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SPECIFICATIONS

RF Carrier Frequency Range

A Band: 797–806 MHz

B Band: 806–810 MHz

Working Range

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

Audio Frequency Response

45 to 15,000 Hz, ± 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

± 15 kHz deviation nominal, ± 25 kHz maximum; compressor-expander system with pre-and de-emphasis

RF Power Output

UC1, UC2: 10 mW, typical

Dynamic Range

>85 dB, A-weighted

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. 15 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 $1/4$ -inch output

System Distortion (ref. ± 15 kHz deviation, 1 kHz modulation)

0.4% Total Harmonic Distortion typical

Power Requirements

UC1, UC2: 9V alkaline battery (Duracell MN1604 recommended); Nicad optional

UC4: 15 Vdc, 600 mA 50/60 Hz

Power Consumption: 600 mA x 15 V, maximum

Transmitter Battery Life (Typical)

8 hours (with Duracell MN1604 9V alkaline battery)

Operating Temperature Range

-7° to 49° C **NOTE:** Battery characteristics may limit this range.

Overall Dimensions

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

UC2/58: 241.30 mm L x 50.8 mm Dia.

UC2/BETA 58: 241.30 mm L x 50.80 mm Dia

UC2/87: 215.90 mm x 50.80 mm Dia.

UC2/BETA 87: 215.90 mm L x 50.8 mm Dia.

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

Net Weight

UC1: 73.50 g without battery

UC2/58, U2/BETA 58: 311.9 g without battery

UC2/87, U2/BETA 87: 198.5 g without battery

UC4: 1.22 kg

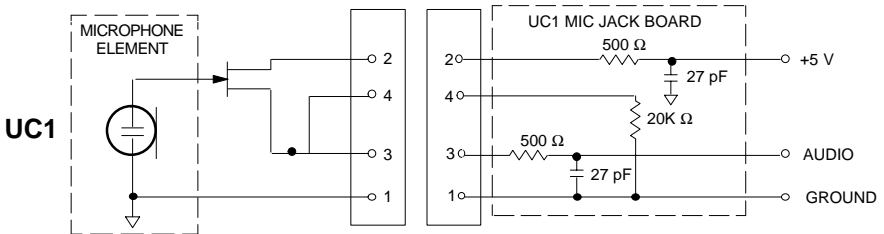
Certification

UC1, UC2: Meets MKK requirements.

UC4: Meets MKK requirements.

UC1 Transmitter Input (Figure 1)

Connector:	4-Pin female miniature connector, TA4F or LEMO connector (optional)
Input Configuration:	Unbalanced, active
Actual Impedance:	18 k Ω with lavalier microphone 1 M Ω with instrument cable
Maximum Input Level:	9 V _{p-p} (10 dBV) for 1% THD at minimum gain setting using 1 kHz signal.
Miniature Connector (TA4F) Pin Assignments:	Pin 1: Tied to Ground Pin 2: Tied to +5 V Pin 3: Tied to Audio Pin 4: Tied thru 20k Ω Resistor to Ground. (On instrument adapter cable, Pin 4 floats)
LEMO Connector Pin Assignments:	Pin 1: Tied to Pin 3 and 10 k Ω to Ground Pin 2: +5V Pin 3: Tied to Pin 1 Pin 4: Tied to Shield (Ground for Positive Bias)
Voltage for Remote Power:	+5 V supplied to microphone cartridge



NOTE: LAVALIER MIC TIES PINS 3 AND 4 TOGETHER; GUITAR CABLE DOES NOT.

FIGURE 1

UC1 Transmitter Output

Antenna:	Flexible 1/4 wave wire
Actual Impedance:	50 Ω
Nominal Output Level:	+10 dBm
Maximum Output Level:	+10 dBm

UC2 Transmitter Input

Input Configuration:	Unbalanced, active
Actual Impedance:	25 k Ω
Maximum Input Level:	9 V _{p-p} (10 dBV) for 1% THD at minimum gain setting using 1 kHz signal.

UC2 Transmitter Output

Antenna:	Internal dipole
Actual Impedance:	50 Ω
Nominal Output Level:	+10 dBm
Maximum Output Level:	+10 dBm

UC4 Receiver Input

Connector:	Antenna	Power Input
Connector Type:	BNC	dc style
Actual Impedance:	50 Ω	—
Nominal Input Level:	-95 to -30 dBm	15 Vdc
Maximum Input Level:	+6 dBm (-20 dBm recommended)	17 Vdc
Pin Assignments:	Shell = Ground Center = Signal	Center pin positive

UC4 Receiver Output

Connector:	High Z Audio	Low Z Audio
Output Configuration:	Unbalanced	Balanced
Actual Impedance:	1 k Ω	44 Ω
Nominal Input Level:	—	—
Output Level:	5 dBu maximum	14 dBu maximum
Pin Assignments:	Tip = Hot Ring/ Sleeve = Gnd	1 = Ground 2 = Hot 3 = Hot

FURNISHED ACCESSORIES

Microphone Stand Adapter (UC2)	WA370A
Zipper Bag (UC1)	26A13
Zipper Bag (UC2)	26A14
Screwdriver	80A498
1/4 Wave Antenna	UA400

OPTIONAL ACCESSORIES

Instrument Adapter Cable (UC1)	WA302
4-Pin Female Miniature Connector, TA4F(UC1)	WA330
In-Line Audio Switch (UC1)	WA360
1.8 Meter (6 ft) Receiver-Mixer Cable (1/4" phone to XLR)	WA410
0.6 Meter (2 ft.) Antenna Extension Cable	UA802
7.6 Meter (25 ft) Antenna Extension Cable	UA825
15.2 (50 ft) Meter Antenna Extension Cable	UA850
In-Line Active Remote Antenna Kit (782 – 810 MHz) (If using the UA845-UB Antenna/Power Distribution System)	UA830A
Antenna/Power Distribution System, 100 Vac	UA845-UA
Directional Antenna for UC4 Receiver (If using the UA845-UA Antenna/Power Distribution System)	UA870A
Remote Mute Switch for UC1	UA101
Passive Antenna Splitter/Combiner	UA220
1/2 Wave Omnidirectional Antenna for UC4 Receiver	UA820A
Remote Mount Antenna Kit	UA500
Front Mount Antenna Kit	UA600

REPLACEMENT PARTS

Hardware Kit (screwdriver, mounting feet, cable clamps)	90VX1371
Bulkhead Adapters for Front-Mounting Antennas	95A8647
15 Vdc Power Cord (100 Vac)	PS40J
SM58 Cartridge with Grille (UC2/58)	R158
BETA 58A Cartridge with Grille (UC2/BETA 58)	R179
SM87 Cartridge with Grille (UC2/87)	R165
BETA 87A Cartridge with Grille (UC2/BETA 87A)	R166
BETA 87C Cartridge with Grille (UC2/BETA 87C)	RPW100
Matte Silver Grille (UC2/58)	RK143G
Matte Silver Grille (UC2/BETA 58)	RK265G
Matte Silver Grille (UC2/BETA 87A)	RK313G
Black Grille (UC2/87C)	RK214G
Black Grille (UC2/BETA 58)	RK323G
Black Grille (UC2/BETA 87A)	RK324G
Belt Clip (UC1)	44A8013
Mounting Brackets, Long	53A8458
Mounting Brackets, Short	53A8454
Mounting Brackets, Link	31A8138
UC4 Logic Connector (Phoenix)	95A8580

JB Models (806 MHz – 810 MHz)

		GROUP									
		GRP. 0	GRP. 1	GRP. 2	GRP. 3	GRP. 4	GRP. 5	GRP. 6	GRP. 7	GRP. 8	GRP. 9
C H A N N E L	0										
	1		806.125	806.250	806.625	806.750	807.625	807.250			
	2		806.375	806.500	806.875	807.500	808.125				
	3		807.125	807.000	807.375	808.000	808.375				
	4		807.750	807.875	808.250	809.125	808.750				
	5		809.000	808.500	808.625	809.375	809.625				
	6		809.500	808.875	809.250	809.750					
	7										
	8										
	9										
	A										
	B										
	C										
	D										
	E										
F											

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