SONY

UHF Synthesized Transmitter Unit

WRT-847B

Capsule Units

CU-F780/G780/E700/E672/F117

Since its introduction, the unique qualities of the Sony 800 Series UHF Wireless Microphone System have been proved in many different applications. It has been particularly successful in quality-critical applications such as broadcasting and productions, where its attributes of wide audio dynamic range, low noise, stable RF transmission and reception, and high reliability have been vital factors.

Building on this success, Sony now introduces an addition to the 800 Series UHF Wireless Microphone family — the newly-developed WRT-847 UHF Synthesized Transmitter Unit together with a range of five interchangeable microphone capsules. These five types of optional capsules enable the WRT-847 to cover a very wide range of applications. The CU-F780, CU-G780 and CU-E700 capsules are designed for vocal and speech applications in broadcasting, live music performances and concert halls, while the CU-E672 and CU-F117 options are suitable for interviews in news gathering and field productions.

The WRT-847 UHF Synthesized Transmitter Unit is fully compatible with existing Sony receiving systems, allowing flexible simultaneous multi-channel operation.

WRT-847 — UHF Synthesized Transmitter Unit

- The WRR-847B model operates over a 24 MHz frequency band between 470 MHz and 806 MHz (UC). The operating frequency of the WRR-847B specifically accommodates the re-allocation of wireless operation frequency band due to the advent of Digital TV broadcasting.
- Five optional microphone capsules are available, providing a choice of characteristics that suit a range of different applications. Microphone capsules are available individually. (One head is required for the WRT-847 to function.)
- Audio compander time constant (TC) switchable between short and long to suit capsule application.
- Selectable RF output level: 10 mW for multi-channel operation and 50 mW for long working distance.
- Audio gain and attenuation setting from +9 dB to -12 dB in 3 dB steps.
- Lockable power switch to avoid accidental power off.
- Easy-to-read LCD with back light indicates extensive information on operating conditions such as channel number, wireless channel frequency in MHz, audio input level, compander time constant, battery status and accumulated battery operating time.
- Battery status information is transmitted to the receiver and shown on an LCD*2 for additional assurance of continuous operation.
- Approximate Height*3 hours of continuous operation is provided by two AA-size (LR6) alkaline batteries.

WRT-847B
UC: 470 MHz to 806 MHz, TV channels 14 to 69
(14 frequency bands, divided into 24 MHz range. All 14 frequency bands may not be available in some areas.)
For details, please consult your nearest Sony office.

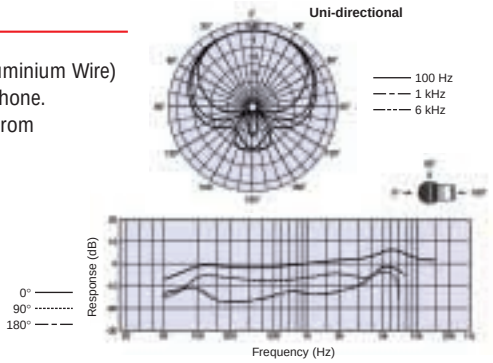
*2 Available only on the WRR-802/WRU-806/WRR-850/WRR-862.
*3 Operating at 10 mW RF output level.

Microphone Capsule Units for the WRT-847

CU-F780

- Dynamic microphone capsule with super cardioid polar pattern.
- Uses the same high quality edgewise winding CCAW (Copper Clad Aluminium Wire) voice coil which is employed in the Sony F-780 wired dynamic microphone.
- Designed for vocal and speech use over a wide range of applications, from broadcasting to live music performances and concert halls.

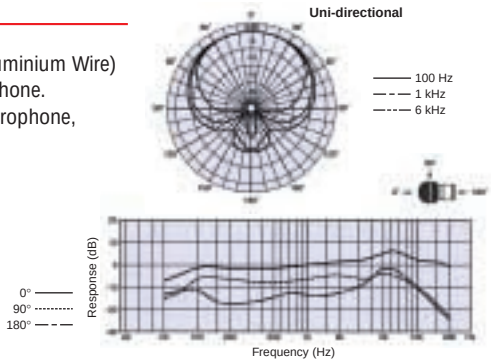
Frequency response:	50 Hz to 18 kHz
Directivity:	Uni-directional (super cardioid)
Dimensions:	ø51 x 90 mm (ø2 1/8 x 3 5/8 inches)
Mass:	180 g (6.3 oz)



CU-G780

- Dynamic microphone capsule with super cardioid polar pattern.
- Uses the same high quality edgewise winding CCAW (Copper Clad Aluminium Wire) voice coil which is employed in the Sony F-780 wired dynamic microphone.
- Special design considerations, based on the capsule of Sony F-780 microphone, in order to cope with High SPL (Sound Pressure Level) vocals and incorporate outstanding feedback rejection.
- Designed for vocal use over a wide range of applications, from broadcasting to live music performances and concert halls.

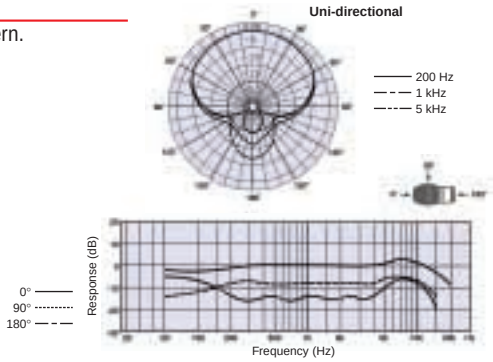
Frequency response:	50 Hz to 20 kHz
Directivity:	Uni-directional (super cardioid)
Dimensions:	ø51 x 90 mm (ø2 1/8 x 3 5/8 inches)
Mass:	180 g (6.3 oz)



CU-E700

- Electret condenser microphone capsule with super cardioid polar pattern.
- Smooth frequency response for natural sound re-production.
- Suitable for vocal and speech applications in broadcasting, live musical performances and concert halls.

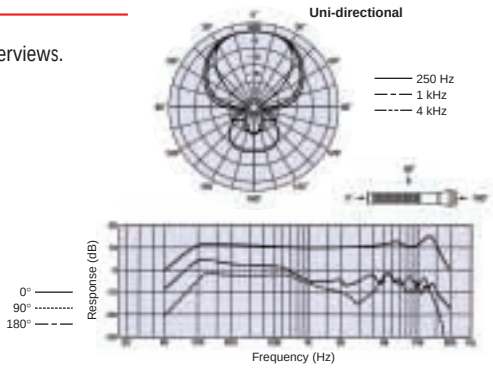
Frequency response:	50 Hz to 18 kHz
Directivity:	Uni-directional (super cardioid)
Maximum SPL:	150 dB
Dimensions:	ø51 x 98 mm (ø2 1/8 x 3 7/8 inches)
Mass:	170 g (6.0 oz)



CU-E672

- Hyper cardioid electret condenser microphone capsule
- A wide variety of applications in news-gathering, sports events and interviews.
- The supplied wind screen reduces wind noise and popping.

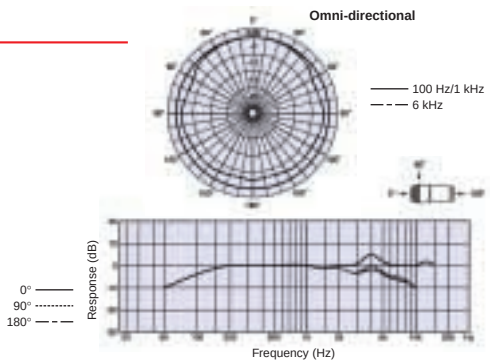
Frequency response:	50 Hz to 16 kHz
Directivity:	Uni-directional (hyper cardioid)
Maximum SPL:	120 dB
Dimensions:	ø37 x 172 mm (ø1 1/2 x 6 7/8 inches)
Mass:	150 g (5.3 oz)
Supplied Accessory:	Urethane wind screen (x 1)



CU-F117

- Omni-directional dynamic microphone capsule.
- Superb rejection of wind noise and popping.
- Designed for interview applications.

Frequency response:	50 Hz to 15 kHz
Directivity:	Omni-directional
Dimensions:	ø44 x 105 mm (ø1 3/4 x 4 1/4 inches)
Mass:	170 g (6.0 oz)
Supplied Accessory:	Urethane wind screen (x 1)



Oscillator:	Crystal controlled PLL synthesizer
Type of emission:	F3E
Carrier Frequencies: **WRT-847B** **UC:**	470 to 806 MHz (Selectable 24 MHz frequency band from 470 MHz to 806 MHz)
RF power output:	10 mW/50 mW selectable (50 Ω load)
Tone signal:	32.768 kHz
Type of antenna:	1/4 wave length whip
Pre-emphasis:	50 µs
Frequency response:	50 Hz to 15 kHz
System dynamic range:	96 dB or more (101 dB typical)
Headroom:	36 dB at ±5 kHz deviation at 1 kHz modulation
Signal to noise ratio:	60 dB or more (A-weighted, modulation frequency 1kHz, with ±5 kHz deviation.)
Audio gain control:	-12/-9/-6/-3/0/3/6/9 dB (in 3 dB steps)
Max. input level:	-7 dBV (at audio gain -12 dB)
Max. input sound pressure level:	142 dB SPL* (with CU-F780/G780/E700/F117 at audio gain -12 dB) 120 dB SPL* (with CU-E672)
Power requirements:	DC 3.0 V (two LR6 AA-size alkaline batteries)
Battery life:	Approx. 8 hours at 25°C (77°F) with Sony LR6 alkaline batteries, at 10 mW RF output
Dimensions:	ø37 x 150 mm (ø1 1/2 x 6 inches) without two antennas
Mass:	Approx. 150 g (0.3 oz) without batteries
Supplied accessories:	Microphone holder (x 1), Channel color seal (x 1), Soft case (x 1), Stand adaptor (AU & CE: PF1/2 to W3/8 type, UC: PF1/2 to W5/8 type)

*dB SPL= 2 x 10^{-5} Pa

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