

# Frequency-agile, Diversity UHF Wireless Systems



ATW-T701

ATW-T702

freeway®  
700 SERIES

ATW-R700



- **Easy operation**
- **Increased range & reliability**
- **Auto scanning selects an open channel**

## Available in 7 System Configurations

ATW-701	UniPak® Body-pack System
ATW-701/G	Guitar System
ATW-701/H	Headworn Microphone System (Includes PRO 8HEcW Microphone)
ATW-701/H92	Headworn Microphone System (Includes PRO 92cW Microphone)
ATW-701/H92-TH	Headworn Microphone System (Includes PRO 92cW-TH Microphone)
ATW-701/L	Lavalier Microphone System
ATW-702	Handheld Microphone System

## System Features

- **8 selectable frequency-coordinated UHF channels**  
Use up to 8 simultaneous systems—all channels compatible
- **Automatic frequency scanning**  
Selects an open channel at the touch of a button
- **Diversity operation for increased range and reliability**  
Selects the stronger signal from two antennas
- **LED channel display plus antenna and AF peak indicators**  
Transmitters also feature multi-color battery/power indicator
- **Balanced XLR and unbalanced 1/4" output connectors**  
For compatibility with most audio gear
- **Tone Lock™ squelch system**  
Eliminates interference when transmitter is off
- **Separate guitar/mic trim control and switchable high/low RF power**  
Featured on the ATW-T701 UniPak® transmitter
- **AA operation on handheld microphone and UniPak® transmitter**  
8–12 hours for UniPak®; 12 hours for handheld

 **audio-technica.**  
always listening



## Specifications†

### Overall System

Operating Frequency	UHF band, 542.125 to 561.250 MHz
Number of Channels	8
Frequency Stability	±0.005%, Phase Lock Loop frequency control
Modulation Mode	FM
Maximum Deviation	±25 kHz
Operating Range	200' typical
Operating Temperature Range	40° F (4° C) to 110° F (43° C)
Frequency Response	100 Hz to 12 kHz

### ATW-R700 Receiver

Receiving System	Antenna-switching diversity
Image Rejection	55 dB minimum
Signal-to-noise Ratio	>80 dB at 10 kHz deviation (IEC-weighted), maximum deviation 25 kHz
Total Harmonic Distortion	≤1% (10 kHz deviation at 1 kHz)
Sensitivity	25 dBµV (S/N 60 dB at 10 kHz deviation, IEC-weighted)
Audio Output	
Unbalanced:	211 mV (-13.5 dBV) (1kHz modulation, 10 kHz deviation)
Balanced:	150 mV (-16.5 dBV) (1kHz modulation, 10 kHz deviation)
Output Connectors	
Unbalanced:	1/4" TS ("mono") phone jack
Balanced:	XLRM-type
Power Supply	100–240V AC (50/60 Hz) to 12 DC 1 A (center positive) switched mode, external power supply
Dimensions	190.0 mm (7.48") W x 42.0 mm (1.65") H x 130.0 mm (5.12") D
Weight	365 g (12.9 oz)
Accessory Included	Power supply

### ATW-T701 UniPak® Transmitter

RF Power Output	High: 10 mW, Low: 5 mW
Spurious Emissions	Under federal regulations
Dynamic Range	>100 dB, A-weighted
Input Connections	High impedance, low impedance, bias
Batteries (not included)	Two 1.5V AA alkaline
Current Consumption	High: 140 mA; Low: 130 mA typical
Battery Life	Approximately 8 hours (High); 10 hours (Low) depending on battery type and use pattern
Dimensions	65.0 mm (2.56") W x 105.0 mm (4.13") H x 18.5 mm (0.73") D
Net Weight (without batteries)	80 g (2.8 oz)

### ATW-T702 Handheld Transmitter

RF Power Output	10 mW
Spurious Emissions	Under federal regulations
Dynamic Range	>100 dB, A-weighted
Microphone Element	Dynamic, unidirectional
Batteries (not included)	Two 1.5V AA alkaline
Current Consumption	120 mA typical
Battery Life	Approximately 12 hours, depending on battery type and use pattern
Dimensions	245.0 mm (9.65") long, 53.5 mm (2.11") diameter
Net Weight (without batteries)	257 g (9.1 oz)
Accessory Included	AT8456a Quiet-Flex™ stand clamp

† 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.

## Optional System Accessories

### Wireless Essentials® Microphones and Cables

All Wireless Essentials accessories are terminated for use with all A-T UniPak® transmitters.

AT829cW	Miniature cardioid condenser lavalier microphone.
MT830cW	Miniature omnidirectional condenser lavalier microphone.
MT830cW-TH	"Theater" model, same as MT830cW except beige color mic and cable.
AT831cW	Miniature cardioid condenser lavalier microphone.
AT889cW	Headworn noise-canceling condenser microphone.
AT892cW	MicroSet® headworn omnidirectional condenser microphone.
AT892cW-CO	Same as AT892cW except cocoa color mic, earset and cable.
AT892cW-TH	"Theater" model, same as AT892cW except beige color mic, earset and cable.
AT898cW	Subminiature cardioid condenser lavalier microphone.
AT899cW	Subminiature omnidirectional condenser lavalier microphone.
AT899cW-TH	"Theater" model, same as AT899cW except beige color mic and cable.

ATM350cW	Cardioid condenser clip-on instrument microphone.
ATM73cW	Headworn cardioid condenser microphone.
ATM75cW	Headworn cardioid condenser microphone.
PRO 8HEcW	Headworn hypercardioid dynamic microphone. Included in ATW-701/H System.
PRO 35cW	Cardioid condenser clip-on instrument microphone.
PRO 92cW	Headworn omnidirectional condenser microphone. Included in ATW-701/H92 System.
PRO 92cW-TH	"Theater" model, same as PRO 92cW except beige color mic and cable. Included in ATW-701/H92-TH System.
U851cW	Cardioid condenser boundary microphone.
U857ALcW	Cardioid condenser gooseneck microphone. Mounts to 3/8"-27 thread.
AT-GcW	Hi-Z instrument/guitar cable with 1/4" phone plug. Included in ATW-701/G System.
AT-GcW-PRO	Professional Hi-Z instrument/guitar cable with 1/4" phone plug.
AT-GRcW	Hi-Z instrument/guitar cable with 90° 1/4" phone plug.
AT-GRcW-PRO	Professional Hi-Z instrument/guitar cable with 90° 1/4" phone plug.
XLRW	Connecting cable for UniPak transmitter with an XLRF-type input connector, for Lo-Z microphones with XLRM-type output terminations.



**audio-technica**

*always listening*

Audio-Technica U.S., Inc. 1221 Commerce Drive, Stow, Ohio 44224  
(330) 686-2600 Fax: (330) 686-0719 E-mail: pro@atus.com www.audio-technica.com

Visit our Web site at [www.audio-technica.com](http://www.audio-technica.com)

for extensive information on selecting and using wireless systems.

Form No. 0473-2605-01 ©2008 Audio-Technica U.S., Inc. Printed in U.S.A.