Offering you more productivity, more reliability and more control, UHF-R is premier wireless technology that helps you master the complexities of large-scale wireless installations. UHF-R takes wireless to a completely new level.

Robust, Reliable RF Performance
- 60 MHz bandwidth for up to 40 simultaneous compatible systems/band
- Track Tuning filtering technology
- Switchable transmitter output power

Superior Wireless Sound Quality
- Shure’s patented Audio Reference Companding

Integrated Networking / Advanced Control
- Wireless Workbench software
- Ethernet and USB compatibility
- AMX/Creston compatibility

Fast Setup and Operation
- Networked Automatic Frequency Selection
- Group Scan
- Infrared Automatic Transmitter Setup

- Rugged & Durable Construction
  - Sweat-resistant all-metal construction
  - Low-profile, lightweight magnesium bodypack
  - Shure’s rigorous mechanical and performance standards
System Specifications

System RF Carrier Frequency Range 470-952 MHz (available frequencies depend upon applicable country regulations)

Working Range 150 m (500 ft.) under typical conditions, 500 m (1600 ft.) line of sight (NOTE: Operating range depends on many variables, including RF signal absorption, reflection and interference)

Audio Frequency Response 40-18,000 Hz (+1 dB, −3 dB), (NOTE: Overall system frequency response depends on the microphone element)

Modulation FM (45 kHz max. deviation), compander system with pre- and de-emphasis

System Distortion <0.3% Total Harmonic Distortion typical (ref. ± 45 kHz deviation, 1 kHz modulation)

Dynamic Range 105 dB, A-weighted

Ultimate Quieting >100 dB A-weighted (ref. 45kHz deviation)

Operating Temperature Range -18º to +57º C (0º to 135º F) (NOTE: Battery characteristics may limit this range)

Frequency Range

<table>
<thead>
<tr>
<th>Band</th>
<th>Range</th>
<th>Handheld</th>
<th>Bodypack</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4E</td>
<td>518-578 MHz</td>
<td>10 / 50</td>
<td>10 / 50</td>
</tr>
<tr>
<td>H4</td>
<td>518-578 MHz</td>
<td>10 / 50</td>
<td>10 / 100</td>
</tr>
<tr>
<td>J5L</td>
<td>578-638 MHz (578-608, 614-638)</td>
<td>10 / 50</td>
<td>10 / 50</td>
</tr>
<tr>
<td>J5</td>
<td>578-638 MHz (578-608, 614-638)</td>
<td>10 / 50</td>
<td>10 / 100</td>
</tr>
<tr>
<td>L3E</td>
<td>638-698 MHz</td>
<td>10 / 50</td>
<td>10 / 50</td>
</tr>
<tr>
<td>L3</td>
<td>638-698 MHz</td>
<td>10 / 50</td>
<td>10 / 100</td>
</tr>
<tr>
<td>G5</td>
<td>740-814 MHz</td>
<td>10 / 50</td>
<td>10 / 50</td>
</tr>
<tr>
<td>R9</td>
<td>790-865 MHz</td>
<td>10 / 50</td>
<td>10 / 50</td>
</tr>
<tr>
<td>G6</td>
<td>740-752 MHz</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>A24</td>
<td>779-886 / 797-806 MHz</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>JBX</td>
<td>806-810 MHz</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>G10A</td>
<td>740-787 MHz</td>
<td>10 / 50</td>
<td>10 / 50</td>
</tr>
<tr>
<td>G1</td>
<td>470-530 MHz</td>
<td>10 / 50</td>
<td>10 / 100</td>
</tr>
<tr>
<td>X1</td>
<td>944-952 MHz</td>
<td>10 / 50</td>
<td>10 / 100</td>
</tr>
</tbody>
</table>

NOTE: This radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and output power levels for wireless microphone products in your region.

System Architectural Specifications

The wireless system shall operate in the UHF band between 518 MHz and 865 MHz, with the specific range being dependent on the user’s locale. The system shall include the option of changing the operating frequency in order to avoid RF interference, enabling up to 108 systems to operate simultaneously in the same location. Preconfigured group, channel and frequency setups shall be available to ensure that multiple systems in use do not interfere with one another.

All transmitters shall be powered by 2 AA batteries and shall have a power on/off switch. The bodypack will have an LED indicating that power is on. Available transmitters shall include: a body pack for use with electric guitars, basses, and other electric instruments, and a handheld microphone for vocals. The transmitters shall have a DC/DC converter to ensure consistent performance, even if battery voltages change.

The receiver shall have a user-programmable, menu-driven LCD showing group, channel, frequency, name, squelch level, and locked/unlocked status. The system shall use technology such as MARCAD® signal combining circuitry to improve reception, minimize signal dropouts, and achieve the best possible signal-to-noise ratio. An equalizer, tone key squelch, and noise squelch circuitry shall be built into the system to provide optimal sound quality and minimize unwanted noise. The receiver shall include dual RF meters (one for each antenna), an audio level meter, and a Networking Interface connector for computer control and monitoring. The receiver shall have a volume control and an adjustable noise squelch control. The system shall be the Shure UHF-R Wireless.

Antenna Combiners and Accessories

- Antennas and receivers must be from the same frequency band. Please check with your local Shure distributor for compatibility information.
- The supplied 1/2 wave antennas can be remotely mounted or mounted directly to the UA845.
- Antennas and cables for use with the UA845 can also be used with stand-alone UHF-R receivers.
- All transmitters shall be powered by 2 AA batteries and shall have a power on/off switch.

Antenna Combiners

- Two Antennas (UR4), Band Dependent
- A8505 RF Distribution Cables (2)

Antenna Accessories

- WA371 Microphone Stand Adapter (UR2)
- 2BA13 Zipper Bag (UR1)
- 2BA14 Zipper Bag (UR2)
- 9IA5023 Antenna Extension Cables (2)
- WA340 Hardware Kit, Locking Connector
- UA700 Bodypack Antenna, 470-530 MHz
- UA710 Bodypack Antenna, 518-578 MHz
- UA720 Bodypack Antenna, 578-638 MHz
- UA730 Bodypack Antenna, 740-865 MHz
- UA740 Bodypack Antenna, 944-952 MHz
- UA820 Two Antennas (UR4), Band Dependent
- 9IA5053 Bodypack Antenna Carrying Case
- 9IN2035 RF Distribution Cables (2)

Optional Accessories

- RPW112 SM58 Head with Grille
- RPW114 SM89 Head with Grille
- RPW116 BETA 58A Head with Grille
- RPW120 BETA 57A Head with Grille
- RPW122 BETA 87C Head with Grille
- RPW116 SM87A Head with Grille
- RPW180 KSM9/SL Head with Grille
- RPW184 KSM9/KB Head with Grille
- RK14G Matte Silver Grille (SM58)
- RKPA06 Matte Silver Grille (SM86)
- RKX14G Matte Silver Grille (BETA 58)
- RKX14G Black Grille (SM58)
- RKX14G Black Grille (BETA 57)
- RKX14G Black Grille (BETA 58)
- RK324G Black Grille (BETA 87C/BETA 87A)
- RK324G Black Grille (BETA 87C/BETA 87A)
- 4BA5551 Belt Clip
- WAS80 Body-Pack Pouch (Black), UR1
- WAS80W Body-Pack Pouch (White), UR1
- WAS81B Body-Pack Pouch (Black), UR1M
- WAS81W Body-Pack Pouch (White), UR1M
- WA335 3-Pin mini Lemo conversion kit
- WA336 3-Pin mini Lemo plug for lawyer
- WA337 Assembly tool for WA336
- AB5WS Pepper Stopper™ Windscreen

WA337 Popper Stopper™ Windscreen

WA337 Assembly tool for WA336

4BA5551 Belt Clip

WA336 3-Pin mini Lemo plug for lawyer

WA337 Assembly tool for WA336

AB5WS Pepper Stopper™ Windscreen
Component Specifications

UR4S+ & UR4D+ Diversity Receiver

Overview
The UR4S+ and UR4D+ receivers provide single and dual-channel options for the premium Shure UHF-R Wireless line. Using the latest in wireless technologies, UHF-R receivers provide advanced control and robust flexibility for a wide range of professional uses.

- Up to 2400 selectable frequencies across 60 MHz bandwidth
- Track Tuning Filtering technology
- Up to 40 preset compatible systems/band (160 w/multiple bands, region dependent)
- Networked automatic frequency selection
- Automatic transmitter setup (including custom group upload)
- Flash memory to store six 60-channel custom frequency groups
- Patented Audio Reference Companding
- Multi-function bit-mapped backlit LCD
- Built-in USB & ethernet network compatibility
- Wireless Workbench control/monitoring software
- Removable antennas
- RF distribution ports allow up to 10 receivers to share a single pair of antennas.
- Microprocessor-controlled diversity

Product Specifications

<table>
<thead>
<tr>
<th>Overall Dimensions</th>
<th>44 mm H x 483 mm W x 366 mm D (1.72 x 19.00 x 14.39 in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Weight</td>
<td>UR4S+ : 10.9 lbs (5.0 kg) UR4D+ : 11.2 pounds (5.1 kg)</td>
</tr>
<tr>
<td>Housing</td>
<td>Galvanized Steel</td>
</tr>
<tr>
<td>Audio Output Level</td>
<td>+24 dBu (-6 dBu mic)</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>200 Ω active balanced (150 Ω mic)</td>
</tr>
<tr>
<td>RF Sensitivity</td>
<td>UR4S+ : -110 dBm typical for 12 dB SINAD; -105 dBm typical for 30 dB SINAD</td>
</tr>
<tr>
<td></td>
<td>UR4D+ : -107 dBm typical for 12 dB SINAD; -102 dBm typical for 30 dB SINAD</td>
</tr>
<tr>
<td>Image Rejection</td>
<td>110 dB typical</td>
</tr>
<tr>
<td>Spurious Rejection</td>
<td>90 dB typical</td>
</tr>
<tr>
<td>Audio Polarity</td>
<td>Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on XLR output pin 2 with respect to XLR pin 3 and on the tip of the 1/4-inch output jack.</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>90 to 230 Vac, 50/60 Hz</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>UR4S+ : 9.6 – 13.2 W; UR4D+ : 12 – 16 W; UA845: 15 – 16 W</td>
</tr>
</tbody>
</table>

Available Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR4S+</td>
<td>Single Channel Wireless Receiver</td>
</tr>
<tr>
<td>UR4D+</td>
<td>Dual Channel Wireless Receiver</td>
</tr>
</tbody>
</table>

Architectural Specifications

The wireless microphone system shall operate in the UHF band and provide a tone key (32,768 kHz) to increase reliability and to minimize unwanted noise. The system shall allow to change the operating frequency in 25 kHz steps in order to avoid RF interference, enabling up to 47 systems to operate simultaneously in one frequency band. Preconfigured group, channel and frequency setups shall be available to ensure that multiple systems in use do not interfere with one another. Additionally, multiple free programmable frequency groups shall allow to create customized setups. An IR synchronization between receiver and transmitter for fast setup shall be implemented.

The receiver shall have an user programmable menu-driven LC display showing group, channel, frequency, name, output level, squelch level, and lock status as well as the most important transmitter settings. It shall use technology such as MARCAD® signal combining circuitry for improved reception, minimized signal dropouts, and the best possible signal-to-noise ratio. Tone key squelch, and noise squelch circuitry shall be implemented to provide optimal sound quality and minimize unwanted noise. The receiver shall include an RF meter for each antenna, an audio level meter, and networking interface connectors for PC control and monitoring. The receiver shall have a volume control and an adjustable noise squelch control.
UR2 Handheld Transmitter

Overview

UHF-R handheld transmitters boast a rugged, lightweight construction and an antenna design which advances RF transmission reliability. The transmitter design allows for interchangeable microphone cartridges. The UR2 is offered with SM58®, SM86, SM87A, Beta 58A®, Beta 87A™, and KSM9. UHF-R Wireless Systems feature KSM9 as the premier choice in handheld vocal microphones.

- Switchable RF power
- Frequency and power lockout
- Bit-mapped backlit LCD
- Powered by 2 AA batteries
- Infrared automatic transmitter sync
- All metal die-cast construction
- Interchangeable cartridges

Product Specifications

Gain Adjustment Range: -10 to +20 dB
Maximum Input Level: +4.8 dBu
Input Impedance: > 1 MΩ
Output Impedance: 50 Ω
RF Power Output: 10 mW or 10/50 mW (region dependent)
Housing: Aluminum die-cast handle and aluminum machined battery cup
Power Requirements: 2 AA alkaline
Battery Life (Typical): 6 hours (high power), 9.5 hours (low power)

Gain Adjustment Range

<table>
<thead>
<tr>
<th>Overall Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR2/SM58: 261 mm L x 51 mm Dia. (10.27 x 2 in.)</td>
<td>UR2/SM58: 306 g (12.0 oz.) without battery</td>
</tr>
<tr>
<td>UR2/SM58: 254 mm x 51 mm Dia. (10 x 2 in.)</td>
<td>UR2/BETA 58A, UR2/BETA 87C: 254 mm x 51 mm Dia. (10 x 2 in.)</td>
</tr>
<tr>
<td>UR2/BETA 58: 258 mm L x 51 mm Dia. (10.15 x 2 in.)</td>
<td>UR2/BETA 87A, UR2/BETA 87C, 325 g (11.5 oz) without battery</td>
</tr>
</tbody>
</table>

Microphone Options

| UR2/SM58B | UR2 Handheld Transmitter with SM58 Cardioid Microphone |
| UR2/SM86 | UR2 Handheld Transmitter with SM86 Cardioid Microphone |
| UR2/SM87A | UR2 Handheld Transmitter with SM87A Supercardioid Microphone |
| UR2/BETA 58 | UR2 Handheld Transmitter with Beta 58A Supercardioid Microphone |
| UR2/BETA 87A | UR2 Handheld Transmitter with Beta 87A Supercardioid Microphone |
| UR2/BETA 87C | UR2 Handheld Transmitter with Beta 87C Cardioid Microphone |
| UR2/KSM9/BK | UR2 Handheld Transmitter with KSM9 Dual-Diaphragm Condenser Microphone, Black |
| UR2/KSM9/SL | UR2 Handheld Transmitter with KSM9 Dual-Diaphragm Condenser Microphone, Champagne |

Architectural Specifications

The wireless handheld transmitter shall operate in the UHF band and shall provide a tone key (32,768 kHz) to increase reliability and to minimize unwanted noise. The system shall allow to change the operating frequency in 25 kHz steps in order to avoid RF interference, enabling up to 47 systems to operate simultaneously in one frequency band. Preconfigured group, channel and frequency set-ups shall be available to ensure that multiple systems in use do not interfere with one another.

The transmitter shall be programmable through a menu as well as infrared synchronization (including the sync of free programmable custom groups). The transmitter shall provide exchangeable microphone capsules as well as a backlit LC display showing name, battery gauge, carrier frequency, gain and lock settings. LCD menu controls should cover adjustable audio gain, tunable carrier frequency, switchable RF power, and frequency and power lock settings as well as the access to the RF Safety Mode (transmitter operation with muted RF carrier).
**Component Specifications**

**UR1 Bodypack Transmitter**

**Overview**

The UR1 Bodypack Transmitter is constructed of lightweight and rugged magnesium to be exceptionally unobtrusive and abuse-resistant. Choose from a wide variety of lavalier and headworn microphones to tailor to your application.

- Switchable RF Power (10/50mW or 10/100mW, Region Dependent)
- Low Profile, Compact Design
- Frequency and Power Lockout
- Bit-mapped Backlit LCD Display
- 2 AA Batteries - Up to 8 hours Continuous Use
- Automatic Transmitter Setup
- Durable, Light-weight Magnesium Construction
- Removable Bodypack Antenna

**Product Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain Adjustment Range</td>
<td>-20 dB to +35 dB</td>
</tr>
<tr>
<td>Maximum Input Level</td>
<td>+10 dBu (sensitivity 0 dB), +20 dBu (sensitivity -10 dB)</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>18 kΩ with lavalier microphone; 1 MΩ with instrument cable</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ω</td>
</tr>
<tr>
<td>RF Power Output</td>
<td>10 mW, 1050 mW or 10/100 mW (region dependent)</td>
</tr>
<tr>
<td>Housing</td>
<td>Cast magnesium</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>2 AA alkaline or rechargeable batteries</td>
</tr>
<tr>
<td>Battery Life</td>
<td>8 hours typical</td>
</tr>
<tr>
<td>Current Drain</td>
<td>180 mA max. (normal RF power setting), 240 mA max. (high RF power setting)</td>
</tr>
<tr>
<td>Overall Dimensions</td>
<td>97.5 mm L x 60 mm W x 17 mm D (3.84 x 2.36 x 0.66 in.)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>97 g (3.4 oz.) without batteries</td>
</tr>
</tbody>
</table>

**Microphone Options**

- WL93: WL93 condenser capsule, omnidirectional lavalier mic
- WL183: WL183 condenser capsule, omnidirectional lavalier mic
- WL184: WL184 condenser capsule, supercardioid lavalier mic
- WL185: WL185 condenser capsule, cardioid lavalier mic
- WL50: WL50 condenser capsule, omnidirectional lavalier mic
- WL51: WL51 condenser capsule, cardioid lavalier mic
- WH90: WH90 condenser capsule, cardioid headworn mic
- WCM16: WCM16 condenser capsule, hypercardioid headworn mic
- WBH53: WBH53 condenser capsule, omnidirectional headworn mic
- WBH54: WBH54 condenser capsule, supercardioid headworn mic
- WB98H/C: WB98H/C condenser capsule, cardioid instrument clip mic

**紧凑型规格**

**Architectural Specifications**

The wireless bodypack transmitter shall operate in the UHF band and shall provide a tone key (32,768 kHz) to increase reliability and to minimize unwanted noise. The system shall allow to change the operating frequency in 25 kHz steps in order to avoid RF interference, enabling up to 47 systems to operate simultaneously in one frequency band. Preconfigured group, channel and frequency setups shall be available to ensure that multiple systems in use do not interfere with one another. The transmitter shall be programmable through a menu as well as infrared synchronisation. The transmitter shall provide a threaded connector to securely lock microphones or instrument cables. The backlit LC display shall show name, battery gauge, carrier frequency, as well as gain and sensitivity settings. The LCD menu controls should cover separately adjustable gain (-10 to +20 dB) and input sensitivity (attenuation pad: +15, 0, -10 dB), tunable carrier frequency, switchable RF power, frequency and power lock as well as the access to the RF Safety Mode (transmitter operation with muted RF carrier).
## UR1M Micro-Bodypack Transmitter

### Overview

Operating on the premium Shure UHF-R® Wireless platform, the UR1M Micro-Bodypack Transmitter offers superior wireless audio and an industry-leading tuning range – all in a durable, ultra-compact and lightweight form factor.

- Half the size of standard bodypacks
- Optimized instrument input
- User selectable RF power: 10mW and 50mW
- Up to 9 hours battery life (output-power and battery type dependant)
- Selectable alkaline, lithium primary, or NiMH battery curves for accurate power metering
- Audio level metering on body pack
- Backlit LCD
- TQG or Lemo-3 connector types available
- Extended sweat resistance
- Remote monitoring with Wireless Workbench® 5

### Product Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain Adjustment Range</td>
<td>20 dB to +35 dB</td>
</tr>
<tr>
<td>Maximum Input Level</td>
<td>+5 dBu (sensitivity 0 dB), +15 dBu (sensitivity -10 dB)</td>
</tr>
<tr>
<td>Input Impedance</td>
<td>200 kΩ TQG, 6.2 kΩ LEMO3</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>50 Ω</td>
</tr>
<tr>
<td>RF Power Output</td>
<td>10 mW or 1050 mW (region dependent)</td>
</tr>
<tr>
<td>Housing</td>
<td>Cast magnesium</td>
</tr>
<tr>
<td>Connector Types</td>
<td>LEMO 3, TQG</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>2 AAA alkaline, lithium primary, or NiMH batteries</td>
</tr>
<tr>
<td>Battery Life</td>
<td>Alkaline: 6 hours (normal RF power), 4 hours (high RF power)</td>
</tr>
<tr>
<td></td>
<td>Lithium primary: 9 hours (normal RF power), 7 hours (high RF power)</td>
</tr>
<tr>
<td></td>
<td>NiMH: 1000 mAH: 6 hours (normal RF power), 4 hours (high RF power)</td>
</tr>
<tr>
<td>Overall Dimensions</td>
<td>49 mm L x 60 mm W x 17 mm D (1.92 x 2.38 x 0.66 in.)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>62 g (2.2 oz.) without batteries</td>
</tr>
</tbody>
</table>

### Microphone Options

- WL93: WL93 condenser capsule, omnidirectional lavalier mic
- WL183: WL183 condenser capsule, omnidirectional lavalier mic
- WL184: WL184 condenser capsule, supercardioid lavalier mic
- WL185: WL185 condenser capsule, cardioid lavalier mic
- WL50: WL50 condenser capsule, omnidirectional lavalier mic
- WL51: WL51 condenser capsule, cardioid lavalier mic
- WH30: WH30 condenser capsule, cardioid headworn mic
- WCM16: WCM16 condenser capsule, hypercardioid headworn mic
- WBIH3: WBIH3 condenser capsule, omnidirectional headworn mic
- WBIH4: WBIH4 condenser capsule, supercardioid headworn mic
- WBH50: WBH50 condenser capsule, cardioid instrument clip mic

### Architectural Specifications

The wireless bodypack transmitter shall operate in the UHF band and shall provide a tone key (32,768 kHz) to increase reliability and to minimize unwanted noise. The system shall allow to change the operating frequency in 25 kHz steps in order to avoid RF interference, enabling up to 47 systems to operate simultaneously in one frequency band. Preconfigured group, channel and frequency setups shall be available to ensure that multiple systems in use do not interfere with one another.

The transmitter shall be programmable through a menu as well as infrared synchronisation. The transmitter shall provide a threaded connector to securely lock microphones or instrument cables. The backlit LC display shall show name, battery gauge, carrier frequency, as well as gain and sensitivity settings. The LCD menu controls should cover separately adjustable gain (-10 to +20 dB) and input sensitivity (attenuation pad: +15, 0, -10 dB), tunable carrier frequency, switchable RF power, frequency and power lock as well as the access to the RF Safety Mode (transmitter operation with muted RF carrier).