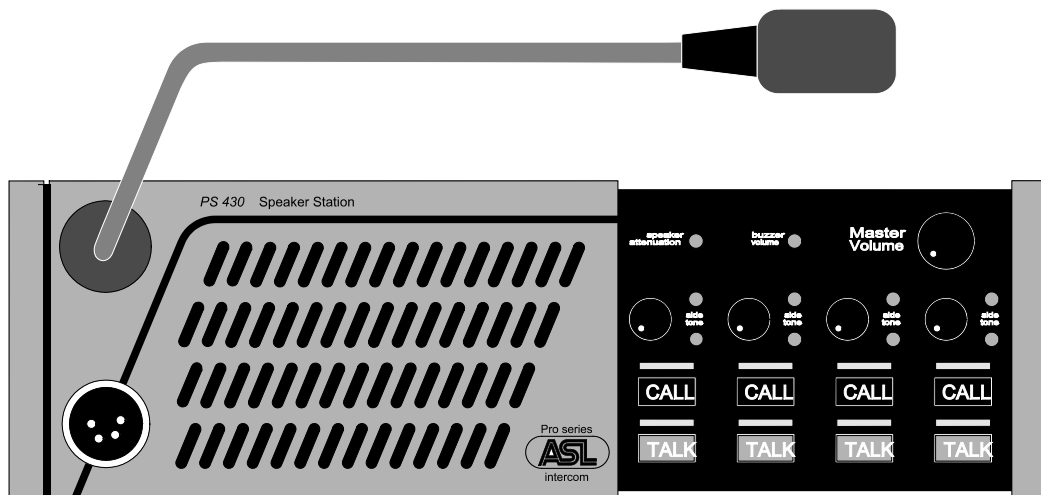




PS 430 FOUR CHANNEL REMOTE SPEAKER STATION



QUICK GUIDE

October 2013

This product is designed and manufactured by:

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1.0 GENERAL DESCRIPTION

The PS 430 is a four channel speaker station for full duplex communications, incorporating a loudspeaker, a gooseneck microphone and a headset connector.

The PS 430 RM model has, instead of the gooseneck microphone, a small built-in electret microphone.

Each channel has a Volume (listen level) control, a Talk and Call button with LED indicators and a two-stage side tone trimmer. A master volume controls the total speaker/headset volume.

The unit is equipped with a limiter for the gooseneck microphone, allowing to speak close into the microphone without giving rise to overload and distortion. Loudspeaker dimming is automatic if the gooseneck mic is enabled. If a headset is connected, both gooseneck microphone and speaker are disabled automatically.

By applying low noise/high speed op-amps, a speech presence filter and a high power bridged headphone amplifiers, communication is very comfortable even in environments with high background noise level. There is a separate amplifier for the loudspeaker.

The unique ASL CALL system provides both a flashing red LED and a very distinctive sound signal. Smooth operation is guaranteed with the CALL button. Only a slight touch makes the red LED flash, whilst holding the button for two seconds will activate the CALL sound signal. The volume of the sound signal (buzzer) can be adjusted at the front panel.

Fully electronic switching allows for 'soft' microphone 'on' switching (latched or momentary), remote Mic Mute facility and automatic speaker attenuation if the gooseneck microphone is activated.

2.0 UNPACKING

After unpacking the unit, please inspect for any physical damage to the unit, and retain the shipping carton and relevant packing materials for use should the unit need returning.

If any damage has occurred, please notify your dealer immediately so that a written claim can be initiated. Please also refer to the warranty section of this quick guide.

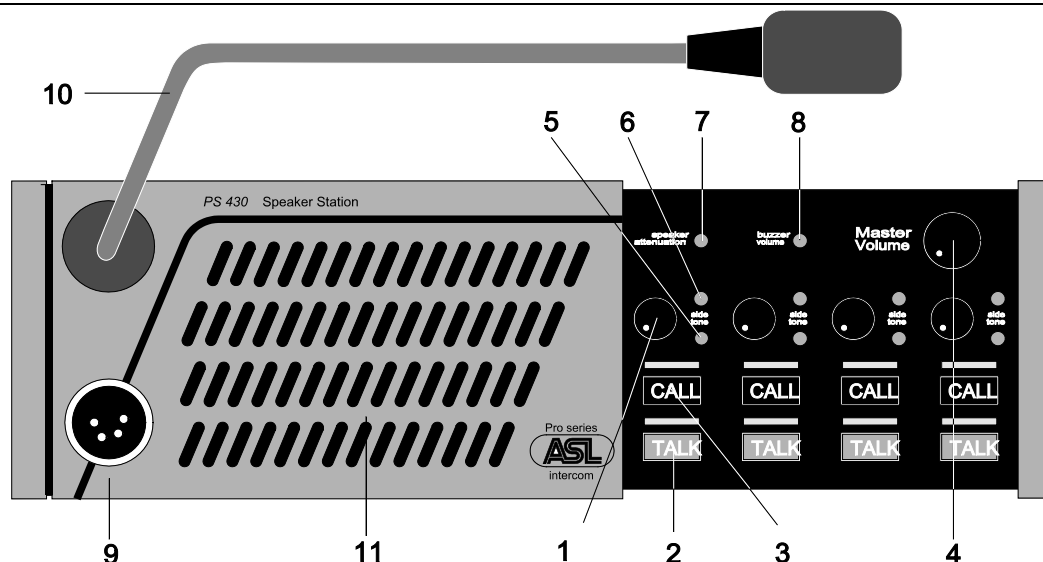
3.0 INSTALLATION

To connect the PS 430 to the system, use professional microphone cable with 2 wires and 1 shield. These cables may be connected to the LINE connector sockets on the PS 430 side panel, using the Y-cords which are in the shipping carton.

The PS 430 is fully protected against wiring errors (reverse power) or short circuit in the interconnect cables.

A kit is available for mounting the PS 430 in a 19" rack, taking 2U of rack space

4.0 FRONT PANEL CONTROLS & CONNECTOR



1 LISTEN LEVEL control knobs

To preset the listen level of each channel.

2 TALK push buttons

These buttons allow talking to each channel separately or to several channels simultaneously. If a TALK button is enabled, its green LED is lit.

Momentary switching:

If a TALK button is pushed and held, the microphone signal is sent to the referring intercom channel until the button is released.

Latched switching:

If a TALK button is pushed shortly, it is electronically latched and the microphone signal is sent to the referring intercom channel. If pushed again, the TALK button switches off.

Mic Mute when latched on:

After on an intercom channel a Mic Mute signal has been received from a PRO Series master station or power supply, the connection between microphone and that intercom channel is interrupted. By pushing the TALK button again, the connection is restored.

3 CALL push buttons

To activate the call system, for each channel separately. By a momentary push a call signal is sent to all stations connected to the referring intercom channel and all Call LED's start flashing. Keeping the CALL button pushed for 2 seconds activates the call buzzer, provided there is no buzzer mute signal on the referring channel.

4 MASTER VOLUME knob

Functions as the master volume control of the listen levels of the 4 intercom channels (see also #1), for both the speaker and the headset.

5 SIDE TONE LEVEL trimmers

To minimize the speaker feeding back into the gooseneck microphone (unit feedback). They also determine the level of your own voice as you hear it in the speaker or headset.

6 SIDE TONE HI trimmers

These trimmers have the same purpose as trimmers #5, but solely for the high frequencies. Trimmers #5 and #6 adjustment procedure, for each channel separately:

- set trimmers in start position: fully clockwise
- switch off the microphones of all connected (speaker-) stations
- make sure that there is no automatic speaker attenuation (turn trimmer #7 fully clockwise)

- push the TALK button of the channel of which one wants to adjust the side tone.
- Slowly turn up the listen volume of the PS 430 (channel- and master volume).
- speak into the gooseneck microphone
- adjust the speaker listen level to a minimum by turning the side tone trimmers counter-clockwise (first trimmer #5 and then trimmer #6; repeat this a few times)
- connect a headset to the PS 430 (the speaker and gooseneck are now automatically disabled) and speak into the headset microphone
- check whether the level of your voice in the headset can(s) is sufficient. If not, push up this level a bit by turning side tone trimmer #5 clockwise.

The trimmer operating area is between fully clockwise and minimum level. Adjusting the side tones does not affect the level of your voice as heard by other stations.

7 SPEAKER ATTENUATOR trimmer

To adjust the extent to which the loudspeaker is automatically dimmed if the gooseneck microphone is switched on. It prevents unit feedback in case side tone rejection is not sufficient.

It also minimizes system feedback or a 'hollow' sound when the gooseneck microphones of other speaker stations (on one or several of the connected party lines) are switched on as well. Adjustment procedure :

- make sure that there is no headset connected
- switch off all TALK buttons of the PS 430.
- inject an audio signal on one of the intercom channels via the aux input of a Pro Series master station or separate power supply
- turn up the listen volume of the PS 430 (channel – and master volume).
- activate the gooseneck microphone (push the TALK button of the selected channel)
- adjust the desired degree of speaker attenuation (turning the trimmer counter-clockwise increases the attenuation)

8 BUZZER VOLUME trimmer

To adjust the volume of the buzzer

9 HEADSET connector (XLR-4)

To connect a headset to the PS 430. The headset must have a can impedance of minimum 200 Ω. In case of two cans in parallel, each can must have an impedance of minimum 400 Ω. The headset microphone may be of the dynamic

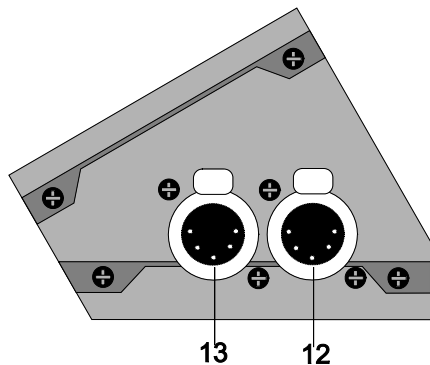
or electret type. If a headset is connected, loudspeaker and gooseneck microphone are disabled automatically.

As an option, an XLR-6 connector can be fitted for binaural use of the headset (see section 6.0)

10 GOOSENECK microphone

A limiter prevents the mic pre-amp from clipping when speaking close into the microphone. The gooseneck microphone is automatically disabled if a headset is connected.

5.0 SIDE PANEL CONNECTORS



- 12 **LINE** connector for channel A & B
- 13 **LINE** connector for channel C & D

These two XLR-5 Line connectors are for connecting the PS 430 to the intercom party lines. One connector is for channel A+B, one connector is for channel C+D.

For linking the XLR-5 sockets to XLR-3 intercom line connectors, each PS 430 comes with two Y-cords, having an XLR-5 connector at one end and two XLR-3 connectors at the other end. On the Y-cords, the XLR-3 with the white ring corresponds with channel A or C.

For pin assignments of Line connectors #12 and #13, see the PS 430 user manual.

6.0 INTERNAL CONTROLS

MIC GAIN trimmers

Inside the unit are two trimmers (located on the PCB) to adjust the gain of the gooseneck microphone and the headset microphone separately. See the PS 430 user manual.

BINAURAL ROUTING jumpers

Internally placed jumpers determine – for each channel separately – the routing of the intercom audio to the left and/or right headset can. See the PS 430 user manual.

7.0 TECHNICAL SPECIFICATIONS

System Specifications

See the PS 430 user manual

Mic. Pre-amps

gain: 40 - 60 dB (adjustable internally)
 presence filter: +6 dB at 5 kHz
 power to electret mic: +9 V DC

Speaker Driver Amp: 1.6 Wrms @ 16 Ω

Headphones Driver Amps

max. output level: monaural: 16 Vrms @ 200 Ω
 binaural: 2x 10.3 Vrms @ 400 Ω
 max. output power: monaural: 1.3 Wrms @ 200 Ω
 binaural: 2x 0.27 Wrms @ 400 Ω

Side Tone Rejection: 0 - 30dB adjustable

Power Consumption PS 430

See the PS 430 user manual

Dimensions & Weight PS 430

width: 283mm / height: 88 mm
 depth: 42/48 mm sloping / weight: 1550 grams

0 dBu is defined as 775 mV into open circuit. ASL reserves the right to alter specifications without prior notice

For more information see the PS 430 user manual. Go to www.asl-inter.com. section 'Support' and review the referring manual

8.0 WARRANTY

This unit is warranted by ASL Intercom to the original end-user purchaser against defects in workmanship and materials in its manufacture for a period of one year from date of shipment to the end-user. Faults arising from misuse, unauthorized modifications or accidents are not

covered by this warranty. If the unit is faulty it should be sent in its original packing, to the supplier or your local ASL dealer, with shipping prepaid. A note must be included stating the faults found and a copy of the original suppliers invoice.