Universal Transmitter
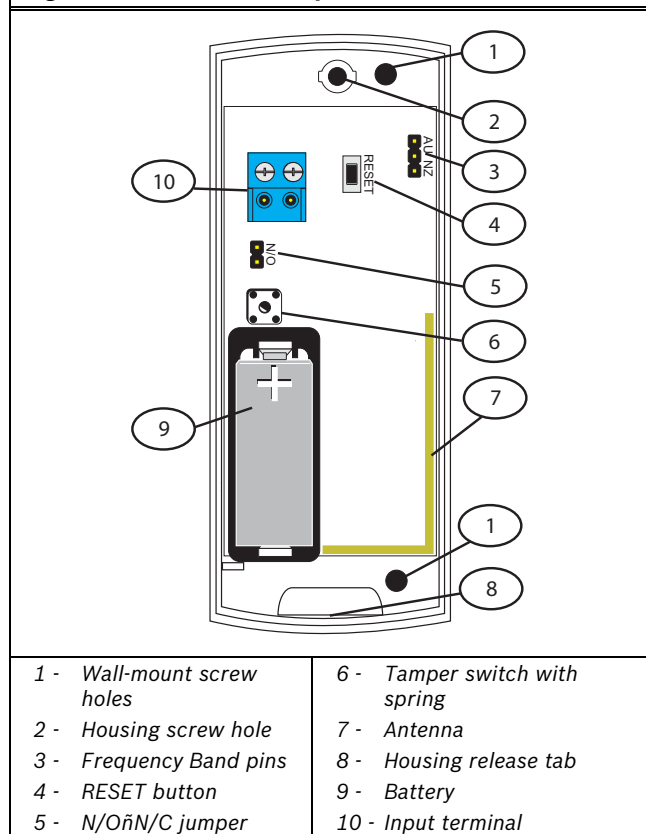## ISW-EN1215EOL   with Wall Tamper

Overview

The ISW-EN1215EOL universal transmitter with an included wall tamper switch can be used with any standard contact or sensor. A 2.2 kΩ end of line (EOL) resistor is included with this transmitter, and is required for operation.

This transmitter includes a back tamper switch. The tamper condition must be defined within the control panel as a trouble condition when the system is disarmed, and as an alarm condition when the system is armed.

Figure 1: Transmitter Components

1 -	Wall-mount screw holes	6 -	Tamper switch with spring
2 -	Housing screw hole	7 -	Antenna
3 -	Frequency Band pins	8 -	Housing release tab
4 -	RESET button	9 -	Battery
5 -	N/OñN/C jumper	10 -	Input terminal

## 1.0   Installation and Startup

- This product is designed to be installed and maintained by professional security technicians.
- This transmitter is intended for indoor use.
- Manually test this product weekly.

1.1   Open the Housing

1. Use a small flat blade screwdriver to press the housing release tab on the bottom of the transmitter (refer to *Figure 1*).
2. Separate the housing cover from the housing base. Refer to *Figure 2*.

Figure 2: Open the Housing

1 - Housing cover	2 - Housing base
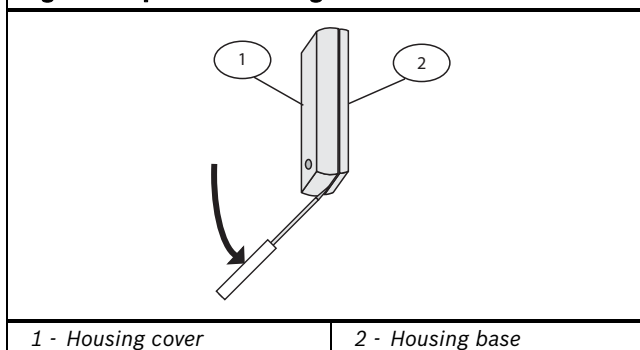
1.2   Mount the Transmitter

1. Route the external wiring through the wall. Refer to *Figure 3*.
2. Mount the transmitter on the wall using the supplied screws. Refer to *Figure 1* for the wall mount screw hole locations.
3. Ensure that the housing base is flush against the wall and the wall tamper switch is firmly pressed.

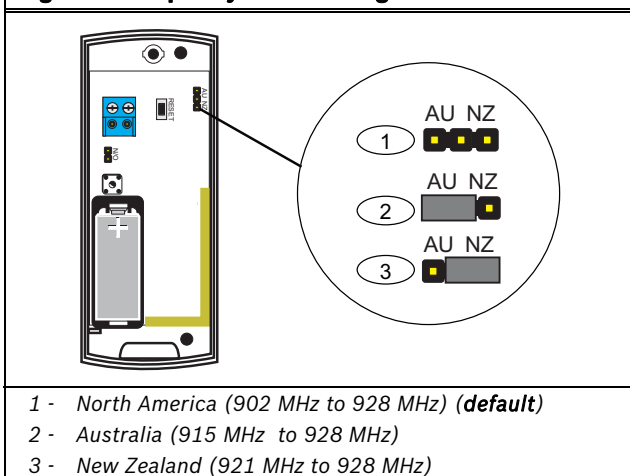### Figure 3: Mount the Transmitter on the Wall

1 -	Wall tamper switch
2 -	External wiring
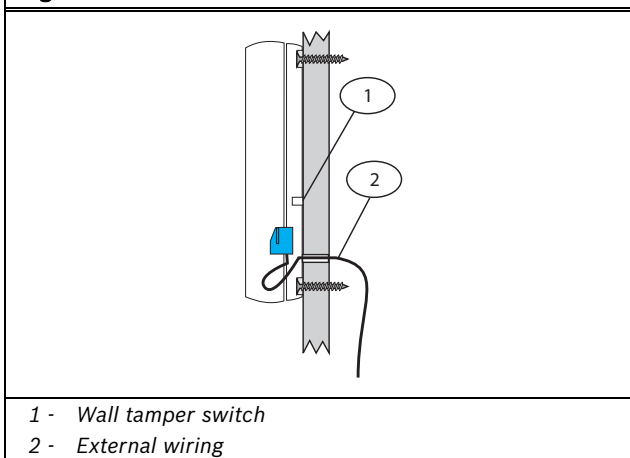
1.3   Configure the Transmitter

1.3.1   Select the Frequency Band

1. Select the appropriate frequency band for your geographic area.
2. Place a selection jumper on the appropriate Frequency Band pins (refer to *Figure 4*).

Figure 4: Frequency Band Settings

1 -	North America (902 MHz to 928 MHz) (**default**)
2 -	Australia (915 MHz to 928 MHz)
3 -	New Zealand (921 MHz to 928 MHz)

BOSCH

1.3.2 Select the Input Type and Wire the Resistor

The N/O-N/C pins allow the choice of a normally open (N/O) or normally closed (N/C) state for the contact circuit wired to the input terminal.
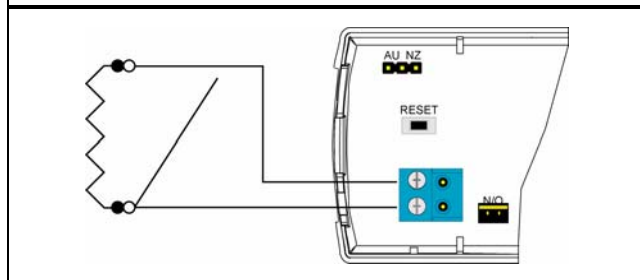
The transmitter is shipped set for normally closed, with no selection jumper on the N/O-N/C pins.

> **i** If you change the transmitter's input setting after initial installation, press the RESET button for the new setting to be effective. Do not touch the Frequency Band pins.

Set for Normally Open Operation

1. Place a jumper on the N/O-N/C pins to select normally open (N/O).
2. Use 22 AWG wire to connect the 2.2 kΩ resistor in parallel with the N/O contact (refer to *Figure 5*). The distance from the external contact to the universal transmitter with wall tamper must not exceed 6.1 m (20 ft).
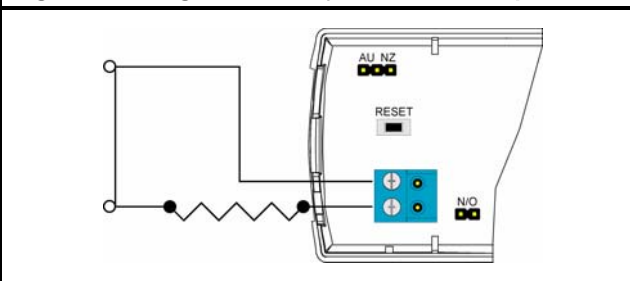
Figure 5: Wiring for Normally Open (N/O) Operation

Set for Normally Closed Operation

1. Remove the jumper from the N/O-N/C pins.
2. Use 22 AWG wire to connect the 2.2 kΩ resistor in parallel with the N/O contact (refer to *Figure 6*). The distance from the external contact to the transmitter must not exceed 6.1 m (20 ft).

Figure 6: Wiring for Normally Closed (N/C) Operation

1.4 Install the Battery

1. Install the new battery.
2. Press the RESET button to complete the configuration. Refer to *Figure 1*.

2.0 Register the Transmitter

You must register the transmitter with the system in order for the transmitter to be monitored and supervised. When the transmitter is supervised, it sends a check-in message to the serial receiver every three min. Each transmitter has a unique factory-programmed identification number.

Refer to the receiverís documentation for details on registering a transmitter.

1. When prompted by the receiver to reset the transmitter, press the RESET button on the transmitter (refer to *Figure 1*).

> **i** When pressing the RESET button, do not touch the Frequency Band pins. Touching the Frequency Band pins while pressing the RESET button can inadvertently set the transmitter to the wrong frequency band.

2. Install the housing cover.
3. Secure the housing cover with a supplied screw inserted through the housing cover and the housing base (refer to *Figure 1* for the housing screw hole location).
4. Test the transmitter by activating each of the conditions and ensuring an appropriate response.

3.0 Replace the Battery

1. Remove the housing screw.
2. Remove the housing cover from the housing base.
3. Remove the old battery.

> **i** Removing the battery causes a tamper condition.

4. Install the new battery.
5. Press the RESET button to initialize the transmitter. Refer to *Figure 1*.
6. Install the housing cover and the housing screw.
7. Test the transmitter and ensure an appropriate response.

4.0 Specifications

> **i** A 2.2 kΩ resistor is required to operate the EN1215EOL.

Dimensions	89 mm x 43 mm x 23 mm (3.5 in. x 1.7 in. x 0.9 in.)
Weight	8.5 kg (3 oz)
External contact	Normally open (N/O) or normally closed (N/C)
Distance, external contact to the universal transmitter	3 m (10 ft) maximum
Power requirement	3 VDC, 60 mA
Typical Battery Life	3 to 5 years
Battery type (BAT604)	Panasonic® CR123A or equivalent
Operating Temperature	0° to +60°C (+32° to +140°F)
Relative humidity	Up to 90% (non-condensing)
UL listings	UL 365, UL 1076, UL 1610, ULC/ORD-C1023-74

Trademark

Panasonic® is a registered trademark of Matsushita Electric Industrial Co., Ltd.