EN

ASSEMBLY AND OPERATING INSTRUCTIONS OF THE RADIANT HEATERS AND LED SPOTS

ExtremeLine dark radiators - ExtremeLine carbon radiators - ExtremeLine LED Spots

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Heaters

Lights

The following is necessary for easy and correct commissioning of your device:

1. remove transport packaging - mounting accessories are located in the end caps of the packaging
2. mount the unit
4. have the electrical connection carried out by a qualified electrician

Optional depending on device model:
5. switch on sensor SE5
6. teach-in the corresponding remote control
7. configuration via APP

I General

1. brief overview

Thank you for choosing an ExtremeLine product. Our advanced heating/lighting system is equipped with the latest technology and designed for indoor and covered outdoor use. These heat and light sources are characterized by a very energy-efficient operation and many convenient functions, which are realized, among others, by radio control. radio control. For the correct installation as well as a proper operation, please follow please follow these instructions. Please pay attention to the type plate on the device. equipment may vary accordingly.

Please also note the following: Technical changes are made in the interest of progress. Our online data is constantly updated, print documents may be older.
older version. Your device was developed and produced in Germany,
therefore the main language of this manual is German, in case of translation-related ambiguities please contact us as the manufacturer.

Please note: All information in this manual is based on our current knowledge and is intended current state of our knowledge and is intended to inform about our products and possible applications (technical changes and further developments, errors and misprints excepted).

2. Use

The radiant heater or LED lamp has been designed for private or commercial use and must not be used for other purposes areas. It is used to achieve a pleasant and comfortable atmosphere at workplaces, on terraces, in pavilions, in smoking areas, in living areas and winter gardens to achieve a pleasant and comfortable atmosphere. The devices can be aimed at specific surfaces by means of various brackets. specific surfaces.
Before installation, please read the instruction manual carefully.
It is to be considered as part of the product. Do not install the device until you have read and understood the have read and understood the operating instructions. If you have any doubts, please contact the seller or the dealer. Keep the manual for the entire life cycle of the product.
life cycle of the product. Pass the operating instructions on to any subsequent owner of the device. Make sure that any supplements received are supplements are inserted into the operating instructions. Make sure before Before starting the installation, make sure that the operating voltage of your power supply corresponds to that the one indicated on the type plate of the device or the accessories. These operating instructions are intended exclusively for the series products. For special versions, deviations in the technical data, installation and dimensions are possible.

- Avoid switching the ExtremeLine product on and off in short intervals, otherwise the service life will be greatly reduced.
- Please note that depending on the current mains voltage, the actual power output of the device will change, as well as the power output due to environmental influences.
- of the device will change.

3. safety instructions

It is essential to comply with local building and fire safety regulations.
Warning:
When mounting...

- The unit (exception: HEAT TOWER) must be firmly mounted and connected to the main power supply by a qualified electrician in accordance with the applicable standards and rules and rules for electrical wiring of the electrical trade in the respective country of and documented.
- The heater must not be mounted directly above or below a power outlet. A safety distance of at least 10 cm must be ensured from the long sides to the nearest power source must be ensured.
- According to VDE 0100, part 701 (observe the regulations valid in your country) the ExtremeLine units may only be installed in installation rooms with high humidity such as bathrooms, pools etc. only in area 3. In such an environment
- Switches and other control devices must be mounted in such a way that they cannot be touched by persons in direct contact with water.
- The equipment must be protected by a separate 30 mA residual current device (RCD). According to existing guidelines, devices must have at least an insulation resistance of 0.3 MOhm.
- When installing in or on metal profiles, pay attention to a possibly

When using...

- The device may only be operated with an approved disconnecting device. It is supplied as standard with an open cable without a plug for the electrical connection.
- Always make sure to switch off the device after use.
- Do not touch any part of the heater during operation or for up to one hours after switching off. There is a risk of burns.
- Keep your unit free of dust, cobwebs, etc. There is a risk of fire.
- Do not operate your device when it is wet or dirty.
- For cleaning your device, follow the instructions in Chapter II.2 (Cleaning and maintenance).
- Ensure that children or persons with reduced physical, sensory or mental capabilities do not operate the unit, sensory or mental capabilities operate the device only under supervision or after or after instruction by a competent person.
- Ensure that neither cables nor furniture or combustible materials come into contact with the surface of the radiant heater. The surface of the radiant heater or are in the immediate vicinity of the heating element. The device must not be covered under any circumstances be covered (exception: HEAT TOWER declaration must be observed).

Protective conductor connection to metal profiles ....

Integrate the cable-carrying profiles, or profiles in which the control components are housed, into the building's equipotential bonding/protective conductor in accordance with the electrotechnical regulations in your country.

In case of a defect...

- Never use the heater with a broken or defective heating coil. Never look directly into the light beam of the LEDs, e.g. if the scattering profile is damaged. Do not operate the LED light with a broken or defective scattering profile. Prevent the use of defective devices under all circumstances! Failure to observe the warnings may result in irreversible eye damage and injury.
- If the power cord of your unit is damaged, it must be replaced by a power cord that is replaced by a power cord approved by the manufacturer.
- If the device or the accessories have a defect or are damaged, the device must no longer be operated. The device must no longer be operated. Please disconnect properly from the power supply, return it to the manufacturer or dispose of it (see chapter I.5) (see chapter I.5)! The device must be secured against reconnection.
- The electronic modules inside the devices cannot be replaced. The heating element of the carbon radiators is available as an accessory part if required and can be replaced. All other heating or lighting elements cannot be not be replaced

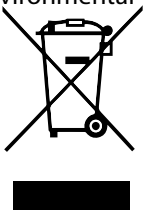
The batteries in the remote control...

- Non-rechargeable batteries must not be charged.
- Only the recommended batteries or those of an equivalent type may be used. Do not use used and new batteries at the same time and do not use different types of batteries at the same time.
- Batteries must be inserted with the correct polarity (+ and -).
- Remove dead batteries from the remote control.
- Remove the batteries from the remote control if it will not be used for a long time.

To ensure safe and secure programming for products without an all-pole power switch, e.g. ExtremeLine Lighting use the Somfy Universal Setting Cable Plug article number 9 015 577. Observe the maximum permissible power.

4. packaging

Carefully unpack your device and the accessories, do not use any sharp objects that could damage the device. The environmentally friendly ExtremeLine packaging, whether placed on the market directly or via retailers, is certified in accordance with §6 of the Packaging Ordinance. This means that it can be disposed of in an environmentally friendly manner in the collection container for packaging materials. The respective local regulations must be observed.



5. decommissioning and disposal

The goods purchased from S.E. System Electronic GmbH can be disposed of free of charge at your local recycling center in accordance with the legal requirements. Please use this and never throw electrical appliances into the household waste. Do not throw used batteries into household waste, but take them to a collection point or dispose of them at a hazardous waste depot. If your ExtremeLine device should one day be taken out of operation, this must be carried out by a specialist in accordance with the applicable rules and secured against recommissioning

6. Guarantee and warranty

The warranty period of 24 months begins on the day of purchase of the new ExtremeLine device. Wear parts or defects that only have an insignificant effect on the usability of the device are excluded from the warranty. The warranty claim must be proven by the original invoice showing the date of purchase and the device model. Our products are subject to continuous further development in line with technical progress. Therefore, in the case of a repair or replacement, the repaired or replaced device does not have to correspond to the original design of the goods complained about. Your new or repaired device must, however, be equivalent or of higher quality with regard to the characteristics of use.

7. Handling in case of warranty

Please contact us as the manufacturer with the valid proof of purchase. Please return the defective device only in consultation with the manufacturer. Please understand

that only complaints with a detailed error description can be processed quickly. A form to simplify the error description is available online at www.ExtremeLine.de. The device sent in will only be accepted if it has been packed appropriately for transport. Please remove any broken carbon tubes prior to shipment to prevent further damage. The manufacturer will, at its discretion, honor warranty claims by repairing or replacing the defective unit. In the case of a replacement unit, the shape and color may differ slightly from the originally purchased unit. The warranty period will NOT be extended if your unit has been replaced or repaired by the manufacturer.

8. Warranty exclusions

Damage or defects caused by improper handling or operation, as well as defects caused by the use of non-original parts or accessories not recommended by the manufacturer, are not covered by the warranty. The warranty also does not cover damage caused by external influences such as fire, lightning, water or any transportation. Liability for consequential damage to persans or property is excluded. The warranty is void if the serial number of the device has been changed, removed or made illegible, as well as if a person not authorized by the manufacturer opens, changes, modifies, rebuilds or repairs the device. Transport damage must be reported immediately to the delivering parcel service and confirmed in writing by them. With your signature upon receipt of the shipment, you confirm the proper acceptance of the goods, as well as the proper external condition of the packaging without defects. Claims for damages are excluded after signature

9. CE Declaration of Conformity

We will be pleased to send you the CE Declaration of Conformity directly upon request.

10. Declaration of Conformity / Ecodesign Directive

The Declaration of Conformity can be obtained directly from us on request. Contact see back page. The product declaration according to EU2015/1188 Ecodesign Directive for electric heating systems can be found at the end of these operating instructions.

II Heaters

1. Minimum distances

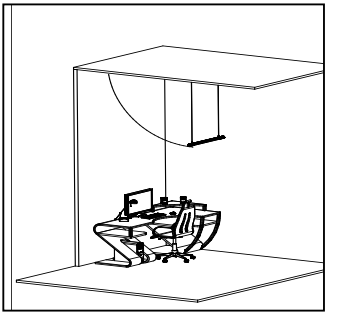
The specified minimum distances must be observed in all cases.

1.1 Rigid mounting

A = at least 80cm B = at least 30 cm C = at least 6 cm to wood & metal E = at least 15 cm to glass awning & fabric D = at least 210 cm to floor, at least 80 cm to combustible objects

1.2 Rope suspension

X + 80 cm. Make absolutely sure that there are no combustible objects in the swivel area. The units may only be suspended vertically and mounted on immovable parts. Prevent the units from vibrating.



2. Cleaning and maintenance

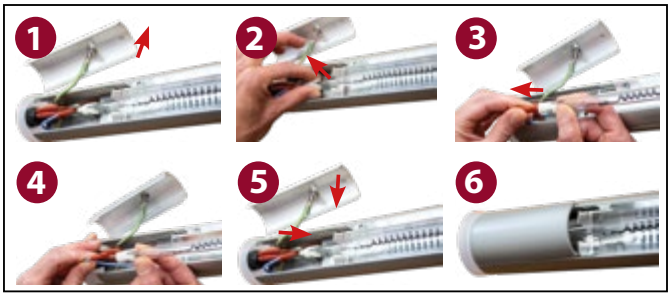
- Before using your device for the first time, clean it with glass cleaner to prevent residues on the surface.
- By cleaning your ExtremeLine unit regularly, you will achieve the longest possible and most efficient efficient operation.
- Always keep the product free of cobwebs, dust, etc. - Fire hazard!
- The surface should be cleaned regularly with a damp, lint-free cloth. Make absolutely sure that the device has not been operated for at least 1 hour. - Danger of burns!
- No voltage may be applied to the unit during cleaning! To do this, you must disconnect it or switch off all poles and secure it against being switched on again during cleaning - risk of burns! - Risk of electric shock!
- The heaters contain hydrophilic components. Please note that after longer idle time the residual current circuit breaker can be triggered. This is not a reason for complaint. In this case, the heater must be checked by a qualified electrician.
- Do not use high-pressure cleaners or similar to clean your ExtremeLine unit.
- Do not use any sharp objects or aggressive cleaning agents for cleaning.
- Make sure that no cleaning residues remain on the device.
- Use only commercially available glass cleaner for cleaning.
- The electronic components inside are maintenance-free.
- The heating element of the Carbon units can be replaced if necessary.

3. error condition detection, spare parts and repair

If you need spare parts, you can get them from your dealer or directly from us as the manufacturer. In case of errors not listed here, please contact your dealer or our support first before sending in your device. Please note that sent in devices can only be processed with a detailed error description.

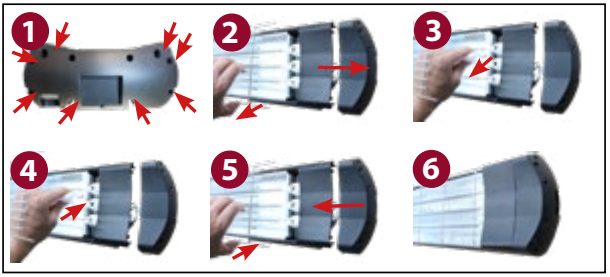
Error	Troubleshooting/cause	Note / Spare parts
Heater does not heat	- Check fuse and mains voltage - Check unit switch	Troubleshooting unsuccessful → Contact support
Unit smells burnt	- When commissioning for the first time - Check the unit for contamination	Troubleshooting unsuccessful → Contact support
The heater trips a residual current circuit breaker or fuse	- Unit got wet - check level of load on fuse	Stop using the device and contact support
The heater does not get warm enough	- Check mounting arrangement - voltage too low - ambient temperature too low - unfavourable environmental influences	
Plastic cover loose or broken	Replace plastic cover	EC1-BK or EC1-WT Exchange tutorial at www.ExtremeLine.de
Carbon tube broken	Replace carbon tube Type ECC900S  ECC900SFH ECC1600SFH 	ECC900S, ECC900SFH or SFH1600 Exchange tutorial at www.ExtremeLine.de **When ordering a replacement, check the different connection types of the heating tubes on your device! Please ask us using your serial number.**
Carbon tube does not light up / heat up	Previous contacting	ECC900 tutorial for exchange at www.ExtremeLine.de
Control does not respond	New contacting	EC2
LED on the heater is not lit	- Check the installation position of the carbon tube for correct seating in the spring clips. - Replace carbon tube	
LED on heater flashes white 1 sec. on / 5 sec. off, current power level remains on	- Reduce distance to the appliance - Replace battery in remote control - Check fuse - Check appliance switch	EC2
LED on heater flashes white 0.2 sec. on / 5 sec. blue	- Check fuse - Check appliance switch	EC2
LED on heater flashes red 1 sec. on / 2 sec. blue	- Replace battery at temperature sensor SE5	
LED on heater flashes red 2 sec. on / 2 sec. blue	- Switch on temperature sensor - Bring temperature sensor within range - Replace battery at temperature sensor SE5	
LED on SE5 flashes red	- Maximum temperature is reached, adjust the value via APP	EC2
Ground fault circuit interrupter trips	- Overtemperature protection has triggered, wait until the heater cools down and switches on again.	If necessary, heat the device by a qualified electrician or send it in
EXremote remote control does not respond	- Replace battery at temperature sensor SE5	Batteries of the type LR03-1.5V or FR03-1.5V
RCD switch trips	- Check the insulation resistance of the unit -Unit has become wet	Have the appliance heated up by a qualified electrician or send it.
ExRemote control does not react	- Battery empty - Remote control defective	Battery type LR03-1,5V oder FR03-1,5V

3.1 Exchange the HEAT TUBE carbon



1. **Remove the cover:** Pull down the side cover on the side of the mains switch firmly. You now have access to the carbon tube.
2. **Remove the heating** element: Pull out the heating element. Be careful not to hit the tube to prevent it from breaking.
3. **Unplug and remove the heating element:** Pull the flat plug on both sides from the heating element and remove them.
4. **Reinsert and plug in heating element:** reinsert the heating element in the same way and plug the flat plug back in at each end.
5. **Replace the cover:** replace the cover.
6. **Check cover & appliance:** Check that the cover is securely in place and carry out a function test.
7. **DONE** Your unit is now ready for use again.

3.2 Exchange the HEAT SHINE/HEAT Tower carbon



1. **Remove end cap:** With the help of a Torx TX10 screwdriver, remove the eight screws with which the plastic cover is attached to the base body.
2. **remove the cover and lift the protective grille:** Now carefully pull the plastic cover and the aluminium cover outwards until the protective grille is exposed, now pull the protective grille out of the profile.
3. **Disconnect and remove the heating element:** Pull the flat plug on both sides from the heating element and remove it.
4. **reinsert and plug in the heating element:** reinsert the heating element in the same way and plug the flat plug back in at each end.
5. **insert the cover and protective grille:** Now replace the protective grille, the aluminium cover and the plastic cover and screw them back on.Check that the covers are securely in place and carry out a function test.
6. **DONE**Your unit is now ready for operation again.

Only a qualified electrician may carry out the replacement in accordance with the applicable regulations. It is essential to use the correct carbon tubes in terms of power and voltage. Only touch the heating element with a dry, clean cloth

3.3 Replacement of the carbon tube Heat Flare

1. **Remove both end caps:** Using a Torx TX10 screwdriver, remove the four screws that attach the plastic cover to the base body.
2. **Remove the housing:** Now carefully pull the housing down from the rear profile.
3. **Unplug and remove the heating element:** Pull the flat plug on both sides of the heating element and remove them.
4. **Reinsert and plug in the heating element:** Reinsert the heating element in the same way and reconnect the flat plug at each end.
5. **Inserting the housing:** Now slide the housing back onto the rear profile.
6. **Assembling the end caps:** Reassemble the two end caps with the four screws. Check the end caps for a secure hold and carry out a function test.
7. **DONE** Your device is now ready for use again.

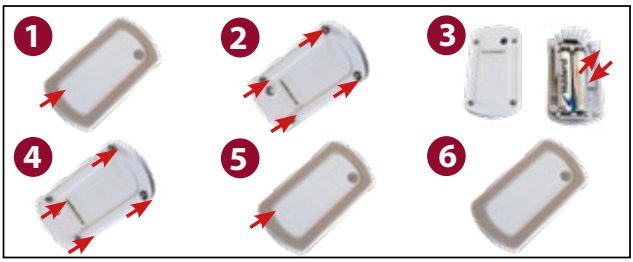
Service videos can be found at

https://www.extremeline.de/hilfe/

https://www.Service.ExtremeLine.de

According to the applicable regulations, the replacement may only be carried out by a qualified electrician. Be sure to use the right carbon tubes in terms of power and voltage. Only touch the heating element with a dry, clean cloth.

3.3 Replacing the battery in the temperature sensor SE5



1. **Remove the seal:** Remove the rear seal with a flat object
2. **Loosen screws:** (4 pieces) by means of a screwdriver and open the housing
3. **Replace battery:** Replace batteries type AAA4
4. M**ount the housing:** Screw in the 4 screws with a screwdriver.
5. **Apply the seal:**Apply the seal with double-sided adhesive tape
6. **Ready:** The sensor is now ready for operation, switch it on again.

4. scope of delivery radiant heaters (see shipping list)

Designation	Control	Scope of delivery				
HZO-Si9	BLE EXTREME LINE		 2x 			ANDROID
HZO-Si1 / SiA	EXREMOTE					
HZO-Si6	elsner elektronik					
HZO-Si7	somfy					
HZO-S00	Without control system single-tier					
HSH-Si1 / SiA	EXREMOTE		 2x 			ANDROID
HSH-Si9	BLE EXTREME LINE					
HSH-Si6	elsner elektronik					
HSH-Si7	somfy					
HSH-E01	Without control system three-level					
HFL-SiA	EXREMOTE		 2x			ANDROID
HFL-Si9	BLE EXTREME LINE					
HFL-Si6	elsner elektronik					
HFL-Si7	somfy					
HFL-S00	Without control system single-tier					
SET2	EXREMOTE		 2x			ANDROID
	Without control system single-tier		 2x			
HTCA-Si9	BLE EXTREME LINE					ANDROID
HTCA-S HTCA-Si1 / SiA	EXREMOTE					
HTCA-Si6	elsner elektronik					
HTCA-Si7	somfy					
HTO-S01.2700.BK	Without control system two-level					Mounting bolt

In addition, note the different lengths and power ratings of the units.

5. Device description

5.1 HEAT TUBE Carbon

The HEAT TUBE Carbon is regulary delivered with an open cable without a plug. The HEAT TUBE Carbon is available in different versions, see chapter II.11 (Technical data). Please note the respective functions and instructions in chapter II.7 (Controls).

5.2 Set2 - 3-piece combination

The Set2 is regularly delivered with an open cable without a plug. The set contains two HEAT TUBE Carbon and one LED TUBE, which are already pre-assembled and packaged. The Set2 can be controlled by means of the remote control supplied. Please note the respective functions and instructions in chapter II.7 (Controls).

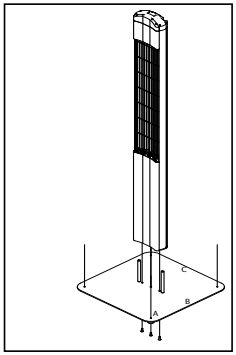
5.3 HEAT ZONE

Unit protection class IPX4, for wall mounting IPX0The HEAT ZONE is regularly delivered with an open cable without a plug. The unit is equipped with an overheating protection. If this is triggered, it switches the unit on again automatically after a certain cooling time. Therefore, it may happen that the status LED does not light up even though the unit is switched on. An ExtremeLine sticker is enclosed with your HEAT ZONE. Depending on the installation direction, this sticker must be attached to the transparent plastic jam cover (LED display). The HEAT ZONE is available in different versions, see chapter II.11 (Technical data). Please note the respective functions and instructions in chapter II.7.

5.5 HEAT SHINE

The HEAT SHINE is regularly delivered with an open cable without a plug. The unit is equipped with an overheating protection. If this is triggered, it automatically switches the unit on again after a certain cooling time. An ExtremeLine sticker is enclosed with your HEAT SHINE. Depending on the mounting direction, this sticker is to be attached to the transparent plastic cover (LED display). The HEAT SHINE is available in different versions, see chapter II.11 (Technical data). Please note the respective functions and instructions in Chapter II.7 (Controls).

5.6 HEAT TOWER HTO



The HEAT TOWER is equipped with two switches. The first switch turns the unit on or off, the second switch allows you to turn off one of the three carbon tubes to reduce the heat. During operation, make absolutely sure that the unit cannot come into contact with clothing or skin through carelessness. Make sure that the stand is secure and firm. For this purpose, the stand can be screwed firmly to the ground. To do this, use the holes provided for this purpose in the base plate and make sure you use suitable dowels and screws according to the nature of the surface. Please observe the specified safety distances (see below). The HEAT TOWER is delivered partially assembled. First, attach the stabilising bolts to the base plate and slide the HEAT TOWER onto it. Then screw the

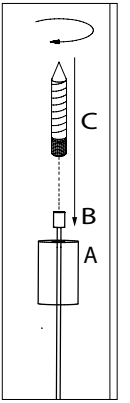
base plate to the HEAT TOWER using the screws supplied. After you have ensured that the HEAT TOWER is standing firmly and securely, you can put it into operation. There must be no flammable objects within a radius of 80 cm. A = M6 holes for levelling feet or floor mounting B = 50 cm C= 80 cm

6. mounting instructions

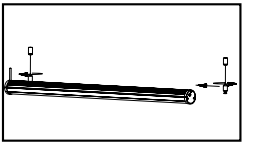
Make sure that the unit is securely and firmly connected to the mounting surface. The mounting brackets must have a tensile and shear strength that can withstand at least three times the weight of the unit to be mounted, including accessories. Test the load capacity of the mounting brackets before commissioning. Use suitable screws and dowels for fastening. These are not included in the scope of delivery. To simplify matters, only one fastening element is shown in the installation description. Please note that you always need two elements to mount your unit securely. For additional mounting material, use parts of the mounting material from the standard accessories (hanger bolt M6x50 or sliding blocks or mounting brackets).

6.1 Rope mounting DAHSMxx

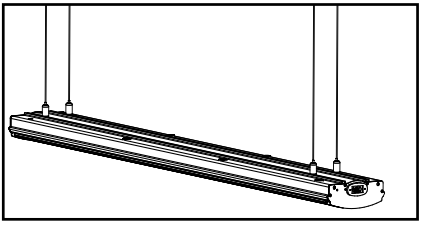
For a TUBE you need 2 rope brackets, otherwise you will receive 4 pieces in the DAHSMH set.

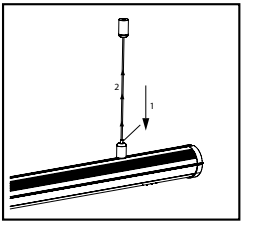


Attaching the rope bracket to the ceiling:
Ensure parallel mounting. Screw C into the corner of the ceiling, then feed the rope through bracket A from above so that the end of the rope is in bracket A. Now screw bracket B into the ceiling. Finally, turn the bracket A into C. Test the strength of the mounting material.Attaching the rope holder to the unit:Loosen the holder in the anti-clockwise direction of rotation and insert the nut on the underside into the profile.



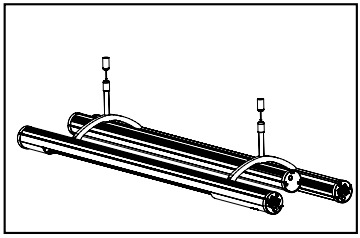
Adjusting the length of the rope:
To adjust the length of the rope, first press down the small sleeve on the screw connection 1, from which the unit is then suspended. Now adjust the rope to the desired length. Excess rope can be shortened or stowed in the groove of the unit.





6.2 Standard mounting the joint DAHGMSH and DAHGMST18

Optionally the joint can be mounted on the mounting plate DAHDB. This is recommended for all surfaces due to the increased contact surface and the 2 fixing points, and also facilitates assembly. Parts list: 2 x DAHGMSH, 2 x M6 Allen screws, 2 x M6 nuts or 2 x DAHGMST18, 2 x M6 Allen screws, 2 x M6 nuts, 2 x washers (between joint and unit).



6.3 Mounting SH3 3-fold holder SH3. This can be combined with both the rope holder and the joint. Parts list: 2 x SH3, 2 x adapter to M10, 2 x set screw M6 (for mounting SH11)

7.0 controls for radiant heaters Si9/Si7/Si6/Si1

7.1 General settings / functions

7.1.1 Display / functions

The integrated control has both a Bluetooth interface and operation via radio systems. Via Bluetooth, the control unit can receive data such as temperature values from sensors, and it is also possible to configure and operate the unit using an Android APP. The power of the radiant heater can be controlled in 3 stages on the units with control.

Status display HEAT TUBE — HEAT ZONE/HEAT SHINE

You will find the unit status indicator on the front of your unit.			
Level	**PowerLED**	**LED**	
0	0% (Off)	Blue	
1	68%	GreenYellow	
2	86%	Orange	
3	100%	Red	
Weekday control activated (power off)		Turquoise	
Turquoise Weekday control active (power on)		Purple	

Temperature sensor SE5

Switch on the temperature sensor when you use your device in a building shell.

7.1.2 Settings via Bluetooth APP (Android)

The BLE Bluetooth Low Energy module enables control and configuration of the ExtremeLine units via Android smartphones. To be able to use these functions, the ExtremeLine Control app must be installed via the Google Playstore (requirements: min. Android 5.0 and Bluetooth Low Energy). After the first start, there is an introduction to the app, which shows the functions and settings. Communication can only take place after a one-time search/saving. Carry out the device search within the first 10 seconds after switching on the device. Only one smartphone can be connected to each unit at a time. **Default password 0000**

Function extract	Factory setting	Setting options
Timer /electronic room temperature control and weekday control	Switched off	Setting per day 4 times programmable
Frost protection	Switched off	Setting value -5 to +8°C
Maximum room temperature	Factory setting 30°C	Setting value 15 to 30°C
Maximum heating time / operating time limit	Factory setting 12h	Setting value 15min to 12h
on/off/dimming in 3 steps		
Automatic update	Updates can change the range of functions.	

To be able to use all functions, please observe the separate operating instructions for the APP! Temperatures can only be used in conjunction with the SE5.

7.2 EXremote (FBHS-EX Si1/ST1) (FBHS-EX2.0 SiA/STA) / Remote control

You can control the ExtremeLine heaters and the ExtremeLine LED spots with the same remote control, which includes 3 batteries (TypeAAA) that are included in the standard scope of delivery. If the remote control is active, a discreet red LED lights up on the upper edge when the button is pressed. You can control several devices and form groups with your remote control.

With the APP (7.1.2), the radiant heater can also be configured and controlled. Note: Only connect the radiant heater to be programmed to the power supply.You can teach in one transmitter in 1 unit.

7.2.1 Key assignment FBHS-EX

FBHS-EX for Si1/ST1	Button	FBHS-ES2.0 for SiA/STA	Button	Function
	Slider Channel key 1 or 2 Slider Button ↓ and ↓ status LED		status LED Slider Button ↓ and ↓ Channel key 1 to 4 Slider	Selection of control channel Dimming the LED luminaires Temperature control of the radiant heaters ↓ Level higher ↓ Level lower

7.2.2 Programming the remote control of the heating (within 10 sec. after switching on)

1. insert the batteries into the remote control 2. switch on the SE5 temperature sensor 3. switch off the heating 4. Activate remote control „ ExtremeLine button (right)“. 5. „ Press the „channel key „ ( ) “ press“ (3 seconds.)	6. Red LED on remote control flashes 7. switch on the heating immediately 8. Your remote control is now paired with the appliance. 9. you can operate your appliance using the temperature button and . 9. you can operate your appliance using the temperature button ( ) and ( ).

7.2.3 Remote control lost / defective

If you want to replace your remote control because it has been lost or is defective, it is not necessary to delete it from the memory. You can simply teach your new remote control to your heater as explained in chapter.

7.2.4 Controlling your heater

To control your heater in the best possible way: Press the programmed channel key.

a) LED on remote control lights up	Remote control active	You can regulate the temperature by means of the key ( ) or the key ( ) and you can switch the appliance to different levels, up to standby mode, by means of the ( ) key.
b) LED on remote control not lit up	Remote control inactive	Use the ExtremeLine key to activate your remote control, press the programmed channel key, use the key ( ) or the key ( ) to regulate the temperature, use the key ( ) to switch your unit to standby mode in various stages. With the ExtremeLine key, you can also switch your appliance on and off.

7.2.5 Technical data

Operating voltage	210-240V / 50Hz	max. power:	3200W
Radio frequency:	2,4GHz	Range	Up to 20 metres

7.3. SE5 temperature sensor

The SE5 temperature sensor can be used in combination with the radiant heaters of the ExtremeLine series, for which the infrared heater must be equipped with a control unit. Please refer to point 4 to find out when the sensor is included in the scope of delivery. The sensor is included in the standard accessories for the unit versions SiA, Si6 and Si7. When used inside the building envelope, the sensor must be switched on. The sensor automatically connects to the control. One sensor can be used for several heaters. The sensor should be mounted near the appliance at head height and should not be exposed to direct light. Maximum distance 5 metres.

The sensor has an on/off button, press the button for 5 seconds to turn it on or off.

If the LED lights up solid blue, the SE5 sensor is activated and will now automatically connect to the heaters in its vicinity. If the display flashes blue, the SE5 sensor is deactivated. The sensor can be attached using the supplied adhesive pad.

A low battery or poor or no reception will be indicated on your heater, see chapter II. 3. Fault condition detection and spare parts.

7.3.1 SE5 Deactivating the SE5 temperature sensor via the APP in the Google Playstore or the power switch as follows

1. Disconnect the heater from the power supply for 1 minute. 2. switch on the power supply for 30 seconds. 3. disconnect the power supply for 4 seconds.	4. switch on the power supply again. Switch the power supply back on. 5. The LED on the heater lights up in white for 4 seconds => temperature sensor deactivated.

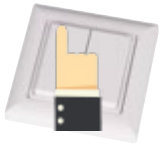
7.3.2 Technical data

Power supply:	Battery 2 x FR03-1,5V	Temperature range	-10 to 40°C
Radio frequency:	BLE 2,4GHz	Range	Up to 20 meter

7.4 BLE (Bluetooth low energy) (Si9/ST9)

BLE EXTREME LINE

For the units with BLE control, the radiant heater can be controlled with a smartphone or a wall-mounted radio switch. **The radio transmitter modules are not included in the scope of delivery. Please also note the separate instructions for the APP.**



7.4.1 Programming the wall radio switch to the heater

(within 15 sec. after on)

You can program several radio transmitter modules into the heater.

1. Switch on the unit (status display flashes n.) 2. Press the radio wall push-button 3. Teach-in is signalled by the status display lighting up continuously for approx. 2 seconds. 4. Our remote control is now paired with the unit	5. You can operate your unit using the switch. Teach-in mode can be deactivated via point 7.4.3.

7.4.2 Deleting the wall radio switch on the heater

1. The status display flashes 2. Press the radio wall push-button to be unlearned.	3. The status display lights up continuously for approx. 2 seconds to indicate that the remote control has been unlearned. 4. Your remote control is now unlearned.

7.4.3 Deactivate BLE teach-in function

1. The status display flashes 2. Press the already taught-in wireless wall switch 5 times upwards and then 5 times downwards.	3. The BLE teach-in mode after switching on the device is now deactivated. Teach-in mode can be activated and deactivated via the APP.

(If the status indicator does not flash for approx. 15 seconds, the BLE learning mode is deactivated and you can set the unit back to learning mode via the smartphone APP under Settings).

7.5 Factory reset BLE configuration

You can perform a factory reset conveniently via APP or with the device switch directly on the radiant heater.

1. switch on the power supply for 90 seconds. 2. disconnect the heater from the power supply for 5 seconds. 3. switch on the power supply for 5 seconds.	4. disconnect the heater from the power supply for 5 seconds. 5. switch on the power supply again, the status LED light up in white for 5s.

7.6 Heater control io-homecontrol® - (SI7/ST7)

On the units with io-homecontrol® control, the radiant heater can be controlled with various io-homecontrol® radio transmitter modules at different power levels. **The radio transmitter modules are not included in the scope of delivery.**

With the APP (7.1.2), the radiant heater can also be configured and controlled. Functions such as switch-off time, frost protection function or weekly time programme are available. Please note that the control is not compatible with the RTS system!

7.6.1. Operating modes for various applications aplications

The operating mode must be set for the Smoove 1 io and Situo products in order to be able to use the functions for radiant heaters and light extensively.Operating mode

Operating mode 2: Control of lighting and electric radiant heaters (scroll wheel active)

To set the operating mode, press the selection button (E) on the back of the transmitter repeatedly until the LED lights up on operating mode 2 (for Situo under the battery cover).

7.6.2. Programming the remote control

These instructions describe the commissioning of the io radio module and the programming of a first local io radio transmitter, e.g. hand-held transmitter Situo 1 io, Situo 5 io, Situo 5 Variation A/M io (scroll wheel), wall transmitter Smoove 1 io, remote control Markilux io-5: Here, a radiant heater or an LED control can only be programmed on channel 3, 4 or 5.

Note: Only connect the radiant heater to be programmed to the power supply.

1. Switch on the power supply. The LED on the radiant heater lights up blue.
2. If using a local io multi-channel hand-held transmitter, select the desired transmission channel. See the Somfy instructions. If using a single-channel io transmitter, this step is omitted.
3. Press the UP and DOWN buttons of the local io radio transmitter simultaneously. The radiant heater is switched on and off again. The LED on the radiant heater briefly lights up red, then blue again.
4. Briefly press the PROG button on the back of the local io radio transmitter. The radiant heater is switched on and off again. The LED on the radiant heater briefly lights up red and then blue again. The io radio transmitter channel is taught-in.
5. If necessary, select operating mode 2 on your radio transmitter according to 7.4.1.

7.6.3 Adding another local io radio transmitter

1. Switch on the power supply. The LED on the radiant heater lights up blue.
2. Press the Prog button on the back of the already taught-in local io radio transmitter until the radiant heater is switched on and off again. The LED on the radiant heater lights up red briefly and then blue again.
3. On a new local io multi-channel hand-held transmitter, first select the desired transmission channel. Refer to the consult the relevant instructions. This step is not necessary for a single-channel io transmitter.
4. Briefly press the PROG button on the back of the new local io radio transmitter. The radiant heater is switched on and off. The LED on the radiant heater briefly lights up red and then blue again. The io radio transmitter channel is taught-in in the io radio module.
5. If necessary, select operating mode 2 on your radio transmitter according to 7.4.1.

7.7.4 Deleting a taught-in local io radio transmitter

The last remaining local io radio transmitter can only be deleted by a factory reset.

1. switch on the power supply. The LED on the radiant heater lights up blue. 2. Press the Prog button on the back of the local io radio transmitter that is to remain programmed until the radiant heater is switched on and off again. The LED on the radiant heater briefly lights up red and then blue again. 3. on a local io multichannel handheld transmitter, first select the Send channel off.	Refer to the corresponding instructions. This step is omitted for a single-channel io transmitter. 4. Briefly press the button on the back of the local io radio transmitter to be deleted. The radiant heater is switched on and off again. The LED on the radiant heater briefly lights up red and then blue again. The io radio transmitter is deleted from the io radio module.

7.7.5 Replacing a damaged/lost local io radio transmitter

All io radio transmitters that have already been taught in are deleted and the new io radio transmitter is taught in.

1. Switch on the power supply. The LED on the radiant heater lights up blue. 2. Switch the power supply off for > 3 s, then on for 8 s, then off again for > 3 s and then on again. The radiant heater switches on and off again. The LED on the radiant heater briefly lights up red and then blue again. 3. First select the desired transmission channel on a new local io multichannel handheld transmitter. Refer to the relevant instructions. This step is not necessary for a single-channel io transmitter.	This step is not necessary for a single-channel io transmitter. 4. Briefly press the Prog key on the back of the new local io radio transmitter. The radiant heater is switched on and off again. The LED on the radiant heater briefly lights up red and then blue again. The new io radio transmitter channel is taught in the io radio module.

7.7.6 Resetting the io radio module to factory settings

All taught-in io radio transmitters are deleted and all other settings are reset to factory settings. (double voltage interruption)

1. Switch on the power supply. The LED on the radiant heater lights up blue. 2. Switch the power supply off for > 3 s, then on for 8 s, then off again for > 3 s and then on again. The radiant heater switches on and off again. The LED on the Radiant heater lights up red briefly, then blue again.	3. press the button on the back of a local io radio transmitter continuously until the radiant heater switches on and off again twice in succession. The LED on the radiant heater lights up red briefly, then blue again, then red again, then blue again. The io radio module has been reset to factory settings.

7.7.7 Technical data

Operating voltage:	210-240V / 50Hz	max. power:	3200W
Radio frequency:	Somfy io 868MHz	Range:	Up to 20 meters

7.8 Heater contorl Elsner Elektronik compatible (SI6/ST6)

Elsner Elektronik (SI6/ST6) On the units with the Elsner Elektronik control, the radiant heater can be controlled with various Elsner Elektronik radio transmitter modules in different power levels. **The radio transmitter modules are not included in the scope of delivery.**

With the APP (7.1.2), the radiant heater can be additionally configured and controlled. Functions such as switch-off time, frost protection function or weekly time program are available.
Note: Only connect the radiant heater to be programmed to the power supply. After switching on, the learning mode is active for 5 minutes.
The radiant heater is not compatible with the Elsner Elektronik Solexa I, Arexa radio modules.

7.8.1 Programming the remote control in general

Observe the corresponding manual / data sheet of the transmitter, the control

7.8.2 Programming the remote control

Remo 8, Remo Pro, RF-B2-UP radio pushbutton interface, Corlo solar radio pushbutton P RF, WS1/ WS1000 Style or Color, WS1000 C , Solexa II

1. switch off the heater 2. put your remote control / controller in programming mode	3. switch the heater on again 4. now you can operate your device via your Elsner Elektronik radio system as usual.

7.8.4 APP operation (optional)

The app for the Solexa II can only be used to operate and call up the status. The automatic settings must be made on the Solexa II display. The settings of the necessary functions according to the legal regulations in the building envelope can be made in parallel via the ExtremeLine APP.

7.8.5 Note

If the radiant heater has been taught-in to a controller, all radio transmitters must be assigned via the controller. Double assignment is not possible. This means that if the radiant heater is controlled via a radio transmitter and the radiant heater is subsequently taught-in to a controller. This means that the remote control in the radiant heater is deleted when it is taught into the control. If the heater has been programmed into a control system and a radio transmitter is subsequently programmed into the heater, the connection to the control system is deleted.

7.8.4 Technical data

Operating voltage:	210-240V / 50Hz	max. power:	3200W
Radio frequency:	868MHz	Range:	Up to 20 meters

7.9 Without control

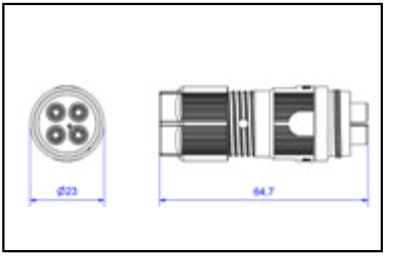
The radiant heater without control system may only be operated outdoors. Note that according to EU Regulation 2015/1188, you need a suitable control system with temperature sensor inside a building envelope.

7.9.1 Single-stage

The radiant heater cannot be controlled and has an ON/OFF switch. The unit is equipped with an overheating protection. If this is triggered, it automatically switches the unit back on after a certain cooling time

7.9.2 Two-stage - 4 pin connector

(for type xxx-E01.x.x)



PIN 1 = N grey
PIN 2 = L 900 Watt black (middle tube)
PIN 3 = L 1800 Watt brown (outer tube)
PIN 4 = PE yellow/green

The radiant heater is equipped with an 80 cm long connecting cable with round plug and is connected on site using the round plug connector (socket) AC 169 RBU/4 (this is included in the scope of delivery). The device is equipped with an overheating protection. If this is triggered, it automatically switches the device on again after a certain cooling time.

The following power levels can be controlled manually with this connection variant.

Power	Phase L1	Phase L2
900 W	x	
1800 W		x
2700 W	x	x

Alternatively, you can connect the fixed power level 2700 watts with a jumper from connection 3 to connection 2 and one of the two connections to the mains voltage.

Circular connector Adels AC 169 RBU/4, compact design: 4-pin, clean, simple connection IP68 (waterproof), cable cross-section max. 2.5 mm2, ambient temperature: max. +85° C, color: black, load limit: 254 V, all information according to the manufacturer.

7.10 ExtremeLine Control (EXTERNAL CONTROL)

The external control ExtremeLine Control can be used in combination with the radiant heaters of the ExtremeLine series. The control has the identical functions as in chapter II 7. The control is housed in an external casing for wall or ceiling mounting. The cable entries are made by means of cable glands.

7.10.1 ExtremeLine Control ST1 EXremote

This allows you to equip our heaters without control externally with our EXremote radio system. For function, operation and technical data, see Chapter II 7.2

7.10.2 ExtremeLine Control ST6 Elsner Elektronik compatible

This allows you to equip our heaters without control externally with our Elsner Elektronik radio system. Function, operation and technical data see chapter II 7.6

7.10.3 ExtremeLine Control ST7 Somfy io compatible

This allows you to equip our heaters without control externally with our radio system Somfy. Function, operation and technical data see chapter II 7.5

7.10.3 ExtremeLine Control ST9 BLE

This allows you to equip our heaters without control externally with our radio system BLE. Function, operation and technical data see Chapter II 7.4

7.10.4 Dimensions and connection

300 mm x 68 mm x 42 mm

Attach the protective conductor properly to the housing. Observe chapter I 2. safety instructions

X1.1	230V IN L
X1.2	230V IN N
X2.1	230V OUT N
X2.2	230V OUT L

7.10.5 Technical data

Operating voltage:	210-240V / 50Hz	max. power:	3200W
Radio frequency:	2,4GHz	Range:	Up to 20 meters

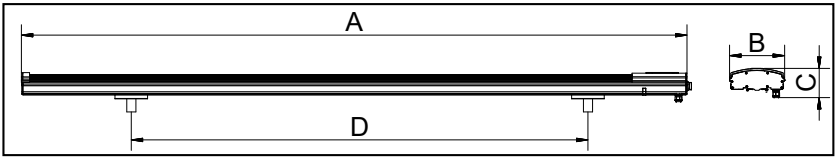
8. technical data heaters

Explanation of the nameplate: HZO - S00 . 2400 . BK

Device model - control variant .power . color

	Dark radiator			Carbon radiator					
PIC20	HZO-			HSH-yyy.2700.xx	HTCA-S		HTO-S00.2700.BK	HFL-	
	yy.1800.xx	yy.2400.xx	yy.3200.xx		yy.900.xx	yy.1800.xx		yy.1600.xx	yy.3200.xx
Color xx	BK/WT (white / black)				Titan		BK (black)	GR (DB703), WT (weiß), C31 (titan), VA (Edelstahl)	
Operating voltage	210 – 240V / 50Hz								
Equipment protection class /-art	I / IP-X4				I / IP-X4		I / IP-X5	I / IP-X4	
Radiation efficiency	65%			76%					
Max. Temperature surface / thread	360°C			1100°C					
Energy efficient ambient operating temperature	-5°C - +23°C rf 70% relative humidity								
Storage temperature	-20°C - + 65°C								
Power in watts	1800	2400	3200	2700	900	1800	2700	1600	3200
Power requirement in amperes	8	11	14	12	4	8	12	7	14
Heatable area, approx.	5,6 m²	7,3 m²	9 m²	14 m²	3,5 m²	6,5 m²	14 m²	8,5 m²	17 m²
Heating time seconds	480			35					
Infrared range	IR-C 3 000nm – 12 000nm			IR-B 1 400nm – 5 000nm					
Connection cable / length	3x1,5mm² / 1,5m				3x1mm² / 2m		3x1,5m² / 1,5m		
Without control system S00	x	x	x	x	x	x	x	x	x
EXremote SiA	-	x	x	x	x	x	-	x	x
Elsner Elektronik Si7	-	x	x	x	x	x	-	x	x
Somfy Si6	-	x	x	x	x	x	-	x	x
BLE Si9	-	x	x	x	x	x	-	x	x
E01 AC169	-	-	-	x	-	-	-	-	-
A Length cm	117	160	204	124	109	206	158	79	170
C Height cm	7,5						7,2	8,5	
B Width/Diameter	16,9 cm				5,5 cm		17,2 cm	9,5	
D Distance fastening cm	70	120	170	70	70	170	-	45	140
Weight kg	5	8	10,5	4,5	1,6	3,2	27	3,8	8
Optimal application	Interior, summer garden, winter garden, living room, bathrooms, garages, hobby room, etc.			Covered outdoor area	Interior, summer garden, winter garden, bathrooms, etc.		Covered outdoor area		

Devices that are intended for outdoor use, for applications in the sauna or as a downstream heating device may only be used there. The SE5 temperature sensor is required for use in a building envelope. Check if your heater is compatible with the SE5. This may already be included in the scope of delivery or available as an accessory.



9.0 Special installation instructions HEAT TUBE carbon

ExtremeLine infrared radiant heaters operate in a spectrum that is pleasant for humans. In order to prevent damage to health, the duration of use and the maximum permissible irradiance must be observed in the following areas of application. Minimum distances must be observed for this purpose.

Application area

- Massage areas
- Wellness areas
- Infrared beds
- Infrared cabins

The limits are regulated in the ICNIRP „Guidlines on Limits of Exposure to incoherent visible and Infrared radiation" 2013 and EN60335-2-53.

Here, for an irradiation duration ≥ 1000 s, the irradiance in the wavelength range 780 nm - 3000 nm must not exceed the value of 100 W m^2 (in the wavelength range 780 nm - 1000 nm, the spectral irradiance may be weighted by a factor of 0.3).

Therefore, special attention must be paid to the mounting situation and clearances.

The listed applications refer to the minimum distances that must be maintained.

For the application in the above mentioned areas, we recommend the use of the integrated or external power control „ExRemote". Through this APP capable power control special functions can be called, such as:

- fixed capacity limitation
- different performance levels
- Maximum limitation of the switch-on time
- Power ON with higher-level control

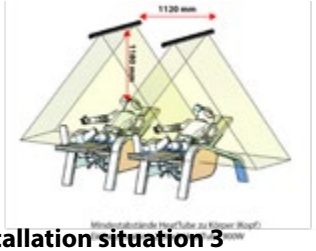
please note the separate operating instructions

Mounting situation, on the ceiling, in direct alignment with the person, or mounting Centered above the person.

Installation situation 1

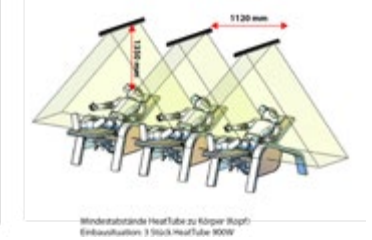
Infrared heater used: 1 piece HEAT TUBE carbon 900 watts, mounted individually. Mounting height above head of at least 1180 mm.

Installation situation 2

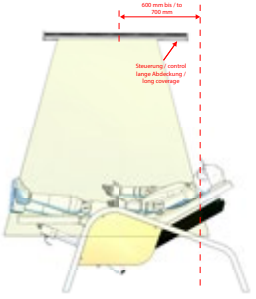


Infrared heater used: 2 pieces HEAT TUBE carbon 900 watts, mounted in parallel at a fixed distance of at least 1120 mm. Mounting height overhead of at least 1180 mm.

Installation situation 3



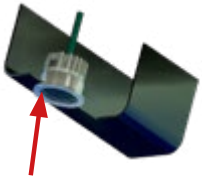
Infrared heater used: 3 pieces HEAT TUBE carbon 900 watts, mounted in parallel at a fixed distance of at least 1120 mm. Mounting height overhead of at least 1350 mm.



We recommend the following mounting arrangement!

III Luminaires

1. LED91xx



Clipping into the profile

Standard Scope of delivery: LED recessed luminaire with Y cable
The LED recessed luminaire has a low installation depth and can be installed in rafters or hollow chamber profiles. The LED recessed lights can be installed in any number and have the same dimming behavior. A compact control unit is required for activation. By means of the ExtremeLine Control Lighting controller, the brightness can be controlled in different dimming levels. A minimum or maximum number of installed luminaires is not necessary with this unique control system. The aluminum construction combined with the coated surface protects the unit even near the coast. Please refer to the operating instructions as well as the „Technical GUIDE".

			
LED light Type LED 9112 1-3 mm Type LED 9113 5-6 mm Type LED 9115 1 -3 mm Type LED 9116 5-6 mm Type LED 9125 1-3 mm	Y Distributor EX36	Extension cable EX37 130 cm EX39 30 cm	Lighting control Type SL0 Type SL8 Type SL7 Type SL6 Type SLB
			
Control Lighting SlimLine Type SL0 Type SL8 Type SL7 Type SL6 Type SLB	Protective cap EX34		

2. cleaning and maintenance

- **The electronic components inside are maintenance-free.**
- **Always keep the product free of cobwebs, dust or similar**
- **fire hazard!**
- **No voltage may be applied to the device during cleaning! To do this, you must disconnect it or switch off all poles and secure it against being switched on again during cleaning**
- **Caution! Do not use high-pressure cleaners or similar to clean your ExtremeLine device.**
- **Caution! Do not use any sharp objects or aggressive cleaning agents for cleaning.**

3. error condition detection and spare parts

If you need spare parts, you can get them from your dealer or directly from us as the manufacturer. In case of errors that are not listed here, please contact your dealer or our support first before sending in your device. Please note that sent in devices can only be processed with a detailed error description.

Error	Troubleshooting/cause	Note / Spare parts
One LED is not lit	- LED cable not plugged in - LED lamp defective	Troubleshooting without success → Contact support
All LED lights are not on	- LED control without power or off - LED supply line interrupted or not plugged in - Short circuit - LED control defective	Troubleshooting without success → Contact support
LED flickers	- LED cable not plugged in correctly - LED control defective	Troubleshooting without success → Contact support
Remote control does not respond	- Check battery/status LED remote control - check remote control on/off	Troubleshooting without success → Contact support

4. installation and connection

4.1 Connection

The LED light has a Y distributor with a connecting cable of approx. 1000 mm and approx. 200 mm, this is equipped with a plug suitable for another LED light or the EX37 extension cable or for the EX36 Y distributor. The distributors/extension cables are parallel and must be connected to the ExtremeLine-Lighting control unit. **The lights may only be operated with approved ExtremeLine brand controls.**

Naming 		Function
1 (black)		GND (0V)
2 (yellow)		Dimming line (0-10V)
3 (red)		Supply (+24)

4.2 Mounting and dimensions

A 35 mm diameter hole with a tolerance of +0 / -0.3 mm must be available for the luminaire.

The installation material thickness for the 9112, 9115, 9125 luminaire may be between 1 and 3 mm and between 5 and 6 mm for the 9113 LED. The installation height is at least 24 mm. The luminaire is fixed in the opening with the integrated hooks. Please ensure that the hole is burr-free. After completion, please remove the protective foil of the LED. Operate the LED with protective foil for test purposes for a maximum of 1 minute. Disassembly is done by slightly compressing the springs from the back and pushing them out to the front. In the case of hollow chamber profiles, carefully pull the LED out to the front without damaging the 3 springs

4.2.1 LED9112, LED9113, LED9115, LED9125

4.3 Total cable length

This LED system works in parallel wiring with appropriate cable cross sections. Please make sure that your total cable length does not exceed 50 meters. In case of doubt, please contact us.

4.4 Technical data

Operating voltage	24V / DC	max. power:	2.8 W
Device protection class, type:	III / IP55 built in profile	Lifespan:	30 000h
Colour temperature	2700k	Energy efficiency class	A
Luminous flux:	330lm	Connection cable	Round cable 3x0.75 mm^2

5. function overview ExtremeLine Lighting controls

Designation	Radio system	Number of LEDs	Incl. remote control
ExtremeLine Lighting SL8	EXremote FBHS-EX	21	YES (FBHS-EX)
ExtremeLine lighting SLB	ExRemote FBHS-EX2.0		YES (FBHS-EX2.0)
ExtremeLine Lighting SL7	Somfy IO		NO
ExtremeLine Lighting SL6	Elsner Elektronik		NO
ExtremeLine Lighting SL0	NO (ON/OFF)		NO
ExtremeLine Lighting SlimLine SL8	EXremote	10	YES
ExtremeLine Lighting SlimLine SLB	ExRemote FBHS-EX2.0		YES (FBHS-EX2.0)
ExtremeLine Lighting SlimLine SL7	Somfy IO		NO
ExtremeLine Lighting SlimLine SL6	Elsner Elektronik		NO
ExtremeLine Lighting SlimLine SL0	NO (ON/OFF)		NO

Please note that it is not possible to operate the ExtremeLine Lighting via APP

6. controls ExtremeLine Lighting

6.1 ExtremeLine Lighting-SL8 / SLB

You can control the ExtremeLine heaters and the ExtremeLine LED spots with the same remote control. The control unit has the EXRemote radio system with integrated power supply unit. The FBHS-EX remote control including batteries is included in the standard scope of delivery. If the remote control is active, a LED lights up. You can use your remote control to control several units and form groups. Please note that the two remote controls SI1/ST1 and SiA/STA are not compatible with each other. **Note: Only connect the LED control to be programmed to the power supply.**

6.1.1 Key assignment FBHS-EX

FBHS-EX for Si1/ST1	Button	FBHS-ES2.0 for SiA/STA	Button	Function
	Slider Channel key 1 or 2 Slider Button ↓ and ↑ status LED		status LED Slider ↓ Button ↑ and ↓ Channel key 1 or 2 Slider	Selecting the control channel dimming the LED luminaires Temperature control of the radiant heaters ↓ Level higher ↑ Level lower

6.1.2 Programming the remote control LED (Within 10 sec. after - on)

1. insert batteries into the remote control 2. switch off the control 3. activate the remote control „ExtremeLine button (right)“.	4. press „channel key“ and ↓ simultaneously (3 sec.) 5. LED on remote control flashes 6. switch on control immediately 7. your remote control is now paired

6.1.3 Controls

a) LED on remote control lights up	Remote control active	Using the dimslider, you can switch the brightness of the luminaires in different steps up to standby mode.
b) LED on remote control does not light up	Remote control inactive	Using the dimslider, you can switch the brightness of the luminaires in various stages up to standby mode.

6.1.4 Lost remote control

If you want to replace your remote control because it is lost or defective, it is not necessary to delete it from the memory. You can simply teach the new remote control to your control as described in chapter III 5.1.2.

6.1.5 Technical data

Operating voltage	110-240V / 50/60Hz	max. power:	by type
Equipment protection class	I / IPX4	Range free field	10 m
Output cable	1,2 Meter	Radio cart:	EXremote 2.4 GHz
Input cable	3x0,75² 4,8 m		

6.2 ExtremeLine Lighting-SL7 io-homecontrol®

Standard Scope of delivery: ExtremeLine Lighting + 3 x EX36 + 3 x EX34 For the units with io-homecontrol® control, the lamp can be controlled with various io-homecontrol® radio transmitter modules. **The radio transmitter modules are not included in the scope of delivery.** The external control ExtremeLine-Lighting can be used in combination with the LED luminaires of the ExtremeLine series. Please note the version designation on the label of your control unit. The control has an integrated power supply unit. At least 3 LEDs must be connected. **Please note that the control is not compatible with the RTS system!**

Note: Only connect the LED control to be programmed to the power supply.

6.2.1. Operating modes for different applications

The operating mode must be set for the Smoove 1 io and Situo products in order to be able to use the functions for radiant heaters and light extensively.

Operating mode 2: Control of lighting and electric radiant heaters (scroll wheel active)

To set the operating mode, press the selection button (E) on the back of the transmitter repeatedly until the LED lights up on operating mode 2 (on Situo under the battery cover).

6.2.2. Programming the remote control.

These instructions describe the commissioning of the io radio module and the teaching-in of a first local io radio transmitter, e.g. hand-held transmitter Situo 1 io, Situo 5 io, Situo 5 Variation A/M io (scroll wheel), wall transmitter Smoove 1 io. Here, a radiant heater or LED control can only be taught-in on channel 3, 4 or 5.

Note: Always connect only the io lamp controller to be programmed to the power supply.

1. Switch on the power supply. 2. When using a local io multi-channel hand-held transmitter, first select the desired transmission channel. Refer to the relevant instructions. If using a single-channel io transmitter, this step is not necessary. 3. Press the UP and DOWN buttons of the local io radio transmitter simultaneously. The connected light is switched on and off again.	4. briefly press the Prog button on the back of the local io radio transmitter. The connected luminaire is switched on and off again. The io radio transmitter channel is taught. 5. When using the local io multi-channel hand-held transmitter Situo 5 Variation A/M io, the io single-channel hand-held transmitter Situo 1 Variation io or the io wall transmitter Smoove 1 io, select operating mode 2 on the back. Refer to the corresponding instructions.

6.2.3 Adding another local Somfy io radio transmitter

1. Switch on the power supply. The LED control is in standby mode. 2. Press the Prog button on the back of the already taught-in local io radio transmitter until the connected lamp switch on and off again. 3. On a new local io multi-channel hand-held transmitter, first select the desired transmitting channel. Refer to the relevant instructions. This step is not necessary for a single-channel io transmitter.	4. briefly press the Prog button on the back of the new local io radio transmitter. The connected luminaire is switched on and off again. The io radio transmitter channel is taught in the io radio module. 5. When using a new local io multi-channel hand-held transmitter Situo 5 Variation A/M io, an io single-channel hand-held transmitter Situo 1 Variation io or an io wall transmitter Smoove 1 io, select operating mode 2 on the back. Refer to the corresponding instructions.

6.2.4 Deleting a taught-in local io radio transmitter

The last remaining local io radio transmitter can only be deleted by resetting it to factory settings.

1. Switch on the power supply. The LED control is in standby mode. 2. Press the Prog button on the back of the local io radio transmitter that is to remain programmed until the connected luminaires switch on and off again. 3. on a local io multi-channel hand-held transmitter, first select the one to be deleted.	Select the transmission channel. Refer to the relevant instructions. This step is not necessary for a single-channel io transmitter. 4. Briefly press the Prog button on the back of the local io radio transmitter to be deleted. The connected light is switched on and off. The io radio transmitter is deleted from the io radio module.

6.2.5 Replacing a defective / lost local io radio transmitter

All io radio transmitters already learned are deleted and the new io radio transmitter is taught in.

1. Switch on the power supply. The LED control is in standby mode. 2. Switch off the power supply for > 10 s, then switch it on for 8 s, then switch it off again for > 10 s and then switch it on again. The connected luminaire is switched on and off again. 3. on a new local io multi-channel hand-held transmitter, first	Select the desired broadcast channel. Refer to the relevant instructions. This step is not necessary for a single-channel io transmitter. 4. Briefly press the Prog button on the back of the new local io radio transmitter. The connected light is switched on and off again. The new io radio transmitter channel is taught in the io radio module.

6.2.6 Resetting the io radio module to factory settings

All taught-in io radio transmitters are deleted and all other settings are reset to factory settings.

1. Switch on the power supply. The LED control is in standby mode. 1. Switch the power supply off for > 10 s, then on for 8 s, then off again for > 10 s and then on again. The connected luminaire is switched on and off again.	2. press the Prog button on the back of a local io radio transmitter continuously until the radiant heater switches on and off again twice in succession. The connected lamp is switched on and off again. The io radio module has been reset to factory setting

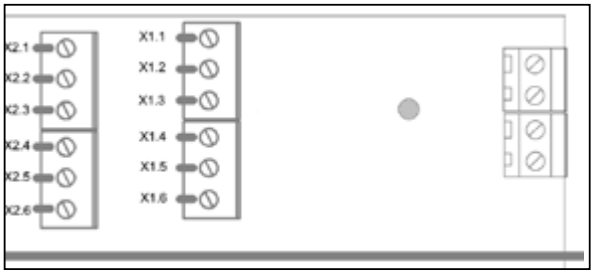
6.2.7 Technical data

Operating voltage	110-240V / 50/60Hz	max. power:	by type
Equipment protection class, type:	I / IPX4	Range free field:	30 m
Output cable :	1,2 Meter	Radio type:	Somfy IO 868MHz
Input cable :	3x0,75² 4,8 m		

6.2.8 Connection assignment Lighting SL7 control unit

Clamp	Channel	Function		Use for type
X1.1	2	+24V (red)		LED 9xxx
X1.2		GND (black)		
X1.3		Control cable (yellow)		
X1.4	1	+24V (red)		
X1.5		GND (black)		
X1.6		Control cable (yellow)		
X2.3	3	GND		LED 70xx
X2.4		+24V		
X2.5	4	GND		
X2.6		+24V		

Terminal assignment



6.3 ExtremeLine Lighting SL6 Elsner Elektronik compatible

Standard Scope of delivery: ExtremeLine Lighting + 3 x EX36 + 3 x EX34 The external control unit ExtremeLine Lighting can be used in combination with the LED luminaires of the ExtremeLine series. Please note the version designation on the label of your control unit. The control unit has an integrated power supply unit. For units with the Elsner Elektronik control, the radiant heater can be controlled with various Elsner Elektronik radio transmitter modules in different power levels. **The radio transmitter modules are not included in the scope of delivery.** The control is not compatible with the Elsner Elektronik radio modules Solexa I and Arexa.

Note: Only connect the lamp control to be programmed to the power supply. After switching on, the learning mode is active for 5 minutes.

6.3.1 Programming the remote control in general

Observe the corresponding manual / data sheet of the transmitter, the control.

6.3.2 Programming the remote control

Remo 8, Remo Pro, RF-B2-UP radio push-button interface, Corlo solar radio push-button P RF, WS1/ WS1000 Style or Color, WS1000 C , Solexa II)

1. switch off the LED control 2. put your remote control / control into programming mode	3. Switch on the LED control again. 4. Now you can operate your unit via your Elsner Elektronik radio system as usual.

6.3.4 APP operation

The APP for the Solexa II can only be used for operation and to call up the status. The automatic settings must be made on the Solexa II display. The settings of the necessary functions according to the legal regulations in building envelopes can be made in parallel via the ExtremeLine APP.

6.3.5 Note

If the LED luminaires have been taught into a control unit, all radio transmitters must be assigned via the control unit. Double assignment is not possible. This means that the remote control in the LED luminaire is deleted when it is taught into the control unit. If the LED luminaire has been programmed into a control unit and a radio transmitter is subsequently programmed into the LED luminaire, the connection to the control unit is deleted.

6.3.6 Technical data

Operating voltage	110-240V / 50/60Hz	max. power:	by type
Equipment protection class, type:	I / IPX4	Range free field:	20 m
Output cable :	1,2 Meter	Radio type:	Elsner Elektronik 868MHz
Input cable :	3x0,75² 4,8 m		

Without control

6.4 ExtremeLine Lighting SL0

Standard Scope of delivery: ExtremeLine Lighting + 3 x EX36 + 3 x EX34 The external control ExtremeLine Lighting can be used in with the LED spots of the ExtremeLine series. Please note the version designation on the label of your control unit. The control unit has an integrated power supply. With this control unit, you can easily switch the ExtremeLine LED spots on and off via a light switch. **With this control unit, you cannot dim the LED spots or control them via radio.**

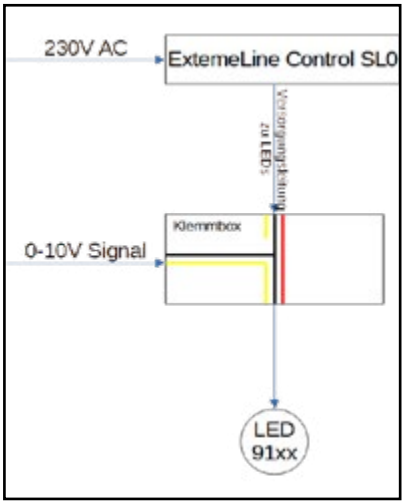
6.4.1 Technical data

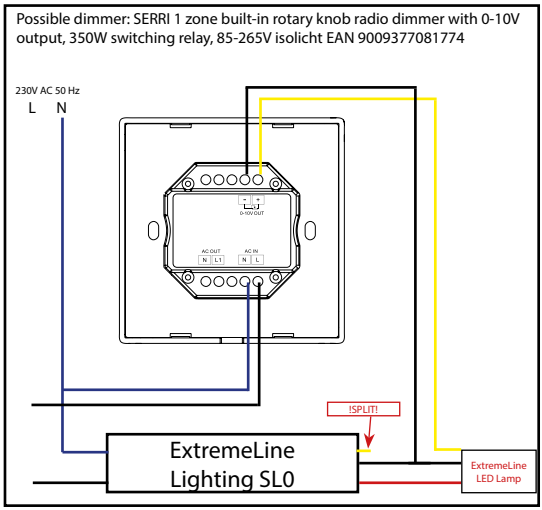
Operating voltage	110-240V / 50/60Hz	max. power:	by type
Equipment protection class, type:	I / IPX4		
Output cable :	1,2 Meter	Input cable :	3x0,75² 4,8 m

6.5 Integrating a dimming actuator into the Lighting SL0

You can integrate an external dimming actuator. To do this, the dimming actuator must output a signal voltage of 0 - 10 V DC. To do this, disconnect the dimming line on the output side of the control and integrate the actuator according to the scheme shown below.

Naming		Function
1 (black)		GND (0V)
2 (yellow)		Dimming line (0-10V)
3 (red)		Supply (+24)





7. technical data

LED luminaires	LED9112	LED9113	LED9115	LED9116	LED9125
Colour	titan		silver		
Operating voltage	24V DC				
Device protection class / device protection type	**LED** I / IP55 (built in profile)				
Energy efficiency class	**D**				
CRI	**>80%**				
Dimmable	10%-100%				
Colour temperature	WW 2700k				
Storage temperature	-20°C - + 65°C				
Power in watts	2,8				
Lumen	330				
Electricity demand in amperes	0,12				
Connection line	0,2 meter / plug IP-67				
Control	ExtremeLine Lighting				
A Length cm	4				
C Height cm	2,5				
Installation diameter	3,5 cm +0 /-0,3 mm				
Lens shap	flat		flat	flat	round
Einbaumaterialstärke	1 - 3 mm	5 - 6 mm	1 - 3 mm	5 - 6 mm	1 - 3 mm
Weight	0,18 kg				
LED control	**Lighting SLxx**		**Lighting SlimLine SLxx**		
Operating voltage	230V AC 50 Hz				
Output voltage	24V DC +Control voltage				
Power	max. 60 W		max. 30W		
Number of LEDs	21		10		
Protection class	for ceiling mounting IP54				
Connection cable input	3x 0,75mm ^{2} Length 4.8 m open cable				
Connection cable output	Cable system 1,2 m				
Box dimensions	320 x 68 x 32 mm		470 x 29 x 42 mm		
Weight	0,3 kg		0,28 kg		
Storage temperature	-20°C bis +65°C				

8. Wireless range

Please select the mounting position so that the radio range is not affected. Depending on how a controller is installed, the range can be greatly influenced. Ranges of 10 to 25 meters can usually be achieved. These can be negatively influenced by unfavorable site conditions.

Where and what does a summer conservatory consist of?

There are materials that have a major impact on the range of radio signals. Aluminum and steel profiles have strong attenuation of radio frequencies and greatly reduce the penetration of the radio signal. House walls, cars or objects such as sliding shutters also reduce the range. The range reduction depends on the type of material, the material density and the wall thickness as well as the interaction of the types of installation with end caps and the air gap between the profiles.

In concrete terms, this means that a profile in which the control is housed and has holes for LED lights has better reception than a profile that is completely closed with metal end caps on the side!

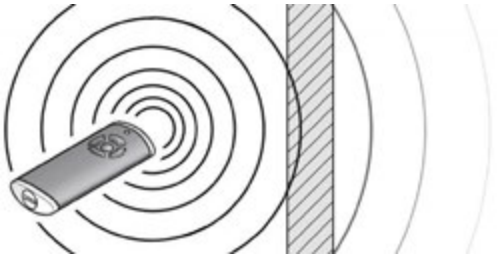
Overall, the ultimate range of the radio signal depends on the sum of the weakening events.

Metal reflects radio waves

Metal is reflective. So it throws back incoming rays or waves. Fewer radio waves reach a radio receiver in a closed metal profile than, for example, in an open metal profile or, even better, a plastic channel. The radio range is thus significantly reduced by the metal. You must take this into account with a conservatory, summer garden or patio roof.**Beton absorbiert Funkwellen**
Wände aus Beton, schlucken das Funksignal regelrecht. Es hat somit wie Metall eine sehr stark dämpfende Wirkung und verringert die Reichweite erheblich.

Concrete absorbs radio waves

Concrete walls literally swallow the radio signal. Like metal, it has a very strong dampening effect and reduces the range considerably.



What causes little attenuation?

Elements made of wood, plastic or thin brick walls have a low level of attenuation and therefore have less of an impact on the range.

Source of interference, objects and electromagnetic radiation

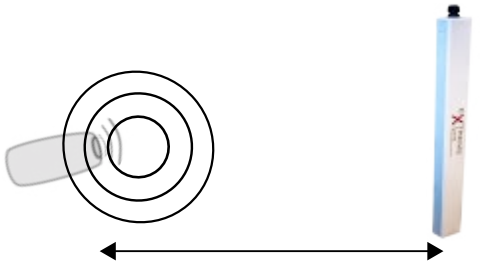
The field range specifies the maximum distance in an open field in which the transmitter and receiver have a direct line of sight and there are no interferences.
This means that objects such as in-house WiFi, fuse boxes, etc. are defined as interference objects that affect the range.

Another problem can be continuous transmitters that send continuous signals contrary to the standards and regulations. These are often cheap Chinese products such as televisions, sound systems, etc. that transmit in different frequencies.

Electromagnetic radiation can also be a cause. If machines, transmission masts, interference emissions from neighboring products, large power distributors are nearby, restrictions can occur.

free field test

If interference occurs, the easiest way is to test the range using a free-field measurement!



If you have range problems, proceed as follows:

1. Check and replace radio transmitter battery (if present)
2. Remove control and check in free field
3. Explore which of the following factors is causing the range problem
4. Determine interference signals
5. Replace controller and radio transmitter.

Improve radio range

- Drill holes in the area of the profile in which the control is housed with a diameter of at least 35 mm
- Install the plastic cap in the control area
- Separate slots or profile / cover to get an opening for the control
- Choose an alternative position for the control
- Remove the end caps of the profiles and place the control on the outside if possible
- Install control in a plastic channel

On the safe side with ExtremeLine !

EU Regulation 2015/1188 on the Ecodesign Directive 2009/125/EC, all infrared and electric heaters within a building envelope must meet specified criteria. Appliances such as extensions.

Building envelopes also
include garages, basements, winter and summer gardens and enclosed hours limitation provided.

Among other things, this includes the possibility of remote control, a room thermostat, a HEATTOWER which is intended for use outdoors, the„roofed outdoor area" In the scope of delivery from the factory, two control types are available. The legally required declaration of conformity You do not have to worry about anything.

For your convenience, ExtremeLine products that are supplied with internal or external controls are explicitly not subject to EU Regulation 2015/1188 according to Article 1.

ExtremeLine Control integrated in the unit	**Radio systems**	**ExtremeLine Control external control to the wall, ceiling or control cabinet Mounting**
SI1/ SIA	Ex Remote radio system	ST1 / STA
SI6	in combination with Somfy IO radio system	ST6
SI7	in combination with radio system elsner elektronik	ST7
SI9	BLE Bluetooth Low Energy	ST9

On-site control
ExtremeLine offers some products with factory provided on-site control without the control required for EU Regulation 2015/1188. This is useful if the installer wants to install his own control system that complies with the regulation. In this case, the installer is responsible for compliance with EU Regulation 2015/1188. . The distributor in this case is explicitly the installer. According to the regulation, the product information according to the attached table must be attached to the operating instructions, as well as published.

Further information on EU Regulation 2015/1188 is available at:
http://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX:02015R1188-20170109

Product information according to EU 2015/1188 Ecodesign Directive

(Required information on electric single room heaters)

Model code: ExtremeLine HEAT ZONE HZO 1800W / 2400W / 3200W black/white

Indication	**Symbol**	**Value**	**Unit**	**Indication**	**X1**
Heat output				**Only for electric storage room heaters: Type of heat supply control (please select one option)**	
Nominal heat output	P_{nom}	1,8-3,2	kW	Manual control of the heat supply with integrated thermostat	NO
Minimum heat output (guide value)	P_{min}	[N.A.]	kW	Manual control of the heat supply with feedback of the room and/or outside temperature	NO
Max. continuous heat output	$P_{max,c}$	1,8-3,2	kW	Electronic control of the heat supply with feedback of the room and/or outside temperature	NO
Auxiliary power consumption				Heat output with fan support	NO
At nominal heat output	el_{max}	[N.A.]	kW	**Type of heat output/room temperature control (select one option)**	
With minimum heat output	el_{min}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
In a state of readiness	el_{SB}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
				Room temperature control with mechanical thermostat	NO
				with electronic room temperature control	NO
				Electronic room temperature control and time-of-day control	NO
				Electronic room temperature control and weekday regulation	YES
				Other regulatory options (multiple answers possible)	
Control systems				Room temperature control with presence detection	NO
Control system: ExtremeLine Control integrated: SIA, SI1, SI6, SI7, SI9 Extern: STA, ST1, ST6, ST7, ST9			**X1**	Room temperature control with open window detection	NO
				with remote control option	YES
				with adaptive control of the heating start	NO
				with operating time limit	YES
				with blacksensor	NO

Manufacturer: S.E. System Electronic GmbH, Eberloh 5, 83128 Halfing, GermanyTel. +49 8055 90 30 980, info@SystemElectronic.de www.ExtremeLine.de

Conformity in accordance with EU Regulation 2015/1188 is only guaranteed when using the above-mentioned control system with the described functions. Please additionally observe the installation and operating instructions

Technical changes reserved. State 5/2023

Product information according to EU 2015/1188 Ecodesign Directive

(Required information on electric single room heaters)

Model code: ExtremeLine HEAT TUBE HTCA 1800W / 1200W titan/black/white

Indication	Symbol	Value	Unit	Indication	X1
Heat output				**Only for electric storage room heaters: Type of heat supply control (please select one option)**	
Nominal heat output	P_{nom}	1,2 - 1,8	kW	Manual control of the heat supply with integrated thermostat	NO
Minimum heat output (guide value)	P_{min}	[N.A.]	kW	Manual control of the heat supply with feedback of the room and/or outside temperature	NO
Max. continuous heat output	P_{maxc}	1,2 - 1,8	kW	Electronic control of the heat supply with feedback of the room and/or outside temperature	NO
Auxiliary power consumption				Heat output with fan support	NO
At nominal heat output	el_{max}	[N.A.]	kW	**Type of heat output/room temperature control (select one option)**	
With minimum heat output	el_{min}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
In a state of readiness	el_{sb}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
				Room temperature control with mechanical thermostat	NO
				with electronic room temperature control	NO
				Electronic room temperature control and time-of-day control	NO
				Electronic room temperature control and weekday regulation	YES
				Other regulatory options (multiple answers possible)	
Control systems				Room temperature control with presence detection	NO
Control system: ExtremeLine Control integrated: SiA, SI1, SI6, SI7, SI9 Extern: STA, ST1, ST6, ST7, ST9			**X1**	Room temperature control with open window detection	NO
				with remote control option	YES
				with adaptive control of the heating start	NO
				with operating time limit	YES
				with blacksensor	NO

Manufacturer: S.E. System Electronic GmbH, Eberloh 5, 83128 Halfing, GermanyTel. +49 8055 90 30 98 0, info@SystemElectronic.de www.ExtremeLine.de

Conformity in accordance with EU Regulation 2015/1188 is only guaranteed when using the above-mentioned control system with the described functions. Please additionally observe the installation and operating instructions

Technical changes reserved. State 5/2023

Product information according to EU 2015/1188 Ecodesign Directive

(Required information on electric single room heaters)

Model code: ExtremeLine HEAT TUBE HTCA 900W / 600W titan/black/white

Indication	Symbol	Value	Unit	Indication	X1
Heat output				**Only for electric storage room heaters: Type of heat supply control (please select one option)**	
Nominal heat output	P_{nom}	0,6 - 0,9	kW	Manual control of the heat supply with integrated thermostat	NO
Minimum heat output (guide value)	P_{min}	[N.A.]	kW	Manual control of the heat supply with feedback of the room and/or outside temperature	NO
Max. continuous heat output	P_{maxc}	0,6 - 0,9	kW	Electronic control of the heat supply with feedback of the room and/or outside temperature	NO
Auxiliary power consumption				Heat output with fan support	NO
At nominal heat output	el_{max}	[N.A.]	kW	**Type of heat output/room temperature control (select one option)**	
With minimum heat output	el_{min}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
In a state of readiness	el_{sb}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
				Room temperature control with mechanical thermostat	NO
				with electronic room temperature control	NO
				Electronic room temperature control and time-of-day control	NO
				Electronic room temperature control and weekday regulation	YES
				Other regulatory options (multiple answers possible)	
Control systems				Room temperature control with presence detection	NO
Control system: ExtremeLine Control integrated: SiA, SI1, SI6, SI7, SI9 Extern: STA, ST1, ST6, ST7, ST9			**X1**	Room temperature control with open window detection	NO
				with remote control option	JA
				with adaptive control of the heating start	NO
				with operating time limit	YES
				with blacksensor	NO

Manufacturer: S.E. System Electronic GmbH, Eberloh 5, 83128 Halfing, GermanyTel. +49 8055 90 30 98 0, info@SystemElectronic.de www.ExtremeLine.de

Conformity in accordance with EU Regulation 2015/1188 is only guaranteed when using the above-mentioned control system with the described functions. Please additionally observe the installation and operating instructions

Technical changes reserved. State 5/2023

Product information according to EU 2015/1188 Ecodesign Directive

(Required information on electric single room heaters)

Model code: ExtremeLine HEAT SHINE HSH 2700W black/white

Indication	Symbol	Value	Unit	Indication	X1
Heat output				**Only for electric storage room heaters: Type of heat supply control (please select one option)**	
Nominal heat output	P_{nom}	2,7	kW	Manual control of the heat supply with integrated thermostat	NO
Minimum heat output (guide value)	P_{min}	[N.A.]	kW	Manual control of the heat supply with feedback of the room and/or outside temperature	NO
Max. continuous heat output	P_{maxc}	2,7	kW	Electronic control of the heat supply with feedback of the room and/or outside temperature	NO
Auxiliary power consumption				Heat output with fan support	NO
At nominal heat output	el_{max}	[N.A.]	kW	**Type of heat output/room temperature control (select one option)**	
With minimum heat output	el_{min}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
In a state of readiness	el_{SB}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
				Room temperature control with mechanical thermostat	NO
				with electronic room temperature control	NO
				Electronic room temperature control and time-of-day control	NO
				Electronic room temperature control and weekday regulation	YES
				Other regulatory options (multiple answers possible)	
Control systems				Room temperature control with presence detection	NO
Control system: ExtremeLine Control integrated: SiA, SI1, SI6, SI7, SI9 Extern: STA, ST1, ST6, ST7, ST9			**X1**	Room temperature control with open window detection	NO
				with remote control option	YES
				with adaptive control of the heating start	NO
				with operating time limit	YES
				with blacksensor	NO

Manufacturer: S.E. System Electronic GmbH, Eberloh 5, 83128 Halfing, GermanyTel. +49 8055 90 30 98 0, info@SystemElectronic.de www.ExtremeLine.de

Conformity in accordance with EU Regulation 2015/1188 is only guaranteed when using the above-mentioned control system with the described functions. Please additionally observe the installation and operating instructions

Technical changes reserved. State 5/2023

EXTREME LINE

Engineered & MADE in Germany

Product information according to EU 2015/1188 Ecodesign Directive

(Required information on electric single room heaters)

Model code: ExtremeLine HEATFLARE HFL 1600W / 3200W inox brushed, Dunkelgrau (DB703), white, titanium

Indication	Symbol	Value	Unit	Indication	X1
Heat output				**Only for electric storage room heaters: Type of heat supply control (please select one option)**	
Nominal heat output	P_{nom}	1,6 -3,2	kW	Manual control of the heat supply with integrated thermostat	NO
Minimum heat output (guide value)	P_{min}	[N.A.]	kW	Manual control of the heat supply with feedback of the room and/or outside temperature	NO
Max. continuous heat output	P_{maxc}	1,6-3,2	kW	Electronic control of the heat supply with feedback of the room and/or outside temperature	NO
Auxiliary power consumption				Heat output with fan support	NO
At nominal heat output	el_{max}	[N.A.]	kW	**Type of heat output/room temperature control (select one option)**	
With minimum heat output	el_{min}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
In a state of readiness	el_{SB}	[N.A.]	kW	Two or more manually adjustable levels, no room temperature control	NO
				Room temperature control with mechanical thermostat	NO
				with electronic room temperature control	NO
				Electronic room temperature control and time-of-day control	NO
				Electronic room temperature control and weekday regulation	YES
				Other regulatory options (multiple answers possible)	
Control systems				Room temperature control with presence detection	NO
Control system: ExtremeLine Control integrated: SiA, SI1, SI6, SI7, SI9 Extern: STA, ST1, ST6, ST7, ST9			**X1**	Room temperature control with open window detection	NO
				with remote control option	YES
				with adaptive control of the heating start	NO
				with operating time limit	YES
				with blacksensor	NO

Manufacturer: S.E. System Electronic GmbH, Eberloh 5, 83128 Halfing, GermanyTel. +49 8055 90 30 98 0, info@SystemElectronic.de www.ExtremeLine.de

Conformity in accordance with EU Regulation 2015/1188 is only guaranteed when using the above-mentioned control system with the described functions. Please additionally observe the installation and operating instructions

Technical changes reserved. State 5/2023

EXTREME LINE

Engineered & MADE in Germany

Thank you very much for purchasing our product which are basically manufactured in Upper-Bavaria, next to lake Chiemsee. Located on the countryside our family owned company focuses on sustainability and the need to protect the environment!

Our decentralised heating solutions for fast and carbon neutral heat is perfect for heating at the push of a button! Please take also advantage of carbon neutral energy when using our products!

We lead by example! ARE YOU?

Find our sustainability report with an integrated environmental statement here: www.extremeline.de

EXTREME LINE
Ihr Lösungsanbieter für Licht, Luft und Wärme

ExtremeLine, eine Marke der S.E. System Electronic GmbH
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