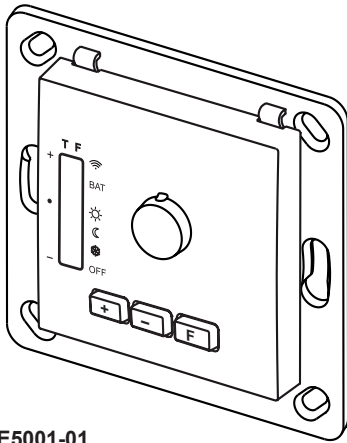


Model



ST01E5001-01

Technische Daten

Frequency:	868.30 MHz
Radiated power:	4.47 mW
Modulation:	FSK
Coding:	Easywave
Range:	
under free field conditions	approx. 150 m
in the building	approx. 30 m
Operating temperature:	-20 °C to +40 °C
Control range:	approx. +14 °C to +25 °C
Measuring cycle:	once per minute
Power supply:	2x 3 V-battery, CR2032
Dimensions:	Format 55
Cover	55 x 55 x 16 mm
Plate	71 x 71 x 1,5 mm
Weight:	28 g

Scope of delivery

Transmission module, 2 batteries CR2032, cover, mounting plate, attachment set, operating instructions

Intended use

The radio thermostat may only be used to measure the ambient temperature and to operate Easywave radio receivers.

The manufacturer shall not be liable for any damage caused by improper or non-intended use!

Safety instructions



Please read the operating instructions carefully before using the device!

Also read the operating instructions for the devices to be controlled! Do not modify the devices!

Have faulty hand transmitters checked by the manufacturer!

Keep the batteries away from children!

Keep the packing away from children!

Function

The temperature sensor ST01 is a battery-operated radio thermostat for indoor use. Detected deviations from the setpoint are sent via Easywave radiogram to radio receivers which are connected to a heating system. That way, the temperature can be controlled between approx. 14 °C and approx. 25 °C via radiogram.

The ST01 can be operated in the control mode ON/OFF or PDM optionally. These control modes determine the intervals in which radiograms will be sent:

ON/OFF (I/O): If the current value has dropped below the setpoint, the heating will be turned on. All current telegrams to be resent in a cycle of 4-hour, in order to not trigger the emergency cutout of the relevant receivers (e.g. RCJ15 and RCP15).

PDM (Pulse duration modulation, only with compatible receivers possible): PDM is an adaptive control mode. The temperature sensor analyzes the heating behaviour and sends switching commands in larger time intervals. So, the battery in the sensor can be used longer.

You can select three different operating modes on the temperature sensor: day operation, night setback and anti-freeze. You can also turn off the temperature sensor.



In the operating modes **day operation**, you can save room temperature setpoints for the desired day room temperature permanently.



In the operating modes **night setback**, you can save room temperature setpoints for the desired night room temperature permanently.



In **anti-freeze mode**, the temperature remains constantly around the freezing point in order to prevent pipes from freezing.

OFF

No temperature control at OFF. The status symbol Code B (OFF) is sent every 4 hours.

The radio thermostat has been programmed with the following settings:

- Control mode I/O
- Operating mode day operation
- Setpoint room temperature 20 °C.

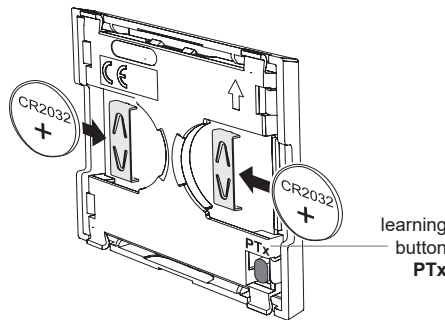
Start-Up

1. Inserting the batteries

Put the enclosed batteries under the battery clip.

Make sure the poling is correct!

The positive pole has to be visible!



2. **Programming ST01 into the receiver and select temperature**

1. Activate the programming mode on the corresponding receiver. You can only do that directly on the receiver.

2. Press the **+** oder **-** button on the sensor to send a telegram
The Easywave Code **A (+)** or **B (-)** will be sent.



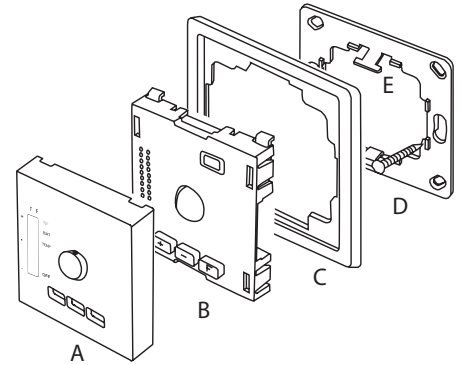
For this operation the sensor must be in the operating mode. All LEDs must be off.

→ the radio symbol on the sensor lights up briefly (2 s) and the transmitter has been programmed into the receiver

3. Press the **+** / **-** button to set the setpoint. Are actual value and target value is identical, the corresponding LED will flicker.

3. Sensor montieren

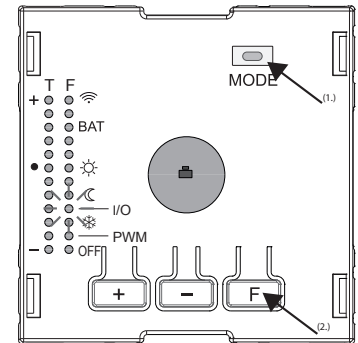
1. Screw or stick the mounting plate (D) to the installation site.
2. Put the cover frame (C, not in the scope of delivery) on the mounting plate (D).
3. Lock the transmission module (B) on the catches and mount the cover (A).



Displaying/setting the operat. mode

1. Press the **F** button to switch between the operating modes / / / OFF.
→ the LED in the right column (F) displays the operating mode of the sensor
→ the LED in the left column (T) display the current temperature and the temperature setpoint
2. Do not press a button for 10 s to save the settings, the LED goes off.

Setting the control mode

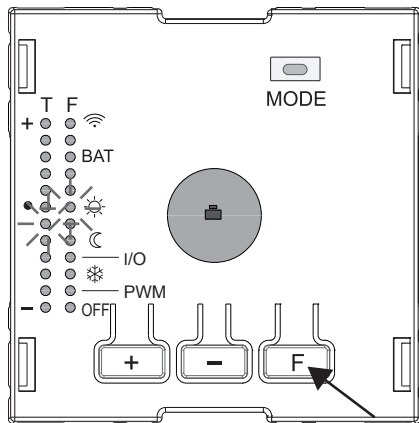


1. Press the mode button. The current mode is displayed for 10 s.
2. Within the 10 s, press the **F** button to switch between PDM and I/O.
3. Do not press a button for 10 s.
→ the LED goes off and the sensor returns from setup mode to control mode
→ the settings have been saved.



The saved control mode remains after a battery change.

Operation overview



Temperature setting (T)

Button

- +** increase current value
- reduce current value

max. value approx. 25 °C

Current value
LED lights

Setpoint
LED blinks

min. value approx. 14 °C

Function setting (F)

Button

- F** displays temperature values and sensor status

LED blinks: radio telegram is transmitted.

LED flashes every minute: battery almost empty

Operating modes **Control modes**

- Day operation
- Night setback
- ON/OFF
- Anti-freeze
- Pulse duration modulation
- LED lights: Sensor is deactivate

Remote learning

The ST01 has a remote learning function. Even a built-in receiver can be brought into learning mode or delete mode by pressing the learning button PTx on the back side of the ST01. Whether a receiver supports this feature, please read its user manual.

Battery check

The battery check function of the ST01 checks the battery voltage during the transmission procedure. In case of a low battery, the battery LED blinks once per minute.

At the end of the transmission process, an undervoltage telegram is transmitted automatically. This telegram can be evaluated by adapted Easy-wave receivers. For information, read the operating instructions for the relevant receiver.

Troubleshooting

The receiver does not react to the temperature sensor:

- Replace the batteries, if necessary.
- Check that the radio link between the sensor and the receiver at the installation site is not impaired.
- Reprogram the sensor into the radio receivers, if necessary.
- Other wireless devices using the same frequency and working in direct proximity may interfere with the device.

Temperature changes do not appear immediately:

- The measuring cycle of 1 minute is not complete.
- If the temperature changes too much, because of the temperature behavior of the sensor materials, the real temperature is displayed with a delay.

Function	Betätigung [Taste drücken]	Anzeige	Bemerkungen
Programming ST01 into the receiver The Sensor must be in the operating mode ¹⁾ .			
	Button + or	LED F radio symbol lights up briefly	Easywave Code A is transmitted. The Sensor remains for 10 seconds in setup mode, the operating mode and the setpoint can be set. ²⁾
	Button -	LED F radio symbol lights up briefly	Easywave Code B is transmitted. The Sensor remains for 10 seconds in setup mode, the operating mode and the setpoint can be set. ²⁾
Setting the control mode (CM) PDM or ON/OFF (I/O)			
	1. Button MODE	LED F current CM lights up	Within 10 seconds press the button F again.
	2. Button F	LED F new CM lights up	
Setting the operating mode (OM)			
	1. Button F	LED F current OM lights up LED T current value lights up LED T setpoint blinks	The Sensor remains for 10 seconds in setup mode, the operating mode and the desired setpoint of the day operation or night setback can be set. ²⁾
	2. Button F	LED F new OM lights up LED T current value lights up LED T setpoint blinks	The Sensor is designed for 10 seconds in setup mode, the operating mode and the desired setpoint of the day operation or night setback can be set. ²⁾
Setting/change the setpoint temperature			
	1. Button F	LED F current OM lights up LED T current value lights up LED T setpoint blinks	If necessary, using the button F to change the operating mode.
<i>setting setpoint</i>	2. Button + / -	LED T current value lights up LED T new setpoint blinks	
			The sensor changes to the operating mode 10 seconds after the last actuation of a button. ¹⁾ The selected value is stored and according to the current settings code A (ON) or code B (OFF) is transmitted. All current telegrams are resent in a cycle of 4-hour, in order to not trigger the emergency cutout of the relevant receivers (e.g. RCJ15 and RCP15).
Activate/deactivate the sensor The Sensor must be in the operating mode ¹⁾ .			
	1. Button F	LED F current operating mode lights up	The sensor is switched off. The control is deactivated. Every four hours a status signal B is sent to the receivers RCP15 and RCJ15, in order to not trigger the emergency cutout.
	2. Button F bis	LED F „OFF“ lights up	

1) operating mode: all LEDs are off

2) The sensor changes to the operating mode 10 seconds after the last actuation of a button and sends the relevant status signal.

General information

Disposal

Waste electronic equipment must not be disposed of with household waste!

Dispose of the waste product via collection facilities for electronic scrap or via your specialist dealer.



Dispose of used batteries in a recycling bin for batteries or via the specialist trade.



Dispose of packaging material in the recycling bins for cardboard, paper and plastic.

Warranty

Within the statutory warranty period we undertake to rectify free of charge by repair or replacement any product defects arising from material or production faults. Any unauthorized tampering with, or modifications to, the product shall render this warranty null and void.

Conformity

Hereby, ELDAT Eas GmbH declares that the radio equipment type ST01 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.eldat.de



Customer service

If the device does not work properly despite proper handling or in case of damage, please contact the manufacturer or your retailer.

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