

1100R Wireless Repeater

Description

The 1100R Wireless Repeater provides increased communication range by forwarding messages from the transmitter to the wireless receiver. Up to eight 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. Using the on-board LEDs, the 1100R Wireless Repeater provides built-in survey capability to allow for single-person installations, eliminating the requirement for an external survey kit.

Compatibility

- All DMP 1100 Series Wireless Receivers using Version 106 or higher software

What is Included

The 1100R Wireless Repeater includes the following items:

- One Model 1100R Repeater
- One Lithium Polymer Rechargeable Battery
- Zone name and number label
- Serial number label
- Hardware pack

Optional items available:

- One Model 376L Plug-in DC Power Supply

Serial Number

For your convenience, an additional pre-printed serial number label is included. Prior to installing the repeater, record the serial number or place the pre-printed serial number label on the panel programming sheet. This number is required during programming. As needed, use the zone name and number label to identify the repeater.

Panel Programming

Program the repeater in the panel as a wireless zone. Program the wireless House Code in System Options prior to adding DMP wireless zones to the system. Follow these steps in **Zone Information**:

- Zone Type: Select an Auxiliary zone type.
- Program Armed Open and Disarmed Open as Trouble.
- Program Armed Short and Disarmed Short as Alarm.
- Wireless: Select YES to program the zone as a DMP wireless zone.
- Serial Number Entry: At the Serial Number: prompt, enter the repeater's eight-digit serial number.

Note: If using multiple repeaters, they must be programmed as sequential zone numbers.

- Supervision Time: Press COMMAND to accept the default time of 240 minutes. Press any top row key to select the supervision time required for the wireless repeater. Press the Select key under the required number of minutes. A check-in time of 60 or 240 minutes should be selected.

The repeater must check in at least once during this time or a missing condition is indicated for that zone. Since 1100R repeaters automatically check in based on the supervision time selected for the wireless zone, no additional programming is needed. Any programming prompts for contact or other information can be ignored.

Note: When an 1100 series receiver is installed, powered up, or the panel is reset, the supervision time for any repeaters and transmitters are reset.

Refer to the panel programming guide as needed.

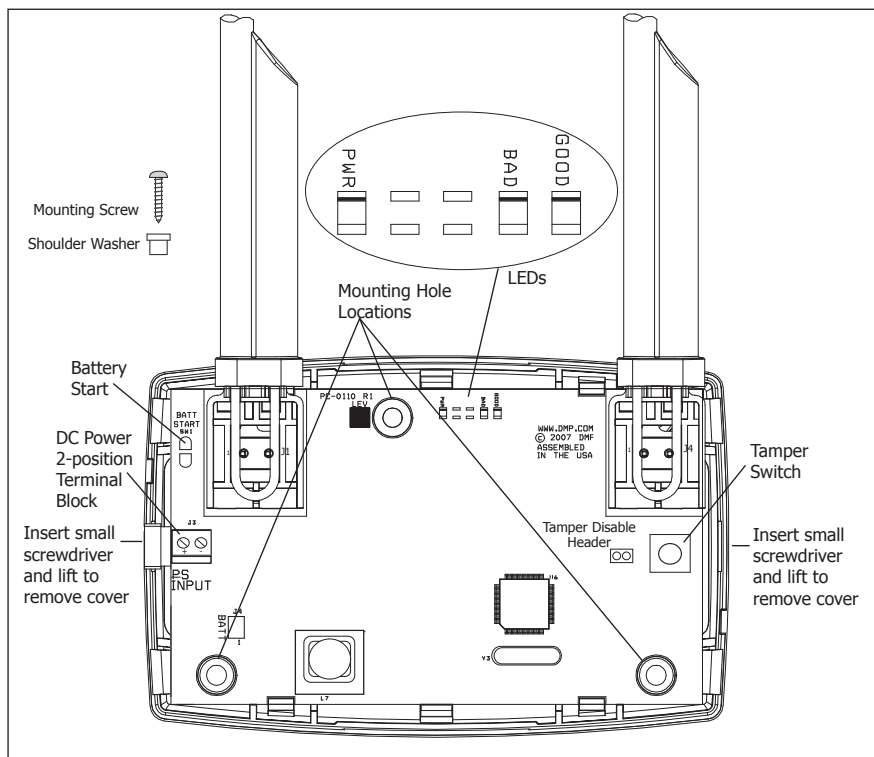


Figure 1: 1100R Repeater PCB Layout

Selecting the Proper Location (LED Survey Operation)

The 1100R provides a survey capability to allow one person to confirm communication with the 1100 series receiver while the cover is removed. The 1100R provides the option to power up using the Lithium battery only for survey operation. Briefly short the Battery Start pads together to power up. Refer to Figure 1.

Survey LEDs

The 1100R automatically begins establishing communication with the 1100 Series receiver at power up. The 1100R Green Survey LED turns on steady when successful communication with the receiver is established. The 1100R Red Survey LED turns on steady when communication cannot be established with the receiver. Relocate the repeater until the Green LED turns on steady indicating successful communication has been established. This Green/Red survey LED operation is different from the standard single LED flash for 1100 Series transmitters.

LED Operation

Three LEDs display repeater operation and activity. Refer to the table below as required.

Label	Operation
GOOD	Steady Green indicates reliable communication has been established with the receiver. Reliable communication is defined as the last 5 messages sent by the repeater have been acknowledged immediately by the receiver. A message can be sent by pressing or releasing the tamper switch.
BAD	Steady RED indicates the repeater has not established reliable communication with the receiver. Communication is not considered reliable when the last 5 out of 15 messages sent by the repeater 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 returns to a steady Green.
PWR	Steady Green to indicate there is power to the repeater.

Installing the Wireless Repeater

Selecting a Location

Mount the 1100R on a flat surface. The 1100R Wireless Repeater is typically mounted between the 1100 Series Receiver and the 1100 Series transmitter(s) that are out of range. Locate as far from the 1100 Receiver as needed to provide the required system range. Install the repeater away from large metal objects. Mounting the repeater on or near metal surfaces impairs performance. If the repeater is powered from an auxiliary power supply, mount the repeater away from the metal power supply enclosure. When selecting the proper mounting location of a repeater, refer to the LED Survey Operation section to confirm communication with the 1100 Receiver.

Tamper Switches

The 1100R is equipped with a case tamper and a wall tamper. 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. If wall tamper is required, place the jumper over just one pin for storage. When faulted, the tamper immediately sends a wireless zone short to the panel.

Mounting the Repeater

1. Insert a small screwdriver and lift as shown in Figure 1 to remove the cover.
2. Secure the receiver to the wall ensuring that the wall tamper switch makes proper contact with the wall. Use the supplied shoulder washers and screws in the mounting hole locations as shown in Figure 1.
3. Snap the cover back on the unit after observing LED operation. Make sure the case tamper spring is installed on the tamper switch.

Powering from External 12 VDC Power Supply

The 1100R can be powered from a 12 VDC power supply such as a DMP Model 505-12. In addition to powering the repeater, the power supply also charges the back-up battery of the repeater. If the DC power source is removed, the power failure is indicated as an open condition on the repeater zone.

Use the following steps to connect the power supply:

1. Using 22 AWG wire, connect the J3 DC Power 2-position Terminal Block to the J6 terminal on the 505-12 power supply PCB. See Figure 2.
2. Observe positive and negative polarity on all connections.

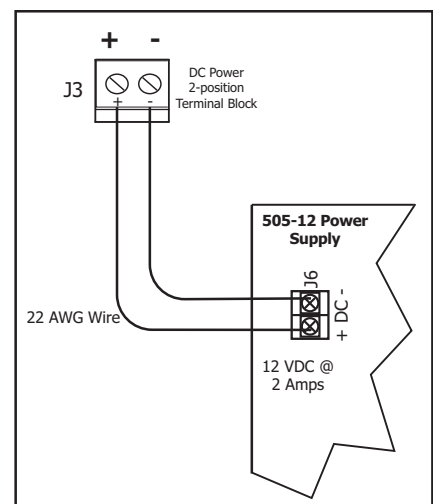


Figure 2: Power Supply Connection

Optional External DC Plug-in Power Supply

When using the optional Model 376L plug-in DC power supply, use the following steps to connect the power supply:

1. Connect the Black wire with White stripe to the positive terminal on the 1100R and the Black wire to the negative terminal.
2. Mount the 1100R near a wall outlet.

In addition to powering the repeater, the DC plug-in power supply also charges the back-up battery. The 376L plug-in DC power supply must be located within 100 feet of the repeater using 22 AWG wire or 250 feet using 18 AWG wire.

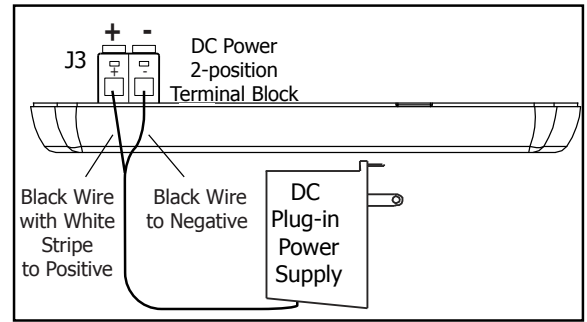


Figure 3: DC Plug-in Connection

Primary Power Loss Indication

When the 1100R is used with the XT Series, XTL, XTLC, XTLN, XTLN-WiFi, or XR100/XR500 Version 205 or lower, a zone trouble indication for the repeater zone occurs within three minutes of a loss of primary power.

When used with the XR150/XR350/XR550 or XR100/XR500 Version 206 or higher, a 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.

Rechargeable Battery

The 1100R rechargeable battery is used to provide up to 24 hours of backup battery power when AC power is not available. The battery is intended for backup power only and not to operate the 1100R Repeater on a daily basis. If the battery is low, or not plugged into the J4 battery connector, a low battery condition is indicated for the repeater zone.

Installing or Replacing the Battery Assembly

Observe polarity when plugging the battery connector into the header. Use only DMP Model 1100RBAT. Replace the battery every 3 years.

Removing the Battery Assembly

1. Remove the repeater housing cover.
2. Disconnect the battery lead connector from the repeater J4 battery header.
3. Squeeze the battery straps to remove the battery.
4. Properly dispose of the used battery.



Caution: Risk of fire, explosion, and burns. Do not disassemble, heat above 212°F (100°C), or incinerate. Properly dispose of used batteries.

Installing the Battery Assembly

Plug-in the rechargeable battery at time of installation.

1. Place the new battery and secure with the battery straps. See Figure 3.
2. Snap the battery assembly in place.
3. Observe polarity and connect the battery lead connector to the repeater J4 battery header.

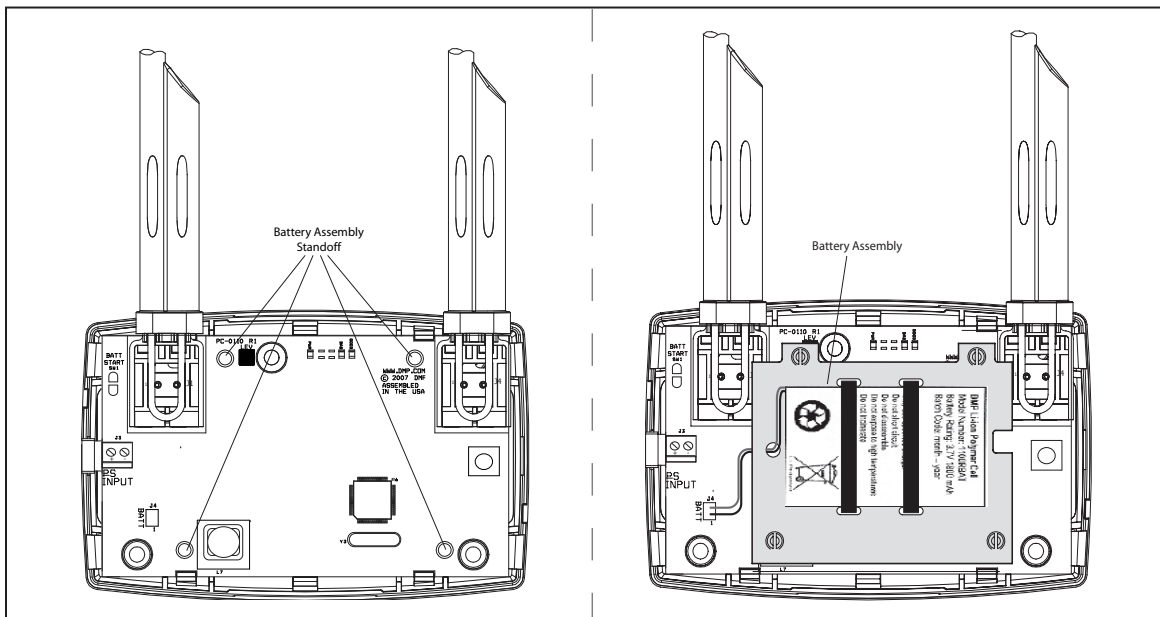


Figure 4: Battery Assembly

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.


Listed Compliance Specifications

Commercial Fire

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.

Powering from External 12 VDC Power Supply

The 1100R is powered from a 12 VDC power supply such as a DMP Model 505-12. In addition to powering the repeater, the power supply also charges the back-up battery of the repeater. If the DC power source is removed, the power failure is indicated as an open condition on the repeater zone. See page 2.

Specifications	Accessories	Compatibility	Patents	Certifications
Primary Operating Voltage	8.0 to 14 VDC 30mA	All DMP 1100 Series Wireless Receivers using Version 106 or higher software and Panels with built-in receivers	U. S. Patent No. 7,239,236	California State Fire Marshal (CSFM) FCC Part 15 ID: CCKPC0110 New York City (FDNY COA #6167) Industry Canada: 5251A-PC0110
Standby Battery	1100RBAT			ANSI/UL 365 Police Station Connected Burglar
Voltage	3.7 VDC			ANSI/UL 609 Local Burglar Alarm Units and Systems
Capacity	800 mAh			ANSI/UL 634 Connections and Switches for use with Burglar Alarm Systems Accessory
Type	Lithium Polymer Rechargeable			ANSI/UL 639 Intrusion Detection Units Accessory
Standby	24 hours			ANSI/UL 1023 Household Burglar Alarm System Units
Frequency Range	905-924 MHz			ANSI/UL 1076 Proprietary Burglar Alarm Units
Dimensions				ANSI/UL 1610 Central Station Burglar Alarm Units
Housing	4.65" L x 3.1" W x 1.4" H			ANSI/UL 268 Smoke-Automatic Fire Detectors
Antennas	8.6" H			ANSI/UL 985 Household Fire Warning System
Color	White			ANSI/UL 864 Fire Protective Signaling Systems
Housing Material	Flame retardant ABS			
1100RBAT	Replacement Rechargeable Battery			
505-12	12 VDC Power Supply			
		INTRUSION • FIRE • ACCESS • NETWORKS		
800-641-4282		2500 North Partnership Boulevard		
www.dmp.com		Springfield, Missouri 65803-8877		
Designed, Engineered and Manufactured in Springfield, Missouri				