

# ATW-R1810

## Single-channel Frequency-agile UHF Camera-mount Receiver

1800 series wireless systems (single-channel)



### Features

- **Easy, user-friendly operation and clear natural sound quality**
- **Compact receiver ideal for on-camera use**
- **True diversity operation for dropout protection and silent switching**
- **Automatic frequency scanning allows selection of open channels**
- **996 selectable frequencies in 25 kHz steps in each of two frequency bands**
- **Tone Lock™ squelch eliminates interference when the transmitter is off**
- **Battery life gauge on the receiver's LCD display**
- **Soft-touch controls for controlling transmitter and receiver**
- **Balanced, adjustable outputs for connection to any mic level inputs**
- **Monitor output on the receiver with level control**
- **Receiver is powered by AA batteries or external 12 VDC supply**
- **Diversity antenna selection and AF peak LED indicator**

### Description

The 1800 Series single-channel, frequency-agile true diversity UHF wireless receiver provides a new standard for audio and RF performance with user-friendly features and flawless operation for camera-mount and special remote applications. The receiver provides the audio quality, range and reliability necessary for the most demanding requirements of today's video and audio systems with two independent receivers in one small housing.

The compact ATW-R1810 receiver incorporates automatic frequency scanning which eliminates the need for searching for clear channels and automatically selects the most appropriate frequency for operation. The flexibility in programming both receivers and transmitters allows the user to customize this wireless system to the needs of virtually every application. True Diversity reception with automatic logic circuitry within each receiver selects the strongest RF signal. The top-mount antennas are removable allowing for different types of antennas and antenna accessories to be used. The receiver incorporates an easy-to-read LCD display with back lighting for easy function monitoring. An advanced digital Tone Lock™ squelch system provides enhanced rejection of interference on the receiver. Multi-function LED indicators are provided for diversity, power and peak signal indication. The receiver's compact design and included pouch with stainless steel clip allow for easy attachment to cameras, sound mixer bags or the user's belt. The receiver is designed to operate on four standard AA alkaline batteries (providing over 10 hours of continuous battery operation) or on external 12V DC. Balanced output allows receiver output to match cameras and field sound mixers. Full headphone confidence monitoring with level control enables the operator to monitor the receiver's audio. All audio output connections are standard mini-XLRM type connections with TA3F to XLRM-type adapter cables included with the system.

Additionally, the frequency configuration used in 1800 Series components allows them to be interchangeable with the Audio-Technica 3000 Series components.

### Architect's and Engineer's Specifications

The frequency-agile FM channel wireless receiver shall be part of a wireless microphone system consisting of a receiver and the appropriate transmitter. Operating in the UHF bands of either 541.500–566.375 MHz or 655.500–680.375 MHz the system shall be capable of operating on any of 996 PLL-synthesized frequencies per band (adjustable in 25 kHz steps).

The all-metal receiver shall be designed for camera-mount or portable operation. The receiver shall utilize True Diversity reception with automatic logic circuitry to choose the strongest RF signal appearing at either antenna and shall provide an automatic scanning function to select appropriate local usable frequencies for proper wireless system operation. All configuration functions of the receiver shall be controlled by soft-touch controls on the receiver top. The receiver shall incorporate a soft-touch power switch and shall have LED operator indicators on the top panel for diversity operation (A-B) and a power/peak indicator. A backlit LCD display shall be provided on the receiver for showing receiver battery status and selected frequency. The system will be equipped with an advanced Tone Lock™ digital identification system. The receiver's design shall provide totally silent audio output mute when the wireless transmitter is turned off or signal is lost to ensure that only the desired wireless microphone transmitter allows the receiver to be un-muted. The receiver shall incorporate a built-in audio monitoring section. Separate level controls shall be provided for audio monitoring and main output. A headphone connector shall be provided on the bottom of the receiver.

The receiver shall be able to be powered by 4 alkaline AA batteries or 12 volts DC at 500 mA. Antennas shall be located on the top of the receiver and shall incorporate standard BNC-type connectors to allow them to be detached from the receiver to facilitate the receiver being used with external antennas or antenna distribution devices.

The receiver as supplied shall include a soft pouch with stainless steel clip for attaching it to a camera, sound mixer bag or the operator's belt. The receiver shall have a metal case with removable battery door and be finished in low-reflectance black. All controls and indicators shall be clearly labeled as to their function and operation.

The wireless receiver shall be an Audio-Technica ATW-R1810 (C/D).

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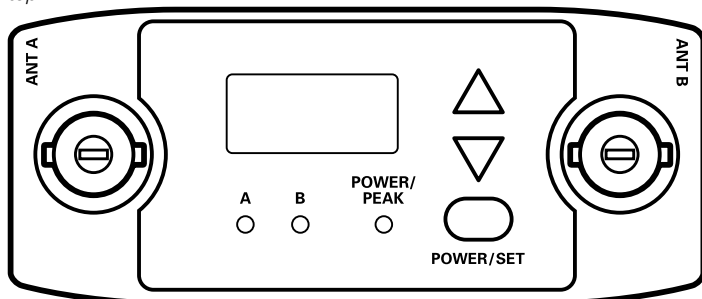
## Specifications

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
Monitor headphone jack	3.5 mm TRS, signals on both Tip and Ring
External power requirements	12V DC nominal, 500 mA
Batteries	Four 1.5V AA alkaline (not included)
Current consumption (battery)	350 mA typical
Battery life	10 hours typical, depending on battery type and use pattern
Dimensions	75.0 mm (2.95") W x 125.0 mm (4.92") H x 32.0 mm (1.25") D
Net weight	300 g (10.5 oz) (without batteries)
Accessories included	Two flexible UHF antennas; 18" TA3F- to XLRM-type output cable; belt pouch

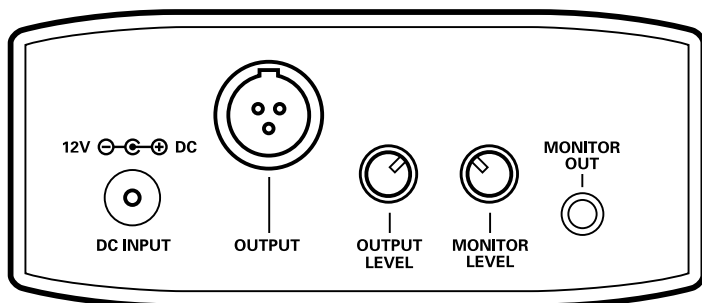
In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

Specifications are subject to change without notice.

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 **audio-technica**

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