LOUROE ELECTRONICS

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

IF-2/IF-4/IF-8
AUDIO INTERFACE ADAPTERS

INSTALLATION AND OPERATING INSTRUCTIONS

DESCRIPTION

The LOUROE IF-2, IF-4 and IF-8 are two, four zone and eight zone audio interface adapters designed for connecting up to two (IF-2), four (IF-4) or eight (IF-8) Louroe microphones with:

- DVR's
- IP Network Cameras with audio inputs
- Video Servers with audio inputs
- PC Sound Card Modules

The <u>input</u> side of the IF-2/IF-4/IF-8 has terminal blocks for receiving the wiring from the microphones. The <u>output</u> side has two types of output:

RCA type - For connection to a DVR, etc. with RCA audio inputs.

3.5mm type - For connection to an IP Network Camera, etc. with a 3.5mm audio input or to "line in" of a PC Sound Card.

These three units also contain individual "audio level control" potentiometers for audio gain adjustment. Output from the Louroe microphone can be increased 10dB or decreased 30dB.

IF-2 AUDIO
INTERFACE ADAPTER
(two audio inputs and outputs)

IF-4 AUDIO
INTERFACE ADAPTER
(four audio inputs and outputs)

IF-8 AUDIO
INTERFACE ADAPTER
(eight audio inputs and outputs)

WIRING CONNECTIONS

MICROPHONE TO INPUT SIDE OF IF-2/IF-4/IF-8

All Louroe microphones contain a terminal block
marked A, B, C

A = 12Vdc power (Red)
B = Audio output (Black)
C = Ground (Bare)

If using recommended wiring, connect as follows:

Red wire goes to Terminal A of microphone (12Vdc power)
Black wire goes to Terminal B of microphone (Audio Output)
Bare wire goes to Terminal C of microphone (Ground)

After all microphones have been connected, bring other end of wiring to the IF-2/IF-4/IF-8 location and connect each microphone to the terminal blocks of the unit marked A, B, C. Be sure to properly match wire colors. If using cable from other manufacturers, color code may vary.

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

CONNECTION BETWEEN IF-2/IF-4/IF-8 AND DVR (OR OTHER AUDIO RECEIVING DEVICES)

The **output** side of IF-2/IF-4/IF-8 has two outputs per microphone
1. RCA type output for connection to a DVR, etc. with RCA audio inputs
2. 3.5mm type output for connection to a DVR, IP Network Camera or DVR that has 3.5mm audio inputs
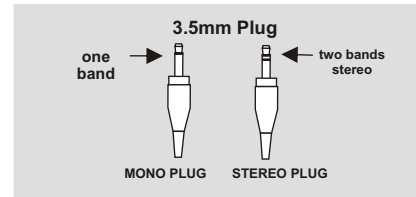
If the receiving device contains **RCA type** "audio in" jacks, then connect from Audio Out of IF-2/IF-4/IF-8 to Audio In of DVR, using the provided RCA connector cables.

If the receiving device contains **3.5mm mono** audio inputs, connect 3.5mm mono cable (supplied) between the output of the IF-2/IF-4/IF-8 and the audio inputs of the DVR, using provided 3.5mm mono cables.

If the receiving device contains **3.5mm stereo** audio inputs, connect one end of the 3.5mm mono cable directly to the output side of the IF-2/IF-4/IF-8 and use **mono** to **stereo** adapter (supplied) for connecting to DVR's audio input.

Included with the units are:
2, 4 or 8 RCA to RCA cables
2, 4 or 8 3.5mm mono to mono cables
2, 4 or 8 3.5mm mono to stereo adapters

3.5mm Plug
one band → (MONO PLUG)   two bands stereo ← (STEREO PLUG)
MONO PLUG   STEREO PLUG

APPLYING POWER TO THE IF-2/IF-4/IF-8

Included with the IF-2/IF-4/IF-8 is a power supply (120V/12Vdc). Connect the small end of the 90° female plug into the 12Vdc jack, located on the input side. Then connect the two-prong large end into a standard 110/120V electrical outlet.

Turn ON/OFF power switch, located behind green power LED to ON position. The green LED will illuminate, indicating power to the system. The system will now provide audio to the DVR, Soundcard Module, IP Network Camera, etc.

AUDIO LEVEL ADJUSTMENT

Located on the input side are potentiometers (round, with adjustment arrow) for each microphone. This is for adjusting the audio gain and to prevent overdriving or underdriving the audio signal.

The adjustment arrows are shipped in the straight-up position. Turn slowly counterclockwise to lower the gain, and clockwise to increase. This will provide the desired level of audio signal into the Audio Receiving Device (DVR, Soundcard Module, etc.). A full turn clockwise increases the gain to 10dB. A full turn counterclockwise will decrease the gain 30dB.

AUDIO TEST SWITCH

The purpose of this switch is to indicate the presence of audio and to assure the user that the IF-2/IF-4 or IF-8 is driving the audio signals into the audio input of receiving device (DVR, IP Network Camera, Video Server, Soundcard module, etc.)

Located on the audio output side of IF-2/IF-4/IF-8 is a DIP switch labeled Audio Test Switch. To the left of the switch is a red LED marked Audio Indicator.

For testing:

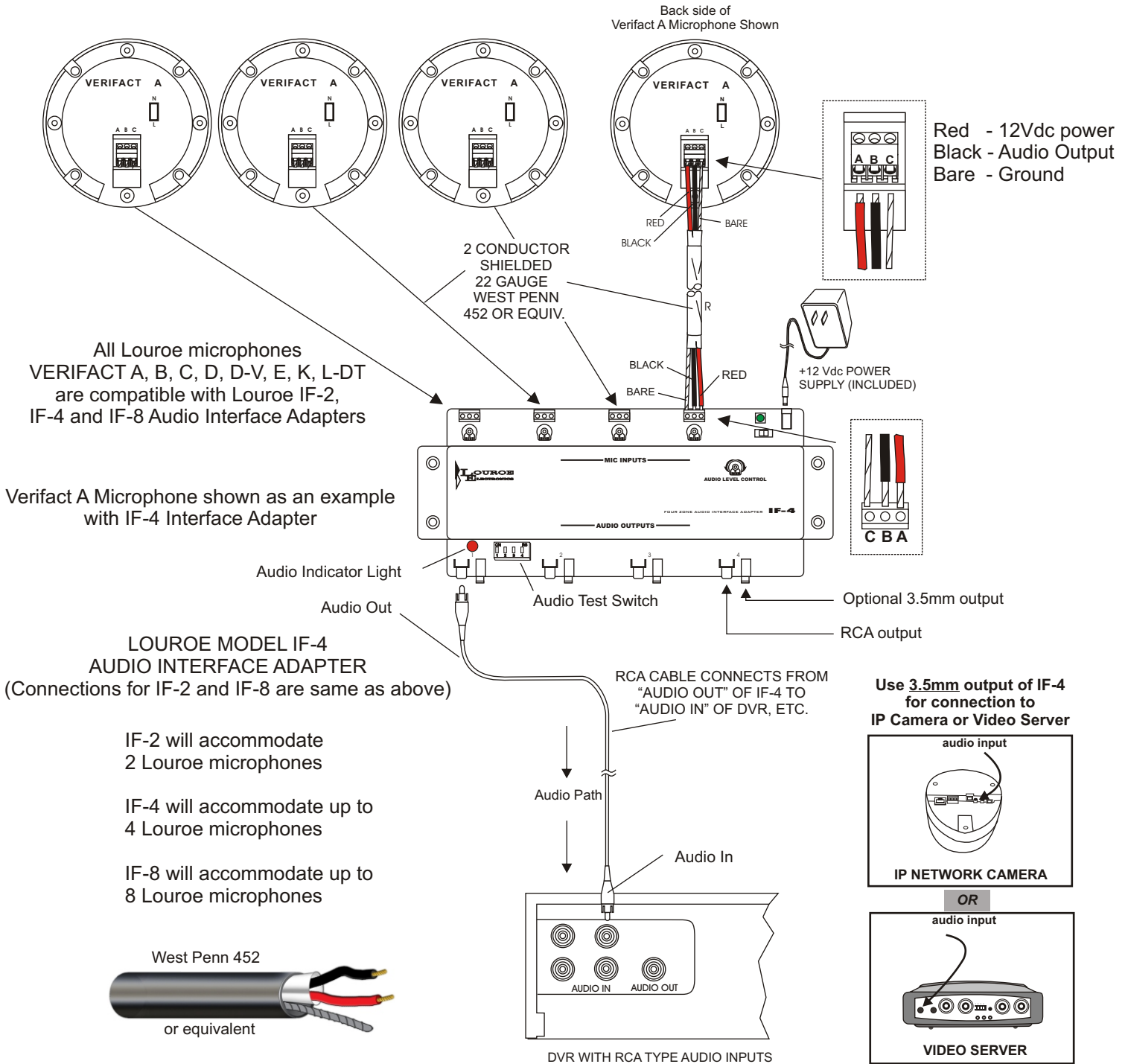1) Select a zone that has a microphone connected to the microphone terminal block.
   IF-2 utilizes pins 1&2. IF-4 utilizes pins 1, 3, 5, 7. IF-8 utilizes pins 1-8.
2) Push pin to the ON position. The red LED will illuminate, indicating audio is present. With short bursts of audio, the LED will flicker and with continuous flow of audio LED illumination is constant.
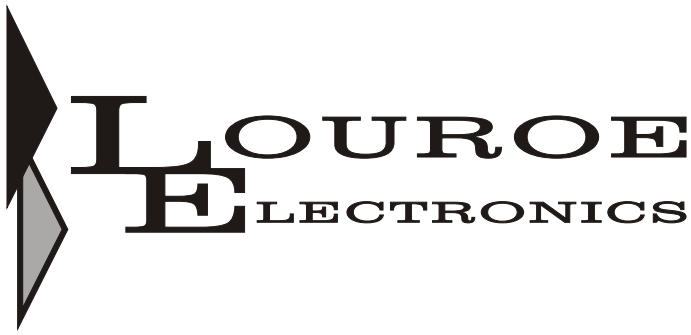
NOTE: Only one microphone can be tested at a time

INTERCONNECTION DIAGRAM
FOR
CONNECTING LOUROE VERIFACT MICROPHONES
TO A DVR WITH MULTIPLE AUDIO INPUTS USING
LOUROE MODEL IF-2, IF-4 OR IF-8 AUDIO INTERFACE ADAPTER
(IF-4 used as an example)

Back side of
Verifact A Microphone Shown

VERIFACT A

Red - 12Vdc power
Black - Audio Output
Bare - Ground

A B C

RED   BARE
BLACK

2 CONDUCTOR
SHIELDED
22 GAUGE
WEST PENN
452 OR EQUIV.

R

All Louroe microphones
VERIFACT A, B, C, D, D-V, E, K, L-DT
are compatible with Louroe IF-2,
IF-4 and IF-8 Audio Interface Adapters

BLACK   RED
BARE

+12 Vdc POWER
SUPPLY (INCLUDED)

C B A

MIC INPUTS
AUDIO LEVEL CONTROL
FOUR ZONE AUDIO INTERFACE ADAPTER IF-4
AUDIO OUTPUTS

Verifact A Microphone shown as an example
with IF-4 Interface Adapter

Audio Indicator Light
Audio Out

Audio Test Switch

Optional 3.5mm output
RCA output

LOUROE MODEL IF-4
AUDIO INTERFACE ADAPTER
(Connections for IF-2 and IF-8 are same as above)

RCA CABLE CONNECTS FROM
"AUDIO OUT" OF IF-4 TO
"AUDIO IN" OF DVR, ETC.

Use 3.5mm output of IF-4
for connection to
IP Camera or Video Server

audio input

IP NETWORK CAMERA

OR

audio input

VIDEO SERVER

IF-2 will accommodate
2 Louroe microphones

IF-4 will accommodate up to
4 Louroe microphones

IF-8 will accommodate up to
8 Louroe microphones

Audio Path

Audio In

West Penn 452

or equivalent

AUDIO IN   AUDIO OUT

DVR WITH RCA TYPE AUDIO INPUTS

LOUROE ELECTRONICS

MANUFACTURED IN THE

USA

SPECIFICATIONS

▪ Input (3-pin terminal block)	Line Level (0dB@1KΩ)
▪ Audio Input Impedance	5kΩ
▪ Audio Output Impedance	600Ω
▪ Audio Output Gain	+10dB
▪ Power Requirements	+12 Vdc, 500mA
▪ Dimensions (IF-2)	6⅛"L x 4½"W x 1¼"H
Dimensions (IF-4/IF-8)	11½"L x 4¾"W x 1¼"H
▪ Weight, net including power supply & cables	IF-2 1.7 lbs (0.8 Kg) IF-4 2 lbs (0.9 Kg) IF-8 2.5 lbs (1.1 Kg)

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.

AUDIO MONITORING On These Premises Louroe

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.

LOUROE ELECTRONICS   6955 VALJEAN AVE, VAN NUYS, CA 91406   TEL (818) 994-6498   FAX (818)994-6458
Website: www.louroe.com   Email: sales@louroe.com

PAGE 4 of 4

IF-2/IF 4/IF 8 in 7/07