

neat

USER GUIDE



REPO

RADIO REPEATER
NARROW BAND 869 MHz

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Important Information



Always treat your product with care. Only NEAT Electronics authorized personnel should perform service.

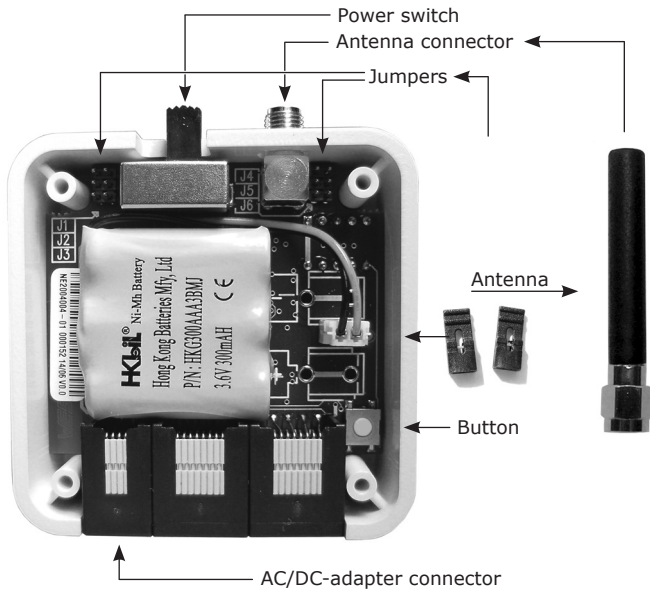


Do not expose your product to open flames, lit tobacco products or temperatures above 60°C.





This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be returned to NEAT Electronics for recycling. The recycling of materials will prevent negative consequences for the environment, human health and help to conserve natural resources.

Overview



Installation

1. To change the configuration of the REPO, remove the lid and mount or remove jumpers. The jumper settings are described on pages 7-9 in this manual.
2. Close and fasten the lid using the screws supplied.
3. Connect the antenna by screwing it into the antenna connector.
4. Mount the REPO in an appropriate place.
5. Connect the AC/DC adapter to the jack marked . Then connect the AC/DC adapter to a mains outlet in the apartment. Only use the AC/DC adapter provided by NEAT, part no. NE31 03001-01.
6. Turn on the REPO with the switch marked .

Configuration

REPO is configured by mounting or removing jumpers on the circuit board inside the unit, as shown in the image on page 5. Please restart the REPO after changing the jumper configuration.

For advanced configuration, the computer program *IOR Programmer* can be used. This is described in the *Technical Handbook for the IOR Family*, document number NE41 06007-02.

Radio Signals to Repeat

REPO can be configured either to repeat all alarms or only alarms from up to 8 pre-programmed transmitters. This is determined by jumper J1 inside REPO.

Jumper	ON (mounted)	OFF (not mounted)
J1	Repeat only pre-programmed	Repeat all alarms

To program an alarm transmitter into REPO, follow these steps:

1. Choose a transmitter number **X** between 1 and 8. Two alarm transmitters can not have the same transmitter number in one REPO.
2. Remove the lid of the REPO. Press and hold the button inside REPO while switching REPO on.
3. Wait until the LED inside REPO flashes **X** times and then release the button.
4. Activate the alarm transmitter.
5. The LED inside REPO flashes once to indicate that the radio code from the alarm transmitter is stored.

Maximum Number of Hops

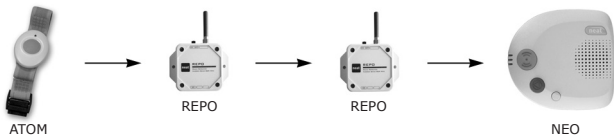
To avoid that an alarm should be retransmitted an infinite number of times in a system with more than one REPO, there is a limit for how many retransmissions that are permitted. This limit is controlled by jumpers J2 & J3 inside REPO.

J2	J3	Maximum Number of Hops
OFF	OFF	1
OFF	ON	2
ON	OFF	3
ON	ON	4

If the value of maximum number of hops is 1, a retransmitted alarm from one REPO will be ignored by all other REPO units in the system.

As a general rule, the maximum number of hops should be equal to the number of REPOs needed to cover the longest distance between an alarm transmitter (such as ATOM) and an alarm receiver (such as NEO).

In the example below the maximum number of hops should be 2.



Note: With *IOR Programmer*, it is possible to choose a larger value than 4 for the maximum number of hops, see page 7.

Delay Between Receive and Transmit

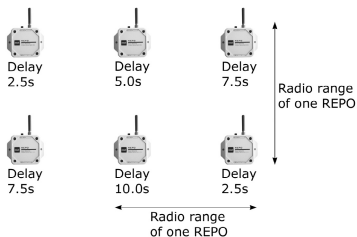
After receiving a radio alarm, the REPO waits a number of seconds before retransmitting the alarm.

To avoid collisions in a system with more than one REPO, this delay between reception and transmission must be different in all REPOs that are within radio range of each other. The radio range of the REPO is approximately 150 meters in free air, but varies much depending on the geometry and building materials of the house when the REPO is used inside.

The delay is configured with jumpers J4 and J5 inside REPO.

J4	J5	Delay
OFF	OFF	2.5 seconds
OFF	ON	5.0 seconds
ON	OFF	7.5 seconds
ON	ON	10.0 seconds

An example of how the delay can be configured in a system with 6 REPOs is shown in the figure here on the right.



Note: With *IOR Programmer*, it is possible to choose other values for the delay, see page 7.

Declaration of Conformity

We NEAT Electronics AB, Varuvägen 2, 246 42 Löddeköpinge, declare under our sole responsibility that our product REPO, NE10 04004-07, is in conformity with the directives 1999/5/CE, 73/23/CE and 89/336/CEE and conforms to the standards:

Safety: EN60950-1:2001

EMC: EN 301489-3 v1.4.1 Class I

Radio: EN 300220-3 v1.1.1

Löddeköpinge, October 2005



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Notes

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