AXIENT DIGITAL WIRELESS SYSTEMS



Incorporating the most innovative wireless audio technology in the world, Axient Digital was engineered from the ground up for professional productions that demand flawless execution.

With an unprecedented level of signal stability and audio clarity, plus flexible hardware options, advanced connectivity, and comprehensive control, it's a wireless system built to take on the challenges of today—and tomorrow.

RF PROTECTION

With outstanding signal quality in even the most complex, congested environments, Axient Digital ensures maximum stability, range, and clarity for uncompromising audio—anywhere, every time.

AUDIO QUALITY

Axient Digital defies limitations for both RF and audio quality. With industry-leading low latency, transparent frequency response, and wide dynamic range, nothing gets in the way of true, pure sound. No matter the setting, it's Shure audio quality you can count on

COMMAND & CONTROL

ShowLink[®] remote control, Wireless Workbench[®], the ShurePlus[™] Channels app, and networked battery monitoring provide unmatched control and insight for seamless performance.

HARDWARE & SCALABILITY

With two transmitter series to choose from—both compatible with a shared receiver platform— Axient Digital is a scalable wireless system that provides incomparable sound for a wide range of applications and settings.



AXIENT DIGITAL WIRELESS SYSTEMS

SYSTEM SPECIFICATIONS (SUBJECT TO CHANGE)

RF		
RF Carrier Frequency Range	470–960 MHz Varies by Region. See Frequency Range and Output Power Table.	
Working Range	100 m (330 ft) Note: Actual range depends on RF signal absorption, reflection and interference.	
RF Tuning Step Size	25 kHz Varies by region.	
Image Rejection	>70 dB typical	
RF Sensitivity	-98 dBm at 10 ⁵ BER	
AUDIO		
Latency	Standard mode: 2.0 ms High Density mode: 2.9 ms	
Audio Frequency Response	AD1: 20 Hz-20 kHz (±1 dB) AD2: 20 Hz-20 kHz (±1 dB) ADX1: 20 Hz-20 kHz (±1 dB) ADX1: 20 Hz-20 kHz (±1 dB) ADX2/ADX2FD: 20 Hz-20 kHz (±1 dB) Note: dependent on microphone type	
Audio Dynamic Range A-weighted, typical, System Gain @ +10	XLR Analog Output: 120 dB (A-weighted); 117 dB (unweighted) Dante Digital Output: 130 dB (A-weighted); 126 dB (unweighted)	
Total Harmonic Distortion -6 dBFS input, 1 kHz, System Gain @ +10	<0.01%	
System Audio Polarity	Positive pressure on microphone diaphragm produces positive voltage on pin 2 with respect to pin 3 of XLR output and the tip of the 6.35 mm (1/4-inch) output.	

FURNISHED ACCESSORIES

RECEIVERS			
90XN1371	Hardware Kit		
95A8994	BNC Bulkhead Adapter		
Var. By Region	1/2 Wave Receiver Atnenna (2)		
95B9023	BNC-BNC Cable (short)		
95C9023	BNC-BNC Cable (long)		
95N2035	Coaxial RF Cascade Cable		
Var. By Region	AC Power Cable, VLock		
Var. By Region	AC Power Jumper Cable		
95A33402	Ethernet Cable, 3 ft.		
95B33402	Ethernet Jumper Cable		
BODYPACK TRAN	SMITTERS		
90B8201	AA Alkaline Batteries (2)		
Var. By Region	1/4 Wave Antenna		
WA340	Threaded TA4F Adapter		
WA610	Transmitter Carrying Case		
29A13	Zipper Bag		
44A12547	Belt Clip		
HANDHELD TRAN	HANDHELD TRANSMITTERS		
95B2313	Zipper bag		
31B1856	Euro-threaded adapter		
90F4046	Swivel Adapter (black)		
89B8201	AA Alkaline Batteries (2)		

OPTIONAL ACCESSORIES (SEE SHURE.COM FOR MORE)

TEMPERATURE RANGE Note: Battery characteristics may limit this range.

0 to 122 °F (-18 °C to 50 °C)

-20 to 149 °F (-29°C to 65°C) NOTE: This Radio equipment is intended for use in musical professional entertainment and similar applications. This Radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and

Operating Temperature Range

Storage Temperature Range

RF power levels for wireless microphone products.

Battery Chargers		Docking Cha	Docking Chargers		Handheld Systems	
SBRC	Rack-Mounted Networked Battery Charger	SBC200	Two-Bay Docking Charger for AD1 & AD2 Transmitters and SB900A Batteries	WA617M	Radome Color ID Kit for AD2 Handheld Transmitters	
SBC-AX	SBRC Battery Charging Module for SB900A Batteries	SBC220	Two-Bay Networked Docking Charger for AD1 & AD2 Transmitters and SB900A Batteries	WA619-A	Radome Color ID Kit for ADX Handheld Transmitters (470–636 MHz)	
SBM910	SBRC Battery Charging Module for SB910 Batteries	SBC240	Two-Bay Networked Docking Charger for ADX1, ADX2 & ADX2FD Transmitters and SB910 & SB920 Batteries	WA619-B	Radome Color ID Kit for ADX Handheld Transmitters (606–810 MHz)	
SBM910M	SBRC Battery Charging Module for SB910M Batteries	SBC840	Eight-Bay Networked Docking Charger for ADX1, ADX2 & ADX2FD Transmitters and SB910 & SB920 Batteries	WA619-C	Radome Color ID Kit for ADX Handheld Transmitters (750–960 MHz)	
SBM920	SBRC Battery Charging Module for SB920 Batteries			AD651B	Talk Switch Button (black)	
SBC10-100	USB Battery Dock Charger for SB900A			WA371	Microphone Stand Adapter	
SBC210	Two-Bay Desktop Battery Charger for SB900A			WA653	Mic Flag Extender Kit	
SBC800	Eight-Up Battery Charger for SB900A					

SBC840M Eight-Bay Networked Battery Charger for SB910M Batteries



AD4D DUAL-CHANNEL DIGITAL WIRELESS RECEIVER

SPECIFICATIONS

(SUBJECT TO CHANGE)		
Dimensions (H × W × D)	1.7 × 19.0 × 13.1 in (44 × 483 × 333 mm)	
Weight	10.1 lb (4.6 kg) without antennas	
Housing	Steel; extruded aluminum	
Power Requirements	100 to 240 VAC, 50–60 Hz 0.68 A max	
Thermal Dissipation	Maximum: 23 W (78 BTU/hr) Idle: 15 W (6	
AUDIO OUTPUT		
Gain Adjustment Range	–18 to +42 dB in 1 dB steps (plus Mute setting)	
Configuration	1/4" (6.35 mm): Transformer-cou- pled Balanced (Tip=audio, Ring=no audio, Sleeve=ground)	
	XLR: Transformer-Coupled Balanced (1=ground, 2=audio +, 3=audio –)	
Impedance Typical, XLR Line Out	100 Ω	
Full Scale Output 200 kΩ load	1/4" (6.35 mm): +8 dBV XLR (LINE setting): +18 dBV XLR (MIC setting): -12 dBV	
Mic/Line Switch	30 dB pad	
Phantom Power Protection	Yes	

NETWORKING

Network Interface	10/100 Mbps, 1 Gbps, Dante Digital Audio
Network Addressing Capability	DHCP or Manual IP address
Maximum Cable Length	100 m (328 ft)

CASCADE OUTPUT

Connector Type	BNC Note: For connection of one additional receiver in the same band
Configuration	Unbalanced, passive
Impedance	50 Ω
Insertion Loss	0 dB, typical

RF INPUT

Spurious Rejection	>80 dB, typical	
Connector Type	BNC	
Impedance	50 Ω	
Bias Voltage	12-13.5 VDC, 150 mA maximium, pe antenna, switchable on/off	
RF Carrier Frequency Range Model-Dependent	AD4D=A: 470-636 MHz AD4D=B: 606-810 MHz AD4D=C: 750-960 MHz	

OVERVIEW

The AD4D Axient Digital Dual Receiver sets a new standard in transparent digital audio and maximum spectral efficiency. Groundbreaking performance features include wide tuning, low latency, and High Density (HD) mode, ensuring solid performance in the most challenging RF environments. Networked control, AES3 + AES67 + Dante[™] and signal routing options bring a new level of management and flexibility to your entire workflow. Compatible with all Axient Digital transmitters.

FEATURES

- Wide tuning range up to 184MHz
- True digital diversity reception per channel for drop-out resistance
- \cdot Networked control with Wireless Workbench $^{\circ}$ and ShurePlus $^{\scriptscriptstyle \mathrm{M}}$ Channels app
- Front panel headphone jack enables Dante Cue and Dante Browse monitoring
- Configurable Ethernet switch for redundant Dante digital output
- AES3 output
- Channel Quality meter displays RF signal-to-noise
- Locking AC connectors





Back Panel



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AD4Q QUAD-CHANNEL DIGITAL WIRELESS RECEIVER

SPECIFICATIONS

(SUBJECT TO CHANGE	=)	
Dimensions (H × W × D)	1.7 × 19.0 × 13.1 in (44 × 483 × 333 mm)	
Weight	10.6 lb (4.8 kg) without antennas	
Housing	Steel; extruded aluminum	
Power Requirements	100 to 240 VAC, 50–60 Hz 0.68 A max	
Thermal Dissipation	Maximum: 31 W (106 BTU/hr) Idle: 21 W (72 BTU/hr)	
AUDIO OUTPUT		
Gain Adjustment Range	–18 to +42 dB in 1 dB steps (plus Mute setting)	
Configuration	1/4" (6.35 mm): Transformer-cou- pled Balanced (Tip=audio, Ring=no audio, Sleeve=ground)	
	XLR: Transformer-Coupled Balanced (1=ground, 2=audio +, 3=audio –)	
Impedance Typical, XLR Line Out	100 Ω	
Full Scale Output 200 kΩ load	1/4" (6.35 mm): +8 dBV XLR (LINE setting): +18 dBV XLR (MIC setting): –12 dBV	
Mic/Line Switch	30 dB pad	
Phantom Power Protection	Yes	

NETWORKING

Network Interface	10/100 Mbps, 1 Gbps, Dante Digital Audio
Network Addressing Capability	DHCP or Manual IP address
Maximum Cable Length	100 m (328 ft)

CASCADE OUTPUT

Connector Type	BMC Note: For connection of one additional receiver in the same band
Configuration	Unbalanced, passive
Impedance	50 Ω
Insertion Loss	0 dB, typical

RF INPUT

Spurious Rejection	>80 dB, typical
Connector Type	BNC
Impedance	50 Ω
Bias Voltage	12-13.5 VDC, 150 mA maximium, per antenna, switchable on/off
RF Carrier Frequency Range Model-Dependent	AD4Q=A: 470-636 MHz AD4Q=B: 606-810 MHz AD4Q=C: 750-960 MHz

OVERVIEW

The AD4Q Axient Digital Quad Receiver sets a new standard in transparent digital audio and maximum spectral efficiency. Groundbreaking performance features include wide tuning, low latency, High Density (HD) mode, and Quadversity[™], ensuring solid performance in the most challenging RF environments. Networked control, AES3 + AES67 + Dante[™] and signal routing options bring a new level of management and flexibility to your entire workflow. Compatible with all Axient Digital transmitters.

FEATURES

- Wide tuning range up to 184MHz
- True digital diversity reception per channel for drop-out resistance
- Networked control with Wireless Workbench[®] and ShurePlus[™] Channels app
- Quadversity[™] mode for extended antenna coverage and improved RF signal-to-noise
- Front panel headphone jack enables Dante Cue and Dante Browse monitoring
- Configurable Ethernet switch for redundant Dante digital output
- Switchable XLR/AES3 outputs
- Channel Quality meter displays RF signal-to-noise
- Locking AC connectors
- Optional DC module available to support redundant power

\bigcirc ENTER \bigcirc 0-0 0 0 0 000 1 2 3 4 ŝ PUSH O TYNE . [rawe SYNC [range] EXIT \bigcirc

AD4Q Front Panel



Back Panel





AD4D-DC DUAL-CHANNEL DIGITAL WIRELESS RECEIVER

SPECIFICATIONS (SUBJECT TO CHANGE)

Dimensions (H × W × D)	1.7 × 19.0 × 13.1 in (44 × 483 × 333 mm)
Weight	10.1 lb (4.6 kg) without antennas
Housing	Steel; extruded aluminum
Power Requirements	100 to 240 VAC, 50-60 Hz 0.68 A max
Thermal Dissipation	Maximum: 23 W (78 BTU/hr) Idle: 15 W (6
DC Input Voltage Range	10.9-14.8 V DC
Maximum DC Input Current	3.3 A
Protection Modes	Overvolrage, Undervoltage, Reverse Polarity
4-Pin XLR	Pin 1: Negative; Pin 2: No Con- nectoin; Pin 3: No Connection; Pin 4: Positive

AUDIO OUTPUT

Gain Adjustment Range	–18 to +42 dB in 1 dB steps (plus Mute setting)
Configuration	1/4" (6.35 mm): Transformer-cou- pled Balanced (Tip=audio, Ring=no audio, Sleeve=ground)
	XLR: Transformer-Coupled Balanced (1=ground, 2=audio +, 3=audio -)
Impedance Typical, XLR Line Out	100 Ω
Full Scale Output 200 kΩ load	1/4" (6.35 mm): +8 dBV XLR (LINE setting): +18 dBV XLR (MIC setting): –12 dBV
Mic/Line Switch	30 dB pad
Phantom Power Protection	Yes

NETWORKING

Network Interface	10/100 Mbps, 1 Gbps, Dante Digital Audio
Network Addressing Capability	DHCP or Manual IP address
Maximum Cable Length	100 m (328 ft)

CASCADE OUTPUT

Connector Type	BNC Note: For connection of one additional receiver in the same band
Configuration	Unbalanced, passive
Impedance	50 Ω
Insertion Loss	0 dB, typical

RF INPUT

Spurious Rejection	>80 dB, typical
Connector Type	BNC
Impedance	50 Ω
Bias Voltage	12-13.5 VDC, 150 mA maximium, per antenna, switchable on/off
RF Carrier Frequency Range Model-Dependent	AD4D-DC=A: 470-636 MHz AD4D-DC=B: 606-810 MHz AD4D-DC=C: 750-960 MHz

OVERVIEW

The AD4D Axient Digital Dual Receiver sets a new standard in transparent digital audio and maximum spectral efficiency. Groundbreaking performance features include wide tuning, low latency, and High Density (HD) mode, ensuring solid performance in the most challenging RF environments. Networked control, AES3 + AES67 + Dante[™] and signal routing options bring a new level of management and flexibility to your entire workflow. Compatible with all Axient Digital transmitters.

FEATURES

- DC Power Module supports backup power sources and remote operation
- Wide tuning range up to 184MHz
- True digital diversity reception per channel for drop-out resistance
- Networked control with Wireless Workbench $^{\circ}$ and ShurePlus $^{\scriptscriptstyle \mathrm{M}}$ Channels app
- · Front panel headphone jack enables Dante Cue and Dante Browse monitoring
- Configurable Ethernet switch for redundant Dante digital output
- AES3 output
- · Channel Quality meter displays RF signal-to-noise
- Locking AC connectors







AD4D-DC Back Panel



AD4Q-DC QUAD-CHANNEL DIGITAL WIRELESS RECEIVER

SPECIFICATIONS (SUBJECT TO CHANGE)

Dimensions (H × W × D)	1.7 × 19.0 × 13.1 in (44 × 483 × 333 mm)
Weight	10.6 lb (4.8 kg) without antennas
Housing	Steel; extruded aluminum
Power Requirements	100 to 240 VAC, 50-60 Hz 0.68 A max
Thermal Dissipation	Maximum: 23 W (78 BTU/hr) Idle: 15 W (6
DC Input Voltage Range	10.9-14.8 V DC
Maximum DC Input Current	4.0 A
Protection Modes	Overvolrage, Undervoltage, Reverse Polarity
4-Pin XLR	Pin 1: Negative; Pin 2: No Con- nectoin; Pin 3: No Connection; Pin 4: Positive

AUDIO OUTPUT

Gain Adjustment Range	–18 to +42 dB in 1 dB steps (plus Mute setting)
Configuration	1/4" (6.35 mm): Transformer-cou- pled Balanced (Tip=audio, Ring=no audio, Sleeve=ground)
	XLR: Transformer-Coupled Balanced (1=ground, 2=audio +, 3=audio -)
Impedance Typical, XLR Line Out	100 Ω
Full Scale Output 200 kΩ load	1/4" (6.35 mm): +8 dBV XLR (LINE setting): +18 dBV XLR (MIC setting): -12 dBV
Mic/Line Switch	30 dB pad
Phantom Power Protection	Yes

NETWORKING

Network Interface	10/100 Mbps, 1 Gbps, Dante Digital Audio
Network Addressing Capability	DHCP or Manual IP address
Maximum Cable Length	100 m (328 ft)

CASCADE OUTPUT

Connector Type	BNC Note: For connection of one additional receiver in the same band
Configuration	Unbalanced, passive
Impedance	50 Ω
Insertion Loss	0 dB, typical

RF INPUT

Spurious Rejection	>80 dB, typical
Connector Type	BNC
Impedance	50 Ω
Bias Voltage	12-13.5 VDC, 150 mA maximium, per antenna, switchable on/off
RF Carrier Frequency Range Model-Dependent	AD4Q-DC=A: 470-636 MHz AD4Q-DC=B: 606-810 MHz AD4Q-DC=C: 750-960 MHz

OVERVIEW

The AD4Q Axient Digital Quad Receiver sets a new standard in transparent digital audio and maximum spectral efficiency. Groundbreaking performance features include wide tuning, low latency, High Density (HD) mode, and Quadversity[™], ensuring solid performance in the most challenging RF environments. Networked control, AES3 + AES67 + Dante[™] and signal routing options bring a new level of management and flexibility to your entire workflow. Compatible with all Axient Digital transmitters.

FEATURES

- DC Power Module supports backup power sources and remote operation
- \cdot Wide tuning range up to 184MHz
- True digital diversity reception per channel for drop-out resistance
- Networked control with Wireless Workbench[®] and ShurePlus[™] Channels app
- Quadversity[™] mode for extended antenna coverage and improved RF signal-to-noise
- Front panel headphone jack enables Dante Cue and Dante Browse monitoring
- Configurable Ethernet switch for redundant Dante digital output
- Switchable XLR/AES3 outputs
- Channel Quality meter displays RF signal-to-noise
- Locking AC connectors
- \cdot Optional DC module available to support redundant power



AD4Q-DC Front Pane



AD4Q-DC Back Panel



AD1 DIGITAL WIRELESS BODYPACK TRANSMITTER

SPECIFICATIONS

(SUBJECT TO CHANGE)

Gain Offset Range	–12 to 21 dB (in 1 dB steps)
Battery Type	SB900A Rechargeable Li-Ion or LR6 AA batteries 1.5 V
Battery Run Time @10 mW	Shure SB900A: up to 9 hours Alkaline: up to 8 hours
Dimensions (H × W × D)	3.4 × 2.6 × 0.9 in (86 × 66 × 23 mm)
Weight	5.47 oz (155 g) wihtout batteries
Housing	Cast Aluminum

AUDIO INPUT

4-Pin male mini connector (TA4M) LEM03 Connector
Unbalanced
ΤΑ4Μ: 910 kΩ LEM03: 8.2 MΩ
Pad Off: 8.5 dBV (7.5 Vpp) Pad Off: 20.5 dBV (30 Vpp)
-120 dBV A-weighted, typical

RF OUTPUT

Connector	SMA
Antenna Type	1/4 Wave
Impedance	50 Ω
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Axient Digital Propietary
Power	2 mW, 10 mW, 35 mW Varies by region. See Frequency Range and Output Power Table.
Specific Absorption Rate	<0.20 W/kg

(SAR)

AVAILABLE MODELS

AD1-TQG	Axient Digital Bodypack, TQG (TA4M) Connector
AD1-LEM03	Axient Digital Bodypack, LEMO3 Connector

OVERVIEW

AD series bodypack transmitters deliver impeccable audio quality and RF performance with wide-tuning, High Density (HD) mode, and encryption. Features durable metal construction, AA or SB900A rechargeable power (with dockable charging), and TA4 or LEMO3 connector options.

FEATURES

Two transmission modes:

Standard for optimal coverage

New High Density mode for maximum system channel count and robust coverage

- Encryption-enabled, secure transmission
- · External contacts for docked charging
- AA or SB900A Li-ion rechargeable batteries
- Detachable ¼ wave antenna
- LEM03 and TA4M connector options



AD1 Bodypack Transmitter

AVAILABLE FREQUENCY BANDS

Band	Range (MHz)	Transmitter Output (mW)
G53	470 to 510	2/10/35
G54	479 to 565	2/10/20
G55	470 to 636*	2/10/35
G56	470 to 636	2/10/35
G57	470 to 616*	2/10/35
G62	510 to 530	2/10/35
H54	520 to 636	2/10/35
K53	606 to 698*	2/10/35
K54	606 to 663**	2/10/35
K55	606 to 694	2/10/35
K56	606 to 714	2/10/35
K57	606 to 790	2/10/35
K58	622 to 698	2/10/35
L54	630 to 787	2/10/35
R52	794 to 806	2/10/35
JB	806 to 810	2/10
X51	925 to 937.5	2/10
X55	941 to 960	2/10/35

Note: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability. * with a gap between 608 to 614 MHz * with a gap between 608 to 614 MHz and a gap between 616 to 653 MHz



AD2 DIGITAL WIRELESS HANDHELD TRANSMITTER

SPECIFICATIONS

(SUBJECT TO CHANGE)

Gain Offset Range	-12 to 21 dB (in 1 dB steps)
Battery Type	SB900A Rechargeable Li-Ion or LR6 AA batteries 1.5 V
Battery Run Time @10 mW	Shure SB900A: up to 9 hours Alkaline: up to 8 hours
Dimensions (L × D)	10.1 × 2.0 in (256 × 51 mm)
Weight	12.0 oz (340 g) wihtout batteries
Housing	Cast Aluminum
audio input	
Configuration	Unbalanced
Maximum Input Level 1 kHz at 1% THD	145 dB SPL, typical (SM58®) Note: dependent on microphone type
RF OUTPUT	
Antenna Type	1/4 Wave
Occupied Bandwidth	<200 kHz

Occupied Bandwidth	<200 kHz
Modulation Type	Shure Axient Digital Propietary
Power	2 mW, 10 mW, 35 mW Varies by region. See Frequency Range and Output Power Table.

Specific Absorption Rate <0.19 W/kg (SAR)

AVAILABLE MODELS

AD2	Axient Digital Handheld Transmitter
AD2/B58A	with Beta® 58A Supercardioid Dynamic Vocal Wireless Microphone Capsule
AD2/B87A	with Beta® 87A Supercardioid Con- denser Vocal Wireless Microphone Capsule
AD2/B87C	with Beta® 87A Cardioid Condenser Vocal Wireless Microphone Capsule
AD2/K8N	with KSM8 Dualdyne™ Cardioid Dynamic Wireless Microphone Capsule (Nickel)
AD2/K8B	with KSM8 Dualdyne [™] Cardioid Dynamic Wireless Microphone Capsule (Black)
AD2/K9N	with KSM9 Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)
AD2/K9B	with KSM9 Dual-Pattern Condenser Wireless Microphone Capsule (Black)
AD2/K9HSN	with KSM9HS Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)
AD2/K9HSB	with KSM9HS Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)
AD2/SM58	with SM58 [®] Cardioid Dynamic Vo- cal Wireless Microphone Capsule
AD2/VP68	with VP68 Omnidirectional Condenser Wireless Microphone Capsule

OVERVIEW

AD series handheld transmitters deliver impeccable audio quality and RF performance with wide-tuning, High Density (HD) mode, and encryption. Features durable metal construction, AA or SB900A rechargeable power (with dockable charging), and black or nickel finish options.

FEATURES

Two transmission modes:

Standard for optimal coverage

New High Density mode for maximum system channel count and robust coverage

- Encryption-enabled, secure transmission
- · External contacts for docked charging
- AA or SB900A Li-ion rechargeable batteries
- Backlit LCD with easy-to-navigate menu and controls
- Low-profile, lockable power switch
- Available cartridges: KSM8, KSM9HS, Beta® 87A/87C, Beta® 58A, SM58®, VP68



AD2 Handheld Transmitter

AVAILABLE FREQUENCY BANDS

Band	Range (MHz)	Transmitter Output (mW)
G53	470 to 510	2/10/35
G54	479 to 565	2/10/20
G55	470 to 636*	2/10/35
G56	470 to 636	2/10/35
G57	470 to 616*	2/10/35
G62	510 to 530	2/10/35
H54	520 to 636	2/10/35
K53	606 to 698*	2/10/35
K54	606 to 663**	2/10/35
K55	606 to 694	2/10/35
K56	606 to 714	2/10/35
K57	606 to 790	2/10/35
K58	622 to 698	2/10/35
L54	630 to 787	2/10/35
R52	794 to 806	2/10/35
JB	806 to 810	2/10
X51	925 to 937.5	2/10
X55	941 to 960	2/10/35

Note: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability. * with a gap between 608 to 614 MHz * with a gap between 608 to 614 MHz and a gap between 616 to 653 MHz



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SPECIFICATIONS (SUBJECT TO CHANGE)

Mic Offset Range	-12 to 21 dB (in 1 dB steps)
Battery Type	Shure SB900 series rechargeable li-ion or AA batteries 1.5 V
Battery Runtime @ 10 mW	Shure SB900A: over 8 hours Alkaline: over 7 hours See Battery Runtime Chart
Dimensions	126 × 44.5 × 44.5 mm (5.0 × 1.8 × 1.8 in.)
Weight	240 g (8.0 oz), without batteries
Housing	Cast metal
Operating Temperature Range	-14 to 122 °F (−10 to 50 °C)
Storage Temperature Range	-40 to 165 °F (-40 to 74 °C)

AUDIO INPUT

Connector	3-pin female XLR
Configuration	balanced
Impedance	Pad (-12 dB): 26.64 kΩ 0 dB: 6.64 kΩ Boost (12 dB): 6.64 kΩ
Maximum input Level 1 kHz at 1% THD	Pad (–12 dB): 21 dBV 0 dB: 9 dBV Boost (12 dB): –3 dBV
Preamplifier Equivalent Input Noise System Gain Setting >+20	–115 dBV Typical, A-weighted
Phantom Power	+48 V (7 mA maximum) +12 V (15 mA maximum)
High Pass Filter	Two-pole (12 dB per octave), cutoff frequency selectable from 40 to 240 Hz in 20 Hz increments
RF OUTPUT	
Antenna Type	Dipole
Impedance	50 Ω
Occupied Bandwidth	< 200 kHz
Channel-to-Channel Spacing	Standard Mode: 350 kHz High Density Mode: 125 kHz
Modulation Type	Shure Axient Digital Propietary
Power	2 mW, 10 mW, 35 mW Varies by region. See Frequency Range and Output Power Table.

Specific Absorption Rate $\$ <0.24 W/kg (SAR)

OVERVIEW

The Axient[®] Digital AD3 plug-on transmitter transforms any microphone into an advanced, portable Axient Digital AD Series wireless microphone, delivering impeccable audio quality and RF performance, wide-tuning, and encryption features. Compatible with Axient Digital AD4D and AD4Q receivers in Standard or High Density modes, AD3 features a custom, fast, and secure XLR connector design, support for both AA and Shure SB900series rechargeable battery options, and simple, user-friendly controls and menus. The AD3 is housed in a lightweight, rugged, metal chassis and is designed to resist sweat, moisture, and debris.

FEATURES

- Patent-pending locking XLR connector for secure, wobble-free connection
- OLED display with easy-to-navigate menu and controls
- Rugged metal construction that is resistant to dust and moisture
- · Automatic input staging optimizes gain setting
- AES 256-bit encryption-enabled for secure transmission
- 300 feet (100 meter) line-of-sight operating range
- · Selectable modulation modes optimize performance for spectral efficiency
- Standard Optimal coverage, low latency
- · High density Dramatic increase in max system channel count
- Switchable power levels (2/10/35 mW, region dependent)
- AA battery (included) or Shure SB900 rechargeable battery (sold separately) options
- Optional Shure SB900A lithium-ion rechargeable battery option provides up to 8 hours of continuous use, precision metering, and zero memory effect
- External power and charging option over USB-C port
- Included: 2 \times AA alkaline batteries, USB-A to USB-C cable, belt clip/pouch, and zippered bag for storage



AVAILABI	E FREQUENC	Y BANDS
Band	Frequency (MHz)	Power (mW)
G53	470 to 510	2/10/35
G54	479 to 565	2/10/20
G55	470 to 636*	2/10/35
G56	470 to 636*	2/10/35
G57	470 to 616*	2/10/35
G62	510 to 530	2/10/35
G63	487 to 636	2/10/30
H54	520 to 636	2/10/35
K53	606 to 698	2/10/35
K54	606 to 663**	2/10/35
K55	606 to 694	2/10/35
K56	606 to 714	2/10/35
K57	606 to 790	2/10/35
K58	622 to 698	2/10/35
L54	794 to 806	2/10
R52	806 to 810	2/10
X51	920 to 937.5	2/10
X55	941 to 960	2/10/35

AD3 Plug-On Wireless Transmitter Note: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability. * with a gap between 608 to 614 MHz * with a gap between 608 to 614 MHz and a gap between 616 to 653 MHz



ADX1M DIGITAL WIRELESS SHOWLINK®-ENABLED MICRO BODYPACK TRANSMITTER

SPECIFICATIONS

(SUBJECT TO CHANGE)

Gain Offset Range	-12 to 21 dB (in 1 dB steps)
Battery Type	Shure SB910M Rechargeable Li-Ion
Battery Run Time @10 mW	up to 7 hours
Dimensions (H × W × D)	2.4 × 2.7 × 0.7 in (60.4 × 68.0 × 18.0 mm)
Weight	1.9 oz (53 g) wihtout battery
Housing	Ultem® (PEI)

AUDIO INPUT

Connector	LEMO3 Connector
Configuration	Unbalanced
Impedance	8.2 ΜΩ
Maximum Input Level 1 kHz at 1% THD	Pad Off: 8.5 dBV (7.5 Vpp) Pad Off: 20.5 dBV (30 Vpp)
Preamplifier Equivalent Input Noise (EIN) System Gain Setting >20	–120 dBV A-weighted, typical

RF OUTPUT

Antenna Type	Integrated Helical
Impedance	50 Ω
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Axient Digital Propietary
Power	2 mW, 10 mW, 20 mW Varies by region. See Frequency Range and Output Power Table.
Specific Absorption Rate	<0.24 W/kg

bsorption Rate <0.24 W/kg (SAR)

AVAILABLE MODELS

ADX1M

Axient Digital Showlink®-Enabled Micro Bodypack Transmitter, LEM03 Connector

OVERVIEW

ADX1M delivers impeccable audio quality and RF performance, and is equipped with ShowLink® remote control for real-time parameter adjustments and interference avoidance. The contoured form factor and lightweight PEI construction offer both comfort and heat resistance. This transmitter features wide tuning, High Density (HD) mode, encryption, and advanced rechargeabilty. Membrane switches and LEMO connector protect against moisture, while the OLED display provides excellent visibility in low-light environments.

FEATURES

- Small and streamlined design for better concealment and wear (68mm × 60mm × 18mm)
- High-contrast OLED display
- · Diversity ShowLink enabled for remote transmitter control and automatic interference avoidance
- · Patent-pending internal adaptive antenna for optimized signal when ADX1M is worn against the body
- Ultem® PEI construction for heat resistance and durability
- Recessed LEMO connector
- · Sealed buttons and LEMO connection for protection against sweat and moisture ingress*
- Two transmission modes: Standard for optimal coverage and new High Density for maximum system channel count and robust coverage
- · Encryption-enabled, secure transmission
- · Up to 7 hours of runtime with SB910M rechargeable batteries
- Detachable belt clip

SHI SH ADXIM

ADX1M Micro Bodypack Transmitter

AVAILABLE FREQUENCY BANDS

Band	Range (MHz)	Transmitter Output (mW)
G53	470 to 510	2/10/20
G54	479 to 565	2/10/20
G55	470 to 636*	2/10/20
G56	470 to 636	2/10/20
G57	470 to 616*	2/10/20
G62	510 to 530	2/10/20
H54	520 to 636	2/10/20
K53	606 to 698*	2/10/20
K54	606 to 663**	2/10/20
K55	606 to 694	2/10/20
K56	606 to 714	2/10/20
K57	606 to 790	2/10/20
K58	622 to 698	2/10/20
L54	630 to 787	2/10/20
R52	794 to 806	2/10/20
JB	806 to 810	2/10/20
X51	925 to 937.5	2/10
X55	941 to 960	2/10/35



ADX1 DIGITAL WIRELESS SHOWLINK®-ENABLED BODYPACK TRANSMITTER

SPECIFICATIONS

(SUBJECT TO CHANGE)

Gain Offset Range	-12 to 21 dB (in 1 dB steps)
Battery Type	SB910 Rechargeable Lithium-Ion
Battery Run Time @10 mW	up to 10 hours
Dimensions (H × W × D)	3.6 × 2.7 × 0.8 in (91 × 68 × 19 mm)
Weight	5.0 oz (142 g) wihtout batteries
Housing	Aluminum

AUDIO INPUT

Connector	4-Pin male mini connector (TA4M) LEMO3 Connector
Configuration	Unbalanced
Impedance	TA4M: 1 mΩ LEMO3: 8.2 MΩ
Maximum Input Level 1 kHz at 1% THD	Pad Off: 8.5 dBV (7.5 Vpp) Pad Off: 20.5 dBV (30 Vpp)
Preamplifier Equivalent Input Noise (EIN) System Gain Setting >20	-120 dBV A-weighted, typical

RF OUTPUT

Connector	SMA
Antenna Type	UHF 1/4 Wave
Impedance	50 Ω
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Axient Digital Propietary
Power	2 mW, 10 mW, 20 mW, 40 mW Varies by region. See Frequency Range and Output Power Table.
Specific Absorption Rate <0.20 W/kg	

(SAR)

SHOWLINK[®]

Network Type	IEEE 802.15.4
Antenna Type	ZigBee Dual Conformal
Frequency Range	2.40 to 2.4835 GHz (24 Channels)
RF Output Power Varies By Region	10 dBm (ERP)

AVAILABLE MODELS

ADX1-TQG	Axient Digital Showlink®-Enabled Bodypack Transmitter, TA4M Connector
AD1-LEMO3	Axient Digital Showlink®-Enabled Bodypack Transmitter, LEM03 Connector

OVERVIEW

ADX1, like all ADX transmitters, sets the stage for exceptional performance, with wide tuning up to 184 MHz, interference protection, advanced rechargeability, streamlined design, and ShowLink® remote control for real-time parameter adjustments right from the booth.

FEATURES

- · Removable antenna and fully concealed buttons and switch
- Two connector options: TA4 and LEM03
- · Advanced control menu with powerful features
- · Durable, moisture-resistant,*lightweight metal case
- · Up to 10 hours of runtime with SB910 rechargeable batteries
- · Diversity ShowLink enabled for remote transmitter control and automatic interference avoidance
- External contacts for docked charging
- Two transmission modes: Standard for optimal coverage and new High Density for maximum system channel count and robust coverage
- · Encryption-enabled, secure transmission



ADX1 Showlink®-Enabled Bodypack Transmitter

AVAILABLE FREQUENCY BANDS

Band	Range (MHz)	Transmitter Output (mW)
G53	470 to 510	2/10/40
G54	479 to 565	2/10/20
G55	470 to 636*	2/10/40
G56	470 to 636	2/10/40
G57	470 to 616*	2/10/40
G62	510 to 530	2/10/40
H54	520 to 636	2/10/40
K53	606 to 698*	2/10/40
K54	606 to 663**	2/10/40
K55	606 to 694	2/10/40
K56	606 to 714	2/10/40
K57	606 to 790	2/10/40
K58	622 to 698	2/10/40
L54	630 to 787	2/10/40
R52	794 to 806	2/10/40
JB	806 to 810	2/10/40
X51	925 to 937.5	2/10
X55	941 to 960	2/10/40

L, 1 + 0/ + 1 Acte: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability. * with a gap between 608 to 614 MHz * with a gap between 608 to 614 MHz and a gap between 616 to 653 MHz



ADX2 DIGITAL WIRELESS SHOWLINK®-ENABLED HANDHELD TRANSMITTER

SPECIFICATIONS

(SUBJECT TO CHANGE)

Gain Offset Range	–12 to 21 dB (in 3 dB steps)
Battery Type	SB920 Rechargeable Lithium-Ion
Battery Run Time @10 mW	up to 9 hours
Dimensions (L × Dia.)	10.0 × 2.0 in (254 × 51 mm)
Weight	11.9 oz (338 g) wihtout battery
Housing	Cast Aluminum
AUDIO INPUT	
Configuration	Unbalanced
Maximum Input Level 1 kHz at 1% THD	145 dB SPL, typical (SM58) Note: dependent on microphone type
RF OUTPUT	
Antenna Type	UHF 1/4 Wave
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Axient Digital Propietary
	2 ==14/ 10 ==14/ 20 ==14/ (0 ==14/

2 mW, 10 mW, 20 mW, 40 mW Varies by region. See Frequency Range and Output Power Table. Power

Specific Absorption Rate <0.19 W/kg (SAR)

SHOWLINK[®]

Network Type	IEEE 802.15.4	
Antenna Type	ZigBee Dual Conformal	
Frequency Range	2.40 to 2.4835 GHz (24 Channels)	
RF Output Power Varies By Region	10 dBm (ERP)	

AVAILABLE MODELS

Axient Digital Showlink [®] -Enabled Handheld Transmitter
with Beta® 58A Supercardioid Dynamic Vocal Wireless Microphone Capsule
with Beta® 87A Supercardioid Condenser Vocal Wireless Microphone Capsule
with Beta® 87A Cardioid Condenser Vocal Wireless Microphone Capsule
with KSM8 Dualdyne [™] Cardioid Dynamic Wireless Microphone Capsule (Nickel)
with KSM8 Dualdyne [™] Cardioid Dynamic Wireless Microphone Capsule (Black)
with KSM9 Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)
with KSM9 Dual-Pattern Condenser Wireless Microphone Capsule (Black)
with KSM9HS Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)
with KSM9HS Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)
with SM58 [®] Cardioid Dynamic Vocal Wireless Microphone Capsule
with VP68 Omnidirectional Condenser Wireless Microphone Capsule

OVERVIEW

ADX2, like all ADX transmitters, sets the stage for exceptional performance, with wide tuning up to 184 MHz, interference protection, advanced rechargeability, streamlined design, and ShowLink remote control for real-time parameter adjustments right from the booth.

FEATURES

- Durable, moisture-resistant, lightweight metal case
- Available in black or nickel finish
- · Up to 9 hours of runtime with SB920 rechargeable batteries
- · External contacts for docked charging with optional fully covered radome
- Diversity ShowLink enabled for remote transmitter control and automatic interference avoidance
- Two transmission modes: Standard for optimal coverage and new High Density for maximum system channel count and robust coverage
- Encryption-enabled, secure transmission



AVAILABLE FREQUENCY BANDS

Band	Range (MHz)	Transmitter Output (mW)
G53	470 to 510	2/10/40
G54	479 to 565	2/10/20
G55	470 to 636*	2/10/40
G56	470 to 636	2/10/40
G57	470 to 616*	2/10/40
G62	510 to 530	2/10/40
H54	520 to 636	2/10/40
K53	606 to 698*	2/10/40
K54	606 to 663**	2/10/40
K55	606 to 694	2/10/40
K56	606 to 714	2/10/40
K57	606 to 790	2/10/40
K58	622 to 698	2/10/40
L54	630 to 787	2/10/40
R52	794 to 806	2/10/40
JB	806 to 810	2/10/40
X51	925 to 937.5	2/10
X55	941 to 960	2/10/40

Note: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability. * with a gap between 608 to 614 MHz * with a gap between 608 to 614 MHz and a gap between 616 to 653 MHz



ADX2 Showlink®-Enabled Handbeld Transmitter

ADX2FD DIGITAL WIRELESS SHOWLINK®-ENABLED FREQUENCY DIVERSITY HANDHELD TRANSMITTER

SPECIFICATIONS (SUBJECT TO CHANGE)

Gain Offset Range	–12 to 21 dB (in 3 dB steps)
Battery Type	SB920 Rechargeable Lithium-Ion
Battery Run Time @10 mW	Single-Carrier Mode: up to 9 hours Frequency Diversity: up to 6.5 hours
Dimensions (L × Dia.)	10.0 × 2.0 in (254 × 51 mm)
Weight	11.9 oz (338 g) wihtout battery
Housing	Cast Aluminum
AUDIO INPUT	
Configuration	Unbalanced
Maximum Input Level 1 kHz at 1% THD	145 dB SPL, typical (SM58) Note: dependent on microphone type

RF OUTPUT

Antenna Type	Integrated Dual-Band Helical	
Occupied Bandwidth	<200 kHz	
Channel-to-Channel Spacing	Standard Mode: 350 kHz High-Density Mode: 125 kHz	
Modulation Type	Shure Axient Digital Propietary	
Power	Single Carrier Mode: 2 mW, 10 mW, 20 mW, 50 mW Frequency Diversity Mode: 2 × 20 mW Varies by region. See Frequency Range and Output Power Table.	
Canaita Abaantian Data	<0.21 W/kg	

Specific Absorption Rate <0.21 W/kg (SAR)

SHOWLINK®

••	
Network Type	IEEE 802.15.4
Antenna Type	ZigBee Dual Conformal
Frequency Range	2.40 to 2.4835 GHz (24 Channels)
RF Output Power Varies By Region	10 dBm (ERP)

AVAILABLE MODELS

ADX2FD	Axient Digital Showlink®-Enabled Frequency Diversity Handheld Transmitter	
ADX2FD/B58A	with Beta [®] 58A Supercardioid Dynamic Vocal Wireless Microphone Capsule	
ADX2FD/B87A	with Beta® 87A Supercardioid Condenser Vocal Wireless Microphone Capsule	
ADX2FD/B87C	with Beta® 87A Cardioid Condenser Vocal Wireless Microphone Capsule	
ADX2FD/K8N	with KSM8 Dualdyne [™] Cardioid Dynamic Wireless Microphone Capsule (Nickel)	
ADX2FD/K8B	with KSM8 Dualdyne [™] Cardioid Dynamic Wireless Microphone Capsule (Black)	
ADX2FD/K9N	with KSM9 Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)	
ADX2FD/K9B	with KSM9 Dual-Pattern Condenser Wireless Microphone Capsule (Black)	
ADX2FD/K9HSN	with KSM9HS Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)	
ADX2FD/K9HSB	with KSM9HS Dual-Pattern Condenser Wireless Microphone Capsule (Nickel)	
ADX2FD/SM58	with SM58® Cardioid Dynamic Vocal Wireless Microphone Capsule	
ADX2FD/VP68	with VP68 Omnidirectional Condenser Wireless Microphone Capsule	

OVERVIEW

ADX2FD, like all ADX transmitters, sets the stage for exceptional performance, with wide tuning up to 184 MHz, interference protection, advanced rechargeability, streamlined design, and ShowLink remote control for real-time parameter adjustments right from the booth.

FEATURES

- · Abillity to transmit RF signal on two discrete carriers
- Optional 50 mW High Power mode for driving increased power on a single frequency
- · Durable, moisture-resistant, lightweight metal case
- Available in black or nickel finish
- Up to 6.5 hours of runtime with SB920 rechargeable batteries when transmitting on two RF carriers, Up to 9 hours of battery life when transmitting on a single RF carrier
- External contacts for docked charging with optional fully-covered radome
- Diversity ShowLink® enabled for remote transmitter control and automatic interference avoidance
- Two transmission modes: Standard for optimal coverage and new High Density for maximum system channel count and robust coverage
- Encryption-enabled, secure transmission



AVAILABLE FREQUENCY BANDS

Band			ransmitter utput (mW)	
		Single Carrier	Frequency Diversity	
G53	470 to 510	2/10/50	2/10/20	
G54	479 to 565	2/10/20	2/10/20	
G55	470 to 636*	2/10/50	2/10/20	
G56	470 to 636	2/10/50	2/10/20	
G57	470 to 616*	2/10/50	2/10/20	
G62	510 to 530	2/10/50	2/10/20	
H54	520 to 636	2/10/50	2/10/20	
K53	606 to 698*	2/10/50	2/10/20	
K54	606 to 663**	N/A		
K55	606 to 694	2/10/50	2/10/20	
K56	606 to 714	2/10/50	2/10/20	
K57	606 to 790	2/10/50	2/10/20	
K58	622 to 698	2/10/50	2/10/20	
L54	630 to 787	2/10/50	2/10/20	
R52	794 to 806	2/10/50	2/10/20	
JB	806 to 810	N	/A	
X51	925 to 937.5	2/10	2/10/20	
X55	941 to 960	2/10/50	2/10/35	

Note: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability. * with a gap between 608 to 614 MHz ** with a gap between 608 to 614 MHz and a gap between 616 to 653 MHz

SHURE

ADX2FD Showlink®-Enabled Frequency Diversity Handheld Transmitter

www.shure.com

AXT600 SPECTRUM MANAGER

SPECIFICATIONS (SUBJECT TO CHANGE)

RF Tuning Frequency Range	470-865, 925-962 MHz		
RF Tuning Step Size	25, 200, 1000 kHz		
	The Spectrum Manager scans the entire RF tuning frequency range in 64 seconds using 8 scanning modules in parallel. Scar time per 60 MHz may be less for specified ranges that allow scanning modules to wo in parallel.		
Scan Time	Step Size	Maxmium Scan Time per 60 Mhz	
	25 kHz	48 seconds	
	200 kHz*	7 seconds	
	1000 kHz*	1 second	
	*Available only	with WWB 6 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 (H × W × D)	1.7 × 19.0 × 14.4 in (44 × 483 × 366 mm)		
Weight	12.0 lbs (5.5 kg)		
Housing	Steel; Extruded Aluminum		
Power Requirements	100 to 240 VAC, 50-60 Hz		
Current Drain	0.8 A RMS (r	efernced at 120 VAC)	
Operating Temperature Range	0 to 140 °F (-18 to 63 °C)		
RF INPUT			
Connector Type	BNC		
Configuration	Unbalanced, active		
Maxiumum Input Level	-20 dBm		
Impedance	50 Ω		
Bias Voltage	12 VDC, 150 mA (300 mA maximum)		

CASCADE OUTPUT

Connector Type	BNC
Configuration	Unbalanced, Active
Impedance	50 Ω
Insertion Loss	<5 dB

MONITOR AUDIO OUTPUT

Audio Frequency Response	40 Hz – 18 kHz, ±3 dB	
Configuration	Unbalanced mono, 1/4 in (will drive stereo phones)	
Impedance	50 Ω	
Maxiumum Signal Level (45 kHz max deviation)	1 W @63 Ω	
Pin Assignments	Tip: Audio + Ring: Audio + Sleeve: Ground	
NETWORKING		
Power Over Ethernet (PoE)	50 VDC, Class 1	

 Network Interface
 Dual Port Ethernet 10/100

 Network Addressing
 DHCP or Manual IP Address

 Capability
 DHCP or Manual IP Address

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.

FEATURES

- 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

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 Panel



AXT600 Spectrum Manager Back Panel



AXT630 & AXT631 ANTENNA DISTRIBUTION SYSTEMS

SPECIFICATIONS (SUBJECT TO CHANGE)

Dimensions	1.7 × 19.0 × 14.4 in		
$(H \times W \times D)$	(44 × 483 × 366 mm)		
Weight	10.1 lbs (1.6 kg)		
Housing	Steel; Extruded Aluminum		
Operating Temperature Range	0 to 140 °F (-18 to 63 °C)		
Storage Temperature Range	-20 to 165 °F (-20 to 74 °C)		
Power Requirements	100 to 240 VAC, 50-60 Hz		
Current Drain	1.0 A RMS (refernced at 120 VAC)		
RF INPUT			
Connector Type	BNC		
Configuration	Unbalanc	ed, active	
	AXT630:	Wideband: 740–698 MHz Band G1: 470–530 MHz Band H4: 518–578 MHz Band J5: 578–638 MHz Band L3: 638–698 MHz	
Band Filters	AXT631:	Wideband: 606–814 MHz BandK4E: 606–666 MHz Band M8: 666–730 MHz Band P8: 578–638 MHz Band Q5: 638–698 MHz	
Impedance	50 Ω		
Bias Voltage	12 VDC, 1	50 mA (300 mA maximum)	
RF Frequency Range	AXT630: 470-698 MHz AXT631: 606-814 MHz		

DISTRIBUTION OUTPUT

Connector Type	BNC (4 pairs)	
Configuration	Unbalanced, Active	
Impedance	50 Ω	
Gain Adjustment Range	Cascade Enabled: -15 to 0 dB (in 1 dB steps) Cascade Disabled: -12 to +3 dB (in 1 dB steps)	
Output Intercept Point	>25 dBm, typical	

CASCADE OUTPUT

BNC (1 pair)	
Unbalanced, wideband	
50 Ω	
<5 dB	
50 VDC, Class 1	
Dual Port Ethernet 10/100	
DHCP or Manual IP Address	

OVERVIEW

Antenna Distribution Systems send the RF signal from a single pair of antennas to multiple receivers. Ultralinear 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-ofband 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.

FEATURES

- · 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

OPTIONAL ACCESSORIES

1/2 Wave Antennas

UA8-518-578	For frequency range 518–578 MHz	In-Line RF Am	plifiers
UA8-578-638	For frequency range 578-638 MHz	UA834WB	In-Line Antenna Amplifier (470–902 MHz)
UA8-638-698	For frequency range 638-698 MHz	UA834XA	In-Line Antenna Amplifier (902–960 MHz)
UA8-572-596	For frequency range 572–596 MHz	Active Directional Antennas	
UA8-554-590	For frequency range 554–590 MHz	UA874US	Active Directional Antenna (470–698 MHz)
UA8-470-530	For frequency range 470–530 MHz	UA874E	Active Directional Antenna (470–790 MHz)
UA8-500-560	For frequency range 500–560 MHz	UA874WB	Active Directional Antenna (470–900 MHz)
UA8-900-1000	For frequency range 900–1000 MHz	UA874X	Active Directional Antenna (925–952 MHz)
UA8-470-542	For frequency range 470–542 MHz	UA874XA	Active Directional Antenna (902–960 MHz)
UA8-554-626	For frequency range 554–626 MHz	— UA864HI	Wall-Mounted Active Directional Antenna (530–790 MHz)
UA8-626-698	For frequency range 626-698 MHz	— UA864HI	
Antennas		1140//4	Wall-Mounted Active Directional Antenna
UA860SWB	Passive Omnidirectional Antenna (470-1100 MHz)	- UA864A (650-952 MHz)	
PA805SWB	Passive Directional Antenna (470-952 MHz)	Cables	
HA-8089	Helical Antenna (480-900 MHz)	UA825	25-foot Coaxial Cable RG8/X
HA-8091	Domed Helical Antenna (460–900 MHz)	UA850	50-foot Coaxial Cable RG8/X

INCLUDED COMPONENTS

95N2035	2-foot Coaxial Antenna Cable (RG-58) (12)	C8006	Shielded 8-inch Ethernet Jumper Cable (1)
95A9128	IEC AC Power Cable (1)	90XN1371	Hardware Kit (1)
95A9129	IEC AC Extension Cable (1)	95B9023	22-inch Coaxial Cable* (1)
C803	Shielded 3-foot Ethernet Cable (1)	95C9023	33-inch Coaxial Cable* (1)

*with integrated bulkhead for front mounting antennas



AXT630 Antenna Distribution System

Front Panel



AXT630 Antenna Distribution System Back Panel

SHURE

AD610 SHOWLINK® WIRELESS ACCESS POINT

SPECIFICATIONS (SUBJECT TO CHANGE)

Antenna Type	2 Omnidirectional 2.4 GHz
Capacity	24 Axient/Axient Digital Transmitters
Mounting Type	WA371 Mic Clip of 1/4-20 thread mount
Operating Temperature Range	0 to 145 °F (-18 to 63 °C)
Storage Temperature Range	-20 to 165 °F (-29 to 74 °C)
Dimensions (H × W × D)	7.34 × 3.960 ×1.825 in (190 × 102 × 47 mm)
Weight	16.3 oz (464 g), without antennas
Housing	Extruded Aluminum
Power Requirements	100 to 240 VAC, 50-60 Hz
SHOWLINK®	
Network Type	IEE 802.15.4
Frequency Range	2.40 to 2.4836 GHz (16 channels)
RF Output Power	10 dBm (ERP)/20 dBm (ERP) Dependent on applicable country regulations
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

ANTENNA CONNECTION

Connector	BNC (4 pairs)
Impedance	50 Ω

SCANNING RADIO

Scanner RF Sensitivity	–106 dBm, typical (integrated antenna)	
NETWORKING		
Network Interface	Ethernet 10/100	
Network Addressing Capability	DHCP or Manual IP Address	

AVAILABLE MODELS

Wireless
ip for one stand
- WA371
et cable for , RJ45-to-
ly-

OPTIONAL ACCESSORIES

AXT644 Directional 2.4 GHz Patch Antenna

OVERVIEW

The AD610 ShowLink[®] access point enables real-time remote control of all ShowLink-enabled Axient[®] transmitters, including both ADX and AXT series models. The access point allows comprehensive management of transmitter parameters from the receiver or Wireless Workbench[®] using 2.4 GHz (IEEE 802.15.4) wireless communication. All parameter changes occur without interruption to the performer

FEATURES

- $\boldsymbol{\cdot}$ Wireless network connectivity between all linked transmitters and access points
- Enables real-time wireless remote control of up to 24 transmitters per access point
- ShowLink offers ability to adjust gain, change frequencies, mute signals and more
- True Diversity antenna scheme maintains a robust link in the 2.4 GHz frequency range
- Automatic channel selection scans the 2.4 GHz range for the best channel. Scans can be saved for future analysis in Wireless Workbench
- · Automatic frequency agility moves he network to the best available channel if signal degrades
- · Is compatible with Axient Digital ADX series and Axient analog (AXT series) systems.



AD610 ShowLink® Wireless Access Point



SBRC SHURE BATTERY RACK CHARGER

SPECIFICATIONS (SUBJECT TO CHANGE)

(SOBSECT TO CHANG	L)
Battery Type	Up to 8 rechargeable Li-Ion bat- teries
Charge Time	50%=1 hour; 100%=3 hours
Charging Module Type	Up to 4 charging modules in any combination
Operating Temperature Range Note: Battery characteristics may limit this range	0 to 145 °F (-18 to 63 °C)
Battery Charging Temperature Range Note: Battery characteristics may limit this range	32 to 140 °F (0 to 60 °C)
Storage Temperature Range Note: Battery characteristics may limit this range	–20 to 165 °F (-29 to 74 °C)
Dimensions (H × W × D)	1.7 × 19.0 × 14.4 in (44 × 483 × 366 mm)
Weight	9.8 lbs (4.4 kg), without batteries or charging modules
Housing	Steel; Extruded aluminum
Power Requirements	100 to 240 V AC, 50-60 Hz
Current Drain	1.8 A RMS (referenced at 90 V AC)
NETWORKING	
Network Interface	Ethernet 10/100
Network Addressing Capability	DHCP or Manual IP Address

OPTIONAL ACCESSORIES

SBC-AX	Charging module for SB900A
SBM910	Charging module for SB910
SBM910M	Charging module for SB910M
SBM920	Charging module for SB920

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.

FEATURES

- $\boldsymbol{\cdot}$ Comprehensive status display with straightforward three-button interface control
- Easily visible charge status by percentage and time-to-full readings in hours and minutes
- Battery health tracking metrics indicate percentage of original capacity and cycle count
- Remote monitoring of battery status through Shure Wireless Workbench® software
- Interchangeable charging modules allow users to mix and match up to eight Shure bodypack and handheld transmitter batteries
- Charges batteries to 50 percent capacity within one hour and full capacity within three hours
- Storage mode prepares batteries for optimal long-term storage
- Charges Shure SB900A, AXT910, and AXT920 rechargeable batteries

INCLUDED COMPONENTS

Region Dependent	IEC-AC Power Cable (1)
C803	Shielded 3-foot ethernet cable
90XN1371	Hardware kit (1)
30B13476	Mounting screws for charger modules (8)





SBRC Shure Battery Rack Charger Back Panel





SPECIFICATIONS (SUBJECT TO CHANGE)

SBC240 TWO-BAY NETOWRKED CHARGER

ODOLAO INO DAI N	
Battery Type	Up to 2 SB910/SB920
Compatible Transmit- ters	Up to 2 ADX1/ADX2/ADX2FD
Charge Current	1.25 A maximum
Charge Time	1 hour: 50% 3 hours: 100%
External Power Supply	PS60
Power Requirements	15 V, 3.33 A maximum
Housing	Molded ABS
Dimensions	2.57 × 3.49 × 8.30 in. (65.2 × 88.7 × 211 mm)
Weight	1.0 lb (450 g)
Operating Temperature Range Note: Battery characteristics may limit this range	0 to 122 °F (-18 to 50 °C)
Storage Temperature Range Note: Battery characteristics may limit this range	–20 to 165 °F (–29 to 74 °C)
NETWORKING	

Network Interface	10/100 Mbps Ethernet
Network Addressing Capability	DHCP or Manual IP Address

SBC240 TWO-BAY NETWORKED CHARGER

OVERVIEW

The SBC240 networked docking charger provides a compact charging and storage solution for any combination of 2 SB910/SB920 batteries or ADX1, ADX2, or

ADX2FD transmitters using Shure rechargeable batteries. The charger is network-enabled to allow for remote monitoring of charger and battery parameters using

Shure Wireless Workbench software. Connect up to 4 SBC240 chargers together to share power and network connectivity.

FEATURES

 Charging for any combination of up to 2 SB910/SB920 batteries or ADX1, ADX2, or ADX2FD transmitters using Shure rechargeable batteries

- · Connect up to 4 chargers together to share power and network connections and save space
- LEDs indicate charge status and errors
- Storage mode to prepare batteries for long-term storage
- · Network-enabled for remote monitoring





SPECIFICATIONS (SUBJECT TO CHANGE)

SBC240 TWO-BAY NETWORKED CHARGER

Up to 8 SB910/SB920
1.25 A maximum
1 hour: 50% 3 hours: 100%
PS60
15 V, 3.33 A maximum
Molded ABS
1.4 × 15.6 × 5.4 in. (34 × 397 × 137 mm)
2.0 lb (0.9 kg)
0 to 122 °F (-18 to 50 °C)
−20 to 165 °F (−29 to 74 °C)

Network Interface 10/100 Mbps Ethernet

Network Addressing DHCP or Manual IP Address Capability

SBC840 EIGHT-BAY NETWORKED CHARGER

OVERVIEW

The SBC840 networked charger provides a compact charging and storage solution for any combination of up to 8 SB910 or SB920 batteries.

The charger is network-enabled to allow for remote monitoring of charger and battery parameters using Shure Wireless Workbench software.

FEATURES

- Charging for any combination of up to 8 SB910 or SB920 batteries
- Compact design fits inside 1RU drawers
- LEDs indicate charge status and errors
- Storage mode to prepare batteries for long-term storage
- Network-enabled for remote monitoring



SBC840 Eight-Bay Networked Charger



SPECIFICATIONS (SUBJECT TO CHANGE)

SBC840M EIGHT-BAY NETOWRKED CHARGER

Battery Type	Up to 8 SB910M
Charge Current	5.75 A maximum
Charge Time	1 hour: 50% 3 hours: 100%
External Power Supply	PS60
Power Requirements	15 V, 3.33 A maximum
Housing	Molded ABS
Dimensions	2.0 × 3.5 × 9.9 in. (52 × 88 × 250 mm)
Weight	1.0 lb (450 g)
Operating Temperature Range Note: Battery characteristics may limit this range	0 to 122 °F (-18 to 50 °C)
Storage Temperature Range Note: Battery characteristics may limit this range	-20 to 165 °F (-29 to 74 °C)
NETWORKING	
Network Interface	10/100 Mbps Ethernet

DHCP or Manual IP Address Network Addressing

Capability

SBC840M EIGHT-BAY NETWORKED CHARGER

OVERVIEW

The SBC840M networked charger provides a compact charging and storage solution for up to 8 SB910M. The charger is network-enabled to allow for remote monitoring of charger and battery parameters using Shure Wireless Workbench software.

FEATURES

- Charging for up to 8 SB910M batteries
- LEDs indicate charge status and errors
- Storage mode to prepare batteries for long-term storage
- · Network-enabled for remote monitoring



SBC840 Eight-Bay Networked Charger



SPECIFICATIONS (SUBJECT TO CHANGE)

SB903 LI-ION RECHARGEABLE BATTERY

Nominal Capacity	1450 mAh
Nominal Voltage	3.7 V
Dimensions (H × W × D)	.28 × 1.34 × 1.97 in. (7 × 34 × 50 mm)
Weight	1.41 oz. (40 g)
Housing	Engineered Thermoplastic Resin
Charging Temperature Range	32 to 113 °F (0 to 45 °C)
Discharging Tempera- ture Range	0 to 140 °F (-18 to 60 °C)
Recommended Storage Temperature Range	50 to 77 °F (10 to 25 °C)

SB910 LI-ION RECHARGEABLE BATTERY

Nominal Capacity	2200 mAh
Nominal Voltage	3.6 V
Dimensions (H × W × D)	.54 × 1.55 × 2.10 in. (13.9 × 39.4 × 53.3 mm)
Weight	1.69 oz (48 g)
Housing	Engineered Thermoplastic Resin
Charging Temperature Range	32 to 113 °F (0 to 45 °C)
Discharging Tempera- ture Range	0 to 140 °F (-18 to 60 °C)
Recommended Storage Temperature Range	50 to 77 °F (10 to 25 °C)

SB910M LI-ION RECHARGEABLE BATTERY

Nominal Capacity	1450 mAh
Nominal Voltage	3.7 V
Dimensions (H × W × D)	.35 × 1.53 × 2.13 in. (8.8 × 38.8 × 54.1 mm)
Weight	1.09 oz (31 g)
Housing	Engineered Thermoplastic Resin
Charging Temperature Range	32 to 140 °F (0 to 60 °C)
Discharging Temperature Range	0 to 140 °F (-18 to 60 °C)
Recommended Storage Temperature Range	50 to 77 °F (10 to 25 °C)

SB920 LI-ION RECHARGEABLE BATTERY

Nominal Capacity	2500 mAh
Nominal Voltage	3.6 V
Dimensions (H × W × D)	.83 × .93 × 2.87 in. (20.8 × 23.7 × 72.8 mm)
Weight	1.90 oz (54 g)
Housing	Engineered Thermoplastic Resin
Charging Temperature Range	32 to 140 °F (0 to 60 °C)
Discharging Temperature Range	0 to 140 °F (-18 to 60 °C)
Recommended Storage	50 to 77 °F (10 to 25 °C)

Temperature Range



SB900A RECHARGEABLE LITHIUM-ION BATTERY

Compatible with AD1, AD2 and AD3 transmitters.



SB910 RECHARGEABLE LITHIUM-ION BATTERY

Compatible with ADX1 bodypack transmitters.



SB910M RECHARGEABLE LITHIUM-ION BATTERY

Compatible with the ADX1M Micro Bodypack transmitter



SB920 RECHARGEABLE LITHIUM-ION BATTERY

Compatible with ADX2 and ADX2FD Handheld Digital Wireless Transmitters

