

# 1800 Series

## Camera-mount UHF Wireless Microphone Systems (dual-channel)



With UHF reception (996 user-selectable frequencies in 25 kHz steps), Audio-Technica's new 1800 Series dual-channel camera-mount wireless microphone systems provide extremely flexible, professional, and easy-to-use portable wireless solutions.

For simultaneous operation of two microphones, 1800 Series dual-channel wireless systems include the ATW-R1820 dual receiver with two completely independent receiver channels in a single unit. Independent audio level controls provide flexible audio mixing and monitoring possibilities. Dual balanced outputs enable signals to be mixed, or independently assigned to each output.

1800 Series wireless systems come equipped with a choice of plug-on and body-pack transmitters. The ATW-T1801 UniPak™ body-pack transmitter features a professional locking 4-pin connector compatible with all Audio-Technica Wireless Essentials® microphones. The ATW-T1802 plug-on transmitter features a locking XLR connector for adapting dynamic and condenser microphones. Both transmitters offer selectable high and low transmission modes to conserve battery life/maximize power.

Additional 1800 Series features include automatic frequency scanning, Tone Lock™ squelch, back-lit LCD, soft-touch buttons, headphone monitor output with independent level control, and durable metal construction.

- **Two completely independent receiver channels in a single unit, for simultaneous operation of two microphones**
- **True Diversity operation for resistance to multi-path interference and dropouts**
- **UHF reception with 996 frequencies selectable in 25 kHz steps**
- **Automatic frequency scanning for easy selection of open channels**
- **Tone Lock™ squelch system eliminates interference when transmitter is off**
- **Two independent balanced outputs**
- **Headphone monitor output with independent level control**
- **Battery fuel-level indicators on receiver and transmitters**
- **Soft-touch controls for easy frequency selection**
- **LCD frequency and battery status display with backlight on receiver and transmitters**
- **Antenna and AF Peak LED indicators**
- **Dual-channel receiver can operate in single-receiver mode to extend battery life when only one audio channel is required**
- **Compact dual receiver is easy to mount on a camera**
- **Transmitters operate in low or high transmission modes to conserve battery life/maximize power**
- **Easy, user-friendly operation**
- **Clear, natural sound quality**
- **Powered by AA batteries or by external 12V DC power (not included)**
- **System components of the 1800 Series and 3000 Series UHF wireless systems can be used interchangeably\***

\* NOTE: The 1800 Series offers operating frequencies in 25 kHz steps, while the 3000 Series offers operating frequencies in 125 kHz steps. This means that not every frequency selectable on the 1800 Series components will be selectable on the 3000 Series components. Set each transmitter-receiver pair to identical frequencies.

## System Components



**ATW-R1820**  
Dual-channel Receiver



**ATW-T1801**  
UniPak™ Transmitter



**ATW-T1802**  
Plug-on Transmitter

## Specifications†

### Overall System

UHF Operating Frequencies	
Band C:	541.500 to 566.375 MHz
Band D:	655.500 to 680.375 MHz
Number of Operating Frequencies	996 total per band (25 kHz increments)
Frequency Stability	±0.005%, Phase Lock Loop frequency control
Modulation Mode	FM
Normal Deviation	±10 kHz
Operating Range	100 m (300') typical
Operating Temperature Range	23° F (-5° C) to 113° F (45° C)
Frequency Response	70 Hz to 15 kHz

### ATW-R1820 Dual-channel Receiver

Receiving System	Dual independent RF sections, automatic-switching diversity
Image Rejection	>50 dB typical
Signal-to-Noise Ratio	104 dB at 30 kHz deviation (A-weighted), maximum modulation 37 kHz
Total Harmonic Distortion	<1% (±10 kHz deviation at 1 kHz)
Sensitivity	25 dBµV, (S/N 60 dB at 5 kHz deviation, A-weighted)
Audio Output (balanced)	27 mV (at 1 kHz, ±5 kHz deviation)
Output Connector	3-pin mini XLR (TA3M-type)
Monitor Headphone Output (typical)	35 mW max., 32 ohm load (per channel)
Monitor Headphone Jack	3.5 mm TRS, signals on both Tip and Ring
External Power Requirements	12V DC nominal, 500 mA
Batteries (not included)	Six 1.5V AA alkaline
Current Consumption (battery)	
Dual-channel Operation	600 mA typical
Single-channel Operation	350 mA typical
Battery Life	
Dual-channel Operation	6 hours typical*
Single-channel Operation	10 hours typical*
	*depending on battery type and use pattern
Dimensions	85.0 mm (3.35") W x 133.0 mm (5.24") H x 36.0 mm (1.42") D
Net Weight (without batteries)	425 grams (15.0 oz)
Accessories Included	Two flexible UHF antennas; two 18" TA3F to XLRM output cables; belt pouch

### ATW-T1801 UniPak™ Transmitter

RF Power Output	High: 30 mW; Low: 10 mW, nominal
Spurious Emissions	Under federal regulations
Dynamic Range	>105 dB, A-weighted
Input Connections	High impedance, low impedance, bias
Batteries (not included)	Two 1.5V AA alkaline
Current Consumption	High: 180 mA; Low: 160 mA, typical
Battery Life	Approximately 6 hours (High); 8 hours (Low), depending on battery type and use pattern
Dimensions	66.0 mm (2.60") W x 87.0 mm (3.43") H x 24.0 mm (0.94") D
Net Weight (without batteries)	80 grams (2.8 oz)

### ATW-T1802 Plug-on Transmitter

RF Power Output	High: 30 mW; Low: 10 mW, nominal
Spurious Emissions	Under federal regulations
Dynamic Range	>105 dB, A-weighted
Input Connector	3-pin locking XLRF-type
Microphone Power	Provides power to condenser microphones rated to operate on 12V phantom power or less
Batteries (not included)	Two 1.5V AA alkaline
Current Consumption	High: 180 mA; Low: 160 mA, typical
Battery Life	Approximately 6 hours (High); 8 hours (Low), depending on battery type and use pattern
Dimensions	40.0 mm (1.57") x 111.0 mm (4.37") x 40.0 mm (1.57")
Net Weight (without batteries)	199 grams (7.0 oz)

## System Components

### ATW-1821

Camera-mount UHF Wireless Microphone System with UniPak™ Transmitters

*Includes:*

ATW-R1820 dual-channel receiver  
Two ATW-T1801 UniPak™ body-pack transmitters  
Two omnidirectional lavalier microphones

### ATW-1822

Camera-mount UHF Wireless Microphone System with Plug-on Transmitters

*Includes:*

ATW-R1820 dual-channel receiver  
Two ATW-T1802 plug-on transmitters

### ATW-1823

Camera-mount UHF Wireless Microphone System with UniPak™ and Plug-on Transmitters

*Includes:*

ATW-R1820 dual-channel receiver  
ATW-T1801 UniPak™ body-pack transmitter  
Omnidirectional lavalier microphone  
ATW-T1802 plug-on transmitter

† Specifications are subject to change without notice.

