

IP CLEAN ROOM Master Station / **IP-CROR 1008415000**

1008015000 / 8015 IP OR Wall Master & Display replaced by the 1008415000

Description

- The IP Operating Room (OR) Master Station is an advanced intercom station intended for use in operating theatres and clean rooms. The station front plate is totally flat and without any holes to minimize bacteria accumulation (clean room technology).
- The station has an excellent audio quality.
- With a large backlit display and Zenitel audio technology the station allows users to read caller ID, listen and talk at a distance.
- The most used functions can be accessed immediately from the four Direct Access Keys (DAK).
- Designed for CCoIP® the station offers a set of critical communication features such as integrated firewall, group call, call priority and over-ride, to name just a few.
- This enables the delivery of instant, efficient and secure voice and data services in an IP environment.

Features:

- Compatible with ZENITEL ICX AlphaCom, IC-EDGE (Can be used as a IC EDGE Controller) and iPBXs (SIP)
- Chemical resistant and anti-bacterial front surface for easy cleaning
- Robust aluminum front plate to withstand maintenance and cleaning conditions
- White backlight for large high contrast display and behind all switches for excellent readability in the dark
- Four programmable Direct Access buttons for functions and direct calls to stations and telephones inside and outside the system
- Powered from the IP network cable using Power over Ethernet (PoE)
- Superb audio quality – active noise cancellation, acoustic echo cancellation
- Relay output contact for control of external equipment – Foot pedal, external button
- Quick and easy Snap-On mechanism for installation in flush mounted back boxes
- Superb audio technology – provides loud speaking hands free duplex communication from any location in the room - no one needs to leave their duty and all present staff can follow the conversation
- Integrated Web server for easy configuration and monitoring.

- IP 8415 Clean room stations are durable.
- The 8415 IP OR station frame is “Aircraft Grade aluminum frame”, not cast aluminum.
- This IP master station is designed to hold up to the harshest environments.

Chemical	Autotex
Ketones	Good
Esters	Very good
Alcohols	Good
Aliphatic hydrocarbons	Very good
Aromatic hydrocarbons	Very good
Chlorinated hydrocarbons	Good
Organic acids	Good
Mineral acids (dilute)	Very good
Alkalis (dilute)	Very good
Oils and fats	Good
Foodstuffs	Good
Household cleaning agents	Very good



 **UL Certified Intercom**

PS050321

ISOLATION / CLEAN ROOMS

- Communication without breaching cleanroom environment
- Noise cancellation for healthcare machines and clean room fans
- Intercom station can be easily disinfected
- Hands-free:
- Foot pedal / external buttons capability connection.



CLEANROOMS AND ISOLATION ROOMS

Cleanroom stations are easy to clean, can withstand most chemicals, and are resistant to bacteria and other contagions. They can be used in isolation rooms to allow quarantined patients to communicate with staff while allowing for efficient disinfection.

Active Noise Cancellation

Having a conversation in a noisy area is difficult enough when you are talking face to face and can be virtually impossible when using a communications system. Entry gates of car parks and toll roads particularly are difficult points to have a conversation due to the noise of idling car and truck engines. What if this noise could be suppressed, wouldn't that make it a lot easier?

Zenitel Active Noise Cancellation is a software feature for Zenitel IP stations. A powerful DSP inside the station will measure the microphone signal and calculate the noise components in that signal. It will effectively remove unwanted noise components, leaving a clean speech signal even if the original speech level is below the level of the surrounding noise. The result will be a clear Open Duplex conversation even with a passing train in the background or talking from inside a car while stuck in front of a barrier.

Noise Cancelling Features if the IP Station

Microphone Comparison

A major advantage of Active Noise Cancellation above the use of a noise cancelling microphone is the fact that the user does not need to speak closely into the microphone, which in certain circumstances can be highly impractical or the need to do so may not be apparent at all to an occasional user.

Level adjustment

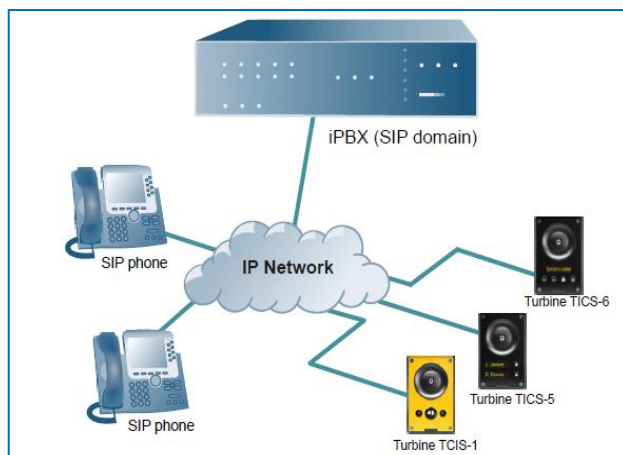
The Active Noise Cancellation feature can be switched off, level setting 0, or be set to different levels. Level 7 will give a maximum noise reduction of over 36 dB. This way the station can be optimally tuned to the environment it is in.

Software

Because the Zenitel solution is purely software based, the Active Noise Cancellation feature can be configured remotely for widely dispersed locations.

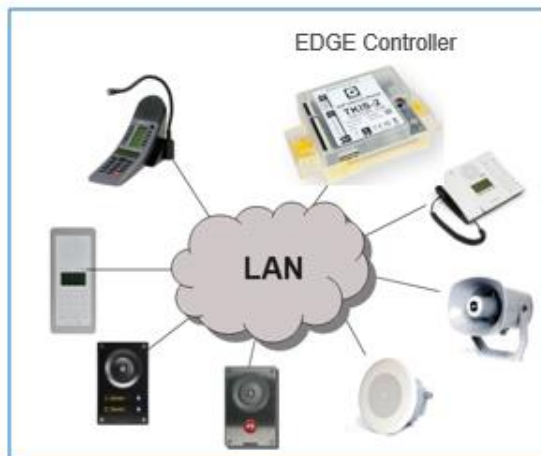
THREE MODES OF PRODUCT OPERABILITY

SIP / VoIP Telephone



No VS licensing
 TURBINE intelligibility features
 Connect to your existing VoIP system
 (Avaya, Cisco, NEC, Alcatel-Lucent,
 etc.)
 GENETEC/Sipelia/Security Center
 Station.

IC-EDGE



No central server
 Program in minutes
 No licensing for first 32 IP stations
 Max 64 devices with licensing for each node
 Supports all Zenitel IP devices
 Mobile APP
 Phone interface with telephone gateway or
 trunk license

ICX-500



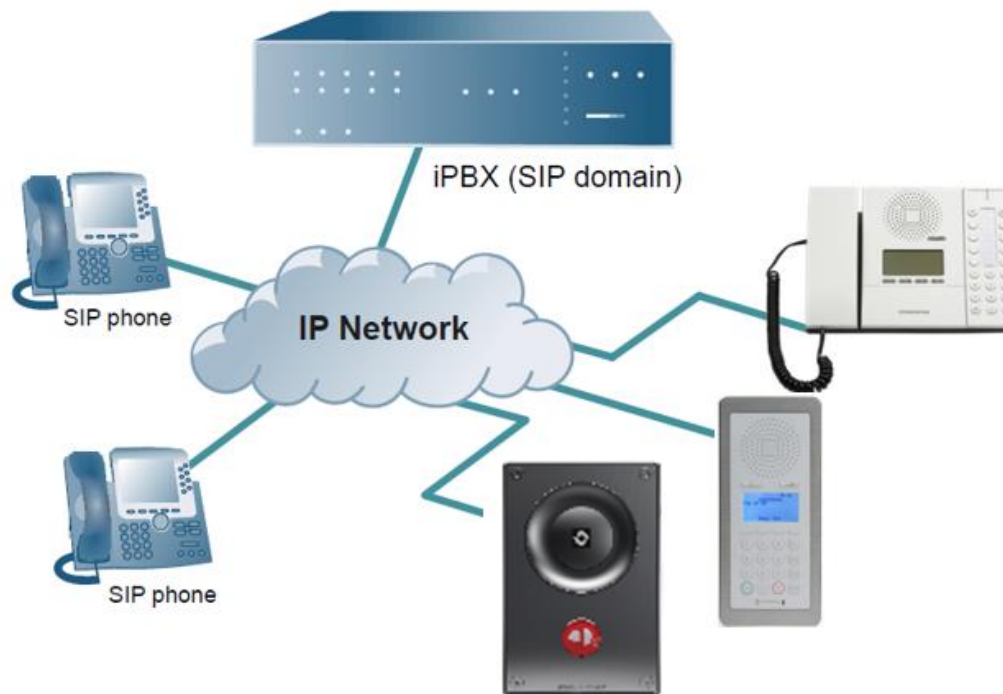
Integrated platform
 Up to 552 devices on a single server
 Supports all Zenitel devices
 Customizable functionality
 Phone interface with telephone gateway or
 trunk license
Multiple Integration partners

SIP APPLICATION EXAMPLE

SIP Technology - This protocol is integrated and available out-of-the-box, on every single IP Device from Zenitel.

The Zenitel products are certified for integration in Avaya, Cisco, NEC and Alcatel Lucent systems. In addition, they are also successfully currently in use, on other platforms such as, Mitel, Asterisk, Nortel and Panasonic.

The Zenitel stations support G.711 (μ -law and A-law), G.722 and G.729.

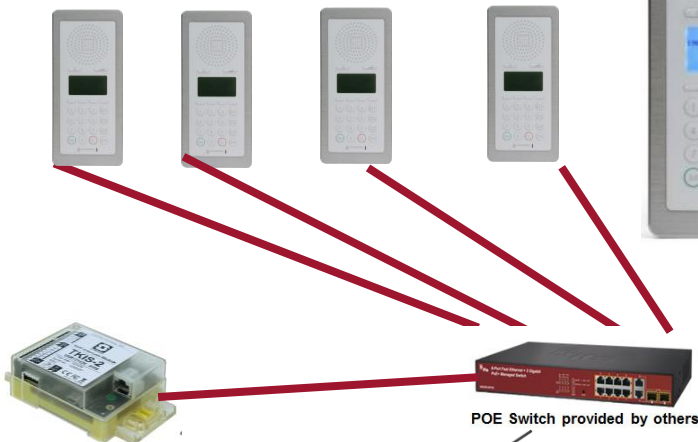


IC-EDGE APPLICATION EXAMPLE

- The IP Clean Room Master Station is an intercom station intended for use in procedure / operating theatres and clean rooms.
- The station front plate is totally flat and without any holes to minimize bacteria accumulation.
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Clean Room Area

1008415000 IP OR Master, display
1008098700 Flush Mount Back Box



OPTION: TKIS-2 Turbine Station Kit used as a Edge Controller

Outside Clean Room Area:

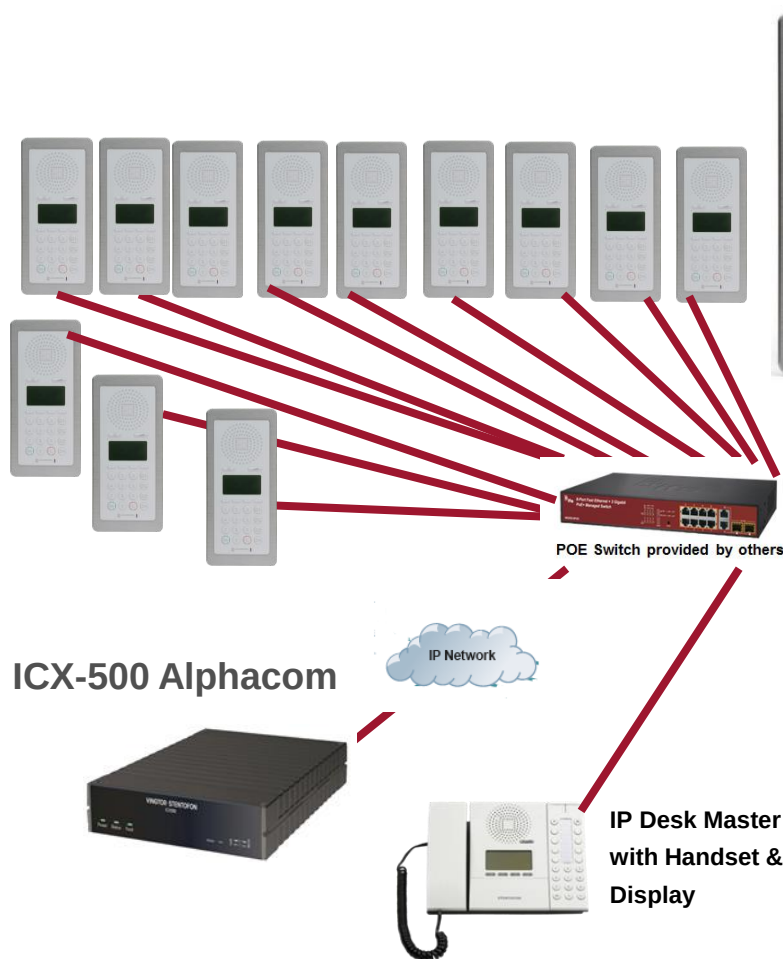


1008001000 IP Desk Master with Handset & Display

- The IC-EDGE System is an IP-based intercom system for up to 32 intercom stations, expandable to 64 stations. License for additional Zenitel devices beyond 32. One license per device.
- Auto discovery of IP stations
- System setup using web browser of PC
- Supports all Zenitel IP stations, no software licensing required for stations
- Zenitel IP stations support active noise cancellation & HD voice
- Supports 3rd party SIP devices (VoIP phones & gateway) software licensing required
- 10 VS-Clients – no cost with each IC-Edge Controller
- It is possible to extend the system with up to 10 third party SIP phones, 10 Telephone gateways and 10 VS-Clients, 10 – Mobile Clients.
- One IC-EDGE system can be linked to up to 50 other IC-EDGE systems.
- Compatible with AlphaCom, IC-EDGE and iPBXs (SIP)
- Chemical resistant and anti-bacterial front surface for easy cleaning
- Robust aluminum front plate to withstand maintenance and cleaning conditions
- Large high contrast display with backlight for excellent readability
- Four dynamic navigation keys and four DAK keys for quick access to system menus and directory entries.
- Quick and easy snap-on mechanism for installation in flush mounted back boxes
- Superb audio technology – gives loud-speaking hands free duplex communication from any location in the room - no one needs to leave their duty and all present staff can follow the conversation
- Powered from the IP network cable using Power over Ethernet (PoE)
- Clean relay output contact for control of external equipment
- Designed to meet the requirements of ISO 14644-1, ISO Designation 5

ICX ALPHACOM APPLICATION EXAMPLE

- The IP Clean Room (OR) Master Station is an advanced intercom station intended for use in operating theatres and clean rooms.
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EXAMPLE of ICX Alphacom System:

22 – 8415 IP OR Flush Master with Display

22 – Flush Back Box for 8415

1 -- IP Desk Master with Handset & Display

1 – ICX-500 Alphacom

23 – ICX IP Station Licenses

** POE Switch Provided By Others. Network by others.*

- Compatible with AlphaCom XE/ICX, IC-EDGE and iPBXs (SIP)
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FIELD HEALTHCARE FACILITIES



DOORS AND ENTRANCES

Stations and speakers at doors and entrances allow communication with patients and visitors prior to admitting them into the facility. Adding elbow, foot, or other alternative switches can further reduce risk of contact between infected and uninfected individuals.



CLEANROOMS AND ISOLATION ROOMS

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ACCESS TO RESTRICTED AREAS

Sensitive areas such as cleanrooms and isolation rooms can be monitored and restricted via intercom stations to ensure that only those authorized to enter have access.

INTEROPERABILITY

- IC-EDGE easily connects to other communication systems:
 - NURSE CALL – ability for patients to call staff
 - PHONE – easily connect external resources
 - RADIO – communication with employees/officers



NURSE CALL, PHONE AND RADIO SYSTEMS

All our stations can be integrated into nurse call, phone, and radio systems to ensure compatibility with any setup.

SIP Intercom / Intercom for any iPBX system

Setting the standard for OPEN and TRANSPARENT technology. SIP Technology is the quintessential example of an open and transparent technology that unifies voice communication. This protocol is integrated and available out-of-the-box, on every single IP Device we manufacture. Our products are certified for integration in Avaya, Cisco, NEC and Alcatel-Lucent systems and have been used on these platforms for many years. In addition, our products are successfully in use, currently, on other platforms such as Mitel, Asterisk and Panasonic. Our units support G.711 (μ -law and A-law), G.722 and G.729.

iPBX systems are now the phone system of choice in most new installations, and many sites are being upgraded to VoIP for the simplicity of installation, management and cabling. Now, as in the past, telephony systems suffer from a lack of specialized terminals, such as the Clean and Operating Room Intercom Station shown.

Zenitel IP Stations are available with SIP Clients, ready to be connected to any iPBX system. All Zenitel Master Stations are compatible with AlphaCom, IC-Edge and SIP, all with the tick of a box in the on-board Webserver.

Zenitel SIP Stations support a wide set of open protocols that allows integration with any iPBX system as well as 3rd party management systems. By connection directly to the IP network, and utilizing existing iPBX infrastructure, Zenitel SIP Intercom is easy to deploy anywhere and at any distance.

Like all Zenitel stations, the SIP Intercom features superb audio quality. This is enabled through a set of advanced technologies such as active noise filtering, acoustic echo cancellation, wide band audio codec, and high-power audio outputs.

CASE STUDY:

The University of South Australia have built new Clean Room labs and required a Clean Room intercom solution.

Unhappy with the previous choice of Clean Room Telephones, UniSA contacted Zenitel, and were able to supply SIP Clean Room Intercom that connects to their NEC iPBX.

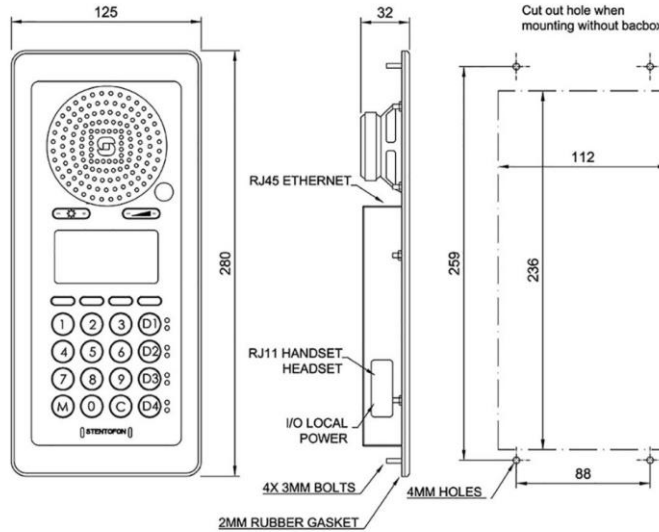
Configuration was as simple as providing Registrar IP address, and extension numbers, with no further configuration required.

The Active Noise Cancellation is removing the fan noise from the audio stream, ensuring that the messages are received first time.

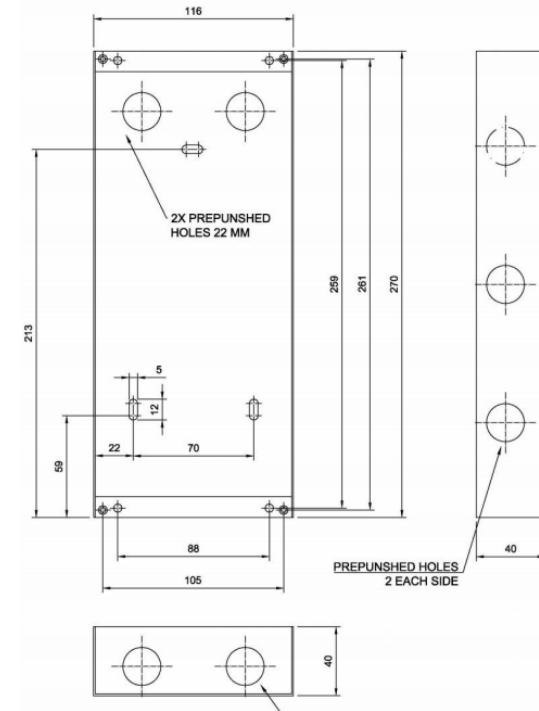
10/11

Back Box Mounting Options

1008098700 FLUSH MOUNT BACK BOX



Related item:
Flush mount back box
1008098700



1000110708 Surface Mount Back STEEL Box

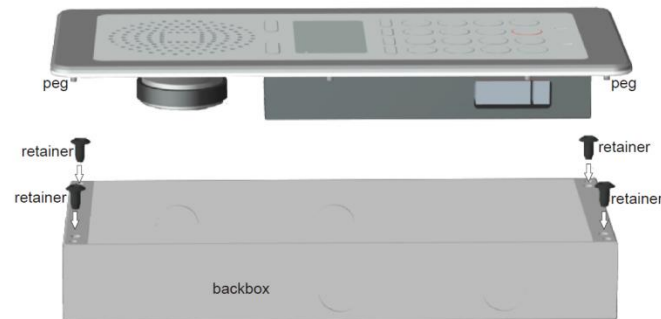
Description: The 1000110708-surface mount back box is specifically designed for use with the 1008415000 IP OR Wall Master Station.

This **SURFACE Mount Box**, painted grey, with conduit knock outs on bottom and center.



Housing: Metal
Color: Grey Paint
Size: 11" H x 5" W x 2 1/2" D
Openings: 1/2" Knockouts on bottom and center
Fasteners: Snap-In Plugs (Installed)

Mounting the Station



The station is securely fastened to the backbox using the four retention pegs supplied.

To mount the station:

1. Insert the four plastic retainers into the larger and inner of the holes at each corner of the backbox.
2. Align the four retention pegs with the four plastic retainers and push the station down until flush with the backbox.

Mounting the Station



zenitel
because communication is critical



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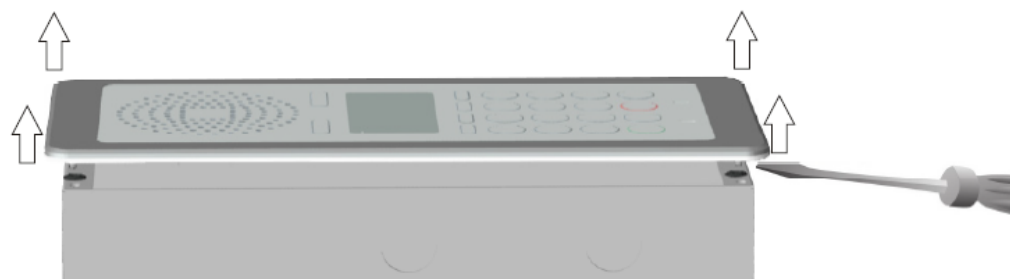
Demounting the Station

Please follow the instructions precisely:

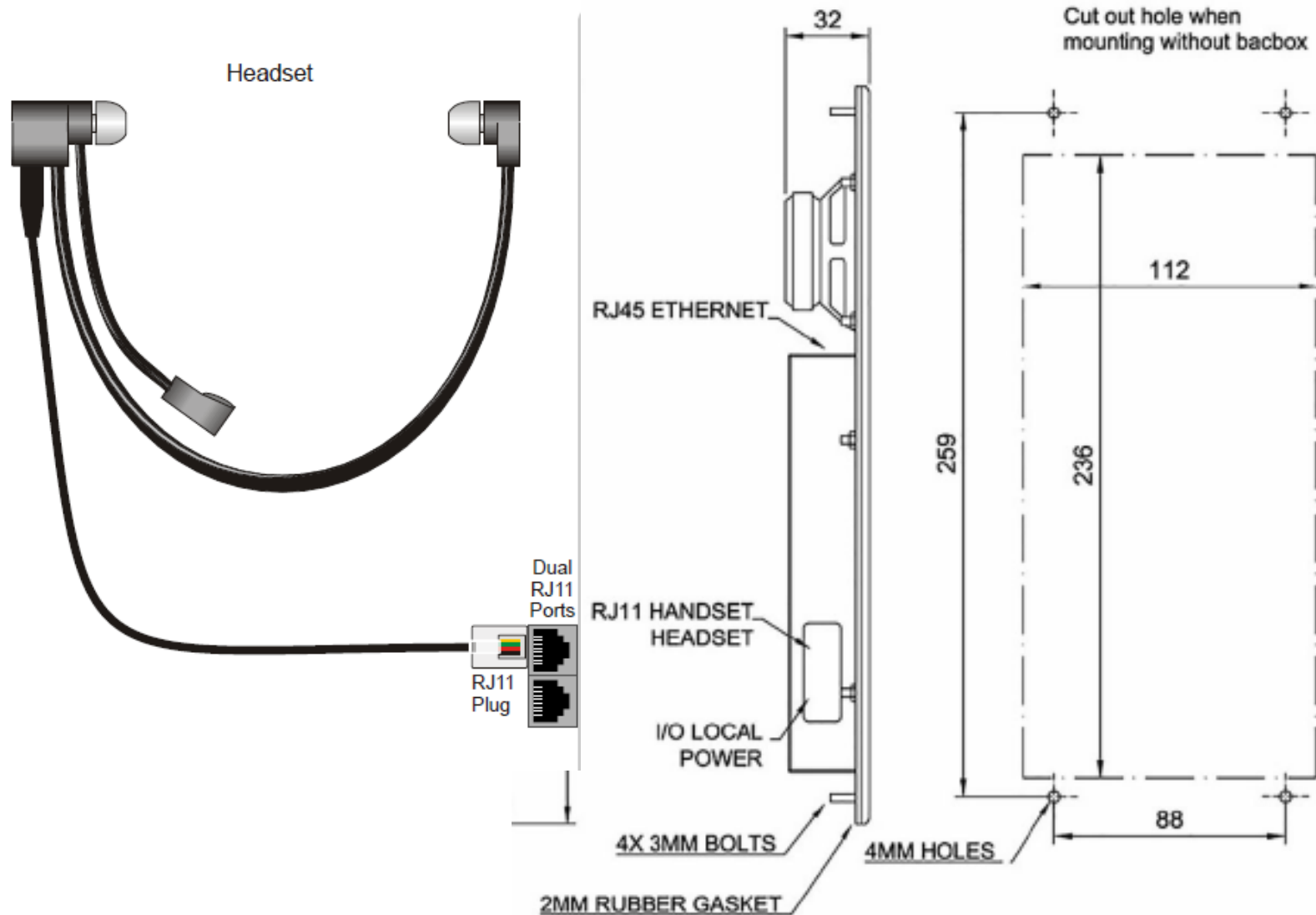
1. Using a flat-head screwdriver, gently pry loose each retention peg from the four corners. Make sure to pry loose each peg gradually so that all four pegs remain at an even plane during the whole process.
2. When the retention pegs are loose enough, lift the station out, making sure to keep the station at an even plane as it is lifted out from the backbox.

Caution

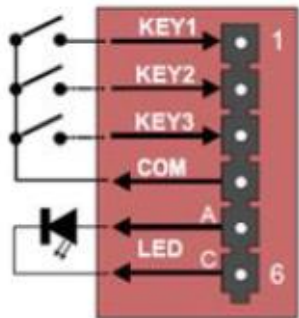
Do not lift the station at an angle as this may damage the pegs!



Head set connection

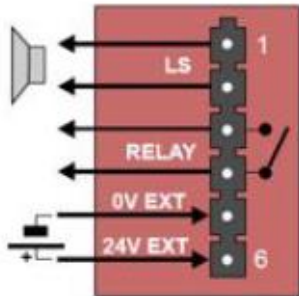


External Connection



- P4** 6-pin plug-on screw terminal for external connections.
- | | |
|---------|------------------------------------|
| Pin 1/4 | Input 1 |
| Pin 2/4 | Input 2 |
| Pin 3/4 | Input 3 |
| Pin 5/6 | Station LED for call message info. |

Relay Connection



- P3** 6-pin plug-on screw terminal for external connections.
- | | |
|---------|--|
| Pin 1/2 | Connect to 1.5 W loudspeaker.
Typical impedance: 8 Ω
Recommended impedance: 6-25 Ω . |
| Pin 3/4 | Internal NO relay contact for door lock control etc. |
| Pin 5/6 | Connect 24 VDC for station power if PoE is not used. Pin 6 is positive. |

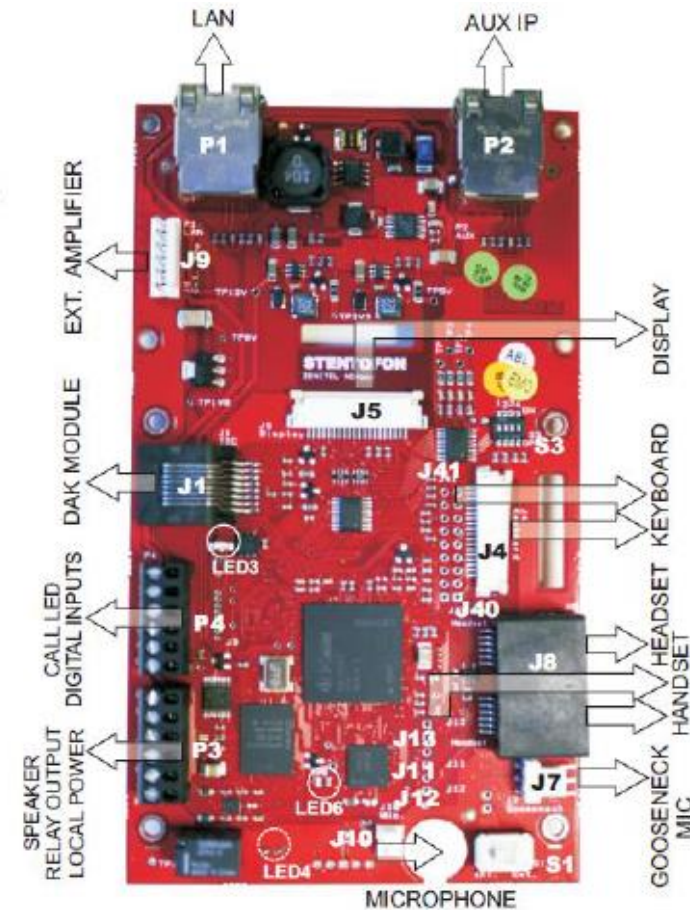


Figure 15 Station Board Connections