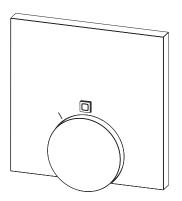
# Alpha IP

# RTA 61001-N1

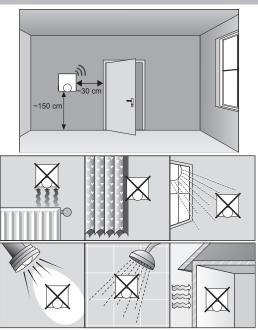


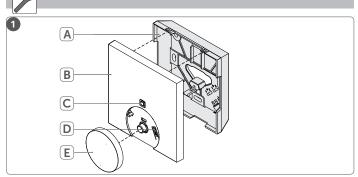


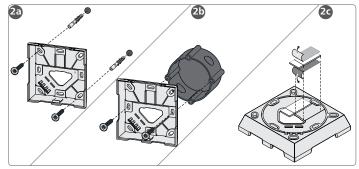


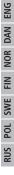


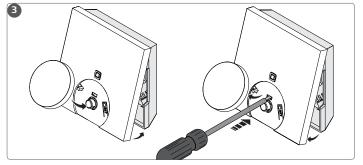


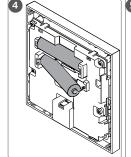


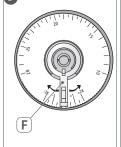


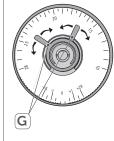












**Contents** 

1 About these instructions

|   | 1.1 Vali     | dity, storage and forwarding of the instructions | 8  |  |  |
|---|--------------|--|----|--|--|
|   | 1.2 Sym      | nbols  | 8  |  |  |
| 2 | 2 Safety     |  |    |  |  |
|   | 2.1 Inte     | ended use  | 9  |  |  |
|   | 2.2 Safe     | ety notes  | 9  |  |  |
| 3 | 3 Function   |  |    |  |  |
| 4 | Device o     | verview  | 11 |  |  |
|   | 4.1 Tecl     | nnical data                                      | 12 |  |  |
| 5 | Decomm       | 13   |    |  |  |
|   | 5.1 Tea      | ch-in of the device                              | 13 |  |  |
|   | 5.1.1        | Teach-in to Alpha IP Base Station                | 13 |  |  |
|   | 5.1.2        | Teach-in to Alpha IP Access Point                | 14 |  |  |
|   | 5.2 Assembly |  | 15 |  |  |
|   | 5.2.1        |  | 15 |  |  |
|   | 5.2.2        | Installation in flush-type box                   | 16 |  |  |
|   | 5.2.3        | Installation with adhesive strips                | 17 |  |  |
| 6 | Operatio     | n  | 17 |  |  |
|   | 6.1 Set      | value balance (offset)                           | 17 |  |  |
|   | 6.2 Tem      | nperature limitation                             | 17 |  |  |
|   | 6.2.1        | Connection test                                  | 18 |  |  |
| 7 | Displays     |  | 19 |  |  |
|   | 7.1 Stat     | us displays                                      | 19 |  |  |
|   | 7.2 Erro     | or indications                                   | 10 |  |  |
| 8 | Changing     | g the batteries                                  | 21 |  |  |

| 9 Cleaning                   | 21 |
|------------------------------|----|
| 10 Reset to factory settings | 22 |
| 11 Decommissioning           | 23 |
| 12 Disposal                  | 23 |
|                              |    |
|                              |    |

## About these instructions

#### Validity, storage and forwarding of the instructions 1.1

These instructions apply to the room control unit Analog RTA 61001-N1. These instructions include information necessary for commissioning and operation. These instructions must the read completely and thoroughly before commencing any work with the device. These instructions must be kept and to be handed over to future users.



The latest version of these instructions/of Additional Alpha IP System information can be found under www.alphaip.de.



System information, functions and operating steps from the instructions for Alpha IP Access Point (HAP 21001) must be observed.

#### 1.2 **Symbols**

The following symbols are used in this manual:



**Note:** Identifies important or useful information

Preconditions

- Result from an action
- List without fixed order 1.. 2.

List with fixed order

8

# 2 Safety

#### 2.1 Intended use

The room control unit Analog RTA 61001-N1 is a component of the Alpha IP System and serves for

- the installation in residence-related environments,
- the registration of the actual temperature (room temperature),
- · the setting of the target temperature (comfort temperature),
- the control of the actual temperature by an activation of the Alpha IP Base station for the control of floor heating systems (FAL-x10x1-xx1) or connected Alpha IP radiator thermostats.
- a wireless communication in the Alpha IP network.

Every other use, modification and conversion is expressively forbidden. Improper use leads to dangers the manufacturer cannot be held liable for, and to an exclusion of warranty and liability.

#### 2.2 Safety notes

All safety notes in these instructions must be observed in order to avoid accidents with personal damage or property damage. No liability is assumed for personal and material damage caused by improper handling or non-observance of the hazard notes. Such cases render all warranty claims invalid. No liability is assumed for consequential damage!

- Only use the device if it is in flawless state.
- Observe the performance limits of the device and its environmental conditions.

- Only operate this device in a dry and dust-free environment.
- Do not expose the device to humidity, vibration, continuous sunlight or other types of heat radiation, coldness, or mechanical loads. Ensure that children do not play with this device or the packaging. Children must be monitored if necessary.

## **Function**

The Alpha IP room control unit Analog RTA 61001-N1 serves for setting the room temperature according to individual requirements. The room control unit measures the temperature in the room and transmits these data cyclically to the Alpha IP Base station FAL-x10x1-xx1 or to connected Alpha IP radiator thermostats. The registered values allow an exact regulation of the room temperature. The target temperature can be set manually with the setting wheel (E).

Communication with other components will be performed over the Homematic (HmIP) radio protocol. The radio transmission is done on a non-exclusive transmission path; thus, disturbance cannot be completely excluded. Disturbance impacts can be caused by switching processes, electric motors or electric appliances.



The range within buildings can differ strongly from the range outside (in open air).

# 4 Device overview

Device overview (see page 4 fig. 1)

- (A) Installation bottom
- (B) Room control unit Analog
- (C) System button (teach-in button and LED)
- (D) SET button
- (E) Setting wheel
- (F) Setpoint correction limiter
- (G) Temperature limiters

| 4.1 Technical data          |                          |   |  |  |  |  |
|-----------------------------|--------------------------|---|--|--|--|--|
| Short designation of device | RTA 61001-N1             |   |  |  |  |  |
| Supply voltage              | 2x 1.5 V LR03/micro/AAA  |   |  |  |  |  |
| Power consumption           | max. 50 mA               |   |  |  |  |  |
| Battery service life        | 2 years (normally)       |   |  |  |  |  |
| Protection type             | IP20                     |   |  |  |  |  |
| Contamination degree        | 2                        |   |  |  |  |  |
| Ambient temperature         | 0 to 50 °C               |   |  |  |  |  |
| Dimensions (W x H x D)      | 86 x 86 x 20 mm / 26 mm  |   |  |  |  |  |
| Weight                      | 90 g (incl. batteries)   |   |  |  |  |  |
| Radio frequency             | 868.3 MHz/869.525 MHz    |   |  |  |  |  |
| Receiver category           | SRD category 2           |   |  |  |  |  |
| Typical radio range         | 250 m (in open air)      |   |  |  |  |  |
| Duty Cycle                  | < 1 % per h/< 10 % per h |   |  |  |  |  |
| Mode of action              | Type 1                   |   |  |  |  |  |
| Guidelines                  | 2014/53/EU<br>2014/30/EU | Telecommunications terminal equipment EMC |  |  |  |  |
|                             | 2011/65/EU               | RoHs                                      |  |  |  |  |

# 5 Commissioning

#### 5.1 Teach-in of the device

In order be integrated into the Alpha IP System and to communicate with other devices, the room control unit Analog must be taught-in first. The room control unit Analog is taught-in directly to the Alpha IP base station, or in conjunction with the radiator thermostats, to the Alpha IP Access Point. In case of direct teach-in, the configuration is done on the device itself; in case of teach-in via the Access Point, it is done via the Alpha IP app.

## 5.1.1 Teach-in to Alpha IP Base Station



For teach-in, keep a minimum distance of 50 cm between the devices.



The teach-in process can be interrupted by shortly pressing the teach-in key again. This is confirmed by a short flash in red colour of the device LED.

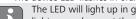


If no teach-in is performed, the teach-in mode is finished automatically after 30 seconds.

If the room control unit Analog shall be taught-in to the Alpha IP Base station, the two devices to be linked must be set to teach-in mode.

RUS

- 1. Select the desired channel at the Alpha IP base station (see Alpha IP Base station instructions).
- 2. Activate the teach-in mode at the base station by pressing and holding the key.
- ✓ The device LED starts to flash in orange.
- 3. Take off the room control unit Analog from the installation bottom (see page 5, fig. 3).
- 4. Pull out the insulating strip from the battery compartment, or insert batteries (see page 5 fig. 4). If batteries have already been inserted, press the system key (C) for at least 4 seconds in order to activate the teach-in mode.
- ✓ The teach-in mode is activated automatically for 3 minutes.
- ✓ The device LED flashes in orange.



The LED will light up in green after a successful teach-in process. If the LED lights up red, repeat the process.

## 5.1.2 Teach-in to Alpha IP Access Point

For a control via the Alpha IP app, the teach-in must of the RTA 61001-N1 must be performed via the Access Point (HAP 21001). Teach-in the device as follows:

- ⇒ The Alpha IP Access Point has been set up via the Alpha IP App (see instructions HAP 21001).
- 1. Open the Alpha IP app on the smart phone.
- 2. Select the menu item Teach-in device
- 3. Release the room control unit Analog from the installation bottom (see page 5 fig. 3).
- 4. Pull out the insulating strip from the battery compartment, or insert batteries (see page5fig.4)If batteries have already been inserted, press the system key (C) for at least 4 seconds in order to activate the teach-in mode.

- 5. The device is displayed automatically in the Alpha IP app.
- Enter the last four ciphers of the device number (SGTIN) or scan the supplied QR code for confirmation. The device number can be found below the QR code or in the battery compartment.



The LED will light up in green after a successful teach-in process. If the LED lights up red, repeat the process.

7. Follow the instructions in the app.

#### 5.2 Installation

The place of installation can be selected flexibly due to the battery operation. Installation can be performed with screws, with the supplied adhesive strips, or in a flush-type box.

#### 5.2.1 On-surface installation

- ⇒ Select an appropriate installation position.
- 1. Ensure that the installation position is free from hidden lines.
- 2. If necessary, release the device from the installation bottom with a suitable screwdriver (see page 5 fig. 3).
- 3. Hold the installation bottom to the installation position. Take care to align the installation bottom correctly (see page 4 fig. 2a/b).
- 4. Align the installation bottom horizontally.

Mark two diagonally opposite bore holes using the installation bottom (see page 5 fig. 2a).



If wood walls are present, the screws can be screwed directly into the wood. Pre-drilling with a 1.5 mm wood drill can facilitate the installation of the screws.

- 6. For stone walls, drill the holes at the marked positions with a 5 mm masonry drill.
- 7. Insert dowels into the bores.
- 8. Install the installation bottom using the supplied screws (see page 4 fig. 5).
- Position the room control unit Analog onto the installation bottom and latch it in (see page 5 fig. 3).

## 5.2.2 Installation in flush-type box

The fixing holes on the installation bottom can be used for installation on a flush-type box (see page 4 fig. 2b).

- If necessary, release the device from the installation bottom with a suitable screwdriver (see page 5 fig. 4).
- 2. Align the installation bottom horizontally on the flush-type box.
- 3. Install the installation bottom with suitable screws (see page 4 fig. 2b).
- Position the room control unit Analog onto the installation bottom and latch it into the clips (see page 5 fig. 3).

#### 5.2.3 Installation with adhesive strips

Depending on the ground, installation can be performed using the supplied double-sided adhesive tapes. Installation is possible on different grounds, as e. g. masonry, furniture, tiles or glass.



If the installation is done with adhesive strips, the installation surface must be smooth, level, undamaged, clean, and free from grease and solvents.

- 2. Remove the protective foil from one side of the adhesive strip.
- 3. Fix the adhesive strip on the back side of the installation bottom in the recesses provided for this (see page 4 fig. 2c).
- 4. Remove the protective foil from the other side of the adhesive strip.
- 5. Align the device horizontally to the desired position and press it on.

# 6 Operation

The target temperature is set manually on a scale from 0 to 5 by turning the setting wheel (E) to the left or to the right.

#### 6.1 Set value balance (offset)

Since the temperature is measured at the room control unit, it may be warmer or cooler in another position in the room. The deviation can be corrected via a set value balance of -2 K to 2 K in 0.5 K increments.

- 1. Remove setting wheel (E). There is a scale for the balance on the inside of the setting wheel (E) (see page 5 fig. 5)
- Insert the set point correction limiter (F) to the desired place in the setting wheel (E).

# 6.2 Temperature limitation

The temperature range for the target temperature to be set as a maximum and a minimum can be limited via the set value elements on the inside of the setting wheel (E) (see page 5 fig. 6).

- 1. Remove setting wheel (E). Read the scale for the limitation on the inside of the setting wheel (E).
- 2. Insert the target value elements (G) into the setting wheel (E) indicating the desired range.

#### 6.2.1 Connection test

During this verification the room control unit Analog sends a switching command to the base station. Depending on the switching status the assigned heating zone has, it will be switched on or off after receiving the command.

- 1. Remove setting wheel (E).
- 2. Press the Set button in order to perform a radio test.

# 7 Displays

# 7.1 Status indications

| Display   | Meaning  | Solution   |
|---|--|--|
| 1 x long illumination in green  | Process confirmed  | Process with the set-up/ operation.  |
| Short flashing in orange  | Radio transmis-<br>sion/transmission<br>attempt/data trans-<br>mission | Wait until the transmission has finished.                                  |
| 1 illumination in orange<br>and 1 in green (after<br>inserting batteries) | Test indication  | After the test indication has gone out, proceed with the set-up/operation. |
| Short flashing in orange (once every 10 sec.)                             | Teach-in mode active   | Enter the last four ciphers of the device serial number for confirmation.  |

# 7.2 Error indications

| Display  | Meaning  | Solution   |
|--|--|--|
| 1 x long illumination in red                                       | Process failed                                   | Repeat the process.  |
| Short illumination in orange (after green or red reception signal) | Batteries dead                                   | Replace batteries.   |
| 1 x long illumination in red                                       | Process failed or<br>duty cycle limit<br>reached | Re-send the command, in case of exceeding the duty cycle after one hour at the latest. Check the device for a defect, e. g. mechanical blocking. Eliminate radio interference. |
| 6 x long illumination<br>in red                                    | Device defective                                 | Observe the indication in the app.     Have the device checked by a specialised dealer.     Replace the device.  |

# 8 Changing the batteries

The flashing code "short illumination in orange (after green or red reception signal)" indicates low batteries. At the same time, the symbol for low batteries is displayed in the Alpha IP app. Replace the batteries by two new ones of the type LR03/Micro/AAA.

- 1. Take off the device from the installation bottom (see page 5, fig. 3).
- 2. Remove the batteries from the back side.
- 3. Insert two new batteries (type LR03/Micro/AAA) according to the marking.
- Position the room control unit Analog onto the installation bottom and latch it in.
- The room control unit performs a self-test for the duration of approximately 2 seconds.
- ✓ This is followed by the initialisation.
- ✓ After that, the test indication flashes (in orange and green).

# 9 Cleaning

Clean the device with a soft, clean, dry, and lint-free cloth. In order to remove heavy contamination, moisten the cloth slightly with lukewarm water. Use a solvent-free detergent for cleaning.

# 10 Restoring the factory settings

The reset to factory setting will delete all settings made by the user.

- 1. Take off the device from the installation bottom (see page 5, fig. 3).
- Remove the batteries.
- 3. Re-insert the batteries according to the marking in the battery compartments. At the same time press the system key (C) for 4 seconds until the LED flashes rapidly in orange.
- 4. Release the system key (C).
- 5. Press the system key (C) again for 4 seconds until the LED lights up in green.
- 6. Release the system key (C) again.
- The device restarts.
- The factory settings are restored.

# 11 Decommissioning

- 1. Take off the room control unit Analog from the installation bottom (see page 5, fig. 3).
- Remove the batteries from the back side.
- 3. Uninstall the device and dispose of properly.

# 12 Disposal

The device must not be disposed with domestic waste. The operator has the duty to hand the device to a suitable collection point. The separate collection and orderly disposal of all materials will help to conserve natural resources

and ensure a recycling in a manner that protects human health and the environment. If you need information about collection points for the device, please contact your local municipality or your local waste disposal services.

This manual is protected by copyright. All rights reserved. It may not be copied, reproduced, abbreviated or transmitted, neither in whole nor in parts, in any form, neither mechanically nor electronically, without the previous consent of the manufacturer.  $\ensuremath{\text{@}}\xspace$  2016