

Features

- UHF-R incorporates automatic frequency selection, transmitter sync and smart menu-driven system functionality for intuitive and fast setup.
- Up to 2400 selectable frequencies across an ultra-wide 60 MHz bandwidth provide superior capability to respond to changing or unpredictable RF conditions.
- UHF-R Wireless features Shure patented Audio Reference Companding for crystal-clear sound beyond the limits of conventional wireless technology.
- UHF-R is available with the Beta 58 – Beta 87.
- Get the latest version of the Wireless Workbench software.

Specifications

Frequency Range and Transmitter Output Power

Band	Range	Transmitter power (mW)	
		Handheld	Bodypack
G1	470-530 MHz	10 / 50	10 / 100
H4E, H4	518-578 MHz	10 / 50 10 / 50	10 / 50 10 / 100
J5E, J5	578-638 MHz (578-608, 614-638)	10 / 50 10 / 50	10 / 50 10 / 100
L3E, L3	638-698 MHz	10 / 50 10 / 50	10 / 50 10 / 100
Q5	740-814 MHz	10 / 50	10 / 50
R9	790-865 MHz	10 / 50	10 / 50
Q6	740-752 MHz	10	10
A24	779-788 / 797-806 MHz	10	10
JBX	806-810 MHz	10	10
Q10	740-798 MHz	10 / 50	10 / 50
X1	944-952 MHz	10 / 50	10 / 100

RF Carrier Frequency Range

470-952 MHz, depending on region

Working Range

UR1, UR2, UR1M: 150 m (500 ft.), under typical conditions
500 m (1600 ft) line-of-sight, outdoors
for a single system

NOTE: Actual working range depends on 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

Gain Adjustment Range

UR1, UR1M: -20 to +35 dB
UR2: -10 to +20 dB

Modulation

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

RF Power Output

See table above.

Dynamic Range

>105 dB, A-weighted

Image Rejection

>110 dB typical

RF Sensitivity

UR4S	UR4D
-110 dBm Typical 12 dB SINAD	-107 dBm Typical 12 dB SINAD
-105 dBm Typical 30 dB SINAD	-102 dBm Typical 30 dB SINAD

Spurious Rejection

>90 dB typical

Ultimate Quieting (ref. 45 kHz deviation)

>100 dB, A-weighted

Signal Polarity

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.

System Distortion (ref. ± 45 kHz deviation, 1 kHz modulation)

<0.3% Total Harmonic Distortion typical

Power Requirements

UR1, UR2: Two 1.5V AA batteries
UR1M: Two 1.5V AAA alkaline, lithium primary, and NiMH batteries
UR4: 100 to 240 Vac, 50/60 Hz

Current Drain

UR1, UR2: 180 mA max. (normal RF power setting)
 240 mA max. (high RF power setting)
UR1M: 130 mA max. at 3V (normal RF power setting)
 200 mA max. at 3V (high RF power setting)
UR4D, UR4S: 0.8 Amps max.

Battery Life (Typical)

UR2: 9.5 hours (low power)
6 hours (high power)

Operating Temperature Range

-18° to +57° C (0° to +135° F)

NOTE: Battery characteristics may limit this range

NOTE: Electrical safety approval is based on a maximum ambient temperature of 35°C (95°F).

Overall Dimensions

UR1: 98 mm L x 60 mm W x 17 mm D (3.84 x 2.38 x 0.66 in.)
UR1M: 49 mm L x 60 mm W x 17 mm D (1.9 x 2.38 x 0.66 in.)
UR2/SM58: 261 mm L x 51 mm Dia. (10.27 x 2 in.)
UR2/SM86: 261 mm L x 51 mm Dia. (10.27 x 2 in.)
UR2/SM87A: 254 mm x 51 mm Dia. (10 x 2 in.)
UR2/BETA 58: 258 mm L x 51 mm Dia. (10.15 x 2 in.)
UR2/BETA 87A, UR2/BETA 87C: 254 mm x 51 mm Dia. (10 x 2 in.)
UR2/KSM9/BK, UR2/KSM9/SL: 250 mm x 49 mm Dia. (9 7/8 x 15/16 in.)
UR4S/UR4D: 44 mm H x 483 mm W x 366 mm D (1.72 x 19.00 x 14.39 in.)

Net Weight

UR1: 97 g (3.4 oz.) without battery
UR1M: 62 g (2.2 oz.) without batteries
UR2/SM58: 356 g (12.6 oz.) without battery
UR2/BETA 58: 314 g (11.1oz.) without battery
UR2/SM86: 317 g (11.2 oz.) without battery
UR2/SM87A: 298 g (10.5 oz.) without battery
UR2/BETA 87A, U2/BETA 87C: 325 g (11.5 oz) without battery
UR2/KSM9/BK, UR2/KSM9/SL: 410 g (14.4 oz.) without battery
UR4S: 4.8 kg (10.6 lbs)
UR4D: 5.0 kg (11.0 lbs)

Housing:

UR1, UR1M: Cast magnesium
UR2: Aluminum die-cast handle and aluminum machined battery cup
UR4S, UR4D: Galvanized steel