COOPER Safety
Fire Systems

EN54

FX2200BW Range Control Panels

Patented Technology



semi-recessing back box (for 4 and 8 zone panel)



FX2204BWHMO 4 zone control panel



simple user interface

Overview

The JSB range of Bi-Wire control panels are designed with Cooper patented 2 wire technology (Patent Number GB2293257) and also includes patented 'Self-Check' detector features (Patent Number EP:02253889).

Bi-Wire conventional detectors, sounders, LED beacons, and relay modules, all share the same zone wiring, delivering significant savings in both cable and installation costs.

All panels in this range have the facility to flash detector LED's in a zone to facilitate the location of any wiring fault in that zone, thereby simplifying the fault finding process.

The 4 and 8 zone panels provide enhanced features, which includes HMO programming per zone via the easily accessible DIP switch. If a zone is programmed for HMO and a fire occurs in that zone, only the sounders in that zone will sound, if the fire is cleared within 2 minutes, the panel will reset automatically, otherwise the sounders in all the zones will operate.

Features

- 2, 4, and 8 zone panels
- Self-Check features
- Detectors, sounders and relay modules share same wiring
- Repeater output on 4 and 8 zone panel
- Class change facility
- Selectable fire/fault relay
- Supports up to 20 detectors and 20 sounders / ancillaries per zone
- Detector removal indication
- Maintenance-free poly switch
- Weekly test/walk test facility

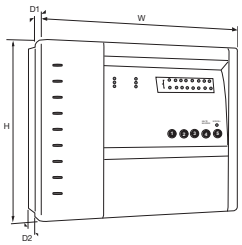
Benefits

- Minimise cabling requirements
- Reduced installation time
- Maximises installation savings
- 4 and 8 zone panels 'HMO' compliant
- Simplified fault finding process
- Improved system integrity

Technical Specification

Code	FX2202BW	FX2204BWHMO	FX2208BWHMO
Description	2 zone Bi-Wire panel	4 zone Bi-Wire panel	8 zone Bi-Wire panel
Standards	EN54 Pt2 & Pt4 EN50130-4: 1996 EN500081-1: 1992, EN61000-2-2: 1994	EN54 Pt2 & Pt4 EN50130-4: 1996 EN500081-1: 1992, EN61000-2-2: 1994	EN54 Pt2 & Pt4 EN50130-4: 1996 EN500081-1: 1992, EN61000-2-2: 1994
Specification			
Number of Zones	2	4	8
Detectors per Zone	20	20	20
Sounders per Zone	20	20	20
Alarm Circuit Load per Zone	150mA	150mA	150mA
End of Line Devices	Active end of line monitoring unit	Active end of line monitoring unit	Active end of line monitoring unit
Auxiliary Fire Signal/Fault Output	1A 24V dc single pole changeover contacts	1A 24V dc single pole changeover contacts	1A 24V dc single pole changeover contacts
HMO Facility	NO	Yes (on all zones)	Yes (on all zones)
Mains Input Voltage	230V ac –10% +15%	230V ac –10% +15%	230V ac –10% +15%
Operating Voltage	24V dc	24V dc	24V dc
Standby Duration	24 hours	24 hours	24 hours
Battery	1 x 2.1Ah (sealed lead acid)	1 x 3.2Ah (sealed lead acid)	2 x 3.2Ah (sealed lead acid)
Recharge Period	24 hours	24 hours	24 hours
Environmental			
Operating Temperature	-5°C to +40°C	-5°C to +40°C	-5°C to +40°C
Humidity (non condensing)	0 to 75% RH	0 to 75% RH	0 to 75% RH
Physical			
Construction	PC	PC	PC
Dimensions	260mm x 212mm x 72mm	332mm x 270mm x 92mm	332mm x 270mm x 92mm
Weight	5.2kg	5.8kg	6.0kg
Ingress Protection	IP30	IP30	IP30
Cable Entry	Top: 6 x 20mm entries with blanking plugs, rear cable entry aperture	Top: 12 x 20mm entries with blanking plugs, rear cable entry aperture	Top: 12 x 20mm entries with blanking plugs, rear cable entry aperture

Dimensions



Description	H (mm)	W (mm)	D1 (mm)	D2 (mm)
2 zone	212	260	72	-
4 and 8 zone	270	332	45	47
Back Box (4 and 8 zone)	264	325	76	-

Description	Cut-out (mm) if back box used
4 and 8 zone	H 265 x W 327 x D 47

Note: If surface mounting add D1 and D2 to obtain depth dimension.

Product Codes

Code	Description
FX2202BW	Bi-Wire 2 zone control panel
FX2204BWHMO	Bi-Wire 4 zone control panel, HMO
FX2208BWHMO	Bi-Wire 8 zone control panel, HMO
FX22003300MB	Semi-recessing back box (for 4 and 8 zone panel)

Installation

1. A full set of Installation and user instructions is supplied with each panel to assist the installer to carry out the work efficiently and safely, and the user to perform routine tests.
2. Panels are designed for wall mounting and can be either surface or semi-flush mounted, via 4 x screw fixing holes on back of housing using the drill template supplied. Recessed mounting requires an appropriate cut-out for the steel semi-recessing box (optional extra), which is screw fixed in to the wall recess. Panel is then screwed to back box via 4 x screw fixing holes (Note: Single zone panel cannot be recessed).
3. Mains power supply cable must be routed via the designated 20mm conduit entry on the top or aperture on rear of the housing. The mains terminal block is provided with maintenance free poly switch protection.
4. 12 conduit entries are provided on the top of the housing for zone, alarm and output cables. Blanking plugs are supplied for un-used entry holes.
5. Standby batteries connected via push-on terminal connectors.
6. End of line (EOL) devices are supplied with the panel and must be fitted at the end of each zone
7. Front cover is screw fixed. System log book is stored behind hinged door.
8. Walk test feature permits single person commissioning (installer) for fast and efficient commissioning prior to handover.

System Functionality

1. Normal and supervisor mode facility. Supervisor mode protected by 4 digit security code to prevent unauthorised use.
2. Supervisor mode provides access to test mode, where a "one-shot" test facility can be initiated by the user. When in operation, the user has a short period of time in which to put a call point into fire condition, after which the system automatically resets and returns to normal mode.
3. Commissioning walk test feature permits the system to be easily tested after installation and prior to handover. The panel automatically resets and returns to normal operation after a detection device has been tested. Each device can then be tested in turn via the same procedure.
4. Supervisor mode also provides facility to disable the following for maintenance or other purposes:
   - Each detection zone independently
   - The outputs (sounders/beacons)

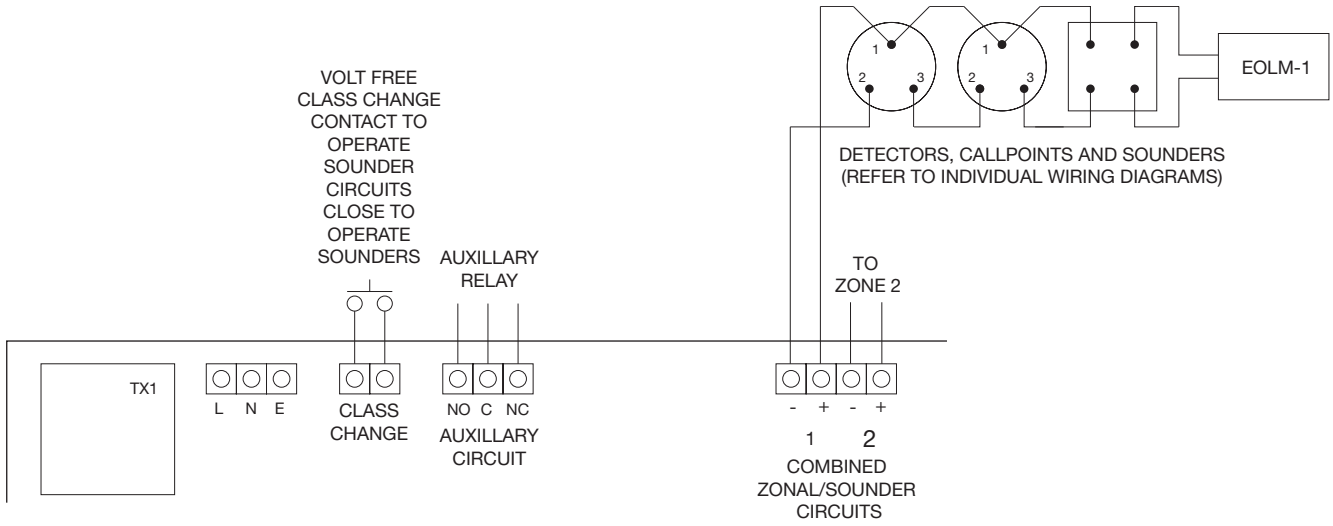
User Interface

1. Stylish and robust compact panel with simple 5 button keypad control of all functions.
2. Simple "one-shot" weekly user test with auto-reset facility.
3. Comprehensive power, fire and fault LED indicators and integral piezo buzzer for on-board fire or fault indication.
4. Battery high/low voltage alarm facility.
5. Neat log book storage facility behind hinged door.

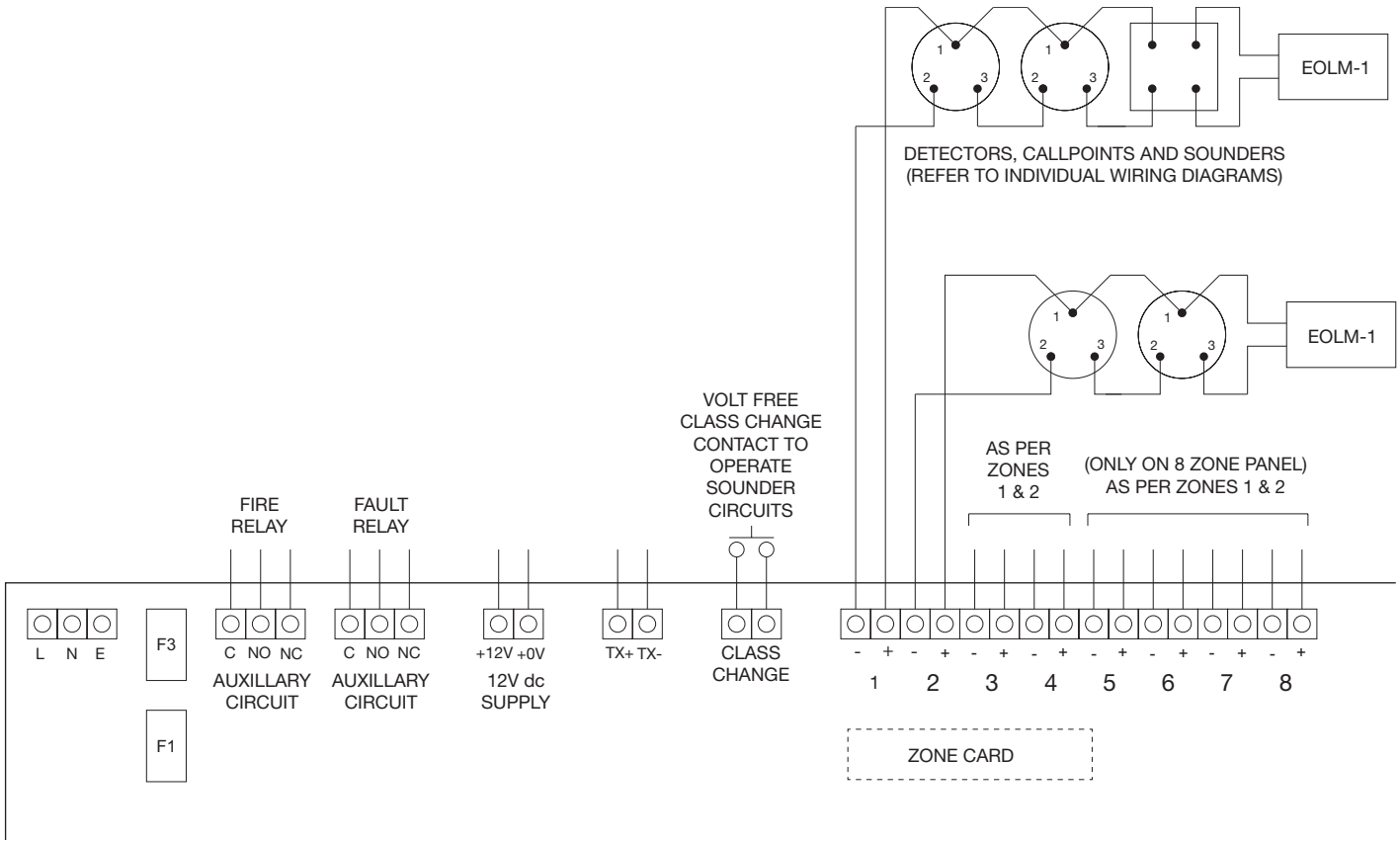
Interface Options

1. Class change input facility. Terminals provided to activate alarms without triggering a fire condition, typically used to indicate school/college class change.
2. Programmable volt free contact relay capable of switching 24V dc 1A for remote signalling of fire or fault conditions. Selectable by jumper link.

Standard Panel Connections - FX2202BW



Standard Panel Connections - FX2204BWHMO and FX2208BWHMO



NOTE:
1. If a base sounder is used as a dedicated sounder(no detector fitted) connect the EOLM or negative out to terminal 2, instead of terminal 3

Cooper Lighting and Safety Ltd, Wheatley Hall Road, Doncaster, South Yorkshire, DN2 4NB. UK.
T: +44 (0) 1302 303350 I F: +44 (0) 1302 303332 I E: techsupport@cooperfire.com I W: www.cooperfire.com