



**MODEL MS-1**

## DESCRIPTION

The MS-1 Mute Switch is an accessory to Louroe Audio Monitoring/Audio Surveillance Systems when microphone muting is required. The MS-1 contains a built-in rocker switch mounted to a single gang stainless steel face plate. This is to mute or disable the audio feed to a base station or other receiving and recording devices. It prevents the operator from listening in to the microphone when it is not needed. The MS-1 fits into a single gang backbox (not included) for mounting to a wall or flat surface.

## OPERATION

A rocker switch is mounted to a single gang stainless steel face plate. Top part of switch is marked MICROPHONE ON WHEN ILLUMINATED. Lower part of switch is marked MICROPHONE OFF.

When the **Top** part of the rocker switch is pressed to MICROPHONE ON WHEN ILLUMINATED, the rocker switch illuminates RED, indicating that the microphone is active and will pick up sounds within it's range.

When **Lower** part of the rocker switch is pressed in to MICROPHONE OFF, illumination turns OFF, indicating that the microphone is muted and no sound is produced.

### 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

---

## WIRING CONNECTION TO LOUROE BASE STATION OR AUDIO INTERFACE ADAPTER

On the back panel of Louroe Base Station or Audio Interface Adapter is a 3-pin terminal block marked A, B, C.

A = 12Vdc

B = Audio Input

C = Ground

If using recommended or similar cable connect as follows:

- 1 Red wire connects to terminal A
- 2 Black wire connects to terminal B
- 3 Bare wire connects to terminal C

## CONNECTION BETWEEN LOUROE BASE STATION OR AUDIO INTERFACE ADAPTER AND LOUROE MODEL MS-1

The 3-pin terminal block of the Model MS-1 has been assigned with letters A, B, C (not shown on actual board) for ease of installations.

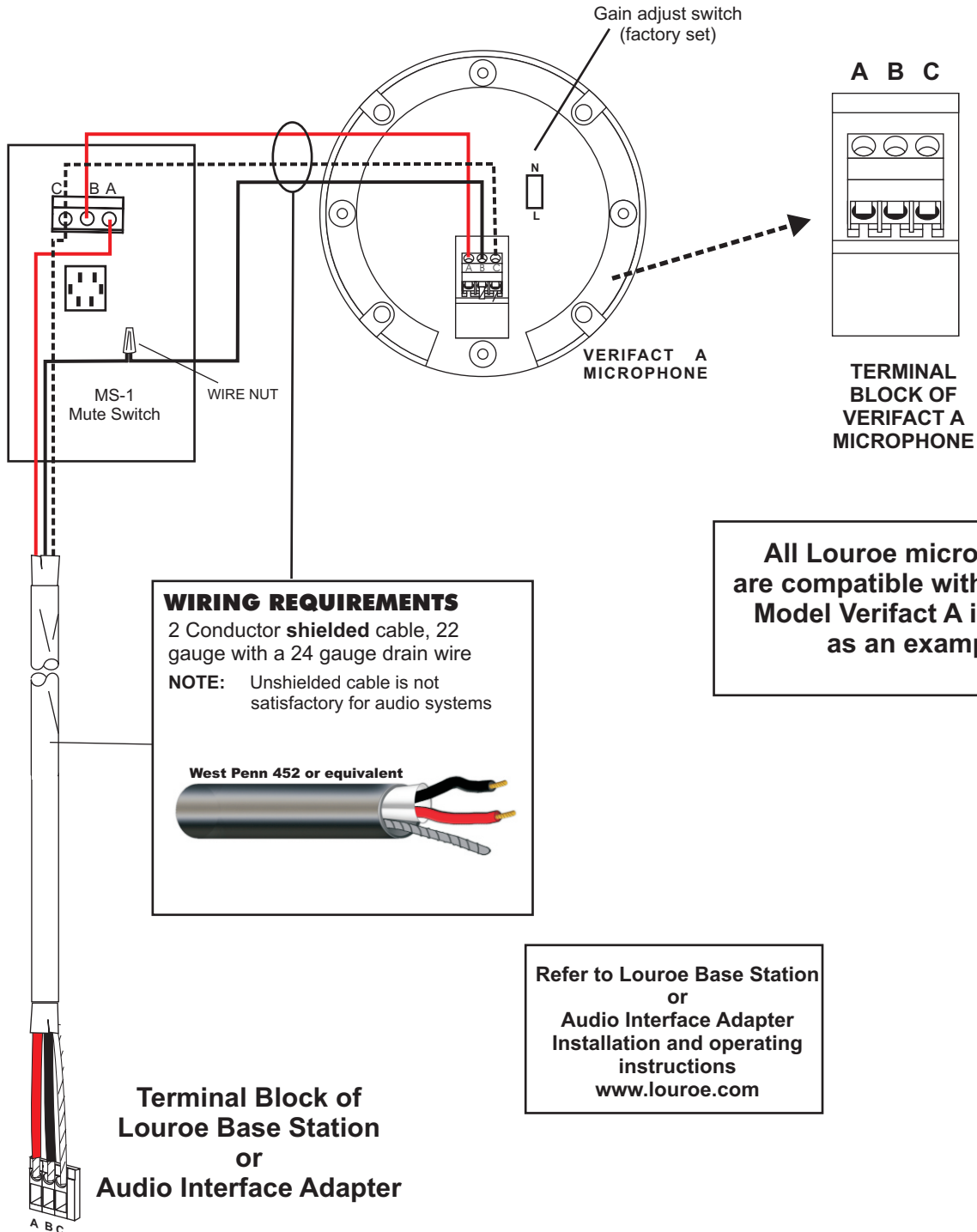
- 1 Using recommended cable connect Red wire from terminal A of base station to terminal A of MS-1
- 2 Connect Black wire from terminal B of base station to terminal B of microphone. Splice the wires together using wire nut (see diagram on next page)
- 3 Connect Bare wire from terminal C of base station to terminal C of MS-1.

## WIRING CONNECTION FROM LOUROE MODEL MS-1 TO MICROPHONE

Using another set of recommended cable (West Penn 452 or equivalent) connect as follows:

- 1 Connect terminal B of MS-1 to terminal A of microphone
- 2 Connect terminal C of MS-1 to terminal C of microphone.
- 3 Connect terminal B of the microphone to terminal B of base station or audio interface adapter using wire nut (mentioned previously).

**INTERCONNECTION DIAGRAM  
FOR  
MS-1 MUTE SWITCH,  
LOUORE MICROPHONE  
AND  
LOUORE AUDIO BASE STATION OR  
AUDIO INTERFACE ADAPTER**



# INSTALLATION AND OPERATING INSTRUCTIONS

## APPLYING POWER TO THE SYSTEM

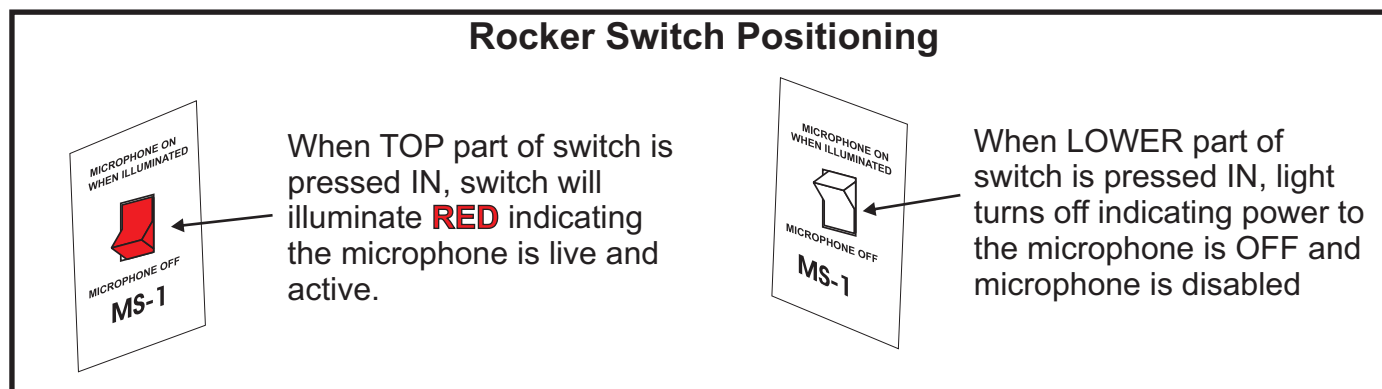
After all wiring between the base station or audio interface, microphone and MS-1 Mute Switch is complete, apply power with the power supply, (included) with the APR-1 Base Station or audio interface.

- 1 First connect small end of 12Vdc Power Supply to the 12Vdc Power Jack[10], then plug power block into a standard 120Vac wall outlet or power strip.
- 2 Turn "ON" power to APR-1 by rotating the Power-Volume Knob[1] clockwise. Adjust volume of audio by rotating the knob either clockwise to increase or counterclockwise to decrease.
- 3 The APR-1 will power up both the remote microphone and the MS-1 Mute Switch

## CONNECTING MICROPHONE DIRECTLY TO A RECORDER

The microphone maybe connected directly to a recorder without the use of an interface adapter or base station

1. Connect +12Vdc power supply to terminals "A" and "C" of the MS-1. Connect +12 Vdc to terminal "A" and -12Vdc or ground to terminal "C".
2. Connect terminal "B" of MS-1 to terminal "A" of microphone (shown in drawing).
3. Connect terminal "C" of MS-1 to terminal "C" of microphone.
4. Run 2 wires from the microphone to the recorder
  - a. Connect terminal "B" of microphone to the positive tip of the 3.5mm mono or .RCA plug (this plugs to the recorder input)
  - b. Connect terminal "C" of microphone to the negative or ground of the 3.5mm mono or RCA plug



# INSTALLATION AND OPERATING INSTRUCTIONS

---

## TESTING AND OPERATION OF SYSTEM

Make sure the Microphone is active. Top part of MS-1 switch must be pressed IN and the Red Rocker Switch illuminated.

1. Create some sound (radio, someone speaking, etc) near the microphone. The sounds will transmit to the APR-1's built-in speaker[9] (see page 6). Adjust the volume of audio by rotating the volume knob clockwise to increase, or counterclockwise to decrease.
2. To mute the system, press the lower part of the rocker switch IN. The lighted switch will go dark, indicating power is OFF and the microphone is DISABLED.
3. Again create some sound. There should be no transmission of audio through the base station (APR-1, etc).
4. If the microphone is directly connected to a recorder, turn ON the recorder to record the audio from the microphone

## RECORDING AUDIO AND AUDIO PLAYBACK

If live audio is to be recorded, connect an RCA patch cable to "Audio Out" of Louroe™ Base Station[12] (see page 7) or audio interface adapter to "Audio In" of the recording device (DVR, VCR, etc.)

## AUDIO PLAYBACK

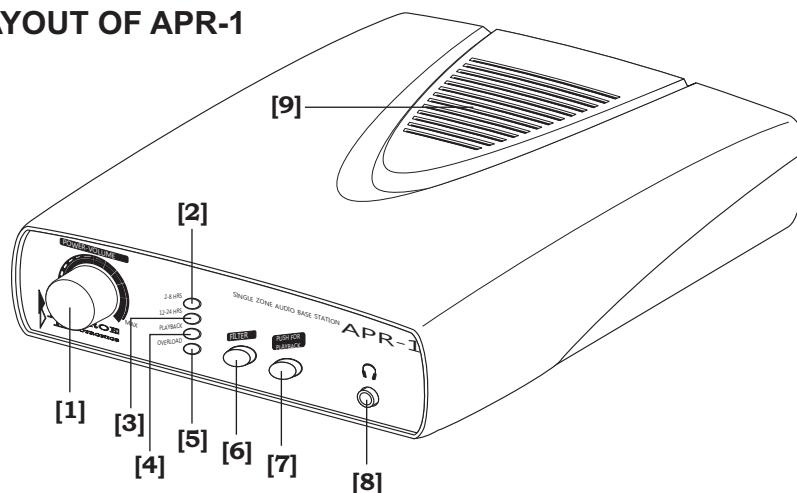
For receiving audio playback through the APR-1 Base Station, connect an RCA cable from "Audio Out" of the DVR, VCR, etc. to "Audio In" [11] (see page 7) of the APR-1. Press the "Audio Playback" Switch of the recording device, then press "Push for Playback" Switch [7] of the APR-1 Base Station. Audio playback will be channeled through the APR-1 Speaker [9]

## SPECIFICATIONS OF MS-1 MUTE SWITCH

▪ Switch contact	9A @125Vac
▪ Supply Voltage	12Vdc
▪ Dimensions	2 ¾" W x 4 ½" H
▪ Faceplate	303 Stainless Steel
▪ Backbox	Single gang electrical box (not included)
▪ Weight	2.5 oz
▪ Shipping Weight	1 lb

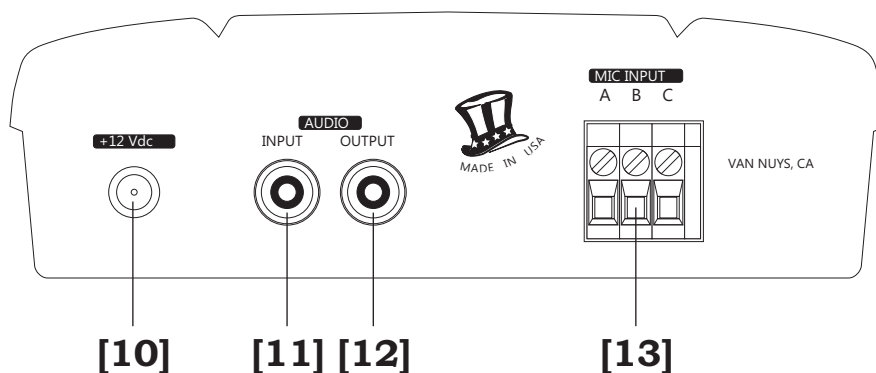
# INSTALLATION AND OPERATING INSTRUCTIONS

## FRONT PANEL LAYOUT OF APR-1



- |     |                       |   |
|-----|-----------------------|---|
| [1] | Power-Volume          | Turns “ON” power to the unit and controls the audio volume through the <b>Speaker[9]</b> .  |
| [2] | Filter OUT Indicator  | Lights (green) when the audio filter is <u>not</u> in use and the <b>Filter Switch[6]</b> is in the “OUT” Position. Also indicates power to the unit.   |
| [3] | Filter IN Indicator   | Used to enhance audio playback from 24 hour time lapse recorders. Lights (orange) when filter button is pushed in. This function is no longer available with this product   |
| [4] | Playback IN Indicator | Lights (yellow) when <b>Push for Playback[7]</b> is pushed in to “ON” position.   |
| [5] | Overload Indicator    | Flashes (red) when there is a short in the power supply.  |
| [6] | Filter Switch         | Normally used for audio playback from a time-lapse recorder. No longer available with this product.   |
| [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 8W to 600W impedance can be used.   |
| [9] | Speaker (3”)          | Provides live audio. Muted when a headphone is connected to <b>Headphone Jack [8]</b> .   |

## 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

## MANUFACTURED IN THE



### 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.