

# Model XR500 Series Wiring Diagram

Refer to XR500 Series Installation Guide (LT-0681) for a complete description of wiring connections.  
Refer to XR500 Series Programming Guide (LT-0679) for complete programming instructions.

## TYPES OF SERVICE

Central Station DACT service may be provided. See sections 29.4.  
Suitable for Remote Station PPU DACT Service. See sections 29.7. Suitable for manual fire alarm, automatic fire alarm, sprinkler supervisory, or water flow alarm.  
Suitable for Grade AA High Line Encrypted Central Station with NET communication. See sections 23.8 and 25.8.  
Grade B may be provided with dialer communication and DMP 350A Enclosure. See section 23.6.  
Suitable for Bank Safe and Vault Service with 350A Enclosure. See section 26.6.  
Suitable for Household Fire and Grade A Household Burglary.  
Suitable for Grade A Local, Police Station Connect, Mercantile, and Proprietary with dialer direct communication and 350A Enclosure. See sections 23.3, 23.5, and 23.6.  
Suitable for Proprietary, PPU, other technologies, (iCOM – XR500 only), local.

## NFPA 72

This equipment should be installed in accordance with Chapter 11 of the National Fire Alarm Code, ANSI/NFPA 72-2002, (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269). Printed information describing proper installation, operation, testing, maintenance, evacuation planning, and repair service is to be provided with this equipment.

## POWER LIMITED

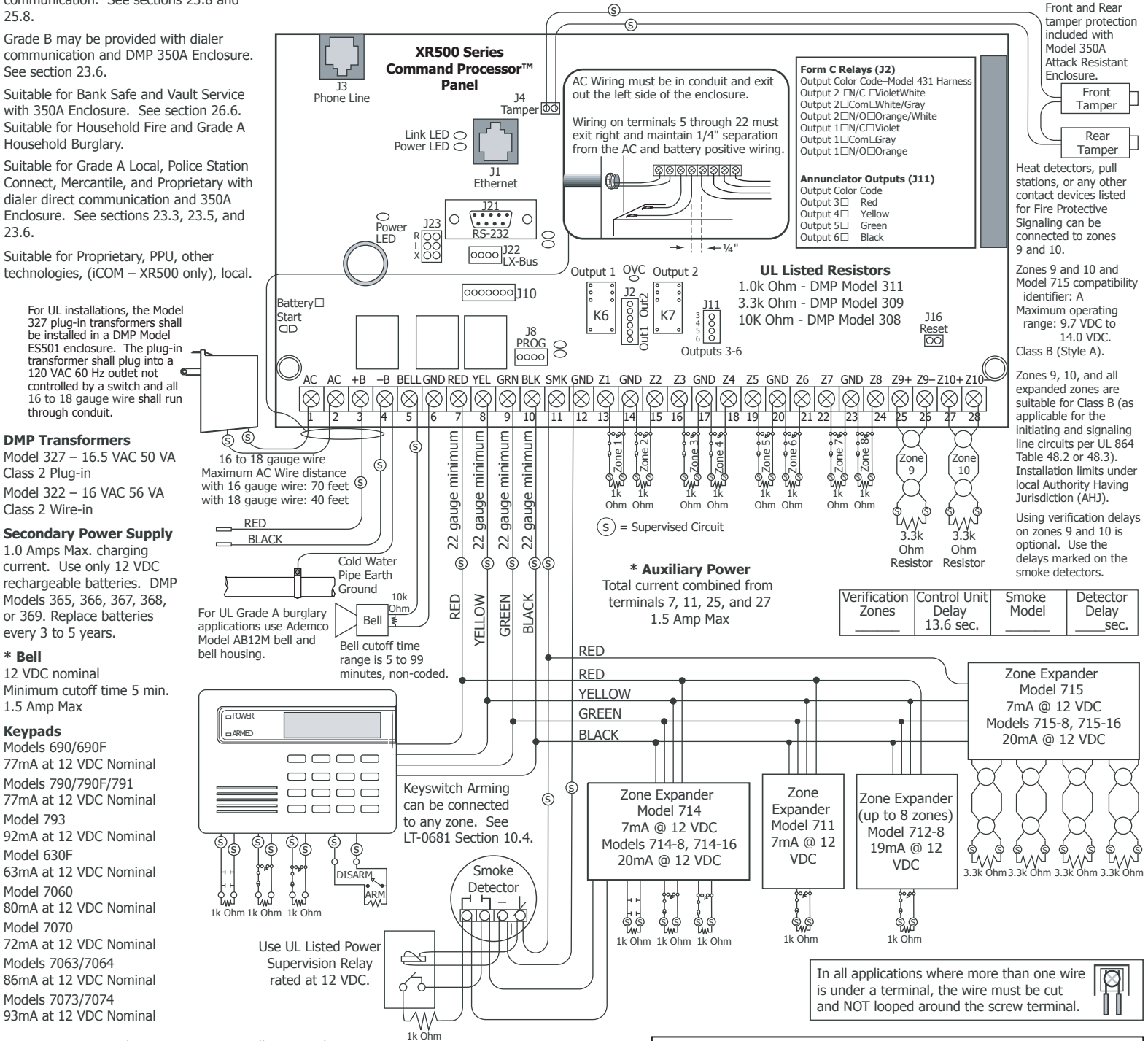
All circuits on the Model XR500 Series comply with the requirements for inherent power limitation and are Class 2 except the red battery wire and AC terminals.

## NFPA 72 OPERATING INSTRUCTIONS

The operating instructions found on the last page of LT-0681 must be located adjacent to the control unit or keypad.

## HOUSEHOLD FIRE WARNING

UL recognized limited energy cable must be used for connection of all initiating, indicating, and supplementary devices.



For UL installations, the Model 327 plug-in transformers shall be installed in a DMP Model ES501 enclosure. The plug-in transformer shall plug into a 120 VAC 60 Hz outlet not controlled by a switch and all 16 to 18 gauge wire shall run through conduit.

**DMP Transformers**  
Model 327 – 16.5 VAC 50 VA Class 2 Plug-in  
Model 322 – 16 VAC 56 VA Class 2 Wire-in

**Secondary Power Supply**  
1.0 Amps Max. charging current. Use only 12 VDC rechargeable batteries. DMP Models 365, 366, 367, 368, or 369. Replace batteries every 3 to 5 years.

**\* Bell**  
12 VDC nominal  
Minimum cutoff time 5 min.  
1.5 Amp Max

**Keypads**  
Models 690/690F  
77mA @ 12 VDC Nominal  
Models 790/790F/791  
77mA @ 12 VDC Nominal  
Model 793  
92mA @ 12 VDC Nominal  
Model 630F  
63mA @ 12 VDC Nominal  
Model 7060  
80mA @ 12 VDC Nominal  
Model 7070  
72mA @ 12 VDC Nominal  
Models 7063/7064  
86mA @ 12 VDC Nominal  
Models 7073/7074  
93mA @ 12 VDC Nominal

See section 11.2 in the XR500 Series Installation Guide (LT-0681) for a complete list of approved 2-wire smoke detectors for zones 9, 10, and 715 Zone Expansion Module zones.

**\* For UL installations, total current combined from Auxiliary (terminals 7, 11, 25, and 27) and Bell Power (terminal 5) cannot exceed: 1.3 Amp with 50 VA transformer, 1.0 Amp Max for Auxiliary Power 1.9 Amp with 56 VA transformer, 1.0 Amp Max for Auxiliary Power and 1.5 Amp Max for Bell**

See LT-0164 for a list of approved 4-wire smoke detectors and power supervision relays.

**WARNING: Incorrect connections may cause damage to the unit.**

**WARNING**  
THIS UNIT MAY BE PROGRAMMED TO USE AN ALARM VERIFICATION FEATURE THAT RESULTS IN DELAY OF THE SYSTEM ALARM SIGNAL FROM THE INDICATED CIRCUITS. THE TOTAL DELAY (CONTROL UNIT PLUS SMOKE DETECTORS) SHALL NOT EXCEED 60 SECONDS. NO OTHER SMOKE DETECTOR SHALL BE CONNECTED TO THESE CIRCUITS UNLESS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ).