

### Broadcast Services - Sound System Purchases

RFI Line Items									
ECPU:ESTIMATED COST P/UNIT	PMP:POTENTIAL MINIMUM PURCHASE	PAP:POTENTIAL ANNUAL PURCHASE	PF:PURCHASE FREQUENCY	ETD:ESTIMATED DELIVERY TIME					
Product name	MFR	MFR product #	ECPU	Min qty	PMP	PAP	PF	ETD	Details
34x16 Matrix Mixer with Signal Processor	Yamaha	MTX5-D		1			1	1	Features: SD Memory Card Slot for playback Easily increase system inputs and outputs MTX Digital Network System Audio Network for MTX System Dante for MTX (MTX5-D, XMV-D only)Daisy Chain Network Star Network Redundant Network Specifications: MIXING capability Mixing Channels: Mixing Channel : 16 Mono + 3 Stereo + 2 Effect Return + 8 Direct-in to Matrix Input Channel Functions: Mono CH : 3-band PEQ, Comp, Gate, Auto Gain Control, Feedback suppressor (available in ch 1-8) Output Channel Functions: Room Delay, Room EQ, Speaker Processor, X-Over (1way & 2way), Delay, 6-band PEQ, Limiter I/O Phantom Power: +48V Internal Processing: Priority Ducking, Ambient Noise Compensator Sampling Frequency Rate: Internal: 48kHz/ 44.1kHz Signal Delay: Less than 3.0ms (AD-DA @48kHz) Total Harmonic Distortion: Less than 0.05% (+4dBu, Gain:-6dB), Less than 0.1% (+4dBu, Gain:+66dB) Frequency Response: 20Hz to 20kHz, +0.5dB, -1.5dB Dynamic Range:107dB (Gain:-6dB) Hum & Noise Level: Equivalent input noise: -60dBu (Gain: 66dB), -83dBu (Gain: -6dB) Crosstalk: -100dB Heat Dissipation: 55.9kcal/h max Power Requirements: AC100V-240V 50Hz/60Hz Power Consumption: 65W Dimensions (WxHxD): 18.9 x 3.4 x 13.9" (480 x 88 x 351mm) Net Weight: 13.9Lbs (6.3kg) Others: Memory bank: PRESET 50 GTIN:0086792973401
1000W Amplifier with 4 Flexible Output-Channels	Lab Gruppen	D10-4L		1			1	1	Processing / Network Lake / Dante Peak output voltage 142 Vpk Max output Current 30 Apk Rational Power Management (RPM) Share "Total burst power" of the product freely among channels. Any channel can scale up to the "single channel max power" Default voltage limitation (can be lifted with RPM configuration) 63 Vpk Protection feature Current Average Limiter (CAL), Very High Frequency Protection (VHF), Direct Current Protection (DC), Short Circuit Protection, Current-Clip Limiter, Voltage Clip Limiter, Temperature protection Amplifier platform Inter Sample Voltage Peak Limiter (ISVPL) Configurable Peak voltage threshold and profile Amplifier gain Digital configurable amplifier gain 22 - 44 dB Dynamic range > 112 dB Load impedance analysis Yes Number of amplifier channels - 4 Total burst power all channels (share among channels with RPM) 1000 W Max output power (all channels driven) 12 ohms 250 W 2.67 ohms 250 W 4 ohms 250 W 8 ohms 250 W 16 ohms 250 W Hi-Z 25 V 250 W Hi-Z 70 V 250 W Hi-Z 100 V 175 W

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<p>Low-Profile Lay-In 2' x 2' Ceiling Tile Loudspeaker</p>	<p>JBL</p>	<p>LCT81C/T</p>	<p>\$105.00</p>	<p>8</p>	<p>\$840.00</p>	<p>\$840.00</p>	<p>1</p>	<p>1</p>	<p>Low-Profile Lay-In 2' x 2' Ceiling Tile Loudspeaker with 200 mm. Wireless Technology Digital UHF Number of RF Channel Frequencies 2560 Diversity Antenna Diversity RF Frequency Band G50: 470 to 534 MHz RF Bandwidth 64 MHz Frequency Step Size 25 kHz Max Operating Range 328.1' / 100 m Max Transmitters per Band 60 Latency &lt; 2.9 ms Modulation Proprietary Receiver Receiver Type Backmount Mounting Options Backmount (with Included Hardware) Rackmount Size 1RU (Full Rack) Antenna 2 x 1/2 Wave External, BNC (Rear-Mount) Antenna Bias Voltage 12 to 13 VDC, 150 mA (per Antenna) Number of Audio Channels 2 Audio I/O 2 x XLR 3-Pin Male Balanced Output Gain Range -18 to +42 dB (1 dB Steps) Pad 0 dB Audio Output Level XLR Outputs: +18 dBV (Line Level, Balanced) XLR Outputs: -12 dBV (MicLevel) Phantom Power Protection On XLR Outputs Frequency Response 30 Hz to 20 kHz ±1 dB (Dependent on Mic) Network I/O 2 x RJ45 (1 Gb/s) Network Protocols DHCP, Dante, Manual IP Impedance XLR Output: 100 Ohms (Balanced) Approximate RF Sensitivity -98 dBm Adjacent Channel Isolation 70 dB Spurious Rejection: &gt;80 dB Power Requirements AC Input AC Input Power 100 to 240 VAC, 50 / 60 Hz at 0.32 A Display &amp; Indicators 1 x Backlit LCD (Battery Status, Channel, Group, Menu Navigation) 2 x Multi-Segment LED (AF Level, Output Level, Peak Housing) Steel Operating Temperature 0 to 122°F / -17 to 50°C Storage Temperature 20 to 165°F / -28 to 73°C Dimensions 19 x 1.7 x 10.8" / 482 x 44 x 274 mm Weight 4 lb / 3.4 kg</p>
<p>Dual-Channel Digital Wireless Receiver</p>	<p>Shure</p>	<p>ulxd4d</p>	<p>\$2,415.00</p>	<p>1</p>	<p>\$2,415.00</p>	<p>\$2,415.00</p>	<p>1</p>	<p>1</p>	<p>For Large Venues &amp; A/V Installations 2 x Digital Audio Channels, 1 Rackspace 64 MHz Tuning Range Expandable up to 60 Channels 2 x Ethernet/Dante Ports 2 x RF Cascade Ports Audio Summing Secure AES-256 Encryption</p>
<p>Digital Handheld Transmitter with Beta 87A Capsule</p>	<p>Shure</p>	<p>ulxd2beta87</p>	<p>\$615.00</p>	<p>2</p>	<p>\$1,230.00</p>	<p>\$1,230.00</p>	<p>1</p>	<p>1</p>	<p>For ULX-D and QLX-D Digital Systems Beta 87A Supercardioid Condenser Capsule Interchangeable Capsule Design Automatic Gain Adjustment 1/10/20mW RF Output Power Mute Mode, Backlit LCD Secure AES-256 Encryption Networked Intelligent Charging 12 Hr with SB900A Rechargeable Battery. Wireless Technology Digital UHF RF Frequency Band H50:534 to 598 MHz RF Bandwidth 64 MHz Frequency Step Size 25 kHz RF Channel Scanning Auto-Scan Max Operating Range 328.1' / 100 m Sample Rate/Resolution 48 kHz / 24-Bit Latency &lt; 2.9 ms Encryption AES 256 Modulation Proprietary Transmitter Transmitter Type Handheld RF Output Power 1 / 10 / 20 mW (Switchable) Audio I/O None Muting Off/On Switch Gain Range 0 to 21 dB (3 dB Steps) Sync Method IR Antenna 1 x Internal Single-Band Helical Power Requirements Battery Battery Type 2 x AA (Included) 1 x Shure SB900A (Not Included, Replaceable) Approx. Battery Life Med.:11 Hours (Alkaline) Med.: 12 Hours (Lithium Shure SB900A) Display &amp; Indicators 1 x Backlit LCD (Battery Status, Channel, Group, Mute, RF Output Power, Sync) Housing Aluminum Operating Temperature 0 to 122°F / -17 to 50 C Storage Temperature -20 to 165°F / -28 to 73°C Dimensions 10.1 x 2" / 256 x 51 mm Weight 12 oz / 340 g Microphone Microphone Type Handheld Sound Field Mono Capsule Electret Condenser Polar Pattern Supercardioid Frequency Range 20 Hz to 20 kHz SNR 70.5 dB A Weighted Equivalent Noise Level 23.5 dB Maximum SPL 140.5 dB SPL THD 1% Impedance 150 Ohms Sensitivity -52.5 dBV/Pa</p>

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Wall-Mounted Wideband Antenna (470-698 MHz)	Shure	ua864us	\$365.00	2	\$730.00	\$730.00	1	1	Wideband Performance Low-Profile Design Wall or Ceiling Mounting Options Metal Surface Mounting Capability LED Indicators for Gain Settings Four-Position Gain Switch Neutral White, Paintable Housing. Connector Type BNC female Impedance 50 Ω Power Requirements 10 to 15 VDC bias from coaxial connection, 75 mA RF Frequency Range 470 to 698 MHz Reception Pattern 3 dB Beam Width at Center Frequency: 100° Third Order Intercept Point (3 OIP) >30 dBm Antenna Gain On Axis, 0 dB Gain Setting at Center Frequency: 2.5 dBi Signal Gain ±1 dB, Switchable: +10, 0, -10, -20 dB RF Overload LED Threshold -15 dBm Operating Temperature Range 20 to 120° F (-7 to 49° C) Storage Temperature Range -20 to 165° F (-29 to 74° C) Dimensions 7 x 7 x 2" (176 x 176 x 51 mm) Weight 17.2 oz (487 g) Packaging Info
100-foot coaxial cable offers BNC to BNC connection.	Shure	ua8100	\$215.00	2	\$430.00	\$430.00	1	1	Package Weight 1.715 lb Box Dimensions (LxWxH) 6.05 x 14.5 x 5"
SM Microphone Cardoid Dynamic	Shure	SM58-LC	\$95.00	4	\$380.00	\$380.00	1	1	Microphone, Wired, Unidirectional, -54.5 dBV/Pa, 50 Hz - 15 kHz, 3 Way Plug XLR, 7.6 m Lead Length. Measures 10' (3m) Five Collapsing Sections Fits NTG1, NTG2 & Video Mic 3/8" Threaded Stud Rode's Boompole provides up to 10' of extension for shotgun microphones. The pole uses a 3/8" industry-standard thread and is designed to fit SM3 Shockmounts, RMS Stand Mounts (NT5, NTG1 & NTG2), and VideoMic. The five-section pole collapses down to 23" for easy portability.
Low silhouette Microphone Desk Stand	Atlas IED	DS2	\$39.00	4	\$156.00	\$156.00	1	1	Base 6" L x 4" W Stand Height 4" Base Material Cast Zinc Base Finish Ebony Tube Finish Chrome Weight 2 lbs. (1kg)
PRESS WALL-Pressbox - Active, wall mount, 14 mic/line output	Whirlwind	Press Wall	\$2,175.00	1	\$2,175.00	\$2,175.00	1	1	Features: 14 mic or line level outputs XLR or 3.5mm transformer balanced output jacks Complete ground isolation between outputs 2 mic or line level inputs Choose front panel inputs or remote connections Expander connection for additional outputs Test tone for level calibration Headphone monitoring of input signals Installs between 16" wall stud centers Specifications: Frequency Response: -5 dBm 20 Hz to -2 dBm 16 kHz Input Impedance Mic: 1.5k Ohms Line: 200k Ohms Output Impedance Mic: 150 Ohms Line: 150 Ohms Maximum Input Level Mic: -5 dBm Line: 50 dBm Maximum Output Level Mic: -5 dBm into 2k Ohms Line: +23 dBm into 2k Ohms Total Harmonic Distortion: 0.075% at 1 kHz, Mic @ Unity Gain Isolation Between Outputs Mic: Greater than 95 dBm Line: Greater than 60 dBm Power Draw AC Mode: 31W Max Finished Size (Flush Mount): 14.25" x 14.25" x 4" Wall Cutout: 12" x 12" Weight with Case: 24 lbs. Shipping Weight: 30 lbs.
30' mic cable	XLR	LyxPro	\$410.00	1	\$410.00	\$410.00	1	1	Microphone Cable Balanced Male to Female 3 Pin Mic Cord for Powered Speakers Audio Interface Professional Pro Audio Performance and Recording Devices - Black
Rode Boompole for Rode NTG1, NTG2 and Video Mic (10')			\$115.00	2	\$230.00	\$230.00	1	1	Material Aluminum Sections Minimum Length 33" (84cm) Maximum Length 10' (3 m)
Totals						\$14,521.00	\$14,521.00		