# Wireless Systems

**WIRELESS INTRODUCTION**

**WIRELESS ATW-C** ................................................................. 4

**WIRELESS MANAGER - FREQUENCY** ......................................... 6

**WIRELESS SERIES OVERVIEW** .................................................. 7

**WIRELESS SYSTEMS**

- 5000 Series ........................................................................... 8
- 3000 Series ........................................................................... 10
- 2000 Series ........................................................................... 14
- AT-One ................................................................................. 16
- System 10 / System 10 PRO .................................................... 18

**Antennas** ............................................................................. 22

**Accessories** ......................................................................... 24

**cH/cW Mic Summary** ............................................................ 25-27

**WIRELESS APPLICATIONS**

- Application 1 - Dual-channel wireless system .............................. 28
- Application 2 - Single-channel wireless system covering two zones 29
- Application 3 - Multiple zones wireless system ........................... 30
- Application 4 - Four-channel wireless system ............................. 32
- Application 5 - Multi-channel wireless system for install ............. 34
- Application 6 - 16-channel wireless system using ATW-DA49a ...... 36
- Application 7 - 16-channel wireless system using daisy chain ....... 38
- Application 8 - 64-channel wireless system / 256-channel wireless system 40

**Radio Equipment Directive (RED) - Restrictions** ..................... 42-43
Clean, Crisp and Accurate
Transparent uppers/mids and rich low-end qualities are combined with advanced acoustic engineering for extensive performance abilities and a clean, crisp and accurate sound reproduction, even at high SPLs.

Warm and Flattering Sound
The AT4033a produces a warm and flattering sound that brings the versatility of a dynamic microphone, as well as the transparency and detail of a high-end capacitor model for a vintage effect.

Condenser microphones capsules **ATW-C5400** and **ATW-C3300**
an heritage from the world acclaimed Studio microphones **AT4050** and **AT4033**.

Interchangeable Microphone Capsules compatible with last generation 3000 and 5000 Series wireless handheld transmitters
All interchangeable microphone capsules can be used with **ATW-T5202** and **ATW-T3202** handheld transmitters. Its industry-standard thread allows use with other compatible handheld transmitters.

Same sound characteristics as the renowned **AT4050** studio microphone offering extreme clarity and realism.

Same element as the classic **AT4033a** studio microphone offering extreme clarity and realism.
Everything under control

The Wireless Manager software supports the setup, control, and monitoring of compatible Audio-Technica wireless devices. The software allows you to determine device settings, make and coordinate frequency plans while offline, and configure import settings whilst connected to wireless systems via network connection. When linked to a compatible receiver, you can scan the RF environment, monitor connected devices, and view the system log.

Note that some frequency bands might not be available in country or region in which you live, or could come with a limited tuning bandwidth/transmitting power due to local regulations.

Audio-Technica - Frequency bands versus wireless series

<table>
<thead>
<tr>
<th>Frequency from &gt; to</th>
<th>DG1 470.125 to 699.875 MHz</th>
<th>GH1 700.125 to 879.875 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Channel</td>
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<tr>
<td>5000-Series Receiver</td>
<td></td>
<td></td>
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<tr>
<td>5000-Series Transmitter</td>
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<tr>
<td>3000-Series Network receiver</td>
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<tr>
<td>2000-Series</td>
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<tr>
<td>AT-One</td>
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<tr>
<td>System 10 System 10 Pro</td>
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<tr>
<td>2.4 GHz</td>
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</tbody>
</table>

Note: some frequency bands might not be available in country or region in which you live, or could come with a limited tuning bandwidth/transmitting power due to local regulations.
## 5000 Series

Designed for use on professional tours, in stadiums, concert halls and festivals with incredible audio quality and proven, critically acclaimed performance for artists, broadcasters and presenters.

## 3000 Series

3000 Series systems have an operating range of 100m and are available in several frequency bands that provide a wide tuning range.

## 2000 Series

Easy to use, flexible to setup, medium - large channel counts, rock solid RF.

## AT-One

Easy to use, for small channel counts, medium operating range, case and rackmount, fairly easy setup.

## System 10 Pro

Easy to use, easy to setup remote receiver unit allows professional fixed installations, license-free, no frequency coordination needed.

## System 10

Easy to use, easy to setup, license-free, no frequency coordination needed. Short range allows usage of another System 10 setup in an adjacent room.

<table>
<thead>
<tr>
<th></th>
<th>Operating range</th>
<th>Indoor range</th>
<th>Outdoor range</th>
<th>Rec. Channel Count</th>
<th>Analog / Digital</th>
<th>Hobby music</th>
<th>Prof. music</th>
<th>Rental company</th>
<th>Theater</th>
<th>School / House of worship / Corporate / Hotel conference room</th>
<th>Large venues / Stadium</th>
<th>Broadcast studio</th>
<th>ENG</th>
<th>Live sport</th>
<th>Film &amp; Location sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000 Series</td>
<td>100 m</td>
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<td>&gt; 40</td>
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<tr>
<td>3000 Series</td>
<td>100 m</td>
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<td>40</td>
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<tr>
<td>System 10 Pro</td>
<td>60 m</td>
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<tr>
<td>System 10</td>
<td>30 m</td>
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<td>2000 Series</td>
<td>100 m</td>
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<tr>
<td>AT-One</td>
<td>60 m</td>
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</tbody>
</table>

**Note:** The marks represent levels of performance and availability, with more marks indicating higher performance or availability.
5000 Series
Frequency-Agile True Diversity UHF Wireless Systems

Comprehensive tuning bandwidth
For maximum versatility in ever-congested RF environment, the dual-channel receiver provides a tuning bandwidth of 230 MHz or 120 MHz (depending on frequency band). Both transmitters (ATW-T5202 and ATW-T5201) feature a tuning bandwidth of 120 MHz and are available in different frequency ranges to provide complete coverage of the receiver’s bandwidth. This allows the user to set up systems with high channel counts, whilst offering the flexibility to tune to open spectrum wherever you travel.

Dual compander for incredible audio quality
Designed for use on professional tours, in stadiums, concert halls, festivals and other demanding audio environments, the Audio-Technica 5000 Series offers the highest-quality wireless live sound, with dual-compander circuitry that processes high and low frequencies separately for unparalleled frequency response and dynamic range.

Designed for professionals
The body-pack transmitter provides highest possible wearing comfort due to its small size - 64 mm × 70 mm × 17 mm, robust and ergonomic full metal body with concealed soft-touch controls, rugged ch-Style connector for secure connection - just to name a few features that meet the needs of professional users.

High channel count
The antenna cascade output connects up to 8 receivers, allowing a single pair of antennas to feed 16 channels of wireless.
## 5000 Series / Wireless Systems

### Audio-Technica

#### Dante® Receiver

**ATW-R5220DAN**

- **CH-style screw-down 4-pin connector** for secure connection to A-T’s CH-style lavaliere and headworn microphones, or cables.

#### Receiver

**ATW-R5220**

| 5000 Series | Receiver: Band DG1: 470.125 to 699.875 MHz  
Band GH1: 700.125 to 819.875 MHz  
Transmitter: Band DE1: 470.125 to 590.000 MHz  
Band EG1: 580.000 to 699.875 MHz  
Band GH1: 700.125 to 819.875 MHz |  
Minimum Frequency Step: 25 kHz  
Modulation Mode: FM  
Operating Range: 100 m |

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### ATW-R5220/ATW-R5220DAN

- **Receiving System**: True diversity  
- **Image Rejection**: 80 dB nominal  
- **Sensitivity**: 18 dBuV at 60 dBA S/N ratio (50 ohms termination)  
- **Maximum Output Level**: XLR, balanced, +18 dBV  
- **Headphone Output**: 6.3 mm (1/4”) TRS stereo 180 mW, typical  
- **Antenna Input**: BNC-type, 50 ohms 12 V DC, 150 mA (combined)

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### ATW-T5201

- **Frequency Response**: 23 to 16,300 Hz  
- **Dynamic Range**: Mic input: 120 dB or higher (A-weighted), typical  
Inst input: 107 dB or higher (A-weighted), typical  
- **Input Connection**: CH-style screw-down 4-pin connector  
- **Spurious Emissions**: Following federal and national regulations  
- **Maximum Deviation**: ±40 kHz (THD:10%)  
- **Total Harmonic Distortion**: 1.0 % or less (at 1 kHz, ±17.5 kHz deviation)  
- **RF Power Output**: High: 50 mW, Mid: 10 mW, Low: 2 mW (switchable), at 50 ohms  
- **Battery Life**: High: 7 hours, Mid: 9 hours, Low: 10.5 hours (alkaline)  
- **Dimensions**: 64 mm × 70 mm × 17 mm (W × D × H)  
- **Net Weight**: Approx. 92 g

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### ATW-T5202

| Frequency Response: 33 to 16,300 Hz Depending on attached microphone element  | Dynamic Range: 116 dB or higher (A-weighted), typical  | Microphone Element: Interchangeable industry standard thread  | Spurious Emissions: Following federal and national regulations  | Maximum Deviation: ±40 kHz (THD:10%)  | Total Harmonic Distortion: 1.0 % or less (at 1 kHz, ±17.5 kHz deviation)  | RF Power Output: High: 50 mW, Mid: 10 mW, Low: 2 mW (switchable), at 50 ohms  | Battery Life: High: 6.5 hours, Mid: 8 hours, Low: 9.5 hours (alkaline)  | Dimensions: 193 mm long, 37 mm maximum diameter  | Net Weight: 200 g |
3000 Series
Frequency-Agile True Diversity UHF Wireless Systems

60 MHz tuning bandwidth
The 3000 Series systems are available in several different frequency bands, and each features a wide 60 MHz tuning range. This allows the user to set up systems with high channel counts, whilst offering the flexibility to tune to open spectrum wherever you travel. Frequencies can be easily scanned and selected on the receiver and then synced with the transmitter via IR sync functionality.

Backup frequency button
Unique multifunction button on the handheld and body-pack transmitters can be used to switch to a backup frequency (on both transmitter and receiver) should interference be encountered.
/ Receiver
ATW-R3210

/ Network-Enabled Receiver
ATW-R3210N

/ Body-Pack Transmitter
ATW-T3201

/ Handheld Transmitter Body
ATW-T3202

cH-style screw-down 4-pin connector for secure connection to A-T's cH-style lavaliel and headworn microphones, or cables.

/ Interchangeable Microphone Capsules (IMC)
(see page 4)
One power supply feeds up to five chargers

Up to five docks can be connected to one power supply (AD-SA1230XA - available separately) to charge a maximum of ten transmitters (per link one AT8687 is required - available separately).

Monitoring and controlling

The ATW-CHG3N networked version of the charging dock allows users to monitor the charging status of all transmitters in the linked docks (per link one AT8687 is required - available separately). Only the first dock must be an ATW-CHG3N, all linked docks (up to four) must be ATW-CHG3.

Protection against misuse

The dock automatically shuts off if alkaline or damaged batteries are detected in the transmitters.
### 3000 Series - Body-pack System

- **ATW-3211**

### 3000 Series - Body-pack System with AT831cH

- **ATW-3211/831**

### 3000 Series - Body-pack System with BP892xcH

- **ATW-3211/892x**

### 3000 Series - Body-pack System with BP892xcH-TH

- **ATW-3211/892x-TH**

### 3000 Series - Body-pack System with AT899cH

- **ATW-3211/899**

### 3000 Series - Handheld System with ATW-C510

- **ATW-3212/C510**

### 3000 Series - Handheld System with ATW-C710

- **ATW-3212/C710**

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## Charging Station

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Charging Time</strong></td>
<td>Approx. 6.5 hours (1,900 mAh rechargeable battery)*</td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>DC12V, 3.0A</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td>4.9W (when 2 transmitters are charging)</td>
</tr>
<tr>
<td></td>
<td>27.4W (CHG3×5) (5 units are connected and 18 transmitters are charging)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>400 g</td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td>Separately available - AC adapter (AD-SA1230XA),</td>
</tr>
<tr>
<td></td>
<td>ATW-CHG3 Link kit (AT8687)</td>
</tr>
</tbody>
</table>

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## 3000 Series

### Operating Frequencies

- Band DE2: 470.125 to 529.975 MHz
- Band EE1: 530.000 to 589.975 MHz
- Band EF1: 590.000 to 649.975 MHz
- Band FG1: 650.000 to 699.875 MHz
- Band GH2: 794.100 to 805.900 MHz
- Band HH2: 821.100 to 831.900 MHz
- and 863.100 to 864.900 MHz

### Minimum Frequency Step

- 25 kHz

### Modulation Mode

- FM

### Operating Range

- 100 m

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## ATW-R3210/ATW-R3210N

### Receiving System

- True diversity

### Image Rejection

- 60 dB nominal

### Sensitivity

- 20 dBuV at 60 dB S/N ratio (50 ohms termination)

### Maximum Output Level

- 6.3 mm (1/4), unbalanced: +14 dBV (ATW-R3210 only)

### Antenna Input

- BNC-type, 50 ohms, 12 V DC, 160 mA (combined)

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## ATW-T3201

### Frequency Response

- 31 to 15,500 Hz

### Dynamic Range

- Mic input: 115 dB or higher (A-weighted), typical
- Inst input: 112 dB or higher (A-weighted), typical

### Input Connection

- ch-style screw-down 4-pin connector

### Spurious Emissions

- Following federal and national regulations

### Maximum Deviation

- ±38 kHz (THD:10%)

### Total Harmonic Distortion

- 1.0 % or less (at 1 kHz, ±17.5 kHz deviation)

### RF Power Output

- High: 30 mW, Low: 10 mW (switchable), at 50 ohms

### Battery Life

- High: 8 hours, Low: 9 hours (alkaline)
- High: 9 hours, 9.5 hours (Ni-MH 1900mAh)

### Dimensions

- 64 mm × 82 mm × 23 mm (W × D × H)

### Net Weight

- Approx. 102 g

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## ATW-T3202

### Frequency Response

- 25 to 16,700 Hz Depending on attached microphone element

### Dynamic Range

- 115 dB or higher (A-weighted), typical

### Microphone Element

- Interchangeable industry standard thread

### Spurious Emissions

- Following federal and national regulations

### Maximum Deviation

- ±38 kHz (THD:10%)

### Total Harmonic Distortion

- 1.0 % or less (at 1 kHz, ±17.5 kHz deviation)

### RF Power Output

- High: 30 mW, Low: 10 mW (switchable), at 50 ohms

### Battery Life

- High: 8 hours, Low: 9 hours (alkaline)
- High: 9 hours, 9.5 hours (Ni-MH 1900mAh)

### Dimensions

- 193 mm long, 37 mm maximum diameter

### Net Weight

- 200 g
2000 Series
Frequency-Agile True Diversity UHF Wireless Systems

Easy to use

Easy setup, automatic scanning and other advanced wireless features - affordable as never before. Though the 2000b system is designed for professional use, the user does not need special training to operate it. Once unboxed, it’s ready to roll! Standard automatic frequency scanning finds and sets the best available channel at the touch of a button. Using multiple wireless systems simultaneously, as any of its 10 preset channels can be used together.

12V antenna power

The ATW-R2100b receiver delivers a bias voltage of 12V / 60mA from each BNC antenna input, enabling the use of antenna boosters or other active components.
2000 SERIES / SYSTEM CONFIGURATIONS / WIRELESS SYSTEMS

/ Receiver
ATW-R2100b

/ Two-Bay Recharging Station
ATW-CHG2

/ Handheld Transmitter
ATW-T220a

2000 Series
Operating Frequencies
I Band: 487.125 to 506.500 MHz
U Band: 606.500 to 631.000 MHz
D Band: 656.125 to 678.500 MHz
F Band: 854.900 to 864.900 MHz
Max. Number of Channels 10
Modulation Mode FM
Operating Range 100 m

ATW-R2100b
Receiving System True diversity
Image Rejection 55 dB nominal, 50 dB minimum
Sensitivity 20dBµV (S/N 60dB at 5 kHz deviation, IEC-weighted)
Maximum Output Level XLR, balanced, +14 dBV - 6.3 mm (1/4), unbalanced: +8 dBV
Antenna Input BNC-type, 50 ohms DC, 60 mA (each)

ATW-T210a
Frequency Response 100 to 15,500 Hz
Dynamic Range 110 dB or higher (A-weighted), typical
Input Connection cH-style screw-down 4-pin connector
Spurious Emissions Following federal and national regulations
Maximum Deviation ≤40 kHz (THD:10%)
Total Harmonic Distortion 1.0 % or less (at 1 kHz, ±17.5 kHz deviation)
RF Power Output High: 30 mW, Low: 10 mW (switchable)
Battery Life High: 7 hours, Low: 9 hours (alkaline)
Dimensions 66 mm × 92 mm × 23 mm (W × D × H)
Net Weight Approx. 81 g

ATW-T220a
Frequency Response 100 to 15,000 Hz
Dynamic Range 110 dB or higher (A-weighted), typical
Microphone Element Cardioid, dynamic
Spurious Emissions Following federal and national regulations
Maximum Deviation ≤40 kHz (THD:10%)
Total Harmonic Distortion 1.0 % or less (at 1 kHz, ±20 kHz deviation)
RF Power Output High: 30 mW, Low: 10 mW (switchable)
Battery Life High: 7 hours, Low: 9 hours (alkaline)
Dimensions 232 mm long, 48 mm maximum diameter
Net Weight 252 g
AT-One
Wireless System

Easy to use
AT-One is designed with simplicity and ease-of-use in mind. Equipped with a practical carrying case, rack-mount kit and detachable antenna, AT-One is the perfect balance of price and performance, ideal for those looking for accurate, reliable performance at an entry-level price.

The AT-One’s frequency plan is divided into two groups with four available channels in each group. All four channels in a group can be used simultaneously.

Cardioid condenser capsule – induction loop ready
The condenser microphone capsule in the ATW-T1 handheld transmitter prevents inductive feedback from nearby hearing loops.

12V antenna power
The ATW-R1 receiver delivers a bias voltage of 12V / 100mA from each BNC antenna input, enabling the use of antenna boosters or other active components.
AT-One / System Configurations / Wireless Systems

// Receiver ATW-R1

// Handheld Transmitter ATW-T3

AT-One
- Operating Frequencies: Band DE3: 482.625 to 511.375 MHz, Band HH2: 824.400 to 830.850 MHz & 863.300 to 864.700 MHz
- Max. Number of Channels: 2 x 4
- Modulation Mode: FM
- Operating Range: 60 m

ATW-R1
- Receiving System: Antenna switching diversity
- Image Rejection: 55 dB minimum
- Sensitivity: 10 dBµV (S/N 60 dB @ 20 kHz deviation)
- Maximum Output Level: XLR, balanced, +4 dBV – 6.3 mm (1/4), unbalanced –2 dBV
- Antenna Input: BNC-type, 50 ohms 12 V DC, 100 mA (each)

ATW-T1
- Frequency Response: 60 to 16,000 Hz
- Dynamic Range: 103 dB or higher (A-weighted), typical
- Input Connection: cW-style lock-down 4-pin connector
- Spurious Emissions: Following federal and national regulations
- Maximum Deviation: ±40 kHz (THD:10%)
- Total Harmonic Distortion: 1.0 % or less (at 1 kHz, –20 kHz deviation)
- RF Power Output: 10 mW
- Battery Life: 10 hours (alkaline)
- Dimensions: 66 mm × 98 mm × 22 mm (W × D × H)
- Net Weight: Approx. 71 g

ATW-T3
- Frequency Response: 60 to 16,000 Hz
- Dynamic Range: 108 dB or higher (A-weighted), typical
- Microphone Element: Cardioid, condenser
- Spurious Emissions: Following federal and national regulations
- Maximum Deviation: ±40 kHz (THD:10%)
- Total Harmonic Distortion: 1.0 % or less (at 1 kHz, –20 kHz deviation)
- RF Power Output: 10 mW
- Battery Life: 10 hours (alkaline)
- Dimensions: 268 mm long, 52 mm maximum diameter
- Net Weight: 277 g

// AT-One - Body-pack System
ATW-11

// AT-One - Body-pack System with AT-GcW
ATW-11/G

// AT-One - Body-pack System with PRO9cW
ATW-11/H

// AT-One - Body-pack System with ATR35cW
ATW-11/P

// AT-One - Handheld System
ATW-13

// Body-pack Transmitter
ATW-T1

// AT-One - Body-pack System
ATW-11

// AT-One - Body-pack System with AT-GcW
ATW-11/G

// AT-One - Body-pack System with PRO9cW
ATW-11/H

// AT-One - Body-pack System with ATR35cW
ATW-11/P

// Handheld System
ATW-13

Latching 4-pin microphone connector for use with Audio-Technica cW-style wireless body-pack transmitters.
System 10
Digital Wireless Systems

Easy to use
System 10 is a digital high-fidelity wireless system designed to provide 24-bit operation, easy setup and clear, natural sound quality. Operating in the 2.4 GHz range, far from TV and DTV interference, System 10 offers extremely easy operation and instantaneous channel selection. Up to eight channels may be used together without any frequency coordination problems or group selection issues. System 10 receivers and transmitters offer an easy-to-read digital ID display.

Three levels of diversity assurance
System 10 provides three levels of diversity: frequency, time and space. Frequency diversity transmits the signal on two frequencies simultaneously for better protection against frequency interference. Time diversity sends the signal twice to maximise signal integrity. Finally, space diversity uses two antennas on each transmitter and receiver to optimize immunity against multipath interference.

System 10 PRO
Digital Wireless Systems

A compact and expandable system
With an RJ12 cable supplied with each system, it is possible to connect up to 5 frames (10 receivers). While many systems can operate without being connected, this is not recommended. Indeed, linking the systems to create a more stable environment in which receivers are coordinated for the reception, transmission and frequency allocation avoids signal loss and optimizes the simultaneous use of the 10 channels.
SYSTEM 10 PRO / SYSTEM CONFIGURATIONS / DIGITAL WIRELESS SYSTEMS

/ Single Channel Receiver
ATW-R1310

/ Dual Channel Receiver
ATW-R1320

/ Handheld Transmitter
ATW-T1002
(specifications, see page 20)

/ Body-Pack Transmitter
ATW-T1001
(specifications, see page 20)

/ Boundary Microphone Transmitter
ATW-T1006

/ Microphone Desk Stand Transmitter
ATW-T1007

// System 10 PRO - Rack-Mount Digital Wireless System
ATW-1301

// System 10 PRO - Rack-Mount Digital Wireless System
ATW-1311

// System 10 PRO - Rack-Mount Digital Wireless System
ATW-1312

// System 10 PRO - Rack-Mount Digital Wireless System
ATW-1302

// System 10 PRO - Rack-Mount Digital Wireless System
ATW-1322

System 10 PRO
Operating Frequencies 2.4 GHz ISM Band
Max. Number of Channels 10
Audio Sampling 24 bit / 48 kHz
Operating Range 60 m

ATW-R1310 & ATW-R1320
Receiving System Diversity (frequency / time / space)
Maximum Output Level XLR, balanced, +6 dBV - 6.3 mm (1/4), unbalanced: 0 dBV

ATW-T1006
Maximum Input Sound Level 138 dB SPL
RF Power Output 10 mW
Spurious Emissions Following federal and national regulations
Internal Battery 3.7 V Rechargeable Li-ion Battery
Battery Rating 5.5 Wh; 1,460 mAh
Battery Life 9 hours (Battery charging time: 4 hours 30 minutes)
Dimensions 96.1 mm W × 38.0 mm H × 122.8 mm D
Net Weight 408 grams

ATW-T1007
RF Power Output 10 mW
Spurious Emissions Following federal and national regulations
Phantom Power 12V DC
Internal Battery 3.7 V Rechargeable Li-ion Battery
Battery Rating 5.5 Wh; 1,460 mAh
Battery Life 9 hours (Battery charging time: 4 hours 30 minutes)
Dimensions 96.1 mm W × 44.2 mm H × 122.8 mm D
Net Weight 392 grams

ATW-T1001 & ATW-T1002 (specifications, see page 20)
System 10
Digital Wireless Systems

Automatic frequency selection
The System 10 automatically changes its frequency. Unlike other systems on the market that attach to 2 or 4 frequency, the System 10 will constantly "monitor" the frequencies and switch if necessary. Thus, there are always a good 2 frequencies in the system, and the user does not need to manually intervene.

System 10 - Stack-Mount
Operating Frequencies 2.4 GHz ISM Band
Max. Number of Channels 8
Audio Sampling 24 bit / 48 kHz
Operating Range 30 m

ATW-R1100
Receiving System Diversity (frequency / time / space)
Maximum Output Level XLR, balanced, +6 dBV - 6.3 mm (1/4), unbalanced: 0 dBV

ATW-T1100
Handheld Transmitter
Frequency Response 20 to 20,000 Hz
Dynamic Range 109 dB or higher (A-weighted), typical
Input Connection cW-style lock-down 4-pin connector
Spurious Emissions Following federal and national regulations
Total Harmonic Distortion 0.05 % or less
RF Power Output 10 mW
Battery Life 7 hours (alkaline)
Dimensions 72 mm × 107 mm × 25 mm (W × D × H)
Net Weight Approx. 100 g

ATW-T1102
Handheld Transmitter
Frequency Response 20 to 20,000 Hz
Dynamic Range 109 dB or higher (A-weighted), typical
Microphone Element Unidirectional, dynamic
Spurious Emissions Following federal and national regulations
Total Harmonic Distortion 0.05 % or less
RF Power Output 10 mW
Battery Life 7 hours (alkaline)
Dimensions 255 mm long, 50 mm maximum diameter
Net Weight 280 g
System 10 Camera-Mount
Portable Camera-Mount Digital Wireless Systems

Small and compact design
With its compact and portable design, the System 10 Digital Wireless Camera System is ideal for video production, reporting and all intermediate mobile applications, the receiver offers several mounting options to suit a wide variety of cameras and recording devices. Each System 10 camera mount wireless system includes a camera mounting spigot in addition to the receiver and the transmitter.

System 10 - Camera-mount Body-pack System
ATW-1701

/ System 10 - Camera-mount Body-pack System with AT8350
ATW-1701x3M

/ System 10 PRO - Camera-mount Body-pack System with AT829cW
ATW-1701/P1

/ System 10 - Camera-mount Handheld System
ATW-1702

/ System 10 - Camera-mount Handheld System with AT8350
ATW-1702x3M

/ Camera-Mount Receiver
ATW-R1700

/ Body-Pack Transmitter
ATW-T1001 (see page 20)

/ Handheld Transmitter
ATW-T1002 (see page 20)

System 10 - Camera-Mount
Operating Frequencies 2.4 GHz ISM Band
Max. Number of Channels 8
Audio Sampling 24 bit / 48 kHz
Operating Range 30 m

ATW-R1700
Receiving System Diversity (frequency / time / space)
Maximum Output Level 3.5 mm, TRS balanced, +6 dBV
3.5 mm, TRS unbalanced, 0 dBV
Battery Type Internal Battery: 3.7V rechargeable Li-ion battery
Battery Life 12 hours (Battery charging time: 4 hours 30 minutes)
Dimensions 56 mm × 91 mm × 28 mm (W × D × H)
Weight Approx 105 g

ATW-T1001 & ATW-T1002 (specifications, see page 20)
WIRELESS SYSTEMS / ANTENNAS

<table>
<thead>
<tr>
<th>Connected Accessory</th>
<th>ATW-A49</th>
<th>ATW-A410P</th>
<th>ATW-B80WB</th>
<th>ATW-49CB</th>
<th>ATW-49SP</th>
<th>ATW-DA49a</th>
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<tr>
<td>Used wireless system</td>
<td>Current per antenna input @12V</td>
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<td>60mA</td>
<td>30mA</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Distribution amplifier</td>
<td>ATW-DA49A</td>
<td>250 mA</td>
<td>+</td>
<td>2 pair (**)</td>
<td>4 pair</td>
<td>2 pair (***)</td>
</tr>
</tbody>
</table>

(*) Although possible to power more than 1 pair it is recommended to use an ATW-DA49a instead.
(**) You would require to use a pair of ATW-49CB to connect 2 pairs of antennas.
(***) 2 pairs would allow to connect 4 pairs of passive antennas (A49) - no active antennas.
Please use the above table to determine the maximum numbers of active components in the antenna cable run.
Example: AT-One (100 mA per antenna cable run) could drive 1 pair of ATW-B80WB boosters and 1 pair of ATW-49SP splitter; (60 mA + 30 mA = 90 mA).
Example: ATW-DA49a (250 mA per antenna cable run) could drive 2 pairs of ATW-49 (6 mA), 2 pairs of ATW-B80WB boosters (2x 60mA per antenna run) and 1 pair of ATW-49CB (90 mA) - Total: 2x 150 mA.

Durability
The ATW-DA49a provides a high OIP3 (+32 dBm) for maximum protection against intermodulation.

/ Active Antenna Combiner Kit (pair)
ATW-49CB

/ Active Antenna Splitter Kit (pair)
ATW-49SP

Specifications
ATW-49a
Antenna Power (optional) 12V DC, 250 mA (combined)
Current Consumption 200 mA ± 50 mA at 12 V DC
Gain +1.0dB typical (within specified bandwidth)
Input 2 x 1 inputs
OIP3 +32dBm typical (within specified bandwidth)
Output 2 x 4 outputs + 1 cascade output - BNC Female
Operating Bandwidth 470-990 MHz
Power Supply 100-240V AC (50/60 Hz) to 12V DC 1A (centre positive)
switched mode external power supply
### Specifications

#### ATW-A49
- **Antenna Type**: Log Periodic Dipole Array (LPDA)
- **Operating Bandwidth**: 440 – 900 MHz
- **Gain**: 6 dB typical
- **Impedance**: 50 ohms typical
- **VSWR**: ≤ 1.7:1
- **Polar Pattern**: Elliptical, 90° acceptance, typical
- **Polarization**: Vertical (when mounted vertically)
- **Number of Elements**: 9
- **Maximum Power Input**: Not specified (intended as receive antenna only)
- **Termination Type**: Fixed right-angle BNC female Connector is positioned to minimize cable strain
- **Weight**: 326 g each
- **Dimensions**: 268 mm L x 285 mm H x 25 mm D
- **Material**: Copper-clad epoxy fiberglass

#### ATW-A410P
- **Gain**: -10 dB / 0 dB / +6 dB / +12 dB
- **OIP3**: > 30 dBm typical (within specified bandwidth)
- **Termination Type**: BNC-J
- **Operating Bandwidth**: 470-990 MHz
- **Temperature Range**: -10°C to 50°C
- **Dimensions**: 175 x 175 x 50 mm (without bracket)
- **Weight**: 390 g (without bracket)
- **Accessories**: Mounting bracket, screws
- **Impedance**: 50 ohms typical (within specified bandwidth)
- **Power Consumption**: 60mA

#### ATW-B80WB
- **Connections**: BNC-J (IN), BNC-J (OUT)
- **Power Supply**: DC 12 V
- **Frequency Range**: 470 – 990 MHz
- **Impedance**: 50 ohms
- **Power Consumption**: 60mA
- **Gain High**: +12 dB Red, +6 dB Green
- **Connections**: BNC-J (IN), BNC-J (OUT)
- **Power Supply**: DC 12 V

### ANTENNAS / WIRELESS SYSTEMS

- **/ UHF Wide-Band Directional LPDA Antennas (pair)**
  - **ATW-A49**
- **/ UHF Powered Wideband Antenna (single)**
  - **ATW-A410P**
- **/ In-Line RF booster 470-990MHz 6dB / 12dB (pair)**
  - **ATW-B80WB**
- **/ 0.9m RF Antenna Cable**
  - **AC3**
- **/ 4m RF Antenna Cable**
  - **AC12**
- **/ 8m RF Antenna Cable**
  - **AC25**
- **/ 15m RF Antenna Cable**
  - **AC50**
/ Antenna Front-Mount Kit
ATW-AF1
For ATW-DA49a

/ Receiver Unit Wall-Mount Holder
AT8690
For System 10 PRO, ATW-RU13

/ 3.5 mm - XLR Cable (ATW-R1700)
AT8350

/ Dual Rack-Mount Kit
AT8677
For AT-One, ATW-R1

/ Universal Joining Plate for AT 9.5” devices
AT8631
For ATW-R3210, ATW-R3210N, ATW-R2100b, ATW-R1300, ATW-R1310, ATW-R1320 and other AT 9.5” devices

/ Camera Shoe Dual Mount
AT8691
For System 10, ATW-R1700

/ 3.5 mm - 3.5 mm Cable (ATW-R1700)
AT8349

/ Blanking Plate
AT8675
For AT8674

/ Rack-Mount Tray
AT8674
For System 10, ATW-R1100
### CH MIC SUMMARY / WIRELESS SYSTEMS

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<th>cW-Version</th>
</tr>
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<tr>
<td><strong>/ Subminiature Omnidirectional Condenser</strong></td>
<td><strong>/ Subminiature Omnidirectional Condenser</strong></td>
</tr>
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<td><strong>Headworn Microphone</strong></td>
<td><strong>Headworn Microphone</strong></td>
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<tr>
<td>BP892xcH &amp; BP892xcH-TH</td>
<td>BP892xcW &amp; BP892xcW-TH</td>
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<td><strong>/ Subminiature Omnidirectional Condenser</strong></td>
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<td>BP893xcH &amp; BP893xcH-TH</td>
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**WIRELESS SYSTEMS / cH/cW**

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Dual-channel wireless system

When more than one wireless microphone system is required, you may find that in certain circumstances using two receivers side-by-side with individual antennas is unsuitable. For example, where the receiver needs to be placed out of sight or in a different room, such as installation for a multi-purpose venue, house of worship or a small live music performance.

The solution is to utilise one pair of antennas placed in the room to feed both the receivers. The signal is passed from the room over two 50 Ohm RF cables to the receivers’ location, where the antenna signals are split into each receiver using the ATW-49SP Active Antenna Splitter Kit.

Check the signal loss of the antenna cable, based on the frequency range of your system and the specified antenna cable length and type. Audio-Technica’s wireless manager software offers a “cable loss calculation tool” to do so. If the dB loss exceeds 7 dB, you should consider including the ATW-B80WB In-Line RF Booster as each 6dB of loss across the signal chain will reduce your systems operating distance by 50%.

The ATW-A49SP is powered by the receivers across the antenna cable – no external power source is required. Though our example includes the ATW-A49 LPDA Antenna, any passive antennas can be used provided they support the frequency range of your wireless systems.

If you require an active antenna like our ATW-A410P, or other active components such as the ATW-B80WB, then check the total current consumption of the individual products (simply add their stated mA together per RF cable run) to make certain that your receiver delivers the necessary power.

Compatible Audio-Technica wireless systems for this solution include the AT-One, 2000 Series and 3000 Series.

Product table

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<th>Description</th>
<th>Alternative</th>
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<td>25/77.6m RF Antenna Cable</td>
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</table>
Single-channel wireless system covering two zones

In some situations, only one wireless system is required, but there is the need to guarantee coverage over two separate areas. This, in most cases, is simply not achievable using one pair of antennas. An example of this would be when needing to cover an indoor area and its associated outdoor space, such as you may find in a restaurant, bar, or house of worship setting. Alternatively, a client may have a hotel ballroom which also divides into two multi-function areas, resulting in the need to cover the sections individually.

To achieve this solution, you will need two pairs of antennas – one pair per area requiring coverage. Then, the four antenna cables run to the receiver location, and they are combined using the ATW-49CB Active Antenna Combiner Kit. The resulting two antenna cables can then connect directly to the wireless receiver. Take care to position the ATW-49CB as close to the antennas as possible, to minimise the quantity of antenna cable required in the installation – this will improve signal integrity and reduce cost for the customer. Refer to the notes in Application 1 for advice on specifying cable length, active antennas and boosters in the cable run.

If the receiver in use can provide adequate current, it is possible to combine Application 1 and Application 2 to create a dual-channel wireless solution with the ability to cover two zones – simply add the ATW-49SP between the ATW-49CB and the receiver.

Compatible Audio-Technica wireless systems for this solution include the AT-One, 2000 Series, 3000 Series and 5000 Series.

Product table

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<th>Code</th>
<th>Description</th>
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<td>AT-One Beltpack Transmitter</td>
<td>ATW-T3 Handheld Transmitter</td>
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<td>25/7.6m RG8 Antenna Cable</td>
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</tbody>
</table>
Multiple zones wireless system

If you need to cover more than two areas which are in proximity of one another, or you simply need to cover one very large area, then this solution may suit your requirements. Consider the need for a wireless microphone which needs to operate throughout the areas of a shopping mall, or over the very wide area of a sports venue – such as a golf course.

Initially, you may consider using multiple pairs of antennas, combining them with multiple ATW-49CB. However, this is not usually the best approach, as you will either run into power issues or the total cable runs will become too long to compensate for incurred RF loss with signal boosters.

This application offers a more elegant solution. The concept begins with placing a wireless receiver of the same type, tuned to the same frequency, in each area with a local pair of antennas.

If you were to use these receivers alone, you could operate the transmitter in each room, provided you activate only one receiver at a time. Then, the audio signal can be sent from the active receiver to the local speaker system as needed. In this scenario, you must manually switch off or mute the unused receivers in order to avoid erratic audio signals being output whilst the wireless transmitter is out of range.

In most cases, this option is not practical. It may not be possible to continually ensure unused receivers are switched off between uses, or a project may demand that the wireless transmitter must work across all areas freely – without continual adjustment by a technician.

The solution is to add the ATDM-0604 Digital SmartMixer. Simply connect the audio signals from each receiver to the ATDM-0604 and set the unit to Smart Mix mode, making sure to allow only one open microphone at a time. This way, a receiver remains active in the mixer until an audio drop out occurs, which will trigger the mixer to automatically switch to the receiver featuring the most reliable signal. With this solution, you can combine up to six areas, whilst creating one reliable output signal.

Check Application 1 for important information on total cable length, active antennas or using boosters in your antenna cable run. It is possible to combine Application 3 with Application 2 in some or all zones to increase the area of coverage even further. Also, it is possible to combine Application 3 with Application 4. In this case, you will require one ATDM mixer for each wireless microphone you want to use.

Compatible Audio-Technica wireless systems for this solution include the AT-One, 2000 Series and 3000 Series.

Product table

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<tr>
<td>1</td>
<td>ATDM-0604</td>
<td>Digital SmartMixer</td>
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</table>
Equipment used

- **ATDM-0604**
- **6 x ATW-R2100b**
- **1 x ATW-T210a**
- **1 x ATW-T220a**

**Computer Audio I/O**

**LAN Connection for Web Remote Manager**

**To Speakers**
Four-channel wireless system

A four-channel wireless system is often required by live music acts, podium discussions, or in fixed installations for multi-purpose rooms. Rental companies may also design their wireless systems in blocks of four channels for small to medium sized events, as these racks are easy to handle whilst being easily scaled up to a larger system when required (see Application 6).

This solution is similar in design to Application 1. The primary difference is the inclusion of the ATW-DA49a, which can divide the incoming pair of antenna signals into four individual signal pairs to feed each receiver. However, this change does not only offer more outputs. In Application 1, the ATW-49SP is powered by the receiver, while in this setup the ATW-DA49a is powered by mains voltage. As a result, the ATW-DA49a distribution amplifier can provide significantly more antenna power for active components in the cable run. Due to the higher current this unit can deliver, it is possible to realise much longer cable runs, with more than one ATW-B80WB booster, as well as drive antenna combiners and active antennas before reaching a power limitation.

Check Application 1 for important information on total cable length, active antennas or using boosters in your antenna cable run. This application can be combined with Application 2 and is the core design for achieving Application 6.

Compatible Audio-Technica wireless systems for this solution include the AT-One, 2000 Series and 3000 Series.

<table>
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</table>
Equipment used

**ATW-DA49a**

**ATW-A49**

**ATW-B80WB**

**4 x ATW-R3210**

**ATW-T3201**

**ATW-T3202**
Multi-channel wireless system for install

This solution is aimed at fixed installations where the use of UHF TV bands is not preferred, such as in locations with a restricted RF environment or where the customer wishes to avoid licensing costs and the need for frequency coordination. Typical applications for this include educational facilities such as schools or universities, multi-function rooms, or conference centres.

This application is based around our System 10 Pro wireless system. System 10 does not use the UHF TV band frequency spectrum (470 - 865 MHz) associated with our other wireless products but operates on the 2.4GHz spectrum, most used for WLAN and Bluetooth® transmission. 2.4GHz offers many benefits, but you must also consider its limitations when using it for wireless audio.

The immediate advantage is that System 10 Pro is completely license free in almost all countries and requires no frequency planning by the installer or operator. However, due to the small wavelength of the 2.4GHz signal (around 12cm), the operating range is shorter than our other wireless systems which use the lower UHF range. This solution is not ideal for open-air scenarios, where long operating distance is required.

However, reduced operating range can also have benefits. For example, if multiple rooms located side-by-side all require a dedicated wireless system, you can reuse the same spectrum by using System 10 Pro in adjacent rooms – very little physical separation between rooms is required.

Another challenge with the 2.4GHz range is the parallel use of Wi-Fi alongside our wireless system. In this case, it is recommended to utilise 5.8GHz for Wi-Fi connectivity in place of 2.4GHz. If this is not possible, the placement of your wireless microphone receiver becomes very important. Here is why System 10 Pro offers the right solution.

2.4GHz antenna cables suffer from higher power losses over their cable run than UHF frequencies. At the same time, many installers do not wish to locate audio racks of receivers in the meeting room, but instead place them in a separate A/V room with the audio mixer and other equipment.

With System 10 Pro, the ATW-RU13 receiver unit can be removed and mounted remotely, connecting to the ATW-RC13 via standard ethernet cable. The ATW-RC13 can stay in the audio rack, whilst the ATW-RU13 can be mounted up to 100m away – on a wall, in the presenter podium, or hidden above the false ceiling in the room. The ATW-RU13 receiver unit is compact in size, and its included wall-mount housing can be painted in any colour to conceal it further.

Ensure to mount ATW-RU13 units as close as possible to the area where the wireless microphones will be used and aim to position any Wi-Fi access points at the opposite side of the room for maximum signal stability.

The compatible Audio-Technica wireless system for this solution is the System 10 Pro.

Product table

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Code</th>
<th>Description</th>
<th>Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ATW-R1320</td>
<td>System 10 Pro Dual Channel Receiver</td>
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</tr>
<tr>
<td>6</td>
<td>ATW-T1006</td>
<td>System 10 Boundary Microphone Transmitter</td>
<td>ATW-T1001, ATW-T1002, ATW-T1007</td>
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<tr>
<td>1</td>
<td>ATDM-0604</td>
<td>Digital SmartMixer</td>
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</table>
Equipment used

**ATDM-0604**

3 x ATW-R1320

**ATW-T1001**

ATW-T1002

or

ATW-T1006

ATW-T1007

or

6x Cat. 5e Cable
16-channel wireless system using ATW-DA49a

Where more than four wireless systems are required, this solution may be the answer. Typical applications include larger live bands, music festivals featuring multiple acts, theatre productions, larger conferences, and in sports broadcast where wireless microphones are used to collect sounds of the event.

This solution begins with the 4-channel system from Application 4. In this scenario, up to four of the 4-channel racks are used and then they are linked together using one ATW-DA49a UHF Antenna Distribution System, achieving 16 channels of wireless audio.

Note: pay special attention to the “star” topology wiring of this example: the top ATW-DA49a feeds the antenna inputs of the following four ATW-DA49a. This means that each antenna signal is passing through no more than two antenna distribution units before reaching the receiver.

Also, that the ATW-DA49a’s link output have not been used in this scenario. If only eight channels are required, it is acceptable to use the ATW-DA49a’s link output to pass the signal along to a second ATW-DA49a – the eight receivers then connect via each distributor’s antenna outputs. However, once more wireless systems are needed, it is best practice to implement the star topology given in this example to avoid unnecessary RF signal degradation.

This concept is easily scalable, making it ideal for rental companies, or businesses with flexible technical requirements. Several self-contained modules of four-channel systems can be used and then quickly combined using one additional ATW-DA49a, as and when required.

Refer to the notes in Application 1 for advice on specifying cable length, active antennas and boosters in the cable run.

This application can be combined with Application 2 and relies on Application 4.

Compatible Audio-Technica wireless systems for this solution include the 2000 Series and 3000 Series.

Product table

<table>
<thead>
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<th>Code</th>
<th>Description</th>
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<td>ATW-R3210N</td>
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<td>ATW-R3210</td>
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<tr>
<td>16</td>
<td>ATW-T3201</td>
<td>3000 Series Beltpack Transmitter</td>
<td>ATW-T3202 Handheld Transmitter</td>
</tr>
<tr>
<td>5</td>
<td>ATW-DA49a</td>
<td>UHF Antenna Distribution System</td>
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<td>Pair of UHF Wide-band Directional LPDA Antennas</td>
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<td>1</td>
<td>ATW-B80WB</td>
<td>Pair of In-Line RF boosters 470-990MHz</td>
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<tr>
<td>4</td>
<td>AC25</td>
<td>25/7.6m RGB Antenna Cable</td>
<td>AC12, AC50, AC100</td>
</tr>
</tbody>
</table>
Equipment used

5 x ATW-DA49a

16 x ATW-R3210

16 x ATW-T3201

or

16 x ATW-T3202

*For 4-channel wiring see Application 4
16-channel wireless system using daisy chain

If you require significant UHF flexibility for touring or are simply in need of a reliable wireless system with exceptional audio quality, the 5000 Series is ideal. Here the 5000 Series is used to achieve a 16-way system. This type of setup is commonly found in music festivals, touring rigs, or in smaller installations for theatre, sports and conferencing. This is an alternative option to Application 6, consider both systems to determine which better suits the requirements.

Based around the 5000 Series, the key to this solution is the powerful antenna distribution amplifier built into the ATW-R5220 Dual Receiver. As seen in the diagram, the ATW-A49 antennas connect directly to the receivers without the need to pass through any external distribution units. Each ATW-R5220 then passes the RF signal along to the next receiver in a daisy-chain configuration. With this, up to eight dual-channel receivers can be combined in a simple and efficient way, providing 16 channels of wireless audio.

Pay special attention to the cable run in the diagram. The first antenna signal has been connected to the first receiver, passing down to the eighth receiver; meanwhile, the second antenna signal starts at the eighth receiver and works upwards. This method affords a degree of redundancy, as should any one receiver lose power the remaining units will continue to receive RF signal from at least one antenna.

Refer to the notes in Application 1 for advice on specifying cable length, active antennas and boosters in the cable run.

This Application can be combined with Application 2 and is essential to Application 8.

The compatible Audio-Technica wireless system for this solution is the 5000 Series.

Product table

<table>
<thead>
<tr>
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<td>AC25</td>
<td>25'/7.6m RGB Antenna Cable</td>
<td>AC12, AC50, AC100</td>
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</tbody>
</table>
Equipment used

8 x ATW-R5220 / ATW-R5220DAN

ATW-A49
ATW-B80WB

ATW-T5201
ATW-T5202

16 x or
64-channel wireless system / 256-channel wireless system

This system is designed for large scale wireless audio projects, as found in theatre, opera, TV & sports broadcasting, music festivals or any application where high numbers of wireless systems are essential requirements.

This solution begins with the 16-way system shown in Application 7. Having constructed racks of eight dual receivers, one ATW-DA49a UHF Antenna Distribution System can be added. This should be placed after the antennas and linked to up to four of the 16-way racks, allowing for 64 simultaneous wireless audio channels.

Is 64-channels the limit? If more than 64-channels are required, the system can be considered as one “module”, and more can be added. Up to four 64-channel modules can then connect to one final ATW-DA49a, opening the possibility for a 256-channel wireless solution – all operating with just one pair of antennas.

Refer to the notes in Application 1 for advice on specifying cable length, active antennas and boosters in the cable run.

This Application can also combine with Application 2 and relies on Application 7.

The compatible Audio-Technica wireless system for this solution is the 5000 Series.

<table>
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<th>Quantity</th>
<th>Code</th>
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Please check local regulations for the latest information about usage of wireless microphones. More information can be found on the manufacturer’s website or by contacting local authorities.

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01.01.2020
### Power Limits

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<th>100 mW ERP</th>
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</table>

### Wireless Systems Guide

- **Audio-Technica**

- **Power limits, Limit on power, Grenze, snage, Max. výstupní výkon, Sendestyrke maksimalt, Vilımssuse limitt, Lähetystehorajoitus, Puissance limitée à, Max. Sendeleistung, Επιτρεπτέο Οριο ισχύος μέγιστη Τελεσίτμενης κόφτης, Teorairin power, Limite di potenza, Jaudas robėžvėrtis, Gálurs apinbojimas, Sahha limitata sa, Maximaal zendvormagen, limit mocy, Limite de potência, Limita puterii, Max. výstupní výkon, Jakaostna omejitev, Potencia limitada a, MAX, All takmörkurn., Maksimalt tillatt utstrålt effekt.

- **Exemption for individual licensing for devices with power of up to 10mW.**

- **Exemption for individual licensing for devices with power over 10mW.**

- **Licensing needed, Платен лиценз, Licença necessária, Licence nécéssaire, Licence- und Anmeldepflichtig, Mη Επιτρεπτέο Χρήση, Tilos használni, Niهدادهاران یا اسید، Uso non permesso, Nedrīkst izmantot, Neli沸腾lia naudoti, Mhx passimis fakos, Zákazné používať, Uporaba ni dovoljena, No se permite el uso, Inte tillåtet att användas, Má ekki nota, Ikke tillatt, Μην χρήση, Χρήση - ανεξάρτητη/ανεξάρτητη, Használható - Díjmentes, OK a úsáid - ceadúnas saor in aisce, OK utilizzo - Senza licenza, Var izmantot, Gebruik niet toegestaan, nie wolno używać, Não é permitido usar, Nu este permisă, Χρήση - ανεξάρτητη, Licenza necessaria, Licence ir nepieciešama, Licenzijuojamas, Hemm bzn licenca, vergunningsplichtig, wymagana licenca, Χρήση - ανεξάρτητη/ανεξάρτητη, Licença necessária, Licence- und Anmeldepflichtig, Mη Επιτρεπτέο Χρήση, Tilos használni, Niهدادهاران یا اسید، Uso non permesso, Nedrīkst izmantot, Neli沸腾lia naudoti, Mhx passimis fakos, Zákazné používať, Uporaba ni dovoljena, No se permite el uso, Inte tillåtet att användas, Má ekki nota, Ikke tillatt.

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