

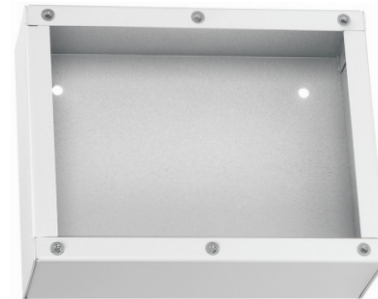


AOP-SP-E

**Backbox (plastic) for flush
mounting to wall or
flat surface**



**Backbox (metal) for surface
mounting to wall or
flat surface**



DESCRIPTION

Model AOP-SP-E is a wall mount speakerphone designed to provide 2-way audio (listen/talkback) with various modes of audio/video transmission systems such as:

- IP Camera
- DVRs
- Video Servers

It contains muting circuit to minimize the effect of acoustic echo on the line. Provided with the unit are two back boxes for either flush or surface mounting to a wall. A 12 Vdc power supply is included. The unit maybe be use for outdoor applications.

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 becomes attenuated, 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 adjustment (MIC) is too high it is going to mute the speaker. Also if the speaker's adjustment (SPKR) is too high, it's going to mute the microphone.

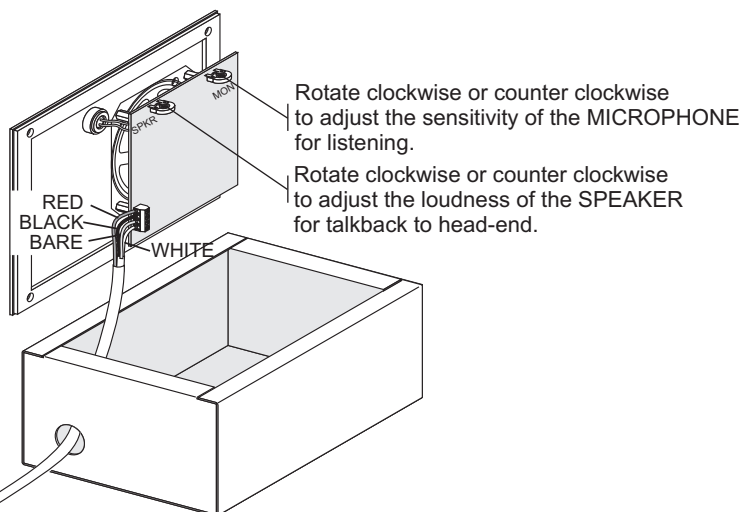
INSTALLATION AND OPERATING INSTRUCTIONS

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



Rotate clockwise or counter clockwise to adjust the sensitivity of the MICROPHONE for listening.

Rotate clockwise or counter clockwise to adjust the loudness of the SPEAKER for talkback to head-end.

WIRING CONNECTION TO AOP-SP-E See connections on the next page

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

- A = 12Vdc power (not used)
- B = Audio output
- C = Ground
- SP = Speaker Connection

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

Bring one end of recommended cable and connect as follows:

- 1) Connect RED wire to terminal marked "B"
- 2) Connect BLACK wire to terminal marked "C" (together with bare wire)
- 3) Connect BARE wire to terminal marked "C"
- 4) Connect WHITE wire to terminal marked "SP"
- 5) No connection on terminal "A"

WIRING CONNECTION TO IP CAMERA OR DVR

Bring the other end of the cable to connector that matches the audio input and outputs of the receiving devices

- 1) RED (positive audio) and BARE (ground) are soldered to the audio connector (RCA, 3.5mm Mono or Stereo plugs). This connector goes to the Audio input of the receiving device (IP Camera, DVR, etc)
- 2) WHITE (positive audio) and BLACK (ground) are soldered to the another audio connector (RCA, 3.5mm Mono or Stereo plugs. This connector goes to the Audio output of the receiving device (IP Camera, DVR, etc).

POWER CONNECTION

The unit has a 2-pin terminal block for power connections marked 12Vdc

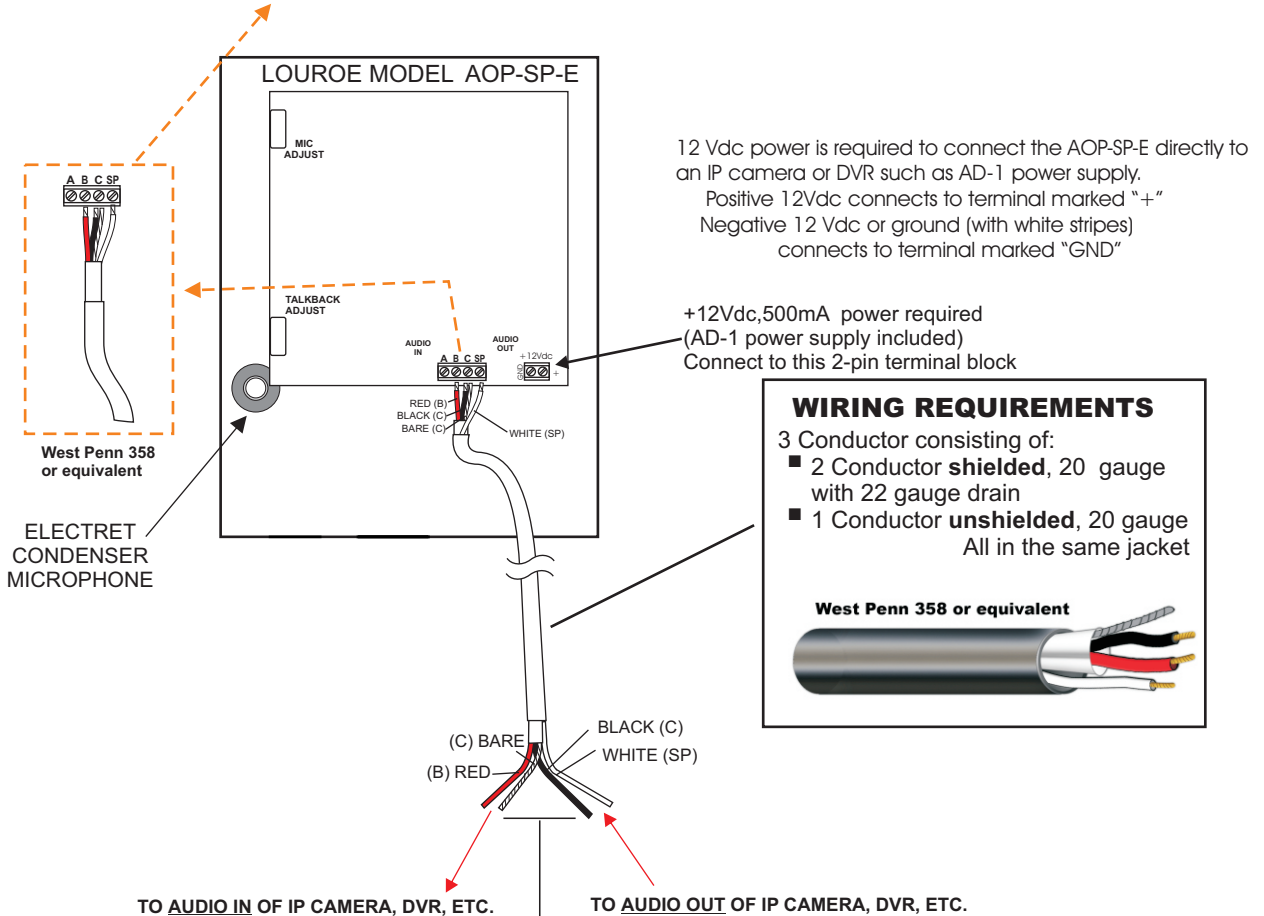
- 1) Connect the positive 12Vdc of the power supply (AD-1) to the terminal marked +
- 2) Connect the negative or ground of the power supply to terminal marked GRD

INSTALLATION AND OPERATING INSTRUCTIONS

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

4-PIN TERMINAL BLOCK IDENTIFIER OF AOP-SP-E (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



WIRING REQUIREMENTS

3 Conductor consisting of:

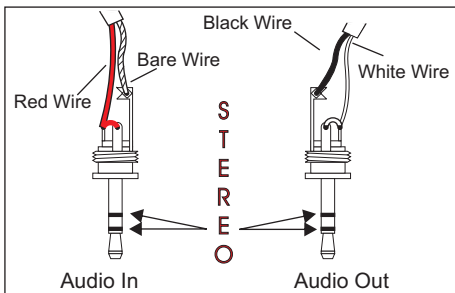
- 2 Conductor **shielded**, 20 gauge with 22 gauge drain
- 1 Conductor **unshielded**, 20 gauge

All in the same jacket

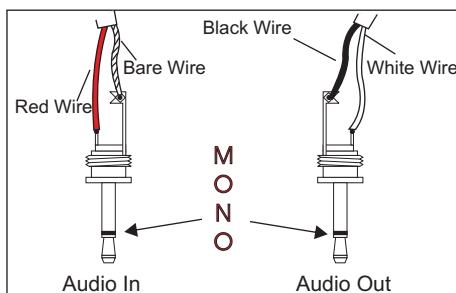
West Penn 358 or equivalent

NOTE: BLACK AND BARE WIRES ARE COMMON GROUND

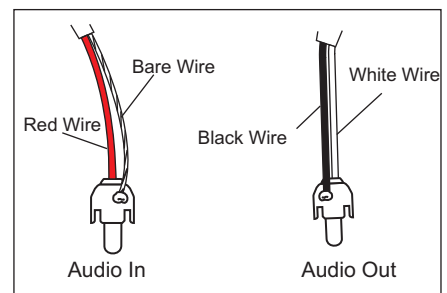
3.5mm STEREO CONNECTION



3.5mm MONO CONNECTION



RCA CONNECTION



INSTALLATION AND OPERATING INSTRUCTIONS

SPECIFICATIONS (Microphone)

■ Type	Electret Condenser
■ Audio output	Line level (0 dB @ 600Ω) unbalanced
■ Microphone element sensitivity	-45 dB
■ Frequency response	40 Hz - 15 kHz
■ Audio Input Impedance	600Ω

SPECIFICATIONS (Speaker)

■ Speaker power output	1W
■ Speaker impedance	8Ω
■ Speaker magnet	1.73 oz ceramic
■ Speaker size	4"
■ Current Drain	200mA
■ Supply Voltage	12Vdc
■ Dimensions	Faceplate 8" H x 6 1/4" W Metal Backbox 8" H x 6 1/4" W x 2 3/4" D Plastic Backbox 8" H x 6 1/4" W x 2 5/8" D
■ Weight	1lb 6 oz
■ Shipping Weight	6 lbs

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.

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.