1103 SERIES WIRELESS UNIVERSAL TRANSMITTER
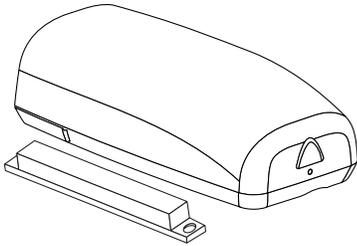
Installation Guide

Figure 1: 1103 Universal Transmitter

DESCRIPTION

The 1103 Series Wireless Universal Transmitters are two-way supervisory wireless transmitters typically used for commercial fire or burglary door and window applications. The 1103E features 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.

Compatibility

All DMP XR Series panels and all 1100 Series Wireless Receivers. For details about XT Series compatibility, refer to "Compatibility".

To enable encryption on 1103E models, Version 183 is required for XT and XR Series panels and Version 300 is required for Wireless Receivers.

What is Included?

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

1 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. (1103E only) 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.
3. (1103E only) 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).
4. At **ZONE INFORMATION**, enter the wireless zone number.
5. At ***UNUSED***, enter the zone name.
6. At **ZONE TYPE**, press any select key or area and select the zone type.
7. At the **NEXT ZN?** prompt, select **NO**.
8. When **WIRELESS?** displays, select **YES**.
9. At **SERIAL#**, enter the eight-digit device serial number.
10. At **CONTACT**, select either **INTERNAL** or **EXTERNAL**.

    📓 **Note:** Use consecutive zone numbers if using both internal and external contacts. Program the external contact first if using both internal and external contacts with Disarm/Disable functionality

11. At **SUPRVSN TIME**, enter a supervision time. Default is **240**.
12. At **DISARM DISABLE**, select **NO** or **YES**.
13. 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.
14. To save panel programming, go to **STOP** and press **CMD**.

2 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 2 during installation.
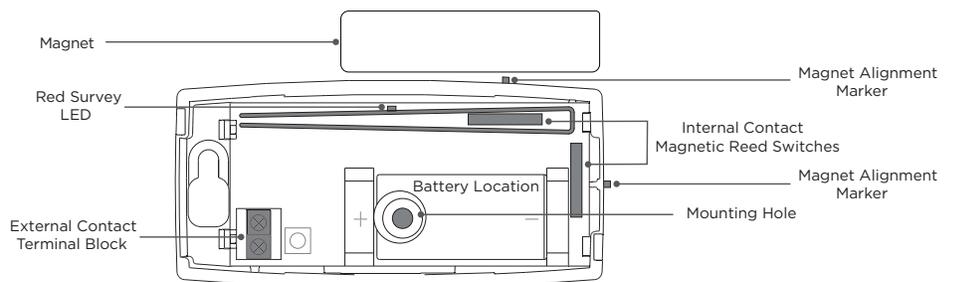

Magnet

Red Survey LED

External Contact Terminal Block

Battery Location

Magnet Alignment Marker

Internal Contact Magnetic Reed Switches

Magnet Alignment Marker

Mounting Hole

Figure 2: Transmitter Components

3 SELECT A LOCATION

The 1103 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.

   ✓ **Confirmed:** If communication is confirmed, for each press or release of the tamper switch, the LED blinks immediately on and immediately off. Repeat this test to confirm five separate consecutive LED blinks. Any indication otherwise means proper communication has not been established.

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

4 MOUNT THE TRANSMITTER

Mount the Housing

When mounting the 1103, refer to Figure 2 and Figure 3 for battery and mounting hole location.

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

Mount the Magnet

Only one magnet is required for internal reed switch operation, either located on the side or end of the enclosure. For internal contact operation, the magnet should be a minimum of 1/8" from the transmitter. The maximum allowable distance between magnets and transmitters is 1", but may be less when mounting on metal surfaces. Refer to Figure 4 and Figure 5 during magnet installation.

Place the magnet on the surface near one of the internal reed switch locations (see the magnet alignment markers on the transmitter base). Use the provided screws to secure the magnet in place.
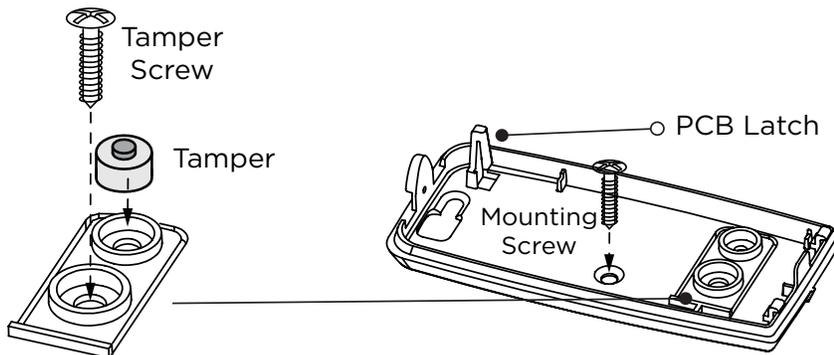

Figure 3: Mounting the Transmitter

5 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. See Figure 6.
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.
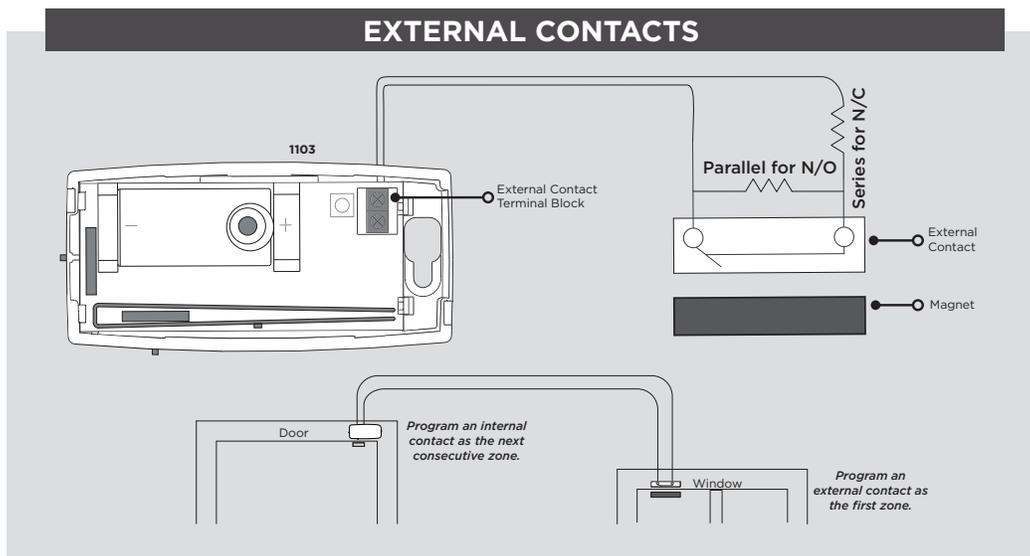4. Snap the transmitter cover back onto the base.

EXTERNAL CONTACTS

Figure 4: 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 Walk Test on the system or complete the following steps to perform a Walk Test from a keypad that is connected to the panel.

At the keypad, enter **8144** (WALK) and select WLS. If the transmitter fails to check in at the keypad, ensure that it is wired properly and check for sources of interference such as metal objects and electronic equipment.

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 and Sensor Reset to Clear LOBAT

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.

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.

FCC INFORMATION

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

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

The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm (7.874 in.) from all persons. It must not be located or operated in conjunction with any other antenna or transmitter.

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:

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

INDUSTRY CANADA INFORMATION

This device complies with Industry Canada Licence-exempt RSS standards. Operation is subject to the following two conditions:

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

This system has been evaluated for RF Exposure per RSS-102 and is in compliance with the limits specified by Health Canada Safety Code 6. The system must be installed at a minimum separation distance from the antenna to a general bystander of 7.87 inches (20 cm) to maintain compliance with the General Population limits.

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:

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

L'exposition aux radiofréquences de ce système a été évaluée selon la norme RSS-102 et est jugée conforme aux limites établies par le Code de sécurité 6 de Santé Canada. Le système doit être installé à une distance minimale de 7.87 pouces (20 cm) séparant l'antenne d'une personne présente en conformité avec les limites permises d'exposition du grand public.

COMMERCIAL FIRE

1. After all transmitters are in position, the WLS option of the panel's Walk Test must be operated and all transmitters programmed for Fire (FI) or Supervisory (SV) must show that their checkin message was received. Refer to the panel programming guide for Trip Counter for DMP Wireless check-in Test (WLS) which describes that both numbers of the counter must match. If not and a failed wireless zone is displayed at END, decrease that transmitters range with the receiver and perform the WLS Walk Test again.
2. For Fire Protective listed systems, the internal contact (magnet) cannot be used. For use only with normally open initiating devices that indicate normal and off-normal (alarm) signals only (i.e. pull stations, heat detectors).
3. The transmitter must be installed within 3 ft of the initiating device when not visible after installation, such as above a ceiling or within a wall. When the transmitter is visible after installation and is seven feet or lower from the floor, it must be installed next to the initiating device. All wiring must be inside the wall.

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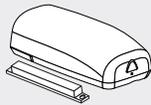
Specifications

Battery	
Life Expectancy	5 years (normal operation)
Type	3.0 V lithium CR123A
Frequency Range:	905-924 MHz
Dimensions	
Transmitter Case	3.3" L x 1.6" W x 1.0" H
Magnet Housing	1.5" L X 0.5" W X 0.7" H
Magnet Spacer	1.5" L X 0.5" W X 0.1" H
Housing Material	Flame retardant ABS

Ordering Information

1103-W Standard Universal Transmitter

1103E-W Encrypted Universal Transmitter

Compatibility

1100X Wireless Receiver Version 104 or higher

1100XH Wireless Receiver Version 105 or higher

1100D Wireless Receiver Version 104 or higher

1100DI Wireless Receiver Version 105 or higher

1100DH Wireless Receiver Version 105 or higher

XT50 Series panels with integrated wireless receiver Version 101 or higher

XTLplus with integrated wireless receiver Version 104 or higher

XTLtouch with integrated wireless receiver Version 104 and higher

Encryption

XT and XR Series Panels Version 183 or higher

Wireless Receivers Version 300 or higher

Patents

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

Certifications

California State Fire Marshal (CSFM)

FCC Part 15 Registration ID CCKPC0191

New York City (FDNY COA #6167)

Industry Canada Registration ID 5251A-PC0191

Underwriters Laboratories (UL) Listed

ANSI/UL 365	Police Station Connected Burglar
ANSI/UL 609	Local Burglar Alarm Units and Systems
ANSI/UL 634	Connections and Switches for use with Burglar Alarm Systems
ANSI/UL 1023	Household Burglar Alarm System Units
ANSI/UL 1076	Proprietary Burglar Alarm Units
ANSI/UL 1610	Central Station Burglar Alarm Units
ANSI/UL 864	Fire Protective Signaling Systems