



ILLUMINATED INTEGRATION

www.illuminated-integration.com

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Harrisburg, PA 17103

Phone: 717-996-4596

Proposal To:

Upper Darby School District

For:

AVLCR Updates

1.0

December 16, 2022

ii-1982

COSTARS 034-E22-163

REDEFINING THE EXPERIENCE.

HIGH SCHOOL

AUDIO - DSP & CONTROL PROCESSING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	QSC CORE NANO Network Core, 64x64 network I/O channels with 8x8 Software-based Dante license included, USB AV bridging, dual LAN ports, VoIP telephony, 8 AEC processors, Half-size 1RU.	\$1,667.00	\$1,667.00	\$0.00	\$1,667.00
1	QSC SLQUD-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). UCI Deployment Software License, Perpetual.	\$89.00	\$89.00	\$0.00	\$89.00
1	QSC SLQSE-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). Scripting Engine Software License, Perpetual.	\$178.00	\$178.00	\$0.00	\$178.00
1	QSC SL-DAN-32-P Q-SYS Software-based Dante 32x32 Channel License, Perpetual	\$708.00	\$708.00	\$0.00	\$708.00
1	QSC QIO-L4o Q-SYS peripheral providing 4 line outputs. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.	\$429.00	\$429.00	\$0.00	\$429.00
1	QSC QIO-ML4i Q-SYS peripheral providing 4 mic/line inputs. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.	\$560.00	\$560.00	\$0.00	\$560.00
2	QSC TSC-101-G3 Q-SYS 10.1" PoE Touch Screen Controller for In-Wall Mounting. Color - Black only	\$2,436.00	\$4,872.00	\$0.00	\$4,872.00
1	QSC TSC-710t-G3 Table top mounting accessory for TSC-70W-G3 and TSC-101W-G3.	\$350.00	\$350.00	\$0.00	\$350.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$303.00	\$303.00	\$0.00	\$303.00
1	Cisco CBS350-24P-4X 24 port POE+ switch with 10G uplink	\$1,100.00	\$1,100.00	\$0.00	\$1,100.00
2	Illuminated Integration Misc. Hardware Fiber SFP	\$35.00	\$70.00	\$0.00	\$70.00
1	Illuminated Integration Misc. Hardware conduit, low voltage j boxes, trim rings, locking covers, etc	\$350.00	\$350.00	\$0.00	\$350.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$5,000.00	\$5,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,504.00	\$5,504.00
1	Illuminated Integration Audio System Tuning professional tuning	\$0.00	\$0.00	\$1,000.00	\$1,000.00
AUDIO - DSP & CONTROL PROCESSING TOTAL					\$22,180.00

AUDIO - CONSOLE

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	HSA Custom Desk Quote ID:49854602 High School	\$14,085.00	\$14,085.00	\$0.00	\$14,085.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$2,960.00	\$2,960.00
AUDIO - CONSOLE TOTAL					\$17,045.00

AUDIO - MICROPHONES

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
4	Shure ULXD4Q--G50 Quad Digital Wireless Receiver with internal power supply, 1/2 Wave Antenna and Rack Mounting Hardware	\$5,791.00	\$23,164.00	\$0.00	\$23,164.00
16	Shure ULXD1--G50 Digital Wireless Bodypack Transmitter with Miniature 4-Pin Connector	\$509.00	\$8,144.00	\$0.00	\$8,144.00
8	Shure ULXD2/SM58--G50 Handheld Transmitter with SM58 Microphone	\$546.00	\$4,368.00	\$0.00	\$4,368.00
16	Shure ULXD8--G50 Wireless gooseneck microphone base for ULXD and QLXD. Includes AA Alkaline Batteries	\$496.00	\$7,936.00	\$0.00	\$7,936.00
16	Shure MX410RLPDF/C 10" Shock-Mounted Gooseneck, Red LED Ring on top, Less Preamplifier, Dual Flexible, Cardioid	\$229.00	\$3,664.00	\$0.00	\$3,664.00
16	Shure SB900B RECHARGEABLE BATTERY	\$98.00	\$1,568.00	\$0.00	\$1,568.00
1	Shure SBRC-US Rack Battery Charger. Compatible with Shure rechargeable batteries AXT910, AXT920 and SB900A.	\$750.00	\$750.00	\$0.00	\$750.00
1	Shure SBC200-US Dual Docking Charger with PS45US Power Supply	\$236.00	\$236.00	\$0.00	\$236.00
3	Shure SBC200 Dual Docking Charger, Power Supply NOT Included	\$187.00	\$561.00	\$0.00	\$561.00
2	Countryman Associates B3W5FF05CAX B3W5FF05CAX, for Shure with TA4F (Code AX), (W5) Mid gain for theatre head miking, (C) Cocoa	\$260.00	\$520.00	\$0.00	\$520.00
2	Countryman Associates B3W5FF05TAX B3W5FF05TAX, for Shure with TA4F (Code AX), (W5) Mid gain for theatre head miking, (T) Tan	\$260.00	\$520.00	\$0.00	\$520.00
2	Countryman Associates B3W5FF05LAX B3W5FF05LAX, for Shure with TA4F (Code AX), (W5) Mid gain for theatre head miking, (L) Light	\$260.00	\$520.00	\$0.00	\$520.00
1	SKB 3i-3021-18BC 30" x 21" x 18" w/wheels cubed foam	\$477.00	\$477.00	\$0.00	\$477.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$500.00	\$500.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$4,440.00	\$4,440.00
AUDIO - MICROPHONES TOTAL					\$57,368.00

AUDIO - HEARING ASSIST

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Williams AV FM 558-24 PRO D FM Plus Large-area Dual FM and Wi-Fi assistive listening system with 24 FM R38 receivers. Features Dante input, coaxial cable and rack panel kit for professional installation. System includes: (1) FM T55 D transmitter, (24) PPA R38N receivers, (24) EAR 022 surround earphones, (6) NKL 001 neckloops, (2) CHG 3512 12-bay chargers, (24) BAT 026-2 AA NiMH rechargeable batteries, (1) ANT 005 remote coaxial antenna, (1) IDP 008 ADA wall plaque and (1) RPK 005 rack panel kit. Replaces FM 458-24 PRO D	\$7,512.00	\$7,512.00	\$0.00	\$7,512.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$1,184.00	\$1,184.00
1	Ubiquiti Networks U6-PRO-US WiFi 6 Pro Dual-Band AP	\$155.00	\$155.00	\$0.00	\$155.00
1	Illuminated Integration MISC Cables CAT6, connectors, network jumpers	\$50.00	\$50.00	\$0.00	\$50.00
AUDIO - HEARING ASSIST TOTAL					\$8,901.00

VIDEO - PROJECTOR

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Visionary Solutions PacketAV E-WP-BT Wall Plate Encoder (Bluetooth) A/V Encoder (Wall Plate), 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE; Upgradeable to AES67/Dante, with Bluetooth Audio	\$1,404.00	\$1,404.00	\$0.00	\$1,404.00
2	Visionary Solutions PacketAV E-WP Wall Plate Encoder A/V Encoder (Wall Plate), 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE; Upgradeable to AES67/Dante	\$1,148.00	\$2,296.00	\$0.00	\$2,296.00
1	Visionary Solutions PacketAV D4100 A/V Decoder, 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE	\$763.00	\$763.00	\$0.00	\$763.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$295.00	\$295.00	\$0.00	\$295.00

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1	Illuminated Integration Misc. Hardware metal boxes, conduit	\$150.00	\$150.00	\$0.00	\$150.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$8,800.00	\$8,800.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,728.00	\$5,728.00
VIDEO - PROJECTOR TOTAL					\$19,436.00

VIDEO - PROJECTION SCREEN

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Draper 114208 Paragon E, 384", HDTV, Matt White XT1000E, 110 V	\$21,876.00	\$21,876.00	\$0.00	\$21,876.00
1	Draper 121223 LVC-IV & LVC-S, 110 V	\$222.00	\$222.00	\$0.00	\$222.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$750.00	\$750.00	\$0.00	\$750.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$4,400.00	\$4,400.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,728.00	\$5,728.00
VIDEO - PROJECTION SCREEN TOTAL					\$32,976.00

RACK & ACCESSORIES

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Middle Atlantic Custom Rack Custom 46U swinging wall rack to house all necessary components for system.	\$5,073.00	\$5,073.00	\$0.00	\$5,073.00
1	SurgeX SX-1120-RT Rack Mount Surge Eliminator and Power Conditioner w/Remote, 1RU	\$993.00	\$993.00	\$0.00	\$993.00
1	CyberPower CP1500PFCRM2U 1500VA/100W 2U Rackmount UPS	\$372.00	\$372.00	\$0.00	\$372.00
1	CyberPower RMCARD205 HTTP SNMP NMS RJ45 ENVIROMENTAL SENSOR PORT 3YR WTY	\$223.00	\$223.00	\$0.00	\$223.00
1	RDL TX-70A 25 V, 70 V, 100 V Input Interface - Unbal. Line Out	\$50.00	\$50.00	\$0.00	\$50.00
4	Littlite TDM Touch Dimmer	\$10.00	\$40.00	\$0.00	\$40.00
4	Littlite L-18-LED-3-UV 18" Gooseneck Mounting Kit Power Supply	\$88.00	\$352.00	\$0.00	\$352.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$4,400.00	\$4,400.00
1	Illuminated Integration Misc. Hardware Rack hardware, cable management and conduit	\$300.00	\$300.00	\$0.00	\$300.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,328.00	\$5,328.00
RACK & ACCESSORIES TOTAL					\$17,131.00

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
111	ETC CSSPOTVMVS ColorSource Spot V ETL with Shutter Barrel with Multiverse - Black	\$1,515.00	\$168,165.00	\$12,210.00	\$180,375.00
58	ETC 414LT 14° lens tube, black	\$373.00	\$21,634.00	\$0.00	\$21,634.00
41	ETC 419EDLT 19° EDLT lens tube with lens installed, black	\$288.00	\$11,808.00	\$0.00	\$11,808.00
4	ETC 426EDLT 26° EDLT lens tube with lens installed, black	\$288.00	\$1,152.00	\$0.00	\$1,152.00
8	ETC 436EDLT 36° EDLT lens tube with lens installed, black	\$288.00	\$2,304.00	\$0.00	\$2,304.00
45	ETC CSPARDB ColorSource PAR Deep Blue, XLR, black	\$800.00	\$36,000.00	\$2,475.00	\$38,475.00
45	ETC 400CC C-Clamp	\$21.00	\$945.00	\$0.00	\$945.00
156	Peak Trading 091-125/312X030B 30" Black Safety Cable	\$4.00	\$624.00	\$0.00	\$624.00
25	Blizzard Lighting DMX-5PIN-5Q 5' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$11.00	\$275.00	\$0.00	\$275.00
25	Blizzard Lighting DMX-5PIN-10Q 10' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$14.00	\$350.00	\$0.00	\$350.00
80	Blizzard Lighting DMX-5PIN-15Q 15' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$18.00	\$1,440.00	\$0.00	\$1,440.00
35	Blizzard Lighting DMX-5PIN-25Q 25' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$21.00	\$735.00	\$0.00	\$735.00
45	Blizzard Lighting PCT-INTER-1410 30-59 PowerCON™ TRUE1 to PowerCON™ TRUE1 compatible 10FT 14AWG with 16A/250V AC UL approved	\$37.00	\$1,665.00	\$0.00	\$1,665.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
30	Blizzard Lighting PCT-INTER-1425 PowerCON™ TRUE1 to PowerCON™ TRUE1 compatible 25FT 14AWG with 16A/250V AC UL approved	\$52.00	\$1,560.00	\$0.00	\$1,560.00
50	Blizzard Lighting PC-INTER-1410 10ft powerCON® compatible male to female interconnect cable, 14 AWG, UL approved	\$32.00	\$1,600.00	\$0.00	\$1,600.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$20,720.00	\$20,720.00
1	Illuminated Integration Removal/Disposal Remove old fixtures	\$0.00	\$0.00	\$11,840.00	\$11,840.00
LIGHTING - STAGE LIGHTING TOTAL					\$297,502.00

LIGHTING - CONSOLE

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ION XE 20 12K-US Ion Xe 20 Console, 12,288 Outputs	\$0.00	\$0.00	\$0.00	\$0.00
1	ETC EOS MFW 20 Eos Motorized Fader Wing, 20 Fader	\$7,269.00	\$7,269.00	\$0.00	\$7,269.00
2	Illuminated Integration Multi-Touch Touchscreen 24" Multi-Touch Touchscreen	\$513.00	\$1,026.00	\$0.00	\$1,026.00
1	RapcoHorizon DURAPATCH-25 25 FT DURACAT CAT5e STRANDED RJ45-RJ45	\$32.00	\$32.00	\$0.00	\$32.00
1	ETC ECPB NET ECPB; NET Plug-in station (1 gang)	\$138.00	\$138.00	\$0.00	\$138.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$2,500.00	\$2,500.00
2	Illuminated Integration Console Training - Level 1 Level 1 Console Training (Initial & 6 Month)	\$0.00	\$0.00	\$3,000.00	\$3,000.00
LIGHTING - CONSOLE TOTAL					\$13,965.00

LIGHTING - POWER & DATA DISTRIBUTION

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
36	ETC R20 Dual 20A 120V Relay Module	\$531.00	\$19,116.00	\$0.00	\$19,116.00
10	ETC ECPB DMXOUT ECPB; DMX Output Plug-In Station (1 gang)	\$138.00	\$1,380.00	\$0.00	\$1,380.00
3	SmartWire 242PDIGICOMP 24-2P EPS STR CMP LC	\$571.00	\$1,713.00	\$0.00	\$1,713.00
3	SmartWire CAT6P Cat6 23-4P Plenum	\$365.00	\$1,095.00	\$0.00	\$1,095.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Misc. Electrical J-boxes, conduit, etc.	\$1,282.00	\$1,282.00	\$0.00	\$1,282.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$16,920.00	\$16,920.00
LIGHTING - POWER & DATA DISTRIBUTION TOTAL					\$41,506.00

LIGHTING - ARCHITECTURAL CONTROL

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ ETC Quote #56768.0.1	\$43,476.00	\$43,476.00	\$0.00	\$43,476.00
1	Doug Fleenor Design NODE16-DIN-JBOX 16 Port Ethernet to DMX Interface, DIN-rail mounted, in junction box	\$1,809.00	\$1,809.00	\$0.00	\$1,809.00
2	SmartWire CAT5P Cat5e 24-4P Plenum	\$224.00	\$448.00	\$0.00	\$448.00
2	West Penn Wire 25225BBK1000 1P 16G STRD UNSHLD PLENII	\$268.00	\$536.00	\$0.00	\$536.00
7	SmartWire 242PDIGICOMP 24-2P EPS STR CMP LC	\$571.00	\$3,997.00	\$0.00	\$3,997.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$5,000.00	\$5,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$11,840.00	\$11,840.00
LIGHTING - ARCHITECTURAL CONTROL TOTAL					\$67,106.00

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC Custom Rigging Quotation Quote #56684 (2) P1500E w/ Prodigy Cable Management & Raceway for 12 Circuits, Foundation HD Controller, (1) Foundation Remote 2, (1) Additional E Stop	\$129,458.00	\$129,458.00	\$23,684.00	\$153,142.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$1,282.00	\$1,282.00	\$0.00	\$1,282.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$3,000.00	\$3,000.00	\$0.00	\$3,000.00
1	Illuminated Integration Removal/Disposal Strip Old Rigging	\$0.00	\$0.00	\$3,580.00	\$3,580.00
RIGGING TOTAL					\$161,004.00

CURTAINS

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Rosebrand Custom Curtain Quote #303443	\$10,787.00	\$10,787.00	\$0.00	\$10,787.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$600.00	\$600.00	\$0.00	\$600.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,370.00	\$5,370.00
CURTAINS TOTAL					\$16,757.00

ADDITIONAL COSTS

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Project Management			\$10,000.00	\$10,000.00
1	Illuminated Integration Design Drawings Drawings to include fixture plots, DMX addressing, rack drawings, system risers, O&Ms.	\$0.00	\$0.00	\$10,400.00	\$10,400.00
1	Illuminated Integration Equipment Fees Lift, Scaffold, Ladder Fees	\$4,000.00	\$4,000.00	\$0.00	\$4,000.00
ADDITIONAL COSTS TOTAL					\$24,400.00
HIGH SCHOOL TOTAL					\$797,277.00

ADDITION - HS ADDITIONAL MOTORIZED RIGGING

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ Quote # : (4) P800G, (1) P1300G, (1) P1500E, Cable Management	\$157,990.00	\$157,990.00	\$75,700.00	\$233,690.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$7,500.00	\$7,500.00	\$0.00	\$7,500.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$4,000.00	\$4,000.00	\$0.00	\$4,000.00
1	Illuminated Integration Travel & Expenses Expenses	\$9,000.00	\$9,000.00	\$0.00	\$9,000.00
RIGGING TOTAL					\$254,190.00
SHIPPING AND TAXES					\$5,000.00
SUMMARY					
EQUIPMENT TOTAL					\$178,490.00
LABOR					\$75,700.00
SHIPPING					\$2,069.01
SHIPPING					\$5,000.00
SALES TAX					\$0.00
ADDITION - HS ADDITIONAL MOTORIZED RIGGING TOTAL					+\$261,259.01

ADDITION - HS ADDITIONAL MOTORIZED FOH LIGHTING POSITION

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
68	ETC 414LT 14° lens tube, black	\$373.00	\$25,364.00	\$0.00	\$25,364.00
31	ETC 419EDLT 19° EDLT lens tube with lens installed, black	\$288.00	\$8,928.00	\$0.00	\$8,928.00
LIGHTING - STAGE LIGHTING TOTAL					\$34,292.00
SHIPPING AND TAXES					\$0.00

CREDITS FOR REPLACED ITEMS

58	ETC 414LT 14° lens tube, black	\$373.00	\$21,634.00	\$0.00	\$21,634.00
41	ETC 419EDLT 19° EDLT lens tube with lens installed, black	\$288.00	\$11,808.00	\$0.00	\$11,808.00
CREDITS					-\$33,442.00
SHIPPING AND TAXES					-\$0.00

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ ETC Custom Rigging Quote	\$41,829.00	\$41,829.00	\$12,717.00	\$54,546.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$300.00	\$300.00	\$0.00	\$300.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$500.00	\$500.00	\$0.00	\$500.00
1	Illuminated Integration Travel & Expenses Expenses	\$800.00	\$800.00	\$0.00	\$800.00
RIGGING TOTAL					\$56,146.00
SHIPPING AND TAXES					\$500.00

SUMMARY	
EQUIPMENT TOTAL	\$44,279.00
LABOR	\$12,717.00
SHIPPING	\$515.80
SHIPPING	\$500.00
SALES TAX	\$0.00
ADDITION - HS ADDITIONAL MOTORIZED FOH LIGHTING POSITION TOTAL	+\$58,011.80

ADDITION - HS MOVING LIGHTS

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
9	Vari-Lite 912400575005 VL800 EVENT PROFILE , 540W 6500k Monochromatic light engine, c/w 2 x 140mm Omega brackets and power input connector, Black	\$6,880.00	\$61,920.00	\$297.00	\$62,217.00
9	Blizzard Lighting PCT-INTER-1410 30-59 PowerCON™ TRUE1 to PowerCON™ TRUE1 compatible 10FT 14AWG with 16A/250V AC UL approved	\$37.00	\$333.00	\$0.00	\$333.00
9	Blizzard Lighting DMX-5PIN-25Q 25' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$21.00	\$189.00	\$0.00	\$189.00
1	Illuminated Integration Shipping	\$0.00	\$0.00	\$0.00	\$0.00
LIGHTING - STAGE LIGHTING TOTAL					\$62,739.00
SHIPPING AND TAXES					\$3,000.00
SUMMARY					
EQUIPMENT TOTAL					\$62,442.00
LABOR					\$297.00
SHIPPING					\$748.96
SHIPPING					\$3,000.00
SALES TAX					\$0.00
ADDITION - HS MOVING LIGHTS TOTAL					+\$66,487.96

DEDUCT - HS QUICKTOUCH CONTROL FOR RIGGING

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ Quote #56684: QuickTouch in Lieu of Foundation	\$91,500.00	\$91,500.00	\$42,360.00	\$133,860.00
RIGGING TOTAL					\$133,860.00
SHIPPING AND TAXES					\$4,500.00
CREDITS FOR REPLACED ITEMS					
1	ETC Custom Rigging Quotation Quote #56684 (2) P1500E w/ Prodigy Cable Management & Raceway for 12 Circuits, Foundation HD Controller, (1) Foundation Remote 2, (1) Additional E Stop	\$129,458.00	\$129,458.00	\$23,684.00	\$153,142.00
CREDITS					-\$153,142.00
SHIPPING AND TAXES					-\$4,500.00
SUMMARY					
EQUIPMENT TOTAL					-\$37,958.00
LABOR					\$18,676.00
SHIPPING					-\$444.10
SHIPPING					\$0.00
SALES TAX					\$0.00
DEDUCT - HS QUICKTOUCH CONTROL FOR RIGGING TOTAL					-\$19,726.10

BEVERLY HILLS MIDDLE SCHOOL

AUDIO - DSP & CONTROL PROCESSING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	QSC CORE NANO Network Core, 64x64 network I/O channels with 8x8 Software-based Dante license included, USB AV bridging, dual LAN ports, VoIP telephony, 8 AEC processors, Half-size 1RU.	\$1,667.00	\$1,667.00	\$0.00	\$1,667.00
1	QSC SLQUD-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). UCI Deployment Software License, Perpetual.	\$89.00	\$89.00	\$0.00	\$89.00
1	QSC SLQSE-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). Scripting Engine Software License, Perpetual.	\$178.00	\$178.00	\$0.00	\$178.00
1	QSC SL-DAN-32-P Q-SYS Software-based Dante 32x32 Channel License, Perpetual	\$708.00	\$708.00	\$0.00	\$708.00
2	QSC QIO-L4o Q-SYS peripheral providing 4 line outputs. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.	\$429.00	\$858.00	\$0.00	\$858.00
1	QSC QIO-ML4i Q-SYS peripheral providing 4 mic/line inputs. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.	\$560.00	\$560.00	\$0.00	\$560.00
2	QSC TSC-101-G3 Q-SYS 10.1" PoE Touch Screen Controller for In-Wall Mounting. Color - Black only	\$2,436.00	\$4,872.00	\$0.00	\$4,872.00
1	QSC TSC-710t-G3 Table top mounting accessory for TSC-70W-G3 and TSC-101W-G3.	\$350.00	\$350.00	\$0.00	\$350.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$365.00	\$365.00	\$0.00	\$365.00
1	Illuminated Integration Misc. Hardware conduit, low voltage j boxes, trim rings, locking covers, etc	\$350.00	\$350.00	\$0.00	\$350.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$5,000.00	\$5,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$7,160.00	\$7,160.00

AUDIO - DSP & CONTROL PROCESSING TOTAL

\$22,157.00

AUDIO - SPEAKERS & AMPS

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
2	Martin Audio CDD15W CDD15 Speaker, WHITE - Main speakers	\$1,870.00	\$3,740.00	\$0.00	\$3,740.00

Illuminated Integration

Confidential Proposal

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Martin Audio SXCF118W SXCF118 Subwoofer, WHITE	\$4,645.00	\$4,645.00	\$0.00	\$4,645.00
2	Martin Audio CDD8W CDD8 Speaker, WHITE - Upper balcony	\$731.00	\$1,462.00	\$0.00	\$1,462.00
4	Martin Audio CDD6W CDD6 Speaker, WHITE - Under balcony speakers	\$410.00	\$1,640.00	\$0.00	\$1,640.00
6	Martin Audio CDDCB6/8W-WR CDD6/8 Celing Bracket, Weatherized, White	\$94.00	\$564.00	\$0.00	\$564.00
2	Community Professional Loudspeakers IC6-1082/96B High Output 8-Inch 2-Way 90 X 60 Indoor Black	\$994.00	\$1,988.00	\$0.00	\$1,988.00
2	Community IVY1082B Vertical Yoke for IC6-1082 Indoor Black	\$96.00	\$192.00	\$0.00	\$192.00
2	TheLightSource SLCB Slim Claw Black	\$41.00	\$82.00	\$0.00	\$82.00
3	Renkus-Heinz CA121M-RDB CA121M-RD Self-Powered with RHAON & Dante Redundant, SA625-RD Amp Module Black	\$2,200.00	\$6,600.00	\$0.00	\$6,600.00
2	Linea Research LR-88C10 Dante Linea Research 88C10 DSP Amplifier with Dante	\$7,077.00	\$14,154.00	\$0.00	\$14,154.00
3	ICE Cable Systems 12-2/P/Black 12awg, 2 Cond, Plenum Rated	\$374.00	\$1,122.00	\$0.00	\$1,122.00
0.25	SmartWire 10-02P-BLK 10-02 105X30 UNS STR CMP Blk	\$1,038.00	\$259.50	\$0.00	\$259.50
1	SmartWire CAT6P Cat6 23-4P Plenum	\$365.00	\$365.00	\$0.00	\$365.00
6	RapcoHorizon PCE2-30 ETHERCON / ETHERCON 30FT	\$54.00	\$324.00	\$0.00	\$324.00
3	ACE Backstage WP-102 Single Gang Wall Panel with 2 Connectrix cutouts	\$7.00	\$21.00	\$0.00	\$21.00
6	ACE Backstage C-15145 NE8FDV-Y110-B: Neutrik Ethercon IDC 110 Punch Down Terminal, CAT5e Black	\$16.00	\$96.00	\$0.00	\$96.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$2,500.00	\$2,500.00	\$0.00	\$2,500.00
1	Illuminated Integration Audio System Tuning Professional Sound System Tuning	\$0.00	\$0.00	\$1,000.00	\$1,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$17,184.00	\$17,184.00
AUDIO - SPEAKERS & AMPS TOTAL					\$57,938.50

AUDIO - CONSOLE

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Yamaha Commercial Audio QL1 18 Motorized faders (16 x 2 master/assignable); 40 input mixing channels (32 mono + 8 stereo); 16 Mix (mono); 8 Matrix (mono); 1 Stereo Master; 1 Mono Master; 16 DCA groups; 16 analog XLR inputs; 8 analog XLR outputs; 2x 2 record/playback channels via USB storage device; built in Dante I/O (64 x 64); 2 MY Card slots; ships with Steinberg Nuendo Live 2 software and one Dante Virtual Soundcard license; rack-mountable with optional RK1	\$8,337.00	\$8,337.00	\$0.00	\$8,337.00
2	Yamaha Commercial Audio RIO1608-D2 16 mic/line inputs, 8 analog outputs, 44.1/48/88.2/96kHz Dante digital network remote I/O unit. Display, encoder and buttons for easy setup, control and monitoring. Remote controllable HA, +48V Phantom Power, HPF, 2 EtherCon® connectors. Dual Power Supplies. 3U Rackspaces. Dante Virtual Soundcard license included	\$5,226.00	\$10,452.00	\$0.00	\$10,452.00
1	HSA Custom Desk Quote ID:50120874	\$10,322.00	\$10,322.00	\$0.00	\$10,322.00
1	Cisco CBS350-24P-4X 24 port POE+ switch with 10G uplink	\$1,100.00	\$1,100.00	\$0.00	\$1,100.00
2	Illuminated Integration Misc. Hardware Fiber SFP	\$35.00	\$70.00	\$0.00	\$70.00
1	SKB 1SKB-R4UW 4U Space Rack stacks w/Roto Racks, wheels, and handle	\$278.00	\$278.00	\$0.00	\$278.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$303.00	\$303.00	\$0.00	\$303.00
2	RapcoHorizon PCE2-30 ETHERCON / ETHERCON 30FT	\$54.00	\$108.00	\$0.00	\$108.00
2	West Penn Wire 25292BBK1000 1P 20G STRD SHLD PLEN II	\$167.00	\$334.00	\$0.00	\$334.00
1	Illuminated Integration Misc. Hardware XLR plates, conduit and misc. hardware	\$250.00	\$250.00	\$0.00	\$250.00
1	Illuminated Integration Console Training - Level 1 Level 1 Console Training	\$0.00	\$0.00	\$1,500.00	\$1,500.00
1	Illuminated Integration Console Training - Level 1 Level 1 Console Training (6 Months Later)	\$0.00	\$0.00	\$1,500.00	\$1,500.00
1	Illuminated Integration Installation Installation and setup provided by Illuminated Integration	\$0.00	\$0.00	\$4,440.00	\$4,440.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$4,125.00	\$4,125.00
AUDIO - CONSOLE TOTAL					\$43,119.00

AUDIO - MICROPHONES

Illuminated Integration

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
4	Audix MB5055 MIC,COND,50"MICROBOOM, M1255B,CARD,HIGH	\$564.00	\$2,256.00	\$0.00	\$2,256.00
4	Shure ULXD4Q--G50 Quad Digital Wireless Receiver with internal power supply, 1/2 Wave Antenna and Rack Mounting Hardware	\$5,791.00	\$23,164.00	\$0.00	\$23,164.00
16	Shure ULXD1--G50 Digital Wireless Bodypack Transmitter with Miniature 4-Pin Connector	\$509.00	\$8,144.00	\$0.00	\$8,144.00
8	Shure ULXD2/SM58--G50 Handheld Transmitter with SM58 Microphone	\$546.00	\$4,368.00	\$0.00	\$4,368.00
16	Audio Technica BP892XCT4-TH Omni Condenser Microphone	\$337.00	\$5,392.00	\$0.00	\$5,392.00
2	RF Venue BPF470T560 Band-Pass Filter (470-560 MHz)	\$399.00	\$798.00	\$0.00	\$798.00
4	RF Venue DISTRO4 DISTRO4	\$499.00	\$1,996.00	\$0.00	\$1,996.00
1	RF Venue D-ARC Diversity Architectural Antenna for Wireless Microphones	\$577.00	\$577.00	\$0.00	\$577.00
24	Shure SB900B RECHARGEABLE BATTERY	\$98.00	\$2,352.00	\$0.00	\$2,352.00
2	Shure SBRC-US Rack Battery Charger. Compatible with Shure rechargeable batteries AXT910, AXT920 and SB900A.	\$750.00	\$1,500.00	\$0.00	\$1,500.00
1	Shure SBC200-US Dual Docking Charger with PS45US Power Supply	\$236.00	\$236.00	\$0.00	\$236.00
3	Shure SBC200 Dual Docking Charger, Power Supply NOT Included	\$187.00	\$561.00	\$0.00	\$561.00
1	West Penn Wire 25292BBK1000 1P 20G STRD SHLD PLEN II	\$167.00	\$167.00	\$0.00	\$167.00
0.2	SmartWire RG58P-BLK RG58U 20SBC 95%TCB CMP Blk Jkt	\$577.00	\$115.40	\$0.00	\$115.40
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$2,960.00	\$2,960.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$500.00	\$500.00
AUDIO - MICROPHONES TOTAL					\$55,086.40

AUDIO - HEARING ASSIST

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
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Illuminated Integration

Confidential Proposal

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Williams AV FM 558-24 PRO D FM Plus Large-area Dual FM and Wi-Fi assistive listening system with 24 FM R38 receivers. Features Dante input, coaxial cable and rack panel kit for professional installation. System includes: (1) FM T55 D transmitter, (24) PPA R38N receivers, (24) EAR 022 surround earphones, (6) NKL 001 neckloops, (2) CHG 3512 12-bay chargers, (24) BAT 026-2 AA NiMH rechargeable batteries, (1) ANT 005 remote coaxial antenna, (1) IDP 008 ADA wall plaque and (1) RPK 005 rack panel kit. Replaces FM 458-24 PRO D	\$7,512.00	\$7,512.00	\$0.00	\$7,512.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$1,184.00	\$1,184.00
1	Ubiquiti Networks U6-PRO-US WiFi 6 Pro Dual-Band AP	\$155.00	\$155.00	\$0.00	\$155.00
1	Illuminated Integration MISC Cables CAT6, connectors, network jumpers	\$50.00	\$50.00	\$0.00	\$50.00
AUDIO - HEARING ASSIST TOTAL					\$8,901.00

VIDEO - PROJECTOR

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Epson V11HA64920 EPSON High Brightness EB-PU2116W Projector, 16,000 Lumens, WUXGA, White	\$18,724.00	\$18,724.00	\$0.00	\$18,724.00
1	Epson V12H004M0B EPSON Middle Zoom Lens #4 for Pro G7000 and L1000 Series (ELPLM11)	\$1,600.00	\$1,600.00	\$0.00	\$1,600.00
1	Chief WMA2S WMA2S WALL MOUNT ACCY, 1 1/2 NPT LAT SHI	\$230.00	\$230.00	\$0.00	\$230.00
1	Chief RPMAUW UNIVERSAL RPMA	\$291.00	\$291.00	\$0.00	\$291.00
1	Visionary Solutions PacketAV E-WP-BT Wall Plate Encoder (Bluetooth) A/V Encoder (Wall Plate), 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE; Upgradeable to AES67/Dante, with Bluetooth Audio	\$1,404.00	\$1,404.00	\$0.00	\$1,404.00
2	Visionary Solutions PacketAV E-WP Wall Plate Encoder A/V Encoder (Wall Plate), 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE; Upgradeable to AES67/Dante	\$1,148.00	\$2,296.00	\$0.00	\$2,296.00
1	Visionary Solutions PacketAV D4100 A/V Decoder, 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE	\$763.00	\$763.00	\$0.00	\$763.00
1	Cisco CBS350-8P-E-2G	\$359.00	\$359.00	\$0.00	\$359.00

Illuminated Integration

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	SmartWire CAT6P Cat6 23-4P Plenum	\$303.00	\$303.00	\$0.00	\$303.00
1	Illuminated Integration Misc. Hardware Network inserts	\$200.00	\$200.00	\$0.00	\$200.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$8,800.00	\$8,800.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,728.00	\$5,728.00
VIDEO - PROJECTOR TOTAL					\$40,698.00

VIDEO - PROJECTION SCREEN

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Da-Lite 21878L COSMO TNSD 226D HD1.1	\$6,270.00	\$6,270.00	\$2,200.00	\$8,470.00
1	Global Cache CL-IP2CC-P CL iTach Wired TCP/IP to Contact Closure with PoE	\$150.00	\$150.00	\$0.00	\$150.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$350.00	\$350.00	\$0.00	\$350.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$4,400.00	\$4,400.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,728.00	\$5,728.00
VIDEO - PROJECTION SCREEN TOTAL					\$19,098.00

RACK & ACCESSORIES

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Middle Atlantic Custom Rack Custom 46U swinging wall rack to house all necessary components for system.	\$5,073.00	\$5,073.00	\$0.00	\$5,073.00
1	CyberPower CP1500PFCRM2U 1500VA/100W 2U Rackmount UPS	\$372.00	\$372.00	\$0.00	\$372.00
1	CyberPower RMCARD205 HTTP SNMP NMS RJ45 ENVIROMENTAL SENSOR PORT 3YR WTY	\$223.00	\$223.00	\$0.00	\$223.00
1	SurgeX SX-1120-RT Rack Mount Surge Eliminator and Power Conditioner w/Remote, 1RU	\$993.00	\$993.00	\$0.00	\$993.00
2	SurgeX SX-N240 Branch Circuit Surge Eliminator, 20A/240V Hardwired - SX-N240	\$1,126.00	\$2,252.00	\$0.00	\$2,252.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Cisco CBS350-24P-4X 24 port POE+ switch with 10G uplink	\$1,100.00	\$1,100.00	\$0.00	\$1,100.00
2	Illuminated Integration Misc. Hardware Fiber SFP	\$35.00	\$70.00	\$0.00	\$70.00
1	RDL TX-70A 25 V, 70 V, 100 V Input Interface - Unbal. Line Out	\$50.00	\$50.00	\$0.00	\$50.00
1	ACE Backstage RPL-345 Three Space Rack Panel with 45 Connectrix cutouts	\$93.00	\$93.00	\$0.00	\$93.00
32	ACE Backstage C-15119 NC3FD-L-B-1: Neutrik 3 Pole Female XLR Gold Contacts, Black	\$8.00	\$256.00	\$0.00	\$256.00
8	ACE Backstage C-15120 NC3MD-L-B-1: Neutrik 3 Pole Male XLR Gold Contacts, Black	\$8.00	\$64.00	\$0.00	\$64.00
4	Littlite L-18-LED-3-UV 18" Gooseneck Mounting Kit Power Supply	\$88.00	\$352.00	\$0.00	\$352.00
4	Littlite TDM Touch Dimmer	\$10.00	\$40.00	\$0.00	\$40.00
0.5	Cleerline Technology D50125MOM3P-BK 50/125 SSF Indoor/Outdoor, Black Jacket	\$637.00	\$318.50	\$0.00	\$318.50
1	Illuminated Integration Misc. Hardware Rack accessories - blank panels, cable management	\$200.00	\$200.00	\$0.00	\$200.00
1	Illuminated Integration Misc. Hardware Fiber Termination Ends	\$125.00	\$125.00	\$0.00	\$125.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$500.00	\$500.00	\$0.00	\$500.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$6,600.00	\$6,600.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,328.00	\$5,328.00
RACK & ACCESSORIES TOTAL					\$24,009.50

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
23	ETC CSSPOTVMVS ColorSource Spot V ETL with Shutter Barrel with Multiverse - Black	\$0.00	\$0.00	\$2,530.00	\$2,530.00
4	ETC 419EDLT 19° EDLT lens tube with lens installed, black	\$0.00	\$0.00	\$0.00	\$0.00
14	ETC 426EDLT 26° EDLT lens tube with lens installed, black	\$0.00	\$0.00	\$0.00	\$0.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
5	ETC 436EDLT 36° EDLT lens tube with lens installed, black	\$0.00	\$0.00	\$0.00	\$0.00
20	ETC CSPARDB ColorSource PAR Deep Blue, XLR, black	\$0.00	\$0.00	\$1,100.00	\$1,100.00
20	ETC SELRN-7.5 D40 narrow round diffuser in frame, black	\$0.00	\$0.00	\$0.00	\$0.00
2	Spotlight Hyperion Followspot LED 700w	\$8,443.00	\$16,886.00	\$1,100.00	\$17,986.00
2	Spotlight SL-BS Tripod stand (low), DIN, adjustable with lazy leg	\$632.00	\$1,264.00	\$0.00	\$1,264.00
35	Blizzard Lighting DMX-5PIN-10Q 10' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$14.00	\$490.00	\$0.00	\$490.00
30	Blizzard Lighting DMX-5PIN-25Q 25' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$21.00	\$630.00	\$0.00	\$630.00
30	Blizzard Lighting PC-INTER-1410 10ft powerCON® compatible male to female interconnect cable, 14 AWG, UL approved	\$32.00	\$960.00	\$0.00	\$960.00
10	Blizzard Lighting PC-INTER-1425 25ft powerCON® compatible male to female interconnect cable, 14 AWG, UL approved	\$49.00	\$490.00	\$0.00	\$490.00
10	Blizzard Lighting PCT-INTER-1410 30-59 PowerCON™ TRUE1 to PowerCON™ TRUE1 compatible 10FT 14AWG with 16A/250V AC UL approved	\$37.00	\$370.00	\$0.00	\$370.00
25	TheLightSource SLCB Slim Claw Black	\$41.00	\$1,025.00	\$0.00	\$1,025.00
43	Peak Trading 091-125/312X030B 30" Black Safety Cable	\$4.00	\$172.00	\$0.00	\$172.00
1	Illuminated Integration Misc. Electrical J-boxes, edison panel mounts & connectors, etc.	\$962.00	\$962.00	\$0.00	\$962.00
1	Illuminated Integration Removal/Disposal Remove Old Fixtures	\$0.00	\$0.00	\$4,736.00	\$4,736.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$7,104.00	\$7,104.00
LIGHTING - STAGE LIGHTING TOTAL					\$39,819.00

LIGHTING - CONSOLE

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ELEMENT 2 1K Element 2 Console, 1,024 Outputs	\$0.00	\$0.00	\$0.00	\$0.00
2	Illuminated Integration Multi-Touch Touchscreen 24" Multi-Touch Touchscreen	\$513.00	\$1,026.00	\$0.00	\$1,026.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	RapcoHorizon DURAPATCH-25 25 FT DURACAT CAT5e STRANDED RJ45-RJ45	\$32.00	\$32.00	\$0.00	\$32.00
0.5	SmartWire CAT5P Cat5e 24-4P Plenum	\$224.00	\$112.00	\$0.00	\$112.00
1	ETC ECPB NET ECPB; NET Plug-in station (1 gang)	\$0.00	\$0.00	\$0.00	\$0.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$2,500.00	\$2,500.00
2	Illuminated Integration Console Training - Level 1 Level 1 Console Training (Initial & 6 month)	\$0.00	\$0.00	\$3,000.00	\$3,000.00
LIGHTING - CONSOLE TOTAL					\$6,670.00

LIGHTING - POWER & DATA DISTRIBUTION

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ CEM3 Replacement	\$9,960.00	\$9,960.00	\$0.00	\$9,960.00
24	ETC R20 Dual 20A 120V Relay Module	\$531.00	\$12,744.00	\$0.00	\$12,744.00
1	The Light Source MegaBatten Custom Quote Quote #PHI22-199219-1	\$11,768.00	\$11,768.00	\$1,650.00	\$13,418.00
3	SmartWire 242PDIGICOMP 24-2P EPS STR CMP LC	\$571.00	\$1,713.00	\$0.00	\$1,713.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$365.00	\$365.00	\$0.00	\$365.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$962.00	\$962.00	\$0.00	\$962.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$641.00	\$641.00	\$0.00	\$641.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$19,800.00	\$19,800.00
LIGHTING - POWER & DATA DISTRIBUTION TOTAL					\$59,603.00

LIGHTING - ARCHITECTURAL CONTROL

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ Quote: PHI22-199753-1	\$83,772.00	\$83,772.00	\$0.00	\$83,772.00
1	Doug Fleenor Design NODE16-DIN-JBOX 16 Port Ethernet to DMX Interface, DIN-rail mounted, in junction box	\$1,809.00	\$1,809.00	\$0.00	\$1,809.00

Illuminated Integration

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
2	SmartWire CAT5P Cat5e 24-4P Plenum	\$224.00	\$448.00	\$0.00	\$448.00
2	West Penn Wire 25225BBK1000 1P 16G STRD UNSHLD PLENII	\$268.00	\$536.00	\$0.00	\$536.00
2	SmartWire 242PDIGICOMP 24-2P EPS STR CMP LC	\$571.00	\$1,142.00	\$0.00	\$1,142.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$5,000.00	\$5,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$11,840.00	\$11,840.00
LIGHTING - ARCHITECTURAL CONTROL TOTAL					\$104,547.00

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ (3) Fly Pipe Hoists - 48' Long, (3) Double Helix Cable Management (1) QT4 Controller, (1) Handheld Remote, (1) Additional E-Stop	\$57,560.00	\$57,560.00	\$30,384.00	\$87,944.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$1,282.00	\$1,282.00	\$0.00	\$1,282.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$3,846.00	\$3,846.00	\$0.00	\$3,846.00
1	Illuminated Integration Removal/Disposal Strip Old Rigging	\$0.00	\$0.00	\$5,728.00	\$5,728.00
RIGGING TOTAL					\$98,800.00

CURTAINS

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Rosebrand Custom Curtain Quote #303375	\$45,971.00	\$45,971.00	\$0.00	\$45,971.00
5	Illuminated Integration Rigging Batten Mounting Hardware	\$350.00	\$1,750.00	\$0.00	\$1,750.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$10,740.00	\$10,740.00
CURTAINS TOTAL					\$58,461.00

ADDITIONAL COSTS

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Project Management	\$0.00	\$0.00	\$8,750.00	\$8,750.00
1	Illuminated Integration Design Drawings Drawings to include a rack drawing and system riser.	\$0.00	\$0.00	\$9,100.00	\$9,100.00
1	Illuminated Integration Equipment Fees Lift, Scaffold, Ladder Fees	\$3,300.00	\$3,300.00	\$0.00	\$3,300.00
ADDITIONAL COSTS TOTAL					\$21,150.00
BEVERLY HILLS MIDDLE SCHOOL TOTAL					\$660,057.40

ADDITION - BH ADDITIONAL FIXTURES

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
5	ETC CSSPOTVMVS ColorSource Spot V ETL with Shutter Barrel with Multiverse - Black	\$1,515.00	\$7,575.00	\$550.00	\$8,125.00
2	ETC 426EDLT 26° EDLT lens tube with lens installed, black	\$288.00	\$576.00	\$0.00	\$576.00
3	ETC 419EDLT 19° EDLT lens tube with lens installed, black	\$288.00	\$864.00	\$0.00	\$864.00
5	Blizzard Lighting DMX-5PIN-15Q 15' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$18.00	\$90.00	\$0.00	\$90.00
5	Blizzard Lighting PCT-INTER-1410 30-59 PowerCON™ TRUE1 to PowerCON™ TRUE1 compatible 10FT 14AWG with 16A/250V AC UL approved	\$37.00	\$185.00	\$0.00	\$185.00
2	ETC ECPB DMXOUT ECPB; DMX Output Plug-In Station (1 gang)	\$135.00	\$270.00	\$0.00	\$270.00
1	Illuminated Integration Sub-Contracted Labor Cut out and finish new center FOH lighting window			\$8,000.00	\$8,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$1,480.00	\$1,480.00
LIGHTING - STAGE LIGHTING TOTAL					\$19,590.00
SHIPPING AND TAXES					\$0.00

LIGHTING - POWER & DATA DISTRIBUTION

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
2	ETC 9101C Outlet box, Surface, 1 GTL, 9101C	\$120.00	\$240.00	\$0.00	\$240.00
LIGHTING - POWER & DATA DISTRIBUTION TOTAL					\$240.00
SHIPPING AND TAXES					\$0.00

SUMMARY	
EQUIPMENT TOTAL	\$9,800.00
LABOR	\$10,030.00
SHIPPING	\$114.98
SHIPPING	\$0.00
SALES TAX	\$0.00
ADDITION - BH ADDITIONAL FIXTURES TOTAL	+\$19,944.98

DREXEL HILL MIDDLE SCHOOL

AUDIO - DSP & CONTROL PROCESSING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	QSC CORE NANO Network Core, 64x64 network I/O channels with 8x8 Software-based Dante license included, USB AV bridging, dual LAN ports, VoIP telephony, 8 AEC processors, Half-size 1RU.	\$1,667.00	\$1,667.00	\$0.00	\$1,667.00
1	QSC SLQUD-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). UCI Deployment Software License, Perpetual.	\$89.00	\$89.00	\$0.00	\$89.00
1	QSC SLQSE-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable). Scripting Engine Software License, Perpetual.	\$178.00	\$178.00	\$0.00	\$178.00
1	QSC SL-DAN-32-P Q-SYS Software-based Dante 32x32 Channel License, Perpetual	\$708.00	\$708.00	\$0.00	\$708.00
2	QSC QIO-L4o Q-SYS peripheral providing 4 line outputs. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.	\$429.00	\$858.00	\$0.00	\$858.00
1	QSC QIO-ML4i Q-SYS peripheral providing 4 mic/line inputs. Up to 4 devices daisy-chainable. 1U-1/4W, powered over Ethernet or +24 VDC. Surface mountable, rack kit sold separately.	\$560.00	\$560.00	\$0.00	\$560.00
2	QSC TSC-101-G3 Q-SYS 10.1" PoE Touch Screen Controller for In-Wall Mounting. Color - Black only	\$2,436.00	\$4,872.00	\$0.00	\$4,872.00
1	QSC TSC-710t-G3 Table top mounting accessory for TSC-70W-G3 and TSC-101W-G3.	\$350.00	\$350.00	\$0.00	\$350.00
1	Illuminated Integration Misc. Hardware conduit, low voltage j boxes, trim rings, locking covers, etc	\$350.00	\$350.00	\$0.00	\$350.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$303.00	\$303.00	\$0.00	\$303.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$5,000.00	\$5,000.00
1	Illuminated Integration Misc Racks & Power Power supply for Core Nano	\$35.00	\$35.00	\$0.00	\$35.00
1	Illuminated Integration Installation Installation and setup provided by Illuminated Integration	\$0.00	\$0.00	\$7,160.00	\$7,160.00
AUDIO - DSP & CONTROL PROCESSING TOTAL					\$22,130.00

AUDIO - SPEAKERS & AMPS

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
2	EAW 2070484-90 MKD1064 BLACK	\$2,025.00	\$4,050.00	\$0.00	\$4,050.00
2	EAW 2070517-90 MKD896 BLACK	\$1,200.00	\$2,400.00	\$0.00	\$2,400.00
1	Danley Sound Labs TH115I Subwoofer 15"	\$2,883.00	\$2,883.00	\$0.00	\$2,883.00
2	Community Professional Loudspeakers IC6-1082/96B High Output 8-Inch 2-Way 90 X 60 Indoor Black	\$994.00	\$1,988.00	\$0.00	\$1,988.00
3	Renkus-Heinz CA121M-RDB CA121M-RD Self-Powered with RHAON & Dante Redundant, SA625-RD Amp Module Black	\$2,200.00	\$6,600.00	\$0.00	\$6,600.00
1	Linea Research LR-88C10 Dante Linea Research 88C10 DSP Amplifier with Dante	\$7,077.00	\$7,077.00	\$0.00	\$7,077.00
1	Linea Research LR-44C06 Dante Linea Research 44C06 DSP Amplifier with Dante	\$4,731.00	\$4,731.00	\$0.00	\$4,731.00
2	EAW 2071006 EAW ACC ALUMINUM BLACK MKD1000 U-BRACKET	\$669.00	\$1,338.00	\$0.00	\$1,338.00
2	EAW 2071005 ACC ALUMINUM BLACK MKD800 U-BRACKET	\$503.00	\$1,006.00	\$0.00	\$1,006.00
2	Community IVY1082B Vertical Yoke for IC6-1082 Indoor Black	\$96.00	\$192.00	\$0.00	\$192.00
2	TheLightSource SLCB Slim Claw Black	\$41.00	\$82.00	\$0.00	\$82.00
3	ICE Cable Systems 12-2/P/Black 12awg, 2 Cond, Plenum Rated	\$374.00	\$1,122.00	\$0.00	\$1,122.00
0.25	SmartWire 10-02P-BLK 10-02 105X30 UNS STR CMP Blk	\$1,038.00	\$259.50	\$0.00	\$259.50
1	SmartWire CAT6P Cat6 23-4P Plenum	\$365.00	\$365.00	\$0.00	\$365.00
6	RapcoHorizon PCE2-30 ETHERCON / ETHERCON 30FT	\$54.00	\$324.00	\$0.00	\$324.00
3	ACE Backstage WP-102 Single Gang Wall Panel with 2 Connectrix cutouts	\$7.00	\$21.00	\$0.00	\$21.00
6	ACE Backstage C-15145 NE8FDV-Y110-B: Neutrik Ethercon IDC 110 Punch Down Terminal, CAT5e Black	\$16.00	\$96.00	\$0.00	\$96.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$1,250.00	\$1,250.00	\$0.00	\$1,250.00
1	Illuminated Integration Audio System Tuning Professional tuning	\$0.00	\$0.00	\$1,000.00	\$1,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$14,320.00	\$14,320.00

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
AUDIO - SPEAKERS & AMPS TOTAL					\$51,104.50

AUDIO - CONSOLE

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Yamaha Commercial Audio QL1 18 Motorized faders (16 x 2 master/assignable); 40 input mixing channels (32 mono + 8 stereo); 16 Mix (mono); 8 Matrix (mono); 1 Stereo Master; 1 Mono Master; 16 DCA groups; 16 analog XLR inputs; 8 analog XLR outputs; 2x 2 record/playback channels via USB storage device; built in Dante I/O (64 x 64); 2 MY Card slots; ships with Steinberg Nuendo Live 2 software and one Dante Virtual Soundcard license; rack-mountable with optional RK1	\$8,337.00	\$8,337.00	\$0.00	\$8,337.00
2	Yamaha Commercial Audio RIO1608-D2 16 mic/line inputs, 8 analog outputs, 44.1/48/88.2/96kHz Dante digital network remote I/O unit. Display, encoder and buttons for easy setup, control and monitoring. Remote controllable HA, +48V Phantom Power, HPF, 2 EtherCon® connectors. Dual Power Supplies. 3U Rackspaces. Dante Virtual Soundcard license included	\$5,226.00	\$10,452.00	\$0.00	\$10,452.00
1	HSA Custom Desk Quote ID:50120874	\$10,322.00	\$10,322.00	\$0.00	\$10,322.00
1	SKB 1SKB-R4UW 4U Space Rack stacks w/Roto Racks, wheels, and handle	\$278.00	\$278.00	\$0.00	\$278.00
1	Cisco CBS350-24P-4X 24 port POE+ switch with 10G uplink	\$1,100.00	\$1,100.00	\$0.00	\$1,100.00
2	West Penn Wire 25292BBK1000 1P 20G STRD SHLD PLEN II	\$167.00	\$334.00	\$0.00	\$334.00
2	Illuminated Integration Misc. Hardware Fiber SFP	\$35.00	\$70.00	\$0.00	\$70.00
1	SmartWire CAT6P Cat6 23-4P Plenum	\$303.00	\$303.00	\$0.00	\$303.00
2	RapcoHorizon PCE2-30 ETHERCON / ETHERCON 30FT	\$54.00	\$108.00	\$0.00	\$108.00
1	Illuminated Integration Misc. Hardware XLR plates, conduit and misc. hardware	\$250.00	\$250.00	\$0.00	\$250.00
1	Illuminated Integration Installation Installation and setup provided by Illuminated Integration	\$0.00	\$0.00	\$4,440.00	\$4,440.00
1	Illuminated Integration Console Training - Level 1 Level 1 Console Training	\$0.00	\$0.00	\$1,500.00	\$1,500.00
1	Illuminated Integration Console Training - Level 1 Level 1 Console Training (6 Months Later)	\$0.00	\$0.00	\$1,500.00	\$1,500.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$4,125.00	\$4,125.00
AUDIO - CONSOLE TOTAL					\$43,119.00

AUDIO - MICROPHONES

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
4	Shure ULXD4Q--G50 Quad Digital Wireless Receiver with internal power supply, 1/2 Wave Antenna and Rack Mounting Hardware	\$5,791.00	\$23,164.00	\$0.00	\$23,164.00
16	Shure ULXD1--G50 Digital Wireless Bodypack Transmitter with Miniature 4-Pin Connector	\$509.00	\$8,144.00	\$0.00	\$8,144.00
8	Shure ULXD2/SM58--G50 Handheld Transmitter with SM58 Microphone	\$546.00	\$4,368.00	\$0.00	\$4,368.00
16	Audio Technica BP892XCT4-TH Omni Condenser Microphone	\$337.00	\$5,392.00	\$0.00	\$5,392.00
4	RF Venue DISTRO4 DISTRO4	\$499.00	\$1,996.00	\$0.00	\$1,996.00
1	RF Venue D-ARC Diversity Architectural Antenna for Wireless Microphones	\$577.00	\$577.00	\$0.00	\$577.00
2	RF Venue BPF470T560 Band-Pass Filter (470-560 MHz)	\$399.00	\$798.00	\$0.00	\$798.00
24	Shure SB900B RECHARGEABLE BATTERY	\$98.00	\$2,352.00	\$0.00	\$2,352.00
2	Shure SBRC-US Rack Battery Charger. Compatible with Shure rechargeable batteries AXT910, AXT920 and SB900A.	\$750.00	\$1,500.00	\$0.00	\$1,500.00
1	Shure SBC200-US Dual Docking Charger with PS45US Power Supply	\$236.00	\$236.00	\$0.00	\$236.00
3	Shure SBC200 Dual Docking Charger, Power Supply NOT Included	\$187.00	\$561.00	\$0.00	\$561.00
0.2	SmartWire RG58P-BLK RG58U 20SBC 95%TCB CMP Blk Jkt	\$577.00	\$115.40	\$0.00	\$115.40
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$500.00	\$500.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$2,960.00	\$2,960.00
AUDIO - MICROPHONES TOTAL					\$52,663.40

AUDIO - HEARING ASSIST

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Williams AV FM 558-24 PRO D FM Plus Large-area Dual FM and Wi-Fi assistive listening system with 24 FM R38 receivers. Features Dante input, coaxial cable and rack panel kit for professional installation. System includes: (1) FM T55 D transmitter, (24) PPA R38N receivers, (24) EAR 022 surround earphones, (6) NKL 001 neckloops, (2) CHG 3512 12-bay chargers, (24) BAT 026-2 AA NiMH rechargeable batteries, (1) ANT 005 remote coaxial antenna, (1) IDP 008 ADA wall plaque and (1) RPK 005 rack panel kit. Replaces FM 458-24 PRO D	\$7,512.00	\$7,512.00	\$0.00	\$7,512.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$1,184.00	\$1,184.00
1	Ubiquiti Networks U6-PRO-US WiFi 6 Pro Dual-Band AP	\$155.00	\$155.00	\$0.00	\$155.00
1	Illuminated Integration MISC Cables CAT6, connectors, network jumpers	\$50.00	\$50.00	\$0.00	\$50.00
AUDIO - HEARING ASSIST TOTAL					\$8,901.00

VIDEO - PROJECTOR

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Epson V11HA64920 EPSON High Brightness EB-PU2116W Projector, 16,000 Lumens, WUXGA, White	\$18,724.00	\$18,724.00	\$0.00	\$18,724.00
1	Epson ELPLM11 Middle Zoom #4	\$1,600.00	\$1,600.00	\$0.00	\$1,600.00
1	Chief WMA2S WMA2S WALL MOUNT ACCY, 1 1/2 NPT LAT SHI	\$233.00	\$233.00	\$0.00	\$233.00
1	Chief RPMAUW UNIVERSAL RPMA	\$291.00	\$291.00	\$0.00	\$291.00
1	Visionary Solutions PacketAV E-WP-BT Wall Plate Encoder (Bluetooth) A/V Encoder (Wall Plate), 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE; Upgradeable to AES67/Dante, with Bluetooth Audio	\$1,404.00	\$1,404.00	\$0.00	\$1,404.00
2	Visionary Solutions PacketAV E-WP Wall Plate Encoder A/V Encoder (Wall Plate), 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE; Upgradeable to AES67/Dante	\$1,148.00	\$2,296.00	\$0.00	\$2,296.00
1	Visionary Solutions PacketAV D4100 A/V Decoder, 4K UHD over IP cinema quality ultra-low latency visually lossless switch matrix routable, with built-in video wall functionality; POE	\$763.00	\$763.00	\$0.00	\$763.00
1	Cisco CBS350-8P-E-2G	\$359.00	\$359.00	\$0.00	\$359.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	SmartWire CAT6P Cat6 23-4P Plenum	\$303.00	\$303.00	\$0.00	\$303.00
1	Illuminated Integration Misc. Hardware Network inserts	\$192.00	\$192.00	\$0.00	\$192.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$8,800.00	\$8,800.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,728.00	\$5,728.00
VIDEO - PROJECTOR TOTAL					\$40,693.00

VIDEO - PROJECTION SCREEN

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Da-Lite 21878L COSMO TNSD 226D HD1.1	\$6,270.00	\$6,270.00	\$2,200.00	\$8,470.00
1	Global Cache CL-IP2CC-P CL iTach Wired TCP/IP to Contact Closure with PoE	\$150.00	\$150.00	\$0.00	\$150.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$350.00	\$350.00	\$0.00	\$350.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$4,400.00	\$4,400.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,728.00	\$5,728.00
VIDEO - PROJECTION SCREEN TOTAL					\$19,098.00

RACK & ACCESSORIES

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Middle Atlantic Custom Rack Custom 46U swinging wall rack to house all necessary components for system.	\$5,073.00	\$5,073.00	\$0.00	\$5,073.00
1	SurgeX SX-1120-RT Rack Mount Surge Eliminator and Power Conditioner w/Remote, 1RU	\$993.00	\$993.00	\$0.00	\$993.00
2	SurgeX SX-N240 Branch Circuit Surge Eliminator, 20A/240V Hardwired - SX-N240	\$1,126.00	\$2,252.00	\$0.00	\$2,252.00
1	CyberPower CP1500PFCRM2U 1500VA/100W 2U Rackmount UPS	\$372.00	\$372.00	\$0.00	\$372.00
1	CyberPower RMCARD205 HTTP SNMP NMS RJ45 ENVIROMENTAL SENSOR PORT 3YR WTY	\$223.00	\$223.00	\$0.00	\$223.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	RDL TX-70A 25 V, 70 V, 100 V Input Interface - Unbal. Line Out	\$50.00	\$50.00	\$0.00	\$50.00
1	Cisco CBS350-24P-4X 24 port POE+ switch with 10G uplink	\$1,100.00	\$1,100.00	\$0.00	\$1,100.00
2	Illuminated Integration Misc. Hardware Fiber SFP	\$35.00	\$70.00	\$0.00	\$70.00
1	ACE Backstage RPL-345 Three Space Rack Panel with 45 Connectrix cutouts	\$93.00	\$93.00	\$0.00	\$93.00
32	ACE Backstage C-15119 NC3FD-L-B-1: Neutrik 3 Pole Female XLR Gold Contacts, Black	\$8.00	\$256.00	\$0.00	\$256.00
8	ACE Backstage C-15120 NC3MD-L-B-1: Neutrik 3 Pole Male XLR Gold Contacts, Black	\$8.00	\$64.00	\$0.00	\$64.00
4	Littlite TDM Touch Dimmer	\$15.00	\$60.00	\$0.00	\$60.00
4	Littlite L-18-LED-3-UV 18" Gooseneck Mounting Kit Power Supply	\$138.00	\$552.00	\$0.00	\$552.00
1	Illuminated Integration Misc. Hardware Rack accessories - blank panels, cable management, custom plates	\$200.00	\$200.00	\$0.00	\$200.00
1	Illuminated Integration Misc. Hardware Fiber Termination Ends	\$125.00	\$125.00	\$0.00	\$125.00
0.5	Cleerline Technology D50125MOM3P-BK 50/125 SSF Indoor/Outdoor, Black Jacket	\$637.00	\$318.50	\$0.00	\$318.50
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$500.00	\$500.00	\$0.00	\$500.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration - Electrical	\$0.00	\$0.00	\$6,600.00	\$6,600.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$5,328.00	\$5,328.00
RACK & ACCESSORIES TOTAL					\$24,229.50

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
13	ETC CSSPOTVMVS ColorSource Spot V ETL with Shutter Barrel with Multiverse - Black	\$0.00	\$0.00	\$1,430.00	\$1,430.00
4	ETC 426EDLT 26° EDLT lens tube with lens installed, black	\$0.00	\$0.00	\$0.00	\$0.00
4	ETC 436EDLT 36° EDLT lens tube with lens installed, black	\$0.00	\$0.00	\$0.00	\$0.00

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QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
5	ETC 450EDLT 50° EDLT lens tube with lens installed, black	\$0.00	\$0.00	\$0.00	\$0.00
20	ETC CSPARDB ColorSource PAR Deep Blue, XLR, black	\$0.00	\$0.00	\$1,100.00	\$1,100.00
20	ETC SELRW-7.5 D40 wide round diffuser in frame, black	\$0.00	\$0.00	\$0.00	\$0.00
16	Blizzard Lighting DMX-5PIN-15Q 15' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$18.00	\$288.00	\$0.00	\$288.00
10	Blizzard Lighting DMX-5PIN-25Q 25' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$21.00	\$210.00	\$0.00	\$210.00
2	Spotlight Hyperion Followspot LED 700w	\$8,443.00	\$16,886.00	\$1,100.00	\$17,986.00
2	Spotlight SL-BS Tripod stand (low), DIN, adjustable with lazy leg	\$632.00	\$1,264.00	\$0.00	\$1,264.00
8	Blizzard Lighting DMX-5PIN-10Q 10' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$14.00	\$112.00	\$0.00	\$112.00
20	TheLightSource SLCB Slim Claw Black	\$41.00	\$820.00	\$0.00	\$820.00
33	Peak Trading 091-125/312X030B 30" Black Safety Cable	\$4.00	\$132.00	\$0.00	\$132.00
1	Illuminated Integration Misc. Electrical J-boxes, edison panel mounts & connectors, etc.	\$962.00	\$962.00	\$0.00	\$962.00
1	Illuminated Integration Programming & Commissioning Fixture testing, burn-in, & focus	\$0.00	\$0.00	\$4,700.00	\$4,700.00
1	Illuminated Integration Removal/Disposal Remove Old Fixtures	\$0.00	\$0.00	\$4,736.00	\$4,736.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$7,104.00	\$7,104.00
LIGHTING - STAGE LIGHTING TOTAL					\$40,844.00

LIGHTING - CONSOLE

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ELEMENT 2 1K Element 2 Console, 1,024 Outputs	\$0.00	\$0.00	\$0.00	\$0.00
2	Illuminated Integration Multi-Touch Touchscreen 24" Multi-Touch Touchscreen	\$513.00	\$1,026.00	\$0.00	\$1,026.00
1	RapcoHorizon DURAPATCH-25 25 FT DURACAT CAT5e STRANDED RJ45-RJ45	\$32.00	\$32.00	\$0.00	\$32.00

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Confidential Proposal

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
0.5	SmartWire CAT5P Cat5e 24-4P Plenum	\$224.00	\$112.00	\$0.00	\$112.00
1	ETC ECPB NET ECPB; NET Plug-in station (1 gang)	\$0.00	\$0.00	\$0.00	\$0.00
1	Illuminated Integration Programming & Commissioning Initial System Set-up	\$0.00	\$0.00	\$2,500.00	\$2,500.00
2	Illuminated Integration Console Training - Level 1 Level 1 Console Training (Initial & 6 month)	\$0.00	\$0.00	\$3,000.00	\$3,000.00
LIGHTING - CONSOLE TOTAL					\$6,670.00

LIGHTING - POWER & DATA DISTRIBUTION

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	The Light Source MegaBatten Custom Quote Quote #PHI22-199219-1	\$15,691.00	\$15,691.00	\$2,200.00	\$17,891.00
2	ETC 9101C Outlet box, Surface, 1 GTL, 9101C	\$0.00	\$0.00	\$0.00	\$0.00
6	ETC ECPB DMXOUT ECPB; DMX Output Plug-In Station (1 gang)	\$0.00	\$0.00	\$0.00	\$0.00
2	SmartWire CAT6P Cat6 23-4P Plenum	\$365.00	\$730.00	\$0.00	\$730.00
2	SmartWire 242PDIGICOMP 24-2P EPS STR CMP LC	\$571.00	\$1,142.00	\$0.00	\$1,142.00
1	Illuminated Integration Misc. Electrical Back boxes, conduit, L5-20 connectors	\$641.00	\$641.00	\$0.00	\$641.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$37,400.00	\$37,400.00
LIGHTING - POWER & DATA DISTRIBUTION TOTAL					\$57,804.00

LIGHTING - ARCHITECTURAL CONTROL

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	ETC ETCCQ Quote: PHI22-199753-1	\$62,901.00	\$62,901.00	\$11,000.00	\$73,901.00
1	Doug Fleenor Design NODE16-DIN-JBOX 16 Port Ethernet to DMX Interface, DIN-rail mounted, in junction box	\$1,809.00	\$1,809.00	\$0.00	\$1,809.00
1	Pathway Connectivity PWVIA DIN P8 RJ45 SFPSLOT POE VIA, DIN-mount, 8-Ports, RJ45 Connector, Empty SFP Slots, PoE Enabled	\$879.00	\$879.00	\$0.00	\$879.00
2	SmartWire CAT5P Cat5e 24-4P Plenum	\$224.00	\$448.00	\$0.00	\$448.00

Illuminated Integration

Confidential Proposal

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
2	West Penn Wire D2402BK1000 2P 24G STRD SHLD DATA PVC	\$207.00	\$414.00	\$0.00	\$414.00
2	West Penn Wire 25225BBK1000 1P 16G STRD UNSHLD PLENII	\$268.00	\$536.00	\$0.00	\$536.00
1	Illuminated Integration Misc. Electrical J-boxes, low-voltage trim rings, etc	\$2,564.00	\$2,564.00	\$0.00	\$2,564.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$33,840.00	\$33,840.00
LIGHTING - ARCHITECTURAL CONTROL TOTAL					\$114,391.00

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
12	Illuminated Integration Rigging Batten Pipe, Mounting Hardware, etc	\$375.00	\$4,500.00	\$0.00	\$4,500.00
1	Illuminated Integration Misc. Rigging Misc. hanging hardware for rigging including strut, clamps, threaded rod, etc.	\$3,000.00	\$3,000.00	\$0.00	\$3,000.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$28,640.00	\$28,640.00
1	Illuminated Integration Removal/Disposal Strip Old Rigging	\$0.00	\$0.00	\$5,728.00	\$5,728.00
RIGGING TOTAL					\$41,868.00

CURTAINS

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Rosebrand Custom Curtain Quote #303384	\$35,741.00	\$35,741.00	\$0.00	\$35,741.00
6	Illuminated Integration Rigging Batten Pipe, Mounting Hardware, etc	\$650.00	\$3,900.00	\$0.00	\$3,900.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$10,740.00	\$10,740.00
CURTAINS TOTAL					\$50,381.00

ADDITIONAL COSTS

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Project Management	\$0.00	\$0.00	\$8,750.00	\$8,750.00
1	Illuminated Integration Design Drawings Drawings to include a rack drawing and system riser.	\$0.00	\$0.00	\$9,100.00	\$9,100.00

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Equipment Fees Lift, Scaffold, Ladder Fees	\$3,300.00	\$3,300.00	\$0.00	\$3,300.00
ADDITIONAL COSTS TOTAL					\$21,150.00
DREXEL HILL MIDDLE SCHOOL TOTAL					\$595,046.40

ADDITION - DH ADDITIONAL LIGHTING FIXTURES

LIGHTING - STAGE LIGHTING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
11	ETC CSSPOTVMVS ColorSource Spot V ETL with Shutter Barrel with Multiverse - Black	\$1,515.00	\$16,665.00	\$1,210.00	\$17,875.00
9	ETC 426EDLT 26° EDLT lens tube with lens installed, black	\$288.00	\$2,592.00	\$0.00	\$2,592.00
2	ETC 436EDLT 36° EDLT lens tube with lens installed, black	\$288.00	\$576.00	\$0.00	\$576.00
11	Blizzard Lighting DMX-5PIN-15Q 15' 5-pin XLR(M) – XLR(F) 120 ohm DMX Cable	\$18.00	\$198.00	\$0.00	\$198.00
10	Blizzard Lighting PCT-INTER-1410 30-59 PowerCON™ TRUE1 to PowerCON™ TRUE1 compatible 10FT 14AWG with 16A/250V AC UL approved	\$37.00	\$370.00	\$0.00	\$370.00
2	ETC ECPB DMXOUT ECPB; DMX Output Plug-In Station (1 gang)	\$140.00	\$280.00	\$0.00	\$280.00
1	Illuminated Integration Installation Labor provided by Illuminated Integration	\$0.00	\$0.00	\$1,814.00	\$1,814.00
1	Illuminated Integration Sub-Contracted Labor Cut out and finish new center FOH lighting window			\$8,000.00	\$8,000.00
LIGHTING - STAGE LIGHTING TOTAL					\$31,705.00
SHIPPING AND TAXES					\$0.00

LIGHTING - POWER & DATA DISTRIBUTION

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
2	ETC 9101C Outlet box, Surface, 1 GTL, 9101C	\$127.00	\$254.00	\$0.00	\$254.00
LIGHTING - POWER & DATA DISTRIBUTION TOTAL					\$254.00
SHIPPING AND TAXES					\$0.00

RIGGING

QTY	DESCRIPTION	PRICE	PRICE EXT	LABOR EXT	TOTAL
1	Illuminated Integration Misc. Rigging Hardware for new toms	\$1,500.00	\$1,500.00	\$0.00	\$1,500.00
RIGGING TOTAL					\$1,500.00
SHIPPING AND TAXES					\$0.00

SUMMARY	
EQUIPMENT TOTAL	\$22,435.00
LABOR	\$11,024.00
SHIPPING	\$260.07
SHIPPING	\$0.00
SALES TAX	\$0.00
ADDITION - DH ADDITIONAL LIGHTING FIXTURES TOTAL	+\$33,719.07

PROJECT SUMMARY

LOCATIONS

	EQUIPMENT	LABOR	TOTAL
HIGH SCHOOL	\$602,766.00	\$194,511.00	\$797,277.00
BEVERLY HILLS MIDDLE SCHOOL	\$449,658.40	\$210,399.00	\$660,057.40
DREXEL HILL MIDDLE SCHOOL	\$339,505.40	\$255,541.00	\$595,046.40
LOCATIONS TOTAL			\$2,052,380.80

SYSTEMS

	EQUIPMENT	LABOR	TOTAL
AUDIO - DSP & CONTROL PROCESSING	\$30,643.00	\$35,824.00	\$66,467.00
AUDIO - SPEAKERS & AMPS	\$75,539.00	\$33,504.00	\$109,043.00
AUDIO - CONSOLE	\$77,193.00	\$26,090.00	\$103,283.00
AUDIO - MICROPHONES	\$153,257.80	\$11,860.00	\$165,117.80
AUDIO - HEARING ASSIST	\$23,151.00	\$3,552.00	\$26,703.00
VIDEO - PROJECTOR	\$57,243.00	\$43,584.00	\$100,827.00
VIDEO - PROJECTION SCREEN	\$36,388.00	\$34,784.00	\$71,172.00
RACK & ACCESSORIES	\$31,786.00	\$33,584.00	\$65,370.00
LIGHTING - STAGE LIGHTING	\$294,180.00	\$83,985.00	\$378,165.00
LIGHTING - CONSOLE	\$10,805.00	\$16,500.00	\$27,305.00
LIGHTING - POWER & DATA DISTRIBUTION	\$80,943.00	\$77,970.00	\$158,913.00
LIGHTING - ARCHITECTURAL CONTROL	\$207,524.00	\$78,520.00	\$286,044.00
RIGGING	\$203,928.00	\$97,744.00	\$301,672.00
CURTAINS	\$98,749.00	\$26,850.00	\$125,599.00
ADDITIONAL COSTS	\$10,600.00	\$56,100.00	\$66,700.00
SYSTEMS TOTAL			\$2,052,380.80

TRAVEL (INCLUDES FOOD, HOTEL & GAS)		\$77,840.00
SHIPPING		\$16,181.17
SALES TAX		\$0.00
SHIPPING		\$18,815.00
PROJECT TOTAL		\$2,165,216.97

SHIPPING, TAXES AND OTHER FACTORS MAY NOT BE REPRESENTED HERE AND WILL APPEAR ON THE ACCEPTANCE PAGE

ACCEPTANCE

ACCEPTANCE

PAYMENT SCHEDULE

100% Equipment & Shipping Deposit Due Prior to Equipment Ordering
 50% Labor Due Upon On-Site Start of Work (NET 30)
 50% Labor Due Upon Project Completion (NET 30)

Labor includes installation, engineering, management and programming labor types.

Credit Card payment will incur a 4% Fee.

ACH Transfers will incur no additional fees.

EQUIPMENT TOTAL	\$1,391,929.80
SHIPPING TOTAL	\$18,815.00
ENGINEERING	\$28,600.00
INSTALLATION	\$548,851.00
MANAGEMENT	\$45,000.00
PROGRAMMING	\$38,000.00
LABOR TOTAL	\$660,451.00
TRAVEL (INCLUDES FOOD, HOTEL & GAS)	\$77,840.00
SHIPPING	\$16,181.17
SUBTOTAL	\$2,165,216.97
TOTAL SALES TAX	\$0.00
PROJECT TOTAL	\$2,165,216.97

OPTIONS Not included in the project total. Initial to the left to add the option to your project.

_____ ADDITION - HS ADDITIONAL MOTORIZED RIGGING	+\$261,259.01
_____ ADDITION - HS ADDITIONAL MOTORIZED FOH LIGHTING POSITION	+\$58,011.80
_____ ADDITION - HS MOVING LIGHTS	+\$66,487.96
_____ DEDUCT - HS QUICKTOUCH CONTROL FOR RIGGING	-\$19,726.10
_____ ADDITION - DH ADDITIONAL LIGHTING FIXTURES	+\$33,719.07
_____ ADDITION - BH ADDITIONAL FIXTURES	+\$19,944.98

TERMS

I accept this proposal and hereby authorize Illuminated Integration to proceed with the installation of the included systems at the facilities of Upper Darby School District constructing at Drexel Hill, PA 55402 as described in the totality of this document. I further authorize Illuminated Integration to be granted the facility access that will be required to complete this project in a workmanlike and timely manner and for payment to be made to Illuminated Integration. It has been made clear to me that there exist no understandings regarding this project with any relevant party unless and until Upper Darby School District and Illuminated Integration agree to such additional or alternate understandings in writing. Project cost and pricing are dependent upon a continual flow of work without interruption or delays imposed by Upper Darby School District or their staff, construction, other building trades or any other party, and additional costs may be incurred by Upper Darby School District from Illuminated Integration. If such delays result in additional costs that are not covered by the pricing in this proposal, I agree that any additions to and/or deletions from the materials and labor to be provided by my acceptance of this proposal and any resulting change(s) in cost of this project shall only be by way of written change order(s) and shall be valid only after being signed by Upper Darby School District and Illuminated Integration. This proposal is valid only if accepted in writing by Upper Darby School District by January 8, 2023.

If any delays occur in payments based on the terms listed above interest at 1.5% will be charged per month after payment is due.

*****Due to rapid manufacturer price increases, if a manufacturer increases their equipment prices prior to an equipment deposit being received, Illuminated Integration reserves the right to send an invoice for the difference of this price change. This additional cost/price increase will be sent as its own invoice for clarity.*****

ACCEPTANCE

UPPER DARBY SCHOOL DISTRICT

SIGNED

DATE

PRINT NAME

TITLE

ILLUMINATED INTEGRATION

SIGNED

DATE

PRINT NAME

TITLE

Q-SYS QIO-ML4i Q-SYS QIO-L4o Q-SYS QIO-ML2x2

KEY FEATURES

- Native audio I/O expanders for Q-SYS
- **QIO-ML4i:** Four (4) mic/line inputs
- **QIO-L4o:** Four (4) line outputs
- **QIO-ML2x2:** Two (2) mic/line inputs and two (2) line outputs
- Professional mic/line level inputs with +48 VDC phantom power and/or line outputs
- Microphone detection on inputs enables monitoring, usage statistics, and failure notifications
- Power-over-Ethernet capable
- Daisy-chain up to four QIO network I/O expanders on a single network run (with local daisy-chained DC power)
- Simple drag-and-drop integration and comprehensive management via Q-SYS Designer Software and Q-SYS Reflect Enterprise Manager
- Surface- or rack-mountable
- Includes surface mounting hardware
- QIO-RMK rack mounting kit sold separately
- QIO-PSU DC power supply sold separately



Q-SYS QIO Series

Network audio I/O expanders for Q-SYS

The Q-SYS QIO Series network audio I/O expanders extend your Q-SYS system's capabilities and enable streamlined interoperability with non-networked audio devices. By separating local I/O from processing hardware, the QIO Series offer modular and easily scalable network I/O to support your desired topology.

BENEFITS

The right I/O where you need it: QIO Series network I/O allows you to provide your Q-SYS system with greater flexibility to deploy mic/line audio connectivity where it's most convenient. Each of the three models features a compact form factor that can be rack- or surface-mounted.

Audio I/O models: feature professional mic/line level inputs with +48 VDC phantom power and/or line outputs to ensure high-performance and compatibility, along with microphone detection on inputs to enable monitoring, usage statistics and failure notifications.

- QIO-ML4i: Four (4) mic/line inputs
- QIO-L4o: Four (4) line outputs
- QIO-ML2x2: Two (2) mic/line inputs and two (2) line outputs

Expanded I/O customization: QIO Series is intended to present a simpler way to add network I/O connectivity to Q-SYS systems, decoupling the physical location of the I/O from processing hardware to support distributed or centralized processing architectures. Additionally, QIO Series lets you customize your I/O configuration, and complements the strengths of newer Q-SYS Core models that were designed with fewer onboard I/O options (Core Nano, Core 8 Flex, or NV-32-H (Core Capable).

Simplicity & scalability: Daisy-chain up to four of the QIO Series devices on a single network run (with local daisy-chained DC power) to consume fewer network ports, avoid rack clutter, and allow for quicker future expansion without pulling additional network cables. Alternatively, QIO Series are also PoE-capable, providing simple single cable connectivity (when devices aren't daisy-chained).

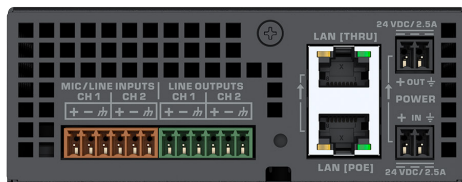
Designed for Q-SYS: QIO Series network I/O are native to Q-SYS, a cloud-manageable audio, video and control platform, built to deliver scalable, flexible AV solutions well into the future. At its foundation, the **Q-SYS OS** serves as the software foundation that manages your QIO Series devices along with a multitude of other native **Q-SYS Products** in the platform. Additionally, the modern IT architecture and development tools of the Q-SYS Platform enable an entire Ecosystem of third-party devices developed by approved **Q-SYS Partners**, as well as a worldwide community of Q-SYS developers using the available tools found in **Q-SYS Open**.

Q-SYS QIO Series

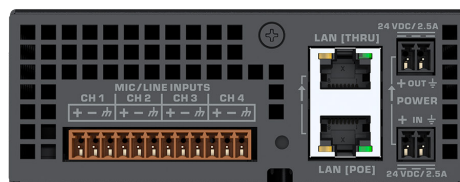
	QIO-ML4i	QIO-ML2x2	QIO-L4o
Connectivity	Four (4) mic/line inputs	Two (2) mic/line inputs and two (2) line outputs	Four (4) line outputs
Mic/Line Inputs			
Maximum input level		+24 dBu	-
Preamplifier gain range		0 dB to 60 dB	-
Input sensitivity range		- 36 dBu TO +24 dBu	-
Phantom power		+48 VDC	-
Input Frequency Response			
20 Hz to 20 kHz		+/- 1.0 dB	-
Input THD+N @ 1 KHz			
@ +24 dBu sensitivity & +24 dBu input		< 0.1%	-
@ +24 dBu sensitivity & +10 dBu input		< 0.05%	-
@ +10 dBu sensitivity & +8 dBu input		< 0.015%	-
@ -10 dBu sensitivity & -10.5 dBu input		< 0.015%	-
@ -36 dBu sensitivity & -36.5 dBu input		< 0.015%	-
Equivalent Input Noise		< -120 dBu, no weighting @ 20 Hz to 20 kHz	-
Input to input crosstalk @ 1 kHz		> 85 dB	-
Input Dynamic Range			
@ +24 dBu sensitivity		> 105 dB	-
@ +10 dBu sensitivity		> 100 dB	-
@ -10 dBu sensitivity		> 95 dB	-
@ -36 dBu sensitivity		> 80 dB	-
Input impedance		5 k Ω single-ended, 10 k Ω balanced	-
Line Outputs			
Output audio range level		-	-36 dBu to +24 dBu
Input Frequency Response			
20 Hz - 20 kHz		-	+/- 0.5 dB
Output THD+N @ 1 KHz			
+10 dBu output level		-	< 0.01%
Output dynamic range		-	108 dB
Output to output crosstalk @ 1 kHz		-	> 85 dB
Output Impedance		-	150 Ω to 300 Ω
Sample rate		48 kHz	
Bit depth		24 bit	

Q-SYS QIO Series

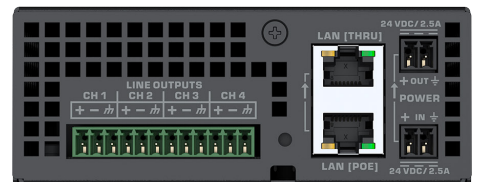
	QIO-ML4i	QIO-ML2x2	QIO-L4o
Other Connectors			
External power supply	24 VDC nominal, 2.5 A on Euro connector with second connector for daisy-chaining (QIO-PSU power supply sold separately)		
LAN (PoE)	Gigabit LAN connection for Q-LAN, PoE		
PoE specification	Conforms to IEEE 802.3af Type 1		
LAN (Thru)	Ethernet daisy-chaining		
General			
Dimensions	8.5 x 4.25 x 1.59 in (215.9 x 108 x 40.4 mm)		
Weight	1.72 lb (0.78 kg)		
Mounting options	Surface- and wall-mountable (hardware included) Rack-mountable; 1RU, quarter-rack width (QIO-RMK rack kit sold separately)		
Environmental			
Ambient operating temperature range	0°C to +50°C		
Humidity	0% - 85% through 30°C, non-condensing		
Storage temperature	-20° to 70°C		
Compliance	FCC 47 CFR Part 15, IC ICES-003, CE (EN55032, EN55035), EU RoHS directive 2011/65/EU, WEEE directive 2012/19/EU, China RoHS directive GB/T26572, EAC, UL, C-UL, NOM-019		



QIO-ML2x2



QIO-ML4i



QIO-L4o

TSC-50-G3 TSC-70-G3 TSC-101-G3

KEY FEATURES

- High performance network touch screen controllers for Q-SYS
- Enhanced onboard processor with increased resolution and significantly improved screen transitions on all models
- Customizable RGB LED status indicators (7-inch and 10 in models only)
- Integrated proximity sensor wakes the screen on approach while an ambient light sensor adjusts screen brightness
- Build intuitive and scalable UCIs in the same software program as your DSP and control programming for a streamlined design and deployment process
- Supports CSS-based styling letting users build more dynamic UCI themes and apply global styles across multiple UCIs
- UCI Controller (in Beta) is an alternative method of building UCIs from a template of control types to simplify deployment and scalability of multiple UCIs
- Supports Power over Ethernet to allow for power and data on a single cable for simple, single-cable installation
- All models support landscape/portrait orientation when wall-mounted
- Optional table top mount accessory available (5-inch model supports landscape/portrait mounting)
- Universal mounting options: Included accessories for mounting to US standard and European wall and junction boxes
- Available in three sizes (5-inch, 7-inch, 10.1-inch)



Q-SYS TSC-G3 Series

Network touch screen controllers for Q-SYS

The Q-SYS TSC Series Gen 3 are high-performance network touch screen controllers native to Q-SYS. Available in three sizes (5-inch, 7-inch, 10-inch), these PoE-capable (power over Ethernet) devices support a wide range of applications needing a fully-customizable user control interface (UCI).

Like all Q-SYS products, the TSC Series Gen 3 integrate seamlessly into a system design and take full advantage of drag-and-drop integration and robust control engine within Q-SYS to provide users with intuitive AV controls for any space.

The Next Generation of Q-SYS Touch

Screens – The TSC Series Gen 3 network touch screen controllers offer a complete redesign, built for higher performance and modern aesthetics. This series offers increased resolutions with significantly improved screen transitions on all models. Furthermore, the enhanced onboard video processor makes these screens future-ready for upcoming Q-SYS video features.

The 7-inch and 10-inch models also feature RGB LED status indicators on the side of the touchscreen that can be fully customizable to signify anything from call/mute status, room-in-use, and beyond.

Lastly, each model supports vertical and horizontal orientation, and allows for wall-mounting in a single-gang wall box (TSC-50-G3), dual-gang wall box (TSC-70-G3 & TSC-101-G3), or table-top mounting with optional accessory (not included).

Fully Customizable User Control Interface –

Q-SYS offers a unique drag-and-drop UCI creation utility within Q-SYS Designer Software for building intuitive and scalable interfaces without the need for any programming. Each TSC Series Gen 3 network touchscreen can display anything from a few simple controls on single page GUIs to comprehensive GUI's with reactive controls that change based on system status. It's also simple to import corporate logos and other graphical elements to enable UCIs tailored to each customer's unique requirements.

Additionally, Q-SYS supports CSS-based styling, which allows integrators to build more dynamic UCI themes and apply global styles across multiple UCIs (or system designs). Q-SYS also offers the new UCI Controller feature (in Beta) that make it much simpler to copy, reuse, and modify UCIs to allow for easier deployment and scalability of multiple UCIs.

Designed for Q-SYS – TSC Series Gen 3 network touch screen controllers are high-performance devices native to Q-SYS, a cloud-manageable audio, video, and control platform, built to deliver scalable, flexible AV solutions well into the future. At its foundation, the **Q-SYS OS** serves as the software foundation that manages your TSC Series devices along with a multitude of other native **Q-SYS Products**. Additionally, the modern IT architecture and development tools of the Q-SYS Platform enable an entire Ecosystem of third-party devices developed by approved **Q-SYS Partners**, as well as a worldwide community of Q-SYS developers using the available tools found in **Q-SYS Open**.

Q-SYS TSC-G3 Series

	TSC-50-G3	TSC-70-G3	TSC-101-G3
Display			
Type	Projective capacitive (PCAP) multi-touch technology, high-resolution 24-bit color display		
Panel dimensions (WHD)	5.55 x 3.2 x 1.49 in (141 x 81.3 x 37.8 mm)	7.28 x 4.53 x 1.54 in (185 x 115 x 39.1 mm)	9.97 x 6.24 x 1.54 in (253.2 x 158.5 x 39.1 mm)
Viewable screen dimensions (diagonal)	4.99 in (126.7 mm)	7 in (177.8 mm)	10.07 in (255.8 mm)
Resolution	1280 x 720 px	1280 x 800 px	1920 x 1200 px
Aspect ratio	16:9	16:10	16:10
Contrast ratio	800:1	850:1	800:1
Brightness	450 Nits	400 Nits	380 Nits
Customizable LED status indicators	No	Yes	Yes
Panel orientation	Landscape / portrait	Landscape / portrait	Landscape / portrait
Wall-mountable	Yes (accessories included)	Yes (accessories included)	Yes (accessories included)
Table top	Optional table top stand accessory	Optional table top stand accessory, supports landscape orientation only	Optional table top stand accessory, supports landscape orientation only
Sensors			
Ambient light sensor	Yes	Yes	Yes
Proximity detection (wake on approach)	No	Yes	Yes
I/O			
LAN (1x RJ45)		1 Gbps	
USB 3.1 (1x Type-C)	No	Yes (for future use)	Yes (for future use)
Power			
Power over Ethernet	PoE Class 2	PoE Class 3	PoE+ Class 4
Weight			
Product weight (net)	8.8 oz (249 g)	19.9 oz (564 g)	33.4 oz (947 g)
Environmental			
Operating temperature		0°-50° C (32°-122° F)	
BTUs	18 typical	26 typical	47 typical
Humidity		5-85% rh non-condensing	

*Specs subject to change without notice

TSC-101-G3



(shown with optional table top stand, available for TSC-70-G3 and TSC-101-G3)

SHURE®

LEGENDARY
PERFORMANCE™



ULX-D® Digital Wireless Systems

BREAKTHROUGH PERFORMANCE





GENERATIONS AHEAD

Shure ULX-D Digital Wireless offers uncompromising 24-bit audio clarity and extremely efficient RF performance with single, dual, and quad channel receivers for any size professional and installed sound reinforcement application. Scalable, intelligent hardware delivers the best performing digital wireless available, with a wide selection of trusted Shure microphones to choose from. And with the latest additions, the ULX-D boundary and gooseneck transmitters, two additional form factors – ideal for large meetings at conference and convention centers, or for AV conferencing where DECT spectrum is not an option – complement the range.

Unmatched spectrum efficiency enables a dramatic increase in the number of simultaneous active transmitters on one TV channel, with rock-solid signal over the entire range. Optional rechargeable accessories eliminate the need for disposable batteries while offering extended run time and metering accuracy in hours and minutes. For secure transmission, all ULX-D components include AES-256 encryption. Generations ahead of any other available system in its class, ULX-D brings a new level of performance to professional and installed sound reinforcement.

Breakthrough Technologies

ULX-D® Digital Wireless represents an incredible advancement in wireless performance. Shure innovation brings to market new features and technologies that dramatically increase spectrum efficiency, dependability, and signal routing convenience.



Transparent 24-Bit Digital Audio

Signal stability with no audio artifacts extends over the entire 100 meter (300 feet) line-of-sight range using standard supplied dipole antennas.



Signal Stability

The 24-bit / 48 kHz digital audio delivers incredibly clear and accurate capturing of source material. It offers a wide frequency range with flat response for superb low range and transient response.



Networked Control

Ethernet networking enables streamlined setup across multiple receivers, Wireless Workbench integration, frequency coordination via Axient Spectrum Manager, AMX and Crestron control as well as Dante™ digital networked audio.



Advanced Encryption

The 256-bit Advanced Encryption Standard guarantees unbreachable privacy – for all installations where secure transmission is key. A new, unique, randomized encryption key is generated every time encryption is enabled.



Lithium Ion Rechargeability

Lithium Ion rechargeability provides up to 11 hours of use on a single charge, while displaying battery life in hours and minutes accurate to 15 minutes.



Scalable Hardware

ULX-D receivers are available in single, dual and quad channel configurations, along with a wide selection of Shure microphones to accommodate any size installation.



High Density Mode

Optimizes the system by running at 1mW RF transmit power and reducing the modulation bandwidth. The result is nearly three times the number of useable frequencies, enabling up to 47 systems in an open 6MHz TV channel.



Form Factors

ULX-D bodypack and handheld transmitters provide complete mobility for presenters, while boundary and gooseneck base transmitters accommodate meeting rooms with flexible seating layouts.



Bodypack Frequency Diversity *(Dual/Quad only)*

The signals from a common source via two bodypack transmitters with different frequencies are routed to receiver's audio outputs. In case of RF interference, switching between channels occurs in milliseconds, without interrupting the audio.



Audio Summing *(Dual/Quad only)*

Combining of selected audio channels to be routed to all selected outputs and allows the receiver to function as a 2 or 4 channel mixer. All XLR outputs of the selected channels provide the summed audio.



Total Command of Shure Networked Audio Hardware

Shure SystemOn Audio Asset Management Software was developed for managing mission critical or large-scale deployments of Shure audio hardware, including ULX-D®, across corporate and higher education networks from one central platform.

SystemOn tracks audio levels, battery life and RF/spectrum status in real time, enabling IT administrators and AV technicians to monitor and control Shure hardware devices remotely using a laptop, smartphone or tablet.



Comprehensive Control for Shure Networked Wireless Systems

Shure Wireless Workbench® 6 software offers comprehensive control for networked Shure wireless systems and provides a rich interface to manage every facet of a performance over the network.

- Perform real-time plotting of scan data from networked Shure scanning hardware in a rich graphical environment
- Monitor and make live remote adjustments to frequency, audio level, RF muting and other equipment settings
- Configurable interference and hardware alerts
- Assign compatible frequencies to networked Shure wireless devices
- Automatically calculate backup frequencies



System Interaction Over WiFi via iOS Devices

Command and control your wireless on the go and roam the performance space while monitoring key Shure wireless system parameters in real time from any iOS device.

- Real-time, precision monitoring of critical device parameters, including:
 - RF level metering
 - Audio level metering
 - Transmitter battery level
 - Frequency Assignments with band, group and channel info
 - RF interference indicator
 - Encryption status
 - Frequency diversity status

ULX-D® Digital Wireless Receivers

ULXD4

Digital Wireless Receiver

- 20 Hz – 20 kHz frequency range with flat response
- Greater than 120 dB dynamic range
- 60 dB of adjustable system gain per channel
- Digital predictive switching diversity
- Up to 64 MHz tuning range (region dependent)
- Up to 17 active transmitters in one 6 MHz TV channel
- High Density mode enables up to 47 active transmitters in one 6 MHz TV channel
- Rock-solid signal stability with no audio artifactst over the entire range
- Optimized scanning automatically prioritizes and delivers the cleanest frequencies
- AES 256-bit encryption equipped for secure wireless transmission
- Ethernet networking for streamlined setup across multiple receivers
- Wireless Workbench® 6 Software for advanced coordination and control
- AXT600 Axient® Spectrum Manager compatibility
- Comprehensive 3rd party control and monitoring across subnets
- Rugged metal housing
- Remoteable ½ wave antennas
- Furnished rack hardware



Digital Audio Networking Over Ethernet

Dante is a total solution for transporting low latency uncompressed audio over standard IP Ethernet networks with sample accurate synchronization, automatic device discovery, and easy to use signal routing.

- Send multichannel audio from ULX-D receivers to Dante-equipped mixers over a single ethernet cable
- Auto-discovery and easy audio networking with Dante Controller
- Compatible with ULXD4D & ULXD4Q receivers



ULXD4D

Dual Channel Digital Wireless Receiver

ULXD4Q

Quad Channel Digital Wireless Receiver

- 20 Hz – 20 kHz frequency range with flat response
- Greater than 120 / 130 dB (analog / digital) dynamic range
- 60 dB of adjustable system gain per channel
- Digital predictive switching diversity
- Up to 64 MHz overall tuning range (region dependent)
- Up to 17 active transmitters in one 6 MHz TV channel
- High Density mode enables up to 47 active transmitters in one 6 MHz TV channel
- Rock-solid signal stability with no audio artifacts over the entire range
- Optimized scanning automatically prioritizes and delivers the cleanest frequencies
- AES 256-bit encryption equipped for secure wireless transmission
- Ethernet networking for streamlined setup across multiple receivers
- Wireless Workbench 6 Software for advanced coordination and control
- AXT600 Axient® Spectrum Manager compatibility
- AMX and Crestron control
- Rugged metal housing

- Remoteable ½ wave antennas
- Furnished rack hardware
- The 1RU metal chassis houses two, respectively four independent receivers, each with their own audio and RF meters, gain control and XLR outputs.
- Internal power supply
- RF cascade ports
- Bodypack Frequency Diversity safeguards against loss of audio signal caused by RF interference or by power loss in a transmitter.
- Yamaha device ID allows simplified channel patching on CL consoles
- Audio Summing — Combining of selected audio channels to be routed to all selected outputs and allows the receiver to function as a 2 or 4 channel mixer.
- Bodypack Frequency Diversity and Audio Summing are complimentary features and can be simultaneously active.
- Dante™: Digital audio is carried over standard Ethernet using shielded Cat5e (or higher) cables.

*YAMAHA is a registered trademark of Yamaha Corporation.



ULXD4 Digital Wireless Receiver



ULXD4D Dual Channel Digital Wireless Receiver



ULXD4Q Quad Channel Digital Wireless Receiver

ULX-D® Digital Wireless Transmitters

ULXD1

Bodypack Transmitter

ULXD2

Handheld Transmitter

- 24-bit/48 kHz digital audio
- Flat frequency response (actual response is microphone dependent)
- >120 dB dynamic range
- AES 256-bit encryption-enabled for applications where secure transmission is needed
- No transmitter gain adjustments needed — optimized for any input source
- High Density mode enabled via IR sync
- Shure SB900A lithium-ion rechargeable battery provides over 11 hours of battery life, precision metering, and zero memory effect
- External charging contacts for docked charging (with the SBC200 Dual Docking Charger)
- Up to 11 hours continuous use with 2 x AA alkaline batteries
- Backlit LCD with easy to navigate menu and controls
- 100 meter (300 feet) line-of-sight operating range (at medium RF power setting)
- Rugged metal construction
- Frequency and / or power lockout
- Interchangeable Shure microphone cartridges, including the legendary SM58® (ULXD2)
- 4-pin TQG or LEMO3 connector (ULXD1)
- Transmitter Mute Mode repurposes the on/off switch into a mute switch, enabling audio muting while preserving RF channel presence
- Detachable ¼ wave antenna (ULXD1)



ULXD6

Boundary Transmitter

NEW

- Very low latency makes the ULXD6 ideal for meetings that require live sound reinforcement
- Long transmission range (up to 100 meters/ 300 feet) for reliable performance in very large meetings at conference and convention centers
- Compatible with the full line of Shure antennas and distribution components, allowing up to 200 ULXD6 boundary microphone transmitters to be used with just one pair of receiving antennas for efficient setup
- Compatible with ULX-D® and QLX-D® digital receivers
- Optional SB900A rechargeable batteries provide up to 9 hours of runtime
- Compatible with standard AA alkaline batteries
- Optional SBC450 (4-bay) and SBC850 (8-bay) Networked Charging Stations allow convenient docking and charging when transmitters are not in use
- Configurable Mute button (Toggle, Push-to-Mute, Push-to-Talk, disabled) and Mute LED behavior
- Adjustable RF power, high-pass filter, and power lock settings

Available Options

- ULXD6/C Cardioid Boundary Microphone Transmitter
- ULXD6/O Omnidirectional Boundary Microphone Transmitter





ULXD8 Gooseneck Base Transmitter

NEW

- Designed for use with Shure Microflex MX405, MX410, and MX415 gooseneck microphones
- Very low latency makes the ULXD8 ideal for meetings that require live sound reinforcement
- Long transmission range (up to 100 meters/ 300 feet) for reliable performance in very large meetings at conference and convention centers
- Compatible with the full line of Shure antennas and distribution components, allowing up to 200 ULXD8 gooseneck base transmitters to be used with just one pair of receiving antennas for efficient setup
- Compatible with ULX-D® and QLX-D® digital receivers
- Optional SB900A rechargeable batteries provide up to 9 hours of runtime
- Compatible with standard AA alkaline batteries
- Optional SBC450 (4-bay) and SBC850 (8-bay) Networked Charging Stations allow convenient docking and charging when transmitters are not in use
- Configurable Mute button (Toggle, Push-to-Mute, Push-to-Talk, disabled) and Mute LED behavior
- Adjustable RF power, high-pass filter, power lock settings and Mute LED brightness



Rechargeability

- Advanced, intelligent Lithium-Ion chemistry
- Transmitters and receivers display remaining battery life in hours and minutes accurate to within 15 minutes
- Full charge within three hours and 50% charge in one hour – charge status LEDs for each battery
- Compatible with ULX-D transmitters, PSM 900 and PSM 1000 bodypack receivers, and the UHF-R UR5 portable receiver
- Monitor battery charging status (*SBC450/SBC850 only*)
- Configure the mute button and LED behavior (*SBC450/SBC850 only*)
- Update boundary/gooseneck Firmware (*SBC450/SBC850 only*)
- Compatible with 3rd party control devices (AMX/Crestron) (*SBC450/SBC850 only*)

SB900A

Shure Rechargeable Battery

Rechargeable Lithium-Ion Battery for use with Shure wireless systems.



SBC450

4-bay Networked Charging Station

4-bay Networked Charging Station for ULXD6 & ULXD8 transmitters

NEW



SBC850

8-bay Networked Charging Station

8-bay Networked Charging Station for ULXD6 & ULXD8 transmitters

NEW



SBC200

Dual Docking Charging Station

Compact and portable two-bay charger holds two SB900A batteries, and ULXD1 & ULXD2 transmitters



SBC800

Eight Battery Charging Station

8-Up battery charger charges eight SB900A batteries.



ULX-D Digital Wireless Specifications (Note: All specifications are subject to change.)

ULX-D System

RF Carrier Range	470 – 932 MHz, varies by region
Image Rejection	>70 dB, typical
Latency	<2,9 ms (3,2 ms in High Density Mode)
RF Sensitivity	-98 dBm at 10 ⁻⁵ BER
Working Range	100 m line-of-sight <i>Note: Actual range depends on RF signal absorption, reflection and interference.</i>
Audio Frequency Range	20 Hz to 20 kHz <i>Note: Dependent on microphone type</i>
Audio Dynamic Range	Analog Output: >120 dB, A-weighted (System Gain @ +10) Dante™ Digital Output: 130 dB (typical), A-weighted
Total Harmonic Distortion	<0,1% (-12 dBFS input, System Gain @ +10)
Operating Temperature Range	-18°C to 50°C <i>Note: Battery characteristics may limit this range.</i>

ULXD4 Digital Wireless Receiver



Dimensions	ULXD4: 171 × 197 × 42 mm, W × D × H ULXD4D, ULXD4Q: 482 × 274 × 44 mm, W × D × H
Weight	ULXD4: 0.9 kg, without antennas ULXD4D: 3.36 kg, without antennas ULXD4Q: 3.45 kg, without antennas
Power Requirements	ULXD4: 15 V DC @ 0.6 A, supplied by external power supply (tip positive) ULXD4D: 100 to 240 V AC, 50-60 Hz, 0,26 A max. ULXD4Q: 100 to 240 V AC, 50-60 Hz, 0,32 A max.
Gain Adjustment Range	-18 to +42 dB in 1 dB steps (plus Mute setting)
Full Scale Output	6,35 mm: +12 dBV XLR: LINE setting= +18 dBV, MIC setting= -12 dBV
Network Interface	ULXD4: Single Port Ethernet 10/100 Mbps ULXD4D, ULXD4Q: Dual Port Ethernet 1 Gbps
Network Addressing Capability	DHCP or Manual IP address, with or without gateway
Housing	ULXD4: Galvanized steel ULXD4D, ULXD4Q: Steel; Extruded Aluminum

ULXD1 Bodypack Transmitter



Audio Frequency Range	20 Hz – 20 kHz
Gain Offset Range	0 – 21 dB (in 3 dB steps)
Battery Runtime @ 10 mW	Shure SB900A Rechargeable Li-Ion: <12 hours 2 × AA Alkaline: <11 hours
Dimensions	86 × 66 × 23 mm (3.4 × 2.6 × 0.9 in.), H × W × D
Weight	142 g, without batteries
Housing	Cast aluminum
Power	1 mW, 10 mW, 20 mW <i>See Frequency Range and Output Power table, varies by region.</i>
Antenna Type	¼ wave detachable

ULXD2 Handheld Transmitter



Audio Frequency Range	30 Hz – 20 kHz
Gain Offset Range	0 – 21 dB (in 3 dB steps)
Battery Runtime @ 10 mW	Shure SB900A Rechargeable Li-Ion: <12 hours 2 × AA Alkaline: <11 hours
Dimensions	256 × 51 mm, L × Dia. (with SM58®)
Weight	340 g, without batteries (with SM58®)
Housing	Machined aluminum
Power	1 mW, 10 mW, 20 mW <i>See Frequency Range and Output Power table, varies by region</i>
Antenna Type	Integrated single band helical

ULXD6 Boundary Transmitter



Audio Frequency Range	50 Hz – 17 kHz
Gain Offset Range	0 – 21 dB (in 3 dB steps)
Battery Runtime @ 10 mW	Shure SB900A Rechargeable Li-Ion: <9 hours 20 minutes 2 × AA Alkaline: <8 hours 40 minutes
Dimensions	113.94 × 61.83 × 34.28 mm (4.48 × 2.43 × 1.35 in.) H × W × D
Weight	241 g with AA batteries
Housing	Molded Plastic
Power	1 mW, 10 mW, 20 mW <i>See Frequency Range and Output Power table, varies by region</i>
Antenna Type	Integrated PIFA

ULXD8 Gooseneck Transmitter



Audio Frequency Range	50 Hz – 17 kHz
Gain Offset Range	0 – 21 dB (in 3 dB steps)
Battery Runtime @ 10 mW	Shure SB900A Rechargeable Li-Ion: <9 hours 2 × AA Alkaline: <8 hours 20 minutes
Dimensions	136.94 × 78.27 × 40.77 mm (5.39 × 3.08 × 1.60 in.) H × W × D
Weight	293 g with AA batteries
Housing	Molded Plastic
Power	1 mW, 10 mW, 20 mW <i>See Frequency Range and Output Power table, varies by region</i>
Antenna Type	Integrated PIFA

SHURE
LEGENDARY
PERFORMANCE™

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SX-1120-RT

TECHNICAL DESCRIPTION

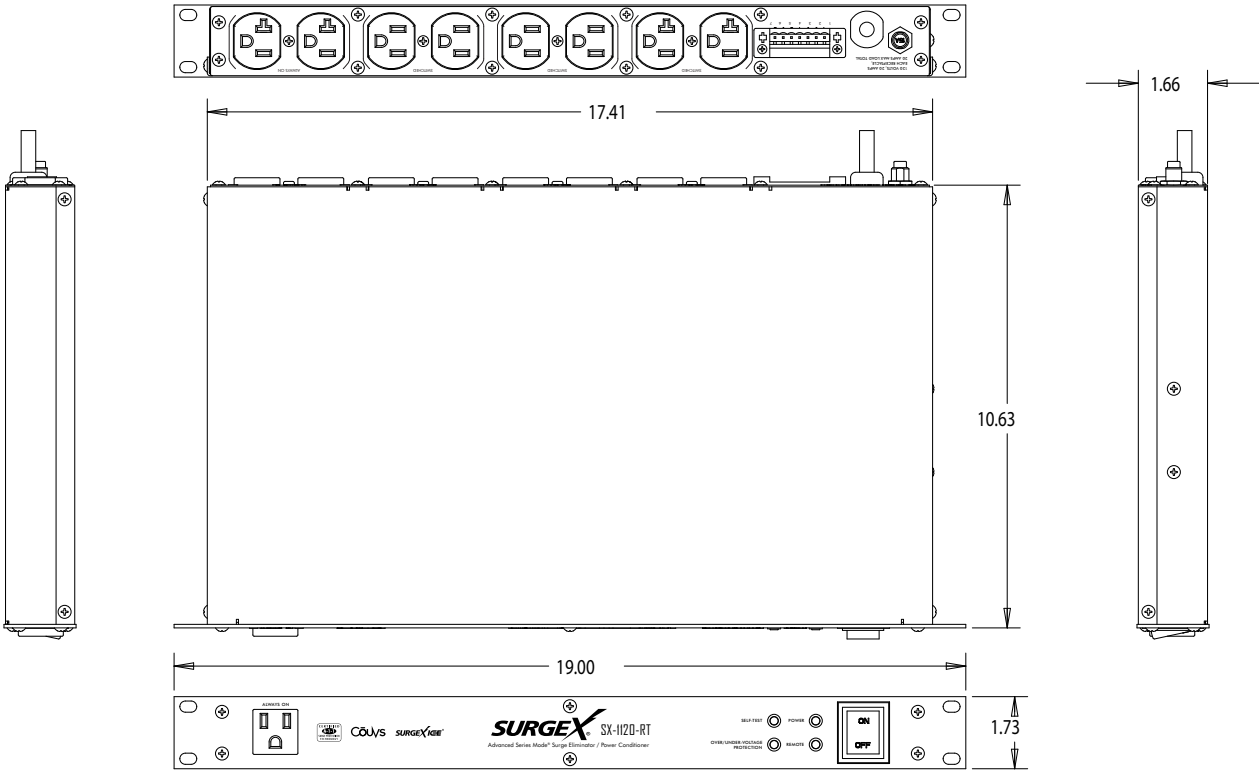
The SX-1120-RT shall be a one-rack-space unit in a magnetic shielding steel enclosure. It shall operate from 120 volts AC and have a 9-foot, grounded, 3-wire #12 line cord. There shall be 8 grounded AC receptacles on the back panel, with 6 switched and 2 always on. There shall be 1 front-panel courtesy receptacle. Overall dimensions shall be 1.75" H x 19" W x 10.5" D. Weight shall be 11 pounds. The unit shall have remote turn-on capabilities enabled by wired connections to a terminal block. Remote turn-on and turn-off shall be activated by either a contact closure or applied DC voltage. There shall be an output voltage source for connection to a remote LED status indicator and a relay output for control and cascading. The SX-1120-RT shall have a load rating of 20 amps at 120 volts, a self-test circuit with visual indicator, and provide EMI/RFI filtering, inrush current elimination and catastrophic over/under-voltage shutdown. It shall withstand at least 1000 occurrences of surge pulse voltages up to 6000 volts.

SPECIFICATIONS		SX-1120-RT
Load Rating		20A
Voltage Rating		120V
Power Requirement (no load)		15 W
Surge Let-through Voltage (6000 Volt Surge)		0 Volts
Maximum Applied Surge Voltage		6000 Volts *
Maximum Applied Surge Current		Unlimited (due to current limiting) *
Maximum Applied Surge Energy		Unlimited (due to current limiting) *
Endurance (C62.41-1991 category B3 pulses)		1 KV > 500,000; 3 KV > 10,000; 6 KV > 1000
EMI/RFI Filter	Normal mode (50Ω load)	> 30dB 80kHz - 50MHz 37 dB @ 100 kHz; 56 dB @ 300 kHz; 75 dB @ 3 MHz; 46 dB @ 30 MHz
	Common Mode (50Ω load)	> 20dB 230kHz - 50MHz > 30dB 700kHz - 20MHz 23 dB @ 300 kHz; 32 dB @ 1 MHz; 50 dB @ 5 MHz; 32 dB @ 20 MHz
Under-Voltage Auto Shutdown		90V
Over-Voltage Auto Shutdown		145V
Over-Current Auto Shutdown		Circuit Breaker
Over-Temperature Auto Shutdown		None
Measurement Accuracy	Voltage	NA
	Current	NA
	Power	NA
	Energy	NA
	Temperature	NA
Network Port		No
Serial Port		None
Temperature Sensor Input		None
Auxiliary Relay Outputs		2 x screw terminal
Contact Closure Input		2 x screw terminal
Dimensions		1.75" H x 19" W x 10.5" D
Weight		11 lbs
Temperature Range:		5C to 35C
Humidity Range		5% to 95% R.H. Non-condensing
Agency Listings		Conforms to UL Stds 1283 & 1449 Certified to CSA Std C22.2 No. 8

* 1.2 x 50 microsecond industry standard combination wave surge as per IEEE C62.41

** Specifications subject to change without notice

SPECS v.030118





RMCARD205 Remote Management Card



Remotely manage, monitor and control your UPS or ATS PDU from a web browser, command line interface (CLI), SNMP or network management system (NMS).

The CyberPower RMCARD205 is a full-featured network UPS management device that remotely manages, monitors, and controls CyberPower UPS systems and ATS PDU products.

The internal card allows remote monitoring and control of a UPS via web browser, command line interface (CLI), SNMP or network management system (NMS). PowerPanel® Business Edition Client software protects servers and workstations from data loss due to power failure by initiating auto-shutdown command from a UPS when a power loss event occurs. An optional environmental sensor (ENVIROSENSOR) can be connected to the RMCARD205 to monitor the ambient temperature and humidity of a server room, IT closet, or other critical environments.

The firmware can be updated via FTP or SCP by users to insure you have the latest features and updates.

A Three-Year Warranty ensures that this network management card has passed our highest quality standards in design, assembly, material and workmanship.

FEATURES

- Real time UPS monitoring
- Supports environment sensor
- Remote management via web browser (HTTP/HTTPS), CLI (Telnet/SSH), or NMS (SNMPv1/v3)
- Automatic events notification via email, SMS, SNMP traps, and Syslog
- View and save Event Logs and Status Records
- Supports RADIUS, LDAP, LDAPS, and Windows Active Directory external authentication protocols
- User upgradeable firmware via FTP or SCP
- Update firmware and configuration file on multiple cards simultaneously using Upgrade and Configuration Utility
- Compatible with select Smart App UPS and ATS PDUs*

SPECIFICATIONS

GENERAL	
Type	Network Management Card
Network Port	Ethernet RJ-45
Data Link Protocol	Ethernet 100Base-TX, Ethernet 10Base-T
LED Status Indicators	Tx/Rx, Link
Universal Port	Optional ENVIROSENSOR
SUPPORTED PROTOCOLS	
HTTP	v1.1: RFC 2616
HTTPS	RFC 2818

SUPPORTED PROTOCOLS - CONT.	
SNMP	v1: RFC 1155, RFC 1156, RFC 1157 v3: RFC 3414
MIB	RFC 1213, RFC 1628
SMTP	RFC 2821
SMTPS	RFC 3207
TLS	v1.1: RFC 4346 v1.2: RFC 5246
SSL	v3.0: RFC 6101
Telnet	RFC 854

*Please see reference

RMCARD205 Remote Management Card



SPECIFICATIONS CONT.

SUPPORTED PROTOCOLS - CONT.

SSH	v2: RFC 4253, RFC 4254
FTP	RFC 959
SCP	v2: RFC 4253, RFC 4254
DNS	RFC 1035
DHCP	RFC 2131
TCP/IP	v4: RFC 791 v6: RFC 2460
RADIUS	RFC 2865
LDAP	v3: RFC 2251
LDAPS	v3: RFC 4513
SysLog	RFC 5424
NTP	RFC 958
Cisco EnergyWise	v1.2.0 and newer

PHYSICAL

Dimensions (WxHxD, in)	2.13 x 1.42 x 3
Dimensions (WxHxD, mm)	54 x 36.06 x 76.2
Weight (lb)	0.08
Weight (kg)	0.036

SHIPPING DIMENSIONS

Dimensions (WxHxD, in)	6.8 x 2.4 x 6.5
Dimensions (WxHxD, mm)	172 x 60 x 165
Weight (lb)	0.51
Weight (kg)	0.23

ENVIRONMENTAL

Operating Temperature	32 °F to 104 °F (0 °C to 40 °C)
Operating Relative Humidity	0% to 90% non-condensing
Operating Elevation	0 ft to 10000 ft (0 m to 3000 m)
Storage Temperature	14 °F to 122 °F (-10 °C to 50 °C)
Storage Relative Humidity	0% to 95% non-condensing
Storage Elevation	0 ft to 50000 ft (0 m to 15000 m)

COMPATIBILITY

Supported CyberPower Models ¹	Select PR/OL/OR series UPS systems and ATS PDU with Expansion Slot
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CERTIFICATIONS

Safety	FCC DoC Class A
Environmental	RoHS Compliant

WARRANTY

Product Warranty	3 years limited
Extended 2-Year Warranty	Optional WEXT5YR-ACC1A

¹Please see Reference Guide for full list of supported models

VL800 EVENTPROFILE

Date: _____

Type: _____

Firm Name: _____

Project: _____

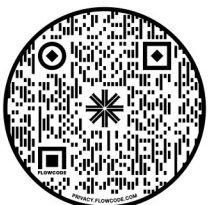
The Vari-Lite VL800 EVENTPROFILE is a compact LED event profile fixture that has the DNA of Vari-Lite built in. This high output framing profile luminaire offers full CYM+CTO color mixing and the signature “Vari-Lite smooth” movement that designers expect. The VL800 EVENTPROFILE, available in black or white body options, includes professional-grade features in a small, tour-ready form factor, supplying a fixed color wheel; static and rotating gobo wheels; and prism, frost, and iris. With camera-ready frequency adjustment options and multi-mode fan control, the VL800 EVENTPROFILE is ready for any application.



- Cost-effective, high output LED profile built by Vari-Lite - affordable LED framing profile from a brand you trust.
- Full CMY-CTO color mixing - variable color mixing with saturation control, offering numerous vivid and creative color options.
- Static and rotating gobo wheels, prism, frost, and iris - professional features in a small form factor. Multiple visual options for a variety of uses.

- Multi-mode fan control - adjust settings to control fan noise. Offers a low dB experience across all frequencies, eliminating buzzing or hums from an otherwise quiet device. Mode options include standard, studio, and whisper mode.
- Adjustable frequency to exceed camera frame rates - camera friendly fixtures for IMAG or live televised events.

For detailed product information, please refer to the Product Guide at <https://www.vari-lite.com/global/products/vl800-eventprofile>



VARI*LTE

Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Source

LED	Monochromatic Light Engine
Source Max Power Consumption	350 W
Source Lumens	30000
Source CCT	6500 K
LED Refresh Rate	1200Hz to 25kHz
Dimming	Electronic 8-bit / 16-bit
Dimmer Curves	Square Law (Default), Linear, S -Curve
Dimmer Control Option	Dimmer Snap On/Off On reduces auto dimmer smoothing
Strobe Speed	0 - 30Hz
Strobe Modes	Continuous, Random, Random Sync

Optical Performance

Zoom Range	8 - 40°
Field Angle	10.4 - 57.5°
Zoom Control	Motorized 8-Bit
Focus	Motorized 16-Bit Control
Output Lumens	Boost - 17,000 Standard - 13,000 Studio - 10,400 Whisper - 8,000
Output CCT	6500 K
CRI RA	76
Tm30	Rf 52 / Rg 122

Color System

Subtractive Color Mixing	CMY Glass Flags
Color Mixing Control	CMY 8-bit
Color Mixing Control Option	Color Snap On/Off Reverse spin color wheel for fast color snap 0-100%
Variable CTO	6500 to 2700 K
Fixed Color Wheel	6 Colors + Open
Color Wheel Effects	Split Colors, Color Wheel Spin, and Shake

Imaging

Framing Shutters	4 Blade - Full Wipe +/-90° rotation
Effects Prism	3 Facet Round
Prism Features	Index/Rotation, MegaStep
Beam Softening	Variable control - Medium Frost
Iris	16 leaf iris open to 80% closing

Electrical

Max output Power Consumption	575 W
Power Connection	TrueOne Compatible - In / Thru Power cable not included - input connector only
Input Voltage	100–240 VAC, 50 / 60 Hz

Data

Supported Protocols	DMX (RDM), ArtNet, sACN
DMX Modes	
16-Bit	45 Channels
16-Bit	40 Channels
Data Connections	5 - Pin XLR Input and Thru, RJ45 Input
Manual Preset Mode	Advanced Feature local control

Noise Level / Fan Control (Base Level 18.6 dB)

Standard Mode	43.6 dB
Studio Mode	37.8 dB
Fan Mode	Continuous (On) / Auto Ramping
Fan Level Preset	Boost, Standard, Studio
Cooling System Type	Hybrid sealed liquid and forced air system

Movement

Pan Angle	540°
Pan Speed	3.4 s
Tilt Angle	270°
Tilt Speed	2.5 s

Mounting

Hanging Centers	400.0 mm (16.0 in)
Fixture mounting/Hanging orientation	Hanging - Floor - Side *See user manual for side hang guidance and restrictions
Secondary Safety Wire Point	1 x Safety point located on underside of upper enclosure Safety Wire not included

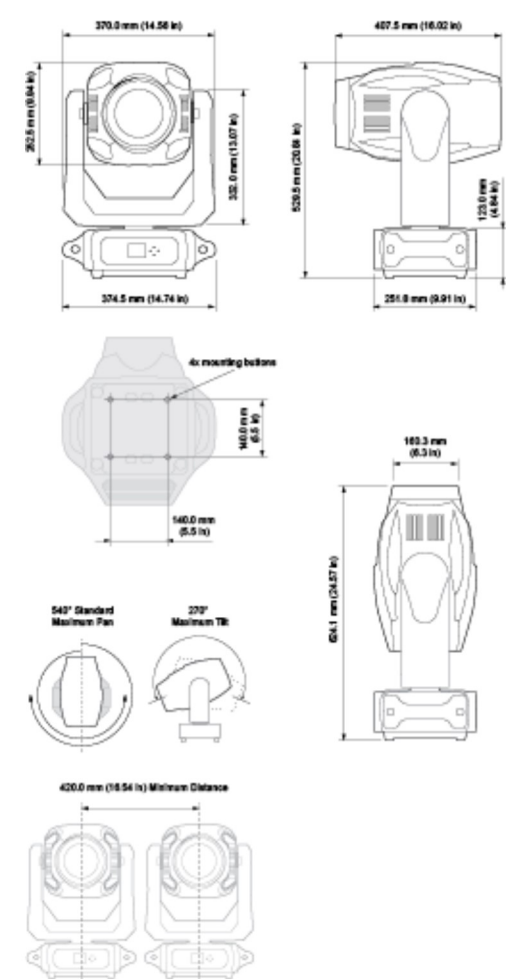
Photometrics and IES Files

Narrow @ 5 m / 16.4 ft	27,300 lux (2,537 fc)
Wide @ 5 m / 16.4 ft	6,900 lux (378 fc)
Narrow @ 10 m / 32.8 ft	4,060 lux (645 fc)
Wide @ 10 m / 32.8 ft	480 lux (49 fc)

For IES files and photometric reports, please refer to the product page:

<https://www.vari-lite.com/global/products/vl800-eventprofile>

Dimensions



Physical

Construction	Superstructure made of Aluminum, and steel metal plates, Covers self-extinguishing fire retardant ABS PC (V0 class)		
IP Rating	IP20		
Standard Finish	Black, White		
Dimensions	375 x 624 x 408 mm (15.0 x 25.0 x 16.0 in)		
Packed Dimensions	720 x 470 x 385 mm (28.0 x 19.0 x 15.0 in)		
Fixture Weight	21.0 kg (46.0 lb)		
Packed Weight	29.0 kg (64.0 lb)		

Certification and Safety

Approbations	CE, ETL, UL, FCC CSA, RoHS, ISO 9001
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Luminaire and Accessories

Product type	Order Code
VL800 EVENTPROFILE, Black	912400575005
VL800 EVENTPROFILE, White	912400576845
Accessories	Order Code
Omega Bracket	3002001497
VL/Strand Omega Bracket , 1 x 140mm Bracket, compatible with VL800 EVENTPROFILE,	



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Date
Project
Fixture
Comments

GENERAL INFORMATION

ColorSource PAR offers a quality of build and light that has never been seen in an affordable wash fixture. Using ETC’s RGB-L color system, the ColorSource PAR provides a rich, bright light unlike any other LED wash light in its class.

APPLICATIONS

- Theatres and performance spaces
- Houses of worship
- Universities and schools
- Hospitality
- Retail
- Exhibition centers
- Meeting rooms
- Clubs
- Cafetoriums

PRODUCT FEATURES

- Three array options:
 - Original RGB-L (Red/Green/Blue/Lime)
 - Deep Blue RGI-L (Red/Green/Indigo/Lime)
 - Pearl (Warm and Cool White), see separate datasheet
- Homogenized optics
- Simple user interface with seven-segment display
- powerCON® in and thru
- 5-pin XLR or RJ45
- LED droop compensation
- Optically calibrated
- Tour-ready, aluminum housing

ORDERING INFORMATION

ColorSource PAR

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
CSPAR	ColorSource PAR, black	7412A1005	7412A1205	
CSPAR45	ColorSource PAR RJ45, black	7412A1015	7412A1215	
CSPARDB	ColorSource PAR Deep Blue, black	7412A1008	7412A1208	
CSPARDB45	ColorSource PAR Deep Blue RJ45, black	7412A1018	7412A1218	

Note: ColorSource PAR luminaires ship with a hanging yoke and a power cable with connector of choice. See page 6 for connector options. C-clamps are not included.
For additional color options, please add the following: -1 for white, -5 for silver gray or -8 for custom color.



PRODUCT SPECIFICATIONS

Source

LED details	40 Lumileds LUXEON® Z LED
Max lumens	PAR: 3,039 PAR DB: 2,429
Lumens per watt	PAR: 28.1 PAR DB: 27.6
L70 rating (hours to 70% output)*	55,000 hours

Color

Colors used	PAR: red, green, blue, lime PAR Deep Blue: red, green, indigo, lime
Color temperature range	Color mixing
Calibrated array	Yes
Red shift	No

Optical

Beam angle range	14.5° (secondary lenses available for multiple beam-spread options)
Gate size	N/A
Aperture size	7.5 in / 190 mm
Pattern projection	No
Pattern size	N/A
Camera flicker control/Hz range	1,200 Hz (default) 25,000 Hz (via RDM)

Control

Input method	DMX512 via 5-pin XLR or RJ45 connectors
Protocols	DMX512/RDM
Modes (footprint)	4 modes, see page 7
RDM configuration	Yes
UI type	Seven-segment, three-button interface
Local control	Yes
Onboard presets	Yes (12)
Onboard sequences	Yes (5)
Onboard effects	No
Fixture-to-fixture control	Yes
Notes	15-bit virtual dimming engine

***Note about LED luminaire lifetime:** ETC utilizes a nationally recognized third-party lab for luminaire testing according to IES LM-84. See etcconnect.com/About/News/ETC-Fixture-Ratings-and-Warranties-Extended.aspx.

All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. In individual situations, LEDs will be used for different durations and levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustments to presets, cues or programs.

Electrical

Voltage range	100–240 VAC 50/60 Hz
Input method	powerCON power in and thru
Inrush	35 A at 120 V (First half-cycle) 49 A at 240 V (First half-cycle)
Fixtures per circuit	9 (15 A power thru connector) 10 (R20 module or similar)
Wattage typical/standby	90 W at 120 V 89 W at 240 V
Current draw	0.75 A at 120 V 0.40 A at 240 V

Thermal

Ambient operating temp	0°–40° C (32°–104° F)
Fan (controllable)	Yes (No)
Droop compensation	Yes
dB range	24.8 dBA average at 1 m
BTUs/hour (RGB-L / DB)	307 / 303

Physical

Materials	Die-cast, all metal housing
Color options	Black, white, silver, or custom color
Mounting options	Yoke, floor stand yoke (available as an accessory)
IP rating	IP20
Weight	3.77 kg (8.3 lb)
Included accessories	Hanging yoke, power cable
User interface	Seven-segment, three-button interface

Warranty

Fixture	5 years
LED array	10 years

Regulatory and Compliance

Approved regulatory standards	cETLus Listed Conforms to UL 1573 Listed Conforms to UL 924 Listed Certified to CSA C22.2 No. 166 Listed Certified to CSA C22.2 No. 141 Listed CE Compliant
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PRODUCT FEATURES

**HOMOGENIZED OPTICS**

The optics consist of a balanced mix of red, green, blue, and lime LEDs to give the best and brightest color mix possible.

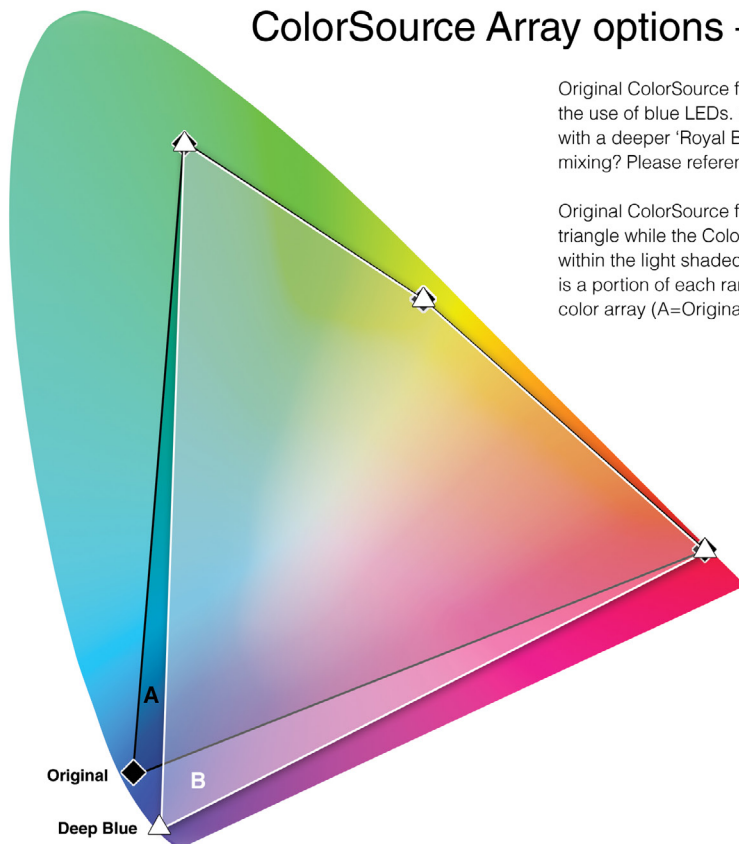
**RGB-L ARRAY**

The custom four-color blend of LEDs incorporates a hint of lime to increase spectral reach and color depth.

**SIMPLE USER INTERFACE**

The simple seven-segment display and navigation buttons enable quick setup and recall of built-in presets.

COLOR METRIC INFORMATION

ColorSource Array options – Original vs. Deep Blue

Original ColorSource fixtures use an RGB-L array where the 'B' represents the use of blue LEDs. ColorSource Deep Blue replaces those blue LEDs with a deeper 'Royal Blue' (indigo) LED. How does this impact your color mixing? Please reference the color chart.

Original ColorSource fixtures can reach any color within the dark shaded triangle while the ColorSource Deep Blue fixtures can reach any color within the light shaded triangle. While much of these areas overlap, there is a portion of each range that can only be reached by the respective color array (A=Original, B=Deep Blue).

Common gels found in original ColorSource

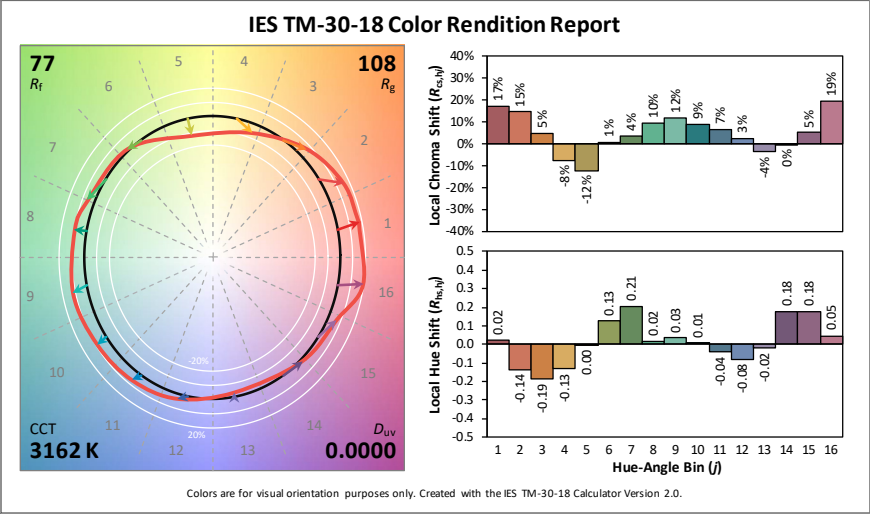
Roscolux 095, 075, 076
Lee 363, 119, 721, 722, 132, 141, 183, 172, 325

Common gels found in ColorSource Deep Blue

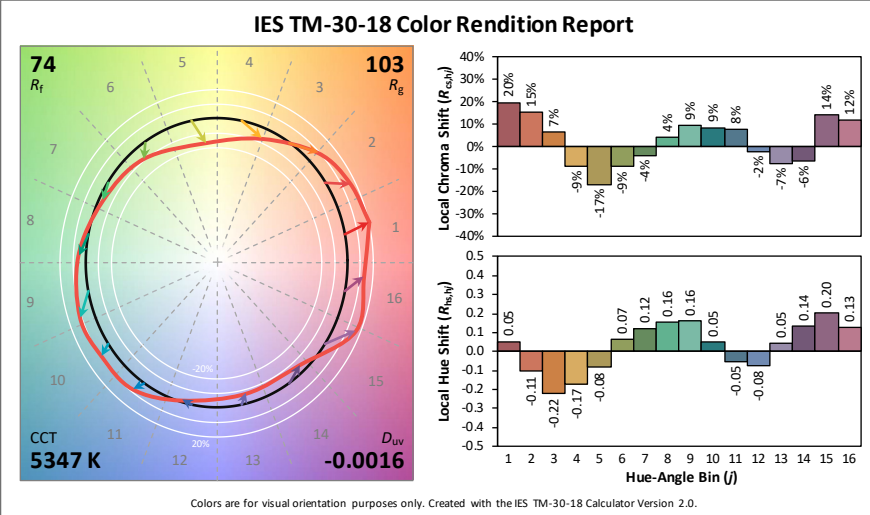
Roscolux 384, 385, 382, 059, 358, 347, 049, 349,
046, 124, 027, 120
Lee 126, 049, 798, 707, 181, 071, 120, 716

COLOR METRIC INFORMATION

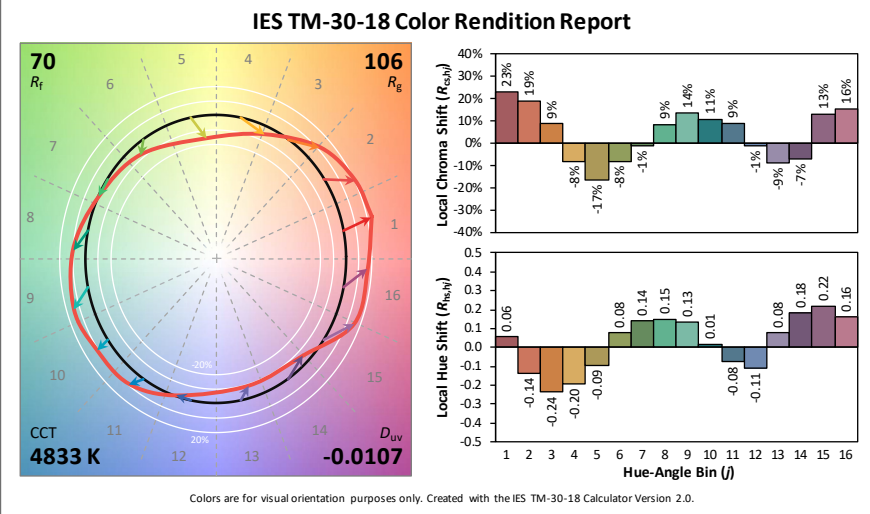
COLORSOURCE PAR 3200 K TM-30-18



COLORSOURCE PAR 4500 K TM-30-18



COLORSOURCE PAR 5600 K TM-30-18

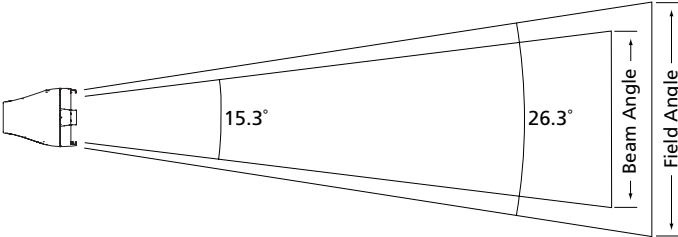


PHOTOMETRICS

ColorSource PAR

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Full ON - Direct	15.3	53,456	3,039	1,905	28.1
3200 K / RGB	15.3	41,323	2,380	1,494	32.9
5600 K / RGB	51,389	2,941	1,831	1,831	28.9

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.



Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	25 ft 7.6 m	226.1 ft 68.9 m
Field Diameter	4.7 ft 1.4 m	7.0 ft 2.1 m	9.3 ft 2.8 m	11.7 ft 3.6 m	–
Illuminance (fc)	511	227	128	82	1
Illuminance (lux)	5,502	2,445	1,375	880	10.76

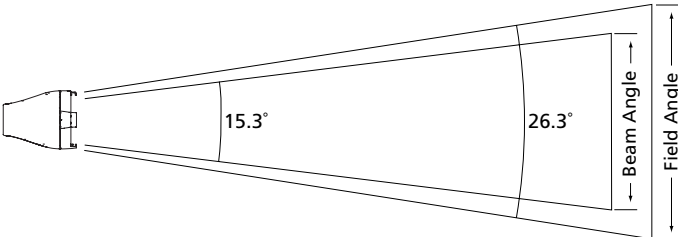
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.467.
For beam diameter at any distance, multiply by 0.269.

ColorSource PAR Deep Blue

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Full ON - Direct	15.3	50,156	2,978	1,874	27.6
3200 K / RGB	15.3	46,653	2,772	1,738	38.3
5600 K / RGB	15.3	46,273	2,723	1,706	26.8

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.



Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	25 ft 7.6 m	226.0 ft 68.9 m
Field Diameter	4.7 ft 1.4 m	7.0 ft 2.1 m	9.3 ft 2.8 m	11.7 ft 3.6 m	–
Illuminance (fc)	511	227	128	82	1
Illuminance (lux)	5,500	2,444	1,375	880	10.76

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.467.
For beam diameter at any distance, multiply by 0.269.

LED Wash Lenses

Nominal									
D40	No Lens	Very Narrow	Narrow	Medium	Wide	Extra Wide	Narrow Oval	Medium Oval	Wide Oval
Lustr+	17	21	27	42	68	100	21x37	25x60	30x82
Vivid	18	22	27	42	69	104	20x37	25x60	30x82
Studio HD	18	23	28	42	69	104	21x29	25x61	30x82
Studio D	22	25	30	43	70	105	24x39	28x62	32x80
Studio T	23	25	30	43	70	105	24x39	28x62	32x80
ColorSource PAR	25	26	32	50	76	100	26x37	29x58	30x63

All values are in degrees.

ADDITIONAL ORDERING INFORMATION

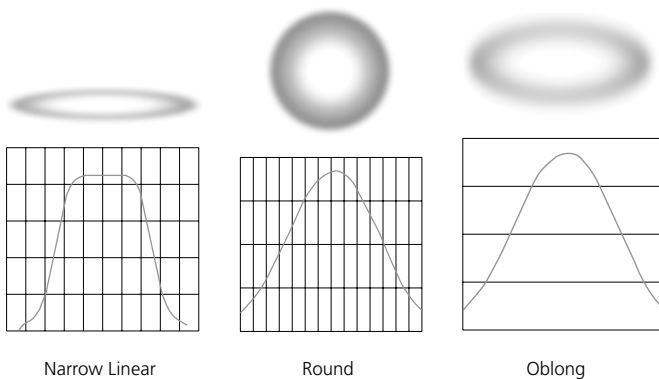
Secondary Lens Options

The following lenses are cut for ColorSource luminaires and create round, linear or oblong field patterns as described below. These lenses are not sized for use in Selador Classic fixtures. Linear lenses may be combined to create desired field size.

MODEL	DESCRIPTION	PART NUMBER	
Linear Field	Rigid polymer construction; does not require a media frame		
SELLVN-7.5	7.5 in / 190 mm very narrow lens	7410K1017	
SELLN-7.5	7.5 in / 190 mm narrow lens	7410K1018	
SELLM-7.5	7.5 in / 190 mm medium lens	7410K1019	
SELLW-7.5	7.5 in / 190 mm wide lens	7410K1020	
SELLEW-7.5	7.5 in / 190 mm extra wide lens	7410K1021	
Round Field			
SELRVN-7.5	7.5 in / 190 mm very narrow lens	7410K1010	
SELRN-7.5	7.5 in / 190 mm narrow lens	7410K1011	
SELRM-7.5	7.5 in / 190 mm medium lens	7410K1012	
SELRW-7.5	7.5 in / 190 mm wide lens	7410K1013	
SELRXW-7.5	7.5 in / 190 mm extra wide lens	7410K1039	
Oblong Field			
SELON-7.5	7.5 in / 190 mm narrow lens	7410K1014	
SELOM-7.5	7.5 in / 190 mm medium lens	7410K1015	
SELOW-7.5	7.5 in / 190 mm wide lens	7410K1016	

[Lenses compared to Source Four PAR EA](#)

Typical Lens Field Profiles



ADDITIONAL ORDERING INFORMATION

Power Input Cables

Use information below to order 5 ft power input leads with factory-fitted connectors. CE Fixtures ship with powerCON to bare end cables in the box.

MODEL	DESCRIPTION	PART NUMBER (NOT CE)	
DPA-A	5 ft / 1.5 m powerCON to parallel blade U-ground (Edison) connector	7410B7037-A	
DPA-B	5 ft / 1.5 m powerCON to 20 A two-pin and ground (stage-pin) connector	7410B7037-B	
DPA-C	5 ft / 1.5 m powerCON to grounded 20 A twistlock connector	7410B7037-C	
DPA-X	5 ft / 1.5 m powerCON to bare-end power input lead	7410B7037-X	

Power-Thru Jumpers

Note: Power-thru jumpers connect to luminaire's output (thru) connector to provide link to successive luminaires.

MODEL	DESCRIPTION	PART NUMBER (NOT CE)	
DPJ-5	5 ft powerCON to powerCON fixture-to-fixture jumper	7410B7020	
DPJ-10	10 ft / 3.0 m powerCON to powerCON fixture-to-fixture jumper	7410B7010	

Luminaire Accessories

MODEL	DESCRIPTION	PART NUMBER	
CSPARFSY	Yoke with floor-stand attachment	7412K1000	
400BD	Barn door (use only as a flexible top hat for diminishing aperture glare, not for beam shaping)	PSF1019	
407CF	Color frame (use for round and oblong lenses)	7061A3007	
400L	Egg crate louver	PSF1028	
400PTH3	Top hat 3 in / 76 mm tube	PSF1022	
400PTH6	Top hat 6 in / 152 mm tube	PSF1023	
400PHH	Half hat 6 in tube	PSF1027	
400CC	C-Clamp (does not ship with fixture) (not CE)	7060A2009 (not CE)	
400SC	Safety cable (30 in / 762 mm)	7060A1022	
DPSJ-25	25 ft / 7.6 m powerCON-to-Edison input power cable with inline switch	7400B7030 (not CE)	

CONTROL

DMX Input Channel Profiles

DMX Profile	DMX Channels	Channel Assignments	Notes
5ch (Default)	5	1-Intensity 2-Red 3-Green 4-Blue 5-Strobe	Lime is mixed automatically.
RGB	3	1-Red 2-Green 3-Blue	
1ch	1	1-Intensity	This mode controls the intensity of Preset 1.
Dir	6	1-Intensity 2-Red 3-Green 4-Blue/Indigo* 5-Lime 6-Strobe	Original ColorSource PAR fixture uses blue in channel 4. Deep Blue ColorSource PAR fixture uses indigo in channel 4.

PHYSICAL

ColorSource PAR Dimensions*

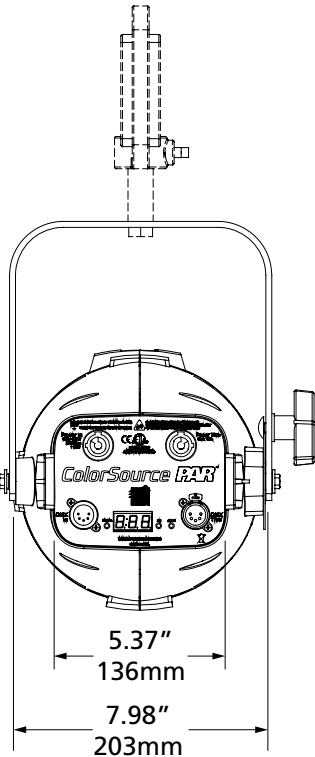
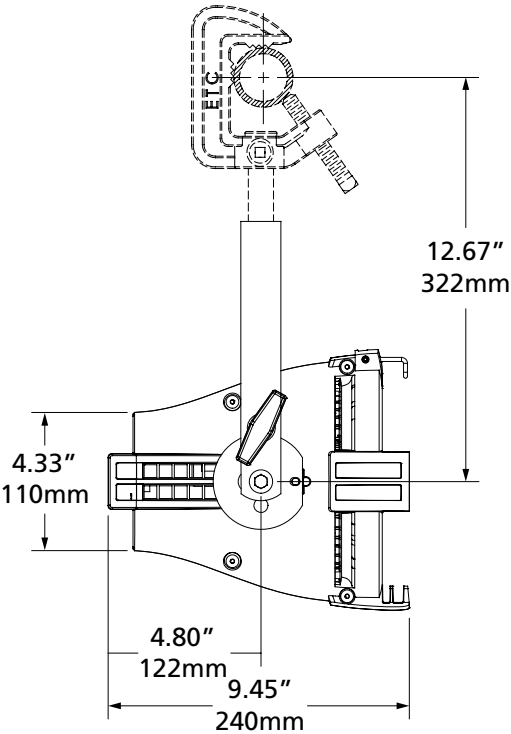
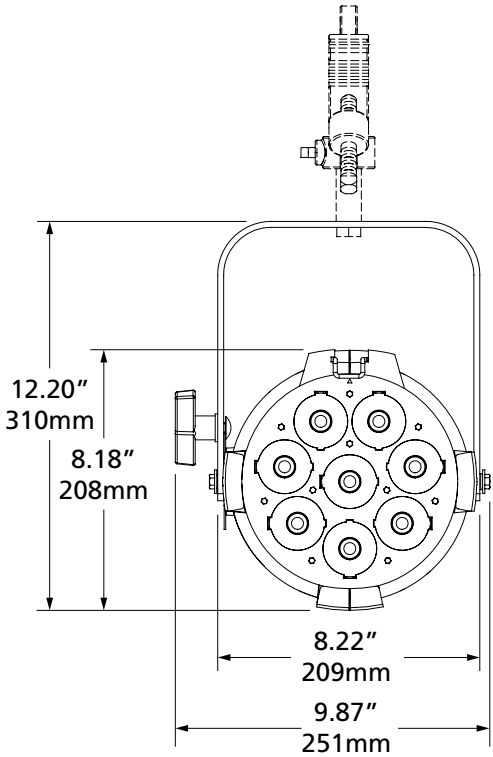
HEIGHT		WIDTH		DEPTH	
in	mm	in	mm	in	mm
12.20	310	7.98	203	9.45	240

* Does not include mounting hardware

ColorSource PAR Weights*

WEIGHT*		SHIPPING WEIGHT	
lb	kg	lb	kg
8.3	3.8	10.1	4.6

* Does not include mounting hardware



Eos Family Control



Type(s)

Project

Date

Notes

GENERAL INFORMATION

Ion Xe 20 is a compact console that includes programming and playback controls. In addition to the backlit keyboard and full-featured software that are a part of other Eos Family consoles, Ion Xe 20 also has twenty non-motorized faders and dedicated displays to easily run control manually.

Eos Family software includes:

- Approachable yet powerful syntax for programmers of every level
- Industry-leading color control tools
- Magic Sheets for custom programming and displays
- Augment3d 3D programming and visualization environment
- Virtual Media Server function for pixel-mapping
- Timecode and automation integration
- Multi-user and multi-programmer working environment

For drawings, photos, and more, visit the [Ion Xe 20](https://www.etcconnect.com/Eos) product webpage. To explore the latest software features, accessories, and other Eos Family products, visit etcconnect.com/Eos.

ORDERING INFORMATION

ION XE 20

MODEL	DESCRIPTION	PART NUMBER
Ion Xe 20 - 2K	Ion Xe 20 console, 2,048 outputs (base)	4311A1021 *
Ion Xe 20 - 12K	Ion Xe 20 console, 12,288 outputs (maximum)	4311A1022 *
Ion Xe 20 10K Up	After-sale 10K output upgrade	4331A0060
Ion Xe 20 10K Initial Up	Ion Xe 20 10K initial output upgrade †	4331A0062
Ion Xe RPU - 2K	Ion Xe Remote Processor Unit, 2,048 outputs (base)	4311A1031 *
Ion Xe RPU - 12K	Ion Xe Remote Processor Unit, 12,288 outputs (maximum)	4311A1032 *
Ion Xe RPU 10K Up	Ion Xe RPU after-sale 10K output upgrade	4311A0061
Ion Xe RPU 10K Initial Up	Ion Xe RPU initial 10K output upgrade †	4311A0063

* Add -US for Edison, -EU for Schuko/UK13A, -AZ for Australasian Type I

† Initial upgrade sold in some markets as an alternative to 4311A1022 / 4311A1032

All models are available without wireless radios (WiFi and Bluetooth). Please contact ETC for ordering information.

SHIPS WITH:

- One three-button scroll mouse and mousepad
- Alpha-numeric keyboard
- Locking regionalized IEC power cord
- Two active display port to DVI adapters
- One 18-inch LED gooseneck Littlelite
- Augment3d AR target kit
- Dust cover



ION XE 20 ACCESSORIES

MODEL	DESCRIPTION	PART NUMBER
Eos MFW 10	Eos Motorized Fader Wing 10	4240A1021 *
Eos MFW 20	Eos Motorized Fader Wing 20	4240A1022 *
Eos FW 20	Eos Standard Fader Wing 20	4240A1023 *
Eos FW 40	Eos Standard Fader Wing 40	4240A1024 *
Net3 RVI3	Remote Video Interface	4250A1130 *
ETC Puck Base	ETC Puck, 1,024 outputs (base)	4380A1133
ETCnomad Base	Client Software Key Kit	4380A1011
Ion Xe 20 FC	Ion Xe 20 Flight Case	I10032

* Add -US for Edison, -EU for Schuko/UK13A, -AZ for Australasian Type I

HARDWARE AND INTERFACES

- Supports two external display port monitors (1920x1080 minimum, 3840x2160 maximum), with optional single-touch or multi-touch screen control and DDC/CI support
- 20 45mm standard faders, 100 10-fader pages configurable as channels, submasters, palettes/presets, timing and effect rate/speed playback control
- Two internal monochromatic LCD displays for fader content
- Main Playback with two 100mm standard faders
- Four encoders for non-intensity parameter control
- Dedicated high-resolution intensity level wheel
- Backlit Eos keypad
- Included USB keyboard
- Solid-state hard drive
- IEC power input (100-240 VAC at 50/60Hz), fused mains power switch, locking regionalized power cable included
- Two individually configurable Gigabit Ethernet ports, RJ45 connectors
- One 802.11ac WiFi Ethernet adapter (to be enabled with future software)
- Bluetooth 5.1 for connecting input accessories (to be enabled with future software)
- sACN and Art-Net network output protocols
- Four DMX-512 / RDM 5-pin XLR ports
- Contact closure triggers via D-Sub connector
- USB 3.1 ports, for flash drives, pointing devices, keyboards (5 USB-A ports, 2 USB-C ports)
- One Littlite XLR port
- One Kensington lock port
- Multiple MIDI and/or SMPTE timecode inputs, MIDI In and Out, Analog/Serial Inputs, OSC transmit/receive, UDP transmit/receive through network interface or Response Gateways

ION XE 20 DIMENSIONS AND WEIGHTS *

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	kg	lb
Ion Xe 20	107	4.2	744	29.3	362	14.2	7.35	16.6
Ion Xe 20 in shipping container	197	7.8	927	36.5	470	18.5	9.98	20.4
Ion Xe 20 in flight case	212	8.3	1146	45.1	494	19.5	18.94	41.8

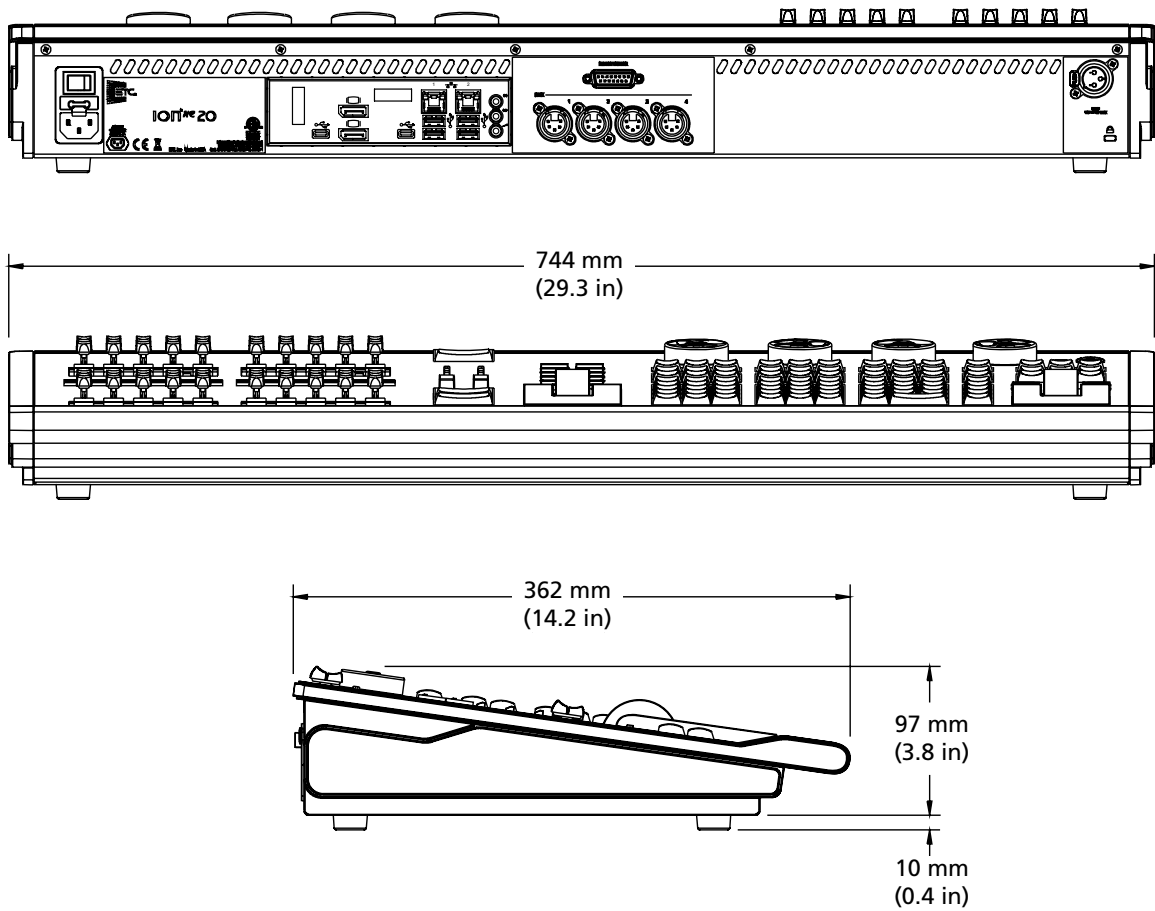
* Dimensions and weights typical

ELECTRICAL AND THERMAL

- Power consumption approximately 2 amps at 120V or 230/240V
- Ambient room temperature 0°-35° C (32°-95° F)
- Ambient humidity up to 90% non-condensing

REGULATORY AND COMPLIANCE

- CE Compliant
- cETLus listed
- UKCA marked
- FCC compliant
- RoHS compliant
- WEEE



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Trademark and patent info: etcconnect.com/IP

etcconnect.com



GENERAL INFORMATION

The Eos motorized fader wings may be used to provide extended playbacks for Eos Ti, Gio, Gio @5, Ion Xe, Eos and Ion Xe RPU's, RVIs, ETCnomad (PC or Mac native) and ETCnomad Puck.

Up to three wings may be attached to any of these devices. There are two wings – a x10 and x20. The x10 has 10 60mm motorized faders, two 4.3" full-color high-resolution displays and three controls buttons. The x20 adds 10 additional faders, two more displays and three controls buttons. The wing provides power sensing and automatically turns on when both an active USB data connections and mains power are provided via the external 12V power supply.

Connected devices must be running Microsoft Windows 7 or higher or Mac OSX El Capitan (10.11) or later. These wings are NOT compatible with Windows XP.

FEATURES

- Playback layout consistent with Eos Ti and Gio
- Either 10 or 20 pageable playbacks (100 pages are supported)
- Paging/bank conventions are determined in a setup menu
- Button/fader and configuration mapping displayed via full-color high-resolution displays.
- Two powered USB ports
- VESA 100x100mm mountable
- Kensington Lock compatible locking point

INTERFACES

- AC Input (100 – 240VAC at 50/60Hz) with external power supply
- Two USB ports

ORDERING INFORMATION

Eos Motorized Fader Wings

MODEL	DESCRIPTION
Eos MFW 20	Eos Motorized Fader Wing 20
Eos MFW 10	Eos Motorized Fader Wing 10

Eos Motorized Fader Wing Accessories

MODEL	DESCRIPTION
Eos 2W FC	Eos Combined Wing Flight Case
Eos PGW	Eos Programming Wing
ETCnomad (512 or 6144)	ETCnomad (512 or 6,144 Output Kit)
ETCnomad Puck (512 or 2048)	ETCnomad Puck (512 or 6,144 Output)

Ships with

- Power supply
- IEC power cord
- Dust cover
- USB cable

The wing is compatible with

- Eos Ti
- Gio
- Gio @5
- Ion Xe/Ion Xe 20
- Eos/Ion/Ion Xe Remote Processor Units
- RVi3
- ETCnomad for PC/Mac (requires ETCnomad Lighting Controller Kit and output device)
- ETCnomad Puck

Note: These wings are not supported on Element or any Windows XP devices. The Eos Motorized Fader Wing cannot be connected to a host computer using a KVM switch.



PHYSICAL

Eos Motorized Fader Wing Dimensions*

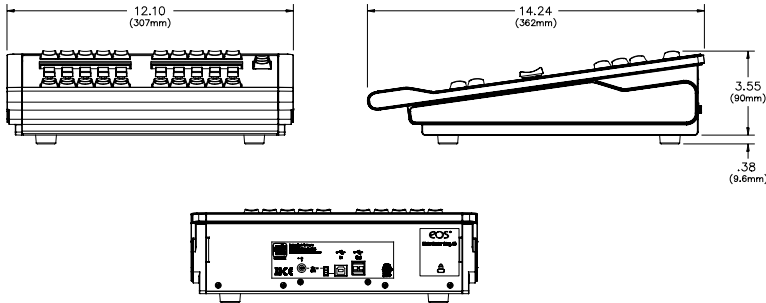
MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
Eos MFW 20	4.27	109	22.30	566	14.24	362
Eos MFW 10	4.27	109	12.10	307	14.24	362
Eos PGW with Flight Case	12.45	316	31.59	802	20.47	520

Eos Motorized Fader Wing Weights*

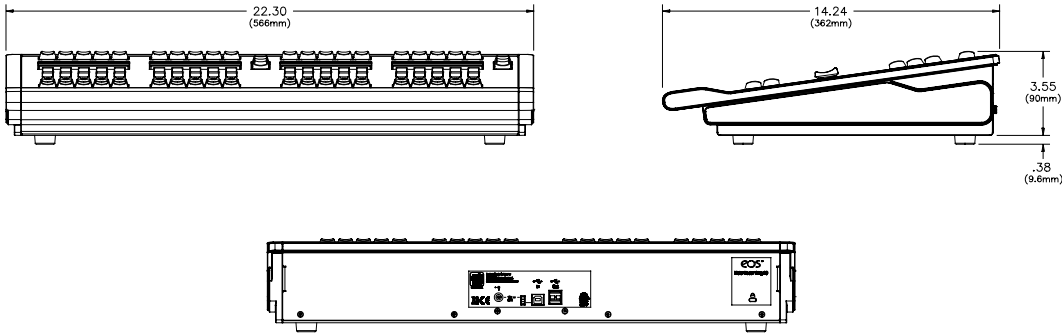
MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
Eos MFW 20	10.7	4.9	17.1	7.8
Eos MFW 10	6.2	2.8	12.5	5.7

*Weights and dimensions typical

EOS MOTORIZED FADER WING 10



EOS MOTORIZED FADER WING 20





Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Paradigm Architectural Control Processor is designed for easy interaction and rapid response. The Paradigm ACP's built-in memory and processing power works with vast amounts of lighting control data and is fast enough to process 1,024 simultaneous fades over any of its native protocols.

APPLICATIONS

- Houses of worship
- Schools
- Restaurants
- Hotels
- Museums
- Casinos
- Ballrooms

FEATURES

- Designed for use in Unison DRd and ERn enclosures
- Point of Control Interface: easy-to-read system display shows the user pertinent system information
- Supports Calculated Energy Reporting for configured loads when used in a Central Control Server System.
- LinkConnect: using Echelon® LonTalk® protocol with LinkPower, the two-wire topology-free system gives you the freedom to put stations where you need them
- NetConnect: Makes use of low-cost, easy-to-install Cat5/5e with PoE to connect touchscreen stations and other devices to a networked Paradigm System
- USBConnect: support for USB flashdrives for configuration upload and download
- QuickLoad: SD Media support for upload, and backup of configuration data
- LightDesigner Access: Web browser interface for easy modification, activation and monitoring of your system configuration and status
- LocalAccess: user control at the interface, including creation of timed events and editing of presets or sequences
- Secure-It Access Control: multiple levels of secure user access at the interface

REGULATORY AND COMPLIANCE

- cULus Listed
- CE Compliant

ORDERING INFORMATION

Paradigm Architectural Control Processor

MODEL	DESCRIPTION
P-ACP	Unison Paradigm Architectural Control Processor

Compatible Power and Control Enclosures

MODEL	DESCRIPTION
DRd	Unison Dimming Enclosure (12 and 24 circuits)
ERn	Unison External Control Enclosure

Unison Paradigm System Accessories

MODEL	DESCRIPTION
P-SPM-E	Unison Paradigm Station Power Module
P-NSPS-D	Unison Paradigm Network Station Power Supply



SPECIFICATIONS

MECHANICAL

- Designed for use in the Unison DRd Rack Enclosure Series and Unison ERn Control Enclosure Series
- Microprocessor-based, solid-state technology to provide multi-scene lighting and building controls
- Fully-contained plug-in module with no discrete wire connections
- Tool-free installation
- Front-panel user interface with backlit LCD and alphanumeric button panel
- Support of RJ-45 Ethernet, Secure Digital (SD) and Universal Serial Bus (USB) media on the front panel

ELECTRICAL

- No discrete wiring connections required for use in a dimming or control enclosure
- Echelon® LinkPower® communications with remote devices, including button stations, button/fader stations, touchscreen stations, sensors, and third party LonMARK compliant products
- Hot swappable
- System configuration and programming information stored in flash memory
- Support of ESTA BSR E1.17 Advanced Control Networks (ACN) and ESTA BSR E1.31 (sACN) Protocols
- Supports EIA-RS232 serial protocol for bi-directional command and communication with third-party equipment
- Two discrete ESTA DMX512A ports, configurable as input or output ports*
- Supports User Datagram Protocol (UDP) messaging input and output for control of Paradigm or external systems
- Four dry-contact closure inputs
- Four contact-closure outputs, rated 1 A at 30 VDC

*When used in a Dimming Enclosure, the second DMX port is always an output

THERMAL

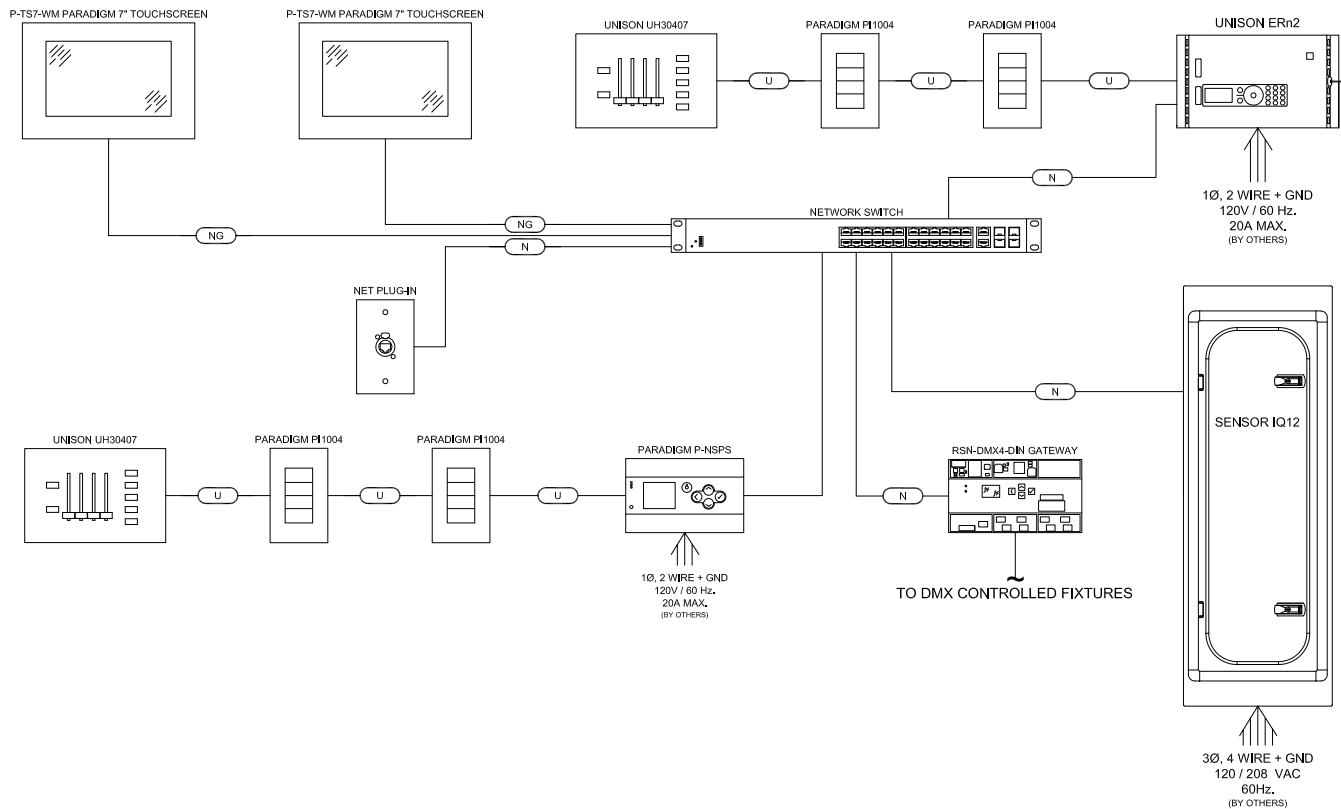
- Ambient room temperature: 0°–40° C (32°–104° F)
- Ambient humidity: 10–90% non-condensing

SPECIFICATIONS

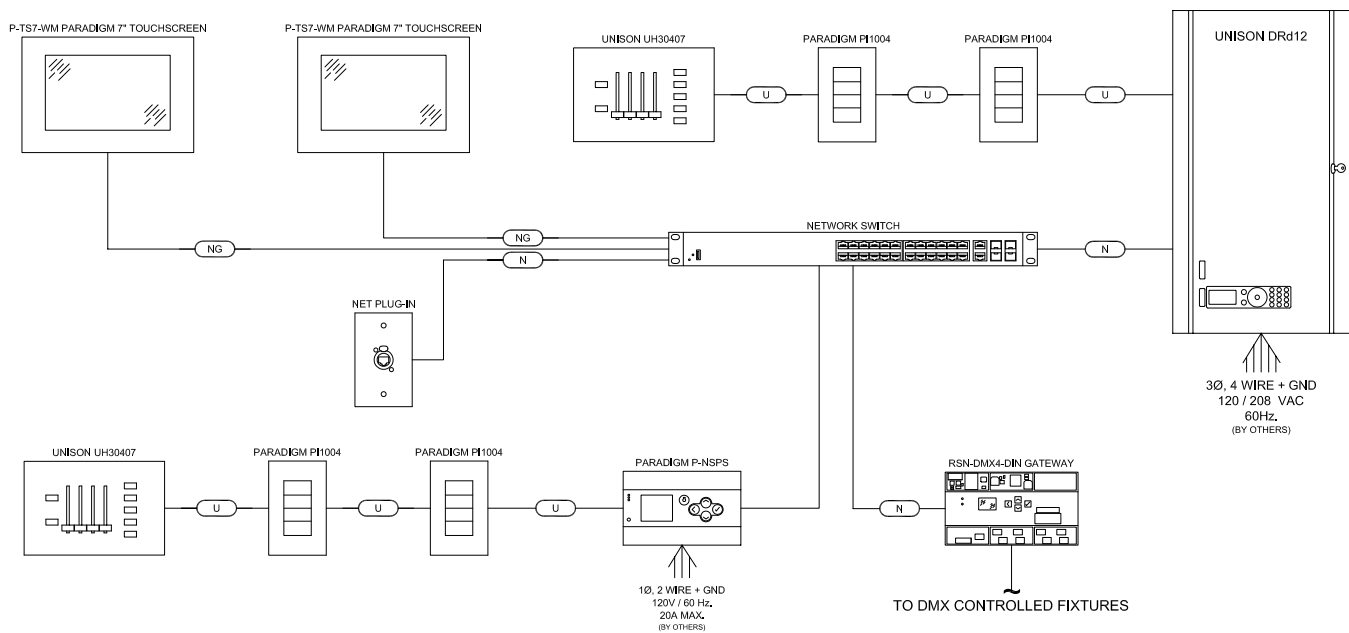
FUNCTIONAL

- Capacity
 - Supports 1,024 channels of control per control processor
 - Supports up to 128 stations per control processor
- System
 - Net3 system interoperability including sACN
 - Network Time Protocol for real-time clock synchronization supporting real and astronomical events
 - Supports two physical DMX ports, each configurable as an input or output
 - Provides configuration of DRd dimming operations
 - Up to 12 control processors per system
 - Addition of processors to a system proportionately increases the overall capacities
- Serial Input/Output
 - Eight-bit word length, parity selection and one or two stop bits
 - Fully customizable input and output messages
 - Bi-directional
- Configuration Data
 - Remote upload from a connected PC running LightDesigner or another connected Paradigm ACP
 - Stored in removable solid-state memory for easy transfer to another Paradigm ACP
- Local User Interface
 - Control functionality for control channels, zones, fixtures, groups, presets, macros, walls and sequences
 - Ability to schedule timed events (add/edit/delete)
 - Transfer of configuration using removable media
 - Transfer of configuration to and from touchscreen stations using removable media
- User Access Controls
 - Two user accounts – Administrator and User, local to each processor
- Web User Interface
 - Internal web server accessible via Ethernet port
 - Activate and deactivate presets
 - Schedule timed events (add/edit/delete)
 - Displays status information and log files
 - Configuration of processor settings
 - Supports configurable user login security options
- Diagnostics
 - Standard and Critical Event logging
- Stations
 - Connected to a Paradigm processor via topology-free LinkConnect, or star-topology NetConnect
 - Discovery and binding accomplished from the local user interface or LightDesigner
- Operation
 - Configurable DMX output refresh rate
 - Support for 16-bit DMX attributes
 - User configurable arbitration for multiple internal and external source data

SAMPLE SYSTEM RISER – ER_n WITH PARADIGM CONTROL



SAMPLE SYSTEM RISER – DRd WITH PARADIGM CONTROL



PHYSICAL

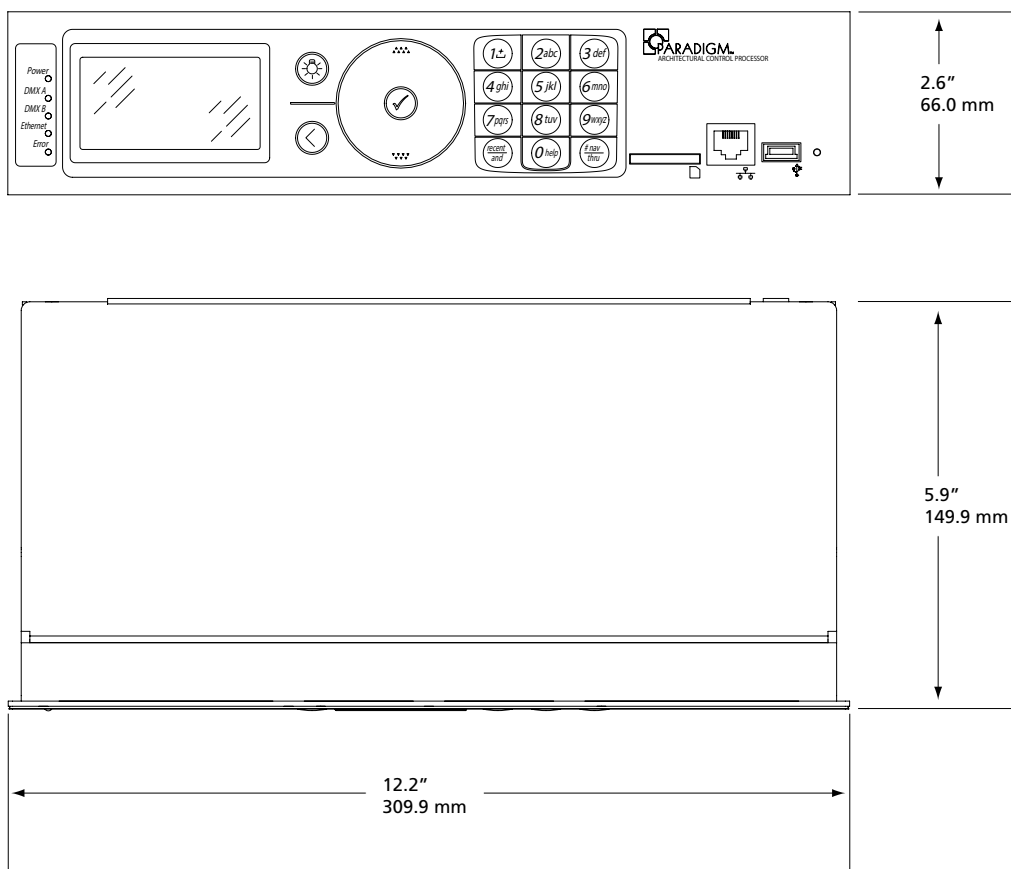
P-ACP Dimensions*

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
P-ACP	2.6	66	12.2	310	6.0	150

P-ACP Weights*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lb	kg	lb	kg
P-ACP	3.8	1.72	4.8	2.18

*Weights and dimensions typical



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*Trademark and patent info: etconnect.com/IPetconnect.com

Sixteen Output Ethernet to DMX Interface

model: NODE16-DIN

technical data sheet



The NODE16-DIN is a DIN-rail mounted Ethernet to DMX bridging device. It accepts Artistic License's Art-Net or Streaming ACN (ANSI E1.31) protocols. There are sixteen DMX512 outputs, and each of the outputs are isolated from the Ethernet input. The Ethernet input connection is made via an RJ45 connector, and the DMX512 output connections are made via pluggable Phoenix terminal blocks. The NODE16-DIN supports Power over Ethernet (PoE – 802.3af) or a 24-48VDC power input. NODE configuration takes place with a backlit graphical LCD and an encoder wheel.

DMX PORT SPECIFICATIONS

Port circuit: Protected EIA-485 receiver (LT1785)

NOTE: This product uses slew-rate-limited output drivers. Slew-rate-limited drivers minimize EMI and reduce reflections.

Output signal: 1.5 Volts (minimum) into 120 Ohm Termination

Connectors: Four 12-position pluggable Phoenix terminal blocks

Port protection: +60V continuous, +15KV transient

Isolation: Optically isolated to 1,500 Volts from the input. The outputs are not isolated from each other.

ETHERNET SPECIFICATIONS

Input circuit: 802.3 Ethernet compliant input (LAN8720)

Input signal: Art-Net or sACN (ANSI E1.31) Ethernet protocols

Input connector: Ethernet RJ-45 with 802.3af PoE (Power over Ethernet) capabilities.

MDIX: Auto-negotiated

MAIN SPECIFICATIONS

Power input: 802.3af PoE (Power over Ethernet) or Auxiliary 24-48VDC 500mA via a 2-position pluggable Phoenix terminal block

Indicators: Red POWER indicator
16 Green MIMIC 1 indicators mimic the level of the first channel on each output (useful in troubleshooting)
16 Green SIGNAL indicators illuminate when DMX output signal is present on each port

Doug Fleenor Design, Inc.

396 Corbett Canyon Road
Arroyo Grande, CA 93420
(805) 481-9599 voice and FAX
(888) 4-DMX512 toll free (888) 436-9512
web site: <http://www.dfd.com>
e-mail: info@dfd.com



DOUG FLEENOR DESIGN

MAIN SPECIFICATIONS (Continued)

Configuration:	Backlit graphical LCD and an encoder wheel.
Option jumpers:	JP1: Disables the encoder wheel from being able to adjust the configuration settings JP2 – JP5: Not used
Environmental:	0-40 °C (32-104 °F); 10-90% humidity, non-condensing
Cooling:	Convection cooling, no fan required
Color:	Green circuit board, black DIN tray
Size and weight:	2.75"H × 4.25"D × 9.375"W, 1 pound

LIMITED MANUFACTURER'S WARRANTY

Products manufactured by Doug Fleenor Design (DFD) carry a five-year parts and labor warranty against manufacturing defects. It is the customer's responsibility to return the product to DFD at the customer's expense. If covered under warranty, DFD will repair the unit and pay for return ground shipping. If a trip is necessary to the customer's site to solve a problem, the expenses of the trip must be paid by the customer.

This warranty covers manufacturing defects. It does not cover damage due to abuse, misuse, negligence, accident, alteration, or repair by other than by Doug Fleenor Design.

Most non-warranty repairs are made for a fixed \$50.00 fee, plus shipping.

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e-mail: info@dfd.com



Prodigy Low Profile Hoist Series



Type(s)	
Project	
Date	
Notes	

GENERAL INFORMATION

APPLICATIONS

Prodigy P1 hoists provide a simple, low-profile way to manipulate stage electrics, scenery, and curtains for setup, storage, and performance. The innovative technologies in Prodigy hoists reduce the space and structure requirements for stage rigging systems.

Fixed speed P1 hoists resolve access challenges to setting up lighting plots and masking drapes by eliminating the need to climb ladders or scaffolds. Instead, battens can be conveniently lowered to any working level, allowing easy access for changing, servicing, and moving items that can then be raised to performance or storage positions high above the stage floor.

Variable speed P1 hoists can raise and lower main drapes and scenery elements as quickly as 55m/min (180 fpm). Combined with ETC's powerful and intuitive Foundation control system, Prodigy hoists give directors and designers artistic access to the potential of your space.

FEATURES

- The revolutionary Prodigy Hybrid Drum manages up to eight lift lines with 15 m (50 ft) of travel in a machine 1/3 the size of comparable hoists
- Hoists can be installed upright, underhung or vertically (EXO only) and support use with traditional upright or underhung head blocks and loft blocks
- Available soft start/stop models reduce the structural stress of moving large loads
- Compression Tube snaps in place to interface with facility structure and neutralize additional lateral forces on the building
- The unique Right Angle Cable Adjuster (RACA) clamp permits rapid fine trim adjustment under load, and saves up to 360 mm (14 in) of required dead hang in building height
- Motor control electronics are included in the hoist Powerhead, no separate motor control cabinet required
- Safety Features Supplied as Standard:
 - Redundant braking
 - Load cells
 - Load profiling
 - Automated self-test
 - Slack line detection
 - Limit switches
 - Encoders

BENEFITS OF PRODIGY HOISTS

- Lightweight – less load on the building and easy to install
- No additional lateral forces imposed on the building – lateral forces neutralized by available Compression Tube
- Innovative cable management systems
- Anywhere-positioning of loft blocks along Compression Tube so lift line placement is not dependent on building structure layout
- May be attached to almost any structure that can support the weight of the hoist plus the lifted load
- Low noise operation
- Powerful, safe, and easy-to-use controllers
- 24/7/365 support for every system in your space

REGULATORY AND COMPLIANCE

- cULus Listed
- PLASA/ANSI E1.6-1

HOIST DATA

Hoist Working Load Limit (WLL)	360–900 kg (900–2,000 lb)
RACA Working Load Limit (WLL)	190 kg (420 lb)
Travel distance	15 m (50 ft)
Lift lines	5 mm (3/16 in); up to eight* lines
Average Speed	10 m/min (30 fpm) fixed speed 55 m/min (0–180 fpm) variable speed
Powerhead weight	135 kg (395 lb) - 300 kg (660 lb)
Dynamic load	1.2 G
Motor operating temperature range	5°–40° C (41°–104° F)

*Hoists supporting Prodigy Cable Management systems provide a max of 7 lifting lines.



Prodigy Low Profile Hoist Series

STANDARD SAFETY FEATURES

- Dual braking system consisting of a motor brake and redundant load side mechanical brake
- Rotary limit switches: upper limit, upper overtravel, lower limit, lower overtravel
- Slack line detection: a lift line slack condition will automatically stop the hoist from downward travel
- Load cell: provides Load Profiling and continuous monitoring of loads to prevent gross overload
- Load profiling: a user-recordable dynamic function to detect load deviations during travel
- Hardwired E-stop: each hoist has its own dedicated E-stop contactor
- Overcurrent protection: integrated overcurrent circuit to protect against electrical overloads

COMPRESSION TUBE MOUNTING

Min Qty of Beam Clamps Required	Beam Clamp Spacing	Tube Weight	Standard Mounting Brackets Available for:
1 @ Powerhead + 1 per section of Compression Tube	Max 4.3 m (14 ft) on center	5.2 kg/m (3.5 lbs/ft)	W-, S-, or I-Beam / Bar Joist / Unistrut*

*Structure must be capable of supporting the hoist system plus the working load.

LOADING INFORMATION (LIFT LINE PLACEMENT)

Loading	Min Load Per Line	Max Load Per Line	Loft Block Locations With Compression Tube			Max # of Lift Lines Available
			First Loft Block	Blocks along Compression Tube		
Distributed load over the length of the batten	12 kg (25 lb)	190 kg (420 lb)	1200 mm (4 ft) min distance from the Powerhead nose or 25 mm (1 in) from Powerhead nose with optional mule block	1200 mm (4 ft) min spacing between loft blocks [2400 mm (8 ft) min spacing to 2nd loft block if mule block is used]	3650 mm (12 ft) max spacing between loft blocks with 48.3 mm x 3.7 mm (1.5 in schedule 40) steel pipe batten 3050 mm (10 ft) max with ETC WebPipe batten	8* *Max of 7 lifting lines if hoist is supporting Prodigy Cable Management

HOIST INFORMATION

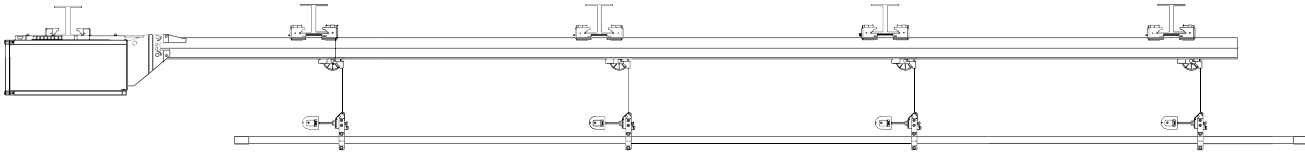
Powerhead Model	Powerhead Weight	Dimensions (H x L x W)	Lifting Capacity	Avg Speed	Power Input	Motor Power	Current Draw	Inrush Draw
P650E P800G EXO P900G	180 kg (395 lb) 205 kg (450 lb)*	370x1210x410 mm (15x48x16 in) 460x1245x410 mm (18x49x16 in)	360 kg (900 lb)	10 m/min (30 fpm)	208 V 60 Hz 3 wire+gnd	1.1 kW (1.5 hp)	5.0 A	16.8 A
P650E/480 P800G/480 EXO P900G/480	180 kg (395 lb) 205 kg (450 lb)*	370x1210x410 mm (15x48x16 in) 460x1245x410 mm (18x49x16 in)	360 kg (900 lb)	10 m/min (30 fpm)	480 V 60 Hz 3 wire+gnd	1.1 kW (1.5 hp)	2.5 A	8.4 A
P1000E P1300G EXO P1400G	180 kg (395 lb) 205 kg (450 lb)*	370x1210x410 mm (15x48x16 in) 460x1245x410 mm (18x49x16 in)	635 kg (1400 lb)	10 m/min (30 fpm)	208 V 60 Hz 3 wire+gnd	1.1 kW (1.5 hp)	6.5 A	16.8 A
P1000E/480 P1300G/480 EXO P1400G/480	180 kg (395 lb) 205 kg (450 lb)*	370x1210x410 mm (15x48x16 in) 460x1245x410 mm (18x49x16 in)	635 kg (1400 lb)	10 m/min (30 fpm)	480 V 60 Hz 3 wire+gnd	1.1 kW (1.5 hp)	3.25 A	8.4 A
P1500E P1900G EXO P2000G	265 kg (580 lb) 300 kg (660 lb)*	460x1295x460 mm (18x51x18 in) 535x1375x460 mm (21x54x18 in)	900 kg (2000 lb)	10 m/min (30 fpm)	208 V 60 Hz 3 wire+gnd	1.5 kW (2.0 hp)	10.5 A	32.6 A
P1500E/480 P1900G/480 EXO P2000G/480	265 kg (580 lb) 300 kg (660 lb)*	460x1295x460 mm (18x51x18 in) 535x1375x460 mm (21x54x18 in)	900 kg (2000 lb)	10 m/min (30 fpm)	480 V 60 Hz 3 wire+gnd	1.5 kW (2.0 hp)	5.25 A	16.5 A
V1000S EXO V1200S	230 kg (500 lb) 265 kg (580 lb)*	410x1425x410 mm (16x56x16 in) 510x1450x410 mm (20x57x16 in)	545 kg (1200 lb)	0-55 m/min (0-180 fpm)	480 V 60 Hz 3 wire+gnd	5.6 kW (7.5 hp)	15.0 A	N/A

*The above EXO powerhead weights do not include the external control boxes which allow for multiple mounting orientations. Control box weights are listed below. Supporting structure for EXO hoists must be rated for the combined total weight of the powerheads, control boxes, and lifted loads.

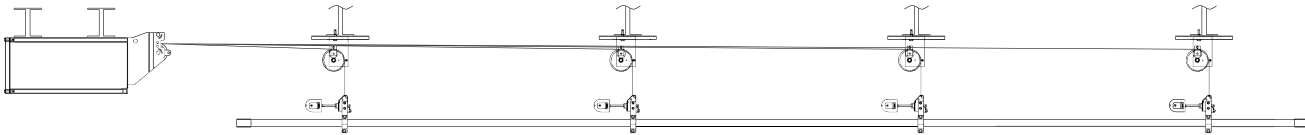
Model	EXO P900G(/480)	EXO P1400G(/480)	EXO P2000G(/480)	EXO V1200S
Weight	9.5 kg (21 lb)	9.5 kg (21 lb)	11.3 kg (25 lb)	15.9 kg (35 lb)

TYPICAL CONFIGURATIONS

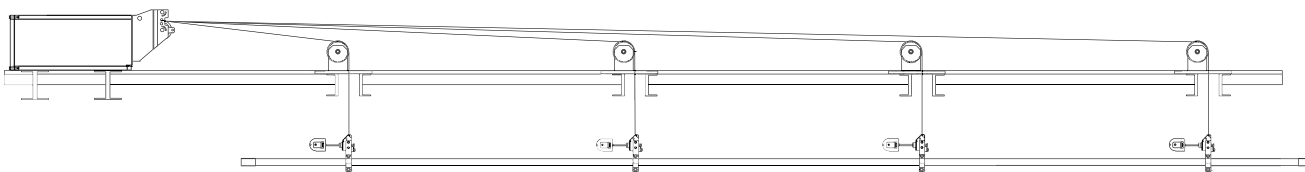
P1 WITH COMPRESSION TUBE



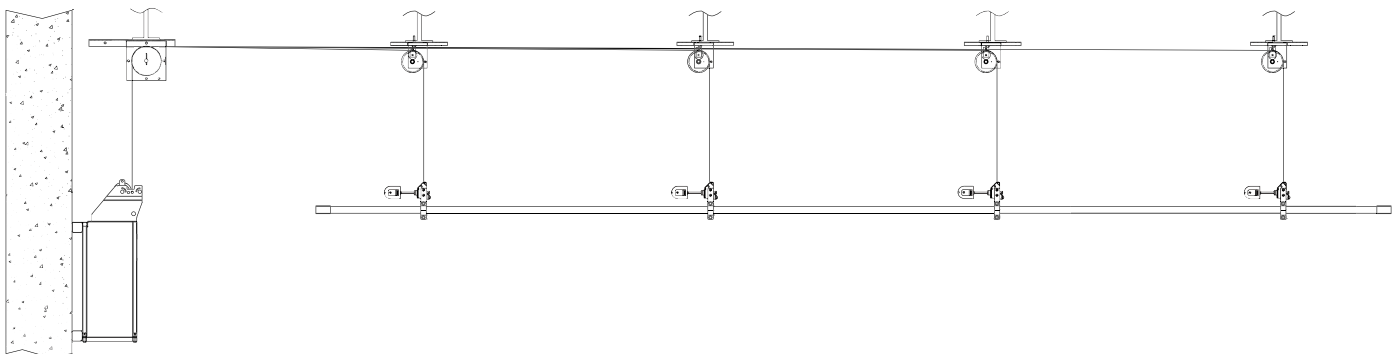
P1 EXO UNDERHUNG



P1 EXO UPRIGHT



P1 EXO VERTICAL WALL MOUNT





Type(s)

Project

Date

Notes

GENERAL INFORMATION

ETC offers a series of innovative cable management products for use with the full range of Prodigy and Vortek automated rigging systems. With a broad range of standard features, highly configurable raceways, and custom color options, we can provide solutions that complement the design of each venue and unlock the full potential of your space. Contact your local ETC sales representative for more details on the integration and customization options for each of the products listed below:

PRODIGY CABLE MANAGEMENT is a unique, low-profile system for Prodigy P1, P2, or P75 hoists. This premier-grade solution is ideal for front-of-house applications and stage electrics with a large number of power and data circuits. Prodigy Cable Management keeps your audience focused on the stage, not on your cables. Specially designed flat cables supply up to 48 circuits and eight data lines to an innovative aluminum raceway that supports almost any type of power or data connector.

HELIX CABLE MANAGEMENT compactly supplies power and data for stage electrics supported by any ETC motorized rigging system as well as hoist power and control for FlyPipe and FlyPipe Studio. Designed for use with ColorSource Raceway to support an all-LED luminaire rig, its lightweight construction means even our smallest hoists can effectively be used for stage electrics. Helix systems support two multiconductor power cables (maximum of six circuits each) and up to eight data cables.

PANTOGRAPH CABLE MANAGEMENT is available with two different styles of raceway: a 9900-series connector strip for performance lighting and an innovative hardwired raceway perfect for houselight applications. The houselight raceway supports the use of normal and emergency circuits together to make it easy to wire and maintain egress lighting for your venue. ETC pantographs are designed to minimize stacking height and are the only pantographs to be UL listed as a complete system. Performance lighting pantographs support up to 16 circuits and four data lines; houselight pantographs support up to eight circuits and two data lines.

CABLE CRADLE options are available for use with any ETC hoist system. Primarily used for renovations of systems already using multiconductor cables to provide power, ETC provides options for single- or double-purchased applications. ETC cable cradles can be stacked to support up to four multiconductor cables and multiple data lines when double-purchased.



SYSTEM COMPARISON

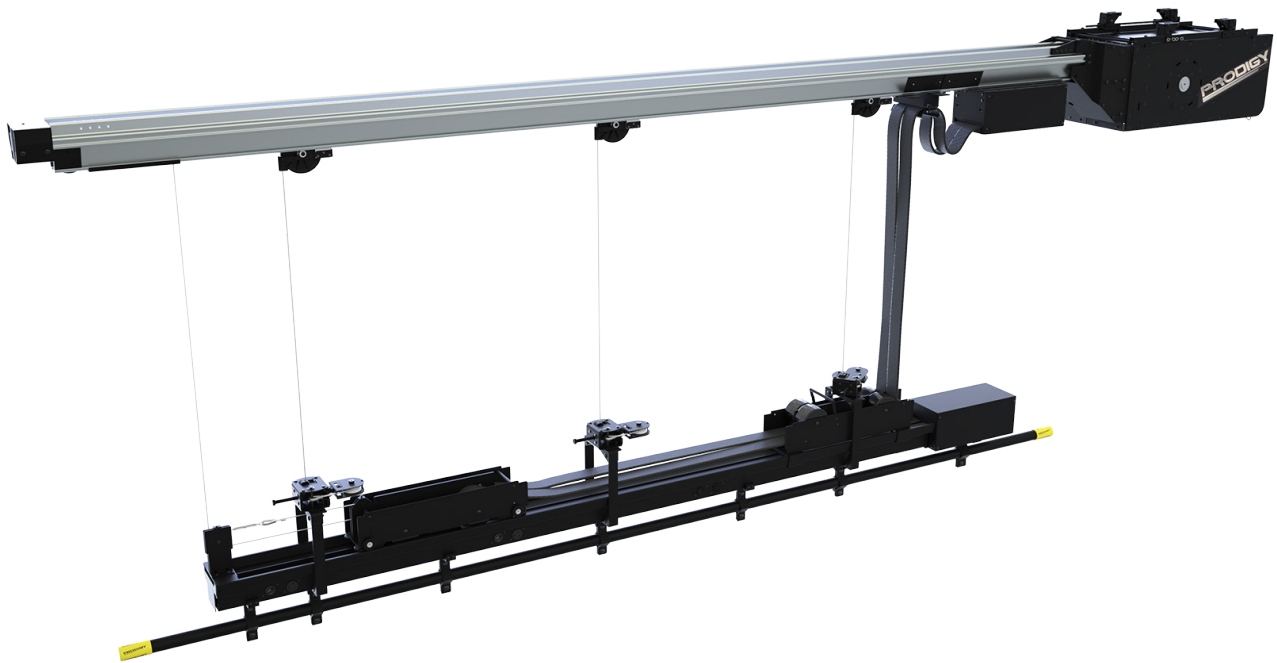
		PRODIGY CABLE MGMT	HELIIX CABLE MGMT	STAGE PANTO	HOUSELIGHT PANTO	CABLE CRADLE
CIRCUIT DETAILS:						
MAX CIRCUITS*		48	14/7	16	8	14
VOLTAGES - 1P		120/230 V	120/230 V	120/230 V	120/230/277 V	120/230/277 V
VOLTAGES - 2P		208 V	208 V	208 V	208 V	208 V
VOLTAGES - 3P		208 V	208 V	208 V	n/a	208 V
MAX CIRCUIT LOAD		2400 W	2400 W	2400 W	2400 W	2400 W
EMERGENCY Y/N		N	Y	N	Y	Y
DATA DETAILS:						
MAX RUNS		8	8	4	2	n/a
WIRING TYPES†		Cat5e‡	Cat5e, Cat6‡, DMX, audio§, video§, fiber§	Cat5e, Cat6, DMX, audio, video, fiber	Cat5e, Cat6, DMX, audio, video, fiber	Cat5e, Cat6, DMX, audio, video, fiber
HOIST COMPATIBILITY		Prodigy P1 Prodigy P2 Prodigy P75	FlyPipe Prodigy P1 Prodigy P2 Prodigy P75 Vortek NXT	Prodigy P1 Prodigy P2 Prodigy P75 Vortek NXT	Prodigy P1 Prodigy P2 Prodigy P75 Vortek NXT	FlyPipe Prodigy P1 Prodigy P2 Prodigy P75 Vortek NXT
RACEWAY COMPATIBILITY		Integrated Prodigy Cable Management Raceway	ColorSource Raceway / 9900-series Raceway	9900-series Raceway	Integrated Houselight Raceway	ColorSource Raceway / 9900-series Raceway
SUPPORTED CONNECTOR TYPES	Receptacles	Y	Y	Y	Y	Y
	Pigtails	Y	9900 only	Y	N	9900 only
	Custom	Y	9900 only	Y	N	9900 only
	Hardwired	N	N	N	Y	N

*Max quantity of circuits assumes two ungrounded conductors per circuit. Providing 3P circuits on distribution strips will reduce the max quantity.

†The wiring types shown are those supported between the upper terminal box of the cable management system and the terminal box on the attached distribution strip.

‡Cat5e and Cat6 wiring can be used to support a variety of signal types, as needed for your application.

§Wiring used for these applications must meet the heat and bend radius requirements of the cable management system. Contact ETC Rigging for more details.



GENERAL INFORMATION

APPLICATIONS

Prodigy Cable Management is a low-profile integrated cable management, raceway, and fixture-mounting solution. Its clean lines are perfect for front-of-house electrics while also supporting demanding on-stage circuit and data requirements.

FEATURES

- Raceway, flat cable, and hoist are UL Listed as a system
- Fully integrated with Prodigy Hoists for smooth movement
- Compact cable management for front-of-house and stage
- Raceway provides power and data distribution for lighting positions and also supports the flat cable and trolley system
- Cable management system stays completely within the width of the lineset
- Storage height of 1070 mm (42 in) from the bottom of the structure to the center of the pipe batten
- Connector strip is prewired at the factory - from the feeder cables in the terminal box at the compression tube all the way through the connector strip. The installer only has to terminate facility wiring at the upper terminal box
- Each system can include up to forty-eight 20 A circuits
- One ground wire and one Cat5e line for DMX or network data is included for every six circuits

BENEFITS

- Easy electrical installation:
 - Only one set of connections at upper termination box
 - Incoming wiring can be located at either end, as needed
- Low storage height:
 - Savings on building height for new construction
 - Maximizes space in retrofit applications
 - Electrics can fit in low-plenum spaces over audience
- No off-stage equipment to get caught on adjacent linesets
- Factory-engineered and integrated with ETC hoists

GENERAL INFORMATION

COMPATIBLE WITH:

HOIST	MODELS
Prodigy P1	P650E, P1000E, P1500E
Prodigy P2*	P2-650LB
Prodigy P75*	P75-2000G, P75-2000GS, P75-3300GS

*Prodigy P2 and P75 hoist systems must include compression tube to be compatible with Prodigy Cable Management.

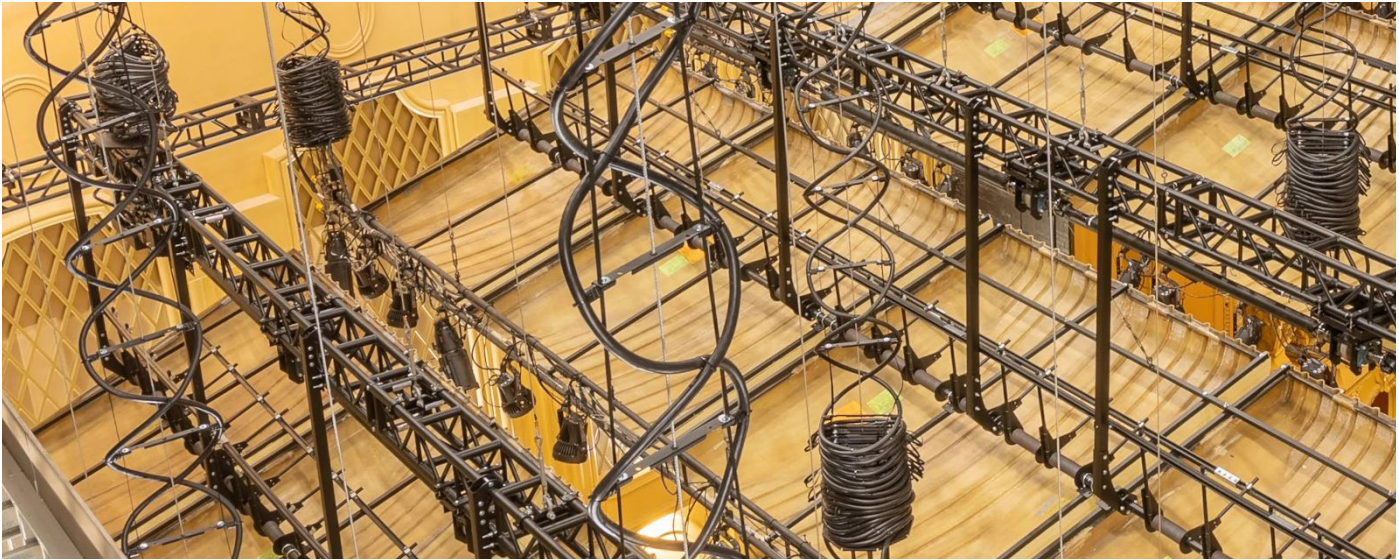
BASIC PARAMETERS:

Stacking height*	1070 mm (42 in)	
Avg weight	w/ ETC WebPipe	w/ standard pipe
	12.6 kg/m (8.5 lb/ft)	14.9 kg/m (10 lb/ft)
Max circuits	48	
Max data runs	8	

*Stacking height is measured from the bottom of the beam or other structural attachment point to the center of the pipe batten.

REGULATORY COMPLIANCE:

- cULus Listed to UL 1573 and CSA C22.2 No. 166



GENERAL INFORMATION

APPLICATIONS

Helix cable management offers a low-profile option perfect for venues with LED lighting rigs. Helix is an integral part of the Prodigy FlyPipe system, providing hoist power and data for every hoist, plus power and data cables to feed a ColorSource Raceway if the FlyPipe is a stage electric. When used with Prodigy P1, P2, P75, or Vortek hoists, Helix supports multiconductor cables and data cables to feed either ColorSource Raceway or 9900-series connector strips.

FEATURES

- Compact cable management for front-of-house and stage
- Stores circuit and data cables for up to 15 m (50 ft) of vertical travel in 1780 mm (70 in) from the bottom of the structure to the center of the pipe batten
- Supports batten spacing as close as 300 mm (12 in) on center
- Easy to install and maintain with options for connectorized ceiling junction boxes and raceway terminal boxes
- Multiple Helixes can be installed on a single lineset
- Each Helix supports two multiconductor power cables (max of fourteen 20 A circuits total) and up to eight data cables
- Available LKS cables combine six 20 A circuits and one Cat5e data cable in a single jacket to simplify connectorized cable runs
- Internal wiring of ETC raceways used with Helix systems is factory-installed, terminated, and tested
- Power and data cables are UL and CSA compliant

BENEFITS

- Easy electrical installation:
 - Only one set of required field terminations at upper termination box when used with connectorized cables
 - Incoming wiring can be located as needed
- Low storage height:
 - Savings on building height for new construction
 - Maximizes space in retrofit applications
 - Electricians can fit in low-plenum spaces over audience
- No off-stage equipment to get caught on adjacent linesets

GENERAL INFORMATION

COMPATIBLE WITH:

HOIST	MODELS
Prodigy FlyPipe	FlyPipe (multiple), FlyPipe Studio (max 1)
Prodigy P1	P800G, P1300G, P1900G
Prodigy P1 EXO	EXO P900G, EXO P1400G, EXO P2000G
Prodigy P2	P2-650LB
Prodigy P75	P75-2000G, P75-2000GS, P75-3300GS
Vortek	VF-0820, VF-2020, VF-1740

STANDARD FLYPIPE CONFIGURATIONS:

Configurations include cabling for hoist power and control.

	9 m (30 ft) max travel (208V)	9 m (30 ft) max travel (480V)	15 m (50 ft) max travel (208V)	15 m (50 ft) max travel (480V)
0 CKTs + 0 data	8006A2051	8006A2059	8006A2055	8006A2063
3 CKTs + 1 data	8006A2053	8006A2061	8006A2057	8006A2065
6 CKTs + 1 data	8006A2086	8006A2088	8006A2087	8006A2089
6 CKTs + 1 data (LKS)	8006A2054	8006A2062	8006A2058	8006A2066

BASIC PARAMETERS:

	9 m (30 ft) max travel	15m (50 ft) max travel
Stacking height*	1525 mm (60 in)	1780 mm (70 in)
Avg weight (0/3/6 CKTs)	14.5 / 25.4 / 30.4 kg (32 / 56 / 67 lb)	22.7 / 37.2 / 47.2 kg (50 / 82 / 104 lb)
Avg weight ColorSource Raceway + batten	w/ ETC WebPipe	w/ standard pipe
	6 kg/m (4 lb/ft)	8.2 kg/m (5.5 lb/ft)
Avg weight 9900-series raceway + batten	w/ ETC WebPipe	w/ standard pipe
	11.2 kg/m (7.5 lb/ft)	13.4 kg/m (9 lb/ft)
Max circuits	14 / 7 ¹	
Max data runs	8 / 7 ¹	

*Stacking height is measured from the bottom of the beam or other structural attachment point to the center of the pipe batten. Available custom configurations can support higher or lower max travel and will increase or reduce stacking height.

¹Maximum when supplying power and data for Prodigy FlyPipe hoists.



GENERAL INFORMATION

APPLICATIONS

ETC Stage Pantographs integrate with 9900-series connector strips to provide distributed power and data for theatrical lighting. Pantographs are an ideal solution for shorter stage electrics in venues requiring lots of vertical travel or minimal space between line sets.

FEATURES

- Patented pantograph design reduces heat buildup and minimizes stacking height
- Connector strip, pantograph, cabling, and hoist are UL Listed as a system
- Supports up to 24 m (80 ft) of vertical travel with a stacking height of 1830 mm (72 in) from the bottom of the structure to the center of the pipe batten
- Each pantograph can accommodate up to sixteen 20 A circuits and multiple low-voltage data cables
- Multiple pantographs can be installed on a single lineset
- Pantograph and internal raceway wiring is factory-installed, terminated, and tested

BENEFITS

- Easy electrical installation:
 - Only one set of required field terminations at upper termination box
 - Pantograph can be located as needed
- Innovative design reduces the stacking space of the pantograph
- System accommodates a variety of fixtures, digitally-controlled equipment, and electronic accessories

GENERAL INFORMATION

COMPATIBLE WITH:

HOIST	MODELS
Prodigy P1	P800G, P1300G, P1900G
Prodigy P1 Exo	EXO P900G, EXO P1400G, EXO P2000G
Prodigy P2	P2-650LB, P2-300KG, P2-600KG, P2-900KG
Prodigy P75	P75-2000G, P75-2000GS, P75-3300GS, P75-SC
Vortek	VF-0820, VF-2020, VF-1740

BASIC PARAMETERS:

Max distance to floor	6.1 m (20 ft)	10.4 m (34 ft)	15.2 m (50 ft)	19.8 m (65 ft)	24.4 m (80 ft)
Stacking height*	1499 mm (59 in)	1524 mm (60 in)	1626 mm (64 in)	1728 mm (68 in)	1830 mm (72 in)
Avg weight of pantograph	12.7 kg (28 lb)	20.9 kg (46 lb)	29 kg (64 lb)	37.2 kg (82 lb)	45.4 kg (100 lb)
Avg weight of raceway+pipe	w/ ETC WebPipe			w/ standard pipe	
	11.2 kg/m (7.5 lb/ft)			13.4 kg/m (9 lb/ft)	
Max Circuits	16				
Max Data	4+ [†]				

*Stacking height is measured from the bottom of the beam or other structural attachment point to the center of the pipe batten.

[†]The maximum quantity of data cables allowed in an ETC stage pantograph will vary based on the quantity of circuits and the types of data cable required. Contact your local ETC sales representative for more information.

REGULATORY COMPLIANCE:

- cULus Listed to UL 1573 and CSA C22.2 No. 166

Houselight Pantograph

Rigging Series



GENERAL INFORMATION

APPLICATIONS

ETC Houselight Pantographs resolve access challenges for cleaning and maintenance of architectural luminaires in performance venues. The Houselight trough provides both normal and emergency power plus optional low voltage control wiring for virtually any canopy- or stem-mounted fixtures.* Available in trough lengths up to 32 m (105 ft), Houselight Pantographs allow you to access the safety and convenience of overhead rigging for:

- Auditorium house lighting
- Convention halls, manufacturing facilities, and other high bay spaces up to 24.4 m (80') in height
- Lobbies and atriums with seating, reception areas, and other architectural features that impede lift access

FEATURES

- Pantograph, trough, and hoist are UL Listed as a system
- The Houselight trough can be suspended up to 4.5 m (15 ft) on-center and supports a total load of 22 kg (50 lb) between suspension points
- Fixtures are directly attached to 22 mm (7/8 in) knockouts and are hard wired into the trough
- Troughs can be wired with up to eight circuits and two low voltage control circuits
- Pantographs accommodate vertical travel up to 15 m (50 ft)
- Pantograph and trough wiring is factory-installed, terminated, and tested

*Lighting fixtures are not included with the Houselight Pantograph system and must be purchased separately.

GENERAL INFORMATION

BENEFITS

- Reduced requirements for maintenance catwalks in performance venues
- Superior access to high bay positions
- Eliminates damage caused by ladders and lifts used for luminaire maintenance over finished flooring and carpeting
- Easy electrical installation:
 - Only one set of required field terminations at upper termination box
 - Incoming wiring can be located as needed

COMPATIBLE WITH:

HOIST	MODELS
Prodigy P1	P800G, P1300G, P1900G
Prodigy P1 EXO	EXO P900G, EXO P1400G, EXO P2000G
Prodigy P2	P2-650LB
Prodigy P75	P75-2000G, P75-2000GS, P75-3300GS
Vortek	VF-0820, VF-2020, VF-1740

BASIC PARAMETERS:

Max distance to floor	6.1 m (20 ft)	10.4 m (34 ft)	15.2 m (50 ft)	19.8 m (65 ft)	24.4 m (80 ft)
Stacking height*	991 mm (39 in)	1016 mm (40 in)	1118 mm (44 in)	1220 mm (48 in)	1322 mm (52 in)
Avg weight of pantograph	12.7 kg (28 lb)	20.9 kg (46 lb)	29 kg (64 lb)	37.2 kg (82 lb)	45.4 kg (100 lb)
Avg weight of trough	4 kg/m (2.7 lb/ft)				
Max circuits	8 normal only or 4 normal plus 2 emergency				
Max low voltage runs	2				

*Stacking height is measured from the bottom of the beam or other structural attachment point to the center of the pipe batten.

REGULATORY COMPLIANCE:

- cULus Listed to UL 1573 and CSA C22.2 No. 166



GENERAL INFORMATION

APPLICATIONS

Prodigy hoist systems are compatible with traditional cable cradles for managing multiconductor cables. This modestly-priced solution is excellent for remodels of existing systems, venues where stacking height is not a concern, or for tungsten lighting rigs that require a large quantity of distributed circuits.

FEATURES

- Multiconductor SO power cables and hard-use data cables managed by cable cradles
- Power and data cables are UL and CSA compliant
- Uses one lift line from a Prodigy or Vortek hoist system to automatically raise and lower the cables along with the lighting batten
- Lift lines can be single or double purchased to support up to:
 - A maximum combined cable weight of 190 kg (420 lb) when single purchased
 - A maximum combined cable weight of 380 kg (840 lb) when double purchased
- Includes cable strain relief at ceiling and raceway terminal boxes

GENERAL INFORMATION

BENEFITS

- Safely replaces manual cable pick lines to automatically manage cable swag overstage and/or offstage
- Supports a large quantities of circuits and/or data runs

COMPATIBLE WITH:

HOIST	MODELS
Prodigy P1	P800G, P1300G, P1900G
Prodigy P1 EXO	EXO P900G, EXO P1400G, EXO P2000G
Prodigy P2	P2-650LB, P2-300KG, P2-600KG, P2-900KG
Prodigy P75	P75-2000G, P75-2000GS, P75-3300GS
Vortek	VF-0820, VF-2020, VF-1740

BASIC PARAMETERS:

Cradle weight	5.4 kg (12 lb)	
Cable weight*	~3 kg/m (2 lb/ft)	
Avg weight ColorSource Raceway + batten	w/ ETC WebPipe	w/ standard pipe
	6 kg/m (4 lb/ft)	8.2 kg/m (5.5 lb/ft)
Avg weight 9900-series raceway + batten	w/ ETC WebPipe	w/ standard pipe
	11.2 kg/m (7.5 lb/ft)	13.4 kg/m (9 lb/ft)
Stacking height*	n/a	
Max circuits per cable	14 (56 total)	
Max data runs	as required	

* Cable weight and stacking height will vary according to system and installation requirements. Please contact your local ETC sales representative for more information.



WebPipe batten shown with ColorSource Raceway and ColorSource PAR

GENERAL INFORMATION

APPLICATIONS

The innovative WebPipe batten by ETC has the same outer diameter – 48 mm (1.9 in) – as schedule 40 steel batten pipe at a fraction of the weight. Ideal for use in schools, town halls, and community theatres, WebPipe makes lower-capacity hoists like P2-650LB a high-value option for moving stage electrics. Available in black or clear anodized finish, WebPipe is compatible with all ETC cable management and hoist systems and can also be used for general purpose motorized line sets, dead hung rigging, pipe grids, and more.

LOADING INFORMATION

Unsupported Span	Maximum Distributed Load	Maximum Point Load	Maximum Deflection at Center
3050 mm (10 ft)	68 kg (150 lb)	29 kg (65 lb)	17 mm (0.66 in)
2440 mm (8 ft)	79 kg (175 lb)	34 kg (75 lb)	13 mm (0.50 in)
1830 mm (6 ft)	95 kg (210 lb)	45 kg (100 lb)	9 mm (0.37 in)
1220 mm (4 ft)	113 kg (250 lb)	86 kg (190 lb)	6 mm (0.25 in)

ORDERING INFORMATION

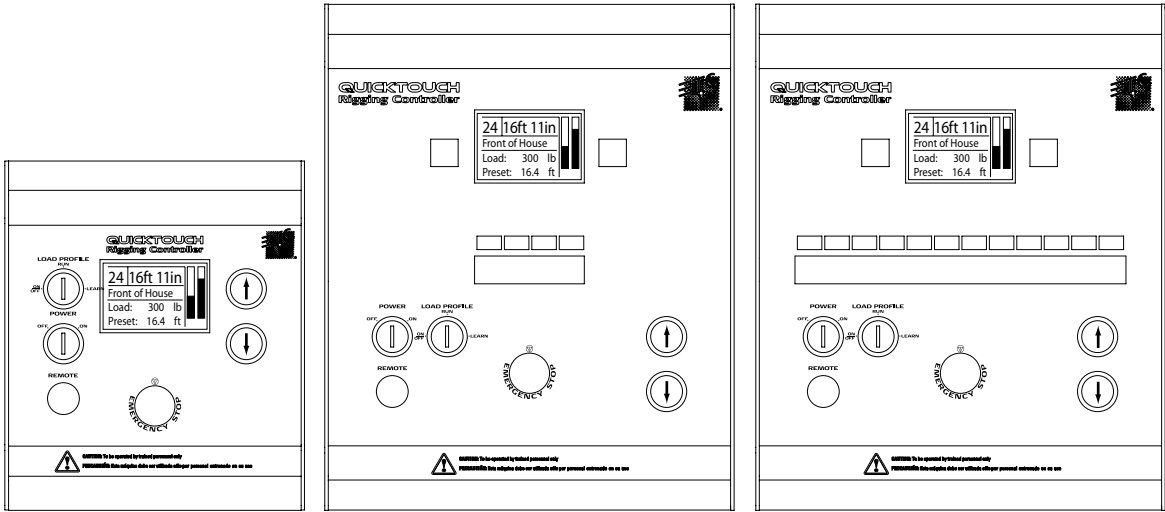
PART NUMBER	MODEL NUMBER	DESCRIPTION
7199A4010-20	WEBPIPE-BLK	WebPipe batten, black anodized, 6 m (20 ft)
7199A4009-20	WEBPIPE-CLR	WebPipe batten, clear anodized, 6 m (20 ft)
7199A2020	WEBPIPE SPLICE	WebPipe batten splice kit



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*Trademark and patent info: etcconnect.com/IP

etcconnect.com

Rigging Control Series



GENERAL INFORMATION

APPLICATIONS

- Rigging control system for fixed-speed hoists
- Academic theater lighting and scenery battens
- Auditorium house light hoists
- Architectural lighting hoists
- Small theater hoists

FEATURES

- Models control from 1 to 24 hoists
- Easy and intuitive to operate
- Illuminated user controls
- Ability to control multiple hoists at the same time
- Write-on or user-printable strips for motor identification
- Status, position and load readout via LCD screen
- User-programmable position preset
- Load profiling stops movement of hoist when outside normal load conditions
- Emergency stop (E-Stop) circuit
- Hold-to-run controls with hard wired deadman circuit
- Reduction of dynamic building loads by limiting the number of moving simultaneously motors
- Multiple languages (including English, Spanish, French), imperial or metric measurements display
- Simple and cost-effective installation wiring via a single low voltage control cable
- Easy configuration via panel or laptop
- Hoist history stored in log files
- Usage-data and service-interval counters
- Automatic self-tests of safety functions and circuits on power-up and at periodic intervals

ACCESSORIES

- Wired Remote Control
- Up to 3 Remote Emergency Stop Button Stations
- Locking Door
- Rack-Mount Kit

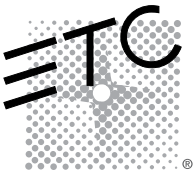
ORDERING INFORMATION

QuickTouch Controller

MODEL	DESCRIPTION
QT1	QuickTouch 1 control station
QT4	QuickTouch Group 4 control station
QT8	QuickTouch Group 8 control station
QT12	QuickTouch Group 12 control station
QT24	QuickTouch Group 24 control station
QT-FBB-SM	Flush backbox for QuickTouch 1
QT-FBB-LG	Flush backbox for QuickTouch 4-24
QT-SBB-SM	Surface backbox for QuickTouch 1
QT-SBB-LG	Surface backbox for QuickTouch 4-24

QuickTouch Controller Accessories

MODEL	DESCRIPTION
FSRC	Fixed-Speed Remote Control, wired
ESBS	Emergency Stop Button Station
ESBS-BB	Emergency Stop Button Station backbox, surface mount
QT-D-SM	Door for QuickTouch 1
QT-D-LG	Door for QuickTouch 4-24
QT-RMK-LG	Rack-Mount Kit for QuickTouch 4-24, surface mount



S P E C I F I C A T I O N S

GENERAL

- Models range up to 24 hoists
- Control multiple hoists at the same time

MECHANICAL

- Rugged industrial steel, fully enclosed, black powder-coated enclosure and backbox
- Flush-mount version fits in "2x4" stud wall

ELECTRICAL

- All (I/O) on terminals or connectors
- Input/Output (I/O):
 - 2 hold-to-run buttons on one hard wired deadman circuit
 - Emergency Stop (E-Stop) circuit
 - 24V-DC low-voltage operation (supplied from hoist)
 - MCX-Bus Universe
 - External E-Stop Station(s) connector
 - USB connector

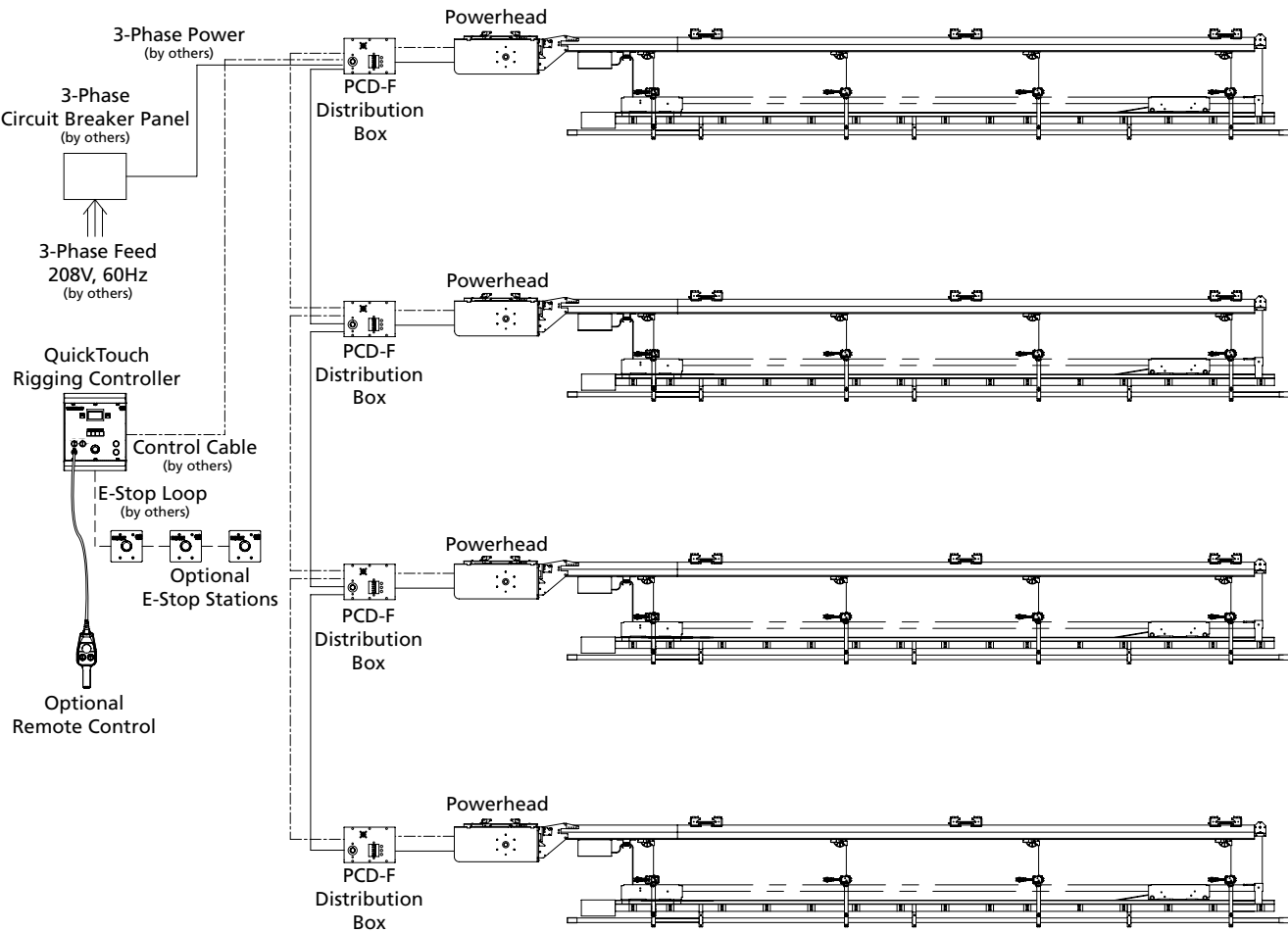
ELECTRONICS

- Illuminated 2.8" full graphical display
- Industrial-grade, illuminated Up / Down and Emergency-Stop buttons
- Maintained Keyswitch for system enable (Power)
- Maintained Keyswitch for load-profile learning and disable
- Remote Control connector
- QuickTouch 4 - 24 stations also contain:
 - 2 display navigation buttons
 - 4-, 8-, 12-, or 24-motor select buttons with illuminated color-coded status fields, depending on model

THERMAL

- Ambient temperature: 32-104°F (0-40°C)
- Relative humidity: 30-90% non-condensing

QUICKTOUCH CONTROLLER RISER



- Power Cable, 3 Phase + Ground
- Control Cable, CAT5e or better
- E-Stop, CAT5e or better

Power cord from Powerhead to PCD – 8'0"

Data cord from Powerhead to PCD – 8'0"

Remote control device cord – 30'0"

PHYSICAL

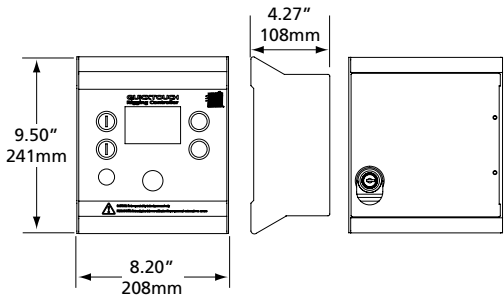
QuickTouch Controller Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
QT1 flush	10.40	264	11.00	279	3.71	94
QT1 surface	9.50	241	8.20	208	4.27	108
QT4 - 24 flush	14.50	368	13.50	343	3.71	94
QT4 - 24 surface	13.84	352	11.20	284	4.25	108

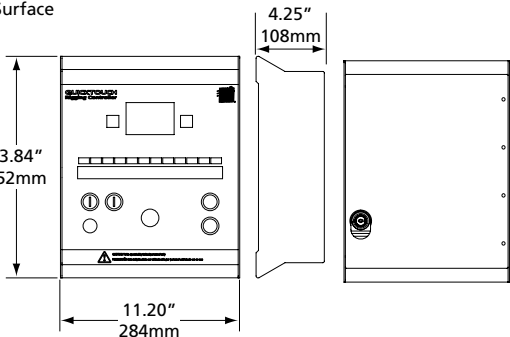
QuickTouch Controller Weights

MODEL	WEIGHT	
	lbs	kgs
QT1 flush	8	3.63
QT1 surface	8	3.63
QT4 - 24 flush	12	5.44
QT4 - 24 surface	12	5.44

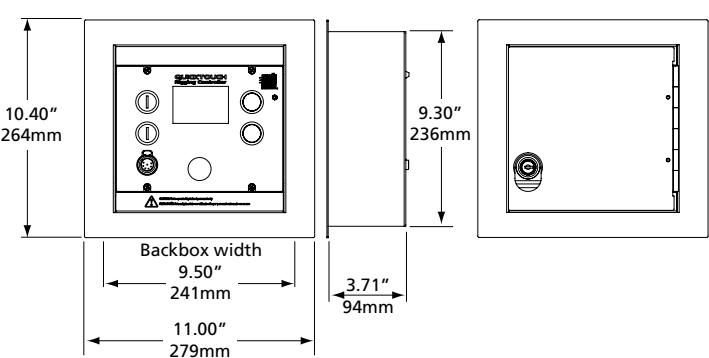
QT1 Surface



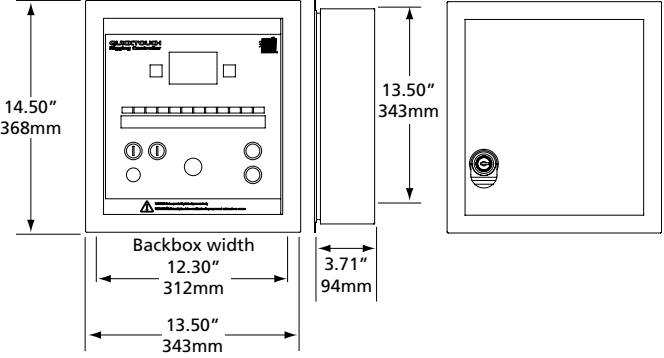
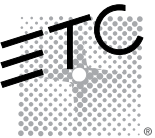
QT4-24 Surface



QT1 Flush



QT4-24 Flush



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US and International patents pending.

CDD15

High-Output Coaxial Differential Dispersion System

Features

- High-output, CDDTM passive two-way system
- Coaxial Differential DispersionTM technology
- Elegant birch plywood enclosure
- User-rotatable coaxial drive unit
- Vertical and horizontal mounting options
- Screw-free perforated steel grille
- 8Ω nominal impedance
- Integral inserts for eyebolt suspension
- Black or white standard colour options

Applications

- Live music clubs and bars
- Nightclubs
- Bars and restaurants
- Museums and AV spaces
- Convention centres
- Hotels
- Retail outlets
- Leisure centres
- Houses of Worship



Ideal for medium-to-large rooms, the CDD15 is a very high-power, passive two-way system designed for installations that demand the ultimate in sonic performance from a single enclosure. It combines very high output capability with exceptional fidelity and coverage consistency. Its coaxial drive unit comprises a powerful 15" (380mm)/3" (75mm) voice coil LF driver and a 1.4" (35mm) exit HF compression driver with a 3" (75mm) pure titanium diaphragm.

The Coaxial Differential Dispersion technology employed in the CDD15 delivers more consistent audience coverage than systems with fixed X° x Y° coverage patterns — projecting relatively more output to the rear of the audience, while having wide horizontal coverage close-up. Its innovative CDD driver achieves 'point source' summation of the LF and HF sections — eliminating off-axis variations in frequency response associated with non-coaxial designs. Improving on conventional coaxial designs, which can suffer from high-frequency beaming, the driver features a static waveguide that merges seamlessly with the unique cone shape — maintaining the dispersion pattern out to very high frequencies.

The visually-distinctive composite enclosure can be used in either horizontal (landscape) or vertical (portrait) orientation, with rotation of the driver easily accomplished by removing the screw-free, protective grille. The CDD15 can be suspended by eyebolts or by means of an optional horizontal yoke.

Finished in black (RAL9005) or white (RAL9016) as standard, the CDD15 can be supplied in any RAL colour to order.

A full-range, passive two-way system, the CDD15 should be used with a compatible controller with appropriate limiter settings to provide system protection.

When used with the DX4.0 controller or an iKON amplifier, there are now enhanced DSP and FIR based pre-sets to deliver the absolute maximum performance and fidelity while limiter settings protect the integrity of the system.

CDD15

High-Output Coaxial Differential Dispersion System

Technical Specifications

Acoustical

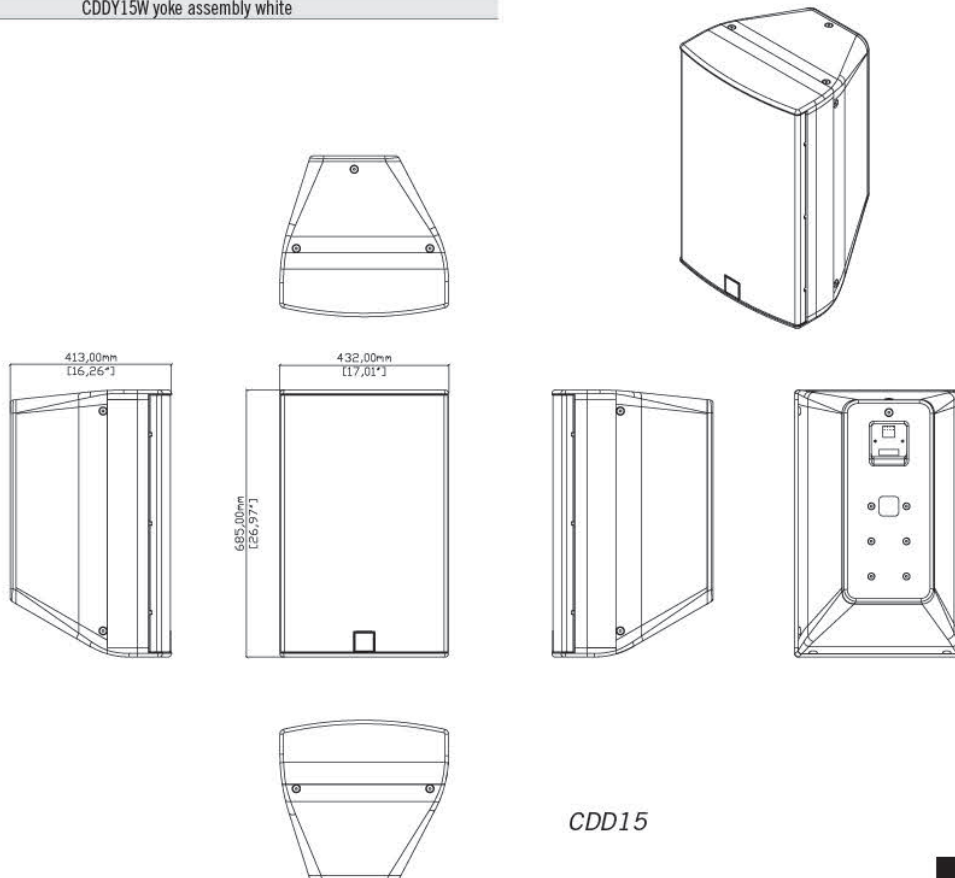
TYPE	High-output, Coaxial Differential Dispersion passive two-way system
FREQUENCY RESPONSE (5)	55Hz-18kHz $\pm$ 3dB, -10dB @ 45Hz
DRIVER	LF: 15" (380mm)/3" (75mm) voice coil, long excursion, shared ferrite motor system with HF HF: 1.4" (36mm) exit/3" (75mm) voice coil, titanium dome compression driver
RATED POWER (2)	400W AES, 1600W peak
RECOMMENDED AMPLIFIER	iK81, VIA5002, VIA5004
SENSITIVITY (8)	100dB
MAXIMUM SPL (9)	126dB continuous, 132dB peak
NOMINAL IMPEDANCE	8 ohms
DISPERSION (-6dB)	100°-60° horizontal, 60° vertical (user-rotatable)
CROSSOVER	1.6kHz passive
ENCLOSURE	68 litre, birch plywood
FINISH	Black or white textured paint
PROTECTIVE GRILLE	Black or white perforated steel with scrim cloth backing
CONNECTORS	Low profile 20A push-lock
PIN CONNECTIONS	Left to right: Input+, Input -, Link -, Link+
FITTINGS	10 x M8 fly points
DIMENSIONS	(W) 432mm x (H) 685mm x (D) 413mm (W) 17.01ins x (H) 26.97ins x (D) 16.26ins
WEIGHT	26kg (57.32lbs)
ACCESSORIES	CDDY15B yoke assembly black CDDY15W yoke assembly white

Notes

- (1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half (2pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open (4pi) space at 2 metres, then referred to 1 metre.
- (6) Measured in open (4pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.
- (9) Calculated at 1 metre.
- (10) Measured in half (2pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.

Trade Descriptions Act

Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice. Martin Audio is committed to refining state of the art sound reinforcement, combining in-depth product and field applications research with advanced manufacturing techniques. Every Martin Audio product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.



CDD15

SXCF118

Compact Cardioid Flown Subwoofer



Features

- Compact, cardioid flown subwoofer
- Front facing 18" (460mm)/4" (100mm) voice coil driver
- Rear facing 14" (356mm)/3.5" (88mm) voice coil driver
- Cardioid dispersion pattern
- 28dB rear rejection at 75Hz
- High output capability
- Tour-grade plywood enclosure

Applications

- Live sound reinforcement
- Fixed installations
- Theatre sound
- Corporate AV events



The SXCF118 is a compact, high performance cardioid subwoofer. The flown version of the SXCF118, it is the ideal partner for flown WPS arrays — combining maximum low frequency output with pattern control. It features an 18" (460mm) forward facing driver and a 14" (356mm) rear facing driver, each driven independently by separate amplifier channels and DSP. Each driver has its own chamber with optimised bass reflex porting.

This arrangement produces a cardioid dispersion pattern which maximises the front radiation and reduces unwanted radiation behind the subwoofer. The recommended iK42 amplifier optimises the DSP parameters for front and rear drivers to maximise the rear rejection — from 21dB at 43Hz to 28dB at 75Hz. This keeps low frequencies away from stages and walls as well as reducing reverberant energy in the room — greatly improving low frequency response accuracy and impact.

In front of the enclosure, the output from the two drivers is additive, giving an extra 2dB of output when compared with a conventional 1 x 18" subwoofer.

The enclosure is constructed from tour-grade plywood and finished with a hard-wearing textured polyurea coating. It is equipped with four grab handles and foam-backed perforated steel grilles protect the front and rear drivers. Integral flying hardware, coupled with the WPSGRIDT, allows the SXCF118 to be incorporated at the top of a WPS array, or flown as a separate array alongside. Interlocking skids prevent movement when stacked and a threaded plate in the top surface facilitates pole-mounting of up to 4 WPM enclosures or a single point source enclosure.

The addition of the input cover accessory makes the SXCF118 weather resistant and suitable for outdoor usage.

SXCF118

Compact Cardioid Flown Subwoofer

Technical Specifications

TYPE	Compact, cardioid subwoofer
FREQUENCY RESPONSE (1)	43Hz – 150Hz $\pm$ 3dB, -10dB @ 34Hz
DRIVERS	18" (460mm)/4" (100mm) voice coil, long excursion, ferrite magnet, waterproof cone 14" (356mm)/3.5" (88mm) voice coil, long excursion, neodymium magnet, waterproof cone
RATED POWER (2)	18": 1000W AES, 4000W peak 14": 800W AES, 3200W peak
SYSTEM AMPLIFIER	iKON iK42
SENSITIVITY (10)	104dB
MAXIMUM SPL(9)	140dB peak
NOMINAL IMPEDANCE	18": 8 ohms, 14": 8 ohms
DISPERSION	Cardioid
ENCLOSURE	Multi-laminate birch ply
FINISH	Textured black polyurea
PROTECTIVE GRILLE	Black HEX perforated steel
CONNECTOR	2 x NL4
PIN CONNECTIONS (INPUT)	18": +1, -1; 14": +2, -2
PIN CONNECTIONS (LINK)	18": +1, -1; 14": +2, -2
FITTINGS	Two skids on base, with mating channels on top M20 top-mounted thread plate for pole mounting Two bar handles on each side Four fittings for optional transit cover
DIMENSIONS (INCL SKIDS)	(W) 650mm x (H) 611mm x (D) 812mm (940mm incl castors) (W) 25.6in x (H) 24.1in x (D) 32.0in (37.0in incl castors)
WEIGHT	75kg (165lbs), 78kg (172 lbs) incl castors
ACCESSORIES	Transit cover

Notes

- (1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half (2pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open (4pi) space at 2 metres, then referred to 1 metre.

Architectural Specifications

The loudspeaker shall be a compact cardioid subwoofer capable of being ground-stacked or flown. It shall consist of an 18" reflex-loaded transducer radiating to the front of the enclosure and a 14" reflex-loaded transducer radiating to the rear. The transducers shall be driven independently by separate channels of a dedicated controller amplifier.

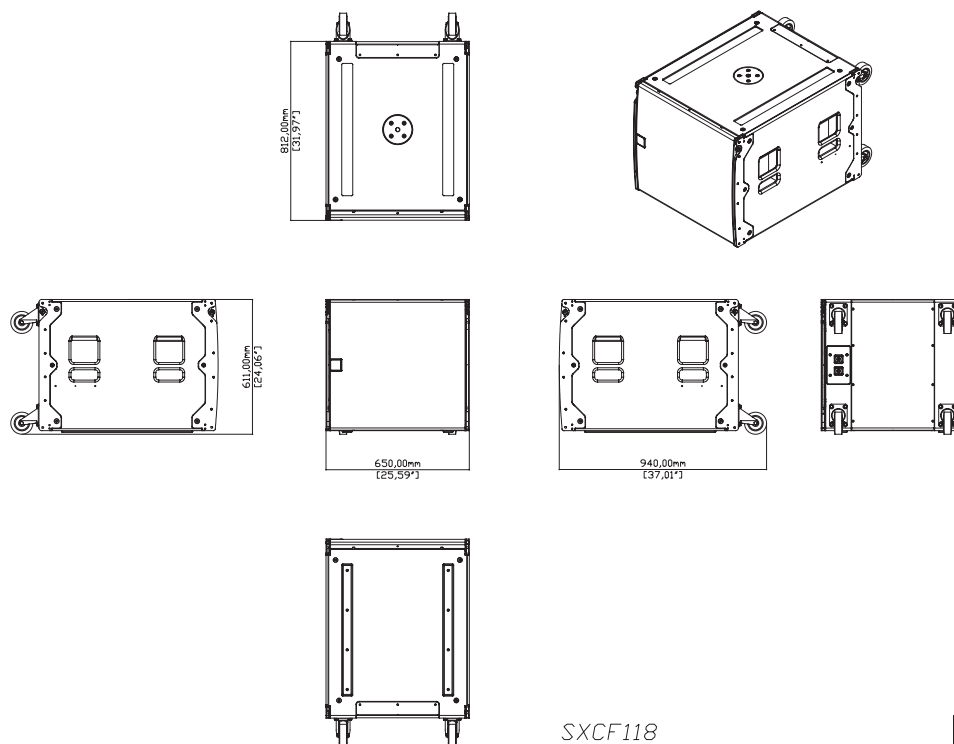
Power handling of the 18" transducer shall be 1000W AES, 4000W peak and power handling of the 14" transducer shall be 800W AES, 3200W peak. Rated impedance of each transducer shall be 8 ohms. The on-axis frequency response shall be 43Hz-150kHz $\pm$ 3dB and the loudspeaker shall produce a maximum SPL of 140dB peak calculated at 1 metre.

The loudspeaker enclosure shall be constructed from multi-laminate birch ply with a textured polyurea coating. The rear connector panel shall be fitted with two NL4 type connectors. The drivers shall be protected by a perforated steel grille and the enclosure shall incorporate an integral rigging system to assemble an array of up to 16 enclosures suspended from a dedicated flying frame. The enclosure shall also be fitted with a threaded pole-mount plate, bar handles and skids.

Dimensions including skids and castors (W x H x D) shall be 650mm x 611mm x 940mm (25.6in x 24.1in x 37.0in). Weight including castors shall be 78kg / 172lbs.

The loudspeaker shall be the Martin Audio SXCF118.

- (6) Measured in open (4pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4pi) space at 2 metres with 2.83v input, using band limited pink noise, then referred to 1 metre.
- (9) Calculated at 1 metre.
- (10) Measured in half (2pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.



SXCF118

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www.martin-audio.com

CDD8

Ultra-Compact Coaxial Differential Dispersion System

Features

- Ultra-compact, CDD[™] passive two-way system
- Coaxial Differential Dispersion[™] technology
- Elegant UPM Formi composite enclosure
- User-rotatable coaxial drive unit
- Vertical and horizontal mounting options
- Screw-free perforated steel grille
- 8Ω nominal impedance
- Discreet mounting accessories
- Black or white standard colour options

Applications

- Live music clubs and bars
- Nightclubs
- Bars and restaurants
- Museums and AV spaces
- Convention centres
- Hotels
- Retail outlets
- Leisure centres
- Houses of Worship



The CDD8 is an ultra-compact two-way passive loudspeaker system with an integrated 8" (200mm) LF/1" (25mm) exit HF Coaxial Differential Dispersion driver which can be easily rotated for horizontal or vertical orientation depending on venue design requirements. Its small size gives no indication of its high output capability. As a stand-alone loudspeaker, it has a multitude of applications and can also be incorporated as an infill loudspeaker in distributed systems using larger CDD models, such as the CDD12 and CDD15.

The Coaxial Differential Dispersion technology employed in the CDD8 delivers more consistent audience coverage than systems with fixed X° x Y° coverage patterns — projecting relatively more output to the rear of the audience, while having wide horizontal coverage close-up. Its innovative CDD driver achieves 'point source' summation of the LF and HF sections — eliminating off-axis variations in frequency response associated with non-coaxial designs. Improving on conventional coaxial designs, which can suffer from high-frequency beaming, the driver features a static waveguide that merges seamlessly with the unique cone shape — maintaining the dispersion pattern out to very high frequencies.

The visually-distinctive enclosure can be used in either horizontal (landscape) or vertical (portrait) orientation, with rotation of the driver easily accomplished by removing the screw-free, protective grille. The curved shape of the enclosure allows it to be surface-mounted close to a wall or ceiling by means of optional wall and ceiling brackets.

Finished in black (RAL9005) or white (RAL9016) as standard, the CDD8 can be supplied in any RAL colour to order.

A full-range, passive two-way system, the CDD8 should be used with a compatible controller with appropriate limiter settings to provide system protection.

When used with the DX4.0 controller or an iKON amplifier, there are now enhanced DSP and FIR based pre-sets to deliver the absolute maximum performance and fidelity while limiter settings protect the integrity of the system.

CDD8

Ultra-Compact Coaxial Differential Dispersion System

Technical Specifications

Acoustical

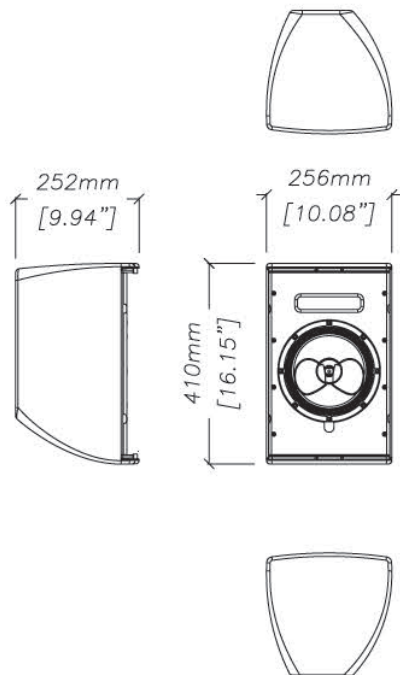
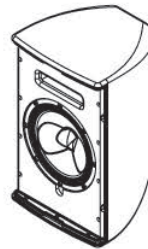
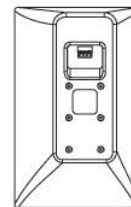
TYPE	Ultra-compact, Coaxial Differential Dispersion passive two-way system
FREQUENCY RESPONSE (5)	70Hz-20kHz $\pm$ 3dB, -10dB @ 55Hz
DRIVER	LF: 8" (200mm)/2" (50mm) voice coil, long excursion, shared ferrite motor system with HF HF: 1" (25mm) exit/1.4" (38mm) voice coil, polyimide dome compression driver
RATED POWER (2)	200W AES, 800W peak
RECOMMENDED AMPLIFIER	iK81, VIA2502, VIA2004
SENSITIVITY (8)	94dB
MAXIMUM SPL (9)	117dB continuous, 123dB peak
NOMINAL IMPEDANCE	8 ohms
DISPERSION (-6dB)	110°-80° horizontal, 60° vertical (user-rotatable)
CROSSOVER	2.3kHz passive
ENCLOSURE	14 litre, composite material
FINISH	Black or white textured paint
PROTECTIVE GRILLE	Black or white perforated steel with scrim cloth backing
CONNECTORS	Low profile 13A push-lock
PIN CONNECTIONS	Left to right: Input+, Input -, Link -, Link +
FITTINGS	6 x M6 inserts for wall/ceiling brackets
DIMENSIONS	(W) 256mm x (H) 410mm x (D) 252mm (W) 10.1ins x (H) 16.1ins x (D) 9.9ins
WEIGHT	9.5kg (21lbs)
ACCESSORIES	CDDWB6/8B wall bracket black CDDWB6/8W wall bracket white CDDCB6/8B ceiling bracket black CDDCB6/8W ceiling bracket white

Notes

- (1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half (2pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open (4pi) space at 2 metres, then referred to 1 metre.
- (6) Measured in open (4pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.
- (9) Calculated at 1 metre.
- (10) Measured in half (2pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.

Trade Descriptions Act

Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice. Martin Audio is committed to refining state of the art sound reinforcement, combining in-depth product and field applications research with advanced manufacturing techniques. Every Martin Audio product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.



CDD8

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CDD6

Ultra-Compact Coaxial Differential Dispersion System

Features

- Ultra-compact, CDD™ passive two-way system
- Coaxial Differential Dispersion™ technology
- Elegant UPM Formi composite enclosure
- User-rotatable coaxial drive unit
- Vertical and horizontal mounting options
- Screw-free perforated steel grille
- 8Ω nominal impedance
- Discreet mounting accessories
- Black or white standard colour options

Applications

- Bars and restaurants
- Museums and AV spaces
- Convention centres
- Hotels
- Retail outlets
- Leisure centres
- Houses of Worship



The ultra-compact CDD6 is a two-way passive loudspeaker system designed to fulfil the requirement for full-frequency dynamic performance from a very small enclosure. Featuring a 6.5" (165mm) LF/1" (25mm) HF Coaxial Differential Dispersion driver, its extremely small size and sleek lines make it ideal for visibly-unobtrusive applications. It can also be used as a fill system in conjunction with larger CDD Series models and, with the addition of an SX subwoofer, can reproduce surprisingly high levels of music program.

The Coaxial Differential Dispersion technology employed in the CDD6 delivers more consistent audience coverage than systems with fixed X° x Y° coverage patterns — projecting relatively more output to the rear of the audience, while having wide horizontal coverage close-up. Its innovative CDD driver achieves 'point source' summation of the LF and HF sections — eliminating off-axis variations in frequency response associated with non-coaxial designs. Improving on conventional coaxial designs, which can suffer from high-frequency beaming, the driver features a static waveguide that merges seamlessly with the unique cone shape — maintaining the dispersion pattern out to very high frequencies.

The visually-distinctive enclosure can be used in either horizontal (landscape) or vertical (portrait) orientation, with rotation of the driver easily accomplished by removing the screw-free, protective grille. The curved shape of the enclosure allows it to be surface-mounted close to a wall or ceiling by means of optional wall and ceiling brackets.

Finished in black (RAL9005) or white (RAL9016) as standard, the CDD6 can be supplied in any RAL colour to order.

A full-range, passive two-way system, the CDD6 should be used with a compatible controller with appropriate limiter settings to provide system protection.

When used with the DX4.0 controller or an iKON amplifier, there are now enhanced DSP and FIR based pre-sets to deliver the absolute maximum performance and fidelity while limiter settings protect the integrity of the system.

CDD6

Ultra-Compact Coaxial Differential Dispersion System

Technical Specifications

Acoustical

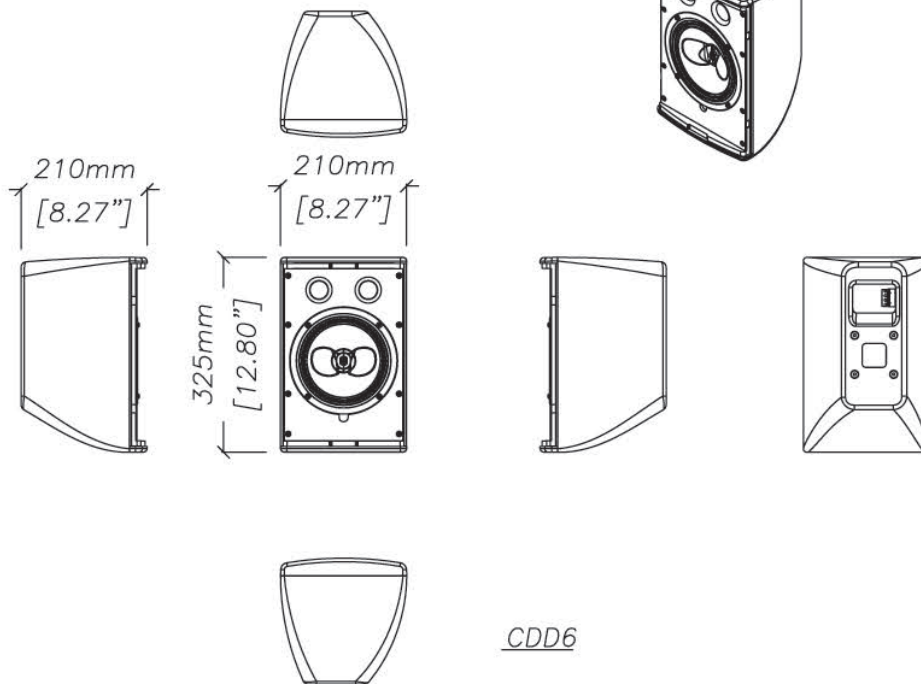
TYPE	Ultra-compact, Coaxial Differential Dispersion passive two-way system
FREQUENCY RESPONSE (5)	80Hz-20kHz $\pm$ 3dB, -10dB @ 70Hz
DRIVER	LF: 6.5" (165mm)/1.5" (38mm) voice coil, long excursion, ferrite motor system HF: 1" (25mm) voice coil, fabric dome with neodymium motor system
RATED POWER (2)	150W AES, 600W peak
RECOMMENDED AMPLIFIER	iK81, VIA2502, VIA2004
SENSITIVITY (8)	91dB
MAXIMUM SPL (9)	113dB continuous, 119dB peak
NOMINAL IMPEDANCE	8 ohms
DISPERSION (-6dB)	110°-80° horizontal, 80° vertical (user-rotatable)
CROSSOVER	2.5kHz passive
ENCLOSURE	9 litre, composite material
FINISH	Black or white textured paint
PROTECTIVE GRILLE	Black or white perforated steel with scrim cloth backing
CONNECTORS	Low profile 13A push-lock
PIN CONNECTIONS	Left to right: Input+, Input -, Link -, Link +
FITTINGS	4 x M6 inserts for wall/ceiling brackets
DIMENSIONS	(W) 210mm x (H) 325mm x (D) 210mm (W) 8.3ins x (H) 12.8ins x (D) 8.3ins
WEIGHT	5.69kg (12.54lbs)
ACCESSORIES	CDDWB6/8B wall bracket black CDDWB6/8W wall bracket white CDDCB6/8B ceiling bracket black CDDCB6/8W ceiling bracket white

Notes

- (1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
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- (7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
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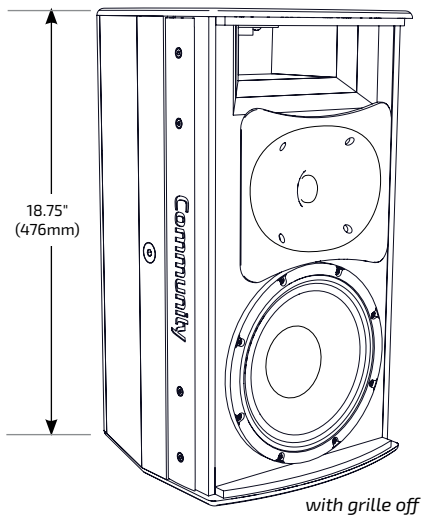
CDD6

I SERIES

Compact 600

IC6-1082/96

HIGH OUTPUT 8-INCH TWO-WAY
90° x 60° INSTALLATION LOUDSPEAKER



APPLICATIONS

MAIN PA or DISTRIBUTED

Restaurants · Presentation Suites · Auditoriums
Retail Spaces · Smaller Houses of Worship · Stadiums
Theme Parks · Cruise Ships · Entrance Halls

FILL or DELAY

Houses of Worship · Auditoriums · Arenas · Stadiums
Theaters · Themed Entertainment · Under Balcony
Stage Lip Fill

DESCRIPTION

I SERIES Compact 600 loudspeakers provide excellent acoustic performance, flexibility and elegant aesthetics for a diverse range of applications in today's performance venues. Designed to support the goals of systems integrators and consultants in need of very compact loudspeakers with exceptional near field fidelity for foreground or background music applications and articulate voice projection with very high output capabilities for fill and distributed applications. I SERIES Compact loudspeakers are engineered to be used alone or integrated into arrays along with I SERIES Point Source (IP) or Subwoofer (IS) models using the comprehensive selection of available BalancePoint™ Flyware modular array brackets.

The IC6-1082/96 is designed for maximum performance in a minimal size enclosure. The large, rotatable horn coupled to a 1.75" (44mm) diaphragm HF driver provides consistent directivity and smooth response through the critical voice band, then seamlessly integrates with the high output 8" LF through the crossover region. The precisely engineered low velocity, flared port ensures low distortion, extended LF performance at any output level. Additionally, 8 ohm or 70V/100V models expand application flexibility both indoors and out. Multiple attachment points provide compatibility with a variety of Community and third party mounting brackets.

FEATURES

- Excellent LF extension and output in a very small enclosure
- Exceptional fidelity with elegant I SERIES aesthetics
- Large, field-rotatable HF horn for smooth, consistent coverage
- Low impedance (8 ohm) or 70V/100V models available
- Low profile U-Bracket or Vertical Yoke available, compatible with most third party wall and ceiling brackets

TECHNICAL SPECIFICATIONS¹

Operating Mode	Low Impedance or 70V/100V models				
Operating Environment	Indoor or Weather-Resistant Outdoor				
Operating Range ²	53 Hz to 20 kHz				
Nominal Beamwidth (H x V)	90° x 60°, rotatable waveguide				
Transducers	LF 1 x 8" (203mm) ferrite driver, 1.8" (45mm) voice coil HF 1 x 1" (25mm) exit, 1.75" (44mm) voice coil, advanced polymer diaphragm, ferrite compression driver				
Continuous Power Handling ³ @ Nominal Impedance	Passive*	45V	250W @ 8 ohms (1000W peak)		
Autoformer Taps/Impedance IC6-1082T96 IC6-1082WT96	70V 200W 100W 50W 25W	@ 70.7V 25 Ω 50 Ω 100 Ω 200 Ω	100V 200W 100W 50W	@ 100V 50 Ω 100 Ω 200 Ω	
Nominal Sensitivity ⁴	@ 1W/1m 95 dB	@ 2.83V 95 dB			
Nominal Maximum SPL ⁵ (Whole Space)	Peak 125 dB	Continuous 119 dB			
Equalized Sensitivity ⁶	@ 1W/1m 94 dB	@ 2.83V 94 dB			
Equalized Maximum SPL ⁷	Peak 124 dB	Continuous 118 dB			
Recommended Amplifiers	250W - 500W @ 8 ohms, (45V - 63V)				
PHYSICAL					
Input Connection	(1) Screw terminal block (5-position)				
Mounting Points	(7) M10 threaded inserts; (4) M8 threaded inserts (rear)				
Environmental	Outdoor: IP55W per IEC 60529, MIL-STD-810G				
Weight IC6-1082/96 IC6-1082WR96 IC6-1082T96 IC6-1082WT96	Indoor 25 lbs (11.3 kg) loudspeaker 29 lbs (13.2 kg) loudspeaker		Weather-Resistant 19.2 lbs (8.7 kg) loudspeaker 23.2 lbs (10.5 kg) loudspeaker		
Dimensions H x W x D	18.75" x 10.40" x 10.63" (476 x 264 x 270 mm)				
Finish	Refer to the Technical Drawing				
OPTIONS					
Accessories	IUB1082 U-Bracket / IVY1082 Vertical Yoke - color matched to cabinet Various third party wall, ceiling and pan/tilt mounts (refer to IC6 IUB/IVY manual for models)				
Configure-to-Order (CTO)	Custom color; factory-rotated horns for horizontal cabinet orientation; custom cable length for weather-resistant models				

¹Rated continuous maximum input voltage at passive loudspeaker input may be higher than for directly connected transducers due to losses in the passive crossover. Voltages applied to the transducer terminals through the passive crossover shall always be the same or lower than the rated continuous voltage for each device.

Community strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.

I SERIES Compact 600

IC6-1082/96

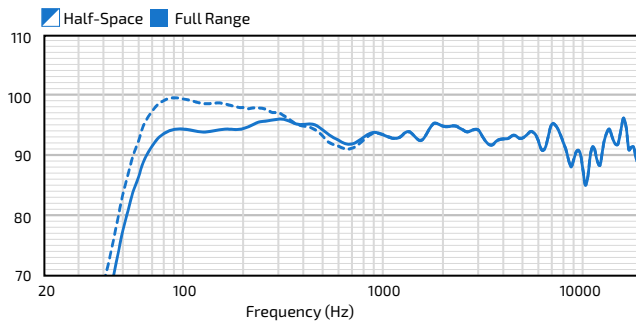
HIGH OUTPUT 8-INCH TWO-WAY
90° x 60° INSTALLATION LOUDSPEAKER

Community®

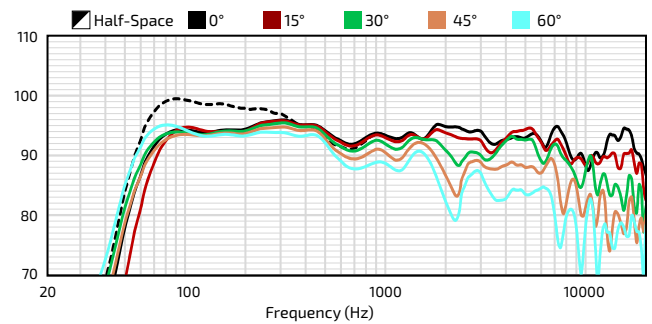
Factory Standard
Portrait Orientation



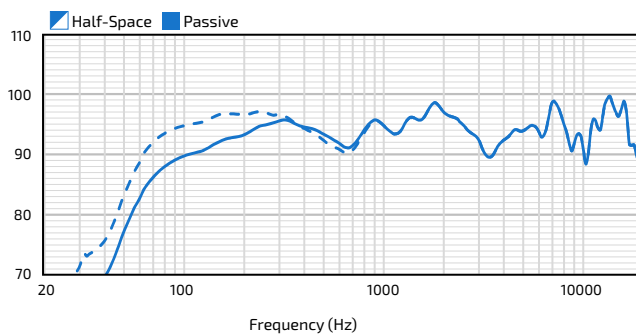
AXIAL PROCESSED RESPONSE (dB)⁸



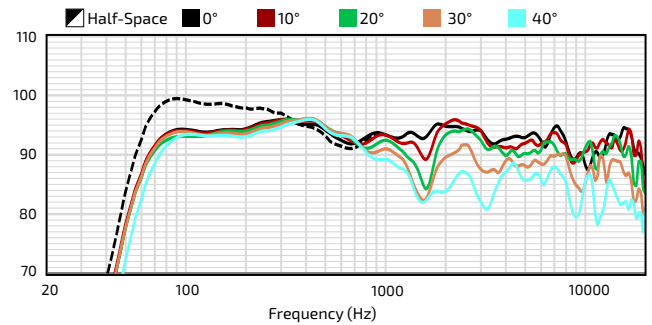
HORIZONTAL OFF-AXIS RESPONSE (dB)¹⁰



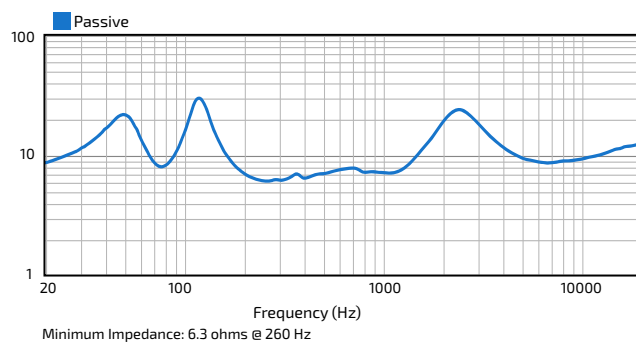
AXIAL SENSITIVITY (dB SPL)⁹



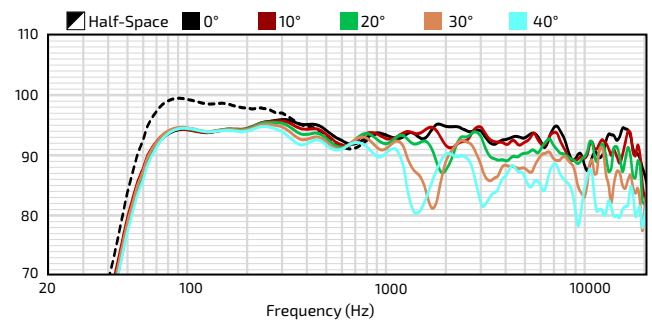
VERTICAL OFF-AXIS UP RESPONSE (dB)¹⁰



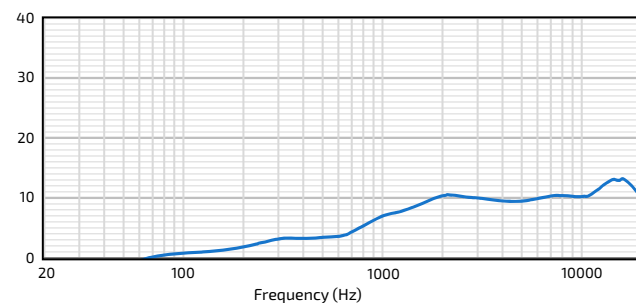
IMPEDANCE (Ohms)



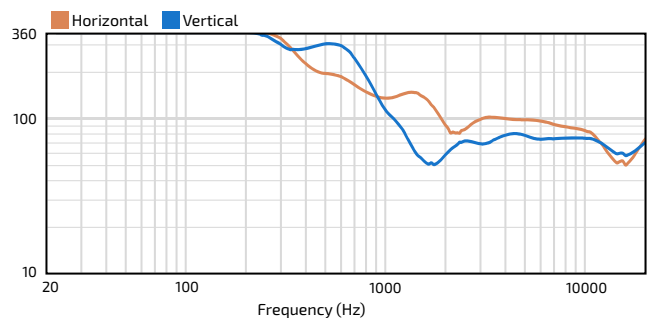
VERTICAL OFF-AXIS DOWN RESPONSE (dB)¹⁰



DIRECTIVITY INDEX (dB)¹¹



BEAMWIDTH (Degrees)¹²



I SERIES Compact 600

IC6-1082/96

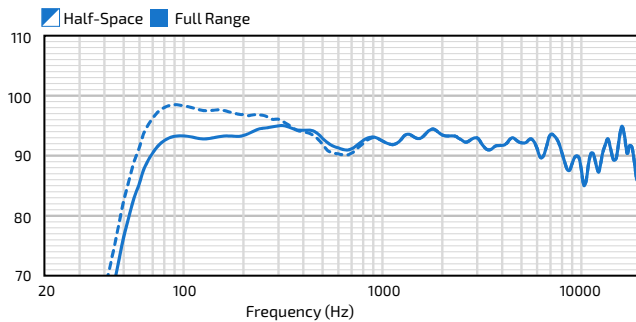
HIGH OUTPUT 8-INCH TWO-WAY
90° x 60° INSTALLATION LOUDSPEAKER

Community®

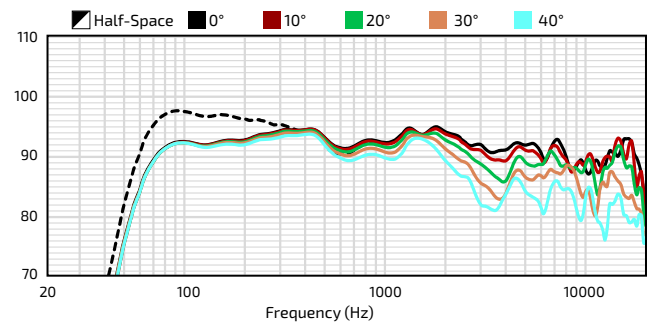


Landscape Orientation

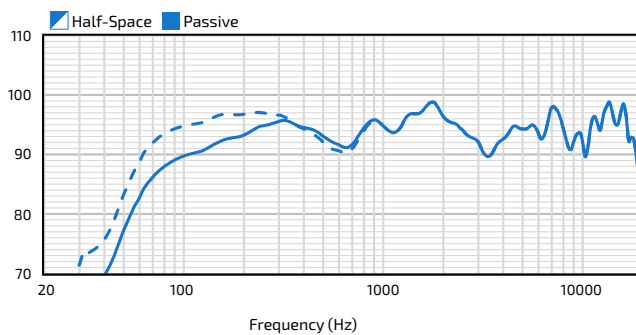
AXIAL PROCESSED RESPONSE (dB)⁸



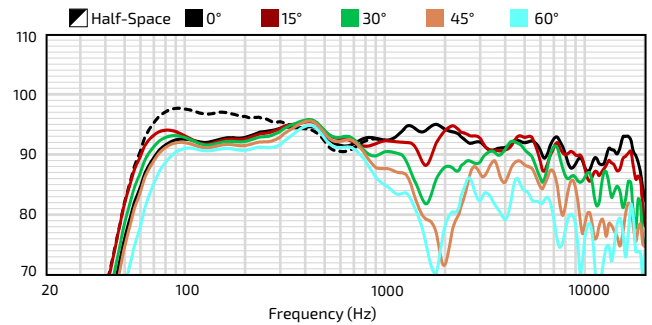
VERTICAL OFF-AXIS RESPONSE (dB)¹⁰



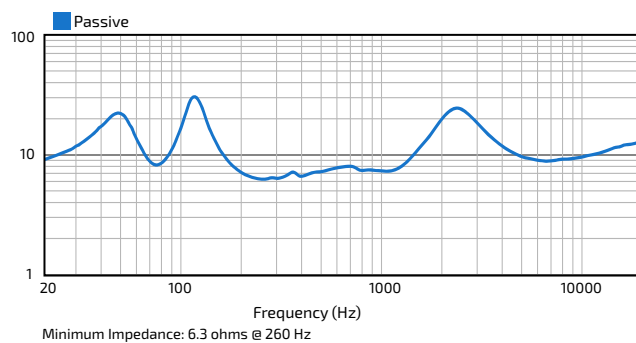
AXIAL SENSITIVITY (dB SPL)⁹



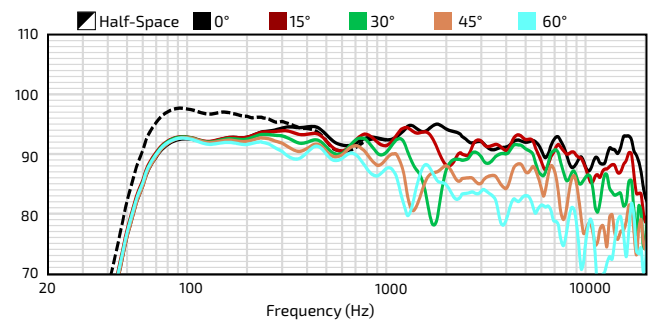
HORIZONTAL OFF-AXIS LEFT RESPONSE (dB)¹⁰



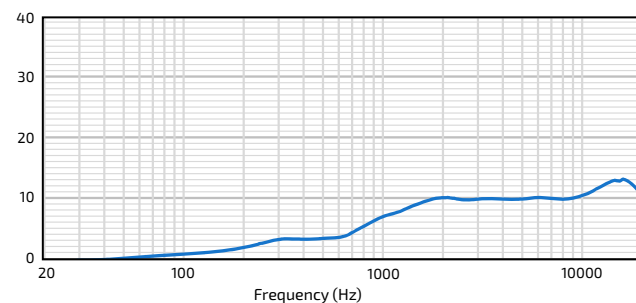
IMPEDANCE (Ohms)



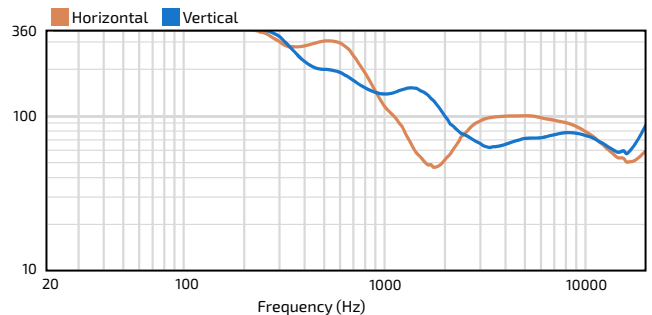
HORIZONTAL OFF-AXIS RIGHT RESPONSE (dB)¹⁰



DIRECTIVITY INDEX (dB)¹¹



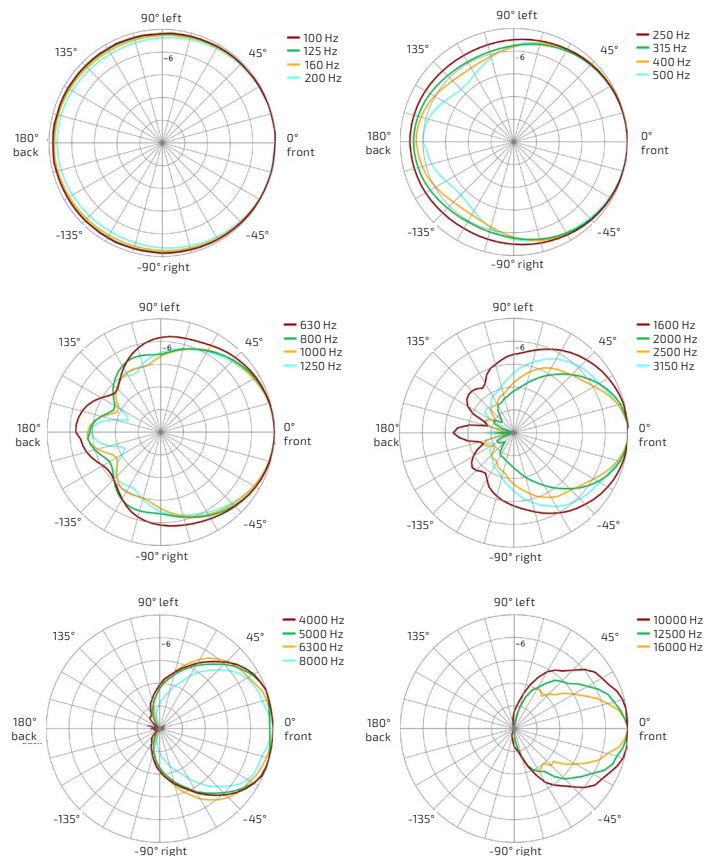
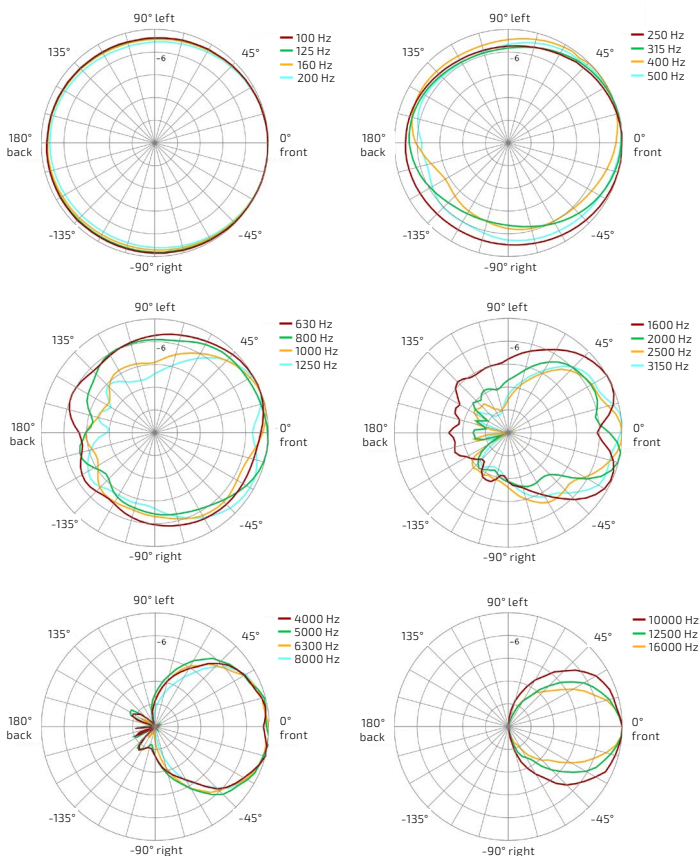
BEAMWIDTH (Degrees)¹²



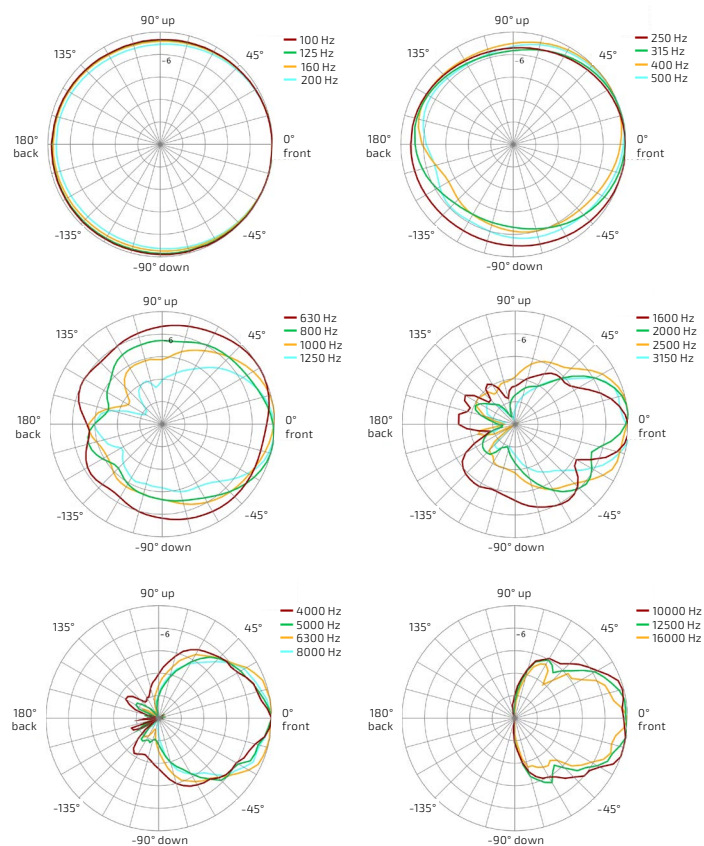
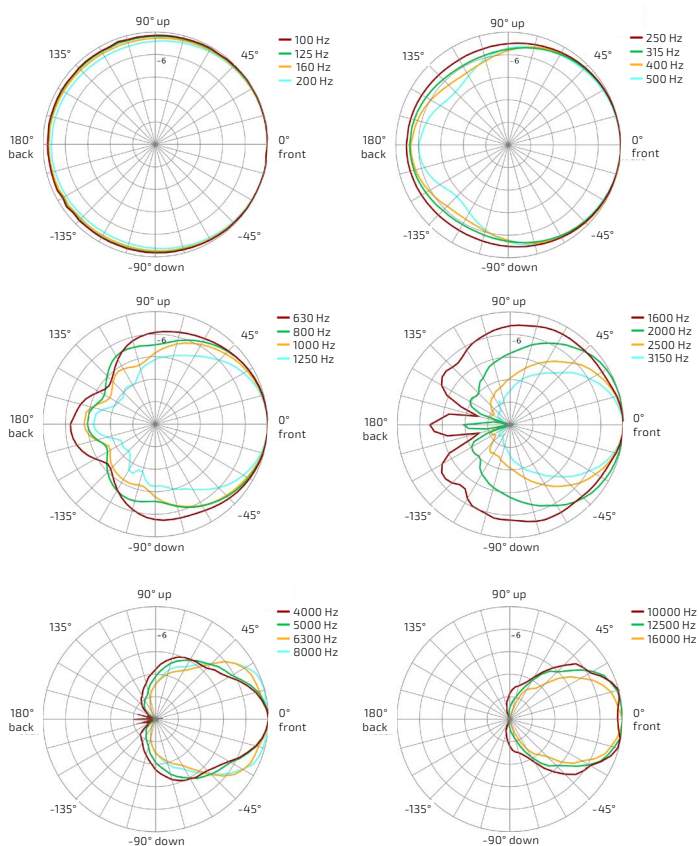
90° x 60° PORTRAIT CABINET

90° x 60° LANDSCAPE CABINET

HORIZONTAL POLAR DATA



VERTICAL POLAR DATA



IC6-1082/96

HIGH OUTPUT 8-INCH TWO-WAY
90° x 60° INSTALLATION LOUDSPEAKER

TECHNICAL DRAWING / DIMENSIONS / FINISH

H x W x D

18.75" x 10.40" x 10.63"
(476 x 264 x 270 mm)

Unit Weight

25 lbs (11.3 kg) / IC6-1082/26 loudspeaker
29 lbs (13.2 kg) / IC6-1082T26 loudspeaker

Shipping Weight

30 lbs (13.5 kg) / IC6-1082/26 loudspeaker
34 lbs (15.3 kg) / IC6-1082T26 loudspeaker

Indoor Models:

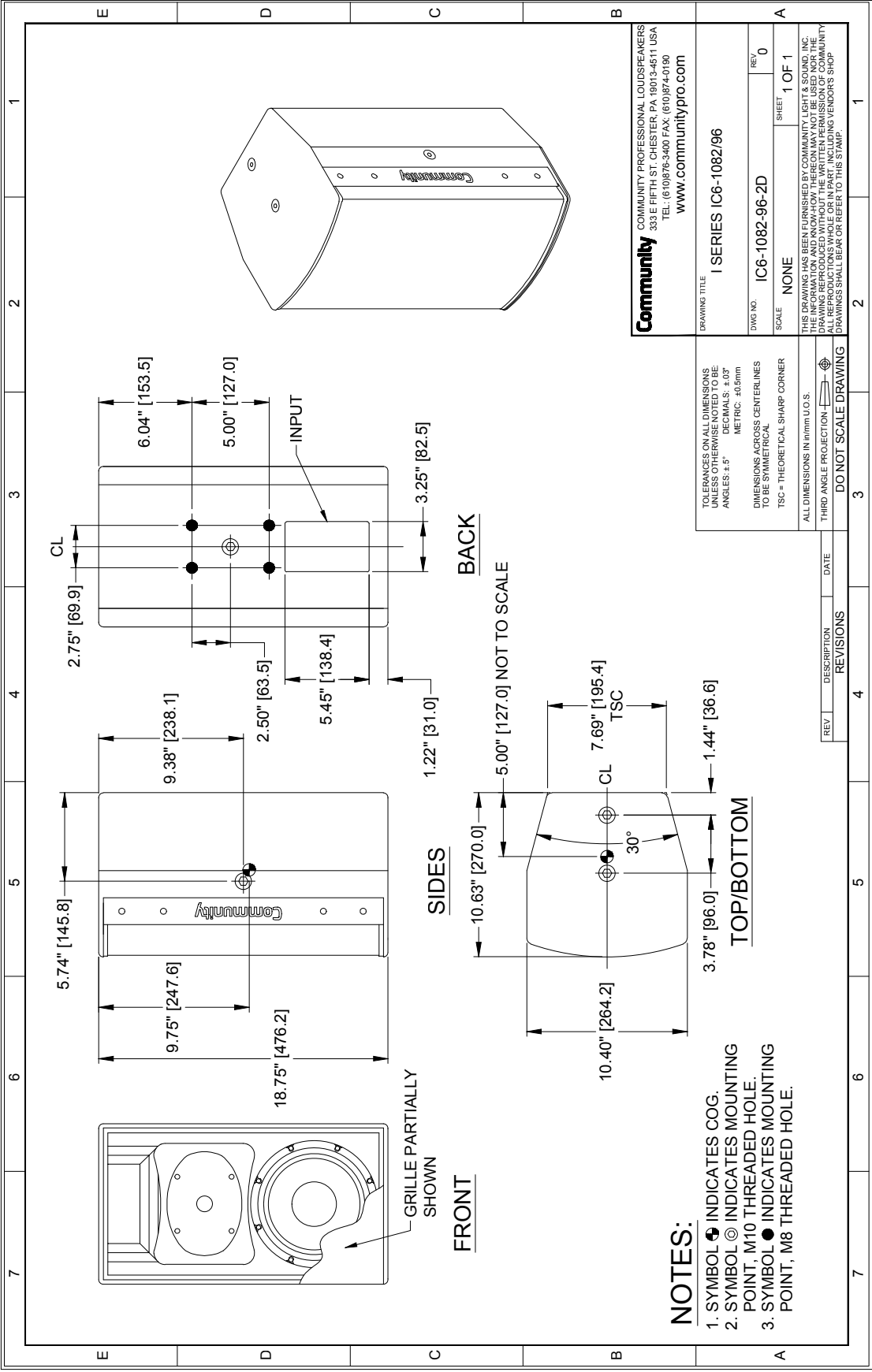
Grille: Powder-coated perforated steel backed with color-matched acoustically transparent woven fabric. Black (RAL#9005) or White (RAL#9003)

Enclosure / Finish: Black (RAL#9005) or White (RAL#9003) low gloss, uniformly textured painted 15mm Baltic Birch plywood.

Outdoor Models:

Grille: Marine grade aluminum with zinc-rich dual-layer powder-coat, featuring hydrophobic treatment on acoustically transparent woven black fabric backing.

Enclosure / Finish: 15mm PolyGlas™, Grey (RAL#7038), heavily textured industrial-grade exterior-rated coating.



*Note: The transformer and outdoor model drawings are available at communitypro.com
On the WR/WT models the input connection differs and the units weigh less than their respective indoor models

I SERIES

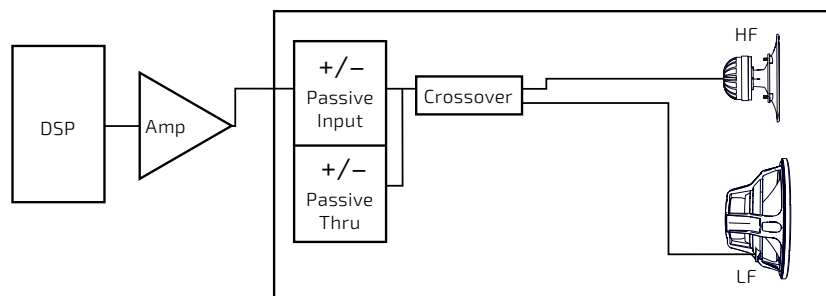
Compact 600

IC6-1082/96

HIGH OUTPUT 8-INCH TWO-WAY

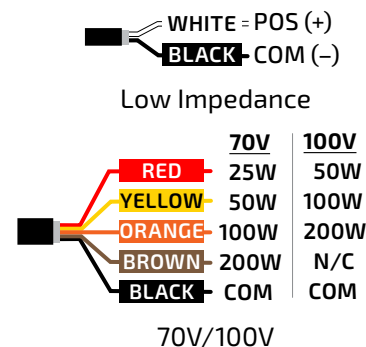
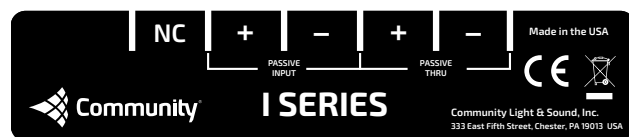
90° x 60° INSTALLATION LOUDSPEAKER

CONNECTION DIAGRAMS

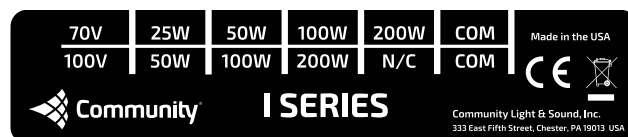


Two-way single amp

WEATHER-RESISTANT INPUT CABLE



Low Impedance Input Panel (Indoor)



70V / 100V Input Panel (Indoor)

NOTES

- PERFORMANCE SPECIFICATIONS** All measurements are taken indoor using a time-windowed and processed signal to eliminate room effects, approximating an anechoic environment, a distance of 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP with settings provided by Community Professional Loudspeakers is required to achieve the specified performance; further performance gains can be realized using Community's dSPEC226 loudspeaker processor with FIR power response optimization.
- OPERATING RANGE** The frequency range in which the on-axis processed response remains within 10dB of the average SPL.
- CONTINUOUS POWER HANDLING** Maximum continuous input voltage (and the equivalent power rating, in watts, at the stated nominal impedance) that the system can withstand, without damage, for a period of 2 hours using an EIA-426-B defined spectrum; with recommended signal processing and protection filters.
- NOMINAL SENSITIVITY** Averaged SPL over the operating range with an input voltage that would produce 1 Watt at the nominal impedance and the averaged SPL over the operating range with a fixed input voltage of 2.83V, respectively; swept sine wave axial measurements with no external processing applied in whole space, except where indicated.
- NOMINAL MAXIMUM SPL** Calculated based on nominal / peak power handling, respectively, and nominal sensitivity; exclusive of power compression.
- EQUALIZED SENSITIVITY** The respective SPL levels produced when an EIA-426-B signal is applied to the equalized loudspeaker system at a level which produces a total power of 1 Watt, in sum, to the loudspeaker subsections and also at a level which produces a total voltage, in sum, of 2.83V to the loudspeaker subsections, respectively; each referenced to a distance of 1 meter.
- EQUALIZED MAXIMUM SPL** The SPL produced when an EIA-426-B signal is applied to the equalized loudspeaker system, at a level which drives at least one subsection to its rated continuous input voltage limit, referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6dB) crest factor of the EIA-426-B test signal.
- AXIAL PROCESSED RESPONSE** The on-axis variation in acoustic output level with frequency of the complete loudspeaker system with recommended signal processing applied. 1/6 octave Gaussian smoothing applied.
- AXIAL SENSITIVITY** The on-axis variation in acoustic output level with frequency for a 1 Watt swept sine wave, referenced to 1 meter with no signal processing. 1/6 octave Gaussian smoothing applied.
- HORIZONTAL / VERTICAL OFF-AXIS RESPONSES** The loudspeaker's magnitude response at various angles off-axis, with recommended signal processing applied in the operating mode which utilizes the largest number of individually amplified pass bands. 1/6 octave Gaussian smoothing applied.
- DIRECTIVITY INDEX** The ratio of the on-axis SPL squared to the mean squared SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. 1/6 octave Gaussian smoothing applied.
- BEAMWIDTH** The angle between the -6dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. 1/6 octave Gaussian smoothing applied.

Data presented on this spec sheet represents a selection of the basic performance specifications for the IC6-1082. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: communitypro.com



Superb Performance, Exceptional Value

Drawing from years of experience and industry leading technologies like Complex Conic waveguides, CA/CX loudspeakers are designed to meet the needs of today's Installed-AV professionals, with a broad range of systems to provide effective solutions for every sound reinforcement challenge at competitive price points.

The new C Series loudspeakers incorporate the latest drivers to deliver clean, natural sound and tight pattern control. Unlike conventional loudspeaker designs, Coaxial designs result in consistent beamwidth over a wider frequency range, providing the natural, transparent sound that Renkus-Heinz is known for in even more compact packages.

Applications

- The CX/CA121M is a compact, 12" Coaxial loudspeaker perfect for any application where very small size, consistent directivity and great sonic performance are required.
- Stage monitoring for performance venues or rental/staging companies.
- Compact, high-output front-fill, or small pole mounted mains speaker using optional Pole Cup Adapter.
- Inherent baffle angle is ideal for cinema surround.
- Large format Under-Balcony.

Compact Design, Sizable Performance

The CX/CA121M was developed for applications needing consistent directivity and great sonics from a very compact cabinet. It features a coaxial transducer based on a 12" woofer and a 1.75" Voice Coil Compression Driver. The woofer and compression driver share a common motor structure for high performance in a very compact package. The result is natural, distortion free output at high sound pressure levels, ideal for all monitoring applications. The Coaxial design also results in ideal constant directivity, for optimal on and off axis performance.

Designed In Flexibility

Steep angle on the recessed input panels keep cable connectors contained with the footprint, resulting in clean stages. Standard 10 mm attachment points make installation and deployment simple and secure. The optional U-Bracket are available in either white or black paint for discrete installation, the optional M10 pole cup adapter is available for quick portable deployment, and combining the U-Bracket and the M10 pole adapter create an easy to use Yoke Mount for Pan and Tilt adjustment in portable scenarios.

Available externally powered or self-powered with the SA625 Amplifier. Self-Powered models bring RHAON II networking, monitoring and control, and Dante digital audio. Self-powered CA121M Models can power one additional CX121M with fully processed, bi-amplified NL4 outputs. This additional layer of flexibility can reduce total system cost, or for applications that require even higher output than a single CA/CX121M can provide.

CA/CX Series

CX121M

Non-Powered

CA121M-A

Powered, Analog

CA121M-RN

RHAON Empowered

CA121M-RD

RHAON & Dante Redundant

12" LF + 1.75" HF Two-way, Coaxial Stage Monitor



• Coaxial Design

Combines HF and MF output into a single source, allowing for high output in an surprisingly small package.

• Exceptional Performance

55 Hz to 20 kHz response and 130 dB, peak SPL.

• Available SA625 Amplifier

SA625 amplifier offers high output, full protection limiting, analog, and optional AES and Dante inputs.

• Self-Powered System Advantage

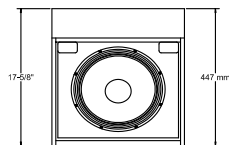
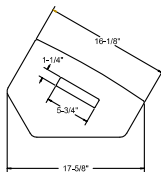
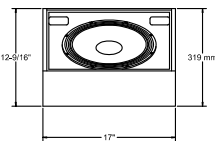
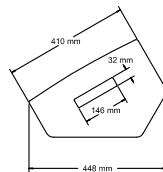
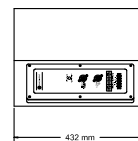
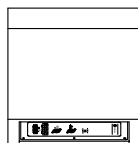
A single CA121M with the SA625 can power one additional CX121M with Bi-Amplified, processed output via an NL4 output.

CA/CX121M Specifications

	CX121M	CA121M-A	CA121M-RN & -RD
Connectors:	2 x Speakon® NL4 Four-place terminal strip, all paralleled	2 x XLR-3, In & Loop-out	2 x XLR-3, In & Loop-out, 2x Ethercon
Sensitivity:	96 dB (1W/1m, whole-space)	1.4 volt for rated output, analog	
Power Handling:	Passive: 300 W AES, 600 W @ 8 ohms, Bi-amp: 300 W AES, 600 W PGM @ 8 ohms, LF 60 W AES, 120 W PGM @ 8 ohms, HF	See SA625 amplifier specs below	
Crossover Frequency:	1.6 kHz, passive, bi-amp selectable	1.6 kHz active electronic	
Weight:		2.5 lbs/13.4 kg	
Frequency Response:		70 Hz to 18 kHz (-3 dB) 55 Hz to 20 kHz (-10 dB)	
Max. SPL:		130 dB (peak, half-space)	
Dispersion		90 x 90 Constant Directivity 33 Degree Monitor Angle	
Enclosure:		3/4" lite-ply plywood	
Grille:		16 GA powder-coated, plated steel	
Transducers:		Transducer: SSC12-1	
Finish:		Black (RAL9010) or White (RAL9011) paint	
Mounting:		2 x M10 attachment points. Optional: UBRKT/CT121MB (black), UBRKT/CT121MW (white) Optional: EEM-M10 Pole Mount Adapter (Black)	
Dimensions:		17 ^{-5/8} " w x 17" h x 12 ^{-9/16} " d 448 mm w x 432 mm h x 319 mm d	

SA625 Amplifier Specifications

	SA625-A	SA625-RN	SA625-RD (Brooklyn II)
Audio Connections:	2 x XLR-3, In & Loop-out, Analog	2 x XLR-3, In & Loop-out, Analog and AES	2 x XLR-3, In & Loop-out, Analog and AES 2 x RJ45 Dante Primary & Secondary Ethernet
Latency:	6.25 ms	6.25 ms	6.25 ms Analog & AES 6.25 ms + Dante transport latency
User DSP:	None	Eight fully parametric filters, high and low shelf, high and low pass filters, delay to 340 ms.	
Software:	None	RHAON II	
Max. Input Level:	+22 dBu, Analog	+22 dBu, Analog, 0 dBFS digital	+22 dBu, Analog, 0 dBFS digital
Network Connections:	None	2 x RJ45, Looping Ethernet/RHAON	2 x RJ45 Dante Primary & Secondary Ethernet/RHAON (Note: Dante and RHAON share a single or redundant Ethernet network.)
Power Output:	LF= 500 watts, @ 8 ohms / HF = 125 watts @ 8 ohms. Multi-band peak and thermal limiting on both channels protects the drivers. Neutrik NL4 provides processed, loop-out to second CX121M. (Looped-to loudspeaker must be in bi-amp mode.)		
Mains Voltage:	100-240 volts, 50/60 Hz auto-switching		
Power Consumption:	Idle: 200 mW. 1/8 power: 120 W (onset of limiting) 1/3 power: 240 W (hard limiting)		
Power Connector:	Neutrik powerCON TRUE-1		
Temperature Limits	Max.: 140° F/60° C, with no direct sun exposure; Min.: -22° F/-30° C; leave unit on to keep interior warm below 32° F/0° C.		



• 88C series

8 Channel Advanced Contractor Amplifiers



Linea Research 8 channel amplifiers present a unique combination of power and audio performance combining advanced DSP and network control with many contractor friendly features. Sharing the same feature set and form factor as the 44C series amplifiers and

available in models developing between 400 Watts and 2,500 Watts per channel (or 5,000 Watts for a bridged pair). Uniquely each channel can be optimised to deliver its power into 2, 4 or 8 Ohm nominal loads as well as 25V, 70V & 100V constant Voltage (CV) lines. This

offers designers and integrators unparalleled flexibility along with the cost effectiveness and space efficiency of an 8 channel product. Generous power reserves ensure that pristine sound quality is maintained even under the most extreme conditions.



- Eight channels of sonically pure Class D amplification
- Unique, precise, 96kHz digital signal processing
- Over-designed switch mode power supply
- Tamper-proof front panel
- Contractor friendly connectors
- Contact closure control ports and relay status outputs
- Ethernet, RS232 and RS485 for system control and monitoring
- Analogue, AES3 and Dante™ / AES67 audio inputs
- Powerful grouping and multi-layer EQ
- Fully designed and engineered by Linea's in-house development team
- Manufactured, tested, and supported entirely in the UK

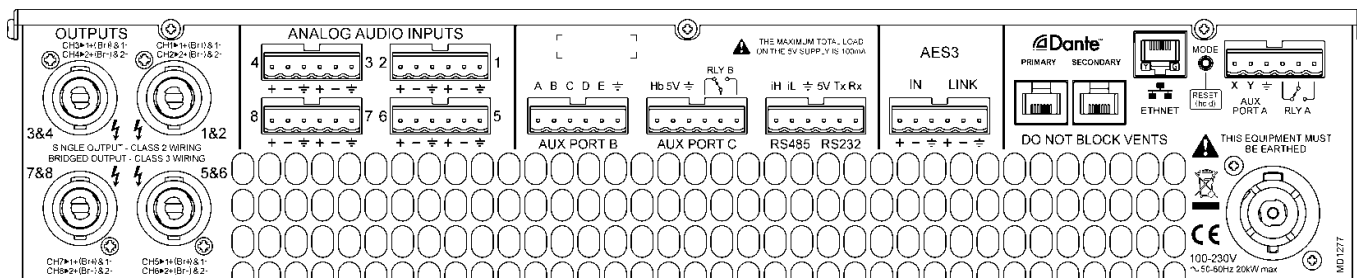
Power per channel, all channels driven

Model	88C20	88C10	88C06	88C03
2 Ohm	1,500	1,250	750	400
4 Ohm	2,500	1,250	750	400
8 Ohm	1,500	1,250	750	400

At Linea Research you will find a company which is committed to designing and producing the finest audio equipment in the world. Research and Development work is led by founder directors Ben Ver and Paul Williams who share a distinguished 25-year history at the top end of our industry. Together with the third founder, Davey Smalley who incorporated Linea in 2003, they have successfully supplied tens of thousands of products to all corners of the globe via OEM technical partners.

Linea Research products are now available under our own brand from a team of distribution partners who share a passion for and commitment to high end audio engineering.

When you choose Linea Research you will be working with people who design the products, people who use the products and above all, people who know pro audio and care about performance and quality:



General Specifications

Number of output channels	Eight
Total power output, all channels driven	20,000, 10,000, 6,000 and 3,000 Watts RMS
Audio inputs	8x Analogue, 2x AES3 and 8x Dante™ / AES67 (factory fitted option)
Digital Signal Processing	High performance 96kHz DSP on all inputs and outputs
Control, monitoring and system status alarms	Ethernet network, RS232 & RS485 Volt-free relay and contact closure ports. Heartbeat system health output
Power-save modes	Standby after user defined time with fast wake up on audio Deep ECO sleep after user defined time with wake up on command
System standby and wakeup	Network command, audio detection & contact closure

Power Output

Model	88C20	88C10	88C06	88C03
Power specification	RMS output power per channel, all channels driven with continuous program material and a nominal ambient temperature of 40°C / 105°F			
Crest Factor of 4 (12dB), 2 Ohm nominal load	1,500W	1,250W	750W	400W
Crest Factor of 2.8 (9dB), 4 Ohm nominal load	2,500W	1,250W	750W	400W
Crest Factor of 2 (6dB), 8 Ohm nominal load	1,500W	1,250W	750W	400W
Bridged, per channel pair, 4 or 8 Ohm load	3,000W / 5,000W	2,500W	1,500W	800W
25V line (CV) operation, Crest Factor 4 (12dB)	625W	625W	485W	355W
70V line (CV) operation, Crest Factor 4 (12dB)	1,970W	1,250W	750W	400W
100V line (CV) operation, Crest Factor 4 (12dB)	2,500W	1,250W	750W	400W

Audio Performance

Amplifier topology	Linea Research high performance Class D
Amplifier modulation scheme	Low feedback, multiple loop, with feed-forward error correction
Dynamic range Measured relative to the amplifier output	Analogue input, better than 113dBA typical AES / Dante™ input, better than 114dBA typical
Gain (with all the DSP level controls set to 0dB)	32dB
Frequency response, 4 Ohm load	<7Hz to >30kHz, 4 Ohms, -2.5dB points
Total harmonic distortion, THD	<0.05% typical, 1kHz signal, AES17 filter, 4 Ohm load
Inter-channel crosstalk, worst case combination	Better than -85dBr at 1kHz and -75dBr at 10kHz
Slew rate	>60V per microsecond typical
Damping factor (Ref 8 Ohms)	>800 at amplifier output (see Linea's "Damping factor debunked" white paper)
Maximum analogue input level	+20dBu
Analogue input sensitivity range for full output	0dBu to +20dBu, continuously adjustable
Analogue input (four channels)	Input 20k Ohm, electronically balanced, link directly connected to input
Analogue ground scheme	AES48 standard compliant
AES3 input (two audio channels)	Transformer isolated with unique active cable equalisation for extended range
AES3 link (two audio channels)	Active AES3 signal regeneration. Automatic direct bypass to the AES3 input ensuring the audio signal will still flow even when the amplifier is powered down
AES3 supported sampling rates	24kHz to 192kHz (auto locking)

Digital Signal Processing

Resolution	40 bit, Linea Research proprietary algorithms
Sample rate	96kHz throughout
Physical inputs to DSP drive modules	8x analogue, 2x AES & 8x Dante™ / AES67 inputs can be routed to four DSP drive modules
Drive module input processing	Input signal routing, Delay, Gain, HPF, Phase, Mute EQ: 2x low shelf, 6x PEQ / band pass and FIR shelving filters
Drive module output processing	Source, Delay, Gain, Phase, Mute, Crossover filters, VX limiters EQ: low shelf, 8x PEQ / band pass and shelving filters / 768 tap FIR
Preset management	10 snapshots for device wide setup, 50 presets for loudspeaker settings Presets can be recalled to sets of outputs or individual outputs as required
Unique high-performance processing	
Overlays	Twelve additional independent overlays of EQ, Delay and Gain Flexible grouping for effective control of many amplifier channels in large systems
Class leading VX limiters	See the 'speaker protection systems' section
Hardman crossover filters	Better out of band rejection than Linkwitz-Riley
LIR crossover filters	Unique Linear Phase alignments without the compromises of FIR filters

Power Supply

Topology (main power supply)	Linea Research high performance Series Resonant
Topology (auxiliary and standby supplies)	Low quiescent Eco-Flyback
Internally stored energy	>600 Joules
Nominal mains input voltage range	85V to 240V, Power supply automatically detects voltage and configures accordingly
Mains input frequency range	47Hz to 63Hz
Mains inrush current (max for <10ms)	6A at 115V, 12A at 230V

Protections Systems

Under all circumstances the control and protection systems will endeavour to deliver the maximum power possible for a given set of conditions, applying limiters only in extreme circumstances. Muting will only occur when a dangerous situation is detected, normal operation automatically resuming when the condition clears.

System protection	Speaker protection
Excessive power supply current or amplifier output current	Sustained clipping prevention
Excessive temperature per sub system: PSU, amplifier and DSP	DC offset protection
Mains voltage within acceptable limits	Excessive HF energy (VHF) limiter
Internal power rails producing correct output	
Fans operating at correct speed	VX audio output limiters
	Vx provides a linear phase virtual crossover and two limiter paths on each output. This unique system delivers effective protection for systems that incorporate passive crossovers.
Power distribution protection systems	Vx Limit Multiband peak limiter, two per output
Mains inrush current limiting for soft start and anti-surge	Vx Max Multiband overshoot limiter, two per output
Mains average current limiting for mains breaker management	X-Max Driver excursion limiter
Randomised initialisation when remotely powered up	T-Max Driver thermal limiter (long term power limiter)
Monitoring, measurements recorded against time	Monitoring, device statistics and counters
Supply current	Number of power cycles counted
Supply voltage	Number of mains brownout events counted
Thermal Capacity	Fan speeds continuously monitored
Each driver current	Fan under-speed events counted
Each driver impedance	Various protection mute events counted
Protection limiting for each output	Driver Impedance continuously monitored

An inbuilt notification system is provided that indicates problems to remote devices either via the network or the Volt-free changeover relay contacts accessible on the rear panel.

Physical

Cooling	Dual vari-speed fans, front to back airflow. Washable, tool-less change filter media.
Analogue IN and LINK	Phoenix™ pluggable terminal block (mating plug supplied)
AES3 IN and LINK	Phoenix™ pluggable terminal block (mating plug supplied)
Amplifier output	Neutrik Speakon™ NL4 connectors
Mains input connector	Neutrik 32A Powercon™
Dante Primary and Secondary	2x Shielded RJ45
Ethernet network	Shielded RJ45
RS232 and RS485	Phoenix™ pluggable terminal block (mating plug supplied)
Relay, 'heartbeat' outputs	Phoenix™ pluggable terminal block (mating plug supplied)
Contact closure inputs	Phoenix™ pluggable terminal block (mating plug supplied)
Front panel LED indicators	Per channel - Input level, output level & status
Enclosure, all models	Standard 19" 2U (88mm), 357mm (14") deep with handles and optional rear support
Net Weight	12.5kg (27.5 Lbs)



For more information about the 88C series amplifiers or Linea's other high-performance audio products, please contact us or your local dealer.

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Email: info@linea-research.co.uk
www.linea-research.co.uk





BP892x MicroSet® Omnidirectional Condenser Headworn Microphones



Broadcast & Production Microphones

Features

- Subminiature omnidirectional condenser capsule offers extremely intelligible, natural vocal reproduction
- Inconspicuous, lightweight headset with capsule diameter of just 2.6 mm is ideal for applications requiring minimum visibility
- Ergonomic under-ear design—the flexible, lightweight, contoured loop hooks behind the ear for an ultra-secure, comfortable fit even for those wearing glasses
- Detachable, field-replaceable cable with robust connector at the earset and a variety of available output terminations
- Handles high sound pressure levels with ease
- Wired version's power module (AT8545) includes a high-pass filter that provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality
- Comes with the AT8464x Dual-Ear Adapter Kit that converts the single-ear MicroSet to a unit that's worn on both ears for maximum stability and comfort
- Constructed of hypoallergenic materials

BP892x Description

The BP892x is a headworn condenser microphone with an omnidirectional polar pattern. It is designed to provide intelligible natural audio for stage and television talent, lecturers and houses of worship.

The microphone requires 11V to 52V phantom power for operation (wired only).

The microphone includes a 1.4 m (55") detachable, field-replaceable cable. Its free end connects to the provided AT8545 power module via a screw-down 4-pin connector. The connector is also available in a variety of terminations for use with Audio-Technica and other manufacturers' body-pack transmitters. The output of the power module is a 3-pin XLRM-type connector.

A recessed switch in the power module permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass UniSteep® filter) to help control undesired ambient noise.

The microphone comes equipped with a power module, a cable clip, a dual-ear mount, two windscreens, two element covers, a moisture guard, a belt clip and a protective carrying case. The microphone is available in black and beige.

Wireless MicroSet® Description

The BP892x is a headworn condenser microphone with an omnidirectional polar pattern. It is designed to provide intelligible natural audio for stage and television talent, lecturers, and worship leaders.

The microphone includes a 1.4 m (55") detachable, field-replaceable cable that is available in a variety of terminations for use in wired and wireless applications, as indicated below.

Cable Terminations

BP892x, BP892x-TH: Terminated with a cH-style screw-down 4-pin connector for use with the included AT8545 power module.

BP892xcH, BP892xcH-TH: Terminated with a cH-style screw-down 4-pin connector for use with Audio-Technica wireless systems featuring cH-style connector.

BP892xcW, BP892xcW-TH: Terminated with a cW-style locking 4-pin connector for use with Audio-Technica wireless systems featuring cW-style connector.

BP892xcLM3, BP892xcLM3-TH: Terminated for Sennheiser® wireless systems using locking 3.5 mm connector.

BP892xcT4, BP892xcT4-TH: Terminated with TA4F-type connector for Shure® wireless systems.

Model numbers ending in "TH" are beige.

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The wired models (BP892x, BP892x-TH) require 11V to 52V phantom power for operation. Included for this purpose is the AT8545 power module, which is equipped with a cH-style screw-down 4-pin input connector and a 3-pin XLRM-type output connector. A recessed switch in the power module permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass UniSteep® filter) to help control undesired ambient noise. A belt clip is also included to hold the power module.

All models of the microphone come with a cable clip, a dual-ear adapter kit, two windscreens, two element covers, a moisture guard, and a protective carrying case. The microphone is available in black and beige.

Operation and Maintenance

The BP892x requires 11V to 52V phantom power for operation (wired only).

Output is low impedance (Lo-Z) balanced. The signal appears across Pins 2 and 3; Pin 1 is ground (shield). Output phase is "Pin 2 hot"—positive acoustic pressure produces positive voltage at Pin 2.

The AT8545 power module included with wired models is equipped with an 80 Hz high-pass UniSteep® filter that provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the microphone's sensitivity to popping in close vocal use. It also reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations. To engage the UniSteep® filter, use the end tip of a paperclip or other small pointed instrument to slide the switch toward the "bent" line.

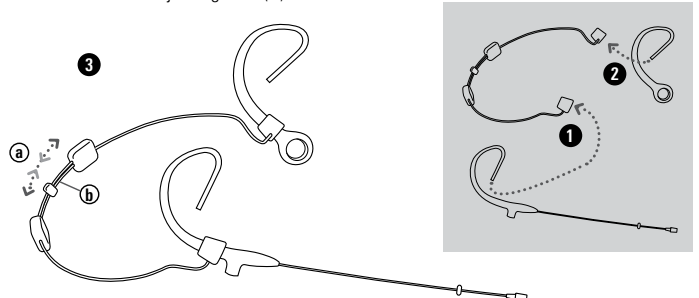
The flexible design of the BP892x MicroSet enables it to be worn on either the left or right ear. Bend a gentle upward curve in the microphone's boom, then hook the lightweight contoured loop around the back of your ear, so that the boom extends from the bottom of your ear. Adjust the boom as needed to follow the contour of your face, positioning the microphone near the corner of your mouth. The microphone has a large acoustical sweet spot; experiment with placement near the corner of your mouth for optimal performance.

A cable clip is provided for strain relief, allowing the microphone to remain securely in place without the weight of the cable pulling on the headset. To use the clip, slip the cable into the clip's cable-holding groove, then attach the clip to your clothing, leaving enough slack in the microphone cable to allow for free, comfortable motion.

The included AT8464x Dual-Ear Adapter Kit allows you to convert the BP892x to a dual-ear unit for increased stability and comfort. The BP892x attaches to either side of the adapter so that the microphone can be worn to either the left or right of your mouth. The headband easily adjusts to fit both children and adults.

How to use the Dual-Ear Microphone Mount

1. Insert the rounded end of your BP892x ear hook into the larger opening of the adapter's left or right tapered holder. Firmly seat the ear hook in the tapered holder.
2. Insert the small rounded end of the additional supplied ear hook into the larger opening of the adapter's remaining tapered holder. Firmly seat the ear hook in the tapered holder.
3. Open the adapter's adjustable behind-the-neck headband to its maximum position by pushing the headband's adjusting tabs together (a). Put the behind-the-neck headband on, hooking the ear hooks over your ears. Adjust the fit of the headband as needed by sliding the headband's adjusting tabs until you arrive at a secure, comfortable fit (a). Attach the microphone cable to the cable clip positioned between the headband's adjusting tabs (b).



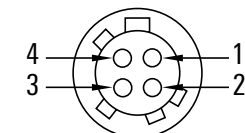
audio-technica

BP892x

The donut-shaped moisture guard is provided to protect the element from sweat and moisture. Position the moisture guard as close to the element as possible to provide maximum protection. To remove the moisture guard, first remove the element cover and place it out of harm's way. Gently slide the moisture guard over the element. Replace the element cover.

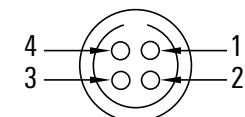
Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

Wireless Termination Diagrams



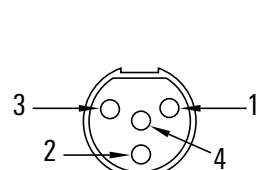
BP892xcW, cW-TH

	Function	Wire Color
Pin 1	Ground/Shield	Green
Pin 2	Instrument	Jumper to Pin 1
Pin 3	Mic Audio	Copper Color
Pin 4	Bias + In	Red



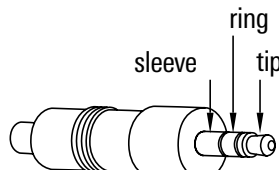
BP892xcH, cH-TH

	Function	Wire Color
Pin 1	Ground/Shield	Green
Pin 2	Instrument	Jumper to Pin 1
Pin 3	Mic Audio	Copper Color
Pin 4	Bias + In	Red



BP892xcT4, cT4-TH

	Function	Wire Color
Pin 1	Ground/Shield	Green
Pin 2	Bias + In	Red
Pin 3	Mic Audio	Copper Color
Pin 4	Source Load	Jumper to Pin 3



BP892xcLM3, cLM3-TH

	Function	Wire Color
Sleeve	Ground/Shield	Green
Ring	Mic Audio	Copper Color
Tip	Bias + In	Red

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Specifications

Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	Omnidirectional
Frequency response	20-20,000 Hz
Low frequency roll-off	80 Hz, 18 dB/octave (wired only)
Open circuit sensitivity	-43 dB (7.2 mV) re 1V at 1 Pa
Impedance	250 ohms (wired only)
Maximum input sound level	136 dB SPL, 1 kHz at 3% T.H.D.
Dynamic range (typical)	104 dB, 1 kHz at 3% T.H.D. Max SPL (wired only)
Signal-to-noise ratio ¹	63 dB, 1 kHz at 1 Pa
Phantom power requirements	11-52V DC, 2 mA typical (wired only)
Current consumption	0.2 mA typical at 5V (wireless only)
Voltage range	2.5-10V (wireless only)
Switch	Flat, roll-off (wired only)
Weight	Microphone, boom & earpiece: 2.6 g (0.09 oz) Power module (wired only): 85 g (3.0 oz)
Dimensions	Microphone: 9.5 mm (0.37") long, 2.6 mm (0.10") diameter Boom: 98.5 mm (3.88") long, 1.07 mm (0.04") diameter Power module (wired only): 100.0 mm (3.94") long, 18.9 mm (0.74") diameter
Output connector (power module)	Integral 3-pin XLRM-type
Cable	Detachable 1.4 m (55") long, 1.6 mm (0.06") diameter, 2- or 3-conductor shielded cable (termination dependent)
Audio-Technica case style	M31
Accessories furnished	AT8545 power module (wired only); AT8464x dual-ear adapter kit; AT8440 cable clip; AT8157 windscreen; AT8171 windscreen; two AT8156 element covers; moisture guard; belt clip (wired only); carrying case

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

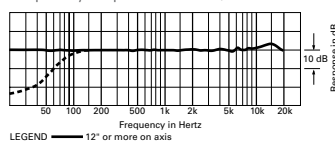
1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

¹ Typical, A-weighted, using Audio Precision System One.

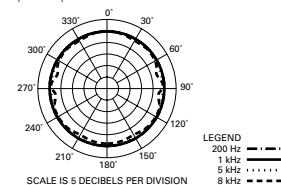
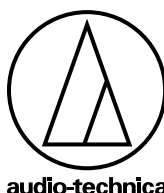
Specifications are subject to change without notice.



frequency response: 20–20,000 Hz



polar pattern



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P52761

Specifications



DISTRO4™

Antenna Distribution System



DISTRO4 is a broadband UHF antenna distribution amplifier that routes antenna signals from a pair of diversity antennas to several receivers in a multi-channel system. DISTRO4 compensates for signal strength lost in the splitting process with high quality amplifiers. Two or more units may be cascaded together to accommodate more than four receivers with the included cascade port.

DISTRO4 features a 2000 mA internal power supply (no wall wart). For active antennas and in-line amplifiers, DISTRO4 provides an internal switch to apply DC power over coaxial cable to antenna connections. It includes all RF and DC power cables needed to connect a 4 channel wireless microphone system as well as cascade to one additional DISTRO4.

SKU **DISTRO4** Includes:

- (1) DISTRO4 Antenna Distribution System
- (4) 36cm / 14" BNC jumpers
- (4) 61cm / 2' DC jumpers
- (1) AC power cord

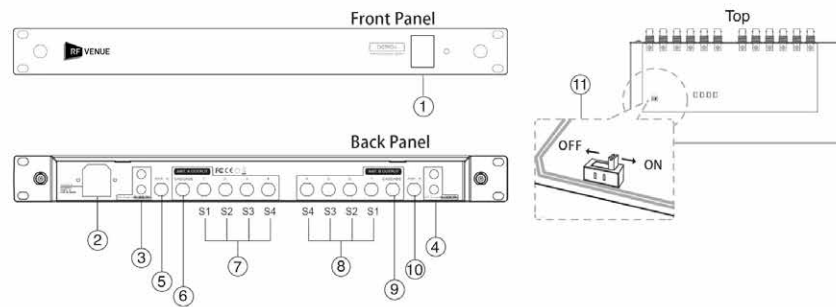
WARNING

- Do not expose this appliance to heat or moisture.
- To avoid shock, do not remove cover. Refer all service to qualified service personnel or distributors.

Specifications

Frequency range	470-952 MHz
RF output level (gain)	3 dB (± 2 dB)
Cascade output level.....	0 dB ~ +2 dB
Output connection isolation.....	≥ 25 dB
Third order intercept point	24 dBm
Impedance	50 Ω
Power consumption	60 W
Input AC voltage	100~240 V switching
DC over coax (to external antennas)	12-14 VDC
Output DC voltage (to receiver jacks)....	+12 V ± 1 A x 4
Output DC connectors.....	5.5mm OD, 2.1mm ID
Dimensions.....	480(W) X 45(H) X 250(D) mm
/ 19(W) X 2(H) X 10(D) in	
Weight	2.15 Kgs / 4.75lbs

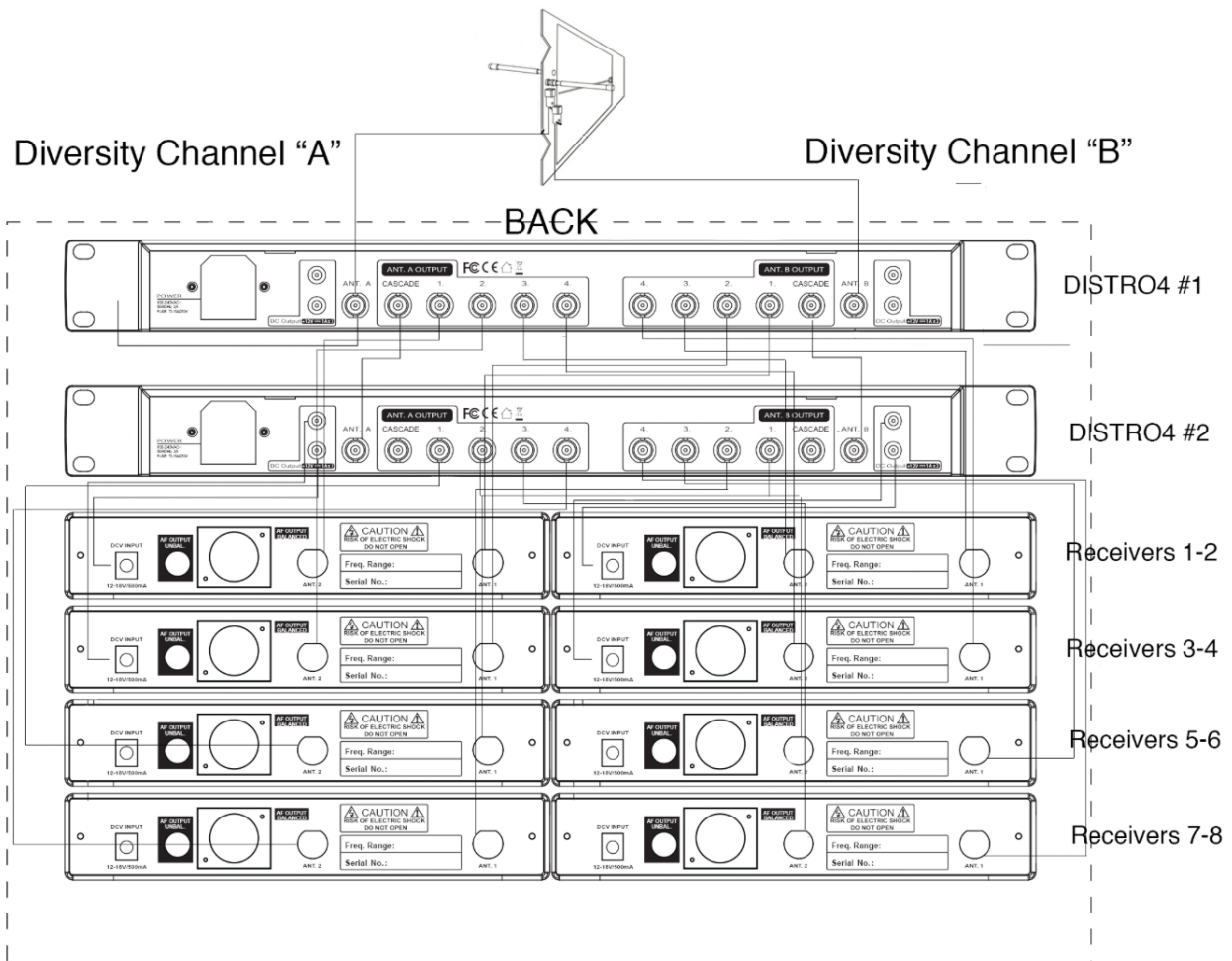
Specifications



- | | |
|-----------------------------|--|
| 1. Power Switch | 8. Antenna "B" output |
| 2. AC input | 9. Cascade output "B" |
| 3. DC output (to receivers) | 10. Antenna "B" input |
| 4. DC output (to receivers) | 11. Power switch Antenna A&B (Internal) |
| 5. Antenna "A" input | Switch on when using 12V DC over coax (to external antennas) |
| 6. Cascade output "A" | |
| 7. Antenna "A" output | |

NOTE: The DC Power-to-Antenna output is factory-set to the 'Off' position. To turn the Power-to-Antenna function 'On', the switch (labeled #11 above) must be moved to the 'On' position. However, access to this switch requires opening the DISTR04 housing cover, which can involve the risk of electric shock; see WARNING below.

WARNING: Opening the DISTR04 housing must only be done only by a qualified service technician, and only once ALL power removed to the unit (disconnect the main power cord from the unit, labeled #2 above).

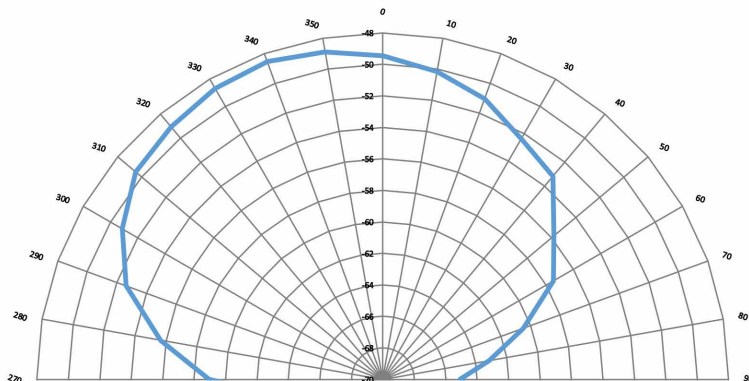


Diversity Architectural Antenna

The new Diversity Architectural Antenna by RF Venue is a high performance antenna system for wireless microphones. Featuring a slim profile enclosure, the Diversity Architectural Antenna can be installed in any position on a wall or ceiling and can be painted to match any interior. Using a unique patent-pending dual-feed antenna design, both A and B diversity connections are provided, so there's no need to install two separately spaced antennas resulting in a more professional look that room designers and architects appreciate.

The Diversity Architectural antenna installs in minutes, with a wall or ceiling-mounted rear plate that is pre-drilled with multiple mounting hole options. The rear plate then simply connects to the front plate, secured with the included mounting screws. Simply connect the two rear-mounted BNC terminated coaxial cables to your in-wall or in-ceiling coaxial cable run and the Diversity Architectural is ready for use.

The Diversity Architectural antenna builds on the highly acclaimed Diversity Fin, eliminating the most common signal dropouts caused by changes in angle and orientation of the RF signal. Ideally suited for conference rooms, multi-purpose meeting spaces, training rooms, and houses of worship, the Diversity Architectural fits into any interior design and delivers professional RF performance in a sleek industrially designed enclosure.



SKU **D-ARC** Includes:
D-ARC Antenna
Ceiling hardware mounting kit
Wall hardware mounting kit

Electrical

Operating frequency	470-616 MHz
Bandwidth.....	146 MHz
Impedance	50Ω
Average return loss	-6.4 dB
Pattern type.....	Diversity Flood
Gain	3 dBd
F/B ratio.....	N/A
F/S ratio	N/A
Polarization	Linear

Physical

Dimensions.....	280X280X50mm / 11" X 11" X 2"
Weight	0.9 kg / 2 lbs
Mount location.....	wall or ceiling
Operating temperature.....	-10-40°C / 14-104°F
Color	White
Connector(s).....	BNC female



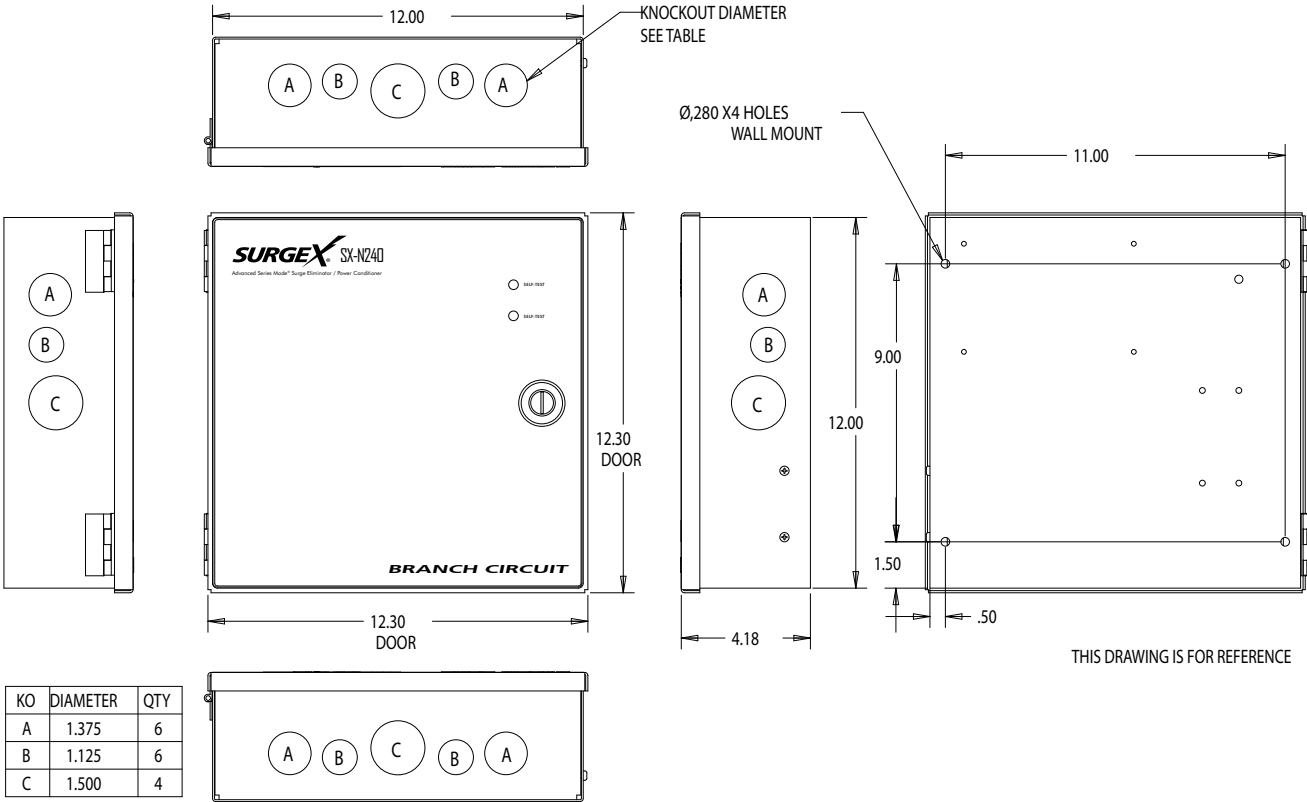
SX-N240

TECHNICAL DESCRIPTION

The SX-N240 shall be housed in a magnetic shielding NEMA steel enclosure. It shall operate from 240 volts AC and have a barrier strip accessible through knock-outs in the enclosure for hardwiring power input and output connections. Overall dimensions shall be 12.0" H x 12.0" W x 4.0" D. Weight shall be 14 pounds. The SX-N240 shall have a load rating of 20 amps at 240 volts, a self-test circuit with visual indicator and provide Advanced Series Mode power protection and EMI/RFI filtering. It shall withstand at least 1000 occurrences of surge pulse voltages up to 6000 volts.

SPECIFICATIONS		SX-N240
Load Rating		20A
Voltage Rating		120/240V
Power Requirement (no load)		8 W
Input/Mains Plug Type		Terminal Strip
Input/Mains Cord Length		None
# of Receptacles		1
Receptacle Type		Terminal Strip
Surge Let-through Voltage (6000 Volt Surge)		0 Volts
Maximum Applied Surge Voltage		6000 Volts *
Maximum Applied Surge Current		Unlimited (due to current limiting) *
Maximum Applied Surge Energy		Unlimited (due to current limiting) *
Endurance (C62.41-1991 category B3 pulses)		1 KV > 500,000; 3 KV > 10,000; 6 KV > 1000
EMI/RFI Filter	Normal mode (50Ω load)	> 20 dB, 39 kHz – 50 MHz > 30 dB, 150 kHz – 50 MHz 25 dB @ 100 kHz; 45 dB @ 300 kHz; 67 dB @ 3 MHz; 35 dB @ 30 MHz
	Common Mode (50Ω load)	> 10 dB, 290 kHz – 50 MHz > 20 dB, 1.9 MHz - 7.875 MHz > 30 dB, 4.2 MHz – 5.125 MHz 10 dB @ 300 kHz; 17 dB @ 1 MHz; 30 dB @ 5 MHz; 14 dB @ 20 MHz
Under-Voltage Auto Shutdown		No
Over-Voltage Auto Shutdown		No
Over-Current Auto Shutdown		None
Over-Temperature Auto Shutdown		None
Network Port		No
Serial Port		None
Temperature Sensor Input		None
BTU/h Max		400 BTU/h
Auxiliary Relay Outputs		No
Contact Closure Input		No
Dimensions		12.0" H x 12.0" W x 4.0" D
Weight		14 lbs
Temperature Range:		5C to 35C
Humidity Range		5% to 95% R.H. Non-condensing
Agency Listings		Conforms to UL Std 1283 Certified to CSA Std C22.2 No. 8

* 1.2 x 50 microsecond industry standard combination wave surge as per IEEE C62.41
** Specifications subject to change without notice
Specifications Version: ESP-SRX_Product_Specs_Master 03.20.20.xlsx



Hyperion Series

700W Followspot

(ver. 2022/07)



SOURCE

- 700W LED ARRAY
- Source life expectancy: > 50.000 h
- Note: for Luminous flux and Colour rendering refer to the table at the end of this document

SOFTWARE FUNCTIONS

- ESD: 8 or 16bit extra soft dimming
- 3 selectable dimmer curves
- Adjustable delay in turning on and off
- PWM LED 500Hz-20KHz
- Service channel
- Stand-alone
- Master Slave
- Hour-counter on single LED
- Storage and factory recovery
- Upgradable Firmware via DMX/USB tool
- Advanced remote settings for all parameters via DMX

CONTROL

- Protocols: DMX512, RDM
- Local potentiometer
- Reversible graphics display with standby-shutdown function
- Wireless ready

DMX Channels	
WHITE	1 / 3 / 6 ch

THERMAL MANAGEMENT

- Wide ventilation slots for better LED cooling with selectable fan speed in: "standard", "silent" and "auto" or DMX regulated
- High efficiency heat pipe cooling system
- No heat load from LED engine towards electronic and vice-versa avoiding the risk of failure due to overheating
- Ta max 40°C

OPTICS

- High-quality glass lens optics – AR coating
- Focus: manual
- Gobo size: B
- Note: for Beam angles refer to the table at the end of this document

PRESETS

- 6way built-in manual colour changer

HOUSING

- Highly resistant body in extruded aluminum and techno-polymer body
- Finishing: Black
- IP 20

ELECTRICAL

- Power supply: 100-240 V – 50/60 Hz
- Power consumption: 700 W
- PF>0.94/230VAC PF>0.98/115VAC at full load

CONNECTION

- Power connector: Chassis PowerCON TRUE1 In/Out
- Additional cable: 2m H05RN-F cable with powerCON TRUE1 female cable connector
- DMX: XLR 5-pole In/Out panel connectors

COMPLIANCE

- CE
- EN 60598-1; EN 60598-2-17
- SSL Licensing Program
- Manufactured in Italy with Quality System ISO 9001:2015

DIMENSIONS

Followspot	36 Kg	1440*420*400 mm
------------	-------	-----------------

DMX chart

	WHITE		
	1CH	3CH	6CH
	8 BIT	8 BIT	16 BIT
1 ch	DIMMER	DIMMER	DIMMER
2 ch		STROBO	DIMMER FINE
3 ch		SERVICE	DELAY
4 ch			FAN
5 ch			STROBO
6 ch			SERVICE

Hyperion Series

700W Followspot

(ver. 2022/07)



Model	Type	CT	(measure at)	CRI	TLCI	TM-30	Beam	Lux	Ø Beam	Lux	Ø Beam	Lux	Ø Beam	Lux	Ø Beam	Lux	Ø Beam	Peak CD
FS HY LED 700	CW	5600K	5600K	97	97	94	7°	11.813	1,2	5.250	1,8	2.953	2,4	1.890	3,0	1.313	3,6	1.181.250
							14°	3.195	2,4	1.420	3,7	799	4,9	511	6,1	355	7,3	319.500
								10 m		15 m		20 m		25 m		30 m		

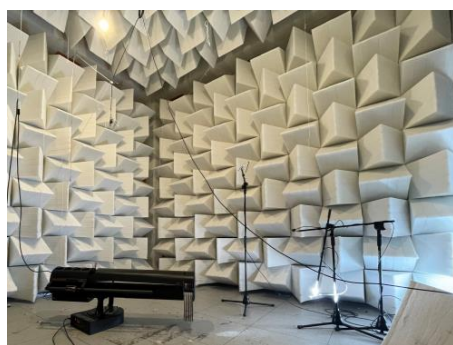
NOISE LEVEL DATA (silent mode)

Test conditions during measurements:

Temperature: 22°C

Relative humidity: 79%

Radius of spherical measuring surface: 2m



Test in hemi-anechoic room

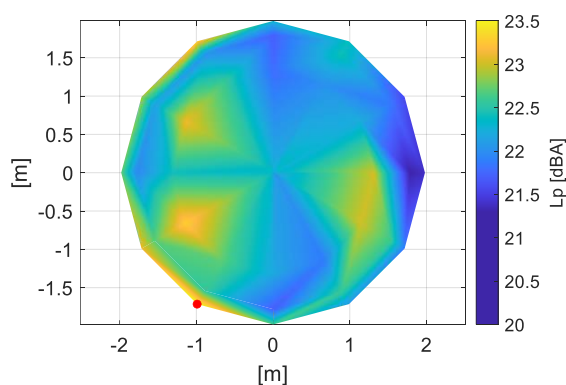
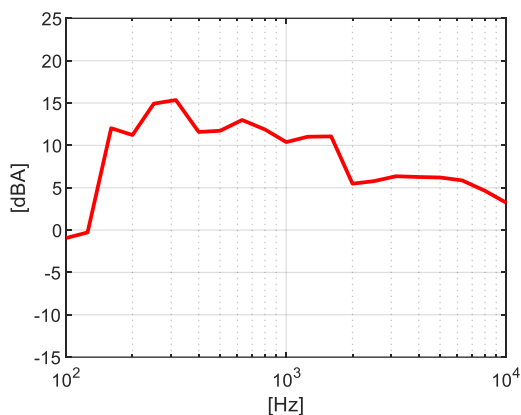
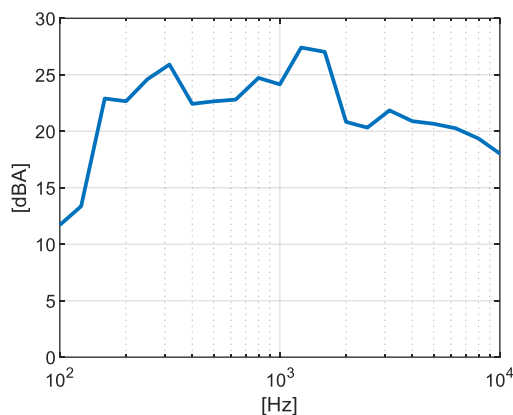


Diagram of Sound Pressure level L_p [dBA], the red point identifies the direction of maximum noise emission ¹



Sound pressure level spectrum [dBA] measured at maximum noise emission point



Sound power level spectrum L_{WA} [dBA]

Total sound pressure level L_p (0.1 – 10 kHz, ref. 2×10^{-5} Pa) at different distances²:

Distance	1 m	2 m	4 m	6 m
Sound pressure level L_p	29.5 dBA	23.5 dBA	17.5 dBA	14.0 dBA

The total sound power level L_{WA} is equal to **36.2 dBA** (0.1 – 10 kHz, ref. 1×10^{-12} W).

¹The positive direction of X axis corresponds to the spotlight central axis and points in the direction of light emission

²Estimated Sound Pressure levels starting from the one measured at the point of maximum noise emissions at 2 m.

Hyperion Series

700W Followspot

(ver. 2022/07)





Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Sensor3 Control Electronics Module (CEM3) is ETC's new platform for power control. CEM3 manages priority-based Ethernet, DMX and Preset control for ultra-smooth 16-bit dimming, fast activation of relays, and instant-on support for emergency-lighting systems. Energy usage, system status, and quick changes to circuit setup can be accessed at its intuitive facepanel or remotely at the lighting console.

APPLICATIONS

- Professional and educational theaters
- Production studios
- Performance halls
- Retail and dining
- Houses of worship
- High-density architectural dimming
- Touring and Portable dimming

FEATURES

- **Net3 Uplink** - Connect to the Net3 lighting network using the ethernet jack on the front of the control module
- **USB QuickLoad** - Back up system settings and upgrade software
- **Point of Control Interface** - Easy-to-read systems display shows the user-pertinent system information
- **Live Control Override** - For presets, set level, and dimmer check
- **Local Menu** - Access to setup features and control directly at the control processor
- **Backup Looks** - 64 presets with programmable fade times and priority allows for take control, pile on, or live control failover sources to ensure that your show will never go black!
- **Connect to Console** - System and rack feedback to live control desks is standard
- **Quick Setup Wizard** - Builds a simple system in a single step
- **Advanced Features (AF)** - Adds dimmer-specific reporting
- **ETC Dimmer Doubling™** - Increase your individually controllable fixtures without adding extra circuits (supported only at 60hz)
- **RideThru** - Optional accessory that supports the processor electronics for a few seconds during a power outage
- **Battery Pack** - Optional accessory that supports the processor electronics for several minutes during a power outage

ORDERING INFORMATION

Control Module

MODEL	DESCRIPTION
CEM3	CEM3 Power Controller

Compatible Systems

MODEL	DESCRIPTION
SENSOR3 INSTALLATION RACKS	
SR3-48/SR3AF-48	Sensor3 48-module installation racks
SR3-24/SR3AF-24	Sensor3 24-module installation racks
SR3-12/SR3AF-12	Sensor3 12-module installation racks
SR3-6/SR3AF-6	Sensor3 6-module installation racks
HSR3/HSR3AF-	Sensor3 230 V installation racks
SR3AFN	Sensor3 GFCI installation racks
ESR3AFN	Sensor3 CE installation racks
SENSOR3 TOURING RACKS	
SP3	Sensor3 small-frame touring rack
SP3	Sensor3 large-frame touring rack
SENSOR3 PORTABLE PACKS	
SP3-2420	Sensor3 12-module portable pack
SP3-1220	Sensor3 6-module portable pack

CEM3 Accessories

MODEL	DESCRIPTION
RK	Retrofit kit for Sensor standard and AF racks



SPECIFICATIONS

GENERAL

- Universal Control Electronics Module
- Direct Ethernet connectivity for dimmer levels, feedback and system control
- UL, cUL LISTED and CE Marked
- UL 924 LISTED for Emergency Lighting Control

PHYSICAL

- Formed-steel body
- Die-cast facepanel finished with textured epoxy paint
- Slide-in module installs and removes without tools
- Spring-loaded module release
- Airflow sensor to ensure adequate airflow

ELECTRICAL

- Accepts:
 - Single phase
 - Three phase WYE
 - Universal Voltage range 91–139V and 181–259 VAC*
 - Line-feed frequencies from 47–53 Hz and 57–63 Hz
 - Automatic frequency-variation compensation
 - Two configurable DMX512 inputs (2500 V opto-isolated)
- *Note: Suggested maximum main transformer tap 135 V or 255 V to allow for line fluctuation.

CONTROL FEATURES

- Eight-line by 20-character graphical LCD for system configuration, live control, and status display
- Full number pad for quick access to dimmers
- Shortcut buttons for Setup, About, and live control
- Five status LED indicators: Power, Network activity, DMX-A, DMX-B, and Panic
- 64 user-programmable presets
- Single Panic circuit with flexible programming
- Replacement CEM3 automatically loads rack configuration
- Configuration backups saved on USB or network
- Dimmer outputs regulate to maintain constant power $\pm 1V$
- Individual output scale voltage settings for load-wiring compensation
- Selectable Firing Modes: Normal, Forward Phase, Reverse Phase, Dimmer Doubled, Sinewave, and Fluorescent
- Control Modes: Dimmed, Switched, Latch/lock, Always On, and Off
- Selectable Dimmer Output Curves: Linear, Modified Linear, Square, Modified Square, Sensor 2.0, and five custom curves
- 16-bit fade resolution (> 30,000-Step Resolution per 1/2 cycle)
- Selectable Data Loss Behavior

FEEDBACK

- All Sensor racks with CEM3 modules include basic system diagnostic reporting
- Standard rack feedback includes: DMX input status, rack power status, and rack temperature
- Advanced Features (AF) provides dimmer-specific status and load feedback (requires AF dimmer rack and AF dimmer modules)

LOCAL PROGRAMMING

LOCAL LIVE CONTROL

- Set Levels, Preset Activation, and Dimmer Check

STATUS (ABOUT)

- All modules: module type, mode, control source, module location, and overtemp
- AF modules: module removed, breaker trip, recorded and actual load
- Rack: temperature, rack type, Run Hours
- Network: IP address, SubNet mask, Gateway and active link
- Rack Data Ports: status for DMX A and B, and sACN
- About Rack Power: frequency, voltage per phase, and voltage headroom
- About Software: version number

SETUP

- Setup dimmer: Firing Mode, Curve, Scale Voltage and Name
- Patch
- Set rack priority per DMX port
- Data Loss Behavior: Hold last Look, Wait and Fade, Play Preset
- Name the rack (using ACN)
- Custom dimmer numbering
- Get Config and save Config to USB

PHYSICAL

CEM3 Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
CEM3	2.06	52	11.80	300	7.00	178

CEM3 Weight

MODEL	WEIGHT		SHIPPING WEIGHT	
	lb	kg	lb	kg
All CEM3	3.5	1.6	6.2	2.8

Maximum BTU Production per Module

MODEL	BTUS	WATTS	EFFICIENCY
All CEM3	<10	<4	N/A



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*Trademark and patent info: etconnect.com/IP

etconnect.com



Type(s)

Project

Date

Notes

GENERAL INFORMATION

Prodigy FlyPipe is a completely new approach to lowering and raising loads for display, storage, or production. Combining the simplicity of classic line shaft designs with that of a modern zero fleet angle hoist, the self-climbing FlyPipe delivers a modular, easy to install rigging solution that is a perfect match for the current generation of lighting and scenery packages.

The self-climbing hoist does not impose lateral loads on the overhead structure, making installation possible in facilities that cannot accommodate counterweight rigging or would otherwise require significant structural reinforcement.

The hoist consists of three modular elements: a Drive section, Span sections, and an End section. The shortest configuration, 5.5 m (18 ft), consists of the Drive and End sections with two TwinLine pairs of 3.1 mm (1/8 in) wire rope. The longest configuration adds four Span sections for a 17.7 m (58 ft) pipe with six TwinLines. Each section has a TwinLine, or set of two 3.1 mm (1/8 in) wire ropes.

FEATURES

- 225 kg (500 lb) working load limit (WLL)
- Unique Zero Fleet Self-Climber design that uses anywhere from two to six TwinLine pairs of 3.1 mm (1/8 in) lift lines with 15.25 m (50 ft) of travel
- Smaller size: Motor and control box is as small as 40 cm (16 in) wide, but can accommodate lineset spacing down to 30 cm (12 in) when mounted in opposing orientations
- Aluminum strut channel integrated into the bottom of FlyPipe allows for easy installation of lighting fixtures, Unistrut® curtain carriers/track, and other hanging hardware
- Hoists can be operated via QuickTouch, QuickTouch+, QuickTouch Preset, and Foundation series controllers
- Standard overload/overcurrent protection and slack line detection safety features
- Four hard-struck limit switches with LED indicator lights for efficient installation
- Encoder to ensure accurate and consistent movement
- Each TwinLine comes pre-terminated on the drum and in the included TwinLine clamps which automatically manage the tension on each TwinLine, and accommodate up to 10 cm (4 in) of trim adjustment, while easily mounting to strut channels

GENERAL INFORMATION

FEATURES (CONTINUED)

- Strut channel compatibility allows for hoist installation to a wide range of web joists, H beams, and other structural steel
- Accommodates point loads up to 115 kg (250 lb) between TwinLines

STANDARD SAFETY FEATURES

- Fail-safe motor brake and SafeStop secondary load arrest: two independent braking systems to ensure safe overhead operation
- Four hard-struck limit switches: End of travels and secondary over-travels, with LED indicators for easy installation
- Overcurrent protection: Protects hoist from damage
- Overload protection: Automatically stops if load exceeds working load limit by greater than 23 kg (50 lb)
- Slack line detection: Automatic detection of hoist misalignment resulting from obstructions, fouling and improper balance will inhibit movement until the fault is cleared
- Automatic self-tests: Safety functions and circuits are automatically checked at power up and at periodic intervals
- Hard-wired E-stop: Each hoist has its own dedicated E-stop contactor
- Manual overrides: Local up/down controls and limit overrides on the Drive section

REGULATORY AND COMPLIANCE

- Built to ANSI/PLASA E1.6-1 standards for motorized hoists
- cULus Listed



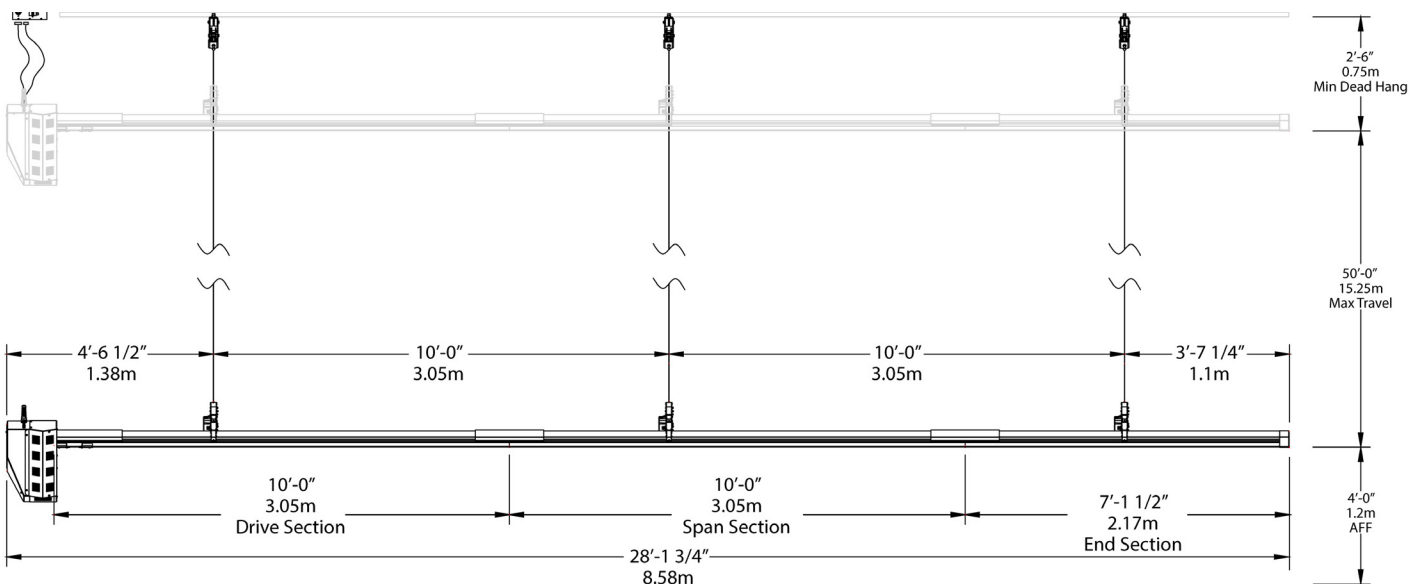
HOIST DATA

Finish	black anodized
Travel distance	up to 15.25 m (50 ft)
Wire rope size	pairs of 3.1 mm (1/8 in) 7x19 GAC
Drive section weight	60 kg (140 lb)
Span section weight	27 kg (60 lb)
End section weight	18 kg (40 lb)
Width	400 mm (16 in)
Length	5.5–17.7 m (18–58 ft), includes motor enclosure
Height	66 cm (26 in)
TwinLines	two to six pairs
Motor operating temperature range	4.5°–40° C (40°–104° F)

Working Load Limit (WLL)	225 kg (500 lb)
Speed	10 cm/s (20 fpm) @ 60 Hz
Input voltage	3-phase, 208 V 60 Hz 3-phase, 480 V 60 Hz
Motor inrush current - up to 11.6 m (38')	~20 A (208 V) ~8.75 A (480 V)
Motor operating current - up to 11.6 m (38')	~4 A (208 V) ~1.75 A (480 V)
Motor inrush current - 14.6 m (48') and 15.7 m (58')	~41.6 A (208 V) ~18 A (480 V)
Motor operating current - 14.6 m (48') and 15.7 m (58')	~4.5 A (208 V) ~1.9 A (480 V)

LOADING INFORMATION (LIFT LINE PLACEMENT)

LOADING & CONFIGURATION GUIDELINES			
Loading	Max load per TwinLine	Max point load between pairs of TwinLines	Number of lift lines available
Distributed load over the length of the truss	190 kg (420 lb) at a 10:1 safety factor	115 kg (250 lb)	up to 6 TwinLine pairs



Corporate Headquarters • Middleton, WI USA

Global Offices • London, UK • Rome, IT • Holzkirchen, DE • Paris, FR • Hong Kong • Dubai, UAE • Singapore • New York, NY • Orlando, FL • Los Angeles, CA

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Trademark and patent info: etconnect.com/IP

etconnect.com

MKD1000 Series

2-Way Full-Range Loudspeakers

- ▶ High output passive or bi-amplified two-way performance
- ▶ QX inspired 4in voice coil compression driver with extended bandwidth
- ▶ Precision EAW signature broadband pattern control
- ▶ Flexible mounting, weather protection, color and transformer options

OVERVIEW

The MKD installation loudspeaker series is engineered to deliver the high output, broadband pattern control and exceptional fidelity that is required by real-world applications from stadiums to intimate music clubs.

MKD builds on EAW's long standing tradition of exceptional installation focused loudspeakers developed in partnership with consultants and sound system integrators worldwide. The compact durable Baltic birch enclosure provides for easy installation with an array of M10 mounting points and optional wall-mount or ceiling-mount brackets. MKD also offers weather protection options, custom colors, and a gently curved front allow for concealed installations in the most visually sensitive environments.

MKD leverages the design tenets and core technologies deployed in our QX series by deploying a pair of spaced low frequency transducers centered around a large format rotatable horn. The acoustically advanced transducers are able to be driven an octave lower than standard drivers through the use of our beamwidth matched crossover technology.

MKD1096

▶ 90° x 60°

MKD1026

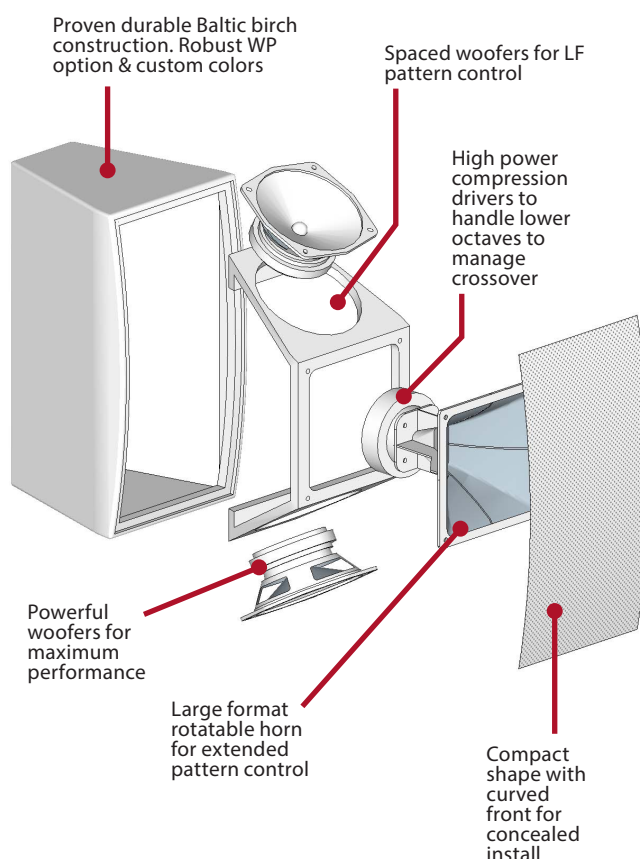
▶ 120° x 60°

MKD1064

▶ 60° x 45°



INSIDE EAW TECHNOLOGIES



TECHNICAL SPECIFICATIONS

2-WAY FULL-RANGE LOUDSPEAKERS

PERFORMANCE	MKD1096	MKD1026	MKD1064
Max SPL ¹ (12 dB Crest Factor)	142dB	141dB	144dB
Max SPL ² (6 dB Crest Factor)	136dB	135dB	138dB
Operating Range ³	57Hz - 20kHz		
Nominal Beamwidth ⁴	90° Horizontal x 60° Vertical	120° Horizontal x 60° Vertical	60° Horizontal x 45° Vertical
Nominal Phase	±15o from ideal high-pass filter		
Input Impedance	LF=8Ω HF=8Ω LF/HF=8Ω		
ACCELERATED LIFE TEST ⁵			
LF/HF (External Crossover)	89.4V	1000W @8ohms	
LF/HF (Internal Crossover)	74.8V	700W @8ohms	
LF	74.8V	700W @8ohms	
HF	28.3V	100W @8ohms	
CONFIGURATION			
LF Transducer, Loading	2 x 10in Cone, 2.5in Voice Coil, Vented		
HF Transducer, Loading	1 x 1.4in Exit, 4in Neodymium Compression Driver, Horn Loaded		
Operating Modes	Passive, Bi-Amp		
PHYSICAL			
Physical/Rigging	12 x M10 Mounting Points		
Dimensions (H×W×D)	26.7 H x 14.6 W x 16.5in D (680 H x 370 W x 420mm D)		
Net Weight	60 lbs / 27.3 kg		
Shipping Weight	70 lbs / 31.8kg		
Mounting Accessories	U-Bracket, M10 Eyebolts		
Input Connector	Terminal block		
ORDERING	MKD1096	MKD1026	MKD1064
Part Numbers			
Black	2070470-90	2070483-90	2070484-90
White	2070510-90	2070511-90	2070512-90
WP (black only)	2070513-90	2070514-90	2070515-90
Accessories			
M10 Eyebolt Kit	0028272 [PA-A2 EYEBOLT KIT (4 PER)]		
U-Bracket Kit	2071006 (Black) / 2071203 (White)		

1 Calculated max SPL at 1m with 4:1 pink noise, crest factor 12dB. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.

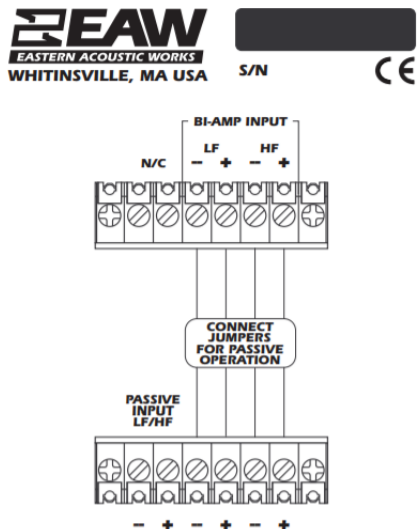
2 Calculated max SPL at 1m with 2:1 pink noise, crest factor 6dB. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.

3 Operating Range: Range where the processed Frequency Response stays within -10 dB SPL of the power averaged SPL within this range; measured on the geometric axis. Narrow band dips are excepted.

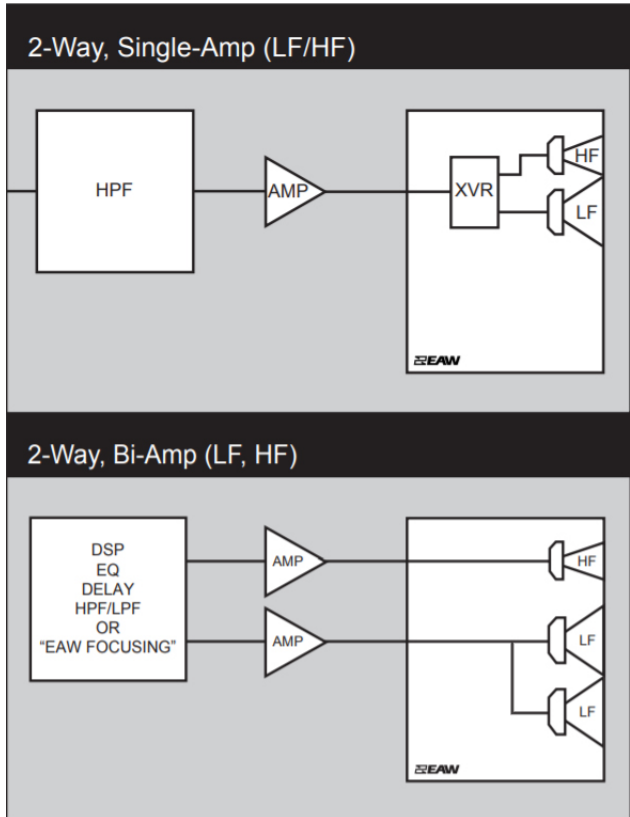
4 Nominal Beamwidth: Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.

5 Accelerated Life Test: Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.

INPUT PANEL



SIGNAL DIAGRAM

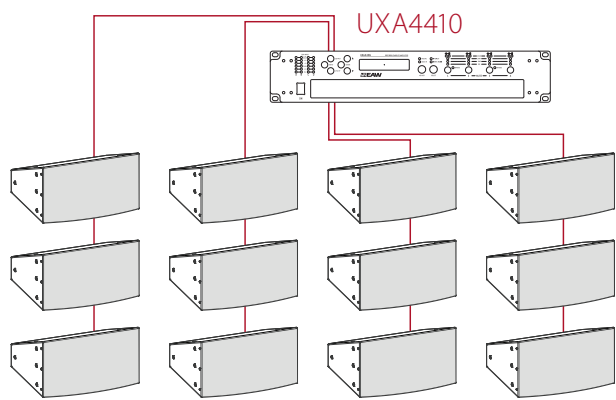


LEGEND

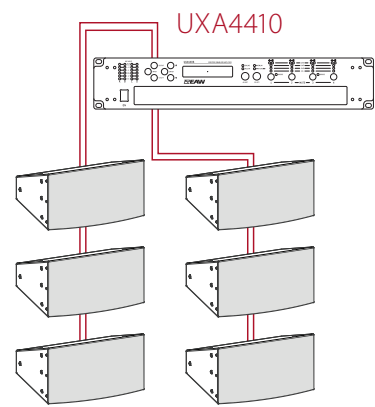
- HPF:** High Pass Filter for crossover –or– Recommended High Pass Filter.
LPF: Low Pass Filter for crossover.
LF/MF/HF: Low Frequency / Mid Frequency / High Frequency.
AMP: User Supplied Power Amplifier –or– Integral Amplifier for NT products.
XVR: Passive LPFs, HPFs, and EQ integral to the loudspeaker.
EAW Focusing: Digital Signal Processor capable of implementing EAW Focusing.

RECOMMENDED AMPLIFIER CONFIGURATION

PASSIVE



BI-AMP



MODEL	PER CHANNEL	PER AMPLIFIER
UXA4810	1	8
UXA4406	2	8
UXA4410	3	12

EAW strongly recommends utilizing the processing setting to take full advantage of your speakers. Pair with EAW UXA Amps for the best performance of EAW Technologies

Third-Party DSP Support
QSYS Powersoft

RIGGING CONFIGURATION

Numerous M10 points for flexible mounting



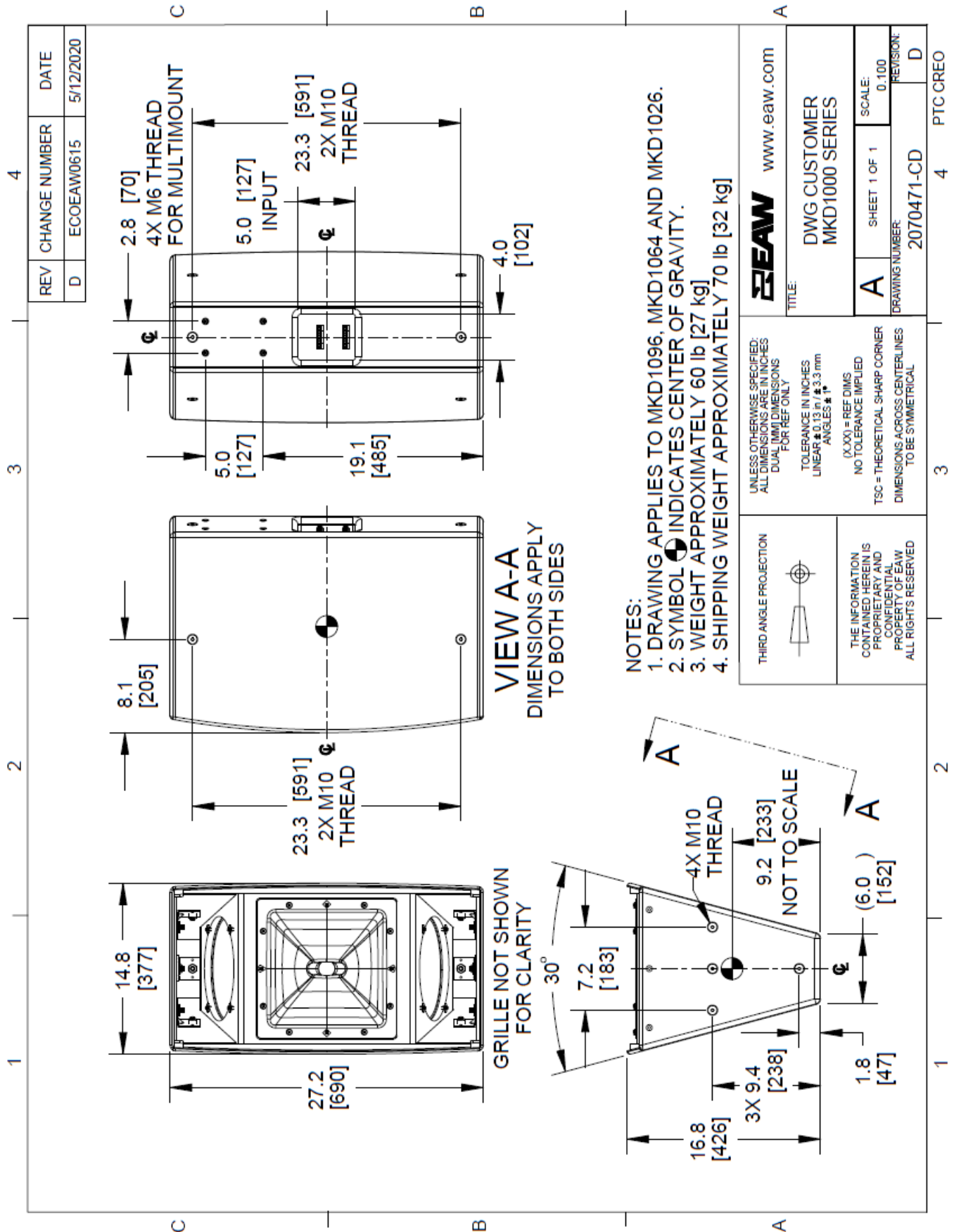
MOUNTING HARDWARE

EAW

DESCRIPTION	PART NUMBER
M10 Eyebolt Kit	0028272 [PA-A2 EYEBOLT KIT (4 PER)]
U-Bracket Kit	2071006 / 2071203

Third-Party Compatible

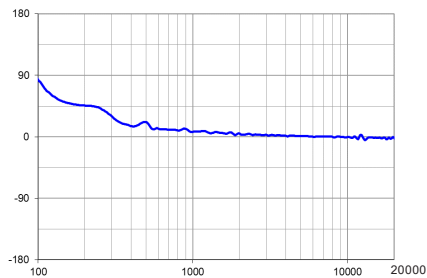
BRAND	MODEL
Adaptive Technologies	MM-120
Polar Focus	QX Mounting System



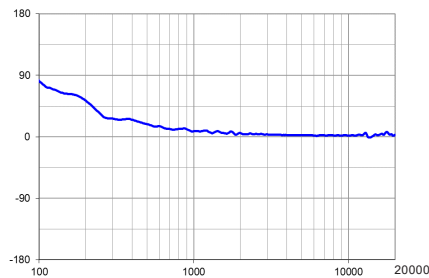
PERFORMANCE GRAPHS

Phase Linearity

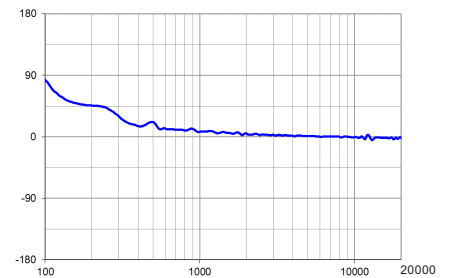
MKD1096



MKD1026

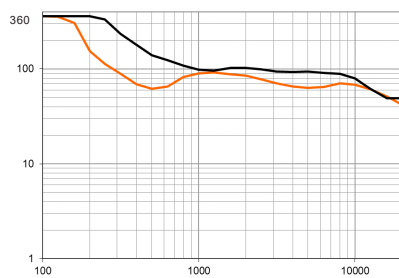


MKD1064

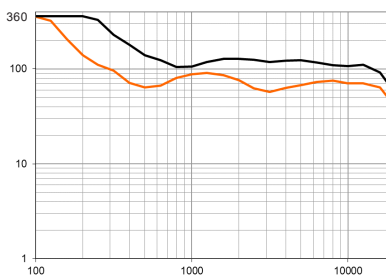


Beamwidth¹ ■=Vertical ■=Horizontal

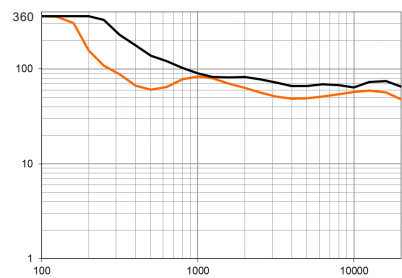
MKD1096



MKD1026

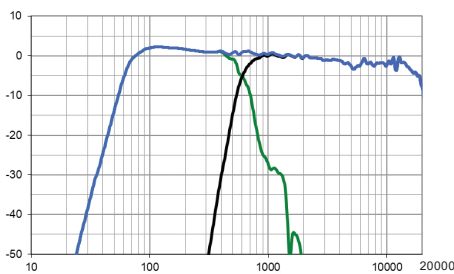


MKD1064

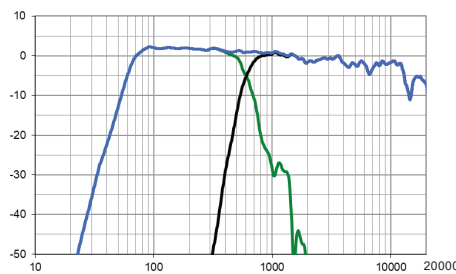


Frequency Response² ■=LF Processed ■=HF Processed ■=Overall Processed

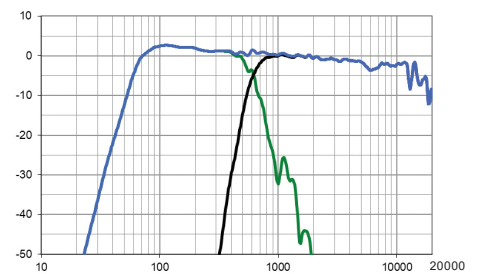
MKD1096



MKD1026



MKD1064



- 1 Average angle for each 1/3 octave frequency band where, starting from the rear of the loudspeaker, the output first reaches -6 dB SPL referenced to 0 dB SPL as the highest level. This method means the output may drop below -6 dB SPL within the beamwidth angle.
- 2 Variation in acoustic output level with frequency for a constant input signal. Processed: normalized to 0 dB SPL. Unprocessed inputs: 2 V (4 ohm nominal impedance), 2.83 V (8ohm nominal impedance), or 4 V (16 ohm nominal impedance) referenced to a distance of 1 m.



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MKD800 Series

2-Way Full-Range Dual-Woofer Loudspeakers

- ▶ High-output, passive two-way performance
- ▶ 2in voice coil compression driver with extended bandwidth
- ▶ Precision EAW signature broadband pattern control
- ▶ Flexible mounting, weather protection, color & transformer options

MKD896

▶ 90° x 60°

MKD826

▶ 120° x 60°

MKD864

▶ 60° x 45°



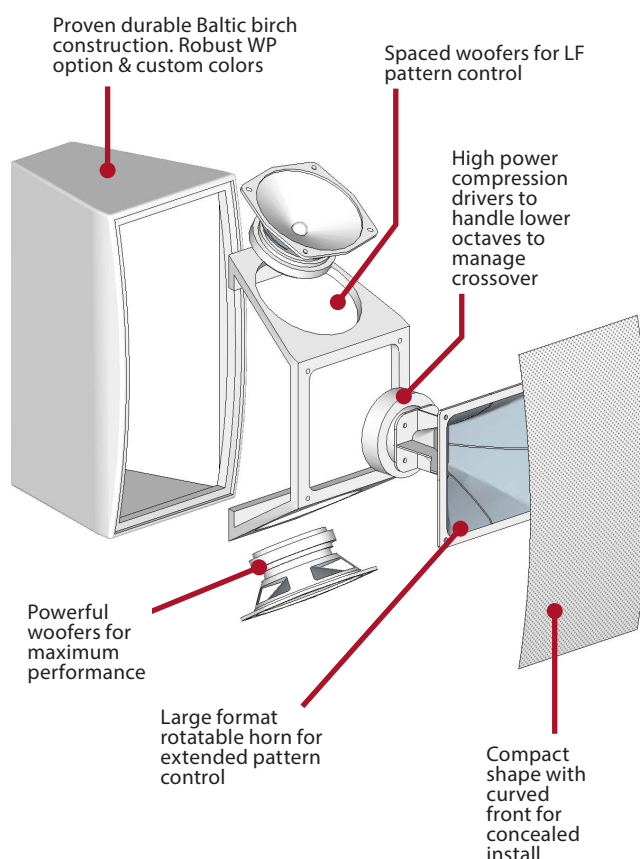
OVERVIEW

The MKD installation loudspeaker series is engineered to deliver the high output, broadband pattern control and exceptional fidelity that is required by real-world applications from stadiums to intimate music clubs.

MKD builds on EAW's long standing tradition of exceptional installation focused loudspeakers developed in partnership with consultants and sound system integrators worldwide. The compact durable Baltic birch enclosure provides for easy installation with an array of M10 mounting points and optional wall-mount or ceiling-mount brackets. MKD also offers weather protection options, custom colors, and a gently curved front allow for concealed installations in the most visually sensitive environments.

MKD leverages the design tenets and core technologies deployed in our QX series by deploying a pair of spaced low frequency transducers centered around a large format rotatable horn. The acoustically advanced transducers are able to be driven an octave lower than standard drivers through the use of our beamwidth matched crossover technology.

INSIDE EAW TECHNOLOGIES



TECHNICAL SPECIFICATIONS

2-WAY FULL-RANGE LOUDSPEAKERS

PERFORMANCE	MKD896	MKD826	MKD864
Max SPL ¹ (12 dB Crest Factor)	135 dB		
Max SPL ² (6 dB Crest Factor)	129 dB		
Operating Range ³	62Hz - 19kHz		
Nominal Beamwidth ⁴	90° Horizontal x 60° Vertical	120° Horizontal x 60° Vertical	60° Horizontal x 45° Vertical
Nominal Phase	±15° from ideal high-pass filter		
Input Impedance	LF/HF=8Ω		
ACCELERATED LIFE TEST ⁵			
LF/HF	80v	800W @ 8ohms	
CONFIGURATION			
LF Transducer, Loading	2 x 8in Cone, 2in Voice Coil, Vented		
HF Transducer, Loading	1 x 1in Exit, 2in Compression Driver, Horn Loaded		
Operating Modes	Passive		
PHYSICAL			
Physical/Rigging	12 x M10 Mounting Points / Multi-Mount Pattern		
Dimensions (H×W×D)	21.6 x 10.8 x 13.8in (550mm x 275mm x 350mm)		
Net Weight	42lb (19kg)		
Shipping Weight	50lb (22.7kg)		
Mounting Accessories	U-Bracket, M10 Kit		
Input Connector	NL4 x 2, Barrier Strip		
PHYSICAL	MKD896	MKD826	MKD864
Part Numbers			
Black	2070517-90	2070521-90	2070522-90
White	2070526-90	2070527-90	2070528-90
WP (black only)	2070532-90	2070533-90	2070534-90
Accessories			
M10 Eyebolt Kit	0028272 [PA-A2 EYEBOLT KIT (4 PER)]		
U-Bracket Kit	2071005 (Black) / 2071202 (White)		

1 Calculated max SPL at 1m with 4:1 pink noise, crest factor 12dB. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.

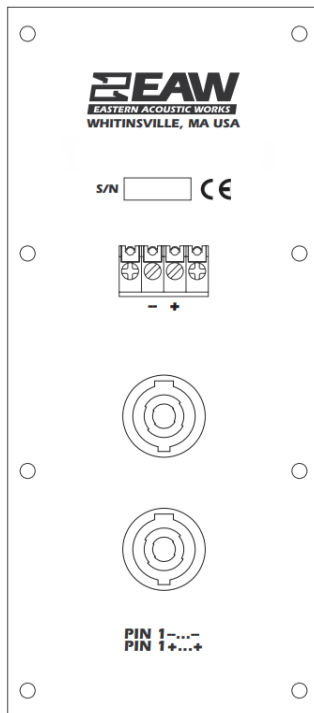
2 Calculated max SPL at 1m with 2:1 pink noise, crest factor 6dB. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.

3 Operating Range: Range where the processed Frequency Response stays within -10 dB SPL of the power averaged SPL within this range; measured on the geometric axis. Narrow band dips are excepted.

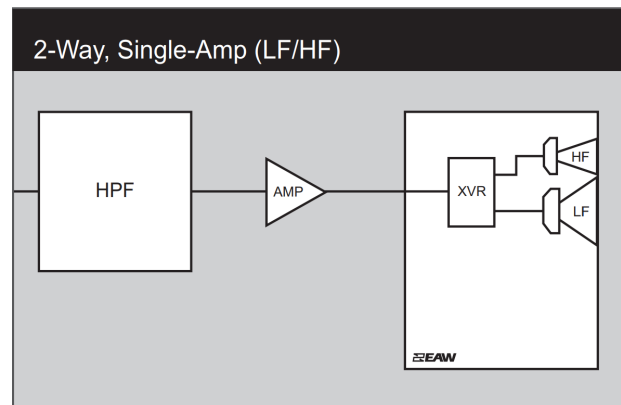
4 Nominal Beamwidth: Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.

5 Accelerated Life Test: Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.

INPUT PANEL



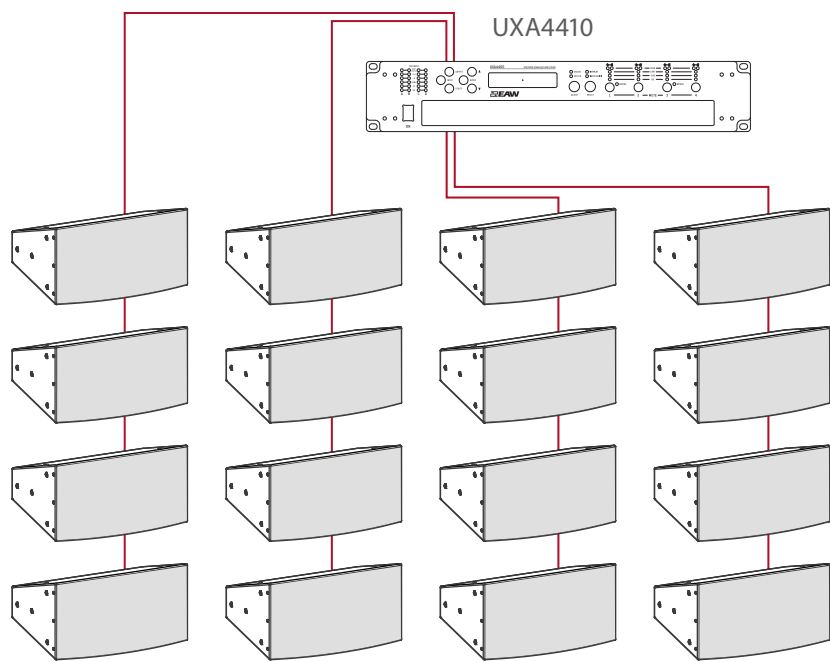
SIGNAL DIAGRAM



LEGEND

- DSP:** User-supplied Digital Signal Processor.
- HPF:** High Pass Filter for crossover or Recommended High Pass Filter.
- LPF:** Low Pass Filter for crossover.
- LF/MF/HF:** Low Frequency / Mid Frequency / High Frequency.
- AMP:** User-supplied Power Amplifier.
- XVR:** Passive LPFs, HPFs, and EQ integral to the loudspeaker.

RECOMMENDED AMPLIFIER CONFIGURATION



MODEL	PER CHANNEL	PER AMPLIFIER
UXA4810	2	16
UXA4406	3	12
UXA4410	4	16

EAW strongly recommends utilizing the processing setting to take full advantage of your speakers. Pair with EAW UXA Amps for the best performance of EAW Technologies

- Third-Party DSP Support
- ▶ QSYS
 - ▶ Powersoft

RIGGING CONFIGURATION

Numerous M10 points for flexible mounting



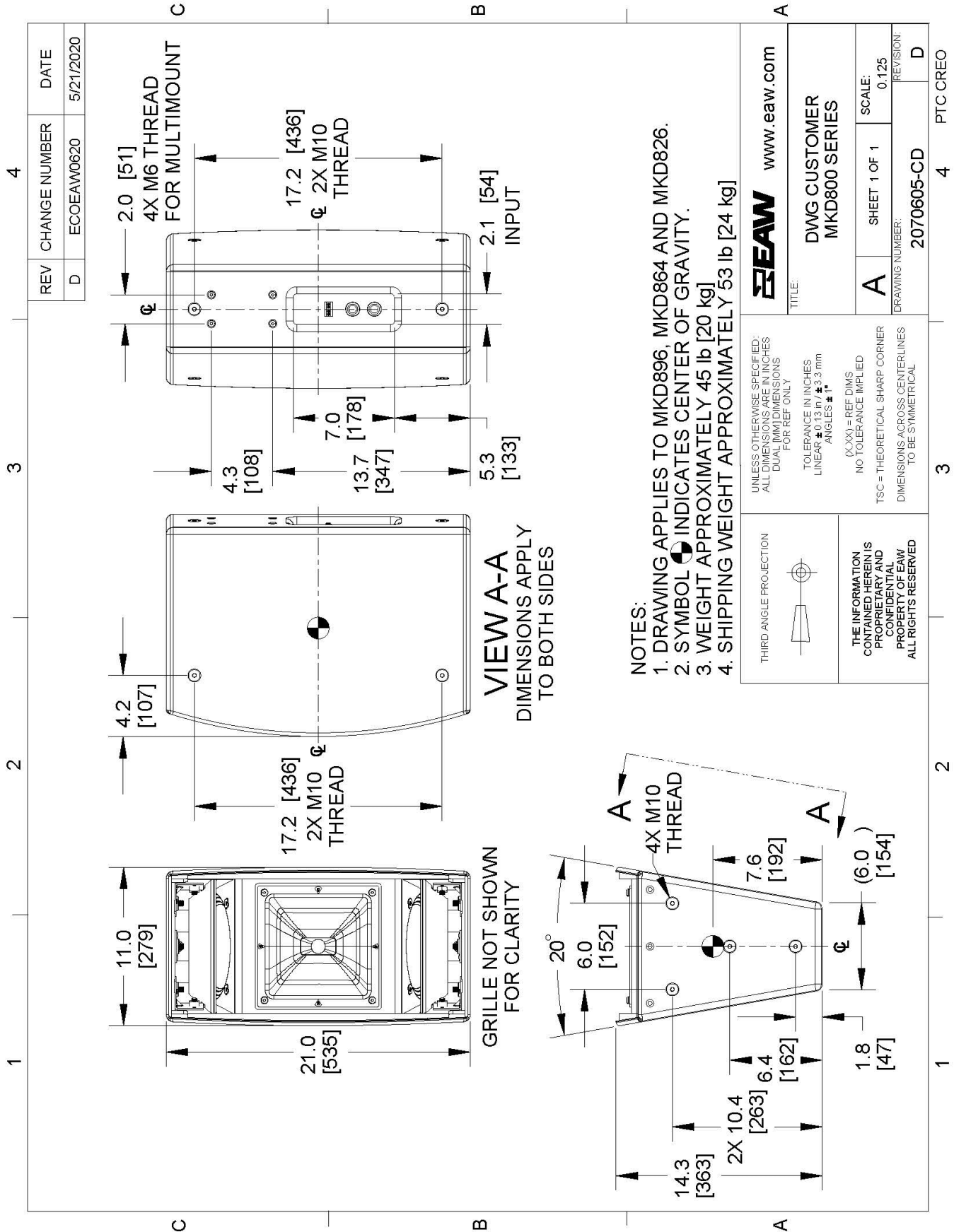
MOUNTING HARDWARE

EAW

DESCRIPTION	PART NUMBER
M10 Eyebolt Kit	0028272 [PA-A2 EYEBOLT KIT (4 PER)]
U-Bracket Kit	2071005 / 2071202

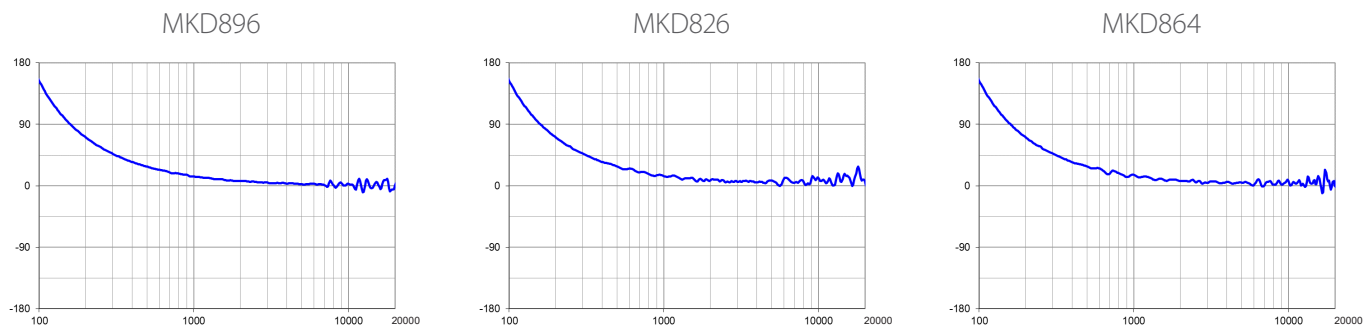
Third-Party Compatible

BRAND	MODEL
Adaptive Technologies	MM-60
Polar Focus	QX Mounting System

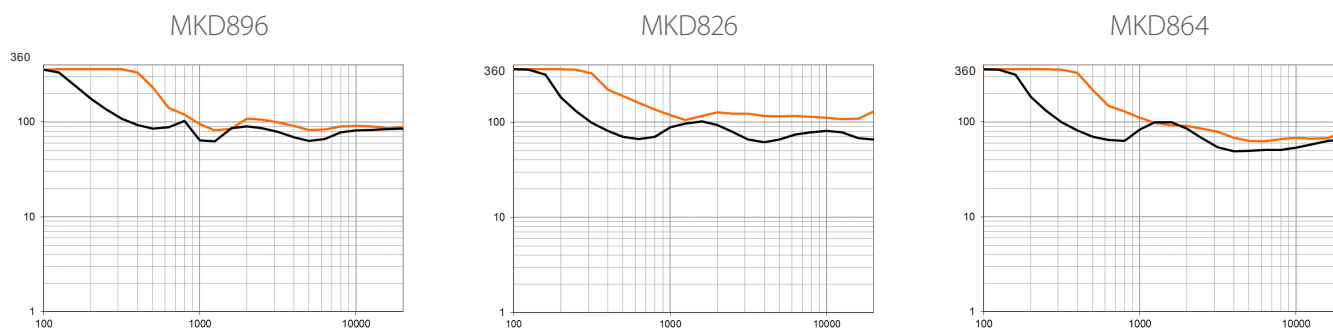


PERFORMANCE GRAPHS

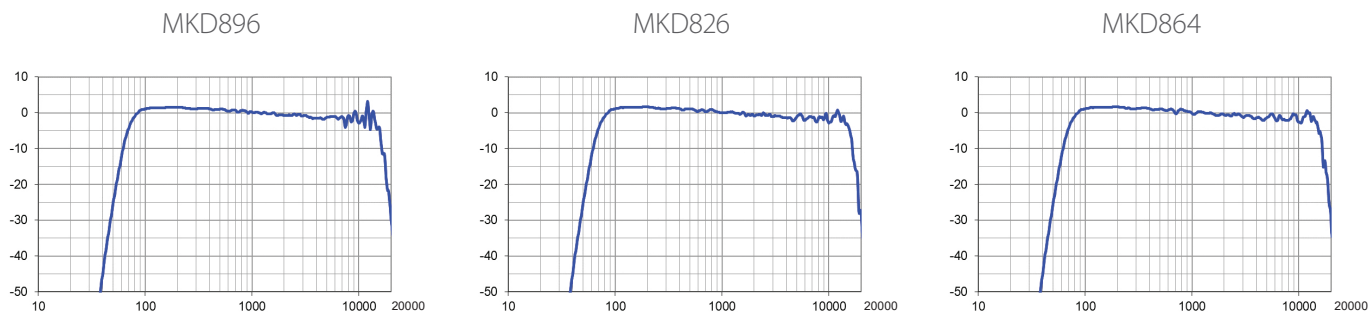
Phase Linearity



Beamwidth¹ ■=Vertical ■=Horizontal



Frequency Response²



¹ Average angle for each 1/3 octave frequency band where, starting from the rear of the loudspeaker, the output first reaches -6 dB SPL referenced to 0 dB SPL as the highest level. This method means the output may drop below -6 dB SPL within the beamwidth angle.

² Variation in acoustic output level with frequency for a constant input signal. Processed: normalized to 0 dB SPL. Unprocessed inputs: 2 V (4 ohm nominal impedance), 2.83 V (8ohm nominal impedance), or 4 V (16 ohm nominal impedance) referenced to a distance of 1 m.

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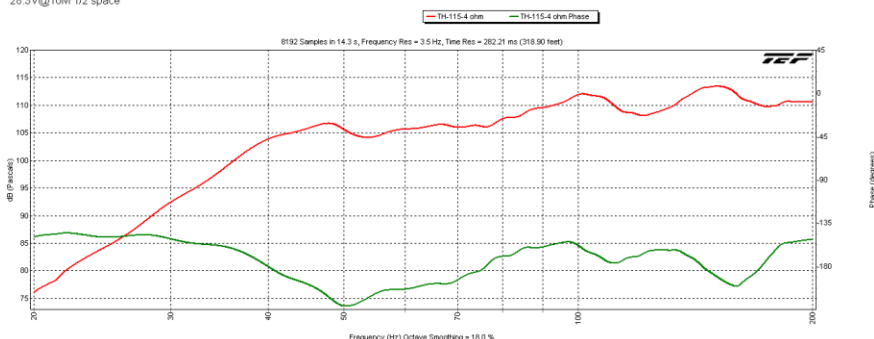


The TH115 is aimed at the concert/tour professional that wants massive punch but light weight and easy portability. Interlocking skids allow the box to be stacked into multiples which produce stunning output and low frequency directivity. The TH115 can also be installed permanently using a variety of fly-points available on the install version.

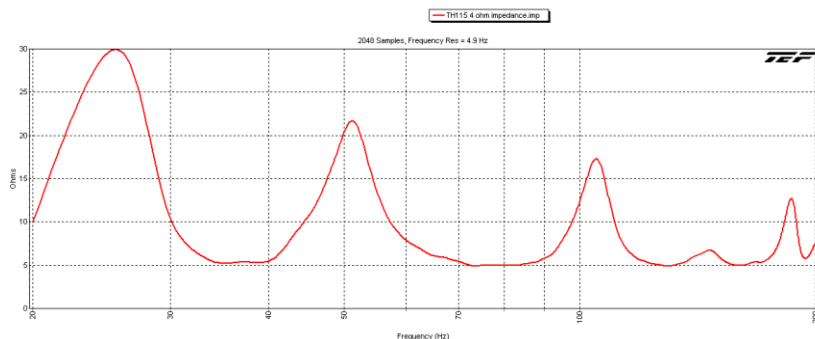
Specifications

Operating Frequency Range 38 Hz - 200 Hz - 3 dB
 33 Hz – 280 Hz -10dB
 Sensitivity @ 1M 106 dB SPL
 112 dB SPL @ 100 Hz max
 (Referenced to 2.83V @ 1M ½ space, measured as 28.3V @ 10M)
 Maximum Output..... 133 dB SPL/139 dB SPL Peak
 139 dB SPL/145 dB SPL Peak @ 100 Hz
 Input Power Ratings..... 1000 W continuous, 4000 W Peak
 Nominal Impedance 4 ohms
 Minimum Impedance..... 5 ohms @ 78 Hz
 Recommended Processing 25 Hz HP @ 24 dB/Butterworth
 Drivers..... LF 1 x 15" Long excursion
 Input Connections..... 2-NL4MP
 Enclosure Material 13ply, 18mm Baltic Birch, polyurea coated

TH-115-4 ohm
 4/18/2011 6:25:29 PM Outdoors
 28.3V@10M 1/2 space



TH115 4 ohm impedance
 5/28/2008 11:29:20 AM



TH115

Lightweight and
Easy Portability



Accessories

Powered version available
 Speaker Cover
 Touring or Install versions
 Weatherized options available

PERFORMANCE DATA

Model	Max SPL	Sensitivity	Magnitude Response	Power Rating	Dimensions (in.)	Weight
TH115	139 dB	106 dB	38 Hz – 200 Hz	2,000 W	40 x 22.5 x 28.5	152 lbs

Architect/Engineers Specs

The loudspeaker shall utilize one 15" long excursion transducer in a patent-pending enclosure. The subwoofer shall have an operating range of -3 dB 38 Hz – 200 Hz with sensitivity of 106 dBSPL, 112 dBSPL @ 100Hz.

133 dBSPL/139 dBSPL peak 139 dBSPL/145 dBSPL @ 100Hz. Power handling shall be 1000 W continuous, 2000 W program. The impedance shall be nominal 4 ohms.

The loudspeaker shall be constructed of 13 ply Baltic birch, water resistant Polyurea coated, properly braced for the intended use and a rugged steel grill. The connectors shall be Neutrik NL4. The Loudspeaker shall be the Danley Sound Labs TH115.

● 44C series

4 Channel Advanced Contractor Amplifiers



Linea Research 4 channel amplifiers present a unique combination of power and audio performance combining advanced DSP and network control with many contractor friendly features. Sharing the same feature set and form factor as the 88C series amplifiers and

available in models developing between 1,500 Watts and 5,000 Watts per channel (or 10,000 Watts for a bridged pair). Uniquely each channel can be optimised to deliver its power into 2, 4 or 8 Ohm nominal loads as well as 25V, 70V & 100V constant Voltage (CV) lines. This

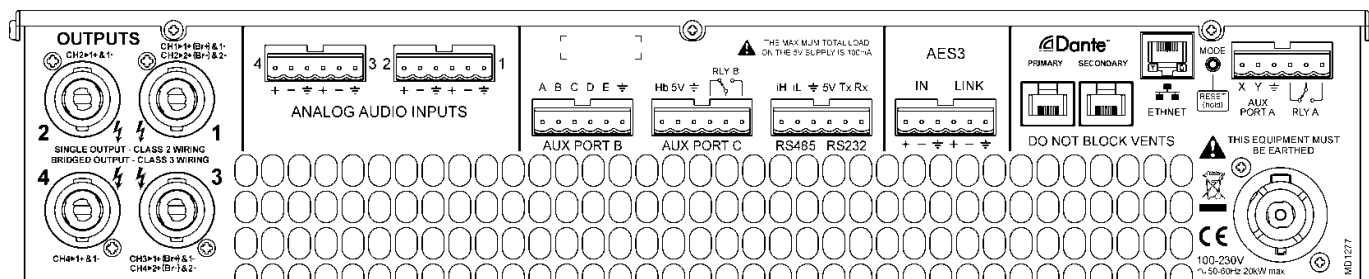
offers designers and integrators unparalleled flexibility and cost-effectiveness. Using state of the art components and a finely optimised design results in generous power reserves that ensure pristine sound quality is maintained even under the most extreme conditions.



- Four channels of sonically pure Class D amplification
- Unique, precise, 96kHz digital signal processing
- Over-designed switch mode power supply
- Tamper-proof front panel
- Contractor friendly connectors
- Contact closure control ports and relay status outputs
- Ethernet, RS232 and RS485 for system control and monitoring
- Analogue, AES3 and Dante™ / AES67 audio inputs
- Powerful grouping and multi-layer EQ
- Accepts 48kHz and 96kHz FIR files via System Engineer
- Fully designed and engineered by Linea's in-house development team
- Manufactured, tested, and supported entirely in the UK

Power per channel, all channels driven

Model	44C20	44C10	44C06
2 Ohm	5,000	2,500	1,500
4 Ohm	3,000	2,500	1,500
8 Ohm	1,500	1,500	1,500



General Specifications

Number of output channels	Four
Total power output, all channels driven	20,000, 10,000 and 6,000 Watts RMS
Audio inputs	4x Analogue, 2x AES3 and 4x Dante™ / AES67 (factory fitted option)
Digital Signal Processing	High performance 96kHz DSP on all inputs and outputs
Control, monitoring and system status alarms	Ethernet network, RS232 & RS485 Volt-free relay and contact closure ports. Heartbeat system health output
Power-save modes	Standby after user defined time with fast wake up on audio Deep ECO sleep after user defined time with wake up on command
System standby and wakeup	Network command, audio detection & contact closure

Power Output

Model	44C20	44C10	44C06
Power specification	RMS output power per channel, all channels driven with continuous program material and a nominal ambient temperature of 40°C / 105°F		
Crest Factor of 4 (12dB), 2 Ohm nominal load	5,000W	2,500W	1,500W
Crest Factor of 2.8 (9dB), 4 Ohm nominal load	3,000W	2,500W	1,500W
Crest Factor of 2 (6dB), 8 Ohm nominal load	1,500W	1,500W	1,500W
Bridged, per channel pair, 4 Ohm load	10,000W	5,000W	3,000W
25V line (CV) operation, Crest Factor 4 (12dB)	1,250W	885W	685W
70V line (CV) operation, Crest Factor 4 (12dB)	3,500W	2,500W	1,500W
100V line (CV) operation, Crest Factor 4 (12dB)	5,000W	2,500W	1,500W

Audio Performance

Amplifier topology	Linea Research high performance Class D
Amplifier modulation scheme	Low feedback, multiple loop, with feed-forward error correction
Dynamic range Measured relative to the amplifier output	Analogue input, better than 113dBA typical AES / Dante™ input, better than 114dBA typical
Gain (with all the DSP level controls set to 0dB)	32dB
Frequency response, 4 Ohm load	<7Hz to >30kHz, 4 Ohms, -2.5dB points
Total harmonic distortion, THD	<0.05% typical, 1kHz signal, AES17 filter, 4 Ohm load
Inter-channel crosstalk, worst case combination	Better than -85dBr at 1kHz and -75dBr at 10kHz
Slew rate	>60V per microsecond typical
Damping factor (Ref 8 Ohms)	>800 at amplifier output (see Linea's "Damping factor debunked" white paper)
Maximum analogue input level	+20dBu
Analogue input sensitivity range for full output	0dBu to +20dBu, continuously adjustable
Analogue input (four channels)	Input 20k Ohm, electronically balanced, link directly connected to input
Analogue ground scheme	AES48 standard compliant
AES3 input (two audio channels)	Transformer isolated with unique active cable equalisation for extended range
AES3 link (two audio channels)	Active AES3 signal regeneration. Automatic direct bypass to the AES3 input ensuring the audio signal will still flow even when the amplifier is powered down
AES3 supported sampling rates	24kHz to 192kHz (auto locking)

Digital Signal Processing

Resolution	40 bit, Linea Research proprietary algorithms
Sample rate	96kHz throughout
Physical inputs to DSP drive modules	4x Analogue, 2x AES & 4x Dante™ inputs can be routed to four DSP drive modules
Drive module input processing	Input signal routing, Delay, Gain, HPF, Phase, Mute EQ: 2x low shelf, 6x PEQ / band pass and FIR shelving filters
Drive module output processing	Source, Delay, Gain, Phase, Mute, Crossover filters, VX limiters EQ: low shelf, 8x PEQ / band pass and shelving filters / 768 tap FIR
Preset management	10 snapshots for device wide setup, 50 presets for loudspeaker settings Presets can be recalled to sets of outputs or individual outputs as required
Unique high-performance processing	
Overlays	Twelve additional independent overlays of EQ, Delay and Gain Flexible grouping for effective control of many amplifier channels in large systems
Class leading VX limiters	See the ‘speaker protection systems’ section
Hardman crossover filters	Better out of band rejection than Linkwitz-Riley
LIR crossover filters	Unique Linear Phase alignments without the compromises of FIR filters

Power Supply

Topology (main power supply)	Linea Research high performance Series Resonant
Topology (auxiliary and standby supplies)	Low quiescent Eco-Flyback
Internally stored energy	>600 Joules
Nominal mains input voltage range	85V to 240V, Power supply automatically detects voltage and configures accordingly
Mains input frequency range	47Hz to 63Hz
Mains inrush current (max for <10ms)	6A at 115V, 12A at 230V

Protections Systems

Under all circumstances the control and protection systems will endeavour to deliver the maximum power possible for a given set of conditions, applying limiters only in extreme circumstances. Muting will only occur when a dangerous situation is detected, normal operation automatically resuming when the condition clears.

System protection	Speaker protection
Excessive power supply current or amplifier output current	Sustained clipping prevention
Excessive temperature per sub system: PSU, amplifier and DSP	DC offset protection
Mains voltage within acceptable limits	Excessive HF energy (VHF) limiter
Internal power rails producing correct output	
Fans operating at correct speed	
	VX audio output limiters
	Vx provides a linear phase virtual crossover and two limiter paths on each output. This unique system delivers effective protection for systems that incorporate passive crossovers.
Power distribution protection systems	Vx Limit Multiband peak limiter, two per output
Mains inrush current limiting for soft start and anti-surge	Vx Max Multiband overshoot limiter, two per output
Mains average current limiting for mains breaker management	X-Max Driver excursion limiter
Randomised initialisation when remotely powered up	T-Max Driver thermal limiter (long term power limiter)
Monitoring, measurements recorded against time	Monitoring, device statistics and counters
Supply current	Number of power cycles counted
Supply voltage	Number of mains brownout events counted
Thermal Capacity	Fan speeds continuously monitored
Each driver current	Fan under-speed events counted
Each driver impedance	Various protection mute events counted
Protection limiting for each output	Driver Impedance continuously monitored

An inbuilt notification system is provided that indicates problems to remote devices either via the network or the Volt-free changeover relay contacts accessible on the rear panel.

Physical

Cooling	Dual vari-speed fans, front to back airflow. Washable, tool-less change filter media.
Analogue IN and LINK	Phoenix™ pluggable terminal block (mating plug supplied)
AES3 IN and LINK	Phoenix™ pluggable terminal block (mating plug supplied)
Amplifier output	Neutrik Speakon™ NL4 connectors
Mains input connector	Neutrik 32A Powercon™
Dante™ Primary and Secondary	2x Shielded RJ45
Ethernet network	Shielded RJ45
RS232 and RS485	Phoenix™ pluggable terminal block (mating plug supplied)
Relay, 'heartbeat' outputs	Phoenix™ pluggable terminal block (mating plug supplied)
Contact closure inputs	Phoenix™ pluggable terminal block (mating plug supplied)
Front panel LED indicators	Per channel - Input level, output level & status
Enclosure, all models	Standard 19" 2U (88mm), 357mm (14") deep with handles and optional rear support
Net Weight	12.5kg (27.5 Lbs)



For more information about the 44C series amplifiers or Linea's other high-performance audio products, please contact us or your local dealer.

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Type(s)

Project

Date

Notes

GENERAL INFORMATION

An LED luminaire crafted by lighting experts with a proven history of quality spot fixtures, ColorSource Spot V brings a richness of color, increased brightness, and leading technology at a price point you'll love. Featuring a five-color array of red, green, blue, indigo, and lime, the ColorSource Spot V provides soft pastels and bold saturated colors from a single fixture. Featuring wireless DMX/RDM control using Multiverse® technology, NFC configuration from your mobile device, and next level brightness, ColorSource Spot V is the ultimate in versatility.

APPLICATIONS

- Theatres and performance spaces
- Houses of worship
- Universities and schools
- Hospitality
- Retail
- Exhibition centers
- Meeting rooms
- Clubs
- Cafetoriums

PRODUCT FEATURES

- Five-color array (red, green, blue, indigo, and lime)
- Simple user interface with seven-segment display
- powerCON® TRUE1® TOP connector
- DMX/RDM in and thru (5-pin XLR)
- Multiverse wireless DMX/RDM
- NFC (near field communication) configuration
- LED droop compensation
- Optically calibrated
- Tour-ready, aluminum housing
- Combine with available adapters to transform your fixture into a fully functional Fresnel or CYC light

ORDERING INFORMATION

ColorSource Spot V Light Engine with Shutter Barrel

(For use with fixed-field lens tubes only)

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
CSSPOTVMVS	ColorSource Spot V with Multiverse, with shutter barrel, black	7423A1011	7423A1211	

ColorSource Spot V Light Engine Body

(For use with zoom lens tubes and adapters and for retrofit of existing fixtures)

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
CSSPOTVMV	ColorSource Spot V with Multiverse, body only, black	7423A1010	7423A1210	

Color options: -1 = white, -5 = silver gray, -8 = custom colors.

Also available without Multiverse wireless control. Contact your dealer for ordering information.

Fixture ships with a soft-focus diffuser in a gobo holder, a C-clamp, and a 1.5 m powerCON TRUE1 TOP power-input cable with a connector of choice. See page 5 for connector options.

Please note: Lens tubes to be ordered separately. C-clamps included in North America regions only.



PRODUCT SPECIFICATIONS

Source

LED details	60 Lumileds LUXEON® C and LUXEON Rebel LEDs
Max lumens	9,498
Lumens per watt	48
L70 rating (hours to 70% output)*	54,000 hours

Color

Colors used	Red, green, blue, indigo, lime
Color temperature range	Color mixing
Calibrated array	Yes
Red shift	No

Optical

Beam angle range	Swappable lens tubes, 5–90 degrees
Gate size	80 mm
Aperture size	6.25–14 in (depending on lens tube)
Pattern projection	Yes
Pattern size	A or B
Camera flicker control/Hz range	5,000 Hz (default) and 25,000 Hz (via RDM)
Notes	Can be used with LED CYC and Fresnel adapters

Control

Input method	DMX512 via 5-pin XLR connector
Protocols	DMX512/RDM
Modes (footprint)	4 modes, see page 4
RDM configuration	Yes
UI type	Seven-segment, three-button interface
Local control	Yes
Onboard presets	Yes (12)
Onboard sequences	Yes (5)
Onboard effects	No
FixtureLink	Yes
Notes	15-bit virtual dimming engine

Wireless

Band	2.400–2.480 GHz
Range	100 m indoors, 500 m line of sight (subject to conditions)
Max receivers	DMX: No limit RDM: Varies by transmitter used Multiverse SHoW Baby®: 585 Multiverse Transmitter: 5,000
Broadcast power	100 mW

Electrical

Voltage range	100–240 VAC 50/60 Hz
Input method	powerCON TRUE1 TOP power in and thru
Inrush	55 A at 120 V (First half-cycle) 59 A at 240 V (First half-cycle)
Fixtures per circuit*	8 fixtures (R20 module or similar)
Wattage typical / standby	199 W / 2 W at 100 V 197 W / 2 W at 120 V 194 W / 2 W at 240 V
Current draw typical / standby	2 A / 0.07 A at 100 V 1.65 A / 0.08 A at 120 V 0.90 A / 0.10 A at 240 V

*Note: All measurements are for 120 V, 60 Hz. Results may vary in different regions.

Thermal

Ambient operating temp	0°–40° C (32°–104° F)
Fan (controllable)	Yes (yes)
Droop compensation	Yes
dB range	24.4 dBA average at 1 m
BTUs/hour	672

Physical

Materials	Die-cast, all metal housing
Color options	Black, white, silver, or custom color
Mounting options	Yoke
IP rating	IP20
Weight	7.7 kg (17 lb) (without lens)
Included accessories	Hanging yoke, 1.5 m power cable, soft-focus diffuser in an A-size gobo holder
Notes	See page 5 for power cable options

Warranty

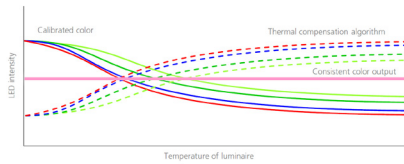
Fixture	5 years
LED array	10 years

Regulatory and Compliance

Approved regulatory standards	cETLus Listed Conforms to UL 1598 Listed Conforms to UL 924 Listed Certified to CSA C22.2 No. 250 Listed Certified to CSA C22.2 No. 141 Listed CE, UKCA, RCM, and CCC Compliant
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All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. In individual situations, LEDs will be used for different durations and levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustments to presets, cues or programs.

PRODUCT FEATURES

**LED DROOP COMPENSATION**

ETC's custom software adjusts for the changes that naturally occur as LEDs heat up and cool down so you never have to worry about color shift.

**RGBIL ARRAY**

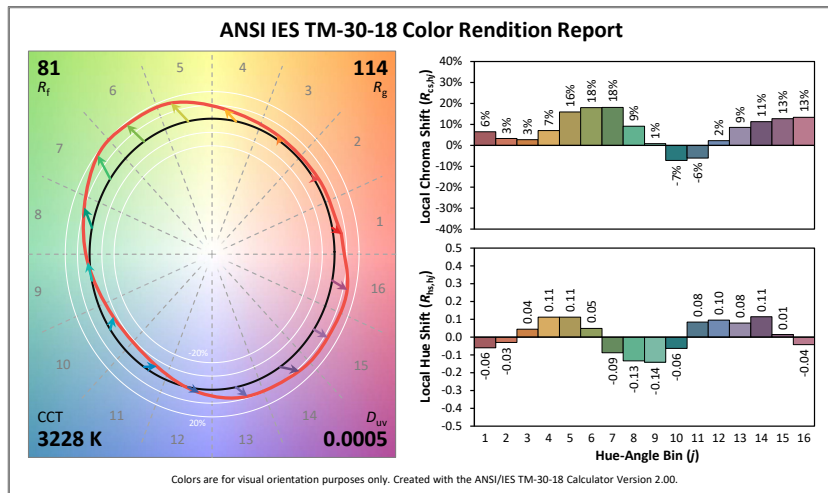
The custom five-color blend of LEDs incorporates indigo and lime to increase spectral reach and color depth.

**WIRELESS**

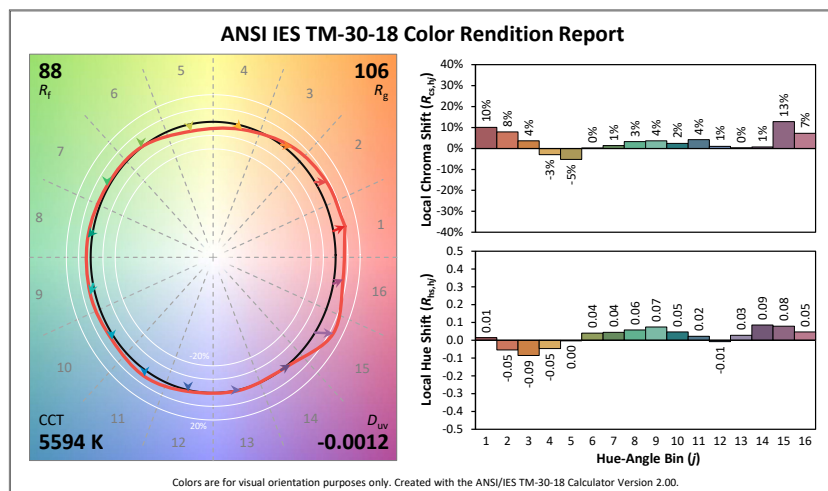
Multiverse gives you up to 10 universes of wireless DMX/RDM control. And NFC configuration is standard with ETC's free Set Light app on your mobile device.

COLOR METRIC INFORMATION

COLORSOURCE SPOT V 3200 K TM-30-18



COLORSOURCE SPOT V 5600 K TM-30-18



PHOTOMETRY INFORMATION

Degrees and Lumens

DEGREE	MAXIMUM OUTPUT FIELD LUMENS	DISTANCE TO ACHIEVE 50 FC
5	5906	36 m/118.1 ft
10	5615	23.2 m/76 ft
14	6690	16.5 m/54 ft
19	6031	12.8 m/42 ft
19 EDLT	6863	13.1 m/43 ft
26	7086	10.4 m/34.1 ft
26 EDLT	8418	11 m/36 ft
36	7890	8.1 m/26.5 ft
36 EDLT	8145	8.2 m/27 ft
50	7864	6.1 m/20 ft
50 EDLT	7980	5.8 m/18.9 ft
70	9498	4.6 m/15 ft
90	9360	4 m/13.1 ft
15-30	7220	7.6 m/25 ft
25-50	9050	11.3 m/37.2 ft

The MyETC: Photometrics app provides full photometry information. For information about the Photometrics app, visit etccconnect.com/Apps/.

CONTROL

DMX Input Channel Profiles

DMX PROFILE	DMX CHANNELS	CHANNEL ASSIGNMENTS	NOTES
Stn: Standard (Default mode)	6	1–Intensity 2–Red 3–Green 4–Blue 5–Strobe 6–Fan	Indigo and Lime are mixed automatically.
RGB	3	1–Red 2–Green 3–Blue	
1ch: 1-channel	1	1–Intensity	This mode controls the intensity of Preset 1.
Dir: Direct	8	1–Intensity 2–Red 3–Green 4–Blue 5–Indigo 6–Lime 7–Strobe 8–Fan	

ADDITIONAL ORDERING INFORMATION

Fixture Accessories

MODEL	DESCRIPTION	PART NUMBER	
400CC	C-clamp (not included with CE fixtures)	7060A2009 (not CE)	
400SC	Safety cable	7060A1022	
400PH-A	Pattern holder (A size) (included)	7060A1013	
400PH-B	Pattern holder (B size)	7060A1014	
400PH-G	Glass pattern holder	7060A1019	
400RS	Drop-In iris	7060A1012	
400CF	Color frame, 159 mm (6.25 in)	7060A3043	
407CF	Square color frame, 190 mm (7.5 in)	7061A3007	
400DN	Donut	7060A1015	
400TH	Top hat, 159 mm (6.25 in)	PSF1021	
400PTH6	Top hat, 191 mm (7.5 in)	PSF1023	
410TH	Top hat, 305 mm (12 in) (for 10° standard lens tubes)	PSF1024	
405TH	Top hat, 356 mm (14 in) (for 5° standard lens tubes)	PSF1025	
400HH	Half hat	PSF10216	

Power Input Cables

Use information below to order 15 m (5 ft) power input leads with factory-fitted connectors. CE fixtures ship with powerCON TRUE1 TOP to bare end cables in the box.

MODEL	DESCRIPTION	PART NUMBER (NOT CE)	
T1PA-A	1.5 m (5 ft) Edison plug to TRUE1 receptacle, UL 1573, black	2500B7029-A	
T1PA-B	1.5 m (5 ft) Stage Pin plug to TRUE1 receptacle, UL 1573, black	2500B7029-B	
T1PA-C	1.5 m (5 ft) Twist Lock plug to TRUE1 receptacle, UL 1573, black	2500B7029-C	
T1PA-X	1.5 m (5 ft) Bare end pigtail to TRUE1 receptacle, UL 1573, black	2500B7029-X	

Power Thru Jumpers

Note: Power thru jumpers connect to a fixture's output (thru) connector to provide a link to successive fixtures.

MODEL	DESCRIPTION	PART NUMBER	
T1PJ-5	1.5 m (5 ft) TRUE1 plug to TRUE1 receptacle fixture power jumper, UL rated, black	2500B7030	
T1PJ-10	3 m (10 ft) TRUE1 plug to TRUE1 receptacle fixture power jumper, UL rated, black	2500B7031	
DPT1A-5	1.5 m (5 ft) powerCON plug (gray) to TRUE1 receptacle adapter cable, black	2500B7038	
T1DPA-5	1.5 m (5 ft) TRUE1 plug to powerCON receptacle (blue) adapter cable, black	2500B7039	

Diffusers

The Soft Focus Diffuser fits into a standard A-size pattern holder and delivers beautiful, homogenized light. You can also use the Soft Focus Diffuser with patterns for dappled and soft-edge projections.

The Smooth Wash Diffuser is used when extra-smooth blending of multiple ColorSource Spot V luminaires is required. The smooth wash diffuser is placed into the gel-frame slot of the lens tube.

MODEL	DESCRIPTION	PART NUMBER	
S4LED-SFD	Soft Focus Diffuser (included)	7460A4019	
S4LED-SWD6	Smooth Wash Diffuser for 159 mm (6.25 in) gel frame slots	7460K1001	
S4LED-SWD7	Smooth Wash Diffuser for 190 mm (7.5 in) gel frame slots	7460K1002	
S4LED-SWD12	Smooth Wash Diffuser for 305 mm (12 in) gel frame slots (for 10° standard lens tubes)	7460K1003	
S4LED-SWD14	Smooth Wash Diffuser for 356 mm (14 in) gel frame slots (for 5° standard lens tubes)	7460K1004	

Multiverse

Model	Description	Part Number	
CT-5900	City Theatrical Multiverse SHoW Baby	4360A1091	
CT-5902	City Theatrical Multiverse Node 900 MHz / 2.4 GHz	4360A1092	
CT-5903	City Theatrical Multiverse Node 2.4 GHz	4360A1093	
CT-5910	City Theatrical Multiverse Transmitter 900 MHz / 2.4 GHz	4360A1094	
CT-5911	City Theatrical Multiverse Transmitter 2.4 GHz	4360A1095	
CT-5912	City Theatrical Multiverse Transmitter 900 MHz	4360A1096	

PREFERRED LENSING OPTIONS (Lenses sold separately)**Fixed Beam Lenses**

MODEL	DESCRIPTION	PART NUMBER	
LED50LT	LED-specific 50° EDLT lens	7460A2008	
LED50LT-1	LED-specific 50° EDLT (white) lens	7460A2008-1	
436EDLT	36° EDLT lens	7060A2048	
436EDLT-1	36° EDLT (white) lens	7060A2048-1	
426EDLT	26° EDLT lens	7060A2047	
426EDLT-1	26° EDLT (white) lens	7060A2047-1	
419EDLT	19° EDLT lens	7060A2046	
419EDLT-1	19° EDLT (white) lens	7060A2046-1	
490LT	90° lens	7060A2052-K	
490LT-1	90° (white) lens	7060A2052-1K	
470LT	70° lens	7060A2051-K	
470LT-1	70° (white) lens	7060A2051-1K	
414LT	14° lens	7060A2050-K	
414LT-1	14° (white) lens	7060A2050-1K	
410LT	10° lens	7060A2001-K	
410LT-1	10° (white) lens	7060A2001-1K	
405LT	5° lens	7060A2000-K	
405LT-1	5° (white) lens	7060A2000-1K	

Zoom Lens Assemblies

Use with light-engine body models.

MODEL	DESCRIPTION	PART NUMBER	
41530LT	Source Four 15°–30° Zoom lens	7060A2030-K	
42550LT	Source Four 25°–50° Zoom lens	7060A2032-K	

LED Adapters

MODEL	DESCRIPTION	PART NUMBER	
S4LEDCYC	LED CYC adapter	7460A2011	
S4LEDFRES	LED Fresnel adapter	7460A2016	

PHYSICAL

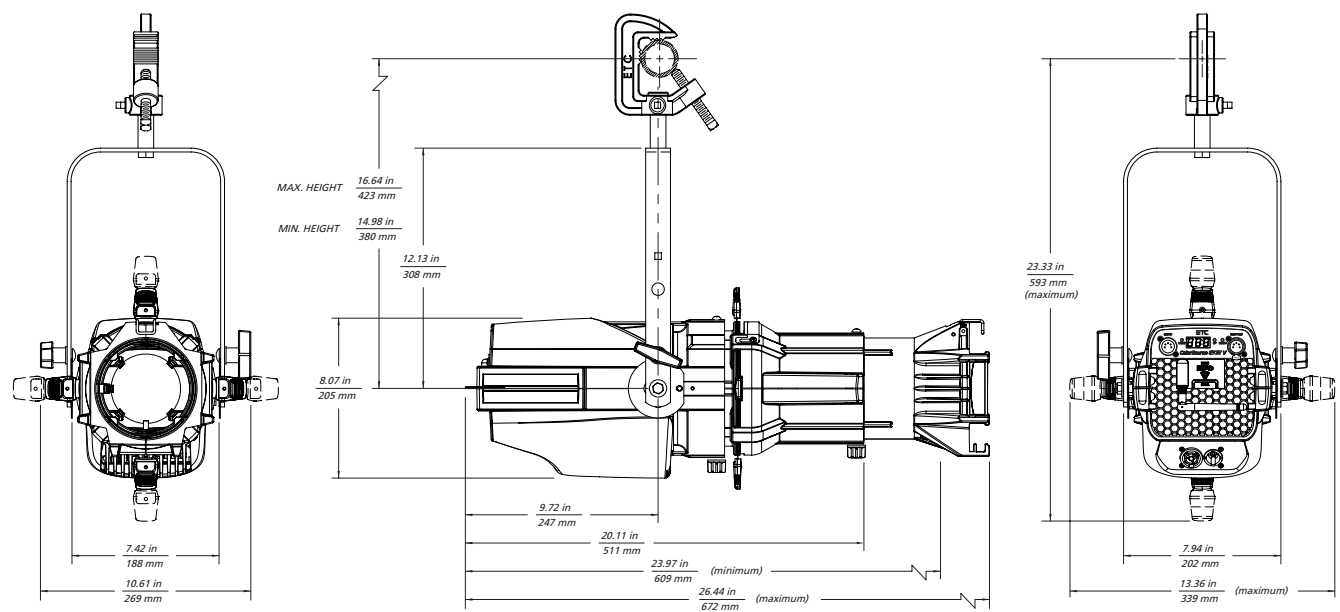
ColorSource Spot V Weights

	WEIGHT*		SHIPPING WEIGHT	
	kg	lb	kg	lb
With Barrel	7.7	17.0	10.0	22.0
Without Barrel	5.9	13.0	7.4	16.3

* Does not include mounting hardware or lens tube

ColorSource Spot V Dimensions

	HEIGHT		WIDTH		DEPTH	
	mm	in	mm	in	mm	in
ColorSource Spot V	593	23.33	339	13.36	672	26.44



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*Trademark and patent info: etcconnect.com/IP

etcconnect.com



Type(s)

Project

Date

Notes

GENERAL INFORMATION

Designed for venues using primarily conventional lighting, the Element 2 control console provides the powerful features of the Eos system in an economical and simplified package. In addition to keypad commands, true LTP Channel Faders provide hands-on control of intensity and can be used to set manual levels and edit recorded cues and submasters. Virtual moving light controls are available to facilitate the use of conventional accessories like moving mirror heads, color scrollers or gobo rotators, or to make controlling small numbers of moving lights simple and direct. Element 2 can be backed up by another Element 2, ETCnomad 6,144 or ETC Puck 6,144 mini-computer.

Eos Family software includes:

- Approachable yet powerful syntax for programmers of every level
- Industry-leading color control tools
- Magic Sheets for custom programming and displays
- Augment3d 3D programming and visualization environment
- Virtual Media Server function for pixel-mapping
- Timecode and automation integration

For drawings, photos, and more, visit the [Element 2](#) product webpage. To explore the latest software features, accessories, and other Eos Family products, visit etcconnect.com/Eos.

ORDERING INFORMATION

ELEMENT 2

MODEL	DESCRIPTION	PART NUMBER
Element 2 - 1K	Element 2 console, 1,024 outputs (base)	4331A1011 *
Element 2 - 6K	Element 2 console, 6,144 outputs (maximum)	4331A1012 *
Element 2 - 5K Up	After-sale 5K output upgrade	4331A0060
Element 2 - 5K Initial Up	Element 2 5K initial output upgrade †	4331A0061

* Add -US for Edison, -EU for Schuko/UK13A, -AZ for Australasian Type I

† Initial upgrade sold in some markets as an alternative to 4331A1012

All models are available without wireless radios (WiFi and Bluetooth). Please contact ETC for ordering information.

SHIPS WITH:

- One three-button scroll mouse and mousepad
- Alpha-numeric keyboard
- Locking regionalized IEC power cord
- Two active display port to DVI adapters
- Augment3d AR target kit
- Dust cover



ELEMENT 2 ACCESSORIES

MODEL	DESCRIPTION	PART NUMBER
ETC Puck Base	ETC Puck, 1,024 outputs (base)	4380A1133
ETC Puck - 6K	ETC Puck, 6,144 outputs (maximum)	4380A1134
ETC Puck Initial Up	ETC Puck Initial 5K output upgrade *	4380A0063
Net3 RV13	Remote Video Interface	4250A1130 †
ETCnomad Base	Client Software Key Kit	4380A1011
Element 2 FC	Element 2 Flight Case	PSR1079

* Initial upgrade sold in some markets as an alternative to 4380A1134

† Add -US for Edison, -EU for Schuko/UK13A, -AZ for Australasian Type I

HARDWARE AND INTERFACES

- Supports two external display port monitors (1920x1080 minimum, 3840x2160 maximum), with optional single-touch or multi-touch screen control and DDC/CI support
- 40 45mm standard faders, 100 10-fader pages configurable as channels, submasters, palettes/presets, timing and effect rate/speed playback control
- Dedicated fader paging knob, with backlit selection labels
- Main Playback with two 45mm standard faders
- On-Demand moving light and LED virtual encoders on connected display monitor
- Dedicated high-resolution intensity level wheel
- Eos keypad
- Included USB keyboard
- Solid-state hard drive
- IEC power input (100-240 VAC at 50/60Hz), fused mains power switch, locking regionalized power cable included
- Two individually configurable Gigabit Ethernet ports, RJ45 connectors
- One 802.11ac WiFi Ethernet adapter (to be enabled with future software)
- Bluetooth 5.1 for connecting input accessories (to be enabled with future software)
- sACN and Art-Net network output protocols
- Four DMX-512 / RDM 5-pin XLR ports
- Contact closure triggers via D-Sub connector
- USB 3.1 ports, for flash drives, pointing devices, keyboards (5 USB-A ports, 2 USB-C ports)
- One Littlite XLR port
- One Kensington lock port
- Multiple MIDI and/or SMPTE timecode inputs, MIDI In and Out, Analog/Serial Inputs, OSC transmit/receive, UDP transmit/receive through network interface or Response Gateways

ELEMENT 2 DIMENSIONS AND WEIGHTS *

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	kg	lb
Element 2	111	4.3	868	34.2	362	14.2	7.26	16.0
Element 2 in shipping container	241	9.5	1022	40.3	495	19.5	9.25	20.4
Element 2 in flight case	212	8.3	1146	45.1	494	19.5	18.94	41.8

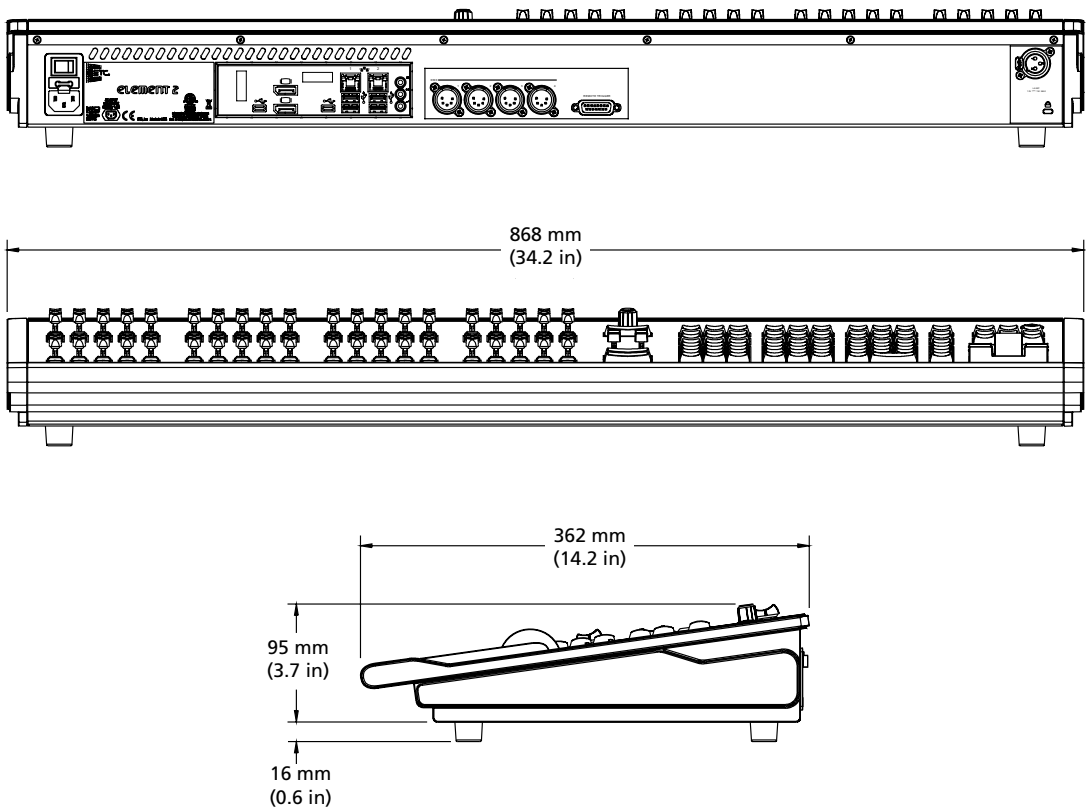
* Dimensions and weights typical

ELECTRICAL AND THERMAL

- Power consumption approximately 1.2 amps at 120V or 230/240V
- Ambient room temperature 0°-35° C (32°-95° F)
- Ambient humidity up to 90% non-condensing

REGULATORY AND COMPLIANCE

- CE compliant
- cETLus listed
- UKCA marked
- FCC compliant
- RoHS compliant
- WEEE



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