

EVCS Combined Emergency Voice Communication Systems

Rev 01.00

FAQs

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1 BATTERY AND POWER SUPPLY QUESTIONS

1.1 What is the recommended battery for all Technoswitch Master Stations and Expander Panels?

- The recommended battery is 1x 12 Volt 7AH.

1.2 Flashing DC LED, battery high impedance, necessitating frequent battery changes.

- Usually, due to the incorrect battery being fitted, e.g. 3.2AH is too small, it needs to be 7AH; or a battery cell has failed, and the system requires a new battery.

1.3 Battery Open Circuit – DC LED not illuminated, PSU LED flashing.

- Check that the battery is connected; check the battery lead.

1.4 AC LED not illuminated.

- Check that the mains supply is healthy.

2 OUTSTATIONS

2.1 Type B Outstation – Call/Cancel button is not flashing green, or Type B is not activating when the Call/Cancel button is pressed.

- Generally, this means the Outstation cable is connected cross polarity, reverse wiring, no damage is likely.

2.2 Type A red LED not illuminated.

- Generally, this means the Outstation cable is connected cross polarity, reverse wiring, no damage is likely.

2.3 Type B Outstation operation problematic when Fire Alarm sounders are activated in the same location, i.e., stairwell.

- This is correct. The only sound heard at the Master Station will be the Fire Alarm sounders; the EVC system cannot discern between the speech and the sounder. Possible solutions: isolate the sounders in the stairwell or replace with VADS; a variation to the fire alarm design may be required.

2.4 After adding a dual-line card to the Master Station, the Outstation connected to the new line circuit illuminates red when pressed. No ringing tone at the Outstation or the Master Station is heard, also no calling indication at the Master Station.

- Although the line card has been added, the monitoring has not been switched on. The DIP switch on the rear of the EVS-228 PCB must be set – see section 6 in the EVS-228 Instruction manual (VS-EVS-228 EVCS Installation Manual Rev 07.00 190919).

3 EVS-228 – MASTER STATION

3.1 Outstation calling – call not connecting – LED flashing red on EVS-228 Master.

- Lift handsets, press the button next to the flashing red LED, the LED changes colour to green – conversation can now take place. Technoswitch equipment does not auto-connect when the handset is lifted.

3.2 No status or power LEDs illuminated.

- 5-Volt rail has failed, or CAT5 cable is not connected. Speak to the Technoswitch Technical Department for advice on required replacement PCBs.

3.3 Flashing yellow line indicators, flashing general fault indicator.

- There is an open circuit fault. Probable cause: no 10K EOL resistor fitted or a break in the cable.

3.4 Solid yellow line indicator, flashing general yellow fault indicator, internally the red LED on the line card is illuminated.

- There is a short circuit fault, probably because of a cable fault.

3.5 No sound is coming from the red telephone handset speaker.

- First, check that the red LED in the telephone bracket is illuminated when the telephone is on-hook. If the LED is not illuminated, a replacement telephone bracket or hook switch is probably required.

Secondly, if the LED is illuminated, the handset may be faulty; contact the Technoswitch Technical Department for a replacement part.

3.6 No ringing sound is heard when the master handset is called from an outstation.

- First, check that the red LED in the telephone bracket is illuminated when the telephone is on-hook. If the LED is not illuminated, then a replacement telephone bracket or hook switch is probably required.

3.7 Mode LED illuminated yellow, no buzzer – when Type B Outstations activated, there is no calling indication on the Master Station.

- The mode LED being yellow indicates that the enable feature has been activated so that the Type B Outstations only show on the Master Station when the Fire alarm system has operated. WC Alarms and Type A outstation will operate as normal.

4 EVS-TMS – NETWORK MASTER STATIONS

All faults are indicated by an icon. See *8 TMS Master Station Display Icons* on page 4 of this document for explanations – by pressing the icon, additional information is provided.

4.1 No Status or power LEDs illuminated.

- 5-Volt rail has failed, or CAT5 cable is not connected. Speak to the Technoswitch Technical Department for advice on required replacement PCBs.

4.2 Outstation Call button pressed and appeared to be calling; however, it does not indicate at TMS Master Station.

- Outstation has not been configured, add to site configuration either by using site config spreadsheet or add using edit function on TMS screen. See section 7 for spreadsheet or section 8.12 if using edit screen in the TMS Manual (VS-EVS-TMS Installation Manual Rev 07.01 191206).

4.3 TMS Master or ACR Repeater added to network shows default factory location text rather than previously loaded location text.

- The recently added panel does not automatically receive the text from the network. You need to first log in at engineer level, press the save button on the engineer screen, and wait until the save is complete. Next, press the load button; this will then update the panel that has just been added. The panel needs to be powered and the network cable correctly connected before this stage.

4.4 TMS Master Station still showing default configuration after site configuration has been loaded using the microSD card.

- This is probably due to an incorrect filename being used: the file must be saved as LXConfig and the file type csv (Comma delimited format) – see section 7 in the TMS manual (VS-EVS-TMS Installation Manual Rev 07.01 191206).

4.5 Mode LED illuminated yellow, no buzzer – when Type B Outstations activated, there is no calling indication on the Master Station.

- The mode LED being yellow indicates that the enable feature has been activated so that the Type B Outstations only show on the Master Station when the Fire alarm system has operated. WC Alarms and Type A outstation will operate as normal.

4.6 Master handset open circuit showing on TMS Master Station

- This indicates a problem with the red handset. Check the red curly cable connection or grey cable connection from hook switch to exchange PCB.

4.7 Logs and load icons are missing after inserting the microSD card into TMS Master.

- The card is incorrectly inserted into the cardholder – retry.

4.8 Logs icon is showing, but load icon is missing after inserting microSD card into TMS Master.

This indicates that the correct file type is not present on the microSD card: it must be saved as LXConfig and the file type csv (Comma delimited format) – see section 7 in the TMS manual (VS-EVS-TMS Installation Manual Rev 07.01 191206).

5 SYSTEM EXPANDER PANELS

- 5.1 CPU and general fault showing on Expander Panel, panel data fault showing on TMS Master Station.**
- The Cat 5 lead from the exchange PCB in the expander to the display PCB is plugged into the wrong RJ45 connector labelled “Desk Handset; it should be connected to “Base”.

6 TECHNOSWITCH EVCS NETWORK WIRING FAULTS

- 6.1 Example – Line 1 Open Circuit**
- Open circuit fault present on line 1: Check EOL 10K or break in the cable.
- 6.2 Example – Line 1 Short Circuit**
- Short circuit fault present on line 1: Short in the cable.
- 6.3 Panel missing, Net IN + NET OUT data fault, AUDIO IN, AUDIO OUT fault showing on the TMS display; it will also indicate the number of the affected panel.**
- This could be caused by either a panel being completely powered down with no mains or battery supply or the panel being completely disconnected.
- 6.4 Example – NET IN data fault panel No 3, NET OUT data Fault panel no 2**
- A cable fault is present on the data pair between panel 2 and 3.
- 6.5 Example – Net IN audio fault panel 3, NET OUT audio fault panel 2**
- A cable fault is present on the audio pair between panel 2 and 3.
- 6.6 Example – Panel 2 NET IN Data fault, Panel 3 NET OUT Data fault, Panel 3 NET IN Audio Short Circuit.**
- This will occur when network Data and Audio pairs have been mixed up and connected into the wrong terminals in a panel. AB are Audio terminals; voltage should read 10 Volts DC. CD is the data terminal; monitoring voltage is 5V DC.
- 6.7 General Fault yellow, Panel 2 NET OUT Audio Short circuit Fault, Panel 3 NET IN Audio Short Circuit**
- A short circuit fault is present on the audio pair of the network between panel 2 and panel 3.
- 6.8 General Fault yellow, Panel 2 NET OUT Data Short circuit fault, Panel 3 NET IN Data Short Circuit fault.**
- A short circuit fault is present on the Data pair of the network between panel 2 and panel 3.
- 6.9 General Fault yellow, Panel 2 NET OUT Audio Open circuit Fault, Panel 3 NET IN Audio Open Circuit**
- An open circuit fault is present on the audio pair of the network between panel 2 and panel 3.
- 6.10 General Fault yellow, Panel 2 NET OUT Data Open circuit Fault, Panel 3 NET IN Data Open Circuit**
- An open circuit fault is present on the Data pair of the network between panel 2 and panel 3.

7 ASSIST CALL – EMERGENCY ASSISTANCE ALARMS

- 7.1 Pull cord operates alarm; however, the system cannot be cancelled.**
- Generally, this is due to a cross polarity on the ASSIST CALL circuit between the pull cord and the Cancel plate. Check the wiring and correct it. Note, the circuit is monitored for short and open circuit, not cross polarity.
- 7.2 The call has been acknowledged, but you cannot reset the system.**
- Check the network wiring and earth connections as per section 5.3.6 in the TMS manual (VS-EVS-TMS Installation Manual Rev 07.01 191206). Only connect the earth screens on the NET IN cables. Cut back and insulate the NET OUT earth screens.

8 TMS MASTER STATION DISPLAY ICONS

	Line open circuit.
	Line short circuit.
	Line earth fault.
	Line card missing associated with this line.
	Master handset open circuit.
	Master handset short circuit.
	Network audio open circuit.
	Network audio short circuit.
	Network data fault.
	Mains failure.
	Battery open circuit.
	Battery short circuit.
	Battery impedance fault.
	CPU fault.
	Faults accepted.

9 REVISION INFORMATION

Revision	Date Issued	Reason for Change	Reference
Rev 01.00	20210309	New Document	New Document



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