# emotion of sauna.



# Assembly and Operating Instructions

# 60FL











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# **Technical specifications**

Supply voltage: 230 V 1N AC 50 Hz

Fuse protection:  $1 \times 10 \text{ A}$ Lamp capacity: 400 W max. Surrounding temperature:  $0 \text{ to } 40^{\circ} \text{ C}$ 

Type of protection: IP X4

Color sequence when in red - red/yellow - yellow/green - green - green/

Automatic mode: blue - blue - blue/red

Color overlap period: 0 seconds

Cycle time: adjustable from 1 to 10 minutes

Dimensions (H x W): 120 x 170 mm

Weight: ca. 1 kg

#### **General Information**

Dear Customer.

with this coloured light control device, you have purchased a high-quality electronic device, which was designed and produced according to the latest standard and quality guidelines.

With this high-quality coloured light controller, you "operate" your coloured light device and with the programming options, you will surely quickly find the settings you feel most comfortable with.

Read these instructions carefully so that you will find your way through programming fast and easily.

#### **General Notices**

The coloured light control device is intended for 230 V 50 Hz voltage and has to be secured separately with a 10 A fuse.

Only an authorized electrician may install and connect the sauna equipment as well as other electric devices.

The regulations of the Electrician's Association (VDE 0100 / Part 703 / 2006-2) must be observed.

As a rule, sauna equipment may only be connected via a permanent mains connection. This must enable you to separate all poles of the device from the mains with a contact opening width of at least 3 mm.

Read the following installation and operating instructions carefully to ensure the error-free operation of your sauna system.



The control-unit may not be mounted within the IR cab.

#### **Effect of Colors**

The **psychological** influence of the colors is perceived by the eyes. From there the color radiation is transferred to the brain in a complex process, where it develops its effect in the form of certain impressions and energy.

The colors affect the **nervous system** vitalizing the body's resistance. Certain body systems are activated depending on the type of color.

**Physical** absorption takes place primarily over the skin through direct radiation of the colors.

**Chemical** absorption takes place in the gasto-intestinal tract in the form of a mixed diet in all colors.

**BLUE**, the color of the sky and water, is connected with longing, vastness and coolness. Coolness retards human functions, the reason why blue is calming and relaxing and can help alleviate nervous disorders, insomnia, restlessness and fear.

**GREEN** is the color of nature. Green light soothes and inspires simultaneously. It provides relaxation and regeneration. Green light is reputed to have a positive effect on the bronchi and lungs and to be helpful for nervous disorders, headache and inflammation of the joints.

**YELLOW** is said to intensify a positive vital attitude and increase general well-being. Yellow colors can stimulate and fortify the nerves and dispel gloom and melancholy, gastro-intestinal disorders can be compensated.

**RED** is associated with fire and blood. The color for activity, vitality and warmth. Red is reputed to stimulate circulation and therefore contribute to a general increase in well-being and vitality

### **Delivery Scope** (changes reserved)

The control device consists of:

 Plastic bag with three attachment screws 4 x 20 mm.

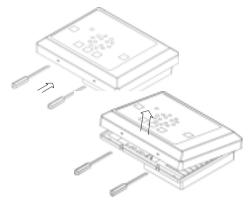
# **General Safety Regulations**

- Only an authorized electrician may install the electronics.
- The regulations of your power supply company as well as the pertinent regulations of the Electrician's Association (DIN VDE 0100) must be observed.
- Careful mortal danger! Never perform repairs and installations yourself.
  Only an expert may remove the casing cover.
- The device may only be operated in accordance with its intended purpose, meaning as a control device for coloured light devices.
- All poles of the device must be separated from the mains prior to all installation and repair work, meaning you have to turn off the fuses and/or main switch.
- Observe the safety and installation notices of the manufacturer.

# **Installation of Control Unit**

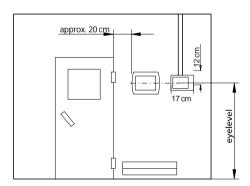
#### **Wall Mount**

It is only permissible to install the control unit outside the booth. If empty conduit is already present for the electrical installation, the conduit determines the position of the control unit. To install proceed as described in the instructions below:



Remove the cover from the control unit. For this purpose press the retaining lugs inward with a flat screwdriver and pull the upper section of the housing up by pivoting.

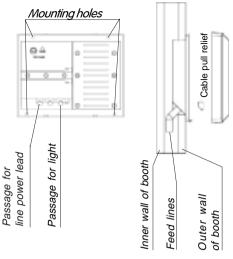
Saw a cut-out in the wall with a width of 17 cm and height of 12 cm at the position the control is to be installed.



Then route the connection lines for the line power and the light to this wall cutout.

If the sauna booth is not equipped with empty conduit for the connection lines, route the cables visibly on the walls of the booth.

In this case cut an additional opening for introducing the lines into the unit at the lower, left corner of the rectangular opening.



Then route the lines into the unit and secure them from being pulled out with the pull relief bridges.

Then position the unit in the wall cut-out and fasten it with four bolts through the mounting holes.

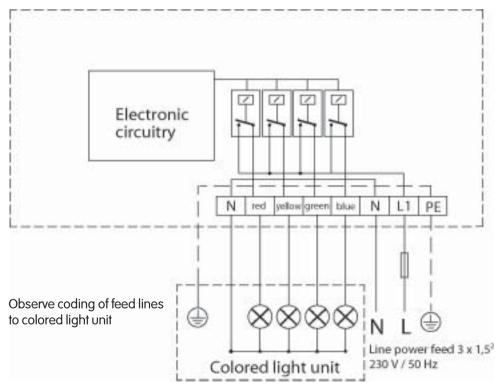
### **Electrical installation**

The electrical installation may be undertaken only by an authorized electrician subject to the regulations of the local power utility company and the VDE.

Connect the lines as illustrated in the connection diagram.

CAUTION: The colored lights are connected by relay contacts and are not fuse-protected internally. Install a 3 x 1,5 mm² hardwire connection with a fuse protection of 10 A.

# **Connection Schematic**



# Operation

### **Button functions**

# 1 - 10 LEDs for color sequence time

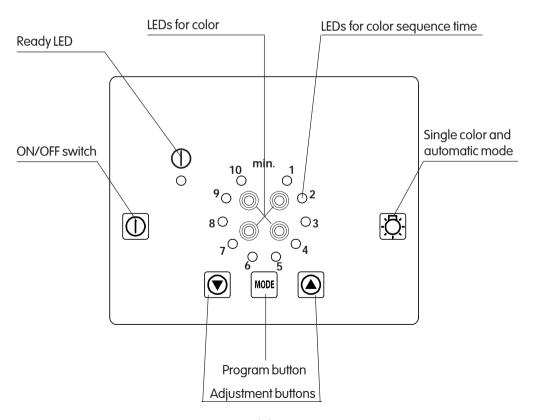
# Ready LED





Program button





# Start-up

After checking all connections again, connect the unit to the line power by switching on the circuit breakers and/or main switch. The green LED above the -symbol signals that the unit is ready for operation.

# Switching on the unit for the first time

Pressing the Start/Stop button for the first time after connecting the power supply switches the unit to its ready mode. The red LED on the colored light unit and the red LED on the control unit illuminate.

# **Default Parameters**

- Manual colored light selection
- Operating time for individual colors in automatic mode: 5 min.
- Operating time for mixed colors in automatic mode: 10 sec.

# **Manual Selection of Light Color**

It is possible to select between individual colors and mixed colors with the and v buttons.

# **Automatic Selection of Light Color**

Press the light button to activate automatic selection of the light color.

During automatic operation 5 LED's illuminate for an operating time of 5 minutes.

When the light color selection is switched to automatic the color sequence is redred/yellow-yellow-yellow/green-greengreen/blue-blue-blue/red. In the basic mode the individual colors are held for 5 minutes and the mixed colors for 10 seconds (see "Default Parameters")

# The following settings can be programmed in the automatic program:

The holding time can be set within the range of 1 min. and 10 min. The row of LED's starts to flash when the button is pressed.

The time can be changed with the and buttons.



Pressing the button again confirms the value set and the corresponding number of LED's illuminates in the row of LED's (5 minutes = 5 LED's, 10 minutes = 10 LED's, etc.)

The holding time for mixed colors can be set to 10 seconds (default setting) or to the operating time for the individual colors:

Press the A- and T-buttons simultaneously and hold for 2 seconds until the row of LED's flashes momentarily. Reset by pressing again.

The parameters set last remain set as long as the control is not separated from the line power.

#### Guarantee

The guarantee is taken over according to the legal regulations at present.

# Manufacturer's warrenty

- The period of warrenty starts from the date of purchase and lasts up to 2years for commercial use and 3 years for private use.
- Always include the completed warrenty certificate when returning equipment.
- The warrenty expires for appliances which have been modified without manufacturer's explicit agreement.
- Damages caused by incorrect operation or handling through non-authorized persons are not covered under the terms of warranty.
- In the event of a claim, please indicate the serial number as well as the article code number and type name with expressive description of the fault.
- This warrenty covers damaged parts but no defects due to wear and tear.

In case of complaint please return the equipment in its original packaging or other suitable packaging (caution: danger of transport damage) to our service department.

Always include the completed warrenty certificate when returning equipment.

Possible shipping costs arising from the transport to and from point of repair cannot be borne by us.

Outside of Germany please contact your specialist dealer in case of warranty claims. Direct warranty processing with our service department is in this case not possible.

Equipment start-up date:

Stamp and signature of the authorized electrician:

#### Attention!

Dear customer.

according to the valid regulations, the electrical connection of the sauna heater and the control box has to be carried out through the specialist of an authorized electric shop.

We would like to mention to the fact that in case of a warrenty claim, you are kindly requested to present a copy of the invoice of the executive electric shop.

Service address: EOS-Werke Günther GmbH Adolf-Weiß-Str. 43 35759 Driedorf-Germany tel +49 (0) 2775 82 240 fax +49 (0) 2775 82 455 servicecenter@eos-werke.de www.eos-werke.de