

INSTALLATION AND OPERATING INSTRUCTIONS
ASK-4® # 101-RM (LE-018)

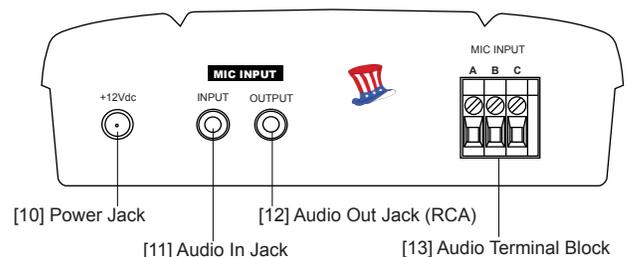
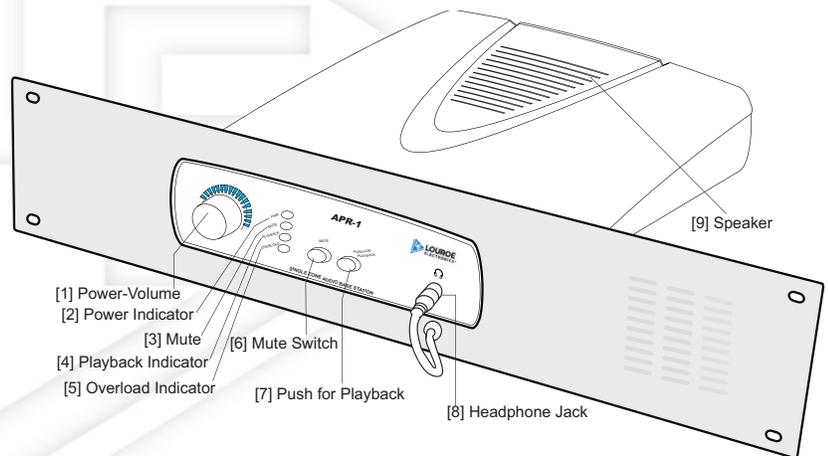
The ASK-4® #101-RM is a rack mount single zone audio monitoring system designed to interface with a DVR, VCR or other recording devices that accept line level input. The APR-1 Audio Base Station Contains a built-in 3" speaker and volume control for producing live audio and audio playback. The Microphone "A" is an omnidirectional preamplified microphone that produces line level output.

PRD #	Description
APR-1 (LE-146)	UL listed Audio Base Station. I Used for listening to live audio from microphone, as well as audio playback from DVR's, VCR's or other audio devices.
Verifact™ "A" Mic (LE-070)	Line Level, Electret condenser microphone with pre-amp. Picks up normal sounds within 30' circle. May be located Up to 1000' from APR-1 Base Station.
AD-1 (LE-242)	UL listed AC ADAPTER. Supplies 12 Vdc to APR-1 and

PRD #	Description
RM-1935 (LE-205)	Rack mount assembly (19"W x 3 1/2' H)
	RCA cable for connection to a DVR/ VCR or other Audio devices that accept line level input

PART DESCRIPTION

[1] Power-Volume	Turns "ON" power to the unit and controls the audio volume through the Speaker[9].
[2] Power Indicator	Lights (green) when the power is present to the unit.
[3] Mute Indicator	Lights (orange) when Mute Switch[6] is pushed in. Audio is muted.
[4] Playback 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] Mute Switch	Used to mute the audio on both live and playback mode.
[7] Push for play-back	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 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. <ul style="list-style-type: none"> • A is 12Vdc • B is Audio • C is Ground



INSTALLATION AND OPERATING INSTRUCTIONS

INTERCONNECTION DIAGRAM

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

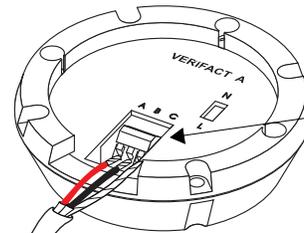
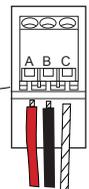
WIRING REQUIREMENTS

Both the Verifact™ "A" Microphone and APR-1 Audio Base Station contain a 3-pin terminal block marked A, B, C
 2 Conductor shielded cable, 22 gauge with a 24 gauge drain wire.
NOTE: Unshielded cable is not satisfactory for audio systems



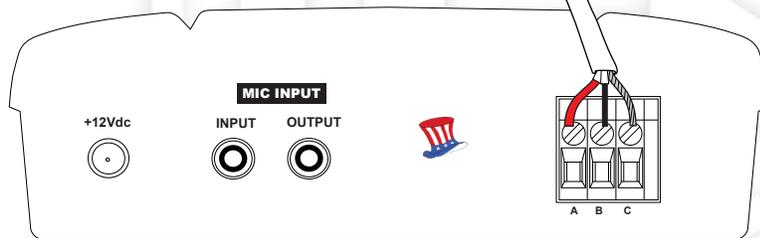
NOTE: If DVR's audio input and output are 3.5mm (mini jack) type, use the appropriate adapter at one end of RCA patch cable for connection. Check with manufacturer's specifications to determine id 3.5, audio input/output is mono or stereo.

VERIFACT™ "A" (LE-070)

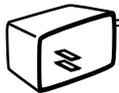



Terminal block Identifier for Microphone
 (A) Red - 12Vdc power
 (B) Black - Audio Output
 (C) Bare - Ground

APR-1 (LE-146)
(Back Panel)



AD-1 AC Adapter
12V/12Vdc, 500mA



[10]

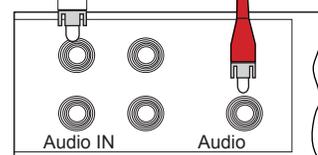
[11]

[12]

[13]

"Audio IN" of APR-1 Connects to "Audio OUT" of DVR or other receiving device

"Audio OUT" of APR-1 connects to "Audio IN" of DVR or other receiving device



Rear Panel of DVR with RCA Type Audio Input

INSTALLATION AND OPERATING INSTRUCTIONS
SENSITIVITY SWITCH OF VERIFACT™ “A” MICROPHONE

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

- N represents normal sensitivity (0dB output into 1kΩ)
- L represents low sensitivity (-6dB output into 1kΩ)

Louroe VERIFACT™ microphones are always shipped with the sensitivity switch in normal (N) position. Do not change unless necessary. To change the sensitivity setting, use a small screwdriver and move slide switch from N to L position. The switch is mounted on the back side of the microphone housing.

NOTE REGARDING INTERFACING ASK-4 KIT #101-RM WITH A DVR OR PC SOUND-CARD

The APR-1 Audio Base Station of ASK-4 Kit #101 is compatible with all commercial DVR's and PC Soundcards that accept line level input (0dB@600Ω). An RCA cable is included with the kit for connecting Audio Out to Audio In of DVR. If DVR's audio input is a 3.5mm jack, an RCA to 3.5mm adapter (not supplied) must be attached to the plug that connects to DVR's Audio Input. Check with DVR's specifications to determine if the audio input requires a stereo or mono 3.5mm plug.

PC soundcards contain a standard 3.5mm stereo Audio Input or Line Input. Do not use Mic Input of soundcard. Louroe microphones are line level (0dB@600Ω) and will overdrive the Mic Input. Use “Audio Input” or Line Input” of the soundcard.

WIRING CONNECTIONS AND TEST

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 2.
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 PWR[2] 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 Push for Playback Switch[7] to “ON” position. Playback Indicator LED[4] will illuminate yellow.
9. Press “PLAY” on the DVR/VCR to playback recorded audio from the AP
10. Press Mute Switch[6] to mute audio heard on the speaker. Mute Indicator LED[3] will light and no audio can be heard on the speaker on both live and playback audio. When Mute Switch[6] is ON Playback Indicator LED[4] will not light even when the Push for Playback Switch[7] is pushed in and the audio is muted.

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, as 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. If using a VCR, it may have both intermittent and constant speed playback. See VCR'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' (7.6 m). WIRING CONNECTIONS AND TEST.

SPECIFICATIONS
VERIFACT™ “A” (LE-070)

Type	Electret Condenser
Output	Line Level 0 dB @ 1KΩ, unbalanced
Frequency Response	40 Hz to 15 kHz ± 1 dB
Current Drain	4 mA
Supply voltage	12Vdc
Dimensions	4”Dia x 1 ½”H

APR-1 (LE-146)

Input sensitivity (mic)	0.78V
Monitor output power	1W@8Ω
Audio line output impedance	600Ω or higher
Audio input impedance	10K
Freq. response	100 Hz to 10 kHz
Headphone impedance	8 to 600Ω
Universal power supply	12 Vdc, 500 mA
Dimensions	8 ¼”L x 5 ¾”W x 1 ¾”H
Weight (shipping)	1.5 lbs. (0.68)Kg

INSTALLATION AND OPERATING INSTRUCTIONS

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.

ABOUT LOUROE ELECTRONICS

Located in Van Nuys, California and 32 years young, Louroe Electronics™ has been the world leading Audio Manufacturer. Our continued growth has resulted from providing innovative products, receiving high customer satisfaction, maintaining strict devotion to quality standards and following the law in Federal, State and Municipal Jurisdiction.

Our "Verifact" line of amplified microphones, complementing base stations, and communication accessories, provide line level output to interface with various digital electronics. Our products are compatible with a wide range of digital video recorders, video cassette recorder, Internet Protocol Network video systems, video servers and computer based recorders.

We are recognized worldwide for our variety of audio monitoring technology. Our products are used in over twenty countries and are utilized in both the private sector and government applications. We currently serve the needs of law enforcement, security, health care, entertainment, hospitality and retail industries and many more.

At Louroe Electronics we maintain rigorous standards to ensure our products provide reliability, durability and excellent performance for our customers' needs. We are proud to continue designing, engineering and manufacturing at our headquarters base in Van Nuys, California.

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.

