

AOPSP-PB

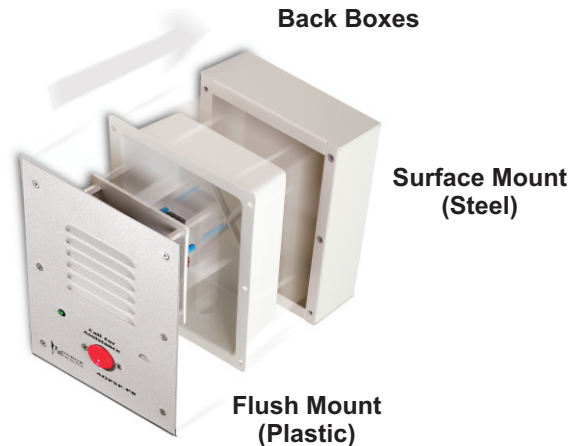
BI-DIRECTIONAL SPEAKERPHONE

INSTALLATION AND OPERATING INSTRUCTIONS



Model AOPSP-PB

is for **flush** or **surface** mounting to a wall or flat surface



DESCRIPTION

Model AOPSP-PB is a wall mount two-way call stations containing a built-in line level electret condenser microphone, a 4"(101mm) speaker and a 1"(25.4mm) call button. It is designed to interface with various modes of audio/video transmission systems such as:

- IP Network Cameras
- DVR's
- Video Servers
- PC Soundcards

Provided with the unit are two back boxes for either flush or surface mounting to a wall. The AOPSP-PB can be used as a stand alone unit or with companion AOP-XD. The **AOP-XD Audio Transceiver Interface** unit provides two-way audio with the receiving device (IP Network Camera, etc.). Also, a built-in 1" (25.4mm) call button for provides switch closure activation with the receiving device.

The AOP-XD provides power to the AOPSP-PB Speakerphone and drives the audio signals (line level) into the audio input of the above receiving devices. It also receives the return audio signals from the "Audio Out" or "Speaker Out" of the DVR, etc. and amplifies the output level for broadcasting through the speaker portion of the AOPSP-PB Speakerphone. AOP-XD contains adjustable audio level controls for listen and talkback. Located on the back panel of the AOP-XD are two RCA audio input and output jacks for accommodating most DVR's, IP Network Camera's audio inputs etc. When the AOPSP-PB is used as a standalone unit, a 12Vdc power supply is needed.

OPERATIONS

The gain of the microphone and speaker are factory adjusted. If it is necessary to change the gain of either or both the audio output of the microphone and speaker of the unit, it has to be done in small increments. For adjusting the gain of the microphone, rotate clockwise to increase or counterclockwise to decrease, the potentiometer marked "MIC" slowly until the desired level is attained. Somebody at the head-end has to listen to it while the adjustments are made. If the microphone's gain is too high, it will attenuate the audio output of the speaker. The output of the speaker will then be cutting off as you talk. If this happens, rotate the potentiometer marked "MIC" slowly counterclockwise to decrease the gain of the microphone until the talkback sound at the speaker no longer cuts off.

To adjust the audio output of the speaker, rotate the "SPKR" potentiometer clockwise (increase) or counterclockwise (decrease) slowly until the desired loudness is attained. If the audio from the microphone starts to get low, rotate the "SPKR" potentiometer counterclockwise a small increment at a time until the microphone audio becomes louder again.

This unit has a built-in muting system that if the microphone's is too high it is going to mute the speaker and vice versa.

INSTALLATION AND OPERATING INSTRUCTIONS

WIRING CONNECTION TO SPEAKER AND MICROPHONE OF AOPSP-PB

Color Code of recommended wiring is:

RED - 12Vdc power to microphone
BLACK - Audio Output
BARE - Ground (microphone)
WHITE - Speaker

Located on the bottom right side of PC board is a 4-pin terminal block marked A, B, C, SP

A = 12Vdc power (red wire)
B = Audio output (black wire)
C = Ground (bare wire)
SP = Speaker connection (white wire)

Bring one end of recommended cable and connect as follows:

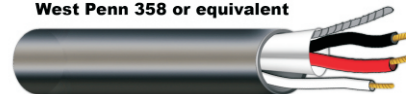
- 1) Connect RED wire to terminal marked "A"
- 2) Connect BLACK wire to terminal marked "B"
- 3) Connect BARE wire to terminal marked "C"
- 4) Connect WHITE wire to terminal marked "SP"

WIRING REQUIREMENTS

3 Conductor consisting of:

- 2 Conductor **shielded**, 20 gauge with 22 gauge drain
 - 1 Conductor **unshielded**, 20 gauge
- All in the same jacket

West Penn 358 or equivalent



Drill an opening top, bottom or back side of backbox for passing wiring or for connecting conduit

WIRING CONNECTION TO AOPSP-PB CALL BUTTON

Connect the two wires (black and green) attached to Call Button Switch to the contacts of the receiving device, using wire nuts and 22 gauge stranded wire. Refer to the receiving device manufacturers instructions for proper connection.

WIRING CONNECTION FROM AOPSP-PB TO AOP-XD AUDIO INTERFACE UNIT

The rear panel of AOP-XD has a 4 pin terminal block marked A, B, C, SP

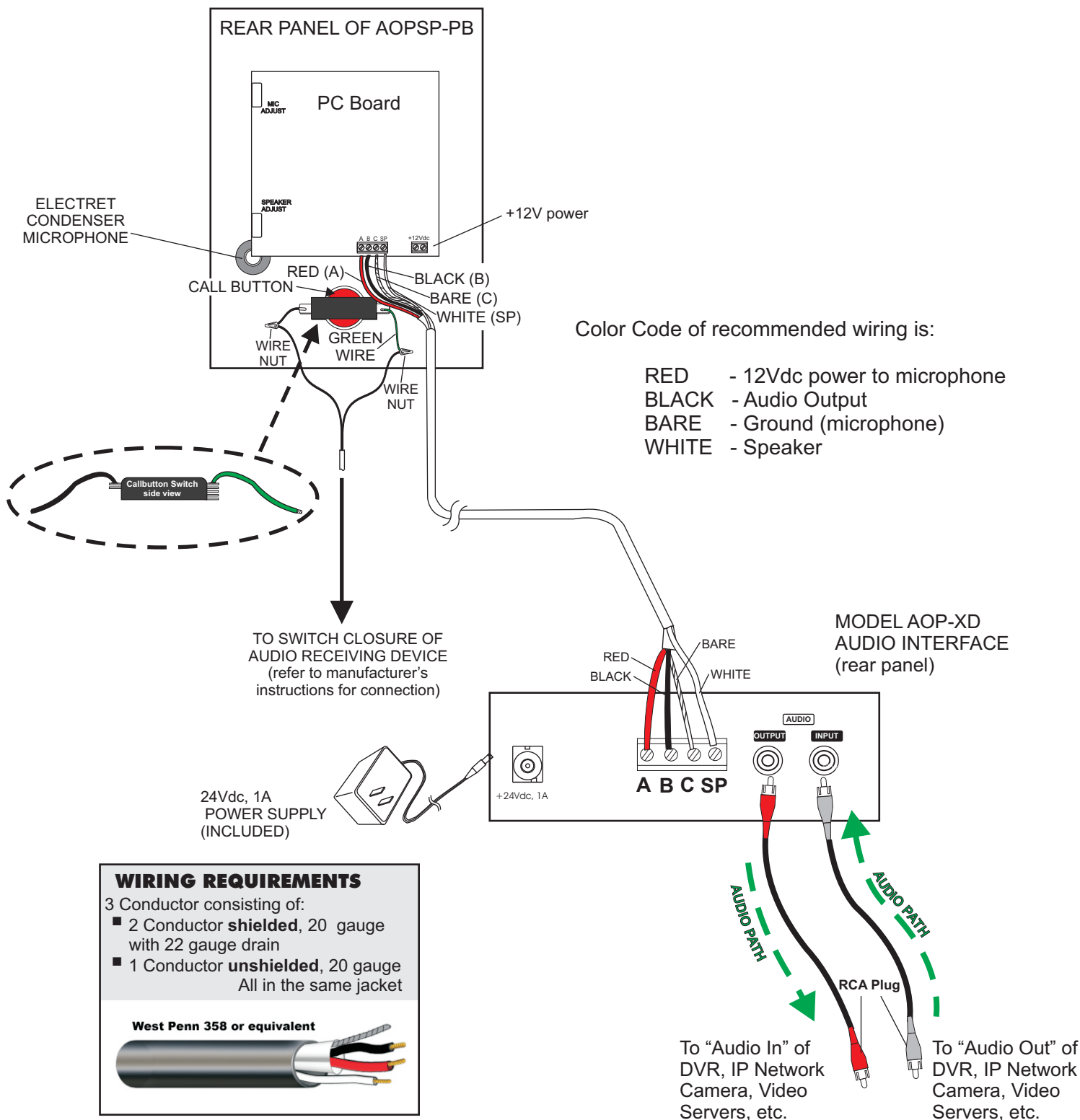
Bring in other end and connect as follows:

- 1) Red wire to terminal A
- 2) Black wire to terminal B
- 3) Bare wire to terminal C
- 4) White wire to terminal SP

APPLYING POWER TO MODEL AOP-XD

Included with the AOP-XD is a 24V, 1A Power Supply. First connect small end to the 24Vdc jack located on the back panel of AOP-XD. Then plug large 2-prong power block into a standard 120V electrical outlet or power strip. Green LED on front panel will illuminate, indicating unit is powered. Model AOP-XD will send power to the remote AOPSP-PB Call Station. For instructions regarding the functions of AOP-XD, refer to accompanying AOP-XD instructions.

INTERCONNECTION DIAGRAM BETWEEN LOUROE MODEL AOPSP-PB AND AOP-XD AUDIO TRANSCEIVER INTERFACE

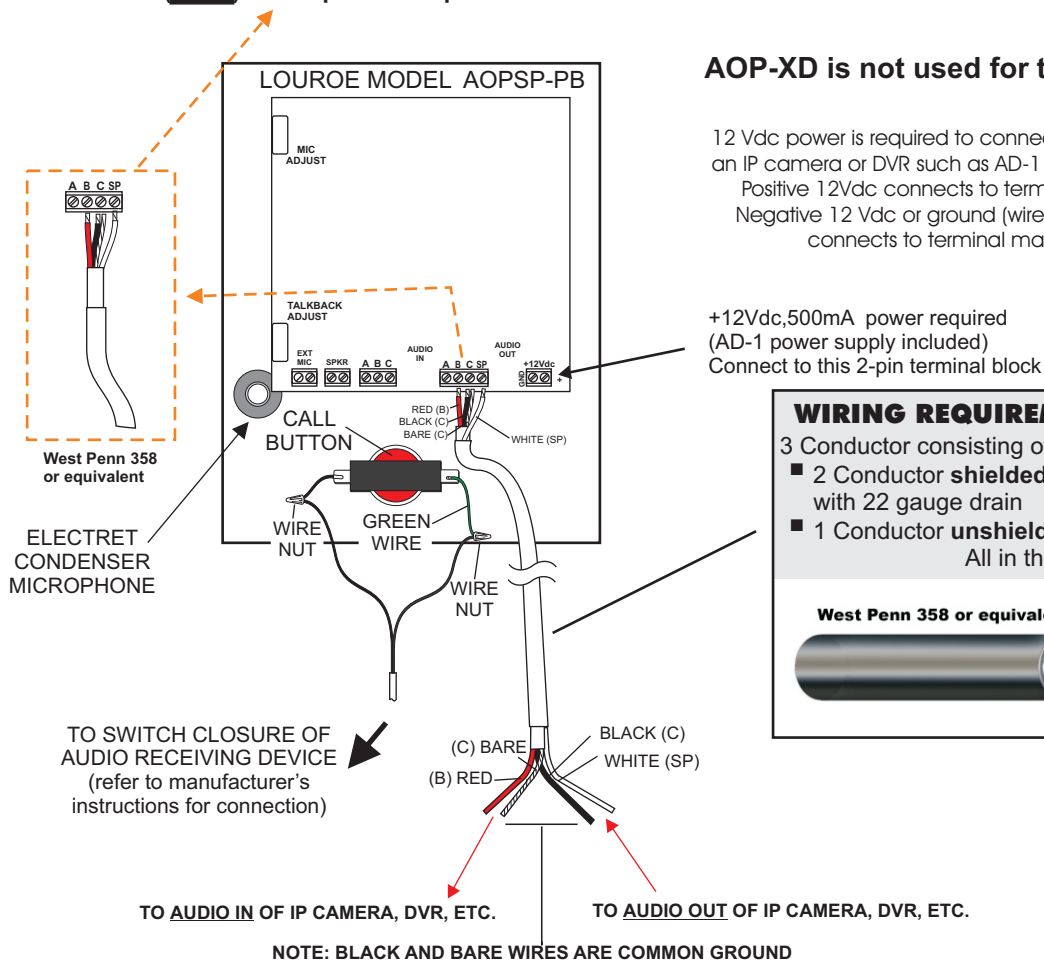


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INTERCONNECTION DIAGRAM CONNECTING LOUROE MODEL AOPSP-PB DIRECTLY TO AN IP CAMERA, DVR, VIDEO SERVER, ETC. USING 3-COND. SHIELDED CABLE

4-PIN TERMINAL BLOCK IDENTIFIER OF AOPSP-PB (A,B,C,SP)

- A = not used with this application
- (red) B = Audio Output
- () C = Ground (audio) and Ground (speaker) (black wire)
- (white) SP = Speaker output



AOP-XD is not used for this application.

12 Vdc power is required to connect the AOP-SP-E directly to an IP camera or DVR such as AD-1 power supply.
Positive 12Vdc connects to terminal marked "+"
Negative 12 Vdc or ground (wire with white stripes) connects to terminal marked "GND"

+12Vdc,500mA power required
(AD-1 power supply included)
Connect to this 2-pin terminal block

WIRING REQUIREMENTS

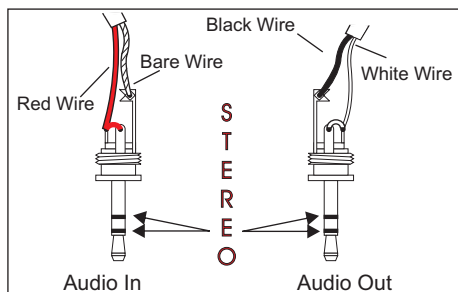
3 Conductor consisting of:

- 2 Conductor **shielded**, 20 gauge with 22 gauge drain
- 1 Conductor **unshielded**, 20 gauge

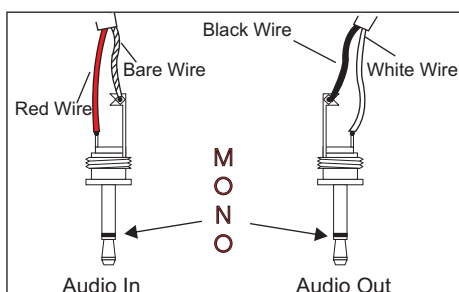
All in the same jacket

West Penn 358 or equivalent

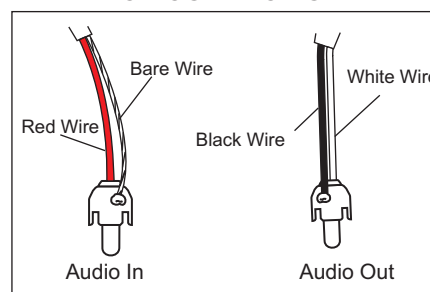
3.5mm STEREO CONNECTION



3.5mm MONO CONNECTION



RCA CONNECTION



INSTALLATION AND OPERATING INSTRUCTIONS

SPECIFICATIONS (Microphone)

■ Type	Electret Condenser
■ Microphone output	line level (0 dB @ 1k Ω)
■ Microphone element sensitivity	-45dB
■ Frequency response	40 Hz to 15 kHz \pm 1 dB
■ Output Impedance	600 Ω unbalanced
■ Supply voltage	12 Vdc

SPECIFICATIONS (Speaker)

■ Speaker Power output	2W
■ Speaker Impedance	8 Ω
■ Speaker magnet	3 oz. ceramic
■ Speaker size	4" (10cm)
■ Weight, net	3 Lbs. (1.4 Kg)

SPECIFICATIONS (Mechanical)

■ Dimensions (Face Plate)	6 1/4"H x 8"W metric (158mm H x 203mm W)
■ Backbox for AOPSP-PB	
Surface Mount Box (metal)	6 1/4"H x 8"W x 2 3/4"D metric (158mm H x 203mm W x 70mm D)
Flush Mount Box (plastic)	
Backbox Portion	5"H x 6 7/8"W x 2 7/8"D metric (127mm H x 175mm W x 67mm D)
Total including flange	6 1/4"H x 8"W x 2 7/8"D metric (158mm H x 203mm W x 67mm D)

IMPORTANT NOTICE

When this equipment is used as part of an audio monitoring system, the law requires that the public be given notice of AUDIO MONITORING ON THE PREMISES. A decal notice is included with each microphone shipped.



Federal Law References:
Federal Regulations, US Code, Title 18. Crime and Criminal Procedure, Sec 2510.

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NOTES

WARRANTY

LOUROE ELECTRONICS® warrants that at the time of shipment products manufactured by LOUROE ELECTRONICS® to be free of defects in material and workmanship. Should a defect appear within one year (12 months) from date of shipment, LOUROE ELECTRONICS® will, at its sole discretion, repair or replace the defective equipment. This equipment shall not be accepted for repair or return without prior notification by LOUROE ELECTRONICS®.

This warranty does not extend to any Louroe product that has been subjected to improper or incorrect installation, misuse, accident, or in violation of installation instructions provided by LOUROE ELECTRONICS®.

Returned shipments to LOUROE ELECTRONICS® shall be at customer's expense. LOUROE ELECTRONICS® will return the equipment prepaid via best way.

INSTALLATION AND OPERATING INSTRUCTIONS

NOTES

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