

# FireNET Plus Wiring Instructions

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This manual provides wiring instructions for the 1 loop and 2 loop version of the FireNET Plus panels, which supports our finest Hochiki's DCP protocol.

*Note: Refer to wiring diagrams for specific part numbers and descriptions of all fire control panels covered in this manual. The operation of this product is intended for indoor use only.*

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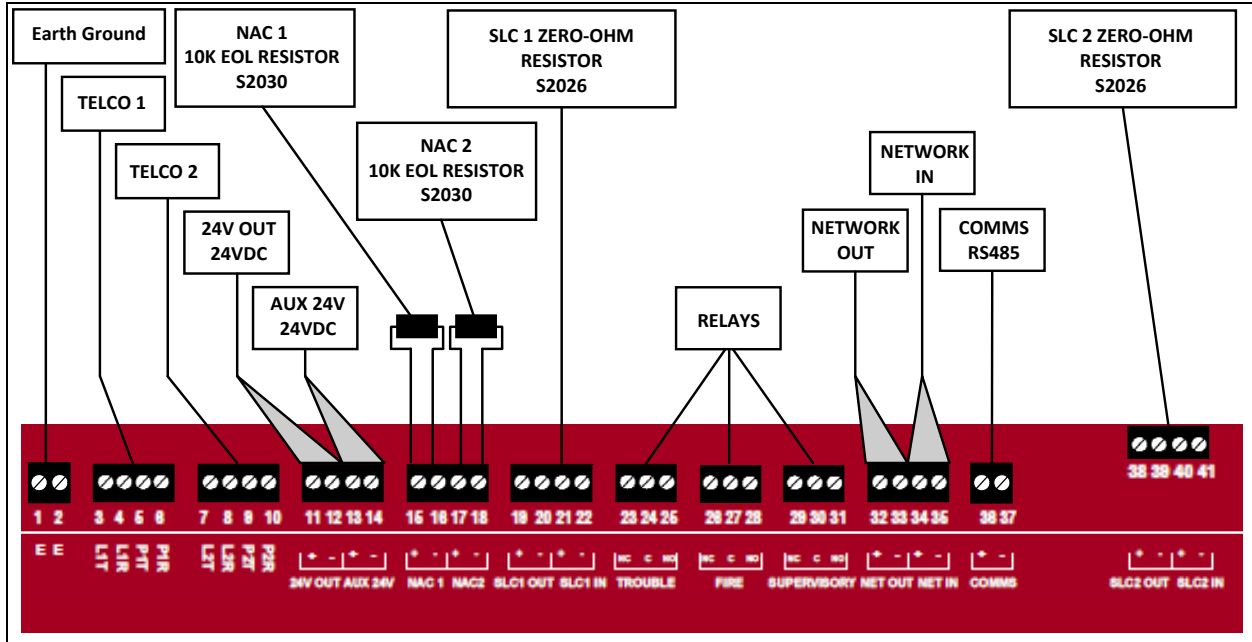


Figure 2

## 5. Model Description


The following are the details of the various FireNET Plus Models:

- FNP-1127 – 1 SLC Loop, Not Expandable
- FNP-1127D – 1 SLC Loop with Integrated DACT, Not Expandable
- FNP-1127E – 1 SLC Loop Expandable to 2 SLC Loops and Networkable
- FNP-1127DE – 1 SLC Loop with Integrated DACT, Expandable to 2 SLC Loops and Networkable

## 6. Power Supply Circuit

Following table is the electrical specification for the Power Supply Circuit:

### Line Connection

Terminals	Description	Voltage	Current
L	AC Line	115 VAC @ 50/60 Hz	2.1 A max
		230 VAC @ 50/60 Hz	1.1 A max
N	AC Neutral		
G 	Earth Ground		

## Power Supply

Parameter	Description
Rating	115 VAC @ 250 VA 230 VAC @ 250 VA
AC Input Fuse	3 A, 250 VAC, Slow-Blow, 5 x 20 mm
Input (Supervised)	115 VAC 50/60 Hz or 230 VAC 50/60 Hz
Transfer Voltage	115 VAC transfer @ 75 VAC 230 VAC transfer @ 160 VAC

## 7. Battery Circuit

Following table is the electrical specification for the Battery Circuit:

Parameter	Description
Standby-Battery Type	Two 12 VDC, 50 AH, Sealed Lead Acid (SLA), batteries
Standby-Battery Charging	Two standby batteries wired in series
Charge Current	Fast charge: 1.25 A Trickle charge: 1.25 A (voltage limited)
Output Current	0 - 4 Amps
Standby-Operating Time	24 Hours
Battery Charge Voltage	27.6 VDC
Fire Control Panel Current Draw From Battery While In Mains Fail, Standby And Not in Alarm	D.P. - TBD mA with buzzer sounding
Maximum Current Draw of FACP, In Alarm	D.P. - TBD mA (Current does not include loads from NACs, Solenoid, Remote Annunciators, Ancillary Boards and Auxiliary equipment)
Maximum Current Draw From Batteries	4 Amps

## 8. Ground Fault

A ground fault indication occurs when 30K Ohms or less is detected between earth ground and the following field terminals of the FireNET Plus Panel:

- ✓ 24V OUT
- ✓ AUX 24V
- ✓ NAC1 and NAC 2
- ✓ SLC1 and SLC2
- ✓ NET IN and NET OUT
- ✓ COMMS

## 9. Power Output Circuits

Special Application outputs are provided on the NAC1 and NAC2 terminals of the FireNET Plus Panel.

## 10. Limited Energy Circuit

All circuits are power limited except for AC input/output and the battery.

## 11. Supervised Circuits

All circuits of the FireNET Plus Panel are supervised except relay terminals for the TROUBLE, FIRE, SUPERVISORY and the TELCO.

## 12. SLC Circuits

SLC circuits of the FireNET Plus Panel operates with Hochiki's DCP-Protocol.

Terminals	Description
SLC1 IN, SLC1 OUT and SLC2 IN, SLC2 OUT	Signaling Line Circuits are Class A, Style 7, Class A, Style 6 or Class B, Style 4.

### 13. NAC Circuits

Following table is the specification for the Notification Appliance Circuits (NAC1 and NAC2):

Parameter	Description
Fuse	Self-resetting 1.6 A electronic
Regulated Continuous Current	Continuous DC currents cannot exceed 1.6 A from NAC 1 and NAC with the total DC current not to exceed 3.2 A.
Regulated Pulsed Current:	Pulse DC currents cannot exceed 900 mA from NAC 1 and NAC with the total DC current not to exceed 1.8 A.
Special Application	24 VDC @ 2.3 A continuous with the combined current of NAC 1 and NAC 2 not to exceed 3.1 A.
Supervision	EOL Device, 0400-01023
Synchronization	<p>Synchronize the regulated output of NAC 1 and NAC 2 with authorized and compatible synchronization modules from Gentex, Amseco, System Sensor or Wheelock. Connect End-Of-Line-Device S2030 to the output of each Synchronization Module installed.</p> <p>The FireNET Plus Panel provides internal device synchronization between the outputs of NAC 1 and NAC 2 when operating NAC devices from Gentex, Amseco, System Sensor or Wheelock.</p> <p><i>External synchronization modules must not be used on the NAC outputs when operating in the special application mode.</i></p>
NFPA Operation Type	Class B, Style Y

#### 1. Maximum Current Ratings

The total sum of device loads in the NAC circuit must not exceed the maximum current specified for the FireNET Plus Panel when operating in Continuous Regulated, Pulsed Regulated, or Special Application mode.

**Note:** Reference NAC manufacturer datasheets for individual device loads and then compare the total sum to the maximum current capability of the FireNET Plus Panel in regulated or special application mode.

#### 2. Single and Dual Circuit Synchronization

NAC channels 1 and 2 of the FireNET Plus Panel provides single and dual circuit synchronization. Single circuit synchronization provides a synchronized output on one of two NAC channels. Dual circuit synchronization provides a synchronized output on both NAC channels.

## 14. Communication Circuits

Phone Line Terminal Connections:

Terminal	Description
L1T	TELCO Line 1 Tip
L1R	TELCO Line 1 Ring
P1T	TELCO Phone 1 Tip
P1R	TELCO Phone 1 Ring
L2T	TELCO Line 2 Tip
L2R	TELCO Line 2 Ring
P2T	TELCO Phone 2 Tip
P2R	TELCO Phone 2 Ring

RS485 Serial Bus:

Terminal	Rating
COMMS (+)	(+) Data 3.3 VDC @ 30 mA max
COMMS (-)	(-) Data

Network Terminals:

Terminal	Rating
NET OUT (+)	(+) Data 3.3 VDC @ 30 mA max
NET OUT (-)	(-) Data
NET IN (+)	(+) Data 3.3 VDC @ 30 mA max
NET IN (-)	(-) Data

## 15. Relay Circuits

The following is the specification for the FireNET Plus Panel Relays:

Parameter	Description
Operation	Common: Operates for all of the signals relative to its type (such as alarm, trouble, supervisory).
Current	1A maximum, volt free change over contact
Voltage	30 VDC max
Power Factor	1.0 PF

## 16. Auxiliary Voltage Circuits

The following is the specification for the FireNET Plus Panel Auxiliary Voltage Circuits:

Terminal	Description
24V OUT	Regulated 24 VDC @ 360 mA max
AUX 24V	Regulated 24 VDC @ 360 mA max

*If you have any questions regarding this matter please contact Technical Support.*

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