# niko 05-315 Mini RF Interface for Push Buttons Instruction Manual



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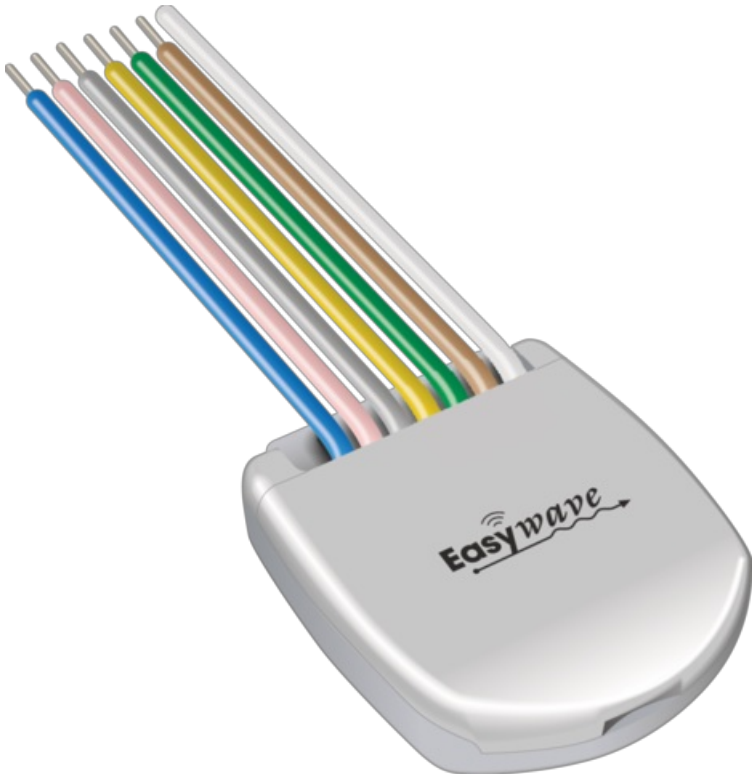
## niko 05-315 Mini RF Interface for Push Buttons




**Read the complete manual before attempting installation and activating the system.**

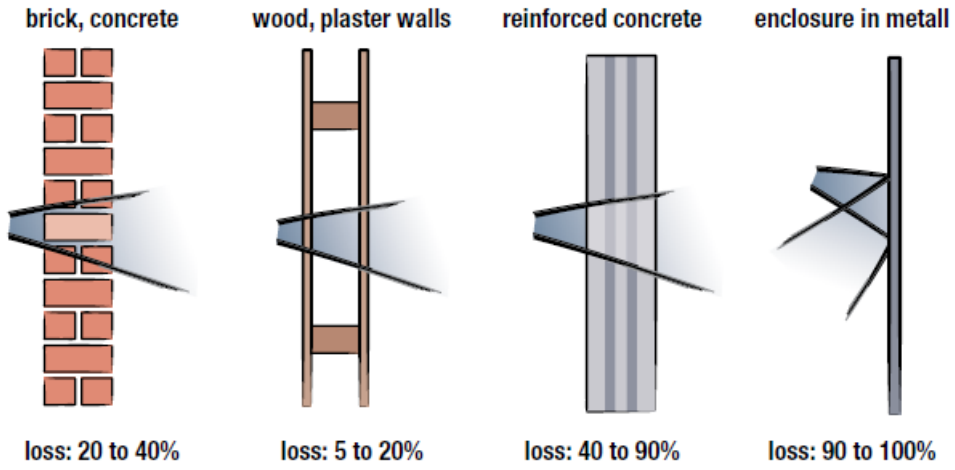
## DESCRIPTION

This Easywave transmitter is part of the Niko RF (Radio Frequency) system, an installation technique that does not require any wiring between the control points (push buttons) and the consumers to be operated. This technique is known as ‘remote control’ or ‘wireless control’. Transmission occurs by means of radio waves at the 868.3MHz frequency. This frequency is reserved for products that do not transmit continuously (1% per hour = 36s.), so that there is only a minimal risk of interference. The system is therefore ideally suitable for use in specific applications such as renovation of interiors, extensions in existing electrical installations where drilling or channeling work is excluded, offices with movable walls… or to avoid the use of complex cabling configurations. It is a modular system built around transmitters and receivers. The wall mounted transmitters take the form of an ordinary switch that can be wall mounted. The hand held transmitters take the form of a conventional remote control unit. Each transmitter can control an unlimited number of receivers simultaneously. Each receiver can be controlled by up to 32 transmitters.

## OPERATION AND USE

### Range between Easywave transmitters and receivers

Equipment using a remote control, such as TV, video and audio, does not suffer interference from the Easywave transmitters. The Easywave transmitters need not be pointed at the receiver. The range in buildings amounts to approx. 30m. In open fields, ranges of up to 100m are possible. The transmitter range depends on the materials used in the building.
You can also use diagnosis unit 05-370 to determine the RF signal strength in a given environment. The device detects all 868,3MHz signals. The reception quality of the transmitter signal or the strength of the interfering signals present is indicated by 9 LEDs, allowing you to determine whether the RF transmitter’s range is sufficient




**Inserting/replacing batteries**

- Avoid direct contact with the battery to prevent it from discharging.
- Check that no NiCd batteries are used.
- Insert the new battery. Observe the polarity (‘+’ and ‘-‘ symbols in the compartment).
- Use a 3V CR2032 (05-315) battery.
- Used batteries are to be returned to an authorised waste collection point

## Mounting instructions and recommendations

NEVER install the transmitters:

- in a metal distribution box, housing or netting;
- in the immediate vicinity of large metal objects;
- on or near the floor.

Never cut the white wire, this is the antenna

**PROGRAMMING**

How to program your Easywave RF system is described in detail in the user manual of the Easywave receivers.

## TROUBLESHOOTING

If, after programming, the system does not work, you can perform a number of extra checks.

**New installation**

- Check whether the battery and the contacts make good permanent contact.
- Check the supply voltage of the receiver in the distribution box.
- Check if everything is connected as shown on the wiring diagrams (see user manual receivers).
- Reset and (re)program the receiver (see user manual receivers; programming).

**Existing installation**

- Check the batteries of the transmitter(s).
- Check the mains voltage (230V~) on the receiver.
- Check the operation of the connected load.
- Check for possible interference caused by changes in the system environment (moving of metal cabinets, walls or furniture…) Restore the original condition, if possible

### Transmitter malfunction

Pick up the transmitter and walk towards the receiver.

- The system still works at reduced distance: the transmitter has been placed outside the transmitter range or there is an interference problem. You can use the diagnosis unit (05-370)
- The system does not work even when holding the transmitter close to the receiver: check the programming (see user manual receivers; programming) and/or the battery of the transmitter.

#### The system automatically switches on and off

- The system automatically switches on: This is only possible if a foreign transmitter was programmed in the receiver within the receiver range. Reset the receiver and reprogram the relevant addresses (see user manual receivers; programming).
- The system automatically switches off: This situation can be similar to the situation described above or be the result of brief current interruptions.

## TECHNICAL DATA

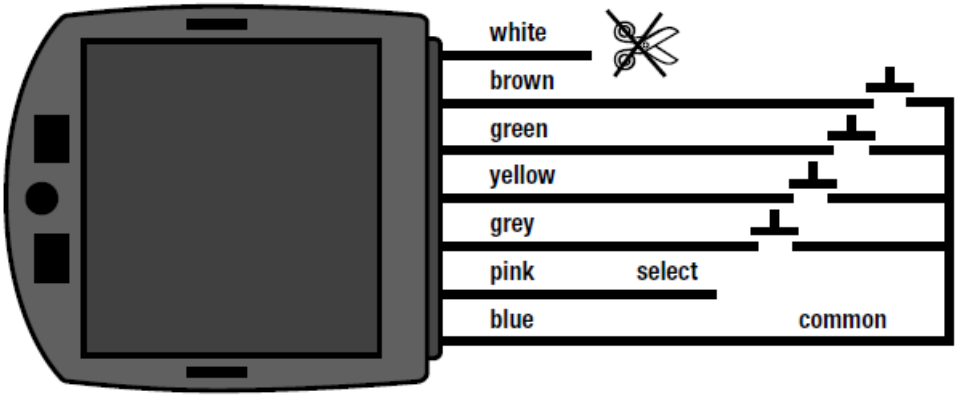
Easywave transmitter 1 channel, 4 control points (05-315)

- transmitter range: 100m in open air; 30m on average in buildings depending on the materials used 1 channel and 4 push buttons or 2 switches
- no wiring between control points and consumers to be operated (RF controlled), only connection between the receiver (switch) and the light or device to be controlled
- orientation (pointing) of the transmitters is not necessary (transmission of signals through non-metal walls is possible)
- operating temperature: -5 to 50°C
- dimensions: 30 x 28 x 9mm
- maximum radio frequency power of the Easywave signal: 3.3 dBm

## WIRING DIAGRAMS

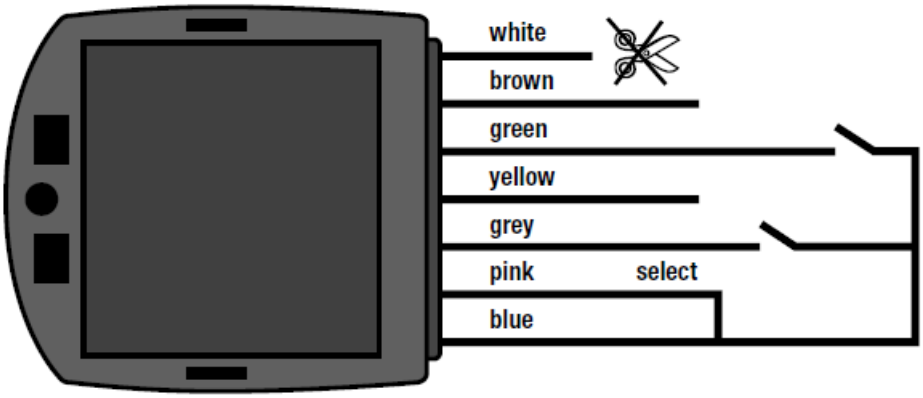
#### Flush mounting interface for push buttons

This interface converts external N.O. contacts into an RF-telegram. The telegram is sent for as long as the contact is closed (max 8s.). The interface is provided with 4 inputs for external contacts (e.g. push buttons) and 1 antenna (wire color: white).




**Flush mounting interface for switch**

The flush mounting interface for switch converts the bistable contacts into an RF-telegram. If the contact closes, the ON-code is sent. If the contact opens, the OFF-code is sent. Between opening and closing the contact, there must be an idle period of at least 200ms. The interface is provided with 2 inputs for the switch and 1 antenna (wire color: white). The interface for switch is only suitable for switch functions with a low control frequency (e.g. door contacts…).




**Warnings regarding installation**

The installation of products that will permanently be part of the electrical installation and which include dangerous voltages, should be carried out by a qualified installer and in accordance with the applicable regulations. This user manual must be presented to the user. It should be included in the electrical installation file and it should be passed on to any new owners. Additional copies are available on the Niko website or via Niko customer services

**CE marking**

This product complies with all of the relevant European guidelines and regulations. For radio equipment Niko llc declares that the radio equipment in this manual conforms with the 2014/53/EU directive. The full text of the EU declaration of conformity is available at www.niko.eu under the product reference, if applicable

**Environment**

This product and/or the batteries provided cannot be disposited in non-recyclable waste. take your discarded product to a recognised collection point. Just like producers and importers, you too play an important role in the promotion of sorting, recycling and reuse of discarded electrical and electronic equipment. To finance the rubbish collection and waste treatment, the government levies recycling charges in certain cases (included in the price of this product).

**Support & contact**
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+32 3 778 90 80 **support@niko.eu**
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Niko cannot be held responsible for this, other than within the legal limits. Please inform us of any deficiencies in the manuals by contacting Niko customer services at
**support@niko.eu**.

## Documents / Resources

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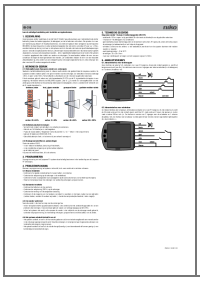
|  | **niko 05-315 Mini RF Interface for Push Buttons** [pdf] Instruction Manual<br>05-315 Mini RF Interface for Push Buttons, 05-315, Mini RF Interface for Push Buttons, Interface for Push Buttons, Push Buttons, Buttons |

## References

- **Niko - home automation, switches, socket outlets and detector**
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