# 1100RINT WIRELESS REPEATER

# Installation Guide

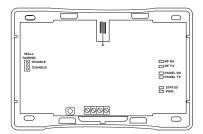


Figure 1: 1100RINT Repeater

#### **GET STARTED**

The 1100RINT Wireless Repeater provides increased communication range by forwarding messages from the transmitter to the wireless receiver. The repeater features 128 bit-AES encryption.

Up to three repeaters can be installed on a wireless system. The repeater is powered from a 12 VDC power supply and includes a 24-hour battery backup.

The 1100RINT Wireless Repeater provides a built-in survey capability to allow for single-person installations, eliminating the requirement for an external survey kit.

#### Compatibility

- 1100INT Wireless Receivers Version 700 and Higher
- 1100XINT Wireless Transmitters Version 700 and Higher
- XT30INT Series Panels Version 693 and Higher
- XTLtouchINT/XTLplusINT Series Panels Version 693 and Higher
- XR150INT/XR550INT Series
   Panels Version 693 and Higher

#### What is Included?

- One 1100RINT Repeater
- One Lithium Polymer Rechargeable Battery
- Hardware Pack



#### PROGRAM THE PANEL

Refer to the panel programming guide as needed.

- 1. Reset the panel.
- If using an XT Series International Panel, enter 665 (PRO) at the keypad to access the PROGRAMMER menu. If using an XR Series International Panel, enter 6653 (PROG).
- Go to SYSTEM OPTIONS. At 1100 ENCRYPTION, select ALL to only add encrypted wireless devices to the system. Select BOTH to allow both encrypted and non-encrypted wireless devices to be programmed.
- 4. The default passphrase appears at the **ENTER PASSPHRASE** prompt. Press **CMD** to keep the default. Press any select key or area to change the passphrase and enter an 8-character hexadecimal string (0-9, A-F).
- 5. In **ZONE INFORMATION**, enter the wireless zone number.
- 6. Enter the **ZONE NAME**.
- 7. Select **AUX 1** (auxiliary 1) as the **ZONE TYPE**.
- 8. At WIRELESS? select YES.
- 9. At **SERIAL NO:**, enter the repeater's eight-digit serial number. If using multiple repeaters, they must be programmed as sequential zone numbers.
- 10. At **SUPRVSN TIME**, press **CMD** to accept the default time of **240** minutes. Press any select key or area to change the supervision time required for the wireless repeater.
- **Note**: When an 1100INT Series receiver is installed, powered up, or the panel is reset, the supervision time for any programmed repeaters and transmitters are reset.
- 11. Program **ARMED OPEN** and **DISARMED OPEN** as **TROUBLE** so that a power trouble sends a trouble alert.
- 12. Program **ARMED SHORT** and **DISARMED SHORT** as **ALARM** so that a tamper sends an alarm alert.
- Press CMD until STOP displays. Press a top row select key or area to save programming.

#### **SELECT A LOCATION**

Mount the repeater away from large metal objects. Mounting on or near metal surfaces impairs performance.

The repeater should be mounted between the 1100INT Series wireless receiver and the 1100INT Series wireless transmitters that are out of range. Mount the repeater as far from the 1100INT Series receiver as needed to provide the required system range.

If the repeater is powered from an auxiliary power supply, mount the repeater away from the metal power supply enclosure.

#### LED Survey Option

The repeater provides a survey capability to allow one person to confirm communication with the receiver while the cover is removed. The repeater provides the option to power up using the lithium battery only for survey operation.

The repeater automatically establishes communication with the receiver when it's powered up. Use the table below to determine good communication between the repeater and the receiver. Relocate the repeater until it establishes good communication with the receiver.



Note: The green/red LED operation is different from the standard single red LED flash for the 1100INT Series transmitters.

LED SURVEY OPERATION	
Status	Operation
GOOD	Green indicates that reliable communication is established with the receiver. Reliable communication is defined as the last five messages sent by the repeater have been acknowledged immediately by the receiver. A message can be sent by pressing or releasing the tamper switch on the repeater.
BAD	Red indicates that the repeater has not established reliable communication with the receiver. Communication is not considered reliable when the last 5 out of 15 messages sent have not been acknowledged immediately by the receiver. Messages may still be communicated, however the communication link between the repeater and the receiver is not optimum. In this case, the repeater should be relocated until the GOOD LED lights green.
PWR	Green indicates that there is power to the repeater.

**Table 1: LED Survey Operation** 

#### MOUNT THE 1100RINT REPEATER

The repeater is equipped with a case and wall tamper. When the housing cover is removed, the case tamper activates and the receiver sends a tamper trouble to the panel. To enable the tamper, see the following steps.

A two-position header is provided to disable the wall tamper. To disable the wall tamper, place the jumper across the two pins of the header.

- 1. With the cover already removed, remove the PCB from the housing to access the tamper and mounting holes.
- 2. Mount the receiver on a flat surface using the supplied screws. See Figure 2 for mounting hole locations.
- 3. Use one of the provided screws to anchor the housing in the wall tamper screw hole.
- 4. Snap the PCB back into the housing attached to the wall. Observe LED operation.

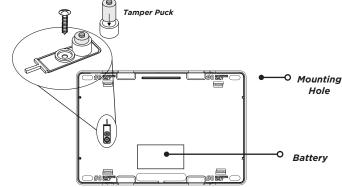


Figure 2: Inside of the 1100RINT Housing

# 4

### **POWER THE 1100RINT REPEATER**

The repeater can be powered from a 12 VDC external power supply such as a DMP model 503INT or an external DC Plug-In power supply such as the DMP Model 376L. In addition to powering the 1100RINT, the power supply also charges the back-up battery on the 1100RINT that should be connected at the time of the installation. If the DC power source is removed, the power failure is indicated as an open condition on the 1100RINT zone.

#### Connect the External Power Supply

- 1. Observe positive and negative polarity on all connections.
- Using the 22 AWG wire, connect the DC power terminal block to the DC terminal on the 503INT power supply PCB. See Figure 3.

#### Connect the External DC Plug-In Power Supply

Use the following steps to connect the model 376 plug-in DC power supply to the repeater:

- Connect the black wire with the white stripe to the R (red) terminal on the 1100RINT.
- 2. Connect the black wire to the B (black) terminal on the 1100RINT.
- Plug the power supply into a wall outlet not controlled by a switch



**Note**: The DC plug-in power supply also charges the backup battery. The 376L plug-in power supply must be located within 30.5 meters of the repeater using the 22 AWG wire or 76.2 meters using 18 AWG wire.

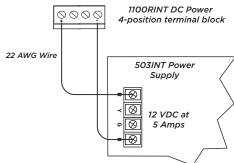


Figure 3: External Power Supply

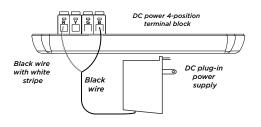


Figure 4: DC Plug-In Power Supply

#### ADDITIONAL INFORMATION

#### Primary Power Loss Indication

When the repeater is used with XT30INT Series and XTLplusINT/XTLtouchINT Series panels, a zone trouble indication for the repeater zone occurs within three minutes of a loss of primary power.

When used with XR150INT/XR550INT Series panels, as power loss indication is displayed at the keypad as -ACPWR for the repeater zone. This occurs within three minutes but a zone trouble report to the Central Station receiver is delayed for one hour.

#### Replace the Backup Battery

The repeater's rechargeable battery provides up to 24 hours of backup battery power when AC or DC power is not available. The battery is intended for backup power only. It should not operate on a daily basis. If the battery is low, or not plugged into the battery connector, a low battery condition is indicated for the programmed zone.

Use only a DMP replacement battery for the backup battery. Replace the battery every three years. Use the steps below to remove and install a new backup battery.

#### Remove the Old Backup Battery

- 1. Remove the 1100RINT housing cover and remove the PCB from the housing.
- 2. Disconnect the battery lead connector from the BAT header.
- 3. Remove the battery from the double sided tape.

#### Install the New Backup Battery

- 1. Place the new battery on the 1100RINT housing base and secure it to the double sided tape.
- 2. Observe polarity and connect the battery lead connector to the BAT header.
- 3. Replace the housing cover.

## **1100RINT** WIRELESS REPEATER

#### **Specifications**

Security Grade 2 **Environmental Class** Ш

0°C - 49°C Operating Temperature Relative Humidity 80% Weight .27 kg

Primary Operating 8.0 to 14.0 VDC, 30 mA

Voltage

**Current Draw** 25 mA (average), 35 mA (peak)

1100RBAT Standby Battery Voltage 3.7 VDC 800 mAh Capacity

Lithium Polymer Rechargeable Туре

Standby 24 hours Frequency Range 863-869 MHz

Housing Material Flame retardant ABS

Dimensions 13.97 cm L x 9.5 cm W x 2.5 cm H

Color White

Accessories

1100RBAT800/8 Replacement 800 mAh battery,

Pack of 8

503INT 12 VDC Power Supply 376L Plug-In DC Power Supply

**Patents** 

U. S. Patent No. 7,239,236



# International Certificates

Intertek (ETL) EN 50130-4:2011

EMC - Product Family Standard.

Immunity Requirements for Components of Fire, Intruder, and

Social Alarm Systems

EN 50130-5:2011 Alarm Systems. Environmental Test

Methods

EN 50131-1:2006+A1:A2 Alarm Systems. Intrusion and Hold-

up Systems. System Requirements

EN 50131-3:2009 Alarm Systems. Intrusion and Hold-

up Systems. Control and Indicating

Equipment

EN50131-5-3:2005+A1:

EN 61000-6-4:2018

2008

Alarm Systems. Intrusion systems. Requirements for Interconnections Equipment using Radio Frequency

Techniques

EN 61000-3-2:2009+A1;A2 Limits - Limits for Harmonic Current

Emissions (Equipment Input Current less than or equal to 16 A per Phase)

EN 61000-3-3:2013 Limits - Limitation of Voltage

> Changes, Voltage Fluctuations and Flicker in Public Low-Voltage Supply Systems, for Equipment With Rather Current less than or equal to 16 A per Phase and Not Subject to

**Conditional Connection** 

Generic Standard - Emission Standard for Industrial

Environments



Designed, engineered, and manufactured in Springfield, MO using U.S. and global components.