UR3 Plug-on Transmitter
Émetteur plug-on UR3
Handsender UR3
Transmisor de mano UR3
Trasmettitore plug-on UR3
Transmissor Portátil UR3
Носимый передатчик UR3
General Description

The UR3 is compatible with any wired XLR microphone and is an essential component for professional field and media production applications. It is comfortable to hold, features a back-lit display, and the audio level and power indicator LEDs are discreetly hidden.

Features

- UHF-R Audio Reference Companding
- Wide-band tuning (region specific)
- Smart, ergonomic industrial design
- Selectable +12V/+48V phantom power
- Sweepable high-pass filter
- Programmable preset list with copy/paste to other UR3s
- Selectable mic/line input
- 10/50 mW RF power (region specific)
- Discretely located audio and battery life indicators
- IR sync

UR3 Plug-on Transmitter

1. Joystick
   Enter, exit and scroll using the joystick

2. XLR Connection
   Connects to any XLR wired microphone or device output

3. Power LED
   Tri-colored LED, green, amber and red

4. Audio LED
   Tri color LED for audio settings, red is peak

5. IR Window
   For transmitting settings from receiver to transmitter

6. Battery Compartment and Battery Cap Retainer
   Requires 2 AA batteries. Turn cover counter-clockwise to open

7. Power Switch
   Press on, press and hold to turn off
Setup

1. Install batteries and turn power on.
2. Select the appropriate level, mic or line, to match the audio signal source: AUDIO > SENS/GAIN > SENS
3. Plug into an XLR microphone or the output of an audio device.
4. Perform a sound check: Adjust the gain until the audio LED peaks red and flickers amber:
   AUDIO > SENS/GAIN > GAIN

Syncing with a UHF-R Receiver

Align IR windows with a UHF-R receiver and press sync on the receiver. The transmitter displays SYNC SUCCESS.
Joystick

Use the joystick for navigating and setting values.

**ENTER:** Access a menu or save the selected value

**EXIT:** Exit or go back

**UP/DOWN:** Scroll through menus or change a value

### RF Settings

Use the RADIO menu to adjust the following RF settings:

**RADIO Menu**

**SET FREQ:** Adjusts group, channel or frequency.

**RF PWRLVL:** Selects 10 mW or 50 mW power level (region specific)

**DISABLE RF:** Disables RF transmission. **RFF** appears on home screen.

**ENABLE RF (if disabled):** Enables RF transmission.

### Audio Settings

**AUDIO Menu**

**SENS/GAIN > SENS:** Adjusts input level to match audio signal source.

- **MIC:** For microphones or mic-level outputs
- **LINE:** For line-level outputs

**SENS/GAIN > GAIN:** Adjusts audio input to the transmitter.

**PHANTOM:** Adds phantom power for condenser microphones. Select **12V** or **48V** as required for the microphone.

**HPF (LOW-CUT):** High-pass filter. Scroll up to turn on the filter and set the low-frequency rolloff in Hz. (Scroll all the way down to turn off.)

### Utility Menu

**UTILITIES Menu**

**LOCK:** Locks the transmitter to prevent changes to settings.

**MIC PRESET:** Accesses the preset list.

**DISPLAY:** Changes the home screen display format.

**BATTERY:** Sets battery type for more accurate battery life metering.

**CONTRAST:** Adjusts display contrast (press up/down).

**RESTORE:** Restores the factory default settings.
Locking and Unlocking the Transmitter

To lock the transmitter, select UTILITIES > LOCK.

To unlock the transmitter:
1. From the home screen, hold ENTER to the right for 5 seconds or until UNLOCK? appears.
2. Push ENTER again.
   An on-screen key appears showing the joystick sequence to unlock the transmitter.
3. Follow the pattern to unlock the transmitter (up, down, left, right).

Power On Shortcuts

RF Off
Use this to turn on the transmitter without transmitting RF. This allows you to change frequency settings on the transmitter without accidentally interfering with a frequency being used by another transmitter.

1. Hold the joystick to the left (EXIT), power on the transmitter.
   The home screen displays RFOFF.
2. Change and save your frequency settings as you normally would – the transmitter will not broadcast.
3. To transmit RF, power the transmitter off or turn the RF on thru the main menu, MAINMENU > RADIO > ENABLERF.

Lock
Use this shortcut to power on the transmitter with the interface locked. This prevents accidental changes to transmitter settings.

1. While holding the joystick to the right (ENTER), power on the transmitter.
   The home screen displays the lock icon.
2. To unlock the transmitter, hold the joystick to the right (ENTER) for 5 seconds and follow the on-screen instructions.
Microphone Presets Menu

The transmitter holds up to 10 microphone presets. Use this menu to access a list, add, delete presets, or to copy and paste a preset list. Use the list submenu to set, modify or delete selected presets.

Note: The UR3 is shipped with an empty preset list.

Access the preset menu: UTILITIES > MIC PRESET

Accessing Microphone Presets

Access the preset list: UTILITIES > MIC PRESET > LIST

1. Scroll down to select a preset.
2. Press ENTER to access the menu for selected preset.

List Submenu

Use the list submenu to set, modify, or delete presets.

1. Access the preset list: UTILITIES > MIC PRESET > LIST
2. Scroll down to select a preset.
3. ENTER to access the menu for the selected preset.

SET: Activates the selected preset.
MODIFY: Modify the selected preset.
DELETE: Deletes the selected preset.

Modify Presets

To change or modify the presets, you must enter the microphone preset submenu: UTILITIES > MIC PRESET > LIST and select a preset. From the sub-menu you can set, modify, or delete the setting.

Use the joystick to edit values:

ENTER: move to the next value.
UP/DOWN: edit the selected value.
EXIT: exit the preset.

To exit and save: Continue to scroll right, through all fields, until PRESET SAVED appears.

To edit the eight-character name:
1. Highlight the preset name and press the joystick down.
2. Scroll up/down to change the character.
3. Scroll right to move to the next character.
4. To exit, continue to scroll right past the last character.

Copy and Paste Preset List

Use COPY/PASTE to transfer the mic preset list from one plug-on transmitter to another. This function can be used between different transmitter frequency bands.

1. Highlight COPY/PASTE from the mic preset menu on both transmitters. (UTILITIES > MIC PRESET)
   Important: COPY/PASTE must be highlighted on both transmitters.
2. Align the transmitter IR windows and press ENTER on the source transmitter (the transmitter you want to copy from).
3. The display shows SUCCESS on both transmitters after transferring the list.
### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modulation</strong></td>
<td>FM (45 kHz max. deviation)</td>
</tr>
<tr>
<td><strong>Frequency Range</strong></td>
<td>470 – 952 MHz*</td>
</tr>
<tr>
<td><strong>Tuning Bandwidth</strong></td>
<td>up to 80 kHz*</td>
</tr>
<tr>
<td><strong>Antenna Type</strong></td>
<td>Dipole</td>
</tr>
<tr>
<td><strong>Carrier Frequencies</strong></td>
<td>up to 3200, tunable increments: 25 kHz*</td>
</tr>
<tr>
<td><strong>RF Output Power</strong></td>
<td>Selectable: 10 mW, 50 mW max.*</td>
</tr>
<tr>
<td><strong>Power Requirements</strong></td>
<td>2 LR6 AA batteries, 1.5 V, alkaline</td>
</tr>
<tr>
<td><strong>Battery Life</strong></td>
<td>typical, alkaline</td>
</tr>
<tr>
<td><strong>Sensitivity Settings</strong></td>
<td>mic, line</td>
</tr>
<tr>
<td><strong>Gain Adjustment Range</strong></td>
<td>-10 to +20 dB</td>
</tr>
<tr>
<td><strong>Tonekey</strong></td>
<td>32 kHz</td>
</tr>
<tr>
<td><strong>Frequency Stability</strong></td>
<td>±0.0015%</td>
</tr>
<tr>
<td><strong>Spurious Radiation</strong></td>
<td>75 dB</td>
</tr>
<tr>
<td><strong>Equivalent Input Noise</strong></td>
<td>-127.0 dBV A-Weighted (audio front end)</td>
</tr>
<tr>
<td><strong>Maximum Audio Input Level</strong></td>
<td>at 0 dB gain setting:</td>
</tr>
<tr>
<td></td>
<td>LINE setting: +24 dBV</td>
</tr>
<tr>
<td></td>
<td>MIC setting: -21 dBV</td>
</tr>
<tr>
<td><strong>RF Output Power</strong></td>
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<tr>
<td></td>
<td>MIC setting: -21 dBV</td>
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</tbody>
</table>

### Differential Input Impedance

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINE</td>
<td>6 kΩ</td>
</tr>
<tr>
<td>MIC</td>
<td>3 kΩ</td>
</tr>
</tbody>
</table>

### Frequency Response

- +1.5 dB, -3 dB, through a UR4 receiver
  - Overall system frequency response depends on microphone element and receiver.
- 35 Hz–17 kHz

### High Pass Filter

- Two-pole (12 dB per octave), cut off frequency selectable from 40 to 240 Hz
- <0.3%

### System Dynamic Range

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>through a UR4 receiver:</td>
<td>LINE</td>
</tr>
<tr>
<td>MIC</td>
<td>105 dB</td>
</tr>
<tr>
<td>through a UR5 receiver:</td>
<td>LINE</td>
</tr>
<tr>
<td>MIC</td>
<td>100 dB</td>
</tr>
</tbody>
</table>

### Audio Input

- Female XLR Connector, 1=ground, 2=hot, 3=cold
- Phantom Power:
  - +48 V: 48 V (±4 V), 7 mA max.
  - +12 V: 12 V (±1 V), 7 mA max.

### Weight

- 196 g (6.9 oz.), with batteries

### Dimensions

- 117 mm x 36 mm x 44 mm (H x W x D)

*varies by region
## Frequency Range and Transmitter Output Power

<table>
<thead>
<tr>
<th>BAND</th>
<th>FREQ (MHz)</th>
<th>Nominal Output Power (mW)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>470-530</td>
<td>10/50</td>
</tr>
<tr>
<td>G1E</td>
<td>470-530</td>
<td>10/50</td>
</tr>
<tr>
<td>H4</td>
<td>518-578</td>
<td>10/50</td>
</tr>
<tr>
<td>H4HK</td>
<td>518-565</td>
<td>10</td>
</tr>
<tr>
<td>H4E</td>
<td>518-578</td>
<td>10/50</td>
</tr>
<tr>
<td>J5</td>
<td>578-638</td>
<td>10/50</td>
</tr>
<tr>
<td>J5E</td>
<td>578-638</td>
<td>10/50</td>
</tr>
<tr>
<td>J5HK</td>
<td>578-638</td>
<td>10</td>
</tr>
<tr>
<td>K4E</td>
<td>606-666</td>
<td>10/50</td>
</tr>
<tr>
<td>L3</td>
<td>638-698</td>
<td>10/50</td>
</tr>
<tr>
<td>L3E</td>
<td>638-698</td>
<td>10/50</td>
</tr>
<tr>
<td>M5E</td>
<td>694-758</td>
<td>10/50</td>
</tr>
<tr>
<td>P8</td>
<td>710-790</td>
<td>10/50</td>
</tr>
<tr>
<td>P9</td>
<td>710-787</td>
<td>10/50</td>
</tr>
<tr>
<td>Q5</td>
<td>740-814</td>
<td>10/50</td>
</tr>
<tr>
<td>MA24</td>
<td>779-806</td>
<td>10</td>
</tr>
<tr>
<td>R16</td>
<td>794-806</td>
<td>10/50</td>
</tr>
</tbody>
</table>

* conductive into 50 ohms

**10mW only from 863-865 MHz

### NOTE:
This Radio equipment is intended for use in musical professional entertainment and similar applications. 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 RF power levels for wireless microphone products.
WARNING: Danger of explosion if battery incorrectly replaced. Operate only with Shure compatible batteries.

WARNING: Battery packs shall not be exposed to excessive heat such as sunshine, fire, or the like.

LICENSING INFORMATION
Licensing: A ministerial license to operate this equipment may be required in certain areas. Consult your national authority for possible requirements. Changes or modifications not expressly approved by Shure Incorporated could void your authority to operate the equipment. 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 strongly urges the user to contact the appropriate telecommunications authority concerning proper licensing, and before choosing and ordering frequencies.

Information to the user
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.

Note: EMC conformance testing is based on the use of supplied and recommended cable types. The use of other cable types may degrade EMC performance.

Changes or modifications not expressly approved by the manufacturer could void the user’s authority to operate the equipment.