

ANNEX 1 (Technical Specifications)

Specifications for AMED Training Room

Category-1 (Sound equipment)

1.1- Wireless Microphone System (Qty: 1 Set)		Your brand and Specifications
	Minimum Requirements	
Model	AKG WMS40 MINI Dual Vocal Set Wireless Microphone System or equivalent	
Frequency Bandwidth (Transmitter)	A & C	
Frequency Bandwidth (Receiver)	A & C	
Audio Frequency Response	40 to 20 kHz (Transmitter & Receiver)	
Range	66' /20 m (Transmitter & Receiver)	
Number of selectable frequencies	1 fixed frequency	
Receiver Antenna	2 X fixed external antennas	
Audio Output (Receiver)	2 X balanced TRS 1/4"(6.3 mm) female jack, Balanced audio output adjustable from mic to line level, output level at rated deviation:500 mV rms	
Operating Time	30 hours	
Features	Dual Receiver Operation, 30 - Hour AA Battery Life, 2 x HT40 Handheld Wireless Transmitters, 2 x Balanced 1/4" Outputs	
Compatibility	Compatible with all AKG MicroMics	
Power Supply	Type: DC Socket, 12 VDC	
Warranty	1 year	

1.2- Pin Microphone System (Qty: 1 Set)		Your brand and Specifications
	Minimum Requirements	
Model	AKG Perception Wireless 45 Presenter Set Band - A or equivalent	
Audio Bandwidth (Transmitter & Receiver)	40 Hz to 20 kHz	
Modulation (Transmitter & Receiver)	FM	
THD & Noise (Transmitter & Receiver)	typ. 0.8%	
Power source	Battery powered	
Package contents	Perception wireless PT 45 Transmitter, Perception wireless SR45 wireless stationary receiver, two pin mic (CK 99 L Lavalier Microphone(clip-on and can connect to transmitter)).	

Handwritten signature and date: 29/05/2022

Features	30MHz selection bandwidth, up to 8 hours of operation, plug and play setup. low battery indication
Warranty	1 year

1.3- 4 or 6 (and above) Channel Mixer (Qty: 5)		Your brand and Specifications
	Minimum Requirements	
Model	YAMAHA MG06X Mixer or equivalent	
Input channels	6 channels: MONO (MIC/LINE): 2, stereo (LINE): 2	
Output channels	STEREO OUT: 2, PHONES: 1	
Bus	STEREO: 1	
Phantom power voltage	+48V	
Power consumption	12W	
Accessory	Mic Stand Adaptor: BMS-10A	
Warranty	1 year	

1.4- Amplifier (Qty: 5)		Your brand and Specifications
	Minimum Requirements	
Model	YAMAHA PX5 Stereo Power Amplifier or equivalent	
Amplifier Class	Class D, Balanced output circuit (BTL)	
Output Power	500W	
Sampling Frequency Rate (Internal)	48 kHz	
I/O Connectors (Line Input)	XLR-3-31 x 2, 1/4" PHONE (TRS) x 2	
I/O connectors (Speaker Output)	Neutrik speakON NL4 x 2, Binding post x 2 pairs, 1/4" PHONE (TS) x 2	
I/O connectors (Others)	USB 2.0 Standard-A Connector (Female) for Save/Load, Speaker preset update, Firmware update with USB memory; AC inlet x1 with AC cord clamp	
Indicators	POWER x 1 (Green), ALERT x 1 (Red), USB x 1 (Green), PROTECT x 2 (Red), CLIP/LIMIT x 2 (Red), SIGNAL x 2 (Green); Auto LED off feature	
Latency	1.5 msec (Analog Input to speakers)	
Accessories	USB cover, Owner's Manual, Specification sheet, AC cable (2.0m) x 1	
Others	USB 2.0 Standard-A Connector (Female) for Save/Load, Speaker preset update, Firmware update with USB memory; AC inlet x 1 with AC cord clamp	
Warranty	1 year	

1.5- Speakers (Qty: 4 Set)		Your brand and Specifications
	Minimum Requirements	

29/05/2022

Model	JBL 25L Speakers or equivalent	
Frequency Range	60 Hz - 20 kHz	
Frequency Response	85 Hz - 17 kHz	
Crossover Type	2nd order low-pass, 3rd order high-pass	
Installation	InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-25UB-1 (&-WH) U-bracket. Secondary safety attachment loop point on back panel.	
Included Accessories	InvisiBall wall-mounting system , 6 mm X 100 mm hex key	
Warranty	1 year	

Category-2 (Video Conferencing equipment)

2.1- Full HD PTZ USB Camera & Speakerphone (Qty: 5)		Your brand and Specifications
	Minimum Requirements	
Model	AVer VC520 Pro2 or equivalent	
PTZ Camera		
Sensor	Super-low-light 2M pixel sensor for clear and natural imaging in low-light conditions	
Resolution	(16:9) 1920x1080, 1600x900, 1280x720, 960x540, 848x480, 800x448x 640x360, 424x240, 320x180, (4:3) 800x600, 640x480, 360x320, 320x240 at 60, 30, 15fps	
Field of View (D/H/V)	84.5° / 76° / 48°	
FOV Adjustment	SmartFrame for automatic FOC adjustment to fit all participants	
Wide Dynamic Range	True WDR upto 120dB	
Zoom	24X total zoom (12X optical zoom)	
Lens Focal Length	3.9mm (wide) ~ 47.3mm (tele)	
Lens F#	1.8 (wide) ~ 2.8 (tele)	
Minimum Focus Distance	1.5m	
Pan	±170° (fast and quiet pan & tilt movement)	
Tilt	90° (up), 30°(down) (fast and quiet pan & tilt movement)	
Video Format	YUV, YUY2, MJPEG, NV12	
Network Compression Format	H.264, H.265	
Network Protocols (Video)	RTSP, RTMP	
Audio Format	AAC-LC	
Network Protocols (Audio)	RTSP, RTMP	
USB	3.1 Gen 1 Type-B, backward compatible with USB 2.0	
Mounts	Camera wall-mount bracket, Ceiling Mount	
Accessories	- Mini DIN8 to D-SUB9 RS232 adapter - USB3.1 fiber extender 20m - USB3.1 type-B to type-A cable 3m - Remote control	

[Handwritten signature]
12/08/2022

Speakerphone		
Microphone	Full duplex microphone array with echo cancellation Advanced noise suppression Dual-omnidirectional microphone array 3.5 mm phone-in jack 3.5 mm line out	
Speaker	6W, Adjustable to 90dB SPL at 0.5 m	
Power Supply		
Type	AC 100V ~ 240V, 50/60 Hz	
Consumption	12V, 5A	
Warranty & Authorization	1 year warranty and Authorization letter	

2.2 Expansion Speaker Phone (Qty: 5)		Your brand and Specifications
	Minimum Requirements	
Model	FONE540 or equivalent	
Features	<ul style="list-style-type: none"> • Wireless Bluetooth / USB Wired for PC • Full duplex microphone array speakerphone • Two omnidirectional microphones support 360° pickup • Full duplex echo cancellation • Advanced noise suppression • Powerful wideband voice processing • Speaker volume: adjustable to 90 dB SPL at 0.5 m • Touch controls for volume down/up, mute, phone input, call, and hang up • Can bridge phone-in and USB into one call 	
Connectivity	<ul style="list-style-type: none"> . 12V power adapter . Micro USB connector . LAN for IP remote access . Expansion port (daisy-chain speakerphone or microphone) . 3.5 mm phone-in jack . 3.5 mm line out 	
Control	<ul style="list-style-type: none"> . UAC, plug and play . WebUI: browser IP access via Chrome™ browser (Internet Explorer not supported) . PTZApp 	
Security	Kensington slot	
Warranty & Authorization	1 year warranty and Authorization letter	

2.3- AI PTZ Auto-tracking Camera (Qty: 5)		Your brand and Specifications
	Minimum Requirements	
Model	AVer PTC115+ or equivalent	
PTZ camera		

[Handwritten signature]
2/10/2022

Image Sensor	1/2.8" 1080p Low Lux CMOS	
Effective Picture Elements	2 Megapixels	
Output Resolutions	Auto, 1080p/60, 1080p/50, 1080p/30, 1080i/60, 1080i/50, 720p/60	
S/N Ratio	>50dB	
Gain	Auto, Manual	
Shutter Speed	1/5 to 1/32,000 sec	
Optical Zoom	22x	
Digital Zoom	12x	
Sensor Zoom	1x	
Camera Control - Interfaces	RS-232 (DIN8)/IP	
Camera Control - Protocols	VISCA (RS-232/IP), PELCO-D & PELCO-P (RS-232), CGI (IP)	
Image Processing	Noise Reduction	
Power Frequencies	Auto, 50 Hz, 60 Hz	
AI Auto Tracking Functions	Wide Area, Stage, Segment	
WEB UI		
Live video preview	Yes	
Camera PTZ control	Pan, Tilt, Zoom, Focus, Preset Control	
Camera/Image Adjustment	Exposure, White Balance, Picture	
Network configuration	DHCP, IP Address, Gateway, Subnet Mask, DNS	
IP Streaming		
Resolution	1080p 60fps (Dual Stream)	
Network Video Compression Formats	H.264, MJPEG	
Maximum Frame Rate	1080p 60fps (Dual Stream)	
Bit-Rate Control Modes	CBR	
Bit-Rate Range Setting	512 Kbps to 6 Mbps	
Network Interface	10/100/1000 Base-T	
Multi-Stream Capability	3 (2 for RTSP, 1 for Web Page), 1080p 60fps (max.)	
Network Protocols	IPv4, TCP, UDP, ARP, ICMP, IGMP, HTTP, DHCP, RTP/RTCP, RTSP, RTMP, VISCA Over IP, ONVIF	
Interface		
Video Outputs	USB, IP, HDMI, 3G-SDI	
Audio Outputs	USB, IP, HDMI	
Audio Inputs	Line in	
Accessories	L-Type Wall Mount, D-Type Ceiling Mount	
Other (Required)	Installation and Training	
Warranty & Authorization	1 year warranty and Authorization letter	

[Handwritten signature]
29/08/2022

Category-3 (Interactive tablet)

Interactive Teaching Digital Pen Display (Qty: 6)

		Your brand and Specifications
Model	Minimum Requirements	
Display	Wacom Cintiq 16 or equivalent	
Panel Type	LCD	
Size	15.6"	
Aspect Ratio	16:9	
Resolution	1920 x 1080	
Video Ports	1 x HDMI	
Contrast Ratio	1000:1	
Color Gamut	72% NTSC	
Brightness	210 cd/m ²	
Response Time	25 ms	
Display Colors	16.7 Million	
Viewing Angle (H x V)	178 x 176°	
Tablet		
Active Area	13.6 x 7.6" / 345.44 x 193.04 mm	
Number of Buttons	None	
Buttons Customizable	No	
Connectivity Cable	USB Type-A	
Dimensions (W x H x D)	16.6 x 11.2 x 1" / 421.64 x 284.48 x 25.4 mm	
Stylus		
Pressure Levels	8192	
Tilt	60°	
Number of Switches	2	
Technology	Electromagnetic Resonance (EMR)	
General		
Cable Length	6' / 1.8 m	
Operating System Support	Windows, macOS/OS X	
OS Compatibility	Windows macOS	
DC Input Power	12 VDC at 3 A	
Warranty	1 Year	

[Handwritten Signature]
29/08/2022