

SigTEL Type B Outstation Manual



IMPORTANT

THIS SECTION MUST BE READ PRIOR TO THE INSTALLATION / MAINTENANCE OF THIS PRODUCT

This equipment must only be installed and maintained by a suitably skilled and technically competent person. No responsibility can be accepted by the manufacturer or distributors of this product for any misinterpretation of an instruction or guidance note or for the compliance of the system as a whole.

Emergency voice communication system design is beyond the scope of this document. An understanding of system components and their use is assumed.

Overview

Emergency voice communication system Type B outstations are normally used to allow communication between disabled refuges and management at a control point.

Building regulations Approved Document B says that some people may not be able to use stairways without assistance and that for them, evacuation involving the use of refuges on escape routes and either assistance down (or up) stairways, or the use of suitable lifts, will be necessary.

What are refuges and where are they required?

Refuges are relatively safe waiting areas for short periods. They are not areas where disabled people should be left alone indefinitely until rescued by the fire and rescue service, or until the fire is extinguished.

In phased evacuation the first people to be evacuated are all those of reduced mobility and those on the storey most immediately affected by the fire.

Refuges should lead directly to a safe route to a storey exit, evacuation lift or final exit, thus being a temporarily safe space for disabled people to wait for assistance for their evacuation.

A refuge should be provided for each protected stairway allowing exit from each storey, except storeys consisting exclusively of plant rooms.

Refuges should not be confused with "Places of relative safety" - see BS 5588-8 & BS 5839-9:2003 for details.

Location

Type B outstations should normally be mounted 0.9 to 1.2 metres above the floor in an easily accessible, well illuminated and conspicuous position free from obstruction.

As far as practicable, outstations in buildings should be located where background noise is normally low [preferably not more than 40 dBA]. Where there is a higher level of background noise, the installation of an acoustic hood around the outstation might help to reduce the effect of background noise to an acceptable level.

Cabling

Use two-core 1.5mm² enhanced fire resistant cable up to 1000 metres from the exchange. Other cables may work but will not comply with the recommendations of BS 5839-9.

Installation

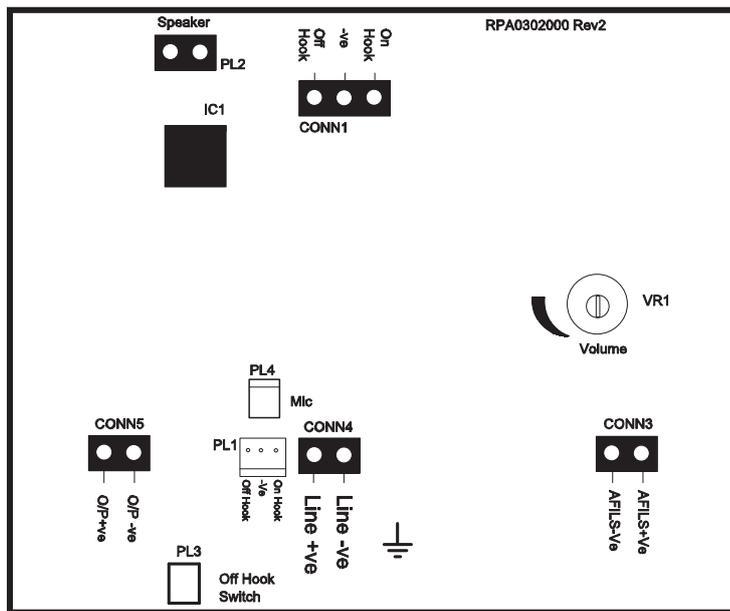
EVC302S - Surface mounting; EVC302F - Flush mounting.

Both units are supplied complete with an identical back box that should be fitted to the wall using suitable fasteners. The back box has 20 mm knock-outs at the top and bottom. Gland the cable correctly and connect a sleeved earth wire to the earth stud.

Connect the line to the LINE IN +Ve and LINE IN -Ve terminals (CONN4)

When installation is complete, secure the lid using the four machine screws supplied. These have a secure pin-hex design that requires a special Allen key (supplied).

Connections



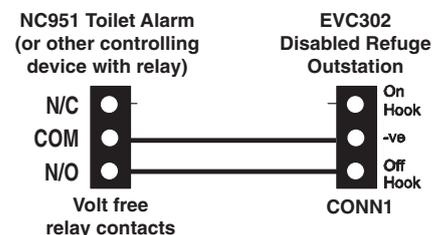
Connecting to an induction loop system

If an audio induction loop facility is required, the outstation's AFILS +Ve and AFILS -Ve terminals (CONN3) should be connected to the line-level input of a suitable induction loop amplifier. The induction loop should be located adjacent to the outstation so that it covers the immediate area of the outstation adequately.

Interfacing to a disabled person toilet alarm system

The outstation can be optionally interfaced to an NC951 disabled persons toilet alarm system by connecting its Off-Hook and -Ve terminals (CONN1) to the toilet alarm's volt free relay contacts as shown, right.

Activation of the NC951 (or any other controlling device with volt free relay contacts) will have the same effect as pushing the Outstation's "push to call or answer" button. Thus, when the call is answered at the exchange, a direct speech channel will be established between the exchange and the outstation. This speech channel will remain open until the disabled persons toilet alarm is reset as there is a definite requirement in disabled persons toilet alarm applications for all reset functions to be carried out at source.



Connecting to a CCTV camera

When the outstation is active its opto-isolated CONN5 terminals (O/P +Ve and O/P -Ve) close and can be used to trigger a CCTV camera or recorder. The maximum current they can pass is 3 mA at 24 VDC. If this current is exceeded, the output will be damaged. If required, an RLPV relay and a 24 VDC power supply can be used to give two sets of volt-free change-over contacts.

Setting to work

At the exchange end, use the FITT line tester to check the cable is OK and that the outstation is working correctly. See the FITT instructions, document DCP0001518 for details. Then follow the relevant SigTEL installation manual for SigTEL EVC or SigTEL Compact.

Shorting the "On Hook" and "-Ve" pins (PL1) effectively hangs up a call so that the engineer does not have to return to the system controller. This is equivalent to hanging up a telephone.

The speaker's volume can be adjusted to suit the application/background noise levels using the VR1 volume control.

OPERATION

Calling from the outstation

Press the "Push to Call or Answer" button. The red "Call in Progress" LED will light steadily and a pulsed ringing tone is heard from the loudspeaker. When the call is answered, the ringing tone stops and two-way speech can commence.

Calling to the outstation

If the outstation is called, the red "Call in Progress" LED pulses and a pulsed ringing tone is heard from the internal beeper. Press the "Push to Call or Answer" button and the LED lights steadily, the ringing tone stops and two-way speech can commence.

SPECIFICATIONS

Dimensions:	Surface 240 x 160 x 53 mm; Flush 250 x 175 x 53 mm
Weight:	Surface 1.3 kg; Flush 1.5 kg
Input voltage (from exchange):	10.7 VDC quiescent; 5 VDC in use
Current consumption @ 24 VDC:	3 mA quiescent; 25 mA in use
Microphone frequency response:	250 Hz to 5 kHz ± 3 dB
Loudspeaker frequency response:	250 Hz to 4 kHz ± 3 dB
Audio output level:	0 dB (775 mV) balanced line level
Switch output:	Opto-isolated normally open open-collector, max 24 VDC 3 mA
External indicators:	Red call in progress LED
External controls:	Push to Call or Answer button (Off Hook)
Internal controls :	Loudspeaker volume
	Engineer's "On Hook" and "Off Hook" pins
Security fasteners:	4 x machine screw pin hex button head
Back box:	Appleby Adaptable box AB573K-B (supplied)

Errors and omissions excepted. The manufacturer's policy is one of continuous improvement and we reserve the right to alter product specifications at our discretion and without prior notice.