LOUROE ELECTRONICS

6955 VALJEAN AVE, VAN NUYS, CA 91406
PH: (818)994-6498 / FAX: (818)994-6458
sales@louroe.com / www.louroe.com

AP-1TB
AUDIO MONITORING BASE STATION
INSTALLATION AND OPERATING INSTRUCTIONS

LOUROE MODEL AP-1TB AUDIO MONITORING BASE STATION

The LOUROE AP-1TB is a single zone audio monitoring base station with a built-in microphone and speaker. When connected with a remote Louroe Speaker/Microphone, it provides a bi-directional (2-way) communication system. Audio can be monitored by pushing in the "Press To Activate Zone" switch. The unit contains an "Audio Out" and "Audio In" jack for connection to a DVR/VCR for recording and playback. A 3.5mm headphone jack is provided for private listening. The AP-1TB is compatible with Louroe Speaker/Microphone Models TLI, TLM Series, TLMC, TLO and TLSP.
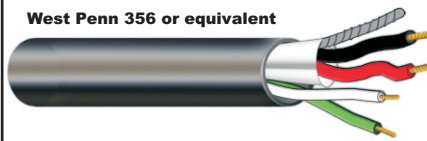

**AP-1 TB Audio Base Station
(can be used as a desktop
or wallmount)**

WIRING REQUIREMENTS
4 Conductor consisting of:
  ▱2 Conductor **shielded**, 20 gauge
     with 22 gauge drain (microphone
     connection)
  ▱2 Conductor **unshielded**, 18 gauge
  (speaker connection)
                 All in the same jacket

West Penn 356 or equivalent
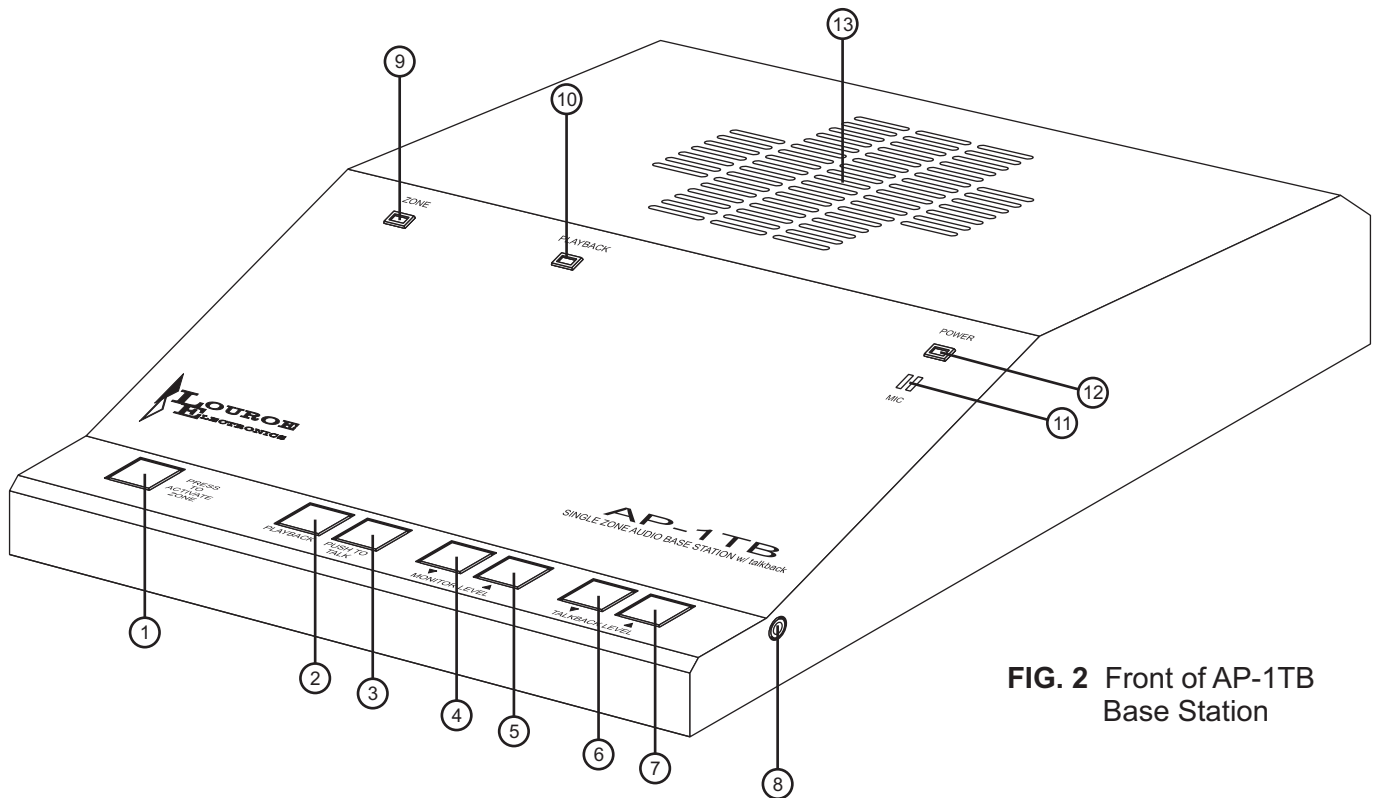
DESCRIPTION OF PARTS
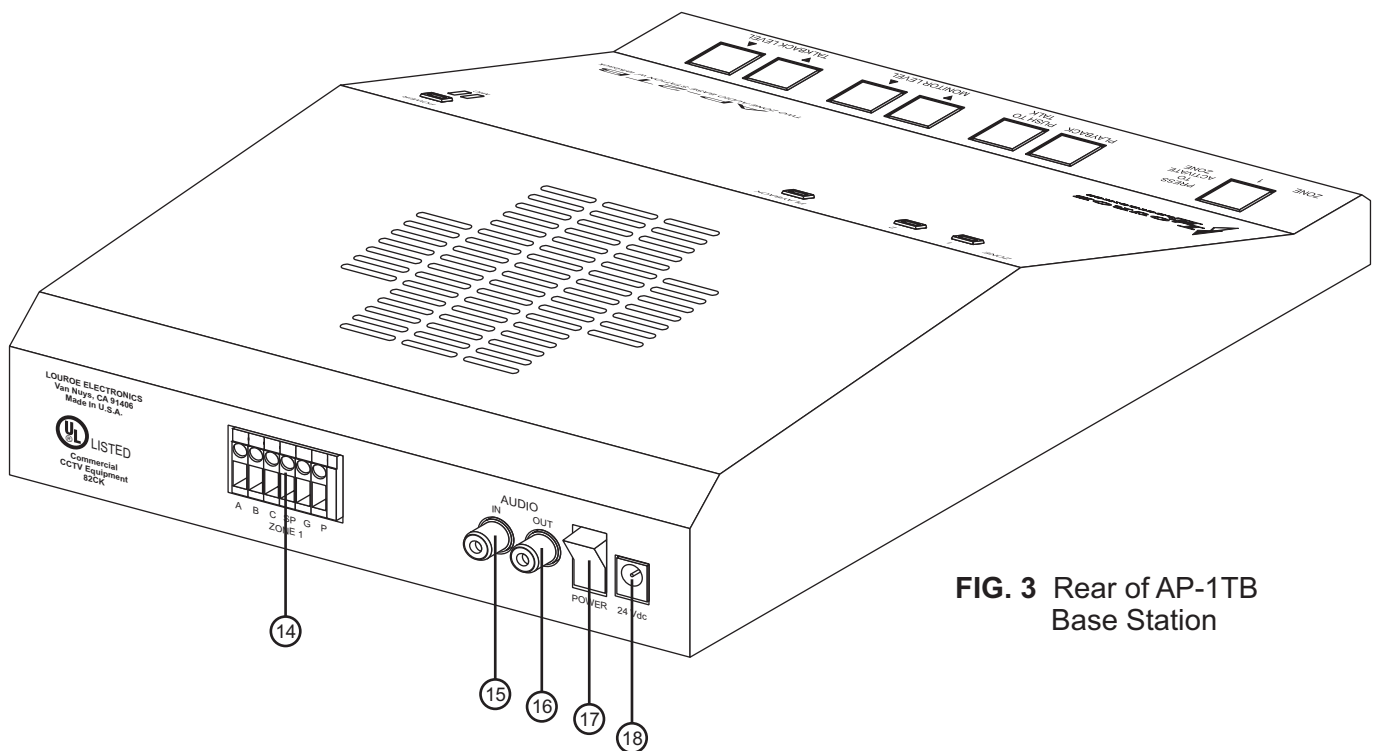
FIG. 2 Front of AP-1TB Base Station

FIG. 3 Rear of AP-1TB Base Station

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DESCRIPTION OF PARTS

[1] Press to Activate Zone Switch

Pressing switch activates the system for listen and talkback. Zone indicator LED **[9]** illuminates. Press switch again to de-activate the system. Zone indicator LED will turn off.

[2] DVR/VCR Playback Switch

Press switch for audio playback from a recorder. The Playback LED**[10]** is illuminated. During this time, live communication (listen mode) is turned off. Pressing switch again cancels playback mode and LED**[10]** turns off.

[3] Talkback Switch

Press to activate talkback feature and to talk to remote speaker/microphone. Audio from remote microphone is muted when switch is pressed. Hold down switch until talkback operation is completed.

[4] Monitor Volume DOWN Control Switch

Press to decrease the level of audio from the Monitor Speaker**[13]**. Continue to press and release until desired level of volume is attained. Pressing and holding down will not change volume.

[5] Monitor Volume UP Control Switch

Press to increase the level of audio from the Monitor Speaker**[13]** Continue to press and release until desired level of volume is attained. Pressing and holding down will not change volume.

[6] Talkback Volume DOWN Control Switch

Press to decrease the loudness of audio at the remote speaker/microphone. Continue pressing switch until desired level of audio is attained. Pressing and holding down will not change volume.

[7] Talkback Volume UP Control Switch

Press to increase the loudness of audio at the remote speaker/microphone. Continue pressing switch until desired level of volume is attained. Pressing and holding down will not change volume.

[8] HeadphoneJack

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.

[9] Zone Indicator LED

Illuminates when a zone is activated. Audio from microphone is present at the Monitor Speaker**[13]**.

[10] Playback Indicator LED

Illuminates when in playback mode. Remains lighted until the Playback Switch**[2]** is pressed again.

[11] Talkback MIC

Built-in microphone for talkback.

[12] Power Indicator LED

Indicates power is present at the unit.

[13] Monitor Speaker

Speaker output. Muted when a headphone is connected to the Headphone Jack**[8]**.

[14] MIC 6-Pin Terminal Block

Connects to speaker/microphone at remote location.

[15] Audio-In Jack

Receives audio from an external source (recorded playback from a DVR or VCR).

[16] Audio-OUT Jack

Passes audio to an external receiver (DVR, VCR, etc.)

[17] Power Switch

Provides power to the unit.

[18] DC-IN Jack

Accepts 24 Vdc from external power supply (AC Adapter included).

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WIRING CONNECTIONS BETWEEN AP-1TB AND REMOTE SPEAKER/MICROPHONE

1) Connect one end of cable to remote speaker/microphone as shown in Fig. 4. Use 4 conductor shielded audio cable such as West Penn 356. Connect wires wrapped with overall shield to terminals "A", "B", and "C" of Speaker/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 other two wires (twisted pair) to "SP" and "G" of Speaker/Microphone's terminal block. Connect cable's **green** wire to terminal marked "SP". Connect cable's **white** wire to terminal marked "G".

3) Connect the other end of the cable to AP-1TB Mic 6-Pin Terminal Block **[14]**. Make sure that wire connected to terminal "A" of remote speaker/microphone connects to terminal "A" of AP-1TB's Mic 6-Pin Terminal Block [14]; wire connected to terminal "B" of speaker/microphone connects to terminal "B" of AP-1TB; "C" to "C", "SP" to "SP" and "G" to "G". Terminal "P" of AP-1TB is used only when paralleling to a second AP-1TB (or more) See figure 5. Observe cable color coding.

4) When a recording device is used, connect Audio-OUT Jack **[16]** to recorder's Audio-IN Jack with an RCA cable (not supplied).

5) Connect Audio-IN Jack **[15]** to recorder's Audio-OUT Jack with an RCA cable.

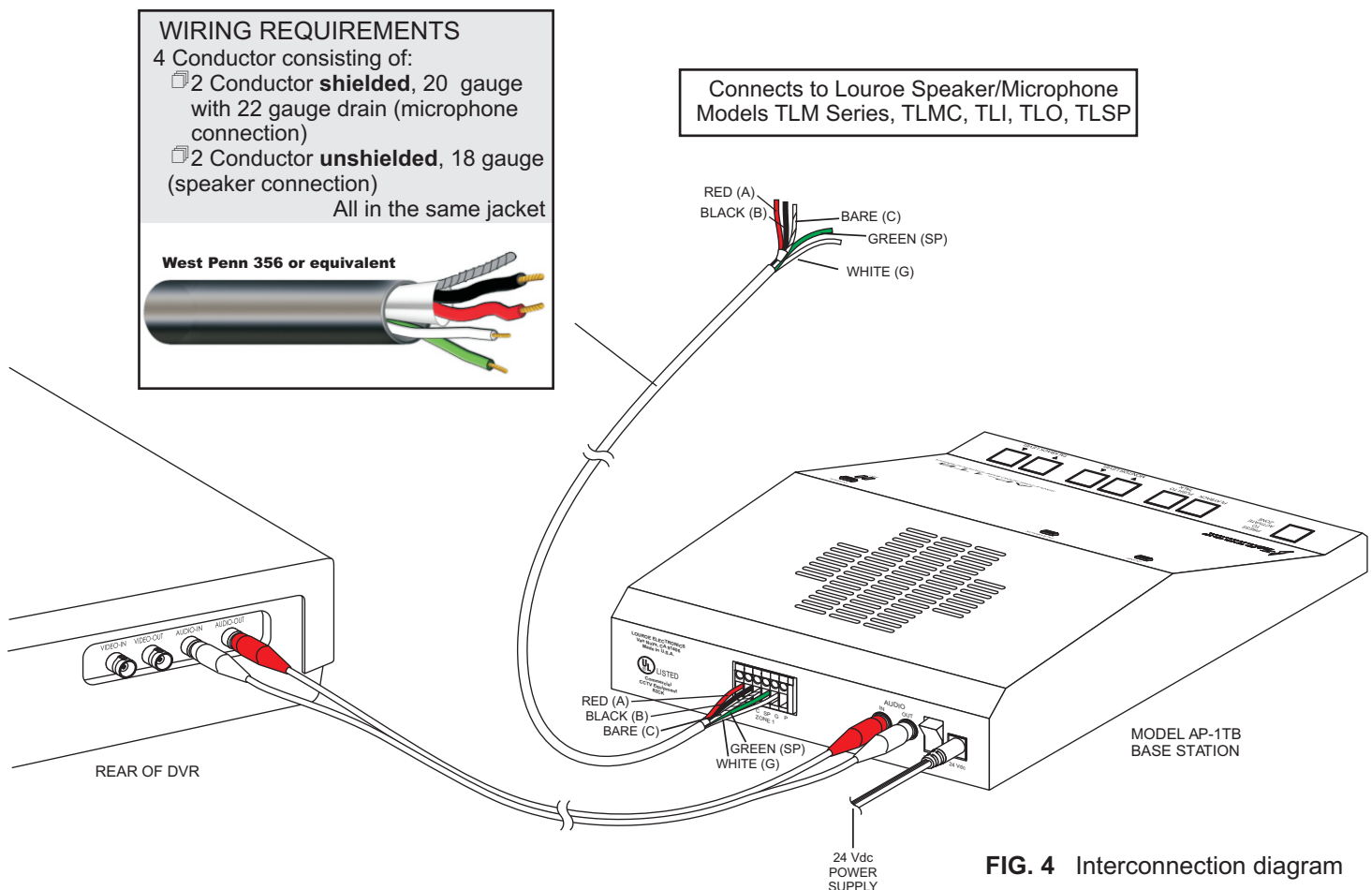6) Plug AC Adapter (supplied) to DC-IN Jack **[18]**.
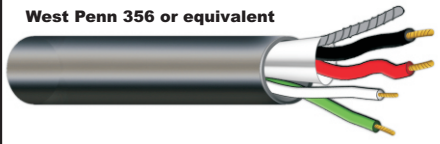

WIRING REQUIREMENTS
4 Conductor consisting of:
  2 Conductor **shielded**, 20 gauge with 22 gauge drain (microphone connection)
  2 Conductor **unshielded**, 18 gauge (speaker connection)
      All in the same jacket

West Penn 356 or equivalent

Connects to Louroe Speaker/Microphone Models TLM Series, TLMC, TLI, TLO, TLSP

RED (A)
BLACK (B)
BARE (C)
GREEN (SP)
WHITE (G)

REAR OF DVR

RED (A)
BLACK (B)
BARE (C)
GREEN (SP)
WHITE (G)

MODEL AP-1TB
BASE STATION

24 Vdc
POWER
SUPPLY

FIG. 4 Interconnection diagram

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PARALLELING TWO AP-1TB AUDIO BASE STATIONS

FOR APPLICATIONS REQUIRING AUDIO MONITORING AND TALKBACK FROM A SECOND LOCATION, USE THE WIRING PROCEDURE SHOWN BELOW

EXAMPLE SHOWS MODEL AP-1TB

WIRING REQUIREMENTS

4 Conductor consisting of:
- 2 Conductor **shielded**, 20 gauge with 22 gauge drain (microphone connection)
- 2 Conductor **unshielded**, 18 gauge (speaker connection)
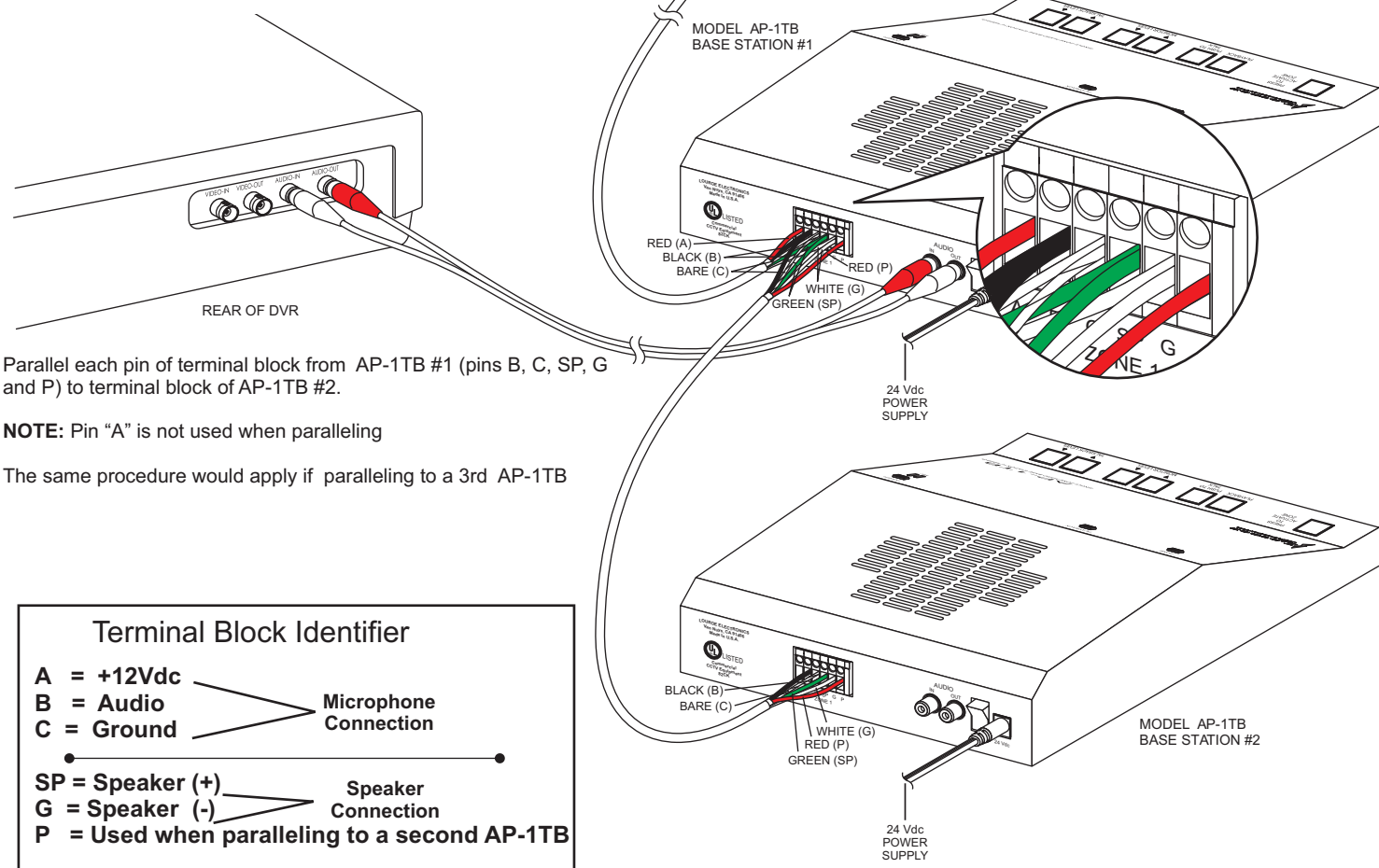
All in the same jacket

West Penn 356 or equivalent

Connects to Louroe Speaker/Microphone Models TLM Series, TLMC, TLI, TLO, TLSP

RED (A)
BLACK (B)
BARE (C)
GREEN (SP)
WHITE (G)

FIG. 5 Paralleling two AP-1TB Base Stations

MODEL AP-1TB BASE STATION #1

RED (A)
BLACK (B)
BARE (C)
RED (P)
WHITE (G)
GREEN (SP)

AUDIO OUT

24 Vdc POWER SUPPLY

REAR OF DVR

VIDEO-IN VIDEO-OUT AUDIO-IN AUDIO-OUT

Parallel each pin of terminal block from AP-1TB #1 (pins B, C, SP, G and P) to terminal block of AP-1TB #2.

NOTE: Pin "A" is not used when paralleling

The same procedure would apply if paralleling to a 3rd AP-1TB

BLACK (B)
BARE (C)
WHITE (G)
RED (P)
GREEN (SP)

MODEL AP-1TB BASE STATION #2

24 Vdc POWER SUPPLY

Terminal Block Identifier

A = +12Vdc
B = Audio   } Microphone Connection
C = Ground

SP = Speaker (+)
G = Speaker (-)   } Speaker Connection
P = Used when paralleling to a second AP-1TB

OPERATION AND TEST

1) First plug DC output of AC Adapter to DC-IN Jack **[18]**,then plug AC Adapter to 120 Vac supply.

2) Turn power to the unit by pushing Power Switch**[17]** located at the back of the unit to ON position. The Power Indicator LED**[12]** will light.

3) Push in the Press to Activate Zone Switch **[1]**. Zone Indicator LED**[9]** will light. Audio should be present at the Monitor Speaker **[13]**. If there is no audio, with a voltmeter, check for 12 Vdc at terminals "A" and "C". Place positive lead of voltmeter to terminal "A" and negative to "C".   If voltage is not present, unit has defective voltage regulator. If voltage is present, check that wires are connected properly to the correct terminals. Otherwise microphone is defective. Call factory for assistance. Adjust volume of audio by pressing the Monitor Volume UP Control Switch**[5]** to increase the level, or the Monitor Volume DOWN Control Switch**[4]** to decrease the level. Press and release switch. Do not hold down as the level will not change.

4) Press and hold Talkback Switch **[3]** and speak into Talkback MIC**[11].** Press Talkback Volume UP Control Switch**[7]** to increase the level of talkback. Press Talkback Volume DOWN Control Switch**[6]** to decrease the level of talkback. Another person is needed to listen to the volume and clarity of talkback at the remote location. Press and release switch. Do not hold down as the level will not change.

5) When a recording device is connected to the unit, press record and record live audio into the DVR/VCR. Press DVR/VCR Playback Switch **[2]** to playback. Playback Indicator LED**[10]** will illuminate. Playback audio will be present at the Monitor Speaker **[13]**.

WALL MOUNTING AP-1TB AUDIO BASE STATION

Bottom of chassis contains four teardrop cut-outs for wall mounting, using #8 screws (not supplied).

SPECIFICATIONS (AP-1TB)

▪ Input Sensitivity (from remote mic)	0.78Vrms
▪ Input sensitivity (talk-back microphone)	-55 dB
▪ Monitor power output	1W @ 8 Ω
▪ Talkback power output(max)	5W into 70V line
▪ Audio output impedance	600Ω
▪ Audio input impedance	10kΩ
▪ Audio frequency response	100 Hz to 10kHz
▪ Headphone impedance	8 to 600Ω
▪ Power input	24 Vdc, 1A or 24 Vdc, 1.5A
▪ Dimensions	8"W x 10 ⅜" D x 2 ⅜"H
▪ Weight	5.5 lbs (2.5 kg)

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NOTE

Model AP-1TB Audio Base Station of ASK-4 Kit #501 is supplied with a <u>70V</u> talkback output, which is standard for most audio applications. Should a <u>600Ω</u> talkback output be required, please contact our factory for details regarding instructions for switching over to 600Ω.

Louroe Electronics
(818) 994-6498
8:00 am 4:30 pm Pacific

LOUROE ELECTRONICS 6955 VALJEAN AVENUE, VAN NUYS, CA 91406 TEL (818) 994-6498 FAX (818)994-6458
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