

Rev A1.0

WIRING LOOMS

Vehicle and Marine Systems are prepared using wiring Looms. These looms use 0.75mm stranded class 5 shielded fire Rated Cables.

The cable has red outer insulation and has 2 hour fire rating in accordance with Australian Standards for fire systems.



Heat Shrink is applied to each connection to provide both mechanical strength and protection from water ingress.

Colour coding using cable ties makes each circuit easy to identify over the life of the system:



Colour		Circuit
	Red	Power
	Yellow	Activation
	Green 1	Detection 1
	Green 2	Detection 2
	Blue	Thermal Fuse
	Orange	Sounder
	White	Relay Output

The connections are made using Deutsch Plugs (DT Series) and these are provided in the kit for each system. Both 2 pin and 3 Pin Plugs are used to ensure that connections are not mixed.

Cables, which go from panel to the various components will need to be assembled by the installer.

The cable is provided separately from the plugs, and service technicians will need to assemble the cable with plugs, and heat shrink to suit the application. Care should be taken to ensure that each cable is marked with the appropriate colour cable tie.



Heat Shrink should be installed using a heat gun, not a naked flame, which can damage the material. Make sure the Heat Shrink is allowed to cool before completing connection.

Linear Heat Detection is supplied in cut lengths with Deutsch Plugs fitted.

FirePro Units are all supplied with Deutsch plug connection for all systems. This allows for easy connection of the FirePro Test Module (FP-08800) for system testing and commissioning.

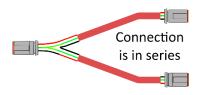


Rev A1.0

FP-08918 - SPLITTER CABLE



Where multiple FirePro generators are used, the activation splitter cables can be used. These are fitted in the cable assembly – this is important for the monitoring and activation circuits.



FP-14016 - BATTERY CABLE



Fire Rated Cable 5A Blade Fuse Fitted with

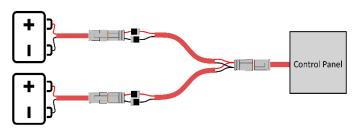
- Deutsch Plug connection to Control Panel
- Battery Terminal Lugs



FP-14020 - DUAL POWER CABLE



Used where the installation has 2 separated power supplies available - e.g. vehicles with dual battery systems. This satisfies the AS requirements for backup battery, saves installing additional battery module.



Rev A1.0

DEUTSCH PLUGS – DT Series

Deutsch Plugs (DT Series) environmentally sealed connectors are designed specifically for cable to cable applications. The connectors are suitable for harsh environment applications where even a small degradation in connection may be critical. Thermoplastic housings offer a wide operating temperature range -55°C to 125°C and silicone rear wire and interface seals allow the connectors to withstand dust and moisture rated to **IP68.** Suitable for up to 13 amps continuous. Contacts: Copper Alloy, Nickel Plated

DT series have been successfully tested to the 20 mm Flammability Test per Standard UL-94.



For crimping the connector pins we recommend using the correct Deutsch Crimping tool as shown.





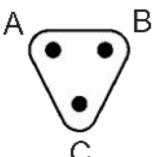
Deutsch Plug 2 Pin Male/Female



a 1 - Active

2 - Neutra

Deutsch Plug 3 Pin Male/Female



A - Active (Red)

B - Neutral (Black)

C - Earth/Shield

Fire Suppression Rev A1.0

Connection of Multiple FirePro Generators

Where multiple FirePro Generators are installed, they must be connected using the FP-08919 Splitter Lead. The Splitter Lead enables the activation current to pass to all FirePro generators and for monitoring of the circuit.

Splitter Leads can be installed at any point on the activation circuit and do not need to be installed adjacent to the fire control panel. For ease of

install, servicing and more efficient field wiring, Splitter Leads should be installed in areas easy to access and minimise extension leads. The activation Circuit is wired in series to allow for fault monitoring.

Installation

- 1.1 FirePro generators **must** remain disconnected until system is completed and fire control panel is no longer in a fault or alarm condition. The FirePro Universal Test Module (P/N FP-08800) can be used to take the panel out of a fault condition.
- 1.2 The supply voltage of any system will determine the wiring which can be used

6vDC Max = 1 FP Units 12vDC Max = 2 FP 24vDC Max = 4 FP Units Units

- 1.3 Where additional units are required in the system a discharge delay module may be required. Need to check the system manual for specifications.
- 1.4 Connection of units

Connection of 2 FirePro Units Activation Cable From Control Panel Repunit 1 Repunit 2 Repunit 3 Repunit 4 Repunit 4 Repunit 5 Repunit 5

Extension Lead Splitter Lead Splitter Lead Splitter Lead Splitter Lead From Control Panel