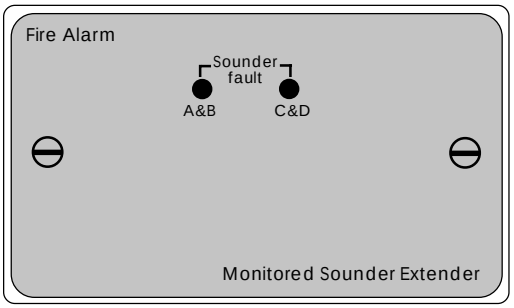
FF502P

UNIVERSAL 4 ZONE MONITORED SOUNDER EXTENDER KIT

CE

GENERAL

The FF502P provides four extra sounder circuits with open and short circuit fault monitoring. It is compatible with most fire alarm control panels and is supplied mounted on a double gang plate which fits standard UK 25mm deep back boxes.

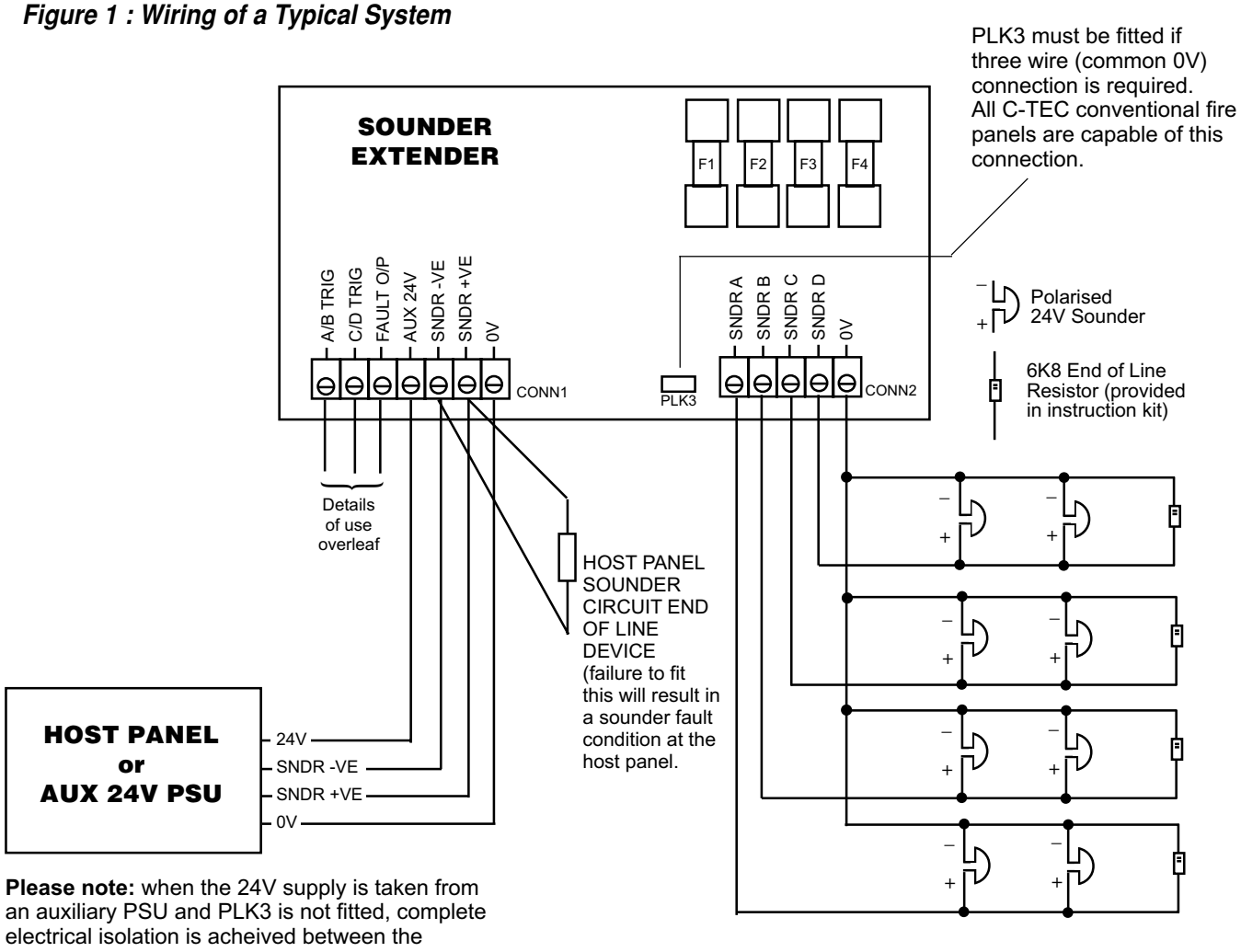


Basic connection requires four wires: 24V DC, 0V, Sounder –Ve & Sounder +Ve.

Sounder -Ve and Sounder +Ve can be connected either at the host panel or at any convenient point on an individual sounder circuit (DO NOT SPUR). 24V DC and 0V can also be derived from the host panel or, alternatively, from an external power supply. However, the power supply to the FF502P must be capable of providing the full anticipated load on all four sounder circuits (see technical specifications overleaf for calculation details).

Please note: If connecting the FF502P to C-TEC's CFP, MFP or FP range of fire panels only three input control wires are required (Sounder -Ve is not required as C-TEC conventional panels have a common 0V rail). If this type of connection is required link PLK3 must be fitted.

Figure 1 : Wiring of a Typical System



Please note: when the 24V supply is taken from an auxiliary PSU and PLK3 is not fitted, complete electrical isolation is acheived between the extension sounders and the host panel.

OPERATION

If an open or short circuit fault is detected on any of the four extender circuits, the FF502P works by connecting a resistor of approximately 680 Ohm across the host panel's sounder circuit. This results in a fault condition being indicated at the host panel on the sounder zone to which the extender board is connected.

Visual indication of open and short circuit faults is also provided at the extender board itself via the two yellow LEDs, L1 & L2. (L1 will light if there is a fault on circuits A or B; L2 will light if there is a fault on circuits C or D).

If the sounder circuit to which theFF502P is connected is activated, it's sounder circuits will automatically follow the sounder output from the host panel.

ADDITIONAL FUNCTIONS

Fault Output trigger:

This is a low current 'pull down' output which can be used for driving external indicators such as a remote LED or to switch in a relay via a transistor (back emf diode must be fitted).

It can also be used to drive a low current trigger input on the fire panel the extension board is connected to. It can be wired to any +Ve voltage less than 30V, such as the 24V on the host panel (see Figure 2 right).

Selectable external trigger(s):

The two sounder circuits (A&B and C&D) can be triggered separately if required by connecting the A/B trig. and C/D trig. inputs to Ov. This can be particularly useful for separate 'zonal' fire outputs or for 'class change' facilities in schools, etc.

Power Supply Monitoring:

The power supply wiring (i.e. 24V and 0V) is not monitored for failure.

If the Sounder Extender unit is located externally from it's power source, monitoring can be achieved by incorporating a 24V relay (C-TEC part no. BF376) as shown in fig. 3.

If this approach is adopted and the power supply lines are broken, a sounder fault condition will show at the host panel.

Fig 2 : Driving a Remote LED from the Fault Output Trigger

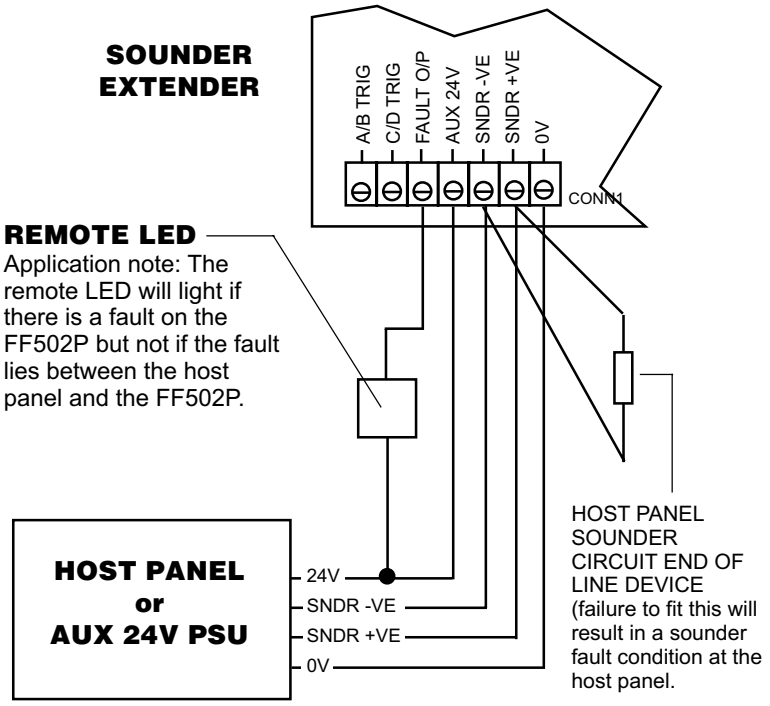
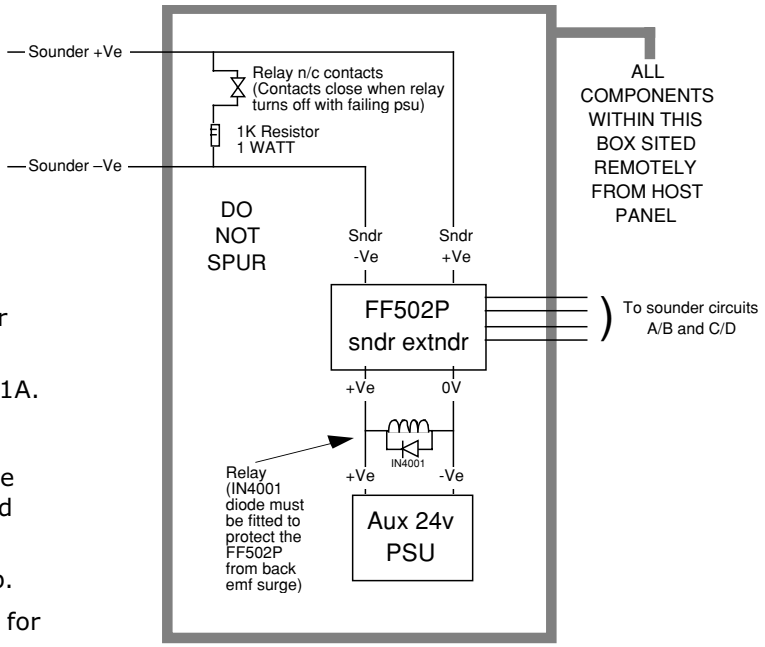


Fig 3 : Enabling Monitoring of a Remote PSU



TECHNICAL SPECIFICATIONS

- Supply Voltage range 15-30V DC.
- Quiescent drain @27V <5mA (Incl. monitor Current).
- Total output current to be no greater than 1A. Max current per circuit 400mA. Each sounder circuit is rated at 400mA. Exceeding the fuse ratings may damage the output of this equipment and is not covered under warranty.
- Dimensions 146mm x 86mm x 20mm deep.
- End of Line Resistors = 4 x 6k8 0.25 Watt, for sounder circuits A,B,C & D.
- A/B & C/D Trigger inputs - Pull down to 0V.