1100X Wireless Receivers

Description

The 1100X Wireless Receiver is compatible with all DMP wireless devices. The receiver provides two-way, supervised communication using 900 MHz frequency hopping-spread-spectrum technology. The receiver and housing easily mount near the panel enclosure or in a remote location. The 1100X Wireless Receiver provides up to 500 wireless zones for XR500 Series Command Processor™ panels and up to 100 wireless zones for XR100 Series Command Processor™ Panels.

What is Included

The receiver includes the following items:

- One Model 1100X Wireless Receiver
- One 4-wire Cable
- Hardware pack

Compatibility

The 1100X Wireless receiver is compatible with any XR500 Series Command Processor™ panels using firmware Version 113 or higher and XR100 Series Command Processor™ panels. No specific receiver programming is required. Once installed, a panel programmed with wireless information automatically recognizes the wireless receiver.

Installing the Wireless Receiver

Choose an optimum location to mount the receiver. The 1100X Wireless Receiver is typically mounted above the panel enclosure or at a distance not to exceed 1000 feet from the panel. Install receivers away from large metal objects. Mounting the receiver on metal surfaces impairs performance. Do not used shielded wire between the panel and receiver. When selecting the proper mounting location of a transmitter, refer to the LED Survey Operation section of the specific installation guide for the transmitter being installed.

Remove the cover from the plastic housing by squeezing both sides toward each other. Secure the receiver to the wall in the desired location installing the supplied shoulder washers and screws in the mounting hole locations as shown in Figure 1. Snap the cover back on the unit. The panel will immediately recognize the 1100X Receiver if the panel is programmed with a house code.
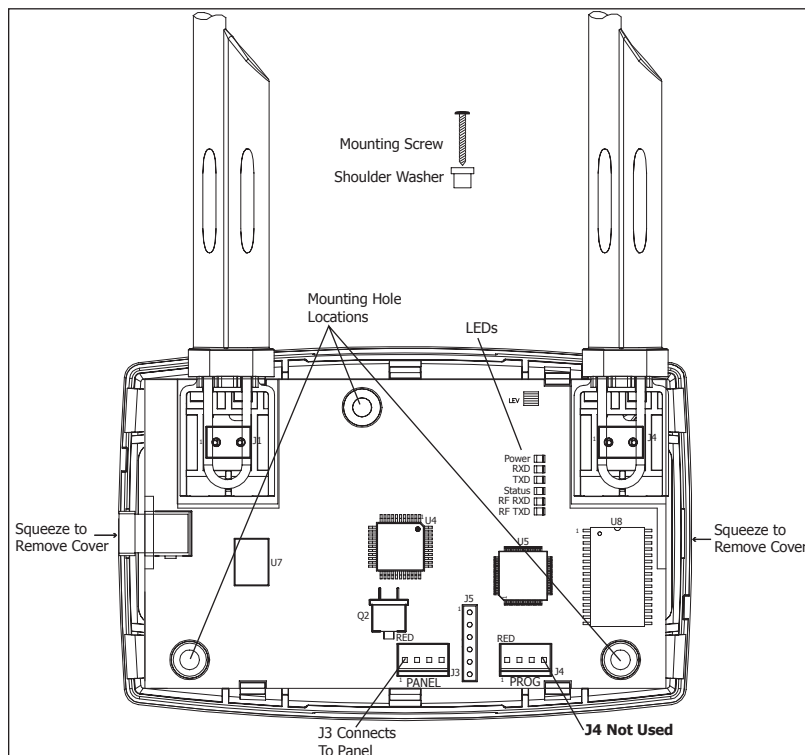

Figure 1: Receiver PCB

1100X Receiver Operation

The 1100X receiver automatically sends the panel house code to wireless transmitters when the unique transmitter serial number is programmed into the panel. The house code identifies the panel, receiver, and transmitters to each other. The receiver only listens for transmissions using the specified house code and/or programmed transmitter serial number.

Note: When setting up a wireless system, it is recommended to program zones and connect the receiver before installing batteries in the transmitters.

Transmitters can be programmed for supervised or unsupervised operation. When programmed as supervised, the transmitter must communicate with the receiver within the programmed number of minutes. If the transmitter fails to communicate, the panel displays a missing condition.

Note: 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.

When any wireless zone programming is changed in the panel, receiver zone programming is updated. At that point, all wireless zones display as normal for approximately one minute, regardless of the actual state of the contact.

1100X LED Operation

Six LEDs display receiver operation and activity. Refer to the table below as required.

PCB LEDs	Label	Operation
Power	POWER	Steady green to indicate there is power to the receiver.
RXD	RXD	Flashes yellow to indicate data is being received from the panel.
TXD	TXD	Flashes green to indicate data is being sent to the panel.
Status	STATUS	Steady red to indicate memory upload. Off when upload is complete.
RF RXD	RF RXD	Flashes yellow to indicate data is being received from a transmitter.
RF TXD	RF TXD	Flashes green to indicate data is being sent to a transmitter.

Wireless Bus Connection

The 1100X Wireless Receiver easily interfaces with the XR500 Series Command Processor™ panels and XR100 Series Command Processor™ panels using the on-board DMP Wireless Bus connection (J22).

Note: The 1100X Wireless Receiver cannot operate if connected to the Keypad Bus.

Harness Connection

Refer to Figure 3 on the next page, the XR500 Series Installation Guide (LT-0681), the XR500 Series Programming Guide (LT-0679), the XR100 Series Installation Guide (LT-0899), the XR100 Series Programming Guide (LT-0896), and use the following steps to connect the panel and receiver:

1. Install a jumper across the header pins next to the letter "X" on the XR500/XR100 panel J23 header to enable on-board DMP Wireless operation.

2. Connect one end of the supplied 4-wire cable to the XR500/XR100 panel 4-pin header labeled LX (J22) and connect the other end to the J3 header on the 1100X Wireless Receiver.

3. After power-up, briefly reset the panel using the J16 jumper to activate zone operation.

4. In System Options, program the House Code (1-50). In Zone Information, program the wireless zones.

Figure 3 shows the XR500 Series panel and the 1100X Wireless Receiver connection. Connection to the XR100 Series panel is the same.
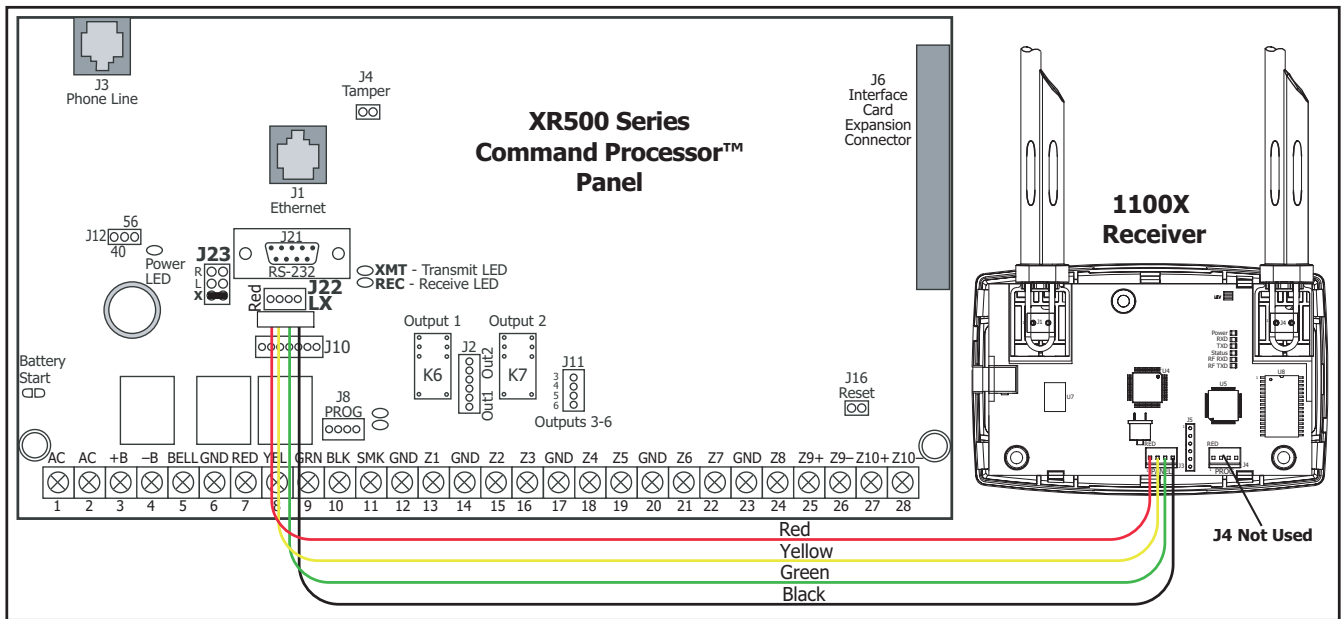

Figure 3: XR500 DMP Wireless Bus Wiring

Transmitter Supervision Time

For UL Listed installations, program the transmitter supervision time in panel zone programming as listed in the following table. Refer to the XR500 Series Programming Guide (LT-0679) or XR100 Series Programming Guide (LT-0896) for complete wireless programming information.

UL Listing		Listed Accessories	Supervision Time
UL 1023	Household Burglary Alarm System Units Accessory	1101/1102/1103 Universal Transmitters 1125 PIR Motion Detector 1142 Two-Button Panic	60 60 60
UL 636	Holdup Alarm Units and Systems Accessory	1142 Two-Button Panic	60
UL 634	Connections and Switches for use with Burglar Alarm Systems Accessory	1101/1102/1103 Universal Transmitters	60
UL 639	Intrusion Detection Units Accessory	1125 PIR Motion Detector	60
UL 365	Police Station Connected Burglar Accessory	1103 Universal Transmitter	60
UL 609	Local Burglar Alarm Units and System Accessory	1103 Universal Transmitter	60
UL 1076	Proprietary Burglar Alarm Units Accessory	1103 Universal Transmitter	60
UL 1610	Central Station Burglar Alarm Units Accessory	1103 Universal Transmitter	60
UL 985	Household Fire Warning system Accessory	1101/1102/1103 Universal Transmitter 1161/1162 Residential Wireless Detectors	3 3

Wireless Troubleshooting

Should wireless devices not operate, refer to the following checklist:

- Verify the receiver is an 1100X and the panel is an XR500 Series with firmware Version 113 or higher or an XR100 Series panel.
- Verify the XR500/XR100 panel J23 jumper is in the "X" position and the 4-wire connector from the receiver is connected to J22.
- Briefly reset panel using J16 jumper to activate wireless operation and wait one minute to test wireless zone(s).
- Verify the House Code (1-50) is programmed in System Options.
- Check address settings of other device(s) connected to LX-Bus to ensure there are no duplicate addresses.
- Verify appropriate zone numbers are assigned as wireless zones.
- Verify that the XR500/XR100 panel XMIT and REC LEDs alternately flash on and off at a rate of 1/4 second each. If the LEDs are On steady or Off, the panel and receiver are not communicating properly. (See Figure 3 above).
- Verify the 1100X LEDs operate correctly as listed in 1100X LED Operation on the previous page.
- Verify all transmit devices are programmed, have batteries correctly inserted, and contact setting is correct.

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.

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.

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

Note: The 1100 Series wireless system is a two-way supervised wireless design. It is compliant with FCC rules as they pertain to 900 MHz Spread Spectrum devices. In rare instances it has been observed that certain 900 MHz cordless telephones may occasionally experience a clicking sound on the telephone while in use. If this occurs, it may be resolved by selecting a different channel on the cordless telephone, or replacing the cordless phone with a different brand or model of 900 MHz telephone or other cordless telephone.

Specifications

Operating Voltage	8.0 to 14 VDC
Current Draw	40mA
Dimensions	
Receiver Housing	4.65" L x 3.1" W x 1.4" H
Antennas	8.6" H
Color	White
Housing Material	Flame retardant ABS

Accessories

1101 Universal Transmitter, Internal/External Contacts
1102 Universal Transmitter, External Contact
1125 PIR Motion Detector
1142 Two-Button Panic Transmitter

The accessories listed below have not been investigated by UL.

1121 Pet Immune PIR Motion Detector
1124 360° Coverage PIR Motion Detector
1129 Glassbreak Detector
1145 Four-Button Key Fob *
1146 Two-Button Key Fob *
1147 One-Button Key Fob *

* All Key Fobs require 1100X V101 or higher. Version label is on the lower left side of Receiver PCB.

Patents

Patent(s) Pending

Listings and Approvals

Underwriters Laboratories (UL) Listed
  UL 1023 Household Burglar Alarm System Units Accessory Intrusion Detection Unit
  UL 636   Holdup Alarm Units and System Accessory
  UL 365   Police Station Connected Burglar Accessory
  UL 609   Local Burglar Alarm Units and Systems Accessory
  UL 1076 Proprietary Burglar Alarm Units Accessory
  UL 1610 Central Station Burglar Alarm Units Accessory
  UL 985   Household Fire Warning System Accessory

FCC Part 15 Registration ID CCK1100

DMP
Digital Monitoring Products

800-641-4282	INTRUSION • FIRE • ACCESS • NETWORKS
www.dmp.com	2500 North Partnership Boulevard
Made in the USA	Springfield, Missouri 65803-8877