

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

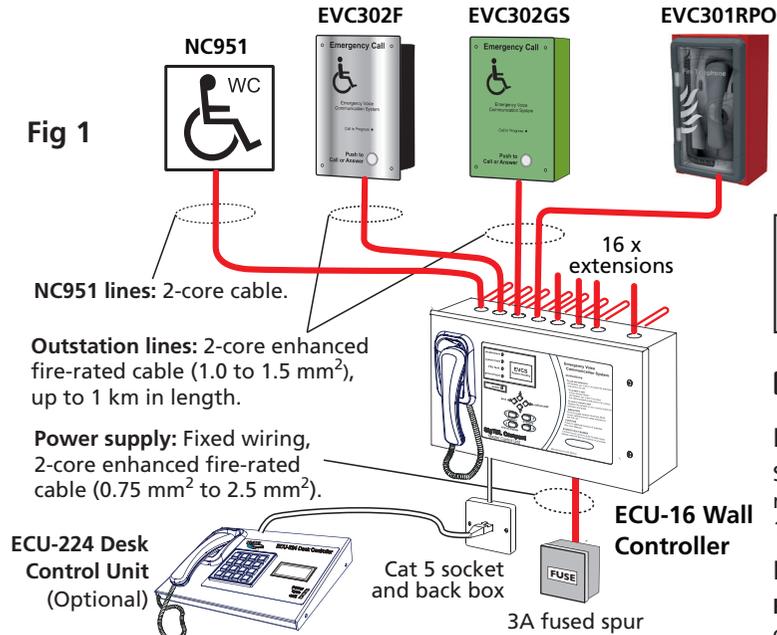


Fig 1

NC951 lines: 2-core cable.

Outstation lines: 2-core enhanced fire-rated cable (1.0 to 1.5 mm², up to 1 km in length).

Power supply: Fixed wiring, 2-core enhanced fire-rated cable (0.75 mm² to 2.5 mm²).

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

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 metres 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

The 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. DAU0000301) 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 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.

SigTEL EVCS Components 3

Part No.	Description
ECU-4	4 Line Master EVC Wall Controller c/w handset & display, requires two 12V 7 Ah batteries
ECU-8	8 Line Master EVC Wall Controller c/w handset & display, requires two 12V 7 Ah batteries
ECU-16	16 Line Master EVC Wall Controller c/w handset & display, requires two 12V 7 Ah batteries
ECU-8NT	8 Line Master EVC Wall Controller (no handset) c/w display, requires two 12V 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)
EVC302RPO	Fire Telephone (Type A) Outstation c/w handset (pull-to-open)
EVC302RLK	Fire Telephone (Type A) Outstation c/w handset (lift key lockable)
BF359/1	IP66 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) interfaces
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-BEZ302	Red flush bezel for EVC302RPO/RLK
EVC423	EVC Configurator Tools

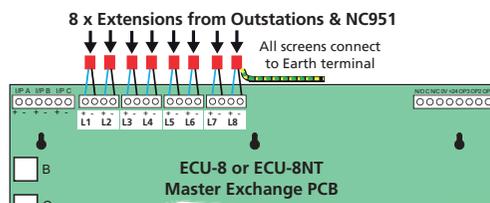
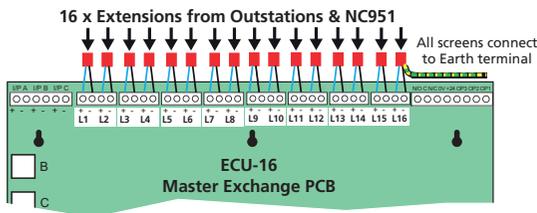


Fig 2



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 the 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

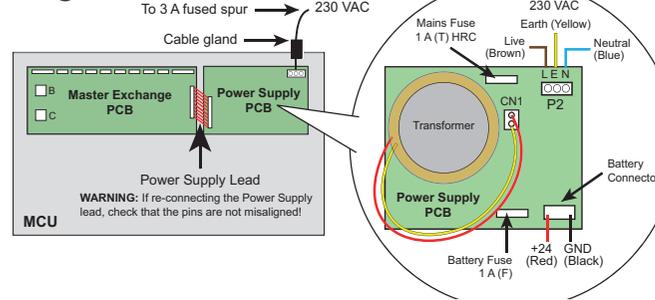
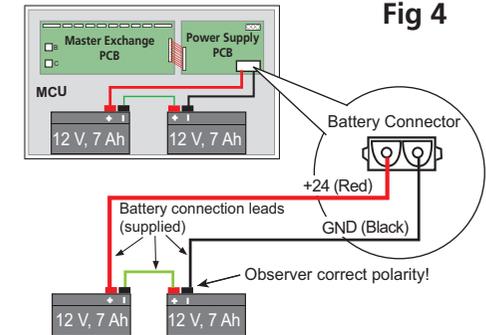


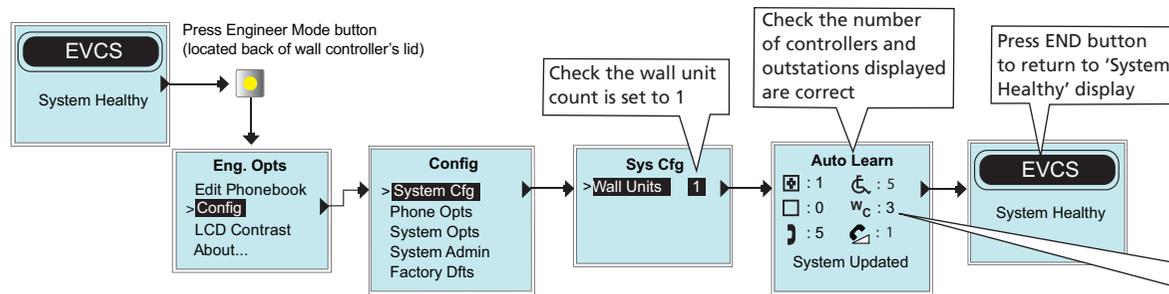
Fig 4



Commission the EVCS

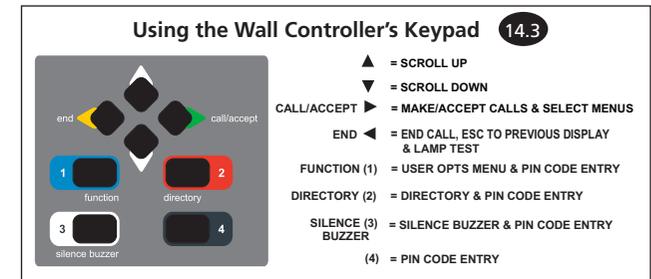
Before commissioning the system ensure that all equipment is fully installed, connected and wiring tested. Check all handsets are on-hook, no calls or faults are present on the system and the controller shows 'System Healthy' status at its LCD display. Configure the system by following the flow chart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

Configure the system 17.1



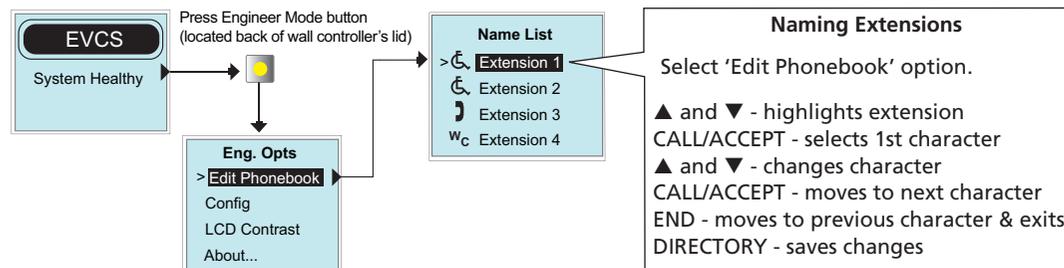
HINT!

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 wall controller, go to each outstation in turn and make a call. At the controller lift the handset. 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.



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)

Additional Engineer Functions

Add/Remove Controllers, Outstations & DPTA interfaces 17.3

Change PIN Code 18.1

Clear Recent Calls 18.4

Set Up Latch Faults 18.3

Set up Auto-Answer 18.5



Manufacturer: SigNET AC Ltd, 6 Tower Road, Washington, Tyne & Wear NE37 2SH. www.signet-ac.co.uk. E&OE. No responsibility can be accepted by the manufacturer or distributors of these power supplies for any misinterpretation of this instruction, or for the compliance of the system as a whole. The manufacturer's policy is one of continuous improvement and we reserve the right to make changes to product specifications at our discretion and without prior notice.