

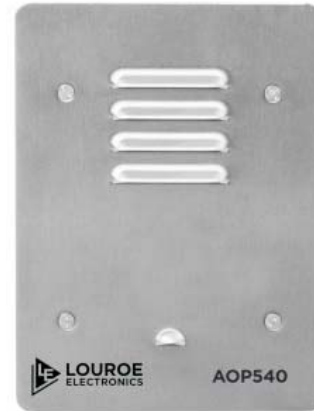
# AOP-530/540

## FULL DUPLEX SPEAKERPHONE

### INSTALLATION AND OPERATING INSTRUCTIONS



**AOP-530**



**AOP-540**

#### DESCRIPTION

Model AOP-530 and 540 are wall mount speaker phones. The AOP-530 integrates a 5/8" illuminated call button. They are capable of full duplex communication and electronic noise cancellation. They are designed to interface with various modes of audio/video transmission systems such as IP Network Cameras, Video Encoder that accept audio, DVR's, soundcards, etc. The units contain a built-in microphone and 2" speaker for providing bi-directional audio with the receiving source (IP network camera, etc.). Speaker volume adjustment potentiometer is located inside the unit. The AOP-530 and 540 are designed to fit into most 3-gang box enclosures and uses spring clamp quick connect terminal blocks for ease of wiring and installation.

Models AOP-530/540 are used in conjunction with other manufacturer's audio receiving devices such as:

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

A built-in illuminated call button (on AOP-530) provides switch closure activation with the receiving device.

#### OPERATIONS

The gain of the microphone and speaker are factory adjusted. 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.

## 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



## WIRING CONNECTION TO AOP-530/540

See connections on the next page

Located on the bottom right side of PC board is a 5-pin terminal block marked IN, GND, OUT, GND, PWR

- IN = Speaker Output
- GND = Ground (bare wire)
- OUT = Audio Output
- GND = Ground (-12VDC)
- PWR = +12VDC

- 1) Connect RED wire to terminal marked "IN"
- 2) Connect BLACK wire to terminal marked "GND" (together with bare wire)
- 3) Connect BARE wire to terminal marked "GND"
- 4) Connect WHITE wire to terminal marked "OUT"

## 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 output 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 input of the receiving device (IP Camera, DVR, etc).

## WIRING CONNECTION TO AOP-530 CALL BUTTON

Connect the two wires (blue and blue/white) 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.

## POWER CONNECTION

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

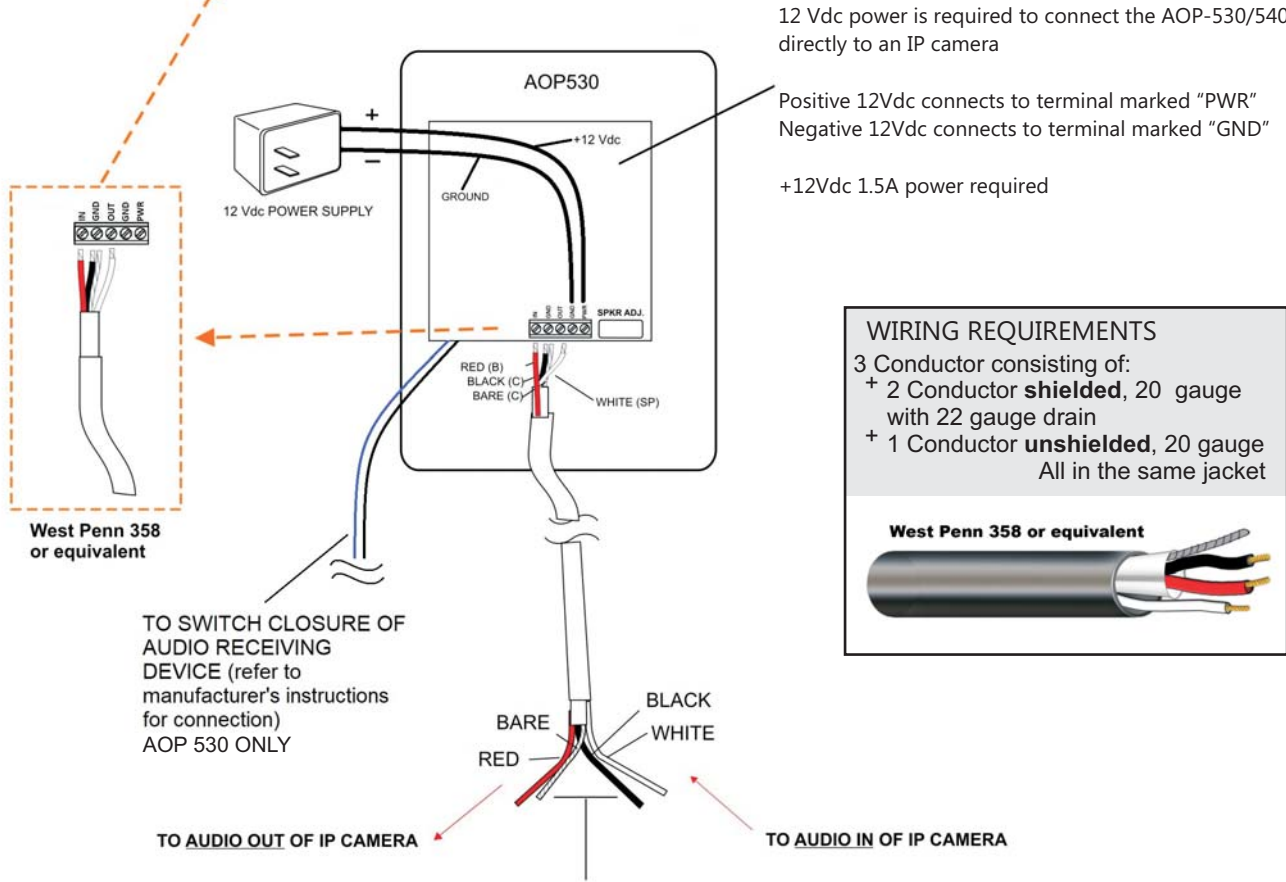
- 1) Connect the positive 12Vdc of the power supply to the terminal marked PWR
- 2) Connect the negative or ground of the power supply to terminal marked GND

# INSTALLATION AND OPERATING INSTRUCTIONS

## INTERCONNECTION DIAGRAM CONNECTING LOUROE MODEL AOP 530/540 DIRECTLY TO AN IP CAMERA, DVR, VIDEO SERVER, ETC. USING 3-COND. SHIELDED CABLE

### 5-PIN TERMINAL BLOCK IDENTIFIER OF AOP-530/540

- (red) IN = Speaker Output
- (bare/blk) GND = Ground (audio), Ground (speaker) (black wire)
- (white) OUT = Audio output
- ( ) GND = 12VDC power supply ground
- ( ) PWR = 12VDC power supply positive



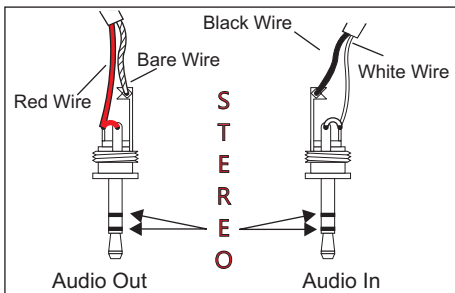
**WIRING REQUIREMENTS**

3 Conductor consisting of:  
+ 2 Conductor **shielded**, 20 gauge with 22 gauge drain  
+ 1 Conductor **unshielded**, 20 gauge  
All in the same jacket

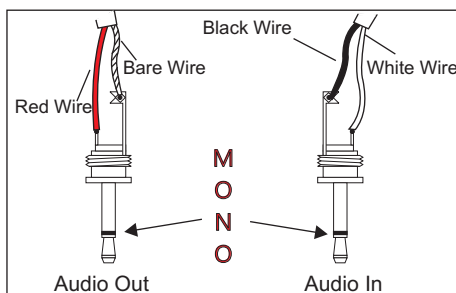
**West Penn 358 or equivalent**

NOTE: BLACK AND BARE WIRES ARE COMMON GROUND

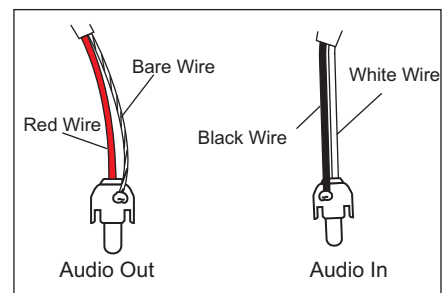
### 3.5mm STEREO CONNECTION



### 3.5mm MONO CONNECTION



### RCA CONNECTION



# INSTALLATION AND OPERATING INSTRUCTIONS

## SPECIFICATIONS (Microphone)

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

## SPECIFICATIONS (Speaker)

■ Speaker power output	1W
■ Speaker impedance	8 $\phi$
■ Speaker magnet	Neodymium
■ Speaker size	2"
■ Current Drain	200mA
■ Supply Voltage	12Vdc
■ Dimensions	6.5" H x 4.8" W x 1.9" D
■ Weight	1lb 7 oz
■ Shipping Weight	3 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 (24 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.