

MAX!

Boiler Controller



PACKAGE CONTENTS

Quantity	Item
1x	MAX! Boiler Controller
1x	Mounting material
1x	User manual

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1 INFORMATION ABOUT THIS MANUAL

Please read this manual carefully before starting to use the device. Keep the manual so you can refer to it at a later date if you need to. If you hand over the device to other persons for use, please hand over the user manual as well.

Symbols used:



Attention!

This indicates a hazard.



Note.

This section contains important additional information.

2 SAFETY INSTRUCTIONS









The device is not a toy; do not allow children to play with it. Do not leave packaging material lying around, as it can be dangerous in the hands of a child.



Do not open the device: it does not contain any components that need to be serviced by the user. In the event of an error, please return the device to the service department.



The device may only be operated indoors and must be protected from the effects of damp and dust, as well as solar or heat radiation.

-  The installation notes in the section “Installation” must be observed! Ignoring installation instructions can cause fires or other hazards.
-  Make sure that the specified wiring and wire cross-sections are used when connecting to device terminals.
-  Do not use the device if there are signs of damage to the housing or connecting sockets, for example, or if it demonstrates a malfunction. If you have any doubts, please have the device checked by an expert.
-  In order for the device to be connected to the supply voltage and the consumer load work needs to be carried out on live voltage-carrying parts. Before connecting the device, remove the fuse from the fuse box.
-  Using the device for any purpose other than that described in this user manual does not fall within the scope of intended use and shall invalidate any warranty or liability. This also applies to any conversion or modification work. The device is intended for private use only.
-  The circuit to the which the device and the load will be connected has to be secured by a cable protection switch in accordance with EN60898-1 (tripping characteristic B or C, max. 16A rated current, min. 6kA interrupting rating, energy limiting class 3).

3 FUNCTION


With the MAX! Boiler Controller you can control your central heating and hot water tank according to your personal needs. You can easily adjust the times and temperature for your heating and hot water via PC from home or via smartphone app, no matter where you are.

The device has two channels:

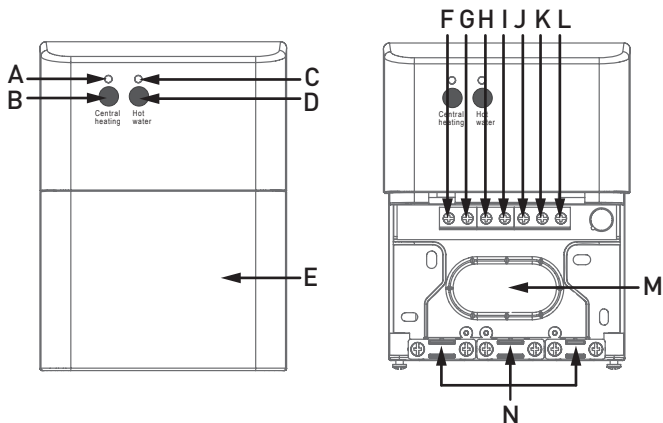
- MAX! Central heating for controlling your heating and
- MAX! Hot water for controlling your warm water tank.

Each channel can be controlled independently.

The configuration of the device is done via the MAX! software. Therefore, simply connect the MAX! Boiler Controller to the MAX! Cube. Then set up your individual week programs with temperatures and times according to your personal needs. With the smartphone app, you can control your system even while being away from home.

 You can control the channel “Central heating” also via the MAX! Wall Thermostat+ and the Boiler Controller, without the need of a MAX! Cube or Internet connection. In this case, the configuration of your heating is done directly on the MAX! Wall Thermostat+. Simply install the MAX! Wall Thermostat+ in a room of your house or flat that is frequently heated and connect the MAX! Boiler Controller with the device. For further information, please refer to the user manual of the MAX! Wall Thermostat+.

4 DEVICE OVERVIEW



- (A) Device LED channel 1
- (B) Channel button 1 ("Central heating")
- (C) Device LED channel 2
- (D) Channel button 2 ("Hot water")
- (E) Cover

- (F) Neutral wire for power supply of the device
- (G) Live wire for power supply of the device
- (H) Life wire for central heating switch
- (I) Call for heat to the boiler
- (J) Normally open hot water terminal
- (K) Normally closed hot water terminal
- (L) Live wire for the hot water switch
- (M) Cut-out for cables
- (N) Strain relief clamp

5 INSTALLATION

5.1 MOUNTING THE MAX! BOILER CONTROLLER



Note. Only to be installed by persons with the relevant electro-technical knowledge and experience!

Incorrect installation can put

- your own life at risk;
- and the lives of other users of the electrical system.

Incorrect installation also means that you are running the risk of serious damage to property, e.g. because of a fire. You may be personally liable in the event of injuries or damage to property.



**Contact an electrical installer!
Specialist knowledge is required for installation!**

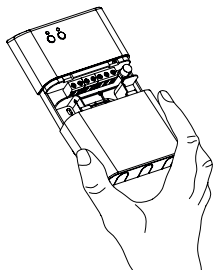
The MAX! Boiler Controller can be easily mounted to pattress boxes or simply on the wall.

5.1.1 MOUNTING ON A PATTRISS BOX

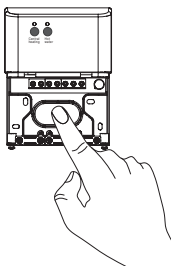


Before installation, disconnect the mains voltage!

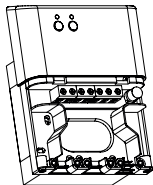
- Remove the existing programmer device from the pattress box. Disconnect the existing cables of the programmer.
- Remove the existing backplate (if present).
- Remove the cover (E) from the MAX! Boiler Controller.



- Remove the cut-out for cables (**M**) and pass the cables through the cut-out hole.




- Fix the MAX! Boiler Controller to the pattress box.





- Connect the power supply.

- Connect the cables of the central heating and hot water tank to the terminals as described in the wiring diagram in sec. "5.2 Wiring diagram".
- Re-attach the cover.
- After finishing installation, switch the mains voltage on again.

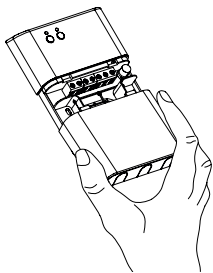
5.1.2 MOUNTING ON THE WALL

 You should fit the device close to the pattrass box of your central heating.

 Before installation, disconnect the mains voltage!

 Make sure that electrical lines in the wall will not be damaged.

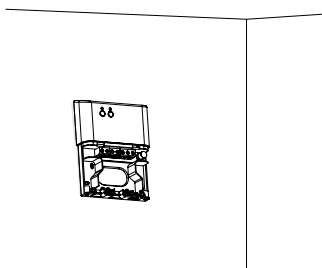
- Remove the existing programmer device.
- Remove the existing backplate (if present).
- Remove the cover (E) from the MAX! Boiler Controller.



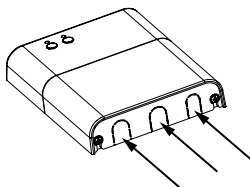
- Mark the bore holes with a distance of 7.8 cm on the wall.
- Drill the two marked bore holes with a 5 mm drill and in-

sert the plugs supplied.

- Turn the screws into the plugs so that they protrude from the wall by approx. 1.5 mm.
- Mount the device on the wall. Hang it using the brackets on the back behind the screw heads.



- Pass the cables through the strain relief clamps.
- Connect the cables of the central heating and hot water tank to the terminals as described in the wiring diagram in sec. "5.2 Wiring diagram".
- Remove the cut-outs of the strain relief on the cover.





- Re-attach the cover to the device.
- After finishing installation, switch the mains voltage on again.

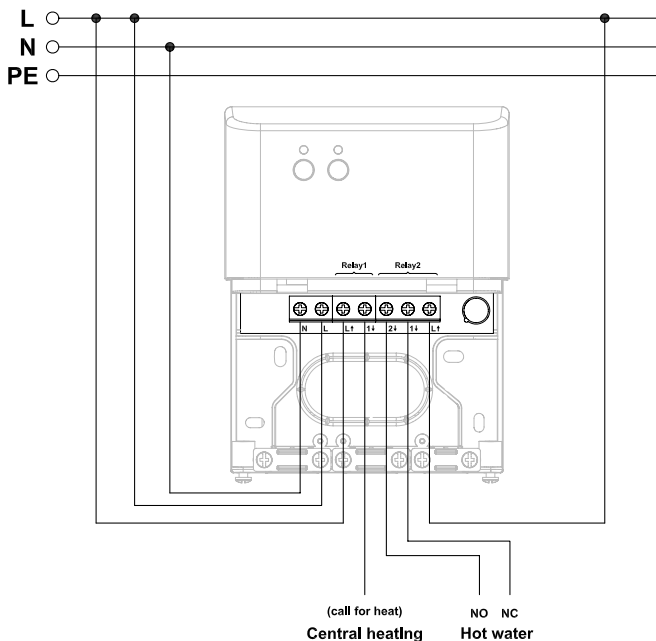
5.2 WIRING DIAGRAM

Permitted wire cross-section:

Rigid wire [mm ²]	Flexible wire with end sleeve [mm ²]
0.75 - 4.0 mm ²	0.75 - 2.5 mm ²

 Rigid wires must be in accordance with H05VV-F or H05RR-F.

 The following picture shows an installation example. Please consider your individual system setup.



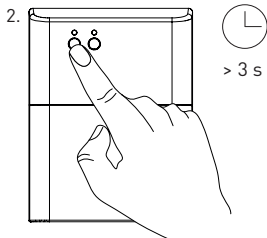
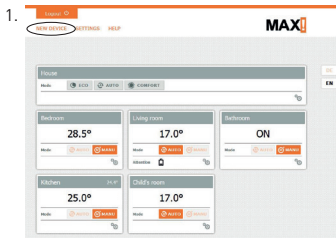
N		Neutral wire for power supply
L		Live wire for power supply
Relay 1 (central heating)	L↑	Live wire for central heating switch
	1↓	Call for heat to the boiler
Relay 2 (hot water)	2↓	Normally open hot water terminal
	1↓	Normally closed hot water terminal
	L↑	Live wire for the hot water switch

6 TEACHING-IN


In order to integrate the MAX! Boiler Controller into a MAX! system it has to be connected to the MAX! Cube via the MAX! software first. All settings and programming (e.g. week programs) can be done via the MAX! software afterwards.


You have to teach-in the two channels (MAX! Central heating and MAX! Hot water) separately.

- Start the local MAX! software and click on “New device”.
- Press and hold down the first channel button (**B**) of the MAX! Boiler Controller for at least 3 seconds to activate teach-in mode. The channel LED will start flashing green.



- The first channel will appear in the software.
- Press and hold down the second channel button (**D**) of the MAX! Boiler Controller to activate teach-in mode of the second channel.
- The second channel will appear in the software as well.
- Click on “Next” in the software to give the device a name and assign it to a room.
- The MAX! Boiler Controller is now integrated into the system and can be configured for each room via the MAX! software or the smartphone app.

 In the MAX! software, you need to create one separate room for the channel “Central heating” and one for the channel “Hot water”. The channel “Central heating” can also be used in rooms that include a MAX! Wall Thermostat+ already.

 If you want to use your system without a MAX! Cube, you can also directly teach-in the channel “Central heating” to the MAX! Wall Thermostat+.

7 MANUAL OPERATION

With the channel buttons **B** or **D**, the single channels can be switched on and off directly on the device. If the device is operated in connection with a MAX! Cube or MAX! Wall Thermostat, the set comfort or eco temperature will be applied.

Manual operation of “Central heating” channel:

- Press the channel button **B** shortly.


The central heating is switched on until the next time the current week program changes.

Manual operation of “Hot water” channel:

- Press the corresponding channel button **D** shortly.

This activates the Boost function: the hot water tank will be switched on for 60 minutes.

By the end of the Boost phase, the channels automatically change back to the prior operating mode.


-  You can also activate the Boost function via the MAX! Wall Thermostat+. Simply press the Boost button to activate the function.

8 RESPONSE TO POWER RECOVERY

After power recovery, the device starts with both channels in MANU Off mode (regardless of the previously set mode). As soon as the MAX! Boiler Controller receives time information from the MAX! Cube or Wall Thermostat, the channels switch into AUTO mode (only if a Cube or Wall Thermostat has been taught-in to the corresponding channel). If any action is carried out by the user, e.g. operation/configuration of mode, setpoint temperature, week program, profile settings etc., the channel switches into AUTO mode as well.

9 RESTORE FACTORY SETTINGS

The factory settings of the MAX! Boiler Controller can be restored manually. Restoring the factory settings deletes all settings and information about taught-in devices.

-  First delete the device from the MAX! software.
- Press and hold down both channel buttons (**B** and **D**) simultaneously for at least 10 seconds.
 - Release the buttons. The channel LEDs first go off and then start flashing 4 times shortly.
 - The factory settings will be restored.

10 ERROR MESSAGES


Error code	Meaning
1x long, 2x short flashing	Device defective
Fast flashing	Teach-in mode active
Permanent light	The corresponding channel is switched on.

11 MAINTENANCE AND CLEANING

The product does not require any maintenance. Enlist the help of an expert to carry out any repairs. Clean the product using a soft, lint-free cloth that is clean and dry. You may dampen the cloth a little with lukewarm water in order to remove more stubborn marks. Do not use any detergents containing solvents, as they could corrode the plastic housing and label.

12 INFORMATION ABOUT RADIO OPERATION

Radio transmission is performed on a non-exclusive transmission path, which means that there is a possibility of interference occurring. Interference can also be caused by switching operations, electrical motors or defective electrical devices.

 The range of transmission within buildings can differ greatly from that available in the open air. Besides the transmitting power and the reception characteristics of the receiver, environmental factors such as humidity in the vicinity have an important role to play, as do on-site structural/screening conditions.

eQ-3 AG hereby declares that this device complies with the essential requirements and other relevant regulations of Directive 1999/5/EC. You can find the full declaration of conformity at www.eQ-3.de.

13 TECHNICAL SPECIFICATIONS

Device short name:	BC-TS-Sw2-WM
Supply voltage:	230 V/50 Hz
Current consumption:	
Channel 1:	16 A max.
Channel 2:	5 A max.
Standby power consumption:	< 0.2 W
Degree of protection:	IP20
Ambient temperature:	5 to 35°C
Dimensions (W x H x D):	98 x 130 x 23 mm
Radio frequency:	868.3 MHz
Receiver category:	SRD category 2
Typ. open area RF range:	> 100 m
Duty Cycle:	< 1% pro h
Weight:	160 g

Max. switching capacity:	
Channel 1:	ohmic load, max. 3680 W relay: NO contact
Channel 2:	ohmic load, max. 1150 W inductive load, max. 230 VA relay: CO
Kind of cable and cross-section:	rigid cable, 0.75 – 4 mm ² flexible cable without ferrule, 0.75 – 2.5 mm ²
Installation:	fixed installation, wall mounting
Method of operation:	Type 1.B
Degree of pollution:	2

Subject to technical changes.



Do not dispose of the device with regular domestic waste!



Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.



The CE sign is a free trading sign addressed exclusively to the authorities and does not include any warranty of any properties.



For technical support, please contact your specialist dealer.

Bevollmächtigter des Herstellers:
Manufacturer's authorised representative:



eQ-3 AG
Maiburger Straße 29
26789 Leer / GERMANY
www.eQ-3.de