

TLO

OUTDOOR SPEAKER/MICROPHONE

INSTALLATION AND OPERATING INSTRUCTIONS

DESCRIPTION

The TLO is a two-way speaker with microphone and re-entry horn for high volume penetration. Weatherized for outdoor use, it is a microphone and speaker within one housing. In operation, the TLO provides both listen and talkback capabilities between the remote zone and Louroye base station, or with other compatible audio receiving devices such as Louroye AOP-SP70.



MICROPHONE CONNECTION OF TLO

The short cable extending from the back of the TLO is the microphone connection and consists of three wires: red, black and bare. Using recommended wiring (West Penn 356 or equivalent), make microphone connections using 20 gauge wire nuts, and matching **red** wire with **red**, **black** with **black** and **bare** wire with **bare** wire. See diagram page 2.

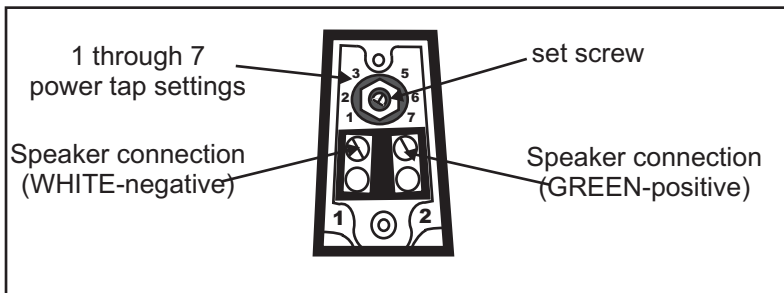
MODEL TLO

SPEAKER CONNECTION OF TLO

Speaker connection is located near the rear of the TLO and has a plexiglass window. Remove window and connect the speaker portion of West Penn 356 (green and white wires) to the two terminal screws marked 1 and 2.

Green speaker wire goes to position 2 (positive)
White speaker wire goes to position 1 (negative)

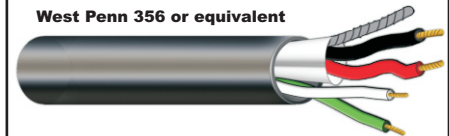
see diagram below



WIRING REQUIREMENTS

4 Conductor consisting of:
2 Conductor **shielded**,
20 gauge with 22 gauge drain
(microphone connection)
2 Conductor
unshielded, 18 gauge (speaker
connection)

West Penn 356 or equivalent



POWER TAP SETTINGS

Located above the speaker connection is a set screw with a dial numbered 1 through 7. Using a small screw driver, adjust the set screw to correspond to the proper power tap setting with the following Louroye audio base stations.

IF TLO IS CONNECTED TO BASE STATION MODELS:

	Setting	Wattage
AP-1TB through AP-16TB	#1	1.8W
DG 12II and DG 25III	1 TLO per zone	#4 15.0W
	2-4 TLO's per zone using MLA-6 Mixer	#2 3.7W
If TLO is to be connected to Louroye AOP-SP70 conversion unit for interfacing with a DVR or PC Soundcard, use setting	#2	3.7W

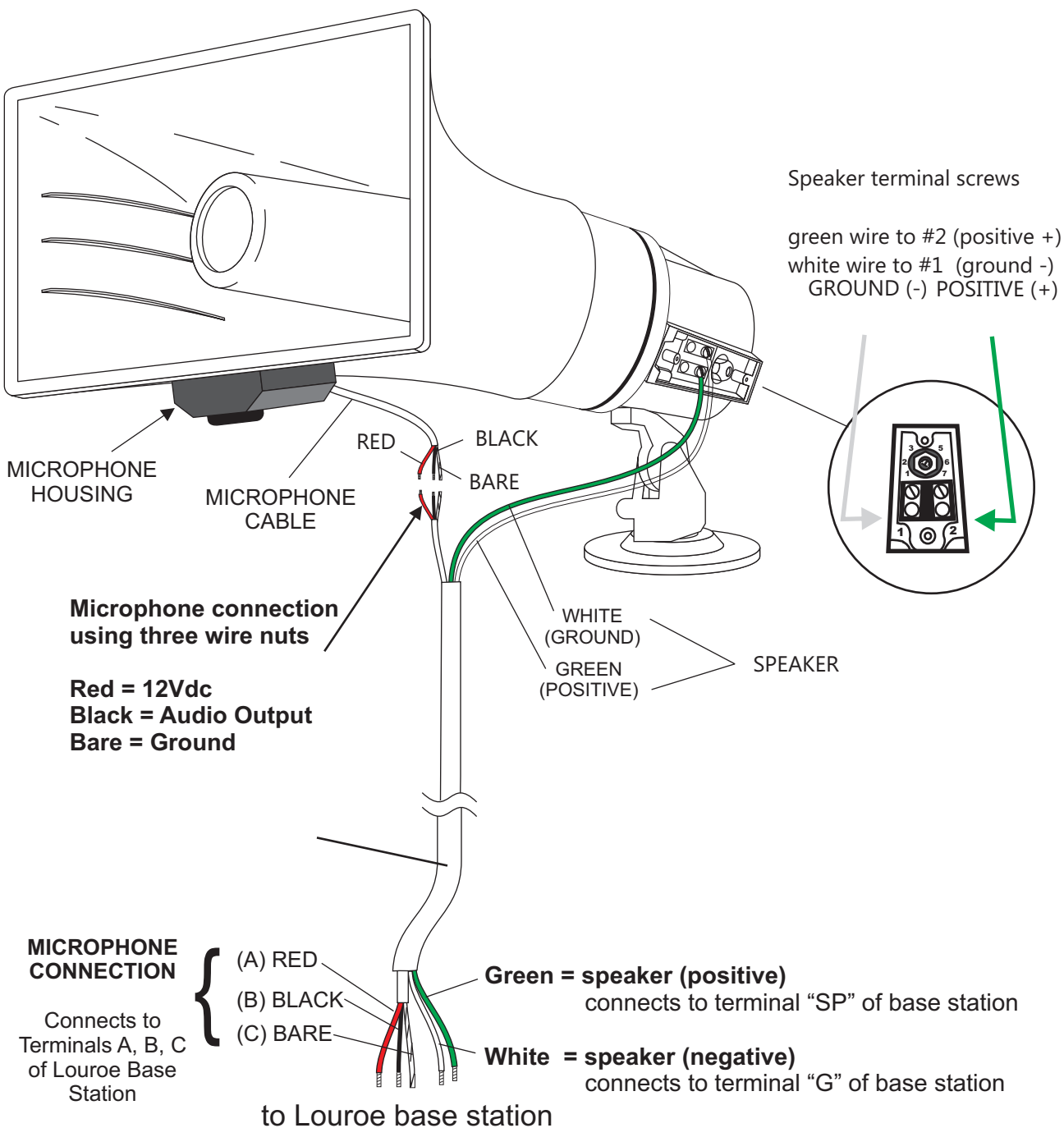
INSTALLATION AND OPERATING INSTRUCTIONS

POSITIONING TLO

After TLO has been mounted to desired structure (wall, pole, etc.), horn should be tilted in a downward position. This will protect the microphone element from water damage.

CONNECTING TLO TO A LOUROE BASE STATION

Model TLO is compatible with all Louroe™ audio base stations that feature two-way talk/listen communication. All Louroe™ base stations contain terminal blocks for receiving both microphone and speaker connections from Model TLO. For wiring and installation instructions, please refer to the specific Louroe™ Base Station being used.



Refer to the specific base station instructions for connections

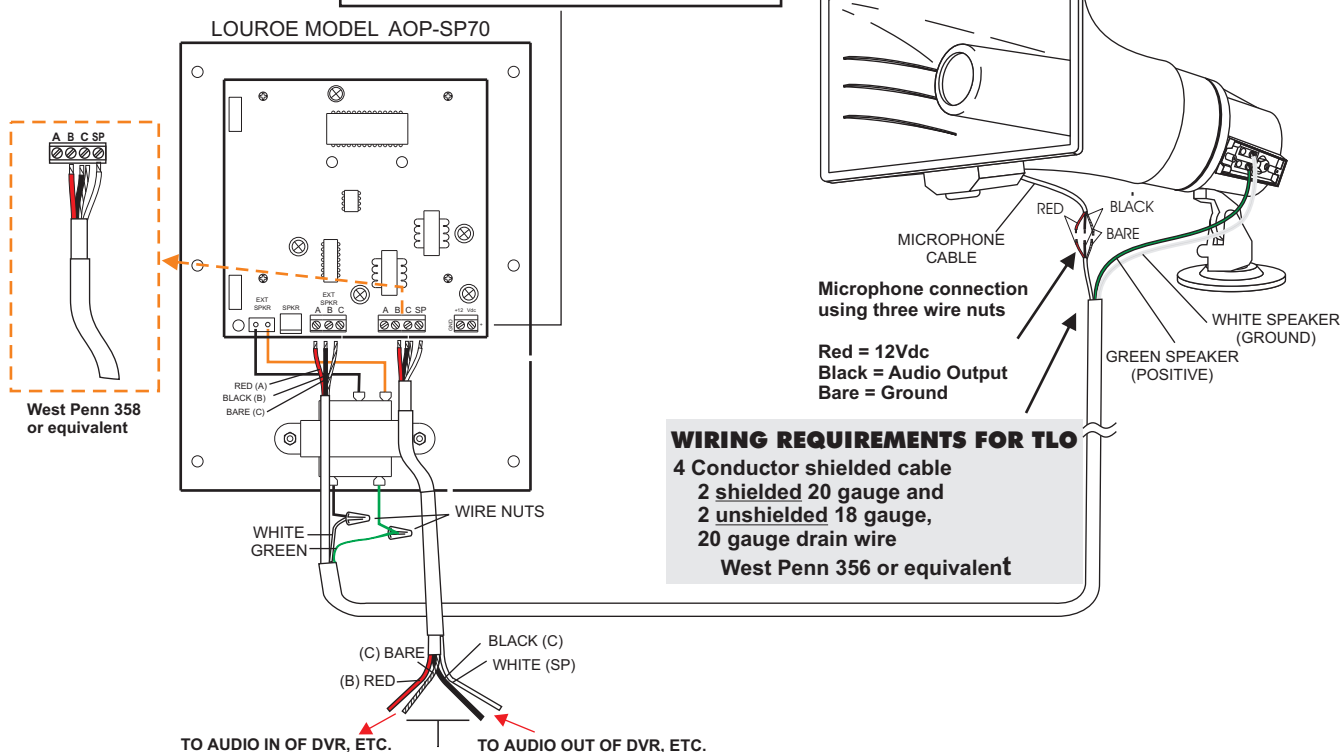
INTERCONNECTION DIAGRAM

LOUORE MODEL AOP-SP70 SPEAKERPHONE CONVERSION UNIT, AND LOUORE MODEL TLO SPEAKER/MICROPHONE CONNECTION TO DVR, IP NETWORK CAMERAS OR VIDEO SERVER

(BI-DIRECTIONAL AUDIO)

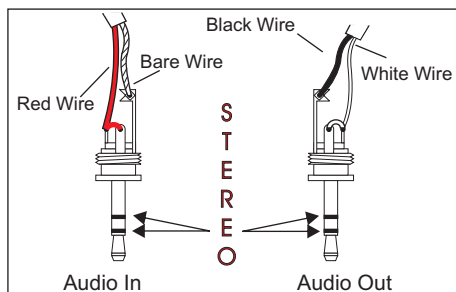
Using power supply (included), connect as follows:
Positive 12Vdc connects to terminal marked "+"
Negative 12Vdc or ground connects to terminal marked "GND"(wire with white stripes)

Model TLO is Designed For Outdoor or Moist Applications

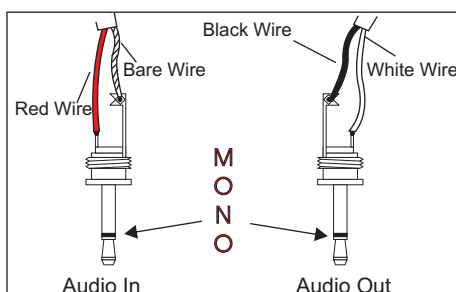


For connection to DVR, IP Network Camera, etc., solder the appropriate plug (RCA, 3.5mm mono or 3.5mm stereo) to match the audio inputs of the receiving device as shown below.
Refer to IP Camera's instruction to determine if 3.5mm audio is mono or stereo

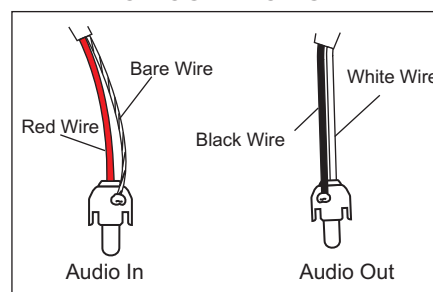
3.5mm STEREO CONNECTION



3.5mm MONO CONNECTION



RCA CONNECTION



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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.

SPECIFICATIONS (MICROPHONE)

■ Sensitivity	-45 dBV/Pa 1 Pa = 94 dB SPL
■ Frequency Response	50 Hz to 15 kHz
■ Output	Line Level (0 dBV, 600Ω @ 1kHz)
■ Current Drain	10mA
■ Supply Voltage	12 Vdc

SPECIFICATIONS (SPEAKER)

■ Power rating	30W
■ Input	70.7V constant
■ Frequency response	350 Hz to 14 kHz
■ Sensitivity	109dB (Measured at 1m, 1W @ 1kHz)
■ Material	Heavy Duty ABS Resin
■ Dimensions	11" W x 6 5/8" H x 12 3/4" D
■ Dispersion	105° x 72°
■ Weight	5 lbs 5 oz
■ Shipping Weight	7 lbs

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.