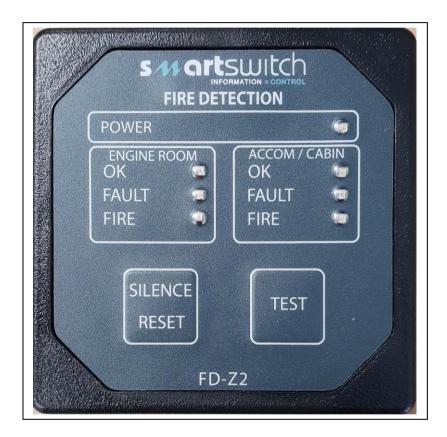


## SMARTSWITCH



# FD-Z2 Fire Detection 2 Zones Installation Manual

#### **FD-Z2** Specifications

Minimum smoke current (alarm current) = 10mA Operate voltage = 9 - 30vdc Quiescent Current = 34mA @12vdc Maximum current per zone = 320mA (including EOL) Siren/Buzzer output = 12vdc @ 800mA All wire = UL Rated

Supply voltage @ 12vdc Maximum sensors = 14 per zone Must use 2k2 EOL resistor

Supply voltage @ 24vdc Maximum sensors = 8 per zone Must use 5k6 EOL resistor

#### FD-Z2 Operation: per zone

"OK" LED On = system is all ok..

"FAULT" LED On = either open or shorted smoke detection cable or sensor.

#### If there is a short on the line:

If a short is detected on the line the "OK "LED will turn Off, the "FAULT" LED and alarm will be turned On, the Sensor Output will also be turned Off. When the "SILENCE / RESET " button is pushed the "FAULT" LED will turn Off and the zone "OK" LED will flash for one minute, after the one minute delay the Sensor Output will be turn On again to check the line. This procedure will repeat until the short is removed.

#### If the line is open circuit:

If a open circuit is detected on the line the "OK "LED will turn Off, the "FAULT" LED and alarm will be turned On. When the "SILENCE / RESET " button is pushed the alarm will be muted.

When the system detects the EOL resistor the "FAULT" LED will turn Off and the "OK" LED will turn On.

"FIRE" LED On = A sensor has detected smoke or heat.

#### SILENT / RESET Button:

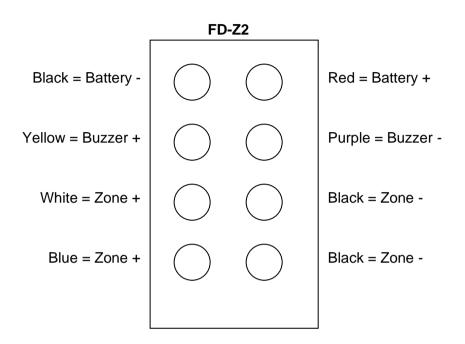
This button will mute the audible alarm and reset the sensors.

The "OK" LED will flash for one minute, after the one minute delay the Sensor Output will be turn On again. This is to allow the smoke to clear the sensor.

TEST Button:

If the TEST button is pressed for three seconds the unit will go into Test mode. All LED'S and the alarm will turn On for five seconds.

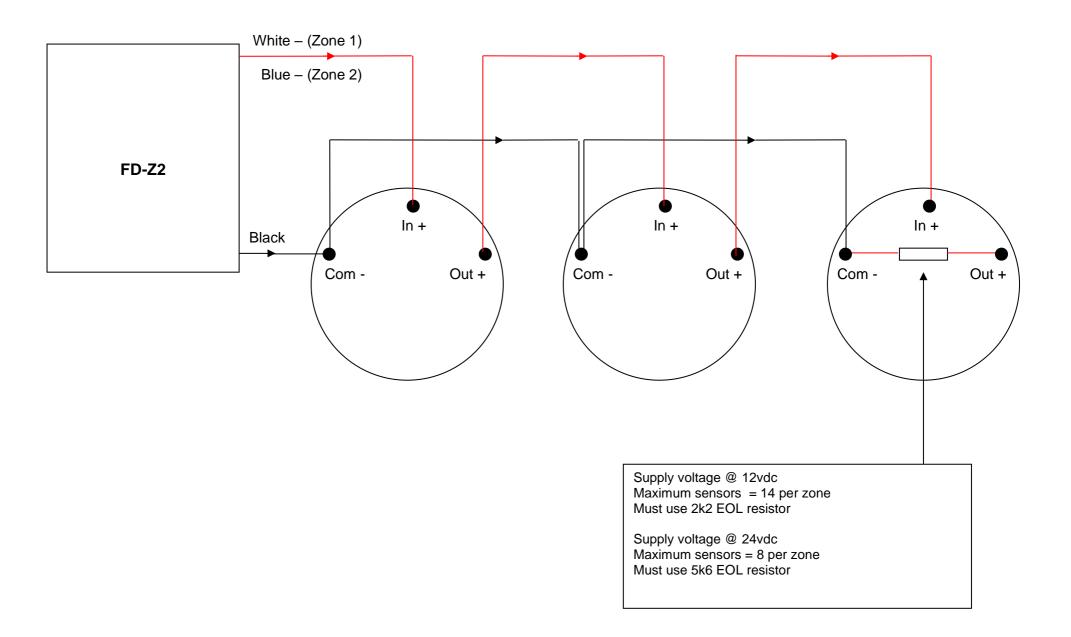
#### FD-Z2 Wiring



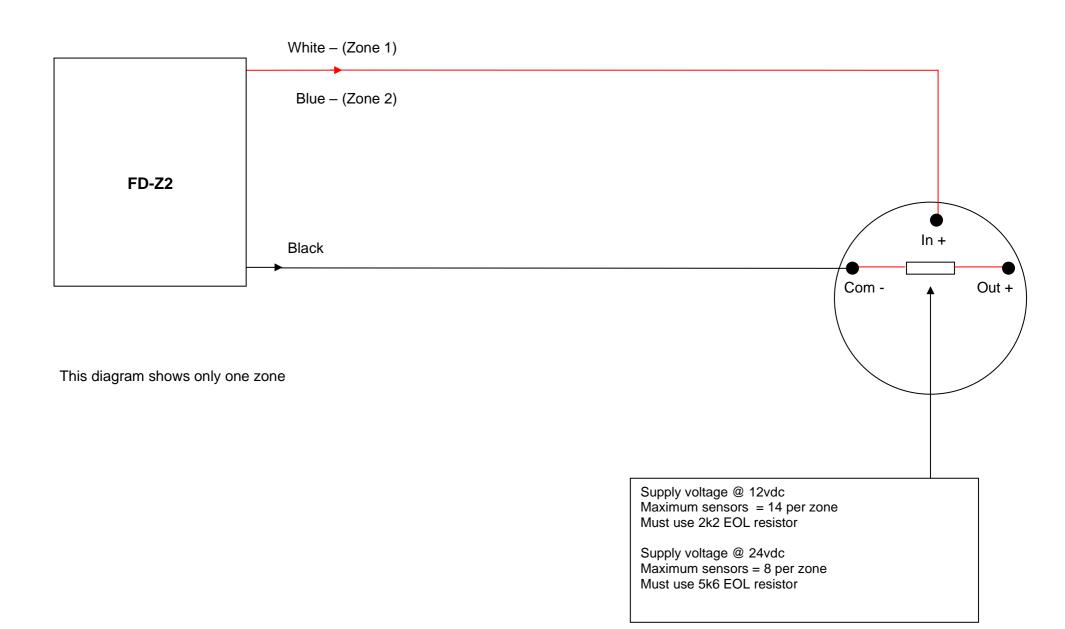


## Connecting Multiple Sensors Per Zone (heat, smoke or both)

This diagram shows only one zone



### Connecting one Sensor (heat or smoke)



NOTE:

If using one Zone only terminate the second Zone with a 2k2 or 5k6 resistor bridge:-

Zone 1 – White to Black

Zone 2 – Blue to Black

Penguin Electronics Ltd

Email: <u>sales@smartswitch.co.nz</u> Web: www.smartswitch.co.nz