

# SHURE®

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PERFORMANCE™

Wireless Systems

SLX® | QLX-D™ | ULX-D® | UHF-R® | AXIENT™

# AXIENT™ Wireless Management Network



The Axient Wireless Management Network establishes a dramatic new threshold of control, convenience and confidence in RF transmission, reception and spectrum management for mission-critical audio applications.

## Remote Control

The Axient ShowLink Access Point establishes a new-to-the-world capability in wireless microphones: comprehensive remote control of all transmitter parameters.

## Spectrum Management

Designed to continuously monitor, evaluate, prioritize, queue and assign compatible UHF frequencies, the Axient Spectrum Manager defines a new class of RF management tool.

## Wireless Workbench® 6

WWB6 features an enhanced graphic user interface, tailored to support the breakthroughs in performance and networkability that Axient offers.

## Frequency Diversity

Enables simultaneous transmission on two independent frequencies to ensure seamless, uninterrupted audio for mission-critical transmitters in extreme RF settings.

## Interference Detection & Avoidance

Axient receivers can automatically detect interference and move to a clear, compatible frequency in a fraction of a second.

## POWER MANAGEMENT

The Axient rechargeable power system sets new standards for real-time monitoring and lifecycle management of batteries and chargers.

# Component Specifications

## AXT400 Dual Channel Receiver

### Overview

The AXT400 Dual Channel Receiver combines advanced analog and digital technology to deliver exceptional RF and audio performance. The receiver features ShowLink™ Remote Control for real-time transmitter adjustments, Frequency Diversity mode for seamless dual-frequency operation, and Interference Detection & Avoidance. It offers up to 228 MHz of wideband tuning and supports AXT and UHF-R series transmitters. Connectivity options include transformer balanced audio outputs, AES3 digital audio output, RF Cascade ports and dual Ethernet ports for networked control and monitoring via Shure Wireless Workbench 6 software.

- Comprehensive real-time remote control of a linked transmitter when used with the AXT610 ShowLink Access Point.
- Detects the presence of an interfering analog or digital signal and avoids it by switching to a 'backup' frequency deployed by the AXT600 Axient Spectrum Manager, either manually or automatically.
- Frequency diversity provides seamless audio in environments where there is a risk of dropouts or interference by using transmission from a single audio source on two independent radio frequencies.
- Up to 228 MHz tuning bandwidth accommodates multiple transmitter bands, providing flexibility and simplifying receiver inventories.
- The AXT400 Receiver shares information with other system components via Ethernet networking, enabling advanced features such as remote control of transmitters and management using WWB® 6 software.
- RF Cascade Ports share RF signal with up to 5 receivers within the same frequency band.
- **Compatible Transmitters :**
  - **AXT100** Bodypack Transmitter,
  - **AXT200** Frequency Diversity Handheld Transmitter
  - **UR1** Bodypack Transmitter
  - **UR1H** Bodypack Transmitter
  - **UR1M** Micro-Bodypack transmitter
  - **UR2** Handheld Transmitter

### Product Specifications (subject to change)

RF Carrier Frequency Range	470-952 MHz Note: varies by region
Working Range	Under typical conditions: 150 m (500 ft) Line of Sight, outdoors for a single system: 500 m (1600 ft) Note: Actual range depends on RF signal absorption, reflection and interference.
Audio Frequency Response	40 – 18 kHz (+1, -3 dB) Note: Dependent on microphone type
RF Tuning Step Size	25 kHz
Modulation <i>45 kHz max. deviation</i>	FM, Audio Reference Companding with pre- and de-emphasis
Signal-to-Noise Ratio (SNR)	XLR Output: >118 dB (A-weighted) @1% THD AES3 Output: >130 dB (A-weighted) @1% THD
Image Rejection	>120 dB, typical
RF Sensitivity	-110 dBm for 12 dB SINAD, typical
Spurious Rejection	>110 dB, typical
Ultimate Quieting	>110 dB, A-Weighted
Squelch Quieting	>115 dB, A-Weighted
Latency	<1 ms
Total Harmonic Distortion <i>45 kHz max. deviation</i>	<0.3%, A-weighted, typical
System Audio Polarity	Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low-impedance output) and the tip of the high impedance 1/4-inch output.
Gain Adjustment Range	0 to -30 dB (in 1 dB steps), plus Mute setting
Dimensions	44 mm x 483 mm x 366 mm (1.7 in. x 19.0 in. x 14.4 in.), H x W x D
Weight	5.5 kg (12.0 lbs)
Housing	Steel; Extruded aluminum
Power Requirements	100 to 240 V AC, 50-60 Hz
Current Drain	1.1 A RMS (referenced at 120 V AC)
Operating Temperature Range	-18°C (0°F) to 63°C (145°F)
Storage Temperature Range	29°C (-20°F) to 74°C (165°F)
<b>RF Input</b>	
Connector Type	BNC
Configuration	Unbalanced, active
Impedance	50 Ω
Bias Voltage	12 V DC, 150 mA (300 mA maximum)
<b>Cascade Output</b>	
Connector Type	BNC
Configuration	Unbalanced, active
Impedance	50 Ω

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**Digital Audio Output**

Configuration	AES3 Type 1, XLR connector:	Channel 1: Left Channel 2: Right
Word Clock Input	Level: Frequency:	3 Vpp 48/96 kHz
Impedance	75 Ω	
Pin Assignments	1: ground 2: audio + 3: audio -	
Phantom Power Protection	Yes	

**Networking**

Power Over Ethernet (PoE)	50 V DC, Class 1	
Network Interface	Dual Port Ethernet 10/100	
Network Addressing Capability	DHCP or Manual IP address	

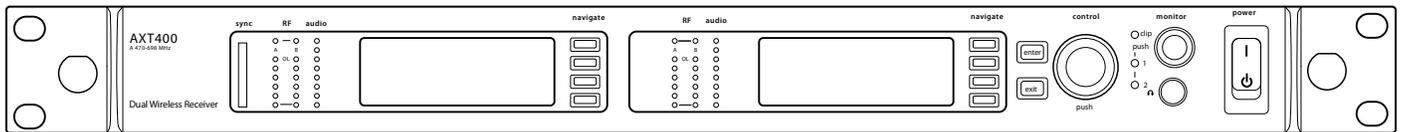
**Analog Audio Output**

Configuration	Monitor: Unbalanced mono, 1/4 in. (will drive stereo phones) 6.35 mm (1/4"): Transformer Coupled Balanced XLR: Transformer Coupled Balanced	
Impedance	Monitor: 50 Ω 6.35 mm (1/4"): <50 Ω XLR: <150 Ω	
Maximum Signal Level 45 kHz max. deviation	Monitor: 1 W@ 63 Ω 6.35 mm (1/4"): 9 dBu XLR: +18 dBu	
Mic/Line Switch	30 dB	
Pin Assignments	Monitor:	Tip: audio + Ring: audio + Sleeve: ground
	6.35 mm (1/4"):	Tip: audio + Ring: audio - Sleeve: ground
	XLR:	1: ground 2: audio + 3: audio -
Phantom Power Protection	Monitor: No 6.35 mm (1/4"): Yes XLR: Yes	

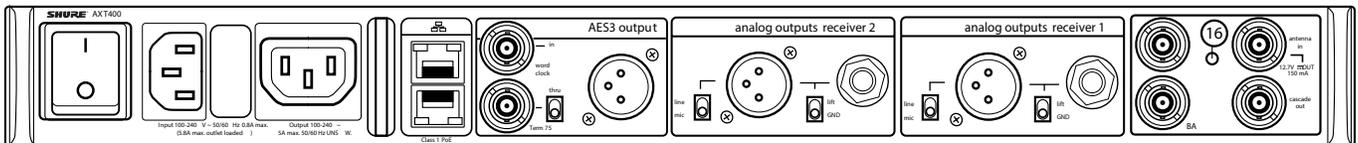
**Included Components**

95N2035	1-foot Coaxial Cascade Cable (2)
95A9128	IEC AC Power Cable (1)
95A9129	IEC AC Extension Cable (1)
C803	Shielded 3-foot Ethernet Cable (1)
C8006	Shielded 8-inch Ethernet Jumper Cable (1)
90XN1371	Hardware Kit (1)
95B9023	22-inch Coaxial Cable* (1)
95C9023	33-inch Coaxial Cable* (1)

\* with integrated bulkhead for front mounting antennas.



AXT400 Dual Channel Receiver Front



AXT400 Dual Channel Receiver Back



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# Component Specifications

## AXT100 Bodypack Transmitter

### Overview

The AXT100 transmitter delivers superior audio performance in a compact, lightweight package. Efficient, ultra-linear RF performance maximizes the number of channels on-air in crowded RF environments. Advanced power management provides extended, rechargeable battery life and highly accurate status metering. ShowLink™ Remote Control enables comprehensive real-time remote control of all transmitter parameters, including real-time frequency adjustments

- Ultra-linear RF performance places more channels on-air in crowded RF environments
- IR Sync function automatically tunes transmitter to the receiver frequency
- Comprehensive real-time remote control of all transmitter parameters when a linked transmitter is within range of a ShowLink Access Point
- Shure lithium-ion rechargeable battery delivers up to 8 hours of runtime from a single charge
- Advanced control menu to adjust frequency and audio settings from the transmitter
- 50 dB of adjustable gain for optimal audio quality
- Lockable user interface prevents accidental or inadvertent changes to controls once settings are made
- Compatible with all Shure wireless microphones that have a TA4F connector.
- LEMO connector version (AXT100LEMO3) available for use with LEMO connector microphones

### Product Specifications (subject to change)

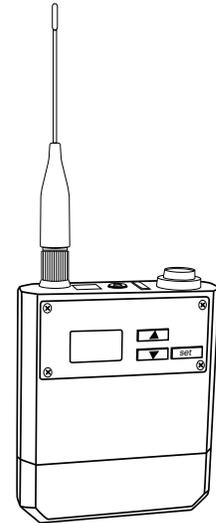
RF Carrier Frequency Range	470–814 MHz Note: varies by region
Working Range	Under typical conditions: 150 m (500 ft) Line of Sight, outdoors for a single system: 500 , (1600 ft) Note: Actual range depends on RF signal absorption, reflection and interference.
Audio Frequency Response	40 – 18 kHz (+1, -3 dB) Note: Dependent on microphone type
RF Tuning Step Size	25 kHz
Modulation (45 kHz max. deviation)	FM, Audio Reference Companding with pre- and de-emphasis
Signal-to-Noise Ratio (SNR)	> 113 dB (A-weighted) @1% THD
Total Harmonic Distortion (45 kHz max. deviation)	<0.3%, A-weighted, typical
System Audio Polarity	Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low-impedance output) and the tip of the high impedance 1/4-inch output.
Gain Adjustment Range	-10 to +40 dB (in 1 dB steps)
Battery Type	Shure AXT910 (Rechargeable Li-Ion)
Battery Life	Up to 8 hours (low power mode)
Dimensions	77 mm x 66 mm x 17 mm (3.0 in. x 2.6 in. x 0.7 in.) H x W x D, (with AXT910 battery)
Weight	146.6 g (5.2 oz.), with batteries
Housing	Cast aluminum
Operating Temperature Range	-18°C (0°F) to 63°C (145°F) Note: Battery characteristics may limit this range.
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F) Note: Battery characteristics may limit this range.
<b>Audio Input</b>	
Connector	4-Pin male mini connector (TA4M), 3-Pin male mini connector (LEMO); See drawing for details
Configuration	Unbalanced
Impedance	1 MΩ
Maximum Input Level (1 kHz at 1% THD)	Gain setting: -10 to +9 dB: 12.5 dBu +10 to +19 dB: -2.5 dBu +20 to +40 dB: -7.5 dBu
<b>RF Output</b>	
Connector	SMA (UHF and ShowLink); Shell=Ground, Center=Signal
Antenna Type	AXT642 Bodypack Dual Band Antenna(integrated helical and 1/4 wave)
Power	See Frequency Range and Output Power table
Impedance	50 Ω
<b>ShowLink</b>	
Network Type	IEEE 802.15.4
Frequency Range	2.40 to 2.4835 GHz (16 Channels)
RF Output Power	10 dBm (ERP)

### Included Components

AXT910	Bodypack rechargeable lithium-ion battery (2)
AXT642	Dual-band flexible antenna
WA340	Threaded TAF4 adapter
WA610	Transmitter carrying case
26A13	Zipper bag
44A12547	Belt clip

### Optional Accessories

AXT910	Bodypack rechargeable lithium-ion battery (2)
AXT652	Y-Cable for bodypack transmitters
AXT652LEMO3	LEMO Y-cable for bodypack transmitters
AXT642	Dual-band flexible antenna
AXT903	Portable bodypack charging station
AXT913	3-AA Battery Sled for AXT100 bodypack transmitter
WA302	Instrument cable
WA304	Instrument cable with right angle 1/4" connector
WA661	Mute switch for bodypack transmitter
WA662	Mute switch for two bodypack transmitters
44A12547	Replacement belt clip



**AXT100**  
Bodypack Transmitter

### Available Frequency Bands

Band	Frequency Range ( MHz)	Power (mW)
A24	779 to 806	10
G1	470 to 530	10/100
G12	479 to 530	10/20
G19	470 to 530	2/10
G1E	470 to 530	10/50
G7C	470 to 510	10/50
H12	518 to 565	10/20
H18	518 to 578	2/10
H4	518 to 578	10/100
H4E	518 to 578	10/50
J12	578 to 638	2/10
J5	578 to 638	10/100
J5E	578 to 638	10/50
J5HK	578 to 638	10
JBX	806 to 810	10
K4E	606 to 666	10/50
L20	638 to 698	2/10
L3	638 to 698	10/100
L3E	638 to 698	10/50
M8	666 to 730	10/50
MA24	779 to 806	2/10
MJBX	806 to 810	2/10
P8	710 to 790	10/50
P9	710 to 787	10/50
Q5	740 to 814	10/50
R16	794 to 806	10/50

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# Component Specifications

## AXT200 Handheld Frequency Diversity Transmitter

### Overview

The AXT200 Handheld Frequency Diversity Transmitter is a rechargeable, remotely controllable handheld transmitter with Frequency Diversity for seamless, uninterrupted audio in even the most challenging RF environments. In addition to Frequency Diversity, the AXT200 delivers ultra-linear RF performance for more channels on-air and superb audio quality. Advanced power management supports extended battery life and highly accurate status metering. ShowLink™ Remote Control enables comprehensive real-time remote control of all transmitter parameters, including real-time frequency adjustments.

- Frequency Diversity enables simultaneous transmission on two independent frequencies to ensure seamless, uninterrupted audio for mission-critical transmitters. Single carrier mode is available if Frequency Diversity is not required.
- Ultra-linear RF performance enables more channels on-air
- IR Sync function automatically tunes transmitter to the receiver frequency
- Comprehensive real-time remote control of all transmitter parameters when a Linked transmitter is within range of a ShowLink Access Point
- Shure lithium-ion rechargeable battery delivers up to 9 hours of runtime from a single charge
- Advanced control menu to adjust frequency and audio settings from the transmitter
- 42 dB of adjustable gain for optimal audio quality
- Lockable user interface prevents accidental or inadvertent changes to controls once settings are made

### Product Specifications (subject to change)

RF Carrier Frequency Range	470-814 MHz Note: varies by region
Working Range	Under typical conditions: 150 m (500 ft) Line of sight, outdoors for a single system: 500 m (1600 ft) Note: Actual range depends on RF signal absorption, reflection and interference
Audio Frequency Response	40 – 18 kHz (+1, -3 dB) Note: dependent on microphone type
RF Tuning Step Size	25 kHz
Modulation (45 kHz max. deviation)	FM, Audio Reference Companding with pre- and de-emphasis
Signal-to-Noise Ratio (SNR)	>113 dB (A-weighted) @1% THD
Total Harmonic Distortion (45 kHz max. deviation)	<0.3%, A-weighted, typical
System Audio Polarity	Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low-impedance output) and the tip of the high impedance 1/4-inch output.
Gain Adjustment Range	-10 to +32 dB (in 1 dB steps)
Battery Type	Shure AXT920/920SL (Rechargeable Li-Ion)
Battery Life	Up to 9 hours (low power mode, Single Carrier Mode)
Weight	395 g (13.9 oz.), with batteries
Housing	Machined aluminum
Operating Temperature Range	-18°C (0°F) to 63°C (145°F) Note: Battery characteristics may limit this range.
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F) Note: Battery characteristics may limit this range.
<b>Audio Input</b>	
Configuration	Unbalanced
Impedance	>30 kΩ
Maximum Input Level (1 kHz at 1% THD)	Gain Position: -10 to +11 dB: 5.5 dBu +12 to +32 dB: -6.5 dBu
<b>RF Output</b>	
Connector	SMA (UHF and ShowLink); Shell=Ground, Center=Signal
Antenna Type	Integrated Dual Band Helical
Power	See Frequency Range and Output Power table
Mode	Frequency Diversity: Dual Carrier Single Carrier: Single Carrier
Impedance	50 Ω
<b>ShowLink</b>	
Network Type	IEEE 802.15.4
Frequency Range	2.40 to 2.4835 GHz (16 Channels)
RF Output Power	10 dBm (ERP)

### Included Components

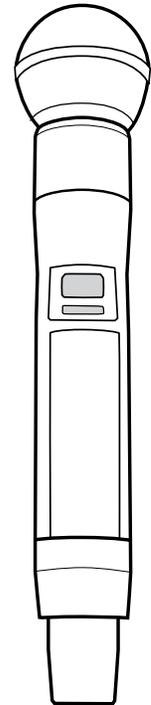
AXT920 or AXT920SL	Handheld rechargeable lithium-ion battery (2)
95A15475	Transmitter carrying case
26A14	Zipper bag
WA371	Microphone stand adaptor
Choice of (1) of the following Shure microphone cartridges	SM58 (RPW112) KSM9 Black (RPW184) BETA 58A (RPW 118) KSM9 Champagne (RPW180) BETA 87A (RPW120) KSM9HS Black (RPW186) BETA 87C (RPW122) KSM9HS Champagne (RPW182)

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**AXT200**  
Handheld Frequency Diversity  
Transmitter (with microphone cartridge)

### Available Frequency Bands

Band	Frequency Range ( MHz)	Power (mW)
A24	779 to 806	10
G1	470 to 530	10/50
G12	479 to 530	10/20
G19	470 to 530	2/10
G1E	470 to 530	10/50
G7C	470 to 510	10/50
H12	518 to 565	10/20
H18	518 to 578	2/10
H4	518 to 578	10/50
H4E	518 to 578	10/50
J12	578 to 638	2/10
J5	578 to 638	10/50
J5E	578 to 638	10/50
J5HK	578 to 638	10
JBX	806 to 810	10
K4E	606 to 666	10/50
L20	638 to 698	2/10
L3	638 to 698	10/50
L3E	638 to 698	10/50
M8	666 to 730	10/50
MA24	779 to 806	2/10
MJBX	806 to 810	2/10
P8	710 to 790	10/50
P9	710 to 787	10/50
Q5	740 to 814	10/50
R16	794 to 806	10/50

### Optional Accessories

AXT920 or AXT920SL	Handheld rechargeable lithium-ion battery (2)
AXT904	Portable handheld charging station
AXT921	1-AA battery carrier for AXT200 handheld transmitter
AXT651	Talk Switch (may not be available in all regions)
WA371	Microphone stand adaptor
AXT913	3-AA Battery Sled for AXT100 bodypack transmitter
WA302	Instrument cable
Shure microphone cartridges	SM58 (RPW112) BETA 87C (RPW122) BETA 58A (RPW 118) KSM9 Black (RPW184) BETA 87A (RPW120) KSM9 Champagne (RPW180) SM86 (RPW114) VP68 (RPW124)

# Component Specifications

## AXT600 Spectrum Manager

### Overview

The Axient Spectrum Manager is a powerful tool for calculating, analyzing and assigning compatible frequencies to wireless components. The Spectrum Manager scans the RF environment and uses this data to calculate compatible frequencies for all wireless channels found on the network. Networked wireless systems can be programmed from the Compatible Frequency List, while backup frequencies are continuously monitored and ranked according to quality. During operation, the Spectrum Manager deploys clear frequencies to receivers when interference occurs. Built-in spectrum monitoring tools provide visual and audio tracking of RF activity.

- The Spectrum Manager captures scan data for the entire UHF frequency range available for wireless audio
- The on-board frequency calculator can be adjusted to avoid specific TV channels, frequency ranges or RF signal above a specified threshold
- Event Log records actions of the Spectrum Manager during operation and provides a snapshot of system performance.
- Backup Frequency Monitoring
- The data screen tracks the real-time status of in-use and backup frequencies
- Scanner feature graphically plots the measured RF signal across the full frequency range
- Use the Listen feature to tune to a frequency and monitor FM demodulated signal using headphones
- Networking enables many of the advanced features of the Axient system, including monitoring and control of remote devices
- RF Cascade Ports allow sharing of RF signal with up to 5 components without antenna splitters or distribution amplifiers

### Product Specifications (subject to change)

RF Tuning Frequency Range	470-865, 925-952 MHz
RF Tuning Step Size	25, 200, 1000 kHz
Scan Time	The Spectrum Manager scans the entire RF tuning frequency range in 64 seconds using 8 scanning modules in parallel. Scan time per 60 MHz may be less for specified ranges that allow scanning modules to work in parallel.  <b>Step Size      Maximum Scan Time per 60 MHz</b> 25 kHz:          48 seconds *200 kHz:        7 seconds *1000 kHz:       1 second  *Available only with WWB6 control
Noise Floor	Resolution Bandwidth 25 kHz:          -110 dBm 200 kHz:        -100 dBm 1000 kHz:       -90 dBm
Image Rejection	>110 dB, typical
Spurious Response	<-100 dBm, typical
Ultimate Quieting	>90 dB, A-Weighted
Dimensions	44 mm x 483 mm x 366 mm (1.7 in. x 19.0 in. x 14.4 in.), H x W x D
Weight	5.5 kg (12.0 lbs)
Housing	Steel; Extruded aluminum
Power Requirements	100 to 240 V AC, 50-60 Hz
Current Drain	0.8 A RMS (referenced at 120 V AC)
Operating Temperature Range	-18°C (0°F) to 63°C (145°F)
<b>RF Input</b>	
Connector Type	BNC
Configuration	Unbalanced, active
Maximum Input Level	-20 dBm
Impedance	50 Ω
Bias Voltage	12 V DC, 150 mA (300 mA maximum)
<b>Cascade Output</b>	
Connector Type	BNC
Configuration	Unbalanced, active
Impedance	50 Ω
Insertion Loss	<5 dB
<b>Monitor Audio Output</b>	
Audio Frequency Response	40 – 18 kHz, ±3 dB
Configuration	Unbalanced mono, 1/4 in. (will drive stereo phones)
Impedance	50 Ω
Maximum Signal Level (45 kHz max. deviation)	1 W @ 63 Ω
Pin Assignments	Tip: audio + Ring: audio + Sleeve: ground
<b>Networking</b>	
Power Over Ethernet (PoE)	50 V DC, Class 1
Network Interface	Dual Port Ethernet 10/100
Network Addressing Capability	DHCP or Manual IP address

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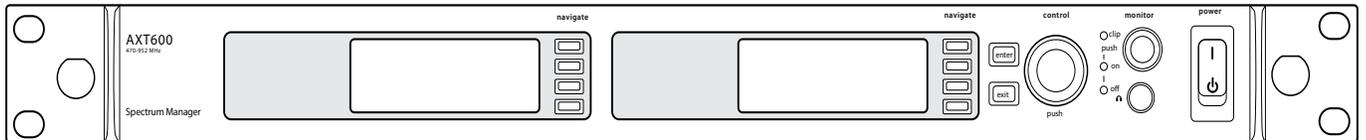
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# Component Specifications

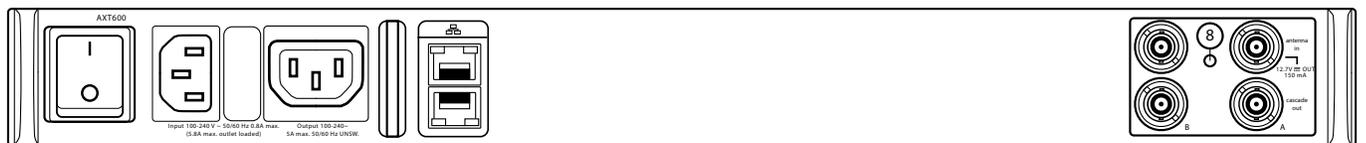
## Included Components

95N2035	1-foot Coaxial Cascade Cable (2)
95A9128	IEC AC Power Cable (1)
95A9129	IEC AC Extension Cable (1)
C803	Shielded 3-foot Ethernet Cable (1)
C8006	Shielded 8-inch Ethernet Jumper Cable (1)
90XN1371	Hardware Kit (1)
95B9023	22-inch Coaxial Cable* (1)
95C9023	33-inch Coaxial Cable* (1)

\* with integrated bulkhead for front mounting antennas.



AXT600 Spectrum Manager Front



AXT600 Spectrum Manager Back

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# Component Specifications

## AXT630, AXT631 Antenna Distribution Systems

### Overview

Antenna Distribution Systems send the RF signal from a single pair of antennas to multiple receivers. Ultra-linear amplification and adjustable attenuation optimize performance in difficult RF environments. Selectable input filters match the available frequency bands of transmitters, providing extra protection from strong out-of-band signals. BNC antenna output pairs distribute band-filtered signal to up to 4 receivers. A pair of wideband cascade ports supplies a wideband RF signal to Spectrum Managers or additional antenna distribution amplifiers. Networking enables Wireless Workbench® 6 system control of filtering ranges and attenuation. To maximize use of available RF spectrum, two models of the Antenna Distribution System are available. The AXT630 covers a frequency range of 470-698 MHz and the AXT631 covers a frequency range of 606-814 MHz.

- Selectable input filtering provides system-wide protection against strong out-of-band signals
- Wideband filtering option covers multiple bands
- Up to 15 dB of selectable RF attenuation for signal-to-noise optimization
- Front panel interface and Wireless Workbench 6 software control provide easy setup and control of filtering, antenna power, and attenuation
- BNC outputs: 4 antenna output pairs
- Wideband RF cascade port with selectable 3 dB make-up gain for connecting wideband devices
- Ethernet Networking: 2 PoE enabled Ethernet ports
- IEC power ports enable daisy-chaining of AC power

### Product Specifications

Dimensions	44 mm x 483 mm x 366 mm (1.7 in. x 19.0 in. x 14.4 in.), H x W x D	
Weight	4.6 kg (10.1 lbs)	
Housing	Steel; Extruded aluminum	
Operating Temperature Range	-18°C (0°F) to 63°C (145°F)	
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F)	
Power Requirements	100 to 240 V AC, 50-60 Hz	
Current Drain	1.0 A RMS (referenced at 120 V AC)	
<b>RF Input</b>		
Connector Type	BNC	
Configuration	Unbalanced, active	
Band Filters	AXT630:	Wideband: 470-698 MHz Band G1: 470-530 MHz Band H4: 518-578 MHz Band J5: 578-638 MHz Band L3: 638-698 MHz
	AXT631:	Wideband: 606-814 MHz Band K4E: 606-666 MHz Band M8: 666-730 MHz Band P8, P9: 710-790 MHz Band Q5: 740-814 MHz
Impedance	50 Ω	
Bias Voltage	12 V DC, 150 mA (300 mA maximum)	
RF Frequency Range	AXT 630: 470-698 MHz AXT 631: 606-814 MHz	
<b>Distribution Output</b>		
Connector Type	BNC (4 pairs)	
Configuration	Unbalanced, active	
Impedance	50 Ω	
Gain Adjustment Range	Cascade Enabled: -15 dB to 0 dB (In 1 dB steps) Cascade Disabled: -12 dB to +3 dB (In 1 dB steps)	
Output Intercept Point	>25 dBm, typical	
<b>Cascade Output</b>		
Connector Type	BNC (1 pair)	
Configuration	Unbalanced, wideband	
Impedance	50 Ω	
Insertion Loss	<5 dB	
<b>Networking</b>		
Power Over Ethernet (PoE)	50 V DC, Class 1	
Network Interface	Dual Port Ethernet 10/100 Mbps	
Network Addressing Capability	DHCP or Manual IP address	



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# Component Specifications

## Included Components

UA802	2-foot Coaxial Antenna Cable (RG-58) (12)
95A9128	IEC AC Power Cable (1)
95A9129	IEC AC Extension Cable (1)
C803	Shielded 3-foot Ethernet Cable (1)
C8006	Shielded 8-inch Ethernet Jumper Cable (1)
90XN1371	Hardware Kit (1)
95B9023	22-inch Coaxial Cable* (1)
95C9023	33-inch Coaxial Cable* (1)

\* with integrated bulkhead for front mounting antennas.

## Optional Accessories

### 1/2 Wave Antennas

UA820G	744-865 MHz
UA820H4	690-746 MHz
UA820J	554-590 MHz
UA820K	606-666 MHz
UA820L3	638-698 MHz
UA820M	694-758 MHz
UA820Q	740-814 MHz
UA820P8	710-790 MHz

### Antennas

UA860SWB	Passive Omnidirectional Antenna (470-1100 MHz)
PA805SWB	Passive Directional Antenna (470-952 MHz)
HA-8089	PWS Helical Antenna (480-900 MHz)

### In-Line RF Amplifiers

UA830WB	470-900 MHz
UA830USTV	470-698 MHz

### Active Directional Antennas

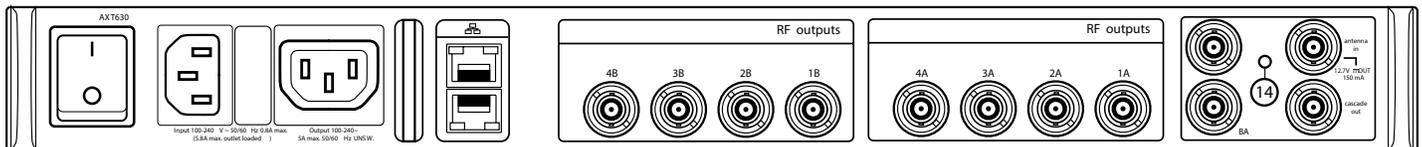
UA870WB	470-900 MHz
UA870USTV	470-698 MHz

### Cables

UA825	25-foot Coaxial Cable RG8/X
UA850	50-foot Coaxial Cable RG8/X
UA8100	100-foot (30.4 m) Antenna Extension Cable



AXT630 Antenna Distribution System Front



AXT630 Antenna Distribution System Back

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# Component Specifications

## AXT610 ShowLink Wireless Access Point

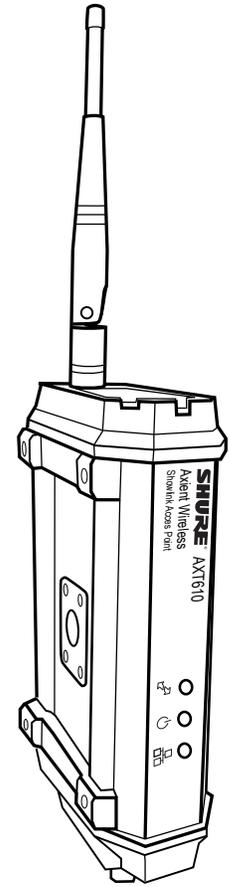
### Overview

The AXT610 ShowLink™ access point enables real-time remote control of the Axient™ transmitters. The access point allows comprehensive management of transmitter parameters from the receiver or Wireless Workbench 6 using 2.4 GHz wireless network communication. All parameter changes occur without interruption to the performer.

- Real-time wireless remote control of up to 16 transmitters per ShowLink access point
- Automated channel selection - Independently scans 2.4 GHz frequency range and determines best channel for use
- Receives power over Ethernet network connection or from an external power supply
- Easy transmitter authentication - Recognizes linked transmitters upon IR sync
- Provides a coverage area equivalent to the range of Axient transmitters
- Automatic hand-offs between multiple access points extend coverage range
- Automatic frequency agility - Moves a ShowLink network to the best available 2.4 GHz channel in the event of signal degradation
- Versatile mounting options - Fits readily available microphone stand adapters and features built-in threading for permanent installation
- Wireless Workbench® 6 system supports networked control of all device functions and provides a ShowLink plot for viewing 2.4 GHz signal levels

### Product Specifications (subject to change)

Antenna Type	Omnidirectional 2.4 GHz
Capacity	16 Axient transmitters
Mounting Type	WA371 Mic Clip or 1/4-20 thread mount
Operating Temperature Range	-18°C (0°F) to 63°C (145°F)
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F)
Dimensions	186 mm x 101 mm x 46 mm (7.34 in. x 3.960 in. x 1.825 in.) H x W x D, without antenna
Weight	476 g (16.8 oz.), without antenna
Housing	Extruded Aluminum
Power Requirements	Power over Ethernet (PoE) Class 1: 36 to 57 VDC/VAC External Power Supply (if PoE is unavailable): 15 V DC (600 mA), double insulated
<b>ShowLink</b>	
Network Type	IEEE 802.15.4
Frequency Range	2.40 to 2.4835 GHz (16 Channels)
RF Output Power	10 dBm (ERP)
Working Range	Under typical conditions: 150 m (500 ft) Line of Sight, outdoors for a single system: 500 m (1600 ft) Note: Actual range depends on RF signal absorption, reflection and interference.
<b>Antenna Connection</b>	
Connector	SMA (Shell=Ground, Center=Signal)
Impedance	50 Ω
<b>Scanning Radio</b>	
Scanner RF Sensitivity	-106 dBm, typical (integrated antenna)
<b>Networking</b>	
Network Interface	Ethernet 10/100
Network Addressing Capability	DHCP or Manual IP address (configurable using Wireless Workbench)



**AXT610**  
ShowLink Wireless Access Point

### Included Components

WA371	Wireless microphone clip for mounting on a microphone stand
31A1856	Euro thread adapter for WA371
C825	Shielded 25-foot Ethernet cable for ShowLink access point, RJ45-to-EtherCon connector

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# Component Specifications

## AXT900 Rack Mount Charging Station

### Overview

The AXT900 charges up to 8 Shure rechargeable batteries in a single, compact rackmount housing. Interchangeable charging modules accommodate any combination of handheld and bodypack batteries. A menu screen displays charging status for each battery, and when connected to a network, charging status can be monitored remotely through the Shure Wireless Workbench 6 software.

- Charge up to 8 batteries in a single rack space
- Batteries charge to 50% capacity within 1 hour
- Ethernet ports for networking
- Interchangeable charger modules for flexibility
- Simple 3-key control interface

### Product Specifications (subject to change)

Battery Type	Up to 8 rechargeable Li-Ion batteries (AXT910/920/920SL)
Charge Time	50%=1 hour; 100%=3 hours
Charging Module Type	Up to 4 charging modules (AXT901 or AXT902) in any combination
Operating Temperature Range	-18°C (0°F) to 63°C (145°F)
Battery Charging Temperature Range	0°C (32°F) to 60°C (140°F)
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F)
Dimensions	44 mm x 483 mm x 366 mm (1.7 in. x 19.0 in. x 14.4 in.), H x W x D
Weight	4.4 kg (9.8 lbs), without batteries or charging modules
Housing	Steel, Extruded aluminum
Power Requirements	100 to 240 V AC, 50-60 Hz
Current Drain	2.5 A RMS (referenced at 120 V AC)

### Networking

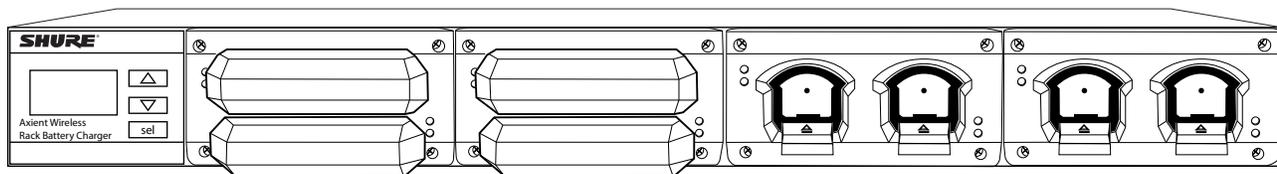
Network Interface	Dual Port Ethernet 10/100
Network Addressing Capability	DHCP or Manual IP address

### Included Components

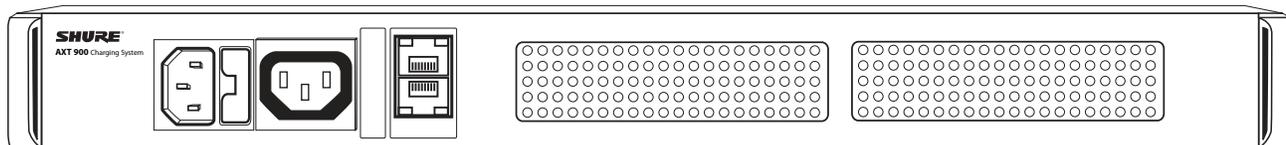
30B13476	Mounting Screws for Charger Modules (8)
95A9128	IEC AC Power Cable (1)
95A9129	IEC AC Extension Cable (1)
C803	Shielded 3-foot Ethernet Cable (1)
C8006	Shielded 8-inch Ethernet Jumper Cable (1)
90XN1371	Hardware Kit (1)

### Optional Accessories

AXT901	2-bay charging module for bodypack battery
AXT902	AXT902 2-bay charging module for handheld battery



AXT900 Rack Charger Front



AXT900 Rack Charger Back

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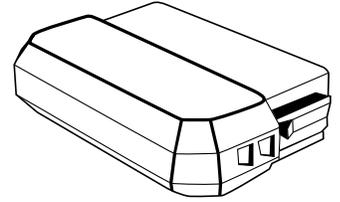
# Component Specifications

## AXT910, AXT920 Rechargeable Batteries

### Overview

The AXT910 and AXT920 Axient Rechargeable Batteries are advanced lithium-ion, high-efficiency, rechargeable batteries for Axient transmitters. They provide extended performance, zero memory effect and real-time metering of remaining charge and other battery status parameters. They integrate seamlessly into transmitters and offer a sustainable, powerful, and reliable alternative to disposable batteries.

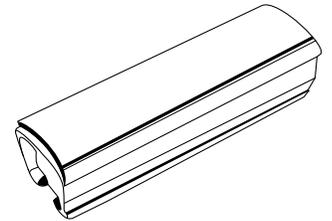
- AXT910 rechargeable battery powers AXT100 Bodypack Transmitters
- AXT920 rechargeable battery powers AXT200 Handheld Transmitters
- Advanced lithium-ion batteries provide reliable, rechargeable power with up to 8 hours of run time.
- Real-time metering reports remaining battery power in hours and minutes to receivers and WWB6, to within 15 minutes of accuracy.
- Zero memory effect through lithium-ion chemistry eliminates the memory effect problems inherent in previous generations of rechargeable batteries.
- Rapid charging brings batteries to 50% capacity within 1 hour.
- Integrated battery design seamlessly and securely locks the rechargeable battery into transmitter body.
- Practical, sustainable design provides an efficient, systematic power management alternative to disposable batteries.



**AXT910**  
Bodypack Rechargeable Battery

### Product Specifications (subject to change)

Battery Type	Up to 2 rechargeable Li-Ion batteries (AXT910/AXT920/920SL)
Nominal Capacity	AXT910: 1900 mAh (7.03 Wh) AXT920/920SL: 2450 mAh (8.82 Wh)
Nominal Voltage	AXT910: 3.7 V AXT920/920SL: 3.6 V
Dimensions	AXT910: 17 mm x 69 mm x 43 mm, H x W x D AXT920/920SL: 21 mm x 76 mm x 26 mm, H x W x D
Weight	AXT910: 74 g (2.6 oz.) AXT920/920SL: 63 g (2.2 oz.)
Housing	AXT910: Molded ABS, Cast Aluminum AXT920/920SL: Molded ABS
Charging Temperature Range	0°C (32°F) to 60°C (140°F)
Discharging Temperature Range	-18°C (0°F) to 60°C (140°F)
Recommended Storage Temperature Range	10°C (50°F) to 25°C (77°F)



**AXT920**  
Handheld Rechargeable Battery

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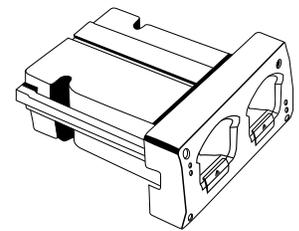
# Component Specifications

## AXT901, AXT902 Charging Modules

### Overview

The AXT901 and AXT902 Charging Modules charge 2 transmitter batteries in the Axient Rackmount Charging Station. Configurable bays in the Rackmount Charging Station allow for mixing and matching of up to 4 charging modules, for a total of 8 handheld or bodypack batteries.

- AXT901 charges 2 AXT910 bodypack transmitter batteries.
- AXT902 charges 2 AXT920 handheld transmitter batteries.
- Fits into Axient Rackmount Charging Stations.
- Rapid charging brings batteries to 50% capacity within 1 hour.
- Completely charges batteries within 3 hours.



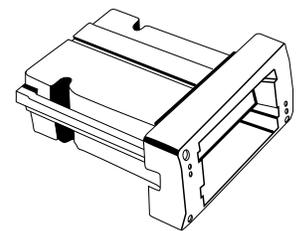
**AXT901**  
Bodypack Charging Module

### Product Specifications (subject to change)

Charge Current	AXT910: 975 mA AXT920/920SL: 1225 mA
Dimensions	50%=1 hour; 100%=3 hours
Weight	AXT901: 44 g (1.6 oz.) AXT902: 39 g (1.4 oz.)
Housing	Molded ABS, Cast Aluminum

### Included Components

30B13476	Mounting Screws for Charger Modules (8)
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**AXT902**  
Handheld Charging Module

## AXT903, AXT904 Portable Charging Stations

### Overview

The AXT903 and AXT904 Portable Charging Module charge 2 transmitter batteries in a convenient and compact desktop unit.

- AXT903 charges two AXT910 bodypack transmitter batteries.
- AXT904 charges two AXT920 handheld transmitter batteries.
- Rapid charging brings batteries to 50% capacity within 1 hour.
- Completely charges batteries within three hours.
- Module can be re-used in AXT900 Rack Mount Charging Station.
- Power supply included.

### Product Specifications (subject to change)

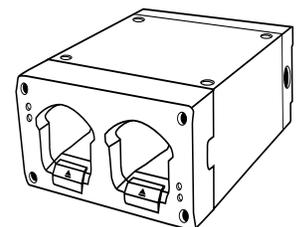
Battery Type	Up to 2 rechargeable Li-Ion batteries (AXT910/AXT920/920SL)
Charge Time	50%=1 hour; 100%=3 hours
Operating Temperature Range	-18°C (0°F) to +40°C (104°F)
Battery Charging Temperature Range	0°C (32°F) to 60°C (140°F)
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F), without batteries
Dimensions	45 mm x 86 mm x 114 mm (1.8 in. x 3.4 in. x 4.5 in.), H x W x D
Weight	350 g (12.3 oz.), without batteries or PS50 External Power Supply
Housing	Cast and extruded aluminum
Power Requirements	5.5 V DC, 2.72 A

### Included Components

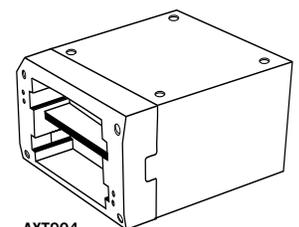
AXT901 for bodypack battery or AXT902 for handheld battery	2-bay Charging Module
PS50	Power Supply
30B13476	Mounting Screws for Charger Modules (8)

### Optional Accessories

AXT901	2-bay charging module for bodypack battery
AXT902	2-bay charging module for handheld battery



**AXT903**  
Portable Bodypack Charging Station



**AXT904**  
Portable Handheld Charging Station

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