

ASK-4 KIT #102

AUDIO MONITORING SYSTEM

INSTALLATION AND OPERATING INSTRUCTIONS

The ASK-4 Kit #102 is a single zone audio monitoring system designed to interface with a DVR, VCR or other recording devices that accept line level input. The APR-1 Audio Base Station contains a built-in 3" speaker and volume control for producing live audio and audio playback. It also has a filter switch that enhances the quality of playback from 24 hour time-lapse recorders.



APR-1
AUDIO MONITORING
BASE STATION



VERIFACT D MICROPHONE

Contents of Kit	Description
APR-1	Audio Base Station. Used for listening to live audio from microphone, as well as playback from DVR's, VCR's or other external audio sources.
Verifact D Microphone	Electret condenser microphone with preamp. Picks up normal sounds 15' away (wall mounted) or within a 30' diameter (ceiling mounted). May be located up to 1000' from APR-1 Base Station.
AD-1	UL® listed AC ADAPTER. Supplies 12 Vdc to APR-1 and Microphone.
Dual RCA Cable	RCA cable for connections to a DVR/VCR or other audio devices that accept line level input (0dB @ 600Ω).

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

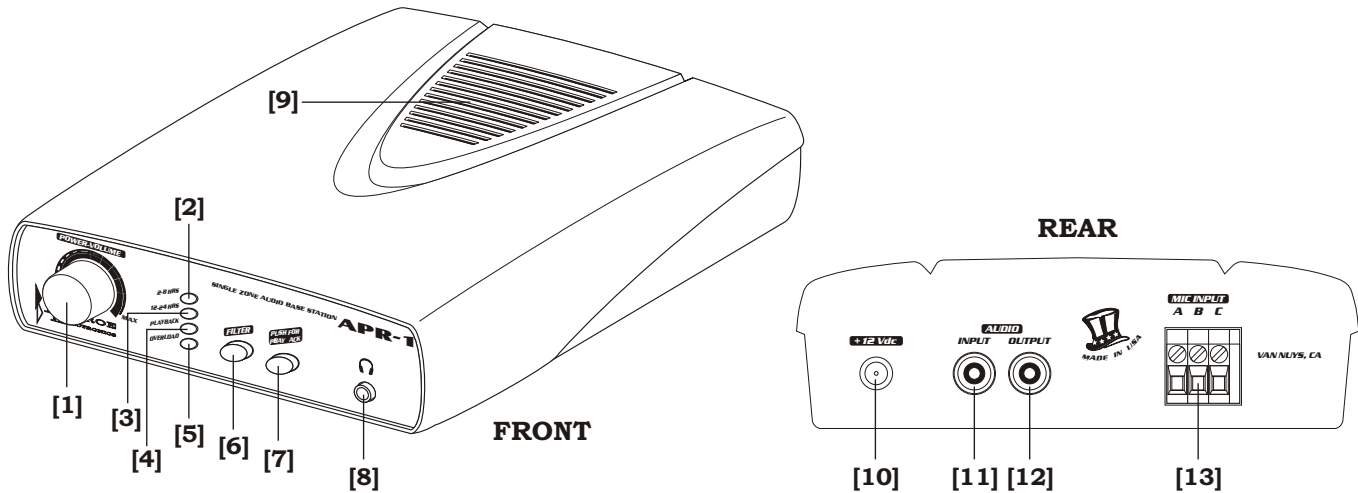


INSTALLATION AND OPERATING INSTRUCTIONS

DESCRIPTION

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

APR-1 FRONT AND REAR PANEL LAYOUT



- | | |
|--|---|
| [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 not in use and the Filter Switch [6] is in the "OUT" Position. Also indicates power to the unit. |
| [3] Filter IN Indicator | Lights (orange) when audio filter is used for playback. Filter Switch [6] is in the "IN" position. |
| [4] Playback IN Indicator | Lights (yellow) when Playback Switch [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 12 or 24 hour 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 12/24 hour time lapse recorders. Not used with DVR's. |
| [7] Playback Switch | 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]. |
| [10] Power Jack | Accepts 12Vdc power from Model AD-1 Power Supply (included with ASK-4 Kit #102). AD-1 has a 90° 2.1mm female plug. |

INSTALLATION AND OPERATING INSTRUCTIONS

- [11] AUDIO IN Jack (RCA) Accepts audio playback from an external source (DVR/VCR). Audio playback is produced through the speaker. The **VCR Switch [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 remote Verifact A Microphone.
- A is 12Vdc Power
B is Audio
C is Ground

SENSITIVITY SWITCH

For special installations that require less microphone sensitivity or where there is background noise, a sensitivity switch has been added to the microphone pre-amp (PC Board). This sensitivity switch has two positions, N and L:

N represents normal sensitivity (0dB output into 1k Ω)

L represents low sensitivity (-6dB output into 1k Ω)

Louroe VERIFACT microphones are always shipped with the sensitivity switch in normal (N) position. Do not change unless required.

LOCATION OF SENSITIVITY SWITCH

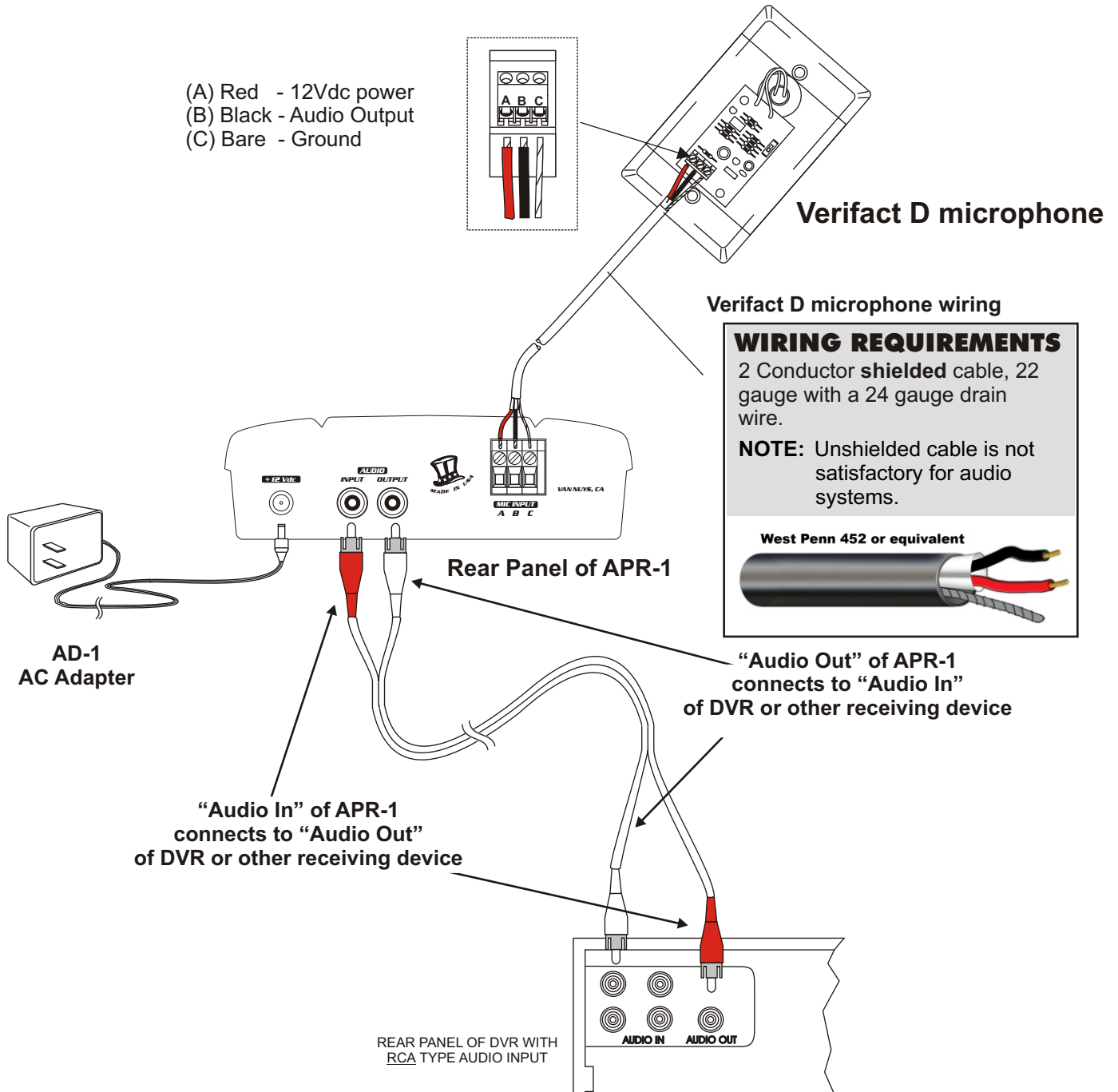
Model D Microphone - If microphone is mounted in an electrical box, remove face plate. Sensitivity switch (red) is located at top right corner of PC Board. Move slide switch to L position.

NOTE REGARDING INTERFACING ASK-4 KIT #102 WITH A DVR

The APR-1 Audio Base Station of ASK-4 Kit #102 is compatible with all commercial DVR's. If DVR contains a 3.5mm "Audio In" Jack, a 3.5mm Adapter **must** be connected to that end of the RCA cable provided with Kit #101. Check with the DVR's manufacturer to determine if the audio input requires a **stereo** or **mono** 3.5mm plug.

INTERCONNECTION DIAGRAM

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



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 AND OPERATING INSTRUCTIONS

WIRING CONNECTIONS AND TEST

Both the Verifact A Microphone and APR-1 Audio Base Station contain a 3-pin terminal block marked A, B, C.

A = 12Vdc Power
B = Audio
C = Ground

Red Wire
Black Wire
Bare Wire

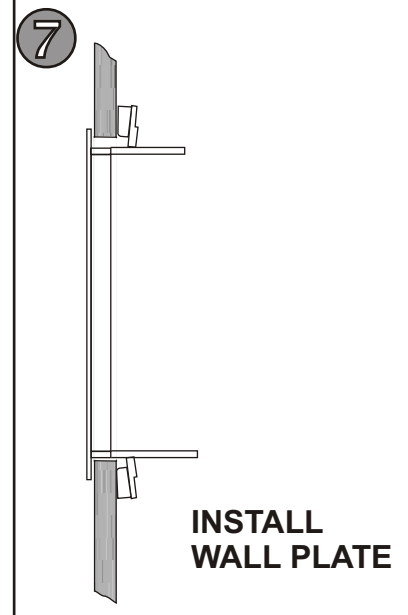
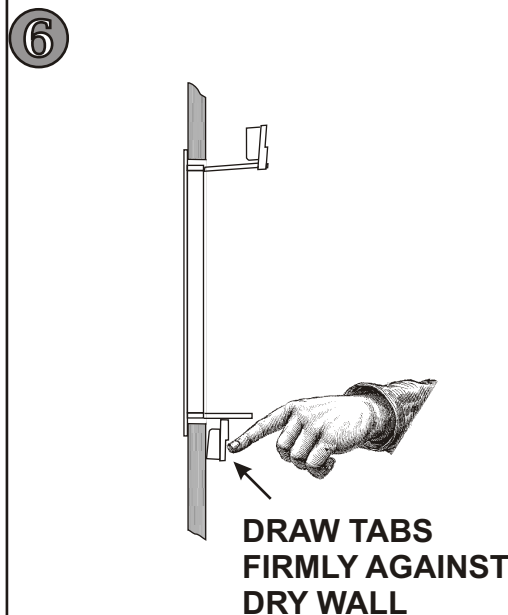
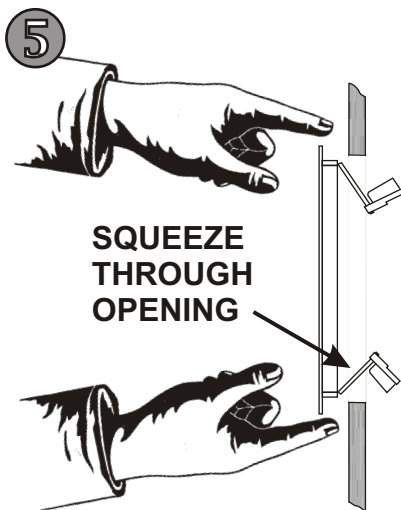
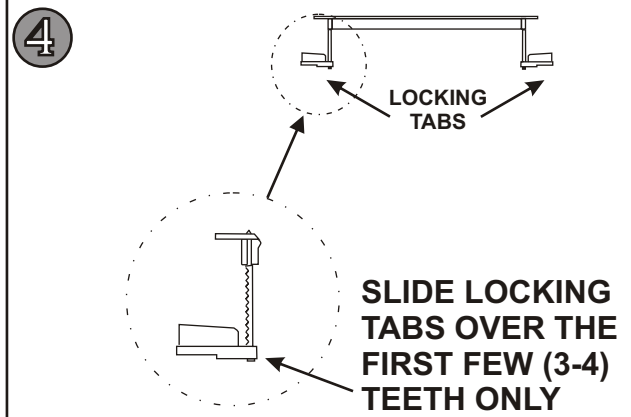
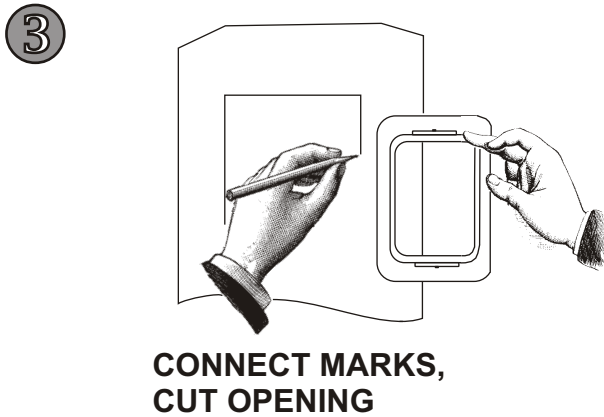
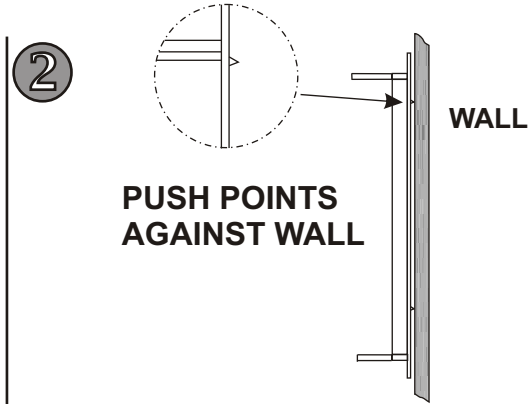
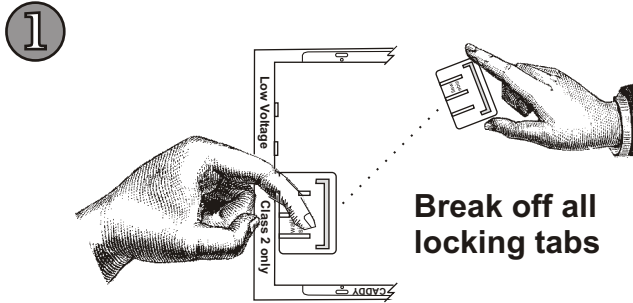
2 Conductor shielded cable, 22 gauge
with a 24 gauge drain wire.
West Penn 452 or equivalent

1. Starting with the microphone, connect **RED** wire to Pin A, **BLACK** wire to Pin B and **BARE** wire to Pin C. Connect other end of cable to Terminal Block on back panel of APR-1 Base Station matching **RED** wire to Pin A, **BLACK** wire to Pin B and **BARE** wire to Pin C. Refer to drawing on page 4.
2. Plug AD-1 power supply (AC Adapter) into the **Power Jack[10]** located on back panel of APR-1 first. Then connect 2-prong block into standard 110/120 AC wall receptacle or power strip.
3. Turn "ON" power to APR-1 by rotating the **Power-Volume Knob[1]** clockwise. The green LED will illuminate. Adjust volume of audio by rotating the knob either clockwise to increase or counterclockwise to decrease. Locate microphone so as not to create feedback with the APR-1. The further the microphone is from the APR-1 the less feedback it generates. System works best if there is an acoustical barrier between the microphone and the APR-1, such as a wall or room divider. If there is no wall or barrier, microphone should be mounted at least 25 ft. from the APR-1 Base Station.
4. Plug headphone into the **Headphone Jack[8]**. **Speaker[9]** output is muted and sound is transmitted through the headphone.
5. Using the dual RCA cable (supplied), connect DVR/VCR's AUDIO OUT jack to APR-1's **AUDIO IN Jack[11]**.
6. Connect DVR/VCR's AUDIO IN jack to APR-1's **AUDIO OUT Jack[12]**.
7. Press "REC" on the recording device and record live audio for several minutes.
8. Press **VCR Switch[7]** to "ON" position. **VCR IN Indicator[4]** will illuminate.
9. Press "PLAY" on the DVR/VCR to playback recorded audio from the APR-1. If using a time-lapse recorder in the 12 or 24 hour mode, it may be necessary to press the **Filter Switch[6]** during playback if the recorded audio is not intelligible. The **Filter Switch[6]** enhances audio playback in the 12-24 hour mode. **If audio 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[6]** must be in the OUT position. The green **LED [2]** will illuminate when Filter Switch is in the OUT position.

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 in cashier's booth, microphone should be installed closer to the customer rather than the cash register. The drawer sound may dominate the recording. It should be installed closest to the area that needs to be monitored and documented.
3. Avoid installing microphone near air vents, air conditioner, fans and other equipment that generate high sound and air pressure.
4. Some recorders may have both intermittent and constant speed playback. See recorder's manual on how to select constant speed.
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 (up to 25').

As an option to mounting Verifact D or D-VR Microphone, the low voltage mounting bracket (supplied) may be used for flush mounting to a ceiling or wall, instead of a single gang electrical box



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 with 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 subject 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.

MANUFACTURED IN THE

