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

**THIS GUIDE IS ONLY FOR 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**

**Install the EVCS**

Site all equipment indoors in well-lit areas, free from obstruction. If background noise exceeds 40 dBA, use an acoustic hood. Site control unit(s) 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**

Remove base PCBs before first fix installation to protect them and expose the base mounting holes. Wall mount the control units, either surface or semi-flush. Fix the base securely onto a wall using No.8 round-head, or countersunk screws. If an optional ECU-8S is fitted make the interconnections to the ECU-4/ECU-8 using supplied looms and short length of steel conduit (25 mm OD, max. length 60 mm). After mounting, remove any dust/swarf and re-install base PCBs. Ensure all connecting looms are refitted.

**Wiring and Cable Entry**

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 outstations / NC951 and the power supply.

**Test Extension Lines**

Test all lines for faults before terminating extension lines to the control unit. Also, test outstation lines using a FITT EVC line tester (see component list above).

**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**

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 Extension Lines to the Control Equipment**

Do not connect extension lines to the ECU-4/ECU-8, or optional ECU-8S, until they have been tested, fault-free and suitable cable glands fitted. Connect extension lines directly to the Exchange PCB (see Fig 2 left). Connect screens to the earth terminal in the back of the enclosure.

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**SigTEL EVCS Components**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>ECU-4</td>
<td>4 Line Master EVC Controller c/w handset &amp; display, needs 2 x 7 Ah batteries</td>
</tr>
<tr>
<td>ECU-8</td>
<td>8 Line Master EVC Controller c/w handset &amp; display, needs 2 x 7 Ah batteries</td>
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<tr>
<td>ECU-8NT</td>
<td>8 Line Master EVC Controller (no handset) c/w display, needs 2 x 7 Ah batteries</td>
</tr>
<tr>
<td>ECU-8S</td>
<td>8 Line Slave EVC Expansion Unit (adds 8 extra lines to ECU-4, ECU-8, ECU-8NT)</td>
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<tr>
<td>EVC3001GF</td>
<td>Disabled Refuse (Type B) Outstation, flush mounting, SS (G - Green steel)</td>
</tr>
<tr>
<td>EVC3021GF</td>
<td>Disabled Refuse (Type B) Outstation, surface mounting, SS (G - Green steel)</td>
</tr>
<tr>
<td>EVC3011RPO</td>
<td>Red Fire Telephone (Type A) Outstation c/w handset (push to open)</td>
</tr>
<tr>
<td>EVC3011RLK</td>
<td>Red Fire Telephone (Type A) Outstation c/w handset (fit lock)</td>
</tr>
<tr>
<td>BF3591F</td>
<td>Weatherproof enclosure for EVC3021GF</td>
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<tr>
<td>BF3591D</td>
<td>Stainless steel enclosure for ECU-4/ECU-8/ECU-8NT</td>
</tr>
<tr>
<td>NC951</td>
<td>Disabled Persons Toilet Alarm (DPTA)</td>
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<td>FITT</td>
<td>EVC Line Tester</td>
</tr>
<tr>
<td>BC2862/2</td>
<td>24 V, 7 Ah battery (2 x 12 V) used with ECU-4/ECU-8/ECU-8NT</td>
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<tr>
<td>AFPBS6</td>
<td>Grey flush bezel for ECU-4/ECU-8/ECU-8NT</td>
</tr>
<tr>
<td>T-BEZ1S1</td>
<td>Red flush bezel for EVC3011RPO and EVC3011RLK</td>
</tr>
<tr>
<td>ECU423</td>
<td>PC programming software</td>
</tr>
</tbody>
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**SigTEL**

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Connecting Mains and Batteries

See Fig 1 overleaf for mains cable type. Connect a suitable 230 Vac supply to the ECU-4/ECU-8 via the base knockouts. 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) to the ECU-4/ECU-8 using the supplied battery connection leads (see Fig 4, far right).

Commission the EVCS

Before commissioning the system ensure that all equipment is fully installed, connected and wiring tested. Check all handsets are on-hook and no calls or faults are present on the system. The ECU-4/ECU-8 shows ‘System Healthy’ status at its LCD display. Configure the system by following the flow chart below.

Configure the system

At the ECU-4/ECU-8, with the handset on-hook, select the ‘Edit Phonebook’ option by following the flow chart below. With an operator at the ECU-4/ECU-8 lift the handset and press the ACCEPT button. 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 ECU-4/ECU-8 your position.

Check audio quality and interactively name extensions

At the ECU-4/ECU-8, with the handset on-hook, select the ‘Edit Phonebook’ option by following the flow chart below. With an operator at the ECU-4/ECU-8, go to each outstation in turn and make a call. At the ECU-4/ECU-8 lift the handset and press the ACCEPT button. 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 ECU-4/ECU-8 your position. They can edit the outstation name directly (see Naming Extensions below). Repeat this process for all remaining outstations but avoid confusion only call in from one outstation at a time. Outstations can also be manually named if you are sure of its location.

Naming Extensions

Select ‘Edit Phonebook’ option.

- and \( \text{\( \uparrow \)} \) - highlights extension
- ACCEPT - selects 1st character
- and \( \text{\( \downarrow \)} \) - changes character
- ACCEPT - moves to next character
- END - moves to previous character & exits DIRECTORY - saves changes

Errors and omissions excepted. No responsibility can be accepted by the manufacturer or distributors of this product 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.

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