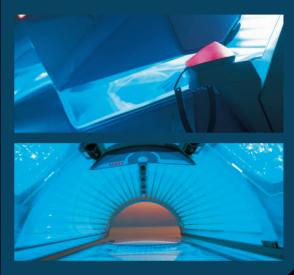
- - - - - - Es

- → EXCELLENCE IQ → EXCELLENCE 800
- → EXCELLENCE **700** → EVOLUTION **IQ**
- → EVOLUTION 600 → EVOLUTION 575
- → EVOLUTION 500 → ADVANTAGE 400
- → ADVANTAGE 350 → LOUNGE
- → OPEN SUN A.R.T. 600
- → OPEN SUN A.R.T. 450 → CLASSIC 300
- → CLASSIC 200 → CLASSIC 8000



# PLANNING MANUAL

- $\rightarrow$ Exhaust air systems and accessories
- Connecting to controls and audio units
- → Multivision
- Information on → air conditioning
- $\rightarrow$ Technical information



# **Planning Manual**

18502302 / Index "k" / en / 06.2005

# for the Ergoline Professional Sunbed Programm

Profi-Tanning by Ergoline is a synonym for innovative technologies and future-oriented product design. The success of Ergoline GmbH is no coincidence but the result of a targeted orientation to the requirements and wishes of the customers. Over 25 years of experience have given Ergoline a know-how advantage for constantly perfected technical manufacture and quality assurance.

Convincing tanning performance, exemplary comfort and, not least, the excellent workmanship of the products make Ergoline No. 1 regarding Professional Sunbed products.



Ergoline

# Dear Customer,

In choosing an Ergoline professional sunbed you have acquired high-performance equipment featuring advanced technology. Your professional sunbed has been manufactured at Ergoline with the greatest care and precision, having undergone numerous quality controls and safety checks. We have done everything to ensure the safe and trouble-free operation of your sunbed. However, you also can do a lot to ensure prolonged satisfaction with your Ergoline product.

The present planning manual provides important planning information and some examples, so that an Ergoline sunbed can be used to full advantage and, with correct adjustment of the ventilation system, a comfortable room climate can be achieved as a condition of a high degree of customer satisfaction.

For correct on-site implementation, your authorised dealer (agent) is available as your first point of contact. He has the necessary experience in handling all types of site-related ventilation problems.

In the event of technical defects or should you have any spare part queries, please contact your agent.

Of course, we are also available should you have any questions.

## Contact adresse:

# JK-Global Service GmbH

After-sales service Rottbitzer Straße 69 53604 Bad Honnef (Rottbitze) Germany

- Telephone: +49 (0) 22 24 / 818-861
- Telefax: +49 (0) 22 24 / 818-205
  - e-Mail: service@jk-globalservice.de www.ergoline.com

## Yours sincerely,

## **Ergoline International GmbH**

We reserve the right to make technical alterations to any representations and statements made in this planning manual. Reprinting or duplication - in whole or in part - is only permitted with our prior written approval and reference to the source.

Ergoline

# General

# Tanning devices

anning actions	
Excellence IQ	Intelligent Power System
Excellence 800	Automatic Power System
Excellence 800	Turbo Power
Excellence 800	Automatic Power System
Excellence 700	Turbo Power
Evolution IQ	Intelligent Power System
Evolution 600	Automatic Power System
Evolution 600	Super Power
Evolution 600	Turbo Power
Evolution 575	Turbo Power
Evolution 500	Automatic Power System
Evolution 500	Turbo Power
Evolution 500	Super Power
Advantage 400	Automatic Power System
Advantage 400	Turbo Power
Advantage 400	Super Power
Advantage 350	Turbo Power
Advantage 350	Super Power
Ambition 250	Super Power
Lounge	Turbo Power
Open Sun A.R.T. 600	Super Power
Open Sun A.R.T. 450	Super Power
Classic 300	Super Power
Classic 200	Super Power
Classic 8000	Ultra

# Planning inlet air and exhaust air

# Controls

Hand-held remote control MCS III plus ICS Individual Cash System Coin device MCS IV plus Coin device MCS VI Studiopilot Accessories: Tower and Tower-Desk

# AQUA FRESH-AROMA system

# MULTIVISION

# Sound systems

3D sound Sound system, Excellence, Evolution Sound system Open Sun 600 Sound system Classic

# Appendix

Performance and air requirements – Overview Inlet and exhaust air cross-sections Maximum exhaust pipe length without additional ventilator Weights



# General

# Contents

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Acrylic glass panel lower part
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Safety
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General

# **Meaning of Symbols**

# Danger information

# Danger!

This safety triangle with the word "Danger" indicates that there is a particular danger for personnel (danger to life, danger of injury).

e.g.:



# Danger!

Risk of personal injury from electrical voltage!



# Caution!

This safety triangle with the word "Caution" indicates that there is a particular danger for devices, equipment and the environment.

# Important information



# Note!

This symbol is not a safety warning, but provides you with information to help you understand operating processes more easily.

# Guidelines

Ergoline devices have been made in conformity with the following guidelines:

- EC directive "Electromagnetic compatibility" 89/336/EEC (as last amended).
- Low voltage directives 72/23/ECC (as last amended).

# 

Ergoline devices carry the following guality marks:

# Intended use

The device is meant for commercial use only, not for home use. This device is used for tanning one adult person at a time, with a skin type suitable for tanning.

Nursing infants and small children through age 7 years may not use this device.

The following applies for children and teenagers between the ages of 8 and 17 years: Only use tanning devices in agreement with a parent or guardian, or after consulting a physician

The acrylic glass panels are designed for a maximum allowable weight of 135 kg.

The purpose of the coin devices is to pay for the tanning time of the Ergoline sunbed. In order that proper operation is ensured, the coin device must be adapted to the properties of the sunbed. The recommended tanning times depend on the tanning device. The tanning times can be taken from the respective operating instructions of the tanning device.

Any other use shall be considered improper. The manufacturer cannot be held liable for damage or injuries resulting from this. The operator bears the sole risk for this.

The proper use also includes compliance with the manufacturer's instructions, operating and maintenance conditions. The device may only be operated, maintained and repaired by persons familiar with these tasks and that have been informed of the dangers involved.

Ergoline

# Acrylic glass panel lower part

The acrylic glass panels for the tanning devices are produced of acrylic glass developed especially for this application. The acrylics used are characterised by a particularly high UV permeability and resistance, as well as an easy-care, hygienic surface that is gentle to the skin.

The acrylic glass panels are formed to their shapes for the specific devices in a technically complex production process. Despite state-of-the-art production know-how, the presence of minor spots, air bubbles or streaks in the acrylic panels is unavoidable. In addition, microfine hairline cracks can occur on the bed surface during operation. These occurrences are material-dependent and are unavoidable in processing, however have no significant effect on the utility value and can therefore not be recognised as defects. Cosmetics or sun screen products must be removed prior to tanning as they can cause damage (e.g. fine cracks on the surface) when used continuously.

# Export

Export of the aforementioned Ergoline sunbeds to the USA and Canada, and the operation of these sunbeds in those countries, is forbidden. In the event of contravention, Ergoline refuses all liability. We point out expressly that in the event of infringement of this regulation, high risks of liability can arise for the exporter and/or the operator.

# Safety

Please note that only authorised service and erection personnel may be used for the erection and installation, as well as the start-up and extension of the Ergoline devices.

The electric connections must be undertaken in accordance with local regulations by a company licensed for this purpose

Danger and safety notices fixed to the device may not be removed or covered. The safety instruction must be easily seen and must be adhered to. Safety installations (e.g. panel switches or filter panels) may not be removed or taken out of action.

Further information can be taken from the operating instructions of the respective Ergoline device.

# **UV Rays**

Depending on the model, Ergoline sunbeds emit a certain amount of UV rays at the place where they are installed. This can cause possible discoloration or fading of the materials used, such as: ceilings, wood, carpets, textiles, etc.

For this reason make certain of the UV resistance of the materials during planning.

# Ozone

Certain wavelengths are reliably filtered out by the lamp glass and the built-in filter panels in the UV low-pressure and UV high-pressure lamps used by Ergoline. Thus, the formation of ozone in damaging concentrations or of other odours is not possible.

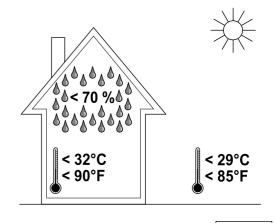
# **Climatic Requirements**

All Ergoline devices are intended for installation in dry rooms without the danger of splash and drip-water. The maximum humidity of this room may not exceed 70 %.

To prevent an excessively high temperature on the bed surface of sunbeds, the room temperature should be a maximum of 3 to 4 °C higher than the outside temperature. However, the temperature in the room may not exceed 32 °C. The optimum temperature range is 25 to 30 °C.

Sufficient ventilation must always be ensured.

The devices may only be transported and stored at temperatures from 2 to 50  $^\circ\mathrm{C}$ 



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# Permissible Floor / Ceiling Loads

When installing sunbeds for professional use, you should always make sure that the floors and ceilings in commercially used rooms are designed to support a maximum load of  $3500 \text{ N/m}^2$ .



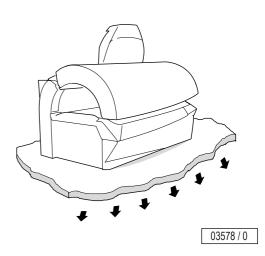
# Caution!

The load-bearing capacity of wooden beam ceilings must be proven in individual cases.

If the actual maximum load exceeds this value, the operator must provide separate documentary evidence in conformity with DIN 1055 – 3, October 2002, for the use of these rooms.

Examples of ceiling loads (based on normal cabin dimensions, 1 tanning device, two persons and small items of furniture):

Tanning devices up to 450 kg: Ceiling load approx. 1500 N/m<sup>2</sup> Tanning devices up to 700 kg: Ceiling load approx. 1840 N/m<sup>2</sup>



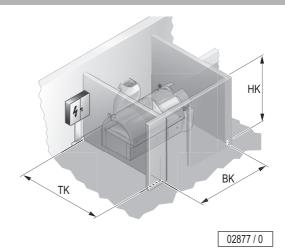
# **Cabin Sizes**

The respective minimum installation surfaces are given in the descriptions of the tanning devices.

The minimum installation surfaces refer to the dimensions:

- BK Width of cabin
- TK Depth of cabin

The height HK of the cabin is dependent on the local conditions and is not given.





# **Mains Supply Lines**

The following supply services must be taken into account in the planning of the position for an Ergoline Professional sunbed and must be laid on before installation of the device:

- · Power connection cable
- Electrical control line (e.g. token/coin box)
- Headphone line

In addition, and depending on the equipment desired, planning must be made for the following supply lines:

- Loudspeaker line
- Line for external music
- · Line for channel selection switching
- Bus line for data Bus
- · Condensation hose

Further information, as well as the position of connections to the device, can be found in the description of the respective device.

# **Electrical Connections**

Please note that the electric connection may only be carried out by an electrical contractor. The electrical installation must comply with national safety regulations.

## Recommendations

At the site, we recommend a selective current-operated e.l.c.b. system (nominal ground current 30 mA) as well as lightning protection and a UPS installation for control and PC installations.

## **Connection requirements**

The electrical installation is to be fitted with an easily accessible all pole isolating device (master switch) on the building side, complying with overvoltage category III. This means that each pin shall have a contact opening width complying with the conditions of overvoltage category III for full isolation.

If it is connected via a plug and socket, the plug system used shall comply with EN 60309-1/A11; 5-pin; 400 V AC  $\sim$  (10 A to 35 A) shall be used. The required rated fusing for a tanning device can be found in the chapter "Technical data" of the tanning device.

The required connection voltages must lie within a tolerance range of +/-5% in order to ensure a malfunction-free and guaranteed operation of the devices. In the design of the electric power lines, a simultaneity factor of 1 must be expected. Time delay fuses must be supplied for protection.

The prescribed connection line per device is H05VV-F 5G x,x (x,x = 1.5 / 2.5 / 4.0 / 6.0) or local equivalent.

The cross-section of the power lines must be selected in conformity with local regulations and depends on:

- · The length of the cable
- The power cable connected to it
- as well as a supply cable per device.

The mains connector cable must be laid prior to assembly of the device. In doing so, care must be taken to allow for cabling reserve, for instance in the tanning cabins, for connection of further devices. We recommend direct mains connection, i.e. without making any additional external contact points on the equipment. Further information can be obtained from the respective device descriptions.

The arrangement of the power cables must be recorded by means of corresponding labeling for the later installation of the devices.

Data, bus and/or control cables must be laid with a minimum distance of 10 cm from the mains supply. Therefore, the power supply and the control cables must not be placed in the same cabling trough

## Ripple control system (TRA)

In some cases, depending on the local power supply company, the sunbeds may adversely affect the mains supply network in the building where the sunbeds are installed, causing interference with the ripple control system (TRA) operated by the power supply company. This may cause malfunctions, for example, of night storage heaters.

If the sunbeds cause this type of interference, the sunbed operator is responsible for installing an audio frequency blocking filter in the building wiring system. Please contact your firm of electricians. Your firm of electricians will be familiar with the technical connection conditions as applied by your local power supply company and will thus be able to match the audio frequency blocking filter to the mains supply of your power supply company.

Ergoline

# Air Conditioning Technology

Ergoline sunbeds with air conditioning make it possible to influence the temperature for the ergonomic panel, surround air and the cabins. With the installed air-cooled air conditioning units, all essential factors involved in air conditioning can be adjusted throughout the entire year to meet the user's wishes and requirements.

# Air humidity

# **Relative humidity**

Air is able to absorb water vapour. This ability to absorb increases with increasing air temperature. For instance, 1 kg air at 15 °C can take up 10.78 g of water vapour but 20.34 g at 25 °C.

If 1 kg of air at 25 °C only contains 10 g water vapour, then the air can absorb a further 10.34 g. In this case, relative humidity is 50%.

# Absolute humidity

Absolute humidity is the mass of water vapour that can be contained in a kilogram of air. Maximum humidity  $x_s$  is reached when the air is saturated with water vapour. Relative humidity is then 100%.

Relative humidity  $\varphi$  is derived from the relationship between absolute and maximum humidity:  $\varphi$  = XXs x 100%.

- $\phi$  = relative humidity
- x = absolute humidity
- $x_s$  = maximum humidity

Air conditioning can

- regulate the temperature of the warm air → Cool;
- regulate interior humidity → Dehumidify in the summer;
- clean the interior air.

# **Condensation water**

Air-cooled air conditioning units have a surface temperature of 4 °C to 12 °C. As the air cools, relative humidity increases, as the ability to absorb water vapour decreases. If the air temperature continues to fall, the temperature drops below dewpoint temperature. The air is then no longer able to hold a part of the water vapour mass it contains, and condensation occurs on the cooler surfaces. The water thus formed is referred to as condensation water. Absolute humidity is reduced by this water mass.

# Condensation drainage

On all air-cooled air conditioning units, condensation ( $\rightarrow$  condensation water) is expelled via the fan ring in the condenser fan. Part of the condensation is evaporated or pumped off by the condensation pump and fed to a condensation container via a plastic hose. The amount of water given off varies and depends on the air as well as the output of the cooling system. Dehumidification output can be as much as 2.8 litres per hour. When laying the plastic hose, please ensure that the hose is not longer than 20 meters and is not higher than 3 meters. The amount of condensation per device can vary even when there are the same devices in the same studio.

# **Acoustic Terminology**

The sound pressure level measurement  $L_{pA}$  is used at a measuring distance d = 1 meter for characterising the acoustic sources in an enclosed space. The measurement is carried out with exhaust air and a switched-on main and body ventilator as

well as air conditioning (when available, limiting temperature 20  $^{\circ}\text{C}$ ).

Terms	Explanations
Sound	Sound is generated by mechanical vibrations. It propagates itself in gaseous, fluid and solid bodies.
Frequency	No. of vibrations per second. Unit: 1 Hertz = 1 Hz = 1/s. The pitch rises with the frequency. Frequency range of human hearing: 16 Hz 20,000 Hz.
Acoustic level	A measure of the strength of the sound (acoustic energy).
Decibel (db)	Standard unit for the acoustic level depicted on a logarithmic scale.
dB (A)	As the human ear finds that different high tones (frequencies) of the same acoustic level have different strengths, the noise must be correspondingly damped with filters at certain frequencies. The frequency evaluation curve with filter A takes this into account and provides a subjective hearing impression. A difference of 10 db (A) corresponds somewhat to a doubling (or halving) of the perceived noise level.

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# **Environmental Declaration**

The JK corporate group is subject to the strict regulations of EC Directive 761/2001 and the standard EN ISO 14001:1996, and undergoes regular internal and external environment audits performed by trained auditors.



# **Environmental Regulations**

# **Disposal of lamps**

UV low-pressure lamps and UV high-pressure lamps contain fluorescent materials and other waste containing mercury.

According to the national waste disposal laws and in accordance with the municipal waste regulations, proof must be provided of the proper disposal of UV lamps.

Your local sales agency will be happy to assist you with the disposal<sup>1)</sup> of UV lamps and batteries.

- Report the number of UV lamps to your local Ergoline agency by telephone or in writing.
- Together with a disposal company, the agency then sees to the collection of the lamps and their proper disposal.

# Disposal of electronic components and batteries

Batteries and printed circuits contain heavy metal compounds. These and electronic devices must be disposed of as special waste in accordance with national waste laws and community waste bylaws. Approach your regional waste recycling association for disposal of batteries, printed circuits and electronic devices.

# Packaging

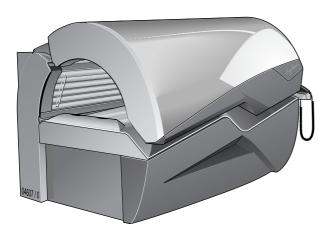
All packaging consists of 100 % recyclable materials. Pakkaging brought into circulation by the JK Corporate Group that is no longer required can be returned to the JK Corporate Group. Your agency partner or dealer will be happy to advise you.

# **Disposal of recyclable materials**

The device has been produced of recyclable materials. When being scrapped later, the device must be disposed of properly. The JK Corporate Group will provide you with information on the content or potential hazards of the materials used.

<sup>1)</sup> Studio user liable for costs





The IQ sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the IQ sensor after approximately 30 hours of operation. For further information refer to the operating instructions.

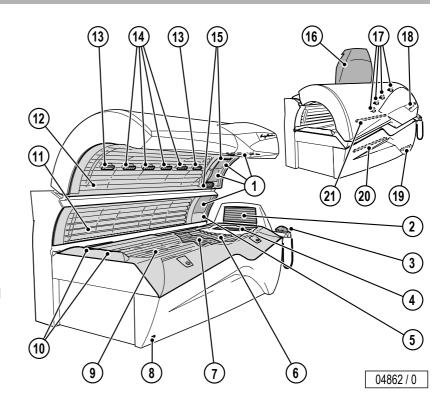


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Device descripition 2
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Planning example for double rear wall    5      With exhaust-air adapter    5      Without exhaust-air adapter    5
Maximum exhaust pipe lengths6
Equipment cooling 7
Surround cooling7
Exhaust air accessories 8
Electrical connections 9
MULTIVISION
Sound system 9
Controls
Air conditioner 9
AQUA FRESH AROMA system 9
IR Interface 9
IQ sensor

# **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. IQ sensor and base station
- 4. Neck tanner
- 5. Headphone connection
- 6. UV low-pressure lamps, lower part
- 7. Intermediate panel
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. Air nozzles body cooling, feet end
- 11. UV low-pressure lamps, side part
- 12. UV low-pressure lamps, canopy
- 13. Nozzles AQUA FRESH
- 14. Air nozzles body cooling
- 15. Air nozzles body cooling head end and AROMA
- 16. Central exhaust air bracket (optional)
- 17. Accent lighting canopy (two coloured)
- 18. Accent lighting canopy
- 19. Accent lighting base
- 20. Accent lighting front panel (blue)
- 21. Accent lighting internal (blue)





# **Technical Data**

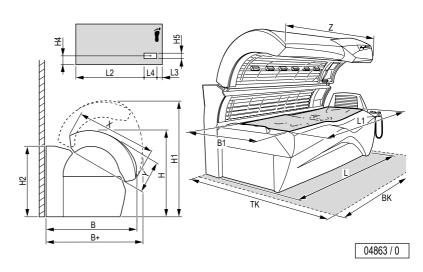
16500 W
400 – 415 V ~3N
50 Hz
3 x 35 A (time-delay)
24 x 120-180 W <sup>1)</sup>
3 x 520 W
19 x 120-180 W <sup>1)</sup>
8 x 120-180 W <sup>1)</sup>
1 x 520 W
6 x 25 W
7 x 25 W

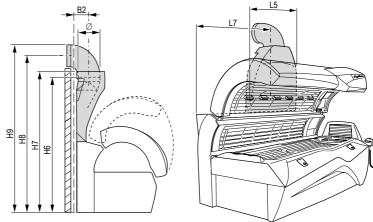
Noise emission	
Acoustic pressure level:	68.9 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	15 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible



# Dimensions

В	1428 mm
B1	850 mm
B2	188 mm
B+	1510 mm
L	2323 mm
L1	2110 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1373 mm
H1	1830 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1224 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
TK	2300 mm





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Ergoline

# Planning example for double rear wall

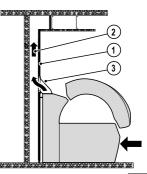
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

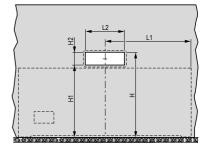
# With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions		
L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rubber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)



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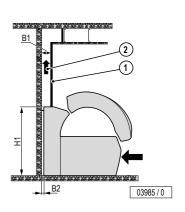
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# Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensi	ons	
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





# Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure	100 Pascal	
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m³	
Dynamic inertia of the air	1.92E-05 Pa x s	

Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		volume Loss coefficient 90° bend in lir (metal)	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	10	
300	8	0500	o (oo1)	0.041)	1	9	
300	0	2500	0.182 <sup>1)</sup>	0.211)	2	8	
					3	7	
Smooth pipe	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
	0.1			<sup>1)</sup> 0.21 <sup>1)</sup>	0	30	
300		2500	0.0611)		1	26	
500		2000			2	22	
					3	18	

1) zeta value (ζ)



# **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.

# Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

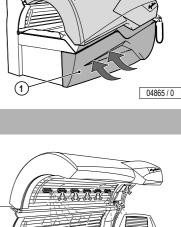
Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

The user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

In automatic mode the initial temperature of the air conditioner (Climatronic, standard equipment) is automatically preselected dependent on the lamp power.

In maximum mode the user can preselect the temperature of the air conditioner (Climatronic, standard equipment).

The temperature of the air conditioner can be adjusted at any time during the tanning.



Excellence IQ

(2)



# Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

# Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

## Smooth pipe

Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

# Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

1

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, fle- xible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece $(\emptyset \ 300 \text{ mm})$	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall



# **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

# **MULTIVISION**

Equipment variant, retrofitting not possible.

# Sound system

Standard equipment.

3D sound: Equipment variant, retrofitting not possible.

# Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

# Air conditioner

Standard equipment: Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled).

# AQUA FRESH AROMA system

Standard equipment: Aroma and body cooling for the user.

# **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Step one ..

# IQ sensor

Standard equipment: The user determines his tanning ability by using the integrated IQ sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

**Step one:** The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

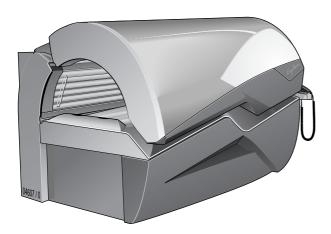
**Step two:** Perform the second measurement on the palest part of your body: e.g. your buttocks or insides of your arms. It's important that this part of the body is included in your tanning assessment. This way, allowance is made for pigmentation progress at the next tanning session and tanning power is increased.

The Intelligent Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.

Step two ...

04734 / 0





The Automatic Power System sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the APS sensor after approximately 30 hours of operation. For further information refer to the operating instructions.



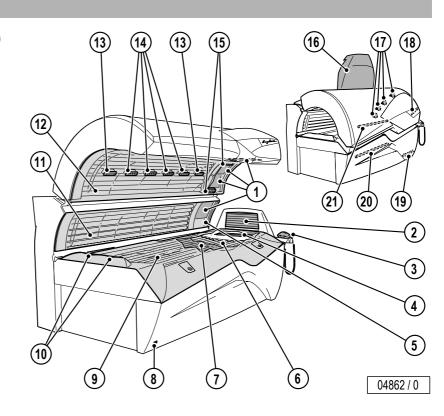
# Excellence 800 APS

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IR Interface
APS sensor

# **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. APS sensor and base station
- 4. Neck tanner
- 5. Headphone connection
- 6. UV low-pressure lamps, lower part
- 7. Intermediate panel
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. Air nozzles body cooling, feet end
- 11. UV low-pressure lamps, side part
- 12. UV low-pressure lamps, canopy
- 13. Nozzles AQUA FRESH
- 14. Air nozzles body cooling
- 15. Air nozzles body cooling head end and AROMA
- 16. Central exhaust air bracket (optional)
- 17. Accent lighting canopy (two coloured)
- 18. Accent lighting canopy
- 19. Accent lighting base
- 20. Accent lighting front panel (blue)
- 21. Accent lighting internal (blue)



# **Technical Data**

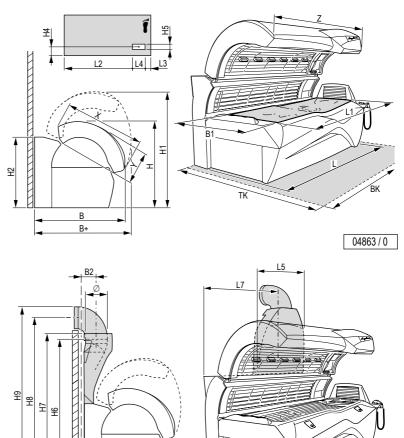
Electrical data	
Nominal power consumption:	18300 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	24 x 160 W
UV high pressure lamps	3 x 520 W
Lower part:	
UV low pressure lamps	19 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 520 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

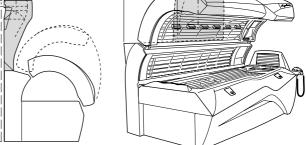
Noise emission	
Acoustic pressure level:	68.9 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	15 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

Ergoline

# Dimensions

В	1428 mm
B1	850 mm
B2	188 mm
B+	1510 mm
L	2323 mm
L1	2110 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1373 mm
H1	1830 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1224 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm





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Excellence 800 APS

# Planning example for double rear wall

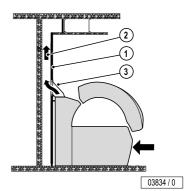
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

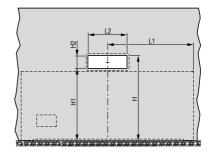
An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

# With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

1116 mm	Tanning bed foot end up to centre of adapter
590 mm	Long adapter, inner edges
1355 mm	Height from floor to inner upper edge of rub- ber profile
1125 mm	Height from floor to inner lower edge
230 mm	Height of adapter (inside)
	590 mm 1355 mm 1125 mm





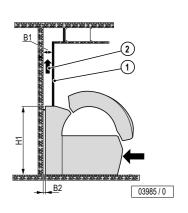
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# Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions				
B1	max. 170 mm			
B2	57 mm			
H1	1078 mm			

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.



# Maximum exhaust pipe lengths

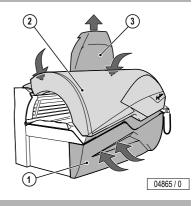
Calculation base (without additional ventilator):			
Back pressure	100 Pascal		
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
		2500 Flow volume		0.211)	0	10	
300	o		0.182 <sup>1)</sup>		1	9	
300	8 Roughness (at centre) k <sub>absolute</sub>				2	8	
					3	7	
Smooth pipe $\varnothing$			Loss coefficient		90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	30	
200	0.1	2500	0.0611)	2500 0.061 <sup>1</sup> ) 0.21 <sup>1</sup> ) 1 2	0.0611) 0.211)	1	26
300	0.1	2000				2	22
					3	18	

1) zeta value (ζ)

# Equipment cooling

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



# Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

The user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

In automatic mode the initial temperature of the air conditioner (Climatronic, standard equipment) is automatically preselected dependent on the lamp power.

In maximum mode the user can preselect the temperature of the air conditioner (Climatronic, standard equipment).

The temperature of the air conditioner can be adjusted at any time during the tanning.



Ergoline

# Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

# Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

## Smooth pipe

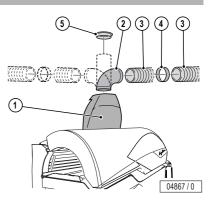
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

# Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece $(\emptyset$ 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall



# **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

# MULTIVISION

Equipment variant, retrofitting not possible.

# Sound system

Standard equipment.

3D sound: Equipment variant, retrofitting not possible.

# Controls

Control	Article No.	Notes	
MCS III plus hand-held remote control 3401060 With chip card terminal		With chip card terminal	
ICS-Unit	3453200	Chip card terminal for APS devices	
MCS IV plus	3401040	With electronic coin tester	
MCS VI	3400970	With electronic coin tester + chip card terminal	
Studiopilot	3400990	With electronic coin tester + chip card terminal	
Studio-Manager	3452900	Software	



# Air conditioner

Standard equipment: Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled).

# AQUA FRESH AROMA system

Standard equipment: Aroma and body cooling for the user.

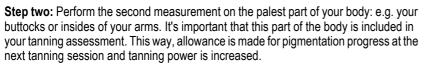
# **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

# **APS** sensor

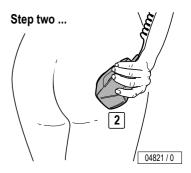
Standard equipment: The user determines his tanning ability by using the integrated APS sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

**Step one:** The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

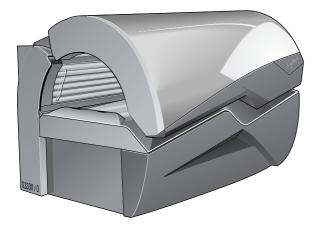


The Automatic Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.









# Turbo Power

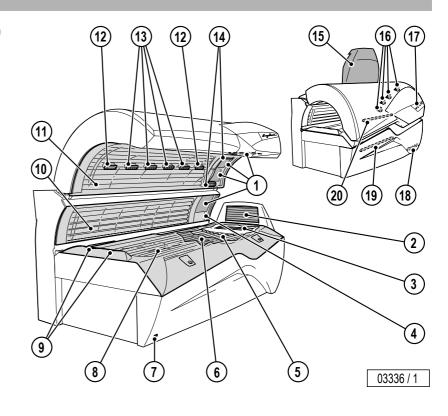
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IR Interface



# **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. Neck tanner
- 4. Headphone connection
- $5. \quad \text{UV low-pressure lamps, lower part} \\$
- 6. Intermediate panel
- 7. Infrared interface
- 8. Acrylic glass panel lower part
- 9. Air nozzles body cooling, feet end
- 10. UV low-pressure lamps, side part
- 11. UV low-pressure lamps, canopy
- 12. Air nozzle/nozzle AQUA FRESH
- 13. Air nozzles body cooling
- 14. Air nozzles body cooling head end and AROMA
- 15. Central exhaust air bracket (optional)
- 16. Accent lighting canopy (two coloured)
- 17. Accent lighting canopy
- 18. Accent lighting base
- 19. Accent lighting front panel (blue)
- 20. Accent lighting internal (blue)



# **Technical Data**

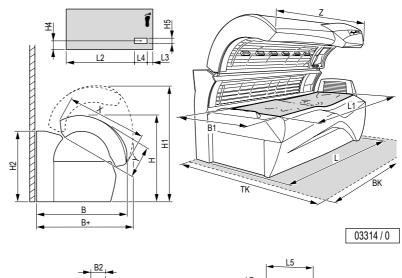
Electrical data		
Nominal power consumption:	18300 W	
Nominal voltage:	400 – 415 V ~3N	
Nominal frequency:	50 Hz	
Rated fusing:	3 x 35 A (time-delay)	
Performance:		
Canopy:		
UV low pressure lamps	24 x 160 W	
UV high pressure lamps	3 x 520 W	
Lower part:		
UV low pressure lamps	19 x 160 W	
Side part:		
UV low pressure lamps	8 x 160 W	
UV high pressure lamps	1 x 520 W	
Neck tanner:		
UV low pressure lamps	6 x 25 W	
Shoulder tanner:		
UV low pressure lamps	7 x 25 W	

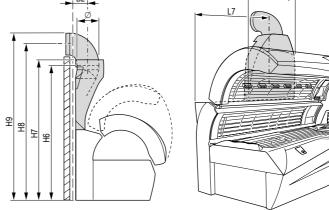
Noise emission		
Acoustic pressure level:	68.9 db (A)	
Inlet and exhaust air		
Temperature difference, supply/exhaust air:	15 °C	
Max. air requirement:	2800 m³/h	
Opt. ambient temperature:	25 °C – 30 °C	
Max. ambient temperature:	15 °C – 40 °C	
Max. inlet air temperature:	40 °C	
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>	
Cabin inlet air cross section at 1.5 m/s:	5200 cm <sup>2</sup>	
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>	
Warm air return:	possible	



# Dimensions

В	1428 mm
B1	850 mm
B2	188 mm
B+	1510 mm
L	2323 mm
L1	2110 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1373 mm
H1	1830 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1224 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm





Excellence 800

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# Planning example for double rear wall

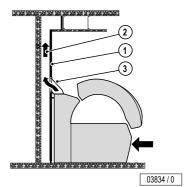
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

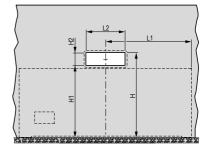
An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

# With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions		
L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rubber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)





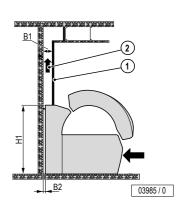
## 03840/0

# Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions		
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.



Ergoline

# Maximum exhaust pipe lengths

Calculation base (without additional ventilator):			
Back pressure 100 Pascal			
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

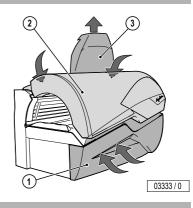
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	volume Loss coefficient		90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
	300 8 2500 0.182 <sup>1)</sup> 0.21 <sup>1)</sup>	0	10			
200		1	1	9		
300 8		2500	0.182''	0.21	2	8
					3	7
Smooth pipe	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
300	0.1		0.0611)	0.211)	0	30
		2500			1	26
					2	22
					3	18

1) zeta value (ζ)



# Equipment cooling

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



# Surround cooling

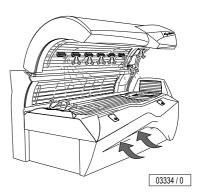
Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

The user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

The user can preselect the temperature of the air conditioner (Climatronic) provided as standard equipment, and therefore adjust the temperature of the bed surface and body air in accordance with his/her wishes.





#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

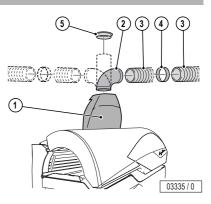
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes	
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes $(\varnothing 300 \text{ mm})$ on the top, top right, top left and to the real	
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_	
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\varnothing$ 300 mm)]	
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-	
4	Corrugated pipe connector piece (Ø 300 mm)	3450270	For connecting two corrugated pipes	
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal	
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall	



#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Equipment variant, retrofitting not possible. 3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Standard equipment: Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled).

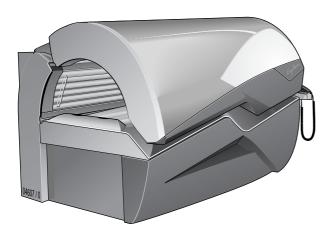
#### AQUA FRESH AROMA system

Standard equipment: Aroma and body cooling for the user.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Ergoline



The Automatic Power System sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the APS sensor after approximately 30 hours of operation. For further information refer to the operating instructions.

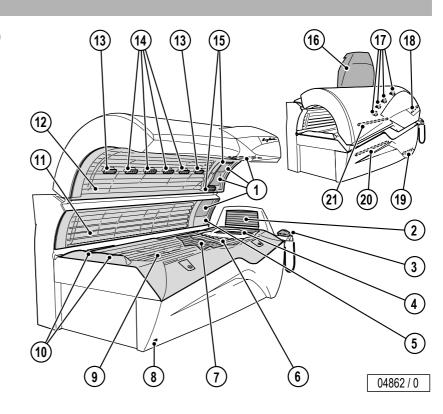


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#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. APS sensor and base station
- 4. Neck tanner
- 5. Headphone connection
- 6. UV low-pressure lamps, lower part
- 7. Intermediate panel
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. Air nozzles body cooling, feet end
- 11. UV low-pressure lamps, side part
- 12. UV low-pressure lamps, canopy
- 13. Nozzles AQUA FRESH
- 14. Air nozzles body cooling
- 15. Air nozzles body cooling head end and AROMA
- 16. Central exhaust air bracket (optional)
- 17. Accent lighting canopy (two coloured)
- 18. Accent lighting canopy
- 19. Accent lighting base
- 20. Accent lighting front panel (blue)
- 21. Accent lighting internal (blue)



#### **Technical Data**

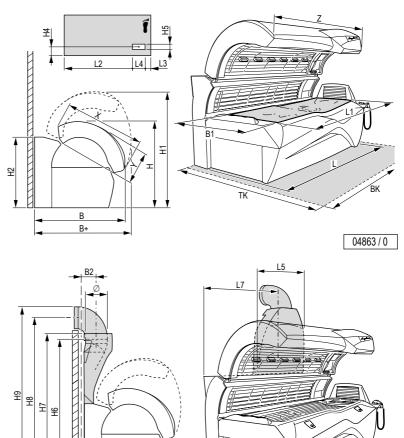
Electrical data	
Nominal power consumption:	18300 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	24 x 160 W
UV high pressure lamps	3 x 520 W
Lower part:	
UV low pressure lamps	19 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 520 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

Noise emission	
Acoustic pressure level:	68.9 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	15 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

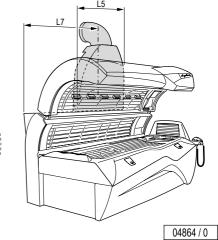
Ergoline

## Dimensions

В	1428 mm
B1	850 mm
B2	188 mm
B+	1510 mm
L	2323 mm
L1	2110 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1373 mm
H1	1830 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1224 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm



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#### Planning example for double rear wall

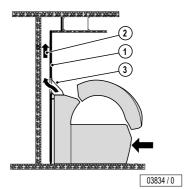
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

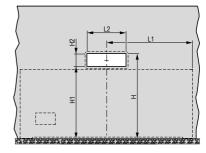
An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

#### With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions		
L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rubber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)





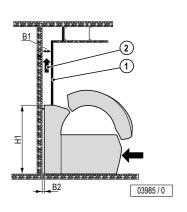
#### 03840/0

#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimens		
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





Ergoline

# Maximum exhaust pipe lengths

Calculation base (without additional ventilator):				
Back pressure	100 Pascal			
Air pressure	100,000 Pascal			
Air temperature	40 °C			
Density	1.112 kg/m <sup>3</sup>			
Dynamic inertia of the air	1.92E-05 Pa x s			

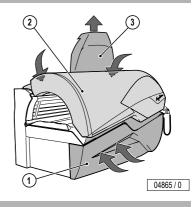
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
		2500		<b>0.21</b> <sup>1)</sup>	0	10
300	o		0.182 <sup>1)</sup>		1	9
300	8				2	8
					3	7
Smooth pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	30
200	0.1	2500	0.0611)	0.0611) 0.211) 1	1	26
300	0.1	2500		0.061 <sup>1)</sup> 0.21 <sup>1)</sup>	2	22
					3	18

1) zeta value (ζ)



#### Equipment cooling

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



#### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

The user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

In automatic mode the initial temperature of the air conditioner (Climatronic, standard equipment) is automatically preselected dependent on the lamp power.

In maximum mode the user can preselect the temperature of the air conditioner (Climatronic, standard equipment).

The temperature of the air conditioner can be adjusted at any time during the tanning.



Ergoline

#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

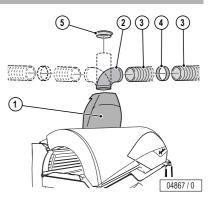
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece $(\emptyset$ 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall



#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Standard equipment. 3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
ICS-Unit	3453200	Chip card terminal for APS devices
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Standard equipment: Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled).

#### AQUA FRESH AROMA system

Standard equipment: Aroma and body cooling for the user.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Ergoline

#### **APS** sensor

Standard equipment: The user determines his tanning ability by using the integrated APS sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

**Step one:** The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

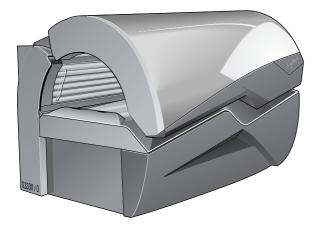
**Step two:** Perform the second measurement on the palest part of your body: e.g. your buttocks or insides of your arms. It's important that this part of the body is included in your tanning assessment. This way, allowance is made for pigmentation progress at the next tanning session and tanning power is increased.

The Automatic Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.

Step two ...

Step one ..





# Turbo Power

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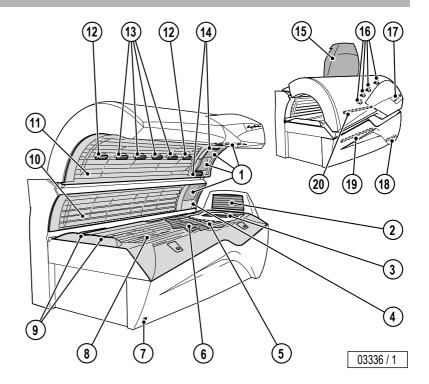
#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. Neck tanner
- 4. Headphone connection
- 5. UV low-pressure lamps, lower part
- 6. Intermediate panel
- 7. Infrared interface
- 8. Acrylic glass panel lower part
- 9. Air nozzles body cooling, feet end
- 10. UV low-pressure lamps, side part
- 11. UV low-pressure lamps, canopy
- 12. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 13. Air nozzles body cooling
- 14. Air nozzles body cooling head end and AROMA (dependent on equipment)
- 15. Central exhaust air bracket (optional)
- 16. Accent lighting canopy (two coloured)
- 17. Accent lighting canopy
- 18. Accent lighting base
- 19. Accent lighting front panel (blue)
- 20. Accent lighting internal (blue)

#### **Technical Data**

#### Electrical data

Nominal power consumption:	
without Climatronic	15000 W
with Climatronic	18300 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	24 x 160 W
UV high pressure lamps	3 x 520 W
Lower part:	
UV low pressure lamps	19 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 520 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

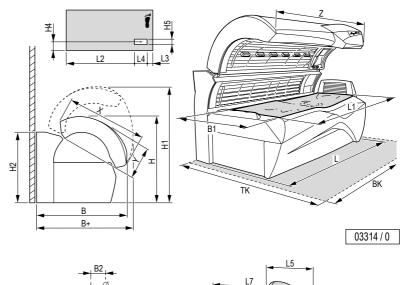


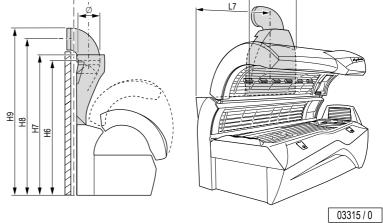
Noise emission	
Acoustic pressure level:	68.9 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air	
without Climatronic:	10 °C
with Climatronic:	15 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

Ergoline

# Dimensions

В	1428 mm
B1	850 mm
B2	188 mm
B+	1510 mm
L	2323 mm
L1	2110 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1373 mm
H1	1830 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1224 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm





Excellence 700

#### Planning example for double rear wall

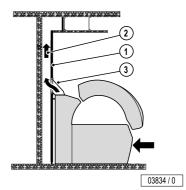
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

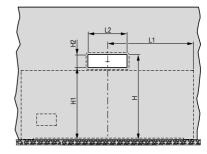
An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

#### With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions		
L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rubber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)





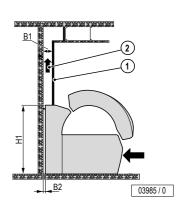
#### 03840/0

#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions		
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.



Ergoline

# Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure 100 Pascal		
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

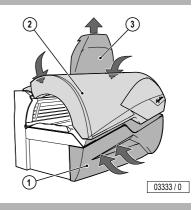
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	10	
300	8	2500	2500 0.182 <sup>1</sup> ) 0.21 <sup>1</sup> ) $\frac{1}{2}$	0.211)	1	9	
300	0	2500		2	8		
					3	7	
Smooth pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	30	
200	0.1	2500	0.0011)	0.0040	1) 0.211)	1	26
300	0.1 250	0.1 2000 0.001%	2500	0.0611)		0.217	2
					3	18	

1) zeta value (ζ)



#### Equipment cooling

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



#### Surround cooling

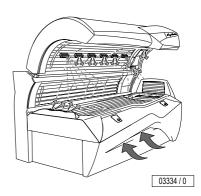
Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

Depending on equipment the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

With a Climatronic (at additional charge) the user can preselect the temperature to adjust the temperature of the bed surface and the body air in accordance with his/her wishes.





#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

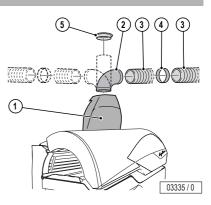
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4.	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\oslash$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece (Ø 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall



#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Equipment variant, retrofitting not possible. 3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled). Equipment variant, retrofitting not possible.

#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Ergoline



The IQ sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the IQ sensor after approximately 30 hours of operation. For further information refer to the operating instructions.



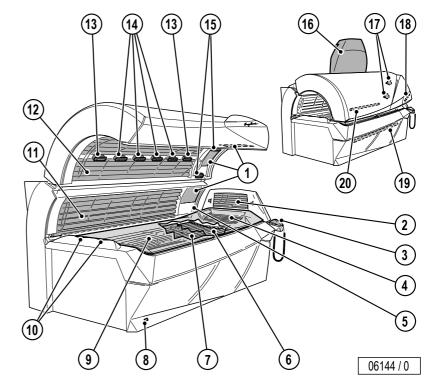
# **Evolution IQ**

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#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. IQ sensor and base station
- 4. Neck tanner
- 5. Headphone connection
- 6. UV low-pressure lamps, lower part
- 7. Intermediate panel
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. Air nozzles body cooling, feet end
- 11. UV low-pressure lamps, side part
- 12. UV low-pressure lamps, canopy
- 13. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 14. Air nozzles body cooling
- 15. Air nozzles body cooling head end and AROMA (dependent on equipment)
- 16. Central exhaust air bracket (optional)
- 17. Accent lighting canopy (two coloured)
- 18. Accent lighting canopy
- 19. Accent lighting front panel (blue)
- 20. Accent lighting internal (blue)



#### **Technical Data**

Electrical	-1-4-
FIGCTRICAL	nara
LICCUICAI	uulu

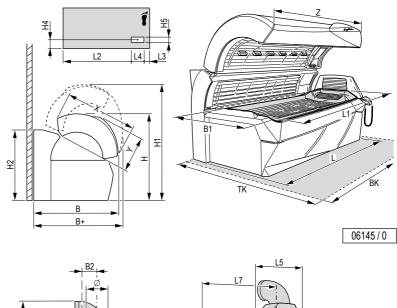
Nominal power consumption:	12600 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	21 x 120-180 W <sup>1)</sup>
UV high pressure lamps	2 x 520 W
Lower part:	
UV low pressure lamps	17 x 120-180 W <sup>1)</sup>
Side part:	
UV low pressure lamps	8 x 120-180 W <sup>1)</sup>
UV high pressure lamps	1 x 520 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W
1) Electronically controlled	

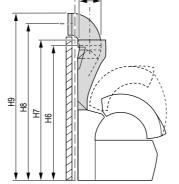
Noise emission	
Acoustic pressure level:	67.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

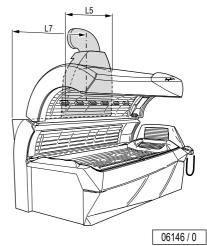
Ergoline

# Dimensions

В	1285 mm
B1	770 mm
B2	188 mm
B+	1345 mm
L	2323 mm
L1	2045 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1333 mm
H1	1745 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1055 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
TK	2300 mm







#### Planning example for double rear wall

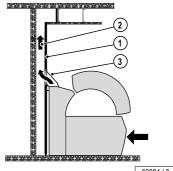
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

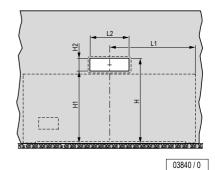
#### With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

1116 mm	Tanning bed foot end up to centre of adapter
590 mm	Long adapter, inner edges
1355 mm	Height from floor to inner upper edge of rubber profile
1125 mm	Height from floor to inner lower edge
230 mm	Height of adapter (inside)
	590 mm 1355 mm 1125 mm





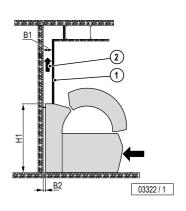


#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions			
B1	max. 170 mm		
B2	57 mm		
H1	1078 mm		

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





# Maximum exhaust pipe lengths

Calculation base (without additional ventilator):			
Back pressure 100 Pascal			
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

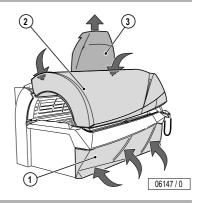
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	10	
300	8	2500	0.182 <sup>1)</sup>	0.011)	1	9	
				0.211)	2	8	
					3	7	
Smooth pipe	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	30	
200	0.1	4 0500 0.0040	0.0611)	0.0611) 0.211)	0.014)	1	26
300	0.1	2500	0.001		2	22	
					3	18	

1) zeta value (ζ)



#### Equipment cooling

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



#### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

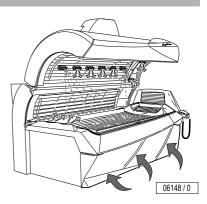
Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

Depending on equipment the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

In automatic mode the initial temperature of the air conditioner (Climatronic, standard equipment) is automatically preselected dependent on the lamp power.

In maximum mode the user can preselect the temperature of the air conditioner (Climatronic, standard equipment).

The temperature of the air conditioner can be adjusted at any time during the tanning.





#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

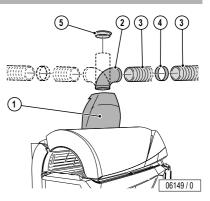
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	plus tube adapter for direct connection		For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece $(\emptyset$ 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall



#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Standard equipment.

3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Standard equipment: Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled).

#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Ergoline

Step one ..

#### **IQ** sensor

Standard equipment: The user determines his tanning ability by using the integrated IQ sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

**Step one:** The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

**Step two:** Perform the second measurement on the palest part of your body: e.g. your buttocks or insides of your arms. It's important that this part of the body is included in your tanning assessment. This way, allowance is made for pigmentation progress at the next tanning session and tanning power is increased.

The Intelligent Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.

t of your body: e.g. your the body is included in mentation progress at the compute your personal Evolution IQ

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The Automatic Power System sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the APS sensor after approximately 30 hours of operation. For further information refer to the operating instructions.



# **Evolution 600 APS**

# Contents

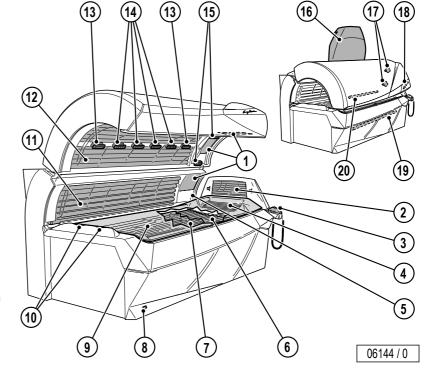
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#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. APS sensor and base station
- 4. Neck tanner
- 5. Headphone connection
- $6. \quad UV \ \text{low-pressure lamps, lower part} \\$
- 7. Intermediate panel
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. Air nozzles body cooling, feet end
- 11. UV low-pressure lamps, side part
- 12. UV low-pressure lamps, canopy
- 13. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 14. Air nozzles body cooling
- 15. Air nozzles body cooling head end and AROMA (dependent on equipment)
- 16. Central exhaust air bracket (optional)
- 17. Accent lighting canopy (two coloured)
- 18. Accent lighting canopy
- 19. Accent lighting front panel (blue)
- 20. Accent lighting internal (blue)

#### **Technical Data**

Electrical data	
Nominal power consumption:	14500 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	21 x 160 W
UV high pressure lamps	2 x 520 W
Lower part:	
UV low pressure lamps	17 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 520 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W



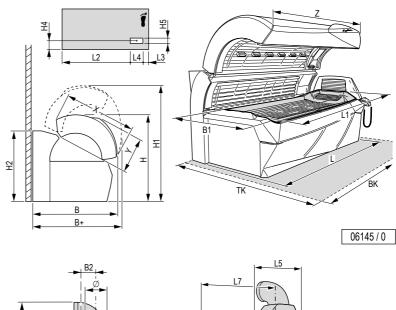
Noise emission	
Acoustic pressure level:	67.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

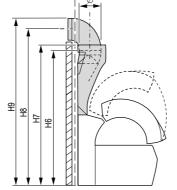
#### 2 - Evolution 600 APS

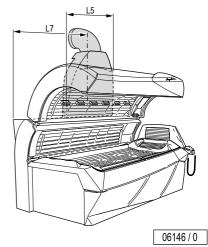
Ergoline

## Dimensions

В	1285 mm
B1	770 mm
B2	188 mm
B+	1345 mm
L	2323 mm
L1	2045 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1333 mm
H1	1745 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1055 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm







#### Planning example for double rear wall

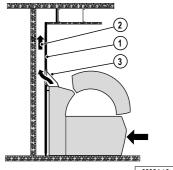
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

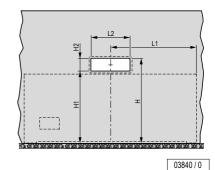
#### With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

1116 mm	Tanning bed foot end up to centre of adapter
590 mm	Long adapter, inner edges
1355 mm	Height from floor to inner upper edge of rubber profile
1125 mm	Height from floor to inner lower edge
230 mm	Height of adapter (inside)
	590 mm 1355 mm 1125 mm





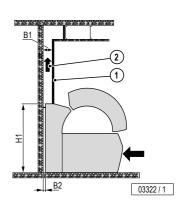


#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions		
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





# Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure	100 Pascal	
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

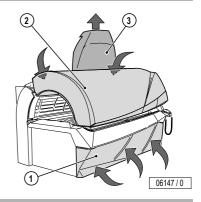
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	10	
300	8	2500	0 (001)	0.040	1	9	
300	0	2500	0.182 <sup>1)</sup>	0.211)	2	8	
					3	7	
Smooth pipe	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	30	
200	0.1	0500	0.4 0500 0.0040	0.0010	0.011)	1	26
300	0.1	2500	0.0611)	0.211)	2	22	
					3	18	

1) zeta value (ζ)



#### Equipment cooling

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment. The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



#### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

Depending on equipment the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

In automatic mode the initial temperature of the air conditioner (Climatronic, standard equipment) is automatically preselected dependent on the lamp power.

In maximum mode the user can preselect the temperature of the air conditioner (Climatronic, standard equipment).

The temperature of the air conditioner can be adjusted at any time during the tanning.





#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

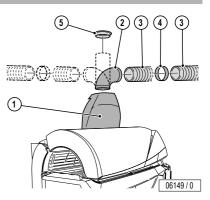
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece $(\emptyset$ 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall



#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Standard equipment.

3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
ICS-Unit	3453200	Chip card terminal for APS devices
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Standard equipment: Climatronic for bed surface and Surround Cooling with fully integrated climate control of body cooling; Cabin climate control via body cooling run-on (temperature-controlled).

#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).



#### **APS** sensor

Standard equipment: The user determines his tanning ability by using the integrated APS sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

**Step one:** The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

**Step two:** Perform the second measurement on the palest part of your body: e.g. your buttocks or insides of your arms. It's important that this part of the body is included in your tanning assessment. This way, allowance is made for pigmentation progress at the next tanning session and tanning power is increased.

The Automatic Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.

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Step one ..

Evolution 600 APS

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Turbo Power Super Power

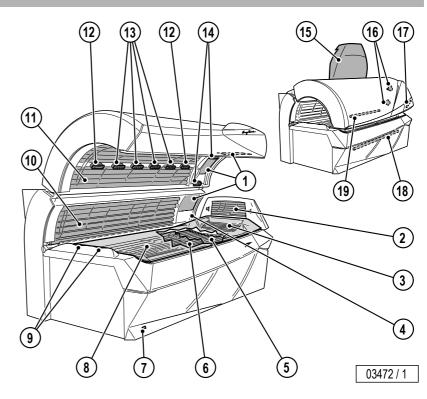
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#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. Neck tanner
- 4. Headphone connection
- 5. UV low-pressure lamps, lower part
- 6. Intermediate panel
- 7. Infrared interface
- 8. Acrylic glass panel lower part
- 9. Air nozzles body cooling, feet end
- 10. UV low-pressure lamps, side part
- 11. UV low-pressure lamps, canopy
- 12. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 13. Air nozzles body cooling
- 14. Air nozzles body cooling head end and AROMA (dependent on equipment)
- 15. Central exhaust air bracket (optional)
- 16. Accent lighting canopy (two coloured)
- 17. Accent lighting canopy
- 18. Accent lighting front panel (blue)
- 19. Accent lighting internal (blue)



Ergoline

#### **Technical Data**

#### Technical Data – Evolution 600 Turbo Power

Nominal power consumption:	
without Air conditioning:	13300 W
with Air conditioning:	14500 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	21 x 160 W
UV high pressure lamps	2 x 500 W
Lower part:	
UV low pressure lamps	17 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 500 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

Noise emission	
Acoustic pressure level:	67.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without Air conditioning: with Air conditioning:	6 °C 11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

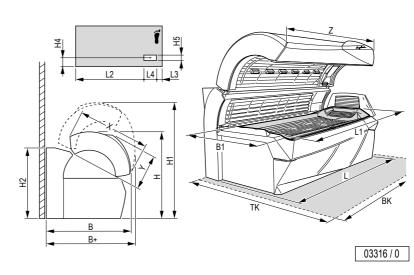
## Technical Data – Evolution 600 Super Power

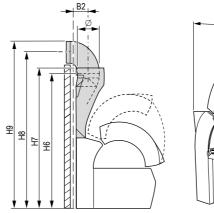
Electrical data			
Nominal power consumption:			
without Air conditioning: with Air conditioning:	9800 W 11000 W		
Nominal voltage:	400 – 415 V ~3N		
Nominal frequency:	50 Hz		
Rated fusing:	3 x 25 A (time-delay)		
Performance:			
Canopy:			
UV low pressure lamps	21 x 100 W		
UV high pressure lamps	2 x 400 W		
Lower part:			
UV low pressure lamps	17 x 100 W		
Side part:			
UV low pressure lamps	8 x 100 W		
UV high pressure lamps	1 x 400 W		
Neck tanner:			
UV low pressure lamps	6 x 25 W		
Shoulder tanner:			
UV low pressure lamps	7 x 25 W		

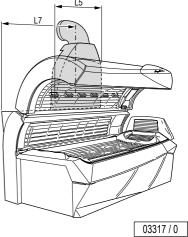
Noise emission	
Acoustic pressure level:	67.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without Air conditioning: with Air conditioning	6 °C 11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

# Dimensions

В	1285 mm
B1	770 mm
B2	188 mm
B+	1345 mm
L	2323 mm
L1	2045 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1333 mm
H1	1745 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1055 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
TK	2300 mm









#### Planning example for double rear wall

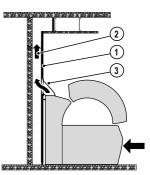
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

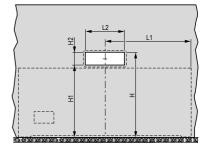
#### With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions		
L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rub- ber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)



03984 / 0



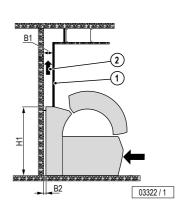
#### 03840 / 0

#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions		
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.



Ergoline

#### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):			
Back pressure	100 Pascal		
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

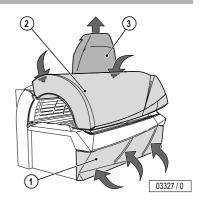
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
300 Smooth pipe ∅	8 Roughness (at centre) k <sub>absolute</sub>	2500 0.182 <sup>1)</sup> Flow volume Loss o				0	10
			0.182 <sup>1)</sup>	0.21 <sup>1)</sup>	1	9	
				0.21	2	8	
					3	7	
			Loss coefficient		90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
	0.4	0.1 2500	0.0611)		0	30	
300				0.011)	1	26	
	U. I			0.0611) 0.211)	2	22	
					3	18	

1) zeta value ( $\zeta$ )

#### **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.





Ergoline

#### **Surround cooling**

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

Depending on equipment the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

Depending on the equipment, an air conditioner enables the additional climate control of the bed surface and the body air.

#### **Exhaust air accessories**

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

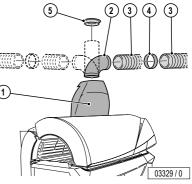
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required. The exhaust air bracket and warm air recycling can also be retrofitted.

Item Accessory parts Article No. Notes 1 Central exhaust air bracket Techno Grey with 3452620 With connection possible for exhaust air pipes warm air recycling, thermostatically controlled ( $\varnothing$  300 mm) on the top, top right, top left and to the rear including connector piece, see Item 4 Central exhaust air bracket Techno Grey, but 3452630 without warm air recycling 2 90° Pipe bend in Techno Grey 3452110 For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube (Ø 300 mm)] 3 Corrugated pipe ( $\varnothing$  300 mm, 6 m length, 3450280 flexible, grey) including 2 pipe clamps 4 Corrugated pipe connector piece ( $\emptyset$  300 mm) 3450270 For connecting two corrugated pipes 5 Connector bracket for corrugated pipe 3450360 Connection of the corrugated pipe, e.g. to a canal (Ø 300 mm) 6 Exhaust air adapter in black (not shown) 3452660 For double rear wall





#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

#### Standard equipment.

3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Equipment variant: Air condition for the bed surface and the body air; retrofitting not possible.

#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Ergoline



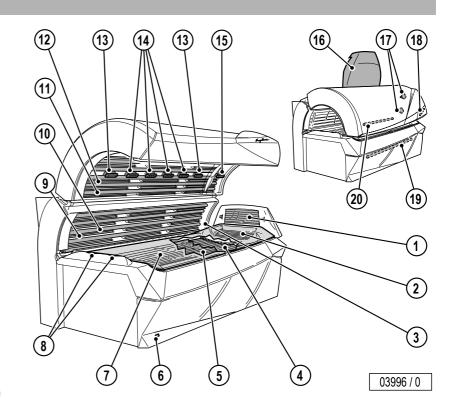
# **Turbo Power**

**Evolution 575** 

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Planning example for double rear wall    5      With exhaust-air adapter    5      Without exhaust-air adapter    5
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MULTIVISION
Sound system
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Air conditioner 8
AQUA FRESH AROMA system 8
IR Interface 8

#### **Device descripition**

- 1. Shoulder tanner
- 2. Neck tanner
- 3. Headphone connection
- 4. UV low-pressure lamps, lower part
- 5. Intermediate panel
- 6. Infrared interface
- 7. Acrylic glass panel lower part
- 8. Air nozzles body cooling, feet end
- 9. UV low-pressure lamps (spaghetti); side part
- 10. UV low-pressure lamps, side part
- 11. UV low-pressure lamps (spaghetti); canopy
- 12. UV low-pressure lamps; canopy
- 13. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 14. Air nozzles body cooling
- 15. Air nozzles head end and AROMA (dependent on equipment)
- 16. Central exhaust air bracket (optional)
- 17. Accent lighting canopy (two coloured)
- 18. Accent lighting canopy
- 19. Accent lighting front panel (blue)
- 20. Accent lighting internal (blue)





# **Technical Data**

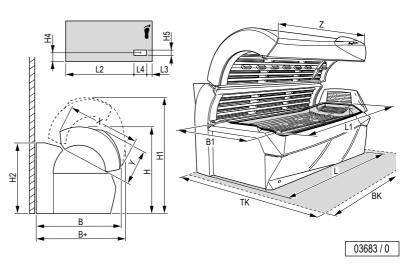
Electrical data	
Nominal power consumption:	
without Air conditioning:	10100 W
with Air conditioning:	11 500 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 25 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	12 x 180 W
UV low pressure lamps (Spaghetti)	33 x 25 W
Lower part:	
UV low pressure lamps	17 x 160 W
Side part:	
UV low pressure lamps	5 x 180 W
UV low pressure lamps (Spaghetti)	12 x 25 W
Neck tanner:	
UV low pressure lamps	6 x 25 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

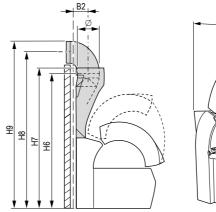
Noise emission	
Acoustic pressure level:	67.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without Air conditioning: with Air conditioning:	6 °C 11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

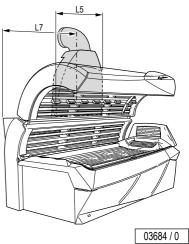
# **Evolution 575**

# Dimensions

В	1285 mm
B1	770 mm
B2	188 mm
B+	1345 mm
L	2323 mm
L1	2045 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1333 mm
H1	1745 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1055 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
TK	2300 mm







#### Planning example for double rear wall

Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

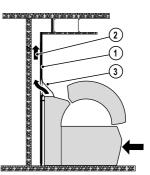
An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

#### With exhaust-air adapter

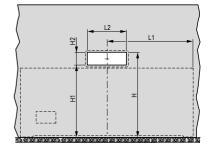
A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions	

L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rubber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)



03984 / 0



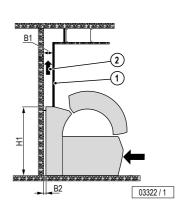
#### 03840 / 0

#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensi	ions	
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





## Maximum exhaust pipe lengths

Calculation base (without additional ventilator):			
Back pressure 100 Pascal			
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

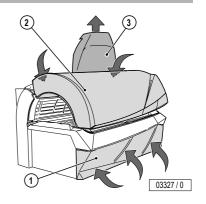
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		Flow volume Loss coefficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	10	
300	o	2500 Flow volume	1)	0.21 <sup>1)</sup>	1	9	
	8		0.182 <sup>1)</sup>	0.21	2	8	
					3	7	
Smooth pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>		Loss coefficient		90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	30	
200	0.1	2500	0.0611)	0.061 <sup>1)</sup> 0.21 <sup>1)</sup>	1	26	
300			0.0017		2	22	
					3	18	

1) zeta value ( $\zeta$ )

#### **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.





#### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In the head area there are two air nozzles that can be switched on separately.

Studio air is also supplied via the air inlet slots beneath the front panel of the sunbed base and fed to two nozzles at feet level at the lying surface height, thus surrounding the body with cooling air.

Depending on equipment the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

Depending on the equipment, an air conditioner enables the additional climate control of the bed surface and the body air.

#### **Exhaust air accessories**

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

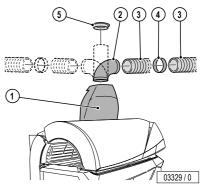
#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required. The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\varnothing$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece (Ø 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset \ 300 \ mm)$	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall







#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Equipment variant, retrofitting not possible. 3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Equipment variant: (Air condition for the bed surface and the body air) retrofitting not possible.

#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

Ergoline



The Automatic Power System sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the APS sensor after approximately 30 hours of operation. For further information refer to the operating instructions.

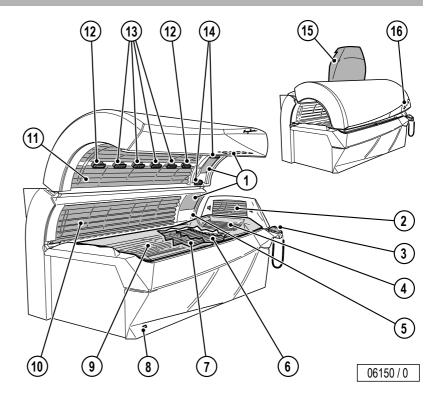


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AQUA FRESH AROMA system7
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APS sensor

#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- 3. APS sensor and base station
- 4. Reflector
- 5. Headphone connection
- 6. UV low-pressure lamps, lower part
- 7. Intermediate panel
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. UV low-pressure lamps, side part
- 12. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 13. Air nozzles body cooling
- 14. Air nozzles body cooling head end and AROMA (dependent on equipment)
- 15. Central exhaust air bracket (optional)
- 16. Accent lighting canopy



#### **Technical Data**

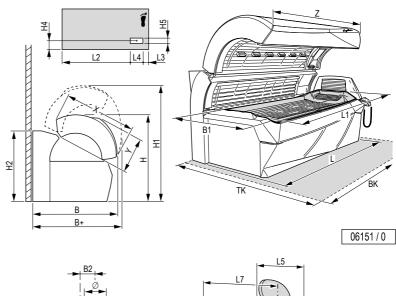
Electrical data	
Nominal power consumption:	13900 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 35 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	18 x 160 W
UV high pressure lamps	2 x 520 W
Lower part:	
UV low pressure lamps	17 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 520 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

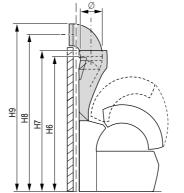
Noise emission	
Acoustic pressure level:	68.8 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

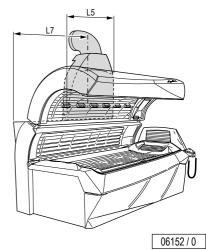
Ergoline

# Dimensions

В	1285 mm
B1	770 mm
B2	188 mm
B+	1345 mm
L	2323 mm
L1	2045 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1333 mm
H1	1660 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1055 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm







#### Planning example for double rear wall

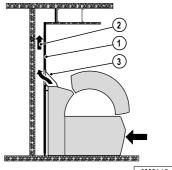
Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

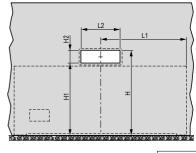
#### With exhaust-air adapter

A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

1116 mm	Tanning bed foot end up to centre of adapter
590 mm	Long adapter, inner edges
1355 mm	Height from floor to inner upper edge of rubber profile
1125 mm	Height from floor to inner lower edge
230 mm	Height of adapter (inside)
	590 mm 1355 mm 1125 mm







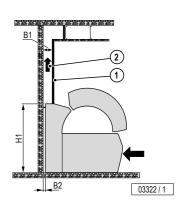
#### 03840 / 0

#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensi	ons	
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





#### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure	100 Pascal	
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

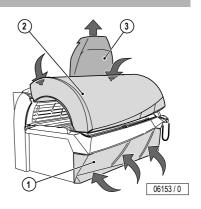
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	10
300	8	2500	0.4001)	0.211)	1	9
300	0	2500	0.182 <sup>1)</sup>	0.21%	2	8
				3	7	
Smooth pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	30
300	0.1	2500	0.0611)	0.211)	1	26
500 0.1	U. I	0.1 2500	0.0017 0.217	U.21 <sup>1</sup> )	2	22
				3	18	

1) zeta value ( $\zeta$ )

# **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.





#### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In The head area there are two air nozzles that can be switched on separately.

Depending on the equipment, the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

An air conditioner enables the additional climate control of the bed surface and the body air.



#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

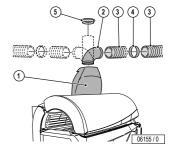
Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required. The exhaust air bracket and warm air recycling can also be retrofitted.

ltem Accessory parts Article No. Notes 1 3452620 Central exhaust air bracket Techno Grey with With connection possible for exhaust air pipes warm air recycling, thermostatically controlled  $(\emptyset$  300 mm) on the top, top right, top left and to the rear including connector piece, see Item 4 Central exhaust air bracket Techno Grey, but 3452630 without warm air recycling 2 90° Pipe bend in Techno Grey 3452110 For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube (Ø 300 mm)] 3 Corrugated pipe ( $\varnothing$  300 mm, 6 m length, 3450280 flexible, grey) including 2 pipe clamps 4 Corrugated pipe connector piece ( $\varnothing$  300 mm) 3450270 For connecting two corrugated pipes 5 Connector bracket for corrugated pipe 3450360 Connection of the corrugated pipe, e.g. to a canal (Ø 300 mm) 6 3452660 Exhaust air adapter in black (not shown) For double rear wall

Ergoline



#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### **MULTIVISION**

Equipment variant, retrofitting not possible.

#### Sound system

Standard equipment.

3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
ICS-Unit	3453200	Chip card terminal for APS devices
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

#### Air conditioner

Standard equipment: Air condition for the bed surface and the body air.

#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).

04734 / 0

#### **APS** sensor

Standard equipment: The user determines his tanning ability by using the integrated APS sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

Step one: The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

Step two: Perform the second measurement on the palest part of your body: e.g. your buttocks or insides of your arms. It's important that this part of the body is included in your tanning assessment. This way, allowance is made for pigmentation progress at the next tanning session and tanning power is increased.

The Automatic Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.

Step two ... 04821/0

Step one ..





Turbo Power Super Power

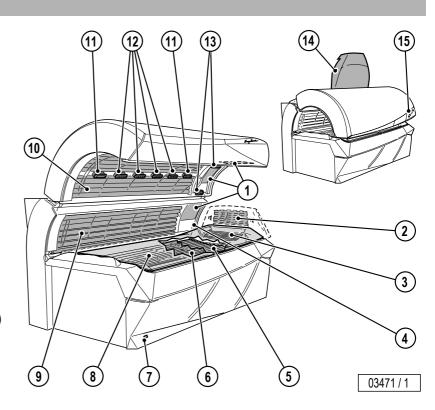
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#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Shoulder tanner
- (Evolution 500 Turbo Power) 3. Reflector
- 4. Headphone connection
- 5. UV low-pressure lamps, lower part
- 6. Intermediate panel (Evolution 500 Turbo Power)
- 7. Infrared interface
- 8. Acrylic glass panel lower part
- 9. UV low-pressure lamps, side part
- 10. UV low-pressure lamps, canopy
- 11. Air nozzle/nozzle AQUA FRESH (dependent on equipment)
- 12. Air nozzles body cooling
- 13. Air nozzles body cooling head end and AROMA (dependent on equipment)
- 14. Central exhaust air bracket (optional)
- 15. Accent lighting canopy





#### Technical Data – Evolution 500 Turbo Power

#### Electrical data

Nominal power consumption:	
without Air conditioning:	12700 W
with Air conditioning:	13900 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 25 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	18 x 160 W
UV high pressure lamps	2 x 500 W
Lower part:	
UV low pressure lamps	17 x 160 W
Side part:	
UV low pressure lamps	8 x 160 W
UV high pressure lamps	1 x 500 W
Shoulder tanner:	
UV low pressure lamps	7 x 25 W

Noise emission	
Acoustic pressure level:	68.8 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without Air conditioning: with Air conditioning:	6 °C 11 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

# Technical Data – Evolution 500 Super Power

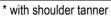
Electrical data	
Nominal power consumption:	
without Air conditioning:	8400 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	18 x 100 W
UV high pressure lamps	2 x 400 W
Lower part:	
UV low pressure lamps	17 x 100 W
Side part:	
UV low pressure lamps	8 x 100 W
UV high pressure lamps	1 x 400 W

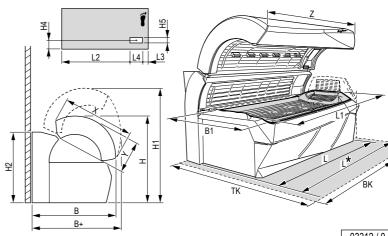
Noise emission	
Acoustic pressure level:	67.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	6 °C
Max. air requirement:	2800 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	588 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	4200 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

# **Evolution 500**

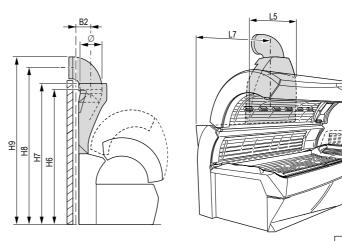
# Dimensions

В	1285 mm
B1	770 mm
B2	188 mm
B+	1345 mm
L	2231 mm
L*	2323 mm
L1	2045 mm
L2	1730 mm
L3	238 mm
L4	265 mm
L5	867 mm
L7	1116 mm
Н	1333 mm
H1	1660 mm
H2	1078 mm
H3	– mm
H4	400 mm
H5	114 mm
H6	1887 mm
H7	1974 mm
H8	2197 mm
H9	2342 mm
Х	1055 mm
Y	472 mm
Z	2235 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm
* ''' ' ''' '	





03312 / 0



03313 / 0

Ergoline

#### Planning example for double rear wall

Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

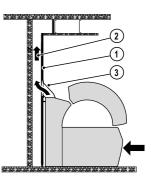
An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the suspended ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

#### With exhaust-air adapter

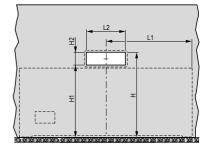
A cut-out must be made in the intermediate wall (see table for dimensions). A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

Dimensions

L1	1116 mm	Tanning bed foot end up to centre of adapter
L2	590 mm	Long adapter, inner edges
Н	1355 mm	Height from floor to inner upper edge of rubber profile
H1	1125 mm	Height from floor to inner lower edge
H2	230 mm	Height of adapter (inside)



03984 / 0



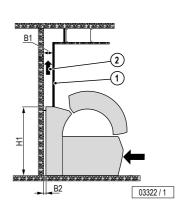
#### 03840 / 0

#### Without exhaust-air adapter

The intermediate wall (1) must securely enclose the rear of the tanning bed.

Dimensions		
B1	max. 170 mm	
B2	57 mm	
H1	1078 mm	

If a tanner is replaced with a new tanner, the intermediate wall (1) must be adapted or replaced so that there are no gaps through which leakage air is drawn. Provision must be made for the inspection doors at the head and foot of the tanner so that the canopy lifting device can be adjusted.





#### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):			
Back pressure	100 Pascal		
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

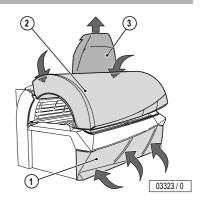
Corrugated pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
300 Smooth pipe ∅		2500 Flow volume	0.182 <sup>1)</sup>		0	10
	o			0.21 <sup>1)</sup>	1	9
	8 Roughness (at centre) k <sub>absolute</sub>			0.21	2	8
					3	7
			Loss coefficient		90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
300	0.1	2500			0	30
			0.0611)	0.211)	1	26
					2	22
					3	18

1) zeta value ( $\zeta$ )

#### **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.





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#### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles over the whole length in the middle of the canopy. In The head area there are two air nozzles that can be switched on separately.

Depending on the equipment, the user can have a pleasant cooling mist (AQUA FRESH) sprayed from the outer nozzles in the body area.

Depending on the equipment, an air conditioner enables the additional climate control of the bed surface and the body air (Evolution 500 Turbo Power only).

#### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

Suitable device exhaust is possible with an exhaust pipe up to 30 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 30 metres.

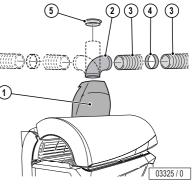
#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452620	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452630	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece (Ø 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset \ 300 \ mm)$	3450360	Connection of the corrugated pipe, e.g. to a canal
6	Exhaust air adapter in black (not shown)	3452660	For double rear wall





Evolution 500

#### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

#### MULTIVISION

Equipment variant, retrofitting not possible.

#### Sound system

Equipment variant, retrofitting not possible. 3D sound: Equipment variant, retrofitting not possible.

#### Controls

Control	Article No.	Notes	
MCS III plus hand-held remote control	3401060	With chip card terminal	
MCS IV plus	3401040	With electronic coin tester	
MCS VI	3400970	With electronic coin tester + chip card terminal	
Studiopilot	3400990	With electronic coin tester + chip card terminal	
Studio-Manager	3452900	Software	

#### Air conditioner

With Evolution 500 Turbo Power: Equipment variant: Air condition for the bed surface and the body air; retrofitting not possible.

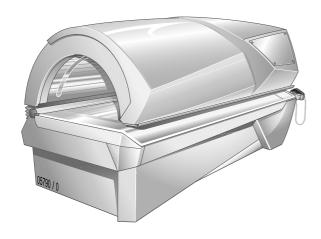
#### AQUA FRESH AROMA system

Equipment variant: Aroma and body cooling for the user; retrofitting not possible.

#### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).





The Automatic Power System sensor is a highly sensitive, photoelectronic precision instrument that is capable of analysing the state of the skin accurately and reliably. For this reason, the IQ sensor is automatically tested for proper working order and measurement accuracy after every measurement cycle. It is also recommended to recalibrate the APS sensor after approximately 30 hours of operation. For further information refer to the operating instructions.



# Advantage 400 APS

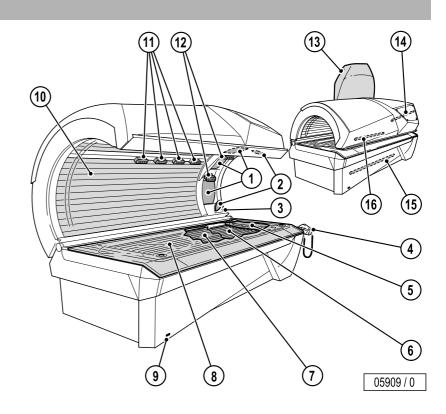
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APS sensor	7



#### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Loudspeaker
- 3. Headphone connection
- 4. APS sensor and base station
- 5. Reflector
- 6. UV low-pressure lamps, lower part
- 7. Intermediate panel (only with air conditioner)
- 8. Infrared interface
- 9. Acrylic glass panel lower part
- 10. UV low-pressure lamps, canopy
- 11. Air nozzles body cooling
- 12. Air nozzles body cooling head end
- 13. Central exhaust air bracket (optional)
- 14. Accent lighting canopy
- 15. Accent lighting front panel
- 16. Accent lighting interal



#### **Technical Data**

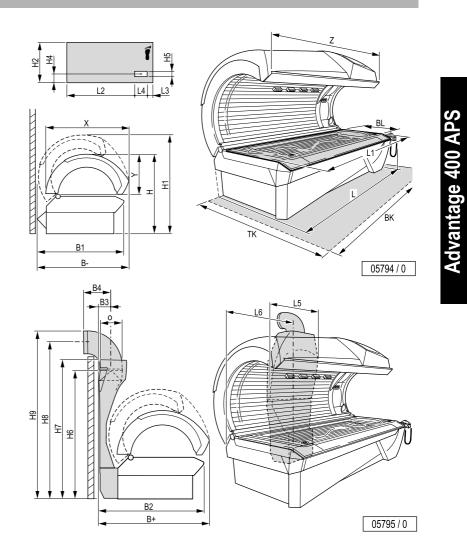
Electrical data				
Nominal power consumption:				
without Air conditioning: with Air conditioning:	9700 W 10700 W			
Nominal voltage:	400 – 415 V ~3N			
Nominal frequency:	50 Hz			
Rated fusing:				
without Air conditioning: with Air conditioning:	3 x 20 A (time-delay) 3 x 25 A (time-delay)			
Performance:				
Canopy:				
UV low pressure lamps	26 x 140 (160) W			
UV high pressure lamps	3 x 400 W			
Lower part:				
UV low pressure lamps	14 x 140 (160) W			

Noise emission	
Acoustic pressure level:	66.4 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without Air conditioning: with Air conditioning:	7 °C 10 °C
Max. air requirement:	2700 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	430 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5000 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

Ergoline

# Dimensions

B-	1310 mm
B1	1180 mm
B2	1300 mm
B+	1430 mm
L	2300 mm
L1	2015 mm
L2	1615 mm
L3	35 mm
L4	273 mm
L5	867 mm
L6	1100 mm
Н	1256 mm
H1	1575 mm
H2	390 mm
H3	– mm
H4	264 mm
H5	167 mm
H6	1679 mm
H7	1760 mm
H8	1979 mm
H9	2124 mm
Х	1220 mm
Y	673 mm
Z	2226 mm
Ø	300 mm
BK	2400 mm
ТК	2100 mm





### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure 100 Pasca		
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

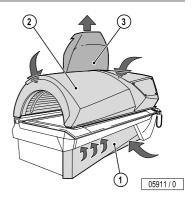
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	12
300	300 8 2300 0.182 <sup>1</sup> ) 0.21 <sup>1</sup> )	0000	0 (001)	0.011)	1	11
		2300	0.1821	0.21	2	10
				3	9	
Smooth pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss coefficient		90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
200 0.4 0200 0					0	36
	0.0611)	0.011)	1	33		
300	300      0.1      2300      0.061 <sup>1</sup> )      0.21 <sup>1</sup> )	0.1 2300 0.0017	2300 0.0019 0.219	0.211)	2	29
					3	26

1) zeta value ( $\zeta$ )

### **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.



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### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles in the middle of the canopy and in the head area. Depending on the equipment, an air conditioner enables the additional climate control of the bed surface and the body air.

### Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 12 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 12 metres.

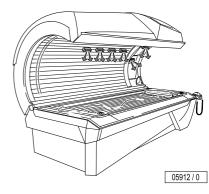
### Smooth pipe

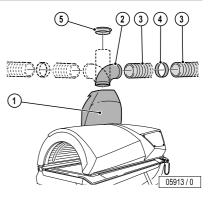
Suitable device exhaust is possible with an exhaust pipe up to 36 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 36 metres.

### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required. The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452840	With connection possible for exhaust air pipes ( $\oslash$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452830	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
4	Corrugated pipe connector piece $(\emptyset$ 300 mm)	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipes, e.g. to a canal







### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

### Sound system

Equipment variant, retrofitting not possible.

### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
ICS-Unit	3453200	Chip card terminal for APS devices
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

### Air conditioner

Equipment variant: Air condition for the bed surface and the body air, retrofitting not possible.

### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).



### **APS** sensor

Standard equipment: The user determines his tanning ability by using the integrated APS sensor to measure face and body. When operating the sensor, the user is assisted by VoiceGuide.

**Step one:** The first measurement is performed on the forehead. A beep confirms a successful measurement. The VoiceGuide then prompts you to perform the second measurement, this time on your body.

**Step two:** Perform the second measurement on the palest part of your body: e.g. your buttocks or insides of your arms. It's important that this part of the body is included in your tanning assessment. This way, allowance is made for pigmentation progress at the next tanning session and tanning power is increased.

The Automatic Power System now takes just a few seconds to compute your personal tanning programme from your measurement readings.

Step two ...

Step one ..





Turbo Power

Super Power

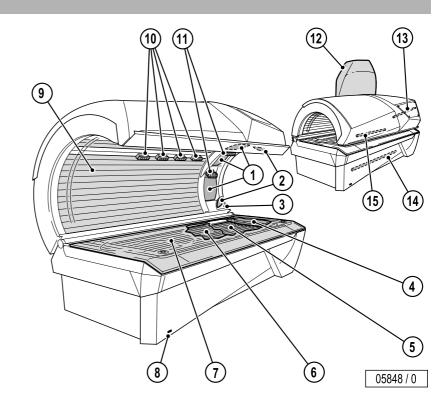
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IR Interface



### **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Loudspeaker
- 3. Headphone connection
- 4. Reflector
- 5. UV low-pressure lamps, lower part
- 6. Intermediate panel (only with air conditioner)
- 7. Infrared interface
- 8. Acrylic glass panel lower part
- 9. UV low-pressure lamps, canopy
- 10. Air nozzles body cooling
- 11. Air nozzles body cooling head end
- 12. Central exhaust air bracket (optional)
- 13. Accent lighting canopy
- 14. Accent lighting Frontblende
- 15. Accent lighting Innenraum



Ergoline

# **Technical Data**

# Technical Data – Advantage 400 Turbo Power

Electrical data	
Nominal power consumption:	
without Air conditioning: with Air conditioning:	9700 W 10700 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	
without Air conditioning: with Air conditioning:	3 x 20 A (time-delay) 3 x 25 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	26 x 140 (160) W
UV high pressure lamps	3 x 400 W
Lower part:	
UV low pressure lamps	14 x 140 (160) W

Noise emission	
Acoustic pressure level:	66.4 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without Air conditioning:	7 °C
with Air conditioning:	10 °C
Max. air requirement:	2700 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	430 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5000 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

# Technical Data – Advantage 400 Super Power

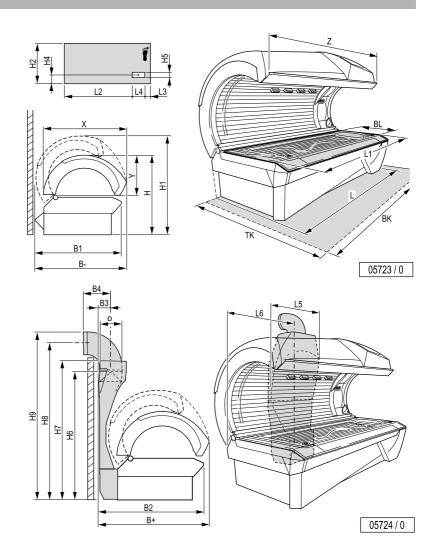
Electrical data	
Nominal power consumption:	
without Air conditioning:	7700 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	26 x 100 W
UV high pressure lamps	3 x 360 W
Lower part:	
UV low pressure lamps	14 x 100 W

Noise emission	
Acoustic pressure level:	66.4 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	7 °C
Max. air requirement:	2700 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	430 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5000 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

Ergoline

# Dimensions

B-	1310 mm
B1	1180 mm
B2	1300 mm
B+	1430 mm
L	2226 mm
L1	2015 mm
L2	1615 mm
L3	35 mm
L4	273 mm
L5	867 mm
L6	1100 mm
Н	1256 mm
H1	1575 mm
H2	390 mm
H3	– mm
H4	264 mm
H5	167 mm
H6	1679 mm
H7	1760 mm
H8	1979 mm
H9	2124 mm
Х	1220 mm
Y	673 mm
Z	2226 mm
Ø	300 mm
BK	2300 mm
TK	2100 mm



Ergoline

### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure 100 Pascal		
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

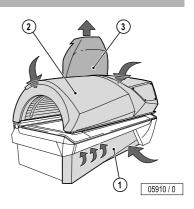
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	0	12
300	8	2200	0.040	1	1	11	
300	0	8 2300 $0.182^{(1)}$ $0.21^{(1)}$	0.21	2	2 10		
		3	9				
Smooth pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
200					0.0610 0.210	0	36
	0.1	2300	2300 0.0611)	0.0611) 0.211)		1	33
300	0.1				2	29	
					3	26	

1) zeta value ( $\zeta$ )

# **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.





05907 / 0

### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 9 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles in the middle of the canopy and in the head area. Depending on the equipment, an air conditioner enables the additional climate control of the bed surface and the body air (Advantage 400 Turbo Power only).

# Exhaust air accessories

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 12 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 12 metres.

#### Smooth pipe

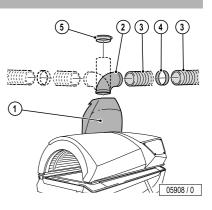
Suitable device exhaust is possible with an exhaust pipe up to 36 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 36 metres.

### Warm air recycling

6 - Advantage 400

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required. The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452840	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rear
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452830	_
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube ( $\emptyset$ 300 mm)]
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	_
4	Corrugated pipe connector piece $(\emptyset 300 \text{ mm})$	3450270	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipes, e.g. to a canal



 $\overline{\Lambda},\overline{\Lambda},\overline{\Lambda}$ 



### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

### Sound system

Equipment variant, retrofitting not possible.

### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

### Air conditioner

Equipment variant: Air condition for the bed surface and the body air, retrofitting not possible.

### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).





Turbo Power

Advantage 350

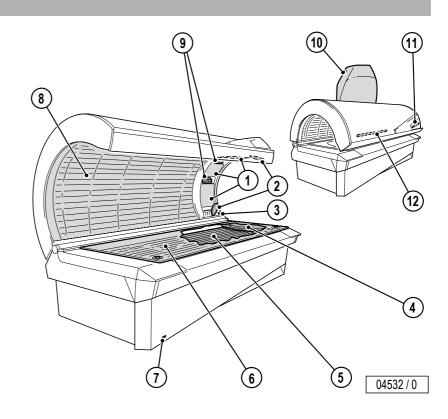
Super Power

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Air conditioner (not available)7

# **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Loudspeaker
- 3. Headphone connection
- 4. Reflector
- 5. UV low-pressure lamps, lower part
- 6. Acrylic glass panel lower part
- 7. Infrared interface
- 8. UV low-pressure lamps, canopy
- 9. Air nozzles body cooling head end
- 10. Central exhaust air bracket (optional)
- 11. Accent lighting canopy
- 12. Accent lighting internal





## **Technical Data**

# Technical Data – Advantage 350 Turbo Power

Electrical data		
Nominal power consumption:		
without Air conditioning:	9600 W	
Nominal voltage:	400 – 415 V ~3N	
Nominal frequency:	50 Hz	
Rated fusing:	3 x 20 A (time-delay)	
Performance:		
Canopy:		
UV low pressure lamps	24 x 140 (160) W	
UV high pressure lamps	3 x 400 W	
Lower part:		
UV low pressure lamps	14 x 140 (160) W	

Technical Data – Advanta	age 350 Super Power
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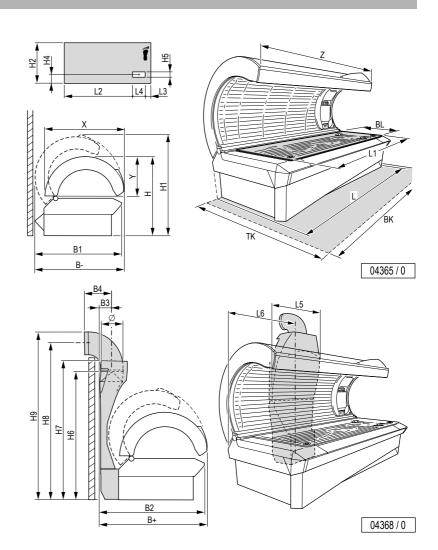
Electrical data		
Nominal power consumption:		
without Air conditioning:	7600 W	
Nominal voltage:	400 – 415 V ~3N	
Nominal frequency:	50 Hz	
Rated fusing:	3 x 16 A (time-delay)	
Performance:		
Canopy:		
UV low pressure lamps	24 x 100 W	
UV high pressure lamps	3 x 360 W	
Lower part:		
UV low pressure lamps	14 x 100 W	

Noise emission	
Acoustic pressure level:	68.1 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	10 °C
Max. air requirement:	2700 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	430 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5000 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

Noise emission	
Acoustic pressure level:	68.1 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	7 °C
Max. air requirement:	2700 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	430 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5000 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm <sup>2</sup>
Warm air return:	possible

# Dimensions

1230 mm
1170 mm
1290 mm
1350 mm
2200 mm
2015 mm
1615 mm
35 mm
273 mm
867 mm
1100 mm
1125 mm
1415 mm
390 mm
– mm
264 mm
167 mm
1679 mm
1760 mm
1979 mm
2124 mm
1114 mm
536 mm
2200 mm
300 mm
2300 mm
2100 mm



Ergoline

### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure 100 Pascal		
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

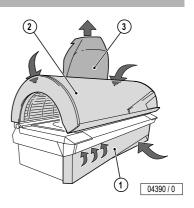
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
		2300 0.182 <sup>1)</sup>		0.182 <sup>1)</sup> 0.21 <sup>1)</sup>	0	12	
300	8		2300 0.182 <sup>1)</sup>		1	11	
300	0				2	10	
						3	9
Smooth pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	36	
300	0.1	2200	0.1 0200 0.0610	0.0011)	0.014)	1	33
300	0.1	2300	0.0611)	0.211)	2	29	
					3	26	

1) zeta value ( $\zeta$ )

# **Equipment cooling**

Cabin or studio air is drawn in beneath the front panel (1) of the lower part of the sunbed and over the filter mats in the canopy (2) (inlet air) in order to cool the equipment.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (3) at the rear of the sunbed.





04465 / 0

### Surround cooling

Surround air ventilation for the user is provided automatically. The intensity is adjustable in 4 steps. Cabin or studio air is drawn in and used for cooling.

The air is fed through several nozzles in the middle of the canopy and in the head area.

### **Exhaust air accessories**

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located above the central exhaust air bracket.

#### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 12 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 12 metres.

#### Smooth pipe

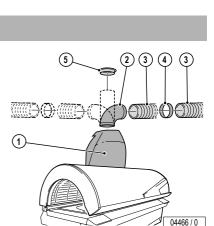
Suitable device exhaust is possible with an exhaust pipe up to 36 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 36 metres.

#### Warm air recycling

Warm air recycling is a technically advanced, secure device which feeds part of the hot cooling air back to the studio via a motor-controlled air choke. A thermostat provides fully automatic control of the studio temperature, between 15 °C and 25 °C as required.

The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes	
1	Central exhaust air bracket Techno Grey with warm air recycling, thermostatically controlled including connector piece, see Item 4	3452840	With connection possible for exhaust air pipes ( $\varnothing$ 300 mm) on the top, top right, top left and to the rea	
	Central exhaust air bracket Techno Grey, but without warm air recycling	3452830	_	
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube (Ø 300 mm)]	
3	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-	
4	Corrugated pipe connector piece $(\emptyset$ 300 mm)	3450270	For connecting two corrugated pipes	
5	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipes, e.g. to a canal	





### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

# Sound system

Equipment variant, retrofitting not possible.

### Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

# Air conditioner (not available)

No air conditioner can be supplied with this device model.





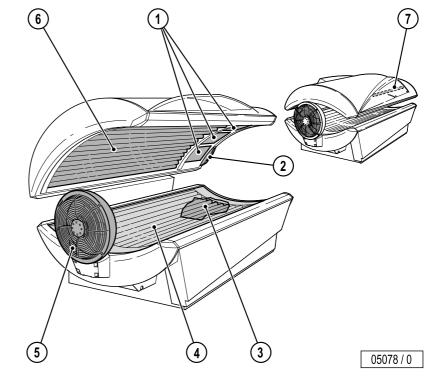
# Super Power

# Contents

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# **Device descripition**

- 1. Face tanner (UV high-pressure lamps)
- 2. Operating panel
- 3. UV low-pressure lamps, lower part
- 4. Acrylic glass panel lower part
- 5. Fan body cooling
- 6. UV low-pressure lamps, canopy
- 7. Accent lighting canopy



# **Technical Data**

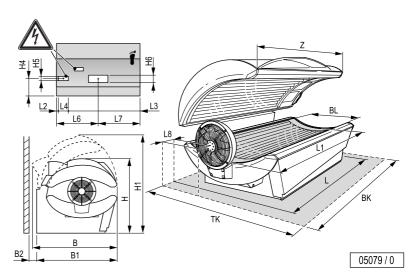
Electrical data	
Nominal power consumption:	
without Air conditioning:	6300 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	18 x 100 W
UV high pressure lamps	3 x 400 W
Lower part:	
UV low pressure lamps	18 x 100 W

Noise emission	
Acoustic pressure level:	63.6 db (A)
Inlet and exhaust air	
Temperature difference, supply/exhaust air:	
without air conditioning:	15 °C
Max. air requirement:	1600 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	802 cm <sup>2</sup>
Warm air return:	not possible



### Dimensions

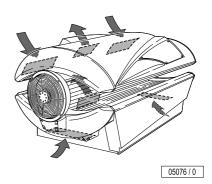
В	1193 mm
B1	1130 mm
B2	140 mm
BL	808 mm
L	2306 mm
L1	2071 mm
L2	24 mm
L3	851 mm
L4	104 mm
L5	226 mm
L6	488 mm
L8	70 mm
Н	1049 mm
H1	1383 mm
H2	613 mm
H4	206 mm
H5	50 mm
H6	87 mm
Х	995 mm
Y	400 mm
Z	2172 mm
BK	2400 mm
ТК	2100 mm



# **Equipment cooling**

To cool the equipment, cabin or studio air is drawn in through two filters in the lower part of the sunbed and two filters at the rear of the canopy (inlet air).

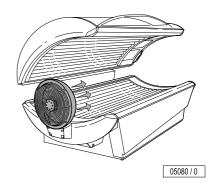
The inlet air is fed past the hot UV low-pressure and high-pressure lamps and finally expelled as warm exhaust air via two exhaust air openings at the rear of the sunbed.





### Surround cooling

Surround air ventilation for the user is provided automatically, but can be switched off and on again as the user wishes. Cabin or studio air is drawn in and used for cooling.



### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

# Sound system

Analia mult	and as a link to
Audio unit	not available
Loudspeaker	not available

### Controls

Control	Article No.	Notes	
MCS III plus hand-held remote control	3401060 With chip card terminal		
MCS IV plus	3401040	With electronic coin tester	
MCS VI	3400970	With electronic coin tester + chip card terminal	
Studiopilot	3400990	With electronic coin tester + chip card terminal	
Studio-Manager	3452900	Software	



Lounge



# Turbo Power

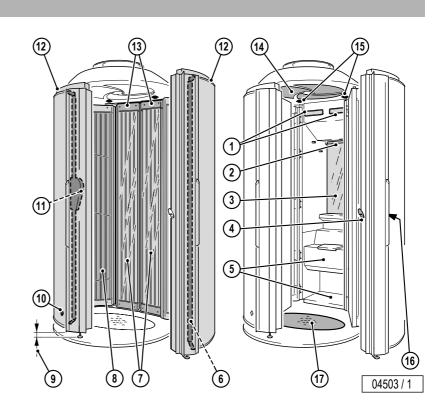
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IR Interface 7



### **Device descripition**

- 1. Exhaust air slots, equipment cooling
- 2. Lighting of comfort cabin
- 3. Mirror
- 4. Inside door lock
- 5. Clothes and shoe storage
- 6. Inside door handle
- 7. UV low pressure lamps inner doors
- 8. UV low pressure lamps outer doors
- 9. Clearance for the air supply (50 mm)
- 10. Infrared interface
- 11. Operating panel with display
- 12. Outer doors
- 13. Inner doors
- 14. Ventilator
- 15. Loudspeaker (accessories)
- 16. Cable for emergency unlocking behind the filter mat)
- 17. Base cover



### **Technical Data**

Electrical data	
Nominal power consumption:	12500 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 25 A (time-delay)
Performance:	
Device door, right side:	
UV low pressure lamps	20 x 180 W
Device door, left side:	
UV low pressure lamps	20 x 180 W
Door of comfort cabin, right side:	
UV low pressure lamps	5 x 180 W
Door of comfort cabin, left side:	
UV low pressure lamps	5 x 180 W

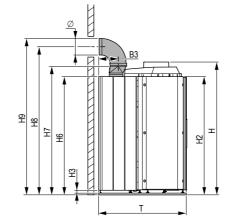
Noise emission	
Acoustic pressure level:	72.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/ exhaust air:	10 °C
Max. air requirement:	2900 m³/h
Opt. ambient temperature:	25 °C – 30 °C
Max. ambient temperature:	15 °C – 40 °C
Max. inlet air temperature:	40 °C
Exhaust cross section w/o exhaust system:	430 cm <sup>2</sup>
Cabin inlet air cross section at 1.5 m/s:	5370 cm <sup>2</sup>
Exhaust cross section with exhaust system:	710 cm² <sup>1)</sup>
Warm air return:	not possible

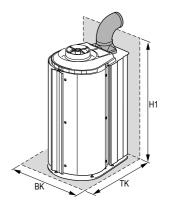
when using a 300 mm exhaust air adapter (see Exhaust air accessories)



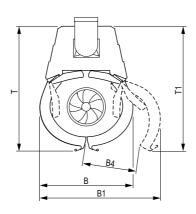
### Dimensions

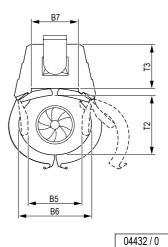
В	1200 mm
B1	1500 mm
B2	325 mm
B3	326 mm
B4	600 mm
B5	680 mm
B6	930 mm
B7	620 mm
H*	2420 mm
H1*	2645 mm
H2*	2145 mm
H3	50 mm
H6*	2145 mm
H7*	2355 mm
H8*	2696 mm
H9*	2846 mm
Т	1600 mm
T1	1650 mm
T2	730 mm
Т3	480 mm
Ø	300 mm
ВК	1600 mm
ТК	2300 mm
* incl_basenlate	





04431 / 1





\* incl. baseplate

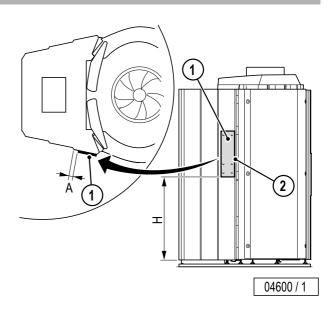
### Installation of a coin device

At the rear part of the tanning device, the coin devices MCS IV plus, MCS VI or Studiopilot can be mounted to the wall of the tanning device (alternatively left or right).

See also "MCS IV plus", "MCS VI" or "Studiopilot" – "Installation variation tanning device".

А	45.5 mm	
Η	1023 mm	level of lower edge of drilling template (ex lower edge of side wall)
1		drilling template 86820

The drilling template must be flush with the front edge (2) of the wall segment.





### Planning example for double rear wall

Installing "exhaust air ducting via a hanging ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

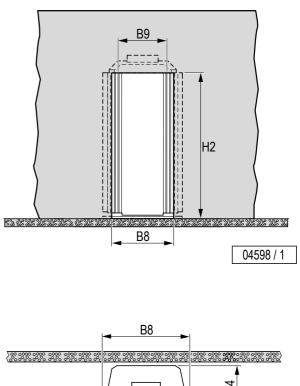
An intermediate wall (1) (e.g. chipboard) tightly enclosing the device at the rear serves as an upward channel for the exhaust air (2), right up to the hanging ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

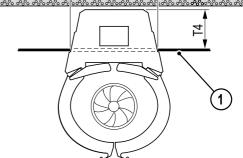
A cut-out is mounted on the intermediate wall (see table for dimensions).

Dimens	ions	
B8	920 mm	width of cut-out
B9	722 mm	width of tanning device at the rear wall
T4	443 mm	minimum distance between intermediate wall and wall
T5	1157 mm	
H2*	approx. 2145 mm	height of cut-out

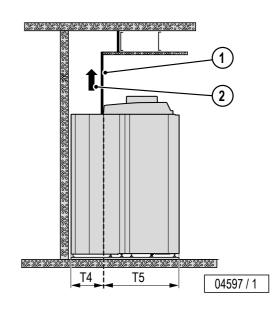
\* incl. baseplate

The intermediate wall (1) must securely enclose the rear of the tanning bed.





04601/0



### Maximum exhaust pipe lengths

Calculation base (without additional ventilator):		
Back pressure	100 Pascal	
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

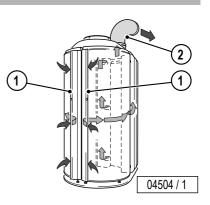
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	10
300	0	2600	0.4001)	0.040	1	8.5
300	8	2000	0.182 <sup>1)</sup>	0.211)	2	7.5
					3	6
Smooth pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	29
300	0.1	2600	0.0611)	0.21 <sup>1)</sup>	1	25
300	0.1	2600	U.U01"	U.21 <sup>1</sup>	2	21
					3	18

1) zeta value (ζ)

# **Equipment cooling**

Cabin or studio air can be drawn in (supply air) along the edges of the door (1) in order to cool the outer doors. Air is drawn in through the openings in the rear of the doors to cool the inner doors.

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure lamps and finally expelled as warm exhaust air (2).





04505 / 1

3

### Surround cooling

A fan (3) is used to provide body cooling. Cabin or studio air will be drawn-in through the fan and routed past the person beneath it.

The fan has 9 speeds.

### **Exhaust air accessories**

Connection to a central exhaust system is possible upwards, upwards right, upwards left and to the rear.

The apertures intended for this purpose are located on top of the comfort cabin.

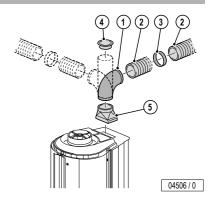
### Corrugated pipe

Suitable device exhaust is possible with an exhaust pipe up to 10 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 10 metres.

#### Smooth pipe

Suitable device exhaust is possible with an exhaust pipe up to 29 metres in length (without 90° bend). An auxiliary fan is required for exhaust pipes longer than 29 metres. The exhaust air bracket and warm air recycling can also be retrofitted.

ltem	Accessory parts	Article No.	Notes
1	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube (Ø 300 mm)]
2	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
3	Corrugated pipe connector piece $(\emptyset 300 \text{ mm})$	3450270	For connecting two corrugated pipes
4	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipes, e.g. to a canal
5	Exhaust air adapter	3452850	_





### **Electrical connections**

Mains supply line	none
Electr. control line	none
Line for external music and channel selection	none

### Sound system

		Artikel-Nr.	Bemerkungen
Audio package	А	3452720	
Loudspeaker set	М	3452860	

M = plus surcharge

A = Equipment variant, plus surcharge, retrofitting not possible

### Controls

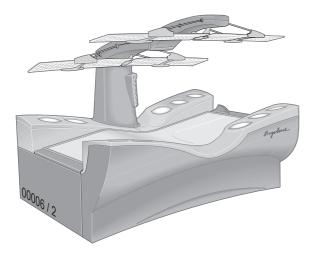
Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

### Air conditioner (not available)

No air conditioner can be supplied with this device model.

### **IR Interface**

Standard equipment: Access to the device data with a hand-held unit (Palm).



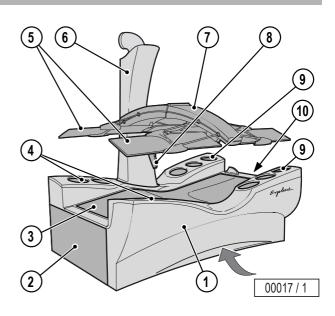
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### **Device descripition**

- 1. Front panel with inlet air aperture (air inlet for equipment cooling)
- 2. Feet end
- 3. Acrylic glass panel lower part
- 4. UV high pressure lamps (feet end)
- 5. 2 Reflector banks (glass)
- 6. Central exhaust air bracket (column)
- 7. Reflector arm with surround air
- 8. Control panel with display
- 9. UV high-pressure lamps (head end)
- 10. Head end



### **Technical Data**

Electrical data		
Nominal power consumption:	13300 W	
Nominal voltage:	400 – 415 V ~3N	
Nominal frequency:	50 Hz	
Rated fusing:	3 x 25 A (time-delay)	
Performance:		
Canopy:		
UV low pressure lamps	17 x 100 W	
Lower part:		
UV high pressure lamps in the upper body region	6 x 800 W	
UV high pressure lamps in the feet region	4 x 700 W	

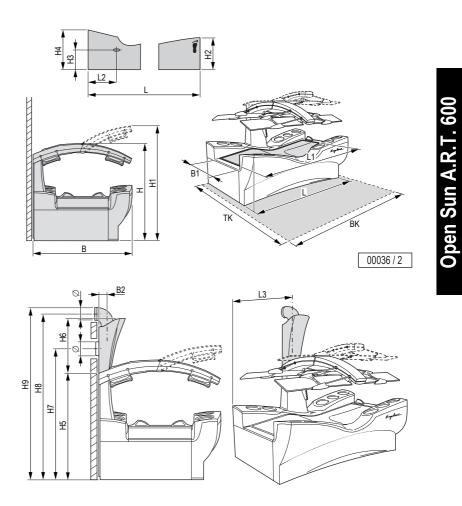
Noise emission	
Acoustic pressure level:	62.3 db (A)
Inlet and exhaust air	
Temperature difference, supply/ exhaust air:	11 °C
Max. air requirement:	2500 m³/h
Opt. ambient temperature:	25 °C
Max. ambient temperature:	40 °C
Max. inlet air temperature:	550 cm <sup>2</sup>
Exhaust cross section w/o exhaust system:	4100 cm <sup>2</sup>
Cabin inlat air araga contian	490 cm <sup>2</sup>
Cabin inlet air cross section	(710 cm²) <sup>1)</sup>
Warm air return:	not possible
1) when using a 200 mm sine adapter (ass Euc)	

1) when using a 300 mm pipe adapter (see Exhaust air accessories)



# Dimensions

В	1660 mm
B1	850 mm
B2	127 mm
L	2332 mm
L1	2100 mm
L2	780 mm
L3	1100 mm
Н	1600 mm
H1	1780 mm
H2	800 mm
H3	470 mm
H4	900 mm
H5	1430 mm
H6	700 mm
H7	1910 mm
H8	2370 mm
H9	2496 mm
Ø	250 mm
BK	2400 mm
TK	2500 mm



00069 / 2

# Maximum exhaust pipe length

Calculation base (without additional ventilator):			
Back pressure	100 Pascal		
Air pressure	100,000 Pascal		
Air temperature	40 °C		
Density	1.112 kg/m <sup>3</sup>		
Dynamic inertia of the air	1.92E-05 Pa x s		

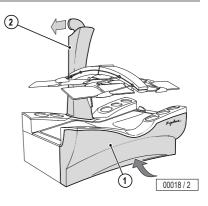
Corrugated pipe $\varnothing$	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	oss coefficient 90° bo		lonath of	
mm	mm	m³/h	of pipe	of bend	pieces	m	
					0	12	
250	0	2500	a (aa <sup>2</sup> )	0.212)	1	10	
(300) <sup>1)</sup>	8	2500	0.182 <sup>2)</sup>	0.212	2	8	
					3	6	

1) can be extended

2) zeta value (ζ)

### **Equipment cooling**

Cabin or studio air (inlet air) is drawn in under the front panel (1) for cooling the device. The air is first cleaned in a filter, fed past the hot UV low-pressure and high-pressure lamps and finally expelled as warm exhaust air via the central exhaust air bracket (2).





### Surround cooling

Surround air is supplied to the user via an oscillating fan in the reflector arm (3). Cabin or studio air is drawn in via air inlet slots above the reflector arm and supplied to the user via outlet nozzles underneath the reflector arm.

Infinite adjustment of the fan can be made manually at any time, to suit the user's comfort requirements.

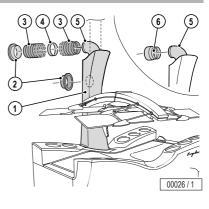
### Exhaust air accessories

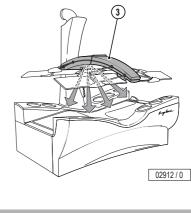
Connection to a central exhaust air system at the rear or upwards is possible.

The apertures intended for this purpose are located above the central exhaust air bracket.

Adequate ventilation of the equipment is possible up to an exhaust air pipe length of 12 meters (without 90° bend). For exhaust air pipe lengths greater than 12 meters, you will require an additional fan.

Item	Accessory parts	Article No.	Notes
1	Central exhaust air bracket in blue, without warm air recycling ( $\varnothing$ 250 mm)	3452140	with tube adapter (see Item 6) connection to a corrugated pipe of $\oslash$ 300 mm is possible
2	Connector bracket for corrugated pipe $(\emptyset$ 250 mm)	3450350	Connection of the corrugated pipe, e.g. to a canal
3	Corrugated pipe ( $\varnothing$ 250 mm, 6 m length, flexible, grey) including 2 hose clips	3400580	-
4	Corrugated pipe connector piece $(\emptyset 250 \text{ mm})$	3400670	For connecting two pipes
5	90° tube bend in blue for exhaust air connec- tion, upwards	3452190	Installation angle can be offset by 45°
6	Tube adapter ( $\oslash$ 250 mm to $\oslash$ 300 mm)	3452200	-





Open Sun A.R.T. 600

### **Electrical connections**

Mains supply line	provided
Electr. control line	none
Line for external music and channel selection	approx. 3000 mm

# Sound system

		Article No.	Notes
Audio package	•	-	Audio unit with VoiceGuide
Loudspeaker set	•	-	

• = as standard

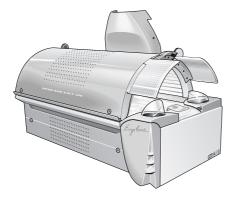
# Controls

Article No.	Notes
3401060	With chip card terminal
3401040	With electronic coin tester
3400970	With electronic coin tester + chip card terminal
3400990	With electronic coin tester + chip card terminal
3452900	Software
	3401060 3401040 3400970 3400990

### Air conditioner (not available)

No air conditioner can be supplied with this device model.





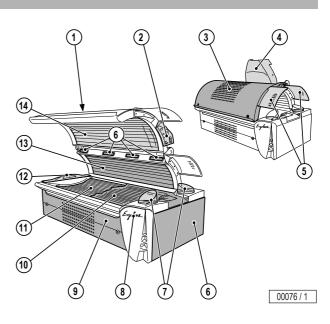
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#### **Device descripition**

- 1. Canopy with air inlet
- 2. Operating elements
- 3. Decorative canopy
- 4. Central exhaust nozzle (optional)
- 5. Glass reflectors for the face tanner
- 6. Sunbed base (component board, fan, etc.)
- 7. Face tanner with protective goggles
- 8. Accent lighting
- 9. Front panel with air inlet
- 10. Acrylic glass panel lower part
- 11. Base
- 12. Air nozzle (surround cooling, feet end)
- 13. Side part
- 14. Canopy



# **Technical Data**

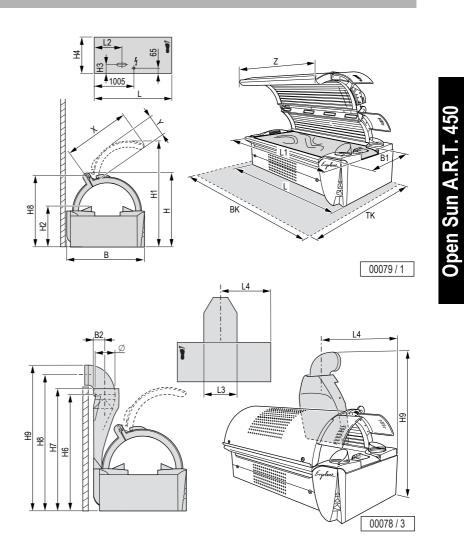
Electrical data	
Nominal power consumption:	8300 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	18 x 100 W
Lower part:	
UV low pressure lamps	18 x 100 W
UV high pressure lamps	2 x 600 W
Side part:	
UV low pressure lamps	9 x 100 W

Noise emission	
Acoustic pressure level:	63.2 db (A)
Inlet and exhaust air	
Temperature difference, supply/ exhaust air:	10 °C
Max. air requirement:	2100 m³/h
Opt. ambient temperature:	25 °C
Max. ambient temperature:	40 °C
Max. inlet air temperature:	435 cm <sup>2</sup>
Exhaust cross section w/o exhaust system:	4000 cm <sup>2</sup>
Cabin inlet air cross section	710 cm <sup>2</sup>
Warm air return:	not possible

Ergoline

# Dimensions

В	1310 mm
B1	1075 mm
B2	181 mm
L	2270 mm
L1	2160 mm
L2	860 mm
L3	867 mm
L4	1330 mm
Н	1160 mm
H1	1555 mm
H2	720 mm
H3	175 mm
H4	620 mm
H7	1475 mm
H8	1555 mm
H9	1780 mm
H10	1930 mm
Х	1020 mm
Y	320 mm
Z	1914 mm
Ø	300 mm
BK	2370 mm
ТК	2300 mm



#### Maximum exhaust pipe length

Calculation base (without additional ventilator):		
Back pressure	100 Pascal	
Air pressure	100,000 Pascal	
Air temperature	40 °C	
Density	1.112 kg/m <sup>3</sup>	
Dynamic inertia of the air	1.92E-05 Pa x s	

Corrugated pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
					0	12
300	o	2150	0.182 <sup>1)</sup>	0.211)	1	10
300	8	2150	0.1821	0.21%	2	8
					3	6

1) zeta value (ζ)

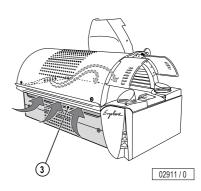
#### **Equipment cooling**

Air is drawn in at the air inlet of the canopy (1) through a filter for cooling the device. The air is led past the warmed UV lamps and is exhausted to the outside through the central exhaust bracket (2) at the rear of the sunbed.

# 

#### **Surround cooling**

Because of the open construction in the region of the head, a foot ventilator is sufficient for cooling the whole body of the user. The foot ventilator is supplied with filtered ambient air through the air inlet above the front plate (3). The intensity of body cooling can be individually adjusted in 5 steps.



Ergoline

(5)

3 4

(1)

(3)(2)

#### **Exhaust air accessories**

Connection to a central exhaust air system upwards is possible.

The apertures intended for this purpose are located above the central exhaust air bracket.

Adequate ventilation of the equipment is possible up to an exhaust air hose length of 12 meters (without 90° bend). For exhaust air hose lengths greater than 12 meters, you will require an additional fan.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket in Techno Grey	3452280	to the connection for exhaust pipes ( $\varnothing$ 300 mm) upwards
2	90° Pipe bend in Techno Grey	3452110	For inlet and exhaust air ducting to right, left or to rear, plus tube adapter for direct connection to central exhaust air bracket [possible with tube (Ø 300 mm)]
3	Connector bracket for corrugated pipe $(\emptyset$ 300 mm)	3450360	Connection of the corrugated pipe, e.g. to a channel
4	Corrugated pipe ( $\varnothing$ 300 mm, 6 m length, flexible, grey) including 2 pipe clamps	3450280	-
5	Corrugated pipe connector piece $(\emptyset \ 300 \ mm)$	3450270	For connecting two corrugated pipes



Open Sun A.R.T. 450

## **Electrical connections**

Mains supply line	provided
Electr. control line	approx. 2000 mm
Line for external music and channel selection	approx. 3000 mm

# Sound system

		Article No.	Notes
Audio package	М	3452270	Audio unit; volume control and channel selection switch are integrated in the control cockpit (Consisting of control box without CD-ROM drive, installation instructions)
Loudspeaker set	М	3452230	

M = plus surcharge

## Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

# Air conditioner (not available)

No air conditioner can be supplied with this device model.





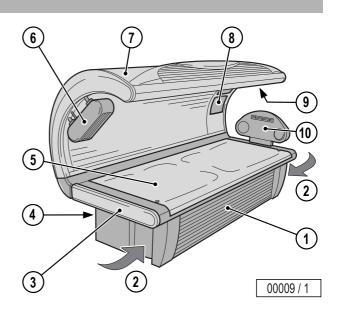
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# **Device descripition**

- 1. Sunbed base
- 2. Inlet air (Air inlet for cooling the equipment)
- 3. Feet end
- 4. Central air outlet vent
- 5. Acrylic glass panel lower part
- 6. Surround fan (feet end)
- 7. Sunbed canopy
- 8. Face tanner (UV high-pressure lamps)
- 9. Operating elements
- 10. Surround fan (head end)



# **Technical Data**

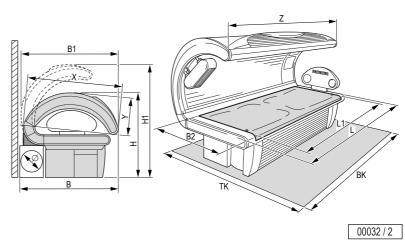
Electrical data	
Nominal power consumption:	7000 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	23 x 100 W
UV high pressure lamps	3 x 400 W
Lower part:	
UV low pressure lamps	15 x 100 W

Noise emission	
Acoustic pressure level:	74.0 db (A)
Inlet and exhaust air	
Temperature difference, supply/ exhaust air:	15 °C
Max. air requirement:	950 m³/h
Opt. ambient temperature:	25 °C
Max. ambient temperature:	40 °C
Max. inlet air temperature:	450 cm <sup>2</sup>
Exhaust cross section w/o exhaust system:	1300 cm <sup>2</sup>
Cabin inlet air cross section	490 cm <sup>2</sup>
Warm air return:	not possible

Ergoline

# Dimensions

В	1023 mm
B1	970 mm
B2	730 mm
L	2250 mm
L1	1885 mm
Н	1010 mm
H1	1250 mm
Х	970 mm
Y	420 mm
Z	1885 mm
Ø	250 mm
BK	2300 mm
TK	2000 mm



# Maximum exhaust pipe length

Calculation base (without additional ventilator):	
Back pressure 100 Pascal	
Air pressure	100,000 Pascal
Air temperature	40 °C
Density	1.112 kg/m <sup>3</sup>
Dynamic inertia of the air	1.92E-05 Pa x s

Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	m³/h	of pipe	of bend	pieces	m
	950	0.182 <sup>1)</sup> 0.21 <sup>1)</sup>	0.211)	0	8
0				1	6
Ö				2	4
			3	2	
	(at centre) k <sub>absolute</sub>	(at centre) Flow volume k <sub>absolute</sub> mm m³/h	(at centre) Flow volume Loss cou k <sub>absolute</sub> mm m³/h of pipe	(at centre) Flow volume Loss coefficient k <sub>absolute</sub> mm m³/h of pipe of bend	(at centre)  Flow volume  Loss coefficient  90° bend in line (metal)    mm  m³/h  of pipe  of bend  pieces    8  950  0.182 <sup>1</sup> )  0.21 <sup>1</sup> )  1

1) zeta value (ζ)

Classic 300

00010 / 1

## **Equipment cooling**

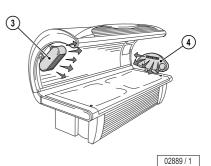
To cool the sunbed, cabin or studio air (inlet air) is drawn in at the head and feet ends of the sunbed base (1).

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled on the left or right as warm exhaust air via the central exhaust air bracket (2).

#### Surround cooling

The surround air for the person using the sunbed is supplied via fans at the head end (4) and feet end (3) by means of an incremental control device.

The cabin or studio air is drawn in via air inlet slots and supplied to the user via outlet nozzles.



4 – Classic 300



#### Exhaust air accessories

The appropriate corrugated pipe is 250 mm in diameter. With pipe lengths in excess of 4 meters, you will require an additional fan.

The size of the additional fan depends on the overall length of the exhaust channel passage and the number of sunbeds connected. For further advice, please consult your ventilation technician!

We offer various accessories that permit easier connection to a central exhaust system or to the individual device exhaust lines.

3 4 5 M

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket, galvanised steel plate; length 952 mm, height 315 mm, depth 280 mm	3400570	Direct connection possibilities of a $\oslash$ 250 mm circular corrugated pipe or a rectangular pipe with a cross section 320 x 270 mm. Connection is to the bottom right or bottom left - not to the top!
2	Central extraction adapter	3451640	Connection to the central exhaust air channel
3	Corrugated pipe ( $\varnothing$ 250 mm, 6 m length, fle- xible, grey) including 2 hose clips	3400580	-
4	orrugated pipe connector piece ( $\varnothing$ 250 mm)	3400670	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset 250 \text{ mm})$	3450350	Connection of the corrugated pipes, e.g. to a canal

#### **Electrical connections**

Mains supply line	available
Electr. control line	Connection made on external contact point of the sunbed
Line for external music and channel selection	-

#### Sound system

		Article No.	Notes
Audio package	0	-	
Loudspeaker set	М	3460010	

M = plus surcharge

o = not available

## Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401070	With chip card terminal
MCS IV plus	3401050	With electronic coin tester
MCS VI	3401020	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

# Air conditioner (not available)

No air conditioner can be supplied with this device model.





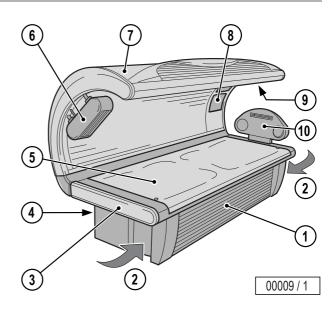
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## **Device descripition**

- 1. Sunbed base
- 2. Inlet air (Air inlet for cooling the equipment)
- 3. Feet end
- 4. Central air outlet vent
- 5. Acrylic glass panel lower part
- 6. Surround fan (feet end)
- 7. Sunbed canopy
- 8. Face tanner
- 9. (UV high-pressure lamps)
- 10. Operating elements
- 11. Surround fan (head end)



# **Technical Data**

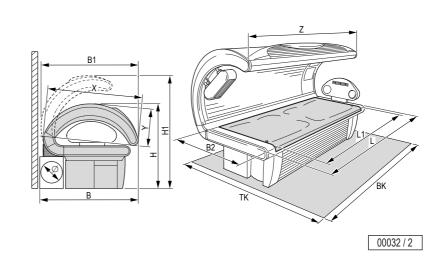
Electrical data	
Nominal power consumption:	6200 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
UV low pressure lamps	17 x 100 W
UV high pressure lamps	3 x 400 W
Lower part:	
UV low pressure lamps	15 x 100 W

Noise emission	
Acoustic pressure level:	74.0 db (A)
Inlet and exhaust air	
Temperature difference, supply/ exhaust air:	15 °C
Max. air requirement:	950 m³/h
Opt. ambient temperature:	25 °C
Max. ambient temperature:	40 °C
Max. inlet air temperature:	450 cm <sup>2</sup>
Exhaust cross section w/o exhaust system:	1300 cm <sup>2</sup>
Cabin inlet air cross section	490 cm <sup>2</sup>
Warm air return:	not possible

Ergoline

# Dimensions

В	1023 mm
B1	970 mm
B2	730 mm
L	2250 mm
L1	1885 mm
Н	1010 mm
H1	1250 mm
Х	970 mm
Y	420 mm
Z	1885 mm
Ø	250 mm
BK	2300 mm
ТК	2000 mm



# Maximum exhaust pipe length

Calculation base (without additional ventilator):	
Back pressure	100 Pascal
Air pressure	100,000 Pascal
Air temperature	40 °C
Density	1.112 kg/m <sup>3</sup>
Dynamic inertia of the air	1.92E-05 Pa x s

Corrugated pipe ∅	Roughness (at centre) k <sub>absolute</sub>	Flow volume	Loss co	efficient	90° bend in line (metal)	Permissible length of straight line
mm	mm	m³/h	of pipe	of bend	pieces	m
250	8	8 950	0.182 <sup>1)</sup> 0.21 <sup>1)</sup>	0	8	
				0.211)	1	6
					2	4
					3	2

1) zeta value (ζ)



#### **Equipment cooling**

To cool the sunbed, cabin or studio air (inlet air) is drawn in at the head and feet ends of the sunbed base (1).

The inlet air is first cleaned in a filter, then fed past the hot UV low-pressure and highpressure lamps and finally expelled on the left or right as warm exhaust air via the central exhaust air bracket (2).

# Surround cooling

The body air for the person using the sunbed is supplied via fans at the head end (4) and feet end (3) by means of an incremental control device.

For this purpose the cabin or studio air is drawn in via air inlet slots and supplied to the user via outlet nozzles.



02889 / 1

00010 / 1



#### **Exhaust air accessories**

The appropriate corrugated pipe is 250 mm in diameter. With pipe lengths in excess of 4 meters, you will require an additional fan.

The size of the additional fan depends on the overall length of the exhaust channel passage and the number of sunbeds connected. For further advice, please consult your ventilation technician!

We offer various accessories that permit easier connection to a central exhaust system or to the individual device exhaust lines.

ltem	Accessory parts	Article No.	Notes
1	Central exhaust air bracket, galvanized steel plate; length 952 mm, height 315 mm, depth 280 mm	3400570	Direct connection possibilities of a Ø 250 mm circular corrugated pipe or a rectangular pipe with a cross section 320 x 270 mm. Connection is to the bottom right or bottom left - not to the top!
2	Central extraction adapter	3451640	Connection to the central exhaust air canal
3	Corrugated pipe ( $\varnothing$ 250 mm, 6 m length, fle- xible, grey) including 2 hose clips	3400580	-
4	Corrugated pipe connector piece $(\emptyset 250 \text{ mm})$	3400670	For connecting two corrugated pipes
5	Connector bracket for corrugated pipe $(\emptyset 250 \text{ mm})$	3450350	Connection of the corrugated pipes, e.g. to a canal

## **Electrical connections**

Mains supply line	available
Electr. control line	Connection made on external contact point of the sun- bed
Line for external music and channel selection	-

#### Sound system

		Article No.	Notes
Audio package	0	-	
Loudspeaker set	М	3460010	

M = plus surcharge

o = not available



## Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401070	With chip card terminal
MCS IV plus	3401050	With electronic coin tester
MCS VI	3401020	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

# Air conditioner (not available)

No air conditioner can be supplied with this device model.



# Planning Manual



Ultra

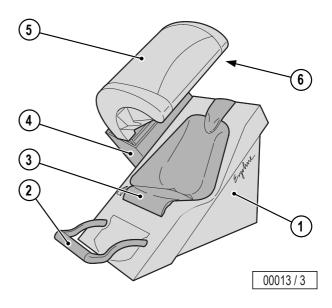
**Classic 8000 Ultra** 

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Device descripition 2
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Planning example 3
Equipment cooling 4
Surround cooling 4
Exhaust air accessories 4
Electrical connections 5
Sound system 5
Controls 5
Air conditioner (not available) 5

# **Device descripition**

- 1. Sunbed base
- 2. Adjustable footrest
- 3. Ergonomic bucket seat
- 4. Central air outlet vent
- 5. Sunbed canopy (with UV high-pressure lamps and surround air)
- 6. Control panel



# **Technical Data**

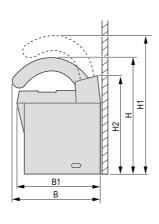
Electrical data	
Nominal power consumption:	5500 W
Nominal voltage:	400 – 415 V ~3N
Nominal frequency:	50 Hz
Rated fusing:	3 x 16 A (time-delay)
Performance:	
Canopy:	
Face tanner	
UV high pressure lamps	6 x 500 W
Hand tanner	
UV high pressure lamps	2 x 280 W

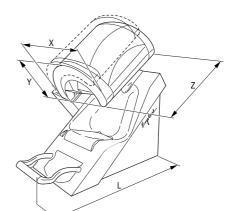
Noise emission	
Acoustic pressure level:	57.5 db (A)
Inlet and exhaust air	
Temperature difference, supply/ exhaust air:	8 °C
Max. air requirement:	1200 m³/h
Opt. ambient temperature:	25 °C
Max. ambient temperature:	40 °C
Max. inlet air temperature:	430 cm <sup>2</sup>
Exhaust cross section w/o exhaust system:	2200 cm <sup>2</sup>
Cabin inlet air cross section	not possible

Ergoline

#### Dimensions

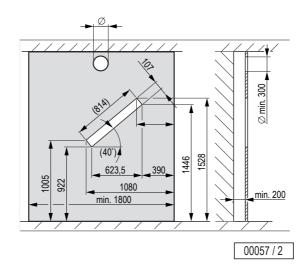
В	1350 mm
B1	1120 mm
L	1710 mm
Н	1730 mm
H1	2010 mm
H2	1460 mm
Х	1200 mm
Y	500 mm
Z	890 mm
Ø	300 mm
BK	2000 mm
ТК	2000 mm





00034 / 4

**Classic 8000 Ultra** 



## **Planning example**

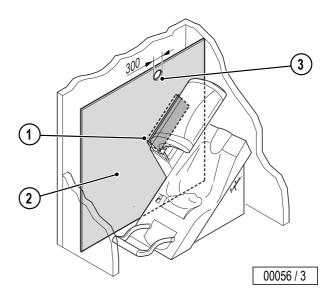
A central air exhaust is only possible via a connection to a socalled double rear wall.

This intermediate wall (2) with exhaust air connection (1) (e.g. chipboard) is designed to fit directly against the rear side of the sunbed and serves as a channel for the exhaust air upwards, if required up to a hanging ceiling.

The corresponding dimensions of such a rear wall for cutting, as well as its positioning, can be taken from the Chapter "Dimensions". Warm air recycling to the studio air conditioning is not provided with this type of tanning equipment.

- 1. Exhaust air connection
- 2. Intermediate wall (e.g. pressed chip board)
- 3. Connection for exhaust air hose

The additional exhaust air connection is required as a necessary accessory in a double rear wall (see Chapter "Exhaust air accessories").





(3)

(2)

#### Equipment cooling

To cool the equipment, cabin or studio air is drawn in beneath the front panel (1) and at the front edge of the sunbed canopy (3) (inlet air).

The air is first cleaned in a filter package, then fed past the hot UV high-pressure lamps and finally expelled as warm air via the exhaust air nozzles (2) at the rear of the sunbed.

## **Surround cooling**

Surround air is supplied to the user via an infinitely adjustable fan in the canopy (3) of the partial tanner.

Cabin or studio air is drawn in via air inlet slots on the outside of the sunbed canopy (3) and then fed towards the face and upper body of the user via an asymmetrically arranged, adjustable outlet nozzle.

#### **Exhaust air accessories**

Exhaust air can only be connected to a central exhaust air system via a double rear wall.

		24/2
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ltem	Accessory parts	Article No.	Notes
1	Exhaust air connection to connection on double rear wall	3451860	Without warm air recycling



02909 / 1

(1)

00014/3

## **Electrical connections**

Mains supply line	Provided
Electr. control line	approx. 1000 mm
Line for external music and channel selection	approx. 500 mm

# Sound system

		Article No.	Notes
Audio package	M 3452050	3452050	Audio unit; volume control and channel selection switch are integrated in the control cockpit
Loudspeaker set		-	

M = plus surcharge

## Controls

Control	Article No.	Notes
MCS III plus hand-held remote control	3401060	With chip card terminal
MCS IV plus	3401040	With electronic coin tester
MCS VI	3400970	With electronic coin tester + chip card terminal
Studiopilot	3400990	With electronic coin tester + chip card terminal
Studio-Manager	3452900	Software

## Air conditioner (not available)

No air conditioner can be supplied with this device model.

# Contents

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Inlet and exhaust connection with and without double rear wall	3
Inlet and exhaust air connection via a hanging studio ceiling with a separate exhaust air ducting	5
Inlet and exhaust air connection via a hanging studio ceiling without an exhaust air ducting system	6



#### **Planning requirements**

# Points that you must observe when planning inlet air and exhaust air ducting in the studio.

When planning ventilation in the studio, you must ensure that the required air throughput for each piece of equipment is constant over the entire tube or hose system and is not reduced by obstructions.

To support the flow of exhaust air throughput, it may be necessary to take an additional fan in the system into account, if applicable (see calculation example for design of additional fan).

The inlet air temperature must not exceed 40  $^\circ\text{C}.$  Temperatures in excess of 40  $^\circ\text{C}$  could impede the operation of the sunbed.

Additional filtering of the inlet air is especially recommended.

There are 3 possible inlet and exhaust air assembly variants for Ergoline sunbeds. The following planning examples can be applied to all Ergoline sunbeds contained in the sunbed range presented in this Planning Manual. Additional information is a given in the respective device descriptions for devices that make special requirements on installation. When fitted with the correct central bracket for inlet and exhaust air, Ergoline sunbeds can also be operated with a free air outlet, i.e. without being connected to a ventilation system in the studio.

Installing "exhaust air ducting via a suspended ceiling and with a double rear wall" is an optically elegant solution without using the central exhaust air bracket.

If you want to use hot air recirculation in conjunction with an exhaust duct, the exhaust duct cannot be routed above a suspended ceiling.



#### Caution!

Before putting a tanning device into operation, the transport pallet must be removed from under the tanning unit. Installation on the transport pallet may result in damage to the device due to obstruction of the air routing.

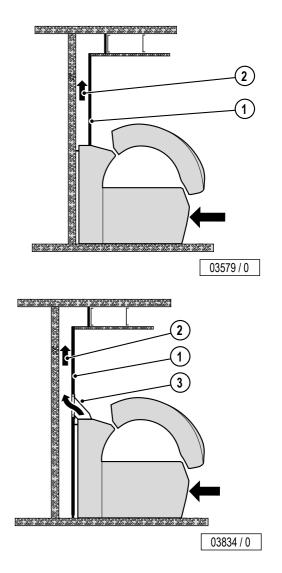
Ergoline

#### Inlet and exhaust connection with and without double rear wall

#### With double rear wall

Without exhaust-air adapter: An intermediate wall (1) (e.g. chipboard) tightly enclosing the sunbed at the rear serves as an upward channel for the exhaust air (2), if required right up to the hanging ceiling. So that the exhaust air is properly extracted, a slight vacuum is required behind the intermediate wall (1); an auxiliary fan must be installed if necessary.

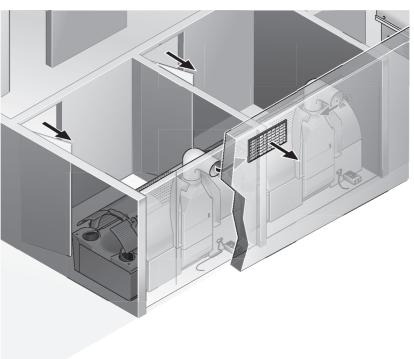
This installation variant is used mostly for single devices.



With exhaust air adapter: A cut-out is mounted on the intermediate wall. A rubber profile on the exhaust-air adapter (3) ensures an air-tight seal on the intermediate wall.

#### Variant A, transverse ventilation:

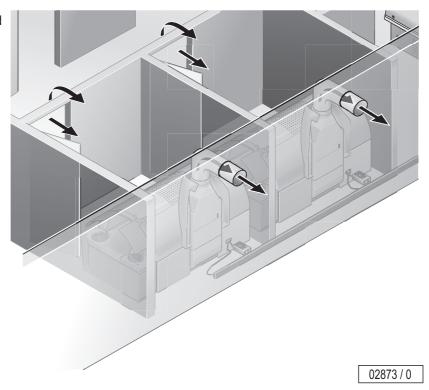
The equipment exhaust air (2) is fed upwards through the exhaust air channel (space behind the double rear wall, approx. 15 cm) underneath the studio ceiling and is expelled there through opposing exhaust air openings.



02872/0

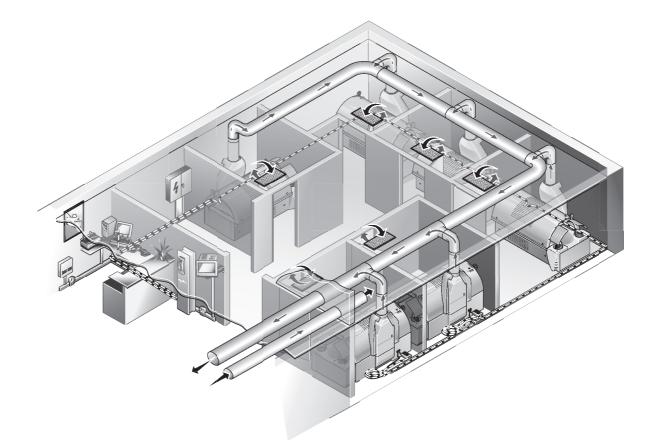
#### Variant B, direct exhaust air:

The equipment exhaust air (2) is channelled directly outside through the exterior wall.



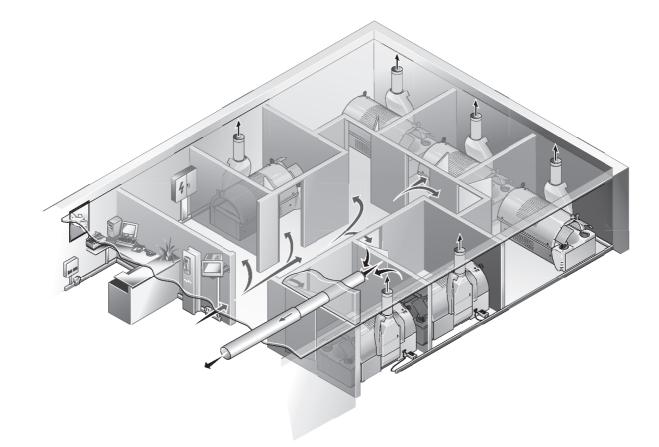


Inlet and exhaust air connection via a hanging studio ceiling with a separate exhaust air ducting



To utilise all the benefits of the innovative ventilation concept of Ergoline sunbeds and to prevent the unnecessary heating of the studio, we recommend that the inlet air for cooling the air conditioning units be supplied from outside via a filtered (as air-tight as possible) hanging ceiling and that the exhaust air be expelled to the outside via a separate hose or duct system.

Exhaust air connection is made using a separate, heat-insulated ducting system (1) inside a hanging studio ceiling. The space in between the room ceiling and the hanging ceiling serves as a channelling space for the equipment inlet air. Inlet and exhaust air connection via a hanging studio ceiling without an exhaust air ducting system



If Ergoline sunbeds are connected with the exhaust air ducting to a hanging studio ceiling without a separate exhaust air ducting system (i.e. the space in between is all that is used for exhaust air transport!), the required inlet air must be supplied from the studio ambient air. In such cases, it is imperative that you ensure that the inlet air is not drawn in from the warm air in the studio ceiling area as this could result in the maximum permissible temperature of 40 °C being exceeded.



02876/0

# Contents

Connection options 2
Connection to Compatible Time Control Devices (Open Sun, Classic)
Connection to Compatible Time Control Devices (Excellence, Evolution, Advantage, Ambition, Lounge)
Connection to Ergoline Coin Boxes (Open Sun, Classic)
Connection to Ergoline Coin Boxes (Excellence, Evolution, Advantage, Ambition, Lounge) 5



## **Connection options**

The Ergoline sunbeds can be connected either to a remote control or a coin box. It is also possible to connect them to time controls from other suppliers.



Caution!

- The device operating time must be dual controlled with a timing device to the standards EN 60335-2-27 and A1 2000 Section 22.108 and 22.109.
- In the case of failure of the controls, it must be ensured that the sunbed is automatically switched off at the most after <110% of the selected tanning time.</li>
- If a timer with a longer running time is used, this can result in injuries to the skin, and in the long run in skin disease.

Depending on the sunbed, some change-overs will be necessary for connection to the various control devices. For further information on this subject, please refer to the descriptions of the respective sunbeds.



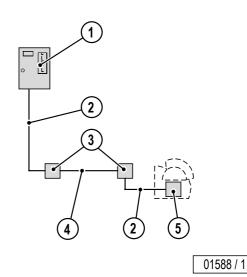
### **Connection to Compatible Time Control Devices (Open Sun, Classic)**

When connecting a compatible time control, the voltage must be supplied from the sunbed.

The sunbed must only be operated with timer control, 30 minutes max. running time. The control scale on the timer must match the time recommended in the tanning program.

#### Legend:

- 1. Coin device without microprocessor
- 2. Flexible control line H 05 VV F 7 G 1.5
- 3. Socket
- 4. Installed control line NYM 7 x 1.5 mm<sup>2</sup>
- 5. Plug (Art. No. 70010440 / Part No. 10440)



Connection to Compatible Time Control Devices (Excellence, Evolution, Advantage, Ambition, Lounge)

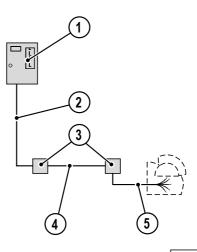
The wiring is connected directly to the connection terminals of the sunbed.

When connecting a compatible time control, the voltage must be supplied from the sunbed.

The sunbed must only be operated with timer control, 30 minutes max. running time. The control scale on the timer must match the time recommended in the tanning program.

#### Legend:

- 1. Coin device without microprocessor
- 2. Flexible control line H 05 VV F 7 G 1.5
- 3. Socket
- 4. Installed control line NYM 7 x 1.5 mm<sup>2</sup>
- 5. Plug (Art. No. 70010440 / Part No. 10440)



03584 / 0

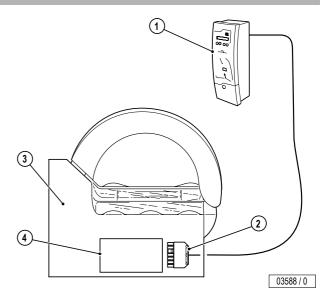
#### Connection to Ergoline Coin Boxes (Open Sun, Classic)

Should the service cable for the coin device with microprocessor be extended, a flexible and shielded control line (8 x 0.5 mm<sup>2</sup> Art. No. 70060740 / Part No. 60740) should be laid.

For further information for installation of coin devices and accessories that can be supplied, please refer to the individual device descriptions.

#### Legend:

- 1. Coin device with microprocessor
- 2. Plug (Art. No. 70010683 / Part No. 10683)
- 3. Tanning device
- 4. Parts support (controller)





#### Connection to Ergoline Coin Boxes (Excellence, Evolution, Advantage, Ambition, Lounge)

The plug (3) on the coin device (1) must be removed if necessary. The control cable (2) is connected directly to the connection strip (5) of the sunbed. The red and the black wires (4) are to be insulated individually.

Should the service cable for the coin device with microprocessor be extended, a flexible and shielded control line (8 x  $0.5 \text{ mm}^2 \text{ Art. No. } 70060740 / \text{Part} \text{ No. } 60740$ ) should be laid.

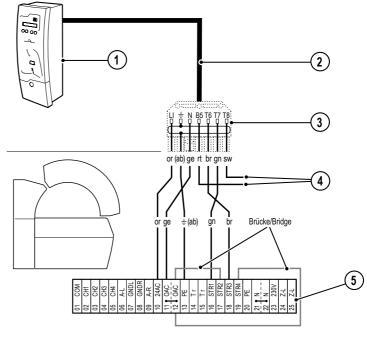
For further information for installation of coin devices and accessories that can be supplied, please refer to the individual device descriptions.

#### Legend:

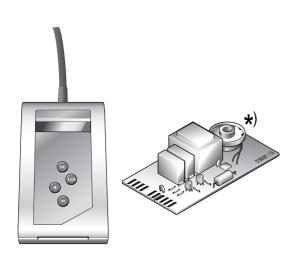
- 1. Coin device with microprocessor
- 2. Flexible, shielded control cable (10 m) included as standard equipment
- 3. Plug
- 4. Wires to be insulated (red and black)
- 5. Connection strip in sunbed

#### Wires:

- sw black
- gn green
- br brown
- rt red ge – yellow
- or orange
- ab shielding



03470 / 1



\*) The circuit board performance MCS is the interface between the hand-held remote control and the professional sunbed devices from Ergoline without inherent electronics (Ergoline 200/300, Classic 200/300).

# Article No.: 3401060

without performance circuit board

# Article No.: 3401070

with performance circuit board\*)

# Contents

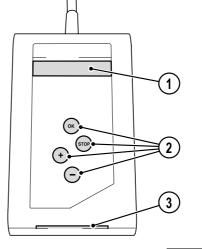
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Connection diagram for Excellence, Evolution, Advantage, Ambition, Lounge	



#### **Device descripition**

- 1. Display
- 2. Operating keys
- 3. Chip card slot

Dual safety cutout switch to standards EN 60335-2-27 and A1 2000 sections 22.108 and 22.109



04178/0

## **Technical Data**

Equipment:	Relay control for connection to a sunbed, with chip card reader
Operating voltage:	Supply from the respective sunbed with a 7-pole plug / direct connection
Colour:	Techno Grey
Max. ambient temperature:	0 to 40 °C
Max. relative air moisture content:	70 %
Max. storage temperature:	0 to 50 °C
Dimensions [mm]: width x height x depth	100 x 180 x 36

## Accessories

#### Accessories supplied

Accessories	Article / Part No. Notes
Master Card (1 piece)	-
Control line (5 m)	Connector plug (extra-low voltage)

Ergoline

# Connection diagram for Open Sun, Classic

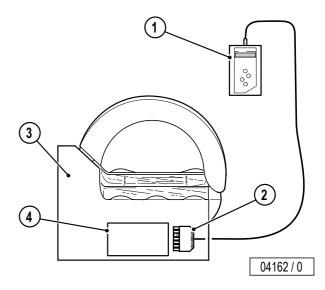
#### Legend:

- 1. Remote control with microprocessor
- 2. Plug
- 3. Sunbed
- 4. Parts support (controller)



## Caution!

The green/black plug may only be used on the Ergoline hand-held remote control.





## Connection diagram for Excellence, Evolution, Advantage, Ambition, Lounge

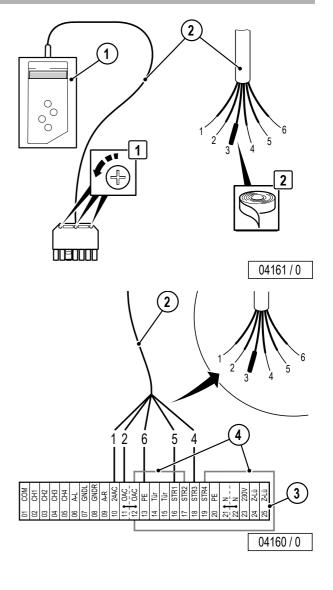
The plug on the hand-held remote con-trol (1) must be removed. The control cable (2) is connected directly to the connection strip (3) of the sunbed. The white wire is to be insulated.

#### Legend:

- 1. Hand-held remote control with micro-processor
- 2. Connection cable (control line)
- 3. Bridge
- 4. Connection strip in sunbed

#### Wires:

- 1
- pink yellow 2 3
- white
- 4 brown
- 5 6 – green – green-yellow



Ergoline





For automatic power systems, the ICS unit is the chip card terminal for a fair and comprehensible calculation: It calculates individually the credits to be deducted for the tanning performance determined personally.

The ICS should preferably be installed in a cabin for controlling an APS tanning system, but it can also be added to universal control systems in a databus.

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Dimensions of ICS 4
Assembly variations 4
Connection diagram 6



#### **Device descripition**

- 1. Display
- 2. Buttons input confirmation (OK) and abort (Stop)
- 3. Adjust buttons (+/-)
- 4. Chip card entry<sup>1)</sup>
- Not shown: Connection lines

Dual safety cutout switch to standards EN 60335-2-27 and A1 2000 sections 22.108 and 22.109

 Chip card (customer) Studio card (Studio personnel) Master card (Studio operator)

#### **Technical Data**

Equipment:	Supply over external power supply
Operating voltage:	24 V AC
Colour:	Light silver matt
Max. ambient temperature:	0 to 40 °C
Max. relative air moisture content:	70 %
Max. storage temperature:	0 to 50 °C
Connections for external devices:	none
Dimensions [mm]: width x height x depth	132 x 200 x 122
Weight:	2.5 kg

#### **ICS unit functions**

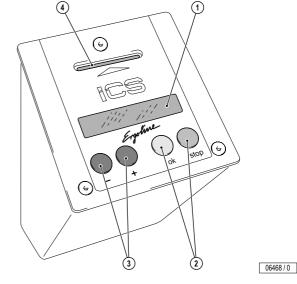
Please consult the sale documents for additional information on the functions provided by the ICS unit.

#### Control unit for APS tanning systems

- · Operation by the client using chip card payment
- Controls APS tanning systems in "Time"or "Dose" mode
- · Databus capable
- · Direct control of a tanning system possible
- Installation preferably in the cabin

#### Counter terminal (loading station for chip cards at the counter)

- · For direct loading and reading of chip cards by studio staff
- No tanning system control
- · Installation without a databus connection at the counter possible
- Databus capable



Ergoline

## Accessories

# **Accessories Supplied**

Accessories	Part no.	Notes	
Master card (1 unit)	-		
Studio card (1 unit)	TN 11673		
Operating instructions	TN 834678		
Assembly instructions/drilling template	TN 842723		
5 m lead	TN 61439	Direct connection without plug	
Power supply unit	TN 12180		

## Accessories (plus surcharge)

Article no.	Notes	
-	Only one card required per studio. If the Master card is lost, please contact Customer Service	
3401010	10 Pieces (Personnel card)	
3400950	100 Pieces per unit	
3452470	400 Pieces per unit	
3800050	100 Pieces per unit	
3452910		
3452380		
3451040	per 100 metres	
3400610	8 x 0.56 mm <sup>2</sup> per running meter	
	- 3401010 3400950 3452470 3800050 3452910 3452380 3451040	

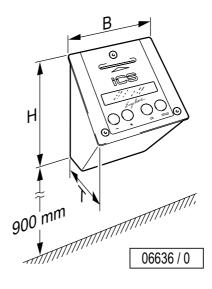
# Accessories from the dealership

Accessories	Article no.	Notes
Cable duct, e.g. LF, halogen-free	-	Manufacturer: Tehalit www.tehalit.com

#### **Dimensions and mounting**

#### **Dimensions of ICS**

- H: 200 mm
- B: 132 mm
- T: 122 mm



## Assembly variations

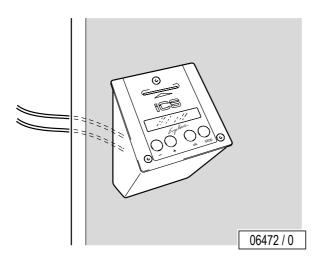
The system must be assembled only on a solid wall. Consult the assembly instructions for detailed information (Order no. 842723).



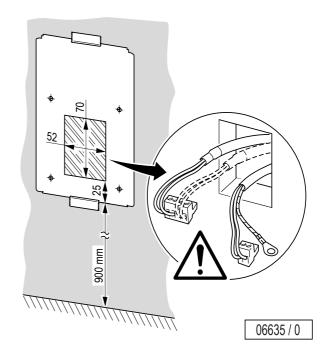
#### Note!

As a power supply unit is used, a socket in the immediate vicinity is necessary. Power supplied via the tanning system is not allowed!

#### Assembly variations: On the wall, cable bushing through the wall

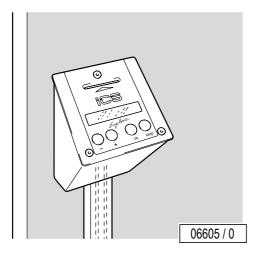


When assembling on the wall, please allow for the corresponding cable bushing:



Ergoline

Assembly variations: On the wall, cable bushing on the plaster



No cable bushing is necessary in this case. We recommend covering the cable with a cable duct.



#### **Connection diagram**

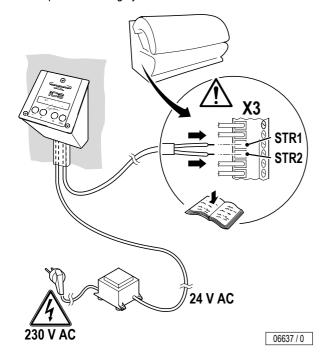
The ICS unit is usually connected directly to a tanning system, but it can also be operated in a network alongside other coin systems or studio pilots.

#### **Connection requirements:**

The ICS unit can **only** be connected in conjunction with tanner interface 2. Tanner interface 1 is not compatible. Please consult the assembly instructions which accompany the ICS unit for details.

# **Connection as control unit – terminal unit** (in a databus or connected directly to the tanning system):

The connection is made through the X3 terminal on the connection strip in the tanning system.



# Connection as control unit in a databus – not as terminal unit:

For other modes of connection, refer to the wiring diagram on the control box or ask the Customer Service department for information.

#### Connection as counter terminal

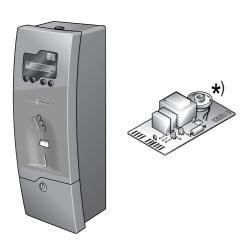
The ICS unit is either incorporated into a databus: Connection is the same as connection as a control unit.

Or the ICS unit is operated in isolation without a tanning system: In this case, no connection is made.

# Note!

If it is used as a counter terminal in a databus, you must set a cabin number in the ICS which is unoccupied (see operating instructions for the ICS unit).

Ergoline



\*) The circuit board performance MCS is the interface between the hand-held remote control and the professional sunbed devices from Ergoline without inherent electronics (Ergoline 200/300, Classic 200/300).

# Article No.: 3401040

without performance circuit board

# Article No.: 3401050

with performance circuit board\*)

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Connection diagram for Excellence, Evolution, Advantage, Ambition, Lounge	



## **Device descripition**

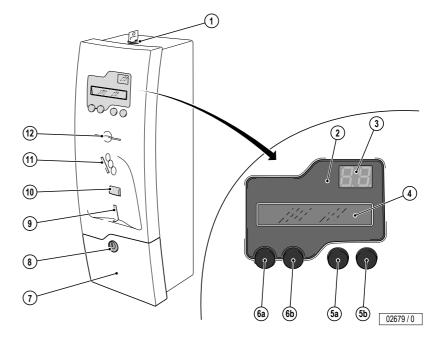
- 1. Housing lock; simultaneous switching from operation to the menus (info, service, config.)
- 2. Control panel
- 3. Time display (remaining time)
- 4. Text display
- 5a Button input confirmation (T3)
- 5b Button abort (T4)
- 6a Adjust button (T1)
- 6b Adjust button + (T2)
- 7. Coin box
- 8. Coin box lock
- 9. Coin return slot
- 10. Coin return button
- 11. Coin insert<sup>1)</sup>
- 12. Chip card slot w/o function
  - 1) 0.5, 1 and 2 Euro coins; tokens (27 mm brass tokens)

Not shown: Mains supply line

Dual safety cutout switch to standards EN 60335-2-27 and A1 2000 sections 22.108 and 22.109

#### **Technical Data**

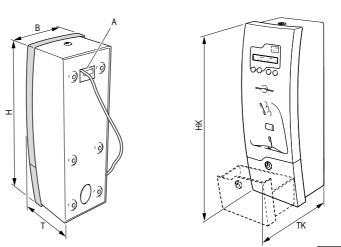
Equipment:	with electronic coin tester
Model:	Relay control for connection to a sunbed
Assembly/Positioning:	Wall-mounting/flush-mounting
Coin box removal:	Lockable coin box at device or central connection by means of coin tube
	Note! When a coin tube is connected, the tube for catching the coins must be led through the rear wall of the coin drawer. Rated break points are predetermined (see installation instructions Part No. 86866).
Operating voltage:	Supply from the respective sunbed with a 9-pole plug
Colour:	Light silver matt
Max. ambient temperature:	0 to 40 °C
Max. relative air moisture content:	70 %
Max. storage temperature:	0 to 50 °C



Ergoline

## Dimensions

Height	Н	[mm]	475
Width	В	[mm]	165
Depth	Т	[mm]	162
	ΗK	[mm]	480
Space requirement	ΤK	[mm]	170
Connection control line	А		
Weight (without coins)		[kg]	7.4



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## Accessories

# Accessories supplied

Accessories	Article / Part No. Notes	
2 Keys for the housing	_	
2 Keys for the coin box	_	
Drilling template	86820	
Operating instructions	800068	
Installation instructions	86866	
Mains supply line	61439	

# Accessories (plus surcharge)

Accessories	Article / Part No.	Notes	
Brass tokens for coin devices	3400530	50 Pieces per unit	
Extension for connecting line	3400610	8 x 0.5 mm <sup>2</sup> per running meter	
Plug and socket part	3400540	For connecting the extension lead to the connecting line.	
Coin tube	3401030	For connecting to a central coin collecting box.	
Special accessories	3452340	For connecting the coin device to tanning devices of other manufacturers.	

#### Installation Dimensions

You can choose between the following installation variants:



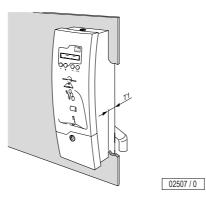
#### Installation variation Against the wall

The installation of the box must only be undertaken against a solid (e.g. brick) wall.

Detailed information can be found in the installation instructions (Part No. 86866).

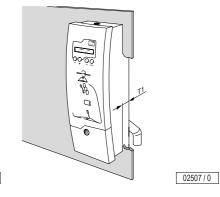
When installing against the wall, please make sure that a corresponding cable feed is available.

- 1. Cable feed in the wall
- 2. Cable feed in the rear wall of the coin housing
- H1 35 mm
- H2 38 mm



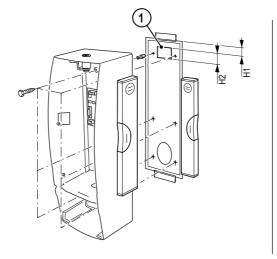
Installation variation In the wall

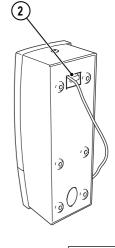
The maximum built-in depth T1 is 55 mm. When installing, ensure that there is a stable backing. Detailed information can be found in the installation instructions (Part No. 86866).



#### Installation variation In the tower

Further information can be found in the description of the tower.





Installation variation Tanning device

See Ergoline "Lounge".

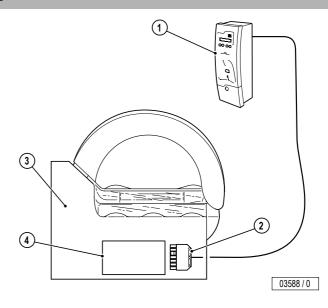
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Ergoline

#### **Connection diagram for Open Sun, Classic**

#### Legend:

- 1. Coin device with microprocessor
- 2. Plug (Art. No. 70010683 / Part No. 10683)
- 3. Sunbed
- 4. Parts support (controller))



## Connection diagram for Excellence, Evolution, Advantage, Ambition, Lounge

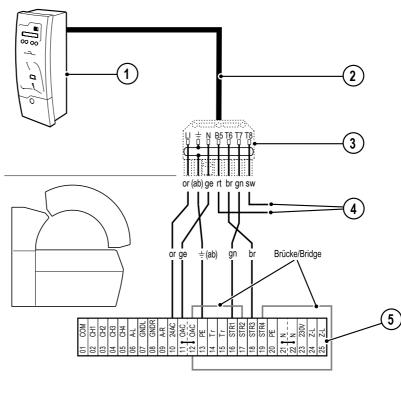
The plug (3) on the coin device (1) must be removed if necessary. The control cable (2) is connected directly to the connection strip (5) of the sunbed. The red and the black wires (4) are to be insulated individually.

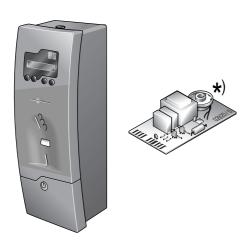
#### Legend:

- 1. Coin device with microprocessor
- Flexible, shielded control cable (10 m) included as standard equipment
- 3. Plug
- 4. Wires to be insulated (red and black)
- 5. Connection strip in sunbed

#### Wires:

- sw black
- gn green
- br brown
- rt red
- ge yellow
- or orange
- ab shielding





\*) The circuit board performance MCS is the interface between the hand-held remote control and the professional sunbed devices from Ergoline without inherent electronics (Ergoline 200/300, Classic 200/300).

# Article No.: 3400970

without performance circuit board

# Article No.: 3401020

with performance circuit board\*

# Contents

Device descripition 2
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Installation Dimensions
Connection diagram for Open Sun, Classic 5
Connection diagram for Excellence, Evolution, Advantage, Ambition, Lounge5



## **Device descripition**

- 1. Housing lock
- 2. Control panel
- 3. Time display (remaining time)
- 4. Text display
- 5. Buttons input confirmation (OK) and abort (Stop)
- 6. Adjust buttons (+/-)
- 7. Coin box
- 8. Coin box lock
- 9. Coin return slot
- 10. Coin return button
- 11. Coin insert<sup>1)</sup>
- 12. Chip card entry2)

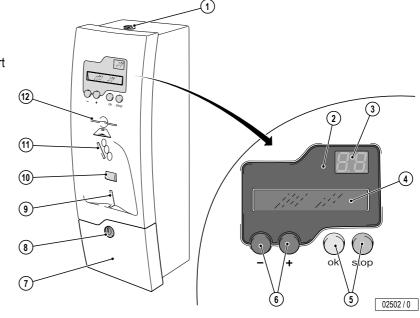
#### Not shown: Mains supply line

- 1) 0.5, 1 and 2 Euro coins; tokens (27 mm brass tokens)
- 2) For Chip Card (customer) Studio Card (Studio personnel) Master Card (Studio operator)

Dual safety cutout switch to standards EN 60335-2-27 and A1 2000 sections 22.108 and 22.109

#### **Technical Data**

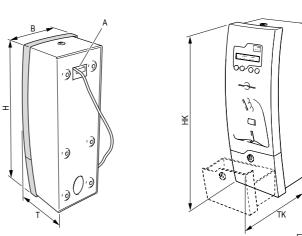
Equipment:	with electronic coin tester and chip card terminal
Model:	Relay control for connection to a sunbed
external connections:	Serial printer interface
Assembly/Positioning:	Wall-mounting/flush-mounting
Coin box removal:	Lockable coin box at device or central connection by means of coin tube
	Note! When a coin tube is connected, the tube for catching the coins must be led through the rear wall of the coin drawer. Rated break points are predetermined (see installation instructions Part No. 86866).
Operating voltage:	Supply from the respective sunbed with a 9-pole plug
Colour:	Light silver matt
Max. ambient temperature:	0 to 40 °C
Max. relative air moisture content:	70 %
Max. storage temperature:	0 to 50 °C



Ergoline

## Dimensions

Height	Н	[mm]	475
Width	В	[mm]	165
Depth	Т	[mm]	162
	ΗK	[mm]	480
Space requirement	ΤK	[mm]	170
Connection control line	А		
Weight (without coins)		[kg]	7.4



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**MCS VI** 

# Accessories

# Accessories supplied

Article / Part No. Notes	
-	
-	
-	
11673	
86820	
86821	
86866	
61439	
	- - 11673 86820 86821 86866

# Accessories (plus surcharge)

Accessories	Article / Part No.	Notes
Master Card (Info- and Service Card)	-	Only one card required per studio. If the Master Card is lost, please contact Customer Service.
Studio Card	3401010	10 Pieces per unit
Brass tokens for coin devices	3400530	50 Pieces per unit
Chip Cards with printed matter	3400950	100 Pieces per unit
Chip Cards with printed matter	3452470	400 Pieces per unit
Chip Cards without printed matter	3800050	100 Pieces per unit
Extension for connecting line	3400610	8 x 0.5 mm <sup>2</sup> , per running meter
Plug and socket part	3400540	For connecting the extension lead to the connecting line
Coin tube	3401030	For connecting to a central coin collecting box
Special accessories	3452340	For connecting the coin device to tanning devices of other manufacturers.

#### Accessories commercially available

If you wish to print out working, daily and total data, a receipt printer can be connected to the coin device.

A suitable printer, for instance is the Epson type LX-300+ (with serial interface or a fully compatible device.

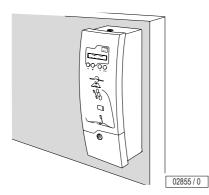
The printed must be adjusted to the settings given in the table for the coin device. Information of the printer settings can be found in the operating instructions for the printer.

#### Settings of the coin device interface

Function	Setting
Input buffer size	$\geq$ 1000 Byte
Word size	8 bit
Parity	none
Baudrate	19200 Baud
Software	ESC/P

#### **Installation Dimensions**

You can choose between the following installation variants:



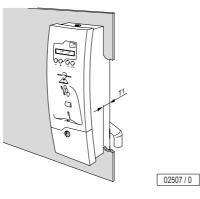
#### Installation variation Against the wall

The installation of the box must only be undertaken against a solid (e.g. brick) wall.

Detailed information can be found in the installation instructions (Part No. 86866).

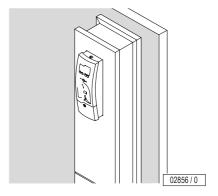
When installing against the wall, please make sure that a corresponding cable feed is available.

- 1. Cable feed in the wall
- 2. Cable feed in the rear wall of the coin housing
- H1 35 mm
- H2 38 mm



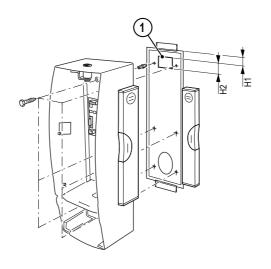
#### Installation variation In the wall

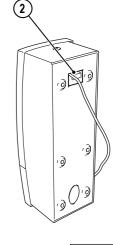
The maximum built-in depth T1 is 55 mm. When installing, ensure that there is a stable backing. Detailed information can be found in the installation instructions (Part No. 86866).



#### Installation variation In the tower

Further information can be found in the description of the tower.





00082 / 1

#### Installation variation Tanning device

See Ergoline "Lounge".

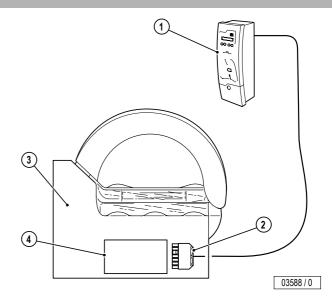
4 – Coin device MCS VI

Ergoline

#### **Connection diagram for Open Sun, Classic**

#### Legend:

- 1. Coin device with microprocessor
- 2. Plug (Art. No. 70010683 /
- 3. Part No. 10683)
- 4. Sunbed
- 5. Parts support (controller)



#### Connection diagram for Excellence, Evolution, Advantage, Ambition, Lounge

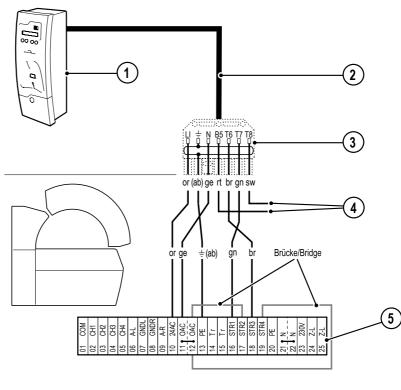
The plug (3) on the coin device (1) must be removed if necessary. The control cable (2) is connected directly to the connection strip (5) of the sunbed. The red and the black wires (4) are to be insulated individually.

#### Legend:

- 1. Coin device with microprocessor
- Flexible, shielded control cable (10 m) included as standard equipment
- 3. Plug
- 4. Wires to be insulated (red and black)
- 5. Connection strip in sunbed

#### Wires:

- sw black
- gn green
- br brown
- rt red
- ge yellow
- or orange
- ab shielded







The Studiopilot controls up to 20 sunbeds via a data Bus. With this Bus, the cabin occupation can be shown on a monitor and the sales data of the Sudiopilot can be transmitted to a PC database.

The Studiopilot is offered in various packages that contain different accessory components for networking your studio.

# Package 1: Article No.: 3452920

Package 2: Article No.: 3452930

# Contents

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Accessories (plus surcharge)	4
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## Package description

Quantity			Article No. / Part No.	-
Package 1			3452920	Ŀ
	Package 2		3452930	
		Component		
1	1	Studiopilot	3400990	
1	1	TV interface with power supply	3452380	
-	1	Studio-Manager software	3452900	
400	400	Chip Cards with printed matter, coloured	3452470	

#### Note!

The studio-manager may only be operated in conjunction with the accessories listed by Ergoline (computer and other hardware).

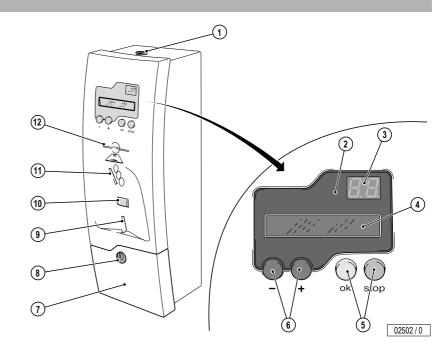
## **Device descripition**

- 1. Housing lock
- 2. Control panel
- 3. Cabin number or sunbed number
- 4. Text display
- 5. Buttons input confirmation (OK) and abort (Stop)
- 6. Adjust buttons (+/-)
- 7. Coin box
- 8. Coin box lock
- 9. Coin return slot
- 10. Coin return button
- 11. Coin insert<sup>1)</sup>
- 12. Chip card entry<sup>2)</sup>

#### Not shown: Connection line for Studiopilot

- 1) 0.5, 1 and 2 Euro coins; tokens (27 mm brass tokens)
- 2) For Chip Card (customer) Studio Card (Studio personnel) Master Card (Studio operator)

Dual safety cutout switch to standards EN 60335-2-27 and A1 2000 sections 22.108 and 22.109



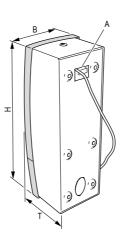


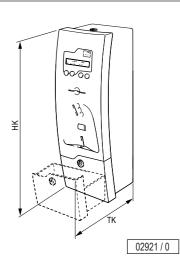
# **Technical Data**

Equipment:	with electronic coin tester and chip card terminal
Model:	Control of max. 20 sunbeds via data Bus. Cabin selection at monitor possible. Transfer of sales data to PC database (Studio Manager1)).
external connections:	Serial printer interface
Assembly/Positioning:	Wall-mounting/flush-mounting
Coin box removal:	Lockable coin box at device or central connection by means of coin tube
	Note! When a coin tube is connected, the tube for catching the coins must be led through the rear wall of the coin drawer. Rated break points are predetermined (see installation instructions Part No. 86866).
Operating voltage:	Supply over external power supply
Colour:	Light silver matt
Max. ambient temperature:	0 to 40 °C
Max. relative air moisture content:	70 %
Max. storage temperature:	0 to 50 °C

# Dimensions

Height	Н	[mm]	475
Width	В	[mm]	165
Depth	Т	[mm]	162
	ΗK	[mm]	480
Space requirement	ΤK	[mm]	170
Connection control line	А		
Weight (without coins)		[kg]	7.4





# Accessoires

# Accessories supplied

Accessories	Article / Part No. Notes	
2 Keys for the housing	_	
2 Keys for the coin box	_	
Master Card (1 piece)	_	
Studio Card (1 piece)	11673	
Drilling template	86820	
Operating instructions	86170	
Installation instructions	86866	
Mains supply line	61439	
Power supply	12180	

# Accessories (plus surcharge)

Accessories	Article / Part No.	Notes
Master Card (Info- and Service Card)	-	Only one card required per studio. If the Master Card is lost, please contact Customer Service
Studio Card	3401010	10 Pieces per unit
Brass tokens for coin devices	3400530	50 Pieces per unit
Chip Cards with printed matter	3400950	100 Pieces per unit
Chip Cards with printed matter	3452470	400 Pieces per unit
Chip Cards without printed matter	3800050	100 Pieces per unit
Extension for connecting line	3400610	8 x 0.5 mm <sup>2</sup> , per running meter
Plug and socket part	3400540	For connecting the extension lead to the connecting line
Coin tube	3401030	For connecting to a central coin collecting box
Special accessories	3452340	For connecting the coin device to tanning devices of other manufacturers.
Sunbed interface 1	3452370	Control for tanning devices (only Classic, Ambition, Advantage 350, Open Sun, other manufacturers)
Sunbed interface 2	3452910	Control for tanning devices (only Advantage 400, Lounge, Evolution, Excellence)
TV interface	3452380	Control modul for monitor or TV
Studio-Manager software	3452900	
Control line	3451040	per 100 metres
Tower Studiopilot	3452410	
Tower Desk	3452420	

#### Accessories commercially available

If you wish to print out working, daily and total data, a receipt printer can be connected to the coin device.

A suitable printer, for instance is the Epson type LX-300+ (with serial interface or a fully compatible device.

The printed must be adjusted to the settings given in the table for the coin device. Information of the printer settings can be found in the operating instructions for the printer.

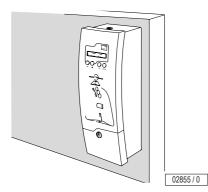
## Settings of the coin device interface

Function	Setting
Input buffer size	$\geq$ 1000 Byte
Word size	8 bit
Parity	none
Baudrate	19200 Baud
Software	ESC/P

02507 / 0

#### **Installation Dimensions**

You can choose between the following installation variants:



#### Installation variation Against the wall

The installation of the box must only be undertaken against a solid (e.g. brick) wall.

Detailed information can be found in the installation instructions (Part No. 86866).

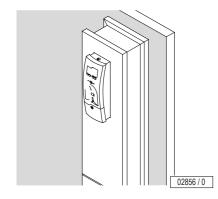
When installing against the wall, please make sure that a corresponding cable feed is available.

- 1. Cable feed in the wall
- 2. Cable feed in the rear wall of the coin housing
- H1 35 mm
- H2 38 mm



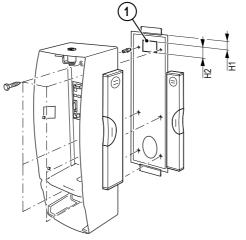
#### Installation variation In the wall

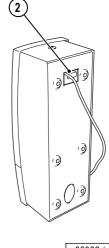
The maximum built-in depth T1 is 55 mm. When installing, ensure that there is a stable backing. Detailed information can be found in the installation instructions (Part No. 86866).



#### Installation variation In the tower

Further information can be found in the description of the tower.





#### Installation variation Tanning device

See Ergoline "Lounge".



### **Connection diagram**

The studiopilot can be networked, i.e. it can be connected to a data Bus and can control up to 20 sunbeds.

In addition a monitor can be connected to the data Bus for showing cabin occupation The monitor is connected to the Bus by means of a TV interface.

The sunbeds are connected via the socalled sunbed-interface with the studiopilots over the data Bus.

Also, several Studiopilots can be operated over a data Bus, for instance, to control two storeys of a studio.

As an option, there is the possibility of exchanging sales data with a PC database, e.g. the Ergoline Studio Manager, and to evaluate them on a customer-specific basis. For this purpose a PC interface for connection to your computer is available.

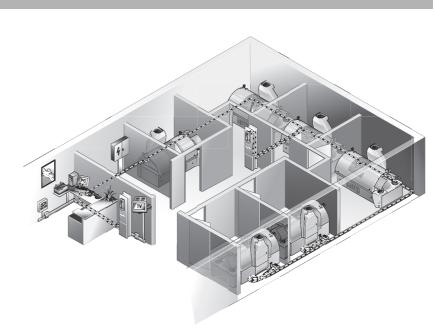
On the next page there is shown a planning example for a studio with

• 6 sunbeds

Studiopilot

- · 2 Studiopilots
- A monitor for showing the cabin occupation and selection, as well as
- A PC database (Ergoline Studio Manager) for managing the customer data and for evaluation of the sales data.

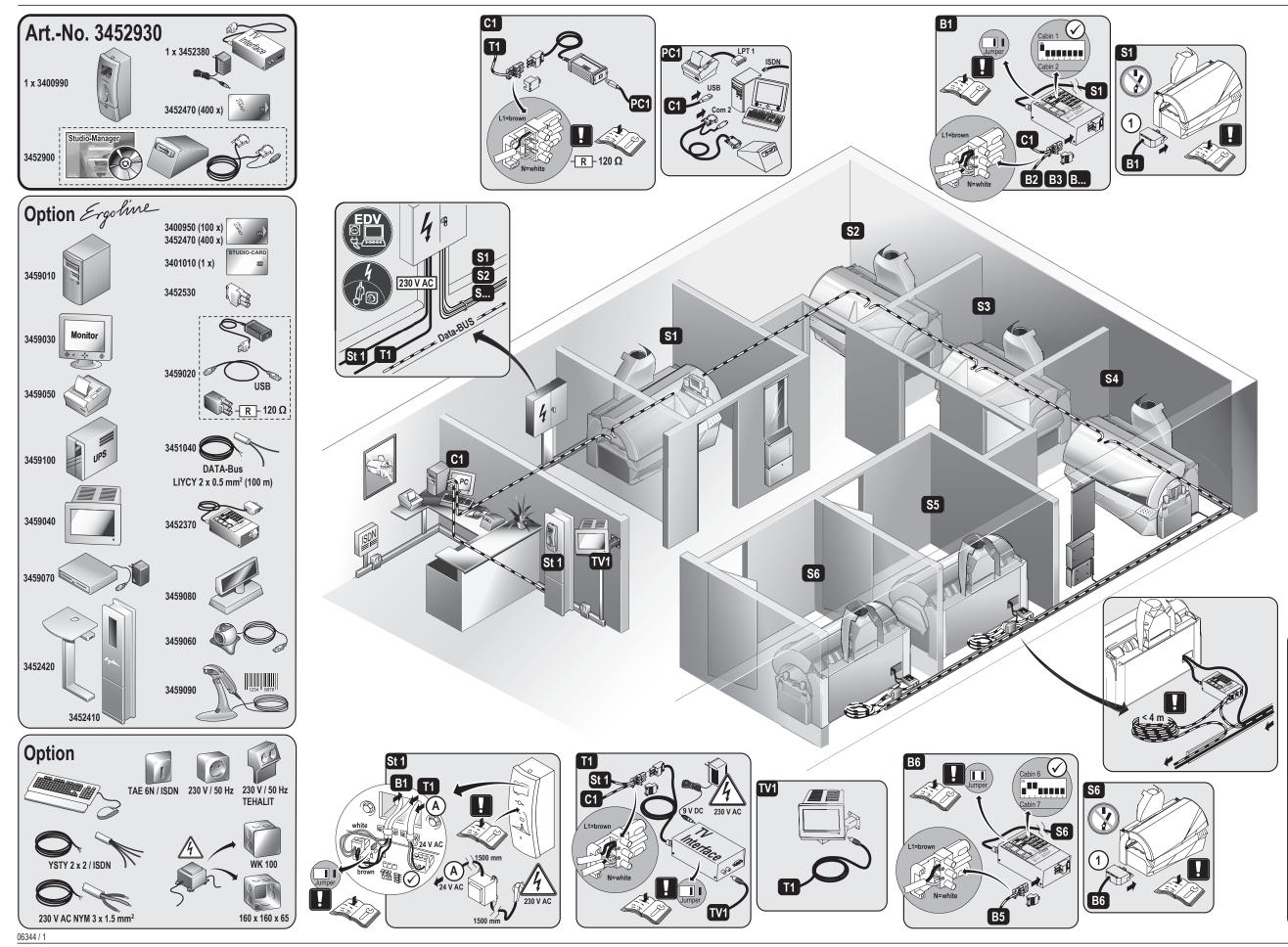
The required installation as well as the components required can be taken from this planning example.



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Ergoline

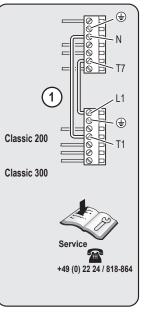
# **Planning Manual**



Ergoline

Lounge Advantage 350 Advantage 400 Advantage 400 APS Ambition 250 Evolution 500 Evolution 500 APS Evolution 600 Evolution 600 APS Evolution 575 Evolution IQ Excellence 700 Excellence 700 APS Excellence 800 Excellence 800 APS Excellence IQ





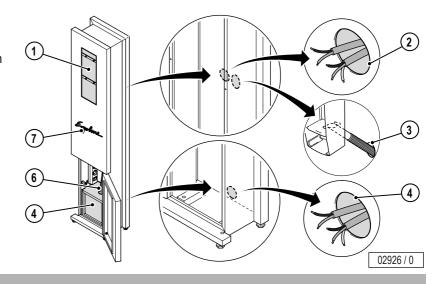


# Contents

Description – Tower	2
Description – Tower Desk	2
Technical Data – Tower	3
Dimensions	3
Assembly	4

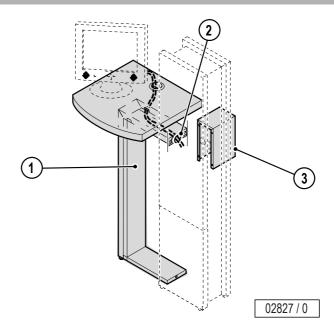
## **Description – Tower**

- 1. Installation space
- 2. Cable feed
- 3. Hole for coin tube for central connection
- 4. Cable feed
- 5. Safe
- 6. Coin tube from coin device in the safe
- 7. Decorative lighting



# **Description – Tower Desk**

- 1. Tower Desk
- 2. Cable feed
- 3. Cover for wall anchorin



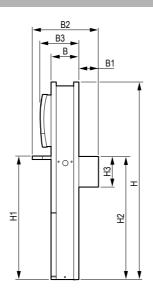


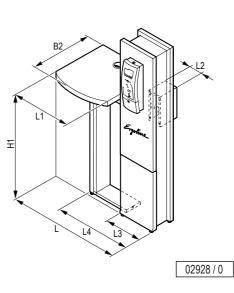
# **Technical Data – Tower**

Connections:	Plug strip for decorative lighting and coin device			
Assembly/Positioning:	ree-standing, anchored against the wall and to the floor			
Coin box removal:	Safe or central connection via coin tube			
	Note! When a coin tube is connected, the tube for catching the coins must be led through the rear wall of the tower. Rated break points are predetermined (see installation instructions Part No. 800192)			
Max. ambient temperature:	0 to 40 °C			
Max. relative air moisture content:	70 %			
Max. storage temperature:	0 to 50 °C			

# Dimensions

В	250 mm
B1	176 mm
B2	600 mm
B3	356 mm
L	1035 mm
L1	600 mm
L2	124 mm
L3	385 mm
L4	782 mm
Н	1780 mm
H1	1120 mm
H2	1116 mm
H3	280 mm

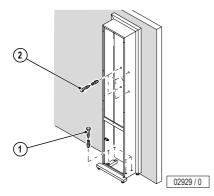




Tower / Tower Desk

## Assembly

The Tower must be fastened to the floor (1) and against the wall (2) in order to ensure stability.



If a Tower Desk is to be installed additionally, then the cover (1) between the Tower and wall must be installed and the Tower must be fixed to the floor (2) and against the wall (3).



Detailed information can be found in the installation instructions (Part No. 800192).

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Ergoline



The AQUA FRESH AROMA system consists of the functions AQUA FRESH and AROMA.

- The AQUA FRESH function sprays a fine liquid mist into the interior of the sunbed for body cooling.
- With the AROMA function aromas stream into the sunbed interior and the cabin.

The AQUA FRESH AROMA system is an optional extra that is not available as a retrofit kit. Please observe the capabilities of the respective tanning device during planning.

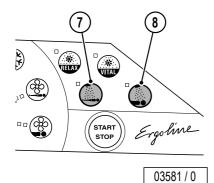
# Contents

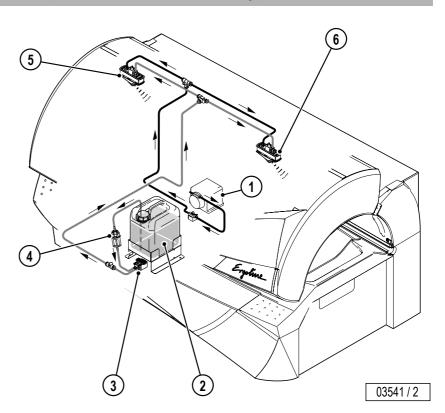
System description – AQUA FRESH (Evolution and Excellence only)	2
System description – AROMA system (Evolution and Excellence only)	2
Accessories	3



### System description – AQUA FRESH (Evolution and Excellence only)

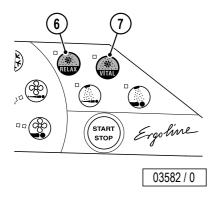
- 1. Intermediate tank
- 2. Air compressor
- 3. Reservoir tank
- 4. Pump
- 5. Aqua Fresh (body nozzle)
- 6. Aqua Fresh (head nozzle)
- 7. Operating element Aqua Fresh body nozzle
- 8. Operating element Aqua Fresh head nozzle

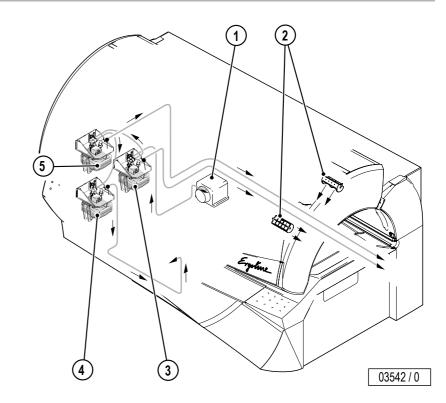




## System description – AROMA system (Evolution and Excellence only)

- 1. Air compressor
- 2. Aroma nozzles (between the facial tanners)
- 3. Aroma container (RELAX)
- 4. Aroma container (CABIN)
- 5. Aroma container (VITAL)
- 6. Operating element RELAX
- 7. Operating element VITAL







# Accessories

Accessories	Article / Part No.	Remark
AQUA SOLAR WITH SKIN⁺ ADDITIVE	365 1303	Canister with liquid for AQUA FRESH
Aroma "Relax"	365 2003	Aroma pot, 100 ml
Aroma "Vital"	365 2103	Aroma pot, 100 ml
Aroma "Cabin"	365 2203	Aroma pot, 100 ml

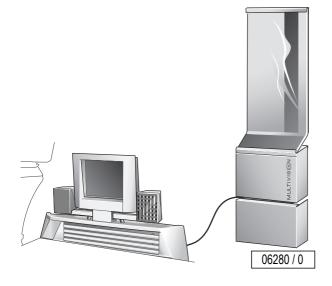
Can be ordered from:

JK-Licht GmbH Eduard-Rhein-Str. 3 53639 Königswinter Germany

🕿 +49 (0) 22 24 / 92 39-0

+49 (0) 22 24 / 92 39-24





MULTIVISION provides the complete range of TV programmes and sundry options for designing an individual programme with DVD or video content for the Excellence and Evolution production models.

This manual depicts the options and the required system crite-ria for configuring MULTIVISION to best suit your individual requirements and the technical possibilities.

MULTIVISION is offered in a range of packages which are designed for different TV reception modes.

# Contents

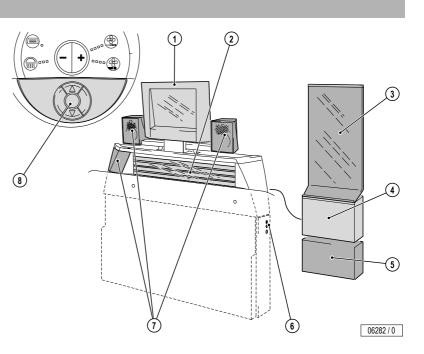
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# **MULTIVISION**

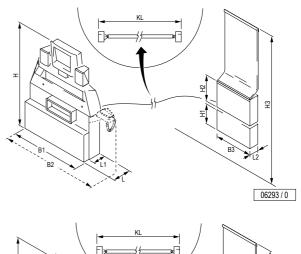
# **Device descripition**

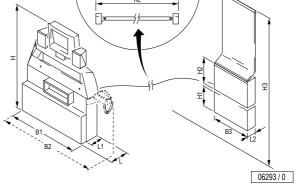
- 1. TFT monitor
- 2. Shoulder tanner
- 3. Acrylic mount for protection of the MULTIVISION box
- 4. MULTIVISION box (Control Unit)
- 5. DVD box for optional DVD drive
- 6. Headset socket
- 7. 3D sound unit with sub-woofer
- 8. Controls



# Dimensions

B1	760 mm
B2	996 mm
B3	430 mm
KL	3900* mm
Н	1005 mm
H1	270 mm
H2	340 mm
H3	1850 mm
L	200 mm
L1	133 mm
L2	97 mm
L3	L4 + 100 mm
BK1	BK + 100 mm
* with extensior	n: max. 8900 mm





## **Technical data**

Performance:	
Shoulder tanner	4 x 25 W (controlled via the tanning device) replaces production standard/optional shoulder tanner
MULTIVISION Box Nominal power consumption:	200 W (MULTIVISION box)
Nominal voltage:	~ 220 - 240 V
Nominal frequency:	50 Hz
Rated fusing:	10 A
Power supply:	MULTIVISION unit via the tanning device MULTIVISION box via jack plug optional: DVD box via USB or jack plug
Colour:	Light silver-matt
Max. ambient temperature:	0 to 40 °C
Max. relative humidity:	70 %
Max. storage temperature:	0 to 50 °C
Weight:	46.70 kg (with IQ sensor: 48.20 kg)

# Fittings and external connections

A MULTIVISION package comprises a MULTIVISION TV unit (with or without an IQ/APS system) and MULTIVISION box (matched to the TV receiver).

Multivision TV unit	Shoulder tanner, TFT monitor, 3D SOUND system (with swivelling loudspeakers and sub- woofer), separate controller (fitted to the tanning device controller), with sensor/base sta- tion for IQ or APS devices as required.
MULTIVISION box:	Control unit plus DVD box for housing an external DVD drive (optional), acrylic mount.
external connections to the MULTIVISION box:	PS/2 connections for service point, external DVD drive S-video connection for external video recorder or home DVD player TV connection (varies according to the MULTIVISION box fittings)



#### **TV** reception options

The following TV connection options are available:

#### **Digital Satellite Reception**

Digital satellite television (DVB-S) can be received all over Europe, regardless of location. The channel choice is immense at over 1000 channels; it also offers foreign language channels and niche programmes, which can offer benefits, according to the customer's layout.

As a rule, installation is more expensive than with other types of connection: The line-up of the satellite dish and its fitting (usually to the building) must be feasible. The MULTIVISION box acts as the satellite receiver.

## Digital terrestrial television

DVB-T (omni-directional television) is available in some conurbations and will in the foreseeable future replace analogue television via an antenna.

There are currently up to 24 channels available, but M-TV, VIVA and DSF are (still) not available in some areas!

## Analogue TV (cable/antenna)

Analogue reception is currently still available throughout Germany, but will in the future be replaced progressively by terrestrial television. ARD, ZDF, the third local channel and, occasionally, a few other programmes, are available.

With cable reception, the cable service provider offers you at least 30 German language channels, but cable reception is only an option where the area has been wired previously for cable TV. You will incur costs for using a cable connection.

MULTIVISION with analogue satellite TV or digital cable connection is not possible!

#### Which TV connection shall I choose for a new connection?

If there is no TV connection in the studio, then then following table provides a decision-making aid:

	Analogue antenna	*Digital antenna	Digital satellite	Analogue cable
External installation necessary?	Yes	Yes	Yes	No
For leases: Does the lessee require a licence?	Yes	Yes*	Yes	Yes
Restricted availability?	No	Yes, obviously	No	Yes
Connectable MULTIVISION units	Unrestricted with the relevant technology			
Can an external DVD player be connected via USB?	Yes			
Can S-video be connected via the S-video connection?	Yes			
Can an external DVD player be connected via the S-video connection?	Yes			
Channels	approx. 5	approx. 24	approx. 200	approx. 30

\* With a very strong signal, a room antenna may suffice, and the lessee may then not always require a licence. Nonetheless, you should plan for a roof or external antenna, as a stronger signal can then be received.

You must clarify in advance for all TV receivers, whether

- reception is theoretically possible (signal strength, local network availability).
- the lessor's permission is required for leases.
- all structural criteria have been met and that an antenna or satellite dish can be fitted.
- the maximum cable lengths listed can be complied with.

We recommend that you ask an expert before taking a decision and planning a system, as only an expert can plan for local conditions and thus plan thoroughly.

Ergoline

#### MULTIVISION options - and what can't be done!

#### MULTIVISION option: DVD channel

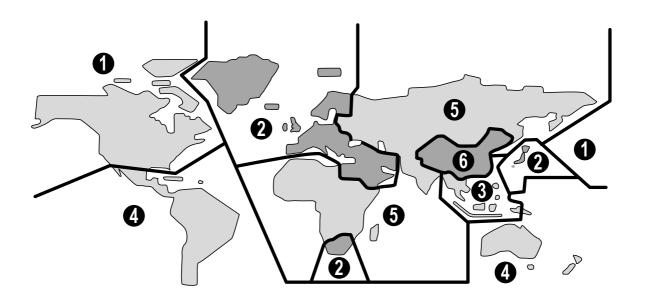
The DVD channel is produced via an external DVD drive. This makes a DVD available to the tanner, which is usually controlled via the MULTIVISION keyboard – provided the DVD is suitable for this.

#### **Requirement:**

- DVD drive (external) with USB connection, suitable for vertical operation.
- 1 jack plug for connecting the DVD drive to the power supply.

#### **Restriction:**

- · Home burned DVDs can sometimes skip or not be played back.
- Only DVDs with the regional code 2 or the marking ALL can be played back..



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#### **MULTIVISION** option: Studio channel

The studio channel cannot be controlled via the MULTIVISION keyboard, and thus can be selected only as an independent channel such as a TV channel.

#### **Requirement:**

- Connection of a home DVD player or S-VHS video recorder via S-video.
  Digital cable TV is also sometimes connected via S-video, but again the channel can only be selected on the receiver box. The MULTIVISION keyboard cannot be used as the control.
- · Connect the leads as shown in the wiring diagram.

#### **MULTIVISION** option: Service point

The service point is called up from the tanning device default mode and allows the customer to set various parameters (e.g. volume, tone, DVD connection, S-video connection, TV channel selection) and access to some functions (TV channel search).

#### **Requirement:**

• Connection of a PS/2 keyboard to the MULTIVISION box for the setting up period.

#### Not possible

Playback of music CDs

## **MULTIVISION** packages

Package	Part no.	Notes
MULTIVISION TV Unit		
MULTIVISION unit without IQ/APS sensor	34592000	
MULTIVISION unit with IQ/APS sensor	34592007	
and MULTIVISION box		

MULTIVISION box analogue	34592009	For analogue cable and antenna reception
MULTIVISION box DVB-S	34592010	For satellite reception
MULTIVISION box DVB-T	34592011	For digital antenna

ne package also includes:		
DVD box for external DVD drive	-	
Leads between MULTIVISION box and unit	-	
Acrylic mount	-	
MULTIVISION Reflex sun visor	703606	
MULTIVISION Reflex sun visor with anti-theft device	705130	



#### Accessories

Use only high quality leads and components. This is the only way to ensure best operation and as free from interference as possible. It is essential that you consult an expert who can design your TV receiver installation to allow for local conditions. Use the components recommended here as far as possible. If other manufacturers are used, refer to the instructions for the individual components. All equipment descriptions and manufacturers' names listed here are proprietary trademarks, even if not marked as such.

#### **Basic Accessories**

Accessories from the dealership	Manufacturer's part no.	Recommended manufacturer Remarks
PS/2 keyboard for service point		off the shelf
Extension lead (between MULTIVISION box and MULTIVISION unit), comprising		All leads: Fa. Reichelt, 5 m lengths
Audio extension lead	AVK 181	3.5 mm stereo jack plug on 3.5 mm stereo jack coupling
S-VGA monitor extension lead Male/female adapter for VGA connection	AK SVGA 105 COM 9231	15-pin HD plug to 15-pin HD plug Adapter 15-pin HD to 15-pin HD
USB 2.0 extension, active	AK USBV AA-5	A plug to A coupling
DVD channel option		
DVD drive, external (fitted in DVD box)		suitable for vertical operation Power supply via mains (mains socket required)
DVD±RW drive, Hi-Speed USB 2.0	3007780	<b>Fa. LaCie</b> Hi-Speed
or Combo CD-RW drive, USB 2.0	3007070	www.avitos.com
oder		
FS-5 CD-RW/DVD COMBO, USB 2.0	22842	Fa. Freecom
or FS-50 DVD+/-RW 8x DOUBLE LAYER, USB 2.0	24113	www.freecom.de
Studio channel option		
Home DVD player		Off the shelf, must be able to play DVD continuously Lead: 1 x 4-pin (audio), 1 x 3.5 mm jack plug
or S-VHS video recorder		Off the shelf, must be able to play video cassette continuously Lead: 1 x 4-pin (audio), 1 x 3.5 mm jack plug
Cable channel*		
Cable channel, fire protection class to building regula- tions		Fa. Tehalit LFH system, halogen free, surface engineering technology Cross-section according to cables to be installed at least 30 x 40 mm.

\* High quality coaxial cable (90 dB, armoured) can be collocated with the databus leads.

**MULTIVISION** 



## **Components for DVB-S**

See the DVB-S studio plan for the wiring diagram.

Manufacturer's part no.	Recommended manufacturer Remarks	
TD 88	Fa. Triax,	
	TD type, at least 88 cm $arnothing$	
	Fa. MIT	
	Blueline Quattro digi	
SMS 5802 NF	FA. Sporn	
	with 8 outputs, with 5 inputs:	
	VH = Vertically high	
	VL = Vertically low	
	HH = Horizontal valley high	
	HL = Horizontal valley low	
	· · · · · · · · · · · · · · · · · · ·	
	(230V mains supply required!)	
	miscellaneous,	
	90 dB, armoured	
	miscellaneous	
DSE 652	Fa. Schwaiger	
	2 SAT-ZF connections, 2 dB	
	miscellaneous,	
	90 dB, armoured	
	miscellaneous,	
	90 dB, armoured	
	miscellaneous	
	part no. TD 88 SMS 5802 NF	part no.    Remarks      TD 88    Fa. Triax, TD type, at least 88 cm Ø      Fa. MIT Blueline Quattro digi      SMS 5802 NF      FA. Sporn with 8 outputs, with 5 inputs: VH = Vertically high VL = Vertically low HH = Horizontal valley high HL = Horizontal valley low VHF (not used) (230V mains supply required!)      miscellaneous, 90 dB, armoured      DSE 652    Fa. Schwaiger 2 SAT-ZF connections, 2 dB      miscellaneous, 90 dB, armoured      miscellaneous, 90 dB, armoured      miscellaneous, 90 dB, armoured

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## **Components for DVB-T**

See the DVB-T studio plan for the wiring diagram.

Accessories from the dealership	Manufacturer's part no.	Recommended manufacturer Remarks
Antenna		
Roof/wall mounted antenna fixing extra or	LOG 2845 F	Fa. FTE digital
Room antenna	ZIFA D2	Fa. Hirschmann digital
1 x coax lead, max. 25 m		miscellaneous, 90 dB, armoured
6-way hub	VTF 8826	Fa. Schwaiger 1 input, 6 outputs, backwards compatible
or amplifier	TVS 5	Axing, 30 dB
2 x F plugs		miscellaneous
extra for each MULTIVISION unit		
1 x coax lead, max. 56 m		miscellaneous, 90 dB, armoured
1 x F-plug (at hub)		off the shelf
HF-socket jack	FS 12 D	Fa. Hirschmann
1 x coax lead, max. 1 m		miscellaneous, 90 dB, armoured, incl. HF plug/HF coupling

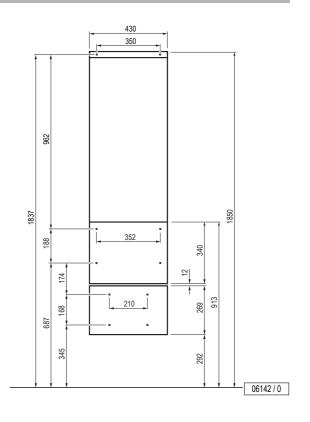
## Components for cable connection/analogue antenna from takeover point

See the analogue TV studio plan for the wiring diagram.

Accessories from the dealership	Manufacturer's part no.	Recommended manufacturer Remarks
1 x coax lead, max. 25 m		miscellaneous, 90 dB, armoured
Domestic connection amplifier	AV 34G Profi	Fa. DigiSat Gain: 34/26 dB, frequency range: 5-862 MHz, return channel, max. 6 connections (230V mains supply needed!)
1 x coax lead, max. 1 m		miscellaneous, 90 dB, armoured
6-way hub	VTF 8826	Fa. Schwaiger 1 input, 6 outputs, backwards compatible
4 x F plugs		miscellaneous
extra for each MULTIVISION unit		
1 x coax lead, max. 56 m		miscellaneous, 90 dB, armoured
1 x F-plug (at hub)		off the shelf
HF-socket jack	FS 12 D	Fa. Hirschmann
1 x coax lead, max. 1 m		miscellaneous, 90 dB, armoured, incl. HF plug/HF coupling

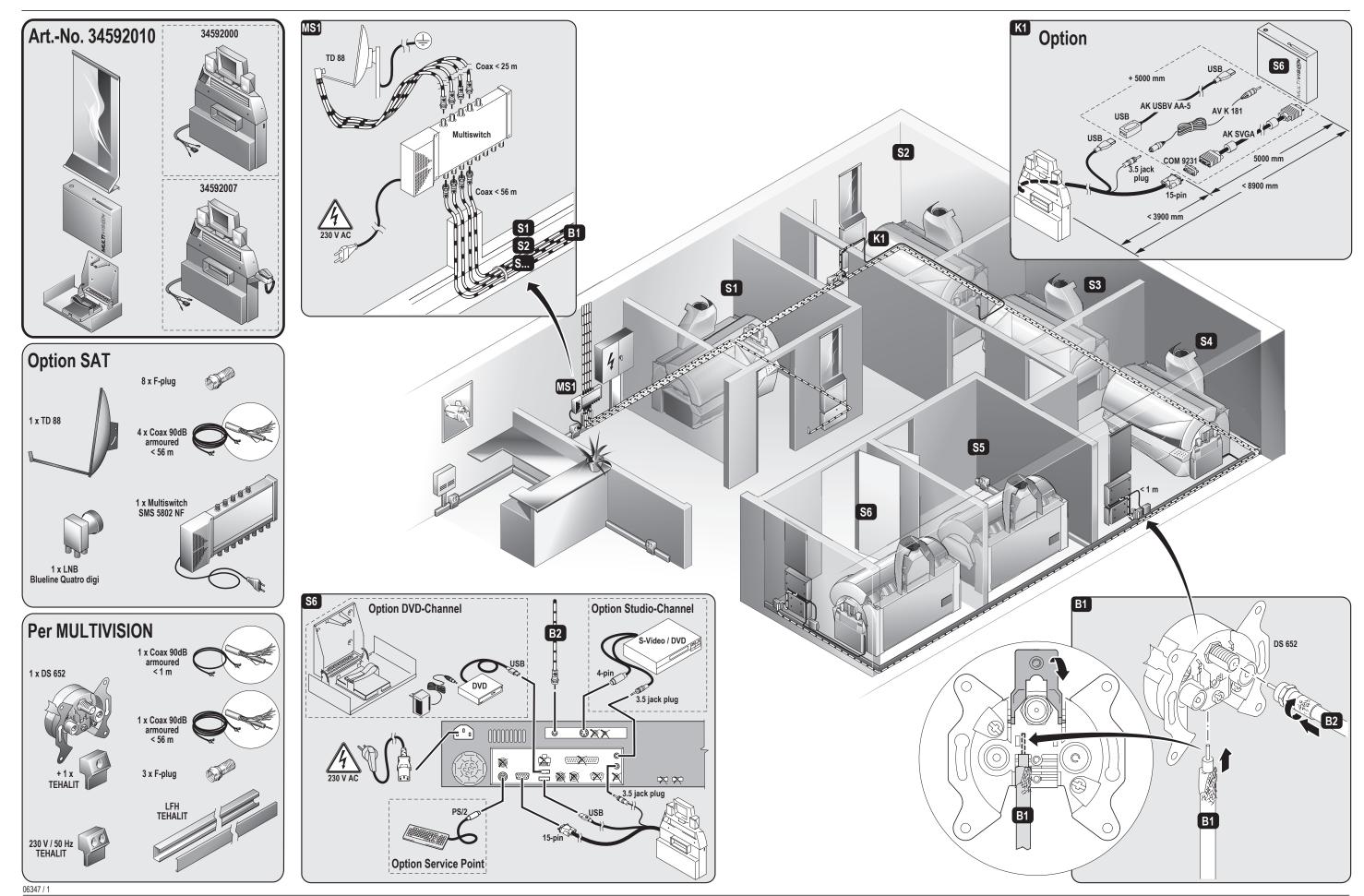
## Assembly

The MULTIVISION TV unit is mounted on the tanning device. The positioning of the drilled holes for fixing the MULTIVISION box, DVD box and acrylic mount is given in the drawing opposite.





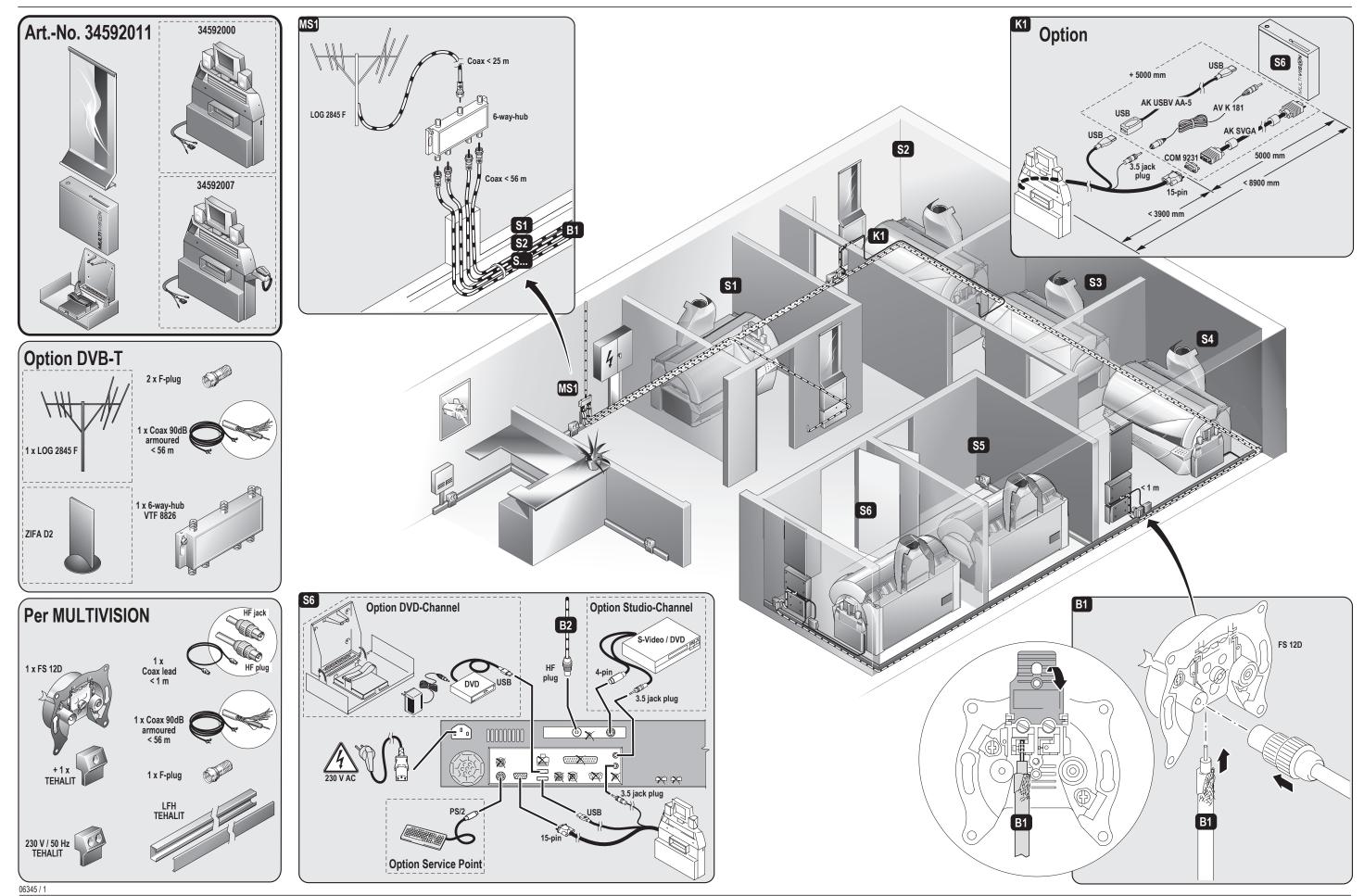
# Planning Manual



Ergoline

# SAT-Digital (DVB-S)

# **Planning Manual**



Ergoline

# **Digital terrestrial (DVB-T)**

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For Ergoline Classic 8000 Ultra	3
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#### General

Ergoline sound systems are available in different models. Please refer to the respective device descriptions regarding the possibilities of the individual sunbeds.

When planning, note that the studio space amplification must not be driven by the same amplifier as the audio unit of the sunbed. If this is not taken into account, difficulties can arise with sound regulation. For this reason, a separate amplifier should be available for every audio unit. On no account must car radios with bridge steps be utilised. A connection cable 6 x 0.5 mm<sup>2</sup> must be used for connecting the amplifier and the audio unit. For further information on the technology, please refer to the descriptions of the individual serial model modifications. External amplifiers and CD players are not included in the Ergoline scope of supply.

Please also note the reporting and fee responsibilities for playing background music in the studio. For information please contact your district office responsible for your place of residence or business.

Contact addresses for Germany:

#### GEMA

Gesellschaft für musikalische Aufführungen und mechanische Vervielfältigungsrechte

Bezirksdirektion NRW Südwall 17-19 44137 Dortmund Germany

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T		
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+49 (0) 231 / 5 77 01-0 +49 (0) 231 / 5 77 01-120 bd-nrw@gema.de

www.gema.de

#### GEZ

Gebühreneinzugszentrale der öffentlich-rechtlichen Rundfunkanstalten in der Bundesrepublik Deutschland

Freimersdorfer Weg 6 50829 Köln Germany

<b>*</b>	Telefon:	+49 (0) 180 / 5 01 65 65
Í	Telefax:	+49 (0) 180 / 5 51 07 00
=	E-Mail:	info@gez.de

www.gez.de

Contact address for Austria:

## AKM

Postfach 334/348 Baumannstr. 8-10 1031 Wien Austria

æ	Telefon:	+43 1 / 717 14
Í	Telefax:	+43 1 / 717 14

www.akm.co.at

Contact addresses for Switzerland:

**SUISA** Bellariastrasse 82 8038 Zürich Switzerland

<b>A</b>	Telefon:	+41 1 / 48 56 666
Í	Telefax:	+41 1 / 48 24 333

www.suisa.ch

SSA Rue Centrale 12 Case Postale 3893 1002 Lausanne Switzerland

<b>A</b>	Telefon:	+41 21 / 31 34 467
Í	Telefax:	+41 21 / 31 34 476

www.ssa.ch

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#### **Connection options and music control**

The following connection options are available with the Ergoline sound systems for the control and playing of music.

#### For Ergoline Evolution and Excellence

Sound system with audio unit without integral music CD player, connected to an external music source:

This can be e.g. a pre-amplifier (CD player output), a pack amplifier (loudspeaker connection of a music amplifier) or a 100 V system. Four relay outputs are available for connection of an additional channel selection.

The volume and channel number can be selected on the control panel.

#### For Ergoline Open Sun A.R.T. 600

Sound system with basic audio unit (with integrated CD drive) connected to an external music source:

The music CD player of the audio unit can be combined with an external music source. You can control the volume as well as the track number or channel number of both music sources on the control panel.

Accessories		Article No.	
7-channel distributor box	М	3451440	Connection of max. 8 audio units
Interface for the 7-channel distributor box (available on request)	М	-	Component for connection of VoiceGuide to the 7-channel distributor box
Transmitter	М	3452350	For some amplifiers for neutralising humming sounds

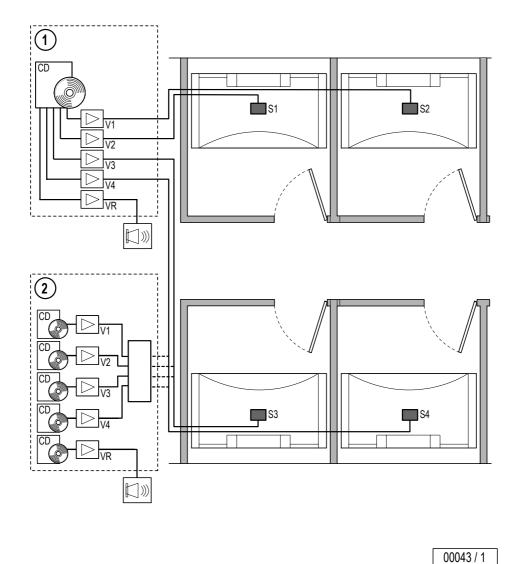
### For Ergoline Classic 8000 Ultra

Sound system with audio unit (with integrated CD drive) as standalone solution:

A music CD can be played in every sunbed. The volume and track number can be selected in the control panel. There is no need for complex wiring in the studio.



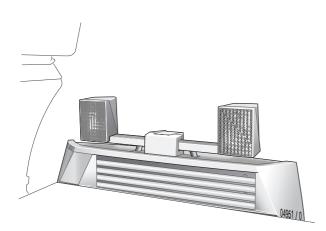
## **Planning examples**



- 1. Ergoline sound system with a CD player and one audio unit without channel selection per cabin **Effect**: The same music is played in all the cabins.
- 2. Ergoline sound system with 5 CD players and one audio unit with channel selection per cabin **Effect:** From each cabin, one of the CD players assigned to the four cabins can be selected.



# **Planning Manual**



3D sound is a high end sound system with integrated shoulder tanner for the Excellence and Evolution system series.

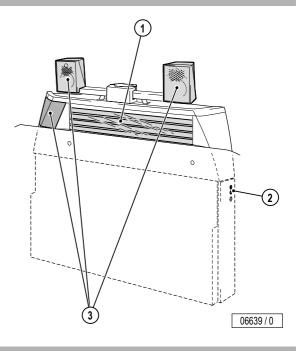
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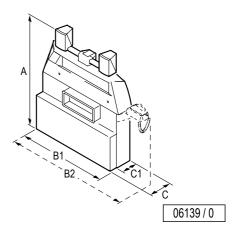
# **Device descripition**

- 1. Shoulder tanner
- 2. Headset socket
- 3. Loudspeaker with subwoofer



## Dimensions

А	850 mm
B1	760 mm
B2	996 mm
С	200 mm
C1	133 mm





## **Technical Data**

Performance:	
Shoulder tanner	4 x 25 W (controlled via the tanning device) replaces production standard/optional shoulder tanner
Power supply:	via the tanning device
Colour:	Light silver-matt
Max. ambient temperature:	0 to 40 °C
Max. relative humidity:	70 %
Max. storage temperature:	0 to 50 °C
External connections:	none
Weight:	39.70 kg (with IQ sensor: 41.20 kg)

# Equipment

	Equipment:	
3D sound unit:	Shoulder tanner swivelling loudspeakers and sub-woofer sensor/base station as appropriate for IQ or APS systems	
Not included:	The 3D sound unit does not include an audio unit	

# 3D sound packages

Package	Part no.	Notes
3D sound unit without IQ/APS sensor	34592003	for devices without IQ/APS sensor
3D sound unit with IQ/APS sensor	34592006	for devices with IQ/APS sensor

The devices Evolution 500 Turbo Power, Evolution 575 Turbo Power, Evolution 600, Evolution APS, Evolution IQ, Excellence 700, 800, Excellence APS, and Excellence IQ contain a complete sound system (depending on equipement):

- · Circuit board with connection for
  - external music and channel selection
  - pre-amplifier and output amplifier
    100 V system
- Headphone jack including wiring harness
- · Vibra panel loudspeaker in shoulder tanner

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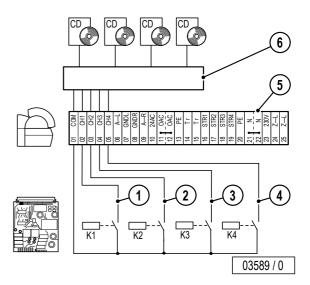


## Audio circuit board

# Connecting an external music source with channel selection

One of four connected music sources can be selected.

- 1. Music channel 1
- 2. Music channel 2
- 3. Music channel 3
- 4. Music channel 4
- 5. Connection strip in sunbed
- 6. Distribution box, channel selection 1-4 (decimal, binary, pulse)



# Connecting an external music source without channel selection

The connected music source can be switched on or off.

- 1. External music source
- 2. Connection strip in sunbed

06 / A-L	Left-hand music channel +
07 / GNDL	Left-hand music channel –
08 / GNDR	Right-hand music channel -
09 / A-R	Right-hand music channel +

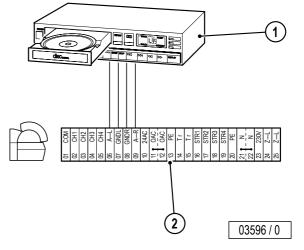
#### Permissible input level:

Pre-amplifier: 600 mV to 3 V

Output amplifier: 5 V to 30 V

or

100 V system: 25 V to 150 V



or

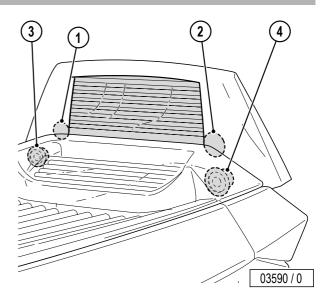


#### Vibra panel loudspeaker

A flat diaphragm loudspeaker is integrated in the panel of the shoulder tanner. Two tweeters (① right, @ left) and two woofers (right, @ left) each are located on the sides.

The special characteristics of the Vibra panel loudspeaker are the homogenous sound dissemination and the higher sound output through the wider-angled emission characteristic. These properties ensure particularly good speech comprehension.

As an alternative to the serial loudspeaker set MULTIVISION or 3D sound can be installed as a play back device.



## VoiceGuide and Info

The devices Evolution 500 Turbo Power, Evolution 575 Turbo Power, Evolution 600, Evolution APS, Evolution IQ, Excellence 700, 800, Excellence APS, and Excellence IQ contain a voice PCB for VoiceGuide and INFO depending on variant equipement.

The Vibra panel loudspeaker in the shoulder tanner is used for voice output.

The required operating buttons (Channel, Volume) are activated on the control panel.

The voice output module consists of 3 chips on a separate voice circuit board:

- Voice chip "Operating and Service" (VoiceGuide)
- · Voice chip "Info Texts" (INFO)
- Microcontroller

On request, it plays situational information to the user and the studio/service personnel:

- The VoiceGuide provides the customer with information about the step which has just been carried out in every situation.
- General audio sequences on the subjects of tanning/ sunbeds can be called up by pressing the INFO button.
- The studio personnel can call up all the service functions and important diagnostics messages on the equipment.

The sunbed provides ready answers to your questions. There is no longer any need to search for the meaning of coded messages in the operating instructions. The VoiceGuide is immediately active every time a new tanning session begins, but if you require it can be switched off by pressing the information button.

On request and plus surcharge, additional modules in other languages can be delivered and installed, if necessary.





# Contents

Audio unit with VoiceGuide 2
Connecting an external music system to a
VoiceGuide



#### Audio unit with VoiceGuide

The Open Sun A.R.T. 600 sunbed contains a complete sound system as standard (audio unit with VoiceGuide).

The scope of supply of a sound system on the above-mentioned sunbeds consists of:

- Control box (1) with internal CD drives for music (2) and speech (3) (VoiceGuide)
- Loudspeakers and headphone jack, with cable harness
- Control units for volume and channel selection or information reproduction
- · Operating and assembly instructions

The assembly position for the control box with the audio unit and VoiceGuide is always located in the sunbed base.

For connection of older music systems it may be necessary to use an additional transmitter (Art. No. 3452350).

#### VoiceGuide

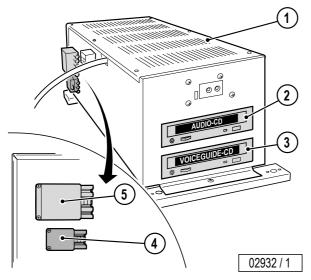
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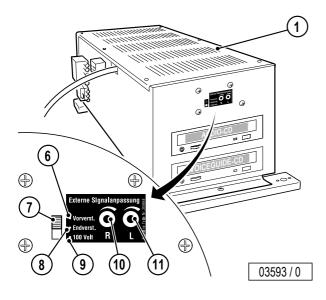
### Connecting an external music system to a VoiceGuide

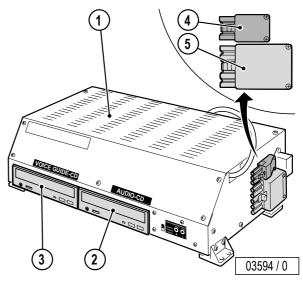


An external music system is connected to an Ergoline sunbed with VoiceGuide by means of 2 plugged connections (plugs 91 and 92) on the control box (1) of the sunbed.

- Through jack 91 (4), Article No.: 79494, external music is supplied to the VoiceGuide and
- through jack 92 (5), Article No.: 50047, the channel selection of the Ergoline sunbed is supplied to the music system.

The jacks must be ordered as accessories from Ergoline. For detailed information about the installation, setting and operation of an external music system on an Ergoline sunbed with VoiceGuide, see the operating instructions of the appropriate sunbed.

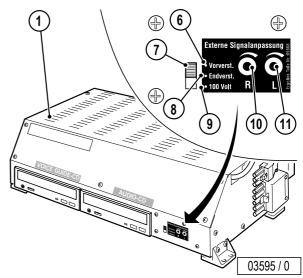




Volume adjustment during tanning is controlled by the sunbed's electronics system (see the operating instructions). The volume of the music signal connected to the sunbed must not be adjusted once the system has been connected.

To adjust the volume to the internal CD drives, there is a switch (7) in the control box (1) for coarse adjustment and two pre-set potentiometers (10 + 11) for fine-tuning. Depending on the position of the switch, the permissible levels of the input signal are as shown in the table below:

Switch position		Permissible input level
6	Pre-amplifier	600 mV to 3 V
8	Pack amplifier	5 V to 30 V
9	100 V system	25 V to 150 V

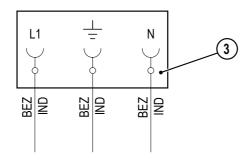


An interface for the Ergoline 7-channel distributor box (available on request) enables the connection of the VoiceGuide system to Ergoline's 7-channel distributor box. One interface is required per sunbed.



Connection arrangement at jack 91 (3) for music signals:

Connection arrangement at jack 92 (4) for channel selection:



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Music signal external left
Common earth
Music signal external right

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BEZ	DNI	BEZ	ONI	BEZ	DNI	BEZ	DNI	BEZ	DNI		

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Function				
Relay 1 for channel selection				
Relay 2 for channel selection				
Common contact				
Relay 3 for channel selection				
Relay 4 for channel selection				

The electrical limit values of the relay contacts are 100 V DC and 500 mA per contact.

The number of external audio channels can be selected in the service module "No. OF EXTERNAL AUDIO CHANNELS" in the range of 0 to 16. The setting "0" switches the use of external music sources Off.

You must determine the channel control depending on whichever music system is used. The Ergoline sound system supports the following channel controls:

- BCD code
- Pulse
- · Decimal code



- Article No.: 3452020
- Article No.: 3452030
- Article No.: 3452040
- Article No.: 3452050

# Contents

Audio unit for the Ergoline Classic 8000 Ultra..... 2



## Audio unit for the Ergoline Classic 8000 Ultra

The scope of supply for Ergoline Classic 8000 consists of:

- Control box for audio unit
- Headphone jack including cable harness for loudspeaker connection
- Volume control and channel selection control, integrated in the operating cockpit
- Channel selection board
- · Operating and assembly instructions

When fitting Ergoline sunbeds with a sound system, one audio unit per sunbed is required. Also, when more than one audio unit is installed, a single distributor box is necessary. Example: For a studio with 4 Ergoline Classic 8000, 4 audio units are required, but only one distributor box.

The distributor box enables you to connect and operate max. 7 amplifiers independently on up to 8 sunbeds.

Example: While the customer on sunbed 1 is listening to classical music, the customer on sunbed 5 can listen to pop music and the customer on sunbed 7 can listen to jazz.

The music signals are output via the headphone jack and can be controlled via the volume control over 8 volume levels.

The channel selection switch enables you to select the various CD players offering all kinds of different music.

Connection:

100 Volt amplifier (min. output 100 Watt)



Do not use an 8  $\Omega$  amplifier.



## Note:

When connecting to an external music installation, it is possible that some strong humming noises may arise. In such a case the use of a transmitter is recommended (Art. No.: 3452350).

Ergoline

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Note: The assorted technical information in this chapter applies to all variants of each device type.



## Performance and air requirements

Ergoline professional sunbed	Capacity w/o with Air conditioner		Fuses <sup>1)</sup>	UV low pressure lamps	UV high pressure lamps	Temperature difference	Air requirement max.4)
				performance	performance	exhaust / supply	
						air	
	Watt	Watt	Ampere	Watt	Watt	°C	m³/h
Excellence IQ Intelligent Power System	-	16500	3 x 35	51 x 120-180	4 x 520	15	2800
Excellence 800 Automatic Power System	-	18300	3 x 35	51 x 160	4 x 520	15	2800
Excellence 800 Turbo Power	-	18300	3 x 35	51 x 160	4 x 520	15	2800
Excellence 700 Automatic Power System	-	18300	3 x 35	51 x 160	4 x 520	15	2800
Excellence 700 Turbo Power	15000	18300	3 x 35	51 x 160	4 x 520	10 <sup>5)</sup> 15 <sup>6)</sup>	2800
Evolution IQ Intelligent Power System	-	12600	3 x 35	46 x 120-160	3 x 520	11	2800
Evolution 600 Automatic Power System	-	14500	3 x 35	46 x 160	3 x 520	11	2800
Evolution 600 Turbo Power	13300	14500	3 x 35	46 x 160	3 x 500	6 <sup>5)</sup> 11 <sup>6)</sup>	2800
Evolution 600 Super Power	9800	11000	3 x 25	46 x 100	3 x 500	6 <sup>5)</sup> 11 <sup>6)</sup>	2800
Evolution 575 Turbo Power	10100	11500	3 x 25	17 x 160 17 x 180	45 x 25 <sup>7)</sup>	6 <sup>5)</sup> 11 <sup>6)</sup>	2800
Evolution 500 Automatic Power System	-	13900	3 x 35	43 x 160	3 x 520	11	2800
Evolution 500 Turbo Power	12700	13900	3 x 35	43 x 160	3 x 500	6 <sup>5)</sup> 11 <sup>6)</sup>	2800
Evolution 500 Super Power	8400	-	3 x 16	43 x 100	3 x 400	6	2800
Advantage 400	9700	-	3 x 20	40 x 160	3 x 400	7 <sup>5)</sup>	2700
Automatic Power System	-	10700	3 x 25	40 x 160	3 x 400	10 <sup>6)</sup>	2700
Advantage 400 Turbo Power	9700	-	3 x 20	40 x 160	3 x 400	7 <sup>5)</sup>	2700
	-	10700	3 x 25	40 x 160	3 x 400	10 <sup>6)</sup>	2700
Advantage 400 Super Power	7700	-	3 x 16	40 x 100	3 x 360	7	2700
Advantage 350 Turbo Power	9600	-	3 x 20	38 x 160	3 x 400	10	2700
Advantage 350 Super Power	7600	-	3 x 16	38 x 100	3 x 360	7	2700
Ambition 250 Super Power	6300	-	3 x 16	36 x 100	3 x 400	15	1600
Lounge Turbo Power	12500	-	3 x 25	50 x 180	-	10	2900
Open Sun A.R.T. 600 Super Power	13300	-	3 x 25	17 x 100	4 x 700 <sup>2)</sup> 6 x 800 <sup>3)</sup>	11	2500
Open Sun A.R.T. 450 Super Power	8300	-	3 x 16	45 x 100	2 x 600	10	2100
Classic 300 Super Power	7000	-	3 x 16	38 x 100	3 x 400	15	950
Classic 200 Super Power	6200	-	3 x 16	32 x 100	3 x 400	15	950
			3 x 16		6 x 500		

 All the tanning devices are connected to 400-415V ~3N only delay-action fuses must be used.

The specified connection voltages must lie within a tolerance range from +/- 5% to retain the guaranteed output data for Ergoline sunbeds.

2) Feet area

3) Upper-body area

4) Ambient temperature max. 25 °C and inlet air max. 40 °C

5) without air conditioner

6) with air conditioner

7) UV low pressure lamps (25W) in canopy and side part

With the electrical connected rating in a studio, a simultaneity factor of 1 must be expected.

Ergoline

## Inlet and exhaust air cross-sections

Ergoline professional sunbed	Exhaust air cross- sections without exhaust air system	Pipe Ø	Cabin Inlet air cross- section at 1.5 m/s	Inlet and exhaust ai cross-sections with exhaust system	
	Exhaust air <sup>1)</sup> cm <sup>2</sup>	mm	cm²	Exhaust air cm²	
Excellence IQ					
Excellence 800	- 588	300	5200	710	
Excellence 700	-				
Evolution IQ					
Evolution 600	- 588	200	4200	710	
Evolution 575	- 000	300	4200		
Evolution 500	-				
Advantage 400	- 430	300	5000	710	
Advantage 350	430	300	5000		
Ambition 250	802	_	_	_	
Lounge	430	300	5370	710	
Open Sun A.R.T. 600	435	300	4000	710	
Open Sun A.R.T. 450	550	250 (300) <sup>2)</sup>	4100	490 (710) <sup>2)</sup>	
Classic 300 Classic 200	- 450	250	1300	490	
Classic 8000 Ultra	430	_	2200	_	

Device exit opening
 Can be extended

## Maximum exhaust pipe length without additional ventilator

Calculation base (without additional ventilator):					
Back pressure	100 Pascal				
Air pressure	100,000 Pascal				
Air temperature	40 °C				
Density	1.112 kg/m <sup>3</sup>				
Dynamic inertia of the air	1.92E-05 Pa x s				

Ergoline professional sunbed	Corrugated pipe	Roughness (at centre)	Flow volume	Loss coefficient		90° bend in line (metal)	length of straight
	Ø	k <sub>absolute</sub>		of bend	of pipe		line
	mm	mm	m³/h			pieces	m
			0500			0	10
Excellence	200	0		0.4004)	0.011)	1	9
IQ / 800 / 700	300	8	2500	0.1821)	0.211)	2	8
						3	7
						0	10
Evolution	200	0	2500	0.182 <sup>1)</sup>	0.211)	1	9
IQ / 600 / 575 / 500	300	8	2500	0.1821		2	8
						3	7
		8	2300	0.182 <sup>1)</sup>	0.211)	0	12
Adventere 400 / 250						1	11
Advantage 400 / 350	300					2	10
						3	9
	300	8	2600	0.1821)	0.211)	0	10
						1	8.5
Lounge						2	7.5
						3	6
			2500	0.182 <sup>1)</sup>	0.211)	0	12
						1	10
Open Sun A.R.T. 600	250	8				2	8
						3	6
						0	12
			2150		0.211)	1	10
Open Sun A.R.T. 450	300	8		0.1821)		2	8
						3	6
		8		0.1821)	0.211)	0	8
			950			1	6
Classic 300 / 200	250					2	4
						3	2

1) zeta value ( $\zeta$ ) Permissible only for direct connection of the exhaust air from inside to outside via a special canal system with pipe bends with smooth surfaces.

# Weights

Ergoline professional sunbed	without air conditioner	with air conditioner		
	<b>kg</b> <sup>1)</sup>	<b>kg</b> <sup>1)</sup>		
Excellence IQ Intelligent Power System	-	681		
Excellence 800 Automatic Power System	-	649		
Excellence 800 Turbo Power	-	647		
Excellence 700 Automatic Power System	-	680		
Excellence 700 Turbo Power	618	678		
Evolution IQ Intelligent Power System	-	626		
Evolution 600 Automatic Power System	-	636		
Evolution 600 Turbo Power	556	634		
Evolution 600 Super Power	556	634		
Evolution 575 Turbo Power	567	637		
Evolution 500 Automatic Power System	562	630		
Evolution 500 Turbo Power	560	628		
Evolution 500 Super Power	504	_		
Advantage 400 Automatic Power System	405	473		
Advantage 400 Turbo Power	403	_		
Advantage 400 Super Power	373	_		
Advantage 350 Turbo Power	388	_		
Advantage 350 Super Power	368	_		
Ambition 250 Super Power	265	_		
Lounge Turbo Power	546	_		
Open Sun A.R.T. 600 Super Power	450	-		
Open Sun A.R.T. 450 Super Power	547	-		
Classic 300 Super Power	232	_		
Classic 200 Super Power	226	_		
Classic 8000 Ultra	340	_		

1) all datas are round figures

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