

# 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 Louroe base station, or with other compatible audio receiving devices.



**MODEL TLO**

#### MICROPHONE CONNECTION OF TLO

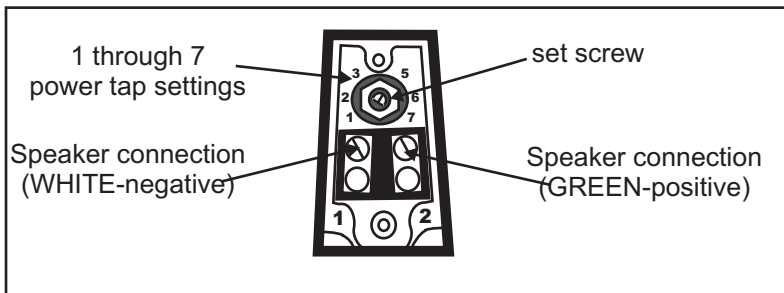
The short cable extending from the back of the TLO is the microphone connection and consists of three wires: red, black and bare. Using recommended wiring (West Penn 356 or equivalent), make microphone connections using 20 gauge wire nuts, and matching **red** wire with **red**, **black** with **black**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

#### 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 Louroe audio base stations.

IF TLO IS CONNECTED TO BASE STATION MODELS:

|                                                                                                                      |                                      | Setting | Wattage |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------|---------|
| AP-1TB through AP-16TB                                                                                               |                                      | #1      | 2.0W    |
| DG 12II and DG 25III                                                                                                 | 1 TLO per zone                       | #4      | 15.0W   |
|                                                                                                                      | 2-4 TLO's per zone using MLA-6 Mixer | #2      | 3.8W    |
| ALA-4TB/ALA-8TB                                                                                                      | 1 per zone or with MLA-6 Mixer       | #1      | 2.0W    |
| AP-4CS/AP-8CS/AP-12CS                                                                                                | 1 TLO per zone                       | #4      | 15.0W   |
|                                                                                                                      | 2-4 TLO's per zone using MLA-6 Mixer | #2      | 3.8W    |
| If TLO is to be connected to Louroe AOP-SP70 conversion unit for interfacing with a DVR or PC Soundcard, use setting |                                      | #2      | 3.8W    |

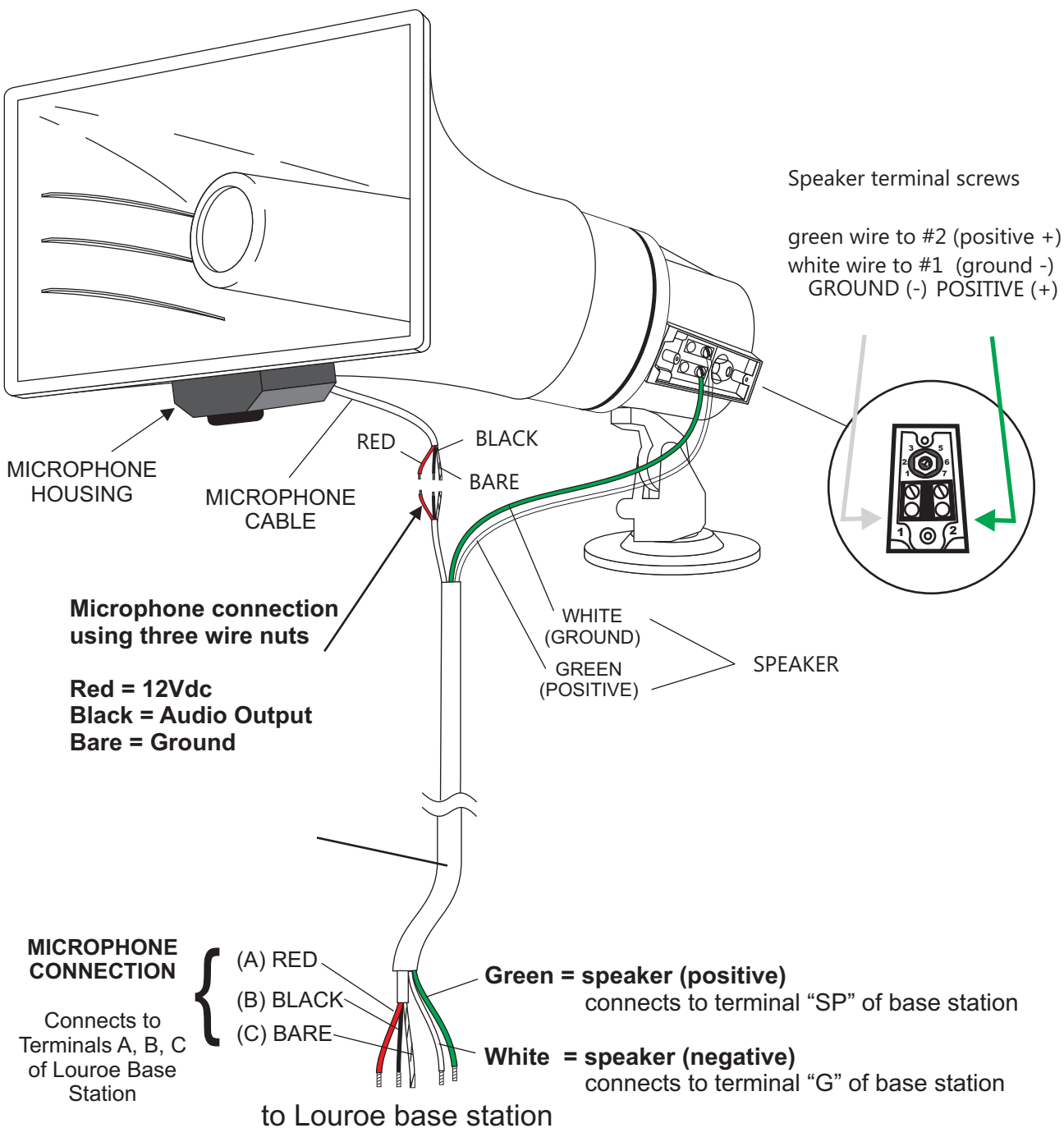
# INSTALLATION AND OPERATING INSTRUCTIONS

## 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.



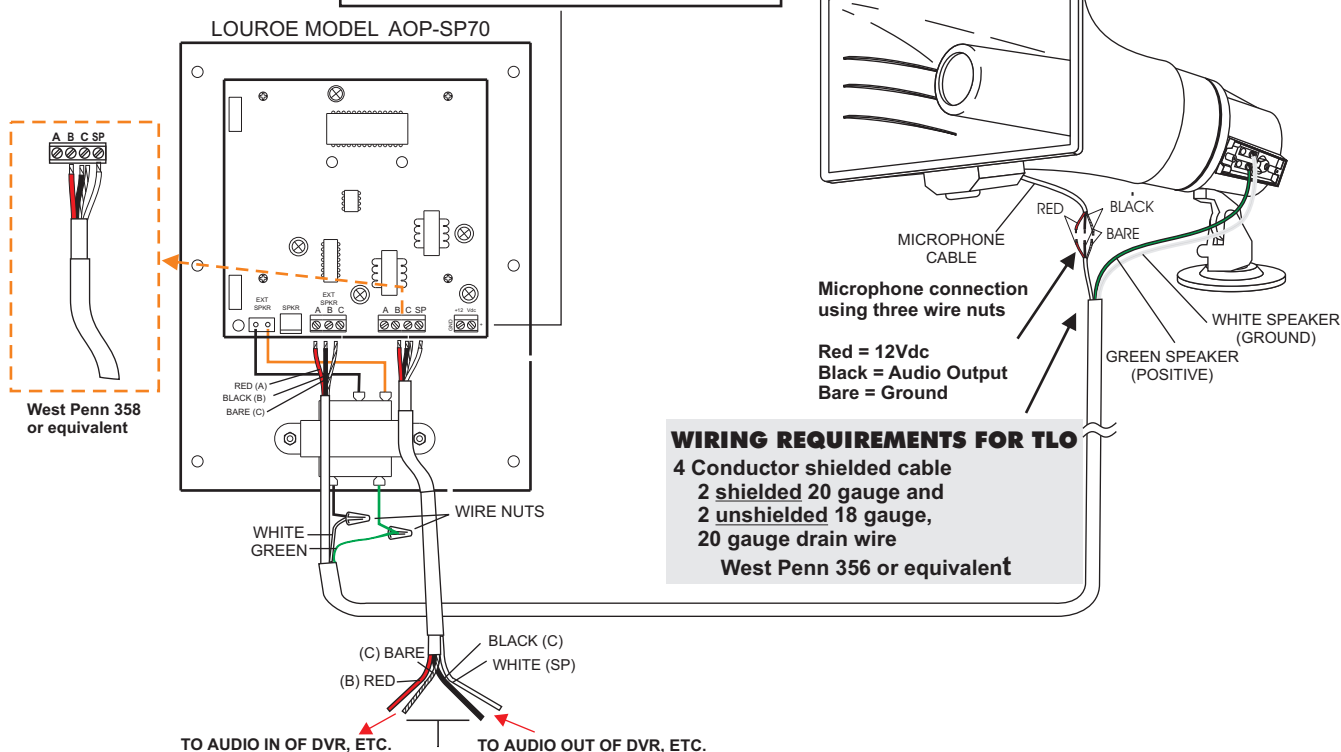
Refer to the specific base station instructions for connections

## 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)

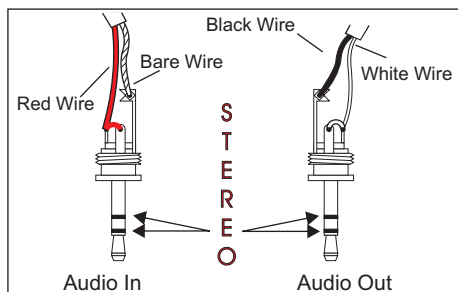
Using power supply (included), connect as follows:  
Positive 12Vdc connects to terminal marked "+"  
Negative 12Vdc or ground connects to terminal marked "GND"(wire with white stripes)

Model TLO is Designed For Outdoor or Moist Applications

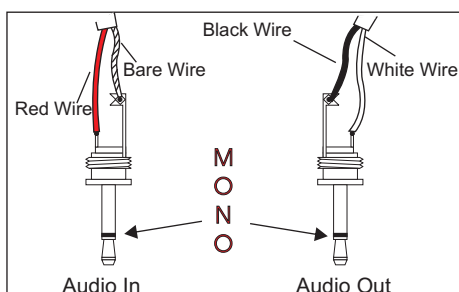


For connection to DVR, IP Network Camera, etc., solder the appropriate plug (RCA, 3.5mm mono or 3.5mm stereo) to match the audio inputs of the receiving device as shown below.  
Refer to IP Camera's instruction to determine if 3.5mm audio is mono or stereo

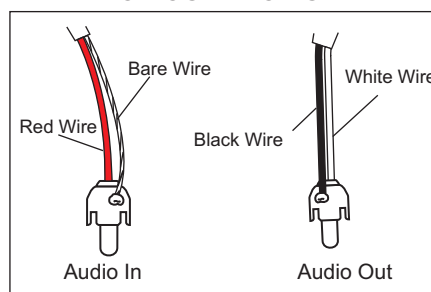
#### 3.5mm STEREO CONNECTION



#### 3.5mm MONO CONNECTION



#### RCA CONNECTION



## MANUFACTURED IN THE



### 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

LOUROYE ELECTRONICS™ warrants that at the time of shipment products manufactured by LOUROYE ELECTRONICS™ to be free of defects in material and workmanship. Should a defect appear within one year (12 months) from date of shipment, LOUROYE 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 LOUROYE ELECTRONICS™.

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

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