IMPORTANT SAFETY INSTRUCTIONS

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. Allow sufficient distances for adequate ventilation and install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as open flames, radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place any open flame sources on the product.
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 wider 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 a 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. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. 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.
15. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
16. The MAINS plug or an appliance coupler shall remain readily operable.
17. The airborne noise of the Apparatus does not exceed 70dB (A).
18. Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.
19. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
20. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
21. Operate this product within its specified operating temperature range.

Explanation of Symbols


Caution: risk of electric shock


Caution: risk of danger (See note.)


Direct current


Alternating current

On (Supply)


Equipment protected throughout by DOUBLE INSULATION or REINFORCED INSULATION


Stand-by


Equipment should not be disposed of in the normal waste stream

WARNING: Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel. The safety certifications do not apply when the operating voltage is changed from the factory setting.

General Description

The GLX-D Frequency Manager distributes RF signal and DC power for Shure GLXD4R receivers. The rack-mountable system increases channel count and reduces the number of required antennas and power supplies. When connected to the GLX-D Frequency Manager, GLXD4R receivers operate in the most spectrally efficient manner.

Features

- Improves the RF performance of connected GLXD4R receivers
- Increases channel count with more efficient frequency management
- Distributes RF signal and power to six receivers
- Cascade ports connect second frequency manager for up to 11 receivers
- Consolidates antennas and power supplies for simpler setup
- Mounts in standard 19 inch equipment racks
- Supports remote antenna placement
- All-metal construction

Included Components

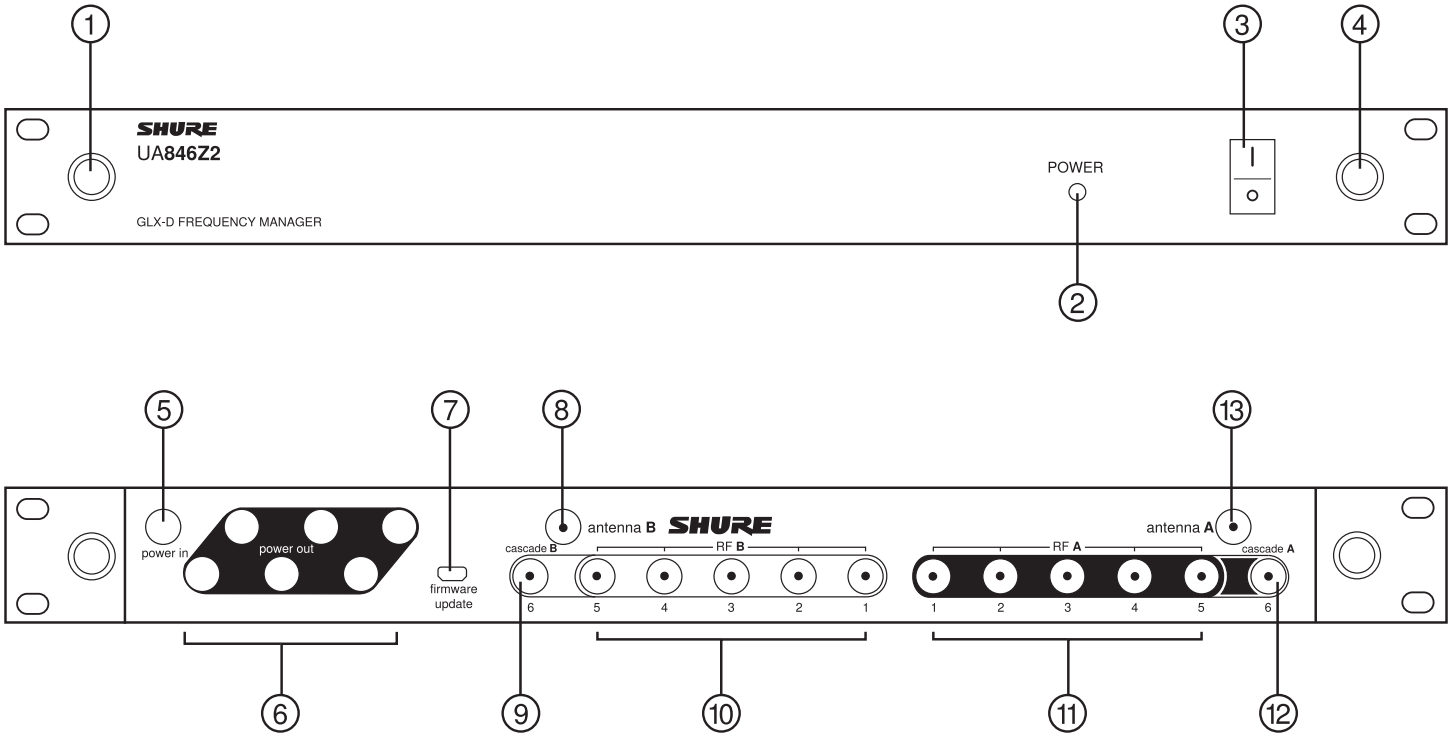
- Rack-mounting hardware
- External power supply
- (6) threaded DC power cables
- (2) Reverse SMA Cable

Optional Accessories and Replacement Parts

Passive Directional Antenna 2.4 GHz	PA805Z2-RSMA
Wall Mount for PA805-RSMA and UA8-2.4GHZ	UA505-RSMA
1/2 Wave Antenna, 45 deg. (2.4 GHz)	UA8-2.4GHZ
0.6 m (2 ft.) Reverse SMA Cable	UA802-RSMA
1.8 m (6 ft.) Reverse SMA Cable	UA806-RSMA
7.6 m (25 ft.) Reverse SMA Cable	UA825-RSMA

15.2 m (50 ft.) Reverse SMA Cable	UA850-RSMA
30.4 m (100 ft.) Reverse SMA Cable	UA8100-RSMA
Power Supply	PS60
Reverse SMA Bulkhead Adapters	95A32436
Nut	95W8631
Washer	95X8631

Front and Rear Panels



① Antenna A Connector
Mount antenna and connect to antenna A input on rear panel.

② Power LED
Illuminates when unit is on.

③ Power Switch
Powers the system on and off.

④ Antenna B Connector
Mount antenna and connect to antenna B input on rear panel.

⑤ Power Input
Connects to supplied external power supply.

⑥ Power Outputs
Connect to receiver power inputs.

⑦ Firmware Update (USB)
Connect to computer to download firmware updates.

⑧ RF Input Antenna B
Use reverse SMA cables to connect antenna.

⑨ Cascade RF B Connector
Connect to second frequency manager's antenna inputs, or connect a sixth receiver.
Note: Do not use other RF outputs to connect to a second frequency manager.

⑩ RF B Connectors
Connect to receiver's antenna B input.

⑪ RF A Connectors
Connect to receiver's antenna A input.

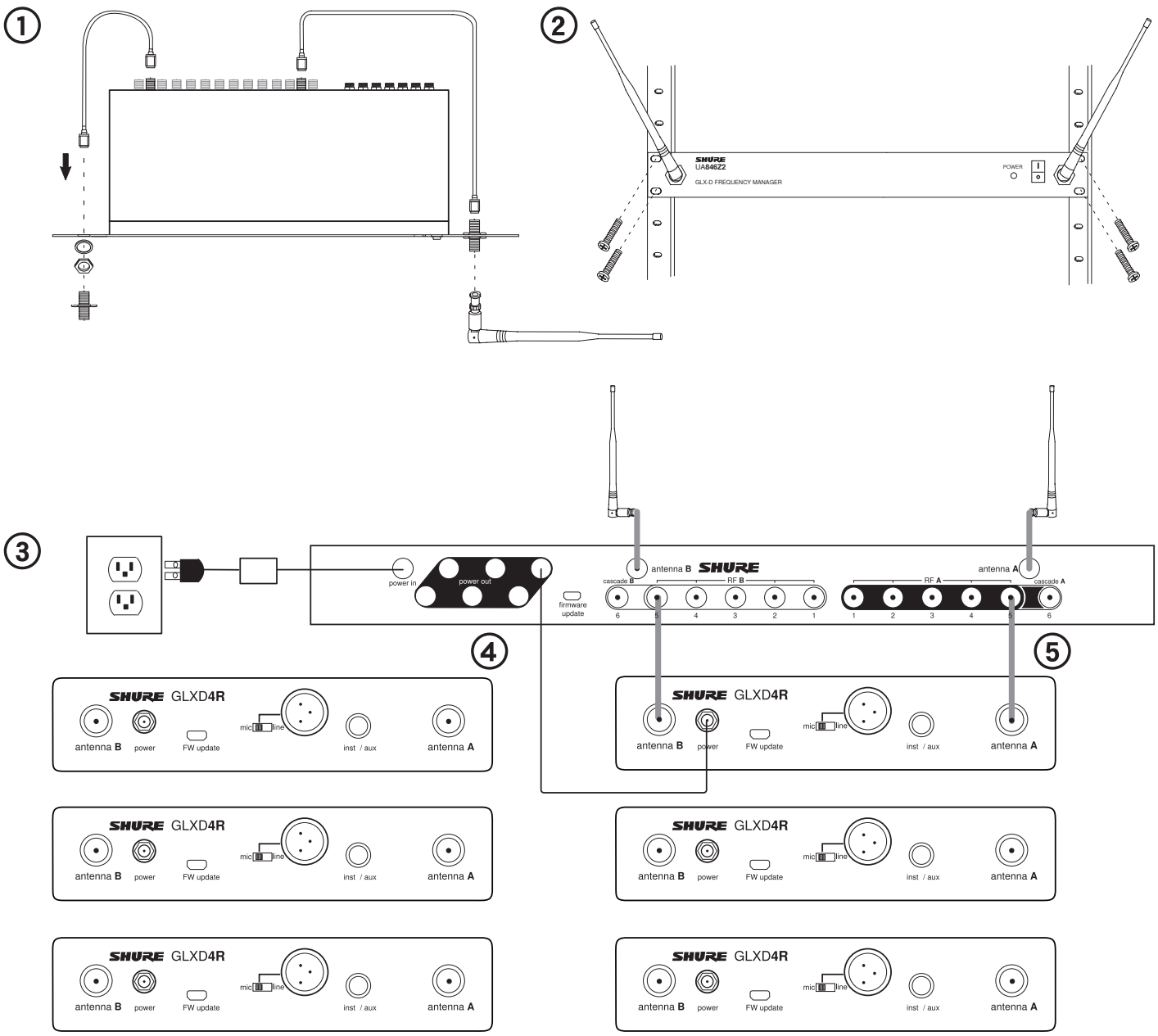
⑫ Cascade RF A Connector
Connect to second frequency manager's antenna inputs, or connect a sixth receiver.
Note: Do not use other RF outputs to connect to a second frequency manager.

⑬ RF Input Antenna A
Use reverse SMA cables to connect antenna.

Hardware Connections

1. Connect each antenna to the antenna A and antenna B outputs on the frequency manager's rear panel.
2. If mounting in equipment rack, use included rackmount hardware to mount as shown.
3. Connect power supply to power outlet and to the power in on the frequency manager.
4. Power each receiver by connecting a DC power cable between the frequency manager's power out and the receiver's power input.
5. Use reverse SMA cables to connect the frequency manager's RF A and RF B ports to each receiver's antenna A and antenna B inputs.

Note: If mounting antennas remotely, see Remote Antenna Placement.



Selecting Frequency Groups

The GLX-D Frequency Manager creates a shared group of frequencies for all receivers to use and automatically assigns frequencies to each receiver. If interference occurs, the frequency manager assigns new frequencies without audible dropouts.

Using a shared group of frequencies for all receivers prevents one receiver from using all of the best frequencies, which can happen if you set up multiple GLXD4R receivers without the frequency manager. Sharing a larger group of frequencies also improves RF reliability for receivers.

1. Press the power button to turn on the frequency manager.
2. Press the power button on the first receiver. The white data sync LED flashes while searching for frequencies.
3. Select a group for all receivers by pressing and holding the group button for two seconds.

Group	Channel Count (Number of Receivers)	Latency	Notes
A	6 typical, 9 maximum	4 ms	
B	9 typical, 11 maximum	7.3 ms	Best group if you experience interference.

Linking Transmitters and Receivers

Tip: Turn on and link one transmitter and receiver pair at a time to prevent transmitters from linking to the wrong receiver.

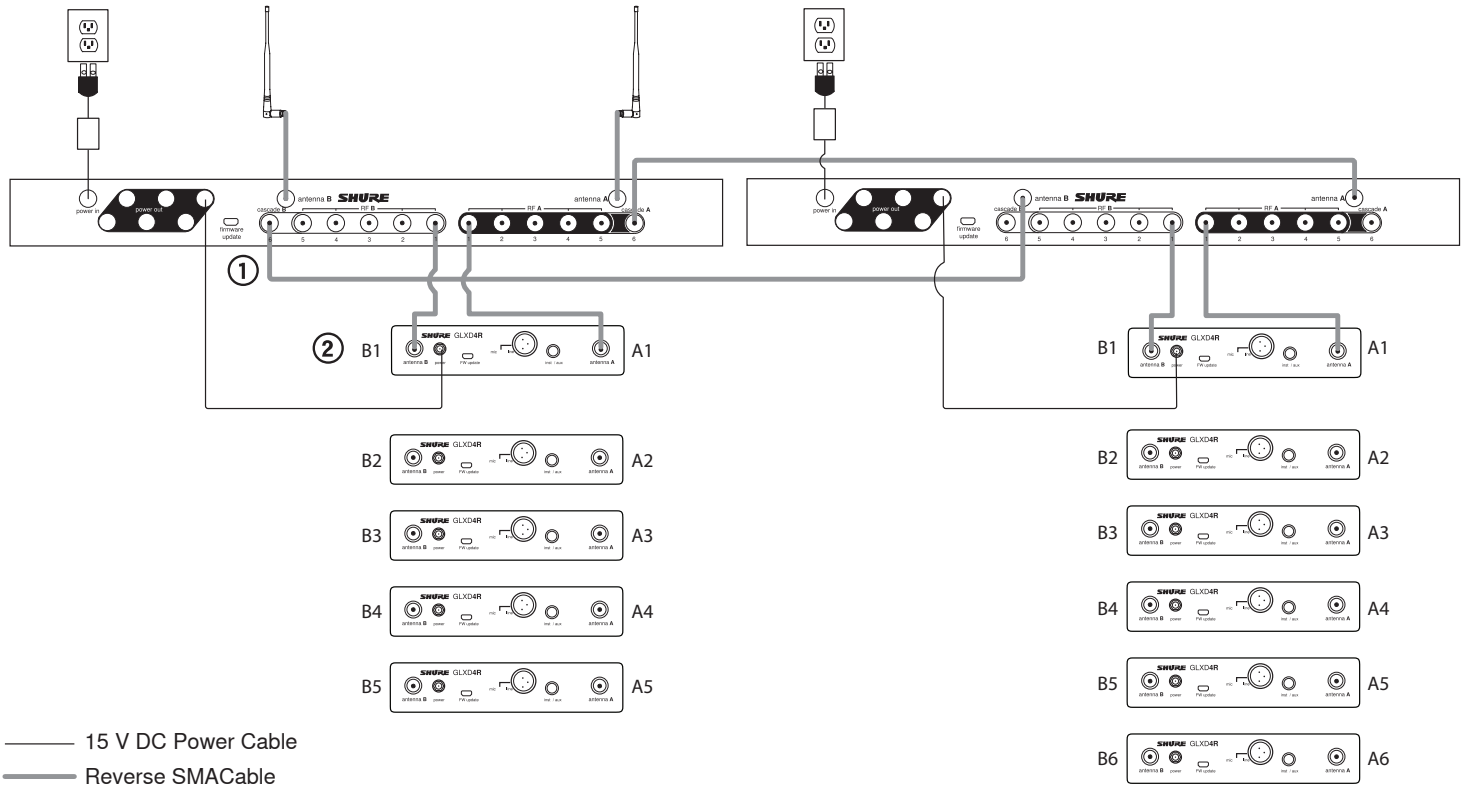
1. After selecting a group using the first receiver, turn on the first transmitter. The blue receiver rf LED flashes as the transmitter and receiver form a link. The rf LED turns solid blue when the link is complete.
2. Turn on the second transmitter and repeat for each additional receiver/transmitter pair to finish linking.

Connecting Two GLX-D Frequency Managers

If using more than six receivers, use the cascade A and cascade B ports to connect two GLX-D Frequency Managers. Frequency managers can be cascaded once for a maximum of 11 receivers.

1. Use reverse SMA cables to connect the cascade A and cascade B ports on the first frequency manager to the antenna A and antenna B ports on the second frequency manager.
2. Connect receivers according to the diagram. For example, use the A2 and B2 ports to connect a second receiver, then use the A3 and B3 ports to connect a third receiver. The cascade A and cascade B ports on the second frequency manager connect to a sixth receiver.

Note: Do not use a passive antenna splitter with the frequency manager. Frequency manager features will not work.



Remote Antenna Placement

Follow these guidelines when mounting antennas remotely:

- Reduce distance between transmitter and antenna.
- Mount antennas farther from each other to improve performance.
- Position antennas so there is nothing obstructing the line of sight to the transmitter, including the audience.
- Keep antennas away from metal objects and any other antennas.

- Use only low-loss reverse SMA cable to avoid poor RF signal.
  - Consult cable's specifications and calculate signal loss for desired cable run.
- Use one continuous length of cable from the antenna to the receiver to increase signal reliability.
- Always perform a walk-around test to verify coverage before using a wireless system during a speech or performance. Experiment with antenna placement to find the optimum location. If necessary, mark any trouble spots and ask presenters or performers to avoid those areas.

Receiver Channel Display

When connected to a frequency manager, each receiver's channel field displays a unique identifier that won't change unless you plug in to a different set of ports on the frequency manager. Use this channel display to help label transmitters or to identify where each receiver is plugged in on the frequency manager.

Frequency Manager	Frequency Manager Port Number	Receiver Channel Display
Frequency manager #1	1	1
	2	2
	3	3
	4	4
	5	5
	6 (cascade)*	6*
Frequency manager #2	1	6
	2	7
	3	8
	4	9
	5	A
	6 (cascade)	B

*If using two frequency managers, this cascade port connects to the second frequency manager, so there is no receiver channel display.

GLXD4 and GLXD6 Receivers

GLXD4 and GLXD6 receivers **cannot** connect to the GLX-D Frequency Manager.

If you plan to use a GLXD4 or GLXD6 receiver in addition to a frequency manager, set up the GLXD4/GLXD6 receiver first. Then turn on and set up the frequency manager.

Note: Using GLXD4/GLXD6 receivers alongside a frequency manager will affect the maximum number of channels you can operate with each group.

Specifications

UA846Z2

Power Requirements

15V DC

DC Output

15V DC (x6)

Output Current

Combined total from all DC outputs

3.8 A, maximum

Operating Temperature Range

–18°C to 63°C

Dimensions

45 x 483 x 192 mm (1.8 x 19 x 7.6 in.) H x W x D

Net Weight

1.63 kg (3.6 lbs)

RF Input

Connector Type

Reverse SMA

RF Frequency Range

2400 to 2483.5 MHz

Receiver Port Isolation

35 dB, typical

Impedance
50 Ω

Maximum Antenna Input Power
-10 dBm

Maximum Receiver Port Input Power
+15 dBm

RF Output

RF Frequency Range
2400 to 2483.5 MHz

Output Intercept Point (OIP3)
48 dBm, typical

Connector Type
Reverse SMA

Impedance
50 Ω

Reverse Isolation
Ouput to Input

35 dB, typical

Gain
Input to any output port

–3 to 0 dB

Certifications

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Meets essential requirements of the following European Directives:

- R&TTE Directive 2014/53/EU
- WEEE Directive 2002/96/EC, as amended by 2008/34/EC
- RoHS Directive 2011/65/EU

  Note: Please follow your regional recycling scheme for batteries and electronic waste

Industry Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation of this device is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The CE Declaration of Conformity can be obtained from Shure Incorporated or any of its European representatives. For contact information please visit www.shure.com

The CE Declaration of Conformity can be obtained from:
www.shure.com/europe/compliance

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