

# **INSTALLATION GUIDE**



1103 Series
Wireless Universal Transmitter

### **GET STARTED**

The 1103 Series Wireless Universal Transmitters are two-way supervisory wireless transmitters typically used for commercial fire or burglary door and window applications. The 1103 features built-in optional 128-bit AES encryption.

The transmitter provides a cover tamper, magnetic reed switch, and an onboard terminal block for external contact wiring. Both sets of contacts can be programmed to operate at the same time. This allows two independent zones to operate from one 1103.

The 1103 Series also features Disarm/Disable functionality. When this option is enabled, Zone Tripped messages are disabled when the system is disarmed.

#### What's Included

- ▶ One 1103 Transmitter
- One Commercial Magnet
- One 470K EOL Resistor
- One 3 V lithium CR123A battery
- Hardware pack

#### Compatibility

- ▶ All DMP 1100 Series Wireless Receivers
- ▶ All DMP XT Series and XR Series panels



**Note:** To enable encryption, 1103 Series Wireless Transmitters must have firmware Version 200 or higher, XT and XR Series panels must have firmware Version 183 or higher, and Wireless Receivers must have firmware Version 300 or higher.

#### **Procedure**

To install an 1103, this guide walks you through these required steps:

- 1. Program the panel.
- 2. Install the battery.
- 3. Use the LED Survey to select a location.
- 4. Mount the transmitter.
- 5. Wire external contacts (optional).
- 6. Test the transmitter.

### **PCB Layout**

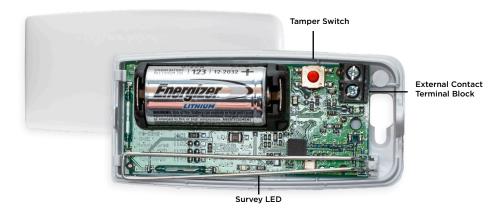


Figure 1: 1103 Layout

### INSTALLATION

### | Program the Panel

Refer to the panel programming guide as needed. After completing each of the following steps, press **CMD** to advance to the next prompt.

- 1. At a keypad, enter **6653** (PROG) to access the Programmer Menu.
- 2. To enable encryption, use the two steps below and then continue to step 3. Otherwise, go to step 3.
  - ► Navigate 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.
  - ► 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).
- 3. At **ZONE INFORMATION**, enter the wireless zone number you would like to use (must begin in the 500 range when using XR panels).
- 4. At \*UNUSED\*, enter the zone name.
- 5. At **ZONE TYPE**, press any select key or area and select the zone type.
- 6. At the **NEXT ZN?** prompt, select **NO**.
- 7. When WIRELESS? displays, select YES.
- At SERIAL#, enter the eight-digit device serial number found on device packaging.
- 9. At **CONTACT**, select either **INTERNAL** or **EXTERNAL**. Use consecutive zone numbers if using both internal and external contacts.
- 10. At **SUPRVSN TIME**, enter a supervision time. Default is **240**.
- 11. At **DISARM DISABLE**, select **NO** or **YES**.
- **Note:** Program the external contact first if using both internal and external contacts with Disarm/Disable functionality.
- 12. At the **NEXT ZONE** prompt, select **YES** if you are finished programming the zone. Select **NO** if you would like to access additional programming options.
- 13. To save panel programming, go to **STOP** and press **CMD**.

### 7 Install the Battery

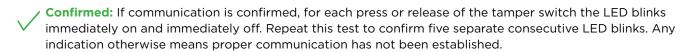
Use a 3.0 V lithium battery, a DMP Model CR123A battery, or an equivalent model from Sony or Murata. For listed installations, use either an Energizer® 123 battery or a CR123A battery manufactured by Panasonic or Tekcell.

- 1. Push the button on the end of the transmitter and separate the two halves.
- 2. Observing polarity, place the battery in the holder and press it into place. Refer to Figure 1 during installation.

# て Use the LED Survey to Select a Location

The 1103 Series Wireless Univeral Transmitter provides a Survey LED capability to allow one person to confirm communication with the wireless receiver or panel while the cover is removed.

- 1. With the cover removed, hold the transmitter in the exact desired location.
- 2. Press the tamper switch to send data to the panel and determine if communication is confirmed or faulty.



Faulty: If communication is faulty, the LED remains on for about 8 seconds or flashes multiple times in quick succession. Relocate the transmitter until the LED confirms clear communication.

# ∠ Mount the Transmitter

#### Mount the Housing

When mounting the 1103, refer to Figure 1 and Figure 2 for battery and mounting hole locations.

- 1. Remove the battery and the PCB.
- 2. Place the supplied #4 screw into the mounting hole and secure the transmitter to the surface.
- 3. Insert the included wall tamper screw as shown in Figure 2.
- 4. Reinsert the PCB and the battery.
- 5. Snap the transmitter cover back onto the base.

#### Mount the Magnet

For magnet placement options, see Figure 3.

#### **Commercial Installation**

Place and hold the magnet cover directly on the door closest to the magnetic reed switch, no more than 1/2" (1.3 cm) apart from the transmitter. Use the provided #4 screws to mount the magnet.

- Place and hold the magnet cover directly on the door closest to the magnetic reed switch, no more than 1/2" (1.3cm) apart from the transmitter.
- 2. Use the provided #4 screws to mount the magnet. See Figure 4.

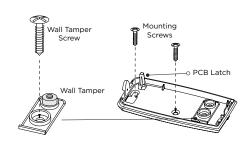
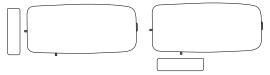


Figure 2: Mounting the Transmitter



**Figure 3: Placement Options** 

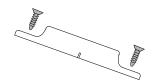


Figure 4: Commercial Installation

# **与 Wire External Contacts (Optional)**

DMP recommends using 18 or 22 AWG unshielded wire. It is recommended to locate a contact within 100 feet of the transmitter. Connect the contact as normally open (N/O) or normally closed (N/C) with the 470K end-of-line resistor. For UL listed installations, program the external contact as Normally Closed (N/C). Refer to the Contact option under Zone Information in the appropriate panel programming guide.

If you use both the magnet reed switch in the transmitter and an external contact, use consecutive zone numbers when connecting them to the panel.

- 1. Use a flathead screwdriver to loosen the two screws on the external contact terminal block.
- 2. Insert external contact wiring into the terminal block and tighten the screws.
- 3. Connect the other ends of the wires to the external contact as either normally open (N/O) or normally closed (N/C) with the included 470K end-of-line resistor.
- 4. Snap the transmitter cover back onto the base.

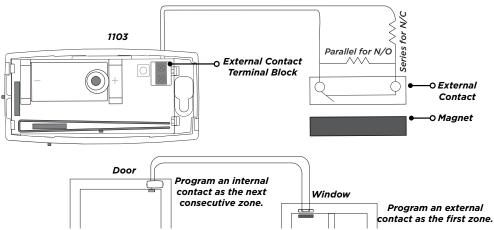


Figure 5: Installing External Contacts

# **6** Test the Transmitter

After the transmitter has been installed, test to confirm that it is communicating reliably with the panel. Use the Tech APP™ to perform a Wireless Check-in Test on the system or complete the following steps to perform a Check-in Test from a keypad that is connected to the panel. At the keypad, enter **8144** (WALK) and select WLS.

When this test is initiated, the panel automatically tests the communication between itself and each wireless zone. Wireless zones should not be manually tripped during this test. Manually tripping zones during this test could lead to a false failure.

### ADDITIONAL INFORMATION

### **Supervision Time**

When a receiver is installed, powered up, or the panel is reset, the supervision time for transmitters is reset. If the receiver has been powered down for more than one hour, wireless transmitters may take up to an additional hour to send a supervision message unless tripped, tampered, or powered up. This operation extends battery life for transmitters. A missing message may display on the keypad until the transmitter sends a supervision message.

#### Replace the Battery

- 1. Push the button on the end of the transmitter and separate the two halves.
- 2. Remove the old battery, observe polarity, and place the new battery in the holder.
- 3. Snap the cover back on the transmitter.

#### **Sensor Reset to Clear LOBAT**

Once the battery is replaced, a sensor reset is required at the keypad to clear the **LOBAT** message. On an LCD keypad, press and hold 2 for two seconds. On a graphic touchscreen keypad, press **RESET**. Enter your user code, if required. The keypad displays **SENSORS OFF** followed by **SENSORS ON**.

#### Compatibility

The 1103 has been designed primarily for use with the XR150/XR550 Series control panels. However, it can be used with the XT30/XT50 or XTL Series panels as well. When used with those panels, the tamper indication is sent via the internal contact zone only. If using the external contact, the internal contact must also be programmed in a separate zone to provide tamper indication. In addition, the supplied magnet must be mounted next to the 1103 internal contact to restore the zone and allow the tamper switch to have priority. This issue does not exist when the transmitter is installed with the XR150/XR550 Series panels.

# **SPECIFICATIONS**

#### **Battery**

Life Expectancy 5 years (normal operation)

Type 3.0 V lithium CR123A

Frequency Range 905-924 MHz

**Dimensions** 

Transmitter Case $3.3 L \times 1.6 W \times 1.0 H in.$ Transmitter Base $3.3 L \times 1.6 W \times 0.1 H in.$ Magnet Housing $1.5 L \times 0.5 W \times 0.7 H in.$ Housing MaterialFlame retardant ABS

### **Encryption**

▶ Firmware Version 200 or higher

XT and XR Series Panels Version 183 or higher

Wireless Receivers Version 300 or higher

# **CERTIFICATIONS**

► California State Fire Marshal (CSFM)

► New York City (FDNY)

► FCC Part 15 Registration ID: CCKPC0191

CCKPC0248

▶ Industry Canada Registration ID: 5251A-PC0191

5251A-PC0248

# **Underwriters Laboratory (UL) Listed**

ANSI/UL 634 Connections and Switches for use with Burglar Alarm Systems

ANSI/UL 1023 Household Burglar Alarm System Units

ANSI/UL 864 Fire Protective Signaling Systems

ANSI/UL 2610 Commercial Premises Security Alarm Units

#### **UL 864 Section 85.2.1 information:**

Minimum signal level needed at the receiver: -30 dBm

Maximum ambient rf noise level: -3.7 dBm

#### **Patents**

▶ U. S. Patent No. 7,239,236

#### **FCC Information**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Industry Canada Information

This device complies with Industry Canada License-exempt RSS standard(s). Operation is subject to the following two conditions:

- This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



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