



USER MANUAL

MPI-2 GLOBAL RACK UNIT

MPI-2 Global Rack Unit

Contents

MPI-2 Global Rack Unit	1
Overview.....	2
Features and Capabilities	2
Inputs.....	2
Outputs.....	2
LEDs	2
Front Panel	4
Rear View.....	5
Wiring	6
To Local MPI	6
Microphone Input.....	6
Microphone RCA Input	7
Phone input	7
GND (Audio Com)	8
AC Input	8
Using the System	8
Power LED.....	8
Activity.....	9
Page On/Off pushbutton	9
Status/Page On LEDs	10
Audio Level (Page/Music) LEDs	10
Input Page Volume potentiometer	10
Operation	11
Phone Paging:.....	11
MIC Paging:.....	11
Direct MIC connection.....	11
Microphone RCA connection.....	12
Paging Priorities:.....	12
Page on/off button:.....	12

Overview

The Global MPI-2 rack unit is Lencore's auxiliary page interface (MPI) to be used for iNET systems. The Global MPI-2 is designed to make a global all-call page to every building that has a Global MPI-2. Paging can be made via any telephone on the network or a microphone. The Global MPI-2 works in conjunction with the Local MPI-2. The Global MPI-2 rack is designed to fit into a standard 19" rack.

Features and Capabilities

- Front panel LEDs. Front panel LEDs indicate various functions and activity of the unit.
- Analog phone input.
- Built-in speaker for testing/troubleshooting.
- Single turn pot to adjust the paging input signal level.
- Ability to connect a Local MPI.

Inputs

- Power input.
- Analog phone line input (RJ11).
- Ground 2-pos terminal block (screw terminals).
- Microphone inputs (individual wires and RCA).

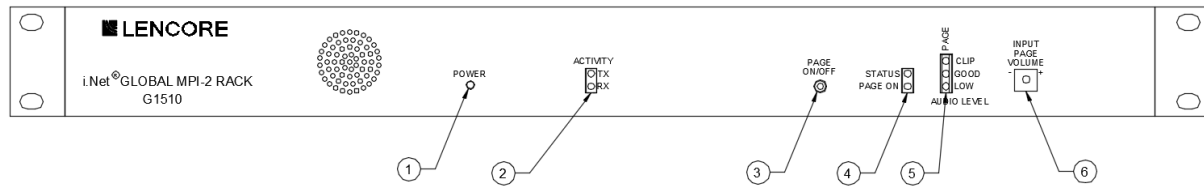
Outputs

- Local MPI (RJ45).

LEDs

- Power – solid when the unit is powered.
- Activity - Rx – blinks when Neuron is receiving data Tx – blinks when Neuron is transmitting data.
- Status – blinks every 8 seconds and solid when paging. Solid when an IR remote button is pressed.
- Page On – solid during an active page.
- Audio input level – one set of three LEDs for paging input level detection. Yellow = low or no input. Blue = good audio level. Red = audio input too high.

Front Panel



1. Power LED

The power LED indicates power to the unit.

2. Activity LEDs

The activity LEDs indicate LON activity.

3. Page On/Off

Used to start and stop a page for audio connected to the MIC input.

4. Status/Page On LEDs

The status LED will flash every few seconds to indicate that the internal processor is operating.

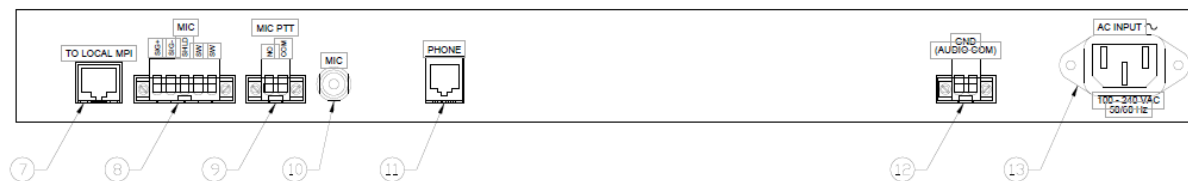
5. Audio Level LEDs

The audio level LEDs indicate the audio input level for paging.

6. Input Page Volume

The input page volume adjustment is used to adjust the input page volume.

Rear View



7. To Local MPI

Connect an RJ45 cable to the Local MPI-2.

8. Mic Input 1

The 5-position MIC input is for a microphone input.

9. PTT for Mic input 2

Input for MIC PTT key switch.

10. Mic Input 2

Mic Line Level Input.

11. Phone

The RJ11/12 phone input is for a POTS appearance phone line.

12. GND (Audio Com)

Connect a single ground wire to the Local MPI-2 ground connector.

13. Power Input

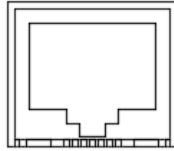
Power cord connector (IEC 60320)

100-240VAC.

Wiring

To Local MPI

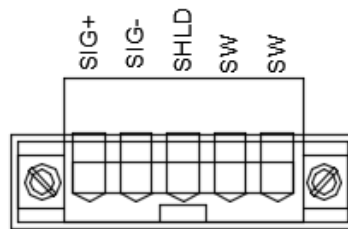
TO LOCAL MPI



The “To Local” MPI connector is for communicating to the Local MPI.
Wire the “TO LOCAL MPI” to the Local MPI’s “TO GLOBAL MPI” connector using an RJ45 cable. The Global MPI-2 cannot operate without the Local MPI-2.

Microphone Input

MIC



The microphone input is for a dynamic microphone.
Connect a microphone to the “MIC” connector using individual wires from the microphone.

SIG+/SIG- = MIC audio

SHLD – MIC shield

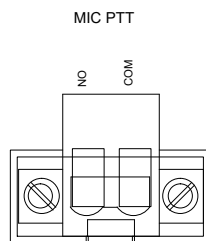
SW/SW = MIC key switch

Microphone RCA Input

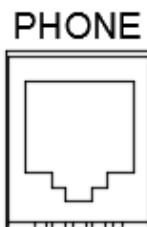


The Microphone RCA input allows a line-level microphone input to be used for paging.
Connect a **line-level** microphone signal to the MIC RCA connector using an RCA cable.

Mic PTT Input



The MIC PTT input is for the microphone's PTT switch.
Wire the MIC PTT wires to this input (polarity independent).



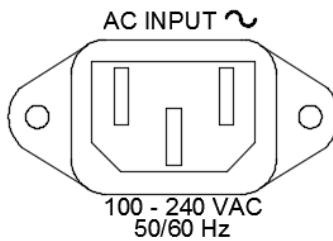
The Phone input is for phone paging.
Connect a POTS appearance phone line to the PHONE connector using an RJ11 cable.

GND (Audio Com)



The GND (Audio Com) connector is the audio return for the system. Connect a single 16 AWG conductor from the Global MPI-2 GND (Audio Com) to the Local MPI-2 GND.

AC Input



Connect the supplied IEC power cord to the AC Input. The unit is rated at 100-240VAC.

Using the System

Power LED



The Power LED indicates power to the MPI.

Activity



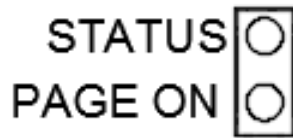
The activity LEDs indicate LON activity. The LEDs will be flickering under normal activity. LON is the communication protocol for the iNET system.

Page On/Off pushbutton



The page on/off pushbutton is used to toggle the page on and off command. This is used for testing and troubleshooting purposes. Press the Page On/Off once to initiate a page and a second time to turn the page off. The Page On LED will stay on until the page is manually turned off indicating that a page is in process.

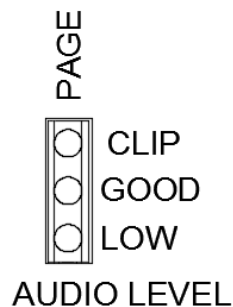
Status/Page On LEDs



The Status LED indicates that the internal microprocessor is functioning normally.

The Page On LED indicates an active page is in progress.

Audio Level (Page/Music) LEDs



The Audio Level LEDs indicate the audio level input for the paging signal. Low (yellow) indicates a low audio level, Good (green) indicates a good audio level, and Clip (red) indicates an audio level that is too high, and clipping is occurring.

Input Page Volume potentiometer



The Input Page Volume potentiometer allows the page input to be adjusted to maintain a good page level indicated by a green LED for the Audio level LEDs. Adjustments can be made by a small flat blade screwdriver. The potentiometer is a single-turn potentiometer. Turning the potentiometer clockwise increases the input page signal while counterclockwise decreases the input page signal.

Operation

Plug the power adapter into the Global MPI-2. The Power LED will be on and solid while the Status LED will blink for approximately 10 seconds. When the Status LED stays off, the MPI-2 is ready to use. Assure that the Local MPI-2 is also in a ready state. The Global MPI-2 adds a second all-call only phone page input and a second all-call MIC page input to the system. The Global MPI-2 is used to page multiple buildings that also have a Global MPI-2 at the same time while the Local MPI-2 allows in-building paging. The priorities of the Local and Global MPI-2 paging depend on the firmware of the units.

Phone Paging:

1. Plug the analog phone line (RJ11) into the MPI-2 Phone input.
2. Dial the extension of the phone line. The Status LED will turn on.
3. Wait for a tone from the MPI then press 00# for an all-call page. The Global MPI-2 cannot make a zoned page.
4. Wait for a tone from the MPI then make the page. Hang up the phone receiver when the page is complete. The Status LED will turn off.

The telephone input requires a POTS appearance line using an RJ11 connector.

Here is the basic specification for a POTS appearance line:

A CO (central office) POTS line is a 2-wire analog appearance.

- 1) It is a 2 wire (Tip and Ring) analog appearance.
- 2) It is configured to be loop start.
- 3) Battery voltage is 48 Volts.
- 4) Loop current of 23 milliamps.
- 5) Must have DTMF signaling capability.
- 6) Must have hang-up (winking) supervision.

Generally, the use of an FXS card (Foreign Exchange Station) or an ATA card (Analog Telephone Adapter) is required not an FXO (foreign exchange office) card.

Assign an extension to the port. Calling the extension will activate the paging system.

MIC Paging:

Direct MIC connection

1. Connect a microphone to the MIC input.
2. Press the MIC key to make a page.

Microphone RCA connection

1. Connect a microphone to Lencore's MICq pre-amplifier.
2. Connect the audio output of the MIC pre-amp to the MIC RCA audio input of the MPI-2.
3. Press the MIC key and make the page.

The page input can be adjusted for the proper level by turning the Page potentiometer CW or CCW. Using a flat-blade screwdriver, turn the adjustment CW to increase the input level and CCW to decrease the input level. The ideal audio input level can be adjusted so the blue LED on the Audio Level (Page) LEDs is on or flickering. Increase the level if only the yellow LED is on. Reduce the level if the red LED is on.

Paging Priorities:

- MIC RCA (all-call) has priority over the phone.

Page on/off button:

Pressing the Page on/off button enables a page from audio source 6. The status LED will be on and solid during the page. Pressing the Page on/off button again stops the page and the Status LED will turn off. This can be used for troubleshooting purposes.

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