



UC Wireless Microphone Systems

# UC Wireless

## UHF SYSTEM





UC4 MARCAD® Diversity Receiver

UC2 Handheld Transmitters



UC2/87 UC2/58  
UC2/Beta 87A UC2/Beta 58  
UC2/Beta 87C



UC1 Body-pack Transmitter



Rack of 4 UC4 Wireless Receivers  
with UA845 Antenna/Power Distribution System

## Make It Easy on Yourself

The Shure UC gives you more of what you want most in a UHF wireless microphone system.

Its flexibility makes it the ideal choice for a wide range of applications. Its ease of operation eliminates the extended learning curve you'd expect from such a high-performance system. Its reliability assures you that you're in for years of trouble-free performance.

In other words, the UC Wireless System lets you make it easy on yourself.

What more could you ask?

## All the Right Features

Shure's UC Wireless System offers the kind of sound-enhancing, time-saving features professional users want most, including:

- The advantages of UHF operation, for minimal interference.
- Frequency agility, which allows you to quickly and easily change frequencies to avoid interference. Choose from over 100 frequencies (international versions may vary).
- Up to 32 system simultaneous operations (international versions may vary).
- The versatility of interchangeable microphone elements from the world's most renowned collection. Choose from a selection of body-pack microphones (lavalier, headworn, instrument or cable) and handheld microphones (SM58, Beta 58A, SM87 or Beta 87®).
- MARCAD® diversity circuitry provides superior reception and exceptional freedom from dropouts.
- Space-saving, half-rack receiver design.
- Built-in adjustable EQ on receiver tailors frequency response to fine tune your system.
- Tone key squelch circuitry prevents unwanted noise from entering the system.
- Noise squelch circuitry virtually eliminates annoying noise bursts.
- TTL logic output terminal on receiver features removable block connector to control external devices based on the status of the UC system.

In short, the Shure UC Wireless System is the professional solution for a wide range of applications.

## Easy to Operate

The Shure UC Wireless is extremely user friendly and intuitive.

- Easy-to-use screwdriver adjustable controls on transmitter and receiver.
- Extensive LED metering on receiver front panel keeps user informed of the status of important functions, including:
  - Dual RF meters and Antenna Diversity LEDs that make it easier to identify "dead spots" in the performing area.
  - Audio meter that monitors received audio level and helps optimize transmitter gain setting.
  - Group/Channel display that indicates current group and channel settings and facilitates easy set-up of multiple channel systems.
  - Low transmitter battery warning LED.
- Three-segment battery fuel gauge on transmitters indicate amount of battery life remaining.
- Transmitter input gain potentiometers and body-pack attenuator switch (0, -20dB) make it easy to set up your transmitter for any application.
- Combined transmitter power on/off and mute switch saves time and hassle.

## Legendary Shure Reliability

When it comes to reliability, the UC Wireless System is built to deliver years of problem-free performance.

- Rugged design and construction of receiver, handheld and body-pack resists day-to-day abuse, year after year.
- Shure's proven record of microphones and transmitter performance is legendary.
- Diagnostic features alert user to potential problems before they occur.

## Accessory Enhancements

The Shure UC Wireless comes with everything you need to operate the system. But you can enhance the system to new levels with a choice of accessories (all of which are available separately), including:

- UA101 Remote Audio Mute Switch for body-pack transmitter. Allows external audio/RF muting of body-pack during performances.
- UA220 Passive Antenna Splitter/Combiner Kit. Combines two diversity receivers while using only two antennas or allows four antennas to be fed into one diversity receiver.
- UA845 Antenna/Power Distribution System. Combines up to five UC4 receivers and powers up to four with only two antennas.
- UA500 Remote Mount Antenna Kit. Includes mounting bracket and  $\frac{1}{2}$  wave antenna for receiver.
- UA600 Front Mount Antenna Kit for receiver (not shown).
- UA870 Directional Antenna (for use with UA845).

## A Tradition of Value

The UC Wireless is just one of Shure's full line of proven wireless systems and other products designed for the installed sound professional. Each one comes with unparalleled service and support. Which is precisely what you've come to expect from 75 years of leadership in state-of-the-art sound reinforcement products.



WM98-Miniature instrument microphone



WL185-Cardioid lavalier microphone



WL184-Supercardioid lavalier microphone



WL183-Omnidirectional lavalier microphone



WL93-Omnidirectional micro-miniature lavalier microphone



WA302-Instrument cable

not pictured: WL50 & WL51 subminiature lavaliers,  
Beta 98H/C clip-on instrument microphone

WH20 Dynamic,  
WH30 Condenser  
Headworn Microphones

WCM16 Headworn  
Condenser Microphone



Beta 53, Beta 54 Headworn Condenser  
Microphones (Available in black or tan)



UA845 Antenna/Power Distribution System

UA101 Remote Mute  
Switch for Body-pack



UA220 Passive Antenna  
Splitter/Combiner Kit

PS40 Power Supply  
for UC4 Receiver  
(included)



UA500 Remote Mount  
Antenna Kit



## Specifications

### RF Carrier Frequency Range

692-862 MHz (692-806 MHz in the U.S.)

### Working Range

152.4 m (500 ft.), minimum, under typical conditions; 487.6 m (1600 ft.) line of sight. NOTE: Actual working range depends on RF signal absorption, reflection and interference

### Audio Frequency Response

45 to 15,000 Hz,  $\pm 2$  dB. NOTE: Overall system frequency response depends on the microphone element

### Gain Adjustment Range

UC1: -6 to 34 dB

UC2: -6 to 26 dB

### Modulation

$\pm 45$  kHz deviation compressor-expander system with pre- and de-emphasis (International versions may vary)

### RF Power Output

UC1, UC2: 50 mW, typical (International versions may vary)

### Dynamic Range

>100 dB, A-weighted (International versions may vary)

### Receiver Audio Output Level (Maximum)

+5 dBu typical, unbalanced output

+14 dBu typical, balanced output

### RF Sensitivity

UC4: -108 dBm at 12 dB SINAD

### Image Rejection

90 dB typical

### Spurious Rejection

70 dB typical

### Ultimate Quieting (ref. 45 kHz deviation)

>100 dB, A-weighted

### Audio 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  $\frac{1}{4}$ -inch output

### System Distortion (ref. $\pm 45$ kHz deviation, 1 kHz modulation)

0.4% Total Harmonic Distortion typical

### Power Requirements

UC1, UC2: 9V alkaline battery ; Nicad optional

UC4: 15 Vdc, 600 mA 50/60 Hz

Power Consumption: 600 mA x 15 V, maximum

### Transmitter Battery Life (Typical)

8 hours

### Operating Temperature Range

-7° to 49°C (20° to 120°F) NOTE: Battery characteristics may limit this range

### Overall Dimensions

UC1: 99.06 mm L x 63.50 mm W x 22.86 mm D

(3<sup>29</sup>/<sub>32</sub> in. L x 2<sup>1</sup>/<sub>2</sub> in. W x 2<sup>9</sup>/<sub>32</sub> in. D)

UC2/58: 241.30 mm L x 50.80 mm D (9<sup>1</sup>/<sub>2</sub> in. L x 2 in. D)

UC2/BETA 58: 241.30 mm L x 50.80 mm D (9<sup>1</sup>/<sub>2</sub> in. L x 2 in. D)

UC2/87: 215.90 mm L x 50.80 mm D (8<sup>1</sup>/<sub>2</sub> in. L x 2 in. D)

UC2/BETA 87: 215.90 mm L x 50.80 mm D (8<sup>1</sup>/<sub>2</sub> in. L x 2 in. D)

UC4: 44.50 mm H x 197.40 mm W x 214.30 mm D

(1<sup>3</sup>/<sub>4</sub> in. L x 7<sup>7</sup>/<sub>100</sub> in. W x 8<sup>1</sup>/<sub>25</sub> in. D)

### Net Weight

UC1: 73.50 g (2.59 oz.) without battery

UC2/58, U2/BETA 58: 311.90 g (11 oz.) without battery

UC2/87, U2/BETA 87: 198.50 g (7 oz.) without battery

UC4: 1.22 kg (2 lbs., 11 oz.)

### Certification

UC1, UC2: Type Accepted under FCC Parts 74. Certified by IC in Canada under TRC-78.

UC4: UL and cUL Listed to UL 813 and CSA C22.2 No. 1. VDE Certified to EN 60 950. Approved under the Notification provision of FCC Part 15; Certified by IC in Canada under TRC-78.

**SHURE**<sup>®</sup>  
It's Your Sound<sup>®</sup>

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