

AP-4TB-RM

4 ZONE RACK MOUNTED TWO-WAY AUDIO BASE STATION INSTALLATION AND OPERATING INSTRUCTIONS



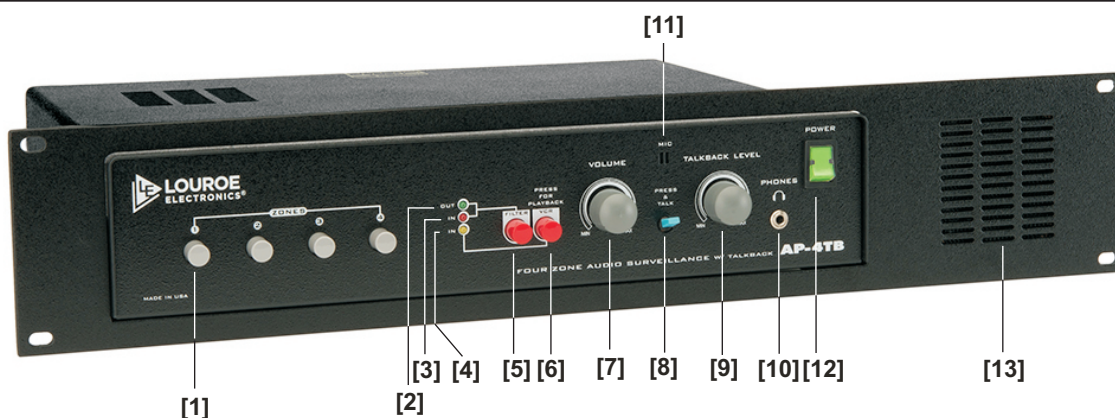
INTRODUCTION

The AP-4TB-RM is a four zone rack mounted audio base station with 2-way talk/listen capabilities. It contains a built-in microphone and speaker (mounted in the front rack panel) for two-way audio communication to the remote station. Unit has volume adjustments for both talk and listen. Zone audio can be activated by manually pressing the zone activation switches of the unit. Provides 4 line level RCA outputs for recording remote microphone audio to DVRs with multiple audio inputs. Selectable Audio output and input from a recorder are provided through RCA connectors at the rear of the unit. Has built-in speaker for listening to live audio. Compatible with all Louroe's two-way remote speaker/microphone units

Contents	Description
AP-4TB-RM	UL listed 4 ZoneTwo-Way Audio Base Station. Used for two-way communication to remote speaker/microphone units. Has Audio IN/OUT for a recorder.
Dual RCA Cable	RCA cable for connection to a DVR/VCR or other Audio devices that accept line level input (0dB @ 600Ω).

INSTALLATION AND OPERATING INSTRUCTIONS

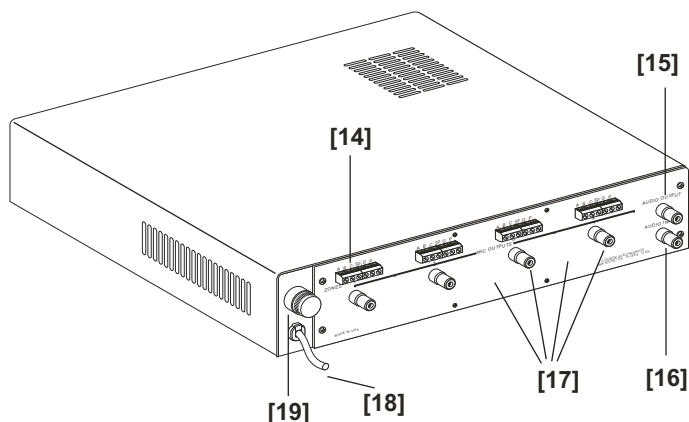
Fig. 1



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|--|---|
| <p>[1] - Zone Selector Switches</p> | <p>Selects zone for monitoring. Press switch of desired zone to listen to live monitored audio. Pressing more than one switch to monitor several zones is possible, but not recommended. Audio pickup from two or more zones will be mixed and difficult to distinguish.</p> |
| <p>[2] - Filter-OUT Indicator</p> | <p>Lights (green) when audio filter is not in use. Indicates power is "ON".</p> |
| <p>[3] - Filter-IN Indicator</p> | <p>Lights (amber) when Filter Switch[5] is pressed to "ON" position.</p> |
| <p>[4] - VCR-IN Indicator
(includes DVR's)</p> | <p>Lights (yellow) when VCR Switch[6] is pressed to "ON" position.</p> |
| <p>[5] - Filter Switch
(not used with DVR's)</p> | <p>Used only when audio playback is from a 12 or 24 hr. time lapse recorder. Pressing Filter Switch[5] will illuminate red LED for 12/24 hour mode. This enhances the quality of recorded audio playback. If playback is from a DVR, filter switch is not used and should be in the "OUT" position. If no recording device is used, then filter switch <u>must</u> be in the "OUT" position. Otherwise live audio will be muted. The green LED illuminates when filter switch is in the "OUT" position.</p> |
| <p>[6] - VCR Switch
(includes DVR's)</p> | <p>If AP-4TB-RM is connected to a DVR, VCR etc. audio is automatically recorded whether VCR switch[6] is in the "IN" or "OUT" position. But for audio playback through the AP-4TB, VCR button <u>must</u> be pressed in the IN position. If no DVR or VCR is used, VCR switch must be in the <u>out</u> position.</p> |
| <p>[7] - Volume Control Knob</p> | <p>Rotate clockwise to increase volume of monitored audio produced through Monitor Speaker [13]. Counterclockwise to decrease.</p> |
| <p>[8] - Talkback switch</p> | <p>Press to talk to remote speakers. Select a zone by pressing the appropriate Zone Selector Switch[1] to talk to desired zone. The built-in Talk back Microphone[11] is located above the Talkback Switch [8].</p> |
| <p>[9] - Talkback Control Knob</p> | <p>Rotate knob clockwise to increase the volume of talkback output; counterclockwise to decrease.</p> |
| <p>[10] - Headphone Jack</p> | <p>Used for private listening. Any 3.5mm stereo headphone with 8 to 600W impedance may be used. Speaker is muted when headphone is used.</p> |
| <p>[11] - Talkback Microphone</p> | <p>Built-in microphone for talkback to remote speaker.</p> |
| <p>[12] - Power Switch</p> | <p>Turns on power to the unit. Illuminates green when powered</p> |
| <p>[13] - Monitor Speaker</p> | <p>Delivers audio through speaker. Muted when a headphone is plugged into the Headphone Jack[10].</p> |

INSTALLATION AND OPERATING INSTRUCTIONS

Fig. 2 Rear Panel of AP-4TB-RM



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|--|--|
| [14] - Mic 6-Pin Terminal Block | Wiring connection for remote speaker/microphone |
| [15] - Audio OUT Jack (RCA) | Passes audio to DVR/VCR, etc. |
| [16] - Audio-IN Jack (RCA) | Receives audio playback from DVR/VCR, etc. |
| [17] - Zone Aux. Mic Output
(each zone) | Used for connection to a DVR with multiple audio inputs or for connecting to another AP-4TB-RM(paralleling two units).
Outputs are line level |
| [18] - AC Power Cord | Connects to a 120 Vac power outlet. |
| [19] - Fuse Holder | Contains ¼A slow-blow fuse |

NOTE REGARDING CONNECTION TO DVR's

Models AP-4TB-RM is compatible with all DVR's that accept line level audio.

If DVR has only one audio input, connect the "Audio Out" jack [15] on back panel of AP-4TB to "Audio In" of DVR using an RCA cable.

If DVR has multiple audio inputs, connect the "Mic Out" jacks [17] on back panel of AP-4TB to the audio inputs of DVR using RCA cables. Output from "mic output" is line level

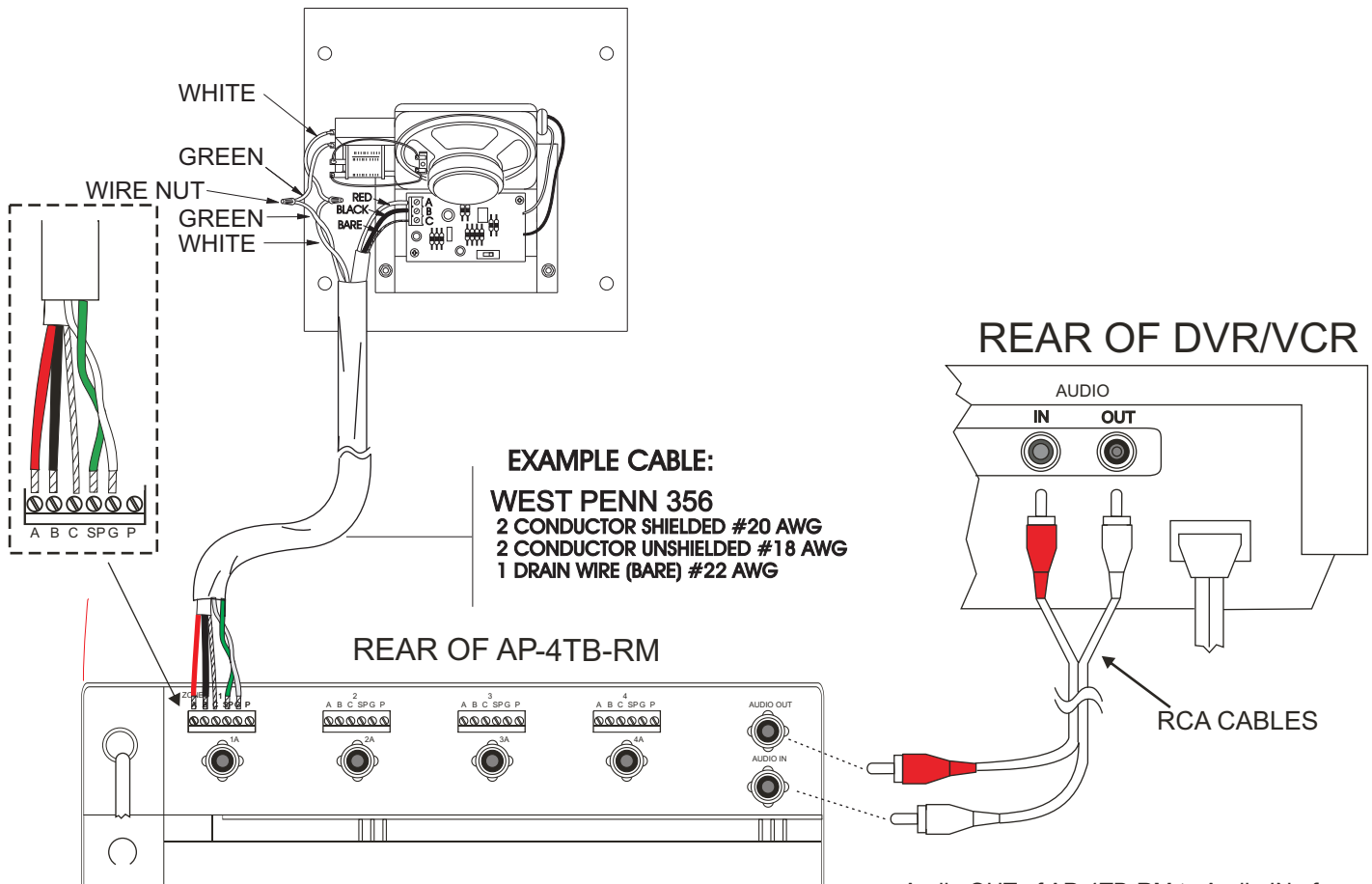
If DVR contains 3.5mm audio input and output jacks instead of RCA type, a 3.5mm adapter must be connected to one end of RCA cable. Check with DVR manufacturer if 3.5mm plug is stereo or mono.

INSTALLATION AND OPERATING INSTRUCTIONS

INTERCONNECTION DIAGRAM BETWEEN LOUROE MODEL TLSP SPEAKER/MICROPHONE AND LOUROE MODEL AP-4TB-RM AUDIO BASE STATION

Louroe Models TLI, TLM, TLO are compatible with AP-4TB-RM

FIG 3



EXAMPLE CABLE:
WEST PENN 356
2 CONDUCTOR SHIELDED #20 AWG
2 CONDUCTOR UNSHIELDED #18 AWG
1 DRAIN WIRE (BARE) #22 AWG

Terminal Block Identifier of AP-4TB/AP-8TB	
Wire color	
Red	A - 12Vdc power to microphone
Black	B - Audio Output
Bare	C - Ground (microphone)
Green	SP - Speaker positive
White	G - Speaker negative
	P - used only when paralleling 2 or more AP-4TB-RM

Audio OUT of AP-4TB-RM to Audio IN of DVR/VCR for recording

Audio OUT of DVR/VCR to Audio IN of AP-4TB-RM for audio playback

INSTALLATION AND OPERATING INSTRUCTIONS

WIRING CONNECTIONS

- 1) Connect one end of cable to remote speaker/microphone, (TLSP, etc.) as shown in Fig. 3. Use 4 conductor shielded audio cable West Penn 356 or equivalent. Connect wires with overall shield to terminals "A", "B", and "C" of microphone's terminal block. When using West Penn 356, connect red wire to terminal "A"; black wire to terminal "B" and bare wire to terminal "C".
- 2) Connect the two speaker wires (white and green) to the 2 wires connected to 70V Transformer. Connect cable's white wire to white wire connected to the 70 volt transformer, using a wire nut. Connect cable's green wire to green wire of transformer with a wire nut.
- 3) Connect the other end of the cable to AP-4TB-RM Mic 6-Pin Terminal Block[14] for the zone which the remote microphone is assigned. Make sure that wire connected to terminal "A" of remote microphone connects to terminal "A" of unit's Mic 6-Pin Terminal Block[14]; wire connected to terminal "B" of microphone connects to terminal "B" of unit; "C" to "C". If using wire from other manufacturers, color code may vary.
- 4) Connect white speaker wire to Mic 6-Pin Terminal Block[14] terminal "G". Connect green wire to terminal marked "SP".
- 5) Repeat steps 1 thru 3 for zones 2, 3, 4 etc.
- 6) When a recorder is used (DVR, VCR etc.), connect Audio-OUT Jack[15] to DVR's Audio-IN Jack with an RCA cable (not supplied).
- 7) Connect Audio-IN Jack[16] to DVR's Audio-Out Jack.

OPERATION AND TEST

- 1) For power, connect AC power cord[18] to a standard 110/120V electrical outlet or power strip.
- 2) Turn on power by pressing Power Switch[12]. LED will illuminate GREEN and Filter-Out Indicator will illuminate GREEN.
- 3) Rotate Volume Control Knob[7] clockwise to increase volume. Counterclockwise to decrease.
- 4) Press Zone Selector Switches[1] marked zone 1. Audio from zone 1 should be present at the Monitor Speaker[13].
- 5) Press Talkback Switch[8] and speak into the Talkback Microphone[11]. Rotate Talkback Volume Control[9] clockwise to increase the level of talkback audio. Another person is needed at the remote location to listen to the volume and clarity of talkback audio.
- 6) Repeat steps 3 and 4 for the other zones.
- 7) When a 24 hour VCR is connected to the unit, press VCR Switch[6]. VCR-IN Indicator[4] will light yellow. Start recording live audio. It is not necessary to use VCR switch if recording into a DVR. The VCR Switch[6] must be in the "OUT" position when a recorder is not connected to the unit. Otherwise live audio will be muted.
- 8) Recorded audio can be played back through the AP-4TB-RM's built-in amplifier and speaker. If audio playback is from a 24 hour time lapse recorder, press Filter Switch[5] to 12/24 hour mode. Filter-In indicator[3] will illuminate red. If playback is from a DVR, filter switch is not used and should be in the "OUT" position. If no recording device is used, then filter switch must be in the "OUT" position. Otherwise live audio will be muted. The green LED will illuminate when filter switch is in the "OUT" position.
- 9) System is now ready for standard operation.

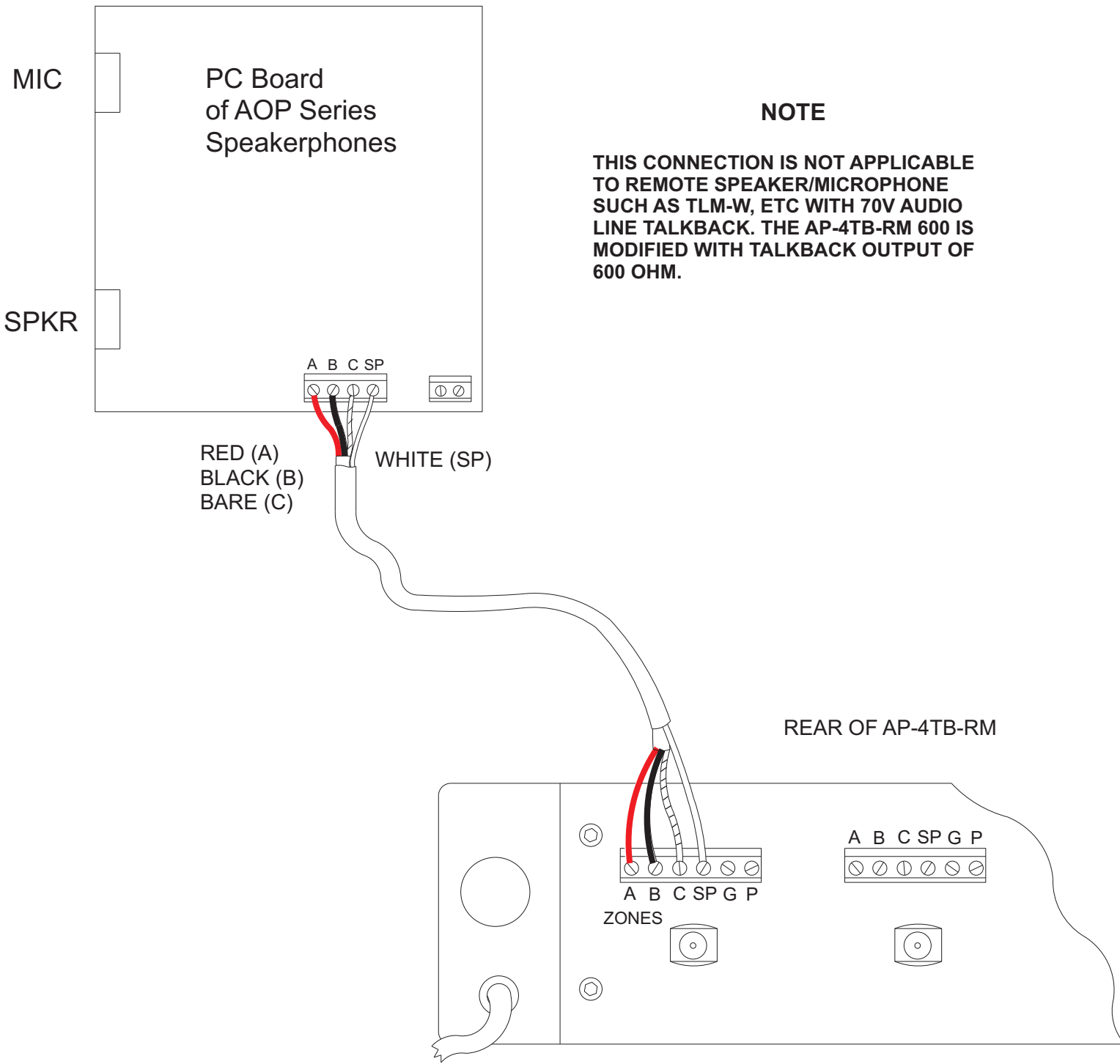
NOTES

SPECIFICATIONS

■ Input sensitivity (talk back microphone)	-45dB
■ Monitor power output	1W @ 8Ω
■ Talkback power output	1.5W into 70V line
■ Audio output impedance	600 Ω
■ Audio input impedance	10kΩ
■ Audio frequency response (flat)	100 Hz to 10kHz
■ Audio frequency response (enhanced)	-20 dB @ 200 Hz to +8dB @3 kHz
■ Headphone impedance	8 to 600 Ω
■ Power input	120 Vac, 60Hz
■ Fuse	¼ A slow-blow
■ Dimensions	10¼"L x 12½"W x 2 ½"H
■ Weight	9 lbs 9 oz
■ Shipping Weight	13 lbs

INSTALLATION AND OPERATING INSTRUCTIONS

INTERCONNECTION DIAGRAM BETWEEN MODEL AOP-SP SPEAKERPHONE AND MODEL WSP-AP-4TB-RM 600 AUDIO BASE STATION



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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.

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 five years (60 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.