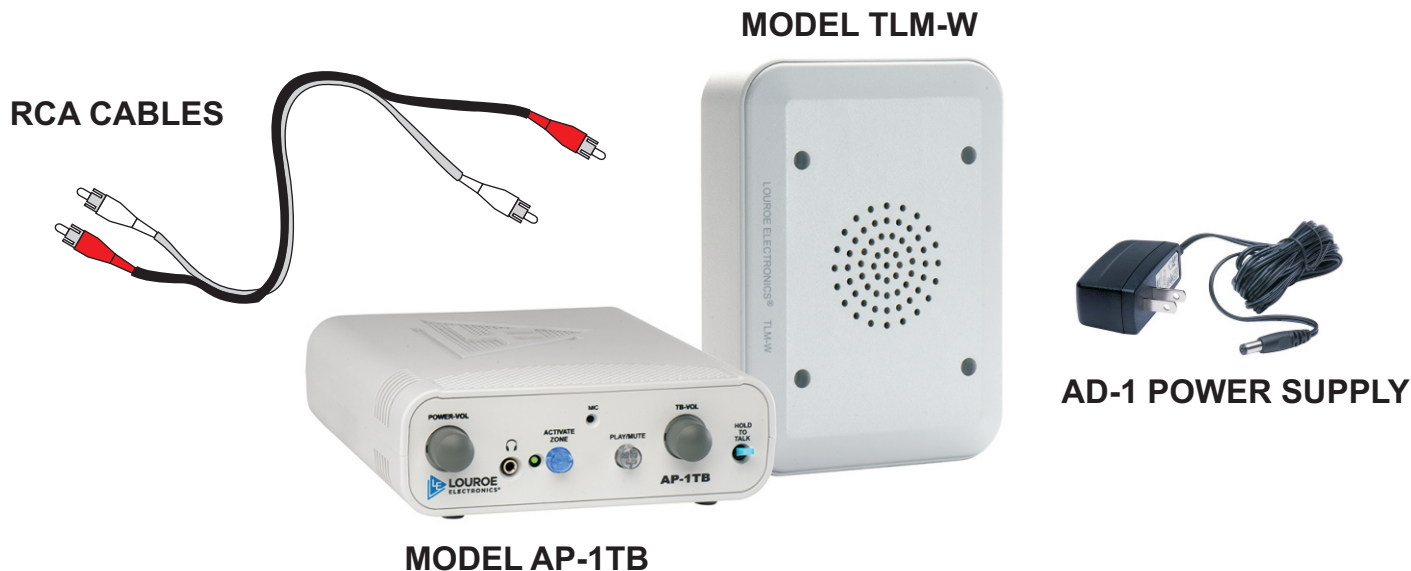


ASK-4® #501

AUDIO MONITORING SYSTEM

INSTALLATION AND OPERATING INSTRUCTIONS

Fig. 1



INTRODUCTION

The ASK-4® 501 is a single zone audio monitoring system with 2-way talk/listen capabilities. It consists of a remote speaker/microphone and audio base station with built-in microphone and speaker.

DESCRIPTION OF EQUIPMENT

AP-1TB AUDIO BASE STATION

A single zone desk top audio base station. Contains a built-in microphone and speaker for listen and talkback with the remote unit (Model TLM-W). Has input/output to DVR/VCR for live audio and playback. UL listed.

MODEL TLM-W

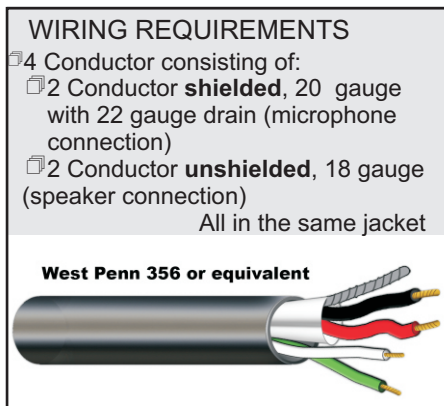
Wall Mount Two-way speaker/microphone - contains an electret condenser microphone and a 2 1/2" speaker.

AC ADAPTER

UL® listed power supply. Supplies 12 Vdc, 500mA to both AP-1TB and TLM-W

DUAL RCA CONNECTOR CABLE

For output/input connection to a DVR/VCR for audio recording and playback.

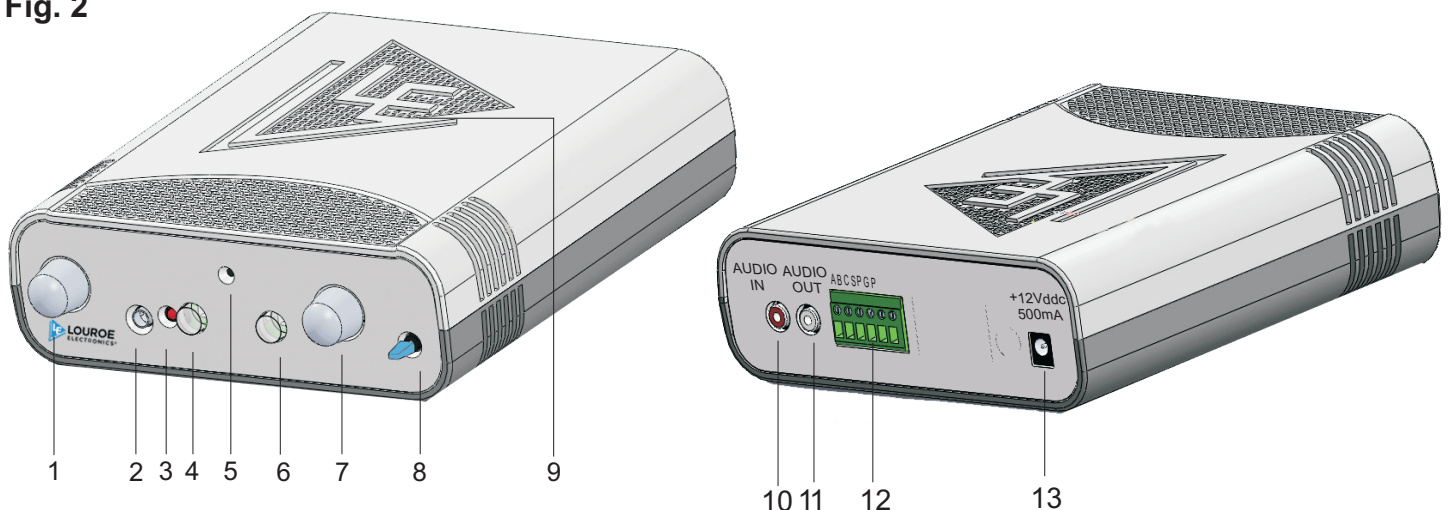


INSTALLATION AND OPERATING INSTRUCTIONS

DESCRIPTION OF PARTS - AP-1TB

[1]	Power-Volume Control	Turns ON power to the unit as indicated by the Power LED[3]. Turning the knob more clockwise increase the volume of the monitored audio heard at the Speaker[9]
[2]	Headphone Jack	Used for private listening. Any 3.5mm stereo headphone with 8Ω to 600Ω impedance may be used. Mutes AP-1TB speaker output when in use.
[3]	Power LED	Lights when Power-Volume Control[1] is turned ON indicating power to the unit.
[4]	Zone Switch	Press to activate two-way audio monitoring.
[5]	Talkback MIC	Built-in microphone for talkback.
[6]	Playback/Mute Switch	Used when playing back audio from a recorder or mute the audio from the microphone. No audio is heard on the Speaker[9] when this switch is ON.
[7]	Talkback Volume Control	Rotate clockwise to increase the loudness of audio heard at the remote Speaker/Mic unit. Rotate counterclockwise to decrease the level of audio heard at the remote Speaker/Mic.
[8]	Talkback Switch	Hold down and talk so audio can be heard at the remote Speaker/Mic unit.
[9]	Monitor Speaker	Monitored audio is heard at this speaker. Muted when a headset is plug into Headphone Jack[2]
[10]	Audio-In Jack	Receives audio from an external source (recorded playback from a DVR or VCR).
[11]	Audio-OUT Jack	Sends audio to an external receiver (DVR, VCR, etc.)
[12]	MIC 6-Pin Terminal	Connects to speaker/microphone at remote location.
[13]	DC-IN Jack	Accepts 12 Vdc from external power supply (AC Adapter included).

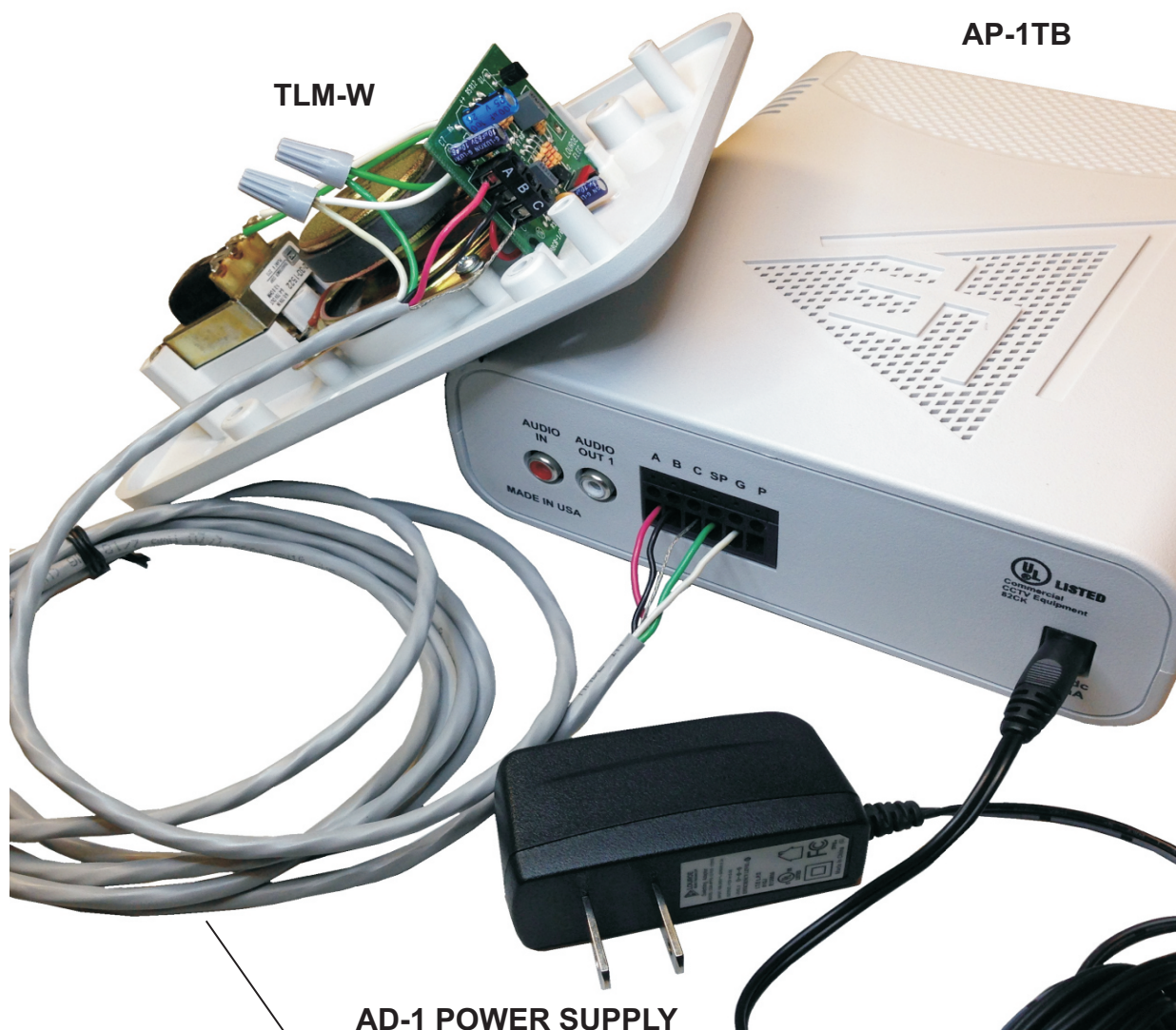
Fig. 2



INSTALLATION AND OPERATING INSTRUCTIONS

INTERCONNECTION DIAGRAM FOR MODEL TLM-W SPEAKER/MICROPHONE AND AP-1TB BASE STATION

Fig. 3



4 Cond Shielded Cable consisting of:
2 Cond Shielded #20 AWG with Drain Wire (Microphone)
2 Cond Unshielded #18 AWG (Speaker)

NOT SHOWN: DUAL RCA CABLES CONNECTED TO RECORDER

MECHANICAL INSTALLATION OF TLM-W SPEAKER/MICROPHONE

The TLM-W can be mounted on its plastic backbox for surface mounting or to a standard 3 gang electrical box for flush mounting to a wall.

When using the plastic backbox, drill the box with an opening the size of the desired conduit where the cable will pass through. If surface mounting to a 3 gang electrical box is needed, install the box inside the wall and screw in the faceplate after the wires are all installed.

WIRING CONNECTIONS BETWEEN MODEL TLM-W SPEAKER/MICROPHONE AND AP-1TB AUDIO BASE STATION

- 1) Connect one end of recommended cable to remote speaker/microphone (TLM-W) as shown in Fig. 3. Connect wires wrapped with overall shield to terminals "A", "B", and "C" of TLM-W's terminal block. When using sample cable, connect **red** wire to terminal "A"; **black** wire to terminal "B" and **bare** wire to terminal "C".
- 2) Connect the two speaker wires (twisted pair) green and white to **green** and **white** wires of TLM-W's 70V transformer. Using wire nut connect **green** wire to **green** wire of TLM-W's 70V Transformer. Again, using wire nut connect **white** wire to **white** wire of TLM-W's 70V Transformer.
- 3) Connect the other end of the cable to AP-1TB **Mic 6-Pin Terminal Block [12]**. Make sure that wire connected to terminal "A" of remote TLM-W connects to terminal "A" of AP-1TB's **Mic 6-Pin Terminal Block [12]**; wire connected to terminal "B" of TLM-W connects to terminal "B" of AP-1TB; "C" to "C". Observe cable color coding. Terminal "P" of AP-1TB is not used with this application. Used only when paralleling to a second AP-1TB.
- 4) For speaker connection, connect **green** speaker wire (positive) to **Mic 6-Pin Terminal Block [12]** terminal "SP", connect **white** speaker wire (ground) to "G".
- 5) When a recording device is used (DVR,VCR,etc.) connect **Audio-OUT Jack [11]** to recorder's Audio-IN Jack with the dual RCA cable (supplied).
- 6) Connect **Audio-IN Jack [10]** to recorder's Audio-OUT Jack with the remaining RCA plug.
- 7) Plug AC Adapter power supply (included) to **DC-IN Jack [18]**.

INSTALLATION AND OPERATING INSTRUCTIONS

OPERATION AND TEST

1) Applying Power To The System

With all wiring connections complete, power up the system using the 12Vdc, 500mA power supply included with the kit. First connect the small end of power supply to the **DC IN Jack [13]** located on rear panel of AP-1TB Base Station. Connect the large end with the 2-prong plug to a standard 120Vac wall outlet or power strip.

2) Rotate the **Power-Volume Control[1]** ON position as indicated by the **Power LED[3]** **Power LED [3]** will illuminate.

3) Testing For Listen And Talkback At The AP-1TB Base Station - Listen Mode

Push in **Zone Switch [4]** located on front panel of AP-1TB. **Zone Switch[4]** will illuminate (blue) and two-way communication is now activated. Have someone create sound by talking at the remote Model TLM-W Speaker/Microphone. Audio should be present via the AP-1TB's **Monitor Speaker [9]**. Adjust loudness of sound heard at the **Monitor Speaker[9]** by rotating the **Power-Volume Control[1]** clockwise to increase or counterclockwise to decrease.

4) Talkback Mode

To speak out to the remote TLM-W, press and hold down **Talkback Switch [8]** of the AP-1TB. Another person is needed to listen at the TLM-W location. If talkback volume needs adjusting, rotate **Talkback Volume Control[7]** clockwise to increase or counterclockwise to decrease.

5) Audio Recording And Playback

Model AP-1TB contains an **Audio Out Jack [11]** and an **Audio In Jack [10]**, located on rear panel. Included with kit is a color coded dual RCA connector cable.

For recording, take one end of dual RCA cable (red) and connect to **Audio Out Jack [11]** of AP-1TB. Connect other end (same color) to Audio In of the recording device (DVR, VCR, etc.). For listening to recorded playback through the AP-1TB, connect RCA plug into Audio Out of the recording device and the other end of RCA plug to **Audio-In Jack [10]** of AP-1TB. Push in **Playback/MuteSwitch [6]** to activate playback mode. **Playback/Mute Switch[6]** will illuminate (orange).The unit is now ready to receive audio from the recorder. Press playback on the recorder. Recorded audio can now be heard at the AP-1TB **Monitor Speaker[9]**. This switch must be turn OFF if not being use for playback as the same switch can be used for muting the audio heard at the **Monitor Speaker[9]** when monitoring audio.

This switch can be used either for muting the sound of the remote microphone heard on the unit's speaker or listening for playback audio from a recorder.

SPECIFICATIONS (Speaker/Mic - Model TLM-W)

Output of microphone (Mic)	Line Level (0 dB, 600 Ω @ 1K Ω)
Frequency Response (Mic)	50 Hz to 15 kHz
Current Drain (mic)	10 mA
Speaker	2 1/2", 7W w/ 70V transformer
Faceplate	6.8"L x 5.12"W x 0.5"D
Backbox	6.92"L x 5.12"W x 1.62"D
Weight	13 oz

SPECIFICATIONS (Base Station - AP-1TB)

Input sensitivity (talkback microphone)	-45 dB
Monitor power output	1W @ 8 Ω
Talkback power output	1W into 70V Line
Audio input impedance	10k Ω
Audio frequency response	100 Hz to 10kHz
Headphone impedance	8 Ω to 600 Ω
Power input	12 Vdc, 500mA
Dimensions	7.9"L x 6.6"W x 2.4"H
Weight	2 lbs 3 oz
Shipping Weight of kit	6 lbs

NOTES

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.

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