



# Getting Good Audio Shouldn't Be A Leap Of Faith

Field-proven UHF performance  
and professional sound quality  
that won't let you down!

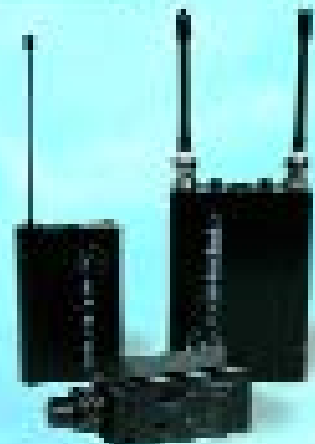
U100 Series Wireless Microphone Systems  
deliver high-flying features: 100 PLL-

synthesized switchable channels •  
True Diversity operation • Rugged  
metal construction • Helical filter  
receiver design • Balanced  
audio output with level  
control • Headphone  
jack with volume  
control • Removable  
receiver antennas •  
And more! "Drop in"

to your A-T dealer, or  
check out the U100 Series at:  
[www.audio-technica.com](http://www.audio-technica.com)



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U100 Series Available as:  
ATW-U101 Body-pack System  
ATW-U102 Plug-on System

# U100 Series

## Camera-mount UHF Wireless Microphone Systems



### ATW-U101 Body-pack System

Includes ATW-R100 Receiver and ATW-T101 Body-pack Transmitter

### ATW-U102 Plug-on System

Includes ATW-R100 Receiver and ATW-T102 Plug-on Transmitter

**U100 Series Systems combine field-proven RF design and outstanding sound quality with a host of professional features!**

- 100 PLL-synthesized channels selectable via switches on receiver and transmitter.
- True Diversity operation selects the better signal from two independent receiver sections, reducing dropouts.
- Robust, rock-solid RF design proven in demanding commercial applications.
- Operation in TV channels 57-59 avoids interference from newly-reallocated frequency bands in TV channels 60-69.
- Frequency-agility allows operation in both analog and DTV operating environments.
- Receiver and transmitters feature rugged metal construction.
- Helical filter receiver design improves rejection of unwanted signals.
- Balanced audio output with level control.
- Removable receiver antennas with BNC connectors.
- Receiver operates on two internal 9V batteries or external 12V DC.
- Headphone jack with volume control.
- Body-pack transmitter features industry-standard TB5M 5-pin mic input connector.

## Specifications†

### Overall System

<b>Operating Frequency</b>	UHF band, 728.125 - 740.500 MHz
<b>Number of Channels</b>	100 total
<b>Frequency Stability</b>	±0.005%, Phase Lock Loop frequency control
<b>Modulation Mode</b>	FM
<b>Normal Deviation</b>	±10 kHz
<b>Operating Range</b>	ATW-U101: 300' typical ATW-U102: 200' typical
<b>Operating Temperature Range</b>	41°F (5°C) to 113°F (45°C)
<b>Frequency Response</b>	100 Hz to 15 kHz

### ATW-R100 Receiver

<b>Receiving System</b>	Dual independent receivers, automatic switching diversity
<b>Image Rejection</b>	35 dB nominal
<b>Signal-to-Noise Ratio</b>	107 dB at 30 kHz deviation (IEC-weighted), maximum modulation 75 kHz
<b>Total Harmonic Distortion</b>	<1% (10 kHz deviation at 1 kHz)
<b>Sensitivity</b>	26 dBuV, (S/N 60 dB at 5 kHz deviation, IEC-weighted)
<b>Intermediate Frequency</b>	45 MHz, 10.7 MHz
<b>Audio Output (balanced)</b>	31.6 mV (at 1 kHz, ±5 kHz deviation, 10k ohm load)
<b>Monitor Headphone Output (typical)</b>	75 mW max. total at 1 kHz, 1% T.H.D., into 32 ohm (each channel) stereo headphones

<b>Monitor Headphone Jack</b>	3.5 mm TRS, signal on both Tip and Ring
<b>Output Connector (balanced)</b>	XLRM-type
<b>External Power Requirements</b>	12V DC nominal, 200 mA
<b>Batteries</b>	Two 9V (NEDA type 1604) alkaline, not included
<b>Current Consumption</b>	130 mA typical
<b>Battery Life</b>	Approximately 5-7 hours (depending on battery type and use pattern)
<b>Dimensions</b>	3.35" (85.0 mm) W x 4.53" (115.0 mm) H x 1.42" (36.0 mm) D
<b>Net Weight (without batteries)</b>	12.0 oz (340 grams)
<b>Accessories Included</b>	Two flexible UHF antennas

### ATW-T101 Body-pack Transmitter

<b>RF Power Output</b>	50 mW Max.
<b>Spurious Emissions</b>	Under federal regulations
<b>Input Connector</b>	TB5M
<b>Line Input Impedance/Level</b>	100k ohms/3.16V max. input at 1 kHz, 1% T.H.D.
<b>Battery</b>	9V (NEDA type 1604) alkaline, not included
<b>Current Consumption</b>	50 mA typical
<b>Battery Life</b>	Approximately 8-10 hours (depending on battery type and use pattern)
<b>Dimensions</b>	2.52" (64.0 mm) W x 3.78" (96.0 mm) H x 0.91" (23.0 mm) D
<b>Net Weight (without battery)</b>	5.0 oz (143 grams)

### ATW-T102 Plug-on Transmitter

<b>RF Power Output</b>	50 mW Max.
<b>Spurious Emissions</b>	Under federal regulations
<b>Input Connector</b>	3-pin XLRF-type
<b>Battery</b>	9V (NEDA type 1604), alkaline, not included
<b>Current Consumption</b>	60 mA typical
<b>Battery Life</b>	Approximately 7-9 hours (depending on battery type and use pattern)
<b>Dimensions</b>	1.58" (40.0 mm) W x 4.32" (109.8 mm) H x 1.58" (40.0 mm) D
<b>Net Weight (without battery)</b>	6.2 oz (177 grams)

### Optional Accessory Microphones

AT831cT5 Miniature cardioid condenser microphone, terminated with a TA5F connector for use with the ATW-T101 transmitter. Includes clothing clip and windscreen.

MT830cT5 Subminiature omnidirectional condenser microphone, terminated with a TA5F connector for use with the ATW-T101 transmitter. Includes clothing clip and windscreens.

MT830cT5-TH "Theater" model, same as MT830cT5 except beige color mic and cable for concealment.

†In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.



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