

CellComRT Digital Cellular Communicator

Description

The CellComRT Digital Cellular Communicator provides a fully supervised alarm communication path over the GSM/GPRS network. The CellComRT is installed remote from the panel enclosure in a supplied plastic housing and can be powered directly from the XR100 or XR500 Series panel LX header or can be powered from an optional power supply.

What is Included

The CellComRT includes the following:

- One Remote Cellular Communicator
- One 380-400 SecureCom Wireless SIM Card
- Plastic Housing
- One 383 Rubber Duck Antenna
- One CELLCOMBAT Lithium Polymer Rechargeable Battery

Compatibility

The CellComRT is compatible with the XR100, XR100N, XR500, XR500N and XR500E Command Processors using software Version 203 or higher. The CellComRT operates on the panel LX header and can be used with an 1100 Series Wireless Receiver.

Installation Safety



Ground Yourself Before Handling the Panel! To discharge static, touch any grounded metal, such as the enclosure, before touching the panel.

Remove All Power From the Panel! Remove all AC and Battery power from the panel before installing or connecting any modules, cards, or wires to the panel.

Bus Connection

The CellComRT interfaces with the XR100/XR500 Series using the panel's on-board LX-Bus header (J22). The CellComRT can be mounted up to 100 feet from the panel enclosure using 22 AWG wire or 250 feet using 18 AWG wire.

Harness Connection

Use the following steps to connect the CellComRT to the panel:

1. Install a jumper across the header pins next to the letter "X" on the XR100/XR500 panel's J23 header.
2. Connect the 4-wire harness from the J22 header on the CellComRT to the XR100/XR500 panel's LX-Bus header (J22).
3. After power-up of the CellComRT, briefly reset the XR100/XR500 panel using the J16 jumper to activate operation.

Installing the CellComRT

Connecting Backup Rechargeable Battery

Observe polarity and connect the rechargeable battery lead connector to the 2-pin CellCom J4 battery header.

Tamper Switches

The CellComRT is equipped with two tamper switches. One is located inside the housing. The second tamper is a wall tamper switch. Before mounting the CellComRT unit, follow these steps to install the tamper springs:

1. Place the included tamper springs on the tamper switches. The long tamper spring installs inside the housing and the short tamper spring installs in the opening in the back of the CellComRT housing.
2. With spring in place, mount the CellComRT on a flat surface that engages the tamper spring and closes the tamper. See Figure 1 for mounting hole locations.

Connecting the Antenna to the CellComRT

Attach the Rubber Duck Antenna to the Antenna SMA Connector (J19) located on the top right side of the CellComRT. See Figure 2.

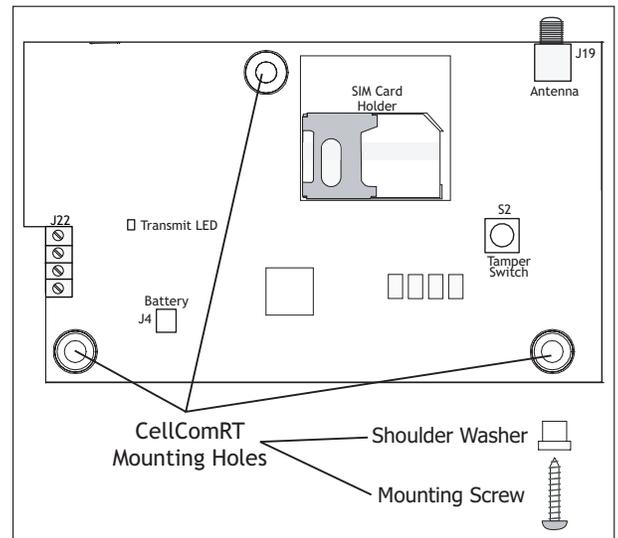


Figure 1: CellComRT PCB

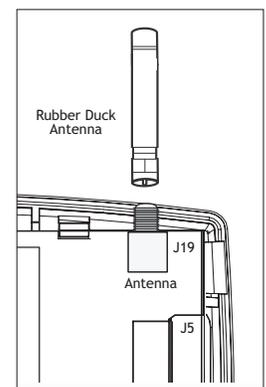


Figure 2: CellComRT Antenna Installation



Connecting the Optional Auxiliary Power Supply

Use the following steps when connecting an optional auxiliary power supply to the CellComRT:

1. Connect the Red wire (auxiliary Power) to the top CellComRT J22 terminal position 'R' and to the DC positive terminal (+) of the power supply. See Figure 3.
2. Connect the Black wire (ground) to the bottom CellComRT J22 terminal position and to the DC negative terminal (-) of the power supply and to the LX header (J22) on the XR100/XR500 Series panel. See Figure 3.

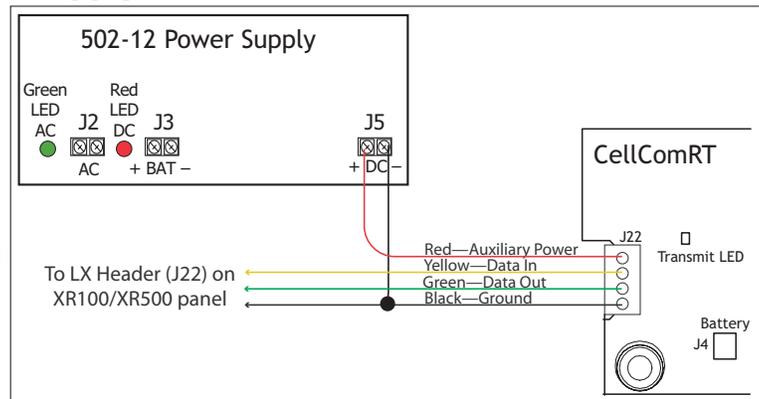


Figure 3: Optional Auxiliary Power Supply Installation

Connecting the Optional Plug-in Transformer

When using an optional Model 376 plug-in DC power supply, mount the CellComRT near a wall outlet. Use the following steps to connect the plug-in power supply to the CellComRT:

1. Remove the barrel connector from the 376 power supply.
2. Connect the plug-in power supply Black wire with White stripes to the top CellComRT J22 terminal position 'R'. See Figure 4.
3. Connect the plug-in power supply solid Black wire to the bottom CellComRT J22 terminal position and to the LX header (J22) on the XR100/XR500 Series panel. See Figure 4.
4. Plug the power supply into a 110 Volt AC outlet not controlled by a switch.

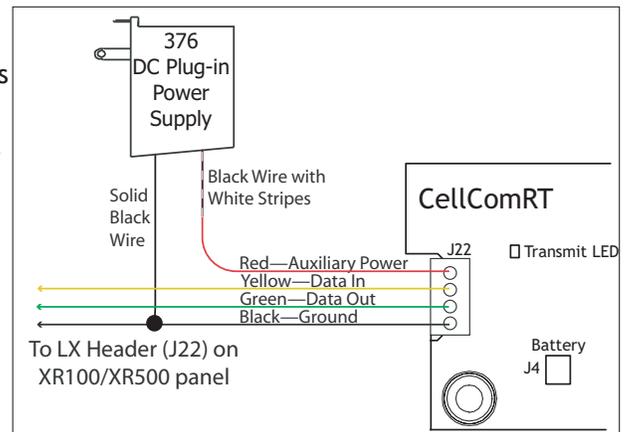


Figure 4: Optional Plug-in Transformer Installation

Programming/Activation

Cellular Service is required before using the CellComRT for signal transmission. Using Remote Link panel communication programming, select CELL as one of the Communication paths. The CellComRT comes with a SIM card ready for activation with SecureCom Wireless, LLC. More information is available at www.securecomwireless.com or refer to the Remote Link Guide (LT-0565). Or, use a SIM card provided by the GPRS carrier of your choice.

LED Indicator

The CellCom Green Transmit LED light flashes when transmission is being made between the CellComRT and the panel.

Diagnostics

The XR100/XR500 Series panels provide a Diagnostics function to test Communication integrity and the Cellular Signal strength of the CellComRT. To use Diagnostics, reset the panel, enter the Diagnostics code 2313 (DIAG), and press COMMAND.

Communication Status

Select COMM STATUS from the Diagnostics menu. The XR100/XR500 panels test the CellComRT for the following items:

- CellCom Operating
- Cellular Tower Detected
- APN (Access Point Name) Correct
- SIM Card Installed
- SIM Card Registered/Active
- Communication Path Integrity

Cellular Signal

Select CELL SIGNAL from the Diagnostics menu. The XR100 and XR500 Series panels test and indicate the strength of the signal using a bar display. One bar indicating a weak signal. Seven bars indicating a strong signal. If the bars indicates a weak signal, options to correct this problem include relocating the CellComRT assembly or extending the CellComRT antenna coax using a Model 381 Coax Extension.

Rechargeable Battery

The CellComRT rechargeable battery is used to provide 24 hours of backup battery power when DC power is not available. The battery is intended for backup power only and not to operate the CellComRT on a daily basis. If the battery is low, or not plugged into the J4 battery connector, a low battery condition is indicated by the CellComRT Cellular Communicator.

Note: If removing the CellComRT from service, disconnect the backup battery from the CellComRT J4 connector.

Installing or Replacing the Battery Assembly

Observe polarity when plugging the battery connector into the header. Use only DMP Model CELLCOMBAT.

Removing the Battery Assembly

1. Disconnect the battery lead connector from the CellComRT J4 battery header.
2. Remove the battery PCB from the three standoffs by unsnapping the top of the plastic clips.
3. 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

1. Align the three battery PCB standoff mounting holes with the standoffs. See Figure 5.
2. Snap the battery assembly in place.
3. Observe polarity and connect the battery lead connector to the CellCom J4 battery header.

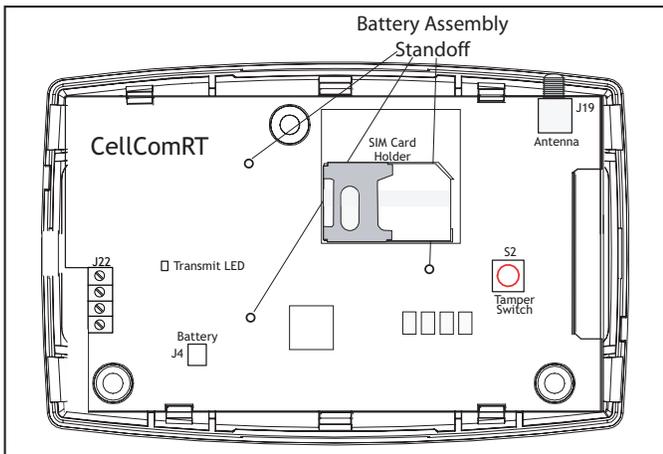


Figure 5: Battery Assembly Standoffs

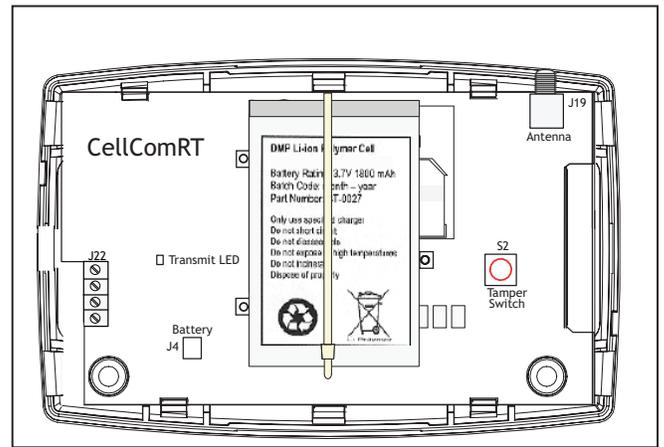


Figure 6: CellComRT Assembly

CellCom System Messages

The following messages are communicated to the DMP SCS-1R receiver to indicate CellCom status:

<p>130 WARNING: Cell Communicator Bus Failed COMMUNICATION SECURITY FEATURE</p> <p>The communication on the bus between the panel and the cellular communicator has failed while no areas of the system were armed. This message may originate from both the panel and the cellular communicator as both monitor the bus. The restoral message is S132.</p>
<p>131 ALARM: Cell Communicator Bus Failed SERVICE NOTIFICATION FEATURE</p> <p>The communication on the bus between the panel and the cellular communicator has failed while any area of the system was armed. This message may originate from both the panel and the cellular communicator as both monitor the bus. The restoral message is S132.</p>
<p>132 Cell Communicator Bus Restored SERVICE NOTIFICATION FEATURE</p> <p>The communication on the bus between the panel and the cellular communicator has restored. Message is sent from the panel to the receiver and is a restoral for S130 and S131.</p>
<p>133 WARNING: Cell Communicator DC Failed SERVICE NOTIFICATION FEATURE</p> <p>The panel has received a message from the cellular communicator that its input DC voltage is missing or low. The cellular communicator is operating from its internal battery. The restoral message is S134.</p>
<p>134 Cell Communicator DC Restored SERVICE NOTIFICATION FEATURE</p> <p>The panel has received a message from the cellular communicator that its input DC voltage has restored. This message is a restoral for S133.</p>
<p>135 WARNING: Cell Communicator Low Battery SERVICE NOTIFICATION FEATURE</p> <p>The panel has received a message from the cellular communicator that the cellular communicator's standby battery is low or missing. The restoral message is S136.</p>
<p>136 Cell Communicator Battery Restored SERVICE NOTIFICATION FEATURE</p> <p>The panel has received a message from the cellular communicator that the cellular communicator's standby battery has restored. This message restores S135.</p>
<p>137 WARNING: Cell Communicator Tamper SECURITY FEATURE</p> <p>The panel has received a message from the cellular communicator that the cellular communicator's built-in tamper circuit was placed in an open condition while no areas of the system were armed. The restoral message is S139.</p>
<p>138 ALARM: Cell Communicator Tamper SECURITY FEATURE</p> <p>The panel has received a message from the cellular communicator that the cellular communicator's built-in tamper circuit was placed in an open condition while one or more areas of the system were armed. The restoral message is S139.</p>
<p>139 Cell Communicator Tamper Restored SECURITY FEATURE</p> <p>The panel has received a message from the cellular communicator that the cellular communicator's built-in tamper circuit was restored to a normal condition. This message is a restoral for S137 and S138.</p>

All the messages above are communicated by the XR100/XR500 control panel except S130 and S131 Cell Communicator Bus Fail which is sent by both the panel and CellCom. For complete information, refer to the Host Communication Specification (LT-0086).

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 Burglary

For listed installations, the CellComRT may be installed in the following configurations:

- Installed and directly powered from the control panel.
- Installed and powered from a UL 603 listed power supply.

The additional on board standby Lithium-Ion battery, CELLCOMBAT, is considered auxiliary operation and has not been evaluated by UL.

The optional Model 376 Plug-in DC Power Supply is considered auxiliary operation and has not been evaluated by UL.

Specifications

Primary Power 12 VDC
Current Draw
Standby 21mA
Peak Transmission 200mA

Ordering Information

CellComRT Remote Digital Cellular Communicator

Accessories

376 DC Plug-in Power Supply
380-400 Level 400 SIM Card (1 supplied)
381-12 12' Coax Extension
381-25 25' Coax Extension
383 Rubber Duck Antenna
386 Wall Mount Antenna Bracket
CELLCOMBAT Replacement Rechargeable Battery assembly

Compatibility

DMP Command Processor panels XR100, XR100N, XR500, XR500N, XR500E using Software Version 203 or higher

Listings and Approvals

FCC Part 15 and CISPR 22

FCC ID: MIVGSM0308

Industry Canada ID: 4160A-GSM0308

Underwriters Laboratories (UL) Listed

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

Export Control

The CellComRT uses AES encryption and any export beyond the United States must be in accordance with Export Administration Regulations.



800-641-4282

www.dmp.com

Designed, Engineered and Assembled in U.S.A.

INTRUSION • FIRE • ACCESS • NETWORKS

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