MAG
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Platform-Agnostic AV Integration: Multipurpose Meeting and Event Space

Request for Proposals (RFP)

Mountainland Association of Governments

May 19, 2026

SOLICITATION NUMBER: MAG-AV-2026-01

PROJECT TITLE: Platform-Agnostic AV Integration: Multi-Purpose Meeting and Event Space

ISSUING AGENCY: Mountainland Association of Governments (MAG)

RELEASE DATE: May 19, 2026

PROPOSAL SUBMISSION DEADLINE: June 5, 2026, 5:00 PM

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1. PROJECT OVERVIEW & SCOPE

1.1 Project Purpose

Mountainland Association of Governments (MAG) is soliciting competitive, sealed proposals from qualified Audio/Visual (AV) integration firms ("Offerors") to design, supply, install, program, test, and deploy a commercial-grade, hardware-agnostic hybrid meeting solution. The system will be installed in the first-floor multi-purpose event, staff, and cafe space at MAG's facility at 282 River Bend Ln, Provo, UT.

1.2 Mission-Critical Timeline

MAG must maintain strict public meeting continuity. The selected Contractor must have the system fully engineered, installed, programmed, and commissioned no later than July 24, 2026, to support the go-live date and first public board meeting on August 1, 2026. Firms unable to commit the necessary engineering and mobilization resources to comfortably fulfill this timeline without reservation are instructed not to submit a proposal.

1.3 Option for Additional Scope (Phase 2 - Third Floor)

MAG reserves the sole right and option to expand the contract resulting from this RFP with the selected Contractor to include the design, supply, and installation of the Audio/Visual systems for the Third Floor Classroom (Divisible Training Space), Standard 12-Person Conference Room, and other office space as necessary.

The exercise of this option shall be at the absolute discretion of MAG and will be contingent upon:

1. The Contractor’s exceptional performance, communication, and strict adherence to schedule during the Phase 1 Event Space deployment.
2. Mutual agreement on pricing, applying the same labor rates, equipment discount percentages, and contract terms established in the Offeror's response to this RFP.

MAG is under no obligation to exercise this option and retains the absolute right to competitively bid Phase 2 separately if it is deemed in the best interest of the agency.

1.4 Utah State Cooperative Contract Preference

MAG strongly prefers Offerors who hold an active, valid Utah State Cooperative Contract

for Audio/Visual Equipment and Services (e.g., contracts under the Utah Division of Purchasing).

Offerors possessing a state contract must list their State Contract Number in their Executive Summary. While holding a state contract is not a mandatory requirement to submit a proposal, eligible vendors will receive a designated point preference during the evaluation phase, as outlined in Section 5.

2. TECHNICAL SCOPE OF WORK

2.1 First-Floor Multi-Purpose Event Space

The multi-purpose space has an approximate capacity of 100 people and serves dynamically as a public board room, internal staff training area, event space, and employee break space. The room features architectural open ceilings with exposed infrastructure. The space is approximately 2,590 square feet. The turnkey system must include the following components:

- **Platform-Agnostic Core:** The system must be natively platform-blind. The hardware architecture must support immediate, seamless functionality across all major soft-coded conferencing applications (including Zoom, Google Meet, Microsoft Teams, Cisco Webex, and GoToMeeting) without requiring firmware flashes, physical component re-patching, or software vendor licensing locks.
- **Hardware-Based BYOD Interface:** The room system must present itself to an end-user's laptop as standard, driverless USB peripherals (UVC/UAC compliant). When connected via a single universal physical link (USB-C or combined HDMI/USB) at the presenter's podium, the host laptop must instantly inherit native control of the room's high-definition cameras, tracking arrays, and integrated audio processing. Video-conferencing computation must be completely offloaded to the connected laptop. The system should also include a wireless option.
- **Microphone & Local Speaker Integration:** The system must successfully interface with MAG's existing pool of mobile, wireless discussion/delegate units (see Attachment B). These specialized units contain both an integrated microphone and an integrated localized speaker.
- **Commercial Displays:** Provide and engineer a clear presentation layer sufficient for the room. Display screens must be out of the way when not in use.
- **Broadcast & Public Streaming Capability:** Include professional-grade Pan-Tilt-Zoom (PTZ) optical cameras capable of capturing high-fidelity fields of view of both the presenter at the podium (the addition of motion tracking capabilities is prefered) and the audience gallery areas for public comment transparency. The camera image should be clear even in low light. Provide and engineer a monitoring and control station for the meeting technician that allows control of cameras and monitoring of all meeting AV.

2.2 Turnkey Requirements & Site Constraints

The building is physically finished; no structural wall tear-outs or extensive drywall modifications will occur. In the Event Space, all cabling and infrastructure must be neatly organized, anchored, and routed through the exposed ceiling architecture in an aesthetically polished, industrial-compliant manner. The contract is strictly comprehensive, encompassing all engineering, specialized rigging, procurement, programming, network testing, site cleanup, and a minimum of four (4) hours of hands-on staff training.

3. PROCUREMENT & TIMELINE RULES

3.1 Master Project Timeline

The following schedule represents the critical path for this solicitation. Dates are subject to change only via official addenda issued by MAG.

Milestone	Date
Optional Site Visit	May 27, 2026, at 9:00 AM
Deadline for Questions	May 28, 2026, at 5 PM via email to Jessica DeLora / jdelora@magutah.gov
Answers Posted	May 29, 2026, at 5 PM at https://magutah.gov/rfp-av-integration/
Proposal Deadline	June 5, 2026, at 5 PM via email to Jessica DeLora / jdelora@magutah.gov
Evaluation and Vendor Interviews (if needed)	June 8-10, 2026
Contract Award and Notice to Proceed	June 11, 2026
On-Site Installation	July 6 - July 20, 2026
System Commissioning/Testing	July 24, 2026
First Public Meeting (Go-Live)	August 1, 2026

3.2 Site Familiarity Clause

The pre-proposal site visit on May 27th is optional but strongly recommended. Regardless of attendance, the selected Contractor shall be solely held responsible for fitting the proposed hardware and cabling paths into the existing structural, electrical, and

architectural layout of the room. By submitting a proposal, the Offeror warrants that they have sufficiently familiarized themselves with the space. MAG will not review or approve any subsequent change orders for physical site constraints, cable routing blockages, or rigging challenges that could have been identified during a standard visual walkthrough.

4. MANDATORY SUBMISSION REQUIREMENTS

Offerors must submit the following in their proposals:

4.1 Technical & Qualifications Content

The submission packet must contain the following components in this order:

1. **Executive Summary & Schedule Commitment:** A formal letter signed by an officer of the firm explicitly confirming that the firm can and will achieve full system commissioning by the July 24, 2026 deadline.
2. **System Architecture & Bill of Materials (BOM):** A detailed conceptual drawing and block diagram showing how the platform-agnostic BYOD architecture will connect. Include a detailed equipment listing identifying brands and models. Offerors must explicitly outline their engineering approach to integrating MAG's microphone units.
3. **Project Management & Day-by-Day Installation Schedule:** A granular timeline detailing specific tasks, milestones, and labor allocations for the installation window.
4. **Past Performance & References:** Proof of a minimum of three (3) turnkey AV installations completed within the last 36 months of equivalent scale. At least two (2) references must represent municipal, county, state, or public-sector clients utilizing hybrid public-streaming systems. Provide client names, project values, and direct phone/email contacts.
5. **Risk Mitigation & Supply Chain Assurance:** A narrative detailing how the vendor will mitigate hardware backorders. Offerors must explicitly state their capability to provide temporary, functional "loaner" equipment at no additional cost to MAG if specified parts experience shipping delays, ensuring the August 1 meeting proceeds on schedule.

4.2 Cost Proposal

The cost proposal must include the completed Budget Proposal Form (Attachment A) and any accompanying itemized cost lists detailing exact equipment models and unit prices.

5. EVALUATION CRITERIA & SCORING

An administrative selection committee will review and score all qualified proposals based on a 100-point matrix. The contract will be awarded to the responsive Offeror demonstrating the highest total score, blending superior schedule certainty and technical compliance with a fair and transparent cost structure.

5.1 Schedule Reliability & Project Management (40 Points Maximum)

Due to the fixed nature of MAG's public board schedule, the vendor's ability to guarantee

execution speed represents the highest evaluation priority.

- **Granular Implementation Plan (20 Points):** Evaluation of the credibility, operational logic, and detail of the day-by-day task breakdown for the July 6–20 installation phase.
- **Expedited Execution Track Record (15 Points):** Scoring of references proving successful completion of compressed, fast-track public projects without delay.
- **Supply Chain Risk Mitigation (5 Points):** Evaluation of the strength, cost-free nature, and readiness of the vendor's "loaner equipment" backup guarantee.

5.2 Technical Design & Platform Agility (30 Points Maximum)

Proposals will be scored on the future-proof nature, operational simplicity, and code-blind flexibility of their electronic design.

- **Universal BYOD Interface Engineering (30 Points):** Full points awarded to, hardware-based UVC/UAC compliant designs that are 100% software-blind.

5.3 Pricing & Value Engineering (30 Points Maximum)

Financial proposals will be mathematically scored based on total baseline cost and long-term cost protection.

- **Turnkey Base Project Cost (15 Points):** Evaluated relative to competing bids. Points will be deducted if critical deployment components (rigging, final network configuration, or staff training) are omitted or labeled as variable fees.
- **Utah State Contract Verification (5 Points):** Awarded to vendors who provide a verified, active Utah State Cooperative Contract number applicable to the scope of work. 0 Points: Awarded to vendors who do not hold a state contract (proposals will still be fully evaluated on their merits, but without the 5-point preference).
- **Phase 2 Fixed Labor Rate Guarantees (10 Points):** Evaluation of the cost-effectiveness and transparency of the fixed hourly labor rates and programming fee sheets provided for the potential third-floor contract expansion.

5. SUBMISSION INSTRUCTIONS

Proposals must be submitted by June 5, 2026, 5 PM via email to Jessica DeLora (jdelora@magutah.gov).

Attachment A: Required Budget Proposal Form

Instructions: Offerors must include this completed form in their submission packet. All figures must represent fixed, all-inclusive pricing. No hidden fees, travel surcharges, or unlisted administrative costs will be honored under the contract.

Part 1: Base Project Cost (Phase 1 - First Floor Event Space)

Cost Category	**Fixed Total (Net Dollar Amount)**
Commercial Hardware & Equipment Total (Attach detailed model itemization)	$ _____
System Engineering, Rigging, & Physical Installation Labor	$ _____
Digital Signal Processor (DSP) Programming & Network Testing	$ _____
All-Inclusive Freight, Logistics, Shipping, and Delivery Fees	$ _____
Post-Installation Support & Staff Training (Minimum 4 Hours On-Site)	$ _____
TOTAL NOT-TO-EXCEED BASE PROJECT COST (Phase 1)	**$ _____**

Part 2: Value-Add Optional Add-On (Itemized Cost)

Optional Component Description	**Fixed Total (Net Dollar Amount)**

Touch-Screen Room Scheduling Panels (Hardware, mounting, and calendar sync setup)	$ _____

Part 3: Phase 2 Labor Rate Guarantees

These hourly rates will apply directly to the Third Floor expansion scope if MAG elects to exercise its option under Section 1.3. Rates must remain fixed through December 31, 2026.

- **Senior AV Systems Engineer / Designer:** $ _____ / Hour
- **Lead Audio DSP Programmer:** $ _____ / Hour
- **On-Site Installation Technician / Rigger:** $ _____ / Hour
- **Project Manager / Training Specialist:** $ _____ / Hour

Vendor Authorized Signature: _____

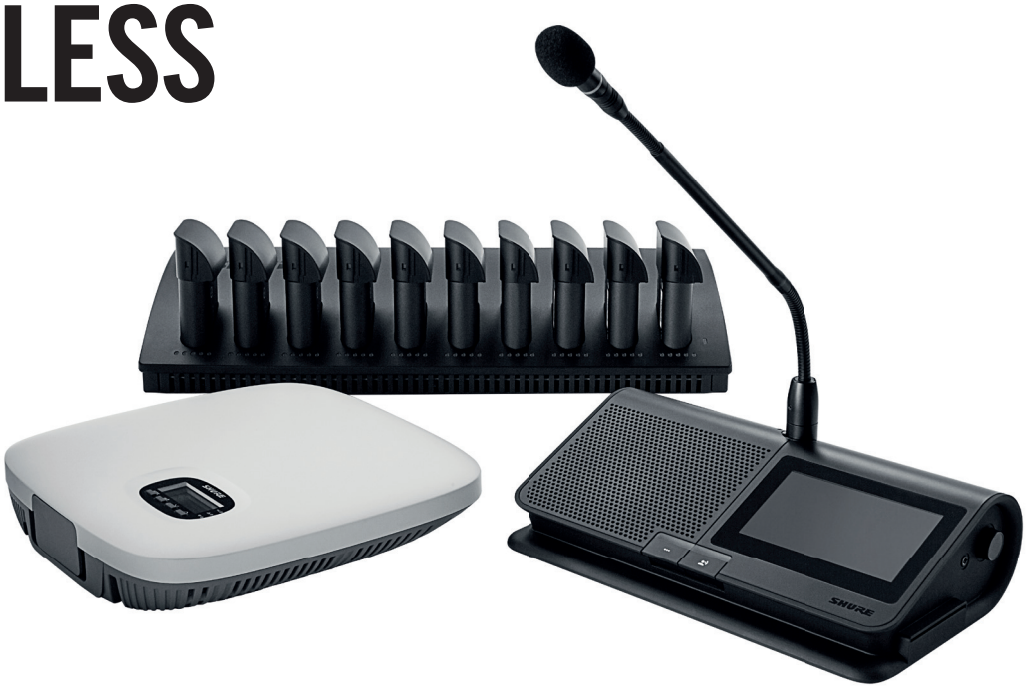
Printed Name / Title: _____

Date: _____

SHURE®

Microflex® Complete Wireless System

MICROFLEX® COMPLETE WIRELESS



Microflex® Complete Wireless offers full conference functionality with the added convenience of encrypted digital wireless transmission for up to 125 participants. It overcomes cable limitations at off-site meetings, in rooms with flexible seating, or in historic buildings where drilling holes in furniture is impractical. Proven Shure RF interference detection and avoidance technology delivers reliable transmission and limits signal dropouts even in the most congested RF environments. Robust wireless encryption keeps meeting content private. Each wireless conference unit is powered by a smart Lithium-Ion rechargeable battery whose remaining charge (in hours and minutes) can be checked remotely by a technician.

Efficient and Reliable RF transmission
Automatic frequency management utilizes proprietary technology to detect interference before it affects system performance.

Premium Audio
Best in class audio capture and reproduction ensures every word spoken is heard.

Powerfully Scalable
Up to 125 units can be used simultaneously with a single wireless access point, with rechargeable batteries that last up to 11 hours.

Quick and Easy Setup
Go from cart to conference in minutes, with little to no wireless coordination or system configuration.

APPLICATIONS

- Boardrooms
- Parliament/City Councils
- Flexible Meeting Rooms
- Training/Seminar Centers
- Conference/Hospitality Venues

PRODUCT HIGHLIGHTS

- Highly intelligible audio
- All-in-one microphone + speaker design
- Dante digital audio net-working
- Shure Network Audio Encryption (AES-256)
- AES-128 wireless encryption

CommShield® Technology

SYSTEM SPECIFICATIONS

Features

RELIABLE WIRELESS PERFORMANCE

- Automatic Frequency Coordination for quick and easy setup
- Uses global 2.4/5 GHz spectrum including DFS channels to maximize available spectrum
- Built-in RF spectrum manager constantly monitors available channel quality
- Automatic Interference Detection and Avoidance resolves potential transmission problems in congested RF environments
- High spectral efficiency allows up to 125 units on one WLAN channel

EASY SETUP AND OPERATION

- MXCWAPT Access Point mounts on wall, ceiling, or stand, and connects with one cable for audio, power, and control
- Each conference unit can be configured as Chairman, Delegate, Listener, or Ambient role
- Smart Lithium-Ion rechargeable battery lasts over 11 hours, recharges in under 4 hours
- Embedded browser-based interface allows remote monitoring and control by chairman or technician
- Speak/request list can be projected on video display without additional software
- Integrated NFC card technology in each conference unit allows participants to be identified by name instead of seat number, regardless of where they sit

BEST-IN-CLASS AUDIO PERFORMANCE

- Proprietary Shure audio codec for natural, intelligible sound quality
- Automatic Gain Control for consistent speech levels for each talker
- Support for Automatic, FIFO (First-In/First-Off), and Manual microphone operating modes
- Gooseneck microphones include interchangeable Microflex cartridges and CommShield Technology for robust RF noise immunity
- Robust AES-128 wireless encryption for enhanced privacy

Specifications

Latency	16ms	MXCW640 Microphone Input to MXCWAPT to MXCW640 Speaker/Headphone Output
	9.2ms	MXCW640 Microphone Input to MXCWAPT Analog Output
	7.7ms	MXCWAPT Analog Input to MXCW640 Speaker/Headphone Output
Frequency Response	100Hz - 20kHz (+0.5dB/-3dB)	MXCW640 Microphone Input to MXCWAPT to MXCW640 Headphone Output. -45dBFS input, Mic Gain = -30dB (AGC Disabled), Headphone Gain = 0dB. Microphone and headphone transducers not included in frequency response measurement.
	220Hz - 15kHz (±10dB)	MXCW640 Microphone Input to MXCWAPT to MXCW640 Speaker Output. -45dBFS input, Mic Gain = -30dB (AGC Disabled), Speaker Gain = 6dB. Microphone transducer not included in frequency response measurement. Speaker transducer was included in frequency response measurement.
Total Harmonic Distortion + Noise	0.06%, typical	MXCW640 Microphone Input to MXCWAPT to MXCW640 Headphone Output. -6dBFS input, 1kHz, Mic Gain = -30dB (AGC Disabled), Headphone Gain = 0dB, 22Hz - 22kHz BW. Microphone and headphone transducers not included in THD+N measurement.
	1%, typical	MXCW640 Microphone Input to MXCWAPT to MXCW640 Speaker Output. -6dBFS input, 1kHz, Mic Gain = -30dB (AGC Disabled), Speaker Gain = 6dB, 22Hz - 22kHz BW. Microphone transducer not included in THD+N measurement. Speaker transducer was included in THD+N measurement.
Dynamic Range	100dB (A-weighted), 97dB (unweighted), typical	MXCW640 Microphone Input to MXCWAPT to MXCW640 Headphone Output. Mic Gain = -30dB (AGC Disabled), Headphone Gain = 0dB, 22Hz - 22kHz BW. Microphone and headphone transducers not included in dynamic range measurement.
	94dB (A-weighted), 91dB (unweighted), typical	MXCW640 Microphone Input to MXCWAPT to MXCW640 Speaker Output. Mic Gain = -30dB (AGC Disabled), Speaker Gain = 6dB, 22Hz - 22kHz BW. Microphone transducer not included in dynamic range measurement. Speaker transducer was included in dynamic range measurement.
Digital Audio Processing	24bit/48kHz	
Digital Audio Networking	DANTE, AES67	
Audio Polarity	Positive pressure on MXCW640 microphone diaphragm produces diaphragm produces positive voltage on pin 2 (with respect to pin 3) of MXCWAPT XLR output.	
RF Working Range	8m (Low), 15m (Medium), 30m (High), 45m (Maximum)	Line-of-sight to the MXCWAPT. Actual range depends on RF signal absorption, reflection, and interference
Mean Time Between Failures (MTBF)	405,790 hours	

MXCW640 Wireless Conference Unit

Overview

The MXCW640 Wireless Conference Unit combines a microphone, loudspeaker, and user controls in an integrated wireless unit that complements any meeting space. Wireless convenience eliminates the need to drill holes or route cables, and makes setup for temporary meetings or in rooms with flexible seating quick and easy. A smart rechargeable Li-Ion battery (included) lasts over 11 hours, and a choice of gooseneck microphones provides excellent voice capture.

Features

- 10-pin modular lockable connection for MXC-series gooseneck microphones
- 4.3 inch color touchscreen displays user controls, voting or meeting information
- Built-in loudspeaker remains on when microphone is activated
- Speak and mute/function buttons with LED status indicators
- NFC ID card slot for participant identification
- Dual 3.5mm headphone jacks with volume controls
- SB930 removable rechargeable Li-Ion battery (included) provides over 11 hours of runtime

Specifications

AUDIO INPUTS

Microphone Input		
Nominal Input Level	-60dBV	Equivalent to 80dBSPL at the MXC416/420 capsule when speaking at a 30cm distance.
Maximum Input Level	-1.5dBV	1% THD+N measured at MXCWAPT Dante Output. Mic Gain = -30dB (AGC Disabled), MXCWAPT Dante Output Gain = 0dB. Microphone transducer not included in measurement.
Frequency Response	20Hz - 20kHz (+0.5dB/-3dB)	Measured at MXCWAPT Dante Output. -45dBFS input, Mic Gain = -30dB (AGC Disabled), MXCWAPT Dante Output Gain = 0dB. Microphone transducer not included in frequency response measurement.
Total Harmonic Distortion + Noise	0.04%, typical	Measured at MXCWAPT Dante Output. -6dBFS input, 1kHz, Mic Gain = -30dB (AGC Disabled), MXCWAPT Dante Output Gain = 0dB, 22Hz - 22kHz BW. Microphone transducer not included in THD+N measurement.
Dynamic Range	112dB (A-weighted), 110dB (unweighted), typical	Measured at MXCWAPT Dante Output. Mic Gain = -30dB (AGC Disabled), MXCWAPT Dante Output Gain = 0dB, 22Hz - 22kHz BW. Microphone transducer not included in dynamic range measurement.
Preamplifier Equivalent Input Noise	-117dBV (A-weighted), typical	22Hz - 22kHz BW
Input Impedance	26kΩ	
Configuration	Unbalanced	

AUDIO OUTPUTS

Speaker Output		
Nominal Output Level	72dBSPL at 0.5m	Measured with an SPL meter using A-weighting and fast averaging
Maximum Output Level	89dBSPL at 0.5m	3% THD+N
Frequency Response	220Hz - 15kHz (±10dB)	Audio Injected at MXCWAPT Dante Input. -6dBFS input, MXCWAPT Dante Input Gain = 0dB, Speaker Gain = 6dB. Speaker transducer was included in frequency response measurement.
Total Harmonic Distortion + Noise	1%, typical	Audio Injected at MXCWAPT Dante Input. -6dBFS input, 1kHz, MXCWAPT Dante Input Gain = 0dB, Speaker Gain = 6dB, 22Hz - 22kHz BW. Speaker transducer was included in THD+N measurement.
Dynamic Range	94dB (A-weighted), 91dB (unweighted), typical	Audio Injected at MXCWAPT Dante Input. MXCWAPT Dante Input Gain = 0dB, Speaker Gain = 6dB, 22Hz - 22kHz BW. Speaker transducer was included in dynamic range measurement.
Headphone Outputs		
Maximum Output Level	2.1dBV	1% THD+N. Audio Injected at MXCWAPT Dante Input. MXCWAPT Dante Input Gain = 0dB, Headphone Gain = 0dB. Headphone transducer not included in measurement.
Frequency Response	100Hz - 20kHz (+0.5dB/-3dB)	Audio Injected at MXCWAPT Dante Input. -6dBFS input, MXCWAPT Dante Input Gain = 0dB, Headphone Gain = 0dB. Headphone transducer not included in frequency response measurement.
Total Harmonic Distortion + Noise	0.04%, typical	Audio Injected at MXCWAPT Dante Input. -6dBFS input, 1kHz, MXCWAPT Dante Input Gain = 0dB, Headphone Gain = 0dB, 22Hz - 22kHz BW. Headphone transducer not included in THD+N measurement.
Dynamic Range	101dB (A-weighted), 99dB (unweighted), typical	Audio Injected at MXCWAPT Dante Input. MXCWAPT Dante Input Gain = 0dB, Headphone Gain = 0dB, 22Hz - 22kHz BW. Headphone transducer not included in dynamic range measurement.
Load Impedance	>8Ω, typical	Headphone outputs are protected against short circuits
Configuration	Dual mono	Will drive stereo and mono headphones
Type	TRRS 3.5mm Female Socket	

RF

WLAN Standard	IEEE 802.11a,g
RF Frequency Bands	2.4GHz ISM / 5GHz UNII
Sensitivity	-75dBm at 10%PER
Output Power	1mW (Low), 3mW (Medium), 6mW (High), 10mW (Maximum)
Antenna Type	Proprietary Internal Bi-level Dual-Band PIFA

POWER

Battery Type	Shure SB930
Battery Connector	Proprietary blade
Battery Chemistry	Lithium-Ion
Battery Voltage	3V - 4.2V
Battery Capacity	35Wh

USB

Input Voltage Range	4.5V - 5.25V
Power Consumption	10W max
Recommended Cable	28AWG/1P + 22AWG/2C, <1.5m

USER INTERFACE

Display Type	Color TFT LCD with Capacitive Touch Screen
Display Size	4.3" (109.2mm)
Display Resolution	480 x 272 (128ppi)

MECHANICAL

Dimensions	70.2mm x 148mm x 257.5mm (2.8" x 5.8" x 10.1")
Weight	1.21kg with battery, 1.025kg without battery
Color	Black
Material	Molded Plastic, Die Casted Aluminmum
Mounting Type	M4 hexagon bolt

ENVIRONMENTAL

Operating Temperature Range	0°C (32°F) to 35°C (95°F)
Charging Temperature Range	0°C (32°F) to 33°C (91.4°F)
Storage Temperature Range	-20°C (-4°F) to 50°C (122°F)
Relative Humidity	<95%

MXCWAPT Access Point Receiver

Overview

The MXCWAPT Access Point Transceiver manages audio routing, frequency coordination, and system control for up to 125 wireless conference units. The MXCWAPT automatically selects the clearest channel in the 2.4 GHz and 5 GHz frequency bands and switches channels to avoid potential interference. The access point provides both Dante™ and analog audio inputs and outputs, and uses a single Ethernet connection for power, audio, and control.

Features

- Controls up to 125 MXCW640 wireless conference units
- Bi-directional wireless connection provides audio to and from conference units and
- enables real-time control of all settings
- Operates in 2.4 GHz / 5 GHz frequency bands, including DFS spectrum
- Automatic frequency coordination, interference detection and avoidance
- Dante digital audio (10 inputs/10 outputs)
- Analog audio input and output (XLR)
- One Ethernet cable for audio, control, and PoE power
- AES-128 wireless encryption for enhanced privacy
- Display for basic system configuration without a laptop
- LEDs indicate power, wireless connection, and network status
- Includes wall / ceiling mounting plate

Specifications

AUDIO INPUTS

Analog Input		
Maximum Input Level	24.9dBV	1% THD+N. Measured at Dante Output. Line Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB
	10.3dBV	1% THD+N. Measured at Dante Output. Aux Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB
Frequency Response	22Hz - 20kHz (+0.5dB/-3dB)	Measured at Dante Output. -6dBFS input, Line Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB
	22Hz - 20kHz (+0.5dB/-3dB)	Measured at Dante Output. -6dBFS input, Aux Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB
Total Harmonic Distortion + Noise	0.03%, typical	Measured at Dante Output. -6dBFS input, 1kHz, Line Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB, 22Hz - 22kHz BW
	0.02%, typical	Measured at Dante Output. -6dBFS input, 1kHz, Aux Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB, 22Hz - 22kHz BW
Dynamic Range	115dB (A-weighted), 113dB (unweighted), typical	Measured at Dante Output. Line Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB, 22Hz - 22kHz BW
	112dB (A-weighted), 110dB (unweighted), typical	Measured at Dante Output. Aux Level, Analog Input Gain = 0dB, Dante Output Gain = 0dB, 22Hz - 22kHz BW
Preamplifier Equivalent Input Noise	-92dBV (A-weighted), typical	Line Level, Analog Input Gain = 0dB, 22Hz - 22kHz BW
	-104dBV (A-weighted), typical	Aux Level, Analog Input Gain = 0dB, 22Hz - 22kHz BW
Connector Type	XLR-3-pin female	Pin 1 = ground, Pin 2 = Audio +, Pin 3 = Audio -

AUDIO OUPUTS

Analog Output		
Maximum Output Level	4.3dBV	1% THD+N. Audio Injected at Dante Input. Dante Input Gain = 0dB, Analog Output Gain = 0dB
Frequency Response	1Hz - 20kHz (+0.5dB/-3dB)	Audio Injected at Dante Input. -6dBFS input, Dante Input Gain = 0dB, Analog Output Gain = 0dB
Total Harmonic Distortion + Noise	0.01%, typical	Audio Injected at Dante Input. -6dBFS input, 1kHz, Dante Input Gain = 0dB, Analog Output Gain = 0dB, 22Hz - 22kHz BW
Dynamic Range	100dB (A-weighted), 97dB (unweighted), typical	Audio Injected at Dante Input. Dante Input Gain = 0dB, Analog Output Gain = 0dB, 22Hz - 22kHz BW
Load Impedance	>600Ω, typical	
Type	Three-pin Male XLR	
Pinout	Standard XLR Pinout (Pin 1 = Ground, Pin 2 = Audio +, Pin 3 = Audio -)	
XLR GND Lift Switch Position	"Left (Pin 1-GND connected) Right (Pin1-GND disconnected)"	
	-104dBV (A-weighted), typical	Aux Level, Analog Input Gain = 0dB, 22Hz - 22kHz BW
Input Impedance	10kΩ	Line Level
	12kΩ	Aux Level
Configuration	Balanced	

RF

WLAN Standard	IEEE 802.11a,g
RF Frequency Bands	2.4GHz ISM / 5GHz UNII
Sensitivity	-80dBm at 10%PER
Output Power	1mW (Low), 5mW (Medium), 13mW (High), 25mW (Maximum)
Antenna Type	Proprietary Internal Bi-level Dual-Band PIFA

POWER

Supply Type	Power Over Ethernet, 802.3af, Class 0 PD
Supply Voltage (at MXCWAPT)	
Power Consumption	12.95W (max), 6.5W (typ)

NETWORK

Interface	Gigabit Ethernet, Dante digital audio
Link Speed	10/100/1000Mbps
Networking Addressing Capability	DHCP or Manual IP address
Cable Length	100m (max)
Cable Type	> Cat5e (shielded/unshielded)
Connector Type	1 x RJ45
Connector LED	Status (Green) / Link Speed (Amber)

USER INTERFACE

Display Type	Monochrome FFSTN LCD
Display Size	1.84 x 0.74" (46.7x18.8mm)
Display Resolution	152 x 78 (78 ppi)
LED Status Indication	Power, Network Audio, Wireless (Red/Green/Amber)
Reset	Pushbutton for Network/Factory Reset

MECHANICAL

Dimensions	47.8mm x 242.5mm x 241.8mm (1.88" x 9.55" x 9.52")
Weight	1.15 kg
Color	White / Gray
Material	Molded Plastic, Die-casted Aluminum
Mounting Type	Wall or ceiling bracket

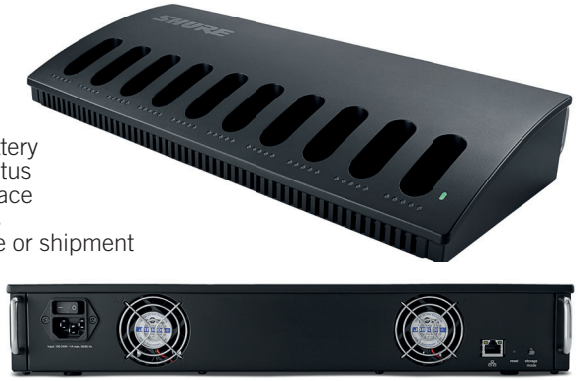
ENVIRONMENTAL

Operating Temperature Range	-7°C (19.4°F) to 49°C (120.2°F)
Storage Temperature Range	-29°C (-20.2°F) to 60°C (140°F)
Relative Humidity	<95%

MXCWNCS Networked Charging Station

Overview

The MXCWNCS Networked Charging Station charges 10 SB930 batteries in 4 hours. LED indicators display charge status, and a RJ45 Ethernet connection enables battery levels to be monitored remotely. Includes IEC power cable and mounting hardware for wall or rack mounting.



Features

- Accommodates up to 10 SB930 rechargeable batteries
- 5-segment LEDs on the unit display charge status individually for every battery
- RJ45 Ethernet connection enables remote monitoring of battery charge status in hours and minutes via Microflex Complete Wireless graphical user interface
- Charges 10 batteries to 50% charge in 1.5 hours, 100% charge in 4 hours
- Selectable storage mode partially discharges batteries for long-term storage or shipment
- Includes hardware for wall and rack mounting
- Includes IEC power cable

Specifications

NETWORK

Interface	Ethernet
Link Speed	10/100Mbps
Networking Addressing Capability	DHCP or Manual IP address
Cable Length	100m (max)
Cable Type	> Cat5e (shielded/unshielded)
Connector Type	1 x RJ45
Connector LED	Status (Green) / Link Speed (Amber)

USER INTERFACE

Display Type	5 LEDs per bay for charging indication
	1 status LED
	2 Ethernet LEDs

MECHANICAL

Dimensions	72.4mm x 438.9mm x 193.5mm (2.9" x 17.3" x 7.6")
Weight	2825 g
Color	Black
Material	Molded Plastic, Steel
Mounting Type	Tabletop, wall mount or rack (4U rackspace required)

ENVIRONMENTAL

Operating/Discharging Temperature Range	-20°C (-4°F) to 35°C (95°F)	Discharging may occur when storage mode is enabled
Charging Temperature Range	0°C (32°F) to 35°C (95°F)	
Storage Temperature Range	-29°C (-20.2°F) to 60°C (140°F)	
Relative Humidity	<95%	

SB930 Rechargeable Battery

Overview

The SB930 Rechargeable Battery powers the MXCW640 Wireless Conference Unit for over 11 hours. LED indicators on the battery display charge status quickly and easily. Charging in the MXCWNCS Networked Charging Station takes just 1.5 hours for a 50% charge, and 4 hours for a 100% charge.

Features

- INCLUDED WITH MXCW640
- Powers MXCW640 wireless conference unit for over 11 hours
- Integrated test button and 5-segment LED to display charge level
- With MXCWNCS Networked Charging Station, charges to 50% in 1.5 hours, 100% in 4 hours
- 3-cell battery with Shure Smart Li-Ion Technology
- Remote monitoring of battery life remaining in hours and minutes

Specifications

USER INTERFACE

Display Type	5 status LEDs and push button to indicate state of charge

MECHANICAL

Dimensions	31mm x 65mm x 101.5mm (1.22in. x 2.56in. x 4.00in.) H x W x D
Weight	184 g
Color	Black
Material	Molded Plastic

Analog Connections

Input	(1) 3-pin block connector (Active Balanced)
Output	(1) 3-pin block connector (Impedance Balanced)

USB Connections
(1) USB 2.0, Type B

Single port carries 1 input and 1 output channel (Summed mono)

Network Connections (Dante Digital Audio)
(1) RJ45

4 input channels, 2 output channels

Polarity

Non-inverting, any input to any output

Power Requirements

Power over Ethernet (PoE), Class 0. (PoE Plus compatible).

Power Consumption

6.5W, maximum

Weight

668 g (1.5 lbs)

Dimensions
H x W x D

4 x 14 x 12.8 cm (1.6 x 5.5 x 5.0 in.)

Control Application

HTML5 Browser-based

Operating Temperature Range

–6.7°C (20°F) to 40°C (104°F)

Storage Temperature Range

–29°C (-20°F) to 74°C (165°F)

Thermal Power Dissipation

Maximum	6.8W (23.0BTU/hr)
typical	6.0W (20.8BTU/hr)

Audio

Frequency Response
+1, -1.5 dB

20 to 20,000 Hz

Dante Digital Audio

Sampling Rate	48 kHz
Bit Depth	24

USB Audio

Sampling Rate	44.1, 48 kHz
Bit Depth	16, 24

Latency

Does not include Dante latency	Analog to Analog	0.98 ms
	Analog to Dante	0.39 ms
	Dante to Analog	0.72 ms
	Dante to Dante	0.14 ms

Dynamic Range
20 Hz to 20 kHz, A-weighted, typical

Analog-to-Dante	113 dB
Dante-to-Analog	117 dB

Equivalent Input Noise
20 Hz to 20 kHz, A-weighted, input terminated with 150Ω

Line	-86 dBV
Aux	-98 dBV

Total Harmonic Distortion
@ 1 kHz, 0 dBV Input, 0 dB analog gain

<0.05%

Common Mode Rejection Ratio
150Ω balanced source @ 1 kHz

>70 dB

Impedance

10.6 kΩ

Input Clipping Level

Line	+27 dBV
Aux	+15 dBV

Output Clipping Level

Line	+20 dBV
Aux	+0 dBV
Mic	-26 dBV

Built-in Digital Signal Processing

Per Channel	Equalizer (4-band Parametric, Analog and USB output channels only), Mute, Limiter, Gain (140 dB range)
System	Matrix mixer

Networking

Cable Requirements

Cat 5e or higher (shielded cable recommended)