

Equipment Description

The WRT-807B is a UHF-synthesized wireless microphone for use in a 800-MHz band UHF-synthesized wireless microphone system.

The WRT-807B operates in conjunction with the WRR-800A/801A/802A/805A, MB-806A UHF Synthesized Tuner for vocal concentration.

The WRT-807B can be also used with existing Sony wireless microphone systems consisting of the WRT-810A/820A/822A/830A UHF Synthesized Transmitter and WRR-810A/820A/840A/850A UHF Synthesized Tuner.

The microphone/transmitter and tuners of the wireless microphone system are classified by frequency band.

A 24 MHz frequency band (or four consecutive-numbered TV channels, such as 66 and 69 of the U66 model) is assigned to each microphone/transmitter and tuner model. In building up a UHF wireless microphone system, be sure to combine a microphone/transmitter and a tuner having the same TV channel number.

For the selectable wireless channels and frequencies, see "Wireless Channel Lists".

Features

Phase Locked Loop (PLL) synthesized system

The WRT-807B features a refined phase locked loop (PLL) synthesizer circuit.

POWER switch with holding function

The POWER switch can be locked in the ON position to protect against accidental power cut-offs.

Low-battery notification on tuner

When the microphone battery is low, the microphone sends a warning to the WRR-800A/801A/802A/805A/850A, MB-806A in the form of "Battery status information."

This information is sent to the WRR-800A/801A/802A/805A/850A, MB-806A about one hour before the battery goes dead to allow the battery to be safely replaced.

When the WRR-800A/801A/802A/805A/850A, MB-806A receives this information, the LED and the LCD on tuner panel start to flash.

Powered by readily available battery type

The built-in, high-efficiency DC-DC converter provides about five hours of continuous and stable operation with just a single LR6 (size-AA) alkaline battery.

LCD readout of various information

The microphones LCD shows the current channel number, frequency, input attenuation setting, and residual battery power.

The accumulated battery use time is also indicated (in one-minute increments) to allow precise monitoring of battery use.

Automatic saving of channel and input attenuation settings

All channel and input attenuation settings are automatically saved when the microphone is turned off (and are maintained even when the battery is removed), thus eliminating the need to make the same settings again the next time you use the microphone.

Highly reliable electronic attenuator

Adjustable in a range of 0 dB to 21 dB in 3-dB steps, the built-in input level attenuator reduces signal distortion during the input of excessively strong audio signals.

Tone signal-incorporated RF carrier signal

The microphone transmits an RF carrier signal that incorporates a tone signal to enable any tuner with a tone squelch circuit to pick out only the target audio signal.

Wide dynamic range and low noise

The microphones compander (compressor/expander) system enables transmission over a wide dynamic range with minimum noise.

Notes on operation

- When operating two or more microphones, keep the microphones separated from each other by a distance of at least 30 cm (1 foot).
- Keep microphones at least 3 meters (10 feet) away from the receiving antenna.

Specifications

Transmitter and modulator section

Oscillator

Crystal controlled PLL
synthesizer
F3E

Type of emission

Carrier frequencies

U62 model:

758.125 to 781.875 MHz
(TV channels 62 and 65)

U66 model:

782.125 to 805.875 MHz
(TV channels 66 and 69)

RF power output

Tone signal

Battery condition signal

Type of antenna

10 mW (50-ohm load)

32.768 kHz

32.782 kHz

1/4 -wavelength wire

Audio section

Microphone type

Pre-emphasis

Deviation

Frequency response

Signal-to-noise ratio

Audio attenuator

Input level

uni-directional dynamic

microphone

50 μ s

± 5 kHz (94 dB_{SPL}¹⁾, 1 kHz input)

50 to 15,000 Hz

57 dB or more (A-weighted,

modulation frequency 1 kHz,

with ± 5 kHz deviation at WRR-

800A/801A)

0 to 21 dB, variable in 3-dB

steps

151 dB_{SPL}

(at audio attenuator 21 dB)

Power section

Power requirements

1.5 V DC

(one LR6/size AA alkaline

battery)

Approx. 5 hours at 25°C or

77°F, with Sony LR6 alkaline

battery

Battery life

General

Operating temperature

Storage temperature

0°C to +50°C (32°F to 122°F)

-30°C to +60°C (-22°F to

+140°F)

Dimensions

51 $\times$ 238 mm (diameter/length)

not including antenna

(2-1/8 $\times$ 9-3/8 inches)

Approx. 440 g (15.5 oz)

including battery

Mass

Supplied accessory

Operating Instructions (1)

Microphone holder (1)

Screw adaptor PF 1/2 to NS 5/8 (1)

Design and specifications are subject to change without

notice.

1) 0 dB_{SPL} = 2×10^{-5} Pa