

MODEL 1912
COMMAND PROCESSOR
BURGLARY/FIRE
CONTROL PANEL/COMMUNICATOR
INSTALLATION GUIDE

Digital **M**onitoring **P**roducts

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BURGLARY/FIRE
CONTROL PANEL/COMMUNICATOR
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FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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PRODUCT SPECIFICATIONS**1.1 Power Supply**

Transformer Input: 16 VAC 20VA or 40VA

Battery Input: 12 VDC 6.5Ah (charges one or two batteries)

Auxiliary: 12 VDC output at 600mA with 40VA transformer

Bell Output: 12 VDC at 1 Amp

Inherent Power Limited

1.2 Communication

Built in dialer communication to DMP Model SCS-1 Receiver

Built in multiplex communication to DMP Model SCS-1 Receiver

Optional dual line dialer module with phone line monitors

Can operate as a local control

1.3 Protection Loops

Four 1K Ω EOL Class B grounded burglary loops

One 3.3K Ω EOL Class B ungrounded powered loop with reset

1.4 Output Contacts

Two auxiliary SPDT relays

Requires two Model 305 relays, each rated for 1 Amp at 30 VDC or 0.5 Amp at 120 VAC

Four auxiliary 12 VDC, 50mA outputs

1.5 Keypad Control

The 1912 panel uses a 4-wire bus to connect up to a maximum of four of the following keypads or loop expanders:

- 670, 770, and 771 Alphanumeric Keypads
- 772, 773, and 774 Non-Alpha Keypads
- 704, 705, 714, and 715 Loop Expanders

1.6 Enclosure Specifications

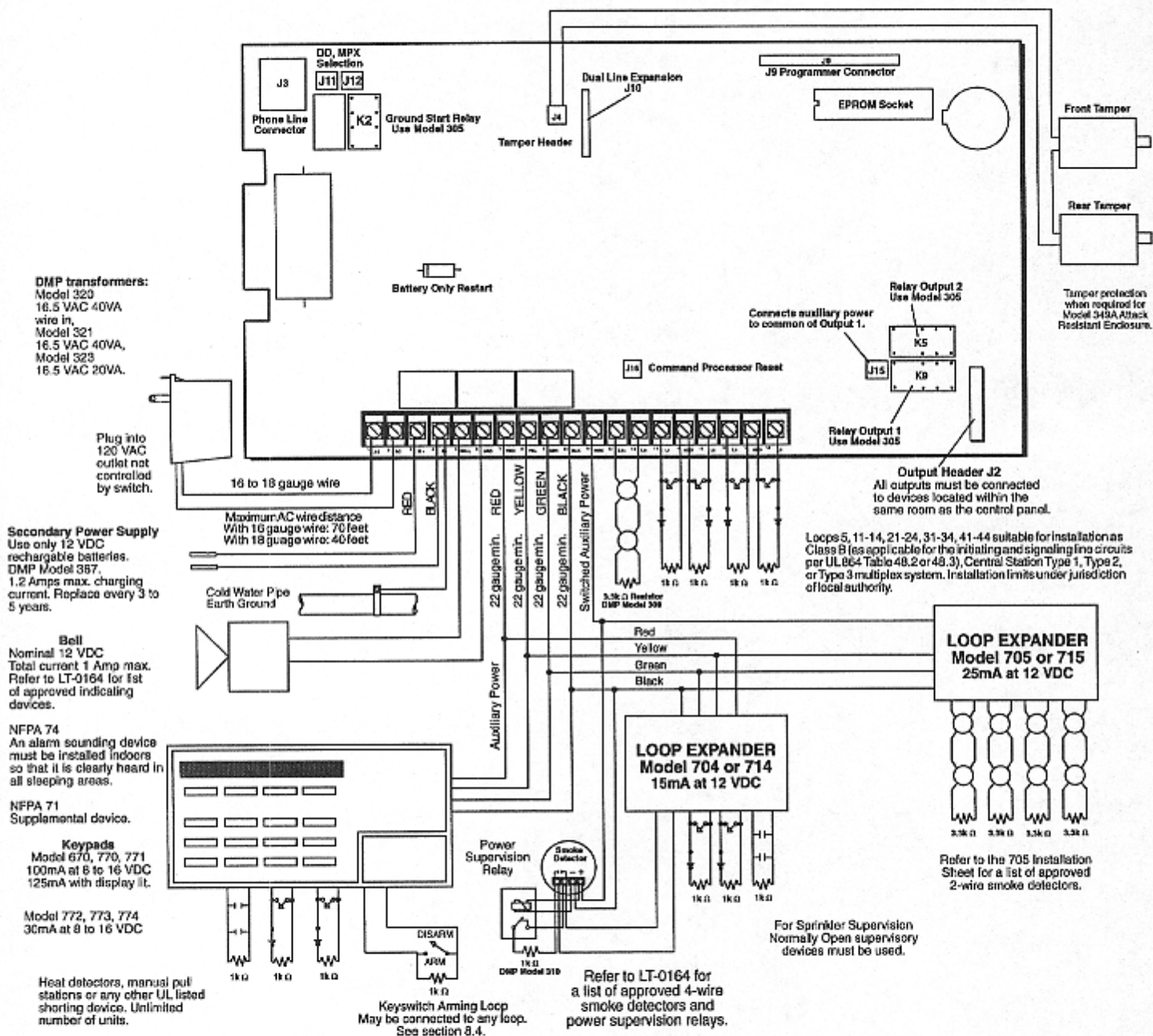
The 1912 is shipped installed in its enclosure with end of line resistors, battery leads, and programming sheets.

Size:	12.5" x 11.5" x 3.0"
Weight:	6 lbs
Color:	Black (61) or Grey (63)
Construction:	18 gauge cold rolled steel

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1.7 Wiring Diagram

The 1912 system below shows some of the accessory modules you can connect for use in various applications. A complete description of each module follows.



1.8 Lightning Protection

Metal Oxide Varistors and Transient Voltage Suppressors help protect against voltage surges on input and output circuits of the 1912. Additional surge protection is available by installing the DMP Model 370 or 370RJ Lightning Suppressors.

PRIMARY POWER SUPPLY

2.1 Terminals 1 and 2

Connect the transformer wires to terminals 1 and 2 on the panel. Use no more than 70 ft of 16 gauge or 40 ft of 18 gauge wire between the transformer and the 1912.

2.2 Transformer Types

The 1912 can be powered by a 16.5 VAC 25VA or 40VA transformer. The transformer must be plugged into a 120 VAC 60 Hz commercial power outlet when system installation is complete. The outlet must not be controlled by a wall switch. **Never share the transformer output with any other equipment.** If a 20VA transformer is used, 400mA is available on the auxiliary output. If a 40VA transformer is used, 600mA is available. The total current available is limited by the total battery standby requirements. See Section 3.8.

SECONDARY POWER SUPPLY

3.1 Battery Terminals 3 and 4

Connect the red battery lead to terminal 3 on the panel. Connect the black battery lead to terminal 4 and to the negative terminal of a DMP Model 367, 12 VDC 6.5Ah sealed lead-acid rechargeable battery. Connect the red battery lead to the positive terminal of the battery. **Observe polarity when connecting battery.**

The negative terminal of the battery connects to the enclosure ground internally. A second battery can be connected by adding a DMP Model 318 dual battery harness. If two batteries are used, a 40VA transformer must be installed. Use sealed lead-acid rechargeable batteries supplied by DMP or manufactured by Eagle Picher or Yuasa to ensure proper charging. **DO NOT USE GEL CELL BATTERIES.**

3.2 System Ground

Terminal 4 of the Model 1912 must be connected to earth ground to provide transient suppression. A cold water pipe or ground rod is recommended. An electrical conduit ground is not recommended. Use 14 gauge wire minimum for grounding.

3.3 Battery Only Restart

When powering up the 1912 control without AC power, it's necessary to short across the CR23 leads to pull in the battery cutoff relay. The leads need a momentary short only. Once the relay has pulled in, the battery power holds it in that condition. If the 1912 panel is powered up with the AC transformer, the battery cutoff relay is pulled in automatically.

3.4 Replacement Period

DMP recommends the battery be replaced every 3 to 5 years under normal use.

3.5 Discharge/Recharge

The 1912 battery charging circuit float charges at 13.9 VDC at a maximum current of 1.2 Amps using a 40VA transformer and at 1.0 Amps using a 20VA transformer. The total current available is reduced by the total auxiliary power draw from terminals 6 and 11. The various battery voltage levels are listed below.

Battery Trouble: below 11.9 VDC, Battery Cutoff: below 10.2 VDC, Battery Restored: above 12.6 VDC

3.6 Battery Supervision

The 1912 tests the battery once every hour when AC power is present. The test is done at 15 minutes past the hour and lasts five seconds. A load is placed on the battery and if the battery voltage falls below 11.9 VDC a low battery is detected. If AC power has failed, a low battery is detected **any time** the battery voltage falls below 11.9 VDC.

If a low battery is detected with AC power present, the test is repeated every two minutes until the battery charges above 12.6 VDC; the battery restored voltage. If a faulty battery is replaced with a fully charged battery, the restored battery will not be detected until the next two minute test is done.

3.7 Battery Cutoff

The panel disconnects the battery any time the voltage of the battery drops below 10.2 VDC. This prevents deep discharge damage to the battery.

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3.8 1912 Power Requirements

During AC power failure, the 1912 panel and all auxiliary devices connected to the 1912 draw their power from the battery. All devices must be taken into consideration when calculating the battery standby capacity. Below is a list of the power requirements of the 1912 control. Add the additional current draw of SECURITY COMMAND keypads, loop expanders, smoke detector output, and any other auxiliary devices used in the system for the total current required. The total is then multiplied by the total number of standby hours required to arrive at the total ampere/hours required.

1912 STANDBY BATTERY POWER CALCULATIONS

Standby Current			Alarm Current		
1912 Control Unit		130mA _____			130mA _____
Relay Outputs 1-2 (ON)	Qty _____ x	30mA _____	Qty _____ x		30mA _____
Voltage Outputs 3-6 (ON)	Qty _____ x	5mA _____	Qty _____ x		5mA _____
Active Loops 1-4	Qty _____ x	1.6mA _____	Qty _____ x		*2mA _____
Active Loop 5		4mA _____			30mA _____
SS Smoke Detectors	Qty _____ x	.1mA _____	Qty _____ x		.1mA _____
DS Smoke Detectors	Qty _____ x	.08mA _____	Qty _____ x		.08mA _____
ESL Smoke Detectors	Qty _____ x	.05mA _____	Qty _____ x		.05mA _____
893 Dual Line Module		12mA _____			50mA _____
					Bell Output 1000mA max. _____
670, 770, 771 Keypads	Qty _____ x	125mA _____	Qty _____ x		125mA _____
Annunciator (ON)			Qty _____ x		20mA _____
Active Loops	Qty _____ x	1.6mA _____	Qty _____ x		*2mA _____
772, 773, 774 Keypads	Qty _____ x	30mA _____	Qty _____ x		30mA _____
Annunciator (ON)			Qty _____ x		20mA _____
Active Loops	Qty _____ x	1.6mA _____	Qty _____ x		*2mA _____
704/714 Loop Expander	Qty _____ x	7mA _____	Qty _____ x		7mA _____
Active Loops	Qty _____ x	1.6mA _____	Qty _____ x		*2mA _____
705/715 Loop Expander	Qty _____ x	7mA _____	Qty _____ x		7mA _____
SS Smoke Detectors	Qty _____ x	.1mA _____	Qty _____ x		.1mA _____
DS Smoke Detectors	Qty _____ x	.08mA _____	Qty _____ x		.08mA _____
ESL Smoke Detectors	Qty _____ x	.05mA _____	Qty _____ x		.05mA _____
Active Loops	Qty _____ x	4mA _____	Qty _____ x		*9mA _____
Aux. Powered Devices (Terminal 7)		_____			_____
(Other than 670, 770, 771, 772, 773, 774, 704, 705, 714, 715)					
Total Standby		_____ mA	Total Alarm		_____ mA

* Based on 10% of active loops in alarm condition

Total Standby _____ mA x _____ = _____ mA/hours

Number of standby
hours required

Total Alarm _____ + _____ mA/hours

Total _____ mA/hours

x .001

= _____ Ampere/Hours Required

DMP Model 320 Transformer required: Whenever there are three or four batteries being charged by the 1912 panel, you must install the DMP Model 320 Transformer.

Cannot Exceed 6.5 with one 367 Battery
Cannot Exceed 13.0 with two 367 Batteries
Cannot Exceed 19.0 with three 367 Batteries
Cannot Exceed 25.5 with four 367 Batteries

BELL OUTPUT

4.1 Terminal 5

Nominal 12 VDC is supplied by Terminal 5 on the panel to power alarm bells or horns. The output is rated for a maximum output of 1 Amp. This output can be steady or pulsed depending upon the Bell Action specified in Output Options. Terminal 6 is the ground reference for the bell circuit. See the wiring diagram, Section 1.7, for a list of compatible devices. The bell output is supplemental for NFPA 71 and 72 (chapter 9) requirements.

KEYPAD, LOOP EXPANDER BUS

5.1 Description

You connect Security Command keypads and loop expanders to the 1912 panel using up to four 4-wire cables connected to terminals 7, 8, 9, and 10. To connect one keypad or loop expander you can use a maximum 500' of 22 AWG or 1000' of 18 AWG wire. Additional keypads or loop expanders on the same run shorten the allowable distances.

Any combination of keypads and loop expanders can be used up to a maximum of four devices. For NFPA 71 applications, the keypad and loop expanders may be limited to the same room and be required to be run in conduit. See Section 22.8.

5.2 Terminal 7 - RED

Nominal 12 VDC is supplied at terminal 7 to power Security Command keypads and loop expanders. Terminal 10 provides the ground reference for terminal 7. Terminal 7 can also power any auxiliary devices connected to the 1912 panel.

The maximum output for terminal 7 is rated at 600mA when a 40VA transformer is used or 400mA when a 20VA transformer is used. The output current is shared with the smoke detector output (terminal 11) and Loop 5 (terminal 12). The combined auxiliary output power can be connected internally to the common terminal of relay output 1 by connecting jumper J15. The current draw of all devices totaled together must not exceed the maximum current rating of the auxiliary output.

5.3 Terminal 8 - YELLOW

Data receive from keypads and loop expanders. It cannot be used for any other purpose.

5.4 Terminal 9 - GREEN

Data transmit to keypads and loop expanders. It cannot be used for any other purpose.

5.5 Terminal 10 - BLACK

Terminal 10 is the ground reference for Security Command keypads, loop expanders and any auxiliary devices being powered by terminal 7.

SMOKE DETECTOR OUTPUT

6.1 Terminal 11

Nominal 12 VDC is supplied at terminal 11 to power 4-wire smoke detectors. Terminal 10 is the ground reference for terminal 11. The Fire Reset menu option allows you to interrupt power from terminal 11 for five seconds to reset smoke detectors or other latching devices. Refer to the Compatible Fire Devices (LT-0164) for a list of 4-wire smoke detectors compatible with the 1912 panel.

6.2 Current Rating

The Smoke Detector Output current is shared with the auxiliary power supply, terminal 7, described in section 5.2. The total current draw of all 4-wire smoke detectors must be included with terminal 7 calculations and must not exceed the maximum output rating for the auxiliary power supply.

POWERED LOOP FOR 2 WIRE SMOKE DETECTORS

7.1 Terminals 12 and 13

A 2-wire Class B ungrounded powered loop is provided on terminals 12 (positive) and 13 (negative). For programming purposes the loop number is 5. The loop uses a 3.3K Ω EOL resistor, DMP Model 309, provided with the control. The loop has an operating range of 8.8 to 14.2 VDC. The UL compatibility identifier is: A. The powered loop is compatible with the following detectors:

Mfg	Model	Detector ID	Base	Base ID	# of Detectors
SS	1400	A	—	—	12
SS	1451	A	B401 or B401B	A	10
SS	1451DH	A	DH400	A	10
SS	2400, 2400TH	A	—	—	10
SS	2451, 2451TH	A	B401 or B401B	A	10
SS	2451	A	DH400	A	10
DS	DS200/DS200HD	A	MB200-2W	A	15
ESL	422C/422CT	S10P	—	—	25

RA-100 MAY BE USED ON ALL BRK DETECTORS
USE 330 OHM RESISTOR IN MB200-2W BASE
DIFFERENT DETECTOR MODELS MAY NOT BE MIXED

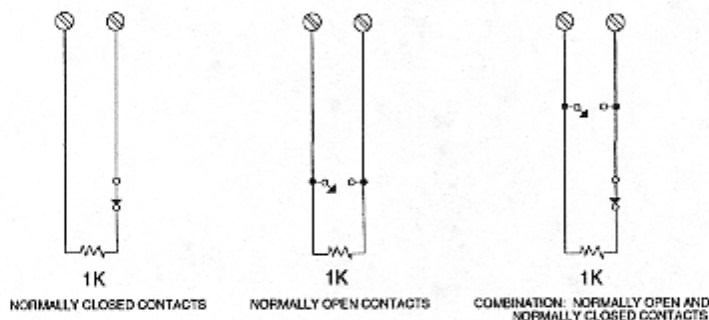
PROTECTION LOOPS

8.1 Description

Loops 1 to 4 on the 1912 panel (terminals 14 to 19) are all Class B grounded burglary loops. For programming purposes, the loop numbers are 1 to 4. Terminals 14 to 19 provide connection as listed below.

Terminal	Function
14	Loop 1 voltage sensing
15	Ground for Loops 1 & 2
16	Loop 2 voltage sensing
17	Loop 3 voltage sensing
18	Ground for Loops 3 & 4
19	Loop 4 voltage sensing

The sensing terminal measures the voltage flowing through a 1000 Ω End Of Line resistor to ground. Dry contact devices can be used in series (normally-closed) or in parallel (normally-open) with any of the burglary protection loops.



8.2 Operational Parameters

Each protection loop detects three conditions: open, normal, and short. The voltage ranges for each of the conditions are listed below:

Condition	Resistance on loop	Voltage on sensing terminal
Open	over 1300 ohms	over 2.0 VDC
Normal	600 to 1300 ohms	1.2 to 2.0 VDC
Short	under 600 ohms	under 1.2 VDC

8.3 Loop Response Time

A condition must be present on a loop for 300 milliseconds before it is detected by the 1912 panel. Detection devices used on the protection loops must be rated for this delay. The loops can be programmed for a fast response delay of 100 milliseconds.

8.4 Keyswitch Arming Loop

Programming a loop as an Arming Type, allows selected areas to arm when the loop is placed into a short condition. The selected areas disarm when the loop is placed into a normal (1K Ω EOL) condition. If placed into an open condition from a normal (disarmed) condition, a trouble is reported. If placed into an open condition from a short (armed) condition, an alarm is reported and the loop is disabled until another disarming occurs within the system. The areas controlled by the loop and the relay outputs that indicate their armed or disarmed status are selected with the 891/891A Programmer.

DRY CONTACT RELAY OUTPUTS**9.1 Description**

Two dry contact relay output sockets are provided on the 1912. The DMP Model 305 relay can be plugged into the sockets labeled K9 (Output 1) and K5 (Output 2). Both outputs provide single pole, double throw contacts and can be operated by a variety of functions.

- 1) Activation by assigned loop condition
 - Steady
 - Pulsing
 - Momentary
 - Follow
- 2) Activation by 24-hour 7 day schedule
 - One ON and one OFF time a day for each relay
- 3) Manually from the Security Command keypad
- 4) Communication failure output
- 5) Armed area annunciation
- 6) Fire Alarm or Fire Trouble

9.2 Contact Rating

The 1912 relay contacts are rated for 1 Amp at 30 VDC or 500mA at 120 VAC. The auxiliary output power from terminal 7 can be internally connected to the common terminal of Relay Output 1 by installing the J15 jumper.

9.3 Harness

The relay contacts are accessible by installing the DMP 304 Harness on the 10-pin header labeled J2. The contact locations on the harness are shown below:

Contact	Color	Wire
Output 1 normally closed	Violet	10
Output 1 common	Gray	9
Output 1 normally open	Orange	8
Output 2 normally closed	Violet	7
Output 2 common	Gray	6
Output 2 normally open	Orange	5

The relay contacts must only be connected to devices located within the same room as the 1912 panel.

12 VDC OUTPUTS 3 To 6

10.1 Description

Four 12 VDC voltage outputs are provided on the 1912 panel. The voltage outputs supply 12 VDC at 50mA each to power external relay coils or other indicators. The voltage outputs can be operated by all of the same functions as Relay Outputs 1 and 2 except schedules.

10.2 Harness

The voltage outputs are accessible by installing the DMP 304 Harness on the 10-pin header labeled J2. The output locations are shown below:

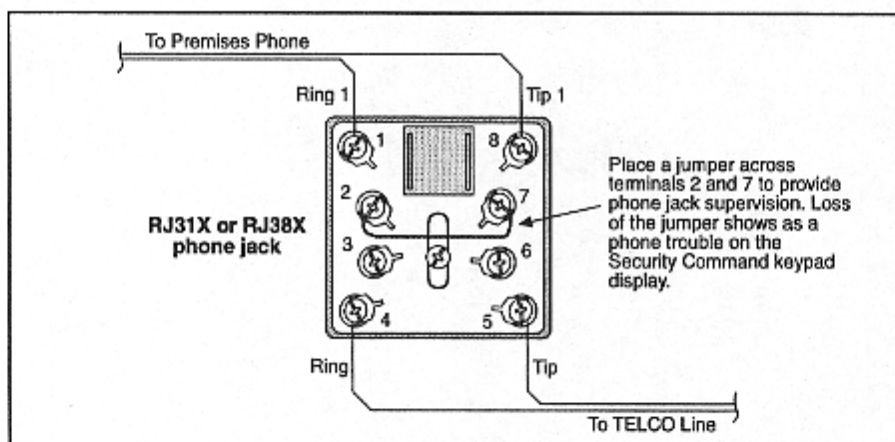
Output	Color	Wire
3	White/Brown	4
4	White/Red	3
5	White/Orange	2
6	White/Yellow	1

The voltage outputs must only be connected to devices located within the same room as the control panel.

TELEPHONE RJ CONNECTOR

11.1 Description

The connection to the switched telephone network is made by installing the DMP 356 RJ Cable into J3 located at the top left hand corner of the 1912 circuit board. The 3-pin headers J11 and J12 must be set to DD for dialer operation and to MPX for multiplex operation.



11.2 FCC Registration

The Model 1912 complies with FCC part 68 and is registered with the FCC. Registration number: CCKUSA-18660-AL-R. Ringer Equivalence: 1.3B

11.3 Notification

Registered terminal equipment must not be repaired by the user. In case of trouble, the device must be immediately unplugged from the telephone jack. The factory warranty provides for repairs. Registered terminal equipment may not be used on party lines or in connection with coin telephones. Notification must be given to the telephone company of:

- The particular line(s) the service is connected to
- The FCC registration number
- The ringer equivalence
- The make, model, and serial number of the device

11.4 Ground Start

For ground start operation, install the DMP 305 Relay into socket K2.

RESET JUMPER J16

12.1 Description

The reset jumper used to reset the microprocessor of the 1912 is located just above the terminal strip in the center of the circuit board. To reset the panel, install the reset jumper over the pins while the panel is powered down then apply power and remove the jumper.

PROGRAMMER CONNECTION

13.1 Description

One 40-pin header is provided for connecting the DMP 891/891A Programmer. The header is located in the top right hand side of the circuit board. The 891/891A Programming Manual (LT-0120) gives complete instructions on the operation of the programmer.

J4 TAMPER CONNECTOR

14.1 Description

Jumper J4 is used for connecting the DMP 306 tamper kit when required for multiplex or Grade A operation.

UNIVERSAL UL BURGLARY SPECIFICATIONS

15.1 Introduction

The programming and installation specifications contained in this section must be completed when installing the 1912 panel in accordance with any of the UL burglary standards. Additional specifications may be required by a particular standard.

15.2 Wiring

All wiring must be in accordance with NEC, ANSI/NFPA 70, UL 681, and UL 611 for burglary installations.

15.3 Control Outside of Protected Area

A Potter EVD or Sentrol 5402 should be used in place of a lined cabinet when the control panel is installed outside of the protected area.

15.4 Police Station Phone Numbers

The digital dialer telephone number programmed for communication must not be a police station phone number, unless that phone number is specifically provided for that purpose.

15.5 Bypass Reports

The bypass reports option must be programmed as YES for all UL burglary applications. See section 7.5 of the 891/891A Programming Manual (LT-0120).

15.6 System Maintenance

Proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential to ensure continuous satisfactory operation of any alarm system. Offering a maintenance program and acquainting the user with the correct procedure for use and testing of the system is also the responsibility of the installing alarm company.

15.7 Multisystem

The Multisystem option must be selected as NO for all UL burglary applications. See section 4.2 of the 891/891A Programming Manual (LT-0120).

15.8 Swinger Bypass

The Swinger Bypass Trips option must be set to zero on all UL burglary systems. See section 8.14 of the 891/891A Programming Manual (LT-0120).

UL 1023 SPECIFICATIONS
Household Burglar-Alarm System Units

16.1 Bell Cutoff

The bell cutoff time cannot be less than five minutes. See section 9.2 of the 891/891A Programming Manual (LT-0120).

16.2 Entry Delay

The maximum entry delay used must not be more than 45 seconds. See sections 8.9 and 8.10 of the 891/891A Programming Manual (LT-0120).

16.3 Exit Delay

The maximum exit delay used must not be more than 60 seconds. See section 8.11 of the 891/891A Programming Manual (LT-0120).

16.4 Weekly Test

The weekly test label (LB-0065) must be installed on the Security Command keypad.

UL 1610, 1076 Specifications
Central-Station and Proprietary Burglar-Alarm Units

17.1 Multiplex Network Capacity

The total number of control panels assigned to one MPX receiving line of the SCS-1 Receiver System must not exceed 90. This is to allow any signal from a 1912 Command Processor to be transmitted to the receiver within 90 seconds. This allows Grade AA Multiplex service.

17.2 Opening/Closing Reports

The Opening/Closing Reports option must be programmed as YES. See section 7.2 of the 891/891A Programming Manual (LT-0120).

17.3 Closing Wait

The Closing Wait option must be programmed as YES. See section 8.6 of the 891/891A Programming Manual (LT-0120).

17.4 Opening Code

The Opening Code option must be programmed as YES. See section 8.4 of the 891/891A Programming Manual (LT-0120).

17.5 Proprietary Dialer

The Model 1912 provides Grade A proprietary service when configured as a digital dialer.

UL 1635 SPECIFICATIONS
Digital Burglar Alarm Communicator System Units

18.1 System Trouble Display

The Status List Display must include at least one keypad that displays system monitor troubles. See section 11.3 of the 891/891A Programming Manual (LT-0120).

18.2 Digital Dialer Telephone Number

Both programmed telephone numbers must begin with a D or P. See section 3.6B and 3.6C of the 891/891A Programming Manual (LT-0120).

18.3 Entry Delay

The maximum entry delay used must not be more than 60 seconds. See sections 8.9 and 8.10 of the 891/891A Programming Manual (LT-0120).

18.4 Exit Delay

The maximum exit delay used must not be more than 60 seconds. See section 8.11 of the 891/891A Programming Manual (LT-0120).

18.5 Automatic Recall

An automatic recall time must be entered so that the Model 1912 transmits the automatic recall message once per day. See sections 3.6D, E, and F of the 891/891A Programming Manual (LT-0120).

18.6 Closing Wait

The Closing Wait option must be programmed as YES. See section 8.6 of the 891/891A Programming Manual (LT-0120).

18.7 System Test

The System Test menu option must be programmed as YES. See section 10.12 of the 891/891A Programming Manual (LT-0120).

18.8 Grade B Central Station

Grade B Central Station service can be provided under UL 1635 by adding a Grade A local audible signal appliance and placing the Model 1912 control into the Model 349A Grade A Attack Resistant Housing.

UL 365, 609 SPECIFICATIONS**Police Station Connected and Local Burglar Alarm Units and Systems****19.1 System Trouble Display**

The Status List Display must include at least one keypad that displays system monitor troubles. See section 11.3 of the 891/891A Programming Manual (LT-0120).

19.2 Entry Delay

The maximum entry delay used must not be more than 60 seconds when using the Model 349A Grade A housing. See section 8.9 and 8.10 of the 891/891A Programming Manual (LT-0120).

19.3 Grade A Bell

A Grade A local audible signal appliance must be used.

19.4 Bell Cutoff

The bell cutoff time cannot be less than 15 minutes. See section 9.2 of the 891/891A Programming Manual (LT-0120).

19.5 Automatic Bell Test

The Automatic Bell Test option must be programmed as YES. See section 9.3 of the 891/891A Programming Manual (LT-0120).

19.6 System Test

The System Test menu option must be programmed as YES. See section 10.12 of the 891/891A Programming Manual (LT-0120).

19.7 Grade A Mercantile

For Grade A Mercantile and Police Station Connect operation the Model 1912 must be mounted in a Grade A attack resistant housing, (DMP Model 349A).

19.8 Mercantile Safe and Vault

When the DMP Model 349A housing is used, the Model 1912 provides operation as a mercantile safe and vault alarm. Bell Supervision and wiring must be in accordance with UL 681. If the Model 1912 is mounted outside the safe or vault, tamper protection and the Sentrol Model 5402 or Potter EVD listed vibration detectors should be used. The Model 1912 does not provide operation as a Bank Safe and Vault alarm.

19.9 Line Security for Police Connect

Basic line security is provided when the Model 1912 is configured as a dialer system. High line security is provided when configured as a multiplex system.

19.10 Transformer

A 40VA transformer must be used. Use the DMP Model 320 or 321.

UNIVERSAL UL, NFPA FIRE ALARM SPECIFICATIONS

20.1 Introduction

The programming and installation specifications contained in this section must be completed when installing the Model 1912 in accordance with any of the UL or NFPA fire standards. Additional specifications may be required by a particular standard.

20.2 Wiring

All wiring must be in accordance with NEC, ANSI/NFPA 70.

20.3 Transformer

A wire in transformer should be used. DMP 320, 16 VAC 40VA.

20.4 End of Line Resistor

The DMP Model 310 1K Ω EOL resistor should be used on all 1K Ω EOL fire loops.

20.5 System Trouble Display

The Status List Display must include at least one keypad that displays system monitor troubles. See section 11.3 of the 891/891A Programming Manual (LT-0120).

20.6 Fire Display

The Status List Display must include at least one keypad that displays troubles and alarms on fire type loops. See section 11.4 of the 891/891A Programming Manual (LT-0120).

20.7 Police Station Phone Numbers

The digital dialer telephone number programmed for communication must not be a police station phone number, unless that phone number is specifically provided for that purpose.

20.8 System Maintenance

Proper installation and regular maintenance by the installing alarm company and frequent testing by the end user is essential to ensure continuous satisfactory operation of any alarm system. Offering a maintenance program and acquainting the user with the correct procedure for use and testing of the system is also the responsibility of the installing alarm company.

20.9 Audible Alarm

When a supplemental audible alarm is used in a fire application, Fire Type loops should be programmed to activate an audible alarm. The Bell Action for Fire Type loops should not be programmed as "N". See section 9.4 and 9.4A in the 891/891A Programming Manual (LT-0120).

20.10 Fire Loop Programming

Fire loops must be programmed to activate a trouble on open conditions and an alarm on short conditions. The swinger bypass function must not be used on any fire loops. If a retard is used on a water flow loop it cannot exceed 60 seconds and any retard in the waterflow initiating devices must be subtracted from the 60 seconds allowed. See sections 13.4 to 13.14 in the 891/891A Programming Manual (LT-0120). The retard delay should not be used on a loop with smoke detectors.

20.11 Model 774 Keypad

The fire key in the upper right corner of the 774 keypad is not intended to replace a manual pull station.

20.12 Style D Loops

If required, the Radionics D129 Dual Style D Initiating Module provides for connection of two Style D loops to the Model 1912. See section 24.4 and the D129 Installation Instructions for wiring information.

UL 985 NFPA 74 SPECIFICATIONS
Household Fire Warning System Units**21.1 Bell Output Definition**

The bell output of the Model 1912 must be programmed to operate steady on burglary alarms and pulsed on fire alarms. See sections 9.4A and 9.4B of the 891/891A Programming Manual (LT-0120).

21.2 System Test

The System Test menu option must be programmed as YES. See section 10.12 of the 891/891A Programming Manual (LT-0120).

UL 864 NFPA 71 – 72 (chapter 9) SPECIFICATIONS
Control Units for Fire-Protective Signaling Systems**22.1 Loop Restoral Reports**

Restoral Reports must be selected as YES. See section 7.4 in the 891/891A Programming Manual.

22.2 System Test

The System Test menu option must be programmed as YES. See section 10.12 of the 891/891A Programming Manual (LT-0120).

22.3 Power Fail Delay

The Power Fail Delay option must be selected as 6 hours. See section 8.13 of the 891/891A Programming Manual (LT-0120).

22.4 Sprinkler Supervisory

Any loop used for sprinkler supervisory must be programmed with "SPRINKLRXX" as the loop name. The last two characters in the loop name may be assigned a number to identify the loop number.

22.5 DACT Systems

Two phone lines must be used. The two phone lines cannot be ground start or party lines. The 893 Dual Phone Line Module is used to provide connection of two phone lines to the system. The backup communication option must be selected as YES.

Two different phone numbers must be programmed for digital communication. See sections 3.6B and 3.6C of the 891/891A Programming Manual (LT-0120). An automatic recall time must be entered so that the Model 1912 transmits the automatic recall message once per day. See section 3.6D, E, and F of the 891/891A Programming Manual (LT-0120).

22.6 Type 2 and Type 3 Central Station Service

Type 2 and Type 3 Central Station service can be provided by using multiplex communication to the DMP SCS-1 Receiver System. The Model 1912 should be set to MPX communication. See section 11.1 of this manual and section 3.5 of the 891/891A Programming Manual (LT-0120).

22.7 Type 1 Central Station Service

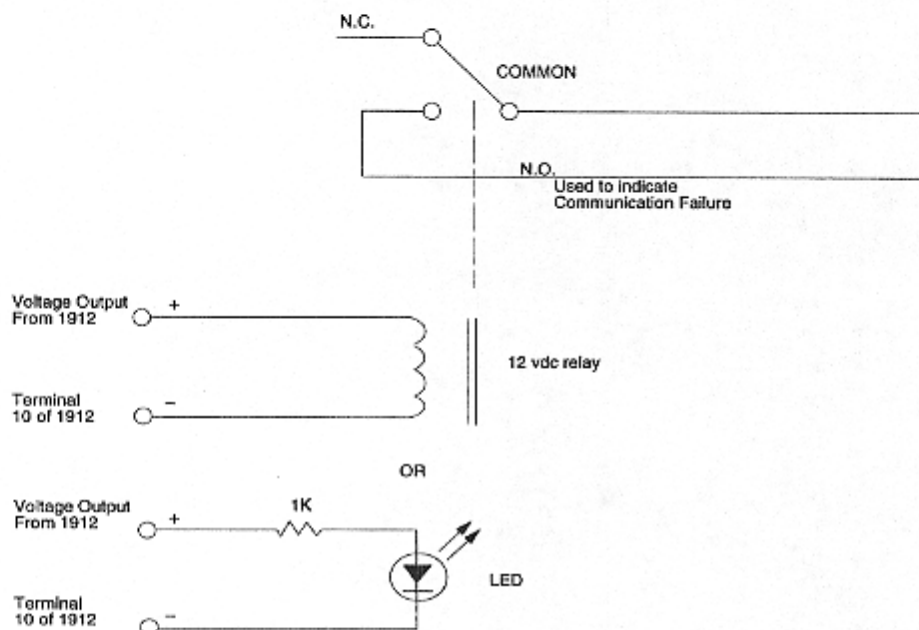
Type 1 Central Station service can be provided by using multiplex as the main communication and digital dialer as backup. The 893 Dual Phone Line Module is used to provide connection of the Multiplex and Dialer lines. See section 3.3 of the 891/891A Programming Manual (LT-0120). If Type 1 Central Station service is provided, an automatic recall time must be entered to test the backup DACT line each day. See section 3.6D, E, and F of the 891/891A Programming Manual.

With both Type 1 and Type 2 Central Station service, the total number of control panels assigned to one MPX receiving line of the SCS-1 Receiver System must not exceed 90. This is to allow any signal from a Model 1912 to be transmitted to the receiver within 90 seconds.

22.8 Keypad 4 Wire Bus

The keypad and loop expander 4-wire bus must be run entirely in conduit and remain inside the same room as the control, unless an external communication failed indicator is added. A 12 VDC relay may be wired as a communication failed indicator. Connect the positive side of the indicator to one of the voltage outputs and the negative side to keypad ground, terminal 10, of the 1912. See Section 10.2.

In addition to the wiring above, the communication failure output must be programmed to activate the appropriate voltage output. See Section 9.5B of the 891/891A Programming Manual (LT-0120). Any keypads which do not have a 24 hour loop installed must have at least one of the loops selected as supervisory with a 1K Ω resistor installed. This loop will then indicate a keypad data bus failure to the central station.



22.9 Proprietary Protective Signaling Systems

The total number of control panels assigned to one multiplex receiving line of the DMP SCS-1 Receiver system must not exceed 90. This is to allow any signal from a Model 1912 to be transmitted to the receiver within 90 seconds.

22.10 Remote Station Protective Signaling Systems

You must provide 60 hours of standby battery. Up to four 12 VDC, 6.5Ah batteries may be used along with a 16 VAC, 40VA transformer, DMP Model 320. See section 3.8 for standby battery calculations. Two Radionics Model D127 Reversing Relay Modules provide two reversing polarity telephone connections. See section 24.5 and the D127 Installation Instruction sheet for wiring details.

CALIFORNIA STATE FIRE MARSHAL SPECIFICATIONS

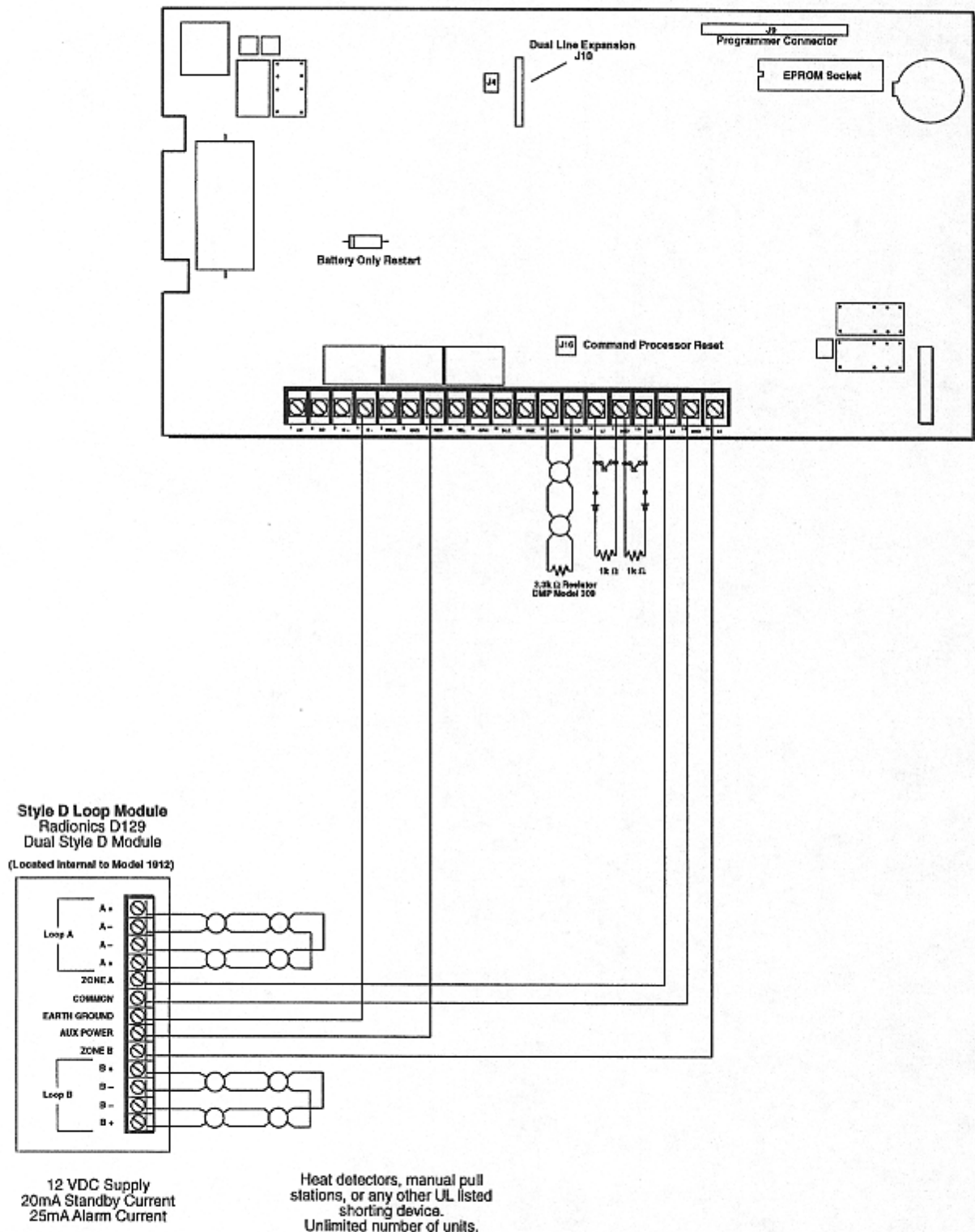
23.1 Bell Output Definition

The bell output of the Model 1912 must be programmed to operate steady on burglary alarms and pulsed on fire alarms. See sections 9.4A and 9.4B of the 891/891A Programming Manual (LT-0120).

23.2 System Test

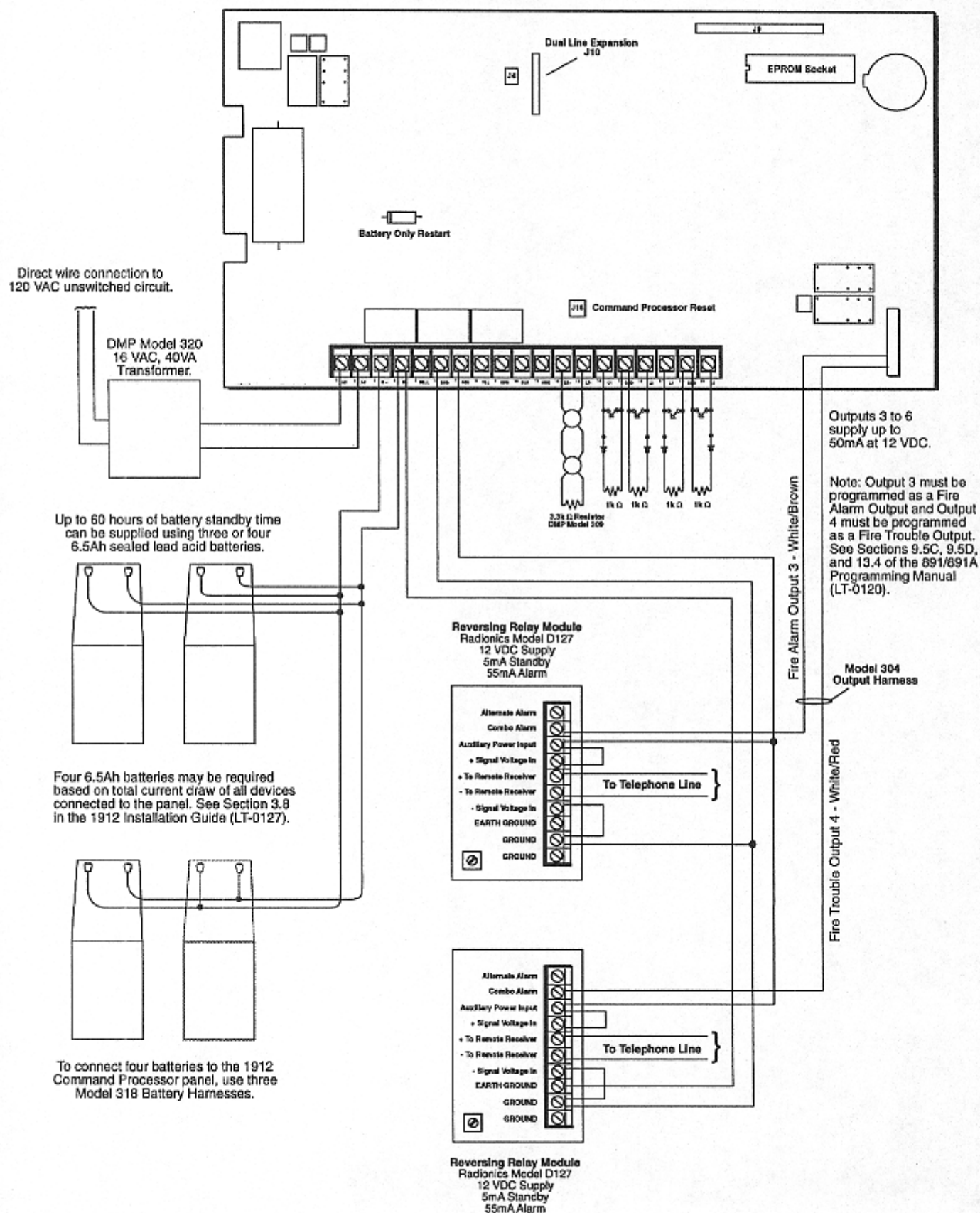
The System Test menu option must be programmed as YES. See section 10.12 of the 891/891A Programming Manual (LT-0120).

24.1 Dual Style D Loop Module Installation



1912 INSTALLATION GUIDE

24.2 Remote Station



Notes