

UCC Geography Room Audio and Sound system requirement

1	Wireless Microphone System				
1.1	Receiver:				
		Switching bandwidth:	up to 42 MHz		
		Nominal/peak deviation	±24 kHz / ±48 kHz		
		Receiver principle	True diversity		
		Sensitivity (with HDX, peak deviation)	< 2.5 µV for 52 dBA eff S/N		
		Adjacent channel selection	Typically ≥ 65 dB		
		Intermodulation attenuation	Typically ≥ 65 dB		
		Antenna inputs	2 BNC sockets		
		Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA		
		Total harmonic distortion (THD)	≤ 0.9 %		
		Dimensions	190 x 212 x 43 mm		
		Weight	980 g		
1.2	Handheld Wireless Microphone Receiver:				
		RF characteristics:			
		Modulation	Wideband FM		
		Switching bandwidth	up to 42 MHz		
		Nominal/peak deviation	±24 kHz / ±48 kHz		
		Frequency stability	± 15 ppm		
		RF output power at 50 Ω	Max. 30 mW		
		AF characteristics:			
		AF frequency response	80 – 18,000 Hz		
		Signal-to-noise ratio (1 mV, peak deviation)	≥ 110 dBA		
		Total harmonic distortion (THD)	≤ 0.9 %		
		Input impedance	40 kΩ		
		Weight (incl. batteries)	450 g		
		Dimensions	Approx. Ø 50 x 265 mm		
1.3	Microphone Capsule				
		Transducer principle	dynamic		
		Sound pressure level	154 dB SPL		
		Pick-up pattern	cardioid		
		Sennheiser EW-100-G4-835-S or Similar Product			
		Country of Origin: Germany			
2	Blu-ray DVD Player				
		4K Disc Playback			
		Multi HDR			
		Display	LED		
		Playable Disc	Blu-ray Disc, UBD-ROM/UBD-R/UBD-RE, BD-ROM/BD-R/BD-RE, DVD-ROM/DVD±R/DVD±RW, Audio CD/CD-R/CD-RW and USB playback		
		Input and Output	HDMI 2.0 Output × 1 (HDMI 2.0a, HDCP 2.2)		
			HDMI 1.4 Output × 1 (Audio Only)		
			USB 2.0 × 1		
			Optical Audio Output		
			Ethernet		
		Dimensions	430 × 45.5 × 205 mm		
		Weight	1.65 kg		
		LG UP970 or Similar Product			
		Country of Origin: Germany			
3	Loudspeaker Management System				
		2 IN, 6 OUT SPEAKER MANAGEMENT SYSTEM WITH PC CONNECTIVITY			
		Setup Wizard streamlines setup through real-time analyzer readings			
		2 balanced XLR input connectors and 6 balanced XLR output connectors			
		AES/EBU digital connectivity for connecting to digital devices with flawless audio			
		4-band parametric EQ with adjustable frequency, Q and level (±12dB)			
		A.G.C. (Automatic Gain Control) on inputs limits maximum audio and reduces distortion			
		Noise gate on inputs for removing rumble and other unwanted noise			
		RMS Compressor with 0 dB precision Logarithmic ratio			
		Peak Limiter on each output			
		USB port on the front panel			
		Phonic I2600 or Similar Product			
		Country of Origin: Taiwan			
4	Professional Amplifier with DSP				
		Stereo Mode (per channel driven)	Continuous Average Output Per Channel		
		FTC @ THD+N=0.1%, f=20Hz~20kHz	Ch1	Ch2	
		8 ohm/Stereo	730W	730W	
		4 ohm/Stereo	1200W	1200W	
		EIA @ THD+I=1%, f=1kHz			
		8 ohm/Stereo	750W	750W	
		4 ohm/Stereo	1250W	1250W	
		Bridge Mono Mode(both channel driven)	Ch1	Ch2	

		8 ohm/Stereo	2400W				
		4 ohm/Stereo					
		Power Bandwidth	20Hz-20kHz				
		(Ref. 1kHz, THD+N=0.1%,+0/-1dB)					
		THD+N	≤0.05%				
		(Ref. 1kHz, f=20Hz-20kHz)					
		Frequency Response	20Hz-20kHz				
		(Ref. 1kHz, 1 watt output, +0/-1dB)					
		IMD(SMPTE4:1)					
		(60Hz-7kHz, 4:1 Half power)					
		4-8 ohm/Stereo	≤0.1%				
		2 ohm/Parallel	≤0.1%				
		8 ohm/Parallel	≤0.1%				
		Crosstalk	≥64dB, 1kHz				
		(RL=8Ω, Half power, Att.Max 600Ω shunt)					
		Residual Noise	≥70dB				
		(20Hz-22kHz LPF,Att.min)					
		S/N Ratio	≥105dB				
		(Filter:A-Weighting, RMS)					
		Damping Factor	≥350				
		(RL=8Ω, f=1kHz)					
		Input Sensitivity (Att. max)					
		4 ohm/Stereo	+0 or +4.0 or +7.0 dBu By Select Switch				
		8 ohm/Bridge	Up to +2.1 dBu from 4 Ω/Stereo Input				
		Threshold Limiter	Threshold -27dB to +15dB / Attack 1.0ms to 250ms				
			Release 50ms to 3000ms / Low cut OFF,60Hz-1KHz				
		Input Delay	Meter/Feet 0 to 99.5m/326Feet. Time 0 ms to 290ms				
		Driver Delay	Meter/Feet 0 to 3.5m/11.3Feet. Time 0 ms to 10.0ms				
		Phase Control	180 degree				
		Input Level Control	0 to -90dB				
		Output gain Control	-15 to +15dB				
		Input Impedance	6kΩ(Unbalance), 12kΩ(Balance)				
		Input	Female XLR jack				
		Output	XLR Male jack (Input Through), Speakon jack,				
		DIMENSION	480 X 88 X 460 (mm)				
		Shipping Weight & Volume	14.00kg				
		STK Control 2.6 or Similar Product					
		Country of Origin: Korea					
5	Compact Passive fullrange Speaker						
5.1	Electroacoustic features						
		acoustic design	passive loudspeaker, 2-way, symmetrical design				
		power rating (nominal)	150 watts				
		power rating (program)	300 watts				
		power rating (peak)	600 watts				
		sensitivity	91 dB				
		components	2 x 6" / 1" calotte horn, with self-resetting Polyswitch-HF protection				
		maximum SPL	118 dB				
		frequency range	50 Hz – 20 kHz				
		nominal impedance	8 ohms				
		nominal dispersion (h x v)	90° x 40°				
5.2	Loudspeaker features						
		weight	approx. 7 kg				
		standard colours	textured paint, white				
		mounting points	10 x M6 thread				
		connectors	1 x Neutrik NL4 Speakon and 4-pole connector inside				
		dimensions (W x H x D)	195 x 510 x 230 mm				
		Horizontal Bracket should be included					
		Fohhn AT-08 or Similar Product					
		Country of Origin: Germany					
6	16-Input Digital Mixer						
		iPad*/Android* tablet controlled 16-input digital mixer for studio and live application					
		8 award-winning Midas-designed, fully programmable mic preamps for audiophile sound quality					
		Built-In Tri-Mode Wifi router for direct operation—no need for external routers					
		Revolutionary Dugan*-style Auto-Mixing automatically manages microphone gain sharing					
		USB connector for uncompressed stereo WAV recording and playback					
		Award-winning X32 effects rack featuring 4 stereo FX slots including high-end simulations such as Lexicon 480L* and PCM70*, EMT250* and Quantec QRS* etc.					
		100-band Real Time Analyzer (RTA) for all channel and bus EQ's					
		Rack ears and protection bumpers included for flexible rack and onstage applications					
		6 aux buses and main LR with inserts, full dynamics processing and 6-band parametric or 31-band graphic EQ					
		4 XLR aux outputs and 2 XLR main outputs plus phones connector					
		40-Bit floating-point DSP features "unlimited" dynamic range with no internal overload and near-zero overall latency					
		Free iOS, Android and PC/Mac*/Linux* apps available for remote operation via Ethernet, LAN or WiFi					

		MIDI In/Out allows controlling the mixer via MIDI equipment (incl. Mackie Control* protocol)				
		Behringer XR-16 or Similar Product				
		Country of Origin: Germany				
7	Power Sequencer					
7.1	Input	Power condition	Single-phase 3 lines			
		Input interface for power cord	Single-phase dynamic air switch			
		Connector	DZ47 C63			
		Max. Diameter of connected cable (L N/PE)	50mm ²			
7.2	Output	Channel quantity		8		
		Output channel		8		
		Power condition	Single-phase 3 lines			
		Connector type	Compatible with socket			
7.3	Other specification	Max. input current	63A(AC220V)			
		Max. output current per channel	30A/60s or 10Arms			
		Interval per step	1sec			
		Max voltage/current for USB LED	5V/50mA			
		Mode of on-line control	Internal burst signal			
7.4	Control	Max. cable length for online control	2m			
		Max. quantity for on-line equipments	10 sets			
		Interface for on-line control	1/4" TR			
7.5	Function and usage	Front panel indicator	Power on, STY, operation, full bypass, individual channel bypass			
		Front panel function	Power switch, power switch and interface for USB light, full bypass option, individual channel option, multifunction socket			
		Rear panel indicator	N/A			
		Rear panel function	Master switch and interface for power input, output socket, on-line input and output socket			
7.6	Dimension /weight	Product dimension (W x D x H) (mm)	483x260x44.5(1U)			
		Packing dimension(W x D x H) (mm)	560x425x80			
		N.W.	5.2kg			
		G.W.	5.6kg			
7.7	Power	AC220V±10% 50-60Hz				
		Famousound PRO1018 or Similar Product				
		Country of Origin: China				
8	22U Rack Cabinet	Dimension	22U *600mm (Width)*600mm(Depth)			