Manuals+ — User Manuals Simplified.

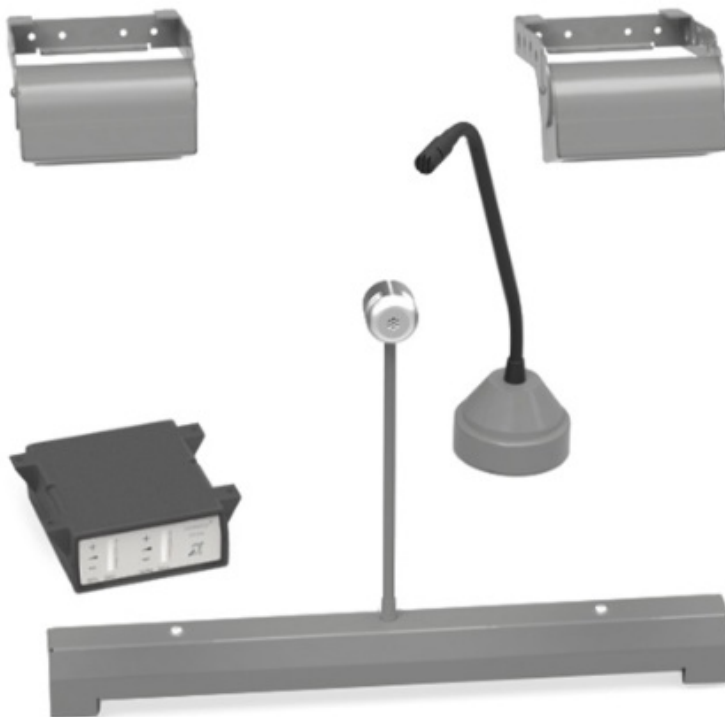# contacta STS-K015 Window Intercom Systems User Guide

Contents

contacta

contacta STS-K015 Window Intercom Systems

Specifications

- Models: STS-K015, STS-K062, STS-K058
- Installation & User Guide Version: September 2023 v1.0

Product Information

Safety Instructions
Before using the Window Intercom System, it is crucial to follow these safety instructions:

1. Read and keep the instructions handy.
2. Heed all warnings and followed all instructions provided.
3. Do not use near water or high humidity levels.
4. Clean only with a dry cloth and avoid inserting liquids or foreign objects.
5. Do not block ventilation openings or install near heat sources.
6. Use only the supplied power supply to prevent damage.
7. Avoid dismantling or modifying any parts of the unit.

Product Overview
The Window Intercom System provides clear communication where speech is impaired by barriers like glass. Features include a hearing loop facility for hearing device wearers.

Components

1. Installation and User Manual
2. A31H Amplifier
3. Overhead Speakers (for K015 and K062) or Surface Mount speaker (for K058)

4. Bent Vandal-Proof Microphone (for K058) or straight stem Microphone (for K015 and K062/K064)

5. Staff Mic Unit (for K015/K062/K064) or Staff Loudspeaker unit (for K058)

Product Usage Instructions

Installation Instructions

- STS-K015

  Follow the detailed installation instructions provided in section 7 of the manual for model STS-K015.

  STS-K062

  Refer to section 10 of the manual for step-by-step installation guidance for model STS-K062.

- STS-K058

  For model STS-K058, follow the installation steps outlined in section 15 of the manual.

Connections

Connect the various components following the guidelines provided in the manual under the Connections section on page 19.

Amplifier Setup

Configure the A31H Amplifier as per the setup instructions in section 20 of the manual for optimal performance.

Using the System

Utilize the Window Intercom System effectively by referring to the usage instructions in section 22 of the manual.

Troubleshooting

If you encounter any issues with the equipment, refer to the Troubleshooting section on page 24 of the manual. Follow the suggested checks, and if the problem persists, contact your dealer for assistance.

FAQ

- Q: Can I use my power supply with the system?

  A: No, it is recommended to only use the supplied power supply to prevent damage to the system.

- Q: What should I do if liquids or foreign objects enter the system?

  A: Immediately turn off the power switch, disconnect the power plug, and contact your local dealer for assistance. Q: How can I get warranty service for the equipment?

  A: In case of equipment issues, refer to the Troubleshooting section in the manual first. If unresolved, contact your dealer for warranty service information.

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.

7. Do not block any ventilation openings. Install under the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug the apparatus during lightning storms or when unused for long periods.

14. Refer to all qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Safety Precautions

Thank you for purchasing this system. Before using, please read the following guide to ensure correct usage. After reading, store this guide in a safe place for future reference. Incorrect handling of this product could result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in this manual.

- This symbol is used to alert you to important instructions within this manual.

- This symbol is used to alert you to the dangers of getting an electric shock.

- Ensure that you only use the supplied power supply. Do not attempt to install your power supply system otherwise, damage may occur.

- Do not attempt to dismantle or modify any parts of the unit.
  No user-serviceable fuses or parts are included.

- Ensure the system is not installed in areas of high ambient temperatures or high levels of humidity or dust.

- It should not be exposed to direct sunlight or be placed next to vibrating or heat-generating equipment.

- This system is designed for indoor use only.
- Do not place the unit on an unstable surface.
- ⚡ Do not insert liquids or foreign objects. This could result in fire or electrical shock. If liquids or foreign objects should enter, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your local dealer.
- Ensure the aerial is taped down securely. Do not leave any trailing leads that may cause a trip hazard.

If a problem occurs with the equipment, first refer to the Troubleshooting section of this guide, and run through the suggested checks. If this does not resolve the problem contact your dealer. They will tell you what warranty condition is applied.

Contacta has a policy of continuous product development, and therefore small specification changes may not be reflected in this manual. Images, labels, packaging, accessories and product colors are subject to change without notice.

Product Overview

Speech transfer systems assist in clear communication where normal speech is impaired by the use of glass, a security screen or other similar barriers.

There is also a hearing loop facility included which provides additional assistance for hearing device wearers.

Components

1. Installation and User Manual
2. A31H Amplifier
3. Overhead Speakers (for models K015 and K062), or a Surface Mount speaker for model K058.
4. Bent Vandal-Proof Microphone (for model K058) or a straight stem Microphone for models K015 and K062/K064
5. Staff Mic Unit (for models K015/K062/K064) or a Staff Loudspeaker unit for model K058
6. Hearing Loop Sticker
7. IEC Lead
8. Hearing Loop Aerial
9. Power Supply
10. Mounting Bracket

Also included is a Fixing Kit, which contains:

1. Adhesive Clip x10
2. No.6 x 1/2" Countersunk Screws x15
3. P-Clips x6

Tools Required

Your basic toolkit will include:

- Screwdrivers (Flat or Blade 2.5mm and Phillips Head PH2)

- Battery or Mains Drill
- Drillbits: 2mm, 3mm, 5mm and 7mm
- Allen Key Set
- Cable Tacking Gun (10mm)
- Wire Cutters/Strippers
- Pliers
- Tape Measure
- Pencil or Marker Pen
- Torch
- Cable Ties
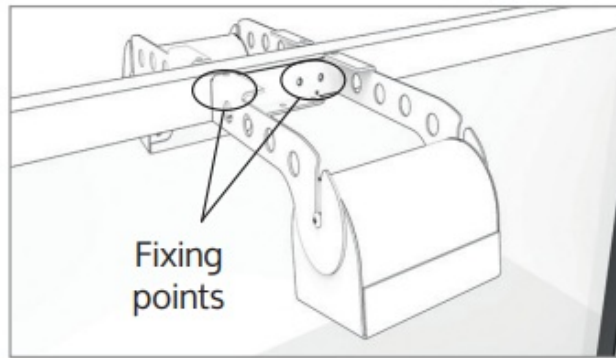- Electrical Insulation Tape
- Trunking

Installation Instructions STS-K015

Install the Staff Microphone, Amplifier, Overhead Loudspeakers, Bridge Bar Unit and Surface Mic in the order described below. If you have followed the steps closely and the system is not functioning as intended, consult Troubleshooting on page 24.

Staff Microphone, Amplifier and Overhead Loudspeakers

Fixing points

1. Place the staff microphone on the staff side of the countertop, ensuring that it does not cause an obstruction and is as close to staff as possible.
2. Place the amplifier under the staff counter, ensuring that it will not obstruct staff when they are sitting.
3. Mark the 4 fixing points for the amplifier under the counter.
4. Drill and fix the amplifier in place using the supplied screws.
5. Use the cable management hole to run the staff microphone cable back to the amplifier. If there is not already a cable management hole, one will need to be drilled in a suitable location near the rear of the counter.
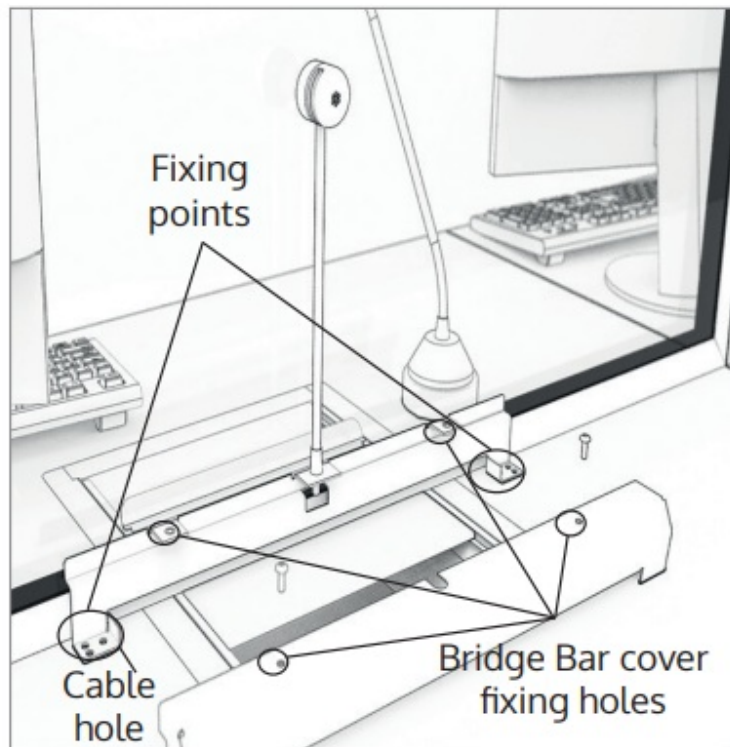
Fixing points

6. Install the overhead loudspeakers:
- a. Find a location on the staff side directly above the pass-through tray. Ensure there is sufficient space and there is no glass behind where you want to drill.
- b. Check the cable route to the amplifier situated under the counter. Ensure access through the countertop and suitable cable length. Drill a cable hole through the rear of the counter if necessary.
- c. Mark 2x fixing points to attach the overhead speakers.
- d. Drill pilot holes and attach the loudspeaker bracket assembly using supplied screws.
- e. Route the cable from the loudspeaker back to the amplifier in a tidy fashion, using cable containment where required.
- f. Repeat the above steps on the customer side of the counter.
7. Install the power supply close to a power socket outlet using the supplied mounting bracket and fixing screws.

Bridge Bar Unit and Surface Mic

Fixing points
Cable hole
Bridge Bar cover fixing holes

1. Position the bridge bar unit on the customer side of the counter top in a central location or around the pass-through tray if present.
2. Ensure the microphone and bridge bar are flat against the screen.
3. Mark the 2 fixing points and 1 cable route hole ready for drilling.
4. Drill pilot holes and a cable hole and attach the assembly with the supplied screws.
5. Feed wiring through the cable hole back to the amplifier. Using provided fixing holes and screws, attach the

bridge bar cover carefully to avoid damage to the wiring.

Under-Counter Hearing Loop Aerial Installation

- The aerial should be fixed under the desk-top or counter centrally on the customer side, one half mounted horizontally under the counter and the other half mounted vertically, facing the customer (as in the first scenario below).
- Position the aerial under the counter using either the provided P-clips or another fixing method of your choice. See the diagram below for recommended positioning.
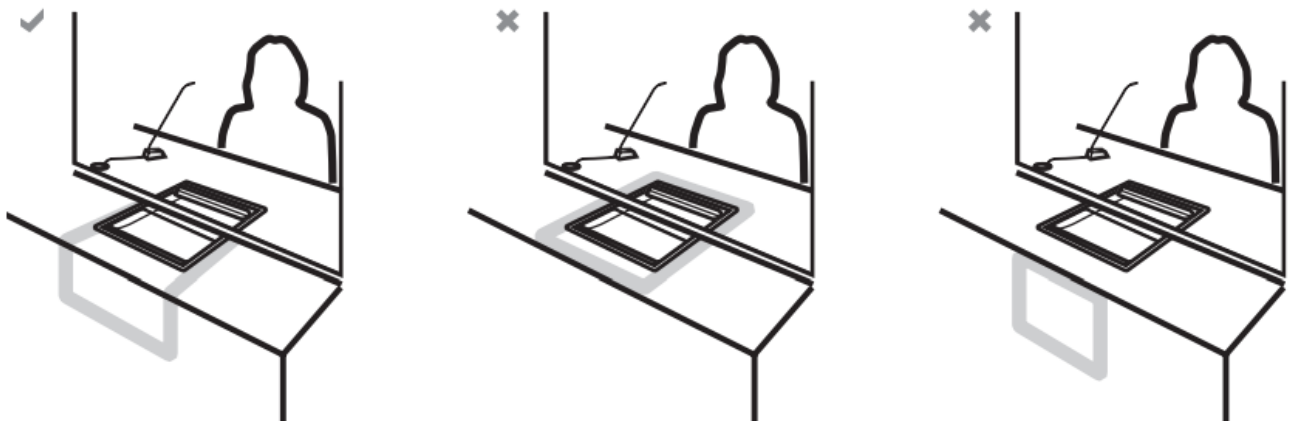

- Ensure all hearing loop signage is displayed clearly.

Installation Instructions STS-K062

Staff Microphone, Amplifier, and Overhead Loudspeaker

1. Place the staff microphone on the staff side of the counter/checkout, ensuring that it does not cause an obstruction and is as close to staff as possible.
2. Place the amplifier under the staff counter/checkout, ensuring that it will not obstruct staff when they are sitting.
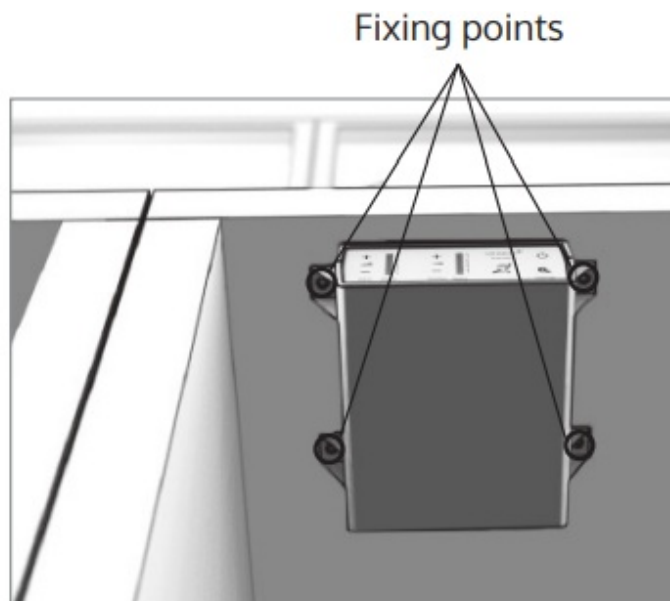
Fixing points

3. Mark the 4 fixing points for the amplifier under the counter.
4. Drill and fix the amplifier in place using the supplied screws.
5. Use the cable management hole to run the staff microphone cable back to the amplifier. If there is not already a cable management hole, one will need to be drilled in a suitable location near the rear of the counter/checkout.

6. Install the overhead loudspeakers:
   - a. Find a location on the staff side directly above the pass-through tray. Ensure there is sufficient space and there is no glass behind where you want to drill.
   - b. Check the cable route to the amplifier situated under the counter/checkout. Ensure access through the counter/checkout and suitable cable length.
   - c. Mark 2x fixing points and 1x cable hole to attach the overhead speakers.
   - d. Drill pilot holes and attach the loudspeaker bracket assembly using supplied screws.
   - e. Route the cable from the loudspeaker back to the amplifier in a neat fashion, using cable containment where required.
   - f. Repeat the above steps on the customer side of the counter.
     Note If you are fitting the overhead speakers back to back on a perspex screen you will need to drill through the perspex. The speaker can then be blotted together.

Fixing Points

Cable cut out

7. Install the power supply close to a power socket outlet using the supplied mounting bracket and fixing screws.

A rubber trim is fitted to the edge of the frame to conceal cables

Customer Microphone

Staff Microphone

Hearing Loop

Anti Vandal Microphone

1. Install the microphone to the screen, this should be installed centrally under the overhead speaker
2. Use the double-side pads on the back of the microphone head and the back of the D-shaped bracket at the base of the microphone stem.
3. Route the cable from the loudspeaker back to the amplifier in a neat fashion, using cable containment where required.


Above-Counter Induction Loop Aerial Installation
The induction loop aerial should be installed in the best possible location as close to where the customer will be standing as possible.
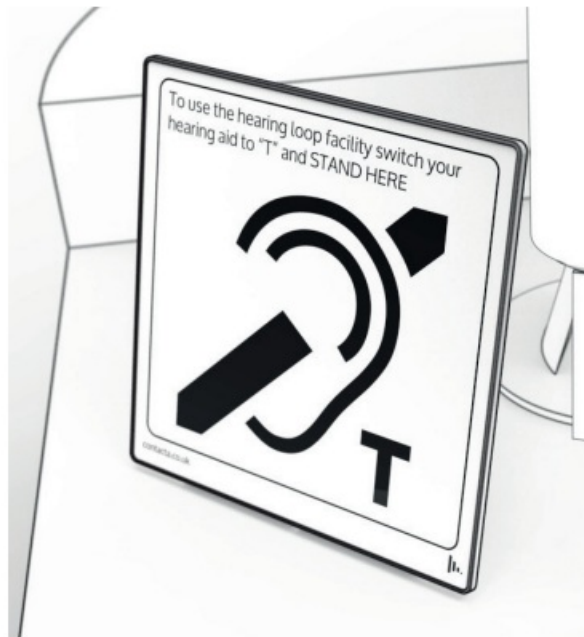

1. The aerial can be fitted onto the counter/checkout using the double-sided pad supplied or cable ties.
2. Route the cable from the induction loop aerial back to the amplifier in a neat and tidy fashion, using cable containment where required.

Install the Staff Loudspeaker unit, Amplifier, and Bent Vandal-Proof Microphone in the order described below. If you have followed the steps closely and the system is not functioning as intended, consult Troubleshooting on page 24.
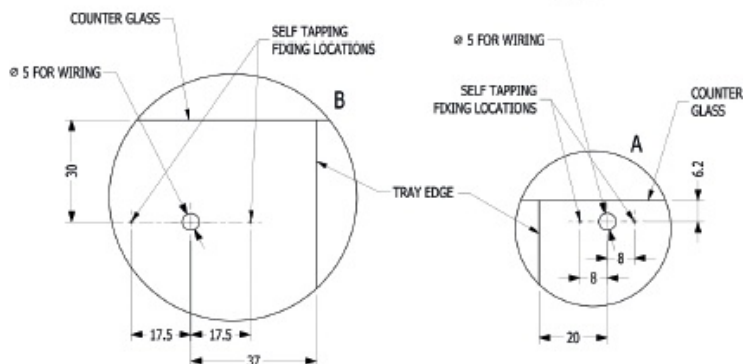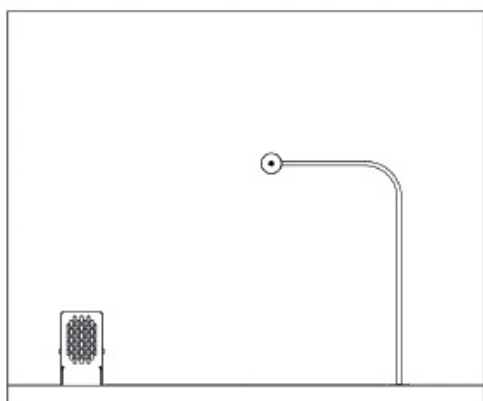
Staff Loud Speaker Unit and Amplifier
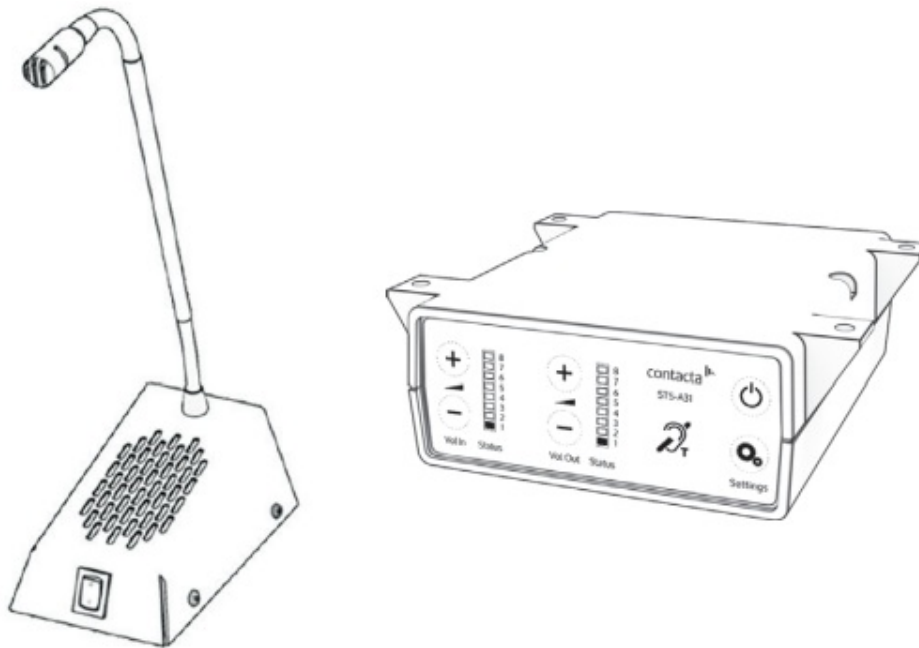
1. Place the Staff Loudspeaker Unit on the staff side of the counter top, ensuring that it does not cause an obstruction and is as close to staff as possible.
2. Place the amplifier under the staff counter, ensuring that it will not obstruct staff when they are sitting.
3. Mark the 4 fixing points for the amplifier under the counter.
4. Drill and fix the amplifier in place using the supplied screws.
5. Use the cable management hole to run the Staff Loudspeaker Unit cable back to the amplifier. If there is not already a cable management hole, one will need to be drilled in a suitable location near the rear of the counter
6. Install the Surface Mounted Speaker:
   - Place the speaker pods on the customer side of the counter top.
   - Disassemble the speaker pods by undoing the screws and removing the housing.
   - Place the mounting brackets next to the pass-through tray/opening, at least 2-3mm away from the screen.
   - Mark the two fixing points and the cable holes to be drilled.
   - Ensure there will be access to retrieve the cables and drill the holes.
   - Fix the speaker pods to the counter, and feed the wires through the cable management holes.
   - Refit the housing with previously removed screws.
   - Route all cabling neatly to the amplifier location on the staff side.

Labels on diagram:
- Housing fixing points
- Cable hole
- Fixing Points
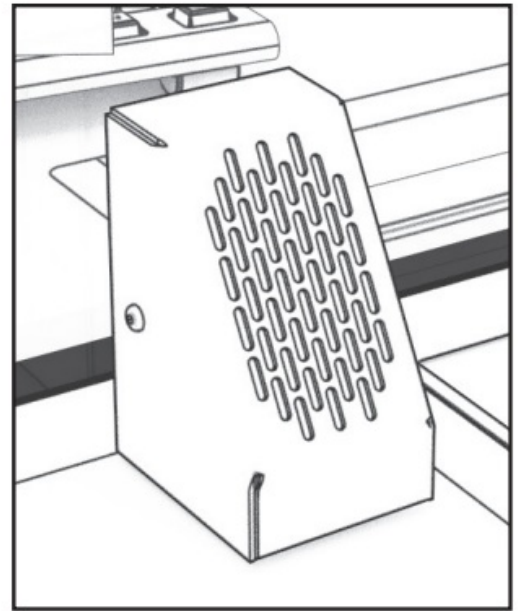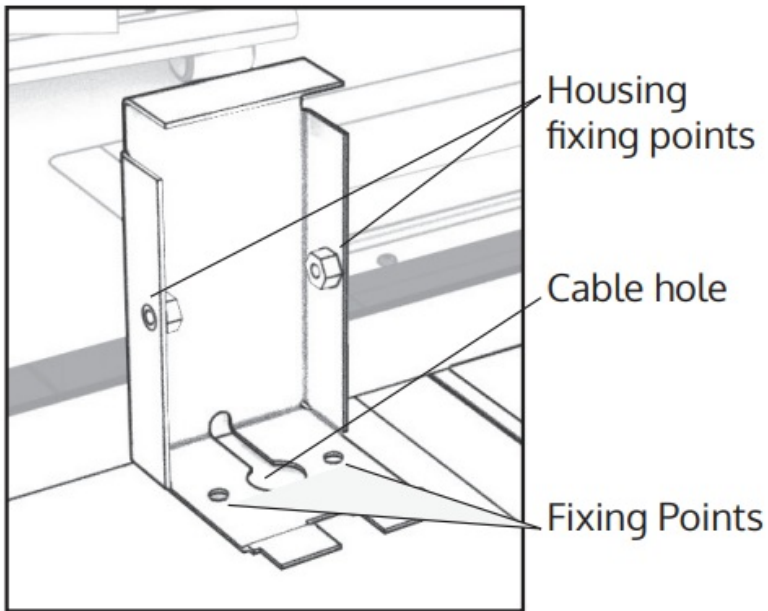
Anti Vandal Microphone

1. Position the microphone stem on the customer side of the counter top.
2. Mark the 2 fixing points and 1 cable route ready for drilling.
3. Drill pilot holes for the fixings and a cable hole.
4. Feed wiring through the cable hole back to the amplifier and fix the microphone in place using the supplied screws.
5. Fix the microphone head to the screen using the double-sided pad supplied.

GLASS

STS-M14-BENT MICROPHONE

STS-S60 SPEAKER POD

SECURE STS-M14-BENT WITH STICKY PADS

410mm WIDE TRAY

COUNTER

B

A

COUNTER GLASS

SELF TAPPING FIXING LOCATIONS

⌀ 5 FOR WIRING

⌀ 5 FOR WIRING

SELF TAPPING FIXING LOCATIONS

COUNTER GLASS

TRAY EDGE

B

A

30

17.5   17.5

37

6.2

8

8

20

Installation Instructions STS-K064

1. Loosen the screws and slide the bracket from the loudspeaker.
2. Attach the microphone to the loudspeaker bracket using the round hole at the top of the unit (see image on the

right).

3. Take the microphone cable and remove the green connector.
4. Take the cable and, ensuring you are going in the shown direction, push the microphone through the hole and thread it all the way through.
5. Thread the microphone through the supplied nut. To do this, hold the microphone and bracket flat on the counter and screw on the nut.
6. Take a suitable spanner, hold the microphone in place, and tighten the nut.


7. The next step is to fit it to the window frame.
8. Find the center of the window. Place the microphone against the glass and push the bracket up to the frame.
9. Hold it in place, and then, using the two holes in the bracket, make a mark on the frame for the screw holes.
10. Use a two-and-a-half-millimeter drill bit and carefully drill pilot holes.

If you remove any green connectors for feeding cables, ensure they are replaced at the correct polarity. It is recommended to take photos of the connectors as a record before taking any apart.

11. Take the bracket with the screw already attached to the frame and align it with the hole in the framework, screwing it into place.
12. Find the second screw and screw it into place.
13. Set the microphone into position by removing the backing and attach to the glass.
14. Attach the loudspeaker to the mounting bracket.
    - Hook the cable up behind the loudspeaker and slide the loudspeaker into the bracket.
    - Push the cable to one side, position the speaker at the desired angle, and then tighten the screws.
15. Find a suitable route to run the cables back to the amplifier location usingtrunking or cble clips if needed.

Staff Loudspeaker Unit and Amplifier
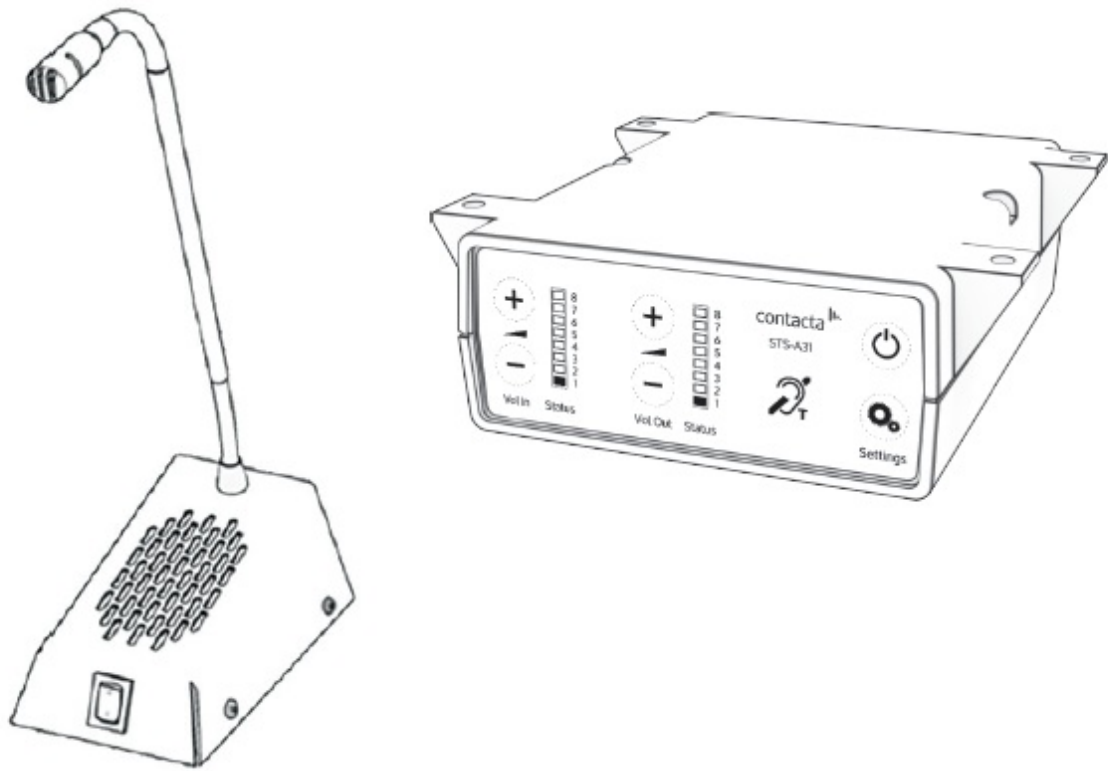
1. Place the Staff Loudspeaker Unit on the staff side of the countertop, ensuring that it does not cause an obstruction and is as close to staff as possible.
2. Place the amplifier under the taff counter, ensuring that it will not obstruct staff when they are sitting.
3. Mark the 4 fixing points for the amplifier under the counter.
4. Drill and fix the amplifier in place using the supplied screws.
5. Use the cable management hole to run the Staff Loudspeaker Unit cable back to the amplifier. If there is not already a cable management hole, one will need to be drilled in a suitable location near the rear of the counter.

Connections

Trim the cables if necessary (apart from the power supply) to the required length for connection to the back of the amplifier. Bare approximately 6mm of the cable ends for connection to the 2 pin plugs (see diagram below).

Negative - or Screened Cable

Positive +
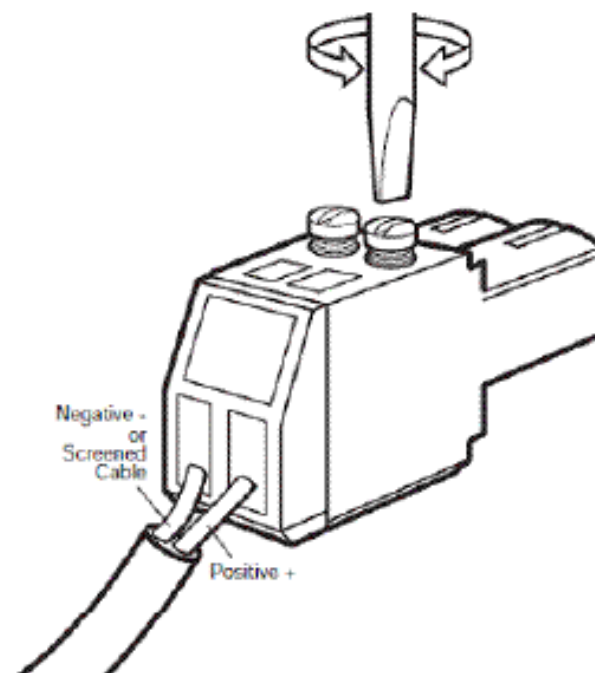
Rear Amplifier Connections

Connect all green plugs to the back of the amplifier, observing the correct locations printed about the sockets (see below diagram).
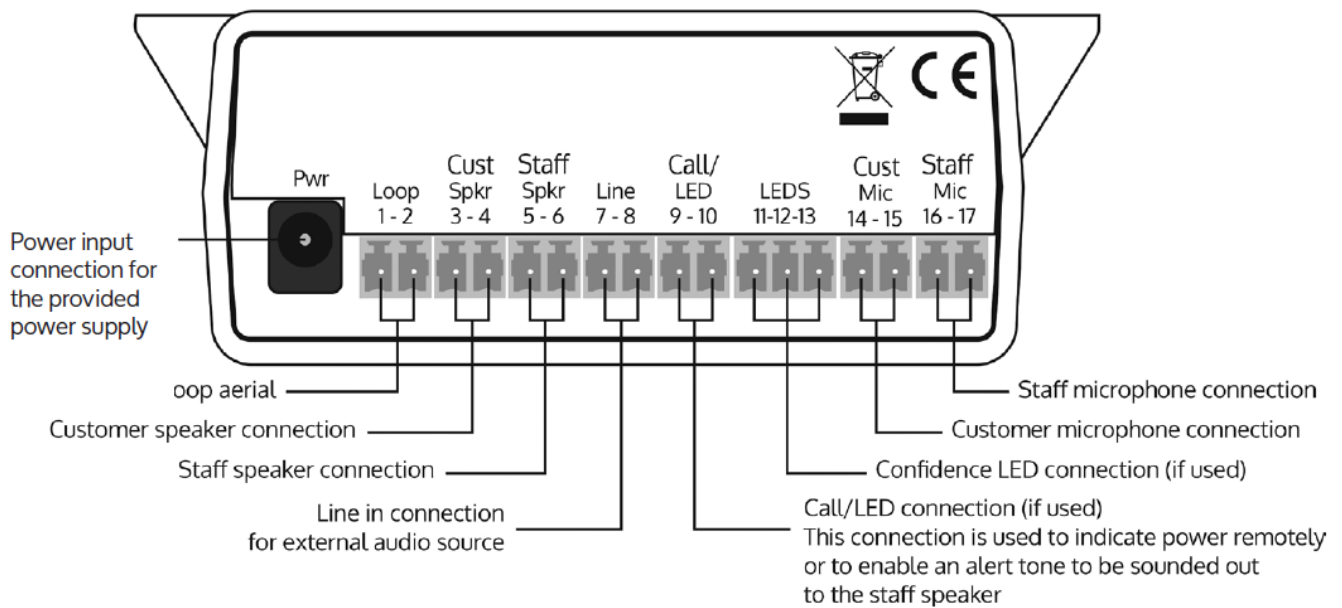
Amplifier Setup

Our amplifier provides full open duplex communication and is compatible with all of our speech transfer systems. It features individual displays for staff or customer adjustments and individual fault lights for easy fault diagnosis. Overview of Front Panel Buttons
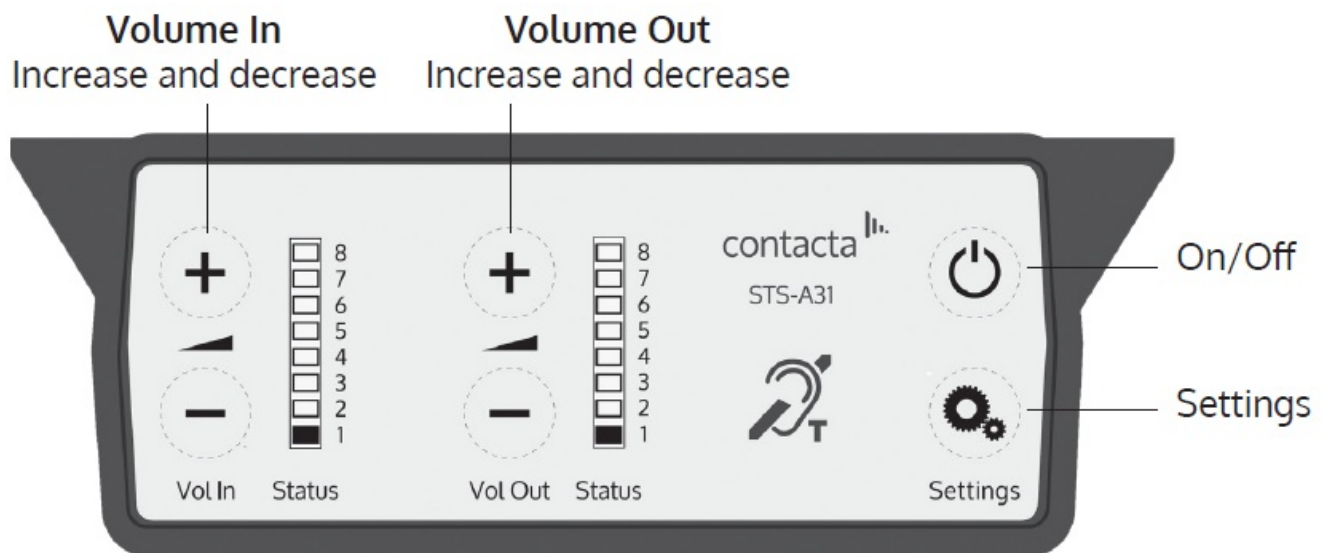
Engineers Mode

Before entering engineer mode, cycle the power. To do this either:

- Switch the power off at the wall socket and back on again. or
- Remove the power connector and re-insert it.

To enter engineer mode, simultaneously press and release the following buttons within 20 seconds of cycling the power:

- Settings button
- Volume In increase button
- Volume Out increase button

The on/off and settings buttons in engineers mode operate as follows:

- Move to the next setup area
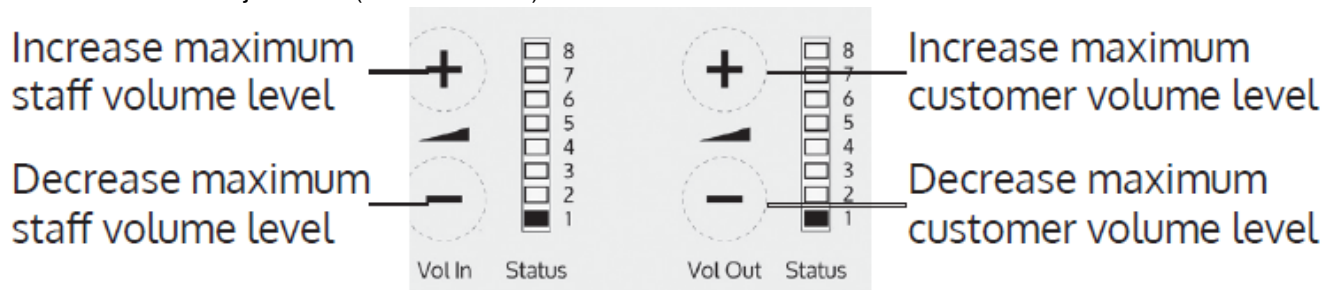
- Save and exit engineers mode

Please note

- Save and exit engineers mode after making any adjustments.
- The amplifier will automatically exit engineer mode without saving if no buttons are pressed for 2 minutes.

Setup Areas
Whilst in engineers mode, there are 3 editable setup areas. You will always enter setup area 1 first. The green Volume In LED bar will flash to indicate which setup area you are in.
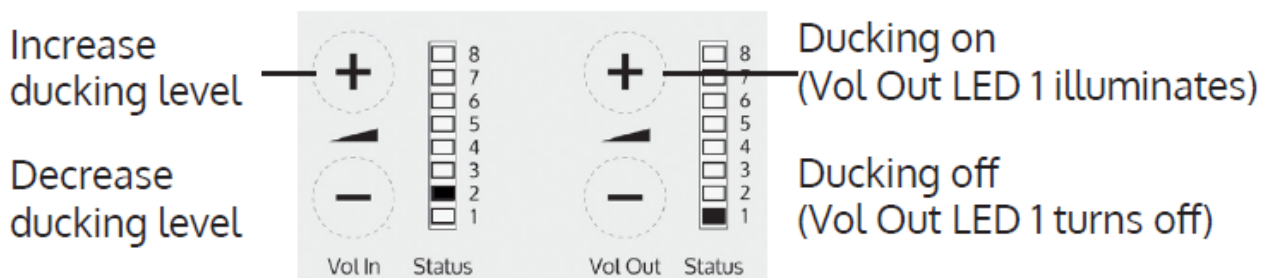
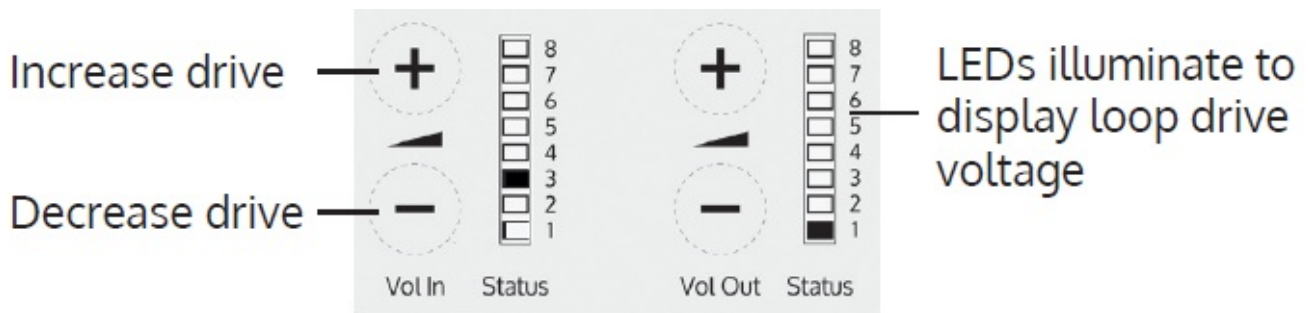**Setup Area 1:**
Maximum Volume Adjustment (LED 1 flashes)

Increase maximum staff volume level

Decrease maximum staff volume level

Increase maximum customer volume level

Decrease maximum customer volume level

Setup Area 2:
Ducking Adjustment (LED 2 flashes)

Increase ducking level

Decrease ducking level

Ducking on (Vol Out LED 1 illuminates)

Ducking off (Vol Out LED 1 turns off)

Setup Area 3:
Hearing Loop Drive Adjustment (LED 3 flashes)

The drive level should be adjusted so the red LED 8 is illuminated only when there are peaks in the speech volume.
If the amplifier does not have a loop attached, you can turn off the red loop fault LED 8 by adjusting the drive down to off.
Please note:

- If the amplifier detects an error in its' settings memory it will restore itself to factory default settings.

Using the System

- When powered and in normal operational mode the amplifier will display Volume In LED 1 as steady green.
- When the amplifier is switched off using the On/Off button, audio is muted and LEDs are not illuminated; press any button to turn the amplifier on again.

To adjust the staff volume level:
Press and hold the Volume In (+) or (-) buttons to increase or decrease the level. The corresponding LED bar will show the volume setting.

To adjust the customer volume level:
Press and hold the Volume Out (+) or (-) buttons to increase or decrease the level. The corresponding LED bar will show the volume setting.

For the best possible performance:

1. Ensure the customer and staff volumes are turned completely down.
2. Adjust staff volume (Volume In) to a comfortable level.
3. Increase customer volume (Volume Out) until feedback is heard.
4. Decrease customer volume (Volume Out) until feedback is just eliminated.

Once you have followed the above steps:
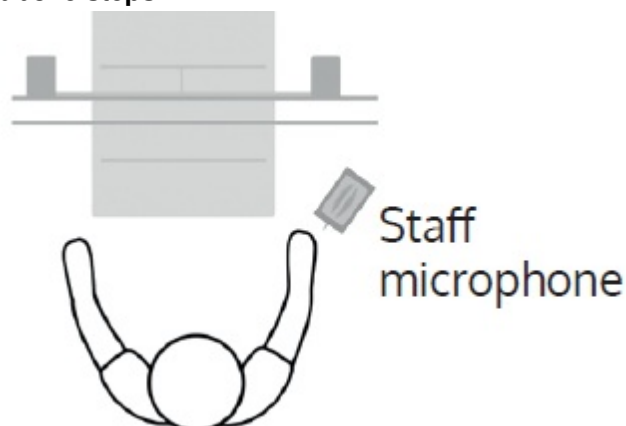
1. The staff microphone is best positioned no more than 300mm away from the staff member.

2. Check the amplifier is fully functional by ensuring the red 'fault' light is NOT displaying.

If there is insufficient volume even after you have adjusted the volume controls, enter engineers mode and raise max volume settings. Exit engineers mode and repeat the initial setup.
The system is now ready to use.

Fault Diagnosis LEDs
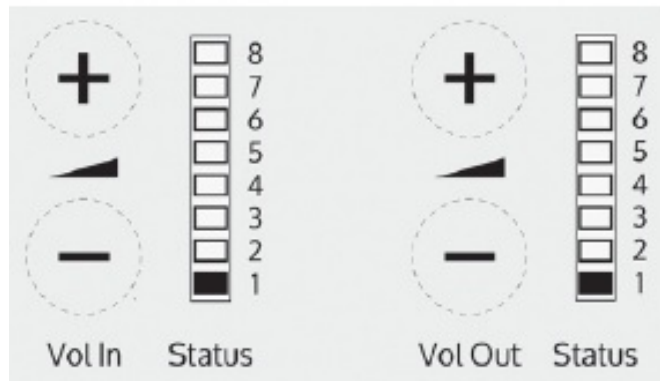
- Volume In LED 8 will stay red if there is a fault with the staff microphone.
- Volume Out LED 8 will stay red if there is a fault with the customer microphone.
- Volume In LED 8 will flash red if there is a fault with the loop (i.e. a broken aerial).

Factory Default Settings
To return the amplifier to the factory default settings:

1. Unplug the power supply and then reconnect it.

2. The LED indicators will show a light pattern in the "Vol In" column. This indicates the firmware revision. This will be followed by a green light at the bottom of each column.

3. Within 20 seconds, press the On/Off button and Volume In (-) button together, then release them.

4. The "Vol In" column will again indicate the firmware revision. This indi-cates that the settings have been restored.

Troubleshooting

Symptom	Possible Fault	Action

There is no power detected through the amplifier (and there is power at the socket).	1) The power jack is not plugged in or faulty.	1) Check power jack is firmly plugged in.
	2) The plug fuse has blown.	2) Replace the fuse, but if it blows again contact your supplier.
	3) Faulty power supply unit.	3) Replace the power supply unit.
	4) Faulty amplifier.	4) Replace amplifier.
The red LED is illuminated on the front panel.	1) Constant red LED: Staff or customer microphone fault.	1) Ensure the microphone is wired correctly and firmly plugged in. Try an alternative microphone to ensure the port is working.
	2) Red LED comes on after speech: Induction loop fault.	2) Ensure the induction loop connector is wired correctly and firmly plugged in.
I can't hear audio through the induction loop.	1) The induction loop or microphone is disconnected.	1) Check instructions for correct connections and, if possible, check the hearing device with a known working hearing loop.
	2) Faulty loop tester.	2) Ensure the loop tester has a new set of batteries.
I can hear interference through speakers (buzzing/whistling / hissing).	1) Unscreened or poorly earthed third-party equipment is being used nearby.	1) Switch off any third-party equipment to identify the source of interference.
	2) Internal volume gain set to high.	2) Access the amplifier Engineer Mode to adjust the internal settings.
	3) Incorrect power supply being used.	3) Ensure that our grounded power supply unit is connected.
Amplifier goes into feedback.	1) Internal volume gain set to high.	1) Access the amplifier Engineer Mode to adjust the internal settings.
	2) The microphone is positioned too close to the speaker.	2) Move the microphone to a location further from the speaker.
The unit does not go into power-saving mode.	1) Ambient noise in the area is too high.	1) Switch off any air con systems, desktop fans, and or computers to reduce ambient noise.

If no action is successful please seek assistance from your distributor or a Contacta installer.
www.contacta.co.uk

Documents / Resources

contacta STS-K015 Window Intercom Systems [pdf] User Guide
STS-K015 Window Intercom Systems, STS-K015, Window Intercom Systems, Intercom Systems, Systems

References

- **Innovative assistive technology solutions - Contacta**
- **User Manual**