

Radio repeater

Order No. : 0867 00

Operating instructions**1 Safety instructions**

Electrical equipment may only be installed and fitted by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

The radio communication takes place via a non-exclusively available transmission path, and is therefore not suitable for safety-related applications, such as emergency stop and emergency call.

Do not shorten, extend or strip the antenna. Device can be damaged.

These instructions are an integral part of the product, and must remain with the end customer.

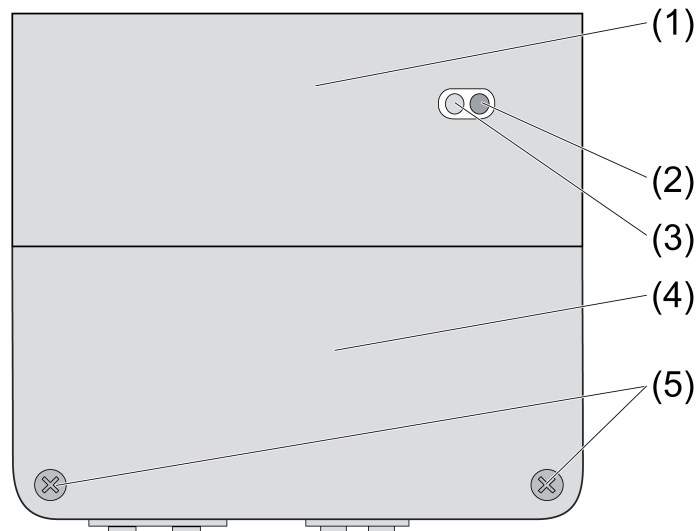
2 Device components

Figure 1

- (1) Repeater
- (2) LED, red
- (3) LED, green
- (4) Housing lid
- (5) Screws

3 Function**System information**

By statute, the transmitting power, the reception characteristics and the antenna cannot be changed.

The range of a radio system from the transmitter to the receiver depends on various circumstances.

The range of the system can be optimised by selecting the optimal installation location, taking into account the structural circumstances.

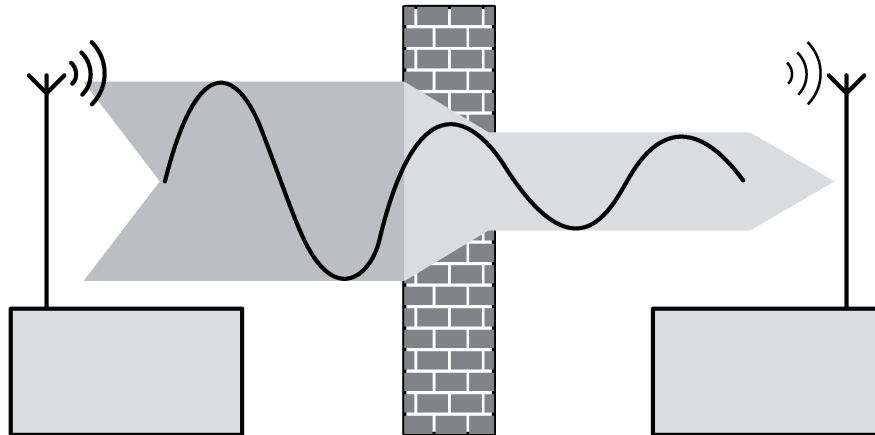


Figure 2: Reduced range due to structural obstacles

Example of penetration of various materials:

Material	Penetration
Wood, Plaster, Plasterboard	approx. 90%
Brick, Chipboard	approx. 70%
Reinforced concrete	approx. 30%
Metal, Metal grid	approx. 10%
Rain, Snow	approx. 1-40%

Intended use

- Device for receiving and repeating radio telegrams
- Extending the range of radio transmitters
- Surface-mounted

Product characteristics

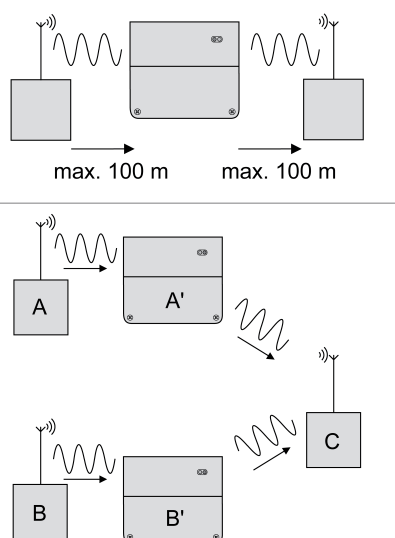


Figure 3

- Max. distance between transmitter and repeater and repeater and receiver 100 m

- Several repeaters can be installed in a single system, e.g. two transmitters **A + B** transmit to a single actuator **C** (Figure 3)
- Indication of the operating states via 2 LEDs:
Red LED lights up briefly: receiving a telegram
Green and red LEDs light up briefly: a taught telegram is being relayed
Red LED flashes continuously: repeater is in programming mode

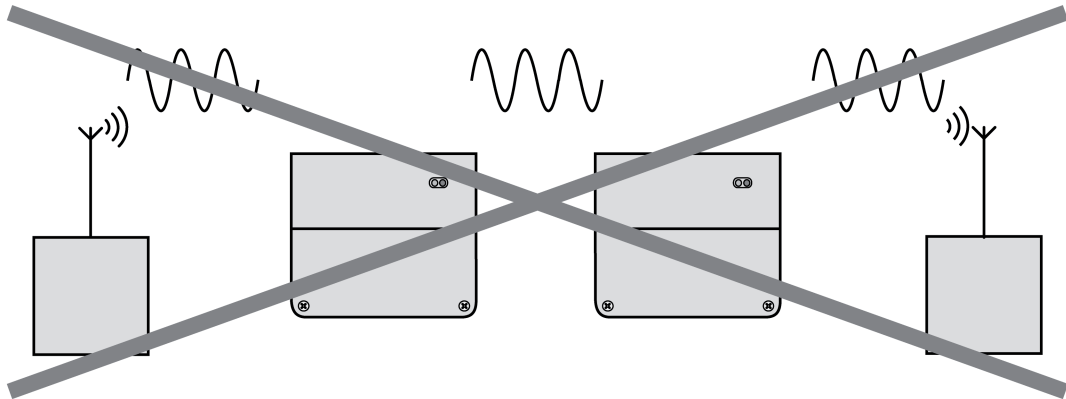


Figure 4

- i** Cascading of repeaters is not possible, i.e. telegrams transmitted by a repeater will not be repeated by another repeater (Figure 4).

4 Information for electrically skilled persons

4.1 Fitting and electrical connection

Mounting and connecting the device



DANGER!

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

Protection rating IP 54 or IP 20, depending on the type of installation:

IP 54 = fixed connection with NYM-J 3x1.5 cable and antenna not routed out of the device.

IP 20 = connection with supplied mains cable and/or antenna routed out of the device.

Maintain a distance of at least 0.5 m from metal surfaces and electrical devices, e.g. microwave ovens, hi-fi and TV systems, electronic ballasts or transformers.

Mount repeater as close as possible to the middle of the desired transmission path.

- Slacken screws (5) and remove housing lid (4).

The **TOP** label on the rear of the housing has to be at the top.

If the repeater is intended to amplify the radio telegrams of a stationary transmitter, the teaching procedure for the radio transmitter should be performed before installation (see Commissioning chapter).

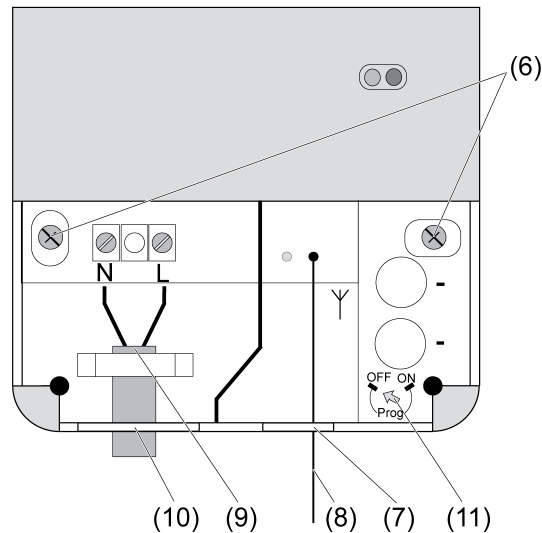


Figure 5

- Fasten repeater with 2 screws (6).
- Break out cable entry (10) and insert mains cable (9).
- Connect mains cable to the repeater.
- Teach transmitter into repeater (see Commissioning chapter).
- Fasten housing lid with screws.

Routing the antenna out of the housing

i Only permitted with protection rating IP 20.

If the radio reception capability of the repeater is not sufficient, it can be improved by routing out the antenna that is rolled up in the device.

- Slacken screws (5) and remove housing lid (4).
- Break out cable entry (7).
- Route antenna (8) out.
- Fasten housing lid with screws.

4.2 Commissioning

Teaching a radio transmitter

In order for the repeater to transmit the radio telegram of a transmitter, this transmitter has to be taught into the repeater.

While a transmitter is being taught the range of the repeater is reduced to approx. 5 m. The distance between the repeater and the transmitter being taught should therefore be between 0.5 m and 5 m.

- Turn **Prog** switch (11) to the **ON** position (Figure 5).
The red Prog LED (2) flashes (Figure 1).
- Trigger teach telegram on radio transmitter (see instructions for radio transmitter).
The radio transmitter has been taught. The green and red LEDs light up as an acknowledgement.

i When the radio transmitter is taught, all of the channels that are present, the All On, All Off and the light scene buttons are also taught.

- Turn **Prog** switch (11) to the **OFF** position.
Both LEDs go out.

Deleting radio transmitters

- Teach-in again the radio transmitter to be deleted.

The red LED lights up to confirm that a radio transmitter has been deleted.

5 Appendix

5.1 Technical data

Rated voltage	AC 230 V ~
Mains frequency	50 / 60 Hz
Ambient temperature	-20 ... +55 °C
Degree of protection	IP 20 / IP 54
Connecting cable	1.5 m
Dimensions W×H×D	110×94×38 mm
Teachable radio transmitter	max. 60
Radio frequency	433.05 MHz ... 434.79 MHz
Receiver category	2
Transmitting range in free field	typ. 100 m
Transmission capacity	< 10 mW

5.2 Troubleshooting

Radio receiver does not respond, or only sometimes.

Cause 1: Radio range exceeded. Structural obstacles reduce the range.

Check routing of antenna. Laying the antenna stretched out increases the range (see chapter Routing the antenna out of the housing).

Cause 2: Incorrect switch setting **Prog** (11).

Turn **Prog** switch to the **OFF** position.

5.3 Conformity

Gira Giersiepen GmbH & Co. KG hereby declares that the radio system type

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corresponds to the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address:

www.gira.de/konformitaet

5.4 Warranty

The warranty follows about the specialty store in between the legal framework as provided for by law

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

Gira

Giersiepen GmbH & Co. KG

Elektro-Installations-
Systeme

Industriegebiet Mermbach
Dahlienstraße
42477 Radevormwald

Postfach 12 20
42461 Radevormwald

Deutschland

Tel +49(0)21 95 - 602-0
Fax +49(0)21 95 - 602-191

www.gira.de
info@gira.de