

1100DH SERIES HIGH POWER WIRELESS RECEIVERS

Installation Guide

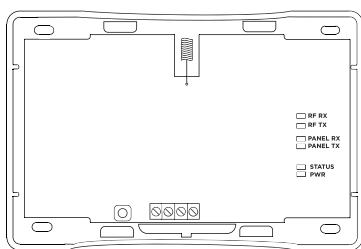


Figure 1: 1100DH High Power Wireless Receiver

DESCRIPTION

The 1100DH Series High-Power Wireless Receivers provide up to 32 wireless zones for XT30/XT50 Series panels and provides two-way communication using 900 MHz frequency hopping spread-spectrum technology. The 1100DHE features 128-bit AES encryption.

The 1100DH contains additional transmit and receiver amplifiers to enable greater distances for 1100 Series operation for harsh building environments.

The system is designed so only one 1100DH is used per panel.

Compatibility

- XT30 Series panels
- XT50 Series panels running firmware Version 102 or higher
- Encryption requires panel Version 183 or higher

What is Included?

- One 1100DH Wireless Receiver
- Hardware Pack

1 PROGRAM THE PANEL

Refer to the panel programming guide as needed.

1. Reset the panel.
2. At a keypad, enter **6653** (PROG) to access the **PROGRAMMER** menu.
3. In **SYSTEM OPTIONS**, program a **HOUSE CODE** between 1 and 50. See *House Code Explained* for more information.
4. If you are programming an XT50 Series panel, select **NO** at the **BUILT IN 1100 WIRELESS** prompt to allow the panel to use the 1100D for wireless communication.
5. (1100DHE only) At the **1100 ENCRYPTION** prompt, 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.
6. (1100DHE 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).
7. Press **CMD** until **STOP** displays and press a select key or area to save and exit the Programmer.

2 MOUNT THE 1100DH

Select a Location

When selecting a location to mount the 1100DH, keep in mind that the receiver should be centrally located between the 1100 Series transmitters used in the installation and no more than 100 feet (30 meters) from the panel using 22 AWG wire, or 250 feet (76.2 meters) using 18 AWG wire.

The additional amplification may inhibit proper communication with 1100 Series wireless transmitters located within four feet of the receiver. This distance may be up to eight feet when using the 1122 PIR or 9000 Series Wireless Keypads.

To ensure optimal performance, be sure to mount the receiver away from large metal objects and at least one foot away from the panel's metal enclosure. Do not use shielded wire between the panel and receiver.

1. Remove the cover from the plastic housing.
2. Use the included #6 screws to secure the 1100DH to the wall. See Figure 2 for mounting hole locations.



3 WIRE THE 1100DH

The 1100DH interfaces with the panel using the panel's keypad bus. This wire run must be a home run to the panel, separate from wire runs to other devices on the Keypad Bus. This wiring restriction is due to the higher current draw needed for the high power RF amplification.

If additional wire distance is required, the 1100DH can be connected anywhere along the keypad bus through a 710 Bus/Splitter module and powered by a 12 VDC power supply (DMP Model 505-12) to separate the receiver power requirements from other devices on the Keypad Bus. Refer to the 710 Installation guide (LT-0310).

1. Connect the red, yellow, green, and black wires to the **PANEL** terminal on the 1100DH and connect the other ends to the 7, 8, 9, and 10 terminals on the panel. See Figure 2.
2. Replace the cover on the housing base.

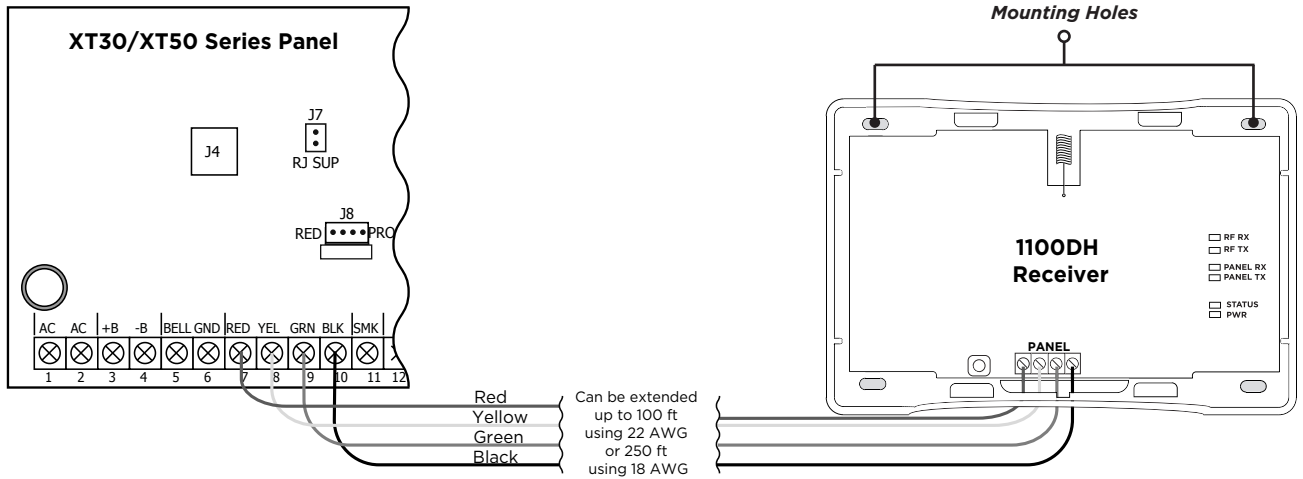


Figure 2: Wiring the 1100DH to the Panel

ADDITIONAL INFORMATION

1100DH LED Operation

The six labeled LEDs on the 1100DH PCB display wireless receiver operation and activity. See Figure 2 for LED locations and Table 1 for LED indications.

House Code Explained

The house code identifies the panel, receiver, and transmitters to each other. The 1100DH automatically sends the specified house code to wireless transmitters when transmitter serial numbers are programmed into the panel.

The 1100DH only listens for transmissions using the specified house code or the programmed transmitters' serial numbers.

LED	INDICATIONS
RF RX	Flashing yellow indicates data is being received from a transmitter.
RF TX	Flashing green indicates data is being sent to a transmitter.
PANEL RX	Flashing yellow indicates data is being received from a panel.
PANEL TX	Flashing green indicates data is being sent to the panel.
STATUS	Solid red indicates memory is being uploaded. Turns off when complete.
PWR	Solid green indicates there is power to the wireless receiver.

Table 1: LED Indications

LED Survey Operation for 1100 Series Transmitters

1100 Series transmitters provide a survey operation that allows one person to confirm that each transmitter is communicating with the wireless receiver or panel to easily determine the best location for the transmitters and the wireless receiver. Follow the directions below to test communication of the wireless transmitters:

1. Remove the transmitter's cover.
2. Hold the transmitter in the exact desired location.
3. Press the tamper switch to send data to the wireless receiver and determine if communication is confirmed or faulty.

✓ **Confirmed:** If communication is confirmed, the survey LED turns on when data is sent to the wireless receiver and off when acknowledgment is received.

✗ **Faulty:** If communication is faulty, the LED remains on for several seconds or flashes multiple times in quick succession. Relocate the transmitter or the wireless receiver until the LED confirms clear communication. Proper communication between the transmitter and wireless receiver is verified when for each press or release of the tamper switch, the transmitter's LED blinks immediately on and immediately off.

Transmitter Supervision Time

For listed installations, program the transmitter supervision time in panel zone programming as listed in the following table. Refer to the panel programming guide for complete wireless programming information.

UL STANDARD	LISTED ACCESSORIES	SUPERVISION TIME
UL 268 Smoke-Automatic Fire Detectors	<ul style="list-style-type: none"> • 1100R Repeater • 1164 Wireless Synchronized Smoke Detector 	3
UL 365 Police Station Connected Burglar Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1103 Universal Transmitter 	60
UL 521 Heat Detectors for Fire Protective Signaling Systems	<ul style="list-style-type: none"> • 1100R Repeater • 1183-135F, 1183-135R 	3
UL 609 Local Burglar Alarm Units and System Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1103 Universal Transmitter 	60
UL 634 Connections and Switches for use with Burglar Alarm Systems Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1101, 1102, 1103, 1106 Universal Transmitters 	60
UL 636 Holdup Alarm Units and Systems Accessory	<ul style="list-style-type: none"> • 1142 Two-Button Holdup Transmitter 	60
UL 639 Intrusion Detection Units Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1127W, 1127C PIR Motion Detectors 	60
UL 985 Household Fire Warning System Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1135 Wireless Sounder • 9060, 9063, 9862 Wireless Keypads 	240
UL 1023 Household Burglary System Units Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1101, 1102, 1103, 1106 Universal Transmitters • 1127W, 1127C PIR Motion Detectors • 1135 Wireless Sounder • 1142 Two-Button Holdup Transmitter • 9060, 9063, 9862 Wireless Keypads 	60
UL 1076 Proprietary Burglar Alarm Units Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1103 Universal Transmitter 	60
UL 1610 Central Station Burglar Alarm Units Accessory	<ul style="list-style-type: none"> • 1100R Repeater • 1103 Universal Transmitter • 1135 Wireless Sounder • 9060, 9063, 9862 Wireless Keypads 	60

Table 2: Wireless Transmitter Supervision Times


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 standard(s). 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.

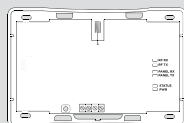
This system has been evaluated for RF Exposure per RSS-102 and is in compliance with the limits specified by Health Canada Safety Code 6. The system must be installed at a minimum separation distance from the antenna to a general bystander of 7.87 inches (20 cm) to maintain compliance with the General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

1100DH HIGH POWER WIRELESS RECEIVERS



Specifications

Operating Voltage	8 to 14 VDC
Current Draw	80 mA Standby 240 mA Peak
RF Rating	720 mW
Frequency Range	905-924 MHz
Housing Dimensions	5.5" W x 3.75" L x 1" H
Housing Color	White
Housing Material	Flame Retardant ABS

Patents

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

Certifications

California State Fire Marshal (CSFM)
FCC Part 15 Registration ID: CCKPC0114R6
Industry Canada: 5251A-PC0114R6

Ordering Information

1100DH-W Standard High Power Wireless Receivers
1100DHE-W Encrypted High Power Wireless Receivers

Intertek (ETL) Listed

- ANSI/UL 365 Police Station Connected Burglar
- ANSI/UL 609 Local Burglar Alarm Units & Systems
- ANSI/UL 985 Household Fire Warning Systems
- ANSI/UL 1023 Household Burglar Alarm System Units
- ANSI/UL 1076 Proprietary Burglar Alarm Units
- ANSI/UL 1610 Central Station Burglar Alarm Units

Compatible With Devices Listed for:

- ANSI/UL 634 Connections and Switches for use with Burglar Alarm Systems Accessory
- ANSI/UL 636 Safety Holdup Alarm Units and Systems
- ANSI/UL 639 Intrusion Detections Units Accessory



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

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