contacta

SecuriCom™

Speech Transfer System

SYSTEM MANUAL

Manual refers to:
STS-K001L, STS-K002L & STS-K003L only

Version: 01
2011, March 28th

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Contents Page

Product Overview

The SecuriCom Speech Transfer System is a two-way intercom specifically designed to aid communications where normal speech is impaired by the use of glass security screens or other similar barriers.

Every system is controlled and powered individually and operates on a stand-alone basis.

Each system comprises a twin-channel audio amplifier, power supply unit, a microphone and speaker for the staff and a microphone and speaker for the customer. The microphone and speaker modules are supplied in various formats to enable the system to be installed in differing locations.

The system operates on an “Open Duplex” basis. i.e. microphone and speaker are live simultaneously, similar to a telephone, with no manual or automatic switching of the voice. This means that clipping of speech is not encountered whilst still allowing users to operate the system “Hands Free”. Sophisticated electronic circuitry in the amplifier and purpose designed speaker and microphone modules ensure that the risk of acoustic coupling or “Feedback” is kept to a minimum.

Securicom also offers an induction loop facility which is built into the system for users of hearing aids. Securicom is offered in a system kit format, or as individual modules, thus allowing maximum flexibility to “tailor” systems to individual requirements.

System Components

1: Bridge Bar System with Loop facility

Part No.	Amplifier	Power Supply	Staff Unit	Customer Unit
STS-K001L	STS-A31	STS-P55	STS-SU1	STS-B80 Bridge IL-AE99 Aerial Loop Signage

2: Surface Mount System with Loop Facility

Part No.	Amplifier	Power Supply	Staff Unit	Customer Unit
STS-K002L	STS-A31	STS-P55	STS-SU1	STS-M54 Microphone STS-S60 Speaker IL-AE99 Aerial Loop Signage

3: Flush Mounting System with Loop Facility

Part No.	Amplifier	Power Supply	Staff Unit	Customer Unit
STS-K003L	STS-A31	STS-P55	STS-SU1	STS-M56 Microphone STS-S61 Speaker IL-AE99 Aerial Loop Signage

4: Staff Unit (common to all systems)

The STS-Su1 Staff unit comprises of a loud speaker and a close talking gooseneck microphone in one discreet unit. An On/Off button mutes the microphone if required for privacy reasons

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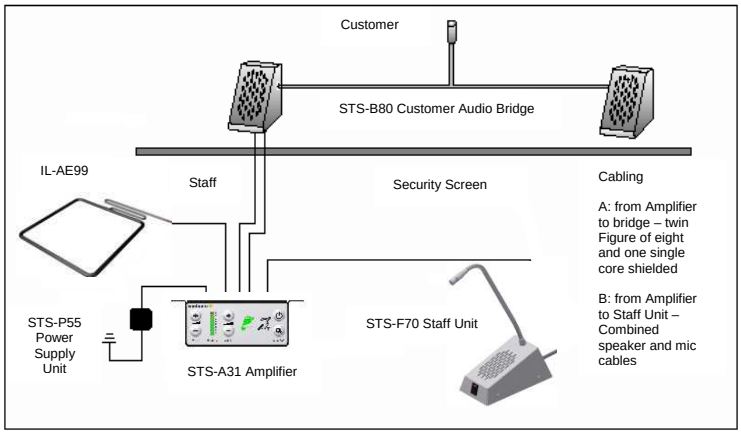
Configuration

1: Bridge Bar System with Induction Loop Aerial

Customer: Customer Audio Bridge Induction Loop Aerial

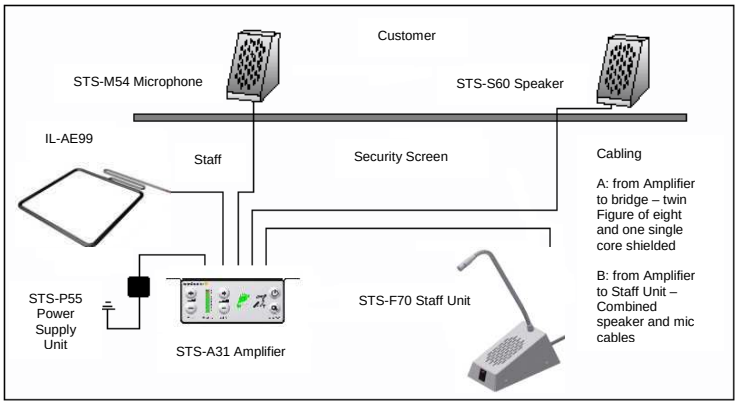
Staff: Staff Unit



2: Surface Mount System with Induction Loop Aerial

Customer: Microphone & Speaker Induction Loop Aerial

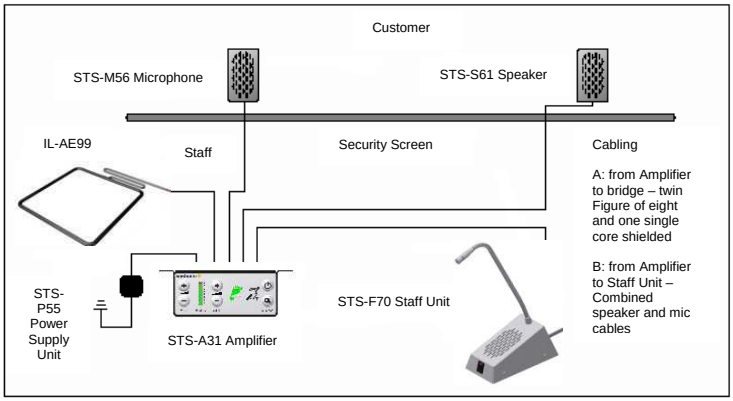
Staff: Staff Unit



3: Flush Mount System with Induction Loop Aerial

Customer: Customer Audio Bridge Induction Loop Aerial

Staff: Staff Unit



Installation

System Components

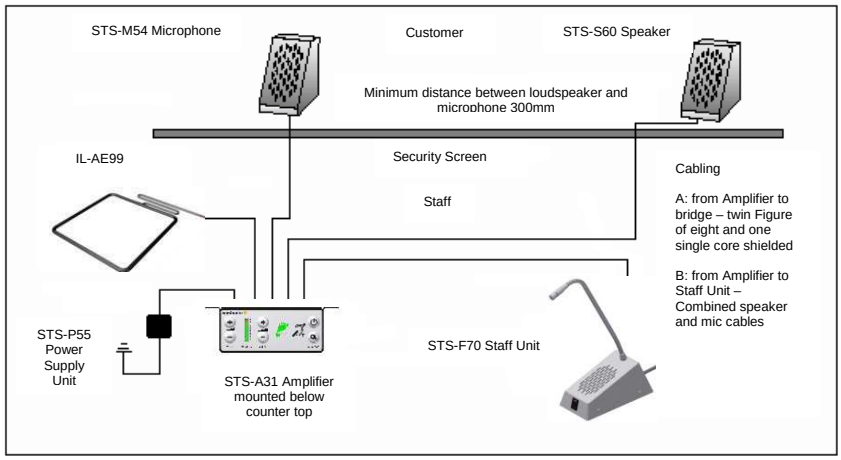
1. STS-A31 Amplifier
2. STS-P55 12v DC Switched Mode Power Supply
3. A Microphone for the Customer
4. A Loudspeaker for the Customer
5. STS-AE99 Induction Loop Aerial

N.B. Microphones and Loudspeakers are available in flush or surface mounting formats.

The STS-F70 Staff Unit for the staff side is supplied as standard. An alternative option comprising separate microphones and loudspeakers is also available.

A Customer Audio Bridge with twin surface mounted loudspeakers and a centrally fitted close speaking microphone is available for the Customer's side.

Siting and Installing the Amplifier



Each SecuriCom system requires one Audio Amplifier (STS-A31) with its associated Power Supply (STS-P55). The Amplifier connects on a plug and socket basis to other system components via individual cables.

The Amplifier should be mounted on a flat surface within close proximity to the other system components and conveniently to hand for the operator. For example, on the staff side under the desk-top or counter-top would be suitable. Ensure there is also access to the Microphone and Induction Loop gain controls located on the side of the amplifier and also to the rear connection sockets before fixing. Twin flanges each with two screw holes are formed at the top of the amplifier housing. These are used to fix the amplifier under the counter top with small self tapping screws. The Amplifier housing need not be opened as all connections are external.

Siting and Installing Microphones and Speakers

Customer Microphones and Loud Speakers may be flush or surface mounted depending on individual requirements. See following pages for fitting instructions. Surface mounted components are best sited at the junction between the counter-top and the glass partition. For best performance, the Microphone should be mounted at least 300 millimeters away from the Loudspeaker. Each component comes with a 3 meter lead and two-way plug. It is advisable to remove the plug before fixing as this enables a neater installation to be achieved using smaller diameter holes through which to feed the cables. However, the cables and plugs must be re-connected correctly or the system will not operate. If in doubt, identify and mark the wires before disconnecting the plug(s).

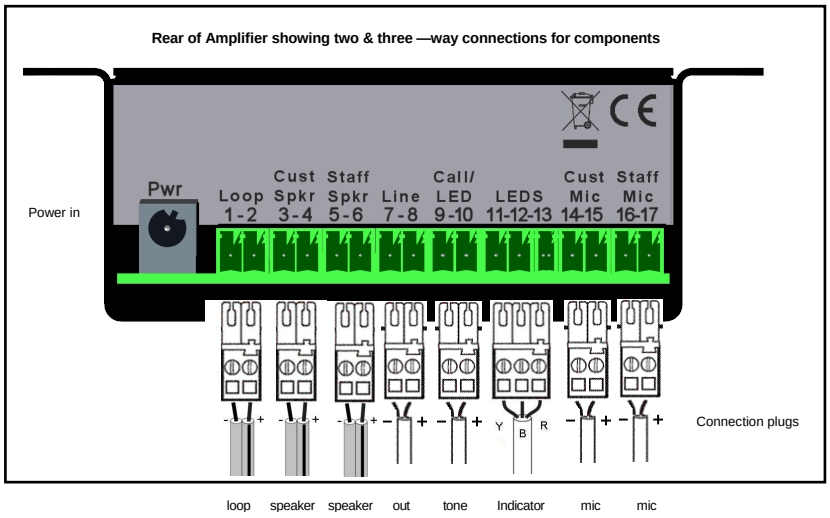
STS-A31 Installation

Positioning & installing the staff unit

There are various different types of staff units in Contacta's range. The staff unit is a self standing module for the staff side. It should be placed conveniently on the counter top so the cashier can hear the loudspeaker and talk into the gooseneck microphone to the customer. The microphone is of the close talking type so background noise is not picked up. A 'Mute' switch is located on the front of the Staff Unit. In the absence of a cable port, a suitably sized hole should be drilled in the counter top at the rear of the staff unit to take the cable.

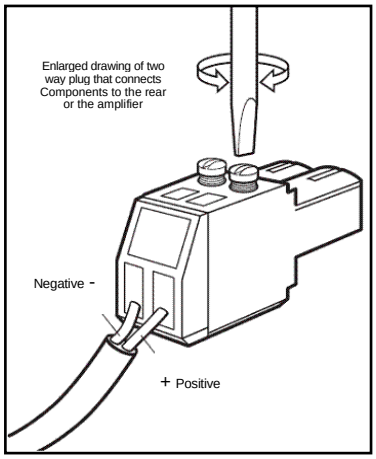
Amplifier Connections

1. Induction Loop Aerial(-)
2. Induction Loop Aerial(+)
3. Customer Speaker (-)
4. Customer Speaker (+)
5. Staff Unit Speaker (-)
6. Staff Unit Speaker (+)
7. Audio Line in (-)
8. Audio Line in (+)
9. LED/Tone (-)
10. LED /Tone (+)
11. Confidence LED (yellow)
12. Confidence LED (black)
13. Confidence LED (Red)
14. Customer Mic (-)
15. Customer Mic (+)
16. Staff Mic (-)
17. Staff Mic (+)



Connecting Components to the Amplifier

Each component (Microphone, Loudspeaker, Staff Unit or Induction Loop comes fitted with two-way connection plug(s), with the exception of the confidence LED connection which is fitted with a three-way connection plug. These connections locate in the appropriate socket(s) at the rear of the Amplifier. The plugs connect to the cables by screw terminal connections so cables can be removed and fed through small, neat apertures for an unobtrusive, discrete installation. However, the cables and plugs must be re-connected correctly or the system will not operate. If in doubt, mark the wires before disconnecting the plug(s). If there is a suitable cable port on the cashier's side, the cables can be diverted through this without the need to remove and reconnect the two-way plugs.



Controls

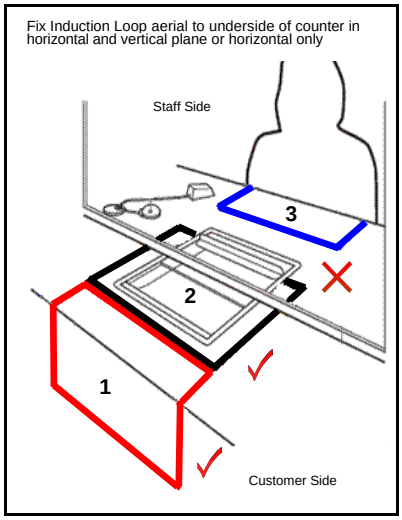
Push button controls are provided on the front of the Amplifier which gives access to the host of the amplifier features. The amplifier allows the user to adjust the output from the loudspeakers this is accompanied by a status LED indicator.

Induction Loop Installation

Induction Loop Facility

The STS-A31 amplifier is supplied with an Induction Loop Facility. If sold in a package it will contain an IL-AE99 Induction Loop Aerial, and a self adhesive induction loop sign. The principle of the system is to transmit sound via an electro-magnetic field which is picked up and amplified by a tele-coil fitted inside customers' hearing aid.

Correct positioning of the Induction Loop Aerial is critical to ensure the loop performs to its full potential. It should be fixed under the desk-top or counter centrally so that half is mounted horizontally under the counter and the other half mounted vertically, facing the customer (Red installation /Location 1). If Red installation is not possible aerial can be installed flat on the counter surface (black installation /Location 2). Do not install in location 3 marked in blue.



Make sure that the Induction Loop self adhesive sticker is displayed in a prominent position. The Induction Loop Aerial connects to terminals (1) and (2) on the amplifier using the appropriate plug and socket.

Loop aerial can be mounted using adhesive clips but if a staple gun is used ensure that the staples do not pierce the aerial's insulation

Adjusting the Induction Loop facility

The induction loop gain is set at a default level and in most circumstances does not need adjusting. However if the loop gain drive does need adjusting please refer to STS-A31 Amplifier setup for instructions.

Fitting Instructions
STS-K001L

Bridge Bar System STS-K001

STS-B80 Audio Bridge
STS-F70 Combined Staff Unit

Figure 1

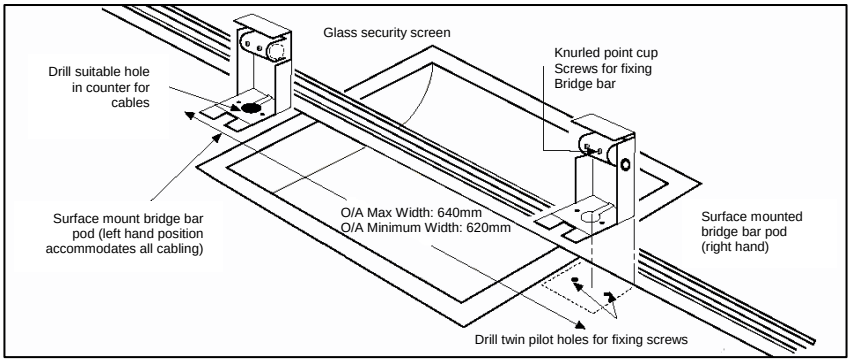


Figure 2

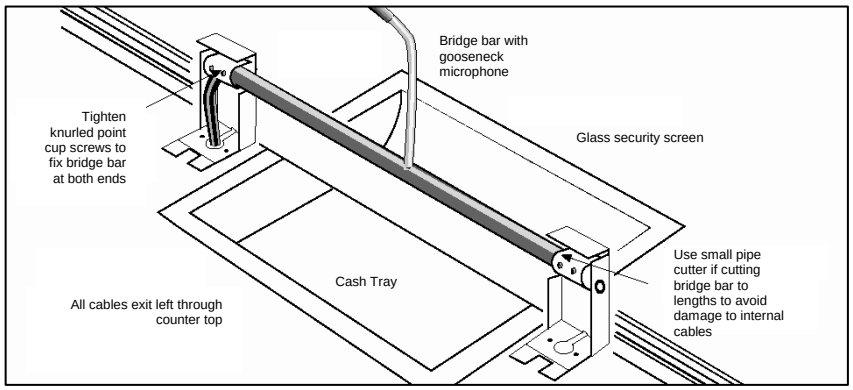


Figure 3

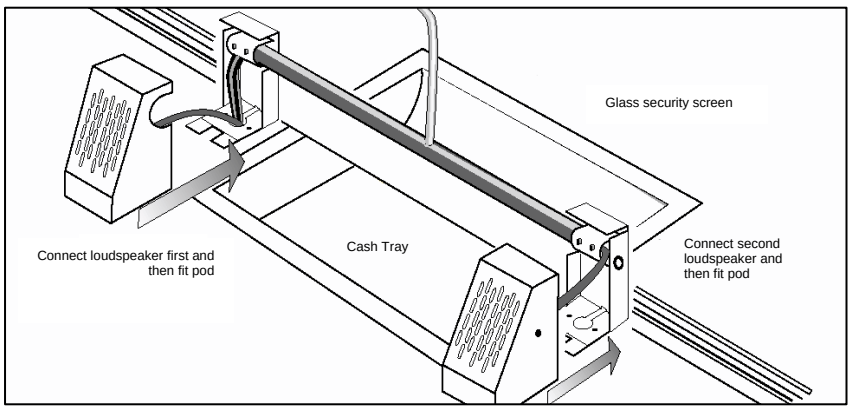
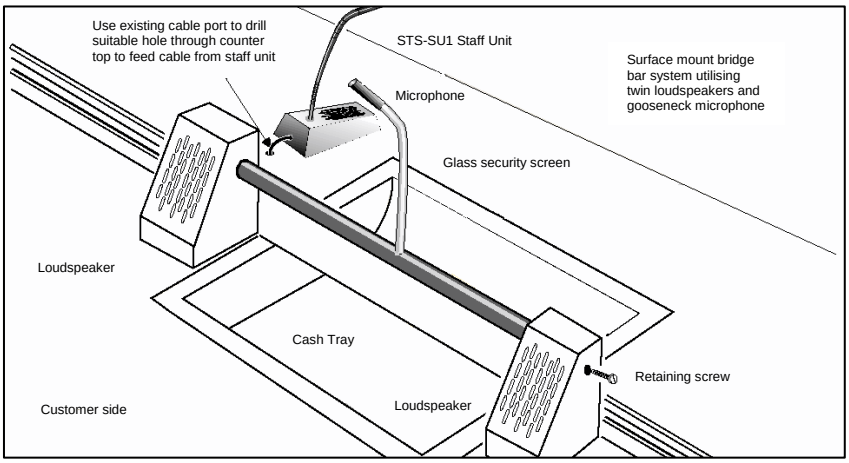


Figure 4



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Fitting Instructions
STS-K002L

Surface Mount STS-K002L

STS-M54 Microphone
STS-S60 Speaker
STS-SU1 Combined Staff Unit

Figure 1

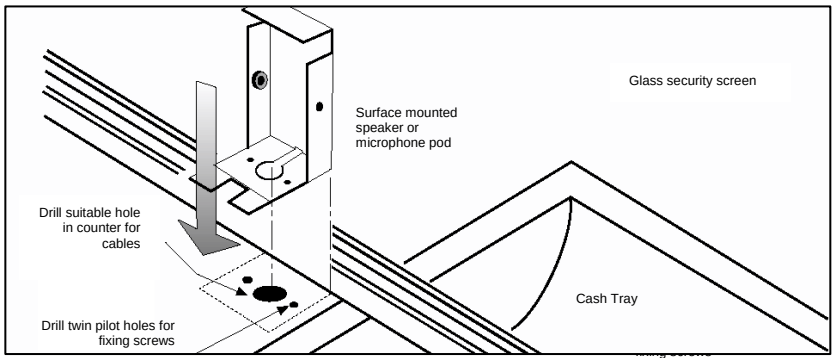
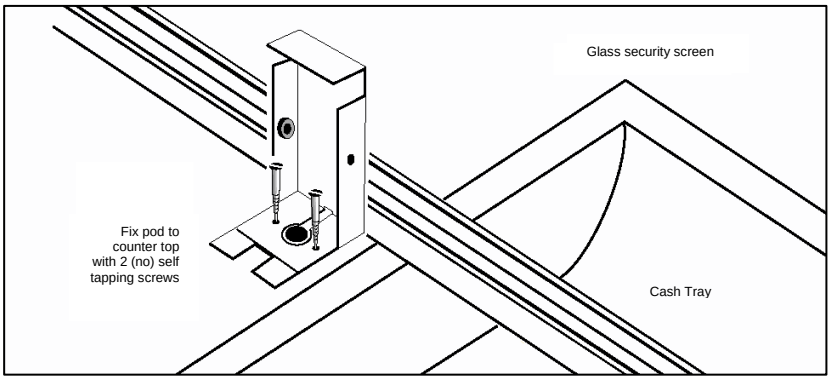


Figure 2



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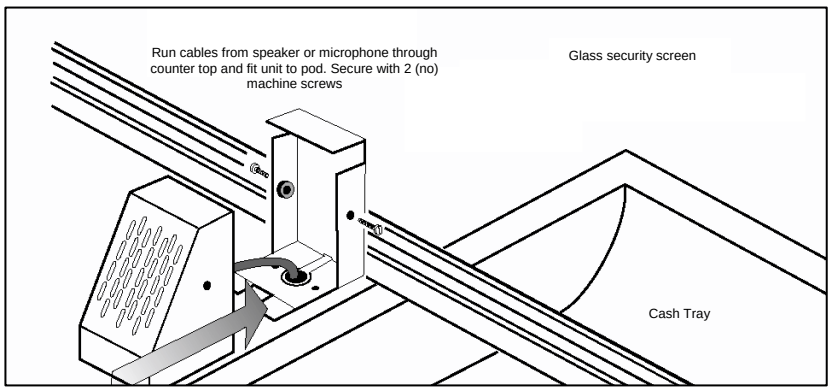

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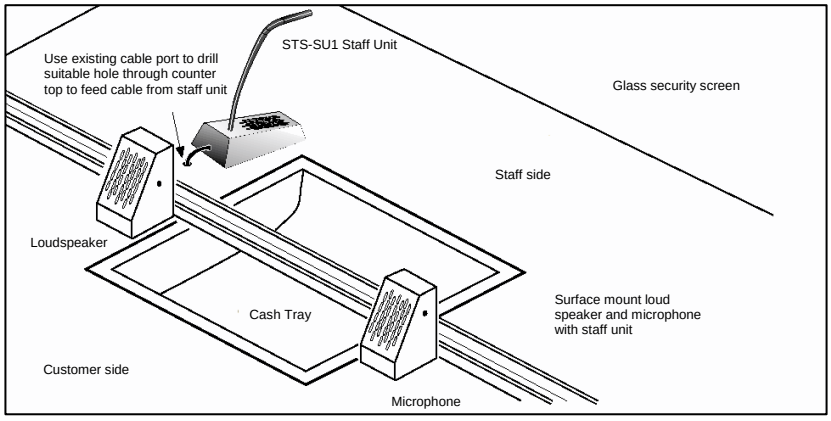


Fitting Instructions
STS-K003L

Flush Mount STS-K003L

STS-M56 Microphone
STS-S61 Speaker
STS-SU1 Combined Staff Unit

Figure 1

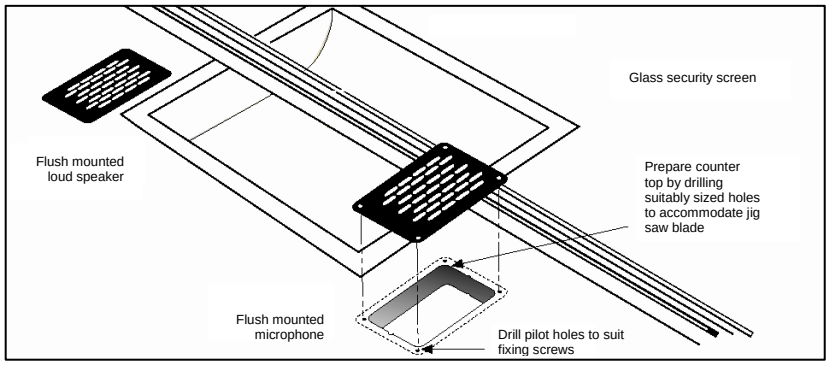
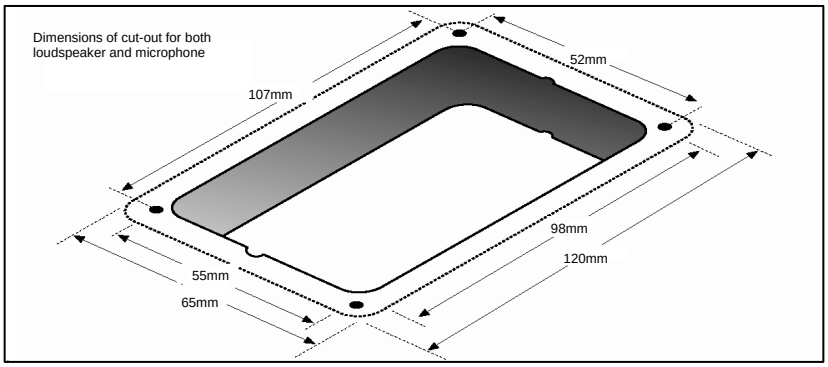


Figure 2



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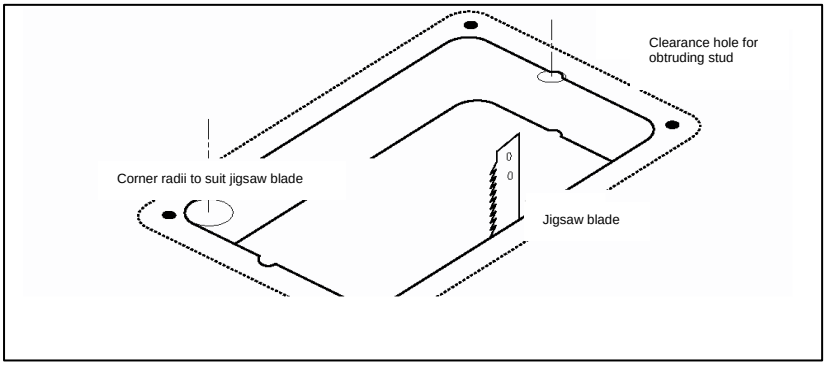

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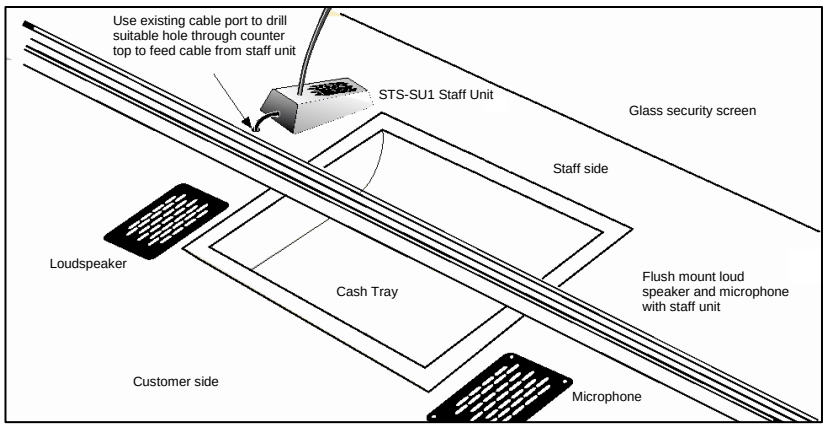
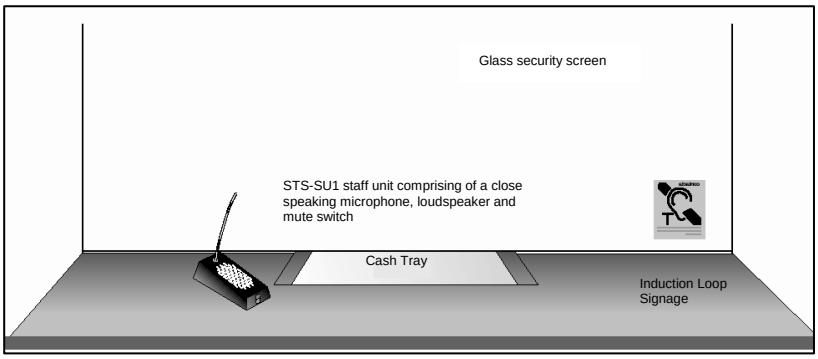


Fitting Instructions
STS-SU1

STS-SU1 Staff Unit

Combined Microphone & Speaker

Figure 1



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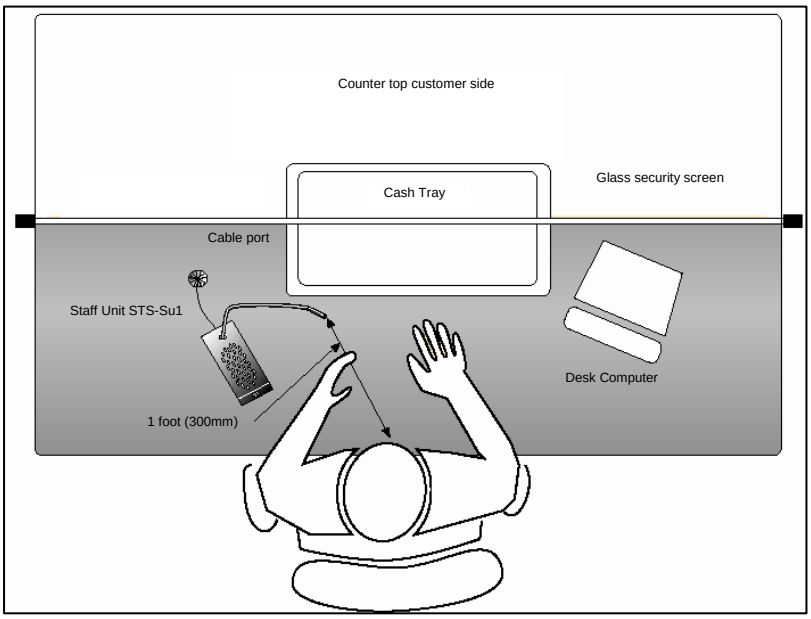
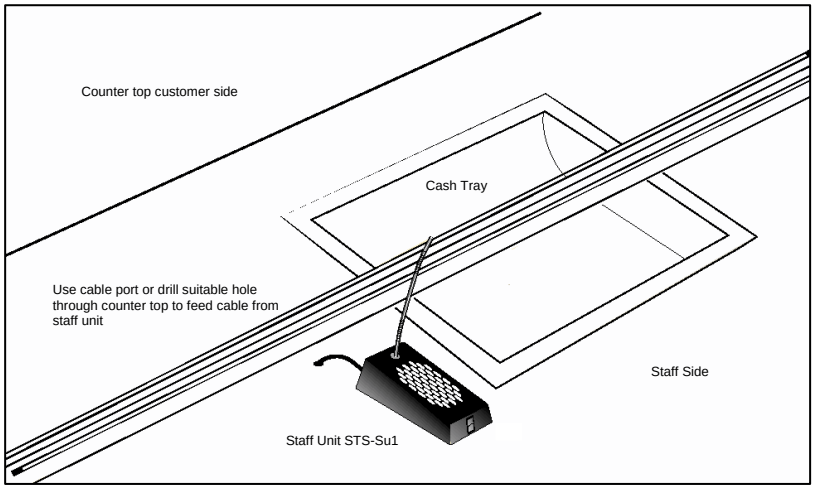


Figure 3



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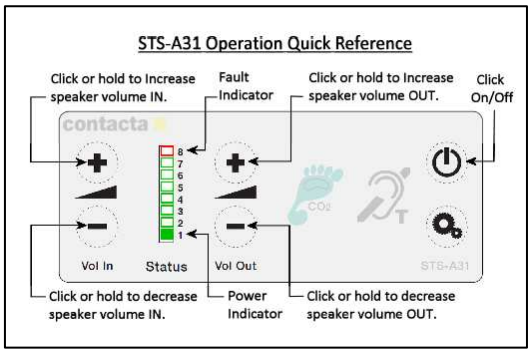
STS-A31 Operating Instructions

Front Panel Overview

There are three setup "pages" available on the STS-A31 amplifier, all of which can only be accessed through the engineer's setup mode. The settings that can be adjusted are:

- Staff/Customer Volume
- Ducking
- Induction Loop Gain



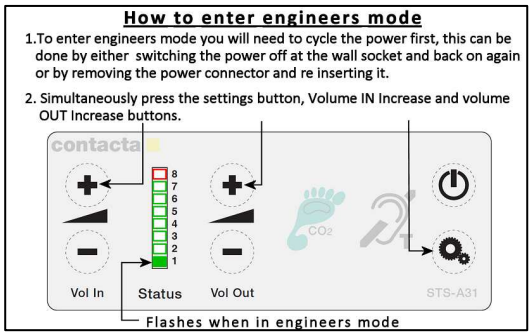
! DUCKING & LOOP GAIN MUST BE LEFT AT DEFAULT LEVELS. IF ADJUSTMENT IS REQUIRED PLEASE SEEK ASSISTANCE FROM CONTACTA TECHNICAL DEPARTMENT

Entering Engineer's Setup Mode

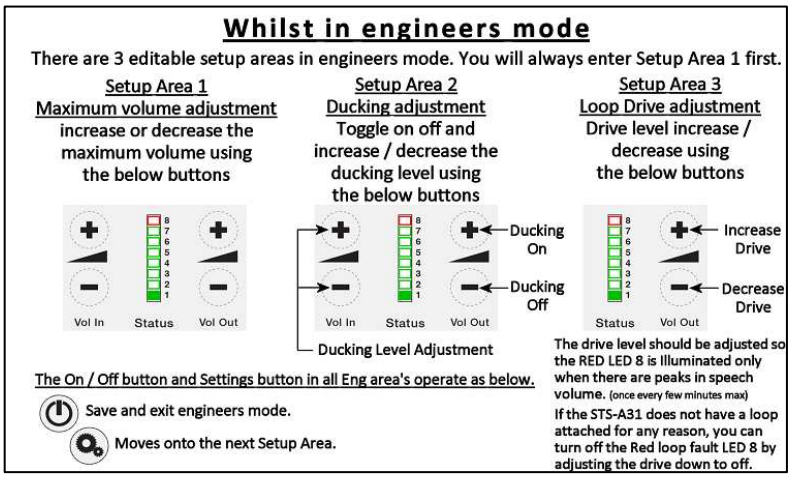
Note: *If the STS-A31 detects an error in its settings memory, it will restore itself to factory default settings.*

Note: *The STS-A31 will exit engineer's setup mode if the "On/Off" button is pressed at any time:*

Note: *The STS-A31 will also exit engineer's setup mode if no button has been pressed for a period of two minutes.*



Whilst in Engineers Mode



! SETUP AREA 2 & SETUP AREA 3 MUST NOT BE ADJUSTED AND MUST BE LEFT AT DEFAULT LEVELS. IF ADJUSTMENT IS REQUIRED PLEASE SEEK ASSISTANCE FROM CONTACTA TECHNICAL DEPARTMENT

Revert To Factory Default Settings

Unplug the power supply (STS-P55) and reconnect it.
Press **"On/Off"** button and **"Vol In -"** button together then release.

The status LED bar graph will show a fixed pattern of LEDs indicating the firmware revision number, followed by all LEDs illuminated. This indicates that the default settings have been restored.

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Maintenance & Troubleshooting

To prolong the life of the product the following procedures should be carried out by the customer on a regular basis to keep the product at its optimal performance

Maintenance

1. Ensure all connectors are firmly inserted into their sockets on a regular basis
2. Do not stretch cables at the rear
3. Clean amplifier readily available cleansing wipes. Do not use solvent based cleaners.
4. Do not allow cleaning fluids to enter the amplifier or vents of the microphone.

Troubleshooting

Symptom	Possible Fault	Action
Feedback (whistling) is occurring	Volume is set too high Microphone placed too close to loudspeaker (STS-K002L & STS-K003L)	Decrease volume at the customer or staff side Re-position microphone or loudspeaker Revert amplifier to factory settings If problem persists please seek assistance from Contacta's Technical Department
No audio is heard through the induction loop	Induction loop disconnected Microphone disconnected Ensure loop tester is working	Check figure 2 for correct connections Ensure loop tester has a new set of batteries Ensure loop has no ferrous materials surrounding installation Please seek assistance from a Contacta engineer if unit is faulty
No audio is heard from the speakers	Green LED is off: Power switched off or failed Green LED flashes every 25 seconds: Unit is "sleeping" in energy saving mode Incorrect speaker connections or faulty speaker unit	Check that power is on Press any button or make a sound near the microphone to wake unit up Check STS-A31amplifier microphone and speaker connections or please seek assistance from Contacta's Technical Department
Interference (buzzing / whistling / hissing) is heard at loudspeaker	Unscreened or poorly earthed third party equipment is being used in close proximity Incorrect power supply being used	Switch off any third party equipment to identify the source of interference Ensure that a Contacta STS-P55 grounded power supply unit is being used

Technical /Sales Support

For problems please contact Contacta technical support.

Contacta Technical support
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