

# Duetto®

Electric sauna infrared emitter unit

Instructions for installation and use

CE

Made in Finland

## Welcome

Welcome to Duetto® infrared heaters. The heat our infrared heaters produces makes you feel good. Heating the bigger muscles of the body gives a maximum benefit of the heaters.

A good time to bathe in an infrared sauna is 30 minutes. Maximum sauna time is one hour.

The heat of the infrared sauna will make you sweat. Remember to drink plenty of clean water to keep hydrated.

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## Delivery Includes

1 pc of Infrared heater for stove sauna (each unit has a manufacturer's serial number)

4 pcs of mounting screws

4 pcs of screw cover plugs

1 pc of the latest revision of instructions for use, care, and installation

(The right for changes is reserved)

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## Technical Details

IR:	Both B/C rays
Power:	110V - 290W 120V - 350W
Dimensions:	Height 36" x Width 12 ¼" x Depth 1 ¼" (Manufacturing K910mm x L310mm x P32mm)
Glass Color:	Black or Grey to be specified in the Customer order
Frame Material:	Untreated Wood
Wire:	9 ¾' (3m) heat-resistant silicone (ungrounded) 2x1, 5mm <sup>2</sup> 
Protection grade:	IP 56 protected against dust and water jets
Certificates:	 800685
EU Markings:	
Nominal voltage:	110V – 120V N1 50-60 Hz
Wave length:	6,8 - 7,3 micrometers
Disposal of unit: Recycle – do not dispose in trash	

## Symbol Explanations



Prompting symbol: “Please read instructions for use, care, and installation before installing or using the equipment”



Prohibiting symbol “The device must not be covered”



800685

Infrared heater is marked ungrounded electric device  
Safety instructions



Duetto<sup>®</sup> infrared heater for sauna is certified



Infrared heater is marked ungrounded electric device  
Safety instructions



Hybrid sauna has both IR and conventional stoves, while IR only sauna has only IR heaters



Water can't be introduced to IR stove



Do not touch the heater while it is switched on. The glass surface is **EXTREMELY HOT** and can cause burns



A broken device must be taken to retailer or recycling centre according to local recycling rules

## Infrared Heater Space Requirements

Duetto infrared heaters are meant to be used one heater to one person, plus the heater(s) needed to warm the legroom area. Each infrared heater requires 50 cm (20 inches) of horizontal wall space.

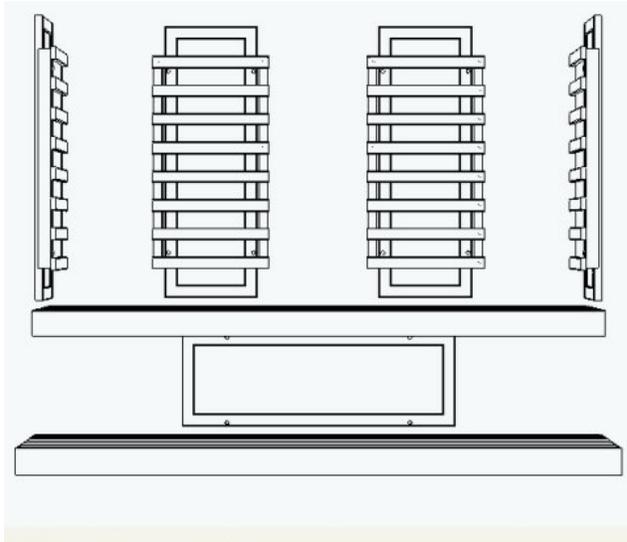
## Calculating the Quantity of Infrared Heaters for a Sauna

The number of infrared heaters needed depends on the size and dimensions of the sauna room and whether it is only an IR sauna or a hybrid sauna (both traditional stove and IR Stove present). It is the responsibility of the sauna designer to determine the required amount and installation locations of heaters per each application. Ceiling installation may be possible in IR alone saunas, but are forbidden in hybrid installation.

## Positioning the Infrared Heater in the Sauna

Duetto infrared heaters are meant to be used one heater to one person, plus the heater(s) needed to warm the legroom area. A heater is mounted on the wall so a bather can sit directly in front of it. To enhance the effect of the heat, more heaters can be installed on the sides of the benches and under the seating bench when adequate space is available. Another heater is mounted on the wall underneath the seating bench to warm the legroom area. Refer to the illustrations below for examples of heater installations. (This picture is for reference only, dimensions are determined by the sauna designer)

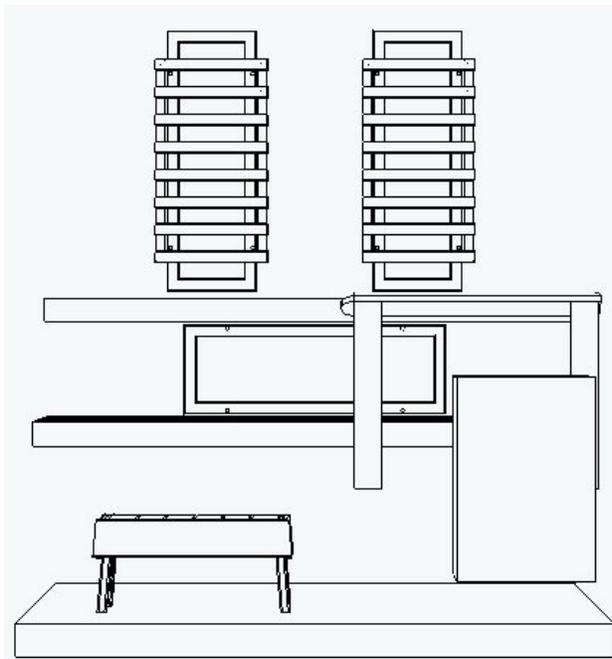
## Installation examples:



Five Duetto heaters are installed for a sauna room that is Approximately 45 ft<sup>3</sup> (abt. 4m<sup>3</sup>). The minimum EU height requirement of the room should be no less than 1800 mm. Your sauna designer will specify the correct and acceptable dimensions.

Two Infrared heaters are mounted on the back wall behind the bench, one on each side wall, and one below the sitting area as a legroom heater.

Safety and leaning grills (purchased separately – not part of Duetto delivery) must be installed to cover all the heaters.



If infrared heaters are retrofitted into a traditional stove-heated sauna, the distance between a heater and the sauna ceiling should at minimum 4" (100 mm).

A stove-heated sauna requires less heaters, assuming the regular stove is used at the same time to heat the sauna room. For example, three heaters are needed for two bathers: one for the back of each bather and one for the legroom area.

Safety and leaning grills (purchased separately – not part of Duetto delivery) must be installed to cover the all heaters.

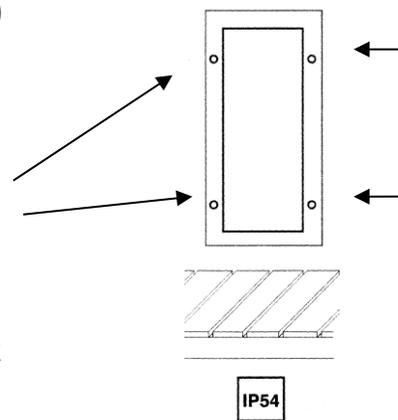
**NOTE:** Do not install heaters in the ceiling of a stove-heated sauna.

## Installation Instructions

**WARNING:** Inspect heater before installation to make sure it is not damaged. Excessive vibration during transport can cause damage to the heating elements. **DO NOT ATTEMPT TO USE** the heater if damage is detected. Contact your dealer for troubleshooting and replacement parts.

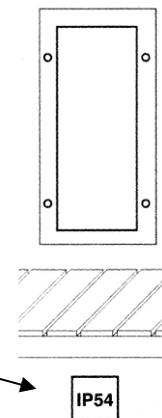
Install the heater onto a straight, solid surface. Allow at least 4" (100 mm) of open surface space around the perimeter of the heater, and at least 4" (100 mm) between the heater and the ceiling of the sauna room.

Use the mounting screws provided in the package to attach the heater to the wall. Place screws through the pre-drilled holes in the unit wooden frame (refer to the illustration here) and screw directly into the wall. Do not over-tighten screws because it can break the glass. Cover each screw head with the included plugs.



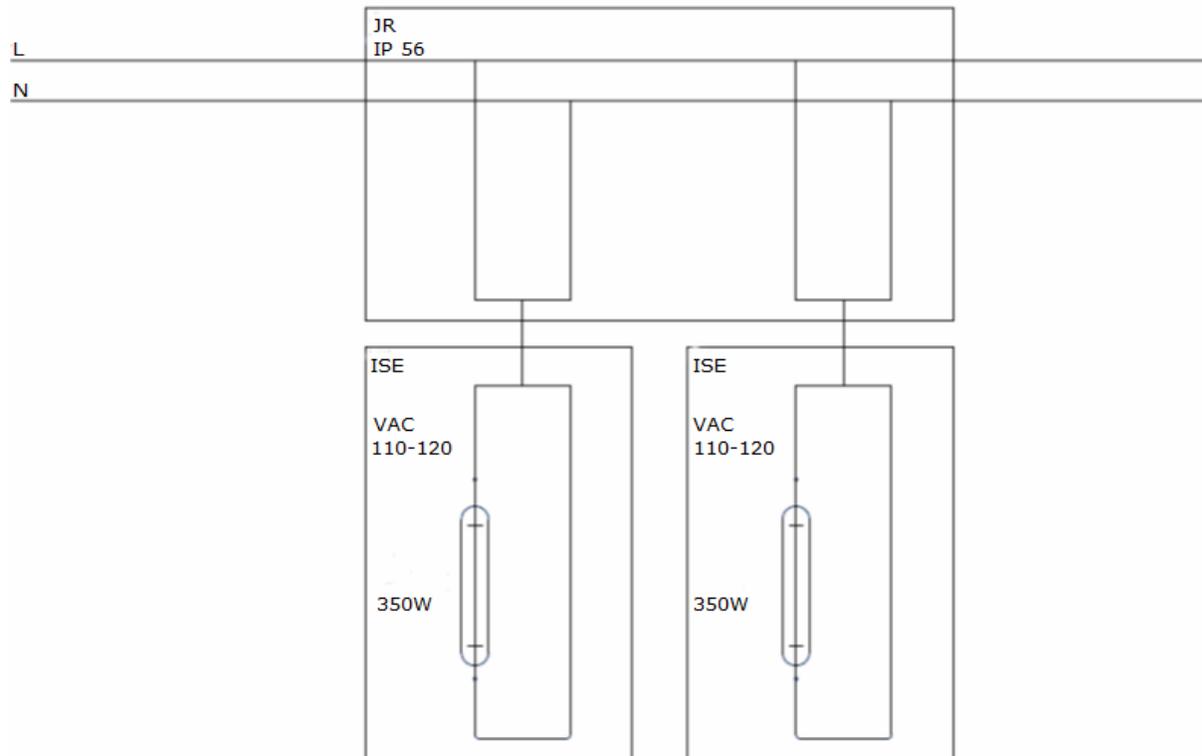
Gently pull the electrical cord downwards, and inspect it carefully for damages. Case the exposed wire with the appropriate materials. (Additional information about casing can be inquired from your dealer)

All electrical work must be carried out by a licensed electrician and must comply with federal, state, and local building codes. Install a junction box in a suitable place, such as against the wall under the benches. (Refer to illustration here)



## Electric Wiring of Infrared Heaters

When performing the electric wiring the infrared heaters can be connected in shunt.



Test the unit to make sure that the infrared heater is functioning properly. If it does not seem to perform as intended during the testing, check the entire installation for any mistakes or damages.

This heater is hot when in use. To avoid burns, do not let skin come in direct contact with hot surfaces. This heater is meant to be used with a grill (not included) for safety purposes. The grill must be installed so that the horizontal bars are at least 1/2" (12 mm) from the surface of the heater, i.e. from the wood frame.

The infrared heater must always be left uncovered.

The ventilation in the back of the heater must not be blocked. There must be adequate ventilation.



The infrared heater must be mounted to a solid base. The ventilation in the back of the heater must not be blocked.



Check that the infrared heaters have turned off and no longer emit heat after you have finished using the sauna.

Never carry out repairs yourself. Contact your Dealer for repairs.



**THE INFRARED HEATER MUST NOT BE COVERED!** Covering of the unit is a **SERIOUS** fire hazard.



The device shall only be controlled by a control unit or timer (not included) suitable for controlling an infrared heater.

## Maintenance

Clean your Duetto® – infrared heater with a cloth and mild detergent.



**Note:** The device must be disconnected during cleaning.

Before turning the heaters on, make sure they are not covered and that they are in good condition.

## Warnings – General and IMF

1. All manufacturer's installation and maintenance instruction must be followed. The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
2. If you are a person with compromised heat pain sensation or under the influence of alcohol, drugs, tranquilizers or medications you should not use infrared warming cabins.

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3. Pregnant women or persons with poor health should consult their physician before using this product.
  4. **CAUTION FIRE HAZARD:** Do not use sauna or this product for heating a dwelling, drying clothes, animals, or any objects.
  5. Inspect sauna and this equipment periodically. If there are any signs of damage to any part, stop using the product immediately.
  6. Minors and people requiring supervision or assistance should never be allowed to use the product without competent supervision. **DANGER OF SEVERE BURN.**
  7. Do not use or store any chemicals in the vicinity of this product.
  8. **ELECTRIC SHOCK HAZARD** – High voltage exists with this equipment. There are no serviceable parts in this product, and it should never be opened.
  9. This product requires sufficient air flow during use.
  10. All sauna manufacturer's instructions and specifications must be followed.
  11. Minimum installation clearance must be adhered to when installing this product.
  12. All controls must be adequately grounded.
  13. Infrared Stove shall not be operated continuously for more than 6 hours.
  14. Do not operate this product if safety grills are not present.
  15. Electrical junction boxes must be installed in sauna room – (as explained above).
  16. For safety purposes, and to utilize exit as needed, sauna door must not have a lock. Confirm door opening direction from your local building code.
  17. Do not paint or treat glass or frame with any media.
  18. This product is an infrared emitter, and infrared cabin should not be used within 24 h after UV radiation exposure, regardless whether exposure is from sun or from artificial source.
  19. **WARNING.** Over exposure to heat can lead to heat exhaustion, heat stroke, and or dehydration.
  20. **WARNING.** EMF-exposure is generated by this product. It has been linked to health risks including cancer. Consult your physician in order to see if your usage should be limited.
  21. Low quality Silicone implants may be affected by heat generated by this unit. Please consult with your physician prior to using it.
  22. **WARNING.** According to ICNIRP, the heat from infrared saunas can cause thermal injury.
  23. Medical conditions like ECZEMA (atopic dermatitis) may worsen when using this product.
  24. Male fertility. Men having low sperm count or having trouble conceiving a child should consult their physician prior to using this product.
  25. Cardiovascular conditions. The American Heart Association warns that people with high blood pressure should consult their physician. Individuals who may be at risk

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from hyperthermia, such as individuals suffering from cardiovascular disease, should see medical advice before use of infrared warming cabins.

26. When persistent erythema (reddening of the skin lasting more than a day) and netlike color changes persist after regular exposure to infrared radiation, exposure should not be repeated and medical advice should be sought to prevent development of *erythema ab igne*.
27. This product is not a toy and should not be played with by children. Children must be supervised to ensure they do not play with the appliance.

## Manufacturer's Warranty

12 months from installation or 18 months from date of delivery, whichever is earlier.

In case of warranty issue, follow these instructions:

1. Contact your dealer for an RMA-number and shipping address
2. Ship the unit back to dealer, customer pays shipping to dealer
3. If unit is determined to be under warranty, the dealer will send you a new unit at manufacturers cost.
4. The new unit shall have a new 12/18 warranty. Warranty receipt is the receipt from the retailer or a report from a licensed electrician / company / inspection measurement report stating the serial number of unit being installed.
5. Warranty covers unit only, no labor or any additional expenses
6. Unliquidated damages are not included in the warranty coverage
7. Warranty is only valid if manufacturer's installation, maintenance, and use instructions have been followed
8. The Manufacturer represents, that the product matches the specifications agreed and is suitable for its ordinary use.
9. The warranty covers possible defects of production and material
10. The Manufacturer is not responsible for defects that are due to installation, normal tear and wear or due to the character qualities of the wooden parts, such as discoloration.

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11. If the device is altered in any way or the instructions of use provided by the manufacturer are not followed exactly, the warranty is voided.
  12. The buyer must take care of the product carefully.
  13. The Manufacturer is not responsible for product defects, malfunctions or deficiencies that are caused by transportation or false storing, installation or use against the manufacturer's instructions or using in a space where the conditions do not comply the manufacturer's recommendations.
  14. When receiving the product, the buyer must make sure it has no defects due to transportation or storing.
  15. The buyer should notify about any defect or malfunction immediately after it has been detected. The notice can be delivered primarily to the retailer of the product, authorised installation company or importer.
  16. The manufacturer is not in any conditions responsible for any direct or indirect losses or financial consequences such as loss of productivity, business profit, contracts, and benefit of use or decrease in revenue.

These terms are valid for the time being since 01.01.2020.

Selling date:

Importer:

Retailers stamp and signature

## NOTE!

Dear Customer

We want to emphasize, that in the case of any warranty claim an inspection sheet and a copy of invoice from the electrician who carried out the work must be provided.