



Installation, use and programming manual

Re-Mote

Modbus remote control for Next-G gas unit heater management

suitable for panel mounting (OCDS015) or wall mounting (OCDS017)



DISPOSAL

The appliance and all its accessories must be disposed of separately in accordance with the regulations in force.



Use of the WEEE symbol (Waste Electrical and Electronic Equipment) indicates that this product cannot be disposed of as household waste. Proper disposal of this product helps to prevent potential negative consequences for the environment and human health.

Revision: A

Code: D-LBR899EN - FW 1

This Installation, use and programming manual has been drawn up and printed by Robur S.p.A.; whole or partial reproduction of this Installation, use and programming manual is prohibited.

The original is filed at Robur S.p.A.

Any use of this Installation, use and programming manual other than for personal consultation must be previously authorised by Robur S.p.A.

The rights of those who have legitimately filed the registered trademarks contained within this publication are not affected.

With the aim of continuously improving the quality of its products, Robur S.p.A. reserves the right to modify the data and contents of this Installation, use and programming manual without prior notice.

TABLE OF CONTENTS

I Introduction	p. 4	2.3	Wall installation (OCDS017).....	p. 10
I.1 Recipients.....	p. 4	2.4	Electrical hookup.....	p. 11
I.2 Available languages	p. 4	2.4.1	Electrical power supply	p. 11
II Symbols and definitions	p. 4	2.4.2	Modbus connection to Next-G gas unit heaters.....	p. 11
II.1 Key to symbols	p. 4	2.4.3	Modbus connection to BMS.....	p. 12
II.2 Terms and definitions	p. 4	2.4.4	Optional room probe OSND013	p. 12
III Warnings	p. 4	2.4.5	LAN connection	p. 13
III.1 General and safety warnings.....	p. 4	2.5	SD Card.....	p. 13
III.2 Compliance.....	p. 5	3 First start-up	p. 13	
III.2.1 EU directives and standards	p. 5	3.1 Preliminary checks	p. 13	
III.2.2 Other applicable provisions and standards	p. 5	3.2 Configuration wizard	p. 13	
III.3 Exclusions of liability and warranty	p. 5	4 Interface description	p. 14	
1 Features and technical data	p. 6	4.1 Sidebar	p. 14	
1.1 Features.....	p. 6	4.2 Zone bar.....	p. 14	
1.1.1 Operation mode	p. 6	4.2.1 Name of the zone	p. 14	
1.2 Dimensions.....	p. 7	4.2.2 Zone operating mode.....	p. 14	
1.3 Connections	p. 8	4.2.3 Zone settings	p. 15	
1.3.1 Front connections	p. 8	4.3 Top bar	p. 16	
1.3.2 Rear connections.....	p. 8	4.3.1 Main on/off	p. 16	
1.4 Technical data.....	p. 9	4.4 "Service"	p. 17	
2 Installation	p. 10	4.5 "Settings".....	p. 17	
2.1 Warnings.....	p. 10	4.5.1 "Screen lock".....	p. 17	
2.2 Panel installation (OCDS015)	p. 10	4.5.2 "Language"	p. 17	
		4.5.3 "Date and Time"	p. 17	
		5 Diagnostics	p. 17	

I INTRODUCTION

Installation, use and programming manual

This Manual is an integral part of the Re-Mote device and must be delivered to the end user together with the device.

I.1 RECIPIENTS

This Manual is intended for:

- ▶ End user, for appropriate and safe use of the device.
- ▶ Qualified installer, for correct device installation.

I.2 AVAILABLE LANGUAGES

This document is originally written in Italian and English. Any other languages are translations of this document. For versions of this document in other languages, see Robur website.

II SYMBOLS AND DEFINITIONS

II.1 KEY TO SYMBOLS



DANGER



WARNING



NOTE



PROCEDURE



REFERENCE (to other document)

II.2 TERMS AND DEFINITIONS

BMS (Building Management System) = plant or building supervisor controller not supplied by Robur.

TAC = Technical Assistance Centre authorised by Robur.

Gas unit heater = generic term for a Robur Next-G condensing gas unit heater.

ID = numerical identifier that uniquely identifies a Robur gas unit heater or Re-Mote device on the Modbus network.

First start-up = appliance commissioning operation which may only and exclusively be carried out by a TAC.

Re-Mote/Appliance/Device = Robur control device that integrates the functions of room temperature control, remote control and report of any anomalies of one or more Robur Next-G gas unit heaters, also divided over several zones.

III WARNINGS

III.1 GENERAL AND SAFETY WARNINGS



Installer's qualifications

Installation must exclusively be performed by a qualified firm and by skilled personnel, with specific knowledge of electrical systems, in compliance with the laws in force in the Country of installation.



Misuse

The appliance must only be used for the purposes for which it has been designed. Any other use is deemed hazardous. Incorrect use may affect operation, duration and safety of the appliance. Adhere to the manufacturer's instructions.



Use of the appliance by children

The appliance can be used by children over 8 years old, and by people with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, only if they are under surveillance or

after they have received instructions regarding safe use of the appliance and understanding the dangers inherent in it. Children should not play with the appliance.



Electrocution hazard

- Disconnect the electrical power supply before any operation on appliance components.
- For electrical connections exclusively use compliant components and according to the specifications provided by the manufacturer.
- Ensure the appliance cannot be accidentally switched back on.



Earthing

Electrical safety depends on effective earthing system, correctly connected to the appliance and installed according to the regulations in force.



In the event of failure

Operations on internal components and repairs

may exclusively be carried out by a TAC, using only original spare parts.

- In the event of failure of the appliance and/or breakage of any component, do not attempt to repair and/or restore and immediately contact the TAC.



Decommissioning and disposal

If the appliance is to be disposed of, contact the manufacturer for its disposal.



Keep the Manual

This Installation, use and programming manual must always accompany the appliance and must be handed to the new owner or installer in the event of sale or removal.

- Extreme operational conditions or however outside of the operational ranges set forth by the manufacturer.
- Damages caused by external agents present in the air of the installation site.
- Abnormal actions transmitted to the appliance by the system or installation (mechanical stresses, pressure, vibrations, thermal expansion, electrical surges...).
- Accidental damages or due to force majeure.

III.2 COMPLIANCE

III.2.1 EU directives and standards

The Re-Mote device complies with the requirements of the following standards:

- ▶ EN 60730-1:2016+A1:2019+A2:2022 Automatic electrical controls for household and similar use - General requirements
- ▶ EN 60730-2-9:2021 Automatic electrical controls for household and similar use - Particular requirements for temperature sensing controls

III.2.2 Other applicable provisions and standards

The design, installation, operation and maintenance of the systems shall be carried out in compliance with current applicable regulations, depending on the Country and location, and in accordance with the manufacturer's instructions. In particular, regulations regarding the following shall be complied with:

- ▶ Electrical systems and equipment.
- ▶ Fire safety and prevention.
- ▶ Any other applicable law, standard and regulation.

III.3 EXCLUSIONS OF LIABILITY AND WARRANTY



Any contractual or extra-contractual liability of the manufacturer for any damage caused by incorrect installation and/or improper use and/or failure to comply with regulations and with the manufacturer's directions/instructions shall be disclaimed.



In particular, the warranty on the appliance may be rendered void by the following conditions:

- Incorrect installation/power supply.
- Misuse.
- Alteration or modification of the product or any part thereof.

1 FEATURES AND TECHNICAL DATA



Proper installation of the Re-Mote device and the Next-G gas unit heaters connected to it is not possible without consulting the installation manual included with the appliances and the instructions given below.

1.1 FEATURES

The Re-Mote device is an optional control device with a 7" colour touch screen that allows centralised management of Next-G gas unit heaters, up to a maximum of 30 gas unit heaters divided over a maximum of 6 zones.

The Re-Mote device is available in two versions:

- ▶ OCDS015 for panel mounting
- ▶ OCDS017 for wall mounting (room probe included)

The OCDS015 version is designed for mounting inside an electrical panel, using the holes provided on the front panel (Figure 1.1 p. 7).

The OCDS017 version is supplied in a plastic electrical box that is fixed to the wall, and is already fitted with the room temperature probe.

The main functions are:

- ▶ Programmed on/off switching of the gas unit heaters, up to a maximum of 30.
- ▶ Possibility of dividing the connected gas unit heaters into several zones, up to a maximum of 6, each with its own setpoint, operating mode and time programming.
- ▶ Setting the heating mode and ventilation mode operation.
- ▶ Management of the automatic destratification function.
- ▶ Space heating setpoint setting.
- ▶ Antifreeze function.
- ▶ Summer ventilation mode activation.
- ▶ Diagnostics.
- ▶ Possibility of temporarily excluding one or more appliances from operation.

- ▶ Possibility to interface with a BMS system.
- ▶ Possibility of connection to the Robur cloud via LAN.

1.1.1 Operation mode

The supported service request types are:

- ▶ standby
- ▶ ventilation
- ▶ fixed power heating (selectable from 3 power levels), with the Re-Mote device providing the setpoint and the room temperature
- ▶ fixed power heating (selectable between 3 power levels), with the Re-Mote device providing the setpoint and the room temperature measured by the gas unit heater via the supplied room temperature probe
- ▶ modulating heating, with the Re-Mote device providing the setpoint and the room temperature
- ▶ modulating heating, with the Re-Mote device providing the setpoint and room temperature measured by the Next-G gas unit heater via the supplied room temperature probe
- ▶ modulating heating, with the Re-Mote device providing the required power level as a percentage of maximum power

In the presence of the Re-Mote device, the contact inputs of the Next-G gas unit heater are not used, except for emergency mode.



Loss of Modbus communication

Loss of communication with the Re-Mote device results in emergency operation, which is active by default.

If emergency operation has been switched off, loss of communication with the Re-Mote device results in deactivation of the service request and switch off the appliance.



For further details on emergency mode, please refer to the Next-G gas unit heater Installation, use and maintenance manual.

1.2 DIMENSIONS

Figure 1.1 Dimensions OCDS015 (panel-mounted version)

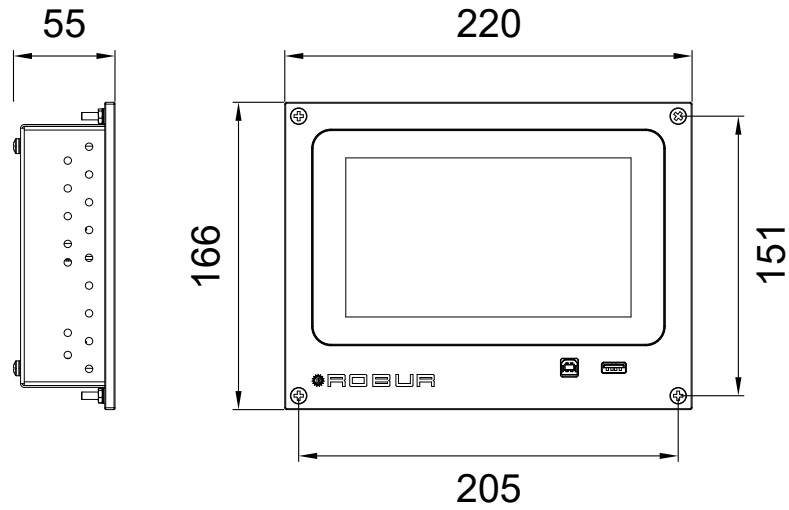
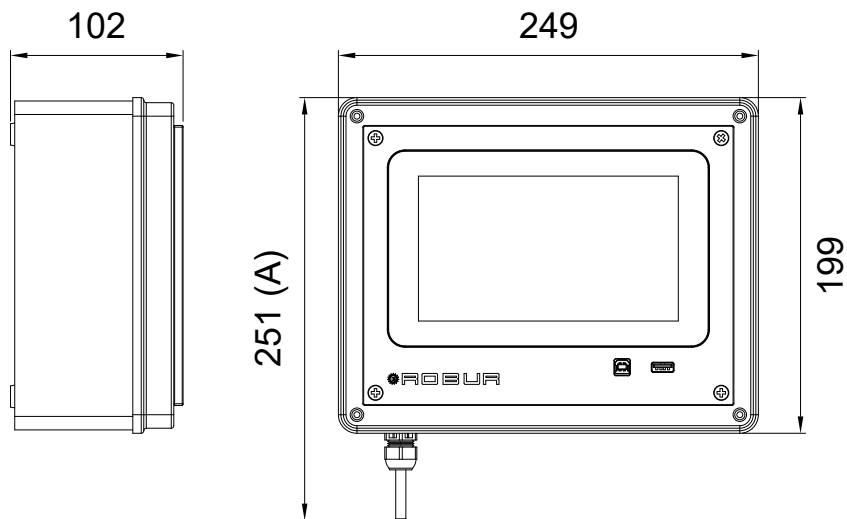


Figure 1.2 Dimensions OCDS017 (wall-mounted version)



A The supplied temperature probe is placed inside the electrical box to avoid damage during transport. During installation, it must be positioned so that it protrudes from the cable gland according to the dimensions indicated.

1.3 CONNECTIONS

1.3.1 Front connections

Figure 1.3 Front connections

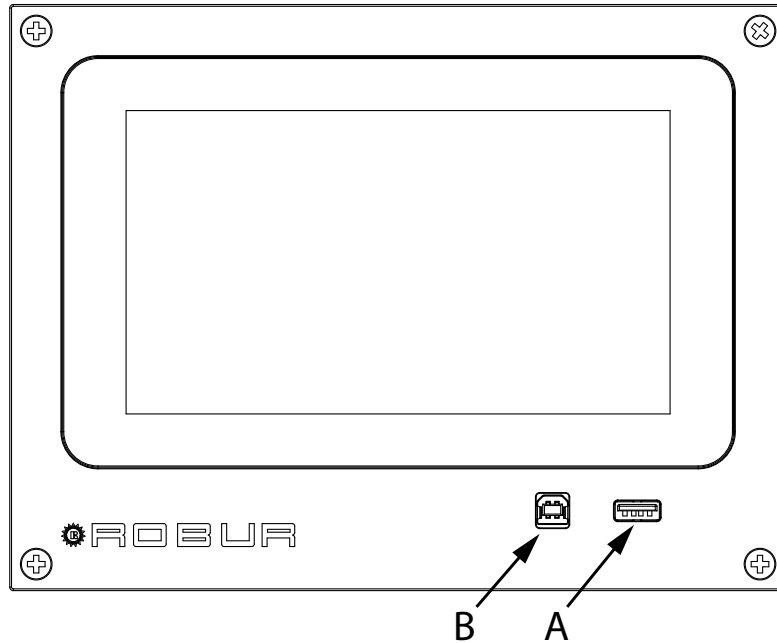


Table 1.1 Front connections

Reference	Description	Connector	Use
A	USB host 1 port	USB type A	Reserved to TACs
B	USB device port	USB type B	Reserved to TACs

1.3.2 Rear connections

The rear connections are accessible by removing the protective metal cover.

Figure 1.4 Rear connections

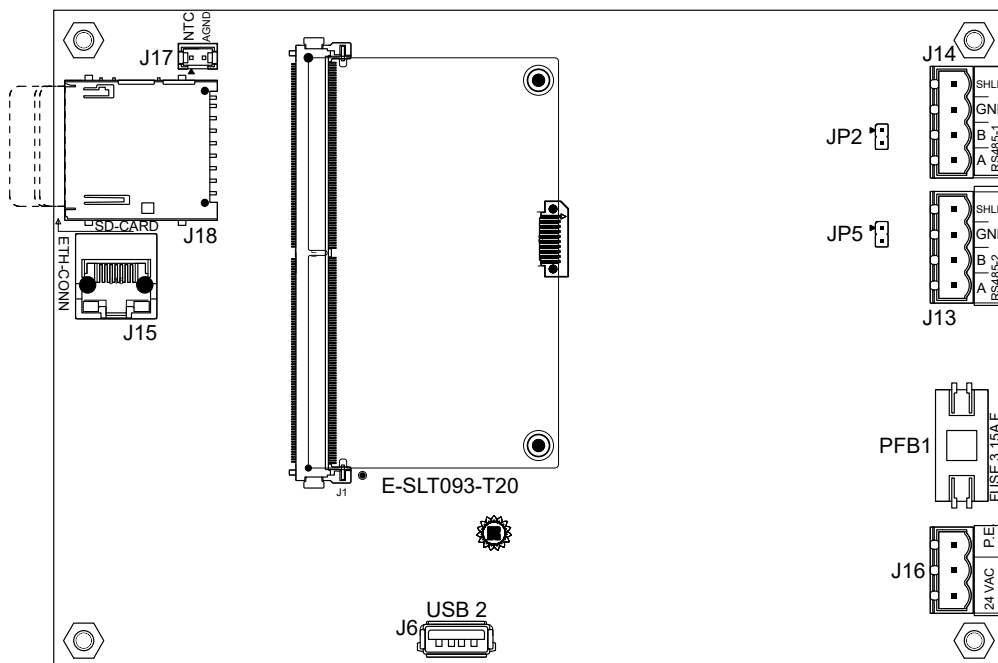


Table 1.2 Rear connections

Reference	Description	Connector	Use
J6	USB host 2 port	USB type A	USB internet key
J13	RS485-2 port	Removable screw 4-pole	Modbus connection to BMS
JP5	Modbus RS485-2 network termination	2-pole Jumper	Jumper closed if terminal network node
J14	RS485-1 port	Removable screw 4-pole	Modbus connection to Next-G gas unit heaters
JP2	Modbus RS485-1 network termination	2-pole Jumper	Jumper closed if terminal network node
J15	Ethernet port 100BASE-T	RJ45	LAN connection to the Internet
J16	24 V AC SELV power supply	Removable screw 3-pole	Device power supply
J17	Room temperature probe input	AMP MODU-II 2-pole	Room temperature measurement
J18	SD Card	SD socket	System log files, data and events
PFB1	Fuse 20x5 mm 3,15 A Fast	Fuse holder	Power supply protection

Table 1.3 RS485 port connections

Terminal	Description	Notes
A	Data bus +	FTP cable Cat 5e: blue wire
B	Data bus -	FTP cable Cat 5e: blue/white wire
GND	Data bus reference	FTP cable Cat 5e: wires green + green/white
SHLD	Cable shielding	FTP cable Cat 5e: shield wire

Table 1.4 Power supply connections

Terminal	Description	Notes
24 VAC	24 V AC SELV power supply	Minimum power 25 VA
P.E.	Earth connection	-

1.4 TECHNICAL DATA

Table 1.5 Technical data

Power supply	Supply voltage	24 V AC ($\pm 20\%$) SELV	
	Frequency	50 / 60 Hz	
	Power of the power supply transformer	≥ 25 VA	
	24 V AC power supply cable	3x0,5 mm ²	
	Maximum 24 V AC cable length	3 m	
Cabling	Power supply protection	internal fuse 5x20 mm 3,15 A Fast	
	Solid wire or stranded wire (twisted or ferrule)	1 cable: 0,5 - 2,5 mm ² 2 cables: 0,5 - 1,5 mm ²	
Function	Software class	A	
	Operation per EN 60730	1.Y (automatic operation)	
Communication ports	LAN Ethernet 10/100 Base T • FTP cable Cat 5e	standard RJ45 screened port	
	RS485 Half Duplex isolated (RS485-1) • FTP cable Cat 5e, maximum total length	4-pin screw port (A, B, common, shield) 1000 m	
	RS485 Half Duplex not isolated (RS485-2) • FTP cable Cat 5e, maximum total length	4-pin screw port (A, B, common, shield) 1000 m	
	Front USB 2.0 host	type A port Power supply available 5 A, max. 1 A (total current available for both host ports)	
	Rear USB 2.0 host	type A port Power supply available 5 A, max. 1 A (total current available for both host ports)	
	Front USB 2.0 device	type B port	
	Input for NTC 10k Beta 3977 temperature probe (available as optional OSND013)	AMP MODU-II bipolar port maximum cable length 1 m	
	Socket for full size SD card	support for SDHC UHS-I cards	
	Protection rating and safety class	IP protection rating	IP 10 (not installed) IP 30 (properly installed)
		Safety class per EN60730	safety class III (presence of functional earth terminal)
Degree of contamination per EN60730		2	

Climatic conditions	Storage	-20 ÷ 65 °C
	Transport	-20 ÷ 70 °C
	Operation	-20 ÷ 55 °C, relative humidity 20 ÷ 90% (non condensing)

2 INSTALLATION

2.1 WARNINGS



Read the warnings in Chapter III p. 4, providing important information on regulations and on safety.



Compliance with installation standards

Installation must comply with applicable regulations in force, based on the installation Country and site, in matters of safety, design, implementation and maintenance of electrical systems.



Installation must also comply with the manufacturer's provisions.



Live components

After placing the appliance in the final position, and prior to making electrical connections, ensure not to work on live components.



Earthing

The appliance must be connected to an effective earthing system, installed in compliance with regulations in force.



Cable segregation

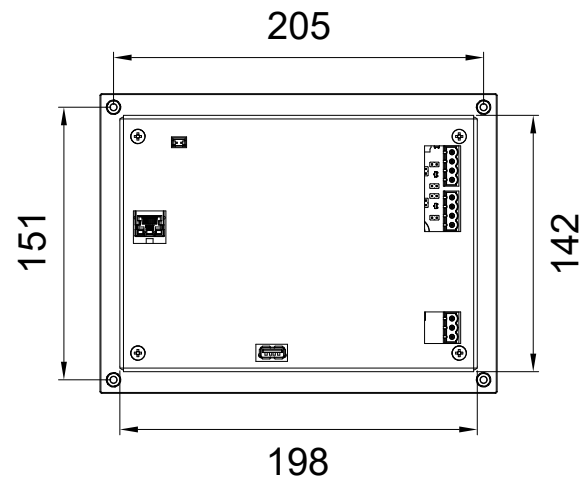
Keep power cables physically separate from signal ones.

2.2 PANEL INSTALLATION (OCDS015)

For panel installation of the OCDS015 device:

1. Ensure that the electrical panel door can support the weight of the Re-Mote device.
2. Make a rectangular cut-out in the electrical panel door of the appropriate size (Figure 2.1 p. 10).
3. Mark the references of the 4 fixing holes on the door and drill the corresponding holes with a 4,5 mm drill bit.
4. Place the Re-Mote device in the cut-out made and secure it with the M4 screws and bolts provided.

Figure 2.1 OCDS015 installation



2.3 WALL INSTALLATION (OCDS017)



It is recommended to place the Re-Mote device at about 1,5 m from the floor, away from draughts, direct exposure to sunlight, influence by direct heating sources (lamps, hot air flows, etc.) and possibly on walls not bordering the outside, so as not to distort the measured temperature and therefore the operation of the system. In this way, unwanted starts and stops of the system will be avoided and optimal comfort in the environment will be guaranteed.

For wall installation of the OCDS017 device:

1. Unscrew the assembly screws of the electrical box containing the Re-Mote device, separating the upper part (to which the Re-Mote device is attached) from the lower part.
2. Place the lower part on the wall, at a height of approx. 1,5 m above the floor, and mark the 4 points where the fixing holes are to be drilled (Figure 2.2 p. 11).
3. Drill the 4 holes in the wall with a 6 mm drill bit and insert D6 nylon wall plugs (not supplied).
4. Fasten the bottom part to the wall using the wall plug screws.
5. Place the supplied temperature probe (which is inside the electrical box so as not to risk damage during transport) so that it protrudes from the cable gland according to the dimensions in Figure 1.2 p. 7.
6. Using a Ø 16 mm core drill, drill the holes in the sides of the lower part where the cable glands are to be installed (3 are supplied, corresponding to the power cable and the 2 Modbus connections). Take care

to drill the holes only in the areas indicated in Figure 2.3 p. 11, so as not to run the risk of damaging the Re-Mote device or the structure of the electrical box. If it is not necessary to use all 3 cable glands, avoid drilling the holes of the cable glands that will not be used.

- Once the electrical connections have been made (Paragraph 2.4 p. 11), reassemble the electrical box.

Figure 2.2 OCDS017 installation

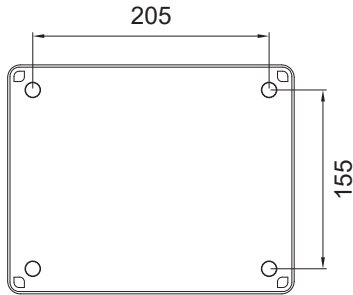
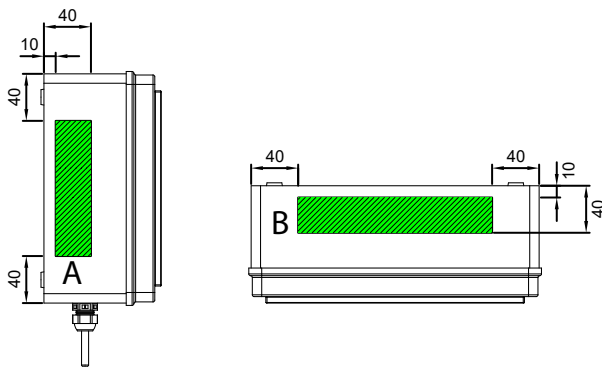


Figure 2.3 Drilling area for OCDS017 cable glands



- A Left and right sides
B Upper side (on the lower side)

2.4 ELECTRICAL HOOKUP

Electrical connections provide:

- Power supply (Paragraph 2.4.1 p. 11).
- Modbus connection to Next-G gas unit heaters (Paragraph 2.4.2 p. 11).
- Modbus connection to BMS (optional, Paragraph 2.4.3 p. 12).
- Room probe connection (optional, Paragraph 2.4.4 p. 12).
- LAN connection (optional, Paragraph 2.4.5 p. 13).



How to make connections

All electrical connections must be made on the appropriate ports at the rear of the Re-Mote device (Paragraph 1.3.2 p. 8):

- Ensure the appliance is not live.
- Remove the metal rear panel, in the case of OCDS017 after opening the plastic box.
- Thread the cables through the appropriate holes in the rear panel for OCDS015, or by drilling the

appropriate holes in the plastic box for OCDS017 (placing the appropriate cable glands at the passages, Paragraph 2.3 p. 10).

- Locate the appropriate connection terminals (Table 1.2 p. 9).
- Make the connections.
- Refit the rear panel and for OCDS017 also refit the plastic box, replacing it appropriately on the wall.

2.4.1 Electrical power supply

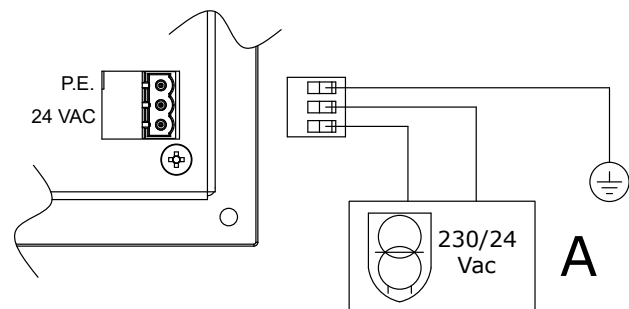
The Re-Mote device must be supplied by a 230/24 V AC - 50/60 Hz safety transformer with a power rating of no less than 25 VA (not supplied); in detail, this transformer must comply with EN 61558-2-6 standard.

Use a 3x0,5 mm² electrical cable and make the connections to the terminals of the 3-pin plug located on the bottom right-hand side of the Re-Mote device (Figure 2.4 p. 11).

The maximum specified length for this cable is 3 m.

The Re-Mote device is also equipped with a buffer battery which, in the event of a power failure, is able to maintain the set values in memory; the duration of the buffer battery is approximately 7 years, after which it must be replaced (contact Robur TAC).

Figure 2.4 Power supply connection



- A Safety and isolation transformer 230/24 V AC - 50/60 Hz

2.4.2 Modbus connection to Next-G gas unit heaters

The Modbus communication network, realised with FTP Cat 5e signal cable, allows one or more Next-G gas unit heaters to be remotely connected and controlled by the Re-Mote device.

It entails a certain number of serial nodes, distinguished in:

- ▶ intermediate nodes, in variable number
- ▶ terminal nodes, always and only two (beginning and end)

Each component of the system, Next-G gas unit heater or Re-Mote device, corresponds to a node, connected to two more elements (if it is an intermediate node) or to just one other element (if it is a terminal node) through two/one Modbus cable section/s, forming an open linear communication network (never star- or loop-shaped).

The Modbus communication network connection be-

tween the Re-Mote device and the Next-G gas unit heaters is made on the J14 port of the Re-Mote device (Figure 1.4 p. 8) and on the RS485 port of each of the Next-G gas unit heaters connected to the Re-Mote device.

How to connect the Re-Mote device to the Next-G gas unit heater

1. Access the terminal block inside the Next-G gas unit heater's electrical panel.
2. Use LAN cable Cat 5e FTP 4x2xAWG 24/1.
3. Make electrical connections as described in Figure

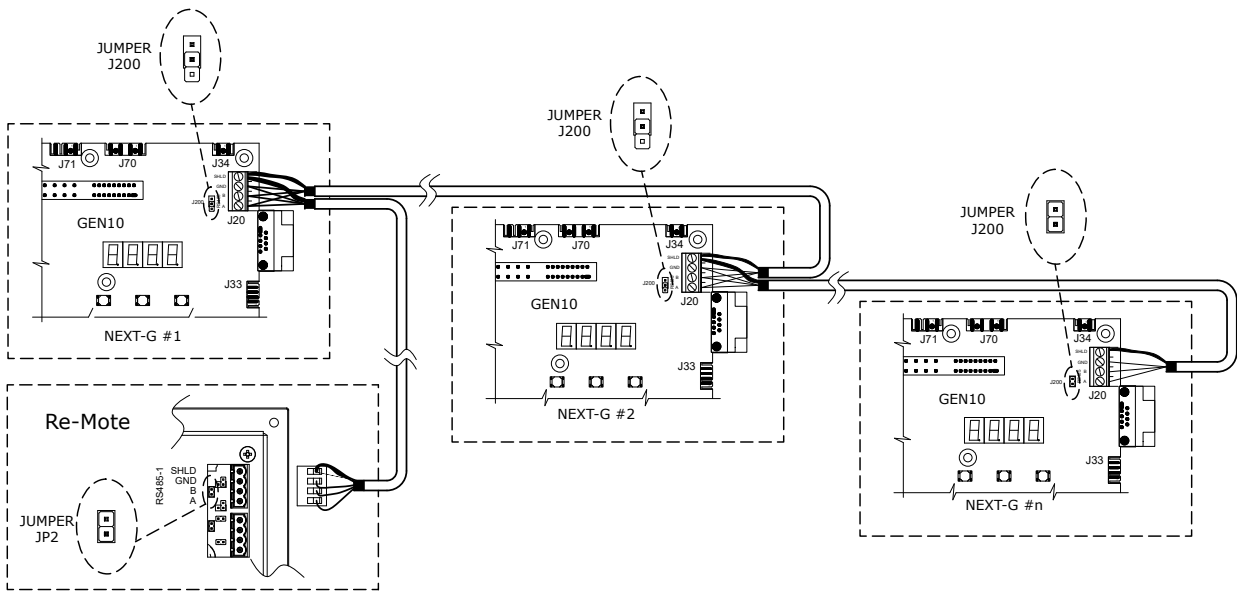
2.5 p. 12.

4. Place Jumper J200 (on the Next-G gas unit heater board): closed if the gas unit heater is a terminal node of the Modbus network or open if it is an intermediate node.
5. Place jumper JP2 (on the Re-Mote device): closed if the Re-Mote device is a terminal node of the Modbus network or open if it is an intermediate node.



The total length of the connection cables between all gas unit heaters and the Re-Mote device must not exceed 1100 m.

Figure 2.5 Modbus connection between Re-Mote device and Next-G gas unit heaters



2.4.3 Modbus connection to BMS

The Modbus connection to the BMS allows the Re-Mote device (which in this case always operates as a Modbus slave) to be connected to a BMS supervisory system (which always operates as a Modbus master), so that the Re-Mote device receives operating instructions from the BMS and transmits information about the status of the gas unit heaters it is managing.

The Modbus communication network connection between the Re-Mote device and the BMS is made on the J13 port of the Re-Mote device (Figure 1.4 p. 8) and on the port intended for this service on the BMS (depending on the specific system used).

How to connect the Re-Mote device to the BMS

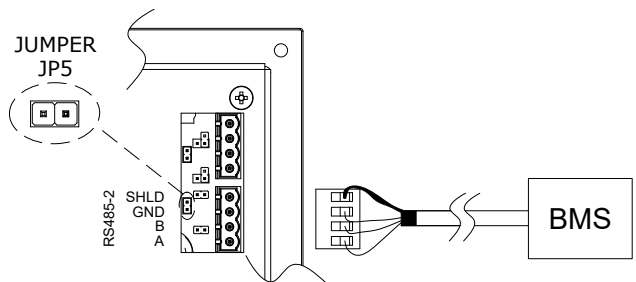
1. Access the J13 terminal block of the Re-Mote device (Figure 1.4 p. 8).
2. Use LAN cable Cat 5e FTP 4x2xAWG 24/1.
3. Make electrical connections as described in Figure 2.6 p. 12.
4. Place jumper JP5 (on the Re-Mote device): closed if the Re-Mote device is a terminal node of the Modbus network connected to the BMS or open if it is an intermediate node.

5. Properly place the termination jumper on the BMS (refer to BMS documentation).



The total length of the connection cables between all gas unit heaters, the Re-Mote device and the BMS must not exceed 1100 m.

Figure 2.6 Modbus connection to BMS



2.4.4 Optional room probe OSND013

The optional room temperature probe (available as OSND013 optional for the panel-mounted Re-Mote OCDS015 device) allows the room temperature to be measured and

used to control the Next-G gas unit heaters connected to the Re-Mote device.

The presence of the probe allows the value read by the probe to be used for control, instead of the value read by each Next-G gas unit heater via the supplied room probe. This implies that each gas unit heater connected to the Re-Mote device will not use the value of its own room probe for control of the gas unit heater, but that communicated by the Re-Mote device.

If the probe is present, it may or may not be used for control depending on the Re-Mote device configuration.



The room temperature probe is supplied with the wall-mounted Re-Mote OCDS017 device.



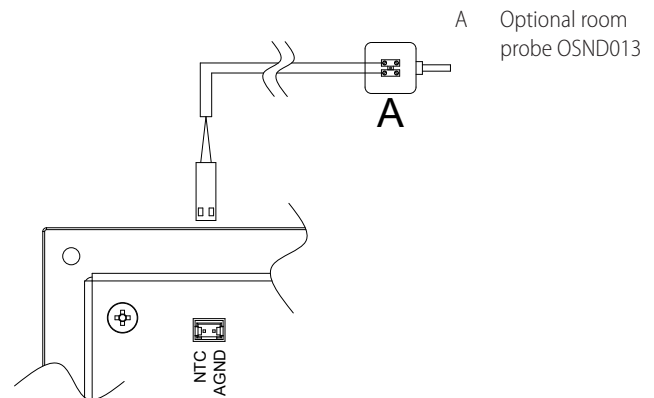
How to connect the optional OSND013 external probe to the Re-Mote device

1. Access the J17 terminal block of the Re-Mote device (Figure 1.4 p. 8).
2. Make electrical connections as described in Figure 2.7 p. 13. The maximum cable length is 1 m.



For further information refer to the instruction sheet supplied with the probe.

Figure 2.7 Room probe connection

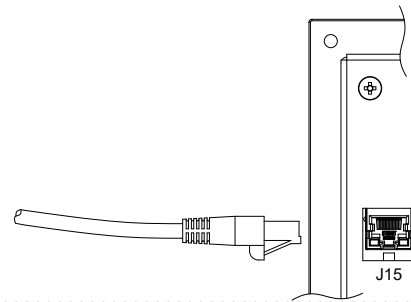


2.4.5 LAN connection

The Re-Mote device provides a 10/100 LAN port with an RJ45 jack, located on the rear side (Figure 1.4 p. 8), for connecting the device to the Internet.

The maximum length of the LAN Cat 5e FTP 4x2xAWG 24/1 cable is 100 m.

Figure 2.8 LAN connection



2.5 SD CARD

For the purpose of recording events occurring on the system managed by the Re-Mote device, a 32 GB capacity SD card is supplied, which is already installed in the device.

3 FIRST START-UP



First start-up entails system configuration and may only be carried out by a Robur TAC. The user/installer is NOT authorised to carry out such operations, under penalty of voiding the warranty.

The installer is obliged to carry out preliminary checks described in Paragraph 3.1 p. 13.

3.1 PRELIMINARY CHECKS



Paragraph dedicated to the installer.

Upon completing installation, before contacting the TAC the installer must check:

- ▶ Correct installation of the Next-G gas unit heater, as specified in the relevant Installation, use and maintenance manual.
- ▶ Correct installation of the Re-Mote device (Paragraph 2 p. 10).
- ▶ Correct Modbus address setting of each Next-G gas unit heater (parameter 40).
- ▶ Correct execution of electrical wiring (Paragraph 2 p. 10).

3.2 CONFIGURATION WIZARD

When the Re-Mote device is switched on for the first time, a configuration wizard is run with the following steps:

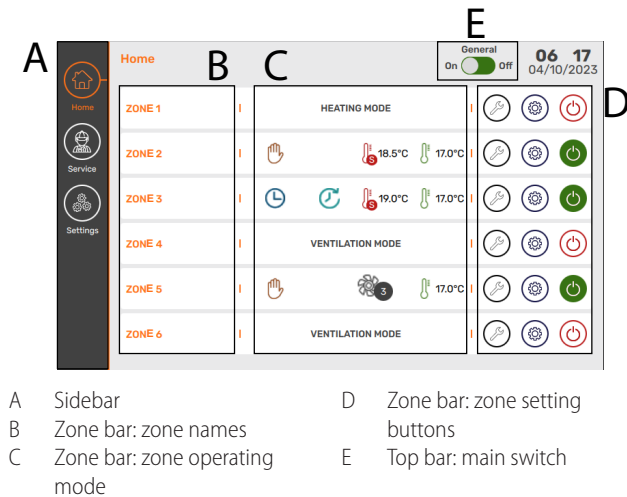
1. Language setting

2. Date and time setting
3. Bus communication check

4. Screen lock setting
5. Zone configuration

4 INTERFACE DESCRIPTION

Figure 4.1 Interface description



4.1 SIDEBAR

The sidebar (A, Figure 4.1 p. 14) is visible from any page. The currently active page has the icon highlighted in orange.

The selectable pages on the sidebar are:



Re-Mote device main page.



"Service" menu, reserved for Robur TACs.



"Settings" menu (Paragraph 4.5 p. 17).

The icons shown on the sidebar are:



0.0 °C Re-Mote device room temperature probe enabled and measured room temperature value.



Cloud connection active.



Screen lock active: tap to lock the screen immediately (Paragraph 4.5.1 p. 17).

4.2 ZONE BAR

The zone bar is only available after completing the configuration.

- The zone bar is only available on the main page. Three elements are shown in the display zone bar:
- ▶ the names of the zones (B, Figure 4.1 p. 14)
 - ▶ the operating modes of the zone (C, Figure 4.1 p. 14)
 - ▶ the zone setting buttons (D, Figure 4.1 p. 14)

4.2.1 Name of the zone

By tapping on the zone name, you can view the gas unit heaters in the zone and display their status (Paragraph 4.2.3.2.4 p. 16).

4.2.2 Zone operating mode

"Heating mode" or "Ventilation mode" indicate the zone's predisposition for operation when the zone switch is off



. When the zone switch is on , the following buttons and icons may be displayed:



Manual operation. In manual operation, all gas unit heaters in the zone run to the fixed setpoint manually set for the zone. Tap to access the time slot configuration page (Paragraph 4.2.3.2.1.2 p. 15).

Automatic operation. In automatic operation all gas unit heaters in the zone operate to achieve the setpoint for the zone in the specific time slot (day of the week and time of day). The button will only show if time slot operation (for heating or ventilation) has been enabled. Tap to access the time slot configuration page or to switch to manual mode, deactivating time slots (Paragraph 4.2.3.2.1.2 p. 15).



"Delay". The button is only available if time slots are enabled and has the function of extending the current operating mode beyond the time slot's switching off period with these rules:

- ▶ Each tap on the button extends the operating time by 30 minutes to a maximum of 120 minutes.
- ▶ At the fifth touch, the delay function is cancelled.
- ▶ The active extension time (30 to 120 minutes) is shown inside the button.
- ▶ The function has no effect if the time slot is currently off.



18.5°C Current setpoint. The button will only show if heating mode is active (in modulation or on/off, Paragraph 4.2.3.1.1 p. 15). Tap to change the setpoint as follows:




- ▶ In manual operation, the value is changed directly (for rules refer to Paragraph 4.2.3.2.1.1 p. 15).
- ▶ In automatic operation, you access the page for setting the different setpoints (comfort, reduced, antifreeze) for the time slots (Paragraph 4.2.3.2.1.2 p. 15).



3 Ventilation speed. The button only appears in ventilation mode. Shows the current ventilation speed. Tap to change the speed as follows:

- ▶ In manual operation, the value is changed directly (for rules refer to Paragraph 4.2.3.2.2.1 p. 16).
- ▶ In automatic operation, you access the page for setting the different speeds (1 to 4) for the time slots (Paragraph 4.2.3.2.2.2 p. 16).



Zone or device error. The button will only show if there is at least one fault (error or warning) on one of the gas unit heaters in the zone. The button replaces the current setpoint button. Tap to display all gas unit heaters in the zone. Those on which there is a fault are highlighted with the symbol , in the case of an error, or , in the case of a warning. When tapping on the specific gas unit heater there is the possibility of resetting the errors by pressing the  button.



Room temperature. The value reported corresponds to the average of the temperatures read by the probes of the gas unit heaters configured in the zone.

4.2.3 Zone settings

The zone settings include three buttons:



Zone settings (Paragraph 4.2.3.1 p. 15).



Zone menu (Paragraph 4.2.3.2 p. 15).



Zone on/off (Paragraph 4.2.3.3 p. 16).

4.2.3.1 Zone settings



This menu is reserved for the installer.

The password 1112023 must be entered to access this menu.

In the menu, it is possible to define for each of the configured zones:

- ▶ The heating mode (Paragraph 4.2.3.1.1 p. 15)
- ▶ The heating setpoint differential (Paragraph 4.2.3.1.2 p. 15)
- ▶ The degree of insulation of the zone

4.2.3.1.1 "Operating mode"

On this page, you can choose the type of heating request from the three types provided:

- ▶ "Modulating heating"
- ▶ "ON/OFF heating"
- ▶ "Heating without temperature control"

If "ON/OFF heating" is chosen, the power level can be selected from three available levels.

If "Heating without temperature control" is selected, the power level can be selected as a percentage of the maximum power.

4.2.3.1.2 "Differential setting"

This page is used to set the heating setpoint differential value, which applies to both manual and automatic operation.

The differential setting is not available in the ventilation

mode and in the "Heating without temperature control" mode.

By tapping on the value, you can change it using the arrows.

The settable value can be set in the range of 0,5÷6,0 °C and must be saved after setting.

4.2.3.2 Zone menu

The zone menu includes the buttons:

- ▶ "Heating mode"
- ▶ "Ventilation mode"
- ▶ "Exclude appliances"
- ▶ "Units Status"
- ▶ "Statistical data"

4.2.3.2.1 "Heating mode"

Tapping this button activates the heating mode (if the current operation is ventilation) and accesses the settings related to:

- ▶ "Setpoint" (Paragraph 4.2.3.2.1.1 p. 15)
- ▶ "Time slots" (Paragraph 4.2.3.2.1.2 p. 15)
- ▶ "Destratification function" (Paragraph 4.2.3.2.1.3 p. 16)
- ▶ "Predictive start-up"

4.2.3.2.1.1 "Setpoint"

The setting is only used if modulation heating mode or ON/OFF heating mode is active, Paragraph 4.2.3.1.1 p. 15.

This setpoint value is only used for manual heating mode (Paragraph 4.2.2 p. 14).

By tapping on the value, you can change it using the arrows.

The settable value can be set in the range of 5,0÷35,0 °C and must be saved after setting.

4.2.3.2.1.2 "Timer"

To access the time slot settings, press the relevant button. Once the time slots have been activated via the time slot switch, the following tabs are available:

- ▶ "Setpoint setting"
- ▶ "Set time slot"

On the "Setpoint setting" tab, set the temperature values for the three configurable levels (the fourth level corresponds to off):

- ▶ Antifreeze (1.0÷5.0 °C, default 5 °C), colour blue
- ▶ Reduced (6.0÷12 °C, default 12 °C), colour brown
- ▶ Comfort (13.0÷35.0 °C, default 18 °C), colour red

By tapping on the value, you can change it using the arrows.

Save the changed settings and continue to the time slot setting.

The time slots are set daily from 00:00 to 24:00 with 30-minute intervals.

For each time interval, only one temperature level can be defined by tapping on the interval. The colour shows the relevant setpoint (blue for antifreeze, brown for reduced, red for comfort, white for off).

To set successive intervals with the same setpoint, it is possible to drag the setting of an adjacent interval.

To change the day, tap on the arrows at the top of the page.

To copy the previous day's settings to the current day, tap

the button at the bottom of the page.

Once the configuration is complete, save the settings.

4.2.3.2.1.3 "Destratification function"

In the operating modes in which the heating service is based on the room temperature (measured directly by the room probe connected to the gas unit heater), it is possible to activate the automatic destratification by installing the destratification temperature probe (available as OSND012 optional) on all gas units heaters in the zone in which you want the function to be available and configuring the appropriate gas unit heater parameters.



Refer to the Next-G gas unit heater Installation, use and maintenance manual for installation of the optional destratification temperature probe and configuration of its parameters.

The function is switched on and off via the relevant switch.

4.2.3.2.2 "Ventilation mode"

Tapping this button activates the ventilation mode (if the current operation is heating) and accesses the settings related to:

- ▶ "Select the ventilation speed" (Paragraph 4.2.3.2.2.1 p. 16)
- ▶ "Time slots" (Paragraph 4.2.3.2.2.2 p. 16)

4.2.3.2.2.1 "Select the ventilation speed"

This value is only used for manual ventilation mode (Paragraph 4.2.2 p. 14).

By tapping on the value, you can change it using the arrows.

The value can be set from 1 (minimum) to 4 (maximum) and must be saved after setting.

4.2.3.2.2.2 "Timer"

To access the time slot settings, press the relevant button. Once the time slots have been activated via the time slot switch, the "Set time slot" tab is available.

Four speed levels are available for each time interval:

- ▶ Speed 1 (minimum), colour blue
- ▶ Speed 2, colour brown
- ▶ Speed 3, colour orange
- ▶ Speed 4 (maximum), colour red



Refer to Paragraph 4.2.3.2.1.2 p. 15 for how to set days and time slots on the desired ventilation levels.

4.2.3.2.3 "Exclude appliances"

This function allows the gas unit heaters configured for the zone to be excluded from operation.

To exclude/include a gas unit heater, tap the gas unit heater ID.







Excluded gas unit heaters are marked with an X on the gas unit heater ID.

An excluded gas unit heater does not communicate its data to the Re-Mote device.

4.2.3.2.4 "Units Status"

Allows the status of the gas unit heaters configured on the zone to be displayed.

The following states are possible for each gas unit heater:

- ▶  if the gas unit heater is switched on
- ▶  if the gas unit heater is switched off
- ▶  if the gas unit heater has an active error (Paragraph 5 p. 17)
- ▶  if the gas unit heater has an active warning (Paragraph 5 p. 17)
- ▶  if the gas unit heater has been excluded (Paragraph 4.2.3.2.3 p. 16)
- ▶  if the gas unit heater is offline (because it is switched off or because Modbus communication has been interrupted)

4.2.3.2.5 "Statistical data"

This menu displays the statistical data of each gas unit heater in the zone.

You can move between the gas unit heaters in the zone using the arrows.

Statistical data are updated at the time the relevant page is accessed.

Statistical data will not be available for excluded gas unit heaters, not compatible with the Re-Mote device or offline.

The available statistical data are:

- ▶ In heating mode:
 - "Total electrical supply ON time"
 - "Total heating request time"
 - "Total flame ON time"
 - "Total ignitions number"
 - "Total missed ignitions number"
- ▶ In ventilation mode:
 - "Total electrical supply ON time"
 - "Total ventilation request time"

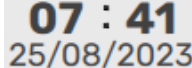
4.2.3.3 Zone on/off


The button is used to activate or deactivate a zone, in the operating mode set in the zone menu (Paragraph 4.2.3.2 p. 15).

In the case of automatic operation, the zone must still be switched on for the gas unit heaters to switch on according to the set programming.

4.3 TOP BAR


The top bar of the display shows the following buttons and icons:

 07 : 41
25/08/2023 Current date and time. Tap to access the "Date and Time" menu (Paragraph 4.5.3 p. 17).

 Re-Mote device error. Tap to access the error description. A reset is not possible. The button disappears when the cause of the error ceases (Paragraph 5 p. 17).

General on/off (Paragraph 4.3.1 p. 16).

4.3.1 Main on/off

 The switch is only available after completing the first configuration and only on the main page.

The switch is off if all zone switches (Paragraph 4.2.3.2 p. 15) are off.

The switch is on if at least one of the zone switches (Paragraph 4.2.3.2 p. 15) is on.

Tapping the switch:

- ▶ From the condition, we move to the condition and all gas unit heaters in all zones will be switched off.
- ▶ From the condition, all zones that were on before the switch was flipped are switched on again.



Zones with automatic operation (Paragraph 4.2.3.2 p. 15) are also active or not depending on the status of the main switch.

4.4 "SERVICE"



Access to the service menu is reserved for Robur TACs.

4.5 "SETTINGS"

The "Settings" menu gives access to some setting menus for the user.

4.5.1 "Screen lock"

The screen lock function prevents changes by unauthorised personnel to Re-Mote device settings.

Once the button has been pushed to access the function, it can be activated or deactivated via the corresponding switch and then the unlocking password, which must have a minimum length of 5 characters, must be configured.

The screen lock is activated after a period of 90 s of inactivity and then the unlocking password must be entered to access the device menus.



The icon in the sidebar indicates that the screen

lock is enabled.

To permanently deactivate the screen lock (i.e. not simply to access menus, for which it is sufficient to enter the password), the screen lock must be deactivated via the screen lock switch.

The configured unlocking password can also be changed in this menu.

4.5.2 "Language"

The available languages are:

- ▶ Italian
- ▶ English
- ▶ French
- ▶ German
- ▶ Czech

4.5.3 "Date and Time"



In this menu, the date and time of the panel can be set.


The switching between daylight saving time and summer time is manual.

5 DIAGNOSTICS



Refer to the Next-G gas unit heater Installation, use and maintenance manual for a detailed list of faults relating to the gas unit heater.

In the presence of a fault, the corresponding button is shown (error  or warning .

Tapping the button displays all gas unit heaters in the zone. Tapping on the specific gas unit heater gives the possibility to reset errors by tapping the  button.

If the display is switched off when the fault is detected, the display will start flashing and at the first touch, it will show information on the faults detected.



If the gas unit heater is still offline, after checking that the electrical connections are correct and the Modbus address of the gas unit heater is correctly set, contact the TAC.

Robur mission

Robur is dedicated to dynamic progression in research, development and promotion of safe, environmentally-friendly, energy-efficiency products, through the commitment and caring of its employees and partners.



caring for the environment

Robur S.p.A.
advanced technologies
for air conditioning
via Parigi 4/6
24040 Verdellino/Zingonia (BG) Italy
+39 035 888111 - F +39 035 884165
www.robur.com export@robur.it

