



APR-1
Audio Monitoring Base Station

Model APR-1 is a single zone non-alarming audio base station. As a system, (with a LOUROE Microphone) it provides one-way live audio with a 3" built-in speaker. Unit contains input/out jacks for connecting to a DVR/VCR for recording and audio playback. The APR-1 has special filtering to enhance audio playback from a 24 hour time lapse recorder. Other features include adjustable volume control and 3.5mm headphone jack. All LOUROE Microphones (Model A, B, C, D, E, K and L-DT) are compatible with the APR-1.

THIS INSTRUCTION INCLUDES THE FOLLOWING

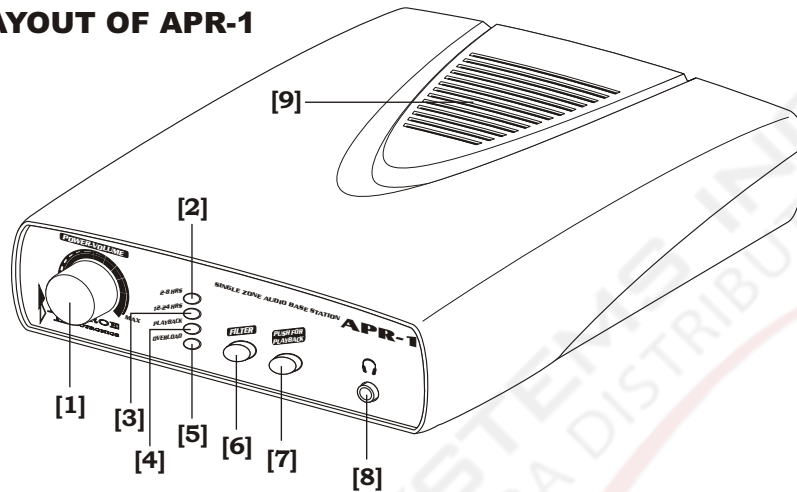
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INSTALLATION AND OPERATING INSTRUCTIONS

DESCRIPTION OF FUNCTIONS

THE APR-1 IS SHOWN BELOW. ALL CONTROLS ARE LOCATED AT THE FRONT PANEL. ALL CONNECTIONS ARE MADE AT THE REAR PANEL.

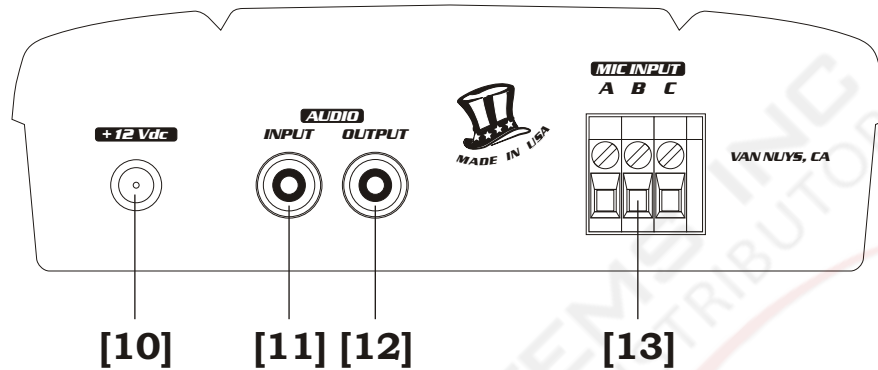
FRONT PANEL LAYOUT OF APR-1



- | | | |
|-----|--|---|
| [1] | Power-Volume | Turns "ON" power to the unit and controls the audio volume through the Speaker[9] . |
| [2] | Filter OUT Indicator | Lights (green) when the audio filter is <u>not</u> in use and the Filter Switch[6] is in the "OUT" Position. Also indicates power to the unit. |
| [3] | Filter IN Indicator
(Not) used with DVR's | Used to enhance audio playback from 24 hour time lapse recorders. Lights (orange) when filter button is pushed in. |
| [4] | Playback IN Indicator | Lights (yellow) when Push for Playback[7] is pushed in to "ON" position. |
| [5] | Overload Indicator | Flashes (red) when there is a short in the power supply. |
| [6] | Filter Switch
(Not) used with DVR's | Normally used for audio playback from a time-lapse recorder. When pressed, audio coming from the Audio IN Jack[11] is passed through an audio filter before going out to the speaker. This enhances the intelligibility of audio playback from 24 hour time lapse recorders. Not used with DVR's. |
| [7] | Push for playback | Used for DVR/VCR playback. May also be used to listen to audio from an external source. Press switch to listen to playback. Switch must be "OUT" or "OFF" when monitoring and recording, otherwise live audio is muted. |
| [8] | Headphone Jack | Used for private listening. Any 3.5mm stereo headphone with 8Ω to 600Ω impedance can be used. |
| [9] | Speaker (3") | Provides live audio. Muted when a headphone is connected to Headphone Jack [8] . |

INSTALLATION AND OPERATING INSTRUCTIONS

REAR PANEL LAYOUT OF APR-1



- [10] Power Jack Accepts 12Vdc power from Model AD-1 Power Supply (included with APR-1 Audio Base Station). AD-1 has a 90° 2.1mm female plug.
- [11] AUDIO IN Jack (RCA) Accepts audio playback from an external source (DVR/VCR). Audio playback is produced through the speaker. The **Push for Playback**[7] must be "IN" during audio playback and "OUT" when not used for playback.
- [12] AUDIO OUT Jack (RCA) Provides audio output and connection to a DVR, VCR, etc.
- [13] Audio Terminal Block A 3-pin terminal block marked A, B, C. Accepts wiring from the remote Louroe Microphone.
- A is 12Vdc Power
B is Audio
C is Ground

INSTALLATION AND OPERATING INSTRUCTIONS

WIRING CONNECTION TO THE LOUROE MICROPHONE

All LOUROE microphones have either a terminal strip or terminal block Marked A, B, C.

- A = 12 Vdc Power
- B = Audio Output
- C = Ground

If using recommended wiring connect as follows:

- 1) Connect Red wire to terminal A of microphone
- 2) Connect Black wire to terminal B of microphone
- 3) Connect Bare wire to terminal C of microphone

WIRING REQUIREMENTS

2 Conductor **shielded** cable, 22 gauge with a 24 gauge drain wire

NOTE: Unshielded cable is not satisfactory for audio systems

West Penn 452 or equivalent



WIRING CONNECTION FROM MICROPHONE TO LOUROE APR-1 BASE STATION

Bring other end of cable to the APR-1 and connect as follows:

On the back panel of APR-1 is a 3-pin terminal block A, B, C.[13]

- 1) Connect Red wire to terminal A of APR-1
- 2) Connect Black wire to terminal B of APR-1
- 3) Connect Bare wire to terminal C of APR-1

APPLYING POWER TO MODEL APR-1 BASE STATION

Supplied with the APR-1 is a 12Vdc, 500mA power supply. Connect the small end to the 12Vdc Power Jack[10] located on back panel of APR-1 **first**, then connect the 2-prong end to a standard 110V outlet. This will power up the APR-1 plus send 12Vdc phantom power to the microphone when the Power-Volume Switch is turned on.

System performs best when there is an acoustical barrier (such as a wall), between the microphone and APR-1. If no barrier, then microphone should be 25' minimum distance from the APR-1. This is to avoid acoustical feedback. If closer, a headphone should be used.

CONNECTING A MICROPHONE FROM OTHER MANUFACTURERS TO THE APR-1

If microphone is a brand other than Louroe it must:

- 1) Operate on 12Vdc power
- 2) Produce Line Level output (0dB@600Ω)

NOTE: Microphones that produce mic level (-55dB) are not compatible with the APR-1 Base Station

- A. If microphone from other manufacturer requires power, refer to the microphone's instructions for applying power. For connecting microphone to the APR-1, there should be two connecting points on the microphone:
- Audio Output
 - Ground

On the back panel of the APR-1 is a 3-pin terminal block marked A, B, C. Using a single conductor shielded cable with a drain wire (ground wire)

- 1) Connect the shielded wire representing Audio Output of the microphone to terminal B of APR-1
- 2) Connect the drain wire representing Ground to terminal C of APR-1.
Terminal A of APR-1 is not used.
- 3) Using the APR-1's power supply connect small end to the 12Vdc jack on APR-1 back panel and the 2-prong end to a standard 110V outlet.

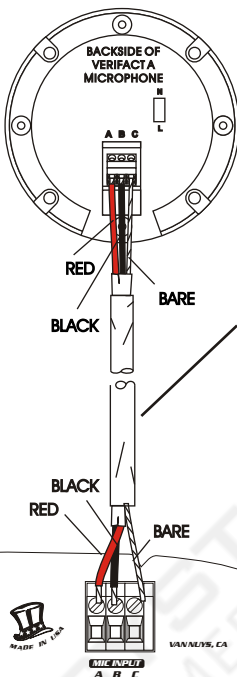
- B. If microphone from other manufacturer is installed in a CCTV camera and draws power from the camera, follow steps 1, 2 and 3 listed above.

INTERCONNECTION DIAGRAM

VERIFACT "A" MICROPHONE TO APR-1 BASE STATION TO DVR, VCR, ETC.

All Louroe Microphones are compatible with the APR-1. Verifact "A" Microphone used as an example

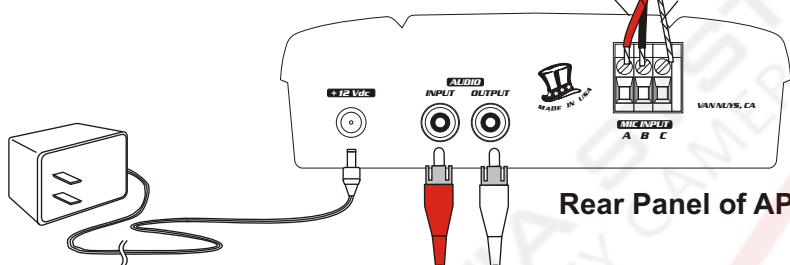
- (A) Red - 12Vdc power
- (B) Black - Audio Output
- (C) Bare - Ground



WIRING REQUIREMENTS
 2 Conductor shielded cable, 22 gauge with a 24 gauge drain wire.

NOTE: Unshielded cable is not satisfactory for audio systems.

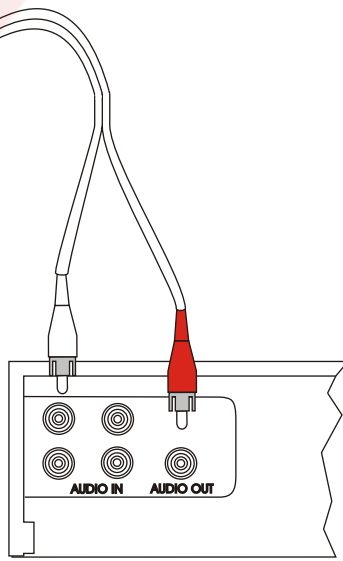
West Penn 452 or equivalent



Rear Panel of APR-1

"Audio In" of APR-1 connects to "Audio Out" of DVR or other receiving device (Red RCA plug)

"Audio Out" of APR-1 connects to "Audio In" of DVR or other receiving device (White RCA plug)



REAR PANEL OF DVR WITH RCA TYPE AUDIO INPUTS

NOTE: If DVR's audio input and output are 3.5mm (mini jack) type, use the appropriate adapter at one end of RCA patch cable for connection. Check with manufacturer's specifications to determine if 3.5mm audio input/output is mono or stereo.

INSTALLATION TIPS

1. Use overall shielded audio cable only. West Penn 452, Belden 8451 or equivalent.
UNSHIELDED CABLE IS NOT SATISFACTORY FOR SOUND SYSTEMS.
2. When used at a cash register checkout, microphone should be installed closer to the customer rather than the cash register, as the drawer sound could dominate the recording. It should be installed closest to the area to be monitored and documented.
3. Avoid installing microphone near air vents, air conditioners, fans and other equipment that generate high sound and air pressure.
4. If microphone is installed in a police interview room, room should be conditioned with any type of carpeting, acoustical ceiling tiles, acoustical foam, etc. to reduce echo. This will enhance the quality of live and recorded audio.
5. The APR-1 and microphone should have a barrier or solid wall between them in order to avoid audio feedback, especially when they are in close proximity to each other. If no barrier, microphone should be at least 25' from APR-1 to avoid acoustical feedback.

SPECIFICATIONS OF APR-1 BASE STATION

■ Input Sensitivity (from remote mic)	0.78Vrms
■ Monitor power output	1W @ 8Ω
■ Audio output impedance	10kΩ
■ Audio input impedance	10kΩ
■ Audio frequency response	100 Hz to 10kHz
■ Audio frequency response (enhanced)	-20 dB @ 200 Hz to +5dB @2 kHz -10dB @ 6 kH
■ Headphone impedance	8 to 600Ω
■ Power Supply	12 Vdc, 500 mA
■ Dimensions	8 1/4"L x 5 3/4"W x 1 3/8"H
■ Weight	1.5 LBS. (681g)

INSTALLATION AND OPERATING INSTRUCTIONS

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 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.

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IN THE**

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ESENTIA SYSTEMS INC
SECURITY CAMERA DISTRIBUTOR