



EVC Master Station

Quick Start Guide

The Crisis EVC Master Station is a ready out of the box EVC system suitable for standalone and small 2 panel network applications up to 8 lines. It is very simple to install, requiring no set up or software, and is compatible with Vox Ignis range of Type A, Type B, Type C outstations and the Assist Call range of emergency assistance alarms.



This guide summarises applicable information from the full manual, which is available from the Eurofyre website by scanning this QR code.

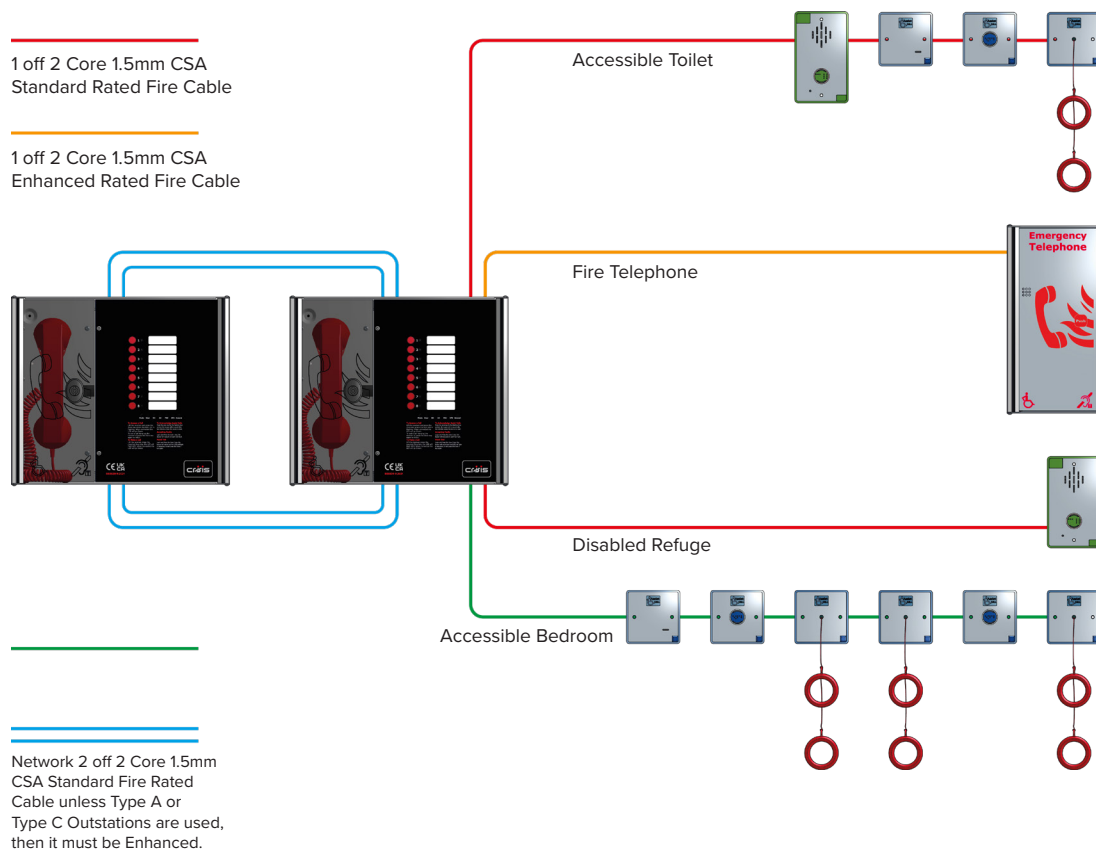



Figure 1: Typical Wiring Diagram - Crisis EVC Master Station

1 Important Safety Information

This Equipment must only be installed and maintained by a suitably skilled and competent person.

This Equipment is defined as Class 1 in EN60065 (Low Voltage Directive) and must be EARTHED.



	Caution: Indoor Use Only
	Warning: Shock Hazard - Isolate Before Opening
	Warning: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE
	Warning: THIS UNIT MUST BE EARTHED
Warning: NO USER SERVICEABLE PARTS	

Each Crisis EVC Master Station requires local isolation with verification as per the Electricity at Work Regulations 1989, returning to a B6A breaker clearly marked “**EMERGENCY VOICE COMMUNICATION SYSTEM. DO NOT TURN OFF**”.



Anti-static handling guidelines


Make sure that electrostatic handling precautions are taken immediately before handling PCBs and other static sensitive components.

Before handling any static-sensitive items, operators should get rid of any electrostatic charge by touching a sound safety earth. Always handle PCBs by their sides and avoid touching any components.

2 Battery Information

In the event of mains failure, BS5839 Part 9:2021 requires battery backup for 24 hours standby and 3 hours operation thereafter.

A Crisis EVC Master Station requires **one number** 12V 7ah vent regulated sealed lead acid battery. The battery is not supplied with the Crisis EVC Master Station.

	Safety Information: Sealed Lead Acid batteries contain sulphuric acid which can cause burns if exposed to the skin. The low internal resistance of these batteries mean large currents will flow if they are accidentally short-circuited causing burns and a risk of fire.
	<i>Exercise caution when handling batteries.</i>
	Power Up Procedure: Always apply mains power before connecting batteries. When connecting batteries, always connect the Positive (Red +) terminal first.
	Power Down Procedure Disconnect the batteries before removing the mains power. When disconnecting batteries, always remove the Negative (Black –) terminal first.

3 Mounting Information

Master Stations should be mounted in fire control rooms or next to the fire alarm panel at a mounting height of between 1.4m and 1.5m above finished floor level to the centre of the controls. Type A outstations (fire telephone) are generally fitted in fire-fighting lobbies and fire and rescues access points at 1.3m to 1.4m above (FFL). Type B outstations are used in disabled refuges at a mounting height of 0.9m to 1.2m (FFL). For Emergency Assistance alarms see Crisis Assist Call datasheet.

Use the 2.5mm AF Hex Key supplied to open the right-hand front cover. Use suitable fixings to mount the back box, there is no need to remove any PCBs or brackets to enable fixing of the enclosure.

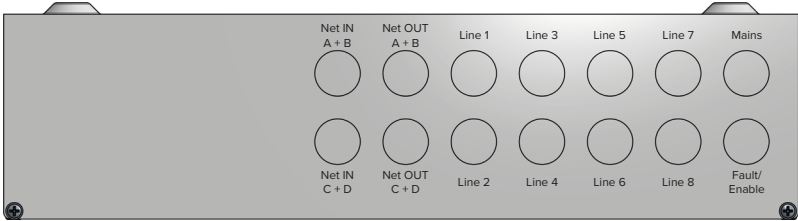


Figure 2: Crisis EVC Network Master Station Top Entries

Unused knockouts must be left unopened to comply with the Low Voltage Directive. Accidentally knocked out holes should be blanked off.

The Crisis EVC Master Station weighs 6kg with batteries, so care should be taken to securely mount the Station on stud walling.

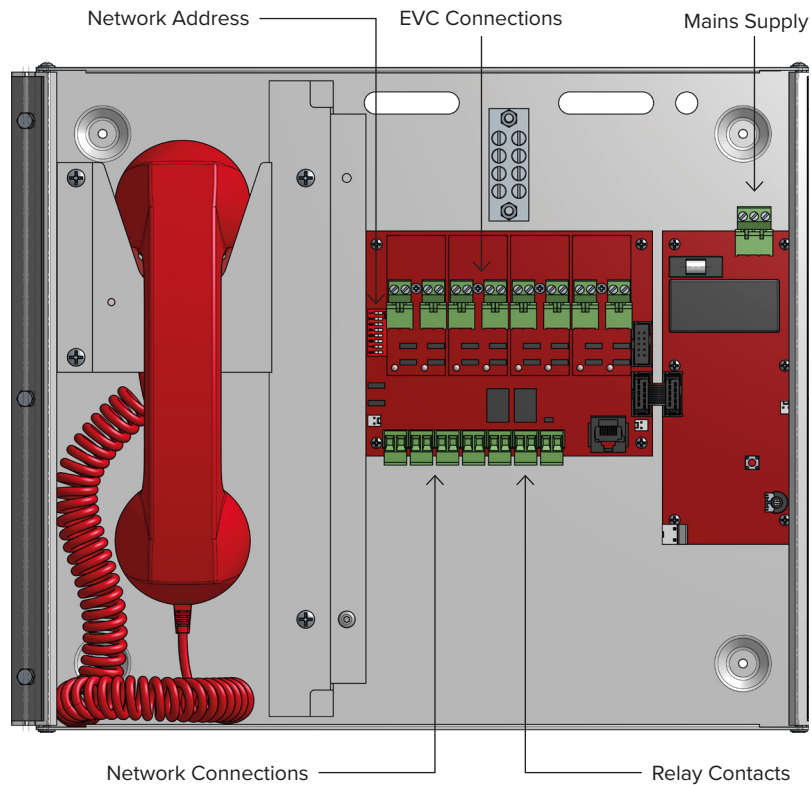


Figure 3: Crisis EVC Master Station Internals

4 Installation

4.1 Cable Information

Fire telephone systems utilise Type A outstations and must use enhanced grade fire resistant cabling throughout for all wiring, including the mains supply to the master station. Maximum distance using 1mm or 1.5mm cable is 500m from outstation to master station.

Disabled Refuge systems utilise Type B outstations, they are wired in standard or enhanced grade fire resistant cabling Refer to BS 5839-9:2021 for full details.

Max distance using 1mm or 1.5mm cable is 500m from outstation to master station.

Emergency assistance alarms (Assist Call) for dedicated circuits use 1mm 2 core flex for lengths of 500m from the master or security cable for shorter lengths from up to 50m for 2 cores up to 200m if 4 cores are twisted together. If sharing with a Type B use the same grade of fire-resistant cable.

4.2 Repeater/Network Wiring

The Crisis EVC Master Station can be connected to another Crisis EVC Master Station to form a small network, maximum of 2 x panels using a maximum of 8 lines, split 8/0, 4/4 or 6/2 across the 2 x panels.

Or it can be connected to an Crisis EVC Repeater. The number of cables and method is the same, see Figure 6.

The default network address for the 2 x panels is 1, they must share the same network address in this example. A EVC Master Station can also form part of a Crisis Network system, please see the full manual for details of wiring etc.

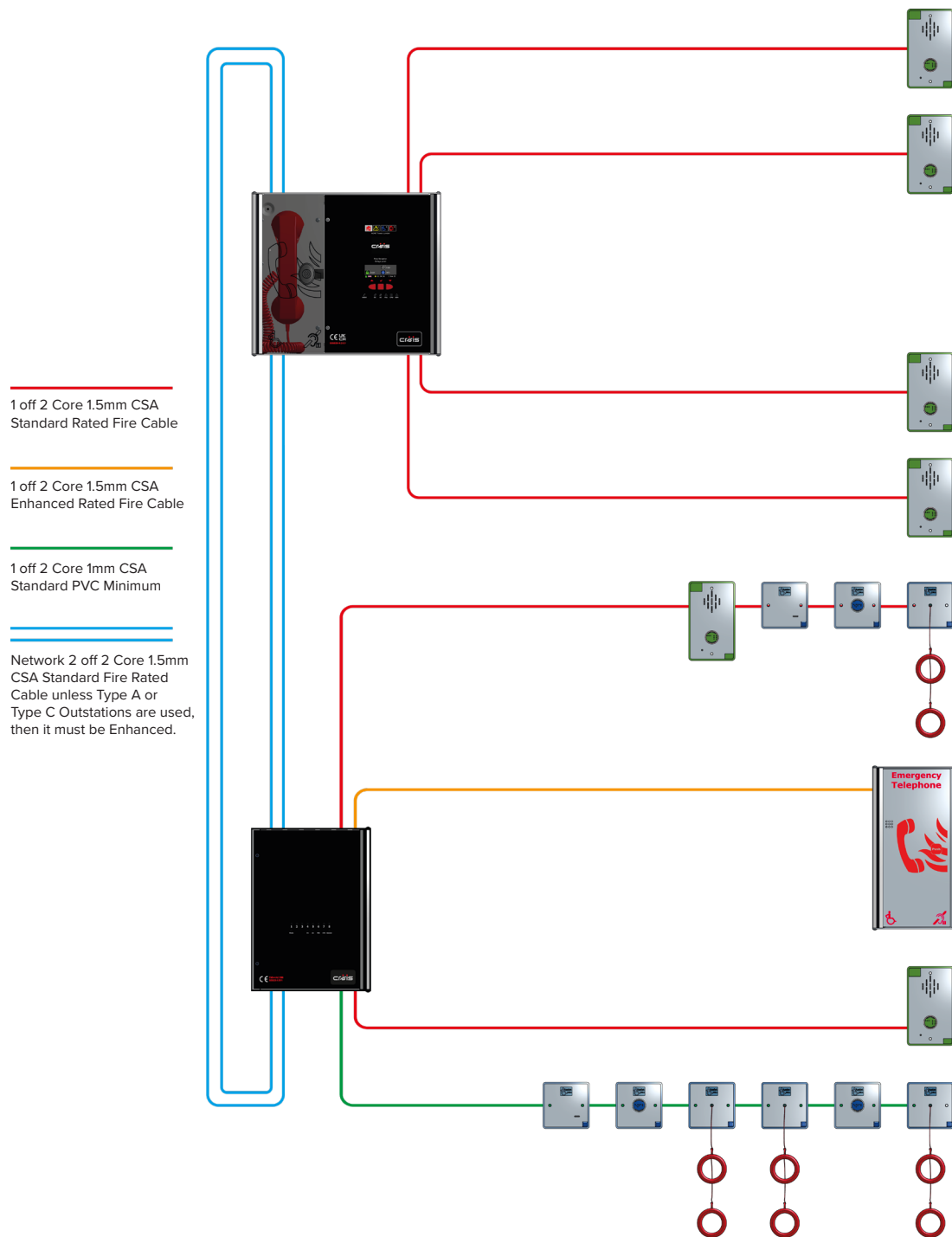


Figure 4: Typical Ring/Network Wiring Diagram - Small Crisis EVC Master Station Network

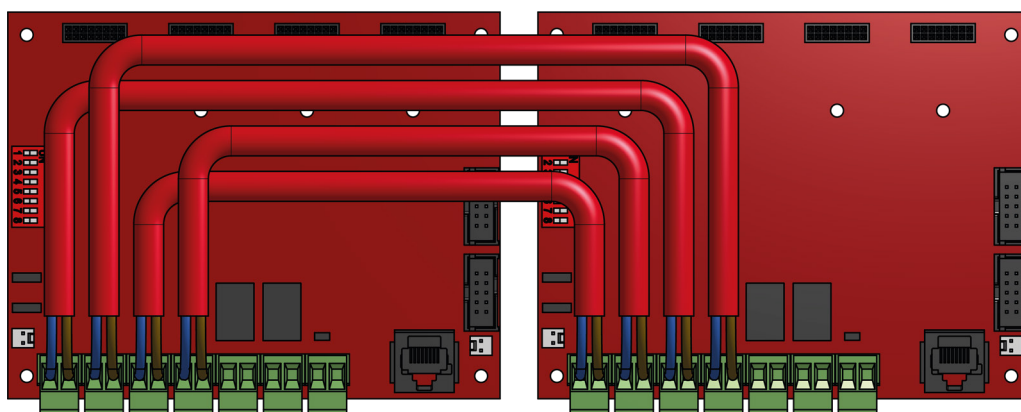


Figure 5: Typical Network Connection Diagram - Crisis EVC Network Master Station



Only connect the earth screens on the Net in cables, cut back and insulate Net OUT earth screens.

4.3 Display PCB DIP Switch Settings

The Crisis EVC Master Station has various site configurations which are configured using the dipswitch located on the rear of the Display PCB.

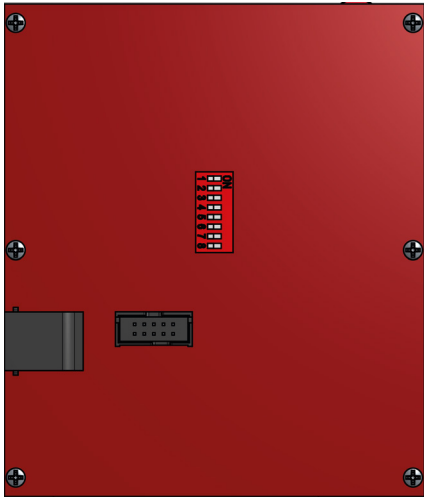


Figure 6: Rear PCB

6.1 Master Station Display PCB Dipswitch Settings

1	2	3	4	5	6	7	8	Remarks
Line 1 & 2	Line 3 & 4	Line 5 & 6	Line 7 & 8	Net In	Net Out	Network	Reserved	
ON								Line Card, 1 fitted
ON	ON							Line Card, 1 & 2 fitted
ON	ON	ON						Line Card, 1, 2 & 3 fitted
ON	ON	ON	ON					Line Card, 1, 2, 3 & 4 fitted
				OFF	OFF	OFF		Default Single Master
				ON	ON	ON		Ring Connected Master
				ON	ON	ON		Ring Connected Repeater

Table 1: Master Station Display PCB Dip Switch Settings

ON = Dipswitch in ON position
OFF = Dipswitch in OFF position

5 Commissioning

The commissioning should be carried out by a competent person who has a basic knowledge and understanding of the design and installation sections of BS 5839-9:2021 and has access to the specification of the project.

1. All wiring should have been checked and be fault free and 10KΩ EOL resistor fitted. The mains and battery can be connected- AC, DC and Mode LEDs should be green.
2. Connect EVC/ Assist Call wiring to the Line cards.
3. Perform intelligibility tests, visit each outstation in turn press call for a Type B or lift the handset in a type A. A 2nd person is required to answer the call.
4. Where Assist Call is fitted, all pull cords in each circuit should be tested, acknowledged at the panel, cancelled at the call location. Ensure all controls and indicators operate correctly.

6 Indications and Controls



Figure 7: Crisis EVC Master Station Indication and Control

6.1 Mode Indicator Summary

Mode	Description
Green Solid	Normal state
Red Solid	Outstation off hook
Blue Solid	Assist call active
Yellow Solid	Refuge (type B) points disabled
Flashing Yellow	Fault on panel

Table 2: Indicator Summary

6.2 Receiving a Call

1. One of the eight zone LEDs and the mode LED will flash red to indicate an incoming call. The flash rate will identify the outstation type, with a Type A outstation having a faster flash rate than a Type B outstation.
2. Lift the Master handset receiver. The User LED will illuminate Red.
3. Press the corresponding zone button (indicated by the red flashing LED). This LED and the User LED will change to flashing green to show that this line is now connected, and a conversation can take place.

6.3 Making a Call

1. To make a call, lift the Master handset receiver and the User LED will illuminate red.
2. Press the zone button for the required outstation. The corresponding zone LED will flash red. This flash rate will be slower than the flash rate for either an incoming Type A or Type B call.
3. When the outstation answers the call, the zone LED flashes green, the mode LED illuminates red and the user flashes green to indicate this line is now connected and a conversation can take place.

6.4 Ending a Call

- To end the call from the outstation, either replace the Type A receiver back on its hook or press the call/cancel button for a Type B outstation.
- To end a conversation from the Crisis EVC Master Station, replace the Master handset receiver back on its hook.



This will not end the call, only the conversation. The outstation will revert back to requesting a call, and the zone LED will flash red to indicate this. The call **MUST** be ended at the outstation.

6.5 Putting a Call on Hold

1. To put a call on hold, press the zone button for the required outstation that is already connected. The zone LED will change from flashing green to flashing green/red. The hold tone will be heard in the handset.
2. To reconnect the call, press the zone button for the required outstation again. The zone LED will change from flashing green/red to flashing green to indicate the call is now connected again.

6.6 Conference Call

Depending upon the number of Line Cards fitted in the Master Station, up to five lines can be connected to the conference call at any one time. To receive a call, see 8.1. To make a call to an individual outstation, see 8.2. The Master Station controls which lines are involved in the conference, and only one conference group is allowed.

6.7 Acknowledging “Assist Call” Alarms

1. When an “Assist Call” goes into alarm, the appropriate zone LED will flash blue, and a two-tone buzzer sounds to indicate that an “Assist Call” alarm has been operated.
2. To acknowledge the alarm, press the corresponding zone button, and the blue LED will illuminate continuously with an intermittent buzzer tone every 15 seconds. If after 2 minutes the “Assist Call” alarm has not been cancelled, the buzzer will resound and the LED will flash blue.
3. Within the WC cubicle the pull cord indicator will change from continuous indication to no indication. The cancel plate will alter from flashing to continuous and the buzzer will change from continuous to intermittent. Outside the cubicle the Over door plate indication will alter from flashing to continuous and the buzzer will change from continuous to intermittent. This change in indication and buzzers during the acknowledge phase indicates to the WC user that help is on the way.

6.8 Accepting Faults

1. Before accepting faults, the fault must be noted in the log book, along with the time the fault was reported.
2. To accept the fault, enter either the access level 2 (code: 1664) or access level 3 (code: 1812) menu, then press zone button 1. The buzzer will silence and the general fault LED will now go steady.
3. Press zone button 8 to exit this menu and to return to the menu options.
4. The buzzer will resound on each new fault.

6.9 Panel Indicator Test

1. To test the panel indicators, enter either the access level 2 (code: 1664) or access level 3 (code: 1812) menu, then press zone button 2.
2. All LEDs will illuminate in a predefined sequence, and the buzzer will sound.
3. Press zone button 8 or button 2 to stop the panel indicator test and to return to the menu options.

7 Outstation Zone Template

There is space to the right of each outstation zone indicator to name the location of the outstation. At the rear of the display door there is a slot located in the centre above the display PCB; the outstation zone template can be inserted here.

The template is in "Word" format and can be downloaded at www.eurofyre.co.uk. This can be completed, printed out and cut to size as shown below.

TAB
Refuge 1 Name Toilet 1 Name
Refuge 2 Name Toilet 2 Name
Refuge 3 Name Toilet 3 Name
Refuge 4 Name Toilet 4 Name
Refuge 5 Name Toilet 5 Name
Spare 1
Spare 2
Spare 3

Figure 8: Crisis EVC Master Station Zone Template

Notes