

SCIF System Information

Before installing any equipment, complete the following section.

Account Number _____
 Address _____
 Phone Number _____
 Control Panel IP Address _____
 Gateway Address _____
 Programming Port _____
 Installation Date _____

1. System Components

The system package includes the following components:

- One XR550DEPCB Panel
- One 350A Attack Resistant Enclosure
- Two 307-S Tamper Switches
- One 306 Tamper Harness
- Two Battery(s)
- One 318 Dual Battery Harness
- One 7000 Series Keypad
- One ES502 Transformer Enclosure (optional)
- Additional Components as Required

2. Reference Information

System Grounding

Connect a 14 AWG or larger wire from XR550DE panel terminal 4 to a good earth ground. DMP recommends a cold water pipe ground, building ground, or a ground rod. Refer to the NEC (National Electrical Code) for grounding information. Do not connect to an electrical ground, conduit, sprinkler or gas pipes, or to a telephone company ground.

System Wiring

All wiring must be in accordance with NEC. Use non-shielded 22 AWG wire up to 500 ft. or non-shielded 18 AWG wire up to 1000 ft. from the panel. Refer to LX-Bus/Keypad Bus Wiring Note (LT-2031) for wire recommendations.

Reference Documents

As needed during installation, refer to the wiring diagram on the back, the XR550 Series Installation Guide (LT-1233), XR550 Series Programming Guide (LT-1232), and any documentation included with the system components.

Refer ICD 705.1 (Intelligence Community Directive) Chapter 7 Intrusion Detection Systems (IDS).

Also consult UL 2050 before installing Electronic Security Systems within a SCIF. Contractors shall comply with UL 2050 by maintaining an active UL Certificate of Installation and Service.

For arms, ammunition, and explosive (Non-Nuclear) refer to the AA&E Manual DoD 5100.76-M. All other classified materials are based on the National Security Program Operating Manual (NISPOM) DoD 5220.22-M.

⚡ Caution: Remove All Power! Remove all AC and battery power from the panel before installing or connecting any modules, cards, or wires.

3. Mount the XR550DE PCB and 350A Enclosure

Mount the 350A enclosure with the XR550DE panel in a secure, dry place to protect the panel from damage due to tampering or the elements. It is not necessary to remove the XR550DE PCB when installing the enclosure.

4. Mount the Tamper Switches

Mount the two 307-S Tamper Switches in the mounting locations provided in the enclosure. Connect the two Tamper Switches together in series. Use the 306 Tamper Harness to connect the Tamper Switches to the XR550DE Tamper Header. All additional enclosures used must also have tamper switches installed.

5. Connect AC Power

⚡ Caution: Do not apply AC Power to the transformer until all devices are connected to the panel. See power requirements for SCIFs in ICD 705 for more information.

Connect the transformer wires to panel terminals 1 and 2. Use no more than 70 ft. of 16-gauge, or 40 ft. of 18-gauge, wire between the transformer and the panel. DMP recommends that all transformer wires from the panel to the ES502 be installed in conduit to protect them from damage.

If used, mount the ES502 Transformer Enclosure over a dedicated 120VAC 60 Hz outlet not controlled by a switch.

After all components are installed, plug the transformer into the dedicated 120VAC outlet where the ES502 is mounted and close the ES502 cover.

📋 Note: Never share the transformer output with any other equipment.

6. Wire the Batteries

⚡ Caution: Observe polarity when connecting batteries. Wire all batteries in parallel. Ensure all battery harness connectors are fully inserted to prevent shorting. The panel's internal battery cutoff relay automatically turns on when the AC transformer is powered.

DMP requires each battery be separated by a PTC in the battery harness wiring to protect each battery from a reversal or short within the circuit.

DMP recommends that each battery be labeled with the installation date.

1. In the panel enclosure, connect the 14" black battery wire to panel terminal 4 negative and the 14" red battery wire to panel terminal 3 positive.
2. Plug the 14" red and black battery wires onto the 318 Dual Battery Harness.
3. Connect the 318 Dual Battery Harness to the two 12V Lead-Acid Batteries located in the panel enclosure. Observe black and red polarity on all connections.

7. Connect Zone Expansion LX-Bus™

Use a DMP model 300 wire harness to connect up to 100 zones using the LX-Bus on the XR550DE control panel.

The Zone Expansion Bus shall not leave the perimeter of the SCIF. When possible, all keypads and zone expansion units should be mounted on interior walls.

8. Connect Network

Use a Standard Ethernet cable with an RJ45 connector and connect one end of the cable to XR550DE ETHERNET port. Connect the other end of the Ethernet cable to the Network connection supplied by the Network Administrator.

The Network LAN/WAN should be powered by a UPS or battery backup source capable of 24-hour operation should AC power be lost. If not, the CSA must approve the Network reliability.

Communications between the XR550DE and the remote monitoring facility with the SCS-1R or SCS-VR Receivers shall be encrypted with the 128 bit or 256 bit (AES) Encryption certified by NIST (National Institute of Standards and Technology). The DMP NIST certificate number for the 128-bit XR550DE is 2350 and the DMP NIST certificate for the 256-bit XR550DE is 2595.

9. Keypad Bus Wiring

Connect the keypad bus wiring to panel terminals 7 through 10. You can install a maximum of 16 supervised devices on the keypad bus. These can be keypads and zone expanders. All devices on this bus shall be supervised, and shall not extend outside the perimeter of the SCIF. When possible, all keypads and loop expansion shall be mounted on interior walls.

10. Installation Completion

Ensure all devices are properly addressed and all LX-Bus and Keypad Bus wiring is free of grounds, wire to wire shorts, AC and RF noise, and induction. Ensure all field devices are properly terminated to the zone expanders or keypads. All unused wire conductors shall be grounded at the panel end only so as not to complete a ground loop condition or act as an antenna. Make note of device circuit wiring to the panel or expansion modules. This is required when programming the zones to ensure proper operation.

11. Zone Lay Out

Zones 1-10 are located directly on the XR550DE panel. Keypad Bus expansion zones are numbered in groups of four corresponding to the address.

Example: Address #1 is zones 11-14 and address 16 is zones 161-164. There are a maximum of 64 zones possible on the Keypad Bus.

On the LX-Bus, the first assigned zone numbers are 500-599. If more than 174 zones are needed the XR550DE can be expanded by four more LX-Buses for a total of 574 zones.

All keypads and zones on the XR550DE system shall be used within the intended SCIF and for no other purpose.

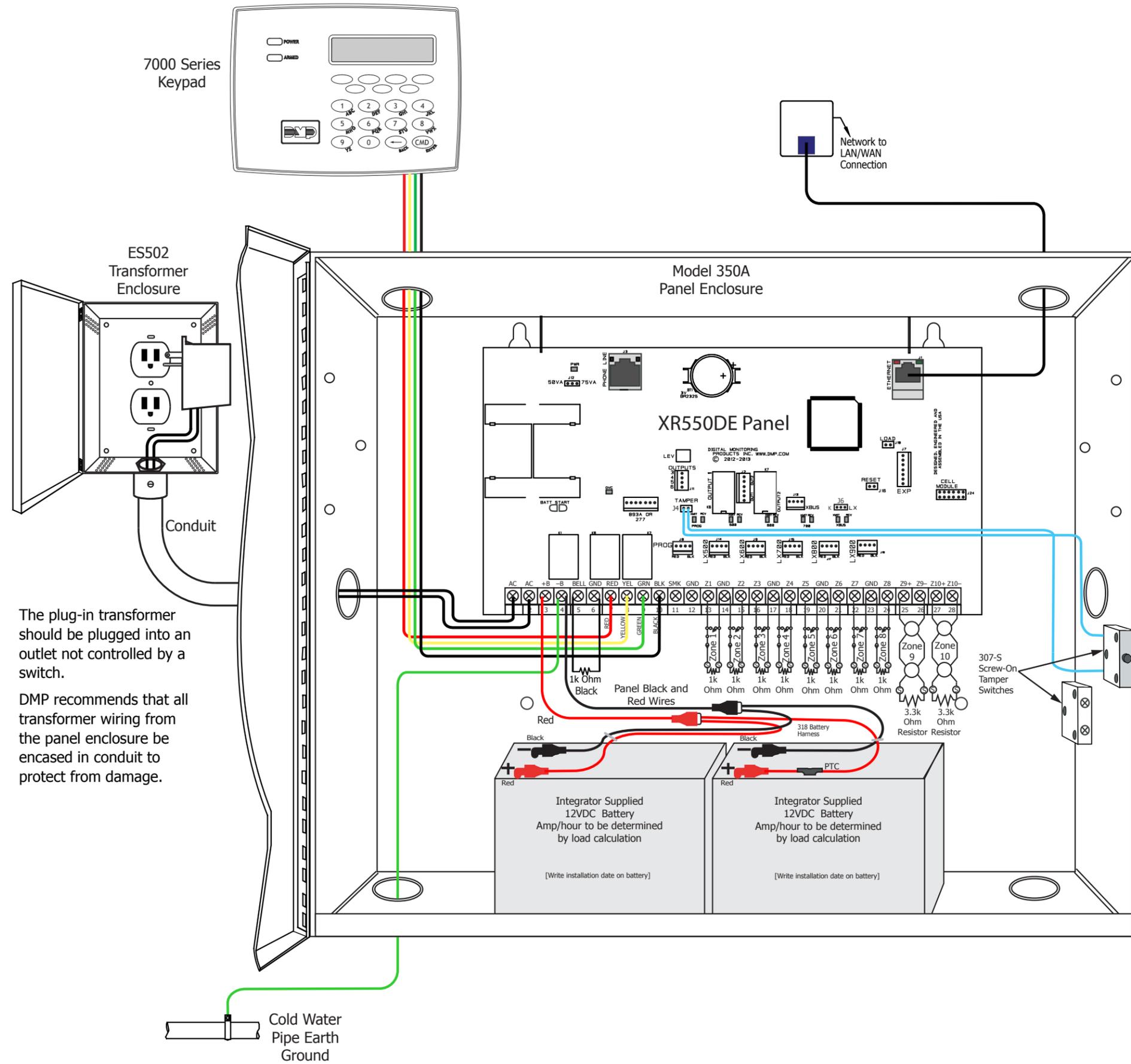
12. Program the XR550DE

Fill out an XR550DE Programming Sheet (LT-1234) prior to programming to ensure you have all the necessary information to properly program the panel. Program the XR550DE panel.

Contractors shall be required to complete the programming sheet and submit the completed sheet with the accreditation paperwork.

13. Wiring Diagram

The following section illustrates a typical SCIF wiring diagrams.



7000 Series Keypad

ES502 Transformer Enclosure

Model 350A Panel Enclosure

Network to LAN/WAN Connection

XR550DE Panel

Conduit

The plug-in transformer should be plugged into an outlet not controlled by a switch.
 DMP recommends that all transformer wiring from the panel enclosure be encased in conduit to protect from damage.

307-S Screw-On Tamper Switches

Integrator Supplied 12VDC Battery
 Amp/hour to be determined by load calculation
 [Write installation date on battery]

Integrator Supplied 12VDC Battery
 Amp/hour to be determined by load calculation
 [Write installation date on battery]

Cold Water Pipe Earth Ground