# GLXD4+ and GLXD4R+

# System Overview

The GLX-D+ wireless systems from Shure combines the leading edge of automatic frequency management technology with best-in-class intelligent lithium-ion battery rechargeability, world-renowned microphones and unparalleled design and construction. Available in a wide offering of bodypack and handheld configurations - including vocal, headset and presenter systems as well as traditional guitar options. The GLX-D+ wireless systems define the newest standard for seamless ease of operation and exceptional digital audio clarity.

- · Exceptional digital audio clarity
- Operates in 2.4 GHz and 5.8 GHz spectrum, available worldwide
- Rechargeable batteries deliver cost-efficiency and up to 17 hours of runtime at 2.4 GHz and 12 hours of runtime at 5.8
- · Adjustable transmitter gain to optimize audio signal
- Automatically moves away from interference without audio interruption
- RF back-channel for remote control of transmitter functions
- Globally-unlicensed 2.4 GHz and 5.8 GHz frequency band allows operation of up to 4 compatible systems in a typical setting and up to 8 compatible systems under ideal conditions
- · Automatic transmitter power-off to conserve battery life when transmitter is not in use

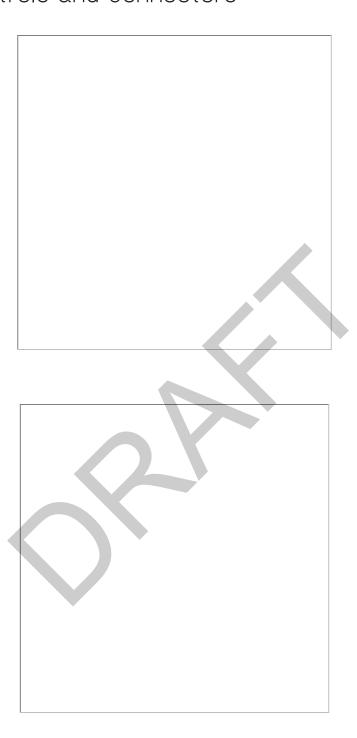
# Quick Start

To reduce set up time, the transmitter and receiver automatically link to form an audio channel the first time they are powered on and never have to be linked again.

Note: When setting up multiple receiver systems, turn on and link each transmitter/receiver pair one at a time to prevent cross-linking.

Step ①	Connect power supply to the receiver and plug cord into an AC power source. Connect the audio output to an amplifier or mixer.
Step ②	Install charged transmitter batteries.
Step ③	Turn on the transmitter and receiver. The blue RF LED will flash while the transmitter and receiver form a link. When the link has successfully formed, the RF LED will remain illuminated.  Note: The transmitter and receiver will remain linked for future usage. At power-up, the blue RF LED will illuminate, skipping the linking step.
Step ④	Check the audio and adjust the gain if necessary.

# Receiver Controls and Connectors



### ① Antenna

Two antennas per receiver. Antennas pick up the signal from the transmitter.

### 2 RF Status LED

- ON = Linked transmitter is on
- Flashing = Searching for transmitter
- OFF = Linked transmitter off or transmitter unlinked

### ③ Group Button

Press and hold for two seconds to enable manual group edit.

#### 4 Link Button

Press to manually link receiver to a transmitter or to activate the remote ID function

#### **⑤** Channel

- Momentary press to start a channel scan
- Press and hold 2 seconds to enable manual channel edit

### **© LCD Screen**

Displays receiver and transmitter status.

#### ② Gain Buttons

Press to increase or decrease transmitter gain in 1 dB increments.

### ® Battery Charging Indicator

Illuminates when battery is in charging bay:

- Red = battery charging
- Green Flashing = battery charge > 90%
- Green = battery charged
- Amber Flashing = charging error, replace battery

### Battery Charging Bay

Charges transmitter battery.

#### Power Switch

Powers the unit on and off.

Note: The battery continues to charges even when the switch is off.

### **11** Power Supply Jack

Connect the supplied 15 V DC external power supply.

### <sup>®</sup> Mic Out

XLR microphone output jack supplies microphone-level audio output.

### **® USB-C Port**

For uploading firmware updates

#### (4) Instr Out

TRS 1/4" (6.35mm) audio output. Connect to mixers, recorders, and amplifiers.

# Receiver Screen

### ① Group

Displays the selected group.

#### ② Channel

Displays the selected channel.

### **③ Transmitter Battery Runtime**

Displays remaining battery life in hours and minutes. Alternatively displays the following battery status:

- CALC = battery life calculation
- Lo = battery life less than 15 minutes
- Err = replace battery

#### 4 Audio Meter

Indicates audio signal level and peaks.

### **⑤** Gain

Displays transmitter gain settings (dB).

#### **© OL Indicator**

Indicates audio overload, reduce gain.

#### **Transmitter Locked**

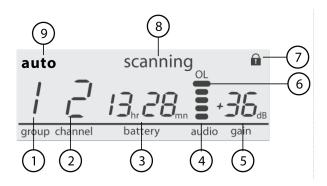
Displayed when linked transmitter controls are locked.

### Scanning

Indicates a scan is in progress.

#### Auto

Indicates that the selected group has backup channels available.



# Transmitters

### ① Antenna

Carries wireless signal.

#### 2 Status LED

LED color and state indicate transmitter status.

#### 3 Power Switch

Turns the transmitter on/off.

### **4** TA4M Input Jack

Connects to a 4-Pin mini connector (TA4F) microphone or instrument cable.

### **⑤ USB-C Charging Port**

Connect to USB-C battery charger.

#### **6** Link Button

- Press and hold within 5 seconds of power-on to manually link with receiver
- Press momentarily to activate Remote ID function

### ② Battery Compartment

Holds 1 Shure rechargeable battery.

### **® Microphone Cartridge**

GLXD2+ transmitter models are available with the following cartridge types: SM58, Beta 58, SM86, Beta 87A.

# Installing Transmitter Batteries

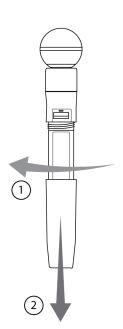
# Bodypack Transmitter

- 1. Move the locking lever to the open position and slide the battery door open.
- 2. Place the battery into the transmitter.
- 3. Close the battery door and slide the latch to lock.



# Handheld Transmitter

- 1. Unscrew and remove the battery cover.
- 2. Place the battery into the transmitter.
- 3. Replace and tighten the battery cover.



# Multiple Receiver Systems

For ease of set up, frequencies are divided into groups to best match the channel requirements for your system.

Select the group by determining the total number of receivers in your system (channel count). All receivers in the system must be set to the same group.

Group	Channel Count (Number of Receivers)	Number of Backup Frequencies	Notes
1	Up to 4	3	Initial factory setting.
2	Up to 5*	3	Best <b>multi-channel</b> group if you experience interference.
3	Up to 8*	0	For large multi-channel systems. Only use Group 3 in controlled Wi-Fi environments because there are no backup frequencies to avoid interference.
4	1	27	Best <b>single-channel</b> group if you experience interference.

<sup>\*</sup>Environmentally dependent, 4 systems typical

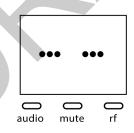
See "Tips to Improve Wireless System Performance" section for additional information.

# Setting Up Receivers and Transmitters

Note: Before beginning, turn off all receivers and transmitters. Turn on and set up each receiver/transmitter pair individually to prevent cross-linking.

- 1. Turn on the first receiver.
- 2. Press and hold the group button to select a group (if necessary) or if the group is already set, press the channel button to scan for the best available channel.
- 3. Turn on the first transmitter. The blue rf LED will illuminate when a link is established.

Repeat steps 1-3 for each additional receiver and transmitter. Remember to set each receiver to the same group.



**Note:** Dashes appearing on the group and channel display during a channel scan indicate that frequencies are not available in the selected group. Choose a group that supports more receivers and repeat the set up steps.

# Manually Linking a Transmitter to a Receiver

Use the manual linking option to change the transmitter linked to a receiver. A common use for manual linking is changing the linked transmitter from a bodypack type to a handheld type.

- 1. Turn on the transmitter: Within 5 seconds, press and hold the LINK button until the transmitter LED begins to flash green.
- 2. Press and hold the link button on the receiver: The blue rf LED will flash, and then remain on when the link has been established.
- 3. Test the audio to verify the link and adjust the gain if necessary.

# Combo Systems

A combo system is created by linking two transmitters to a single receiver. Only one transmitter can be active at a time to prevent cross interference. Gain settings for each transmitter can be independently set and stored when the transmitter is active.

**Important!** Do not turn on and operate both linked transmitters at any time.

Turn off both transmitters before beginning.

- 1. Press the group button to select a group. The receiver automatically scans the selected group to find the best available channel.
- 2. Turn on transmitter 1 and link it to the receiver. Adjust the gain, and then turn off the transmitter.
- 3. Turn on transmitter 2 and link it to the receiver. Adjust the gain, and then turn off the transmitter.

# **Firmware**

Firmware is embedded software in each component that controls functionality. Periodically, new versions of firmware are developed to incorporate additional features and enhancements. To take advantage of design improvements, new versions of the firmware can be downloaded and installed using the Shure Update Utility tool.

Software is available for download from http://www.shure.com/update-utility.

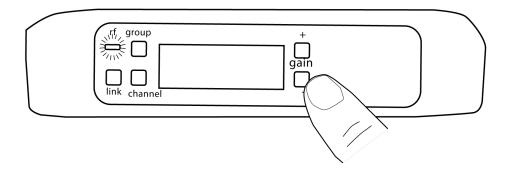
# Operation

# Gain Adjustment

Use the gain buttons on the receiver to increase or decrease the gain of a linked transmitter:

- Turn on the linked transmitter and momentarily press the gain buttons to adjust the gain in 1 dB increments
- · For faster gain adjustments, press and hold the gain buttons

Tip: Monitor the audio and observe the receiver audio meter level while adjusting the gain to prevent signal overload.



# Locking and Unlocking the Controls

The controls of the receiver and transmitter can be locked to prevent accidental or unauthorized changes to settings.

Note: Locks are not affected by power cycles.

# Locking the Receiver Controls

Simultaneously press and hold the group and channel buttons until LK appears on the LCD. Repeat to unlock.

- · LK is displayed if a locked control is pressed
- · UN is displayed momentarily to confirm the unlock command

# Locking the Transmitter Power Switch

Starting with the transmitter set to off, press and hold the LINK button while turning on the transmitter. Continue to hold the link button until the lock icon appears on the receiver LCD. Repeat sequence to unlock.



Optionally, the transmitter power switch can be remotely locked from the receiver front panel:

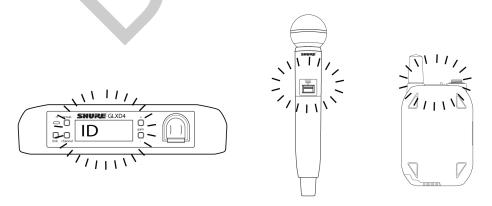
Simultaneously press and hold the group and link buttons for approximately 2 seconds until the flashing lock icon appears on the receiver LCD. Repeat sequence to unlock.

# Identifying Linked Transmitters and Receivers with Remote ID

Use the Remote ID feature to identify linked transmitter and receiver pairs in multiple receiver systems. When Remote ID is active, the receiver LCD will blink and display ID. The status LED of the corresponding transmitter will alternately flash red and green for approximately 45 seconds.

To activate Remote ID:

- 1. Momentarily press the link button on the transmitter or receiver.
- 2. The LCD of the linked receiver will blink and display ID and the status LED on the linked transmitter will flash red/green.
- 3. To exit Remote ID mode, momentarily press the link button or allow the function to timeout.



# Manually Selecting a Group and Channel

Specific groups and channels can be assigned to the receiver instead of using the automatic scan function.

Note: Group 3 should only be used in controlled Wi-Fi environments to prevent interference from unexpected Wi-Fi devices.

# Selecting a Group

- 1. Press and hold the group button for 2 seconds until the group display flashes.
- 2. Press the group button to scroll through the available groups.
- 3. The receiver will automatically save the selected group.

# Selecting a Channel

- 1. Press and hold the channel button for 2 seconds until the channel display flashes.
- 2. Press the channel button to scroll through the available channels.
- 3. The receiver will automatically save the selected channel.

**Note:** A double dash symbol-- displayed on the receiver screen during a channel scan indicates that there are no available channels within the selected group. Choose a group with more channels and repeat set up steps.

# Accessories

# **Furnished Accessories**

Power Supply	PS43
Carrying Case	95E16526
Shure Lithium-Ion Rechargeable Battery	SB904
USB-C Cable	unsure

# Optional Accessories

Black Bodypack Pouch		WA582B
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# Specifications

Tuning Bandwidth 2400–2483.5 MHz, 5725-5850 MHz

# Working Range

Indoor	Up to 30 m ( 100 ft) typical, Up to 60 m ( 200 ft) maximum
Outdoor	Up to 20 m (65 ft) typical, Up to 50 m (165 ft) maximum

Transmit Mode

Shure proprietary digital

Audio Frequency Response

20 Hz- 20 kHz

## Dynamic Range

120 dB, A-weighted

## **RF** Sensitivity

-88 dBm, typical

### Total Harmonic Distortion

0.2%, typical

## **RF Output Power**

10 mW E.I.R.P. max

## Operating Temperature Range

0°C to 45°C

### Storage Temperature Range

-29°C (-20°F) to 74°C (165°F)

## **Polarity**

Positive voltage applied to the tip of the guitar cable phone plug produces positive voltage at the tip of the high impedance ¼-inch output.

### **Battery Life**

Up to 11.5 hours

### **Guitar Tuner**

Tuning Accuracy	±1 cent
Tuning Range	F#0 to C8

### Channel Count

4 typical, Up to 8 maximum

GLXD1

### **Dimensions**

90 x 65 x 23 mm ( 3.56 x 2.54 x 0.90 in.), H x W x D (without antenna)

## Weight

132 g (4.7 oz.) without batteries

## **Power Requirements**

3.7 V

Rechargeable Li-Ion

### Housing

Cast Metal, Black Powdercoat

Input Impedance 900  $k\Omega$ 

RF Output Power 10 mW E.I.R.P. max

Transmitter Input

Connector

4-Pin male mini connector (TA4M)

Configuration Unbalanced

Maximum Input Level 1 kHz at 1% THD +8.4 dBV (7.5 Vp-p)

Antenna Type
Internal Monopole

# Pin Assignments

TA4M

1	ground (cable shield)
2	+ 5 V Bias
3	audio
4	Tied through active load to ground (On instrument adapter cable, pin 4 floats)

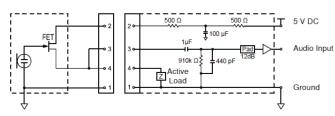
# Pin Assignments

TA4M

1	ground (cable shield)
2	+ 5 V Bias
3	audio
4	Tied through active load to ground (On instrument adapter cable, pin 4 floats)



#### **TA4M Connector**



# Weight

SM58	267 g (9.4 oz.) without batteries
BETA 58	221 g (7.8 oz.) without batteries
SM86	275 g (9.1 oz.) without batteries
BETA 87A	264 g (9.3 oz.) without batteries

# Housing

Molded Plastic

# Power Requirements

3.7 V

Rechargeable Li-Ion

# RF Output Power

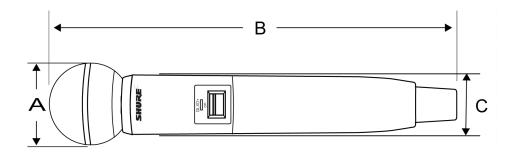
10 mW E.I.R.P. max

Maximum Input Level

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SM58	146 dB SPL
BETA 58	147 dB SPL
SM86	143 dB SPL
BETA 87A	147 dB SPL

# Dimensions

Model	А	В	С
SM58	51 mm, (2.0 in.)	252 mm, (9.9 in.)	37 mm, (1.5 in.)
BETA 58	51 mm, (2.0 in.)	252 mm, (9.9 in.)	37 mm, (1.5 in.)
SM86	49 mm, (1.9 in.)	252 mm, (9.9 in.)	37 mm, (1.5 in.)
BETA 87A	51 mm, (2.0 in.)	252 mm, (9.9 in.)	37 mm, (1.5 in.)



## **Dimensions**

40 x 183 x 117 mm (1.6 x 7.2 x 4.6 in.), H x W x D

## Weight

286 g (10.1 oz.) without batteries

### Housing

Molded Plastic

## **Power Requirements**

14 to 18 V DC (Tip positive with respect to ring), 550 mA

## Spurious Rejection

>35 dB, typical

## Gain Adjustment Range

-20 to 40 dBin 1 dB steps

## Phantom Power Protection

Yes

## **Tuning Bandwidth**

2400-2483.5 MHz

### Working Range

Indoor	Up to 30 m ( 100 ft) typical, Up to 60 m ( 200 ft) maximum
Outdoor	Up to 20 m (65 ft) typical, Up to 50 m (165 ft) maximum

Transmit Mode

Frequency Hopping

## Audio Frequency Response

20 Hz- 20 kHz

Dynamic Range 120 dB, A-weighted

RF Sensitivity -88 dBm, typical

Total Harmonic Distortion 0.2%, typical

RF Output Power 10 mW E.I.R.P. max

Operating Temperature Range -18°C (0°F) to 57°C (135°F)

Storage Temperature Range -29°C (-20°F) to 74°C (165°F)

# **Polarity**

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 1/4-inch output.

Battery Life
Up to 16 hours

Channel Count 4 typical, Up to 8 maximum

# **Audio Output**

# Configuration

XLR Output	Impedance balanced
6.35 mm (1/4") output	Impedance balanced

### Impedance

XLR Output	100 Ω
6.35 mm (1/4") output	100 $\Omega$ (50 $\Omega$ , Unbalanced)

## Maximum Audio Output Level

XLR connector (into 600 Ω load)	+1 dBV
6.35 mm (1/4") connector (into 3 kΩ load)	+8.5 dBV

## Pin Assignments

XLR Output	1=ground, 2=hot, 3=cold
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6.35 mm (1/4") connector

Tip=audio, Ring=no audio, Sleeve=ground

# Receiver Antenna Input

Impedance

50 Ω

Antenna Type

1/2 Wave Sleeve Dipole, non-removable

Maximum Input Level

-20 dBm

# Information to the user

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.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the users authority to operate the equipment.

# Certifications

FCC ID: DD4GLXD1Z3, DD4GLXD2Z3, DD4GLXD4Z3, DD4GLXD4RZ3, DD4GLXD6Z3

IC: 616A-GLXD1Z3, 616A-GLXD2Z3, 616A-GLXD4Z3, 616A-GLXD4RZ3, 616A-GLXD6Z3

CAN ICES-003 (B)/NMB-003(B)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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;
- 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. L'utilisateur final doit suivre les instructions spécifiques pour satisfaire les normes. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate.

Pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée, selon le cas.

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications. Certified by ISED in Canada under RSS-247 and RSS-GEN.

#### 運用に際しての注意

この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか工場の製造ライン等で使用されている移動体識別用の構内無線局(免許を要する無線局)及び特定小電力無線局(免許を要しない無線局)並びにアマチュア無線局(免許を要する無線局)が運用されています。

- 1. この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局並びにアマ チュア無線局が運用されていないことを確認して下さい。
- 2. 万一、この機器から移動体識別用の構内無線局に対して有害な電波干渉の事例が発生した場合には、 速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連絡頂き、混 信回避のための処置等(例えば、パーティションの設置など)についてご相談して下さい。
- 3. その他、この機器から移動体識別用の特定小電力無線局あるいはアマチュア無線局に対して有害な電波干渉の事例が発生した場合など何かお困りのことが起きたときは、保証書に記載の販売代 理店または購入店へお問い合わせください。代理店および販売店情報は Shure 日本語ウェブサイト http://www.shure.co.jp でもご覧いただけます。

現品表示記号について

2.4 XX 8

現品表示記号は、以下のことを表しています。 この無線機器は 2.4GHz 帯の電波を使用し、変調方式は「その他」の方式、想定与 干渉距離は 80m です。 2,400MHz~ 2,483.5MHz の全帯域を使用し、移動体識別装置の帯域を回避することはできません。



Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Connection and use of this communications equipment is permitted by the Nigerian Communications Commission.

Paraguay Distributor: Microsystems S.R.L., Senador Long 664 c/Dr. Lilio, Asunción, Paraguay

取得審驗證明之低功率射頻器材,非經核准,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前述合法通信,指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

Hereby, Shure Incorporated declares that the radio equipment is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: http://www.shure.com/europe/compliance

Authorized European representative:

Shure Europe GmbH

Headquarters Europe, Middle East & Africa

Department: EMEA Approval Jakob-Dieffenbacher-Str. 12 75031 Eppingen, Germany Phone: +49-7262-92 49 0 Fax: +49-7262-92 49 11 4 Email: EMEAsupport@shure.de

	有害物质					
部件名称	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
电路模块	X	0	0	0	0	0
金属模块	X	0	0	0	0	0
线缆及其组件	X	0	0	0	0	0
外壳	0	0	0	0	0	0
电源适配器*	X	0	0	0	0	0
电池组*	X	0	0	0	0	0

### 本表格依据 SJ/T11364 的规定编制。

- O:表示该有害物质在该部件所有均质材料中的含量均在 GB/T26572 规定的限量要求以下。
- X: 表示该有害物质至少在该部件某一均质材料中的含量超出 GB/T26572 规定的限量要求。
- 注:本产品大部分的部件采用无害的环保材料制造,含有有害物质的部件皆因全球技术发展水平的限制而无法实现有害物质的替代。
- \*:表示如果包含部分