



USER MANUAL

Smart Router
(Model G145)

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In the event of trouble, please contact:

Name:

Address:

Phone Number:

IMPORTANT SAFETY INSTRUCTIONS



**RISK OF ELECTRIC SHOCK- DO NOT OPEN THE UNIT.
THERE ARE NO SERVICABLE COMPONENTS INSIDE.**

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 14) **WARNING** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture and do not expose to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus

General operation:

The Smart Router ensures quality data transmission, paging and music integrity across long cable runs (3000 feet or more). Each router terminates and rebroadcasts paging, audio, and control network (LON) signals back to full strength allowing the system wiring network to work at best practices standards.

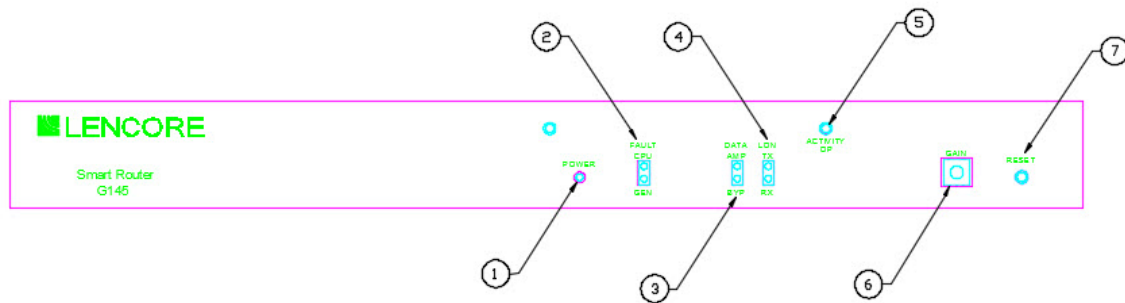
The Smart Router works with Lencore's i.Net Head-End equipment.

Features and Capabilities:

- Amplifies paging and music signals.
- Repeats the LON signal.
- Properly terminates the Data signals.
- Allows adjustment to the amount of amplification to compensate for cable loss for various lengths of cable.

Overview

Figure 1 – Front panel



1. Power LED

The power LED indicates that the unit is powered.

2. Fault LEDs

The Fault LED indicates a fault within the unit being a processor or general fault.

3. Data LEDs

The Data LEDs indicate whether the audio on the Data cable is in amplified or bypass mode.

4. LON LEDs

The LON LEDs indicate LON activity.

5. Activity LON 1 LED

This LED indicates LON activity.

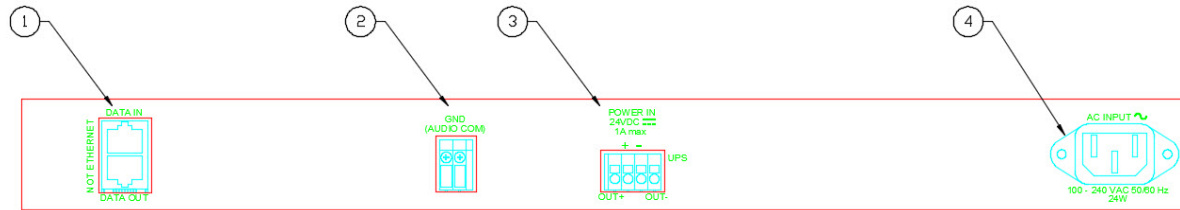
6. Gain Switch

The Gain adjustment is to be set based on the length of the Data cable. (see Table 1)

7. Reset button

The Reset button is used to make a hardware reset for servicing purposes.

Figure 2 - Rear panel



1. DATA IN/OUT

Connect the Data out port to the next OP.
The Data in port receives the data cable from the previous OP.

2. GND

The ground connector is used to connect a ground wire from the previous OP and to the next OP.

3. Power IN (24VDC)

This connector is used to connect an external 24VDC UPS.

4. AC INPUT

Power cord connector (IEC 60320)
100-240VAC.

Wiring

Power and Network connections:

1. Plug the unit into a standard 115 or 208 VAC power outlet.
2. Connect the data cable from a previous OP DATA OUT to the Smart Router's DATA IN port. Connect a cable from the router's DATA OUT port to the next OP DATA IN connector.
3. Connect a ground wire from the previous OP power "-" to the Smart Router's GND terminal and another ground wire from the Smart Router's GND terminal to the next OP.
4. Figure 3 depicts a typical flow diagram showing the wiring of the Smart Router to other Lencore equipment.

Wiring Type and Gauge:

Data In/Out: Cat5e

24VDC power: 16 AWG

GND: 16 AWG

- All wire to be UL listed, 150V or greater

* Any wire installed in the plenum must be plenum rated.

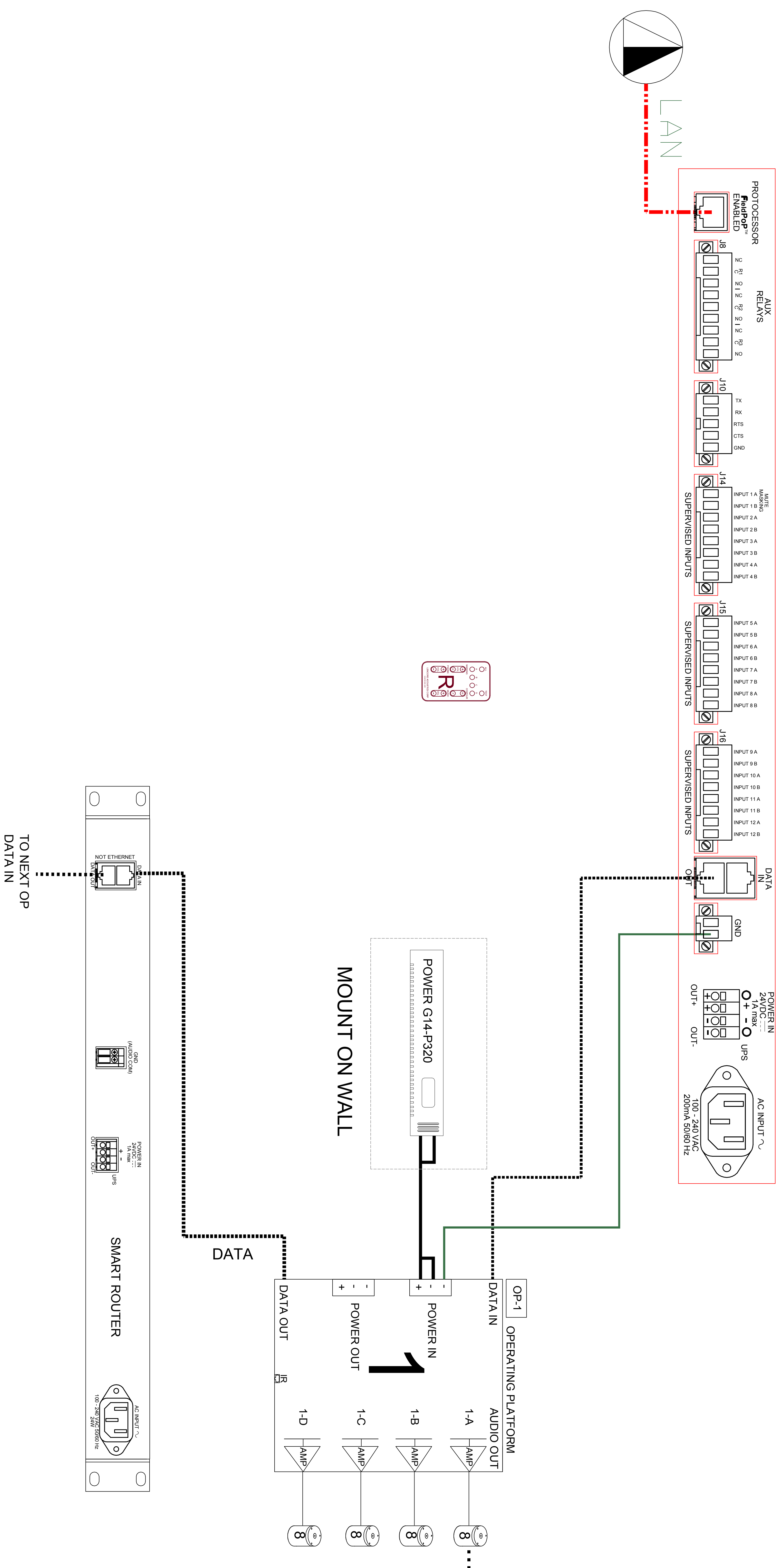
Gain Setting

Set the Gain switch using the chart below:

Switch Position	Cable length in feet
0	1500 – 2000
1	2001 – 2500
2	2501 - 3000

Table 1 - Gain Switch Setting

G8350 RACK MOUNTED HEAD END



(516) 682-9292 Tel. (516) 682-4785 Fax	
1.	CHRIS D
2.	SCOTT J.
3.	MARTIN C.
No.	
SIGNATURE	
DATE	

(516) 682-9292 Tel.
(516) 682-4785 Fax

i.Net Router Flow

Lencore Part Number: PART NUMBER

DRAWN BY: **DATE:**
2/25/2020

Drawing Size: 36x48 (E-Size)

SHEET

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UPS Connection:

The UPS output would connect to the terminal block: +24VDC to input pin “+” and 24V COM to either input pin “-“. The UPS must be 24VDC regulated Normal and standby load is 75mA.

Testing Procedure

Equipment should only be tested by qualified trained personnel. These instructions are meant as a guide to what testing should take place; it is not an instruction on how to complete the testing. Refer to the Operations, Sound Manager, and Configurator manuals for detailed information.

Testing should be performed monthly or more frequently if necessary.

1. Test that the unit is amplifying the audio from input to output based on the Gain setting.
2. Test that the unit is re-transmitting the LON signal.

Maintenance Procedure

Equipment should only be inspected and maintained by qualified trained personnel. These instructions are meant as a guide to what actions should take place; it is not an instruction on how to complete the activities.

Maintenance should be performed monthly or more frequently if necessary.

1. Inspect and clean if necessary, the unit's vent holes.
2. Ensure that all cables and wires are properly seated in their respective connectors.

Revision Level	Revision Date	Description of Revision	Revision Author
A	11/20/20	Initial Release	M. Cook
B	3/22/21	removed all references to UL2572	M. Cook

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