GLX-D® ADVANCED DIGITAL WIRELESS

THE EASIEST MULTI-SYSTEM WIRELESS SOLUTION
GLX-D® Advanced Digital Wireless

EXCEPTIONAL MULTI-SYSTEM RELIABILITY.

With exceptional audio clarity and award-winning features, GLX-D® Advanced Digital Wireless is the best choice to provide Houses of Worship, schools and music venues with seamless setup, intelligent rechargeability and superior multi-system wireless performance.

SYSTEM COMPONENTS

Frequency Manager

UA846Z2 GLX-D Frequency Manager
- Provides advanced frequency management to a linked receiver community for improved RF performance and increased channel count
- Link multiple receivers via RF ports for patented data communication and traditional antenna distribution
- Revolutionary intelligent frequency management quickly identifies the best frequencies
- Identifies and assigns optimal frequencies to receiver/transmitter pairs
- In case of interference, automatically and seamlessly transitions to backup frequencies
- Provides power to the GLXD4R receivers, eliminating need for power strips or multiple outlets.
- Globally-unlicensed 2.4 GHz frequency band

Wireless Receiver

GLXD4R Rack Mount Receiver
- Integrated battery charge port for intelligent Shure lithium-ion transmitter batteries, two-color charge indicator LED
- Detachable antennas for remote mounting
- Remote adjustable transmitter gain control
- Hi-res LCD screen status display
- XLR and ¼” output connectors
- Rugged metal chassis design
- Included rack mount hardware

Wireless Transmitters

GLXD1 Bodypack Transmitter
GLXD2 Handheld Transmitter
- Automatically links to GLXD4R receiver
- Microphone Options
  GLXD1 accommodates a variety of Shure microphone options including instrument, lavalier and head-worn options
  GLXD2 provides legendary Shure microphone options including the industry-standard SM58®
- Operating Range
  Indoors: Up to 100 feet (30 m) typical, with a maximum of 200 feet (60 m) under ideal conditions
  Outdoors: Up to 65 feet (20 m) typical, with a maximum of 165 feet (50 m) under ideal conditions
- Up to 16 hours of use from a full charge
- Sophisticated design with durable, lightweight construction
Advanced Frequency Management

GLX-D® Advanced Digital Wireless products and accessories unlock and expand key GLX-D frequency management features making it easy to rely on seamless, crystal-clear audio.

1. Using One GLX-D Frequency Manager

- Connect up to six GLXD4R Rack Mount Receivers via the RF ports
- Remote mounted antennas should be connected to the system to minimize interference
- 2.4 GHz band is scanned to locate the best frequencies available
- Best frequencies are assigned to the receivers and transmitters, updating automatically if interference is detected

2. Using two GLX-D Frequency Managers

- Connect the antenna inputs of the second Frequency Manager to the corresponding cascade ports of the first Frequency Manager
- Enables confident operation of up to 9 simultaneous systems in typical conditions (11 in optimal conditions)
- Once set up correctly, a system of GLX-D Advanced Wireless products is ready to go at the flick of the power switch

REMOTE MOUNTING ACCESSORIES

Passive Directional Antenna

- Improved wireless reception: 8 dB of passive directional antenna gain
- Improved rejection of interference from 2.4GHz sources: 24dB front-to-back ratio for improved rejection of off access signals
- Includes 10’ RMSA cable

Mounting Kit

- UA505 Mounting Kit
- Remote mount PA805Z2-RSMA and UA8-Z2 antennas in permanent installations

Antenna Cables

- RSMA Cables
- 50Ω coaxial RF cables available in lengths of 6, 25, 50 and 100 feet for installation-specific antenna placement
3. Remote Mount Placement
Remote mounted antennas should be positioned for maximum line-of-sight to the GLX-D transmitters.

4. Directional Antenna Positioning
Position the rear of the antenna to a known wireless access point, with the front pointing to the transmitters.

RECHARGEABLE POWER MANAGEMENT
GLX-D transmitters feature best-in-class lithium-ion batteries that quickly recharge using the charging port on the receiver, or a variety of optional USB connectors. Staying ready for the show has never been simpler.

More performing, less recharging.
Get up to 16 hours of use from a single full charge.

Ready to go when time is tight.
Connect for a 15-minute quick charge and count on up to 1.5 hours of performance.

An accurate pulse on battery life.
Precision metering displays in hours and minutes on the GLXD4R receiver’s LCD screen.

The power to waste less.
Each rechargeable battery delivers up to 10,000 hours of regular use, the equivalent of up to 2,500 disposable alkaline batteries.

Charge battery in-transmitter with:
- GLXD4R integrated charge port

Charge battery separately with:
- USB charge cable
- USB wall charger (available separately)
- USB car charger (available separately)
- USB battery dock charger (available separately)
GROUNDBREAKING WIRELESS TECHNOLOGY—THIS IS NOTHING SHORT OF A REVOLUTION.

GLX-D® Advanced Digital Wireless is the best-sounding, easiest to use multi-system solution for small-to-medium houses of worship, education facilities and music performance venues.
## System Specifications

<table>
<thead>
<tr>
<th>Compatibility</th>
<th>Operate up to 9 compatible systems in typical setting, up to 11 maximum under ideal conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Operating Range</td>
<td>Indoors: Up to 100 feet (30 m) typical, with a maximum of 200 feet (60 m) under ideal conditions. Outdoors: Up to 65 feet (20 m) typical, with a maximum of 165 feet (50 m) under ideal conditions.</td>
</tr>
<tr>
<td>Transmit Mode</td>
<td>Shure GLX-D Proprietary Digital</td>
</tr>
<tr>
<td>Audio Frequency Response</td>
<td>20 Hz – 20 kHz</td>
</tr>
<tr>
<td>Note</td>
<td>Dependent on microphone type</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>120 dB, A-weighted</td>
</tr>
<tr>
<td>Latency</td>
<td>Groups 1 and A: 4.0 ms. Groups 2, 3, 4, and B: 7.3 ms</td>
</tr>
<tr>
<td>RF Sensitivity</td>
<td>-88 dBm, typical</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>0.2%, typical</td>
</tr>
<tr>
<td>RF Output Power</td>
<td>10 mW E.I.R.P. max</td>
</tr>
<tr>
<td>Operating Temperature Range</td>
<td>-18 °C to 63 °C (0 °F to 145 °F)</td>
</tr>
<tr>
<td>Note</td>
<td>Battery characteristics may limit this range.</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-29 °C (~-50 °F) to 74 °C (165 °F)</td>
</tr>
<tr>
<td>Polarity</td>
<td>Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low-impedance output) and the tip of the high impedance ¼-inch output.</td>
</tr>
<tr>
<td>Battery Life</td>
<td>Up to 16 hours</td>
</tr>
<tr>
<td>NOTE</td>
<td>All Specifications are subject to change. Performance may vary depending on country regulations and operating environment.</td>
</tr>
</tbody>
</table>

## Frequency Manager, Receiver & Antenna Specifications

### UA84622 Frequency Manager
- **Power Requirements**: 15 VDC
- **DC Output**: 15 VDC (±8)
- **Output Current**: Combined total from all DC outputs 3.8 A, maximum
- **Operating Temperature Range**: -18 °C to 63 °C (0 °F to 145 °F)
- **Dimensions**: 45 × 483 × 192 mm (1.8 × 19 × 7.6 in) H × W × D
- **Net Weight**: 1.63 kg (3.6 lbs)

### GLXD4 Rack Mount Receiver
- **Dimensions**: 42 × 197 × 163 mm (1.7 × 7.8 × 6.4 in.) H × W × D
- **Weight**: 907.2 g (32 oz.) without batteries
- **Housing**: Steel
- **Power Requirements**: 14 to 18 VDC tip positive with respect to ring 550 mA
- **Spurious Rejection**: >35 dB, typical
- **Gain Adjustment Range**: -18 to 42 dB in 1 dB steps
- **Phantom Power Protection**: Yes
- **Mic/Line Switch**: 30 dB Pad
- **RF Input Connector Type**: Reverse SMA
- **Output Intercept Point (OIP3)**: 2400 to 2483.5 MHz
- **Reverse SMA Connector Type**: 24 dB @2.45 GHz, typical
- **Gain**: 50 ± 2 dB
- **Spurious Rejection**: >35 dB, typical
- **Efficiency**: >90%
- **Impedance**: 50 Ω
- **Polarization**: Linear
- **Front-to-back ratio**: 24 dB
- **Connector Type**: Reverse SMA
- **Dimensions**: 42 × 164 × 27.5 mm (1.7 × 6.5 × 1.1 in) H × W × D
- **Net Weight**: 2.5 oz. (70 g)

### GLXD2 Handheld Transmitter
- **Dimensions**: 305 × 48 × 95 mm (12 × 1.9 × 3.7 in.) H × W × D
- **Weight**: 927 g (2.04 lbs)
- **Audio Frequency Response**: 20 Hz – 20 kHz
- **Maximum Input Level**: -12 dBV (Unbalanced) +12 dBV (Balanced)
- **Dynamic Range**: 145 dB SPL
- **Audio Output Configuration**: Balanced
- **Impedance**: 100 Ω @ (50 Ω, Unbalanced)
- **Full-Scale Output**: Line setting +18 dBV, MIC setting -12 dBV
- **Pin Assignments**: 1=ground, 2=hot, 3=cold, 4=audio, sleeve=ground
- **Antenna Type**: ½ Wave Sleeve Dipole
- **Maximum Input Level**: +15 dBm
- **Maximum Receiver Port Input Power**: -10 dBm
- **Maximum Antenna Input Power**: 50 Ω
- **Reverse Isolation**: 35 dB, typical
- **Receiver Port Isolation**: 24 dB
- **Spurious Rejection**: >35 dB, typical
- **Efficiency**: >90%
- **Impedance**: 50 Ω
- **Polarization**: Linear
- **Front-to-back ratio**: 24 dB
- **Connector Type**: Reverse SMA
- **Dimensions**: 105 × 164 × 27.5 mm (4.1 × 6.5 × 1.1 in.) H × W × D
- **Net Weight**: 2.5 oz. (70 g)

### GLXD4R Rack Mount Receiver
- **Dimensions**: 42 × 164 × 27.5 mm (1.7 × 6.5 × 1.1 in) H × W × D
- **Weight**: 927 g (2.04 lbs)
- **Audio Frequency Response**: 20 Hz – 20 kHz
- **Maximum Input Level**: -12 dBV (Unbalanced) +12 dBV (Balanced)
- **Dynamic Range**: 145 dB SPL
- **Audio Output Configuration**: Balanced
- **Impedance**: 100 Ω @ (50 Ω, Unbalanced)
- **Full-Scale Output**: Line setting +18 dBV, MIC setting -12 dBV
- **Pin Assignments**: 1=ground, 2=hot, 3=cold, 4=audio, sleeve=ground
- **Antenna Type**: ½ Wave Sleeve Dipole
- **Maximum Input Level**: +15 dBm
- **Maximum Receiver Port Input Power**: -10 dBm
- **Maximum Antenna Input Power**: 50 Ω
- **Reverse Isolation**: 35 dB, typical
- **Receiver Port Isolation**: 24 dB
- **Spurious Rejection**: >35 dB, typical
- **Efficiency**: >90%
- **Impedance**: 50 Ω
- **Polarization**: Linear
- **Front-to-back ratio**: 24 dB
- **Connector Type**: Reverse SMA
- **Dimensions**: 105 × 164 × 27.5 mm (4.1 × 6.5 × 1.1 in.) H × W × D
- **Net Weight**: 2.5 oz. (70 g)

### PA805Z2-RSMA Passive Directional Antenna
- **Frequency Range**: <2.1 GHz
- **Antenna Gain**: 9 dBi
- **Horizontal Beam Width**: 100 degrees
- **Efficiency**: >90%
- **Impedance**: 50 Ω
- **Polarization**: Linear
- **Front-to-back ratio**: 24 dB
- **Connector Type**: Reverse SMA
- **Dimensions**: 105 × 164 × 27.5 mm (4.1 × 6.5 × 1.1 in) H × W × D
- **Net Weight**: 2.5 oz. (70 g)

## Transmitter Specifications

### GLXD1 Bodypack Transmitter
- **Dimensions**: 90.4 × 64.5 × 22.9 mm (3.55 × 2.54 × 0.90 in.), H × W × D
- **Power Requirements**: 3.7 V Rechargeable Li-Ion
- **Housing**: Cast Metal, Black Powdercoat
- **Input Impedance**: 900 kΩ
- **RF Output Power**: 10 mW E.I.R.P. max
- **Transmitter Input Connector**: 4-Pin male mini connector (TA4M)

### GLXD2 Handheld Transmitter
- **Dimensions**: 252 × 51 mm (9.9 × 2.0 in.) L × Dia.
- **Weight**: 267 g (9.4 oz.)
- **Power Requirements**: 3.7 V Rechargeable Li-Ion
- **RF Output Power**: 10 mW E.I.R.P. max
- **Maximum Input Level**: 145 dB SPL
- **Housing**: Molded Plastic

## Additional Information

**United States, Canada, Latin America, Caribbean:**
Shure Incorporated
5800 West Touhy Avenue
Niles, IL 60714-4608 USA

Phone: +1 847-600-2000
Fax: +1 847-600-1212 (USA)

Email: info@shure.com
www.shure.com

**Europe, Middle East, Africa:**
Shure Europe GmbH
Jakob-Dieffenbacher-Str. 12,
75031 Eppingen, Germany

Phone: +49-7262-9249114
Fax: +49-7262-92490
Email: info@shure.de
www.shure.eu

**Asia, Pacific:**
Shure Asia Limited
22/F, 625 King’s Road
North Point, Island East
Hong Kong

Phone: +852-2893-4290
Fax: +852-2893-4055
Email: info@shure.com.hk
www.shureasia.com