

## Installation and User's Guide

# FL 400 / FL 400S FL 800 / FL 800 UV



FL 400



FL 400 S



FL 800



FL 800 UV



**Table of Contents**

Important Notes ..... 3

Installation ..... 3

First use ..... 5

Tanning instructions (FL 800 UV) ..... 6

Circuit diagram for non-detachable coloured light units ..... 7

Changing bulbs and starters ..... 8

Performance data ..... 8

Effect of the colors ..... 9

Guarantee ..... 10

## Important Notes

**Improperly installed hardware can cause a fire hazard! Please read this installation guide thoroughly. It is especially important to consider applicable dimensions and observe the following instructions:**

- The coloured light units are designed for a supply voltage of N 230 V AC and, except for the plug-in unit FL 400 S, switched on via the coloured light control unit.
- The non-detachable coloured light units should be operated with control unit. The control unit is affixed to the sauna's exterior wall in an appropriate place.
- The unit is equipped with a safety glass panel (type FL 800 UV with acrylic panel). Never operate the unit with a broken safety glass panel.
- Coloured light units, control units and other electrical equipment that are designed to be non-detachable, should only be installed and connected to the mains by a locally approved electrical installation company. In this regard, the necessary safety measures in accordance with VDE 0100 v. § 49 DA/6 and VDE 0100 Part 703/2006-2 § 4 should be observed in particular. All power cables that are installed inside the sauna room must be suitable for an ambient temperature of at least 140°C. Silicone cables suit the required purpose.

## Installation

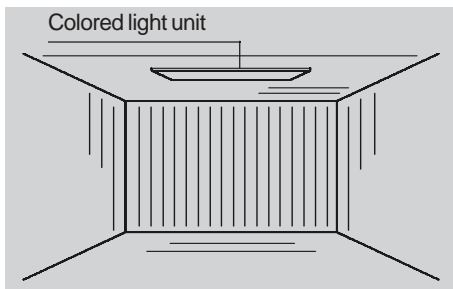
**The devices must be used in IR-cabines only!**

The coloured light unit can be assembled on the wall or ceiling in the sauna room.

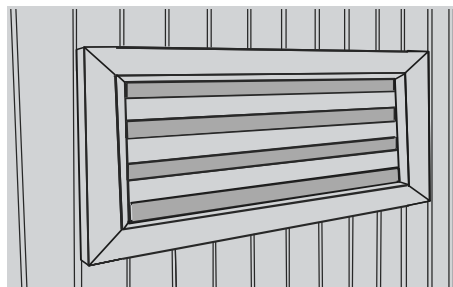


Except for FL 800 UV - this unit may only be assembled on the wall.

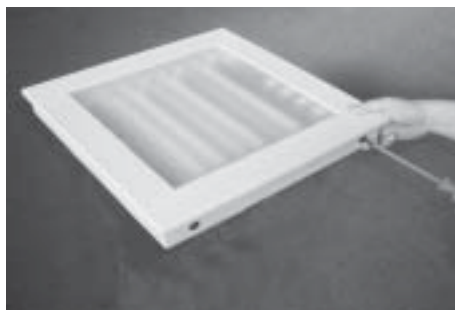
Installation on the cabin ceiling



Installation on the cabin wall

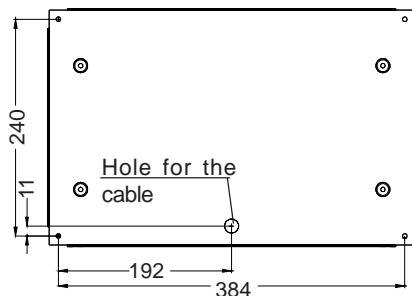


For assembly, first of all the wooden frame has to be removed. To do this, the 4 screws with plastic heads on the sides of the frame must be loosened.

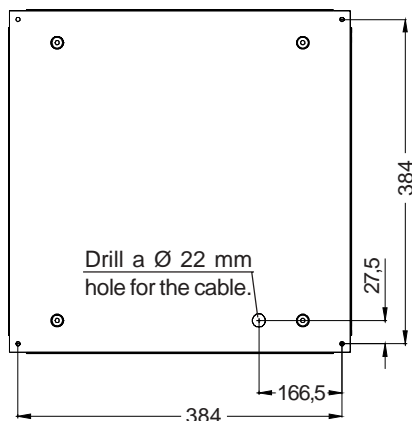


Next mark the fixing points on the sauna's ceiling and where the lighting unit's cable will be introduced. The lighting unit is fastened on the corners using 4 screws.

Drilling distances for assembling types FL 400 / FL 400S



Drilling distances for assembling type FL 800 / FL 800 UV



Drill a hole to introduce the cable into the sauna unit:

- on types FL 400S / FL 800 / FL 800 UV: Ø 40 mm
- on type FL 400: Ø 22 mm

**Attention:** Do not cut any frame or supporting woods of the ceiling or wall. In this case the static stability of your cabin is no longer guaranteed.

The coloured light unit can now be fastened to the sauna unit using the 4 screws on each corner.



To complete the installation, the housing frame is fastened back on.



## First use

### Plug-in models:

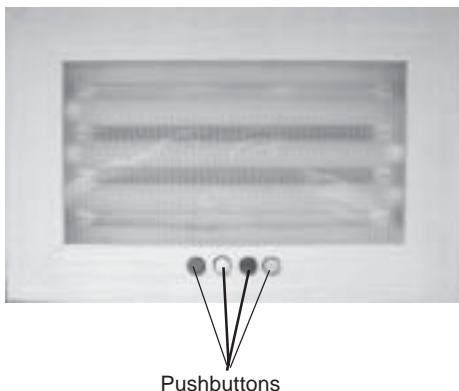
Type FL 400S is ready to plug in. After connecting the supply cable to the plug, this appliance is ready for use.

### Operation:

Appliance type FL 400S is operated using 4 pushbuttons on the wooden frame.

Each pushbutton controls a colour. If a pushbutton is pressed, the respective coloured light comes on. Pressing it again switches the light in question back off.

Several lights can be switched on simultaneously.



### Non-detachable models:

The non-detachable models, FL 400, FL800 and FL 800 UV, are operated using the control unit EMOTEC C55, EMOTEC HIC75, ECON F1 or 60FL. Please take note of the control unit's operating instructions.

### Operating the UV lights on the FL 800 UV



You should precisely follow the advice below.

The sun provides warmth, light and ultraviolet rays. The three different types of ultraviolet rays are UV-A, UV-B and UV-C rays. The long-wave UV-A rays are gentle to the skin and tan the pigment. It is the rays of the UV-B region which first start the formation of pigment but they also cause sunburn. UV-C rays don't penetrate the earth's atmosphere. If UV-B rays are largely filtered out, then sunburn will not occur but, on the other hand, no melanine will form. Melanine is the substance in the cells on the surface of the skin which changes into pigment. This pigment then darkens in mild UV-A light and thus the skin tans.

The UV-A light of the sun, which is pure and gentle to the skin, tans very slowly. However in radiation intensities higher than that of the sun, the UV-A light, by means of direct pigmentation, is able to tan the pigments already present in the skin. With FL 800 UV you can obtain this direct tanning which is gentle to the skin. Rays may be dangerous for your eyes.

- The device must be used in IR-cabines only.
- If you are not feeling well or have unclear symptoms, do not use the tanning instrument without the permission of the doctor. The same holds true if you are taking any kind of medication - especially such medicines which lead to an increased sensitivity to the sun or to light.
- Make sure that you avoid an overdose of the insolation. This basic warning is valid for every type of tanning instrument and even more so for the sun itself.
- When using the instrument, make sure that you wear protective glasses.
- The device must not be switched on in explosive areas.
- Do not expose articles which would also fade or be damaged by natural sunshine to the UV-A light of the instrument.

- Do not use any sun protection creams. The skin should be clean and free of cosmetics.
- After the tanning session apply a moisturizer to the skin.



**The FL 800 UV unit must only be installed on the side walls of infrared saunas.**

## Tanning instructions (FL 800 UV)

The length of the tanning sessions will depend on your particular skin type. Always wear protective glasses or goggles when tanning. Ten sunbaths in a row make up the normal tanning cycle; the length of the individual sessions should be selected in accordance with the table. Then take a break for four weeks.

Do not attempt to archieve a quicker tan by extending the length of the tanning treatments. If you feel that your skin is tight and reddened, you should reduce your tanning time by 5 minutes and tan only on alternate days.

It is not possible to obtain a deeper tan than what would be possible in the sun at ideal conditions; your skin type is what ultimately determines the degree of tan which you will achieve. It is quite natural that fair skin, in particular, which hardly develops any pigments at all in the natural sun, will be just as difficult to tan under artificial sun.

Tanning session	1st day	2nd-10th day
very sensitive skin (always reddening, negligible tanning)	5 min	15 min
sensitive skin (always reddening, little tanning)	10 min	20 min
normal skin (little reddening, fair tanning)	10 min	25 min
insensitive skin (never reddening, quick tanning)	10 min	30 min

# Switching on the UV tubes (FL 800 UV)



Timer for UV lights

The desired time can be set using the knob on the timer.  
The maximum setting on the tanning time is 30 minutes.

Keep as close as possible to the tanning device. The closer you are to the device, the greater the tanning effect.

When the set time expires, the appliance switches off automatically.

Connect the control unit according to the wiring diagram below.

color coding:	green/yellow	=PE
	1	= N
	2	= red
	3	= yellow
	4	= green
	5	= blue
	6	= UV

## Spare parts:

The UV tubes are subject to ageing.  
Their tanning ability wears out after about 500 hours, after which they should be replaced.

Only replace with original spare parts.

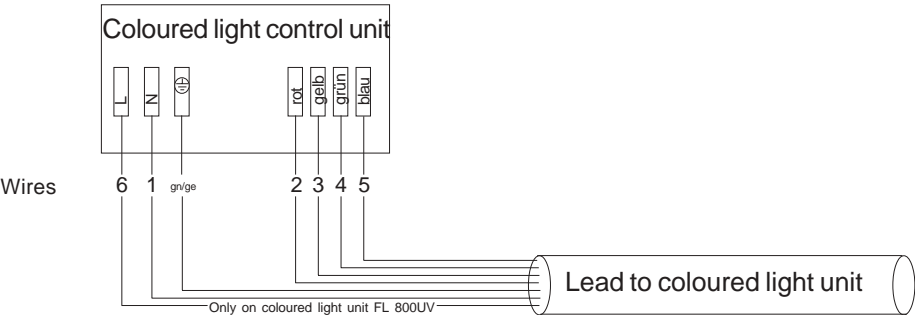
You can purchase the following replacement bulbs from specialist retailers or our service centre:

Tanning tubes:  
Excellent VSE Power 15 W 2%  
Item no.: 20003116

Coloured tubes:		
8 W green	Item no.:	20013572
8 W red	Item no.:	20013574
8 W blue	Item no.:	20013575
8 W yellow	Item no.:	20013576

Starter:  
Dr. Kern BST 20 W  
Item no.: 20008777

## Circuit diagram for non-detachable coloured light units



## Changing bulbs and starters



### CAUTION!

**Before opening your coloured light unit, disconnect both the coloured light unit and the control unit from the mains!**

**Only replace with original spare parts.**

Undo the plastic screws on the housing and remove it.

You can now change the bulbs or starters. The bulbs and starters can be removed by turning them in their sockets. Then insert the new bulbs or starters and turn them about 90° in their sockets. Next replace the housing and fasten it with the plastic screws.



## Performance data:

FL 400 FL / 400 S

4 special coloured light bulbs each 8W

Voltage 230 V AC N 50 Hz

Power consumption 35 W

FL 800

8 special coloured light bulbs each 8W

Voltage 230 V AC N 50 Hz

Power consumption 70 W

FL 800 UV

4 special coloured light bulbs each 8W

4 UV bulbs each 18 W

Voltage 230 V AC N 50 Hz

Power consumption 115 W

All coloured light units (except FL 400S) are operated using the coloured light control unit. EMOTEC HIC75, EMOTEC C55, ECON F1 or 60FL.



The emotional effects of the colors are perceived through the eyes. From there the color rays are relayed by a series of complex processes to the brain and unfold their effects in form of certain impressions and energies.

Neural color reception leads to an activation of the immune system. Depending on the color, specific physical systems are addressed and activated.

The physical absorption essentially takes place through direct color exposure to the skin.

The chemical absorption takes place in the gastrointestinal tract by ingestion of various colorful foods.

**BLUE**, the color of sky and water, is associated with yearning, vastness and cold. The cold slows down bodily functions. This is the reason why blue is said to have a soothing and relaxing effect and to help in cases of nervous disorders, insomnia, uneasiness and fearful states.

**GREEN** is the color of nature. Green light soothes and inspires at the same time and helps recuperation and regeneration. Green light is thought to positively influence the lungs and the respiratory system and be helpful for nervous conditions, headaches and joint inflammations.

**YELLOW** is said to promote positive attitudes and general wellness. Yellow colors can stimulate and strengthen nerves as well as dissipate gloom and melancholy and counteract stomach and intestinal disorders as well.

**RED** is associated with fire and blood. It is the color of activity, vitality and warmth. Red is said to stimulate blood flow and thus increase well-being and vitality.

### Guarantee

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

### Manufacturer's warranty

- The period of warranty starts from the date of purchase and lasts up to 2 years for commercial use and 3 years for private use.
- Always include the completed warranty certificate when returning equipment.
- The warranty 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 warranty 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 warranty 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:

Service address:  
EOS-WERKE Günther GmbH  
Adolf-Weiß-Straße 43  
35759 Driedorf, Germany  
Tel. +49 (0)2775 82-0  
Fax +49 (0)2775 82-431  
servicecenter@eos-werke.de  
www.eos-werke.de