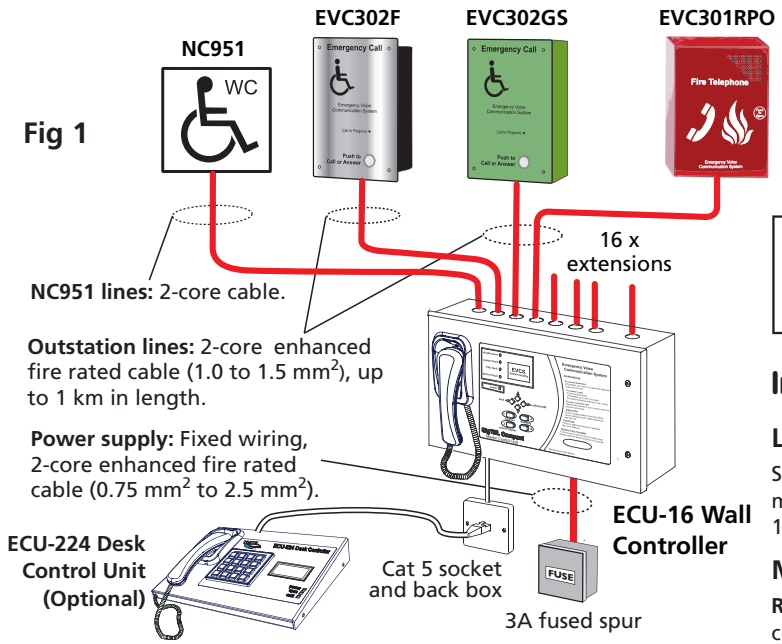
SigTEL (1 to 16 Lines) Standalone EVCS - Quick Start Installation Guide

THIS GUIDE IS ONLY FOR SUITABLY SKILLED AND EXPERIENCED INSTALLERS OF EMERGENCY VOICE COMMUNICATION SYSTEMS (EVCS) and summarises key information provided in the full manual (Document No. DAU0000091). Section numbers, e.g. 6.1 , reference sections in the full manual with additional information.

SigTEL EVCS Typical Wiring Overview

Fig 1



ECU-16 (shown left) has 16 available extensions. ECU-8 has eight and ECU-4 has four.

SigTEL EVCS Components 3

Part No.	Description
ECU-4	4 Line Master EVC Wall Controller c/w handset & display, requires two 12 V 7 Ah batteries
ECU-8	8 Line Master EVC Wall Controller c/w handset & display, requires two 12 V 7 Ah batteries
ECU-16	16 Line Master EVC Wall Controller c/w handset & display, requires two 12 V 7 Ah batteries
ECU-8NT	8 Line Master EVC Wall Controller (no handset) c/w display, requires two 12 V 7 Ah batteries
ECU-224	1-224 Line Desk Control Unit c/w handset and display
EVC302F/GF	Disabled Refuge (Type B) Outstation, flush mounting, stainless steel ('G' - Green fascia)
EVC302S/GS	Disabled Refuge (Type B) Outstation, surface mounting, stainless steel ('G' - Green fascia)
EVC301RPO	Red Fire Telephone (Type A) Outstation c/w handset (push to open)
EVC301RLK	Red Fire Telephone (Type A) Outstation c/w handset (lift lock)
BF359/1	Weatherproof enclosure for EVC302F/GF
BF359/3M	Stainless steel enclosure for controller (ECU-4 / ECU-8 / ECU-16)
BF359/3S	Stainless steel enclosure for controller (ECU-8NT)
NC951	Disabled Persons Toilet Alarm (DPTA)
FITT	EVC Line Tester
BC286/2	24 V 7 Ah battery (2 x 12 V) used with controller (ECU-4 / ECU-8 / ECU-16 / ECU-8NT)
EVC385	Grey flush bezel for controller (ECU-4 / ECU-8 / ECU-16 / ECU-8NT)
T-BEZ301	Red flush bezel for EVC301RPO and EVC301RLK
EVC423	PC programming software

Install the EVCS

Location 6.1

Site all equipment indoors in well-lit areas, free from obstruction. Site wall controllers in the control room or lobby, 1.4 metres above final floor level (FFL). Fit Type A (fire telephone) outstations in fire fighting lobbies and fire access points, 1.3 to 1.4 metres above FFL. Fit Type B (disabled refuge) outstations in disabled refuges, 0.9 to 1.0 metre above FFL.

Mounting 7

Remove base PCBs before first fix installation to protect them and expose the base mounting holes. Wall mount the controllers, either surface or semi-flush. Fix the base securely onto a wall using No.8 round-head, or countersunk screws. After mounting, remove any dust/swarf and re-install base PCBs. Ensure all connecting looms are refitted.

Wiring 4

See **Fig 1** above for cable types. Install wiring in accordance with the relevant national, regional or local regulations (in the UK this is the IEE Wiring Regs BS 7671 and BS 5839 Part 1). Use enhanced fire-rated cables from the controller to the Type A & B outstations and the power supply.

Test Extensions 12

Test all extensions for faults before terminating to the controller using a FITT EVC line tester.

CAUTION: DO NOT use an Insulation Resistance Tester with any devices connected as they will be destroyed and the warranty will be void.

Fit Outstations & NC951 Interface 11

Maximum recommended cable distance to the outstations is 1 km, beyond which audio quality may degrade. For wiring and connection details refer to Type A outstation instructions (Doc. No. DCM0003819) and Type B outstation instructions (Doc. No. DAU0302000).

Connect Extensions 13.1 and Optional Desk Control Unit 13.5 to the Wall Controller

Do not connect extensions to the controller until they have been tested, fault-free and suitable cable glands fitted. Connect extensions directly to the Master Exchange PCB inside the controller (see **Fig 2** left). Connect screens to the earth terminal in the back of the enclosure. For an optional Desk Control Unit (ECU-224), mount a CAT5 wall socket near to the controller's location and connect from the wall socket to the ECU-224 using a CAT5 lead (supplied). Connect two 4-core fire-rated cables (not supplied) from the controller to the wall socket.

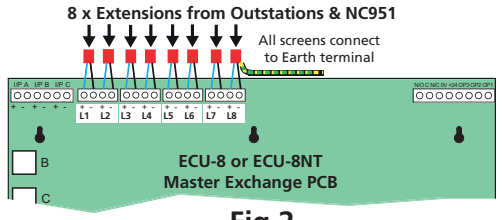
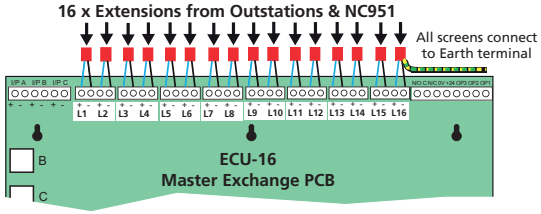


Fig 2



Connecting Mains 10 and Batteries 16

See **Fig 1** overleaf for mains cable type. Connect a 230 Vac supply to the controller via top right knockouts (or, where convenient). Terminate the mains cable at the Power Supply PCB (plug P2) and NOT to main earth chassis (see **Fig 3** right).

For the emergency standby power supply, only use good quality, sealed VRLA batteries. Position and connect two 12 V, 7 Ah batteries (BC286/2) inside the controller using the supplied battery connection leads (see **Fig 4** far right).

Fig 3

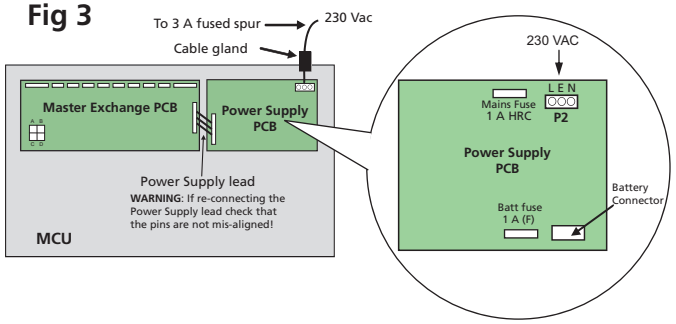
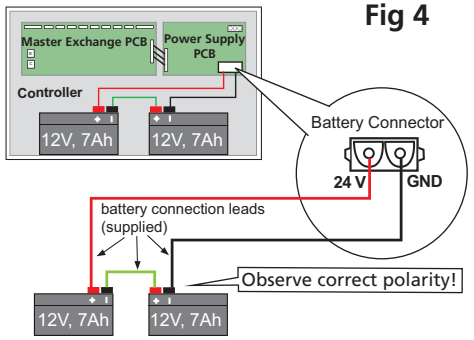


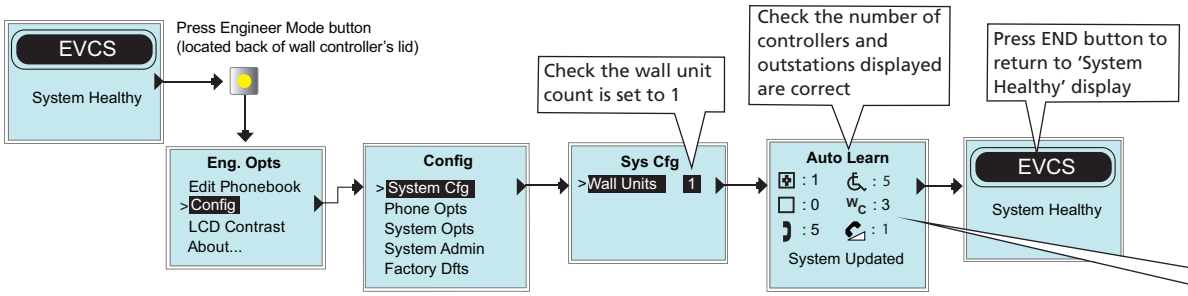
Fig 4



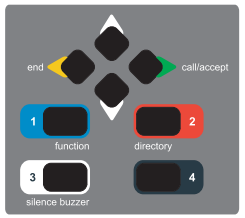
Commission the EVCS

Before commissioning the system ensure that all equipment is fully installed, connected and wiring tested. Check all handsets are on-hook, no calls or faults are present on the system and the controller shows 'System Healthy' status at its LCD display. Configure the system by following the flow chart below.

Configure the system 17.1



Using the Wall Controller's Keypad 14.3



▲	= SCROLL UP
▼	= SCROLL DOWN
CALL/ACCEPT ▶	= MAKE/ACCEPT CALLS & SELECT MENUS
END ◀	= END CALL, ESC TO PREVIOUS DISPLAY & LAMP TEST
FUNCTION (1)	= USER OPTS MENU & PIN CODE ENTRY
DIRECTORY (2)	= DIRECTORY & PIN CODE ENTRY
SILENCE (3) BUZZER	= SILENCE BUZZER & PIN CODE ENTRY
(4)	= PIN CODE ENTRY

What the symbols mean

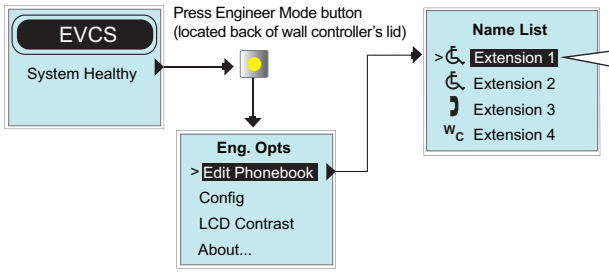
- - No. of wall units c/w phone ECU-4 /-8 /-16
- - No. of wall units ECU-8NT
- - No. of desk control units ECU-224
- - No. of type A (fire telephone) outstations
- - No. of type B (disabled refuge) outstations
- W_C - No. of disabled persons toilet alarms (DPTA)

HINT!

PC Tools (EVC423) are available that allow quick and easy editing of extension names and also provide limited engineering functions. Contact your supplier for details.

Check audio quality and interactively name extensions 17.5

At the wall controller, with the handset on-hook, select the 'Edit Phonebook' option by following the flow chart below. With an operator at the controller, go to each outstation in turn and make a call to the controller lift. The outstation's channel is opened for speech and automatically selected for editing. Check audio quality of the line and inform the operator at the controller your position. They can edit the outstation name directly (see Naming Extensions below). Repeat this process for all remaining outstations.



Naming Extensions

Select 'Edit Phonebook' option.

▲ and ▼ - highlights extension
CALL/ACCEPT - selects 1st character
▲ and ▼ - changes character
CALL/ACCEPT - moves to next character
END - moves to previous character & exits
DIRECTORY - saves changes

Additional Engineer Functions

Add/Remove Controllers, Outstations & DPTA 17.3

Change PIN Code 18.1

Set up Auto-Answer 18.5

Set Up Latch Faults 18.3

First Come, First Served 18.6

Clear Recent Calls 18.4