# **ACCESS UHF SERIES USER GUIDE**

This user guide provides detailed instructions for your Access UHF series wireless system. To get your system up and running in minutes, see the Access UHF Series Quick Set Up Guide.

Your new Access UHF Series system is designed to give you both the freedom of a wireless system and world-famous Shure sound quality. This manual covers all four Access UHF Series systems: the AXU58D handheld systems; the AXUHD Headset systems; and the AXULD lavalier microphone system.

Wireless System Components	AXU58D Hand-held systems for singers	AXUGD  Bodypack systems for electric guitar, bass, and other electric instruments	AXUHD Bodypack system for hands- free applications, such as aerobics instruction or percussion	AXULD  Bodypack system for public speaking, theater, or business presentations
Transmitter:	AXU2 Hand-Held Microphone-Transmitter	AXU1 Body-Pack Transmitter		
Microphone:	SM58 Microphone	WL184 Supercardioid Lavalier Microphone	WH20TQG Headset Microphone	A302 Adapter Cable
Receiver:	AXU4 Diversity Receiver			
Power Supply:	PS20 (105–125 VAC, 60 Hz), o PS20E (230 VAC, 50 Hz)			
Battery:	9 V Alkaline (Duracell MN 1604)			
Supplied Accessories:	Microphone Stand Adapter, Receiver Feet, VELCRO® Receiver Mounting Strips	Receiver Feet, VELCRO Receiver Mounting Strips	Receiver Feet, VELCRO Receiver Mounting Strips	Receiver Feet, VELCRO Receiver Mounting Strips

# RECEIVER FEATURES

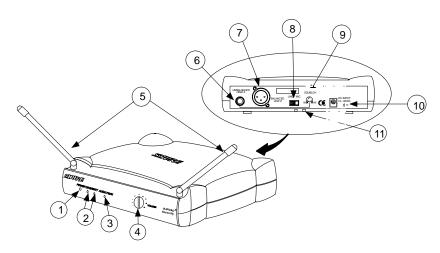


FIGURE 1. AXU4 RECEIVER FEATURES

- Power On Indicator: This green light glows when DC Power ia applied to receiver.
- Diversity A/B Indicators: These yellow lights glow when the receiver detects RF signals from the transmitter. When only one light glows, the signal is being received on only one antenna.
- Audio Peak Indicator: This red light flickers when the receiver audio output signal approaches the overload clipping level.
- 4. **Volume Control:** Increases or decreases receiver output volume. It does not affect audio clipping levels.
- Antennas: Receive RF signals from the transmitter. For best performance, point the receiver antennas away from each other at a 45° angle.
- 6. 1/4" Phone Jack Connector (Unbalanced High Z Output):
  An unbalanced audio cable with a 1/4" phone plug (such as a

- standard guitar cable) can be used between this connector and your amplifier input.
- XLR Audio Output Connector: Balanced low Z microphone level output.
- Mic/Line Switch: Switches output of XLR connector from microphone level to line level. Use line level when connecting receiver to a device without an available mic-level input, such as a power amplifier, signal processor, or VCR.
- Squelch Control: Adjusts squelch to enhance signal quality or extend system range. This control is factory pre-set, and normally does not require further adjustment.
- 10. Power Input Connector: Mates with the AC power adapter.
- Power Cable Retainer: Secures the AC adapter cable to the receiver.

# TRANSMITTER FEATURES =

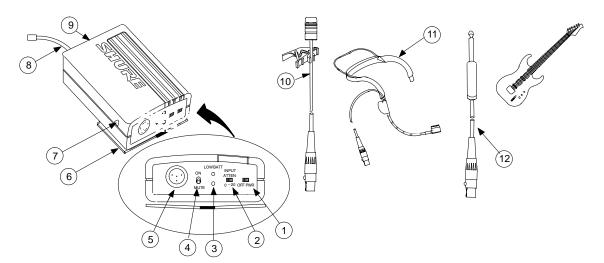


FIGURE 2. AXU1 AND AXU1G BODYPACK TRANSMITTER FEATURES

- 1. Power Switch: Turns transmitter power on and off.
- 2. **Input Attenuation Switch:** Allows choice between 0 dB and -20 dB attenuation, for greater audio gain control.
- Power/Battery Fuel Gauge: The green light indicates the unit is on. The red light indicates less than one hour of battery life remains.
- Mute Switch: Slide to ON for normal operation. Slide to MUTE to prevent sounds from being picked up by the receiver without turning the transmitter off.
- 5. **Input Connector**:Tini Q-G<sup>®</sup> connector allows connection to a variety of lavalier and headset microphone cables and the Shure WA302 instrument adapter cable.
- Belt Clip: Secures the transmitter to a belt, waistband or guitar strap.
- Audio Gain Control: Provides audio level adjustment to accommodate various input signal strengths (e.g., speaking into a microphone or playing an instrument). The factory setting is

- at mid-point. A small screwdriver is supplied to make adjustments.
- Antenna: A flexible wire antenna is permanently attached to the bottom of the AXU1 body-pack transmitter. For best operation, the antenna must hang vertically, and should <u>not</u> be coiled or bundled.
- 9. **Battery Compartment:** Holds one 9 V battery. Hinged cover opens to provide access to the battery.
- Lavalier Microphone: Supercardioid WL184 condenser lavalier microphone clips onto a tie, lapel, or acoustic instrument. Includes a Tini Q-G connector.
- Headset Microphone (WH20TQG): Headset microphone features a headset frame, headband, and an attached Tini Q-G connector. See tag attached to headset for assembly instructions.
- WA302 Instrument Adapter Cable. Connects output from electric guitar, bass, and other electronic instruments to transmitter input.

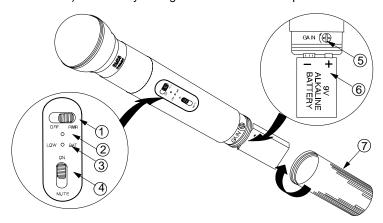


FIGURE 3. AXU2 MICROPHONE-TRANSMITTER FEATURES

- 1. Power Switch: Recessed to prevent accidental turn-off.
- 2. Power On Indicator: Glows green when power is on.
- Low Battery Indicator: Glows red when one hour or less of operating time remains and battery should be changed.
- 4. **Mute Switch:** Slide to ON for normal operation. Slide to MUTE to prevent sounds from being transmitted to the receiver. *Muting the transmitter does not turn off power.*
- Audio Gain Control: Allows you to adjust the transmitter to match the loudness of your vocals. A small screwdriver is supplied to make adjustments.
- 6. **9V Alkaline Battery (shown installed):** Provides power to the microphone-transmitter.
- Battery Cover: Unscrews for access to the 9V alkaline battery and gain control.

# **SYSTEM SETUP**

### **BATTERY INSTALLATION**

- Slide the transmitter POWER ON/OFF switch to the OFF position.
- AXU1, AXU1G: Press down on the OPEN side of the battery compartment cover, slide it back and flip it open, as shown in Figure 4.

**AXU2**: Unscrew the transmitter battery cover to expose the battery terminals, as shown in Figure 4.

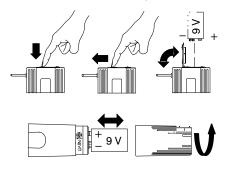


FIGURE 4. BATTERY INSTALLATION

Insert a fresh 9V alkaline battery into the battery compartment (A Duracell MN1604 is recommended). A fresh 9V alkaline battery will typically provide 18 hours of performance time. A fully charged 8.4V NiCad battery will provide about 2 hours of performance time.

**IMPORTANT:** Carbon-zinc and zinc-chloride batteries will not provide adequate power and are not recommended.

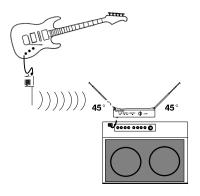
4. Replace the battery cover.

## **HEADSET ASSEMBLY**

- Refer to the tag attached to the headset for assembly instructions. After assembling the WH20, adjust the headband and place it on your head.
- 2. Position the microphone over the corner of your mouth, about 1/2 inch away. See Figure 5.
- 3. To reduce pops and breath noise, place the supplied foam windscreen over the microphone.



FIGURE 5. HEADSET MICROPHONE POSITION





 Attach the transmitter to your belt, guitar strap, or waistband as shown in Figure 6. Depress the tab marked PRESS and slip the belt or strap between the transmitter body and the belt clip. For added stability, draw the strap or belt toward the clip's top wire, especially when using thin guitar straps.

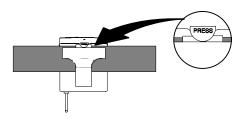


FIGURE 6. TRANSMITTER SETUP

Plug your guitar, headset microphone, or lavalier microphone into the transmitter.

### RECEIVER SETUP

- Plug one end of the AC power adapter into the DC INPUT connector on the back of the receiver.
- 2. Loop the power cable around the cable retainer on the bottom of the receiver. See Figure 7.
- Plug the other end of the AC power adapter into an AC power source. The green POWER light on the receiver will glow.

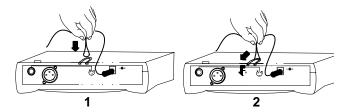


FIGURE 7. POWER CABLE RETAINER

- 4. Connect the receiver output as follows:
  - AXUGD: Plug a standard guitar cable (two provided) into the receiver's output connector. Plug the other end into a guitar amplifier, as shown in Figure 8.
  - AXUHD, AXU58D or AXULD: Use a cable with a 1/4 inch
    phone plug or a female XLR connector to connect the receiver to a mic level input of a mixer or PA system, as shown
    in Figure 8.
- Extend antennas fully and point them away from each other at a 45° angle, as shown in Figure 8.

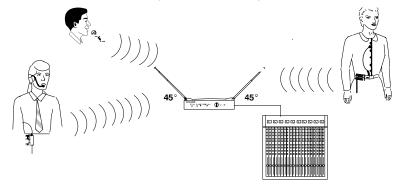


FIGURE 8. WIRELESS SYSTEM OPERATION

## STACKING AND RACK-MOUNTING RECEIVERS

Multiple AXU4 receivers may be stacked or rack-mounted, as shown in Figure 9.

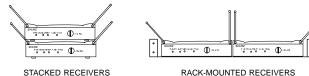


FIGURE 9. RECEIVER MOUNTING

To stack multiple receivers, attach the rubber feet to the bottom corners of both units and make sure the bottom receiver is on a flat, stable surface. Extend antennas fully and point them away from each other at a 45° angle.

To rack-mount one or two receivers, slide the receiver(s) into a standard audio rack space. Refer to the *Optional Accessories* paragraph for rack mount accessories. If two receivers are mounted side by side, the outer antennas should be at 45° and the inner antennas should be vertical.

# WIRELESS SYSTEM OPERATION =

### **OPERATING YOUR WIRELESS SYSTEM**

- 1. Slide the transmitter MUTE switch to the ON position.
- Sing, speak, or play your instrument at typical volume levels. (AXUGD systems: turn the volume control on your guitar or bass all the way up.) Normal operation is indicated by:
  - Steady glow of one or both yellow DIVERSITY A/B lights.
  - Flickering of the red TRANSMITTER AUDIO PEAK light when loud sounds are transmitted.

**NOTE:** If the yellow DIVERSITY A/B lights do not glow, consult the *Troubleshooting* Section in this guide.

If the red TRANSMITTER AUDIO PEAK light on the receiver does not flicker occasionally, refer to the *Wireless System Adjustments* Section.

 When finished, slide the MUTE switch to MUTE. Then slide the transmitter POWER switch to OFF. (Muting the transmitter first will help prevent audio thumps that may occur when powering off the transmitter.)

**NOTE:** If the DIVERSITY A/B lights do not go out after you turn off your transmitter, your receiver is picking up an RF signal from some other source. If you cannot identify and remove this source (usually other digital or wireless electronic equipment nearby), place your receiver in another location. If external RF sources cannot be avoided, you may need a wireless system that operates on a different carrier frequency. Contact your Shure dealer for details.

# **WIRELESS SYSTEM ADJUSTMENTS**

# TRANSMITTER AUDIO GAIN ADJUSTMENT

The audio gain control on each transmitter has been factory-preset at the mid-range position. This produces the best results in most applications. If the red AUDIO PEAK light on the receiver does not flicker, the preset gain level may be too low and the audio gain may need to be increased until a proper signal-to-noise ratio is reached. This may be necessary for soft singers or talkers, or guitar or basses with low outputs.

For loud singers or talkers, or instruments with high outputs, the preset gain level may be too high, causing unwanted distortion. This condition is indicated by the continuous glow of the red PEAK light on the receiver during usage.

- To Increase Gain: Rotate the transmitter gain control clockwise with the supplied screwdriver, as shown in Figure 10, until the red TRANSMITTER AUDIO PEAK light on the receiver flickers when the guitar is played loudly, or when you sing or speak in a loud voice.
- To Reduce Gain: Rotate the transmitter gain control counterclockwise, as shown in Figure 10, until the red TRANSMIT-TER AUDIO PEAK light on the receiver flickers only when the guitar is played loudly, or when you speak or sing in a loud voice.
- To Return Audio Gain to the Factory Setting: Rotate the transmitter audio gain control counterclockwise as far as it will go (AXUGD systems), clockwise as far as it will go (AX-UHD systems), or to mid position (AXU58D and AXULD systems). See Figure 10.

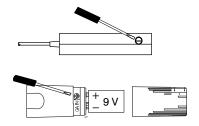


FIGURE 10. GAIN ADJUSTMENT AXU1 GAIN/ATTENUATION SETTINGS

The attenuation switch and the gain control on the AXU1 bodypack can be used to provide a wide spectrum of gain control choices. The following ranges are starting points; actual output levels may vary.

DEVICE	LEVEL	ATTENUATION SWITCH SETTING	GAIN CONTROL SETTING
Lavalier Microphone	Conversational Voice	0 dB	HIGH (clockwise)
Lavalier Microphone	Projected Voice	0 dB	MIDRANGE
Headset	Conversational Voice	0 dB	MIDRANGE
Headset	Projected Voice	0 dB	LOW (counterclockwise)
Electric Guitar or Bass	Passive Electronics	–20 dB	HIGH (clockwise)
Electric Guitar/Bass	Active Electronics	–20 dB	MID-RANGE
Electric Guitar/Bass	Active Electronics	–20 dB	LOW (counterclockwise)

### RECEIVER VOLUME ADJUSTMENT

The volume control on the front panel of the AXU4 receiver can be adjusted to make the wireless system output level identical to that of a cabled guitar or bass or wired microphone. After making any necessary transmitter gain adjustments, adjust the receiver volume control until the output reaches the desired level. Rotate the volume control clockwise to *increase* output. Rotate it counterclockwise to *decrease* output.

### RECEIVER SQUELCH ADJUSTMENT

The squelch control on the AXU4 receivers is factory preset for optimum performance. No further adjustment is normally required. It is possible to adjust the squelch control setting to emphasize either signal quality or system range:

- Turning the squelch control clockwise causes the receiver to demand a higher quality signal (less noise before muting), but decreases operating range.
- Turning the squelch control counterclockwise allows a lower quality signal through (more noise before muting), but increases operating range.

To return the receiver squelch control to the factory setting, rotate it to the mid-range position (so the slot is vertical).

### ABOUT THE SHURE NOISE SQUELCH SYSTEM

Conventional squelch circuits analyze RF signal strength; they cannot distinguish between noise and desired signals. Consequently, when a conventional wireless system is used in a noisy RF environment, its circuits may "open" unexpectedly, sending loud bursts of noise through the receiver when the transmitted signal is weak or turned off.

Unlike conventional wireless systems, Shure Access systems use a noise squelch circuit that analyzes *signal quality* instead of signal strength. A special detector monitors the level of high frequency noise. When the transmitter signal is strong, the system's noise level is low and the receiver sends audio through. When the transmitter signal is weak or absent, the system's noise level is high and the squelch circuit will mute the receiver. This virtually eliminates the possibility of annoying bursts of noise coming through the receiver.

### TIPS FOR ACHIEVING MAXIMUM PERFORMANCE

- Make sure you can always see a receiver antenna from the transmitter position.
- Keep the distance from transmitter to receiver antenna as short as possible.
- Point receiver antennas away from each other at 45° from vertical.
- Avoid placing the receiver antennas near metal surfaces and obstructions.
- Monitor battery fuel gauge and replace battery as soon as red light is on.
- Let the body-pack transmitter antenna hang freely; do not coil or keep in pocket.
- If stacking or rack mounting receivers in a multiple-system use situation, do not allow antennas to touch or cross.
- Perform a walk-through before performance or presentation.
   If dead spots are found, adjust location of receiver. If dead spots remain, mark spots and avoid.

# TROUBLESHOOTING

DDOD! FM	INDICATOR STATUS		2011710110	
PROBLEM	RECEIVER	XMITTER	SOLUTIONS	
	POWER ANTENNA AUDIO ON A B PEAK	POWER  O  LOW BATT	<ul> <li>Slide transmitter POWER switch to ON.</li> <li>Make sure battery is inserted properly (+/– battery terminals must match transmitter terminals).</li> <li>Insert fresh battery.</li> </ul>	
	POWER ANTENNA AUDIO OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	POWER -0 LOW BATT	<ul> <li>Make sure AC adapter is securely plugged into electrical outlet and into DC input connector on rear panel of receiver.</li> <li>Make sure AC electrical outlet works and supplies proper voltage.</li> </ul>	
No sound.	POWER ANTENNA AUDIO  ON A B PEAK	POWER	Slide transmitter MUTE switch to ON.	
	POWER ANTENNA AUDIO  ON A B PEAK	POWER	<ul> <li>Extend antennas. Receiver antennas should point away from each other at a 45° angle from vertical.</li> <li>Move receiver away from nearby metal objects.</li> <li>Remove obstructions and maintain line of sight between transmitter and receiver.</li> </ul>	
	POWER ANTENNA AUDIO  ON A B PEAK	POWER	<ul> <li>Move transmitter closer to receiver.</li> <li>Increase transmitter gain until Transmitter Audio Peak light flashes on loud peaks.</li> <li>Turn up receiver volume control as necessary.</li> </ul>	
No sound or faint sound.	POWER ANTENNA AUDIO  O  O  A  B  PEAK	POWER	<ul> <li>Turn up receiver volume control.</li> <li>Check cable connection between receiver and amplifier or mixer.</li> </ul>	
Sound level from the receiver is different from that of a cabled guitar or microphone.			<ul><li>Adjust transmitter gain as necessary.</li><li>Adjust receiver volume as necessary.</li></ul>	
Sound level is different when you change guitars.			<ul> <li>Adjust transmitter gain to compensate for differences between guitar output levels.</li> </ul>	
Distortion increases gradually.		POWER	Replace transmitter battery.	
Bursts of noise, distortion, or other radio signals interrupt performance.	ANTENNA -ÒÒ À B	POWER  O  LOW BATT	<ul> <li>If noise occurs when transmitter is turned off, remove or turn off nearby sources of RF (such as other wireless systems, CB radios, etc.).</li> <li>Use a wireless system that operates on a different frequency.</li> </ul>	
Momentary loss of sound as transmitter is moved around performing area (dropouts).	ANTENNA O O A B	POWER -0 LOW BATT	<ul> <li>Reposition receiver and perform walk-through test. If audio dropouts persist, mark "dead" spots and avoid them during performance.</li> </ul>	

# = SPECIFICATIONS \_\_\_\_\_

# **SYSTEM SPECIFICATIONS**

Frequency Range: (NOTE: Available frequencies depend on applicable regulations in country where the system is used.)	Approximately 596 MHz to 862 MHz
Operating Range:	100 m (approximately 300 ft.) under typical conditions
Audio Frequency Response:	20 to 16,000 Hz ± 3 dB
Image Rejection:	75 dB typical
Spurious Rejection:	75 dB typical
System Distortion	0.1% THD typical
(ref. ±45 kHz deviation, 1 kHz modulation):	
Signal-to-Noise Ratio:	90 dB
Maximum Recommended Input Level, AXU1 (attenuation switch at -20 dB, gain at +32 dBV):	-110 dBm for 12 dB SINAD typical
Minimum Recommended Input Level, AXU1 (attenuation switch at 0 dB, gain at –80 dBV):	-80 dB
Operating Temperature Range: (NOTE: Battery characteristics may limit range)	7° to 38°C (45° to 100°) F
Transmitter Battery Life:	12 hours with 9 V alkaline battery (Duracell MN1604 recommended).

# **BODY-PACK TRANSMITTER SPECIFICATIONS**

RF Output:	15 mW Typical
Input Configuration:	Unbalanced
Connector Type:	4-pin Tini QG (male)
Actual Impedance:	1 ΜΩ
Connector Pin Assignments:	Pin 1:Tied to Ground Pin 2:Tied to +5 V Pin 3:Tied to Audio Pin 4:Tied to 20kΩ Resistor and Audio Ground
Dimensions:	82.6 mm H x 63.5 mm W x 26.2 mm D (3.25" H x 2.50" W x 1.03" D)
Net Weight:	125g (4.4 oz.) including battery
Power Requirements:	9 V alkaline battery (Duracell MN1604 recommended); 9 V lithium battery optional.
Nominal Current Drain:	40 mA

<sup>\*</sup> Gain Control at minimum
\*\* Gain Control at maximum

# HAND-HELD TRANSMITTER SPECIFICATIONS

RF Output:	15 mW Typical
Dimensions:	241 mm H x 51 mm D (9.49 in. H x 2.01 in. D)
Net Weight:	296g (10.4 oz.)
Power Requirement:	9 V alkaline battery (Duracell MN1604 recommended); 9 V lithium battery optional.
Nominal Current Drain:	40 mA

# **RECEIVER SPECIFICATIONS**

Connector:	3-Pin XLR (male)	1/4" phone plug (female)	
Maximum Output Levels:	Line Level: +10 dBV Mic Level: -22 dBV	+4 dBV	
Nominal Output Levels:	Line Level: -22 dBV Mic Level: -46 dBV	−26 dBV	
Output Configuration:	Active Balanced	Unbalanced	
Actual Impedance:	Line Level: $5.5 \text{ k}\Omega$ Mic Level: $500 \Omega$	1 kΩ	
Connector Pin Assignments:	Pin 1: ground Pin 2: hot Pin 3: cold	Tip: hot Sleeve: ground	
Dimensions:	41 mm H x 197 mm W x 138 mm l in. D)	D (1.625 in. H x 7.77 in. W x 5.42	
Net Weight:	419.6g (14.8 oz.)		
Power Requirements:	12-18 VDC nominal, 200mA		
Power Supply:	120 V or 230V AC adaptor with 2.1 mm female plug		
Voltage/Current/Phantom Power Protection:	Yes	Yes	

# ACCESSORIES, LICENSING AND WARRANTY =

### **FURNISHED ACCESSORIES**

Screwdriver
Mounting Block
Single-Mount Tie Bar RK240SB*
Windscreen RK242WS*
Receiver AC Adapter PS20 (120V), PS20E (230V)
Swivel Adapter WA370A
17" Carrying Case WA605
1/4" to 1/4" Cable (AXUGD System only) WA303
1/4" to Tini QG Cable (AXUGD System only) WA302
* Replacements furnished in multiples of 4.

OPTIONAL ACCESSORIES
1.8 Meter (6 ft.) Receiver-Mixer Cable WA410
Right Angle 1/4" to Tini Q-G cable WA304
Dual Tie Clip (AXULD System) RK183T2
Miniature Instrument Microphone with
Universal Horn Clamp WM98KCS
Rack Mount Kit URT
Rubber Receiver Feet (4) 66A8053
VELCRO Fastener, Hook (2) 80A8118
VELCRO Fastener, Loop (2)
Amp/Powered Mixer Stand for AXU4 Receiver WA595
Inline Audio Switch for AXU1 Transmitter WA360
NOTE: For additional service or parts information, contact Shure's
Service department at 1-800-516-2525. Outside the U.S., con-
tact an Authorized Shure Service Center.

### **CERTIFICATION**

**AXU1:** Type Accepted under FCC Part 74. Certified by IC in Canada under RSS-123. Conforms to European Union directives, eligible to bear CE, meets requirements of European wireless EMC standard pr ETS 300 445.

AXU258: Type Accepted under FCC Part 74. Certified by IC in Canada under RSS-123. Conforms to European Union directives, eligible to bear CE marking; meets European Union Requirements. ETSI Type Approval: pr I-ETS 300 442, EMC Immunity: ETS 300 445.

AXU4: Approved under the Declaration of Conformity provision of FCC Part 15. Certified by IC in Canada under RSS 123 (AXU4). Conforms to European Union directives, eligible to bear CE marking; meets requirements of European wirelessEMC standard pr ETS 300 445. Power supply meets Low Voltage Directive:73/23/EEC.

### WARRANTY INFORMATION

Shure Incorporated ("Shure") hereby warrants that these products are free from defects in material and workmanship for a period of two years from the date of purchase for all microphone cartridge and housing assembly parts and, for a period of one year from date of purchase, all transmitter and receiver parts. At its option, Shure will repair or replace the defective product and promptly return it to you. You should retain proof of purchase to validate the purchase date and return it with any warranty claim. If you believe this product is defective within the warranty period, carefully repack the unit, insure it, and return it postpaid to:

> **Shure Incorporated Attention: Service Department** 222 Hartrey Avenue Evanston, IL 60202-5730 U.S.A.

Customers outside the U.S.A. should ship the product to the authorized Shure Distribution Center in their region.

This warranty does not apply in cases of abuse or misuse of the product, use contrary to Shure's instruction, or unauthorized repair. All implied WARRANTIES of MERCHANTABILITY or FIT-NESS FOR A PARTICULAR PURPOSE are hereby disclaimed and Shure hereby disclaims liability for incidental, special or consequential damages resulting from use or unavailability of this product.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

For additional microphone service or parts information, please contact Shure's Service department at 1-800-516-2525 or Shure's website at www.shure.com. Outside the United States, please contact your Authorized Shure Service Center.

## LICENSING INFORMATION

This Shure wireless transmitter is accepted under FCC Part 74 and/or Part 90.

IMPORTANT: Licensing of Shure wireless microphone equipment is the user's responsibility, and licensability depends on the user's classification and application, and on the selected frequency. Shure urges the user to consult the appropriate telecommunications authority before choosing and ordering frequencies.

Changes or modifications not expressly approved by Shure Inc. could void your authority to operate this equipment.

### TRADEMARK NOTIFICATION

"Tini Q-G" is a registered trademark of Switchcraft Incorporated. "VELCRO" is a registered trademark of Velcro Industries B.V.

# **Declaration of Conformity**

We of

Shure Incorporated 222 Hartrey Ave. Evanston IL 60202–3696 U.S.A. 847–866–2200

declare under our sole responsibility that the following products,

Model: AXU4 Name: AXU4 Receiver

were tested and found to comply 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.

Testing was completed by the following NVLAP or A2LA accredited laboratory:

BZT privat CETECOM GmbH 66117 Sarbruken Unterturkheimer StrBe 6–10 Deutschland telephone +49 681 598 – 9000 fax +49 681 598 – 9075

Shure Incorporated., Manufacturer.

Signed:

Date: November 5, 1999

Name, Title: Craig Kozokar, Senior Quality Engineer