

OUR HISTORY

ImageNet Consulting was founded as Southwest Typewriter Company in 1956.

As times and technology changed, so did our name.

Southwest Typewriter Company began a legacy of providing superior solutions, products, and service. Over the years, we've seen constant innovations in office equipment and communication technology and as the copy machine revolution began in the 1970s, we supplied our clients with the products that met their budgets and provided the best solution. Through the generations we continue to utilize the platforms of leading technology companies to maximize efficiencies and lower costs for our clients.

See more of our story at ImageNet.com/History

PROJECT PROPOSAL FOR:

Stillwater Public Schools

PROJECT: P-3810 High School AV

PREPARED ON*: November 19, 2025

Stillwater, OK

Priced Under

ImageNet TIPS/TAPS Contract 240101-2
Technology Solutions, Products, and Services

*Pricing is subject to change at any time, and this proposal's pricing is valid for thirty (30) calendar days from proposal creation.

Should the proposal be signed after this thirty (30) day period, ImageNet Consulting reserves the right to update any pricing based on current market rates.

SCOPE OF WORK

Project Description:

This proposal will not be valid until a full scope of work is attached and agreed upon. If signed prior to a full Scope of Work being agreed upon, ImageNet can void the agreement pending the Scope of Work being reviewed and accepted by the customer and ImageNet. The intent is to discuss the offering and ensure that the proposal is accurate with expectations, and that budgetary concerns are being addressed.

Presentation Rooms 1st and 2nd Floor:

The presentation rooms will utilise an OFE Promethean IFP as the main screen and PC source. Two Sony displays will be installed on either side of the Promethean. Video from the PC or Crestron AirMedia will be available to route to any display in the room via an Extron DTP3 Matrix switcher. Extron ceiling-tile replacement speakers will be installed for audio output and powered by the amplifier inside the Extron unit. A Shure wireless Microphone system consisting of a charging base, handheld microphone, and body pack with a lapel mic will allow presenters to project their voice through the speakers. An Extron XLR 2-in 2-out wall plate will be provided for hardwired audio expansion. An Extron 7in control panel will be provided and will utilize the built-in control processor on the Extron Matrix Switcher to control the room.

Band Room:

The band room will utilise an OFE Promethean IFP as the main screen and PC source. An Epson projector equipped with an ultra-short throw lens will be installed above the Promethean and will project onto the specified 220" painted surface. Video from the PC or Crestron AirMedia will be available to route to any display in the room via an Extron DTP3 Matrix switcher. Extron ceiling-tile replacement speakers will be installed for audio output and powered by the amplifier inside the Extron unit. An Extron XLR 2-in 2-out wall plate will be provided for hardwired audio expansion. An Extron 7in control panel will be provided and will utilize the built-in control processor on the Extron Matrix Switcher to control the room. (1) Shure MXW neXt 2 Wireless mic base unit, (1) MXW2X/SM58 Handheld Mic, (1) MXW1XO Bodypack, (1) WL185 lavalier microphone, and (1) PGA31 headset mic.

Optional: A Shure wireless Microphone system consisting of a charging base, handheld microphone, and body pack with a lapel mic and headset mic will allow presenters to project their voice through the speakers. An Extron XLR 2-in 2-out wall plate will be provided for hardwired audio expansion. An Extron 7in control panel will be provided and will utilize the built-in control processor on the Extron Matrix Switcher to control the room.

Cafeteria:

The cafeteria will utilize an Extron NAV AV-over-IP system that can be added to as needed for years to come. Extron NAV encoders will be used to ingest video sources into the system. One Extron NAV decoder will be connected to the OFE LED Wall processor. The other decoders will connect to the displays throughout the cafeteria. Four Sony displays will be provided near the servery and seating areas. QSC pendant speakers and pendant subwoofers will be installed in the seating area, and six ceiling speakers will be installed in the servery. A QSC CX-Q networked Amplifier will power the speakers. Two 2x2 XLR wall plates and one Bluetooth wall plate will be provided for external audio sources. One QSYS Core will be used as the audio and control processor with two control panels, one at the top of the stairs and one below.

Gym:

The gym will feature two Epson projectors installed in the back of the gym and projected onto two Da-Lite 220" Cosmopolitan electric screens. QSYS AV-over-IP endpoints will be used to route video from the rack inputs to the projectors. A 2x2 XLR wall plate and Bluetooth wall plate will be provided for external audio sources. One QSYS Core will be used as the audio and control processor with one control panel. A JBL speaker cluster and two subwoofers will be flown from the ceiling and powered by QSC CX-Q amplifiers in the

rack. A 2-Channel Shure ULXD receiver will be installed in the rack and will be paired with two wireless handheld microphones. Rechargeable batteries and a charging station will be provided.

Conference Rooms:

The conference rooms will feature an OFE TCL 75" display mounted at the front of the room using an OFE mount. One ViewSonic WPD-900 will be installed behind the TCL.

Site Requirements and Customer Provisions:

- Customer Point of Contact must be accessible should any site decisions need to be made during installation. On-site Customer Representative is necessary to expedite issue escalation
- Power and data in place (type, number of circuits, location)
- Owner furnished equipment (Customer PC, specific software installation)
- Company image files or digital assets for any user control interfaces
- Network credentials and any network access information or IP configuration information will be need to be provided to ImageNet by the customer prior to installation or configuration of equipment.

Reoccurring Charges:

- The Q-SYS Reflect platform requires a reoccurring annual charge and the first year is included in this proposal. For continuance of service, the Reflect Service will need to be paid annually by the customer if continuance of the service is desired in year 2 and onward.

Specific Exclusions and Declarations:

- Work to be performed during normal business hours
- Free and accessible parking on premises
- Unless stated otherwise, ImageNet will not be installing electrical circuits or network cabling for access to customer network.
- It is assumed that the work area will be dust free and clear of other trades, otherwise damage to devices could occur.
- O365, Teams, Zoom, or other types of platform admin software/account maintenance is not included with any ImageNet project and will need to be managed by the customer.
- ImageNet is not responsible for, and does not warranty, any owner furnished equipment. Examples of common owner furnished equipment include, but are not limited to, displays, PCs, and existing structured cabling.
- ImageNet is not responsible for repair or painting of old mounting locations where equipment was removed.

Project Timeline:

Typical scheduling lead time of 6-8 weeks from signed order dependent on equipment availability.

- **Pre-Installation:**
 - Equipment has been ordered – bi-monthly automated update emails will be sent to Customer with equipment status
 - Project Kick-off Call with ImageNet and Customer prior to scheduling installation
 - Once Equipment is fully received installation will be scheduled
 - Device information documented for reference
- **Installation:**
 - Equipment delivered to site (may arrange for delivery prior to installation)
 - Installers load-in to site and organize equipment
 - Installers confirm site conditions and mark locations for cable pulls and items to be installed
 - Installers pull all required cabling, then terminate, verify, and label cabling.
 - Devices are installed/mounted as determined in this Scope of Work.

- Installation status updates will be provided to Customer
- **Testing and Commissioning:**
 - Update device firmware
 - Upload and verify control programming
 - Configure all devices
 - Verify full system functionality
 - Calibrate audio levels
 - Confirm that all device information, files, configurations are documented
 - Conduct user training
- **Project Closeout:**
 - Signature on Final Completion if no punch-list items remain
 - Signature on Substantial Completion with remaining punch-list items documented
 - System documentation delivered to customer (as desired)
 - Customer Survey

CAFETERIA

VIDEO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Crestron AM-3100-WF AirMedia® Receiver 3100 with Wi-Fi® Network Connectivity	\$1,650.00	30%	\$495.00	\$1,155.00	\$1,155.00	\$225.00
	1	QSC CORE 8 FLEX 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.	\$3,525.00	30%	\$1,057.50	\$2,467.50	\$2,467.50	\$0.00
	1	QSC SLDAN-16-P Q-SYS Software-based Dante 16x16 Channel License, Perpetual.	\$600.00	30%	\$180.00	\$420.00	\$420.00	\$0.00
	1	QSC SLMST-8N-P Q-SYS Core 8 Flex, Core Nano, NV-32-H (Core Capable) license for Microsoft Teams Room software features, enables both Q-SYS Scripting and UCI Deployment, Perpetual	\$535.00	30%	\$160.50	\$374.50	\$374.50	\$0.00
	1	Extron Electronics 60-1534-01 Entry Level Version for 16 Endpoints	\$2,420.00	30%	\$726.00	\$1,694.00	\$1,694.00	\$0.00
	1	Extron Electronics 79-2551-01 LinkLicense for NAVigator SIS Control			\$0.00	\$0.00	\$0.00	\$0.00
	4	Extron Electronics 60-2040-01 1G Pro AV over IP Compact Encoder - HDMI	\$1,460.00	30%	\$438.00	\$1,022.00	\$4,088.00	\$0.00
	8	Extron Electronics 60-2040-03 1G Pro AV over IP Compact Decoder - HDMI	\$1,390.00	30%	\$417.00	\$973.00	\$7,784.00	\$0.00
	4	Sony FW-65BZ40L 65" BRAVIA 4K HDR PROFESSIONAL DISPLAY	\$2,100.00	30%	\$630.00	\$1,470.00	\$5,880.00	\$0.00
VIDEO TOTAL								\$24,088.00

AUDIO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	8	QSC AD-P6T-WH 6.5" two-way pendant speaker - White	\$425.00	30%	\$127.50	\$297.50	\$2,380.00	\$0.00
	4	QSC AD-P.SUB-WH 6.5" Dual voice-coil pendant subwoofer, provides High-pass output for up to four (4) satellite speakers, 70/100V transformer with 4Ω bypass, includes cable and fasteners for suspended installation. Color - White.	\$645.00	30%	\$193.50	\$451.50	\$1,806.00	\$0.00

ImageNet Consulting - Tulsa

Confidential Proposal

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	6	QSC AD-C6T-ZB-WH 6.5" Two-way ceiling speaker, 70/100V transformer with 16Ωbypass, zero bezel design, 150° conical DMT coverage, includes C-rign and rails for blind mount installation. Priced individually, sold in pairs. White only.	\$325.00	30%	\$97.50	\$227.50	\$1,365.00	\$0.00
	1	QSC CX-Q 4K4 4-Channel 1000W/CH Q-SYS Network Amplifier, Lo-Z, 70V, 100V direct drive, FlexAmp™, Mic/line Inputs, 100-240V.	\$4,270.00	30%	\$1,281.00	\$2,989.00	\$2,989.00	\$450.00
	1	QSC SLDAN-16-P Q-SYS Software-based Dante 16x16 Channel License, Perpetual.	\$600.00	15%	\$90.00	\$510.00	\$510.00	\$0.00
	1	QSC unD6IO-BT 4x2 Channel 2 Gang US, Dante/AES67 Wall Plate w/Bluetooth, RCA, 3.5 mm I/O, PoE (white and black faceplates included).	\$1,480.00	30%	\$444.00	\$1,036.00	\$1,036.00	\$0.00
	2	QSC unDX2IO+ 4x2 Channel 2 Gang US Dante/AES67 Wall Plate 2 Mic/Line In x 2 Out (XLR), Phoenix I/O, PoE (white and black faceplates included)	\$1,145.00	30%	\$343.50	\$801.50	\$1,603.00	\$0.00
	1	Shure MXWAPX4=-Z10 Wireless Accesspoint configured for 4 Channels, with inbuilt Intellimix	\$3,713.00	15%	\$556.95	\$3,156.05	\$3,156.05	\$0.00
	1	Shure MXWDX4 Networked Dock - 4 Bay	\$1,238.00	15%	\$185.70	\$1,052.30	\$1,052.30	\$0.00
	1	Shure MXW2X/SM58=-Z10 Microphone - Handheld - SM58 Cartridge	\$832.00	25%	\$208.00	\$624.00	\$624.00	\$0.00
	1	Shure WL185MB/C-TQG LAVALIER MICROPHONE, CARDIOID, BLACK	\$191.00	25%	\$47.75	\$143.25	\$143.25	\$0.00
	1	Shure MXW1X/O=-Z10 Microphone - Bodypack	\$812.00	25%	\$203.00	\$609.00	\$609.00	\$0.00
	2	Shure BETA 58A Supercardioid Dynamic with High Output Neodymium Element, for Vocal and Instrument Applications	\$245.00	31%	\$76.00	\$169.00	\$338.00	\$0.00
	2	Shure C25B 25' Heavy-Duty Cable, Black XLR Connector on Microphone End	\$35.00	15%	\$5.25	\$29.75	\$59.50	\$0.00
AUDIO TOTAL							\$18,121.10	

CONTROL

Equipment prices include any required accessories. Labor prices include design, engineering, installation and programming.

ImageNet Consulting - Tulsa

Confidential Proposal

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Netgear GSM4230P-100NAS AV LINEM4250-26G4F-POE+24X1G POE+ 300W	\$1,871.91	40%	\$748.76	\$1,123.15	\$1,123.15	\$0.00
	1	Middle Atlantic UPX-RLNK-1500R-2 1500VA 120V UPS RLNK BANK CONTROL	\$3,422.00	35%	\$1,197.70	\$2,224.30	\$2,224.30	\$0.00
	2	QSC TSC-70-G3 Q-SYS 7" PoE Touch Screen Controller for In-Wall Mounting. Color - Black only	\$2,000.00	30%	\$600.00	\$1,400.00	\$2,800.00	\$0.00
CONTROL TOTAL								\$6,147.45

MISC

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ImageNet Installation Materials			\$0.00	\$5,000.00	\$5,000.00	\$0.00
MISC TOTAL								\$5,000.00

LABOR

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ImageNet Labor Project Coordination, Delivery, Project Management, Installation, and Commissioning of AV Project			\$0.00	\$0.00	\$0.00	\$21,385.00
LABOR TOTAL								\$21,385.00
CAFETERIA TOTAL								\$74,741.55

GYM

VIDEO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	2	Epson V11HA65920 EPSON EB-PU2113W Laser Projector, Interchangeable Lens, 13,000 Lumens, WUXGA with 4KE, White	\$29,239.00	40%	\$11,695.60	\$17,543.40	\$35,086.80	\$0.00
	2	Epson V12H004M0B EPSON Middle Zoom Lens #4 for Pro G7000 and L1000 Series (ELPLM11)	\$3,130.00	40%	\$1,252.00	\$1,878.00	\$3,756.00	\$0.00
	2	Da-Lite 29934L COSMO TNSD 220D PRLX STR 1.0 HDTV	\$10,780.00	30%	\$3,234.00	\$7,546.00	\$15,092.00	\$0.00
	1	Crestron AM-3100-WF AirMedia® Receiver 3100 with Wi-Fi® Network Connectivity	\$1,650.00	30%	\$495.00	\$1,155.00	\$1,155.00	\$225.00
	1	Crestron AM-TX3-100 AirMedia® Series 3 Connect Adaptor [Available April 21st, 2023]	\$800.00	30%	\$240.00	\$560.00	\$560.00	\$0.00
	2	QSC NV-21-HU 4K60 4:4:4 Network Video Endpoint for Q-SYSEcosystem, software configurable as Encoder or Decoder. 1 HDMI 2.0 Input, 1 USB-C Input, 1 HDMI 2.0 output. Optional Software License to enable AV Bridging (SLQBR-P).	\$2,400.00	30%	\$720.00	\$1,680.00	\$3,360.00	\$0.00
	1	QSC NV-32-H (Core Capable) 4K60 4:4:4 Network Video Endpoint for the Q-SYS Ecosystem, software configurable as Encoder or Decoder. 3 HDMI 2.0 Inputs, 2 HDMI 2.0 Outputs, on-board AV Bridging. Supports optional stand-alone "Q-SYS Core Mode" operation for audio DSP with local video switching (no encoding or decoding) and AV Bridging.	\$4,460.00	30%	\$1,338.00	\$3,122.00	\$3,122.00	\$0.00
	1	QSC CORE 8 FLEX 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.	\$3,525.00	30%	\$1,057.50	\$2,467.50	\$2,467.50	\$0.00
	1	QSC SLDAN-16-P Q-SYS Software-based Dante 16x16 Channel License, Perpetual.	\$600.00	30%	\$180.00	\$420.00	\$420.00	\$0.00
VIDEO TOTAL								\$65,244.30

AUDIO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	QSC unD6IO-BT 4x2 Channel 2 Gang US, Dante/AES67 Wall Plate w/Bluetooth, RCA, 3.5 mm I/O, PoE (white and black faceplates included).	\$1,480.00	30%	\$444.00	\$1,036.00	\$1,036.00	\$0.00
	1	QSC unDX2IO+ 4x2 Channel 2 Gang US Dante/AES67 Wall Plate 2 Mic/Line In x 2 Out (XLR), Phoenix I/O, PoE (white and black faceplates included)	\$1,145.00	30%	\$343.50	\$801.50	\$801.50	\$0.00
	1	QSC CX-Q 4K4 4-Channel 1000W/CH Q-SYS Network Amplifier, Lo-Z, 70V, 100V direct drive, FlexAmp™, Mic/line Inputs, 100-240V.	\$4,270.00	30%	\$1,281.00	\$2,989.00	\$2,989.00	\$0.00
	2	QSC CX-Q 8K4 4-Channel 2000W/CH Q-SYS Network Amplifier, Lo-Z, 70V, 100V direct drive, FlexAmp™, Mic/line Inputs, 100-240V.	\$5,355.00	30%	\$1,606.50	\$3,748.50	\$7,497.00	\$0.00
	3	JBL Professional AM7215/64 High Power 15" 2-Way Full-Range Loudspeaker System with JBL Differential Drive® 75mm (3-in) dual voice coil and dual magnetic gap 2265H low frequency driver and 2432H high-frequency 38mm (1.5 in) exit, 75mm (3 in) voice-coil compression driver. 60° x 40° rotatable Progressive Transition™ waveguide, Bi-Amp/Passive Switchable. Available in Black or White (-WH). Priced as each. Suspension eyebolts not included. Optional U-bracket model MTU-1	\$3,820.00	30%	\$1,146.00	\$2,674.00	\$8,022.00	\$0.00
	2	JBL Professional ASB7118 SINGLE 18" SUBWOOFER	\$4,500.00	30%	\$1,350.00	\$3,150.00	\$6,300.00	\$0.00
	4	JBL Professional 229-00009-01 HARDWARE KIT, SP/VS	\$75.00	30%	\$22.50	\$52.50	\$210.00	\$0.00
	1	Adaptive Technologies Group FP-AM7215-3X1 Clustering and flying AM7215 and AM5215 series loudspeakers is easy, safe and very predictable. This planar array suspension kit joins three AM7215 or AM5215 cabinets together to be flown as one, tight-packed for near field placement or splayed out for further distances from the audience.	\$700.00	35%	\$245.00	\$455.00	\$455.00	\$0.00
	1	Shure ULXD4DGV-G50 Dual Digital Wireless Receiver with Always On AES256 Encryption, Internal Power Supply, 1/2 Wave Antenna and Rack Mounting Hardware, 470-534 MHz	\$4,979.00	25%	\$1,244.75	\$3,734.25	\$3,734.25	\$0.00

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	2	Shure ULXD2/SM58=-G50 Handheld Transmitter with SM58® Microphone	\$895.00	25%	\$223.75	\$671.25	\$1,342.50	\$0.00
	2	Shure SB900C SHURE SB900C Battery	\$140.00	25%	\$35.00	\$105.00	\$210.00	\$0.00
	1	Shure SBC220-US 2 Bay Networked Docking Station	\$507.00	25%	\$126.75	\$380.25	\$380.25	\$0.00
	1	RF Venue D-ARCDISTRO4 This turnkey bundle includes everything needed to configure up to 5 channels of wireless microphones. Included in the bundle * D-ARC; Patent pending Diversity Architectural Antenna system reduces signal dropouts * DISTRO4: 4 Channel antenna distribution with internal power supply and cascade ports * WRG8X25: Two 25' Premium low loss double shielded coaxial cables.	\$1,449.00	10%	\$144.90	\$1,304.10	\$1,304.10	\$0.00
AUDIO TOTAL							\$34,281.60	

CONTROL

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	2	QSC TSC-70-G3 Q-SYS 7" PoE Touch Screen Controller for In-Wall Mounting. Color - Black only	\$2,000.00	30%	\$600.00	\$1,400.00	\$2,800.00	\$0.00
	1	Netgear GSM4230P-100NAS AV LINEM4250-26G4F-POE+24X1G POE+ 300W	\$1,871.91	40%	\$748.76	\$1,123.15	\$1,123.15	\$0.00
	2	Da-Lite DL15316 SCREEN CONTROLLER	\$700.00	20%	\$140.00	\$560.00	\$1,120.00	\$0.00
CONTROL TOTAL							\$5,043.15	

MISC

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ImageNet Installation Materials Conduit, Cabling, Rigging			\$0.00	\$7,000.00	\$7,000.00	\$0.00
MISC TOTAL							\$7,000.00	

LABOR

Equipment prices include any required accessories. Labor prices include design, engineering, installation and programming.

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ImageNet Labor Project Coordination, Delivery, Project Management, Installation, and Commissioning of AV Project			\$0.00	\$0.00	\$0.00	\$20,385.00
LABOR TOTAL								\$20,385.00

POWER AND ACCESSORIES

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Middle Atlantic DWR-24-22 24SP/22D WALLRACK BLACK	\$1,673.00	35%	\$585.55	\$1,087.45	\$1,087.45	\$0.00
	1	Middle Atlantic UD2 2SP UTIL.DRAWER,BLK	\$241.00	35%	\$84.35	\$156.65	\$156.65	\$0.00
	1	Middle Atlantic KYLK KEYLOCK OPTION FOR UD SER	\$45.00	35%	\$15.75	\$29.25	\$29.25	\$0.00
	1	Middle Atlantic LVFD-24 Vented Front Door, 24 RU Racks, DWR/EWR Series	\$610.00	35%	\$213.50	\$396.50	\$396.50	\$0.00
	1	Middle Atlantic VT1 1SP PERFORATED VENT PANEL	\$31.00	35%	\$10.85	\$20.15	\$20.15	\$0.00
	1	Middle Atlantic RLNK-915R SELECT SERIES PDU WITH RACKLINK	\$795.00	35%	\$278.25	\$516.75	\$516.75	\$56.25
	1	ImageNet Scaffolding/Lift Rental			\$0.00	\$2,000.00	\$2,000.00	\$0.00
POWER AND ACCESSORIES TOTAL								\$4,263.00
GYM TOTAL								\$136,217.05

PRESENTATION ROOMS 1ST AND 2ND FLOOR (2)

VIDEO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
OWNER								
	1	FURNISHED Promethean ActivPanel 86" 4K ActivPanel 86" 4K - 4 x Pen, Vesa Mount & cable pack included. ActivInspire Professional Edition available FOC	\$11,429.00	100%	\$11,429.00	\$0.00	\$0.00	\$400.00
	2	Sony FW-75BZ40L 75" BRAVIA 4K HDR PROFESSIONAL DISPLAY	\$3,360.00	30%	\$1,008.00	\$2,352.00	\$4,704.00	\$0.00
	2	Chief XTM1U X-Large Fusion Series Micro-Adjustable Tilt Wall Mount for 75" - 98" Displays	\$519.00	35%	\$181.65	\$337.35	\$674.70	\$0.00
	1	Crestron AM-3100-WF AirMedia® Receiver 3100 with Wi-Fi® Network Connectivity	\$1,650.00	30%	\$495.00	\$1,155.00	\$1,155.00	\$225.00
	1	Crestron AM-TX3-100 AirMedia® Series 3 Connect Adaptor [Available April 21st, 2023]	\$800.00	30%	\$240.00	\$560.00	\$560.00	\$0.00
	3	Extron Electronics 60-1331-13 DTP HDMI 4K 330 Rx Long Distance HDMI Twisted Pair Receiver - 330 feet (100 m)	\$690.00	30%	\$207.00	\$483.00	\$1,449.00	\$0.00
	1	Extron Electronics 60-1331-12 Long Distance HDMI Twisted Pair Transmitter - 330 feet (100 m)	\$690.00	30%	\$207.00	\$483.00	\$483.00	\$0.00
	1	Shure MXWAPXD2=-Z10 Access Point/Charger/DSP - 2 Ch.	\$1,786.00	25%	\$446.50	\$1,339.50	\$1,339.50	\$0.00
	1	Shure MXW2X/SM58=-Z10 Microphone - Handheld - SM58 Cartridge	\$832.00	25%	\$208.00	\$624.00	\$624.00	\$0.00
	1	Shure MXW1X/O=-Z10 Microphone - Bodypack	\$812.00	25%	\$203.00	\$609.00	\$609.00	\$0.00
	1	Shure WL185MB/C-TQG LAVALIER MICROPHONE, CARDIOID, BLACK	\$191.00	25%	\$47.75	\$143.25	\$143.25	\$0.00
VIDEO TOTAL								\$12,366.45

AUDIO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Extron Electronics 60-1570-12A 4K/60 Presentation Matrix Switcher with Reversible DTP3 I/O, Control Processor and Amplifier, LL UI Upgrade	\$16,140.00	30%	\$4,842.00	\$11,298.00	\$11,298.00	\$0.00
	4	Extron Electronics 42-141-03 Ceiling - 2' x 2' Drop-In, Xfmr, Pair	\$630.00	30%	\$189.00	\$441.00	\$1,764.00	\$400.00
	1	Extron Electronics 60-1942-23 AXI 22 AT D Plus & WPD 102 XLRM Kit - White	\$1,350.00	30%	\$405.00	\$945.00	\$945.00	\$0.00
AUDIO TOTAL								\$14,407.00

CONTROL

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Extron Electronics 60-1563-03 7" Wall Mount TouchLink® Pro Touchpanel - White	\$2,420.00	30%	\$726.00	\$1,694.00	\$1,694.00	\$0.00
	1	Netgear GSM4212P-100NAS M4250-10G2F-POE+8X1G POE	\$951.54	40%	\$380.62	\$570.92	\$570.92	\$0.00
CONTROL TOTAL								\$2,264.92

MISC

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Middle Atlantic EWR-16-22SD 16SP/22D ECONO WLRK,BK,DR	\$1,307.00	35%	\$457.45	\$849.55	\$849.55	\$0.00
	1	Middle Atlantic RLNK-915R SELECT SERIES PDU WITH RACKLINK	\$795.00	35%	\$278.25	\$516.75	\$516.75	\$56.25
	1	ImageNet Installation Materials			\$0.00	\$500.00	\$500.00	\$0.00
MISC TOTAL								\$1,922.55

LABOR

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ImageNet Labor Project Coordination, Delivery, Project Management, Installation, and Commissioning of AV Project			\$0.00	\$0.00	\$0.00	\$8,680.00
LABOR TOTAL								\$8,680.00

PRESENTATION ROOMS 1ST AND 2ND FLOOR TOTAL (EACH)	\$39,640.92
PRESENTATION ROOMS 1ST AND 2ND FLOOR TOTAL (2)	\$79,281.84

CONFERENCE ROOMS (8)

MISC

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
+ImageNet	1	ImageNet Installation Materials Hardware and Cabling			\$0.00	\$50.00	\$50.00	\$0.00
MISC TOTAL								\$50.00

LABOR

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
+ImageNet	1	ImageNet Labor Project Coordination, Delivery, Project Management, Installation, and Commissioning of AV Project			\$0.00	\$0.00	\$0.00	\$710.00
LABOR TOTAL								\$710.00

WIRELESS PRESENTATION

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ViewSonic WPD-900 ViewShare WPD-900 Wireless Screen Casting Kit.	\$299.00	56%	\$167.57	\$131.43	\$131.43	\$0.00
WIRELESS PRESENTATION TOTAL								\$131.43
CONFERENCE ROOMS TOTAL (EACH)								\$891.43
CONFERENCE ROOMS TOTAL (8)								\$7,131.44

ADDITIONAL VIEWSONIC WPD-900 UNITS

SCOPE

Brings the total count to 10 units, counting the 8 units for the Conference Rooms.

WIRELESS PRESENTATION

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	2	ViewSonic WPD-900 ViewShare WPD-900 Wireless Screen Casting Kit.	\$299.00	56%	\$167.57	\$131.43	\$262.86	\$0.00
WIRELESS PRESENTATION TOTAL								\$262.86
ADDITIONAL VIEWSONIC WPD-900 UNITS TOTAL								\$262.86

BAND ROOM

VIDEO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Epson V11HA65920 EPSON EB-PU2113W Laser Projector, Interchangeable Lens, 13,000 Lumens, WUXGA with 4KE, White	\$29,239.00	40%	\$11,695.60	\$17,543.40	\$17,543.40	\$0.00
	1	Epson V12H004X0B EPSON ULTRA SHORT THROW LENS (ELPLX02S), BLACK	\$20,369.00	40%	\$8,147.60	\$12,221.40	\$12,221.40	\$0.00
		OWNER FURNISHED Promethean ActivPanel 86"						
	1	4K ActivPanel 86" 4K - 4 x Pen, Vesa Mount & cable pack included. ActivInspire Professional Edition available FOC	\$11,429.00	100%	\$11,429.00	\$0.00	\$0.00	\$400.00
	1	TCL TM85N 85", UHD, 500Nits, 24/7, Landscape & Portrait, Speakers, Android 13	\$5,088.00	10%	\$508.80	\$4,579.20	\$4,579.20	\$0.00
	1	Strong SM-T-XL X-Large Tilt Mount for 75"-98" Flat-Panel TVs	\$456.99	35%	\$159.95	\$297.04	\$297.04	\$0.00
	1	Crestron AM-3100-WF AirMedia® Receiver 3100 with Wi-Fi® Network Connectivity	\$1,650.00	30%	\$495.00	\$1,155.00	\$1,155.00	\$225.00
	1	Crestron AM-TX3-100 AirMedia® Series 3 Connect Adaptor [Available April 21st, 2023]	\$800.00	30%	\$240.00	\$560.00	\$560.00	\$0.00
	2	Extron Electronics 60-1331-13 DTP HDMI 4K 330 Rx Long Distance HDMI Twisted Pair Receiver - 330 feet (100 m)	\$690.00	30%	\$207.00	\$483.00	\$966.00	\$0.00
	2	Extron Electronics 60-1331-12 Long Distance HDMI Twisted Pair Transmitter - 330 feet (100 m)	\$690.00	30%	\$207.00	\$483.00	\$966.00	\$0.00
	1	Shure MXWAPXD2--Z10 Access Point/Charger/DSP - 2 Ch.	\$1,786.00	23.9%	\$427.50	\$1,358.50	\$1,358.50	\$0.00
	1	Shure MXW2X/SM58--Z10 Microphone - Handheld - SM58 Cartridge	\$832.00	24%	\$199.57	\$632.43	\$632.43	\$0.00
	1	Shure MXW1X/O--Z10 Microphone - Bodypack	\$812.00	24.1%	\$195.86	\$616.14	\$616.14	\$0.00

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Shure WL185MB/C-TQG LAVALIER MICROPHONE, CARDIOID, BLACK	\$191.00	24%	\$45.79	\$145.21	\$145.21	\$0.00
	1	Business Machine Security PROJ PRO SNORKEL BMS Heavy-Duty "Snorkel" Lens Projector Protector For Epson Pro L1750UNL & 1755UNL + ELPLX02S / WS Short Fixed LensSecurity/Safety Cage- Key Feature: Full Metal Enclosure (cage) Locking front Hinged Doors. Precision adjustment for pitch, roll, & yaw. LOC II Projector mount (Interior Projector Mount) included. Cable Storage and Management Attaches to standard 1 1/2" pipe. Access panels on both sides. Accommodates Epson Pro L1750unl Projector and other Epson Pro L projectors with the same dimensions. Accommodates ELPLX02 Short "Snorkel" Lens.COLOR: SPECIFY WHITE or BLACK ON PURCHASE ORDER.HAVE ANOTHER PROJECTOR w/ SNORKEL LENS? CALL FOR PRICING.	\$2,499.99	-4%	\$-100.01	\$2,600.00	\$2,600.00	\$0.00
	1	Business Machine Security CTAWA 17-24 CTAWA 17-24	\$379.99	0%	\$0.00	\$379.99	\$379.99	\$0.00
VIDEO TOTAL								\$44,645.31

AUDIO

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Extron Electronics 60-1570-12A 4K/60 Presentation Matrix Switcher with Reversible DTP3 I/O, Control Processor and Amplifier, LL UI Upgrade	\$16,140.00	30%	\$4,842.00	\$11,298.00	\$11,298.00	\$0.00
	4	Extron Electronics 42-141-03 Ceiling - 2' x 2' Drop-In, Xfmr, Pair	\$630.00	30%	\$189.00	\$441.00	\$1,764.00	\$400.00
	1	RDL DB-BTN21 Wall-Mounted Bluetooth® Dante Interface - Black	\$582.12	35.2%	\$204.82	\$377.30	\$377.30	\$0.00
	1	Shure PGA31-TQG PGA31 Performance Headset Condenser Microphone	\$76.00	25%	\$19.00	\$57.00	\$57.00	\$0.00
AUDIO TOTAL								\$13,896.30

CONTROL

ImageNet Consulting - Tulsa

Confidential Proposal

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Extron Electronics 60-1563-03 7" Wall Mount TouchLink® Pro Touchpanel - White	\$2,420.00	30%	\$726.00	\$1,694.00	\$1,694.00	\$0.00
	1	Netgear GSM4212P-100NAS M4250-10G2F-POE+8X1G POE	\$951.54	40%	\$380.62	\$570.92	\$570.92	\$0.00
CONTROL TOTAL								\$2,264.92

MISC

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	Middle Atlantic EWR-16-22SD 16SP/22D ECONO WLRK,BK,DR	\$1,307.00	35%	\$457.45	\$849.55	\$849.55	\$0.00
	1	Middle Atlantic RLNK-915R SELECT SERIES PDU WITH RACKLINK	\$795.00	35%	\$278.25	\$516.75	\$516.75	\$56.25
	1	ImageNet Installation Materials			\$0.00	\$500.00	\$500.00	\$0.00
MISC TOTAL								\$1,922.55

LABOR

IMAGE	QTY	DESCRIPTION	MSRP	DISC	DISCOUNT	PRICE	PRICE EXT	LABOR EXT
	1	ImageNet Labor Project Coordination, Delivery, Project Management, Installation, and Commissioning of AV Project			\$0.00	\$0.00	\$0.00	\$8,680.00
LABOR TOTAL								\$8,680.00
BAND ROOM TOTAL								\$71,409.08

IMAGENET ANNUAL BLOCK TIME SERVICE AGREEMENT - 25 HOURS

Audio/Video Annual Block Time Service Agreement Terms and Conditions:

1. Extended "White Glove" Support

ImageNet offers White Glove Service for work on Audio/Video ("AV") systems beyond the standard manufacturer's warranty. We will help solve issues including troubleshooting, dismounting, shipping, and remounting. This coverage and service begins on the first (1st) day after acceptance of the services and pertains to all ImageNet provided AV hardware. The price of this agreement is assessed annually. An ImageNet Service Technician will respond via phone or email with initial troubleshooting within one business day once the request is submitted (via <https://forms.clickup.com/f/86564-392/9B5UOFBPHIRG4D40K>). A technician then will be on site, if needed, within 72 hours from initial request.

I. What's Included:

- a. This agreement contains an allowable block of time totaling 25 hours for the year. Time includes travel to and from the client's site from the closest AV-supported ImageNet Consulting office location. By signing this agreement, calls are no longer billed at a two hour minimum. This could yield more service calls than the normal service rates allow should issues be quickly attended to, in addition to the discounted hourly rate for signing this agreement. Once block time is used, the client will be billed at the block time rate of \$150/hr without a two hour minimum, per the agreement. Unused block time does not roll over year to year.
- b. The manufacturer's original equipment warranty including labor coverage for removal and installation of any warranted equipment (coverage length typically between one to seven years, unique per manufacturer).
- c. Protection against damage to system equipment from power surges, lightning, brownouts, or other high/low voltage/current conditions experienced on customer's power grid if a failure occurs while properly connected to a surge protector approved by the Underwriter's Laboratory. Your surge protector may be collected by the Administrator for examination.
- d. Labor for replacement of consumable items such as batteries, mishandled/damaged cabling, damaged LCD/LED panels, miscellaneous system light sources, or projection lamps/light sources if they are the cause of system performance issues. Consumable parts themselves will be provided by the Customer or purchased and billed to the Customer by ImageNet.
- e. Any desired software/firmware updates and feature enhancements on system components will be covered only if permission is granted by the customer stakeholder/manager/IT Department to the system for such updates. Contact ImageNet AV prior to updating your other networking/PC peripherals if software/firmware compatibility could be a concern for AV system performance.
- f. Training on ImageNet provided AV systems and requests for service not related to technical problems but classified as "operator error".
- g. Assistance with set up and training on Loaner equipment.

II. What's Not Included:

- g. Uninterrupted or error-free operation of the product.
- h. We shall not be liable for the loss or destruction of data or media resulting from the use or service of the equipment, system failure, misuse, or damage. It is your responsibility to secure and back-up all programs and data contained or affected by the equipment.
- i. Support of any modifications/connections to the system made by others, without prior written permission from ImageNet AV.
- j. Any software/firmware updates/redactions needed for restored functionality on the ImageNet installed AV system or peripherals when updates were not performed by ImageNet technicians.
- k. Any damage caused directly to the equipment by the customer or their guests.

2. Authorization to Install software

As part of the Professional Services, ImageNet may be required to install copies of third-party or ImageNet-branded software products (the "Software"). Customer authorizes ImageNet to accept the license terms accompanying the software (collectively "Shrink-wrap Terms") on Customer behalf, and acknowledge it is the Customer responsibility to review any Shrink-wrap Terms associated with the software. Shrink-wrap Terms may be in electronic format, embedded in software, or contained within the Software documentation.

3. Agreement Terms

This Agreement will begin upon delivery of Equipment and continue for twelve (12) months (the "Initial Term"). This Agreement will be automatically extended upon expiration of the Initial Term for an additional twelve (12) months (the "Renewal Term") unless you provide written notice to us of your intent to cancel the Agreement at least thirty (30) days prior to the last day of the Initial Term. Either party may cancel this Agreement at the end of the Initial Term or any Renewal Term with at least thirty (30) day written notice. We reserve the right to increase contract rates annually, not to exceed 15% of the previous year's rates.

4. Payment

Payment is due ten (10) days from date of invoice. Payment by credit card may incur a non-refundable convenience fee. Delinquent amounts will accrue interest at a rate of one and one-half percent (1.5%) of the past due amount per month (or, if lower, the maximum rate of interest chargeable under applicable law). You will pay all federal, state and local sales, use property, excise or other taxes

imposed with respect to the equipment listed on this Agreement. We will provide electronic copies of invoices via email to you on a monthly, quarterly, or annual basis. Should you elect to have invoices mailed to you, we will charge you \$3.00 per invoice as an administration fee to print, package, and mail requested invoices.

5. Indemnification

Each party agrees to hold harmless, defend, and indemnify the other party against any liability, demand, claim or cause of action for personal injury or property damage due to or arising out of the acts of that party, its agents and employees. You agree to defend us, at your sole expense, against all suits, action or proceedings in which we are made a defendant for actual or alleged infringement of any intellectual rights. However, each party shall have no obligation to hold harmless, defend or indemnify the other from or for liability arising from the other's own intentional or negligent acts. In no event will either party be liable to the other for consequential damages due to non-performance, any breach of this Agreement, or any act of its employees or agents.

6. Assignment

Neither party may sell or assign, by operation of law or otherwise, any, or all, of its responsibilities hereunder or attempt to transfer any, or all, of its interest in this Agreement without written consent of the other party, such consent not to be unreasonably withheld. Any attempt to sell, assign, or transfer this Agreement in violation of this paragraph shall be void. You agree that if we sell, assign, or transfer this Agreement, the new owner will have the same rights and benefits that we now have. You agree that the right of the new owner will not be subject to any claims, defenses, or set offs that you may have against us. In the event of a sale, assignment, or transfer, we agree to remain responsible for our obligations hereunder.

7. Miscellaneous

This Agreement supersedes all prior discussions or understandings between the parties. This Agreement cannot be changed or terminated orally. No modification of this Agreement shall be binding unless signed by both parties. If any provision of this Agreement is held to be invalid or unenforceable, the remainder of the Agreement shall still be construed as valid and enforceable. No waiver shall be deemed to be made by any party of any of its rights hereunder unless, the same shall be in writing signed by the waiving party and any waiver shall be a waiver only with respect to the specific instance involved and shall in no way impair the rights or obligations of any party in any respect at any other time.

OTHER THAN THE OBLIGATIONS SET FORTH HEREIN, WE DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OR MERCHANTABILITY FOR USE OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL EITHER PARTY WILL BE RESPONSIBLE FOR DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, DAMAGES ARISING OUT OF THE PERFORMANCE OF THE EQUIPMENT, INABILITY TO USE ANY SOFTWARE LICENSED BY US, OR THE LOSS OF THE USE OF THE EQUIPMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND YOU HEREBY WAIVE ANY CLAIMS RELATED THERETO.

8. Breach or Default

If you do not pay all charges for services as provided hereunder, promptly when due: (1) we may (a) refuse to provide service for the Equipment or (b) furnish service on a C.O.D. (cash on deliver) "Per Call" basis at our current labor rates and (2) you agree to pay us all costs and expenses of collection including the reasonable attorney's fee permitted by law in addition to all other rights and remedies available to us.

9. Jurisdiction

This Agreement will be construed, performed, and enforced in accordance with, and governed by, the laws of the State of Oklahoma (excluding its conflict of laws provision). Both parties consent to the exclusive jurisdiction of any claims related to this Agreement in the state or federal courts of Oklahoma, and each party irrevocably waives any objection, including any objection of laying venue, which it may have, or hereafter have, to the bringing of any action or proceeding in any such court in respect of this Agreement. BOTH PARTIES WAIVE ANY RIGHT TO TRIAL BY JURY OF ANY DISPUTE ARISING OUT OF, OR RELATING TO, THIS AGREEMENT.

10. Signer Authority

Each person signing this Agreement represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Agreement. Each party represents and warrants to the other that the execution and delivery of the Agreement and the performance of such party's obligations hereunder have been duly authorized and that the Agreement is a valid and legal agreement binding on such party and enforceable in accordance with its terms.

11. Entire Agreement

This Agreement constitutes the entire agreement between parties and may not be modified except in writing signed by duly authorized officers of both parties.

IMAGENET ANNUAL BLOCK TIME SERVICE AGREEMENT - 25 HOURS +\$3,750.00

ACCEPTANCE

FINANCIAL

PAYMENT SCHEDULE
Net 30 upon delivery of goods and services.

SHIPPING \$5,827.08
IMAGENET ANNUAL BLOCK TIME SERVICE \$3,750.00
AGREEMENT - 25 HOURS (ANNUALLY)

SUBTOTAL \$378,620.90
PROJECT TOTAL \$378,620.90

TERMS

To the extent allowed by Oklahoma Law, If payment is not received when due we may assess an administrative charge to offset our collection expenses, an amount calculated at the rate of ten cents per one dollar as listed above "Total Purchase Amount". If payment is not received within thirty days of invoice date we may take immediate possession of the Equipment and charge a restocking fee of no more than twenty five percent (25%) of the original purchase price. Such an addition to any other remedies provided for by law and may be, to the extent permitted by law, exercised either concurrently or separately. No failure on our part to exercise any right or remedy and no delay in exercising any right or remedy shall operate as a waiver of any right or remedy or to modify the terms of this Agreement. A waiver of default shall not be construed as a waiver of any other subsequent default.

***Current equipment pricing is subject to change at any time, and ImageNet reserves the right to requote this project at any time should new pricing be received from vendors and equipment suppliers before project acceptance. Tax will be calculated in the project invoicing phase via ImageNet Accounts Receivable, and is not able to be provided in this document.*

Must include P-3810 in all POs

ACCEPTANCE

STILLWATER PUBLIC SCHOOLS

SIGNED

DATE

Board President

PRINT NAME

TITLE

IMAGENET CONSULTING - TULSA



NOV 19, 2025

SIGNED

DATE

COPY EGAN WOOD
PRINT NAME

SENIOR SOLUTIONS SPECIALIST
TITLE

Statement of Work

ImageNet AV Statement of Work (SOW) Contract

Project completion is subject to receipt of equipment. Estimated minimum 6-8 weeks for equipment delivery unless otherwise specified in contract agreement. Installation will be scheduled once 100% of equipment has been received, unless otherwise requested or agreed upon.

Once Project Contract (SOW) paperwork has been received from the client by ImageNet, ImageNet will manage the ordering of all components. At that time, all sales are final and any changes to the scope of work will be subject to a Request For Change, revised PO, and will be at the expense of the client unless otherwise noted. A Request for Change will need to be completed and signed by both an approved Customer Representative/Project Manager and ImageNet Consulting Representative.

This Consulting Services Agreement (the "Statement of Work") is made and entered into as of "Date" below between ImageNet Consulting, with a place of business at 913 North Broadway, Oklahoma City, OK 73102 and Customer.

If any changes or additions are required outside of the defined scope and deliverables previously listed, a Request for Change will need to be completed and signed by both the Customer Representative, Project Manager, and ImageNet Consulting representative(s).

Pursuant to this Agreement, Customer is engaging ImageNet to provide certain consulting services as more fully described herein. This Agreement consists of the following documents, incorporated herein by this reference:

- Attachment A: Individual Project Requirements
- Attachment B: Request For Change
- Attachment C: Project Substantial Completion Form
- Attachment D: Project System Warranty Terms
- Attachment E: Project Final Completion Form

Customer has read and agrees to the terms and conditions and attachments listed. This Agreement will be effective only when executed below by an authorized representative.

AGREED TO:

DATE OF AGREEMENT

AUTHORIZED CUSTOMER REPRESENTATIVE

CUSTOMER NAME

CUSTOMER ADDRESS

Statement of Work

Attachment A: Individual Project Requirements

1. PROPOSAL TERMS & CONDITIONS

- a. All pricing listed in Proposal include labor. Rates are based on a commitment that work is to be performed during regular business hours; 8AM to 5PM local time, Monday through Friday. Should project work push beyond these normal hours without prior agreement with ImageNet, additional labor rates/charges may apply.
- b. It is assumed that all work will be completed as a continuous effort. Disruptions of this continuous effort beyond the control of ImageNet Consulting may require additional labor costs. Additionally, if the project is finished ahead of the estimated completion, there will be no credit issued to the customer.
- c. All System Engineer/Programming work outside of work defined within the SOW is billed at \$175.00 per hour.
- d. ImageNet Consulting will install, test, and verify that the AV solution is working as designed. Following the install, ImageNet will conduct training with the end users of the system so that it will be utilized as desired. Additional training and materials outside of what is outlined in the proposal will be an additional charge based upon the scope of the project.

2. CUSTOMER SITE/PROJECT REQUIREMENTS

- a. Power will be needed at the mounting locations of all electrical components, provided by a licensed electrician, and is the responsibility of the client. It is recommended that all AV hardware be installed on their own circuit(s) to reduce interference, surges, and other issues.
- b. Network drops are recommended at the mounting location of all equipment and are the responsibility of the client to provide and maintain. Certain equipment cannot be installed without PoE/PoE+ network drops, and many components require internet connection to perform maintenance tasks and basic functions.
- c. Customer to identify and provide an IT Administrator for solution implementation and support interaction.
- d. Customer will provide access to all areas required to complete this project. Any areas of high security or hazard should be made known prior to project commencement.
- e. Customer will provide access to all information and documentation required to complete this project.
- f. Customer will provide an onsite contact person responsible for providing direction and approvals on completion of work.
- g. Customer will directly provide all non-ImageNet hardware and software support required unless specifically indicated in the proposal.
- h. Customer will ensure that any customer provided hardware will meet all required specifications for the project.
- i. Customer will assure that all required LAN/WAN access and administrative rights are made available to complete the installation.
- j. Customer is solely responsible for updating PC OS and 3rd party software. i.e. Windows 10, Zoom, MS Teams etc.
- k. Customer will provide Remote Access capabilities and credentials so that ongoing support can be provided as necessary via phone and remote desktop support, or an onsite resource that can accommodate remote support.
- l. Customer is solely responsible for maintaining agreed upon timeline, customer-side delays may push back launch dates by a ratio that exceeds 1:1 and may incur further service costs.
- m. Customer is solely responsible for required A/C power at device location as needed.
- n. Customer is solely responsible for required data connections at device location as needed.
- o. Customer is solely responsible for ceiling grid modification unless specified otherwise.
- p. Customer is solely responsible for providing adequate trash and old equipment disposal in accordance with local ordinances.
- q. Customer is solely responsible for providing parking availability, loading and unloading access, access control, and hours of operation.
- r. Customer is solely responsible for providing an OSHA approved lift or scaffolding unless otherwise specified in the proposal.
- s. Customer must ensure install site meets agreed upon standards and is free of obstruction.
- t. Customer is solely responsible for modification to furniture unless otherwise specified in the proposal.
- u. Customer is solely responsible for modification of existing walls to properly support new equipment and patch/repair of old/unused mounting holes/damage unless specified otherwise in the proposal.
- v. If any of the above items are not met by the client at the time ImageNet arrives on site to install, a revised PO for additional labor may be assessed unless otherwise noted by ImageNet.
- w. All project/shipping timelines are approximate until items are received in our warehouse. Project completion is subject to receipt of equipment. Estimated 6-8 weeks for equipment delivery unless otherwise specified in contract agreement. Installation will be scheduled once 100% of equipment has been received unless otherwise specified in the contract agreement.
- x. ImageNet will work with the client to schedule installation based on: a) the estimated arrival time of the components, b) all necessary action items required by the client as listed above, and c) any additional needs.
- y. ImageNet Consulting does its best to anticipate conversion changes and user needs. However, once a design agreement is established, changes requiring more than 1 hour of work could require a Request For Change and may incur additional costs.

3. DATA & SOFTWARE/FIRMWARE

- a. ImageNet Consulting is not responsible for the loss of data or any A/V recordings due to system failure, misuse, or damage.
- b. Future 3rd party software installation or services by ImageNet Consulting are an added cost unless otherwise agreed upon.

4. WALLBOARD DIGITAL SIGNAGE SOLUTIONS (if included in Project Scope)

- a. A "Welcome Letter" document will be sent out to the client on any project involving Wallboard Digital Signage Software. This document will help us outline training timeframes for the software, initial content design, and necessary network information so we can pre-configure the media players for easy installation. This document must be returned by the client for ImageNet to proceed with installation.

Attachment B: Request For Change

Request For Change

RFC Number: _____

Date: _____ Party requesting change: _____

Nature of the proposed change:

Reason for the proposed change:

Impact of the proposed change on project:

Pricing: _____

P.O. to which changes will apply: _____

Schedule Changes: _____

This Project Change Request is (circle): Approved Rejected

Signatures:

ImageNet Consulting Representative: _____

Customer Representative: _____

Statement of Work

Attachment C: Project Substantial Completion Form

ImageNet AV Project # _____ Date _____

Project Name: _____ PO # _____

Company Name: _____ Phone: _____

Address: _____

Installation Site: _____

Room Number(s): _____

Client Contact: _____ Phone: _____

AV System Warranty Dates Start: _____ End: _____

The audiovisual project described above has been found to be substantially complete and acceptable to the owner and/or their representative with the following exceptions:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

To finalize project, client agrees to arrange and schedule training(s) in a timely manner following substantial completion. Training to include any client stakeholders in the project, facility managers who may be involved in the area(s) of the AV System, client system support technicians the design involves, and key end users who can pass on training to fellow coworkers.

AV System Training Date(s)/Time(s): _____

AV System Training Key Inclusion(s): _____

Client hereto acknowledges acceptance of the project and commencement of the warranty period and training for the systems noted according to the terms detailed in the attached warranty statement.

Name: _____ Title: _____

Signature: _____ Date: _____

Statement of Work

Attachment D: Project System Warranty Terms

All new equipment contained in this system is warranted to be free of manufacturing defects per the terms and conditions of the original manufacturer's warranty. All manufacturers' warranties are honored and serviced by ImageNet Consulting. If not included in original project scope, purchasing additional warranty for equipment, or a preventative maintenance service agreement can be arranged after system is signed for substantial completion.

A. DURATION

1. Three (3) years, which will begin immediately following substantial completion of the installation and applicable training provided by ImageNet AV. The established start date is noted in the signed Substantial Completion Form above.

B. THE WARRANTY SHALL INCLUDE:

1. Maximum one (1) business day response via telephone and/or email following receipt of the AV Integrator's standard Request for Service by an authorized representative.
2. On-site response within three (3) business days if deemed necessary during the service inquiry/discovery process.
3. Small parts, cables, or system components to restore system performance as required.
4. Any failed field terminations of system cabling performed by ImageNet AV during the installation process.
5. Labor to repair/service the system, components, and parts to restore the system to complete operational condition should the issue be reasonably repairable on site.
6. The cost to remove, reinstall and transportation to and from our service center, or the supplier/factory for components covered under their standard manufacturer warranty.

C. THE WARRANTY SHALL NOT INCLUDE:

1. Replacement of consumable items such as batteries, mishandled cabling, damaged LED/LCD panels, miscellaneous system light sources, or projection lamps/light sources. Costs for such will be billed at current equipment and labor rates unless a manufacturing defect is discovered during the manufacturer's standard warranty period.
2. Issues due to software/firmware updates on system components or peripherals not performed by ImageNet AV technicians. Contact ImageNet AV prior to updating peripherals if software/firmware compatibility could be a concern for system performance. Charges could be applicable per our standard repair service policy of \$200/hour to restore original system performance.
3. Requests for service not related to technical AV system problems but classified as "operator error". Under these conditions service charges could be applicable as per our standard repair service policy of \$200/hour.
4. Service required because of negligence, misuse, attempted repairs by anyone other than ImageNet AV, or damage, or for equipment not related to the system supplied and installed by ImageNet AV. Under these conditions, the warranty will become void, and charges could be applicable per our standard repair service policy of \$200/hour.
5. Loaner equipment that is in place while the originally installed equipment it has replaced is under repair.
6. Connections to the contracted system made by others. Under these conditions service charges could be applicable as per our standard repair service policy of \$200/hour.
7. Modifications to the system made by others, without prior written permission from ImageNet AV. Under these conditions service charges could be applicable as per our standard repair service policy of \$200/hour.

D. REQUESTS FOR SERVICE

Requests for service must be made by contacting the ImageNet Consulting service helpdesk (800-937-2647) and stating the need for an AV System Service Ticket. Direct Service Ticket hyperlinks and/or QR Codes may also be provided for filling out the form during training. Tickets must be officially input via these means by an authorized customer representative prior to AV Service process inception. See Section B, Terms 1 & 2 for Ticket response times.

E. REPORT

A written report/invoice will be issued following each repair/service and must be acknowledged by an authorized representative.

Statement of Work

Attachment E: Project Final Completion Form

Date: _____

I, _____(Project Manager)

agree that ImageNet Consulting has completed this project and associated system training to the satisfaction of

_____ (Company Name)

and achieved every goal outlined in this Statement of Work in addition to any change requests that were made during the project. No further work will be done for Client in regards to this project, any additional requests will detailed in a new document with a different project scope.

AGREED TO:

Company Name

Authorized Representative Signature

Specifications

FF 120T and FF 220T

Audio/acoustic and electrical

Speaker type	1-way, full-range, in-ceiling speaker
Frequency range	68 Hz to 18 kHz, -10 dB, half space
Power capacity	16 W (rms) continuous pink noise 32 W (rms) continuous program
Nominal sensitivity.....	86 dB SPL, 1 watt, 1 m, half space
Nominal coverage angle.....	170° conical coverage
Nominal impedance	8 ohms per speaker
Driver	(1) 3" (76.2 mm) paper cone
Input connector	(1) 10 mm Euro-style captive screw terminal block, 7 pole
Tap settings	
70 V input.....	16 W, 8 W, 4 W, 2 W, 1 W, null (bypass 8 ohm direct connection)
100 V input.....	Null, 16 W, 8 W, 4 W, 2 W, 1 W (bypass 8 ohm direct connection)

General

Package	2 speakers (1 pair) with 2' (61 cm) cross bars
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Mounting	
FF 120T.....	Drops into 2' x 2' (61 cm x 61 cm) or 2' x 4' (61 cm x 122 cm) suspended tile ceilings
FF 220T	
US version.....	Drops into 2' x 2' (61 cm x 61 cm) or 2' x 4' (61 cm x 122 cm) suspended tile ceilings
Metric version	Drops into 600 mm x 600 mm or 600 mm x 1200 mm suspended tile ceilings
Enclosure type	
FF 120T.....	Composite, rectangular, with metal grille
FF 220T.....	Composite, square, with metal grille
Enclosure outer dimensions	
FF 120T.....	3.25" H x 11.75" W x 23.75" L (8.3 cm H x 29.9 cm W x 60.3 cm L)
FF 220T	
US version (2' x 2').....	3.25" H x 23.75" W x 23.75" L (8.3 cm H x 60.3 cm W x 60.3 cm L)
Metric version (600 mm x 600 mm)	
.....	3.25" H x 23.4" W x 23.4" L (8.3 cm H x 59.4 cm W x 59.4 cm L)
Product weight	
FF 120T.....	Single: 5.1 lbs (2.3 kg)
FF 220T.....	Single: 7.8 lbs (3.5 kg)
Shipping weight	
FF 120T.....	Pair: 15 lbs (6.8 kg) with mounting kit
FF 220T.....	Pair: 21 lbs (10 kg) with mounting kit
Vibration	ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance

Safety..... CE, NFPA90A, NFPA70;
UL Listed for use in plenum airspaces: meets UL 2043 for heat and smoke
release, meets UL 1480 for commercial and professional audio systems

Environmental..... Complies with the appropriate requirements of RoHS, WEEE.

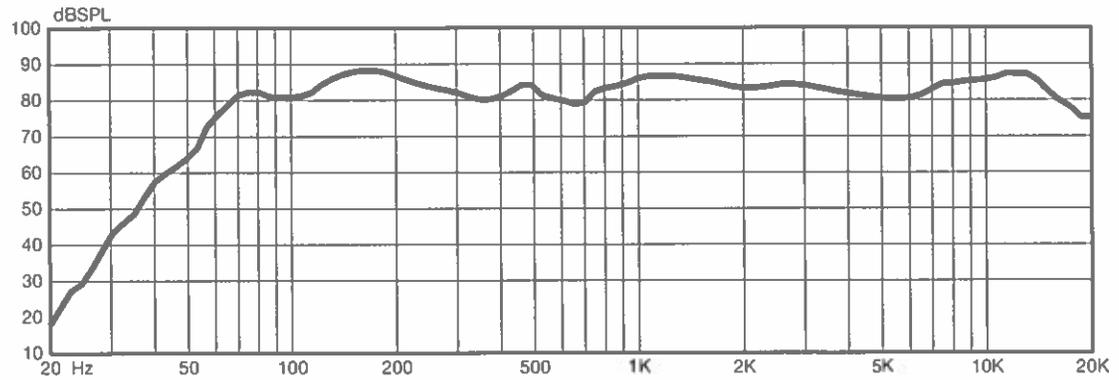
Warranty 5 years parts and labor

NOTE: All nominal levels are at $\pm 10\%$.

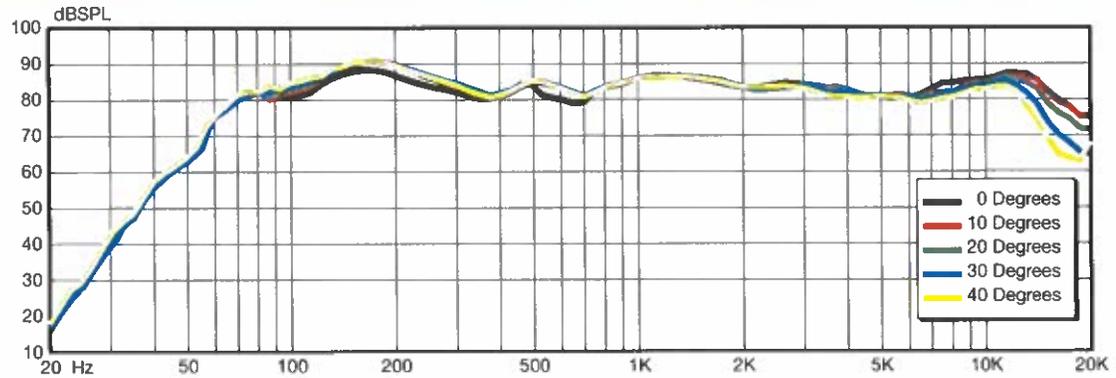
NOTE: Specifications are subject to change without notice.

FF 120T and FF 220T RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

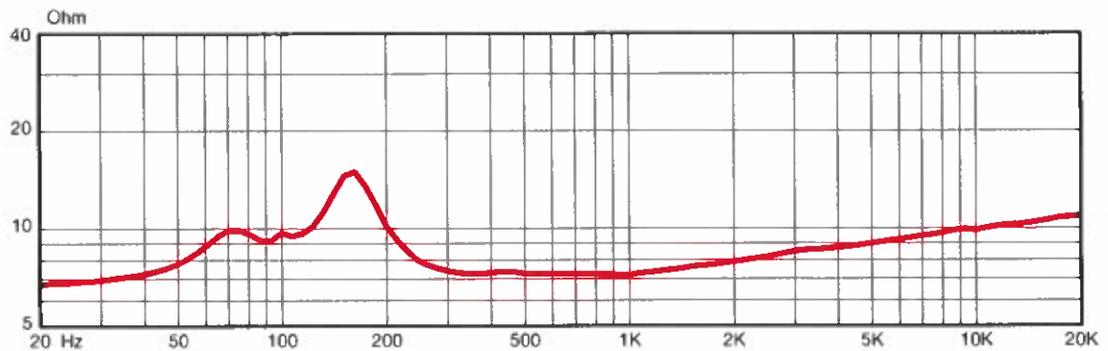
SPL vs. FREQUENCY – 1 WATT @ 1 METER RESPONSE, HALF SPACE (2π)



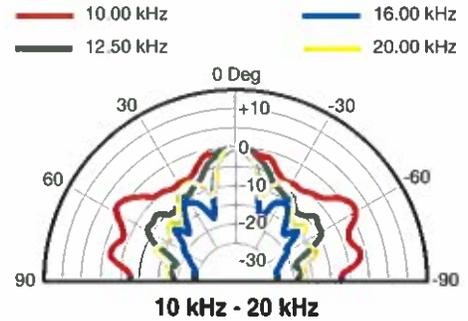
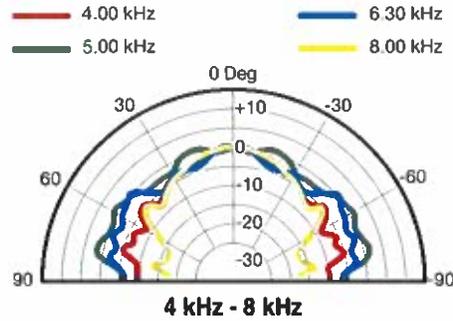
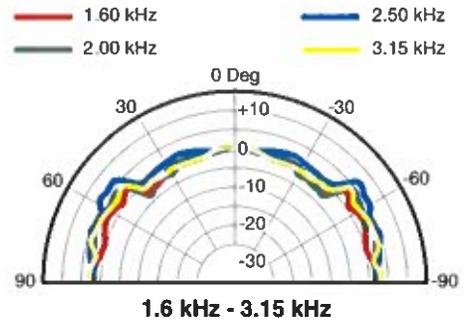
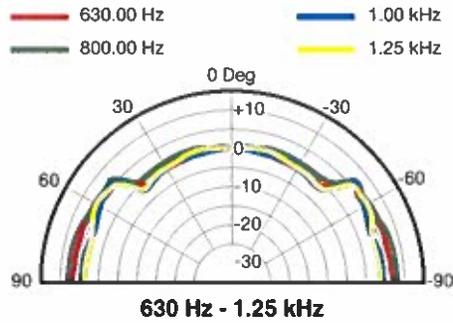
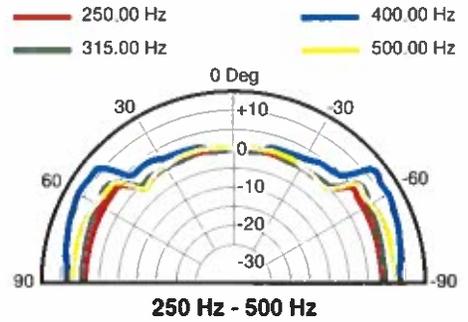
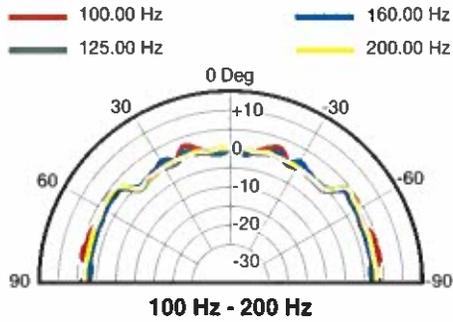
SPL vs. FREQUENCY – HORIZONTAL OFF-AXIS RESPONSE, HALF SPACE (2π)



IMPEDANCE vs. FREQUENCY



FF 120T and FF 220T POLAR GRAPHS – 1/3 OCTAVE, HORIZONTAL



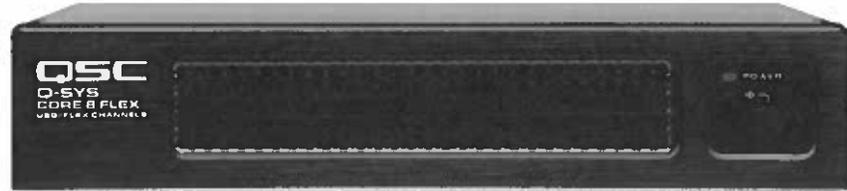
8.1 030915-D3



Q-SYS™ Core 8 Flex
analog + network I/O processor

Features

- 64 x 64 networked audio channels (Q-LAN / AES67)
- Eight on-board FLEX channels and GPIO
- 8 x AEC (acoustic echo cancellation) processors
- Up to 32 x 32 Dante audio channels (8 x 8 included)
- USB AV bridging (8 x 8 audio + Q-SYS camera support)
- External USB audio device host
- Supports up to 2 VoIP softphone instances
- Full featured Q-SYS Control engine
- Dual gigabit ethernet ports with assignable application resources offering any combination of VoIP, Q-LAN Control, Q-LAN audio or network redundancy
- Internal power supply
- 1U half-width, includes mounting hardware



Introducing the Q-SYS Core 8 Flex audio, video and control (AV&C) processor, which extends the applications of the Q-SYS Ecosystem into a wider range of smaller-scale installations across corporate, higher education, healthcare and beyond. Built on the same foundational technology as the rest of the Q-SYS processor portfolio, including the best-in-class Q-SYS Core 110f, the Core 8 Flex is designed for applications with lower network channel capacity and/or targeted processing requirements.

Core 8 Flex offers onboard analog audio I/O and GPIO *plus* network AV&C processing, and like all Q-SYS Core processors, the Core 8 Flex delivers features and functionality at the software level, including acoustic echo cancellation (AEC), wide-area paging, video routing, and a full featured control engine without the need for dedicated control processors.

Onboard analog I/O plus network I/O

In addition to its 64 x 64 network audio I/O capacity, the Core 8 Flex offers eight on-board Flex channels and eight GPIO on-ramps to integrate analog audio and control devices into the Q-SYS Ecosystem.

Rightsized. Uncompromised.

Rather than deploying an AV&C processor with unused analog I/O that occupies a full rack space, Core 8 Flex offers a smaller, space-efficient solution with the right amount of analog I/O. However, it does not compromise on functionality; instead it delivers a fully-integrated and customized

Q-SYS experience, from paging and background music distribution to control, automation and beyond (the same feature set as the larger Cores in the processor portfolio).

Optimized for the meeting space

While it can be used across multiple installation types, Core 8 Flex provides the AV infrastructure to enable full room web conference integration, particularly for larger, more challenging spaces. It features USB integration with all major web conferencing applications, eight channels of acoustic echo cancellation (AEC), two VoIP softphones, Software-based Dante to enable modern microphones, and a full-featured control engine for third-party device integration.

Reduce complexity and improve scalability with the Q-SYS Ecosystem

The Q-SYS Core 8 Flex joins a growing Ecosystem of AV&C processors built on a flexible software foundation that delivers features and functionality without relying on dedicated, single-purpose hardware. Like all Q-SYS Cores, the Core 8 Flex let integrators take full advantage of the same Q-SYS software suite to design and configure systems, and end users can benefit from a more holistic user experience as a result of all native Q-SYS peripherals, and the system's ability to scale your system without having to rip-and-replace your configuration file.

Q-SYS Core 8 Flex Preliminary Specifications

Audio Inputs	
Phantom power	+48 VDC, 10 mA per input max
A/D - D/A converters	24 bit
Sample rate	48 kHz
Input frequency response	
20 Hz to 20 kHz @ +24dBu	+0.05 dB / -0.5 dB
Input THD+N @ 1kHz	
@ +24 dBu sensitivity & +24 dBu input	< 0.1%
@ +24 dBu sensitivity & +10 dBu input	< 0.0015%
@ +10 dBu sensitivity & +8 dBu input	< 0.001%
@ -10 dBu sensitivity & -10.5 dBu input	< 0.001%
@ -39 dBu sensitivity & -39.5 dBu input	< 0.007%
Input to input crosstalk @ 1 kHz	
@ +24 dBu sensitivity	110 dB typical, 90 dB Max
@ +10 dBu sensitivity	105 dB typical, 90 dB Max
@ -10 dBu sensitivity	100 dB typical, 90 dB Max
@ -39 dBu sensitivity	75 dB typical
Input dynamic range	
@ +24 dBu sensitivity	> 109.5 dB
@ +10 dBu sensitivity	> 106.4 dB
@ -10 dBu sensitivity	> 104.6 dB
Input common mode noise rejection	
@ +24 dBu sensitivity	< 51, 20 Hz - 3 kHz
	< 43, 20 Hz - 10 kHz
	< 36, 20 Hz - 20 kHz
@ +10 dBu sensitivity	< 57, 20 Hz - 3 kHz
	< 47, 20 Hz - 10 kHz
	< 41, 20 Hz - 20 kHz
@ -10 dBu sensitivity	< 67, 20 Hz - 3 kHz
	< 58, 20 Hz - 10 kHz
	< 53, 20 Hz - 20 kHz
@ -39 dBu sensitivity	< 60, 20 Hz - 3 kHz
	< 54, 20 Hz - 10 kHz
	< 50, 20 Hz - 20 kHz
Input impedance (balanced)	7.2k Ω nominal
Input sensitivity range (1 dB steps)	-39 dBu minimum to +24 dBu maximum

Q-SYS Core 8 Flex Preliminary Specifications

Audio Outputs

Output frequency response

20 Hz to 20 kHz @ all settings	+ 0.5 / -0.3 dB
Output THD	0.005% typical, +20 dBu max output level
EIN (no weighting, 20 Hz to 20 kHz)	< -121 dB
Output crosstalk @ 1 kHz	> 100 dB typical, 90 dB max
Output dynamic range	> 108 dB
Output impedance (balanced)	332 Ω

Channel Capacity

Q-LAN channels	64 x 64
Dante channels	8 x 8 (included); up to 32 x 32 with optional license
AEC channels	8
WAN / media stream channels	12 x 12
Network peripherals	32 (includes native Q-SYS cameras, I/O, NV, TSCs, paging stations, Extensions and plugins with their "Is Managed" property set to "Yes". It does not include Streaming I/O, Loudspeakers, Scripts or plugins with their "Is Managed" property set to "No".)
Audio recording / playback	4 ch recording / 16 ch playback (expandable to 32 ch with optional license - available Spring 2021)
Media drive capacity	approximately 16 GB on the default drive (subject to change; upgrade options are available)

Control

RS232	2 ports
GPIO	8 x 8

USB Inputs & Outputs

USB B or C (audio)

Bit depth	16 bit
Channel count	8 x 8
Sample Rate	48 kHz
USB audio device hosting	Support for standard USB headset, speakerphone on USB type A connection (one device at a time)

Input

Sample rate	48k or 16k, mono
Resolution	8-bit, 16-bit, 24-bit, 32-bit, float
Format	little-endian, signed or unsigned

Output

Sample rate	48k only, stereo
Resolution	8-bit, 16-bit, 24-bit, 32-bit, float
Format	little-endian, signed or unsigned



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Q-SYS Core 8 Flex Preliminary Specifications

Physical

Product dimensions (L x W x H)	11.3 x 8.7 x 1.7 in (286.5 x 220 x 43.7 mm)
Product weight	4.0 lbs (1.8 kg)
Shipping box dimensions (L x W x H)	15.0 x 13.3 x 3.1 in (381.0 x 336.6 x 79.5 mm)
Shipping weight	6.4 lbs (2.9 kg)

Environmental & Safety

Power consumption	40 W typical
Operating temperature	0-50°C
Percent relative humidity, non-condensing	5 to 85%
BTU/heat load	110 BTU/hour

Compliance	FCC Part 68 / TIA-968-B (USA) ES203 021, CE, RoHS (Europe), PTC200 (New Zealand) NOM-151-SCT1 (Mexico) JATE (Japan)	UL and C-UL listed (USA & Canada) AC (Eurasian Customs Union) PSTN01 (Taiwan) Industry Canada CS-03 (Canada) AS/ACIF S002 and RCM (Australia) ANATEL Resolution 473 (Brazil)
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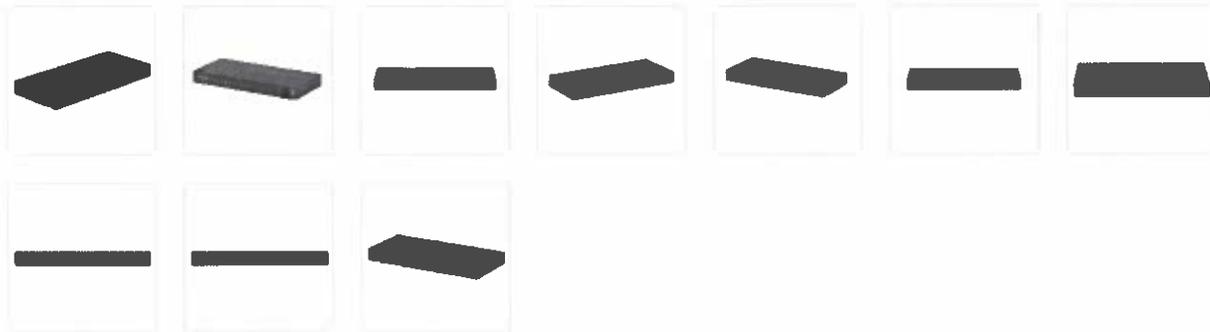
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NETGEAR / GSM4212P-100NAS

M4250-10G2F-POE+ AV SWITCH PERP



Switching engineered for 1G AV over IP with PoE+, Ultra90 PoE++ and rear-facing ports ensuring a clean integration in AV racks. M4250 switches come pre-configured for standard audio and video signals. When requirements are more specific, an AV user interface offers customization with port-based profiles. For audio Dante, Q-SYS and AES67 profiles are available, as well as an AVB profile requiring an AVB license sold separately. For video the M4250 offers profiles for NVX, SVSI, Q-SYS, NDI, Dante etc. as well as audio/video/control mixed profiles. When multiple switches, NETGEAR IGMP Plus[™] brings automation for you to just connect them together.

- Expand your network capacity with the help of 10 networking ports and transfer your data quickly and easily
- Supports optical fiber cable to span longer distances and provided high data transmission rates between servers and network components
- Gigabit Ethernet port for ultra-fast network speeds
- Can work as layer 3 routing for scalable network design
- Managed switch provides a reliable foundation for your network
- Built-in power supply to ensure all components are being supplied with accurate voltage
- Rack mounting enables you to organize wires & secure cables for professional installation
- Pre-configured for Audio and Video over IP out of the box

NETGEAR / GSM4212P-100NAS

M4250-10G2F-POE+ AV SWITCH PERP

GENERAL INFORMATION

Manufacturer Part Number GSM4212P-100NAS

Manufacturer Website Address <http://www.netgear.com>

Brand Name Netgear

Product Line AV Line

Product Model M4250-10G2F-PoE+

Product Name AV Line M4250-10G2F-PoE+ 8x1G PoE+ 125W 2x1G and 2xSFP Managed Switch (GSM4212P)

Product Type Ethernet Switch

INTERFACES/PORTS

Total Number of Network Ports 10

Modular Yes

Port/Expansion Slot Details 8 x Gigabit Ethernet PoE+

2 x Gigabit Ethernet Network

2 x Gigabit Ethernet Expansion Slot

MEDIA & PERFORMANCE

Media Type Supported Optical Fiber

Twisted Pair

Ethernet Technology Gigabit Ethernet

Network Technology 1000Base-T

1000Base-X

I/O EXPANSIONS

Number of Total Expansion Slots 2

Expansion Slot Type SFP (mini-GBIC)

Shared SFP Slot No

Number of SFP Slots 2

NETWORK & COMMUNICATION

Layer Supported 3

MANAGEMENT & PROTOCOLS

Manageable Yes

POWER DESCRIPTION

PoE (RJ-45) Port Yes

PoE Budget 125 W

Power Source Power Supply

Power Plug Type Type C

Plug/Connector Type IEC 60320 C14

PHYSICAL CHARACTERISTICS

Compatible Rack Unit 1U

Form Factor Rack-mountable

MISCELLANEOUS

Environmentally Friendly	Yes
Environmental Certification	RoHS
	WEEE
	REACH
	ErP

WARRANTY

Limited Warranty	Lifetime
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ITEM DETAILS

Category	Networking
UPS Shippable	Y
Shipping Weight	9
UPC Code	606449149531

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SONY

BRAVIA Professional Displays

2023 Lineup Brochure

androidtv



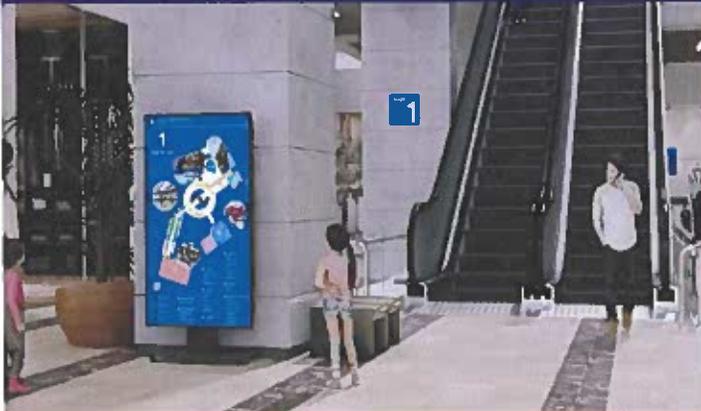
The four pillars of performance, Unifying our solutions with your business needs

Our new lineup of BRAVIA Professional Displays incorporates all the picture quality, installation flexibility, robust usability and sustainability requirements needed for today's commercial applications.

Picture Quality

In addition to Sony's unique picture processing, wide color gamut, and high-contrast technologies, our new Deep Black Non-Glare Coating technology minimizes glare with impressive image quality.

*Deep Black Non-Glare Coating in BZ40L Series only



Installation Flexibility

Available in a wide range of sizes and ever-evolving installation flexibility, to fit a variety of spaces.



Robust Usability

Packed with useful functions, purpose-driven applications, and customized settings to make daily operations more efficient.



Sustainability

Making it, moving it, using it more efficiently: improving multiple aspects across the product life cycle, such as reduction of virgin plastic, improvement of transportation efficiency, and review of power consumption during use.

Picture Quality

*BZ40L feature

Low reflection coating



Non-glare coating

Low reflection coating

Deep Black Non-Glare Coating



Non-glare coating

Low reflection coating



Non-glare coating

Low reflection coating



Non-glare coating

Low reflection coating

Non-glare coating

Sony's Deep Black Non-Glare Coating is a big step forward in panel technology, reducing screen reflection without compromising image brightness, contrast, detail and clarity. The result: bright, attention-grabbing pictures with rich colors and deep blacks that are seen clearly from any angle.

One chip, incredibly real images

Cognitive Processor XR™

The Cognitive Processor XR™ chip analyzes and recreates content based on human sight and hearing, to deliver pictures with the utmost depth and reality.

*In BZ50L Series only



4K HDR Processor X1™

With Object-based HDR remaster and Super Bit Mapping 4K HDR technology, our new 4K HDR Processor X1 reproduces more depth, textures and natural colors than our 4K Processor X1. You'll see pure colors at higher brightness levels for exceptionally realistic pictures.



Improve sales promotions with striking picture quality



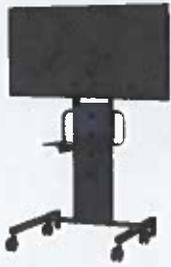
Communicate effectively with detailed text and graphics

Installation Flexibility

Installation Flexibility

In addition to landscape, portrait, and tilt installation, BRAVIA Pro Displays can be used with mobile stands for effective use of space, and ceiling mounted for digital signage.

Special installations such as easel stands, and multi-display installations are also possible.



Mobile stand



Ceiling tilt mount



Easel stand



Casing stand



Multiple displays



Consistent lineup design

The design of the BZ-L series displays is standardized, allowing for uniformity when mixing models. Wiring is also standardized, making installation easier.



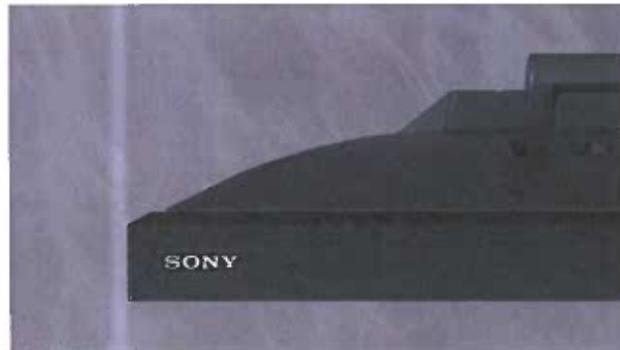
Consistent platform

The BZ-L Series' SoC and Android OS platform are common across all series, allowing for simple installation.



24/7 Operation

Business never sleeps: BRAVIA is engineered for dependable 24/7 operation in the most challenging corporate and commercial environments.



Side logo position

The Sony logo is positioned on the top right side of the display bezel, so nothing distracts your audience from immersive images.

Robust Usability

High Performance SoC

Equipped with a high performance SoC, high-resolution video can be played smoothly and easy to display interactive signage content without the need for a dedicated set-top box, media player or PC.



Pro Settings

When it comes to business, we know there's no such thing as "one size fits all." That's why our BZ-L series comes with our Pro Mode technology as standard – giving you multiple customization options at the touch of a button.



Sony Signage Solution

On-board BRAVIA Signage Free (BSF) software automatically plays out HTML content, video and photos.

Partner Solutions

We work closely with top companies to add even more value to our innovative AV products, for networking, device management, automation, digital signage, and more.

HTML5



Flexible content layout with HTML5

The BZ Series offers built-in support for the HTML5 application platform, so it's possible to use HTML5 interactive signage content without requiring a set-top box or PC. The content screen can be freely laid out using the 4K video, pictures, or even with a HDMI input.

Mirroring



Wireless screen mirroring

Easily mirror content wirelessly from a handheld device onto BRAVIA with in-built support for Apple AirPlay and Chromecast built-in.

IP control



Remote control for multiple display

BRAVIA Pro Displays offer IP control with many display features like switching input sources via IP. Both HTML5 and Android apps running on the display can send IP control commands to the display and can be run from external IP-enabled devices.

Sustainability

Making it, moving it, and using it more efficiently: Advanced engineering for sustainability

To reduce environmental impact, we are focused on multiple aspects across the product life cycle, such as reduction of virgin plastic, improvement of transportation efficiency, and more efficient power consumption.

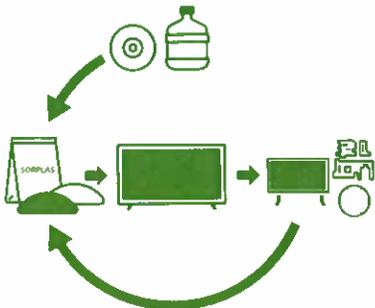


STEP 1 Making it

Towards closed loop with repeated recyclability

One advantage of SORPLAS™ is that it won't degrade too much even after being recycled several times. Recycled SORPLAS™ parts have the potential to reduce the volume of waste and contribute toward a recycle-oriented society.

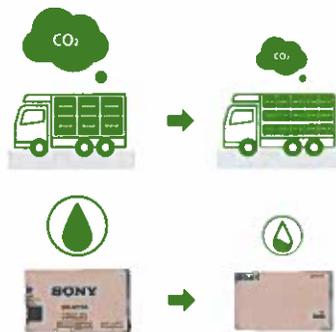
* All BZ-L series include Sony's SORPLUS recycled plastic.



STEP 2 Moving it

Cutting CO2 with smaller and lighter Packing

By reengineering the packaging that protects the product during shipping, we cut the package size by 15% and total weight by 10%. This increases the number of units on one pallet by approximately 1.3 times. As a result, CO2 emissions per unit from product transportation have been reduced by approximately 15%.



STEP 3 Using it

All your energy-saving settings in one place

With the flexible and configurable Eco Dashboard, energy saving settings can now be centrally managed.

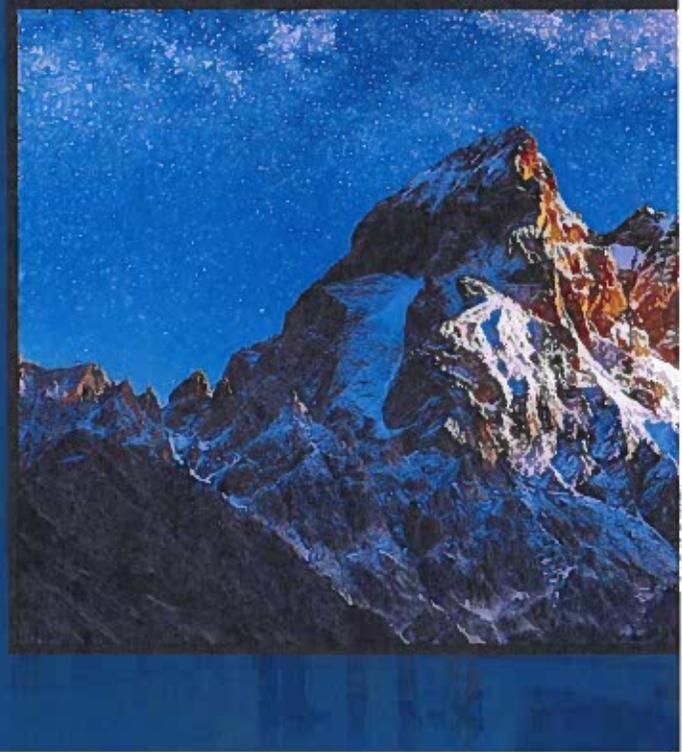
You can easily customize energy saving settings for your usage, viewing environment, and the content you are watching, all in one place, and visualize the contribution you are making to reduce environmental impact.



BZ50L

Experience absolute picture quality with Sony's flagship professional 4K display and Sony XR™ processing.

98"



android tv

Spectacular 780 nit brightness

Brighter is better. In busy retail showrooms or corporate lobbies, 98" BRAVIA shines with an extraordinary 780 nit screen brightness that can't be missed, even in light-flooded spaces. Full Array Local Dimming boosts peak brightness further still to an eye-popping 1500 nits.



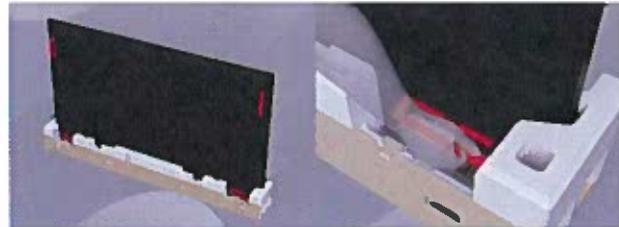
Lighten the load

The 98" BRAVIA BZ50L weighs around 21kg (46lbs) less than the previous 100" 100BZ40J model, lightening the load on installation teams.



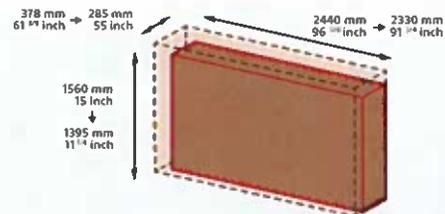
Safer carrying

Ergonomically positioned lower horizontal handles are easy to grab, making lifting easier and more comfortable.



Easier access

Reduced carton size eases transportation. The ability to carry BRAVIA vertically (portrait style) gives easier access in elevators and stairways.



Cognitive Processor XR™

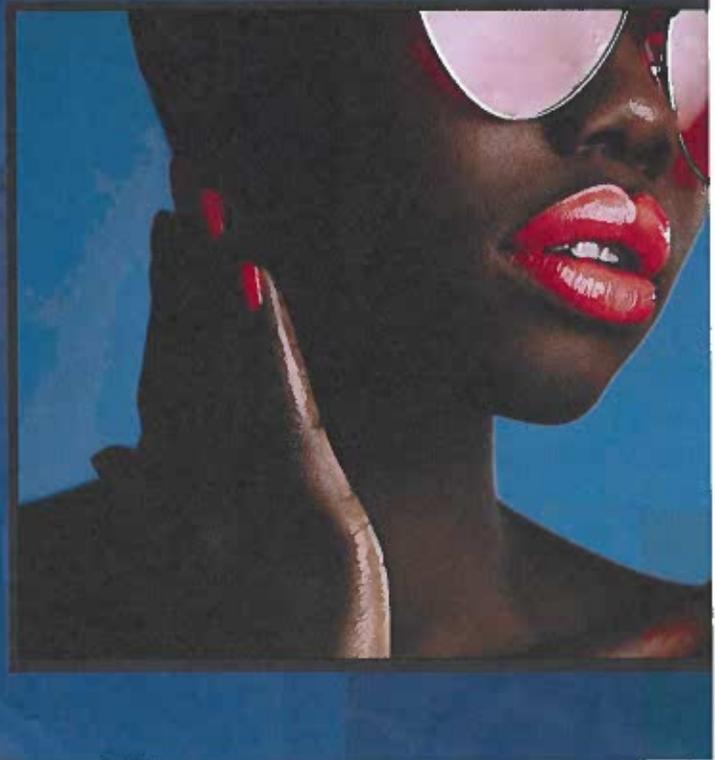
The world's first picture processor with cognitive intelligence understands how humans really see the world.

The 98" BRAVIA with Cognitive Processor XR™ opens up an unprecedented viewing experience that immerses you even more deeply in the scene.

BZ40L

Exceptionally bright 4K displays with unique Deep Black Non-Glare technology

85" 75" 65" 55"



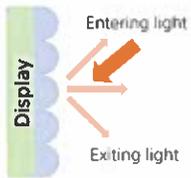
Deep Black Non-Glare Coating



androidtv

Deep Black Non-Glare Coating

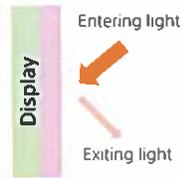
Deep Black Non-Glare Coating combines innovative technologies – delivering an unprecedented reduction in both screen glare and reflection that doesn't compromise picture quality.



Anti-Glare

A microscopic unevenness is added to the surface of the display panel.

Incident light is diffusely reflected in all directions, becoming a whitish blur that's less noticeable to viewers than sharply reflected light.



Low Reflection

A special coating is added to the surface of the panel. Incident light rays bounce off the surface of the clear layer, as well as the panel surface beneath. Interference between the reflected rays causes cancellation, reducing reflections seen by viewers.

Sony's Deep Black Non-Glare Coating combines anti-glare and low-reflection technologies. Reducing reflections and boosting contrast, it's the key to dynamic visuals bursting with true-to-life color and detail that inspire everyone, from corporate visitors and staff to shoppers and students.

Exquisite images that always stand out

Available in screen sizes from 55" to 85", the BRAVIA BZ40L Series grabs your audience's attention with extremely high 700 nit screen brightness for punchy, high-impact visuals that are always seen clearly.

Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra wide viewing angle lets everyone in the room enjoy clear, bright images, wherever they're positioned.



Styled to blend with every environment

- BRAVIA Pro Displays come supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation
- The Sony logo is discreetly positioned on the edge of the display's beautifully slim bezel – with nothing distracting your audience from immersive images.
- Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.



BZ35L

Enhanced professional displays with 32GB of storage and more robust brightness

85" 75" 65" 55"



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Vibrant, true-to-life images that can't be missed

BRAVIA BZ35L Series grabs your audience's attention with high 550 nit screen brightness for punchy, high-impact visuals that are always seen clearly.

Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra-wide viewing angle ensures that everyone in the room can enjoy clear, bright images wherever they're positioned.



Large 32GB internal storage

The internal memory on some other displays is eaten up by the operating system, leaving little space for your own apps and content.

BRAVIA BZ35L doubles internal storage from 16GB to a generous 32GB – giving loads more room on board to hold apps, photos, videos and digital signage.



Styled to blend with every environment

- BRAVIA Pro Displays come supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation.
- The Sony logo is discreetly positioned on the edge of the display's beautifully slim bezel – with nothing distracting your audience from immersive images.
- Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.



BZ30L

Professional 4K displays with Sony X1 processing, Pro-Mode, 24/7 operation, portrait/tilt install supported, AirPlay and Chromecast built-in™ as well as a complete range of sizes

85" 75" 65" 55" 50" 43" 32"

*32" is BZ30J model



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Latest Sony picture technologies to impress every audience

The BRAVIA BZ30L Series offers a generous 440 nit screen brightness. Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra-wide viewing angle ensures that everyone in the room can enjoy clear, bright images wherever they're positioned.



Extensive Lineup 32" to 85"

The BZ30 Series offers a range of sizes from 32" to 85" making them ideal for large projects requiring multiple sized displays that deliver the same picture quality, brightness and contrast.

*32" is BZ30J model

Styled to blend with every environment

- BRAVIA Pro Displays come supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation.
- The Sony logo is discreetly positioned on the edge of the display's beautifully slim bezel – with nothing distracting your audience from immersive images.
- Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.



Flexible content layout with HTML5

The BZ Series offers built-in support for the HTML5 application platform, so it's possible to use HTML5 interactive signage content without requiring a set-top box or PC. The content screen can be freely laid out using the 4K video, pictures, or even with a HDMI input.



Wireless screen mirroring

Easily mirror content wirelessly from handheld device onto BRAVIA with in-built support for Apple AirPlay and Chromecast built-in.

BZ50L/BZ40L-series Specifications

Flagship / High Brightness Non Glare

		FW-98BZ50L	FW-85BZ40L	FW-75BZ40L	FW-65BZ40L	FW-55BZ40L
General features	Screen Size	98	85	75	65	55
	Brightness (cd/m ²)	780	650		700	
	Contrast Ratio	5000:1	6000:1		1200:1	
	Dynamic Contrast Ratio	700,000:1	500,000:1		600,000:1	
	Response Time (ms)	6.5	15.9		8.0	
	Display resolution (H x V, pixels)	3840 x 2160				
	HDR (High Dynamic Range) compatibility	Yes (HDR10,HLG,Dolby Vision)				
	Aspect Ratio	16:9				
Display features	Portrait/Tilt Compatibility	Yes				
	Dimming type	Local Dimming			Frame Dimming	
	Display Device	LCD				
	Panel Type	VA			IPS	
	Backlight type	Direct (Full Array LED)			Direct LED	
	TRILUMINOS Display	XR Triluminos Pro			TRILUMINOS PRO	
	Color gamut (DCI-P3)	95%			92%	
	Picture Processor	Cognitive Processor XR			4K HDR Processor X1	
	Operation time	24/7				
	Deep Black Non-Glare coating	No			Yes	
	Haze (%)	2%	58%		47%	
	Viewing Angle (Right/Left)	178 (89/89) degree				
	Viewing Angle (Up/Down)	178 (89/89) degree				
	Video Specs	Video Processing	XR 4K Upscaling			4K X-Reality PRO
Motion enhancer		XR Motion Clarity			Motionflow XR 240 (Native 60Hz)	
HDMI Signal		4096x2160p (24,60Hz), 3840 x 2160p (24, 30, 60, 120Hz), 1080p (24, 30, 60, 120Hz), 1080i (60Hz), 720p (24, 30, 60Hz), 480p			4096 x 2160p (24, 60Hz), 3840 x 2160p (24, 30, 60Hz), 1080p (24, 30, 60Hz), 1080i (60Hz), 720p (24, 30, 60Hz), 480p	
Audio Specs	Speaker Position	Down Firing + Side Back			Down Firing	
	Audio Power Output	10W + 10W + 10W + 10W			10W + 10W	
Professional features	Pro mode				Yes	
	HDMI auto wake-up				Yes	
	HTML5 platform				Yes	
	Multicast/IPTV				Yes	
	Operating System				Android TV	
	On-board Storage (GB)				32GB	
Network Specs	Wi-Fi Direct				Yes	
	Wi-Fi Certified				Yes	
	Wireless LAN				Integrated	
Convenience features	USB playback codecs	MPEG1:MPEG1/MPEG2PS:MPEG2/MPEG2TS (HDV,AVCHD):MPEG2,AVC/MP4 (XAVC S):AVC,MPEG4,HEVC/AVI:Xvid,MotionJpeg/ASF(WMV):VCI/ MOV,AVC,MPEG4,MotionJpeg/MKV:Xvid,AVC,MPEG4,VP8,HEVC/WEBM:VP8/3GPP:MPEG4,AVC/MP3/ASF (WMA)/LPCM/WAV/MP4AAC/FLAC/IPEG				
	On Screen Clock				Yes	
	Sleep Timer				Yes	
	On/Off Timer				Yes	
	Chromecast built-in				Yes	
	Apple AirPlay				Yes	
Control Specs	IP Control				Yes	
	RS-232C Control				Yes	
	HDMI-CEC				Yes	
Inputs and outputs	HDCP	HDCP2.3 (for HDMI/2/3/4)				
	Composite Video Input (s)	Hybrid w/S-Center Speaker Input x1 (Side, Mini jack)			1 (Side, Mini jack)	
	HDMI inputs total	4 (4Side)				
	Analog Audio Input (s) (Total)	1 (Side Analog Conversion)				
	Digital Audio Output (s)	1 (Side)				
	USB ports	2 (Side)				
Design features	Ethernet inputs	1 (Side)				
	VESA [®] Hole Pitch (W x H)	600 x 400 mm / 23 ^{3/4} x 15 ^{5/8} inch	400 x 400 mm / 15 ^{3/4} x 15 ^{5/8} inch		300 x 300 mm / 11 ^{7/8} x 11 ^{7/8} inch	
Accessories	Wall-mount adjuster (Bundled) *depending on the region.	No			Yes	
	Table-top stand (Optional) *depending on the region.	No			Yes	Yes
Environment Specs	On-Mode Power 1000h SDR (Lot 5)	154 kWh/1000h	151 kWh/1000h	106 kWh/1000h	84 kWh/1000h	76 kWh/1000h
	Rated Power Consumption	505 W	373 W	299 W	229 W	201 W
	Power Consumption (in Standby)	0.5 W				
	Dynamic Backlight Control	Yes				
Measurements	Power Saving Mode / Back Light Off Mode	Yes				
	Dimension of TV without Stand (W x H x D)	2199 x 1255 x 85 mm / 86 ^{5/8} x 49 ^{3/8} x 3 ^{3/8} inch	1899 x 1089 x 71 mm / 74 ^{11/16} x 42 ^{7/8} x 2 ^{7/8} inch	1686 x 969 x 72 mm / 66 ^{1/2} x 38 ^{1/4} x 2 ^{13/16} inch	1462 x 942 x 71 mm / 57 ^{5/8} x 33 ^{1/4} x 2 ^{7/8} inch	1243 x 721 x 71 mm / 49 x 28 ^{1/2} x 2 ^{7/8} inch
	Dimension of TV with Stand (W x H x D)	-				
Weight	Dimension of Package Carton (W x H x D)	2330 x 1394 x 283 mm / 91 ^{3/4} x 55 x 11 ^{1/4} inch	2036 x 1239 x 258 mm / 80 ^{1/4} x 48 ^{7/8} x 10 ^{1/4} inch	1824 x 1114 x 187 mm / 71 ^{7/8} x 43 ^{7/8} x 7 ^{3/8} inch	1588 x 965 x 184 mm / 62 ^{1/8} x 38 x 7 ^{1/8} inch	1362 x 840 x 160 mm / 53 ^{5/8} x 33 ^{1/8} x 6 ^{3/8} inch
	Weight of TV without Stand	67.2 kg / 148.1 lb	44.5 kg / 98.1 lb	31.5 kg / 69.4 lb	21.4 kg / 47.2 lb	15.8 kg / 34.9 lb
	Weight of TV with Stand	-				
Weight	Weight of Package Carton (Gross)	91 kg / 200.5lb.	62 kg / 136.6lb.	43 kg / 94.8lb.	31 kg / 68.3lb.	23 kg / 50.7lb.

BZ35L-series Specifications

Enhanced

		FW-85BZ35L	FW-75BZ35L	FW-65BZ35L	FW-55BZ35L	
General features	Screen Size	85	75	65	55	
	Brightness (cd/m ²)	550				
	Contrast Ratio	6000:1		1200:1		
	Dynamic Contrast Ratio	400,000:1				
	Response Time (ms)	15.9		8.0		
	Display resolution (H x V, pixels)	3840 x 2160				
	HDR (High Dynamic Range) compatibility	Yes (HDR10, HLG, Dolby Vision)				
Aspect Ratio	16:9					
Portrait/Tilt Compatibility	Yes					
Display features	Dimming type	Frame Dimming				
	Display Device	LCD				
	Panel Type	VA		IPS		
	Backlight type	Direct LED				
	TRILUMINOS Display	TRILUMINOS PRO				
	Color gamut (DCI-P3)	92%				
	Picture Processor	4K HDR Processor X1				
	Operation time	24/7				
	Deep Black Non-Glare coating	No				
	Haze (%)	2%		1%		
	Viewing Angle (Right/Left)	178 (89/89) degree				
Viewing Angle (Up/Down)	178 (89/89) degree					
Video Specs	Video Processing	4K X-Reality PRO				
	Motion enhancer	Motionflow XR 240 (Native 60Hz)				
Audio Specs	HDMI Signal	4096x2160p (24,60Hz), 3840x2160p (24,30,60Hz), 1080p (24,30,60Hz), 1080i (60Hz), 720p (24,30,60Hz), 480p				
	Speaker Position	Down Firing				
Professional features	Audio Power Output	10W + 10W				
	Pro mode	Yes				
	HDMI auto wake-up	Yes				
	HTML5 platform	Yes				
	Multicast/IPTV	Yes				
	Operating System	Android TV				
Network Specs	On-board Storage (GB)	32GB				
	Wi-Fi Direct	Yes				
Convenience features	Wi-Fi Certified	Yes				
	Wireless LAN	Integrated				
	USB playback codecs	MPEG1/MPEG2/MPEG2PS/MPEG2/MPEG2TS(HDV,AVCHD)/MPEG2_AVC/MP4(XAVC S)/AVC/MPEG4_HEVC/AVI-Xvid/MotionJpeg/ASF(WMV)/VC1/MOV/AVC/MPEG4/MotionJpeg/MKV/Xvid_AVC/MPEG4_VP8/HEVC/WEBM_VP8/3GPP/MPEG4_AVC/MP3/ASF(WMA)/LPCM/WAV/MP4AAC/FLAC/IPEG				
	On Screen Clock	Yes				
	Sleep Timer	Yes				
	On/Off Timer	Yes				
	Chromecast built-in	Yes				
	Apple AirPlay	Yes				
	Control Specs	IP Control	Yes			
		RS-232C Control	Yes			
HDMI-CEC		Yes				
Inputs and outputs	HDCP	HDCP2.3 (for HDMI 2/2.3/4)				
	Composite Video Input (s)	1 (Side, Mini Jack)				
	HDMI inputs total	4 (4 Side)				
	Analog Audio Input (s) (Total)	1 (Side Analog Conversion)				
	Digital Audio Output (s)	1 (Side)				
	USB ports	2 (Side)				
	Ethernet inputs	1 (Side)				
Design features	VESA ¹ Hole Pitch (W x H)	400 x 400 mm / 15 ^{7/8} x 15 ^{7/8} Inch	300 x 300 mm / 11 ^{3/8} x 11 ^{3/8} Inch			
Accessories	Wall-mount adjuster (Bundled) *depending on the region.	Yes				
	Table-top stand (Optional) *depending on the region.	No		Yes		
Environment Specs	On Mode Power 1000h SDR (Lot 5)	135 kWh/1000h	106 kWh/1000h	85 kWh/1000h	71 kWh/1000h	
	Rated Power Consumption	323 W	235 W	218 W	169 W	
	Power Consumption (In Standby)	0.5 W				
	Dynamic Backlight Control	Yes				
Measurements	Power Saving Mode / Back Light Off Mode	Yes				
	Dimension of TV without Stand (W x H x D)	1899 x 1089 x 71 mm / 74 ^{7/8} x 42 ^{7/8} x 2 ^{7/8} Inch	1686 x 969 x 72 mm / 66 ^{3/4} x 38 ^{1/4} x 2 ^{7/8} Inch	1462 x 842 x 71 mm / 57 ^{5/8} x 33 ^{1/4} x 2 ^{7/8} Inch	1243 x 721 x 71 mm / 49 x 28 ^{3/8} x 2 ^{7/8} Inch	
	Dimension of TV with Stand (W x H x D)	-	-	1462 x 912 x 338 mm / 57 ^{5/8} x 36 x 13 ^{3/8} Inch	1243 x 787 x 338 mm / 49 x 31 x 13 ^{3/8} Inch	
Weight	Dimension of Package Carton (W x H x D)	2036 x 1239 x 258 mm / 80 ^{1/4} x 49 ^{1/8} x 10 ^{1/4} Inch	1824 x 1114 x 187 mm / 71 ^{3/8} x 43 ^{7/8} x 7 ^{3/8} Inch	1588 x 965 x 184 mm / 62 ^{5/8} x 38 x 7 ^{3/8} Inch	1362 x 840 x 160 mm / 53 ^{3/8} x 33 ^{1/8} x 6 ^{3/8} Inch	
	Weight of TV without Stand	44.5 kg / 98.1 lb	31.5 kg / 69.4 lb	21.2 kg / 46.7 lb	15.7 kg / 34.5 lb	
	Weight of TV with Stand	-	-	22.1 kg / 48.7 lb	16.6 kg / 36.6 lb	
	Weight of Package Carton (Gross)	62 kg / 136.6 lb.	43 kg / 94 lb.	30 kg / 66 lb.	23 kg / 50.7 lb.	

BZ30L-series Specifications

Complete

		FW-85BZ30L	FW-75BZ30L	FW-65BZ30L	FW-55BZ30L	FW-50BZ30L	FW-43BZ30L
General features	Screen Size	85	75	65	55	50	43
	Brightness (cd/m ²)	440					
	Contrast Ratio	6000:1	1200:1			5000:1	1200:1
	Dynamic Contrast Ratio	300,000:1			400,000:1		
	Response Time (ms)	15.9	8.0			9.5	8.0
	Display resolution (H x V, pixels)	3840 x 2160					
	HDR (High Dynamic Range) compatibility	Yes (HDR10,HLG,Dolby Vision)					
Aspect Ratio	16:9						
Portrait/Tilt Compatibility	Yes						
Display features	Dimming type	Frame Dimming					
	Display Device	LCD					
	Panel Type	VA	IPS			VA	IPS
	Backlight type	Direct LED					
	TRILUMINOS Display	TRILUMINOS PRO					
	Color gamut (DCI-P3)	92%					
	Picture Processor	4K HDR Processor X1					
	Operation time	24/7					
	Deep Black Non-Glare coating	No					
	Haze (%)	2%					1%
	Viewing Angle (Right/Left)	178 (89/89) degree					
	Viewing Angle (Up/Down)	178 (89/89) degree					
Video Specs	Video Processing	4K X-Reality PRO					
	Motion enhancer	Motionflow XR 240 (Native 60Hz)					
	HDMI Signal	4096 x 2160p (24, 60Hz), 3840 x 2160p (24, 30, 60Hz), 1080p (24, 30, 60Hz), 1080i (60Hz), 720p (24, 30, 60Hz), 480p					
Audio Specs	Speaker Position	Down Firing					
	Audio Power Output	10W + 10W					
Professional features	Pro mode	Yes					
	HDMI auto wake-up	Yes					
	HTML5 platform	Yes					
	Multicast/IPTV	Yes					
	Operating System	Android TV					
Network Specs	On-board Storage (GB)	16GB					
	Wi-Fi Direct	Yes					
	Wi-Fi Certified	Yes					
Convenience features	Wireless LAN	Integrated					
	USB playback codecs	MPEG1/MPEG1/MPEG2PS/MPEG2/MPEG2TS (HDV,AVCHD);MPEG2,AVC/MP4 (XAVC S);AVC,MPEG4,HEVC/AVI;Xvid,MotionJpeg/ASF (WMV);VCI/MOV;AVC,MPEG4,MotionJpeg/MKV;Xvid,AVC,MPEG4,VP8.HEVC/WEBM;VP8/3GPP;MPEG4,AVC/MP3/ASF (WMA)/LPCM/WAV/MP4AAC/FLAC/IPEG					
	On Screen Clock	Yes					
	Sleep Timer	Yes					
	On/Off Timer	Yes					
	Chromecast built-in	Yes					
	Apple AirPlay	Yes					
Control Specs	IP Control	Yes					
	RS-232C Control	Yes					
	HDMI-CEC	Yes					
Inputs and outputs	HDCP	HDCP2.3 (for HDMI1/2/3/4)					
	Composite Video Input (s)	1 (Side, Mini jack)					
	HDMI inputs total	4 (4Side)					
	Analog Audio Input (s) (Total)	1 (Side Analog Conversion)					
	Digital Audio Output (s)	1 (Side)					
	USB ports	2 (Side)					
Design features	Ethernet Inputs	1 (Side)					
	VESA® Hole Pitch (W x H)	400 x 400 mm / 15.74 x 15.74 inch	300 x 300 mm / 11.79 x 11.79 inch			200 x 200 mm / 7.87 x 7.87 inch	
Accessories	Wall-mount adjuster (Bundled) *depending on the region.	Yes					
	Table-top stand (Optional) *depending on the region.	No			Yes		
Environment specs	On-Mode Power 1000h SDR (Lot 5)	128 kWh/1000h	142 kWh/1000h	113 kWh/1000h	92 kWh/1000h	71 kWh/1000h	54 kWh/1000h
	Rated Power Consumption	248 W	306 W	230 W	202 W	140 W	103 W
	Power Consumption (in Standby)	0.5 W					
	Dynamic Backlight Control	Yes					
Measurements	Power Saving Mode / Back Light Off Mode	Yes					
	Dimension of TV without Stand (W x H x D)	1899 x 1089 x 71 mm / 74.76 x 42.76 x 2.79 inch	1686 x 969 x 72 mm / 66.77 x 38.14 x 2.84 inch	1462 x 842 x 71 mm / 57.56 x 33.14 x 2.79 inch	1243 x 721 x 71 mm / 49 x 28.39 x 2.79 inch	1126 x 653 x 70 mm / 44.33 x 25.69 x 2.76 inch	972 x 567 x 70 mm / 38.27 x 22.32 x 2.76 inch
	Dimension of TV with Stand (W x H x D)	1462 x 912 x 338 mm / 57.56 x 36 x 13.31 inch			1243 x 787 x 338 mm / 49 x 31 x 13.31 inch	1126 x 718 x 286 mm / 44.33 x 28.39 x 11.26 inch	972 x 632 x 286 mm / 38.27 x 25 x 11.26 inch
Weight	Dimension of Package Carton (W x H x D)	2036 x 1239 x 258 mm / 80.16 x 48.78 x 10.16 inch	1824 x 1114 x 187 mm / 71.81 x 43.86 x 7.36 inch	1588 x 965 x 184 mm / 62.52 x 38 x 7.24 inch	1362 x 840 x 160 mm / 53.62 x 33.07 x 6.30 inch	1240 x 782 x 141 mm / 48.82 x 30.8 x 5.54 inch	1070 x 695 x 141 mm / 42.13 x 27.36 x 5.54 inch
	Weight of TV without Stand	44.5 kg / 98.1 lb	31.7 kg / 69.9 lb	21.2 kg / 46.7 lb	15.7 kg / 34.6 lb	12.3 kg / 27.1 lb	10 kg / 22.1 lb
	Weight of TV with Stand	-	-	22.1 kg / 48.7 lb	16.6 kg / 36.6 lb	12.9 kg / 28.5 lb	10.5 kg / 23.2 lb
	Weight of Package Carton (Gross)	62 kg / 136.6 lb.	43 kg / 94.8 lb.	30 kg / 66.1 lb.	23 kg / 50.7 lb.	17 kg / 37.5 lb.	14 kg / 30.9 lb.



You've got our support

Our 3 Year After-sales service package comes as standard



EU wide professional "ELITE" Helpdesk available Mon-Fri 9am-6pm



Advanced Exchange of the display in 4-7 days



Onsite Tech-assistance: technician removes original unit, installs replacement, and ships non-working unit to Sony



Faulty displays are recycled as part of our Road to Zero initiative



3 years as standard. +2 years extensions available (up to 30,000hrs)

Even greater peace of mind

Expanded after-sales care options for BRAVIA Professional Displays



PrimeSupport Pro

Find your local telephone number to contact our PrimeSupport Helpdesk on our website pro.sony/support-services/support-contact-us Monday to Friday 09:00 - 18:00 (Central European Time), excluding local national holidays. Support is available in English, French, Italian, German and Spanish.

Optional PrimeSupport Pro packs can be purchased to add a 2-year extension to the standard 3-year PrimeSupport, and to give long-term assurance of expert support and technical assistance for a total of 5 years from the purchase date.

For full information and pricing details, please get in touch with your Sony team or email primesupport@sony.com

Our extended PrimeSupport package options

can be found in the below matrix for each model or series.



PSP Package Name	Included	PSP, PROBRAVIA1, PC2	PSP, PROBRAVIA2, PC2	PSP, PROBRAVIA3, PC2	PSP, PROBRAVIA4, PC2	PSP, PROBRAVIA5, PC2	PSP, PROBRAVIA6, PC2	PSP, PROBRAVIA7, PC2	
Price Band	N/A	1	2	3	4	5	6	7	
Service Level	*Elite helpdesk hours (Mon-Fri 9:00-18:00 CET), Advanced replacement by a new or refurbished unit in case of product fault. Logistics included*								
Service Duration	3 Years Total +2 year PrimeSupportPro extension, 5 Years Total or 30,000 hours.								
Model Range	BZ L series								
	All Models	FW-43BZ30L FW-32BZ30J	FW-55BZ35L FW-55BZ30L FW-50BZ30L	FW-75BZ30L FW-65BZ40L FW-65BZ35L FW-65BZ30L FW-55BZ40L	FW-75BZ40L FW-75BZ35L	FW-85BZ40L FW-85BZ35L FW-85BZ30L		FW-98BZ50L	
	Turner L Series								
	All Models	FWD-43X80L FWD-50X80L	FWD-55X80L FWD-65X80L	FWD-75X80L FWD-85X80L FWD-65X95L	FWD-55A80L FWD-55A95L FWD-65A80L	FWD-65A95L FWD-75X95L	FWD-77A80L FWD-77A95L FWD-83A80L FWD-85X95L	FWD-98X90L	
	BZ (Legacy)								
	All Models	FW-32BZ30J FW-43BZ30J	FW-43BZ35J FW-50BZ30J FW-50BZ35J FW-55BZ30J FW-55BZ40H	FW-65BZ40H FW-65BZ30J FW-75BZ30J	FW-75BZ40H	FW-85BZ35F FW-85BZ40H		FW-100BZ40J	
	Turner (Legacy)								
	All Models	FWD-43X80J FWD-32W800 FWD-49X80H FWD-43X80H	FWD-43X80K FWD-50X80K FWD-55X80K FWD-50X80J FWD-55X80J FWD-65X80J	FWD-42A90K FWD-55A80K FWD-75X80K / FWD-75X81K FWD-48A90K FWD-65X80K FWD-55A80J FWD-65X95J FWD-75X81J FWD-48A9 FWD-55X80H FWD-55A8 FWD-65X80H FWD-65X90H FWD-75X90H FWD-75X905H	FWD-65A80K FWD-55A95K FWD-55A90J FWD-75X95J FWD-65A80J FWD-85X85J FWD-65A8 FWD-85X90H	FWD-65A95K FWD-65X95K FWD-85X85K FWD-65A90J FWD-77A80J FWD-85X95J FWD-75X80H	FWD-75Z9K FWD-75X95K FWD-77A80K FWD-85X95K FWD-75Z9J FWD-83A90J FWD-85Z9J FWD-85X80H	FWD-85Z9K	

BRAVIA Professional Alliance Partners



Discover how we work closely with top companies to add even more value to our industry-leading AV products and solutions. Our BRAVIA Professional Displays support a growing ecosystem of compatible technologies from established and emerging solution providers.

Whether it's configuring a digital signage network, connecting participants using video collaboration, or outfitting a room for device management and automation, we are committed to helping you.

Visit : pro.sony/Alliances

Business Applications



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For full features visit : pro.sony/BRAVIA

SONY

FW-85BZ40L

85" Exceptionally bright 4K HDR professional display with unique Deep Black Non-Glare technology



Overview

Superlative picture quality. Made for professionals.

Engineered to perform flawlessly in demanding retail, corporate and educational environments, the FW-85BZ40L is the truly professional display. It's packed with Sony innovation - including latest Deep Black Non-Glare technology - for impressively bright, high-contrast 4K HDR images with sumptuous colours and exquisite detail. Pro-friendly features simplify integration, easy operation and seamless content sharing in today's connected AV environments. And with generous customisation options, the FW-85BZ40L is the premium LED display that fits right in with your business needs.

Features

Deep Black Non-Glare

Featured exclusively on BRAVIA BZ40L, Sony's Deep Black Non-Glare Coating combines anti-glare and low-reflection technologies. Reducing reflections and boosting contrast, it's the key to dynamic visuals bursting with true-to-life colour and detail that inspire everyone, from corporate visitors and staff to shoppers and students.

Exquisite images that always stand out

Our 85" FW-85BZ40L grabs your audience's attention

with extremely high 650 nits screen brightness for punchy, high-impact visuals that are always seen clearly. Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra-wide viewing angle ensures that everyone in the room can enjoy clear, bright images wherever they're positioned.

Richer, more natural colour

Sony's power-packed 4K HDR Processor X1 and TRILUMINOS Pro technology faithfully reproduces a phenomenal range of rich, true-to-life colours.

Finer detail

4K X-Reality PRO processing upscales pictures closer to true 4K quality. Images are sharpened and refined in real time, revealing extra detail from lower-resolution picture sources.

Smoother movement

Motionflow XR ensures smoother, more natural reproduction of rapidly-moving on-screen images.

Installation flexibility to suit every environment

The sleek, minimal design of the FW-85BZ40L Series brings impeccable style to any business environment. The display's elegant lines are further enhanced by practical touches for seamless integration in retail stores, colleges and corporate workspaces.

Wall-Mount Adjuster

BRAVIA comes supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation.

Side Mounted interfaces

Signal connections, networking and other interfaces are conveniently side mounted for easy installation and

access when the display's in portrait position.

Discreet Logo

The Sony logo is discreetly positioned on the edge of the display's bezel - with nothing distracting your audience from immersive images.

Landscape, Portrait and Tilt

Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.

Round the clock reliability

Business never sleeps: BRAVIA is engineered for dependable 24/7 operation in the most challenging corporate and commercial environments.

Special settings for professional use

Pro Settings mode makes doing business even easier, allowing you to customise BRAVIA settings and operating modes to suit the demands of corporate or retail environments. Disable input or remote control functions, schedule on/off times, remove labels and block buttons to avoid tampering when the screen's being used in public spaces. Customise and store display settings, then copy them easily from display to display via USB flash memory.

Get great pictures fast

Forget fiddling with display settings - focus on getting amazing results without fuss. One Step Setting offers presets tuned to your environment including meeting room, vivid signage, natural signage and graphics. Just pick a preset: BRAVIA instantly configures picture mode, input, control settings and more.

Easy multi-screen setup

Configuring multiple screens for large display applications is easier than ever. The Multi Display Setting (MDS) app helps you create stunning video walls with multiple BRAVIA displays 'tiled' together.

Easy integration

FW-85BZ40L is made for today's connected world. There's seamless support for today's leading automation and control platforms, while open APIs simplify integration with other vendor solutions.

Large 32GB internal storage

The internal memory on some other displays is eaten up by the operating system, leaving little space for your own apps and content. FW-85BZ40L doubles internal storage from 16GB to a generous 32GB - giving loads more room on board to hold apps, photos, videos and digital signage.

Signage made simple

Informing and guiding visitors with digital signage in retail stores and corporate spaces has never been simpler. Built-in support for HTML5 makes it easy to display interactive signage content on BRAVIA without the need for a dedicated set-top box, media player or PC. On-board BRAVIA Signage Free (BSF) software automatically plays out HTML content, video and photos when a USB stick memory is slipped into BRAVIA. It's that simple.

Wireless screen mirroring

Easily mirror content wirelessly from handheld device onto BRAVIA with in-built support for Apple AirPlay and Google Chromecast.

Meet more easily

Get Google Meet from Google Play Store, and pair

BRAVIA with a compatible webcam for easy video meetings.

With BRAVIA, sustainability in every scene

With growing demand for ever larger display screens, there is also the risk of greater resource and energy use. However, Sony's sustainability commitments are realizing efficiency gains from product development right through to customers viewing screens.

Specifications

General Features

Screen Size	85"
Brightness (cd/m ²)	650
Contrast Ratio	6000:1
Dynamic Contrast Ratio	500,000:1
Response Time (ms)	15.9
Display resolution (H x V, pixels)	3840 x 2160
HDR (High Dynamic Range) compatibility	Yes (HDR10,HLG,Dolby Vision)
Aspect Ratio	16:9
Portrait/Tilt Compatibility	Yes

Display Features

Dimming type	Frame Dimming
Display Device	LCD
Panel Type	VA
Backlight type	Direct LED
TRILUMINOS Display	TRILUMINOS PRO
Color gamut (DCI-P3)	92%
Picture Processor	4K HDR Processor X1
Operation time	24/7
Deep Black Non-Glare coating	Yes
Haze	58%
Viewing Angle (Right/Left)	178(89/89) degree
Viewing Angle (Up/Down)	178(89/89) degree

Video Specs

Video Processing	4K X-Reality PRO
Motion enhancer	Motionflow XR 240 (Native 60Hz)
	4096x2160p(24,60Hz), 3840x2160p(24,30,60Hz),

HDMI Signal	1080p(24,30,60Hz), 1080i(60Hz), 720p(24,30,60Hz), 480p
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Audio Specs

Speaker Position	Down Firing
Audio Power Output	10W + 10W

Professional Features

Pro mode	Yes
HDMI auto wake-up	Yes
HTML5 platform	Yes
Multicast/IPTV	Yes
Operating System	Android TV
On-board Storage (GB)	32GB

Network Specs

Wi-Fi Direct	Yes
Wi-Fi Certified	Yes
Wireless LAN	Integrated

Convenience Features

USB playback codecs	MPEG1:MPEG1 / MPEG2PS:MPEG2- / MPEG2TS (HDV,AVCHD):MPEG2,AVC / MP4 (XAVCS):AVC,MPEG4,HEVC / AVI:Xvid,MotionJpeg / ASF (WMV):VC1 / MOV:AVC,MPEG4,MotionJpeg / MKV:Xvid,AVC,MPEG4,VP8.HEVC / WEBM:VP8 / 3GPP:MPEG4,AVC / MP3 / ASF (WMA) / LPCM / WAV / MP4AAC / FLAC / JPEG
---------------------	---

On Screen Clock	Yes
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Sleep Timer	Yes
-------------	-----

On/Off Timer	Yes
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Chromecast built-in	Yes
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Apple AirPlay	Yes
---------------	-----

Control Specs

IP Control	Yes
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RS-232C Control	Yes
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HDMI-CEC	Yes
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Inputs and Outputs

HDCP	HDCP2.3(for HDMI1/2/3/4)
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Composite Video Input (s)	1(Side, Mini jack)
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HDMI inputs total	4(Side)
Analog Audio Input (s) (Total)	1(Side Analog Conversion)
Digital Audio Output (s)	1(Side)
USB ports	2(Side)
Ethernet inputs	1(Side)

Design Features

VESA® Hole Pitch (W x H)	400 x 400 mm / 15 3/4 x 15 3/4 inch
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Accessories

Wall-mount adjuster (Bundled) *depending on the region.	Yes
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Table-top stand (Optional) *depending on the region.	No
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Environment Specs

Rated Power Consumption	373 W
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Power Consumption (in	0.5 W
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Standby)

Dynamic Backlight Control	Yes
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Power Saving Mode / Back Light Off Mode	Yes
---	-----

Measurements

Dimension of TV without Stand (W x H x D)	1899 x 1089 x 71 mm / 74 7/8 x 42 7/8 x 2 7/8 inch
---	--

Dimension of TV with Stand (W x H x D)	-
--	---

Dimension of Package Carton (W x H x D)	2036 x 1239 x 258 mm / 80 1/4 x 48 7/8 x 10 1/4 inch
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Weight

Weight of TV without Stand	44.5 kg / 98.1 lb
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Weight of TV with Stand	-
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Weight of Package Carton (Gross)	62 kg / 136.6lb.
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Further Information

Product
Information
Sheet
(Europe
Only)

<https://eprel.ec.europa.eu/qr/1393029>

Related
products



BRAVIA BZ40L Series

Exceptionally bright
4K HDR professional
displays with
unique Deep Black
Non-Glare
technology
Available in multiple
screen sizes

Gallery







Q-SYS NV-32-H (Core Capable)

STANDARD FEATURES

Core mode

- Fully integrated Q-SYS Core processor
- Onboard 3 x 2 HDMI video switcher
- 64 x 32 network audio channels
- Supports up to 32 x 32 Software-based Dante channels (none included)
- 8x AEC channels
- Supports up to three (3) Q-SYS NM-T1 tabletop microphones
- 1 x VoIP softphone instance
- Audio I/O via HDMI, USB and 3.5 mm
- Local decoding of Q-SYS Mediacast streams

Peripheral mode

- Native HDMI video and audio distribution for Q-SYS
- Q-SYS Shift™ adaptive video compression codec
- Software-configurable as an encoder or decoder
- Simultaneous streaming capabilities
- Local decoding of Q-SYS Mediacast streams

Licensable Features*

- Q-SYS Scripting Engine
- Q-SYS UCI Deployment
- Software-Based Dante
- Core Mode Video Streaming



Q-SYS NV-32-H (Core Capable)

Native Network Video Endpoint for Q-SYS

The NV-32-H (Core Capable) is a multipurpose, software-configurable video endpoint native to Q-SYS that offers two operating modes to choose between, based on the needs of the application.

CORE MODE

Consolidated Q-SYS AV processor, control engine, and local HDMI video switcher to support video collaboration in small and medium sized meeting rooms and classrooms.

CORE MODE STREAMING LICENSE FEATURE

The Q-SYS NV-32-H Core Mode Video Streaming license expands the NV-32-H (Core Capable) by combining Core mode and Peripheral mode to simultaneously offer Core processing and network video encoding/decoding, streamlining installations while lowering product and installation costs.

PERIPHERAL MODE

Native HDMI and audio distribution without the need for additional control processors, bridges or complicated programming.

Like all Q-SYS devices, the NV-32-H (Core Capable) offers native integration and control, simplifying setup, configuration and firmware management while eliminating the need for advanced programming knowledge.

*To learn more about Licensable Features visit qsys.com/licenses

Q-SYS NV-32-H (Core Capable)

CORE MODE

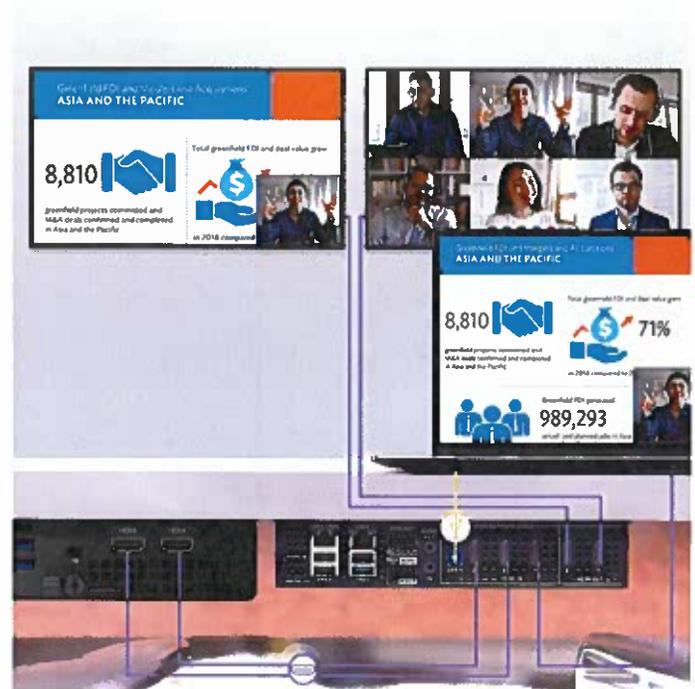
- **Fully integrated Q-SYS processor:** 'Core Mode' enables the same integrated audio, video and control features as the rest of the Q-SYS Core portfolio, but with I/O and processing capabilities specifically tuned for video collaboration in small meeting rooms or classrooms.
- **Onboard HDMI switch:** The 3 x 2 HDMI I/O enables in-room users to easily share presentation or video content from their laptops or other video sources (video encoding/decoding is unavailable in this mode). Onboard HDMI switching is 3 x 1 @ 4K60 or 3 x 2 @ 1080p.
- **Consolidated AV functionality:** The 1 RU, half-rack unit consolidates disparate AV functionality to free up physical space and reduce hardware and installation costs.

PERIPHERAL MODE

- **Quality:** The NV-32-H provides high-quality, low latency video streaming with resolutions of up to 4K60 4:4:4 over a standard gigabit network.
- **Network optimized compression scheme:** Q-SYS Shift™ video compression codec actively adjusts network bandwidth resources according to content, affording massive network savings for common meeting room content without compromising on the ability to stream full-motion video.
- **Single device solution:** The NV-32-H is configurable as an encoder or decoder, simplifying the ordering and specification process and providing flexibility for meeting spaces.
- **Simultaneous streaming:** With 3x HDMI inputs and 2x HDMI outputs, the NV-32-H enables flexible room design scenarios, such as simultaneous 1080p60 streaming for dual-monitor rooms, with a single device. It also enables soft codec applications that support dual video output.
- **Local output switching:** When set as a decoder, the NV-32-H can provide local video source selection in addition to displaying content from network streams.
- **Test your network:** The NV-32-H features a Network Test feature, accessible in Q-SYS Designer Software, that allows you to send full video data loads across your network to check for potential network configuration issues without needing actual video sources and/or sinks connected.

SHARED BENEFITS

- **Native integration and control:** Q-SYS software-based control allows you to add native Q-SYS Products, including the NV-32-H, to your system design and route them anywhere on the network with simple drag-and-drop components. This simplifies setup, configuration, and firmware management and eliminates the need for additional hardware or advanced programming knowledge.
- **Q-SYS AV Bridging:** The NV-32-H allows users to connect their device via USB to integrate Q-SYS audio and camera feeds easily enabling remote meetings.
- **Q-SYS audio integration:** The NV-32-H allows audio feeds from connected video sources to be routed natively, along with the video stream, to any other endpoint on the network, or use the HDMI output as a Q-LAN audio destination for source audio, paging or any other Q-SYS asset. Additionally, the onboard analog audio output allows for direct connection of Q-SYS non-networked amplifiers, external loudspeakers, or audio recorders.
- **USB HID Routing over IP:** Allows users to connect USB HID devices (keyboard, mouse or touchscreen) and route the signals over the network, simplifying installation and reducing costs by removing equipment from the room.



Q-SYS NV-32-H (Core Capable)

CONTROL

- **RS-232:** Three-pin Euro terminal connection to control third-party devices with Q-SYS Control, user configurable.
- **GPIO:** Three inputs and two outputs for control of third-party devices via Q-SYS Control, user configurable.

USB

- **USB HID routing over IP:** Support for USB HID sources, including keyboard, mouse, and touch screen.
- **Q-SYS AV Bridging:** The NV-32-H is a native endpoint for Q-SYS AV Bridging. This feature is available in both Core and Peripheral Mode. The NV-32-H allows users to connect their device via USB to integrate Q-SYS audio and camera feeds by emulating a webcam video driver, AEC speakerphone audio driver, and multi-channel soundcard driver over a single USB connection.

AUDIO

- **Network audio:** Use a total network channel count of 64x32, including Q-SYS native audio channels or Dante channels (licensable up to 32x32).
- **HDMI audio input:** Each HDMI input is able to receive up to eight channels of PCM audio, which are routable within Q-SYS Designer Software.
- **HDMI audio output:** Each HDMI output has the ability to output up to eight channels of PCM audio, making each HDMI output a full-featured Q-SYS audio destination for source audio content, or any other Q-SYS audio feature such as paging, audio playback etc.
- Supports up to three (3) Q-SYS NM-T1 network tabletop microphones.
- **Analog audio input:** Mic/line input on a 3.5 mm TRS connector, routable within Q-SYS Designer Software, for direct connection of microphones or audio players.
- **Analog audio output:** Line output on a 3.5 mm TRS connector, routable within Q-SYS Designer Software, for direct connection of QSC non-networked amplifiers, external speakers or audio recorders.

SECURITY

Supports AES-128 encryption for audio and video signals from encoders to decoders as well as 802.1x authentication (available in Q-SYS Designer Software v8.4 or higher).

- **Content Protection:** HDCP 2.2 compliant.

Q-SYS SHIFT® ADAPTIVE VIDEO CODEC*

- **Modes:** Multicast and unicast
- **Bitrates:** 10 Mbps - 800 Mbps
- **Streaming protocol:** RTP

SCALER

Each HDMI output features a robust, polymorphic 4K60 4:4:4 scaler that can accommodate the most challenging resolution and frame rate conversions. The scaler on each HDMI output is capable of operating in three modes (configurable within Q-SYS Designer Software):

- Stretch-to-fit
- Maintain aspect ratio
- 1:1 pixel mapping

* Supported in Peripheral Mode and with the NV-32-H Core Mode Video Streaming license

Q-SYS NV-32-H (Core Capable)

CONNECTORS

- **USB type A:** Connect USB audio peripherals (headsets, microphones, or speakers) or USB HID devices (keyboard, mouse, or touchscreen); route signals over Q-SYS network.
- **USB type B:** The NV-32-H allows users to connect their device via USB to integrate Q-SYS audio and camera feeds by emulating a webcam video driver, AEC speakerphone audio driver, and multi-channel soundcard driver over a single USB connection.
- **Analog audio input:** 3.5 mm TRS connection for PC-Level audio input from a microphone or media player, such as mobile phone or tablet.
- **Analog audio output:** 3.5 mm TRS connection for Q-SYS non-networked amplifiers, external loudspeakers, or audio recorders.
- **LAN A:** Connection to network; includes PoE++ capability for the NV-32-H via 802.3bt Type 4 midspan injector or network switch.
- **LAN B:** Redundant connection for audio and control traffic (Core Mode only). Can be used to connect to alternate network for monitoring/management traffic.
- **Power input:** Two-pin euroblock terminal connection for external 48 V DC, 1.5 A power supply (not included).
- **RS-232:** Three-pin euroblock terminal connection for extension of Q-SYS Control to third-party devices.
- **General purpose I/O:** Euroblock terminal connection for extension of Q-SYS Control to third-party devices.

SOFTWARE-CONFIGURABLE I/O CONFIGURATIONS*

When set as an encoder:

- **Encode:** Encode one 4K60 HDMI video stream or up to three 1080p HDMI videos streams for distribution across a standard gigabit network.
- **Courtesy monitor:** Use HDMI Out 1 as a "courtesy monitor", displaying any of the three locally connected HDMI sources at resolutions up to 4K60.

When set as a decoder:

- **Decode:** Decode one 4K60 network stream or up to two simultaneous 1080p60 streams (for dual display rooms) for displaying at formats up to 4K60 on a connected display.
- **Local source switching:** Toggle between network streams or locally connected HDMI sources (single 4K60 or dual 1080p60 sources).



*Supported in Peripheral Mode and with the NV-32-H Core Mode Video Streaming license

Q-SYS NV-32-H (Core Capable)

Channel Capacity (Core Mode Only)

QLAN / AES67	64 x 32
Dante channels	Licensable up to 32 x 32 (none included)
AEC processors	8 @ 200 ms
VoIP instances	1
Audio recording / playback	4 ch recording / 16 ch playback
NM-T1 Capacity (Wideband)	3
Q-SYS peripheral limit*	32

Encoding/Decoding

Video compression	Q-SYS Shift™ compression codec Q-SYS Mediacast compression codec (decode only)
Bitrates	Q-SYS Shift™: 10Mbps – 800Mbps Q-SYS Mediacast: 1Mbps – 25Mbps

Q-SYS Shift Resolution	Framerate	Chroma sampling
3840 x 2160p	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4
3440 x 1400p	60	4:4:4
2560 x 1600p	60	4:4:4
2560 x 1440p	60	4:4:4
2560 x 1080p	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4
1920 x 1080p	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4
1280 x 720p	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4
640 x 480p	60	4:4:4

Q-SYS Mediacast Resolution	Framerate	Chroma sampling
1920 x 1080p	30	4:2:0

Content protection	Q-SYS Shift™: HDCP 2.2 compliant, AES-128 encryption for all audio and video signals between encoders and decoders Q-SYS Mediacast: HDCP is not supported
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Video I/O

HDMI 2.0 inputs	3x HDMI capable of receiving source input video formats up to 4K60 4:4:4
HDMI 2.0 outputs	2x HDMI capable of scaling and outputting video formats up to 4K60 4:4:4
Scaler	Each HDMI output features a robust, polymorphic 4K60 4:4:4 scaler that can accommodate the most challenging resolution and frame rate conversions.
Color formats	RGB Full or Limited, BT.601 & BT.709 (supported in Q-SYS Designer Software v8.3 or higher)

Audio I/O

HDMI inputs	8-channel PCM audio, Q-SYS routable
HDMI outputs	8-channel PCM audio, Q-SYS routable
Analog audio input	3.5 mm unbalanced stereo mic/line input Q-SYS routable Signal-to-noise: 80 dB THD+N: 0.009% @ 0 dB Input frequency response: 20 Hz to 20 kHz +0.05% / -0.5% Input Impedance (unbalanced): 5 k Ω nominal Analog to digital converters: 24 bit, 48 kHz
Analog audio output	3.5 mm unbalanced stereo line output Q-SYS routable Signal-to-noise: 90 dB THD+N: 0.0167% @ 0 dB output frequency response: 20 Hz to 20 kHz +0.02% / -0.5%

General

Dimensions	8.66 x 11.28 x 1.72 in (220 x 286.6 x 43.6 mm)
Weight	4.0 lb (1.81 kg)
Mounting options	Rack-mountable, 1 RU half-rack width, Surface-mountable, table or wall-mount, All mounting hardware is included.
Regulatory options	CE, FCC part 15 class B, RoHS

Q-SYS NV-32-H (Core Capable)

Other connectors

USB	Supports bridging of Q-SYS camera feeds, audio and USB HID
RS-232	Three-pin Euroblock terminal connector for extension of Q-SYS Control to third-party devices, user configurable.
GPIO	Euroblock terminal connector for extension of Q-SYS Control to third-party devices, user configurable.
LAN A	Gigabit LAN connection for interface with Q-LAN; PoE++ 802.3bt Type 4 for power
LAN B	Redundant connection for audio & control traffic (Core Mode only)
Power over ethernet specification/wattage	Conforms to IEEE 802.3bt Type 4
Physical power supply info	48 V DC Nominal, 1.5 A on 2-pin Euro connector

Environmental

Ambient operating temperature range	0-50° C
Humidity	5 to 85% non-condensing
Storage temperature	-20 to 70° C

Heat Loss

Average observed @ 25°C ambient	40 W power, 136 BTU/HR
Maximum predicted @ 25°C ambient	57 W power, 195 BTU/HR

What's in the box?

NV-32-H (Core Capable) video endpoint, Euro-terminal connectors for RS-232, GPIO and power, Rack mounting accessories, Surface mounting accessories, Safety and warranty statement.

* include native Q-SYS (cameras, I/O, NV, TSCs, paging stations), Extensions and plugins with their "Is Managed" property set to "Yes". It does not include Streaming I/O, Loudspeakers, Scripts or plugins with their "Is Managed" property set to "No".

Q-SYS NV-21-HU

NATIVE NETWORK VIDEO ENDPOINT FOR Q-SYS

KEY FEATURES

- Single cable solution for video distribution, AV bridging, and device charging¹
- Native HDMI video and audio distribution for Q-SYS
- Q-SYS Shift™ adaptive video compression
- Software configurable as an encoder or decoder
- Dual Streaming via HDMI and USB-C
- Q-SYS AV Bridging feature license



The Q-SYS NV Series NV-21-HU enables native video distribution on the Q-SYS Platform. The NV-21-HU is a software configurable endpoint offering a comprehensive single-cable solution for video distribution, AV bridging, and device charging via USB-C. The NV-21-HU's compact size and reduced I/O make it ideal for supporting meeting rooms, learning spaces, hospitality and entertainment installations. The NV-21-HU can be used alongside other Q-SYS NV Series video endpoints, providing system design flexibility. Like all Q-SYS products, the NV-21-HU offers native integration and control, simplifying configuration and operation.

SINGLE CABLE SOLUTION

The Q-SYS NV-21-HU simplifies the user experience and intuitively supports a wide range of devices. A single USB-C connection to the NV-21-HU enables a user's device to distribute video formats up to 4K60 4:4:4 via Q-SYS Shift™ video codec, integrates Q-SYS network camera and audio feeds into a supported collaboration application and charges their device simultaneously¹.

MAXIMIZE FLEXIBILITY IN DESIGN & SPECIFICATION

The NV-21-HU is software-configurable as an encoder or decoder in Q-SYS Designer Software and offers the ability to operate in either HDMI or USB-C mode, supporting a broader range of user devices without adapters or converters. In addition, the integrated AV Bridging capability eliminates the need for additional hardware and infrastructure to connect Q-SYS network cameras and audio feeds to a UC application.

- **HDMI Mode:** In HDMI mode, the NV-21-HU enables video distribution from the HDMI input and uses the USB-C connection to offer AV bridging and device charging.
- **USB-C Mode:** In USB-C mode, the NV-21-HU enables video distribution, AV bridging and device charging via the USB-C connection.
- **Dual Streaming Support (when set as encoder):** In dual streaming mode, the NV-21-HU enables both the HDMI in and USB-C to encode separate video streams to the network (1080p maximum resolution). Supported in Q-SYS Designer Software v9.10 and later.

RIGHT-SIZED

The NV-21-HU provides designers with a more compact endpoint within the NV Series. The smaller design and reduced I/O (compared to the Q-SYS NV-32-H) enable simple and scalable designs across various applications, including meeting rooms, learning spaces, hospitality, and entertainment installations.

DESIGNED FOR Q-SYS

Q-SYS NV Series network video endpoints are native to Q-SYS, which is powered by the Q-SYS OS; this software foundation manages NV Series endpoints and all other Q-SYS Products from a single application. The Q-SYS Platform's modern IT architecture and development tools enable an entire ecosystem of third-party integrations developed by approved Q-SYS Partners and a worldwide community of developers using the available tools found in Q-SYS Open.

IMPORTANT NOTE: There are temporary software limitations for the NV-21-HU. Please visit qsys.com/nv21 for more details and for on targeted resolution dates.

¹ An external power supply is required for any device charging over the USB-C connection. NV-21-PSU available separately.

CONTROL

- **RS-232:** Three Pin Euro terminal connection to control third-party devices with Q-SYS Control, user-configurable.

USB

- **USB HID control:** Control host PCs with a USB connection using USB HID components in Q-SYS Designer Software.
- **Q-SYS AV Bridging:** The Q-SYS AV Bridging feature licenses expands the functionality of the NV-21-HU, allowing users to connect their devices via USB-C directly to the network video endpoint to integrate Q-SYS audio and camera feeds for remote meetings easily. The NV-21-HU emulates a webcam (for video streams from Q-SYS network cameras), a speakerphone, and a multi-channel soundcard over a single driverless USB connection.

AUDIO

- **HDMI Audio Input:** Receive up to 8 channels of PCM audio from your video source, which are routable within Q-SYS Designer Software.
- **USB-C Audio Input:** Receive up to 8 channels of PCM Audio from your video source, which are routable within Q-SYS Designer. Additional 1x1 Speakerphone and 2x2 Soundcard options are available with the Q-SYS AV Bridging feature licenses¹.
- **HDMI Audio Output:** Embed up to 8 channels of PCM audio from Q-SYS to the HDMI output of the NV-21-HU to utilize the built-in speakers of a display as a Q-SYS audio destination for source audio content or any other audio, including paging, background music, etc.

SECURITY AND AUTHENTICATION

- **AES-128:** NV Series supports AES-128 encryption for audio and video signals from encoders to decoders
- **Content Protection:** HDCP 1.4 & HDCP 2.3 compliant
- **802.1x:** 802.1x authentication is available and configurable through Q-SYS Peripheral Manager

¹Not supported at initial release, please use the 2x2 USB Soundcard for USB-C audio routing.

Q-SYS SHIFT™ ADAPTIVE BITRATE CODEC

The NV-21-HU uses Q-SYS Shift™ video compression to provide high-quality, low-latency video streaming supporting video formats up to 4K60 4:4:4 over a standard gigabit network. Q-SYS Shift™ leverages DCT and temporal compression technologies, much like those found in H.264 and H.265 video compression codecs. Q-SYS optimized Shift™ to provide flawless image quality from the most demanding content sources. Further, Shift™ intelligently manages and optimizes the resulting network bitrate by only refreshing changes within each frame, allowing for significantly reduced bandwidth usage as compared to other compression codecs.

- **Modes:** Multicast and Unicast
- **Bitrates:** 10 Mbps - 800 Mbps
- **Streaming Protocol:** RTP

SUPPORTED VIDEO FORMAT

Resolution	Frame rate (Hz)	Chroma sampling level	Bit Depth
3840 × 2160 (4K UHD)	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4	8 bit
3440 × 1400	60	4:4:4	8 bit
2560 × 1600	60	4:4:4	8 bit
2560 × 1440	60	4:4:4	8 bit
2560 × 1080	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4	8 bit
1920 × 1200	60	4:4:4	8 bit
1920 × 1080 (1080 p)	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4	8 bit
1920 × 720 (720 p)	60, 59.94, 50, 30, 29.97, 25, 24	4:4:4	8 bit
640 × 480	60	4:4:4	8 bit

* All video formats are progressive
4:2:0 Chroma subsampling and HDR not supported

SCALER

The NV-21-HU features a robust 4K60 4:4:4 scaler that can accommodate the most challenging resolution and frame rate conversions from network streams or local HDMI and USB-C sources. The scaler is capable of operating in three modes (configurable within Q-SYS Designer Software):

- Stretch-to-fit
- Maintain aspect ratio
- 1:1 pixel mappin

 Q-SYS
SHIFT™

CONNECTORS

- **Power In:** Two-pin euroblock terminal connection for an external 12 V DC, 9 A power supply (not included, NV-21-PSU available separately). An external power supply connection is required for any device charging over the USB-C connection.
- **POE/LAN:** Connection to Q-LAN network; includes PoE Type 3, Class 5 capability via a network switch or midspan injector. When powered via PoE, the NV-21-HU cannot charge devices over the USB connection.
- **USB-A:** Supports USB HID Routing (5 V DC 900 mA)
- **RS-232:** Three-pin euroblock terminal connection for extension of the Q-SYS Control Engine to third-party devices.
- **USB-C:** USB-C connection capable of receiving alt-mode DisplayPort video formats up to 4K60 4:4:4, Q-SYS Audio and Video Bridging and device charging up to 65 W. An external power supply is required for any device charging over the USB-C connection.
- **HDMI IN:** HDMI connection capable of receiving video formats up to 4K60 4:4:4, up to 8 channels PCM Audio from a connected source.
- **HDMI OUT:** HDMI connection capable of transmitting video formats up to 4K60 4:4:4, up to 8 channels PCM Audio to a connected output.
- **Simple Mounting:** Optional surface mounting brackets (included) provide installers with multiple options to optimize airflow in various installation scenarios. Mounting options and installation instructions are available in the hardware user guide.



VIDEO I/O

HDMI 2.0 input	1x HDMI 2.0, capable of receiving input video formats up to 4K60 4:4:4
USB-C input	USB 3.2 Gen 1x1 (5Gbps) Type-C Device Port - supporting DisplayPort Alt-Mode (DP 1.4 Sink) - USB Power Delivery up to 65 W
HDMI 2.0 output	1x HDMI capable of scaling and outputting video formats up to 4K60 4:4:4
Scaler	HDMI output features a robust 4K60 4:4:4 scaler that can accommodate the most challenging resolution and frame rate conversions.

AUDIO I/O

HDMI inputs	8-channel PCM audio, Q-SYS routable
USB Type C input	8-channel PCM audio, 1x1 speakerphone, 2x2 soundcard1, Q-SYS routable
HDMI output	8-channel PCM audio, Q-SYS routable

OTHER CONNECTORS

USB Type C input	AV Bridging: Route Q-SYS network camera and audio feeds to a host via USB connection. Device Charging: Supports charging up to 65 Watts2 - 3A: 5V, 9V, 12V, 15V - 3.25A: 20V
USB Type A input	USB HID Routing - 5 V DC 900 mA
LAN	1000BASE-T, 2.5GBASE-T compliant
Power Over Ethernet	PoE Type 3, Class 5 (40W at PD, 45W at PSE) ¹
Auxiliary Power Supply	12 V DC 9 A Power Supply. NV-21-PSU sold separately ²

GENERAL

Dimensions	7.3 × 5.2 × 1.2 in (185 × 131.5 × 30.5 mm)
Weight	1.75 lbs (794 g)
Mounting options	Flexible surface mounting hardware included
What's in the box?	NV-21-HU video endpoint Euro Terminal connector for RS-232 Surface mounting accessories Safety and warranty statements

ENVIRONMENTAL

Ambient operating temperature range	0° to 40° C
Humidity	5 to 90 RH % non-condensing
Storage temperature	-20 to 70° C
Expected Product lifecycle	10 years
Thermal dissipation	
Without device charging over USB-C (PoE or aux power) @ 25°C ambient	30 W max (102 BTU/hr)
With device charging over USB-C (aux power) @ 25°C ambient	35 W max (119 BTU/hr)



Q-SYS SPA-Q Series Network Amplifiers

KEY FEATURES

- Two or four output channel models at 60 W per channel
- Two onboard software-definable flex channels (as mic/line inputs with 48V phantom power, or as line level outputs)
- Four bi-directional GPIO connections
- Discrete half-rack, 1RU footprint and included mounting hardware
- Network operability enables close proximity installation to connected loudspeakers and other in-room endpoints



Q-SYS SPA-Q Series Network Amplifiers

Small-format network amplifier with onboard Flex I/O

The Q-SYS SPA-Q Series network amplifiers continue the Q-SYS Platform evolution of pairing centralized Core OS processing with expanding network endpoint utility, delivering rightsized amplification as well as flexible Q-SYS system configuration and control to a wide variety of space-types.

BENEFITS

Rightsized for Smaller Spaces: With two or four output channel models at 60 W per channel, the Q-SYS SPA-Q network amplifiers bring the audio quality you've come to expect into compact high-impact spaces. The half-rack, 1RU footprint and included hardware for multiple mounting options allows for flexible placement within your rooms, including within podiums or behind monitors, and its convection-cooled design means that you can rely on quiet, continuous performance.

Feature-Focused System Design and Scalability: The Q-SYS SPA-Q Series network amplifiers operate on your network, so you can install your amplifier closer to its connected loudspeakers and other in-room endpoints, freeing you to choose between placing your Q-SYS Core processor in-room, OR centralizing it to serve multiple spaces around the building.

Q-SYS SPA-Q Series network amplifiers join a host of other Q-SYS products (like QIO Series as well as Q-SYS Feature and Scaling Licenses) that pair perfectly with smaller Q-SYS Cores (like the Q-SYS Core Nano processor) to decouple the physical I/O from the processor and allow for an unmatched degree of system customization and scalability without over investing in unused onboard I/O channels or processing power.

Untethered Processing Through Flexible Network I/O Endpoints: SPA-Q models feature convenient additional audio and control integration points into your Q-SYS system. Two onboard software-definable flex channels (as mic/line inputs with 48V phantom power, or as line level outputs) route legacy analog microphones anywhere on the network or provide signal to an external recorder. Leverage the available onboard GPIO to power/control microphone LEDs or any required sensors or buttons using four bi-directional GPIO pins.

Designed for Q-SYS: The Q-SYS SPA-Q Series network amplifiers 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 Q-SYS SPA-Q network amplifiers, 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.

SPA-Q Network Amplifiers

	Q-SYS SPA-Qf 60x2	Q-SYS SPA-Qf 60x4
POWER MATRIX		
Amplifier Channels	2	4
Single Ended*		
8 Ω	60 W	60 W
4 Ω	60 W	60 W
16 Ω	60 W	60 W
BTL Power		
4 Ω	100 W	100 W
8 Ω	120 W	120 W
16 Ω	120 W	120 W
70 Vrms	120 W	120 W
100 Vrms	120 W	120 W
Frequency Response (8 Ω)	20 Hz - 20 kHz (+0.2/-0.08 dB)	
Voltage Peak Rating	75 Vpk	
Current Peak Rating	12 Apk	
Signal to Noise (20 Hz - 20 kHz)	>100 dB	
Output Circuitry	Class D	
Voltage Gain (Lo-Z/70 V/100 V)	29/36/39 dB(Vrms/FS)	
High-Z setting (software setting)	70V RMS or 100 V RMS	
Low-Z operation range	2 - 16 Ω	
Controls & Indicators (front)	Signal (Blue), Limit (Yellow) / Protect (Red), Power (Blue), Fault (Yellow)	
Flex IO Connector	2 x 3.5 mm 3 position Euro (blue)	
Output Connectors	1 x 5 mm 4 position Euro (green) with screw locks	2 x 5 mm 4 position Euro (green) with screw locks
GPIO	1 x 3.5 mm 6 position Euro (Black) 4x bi-direction pins, 1 x Power Pin (3.3 V, 100 mA), 1x Ground Pin	
FLEX INPUTS/OUTPUTS		
Audio flex channel capacity	2	
Audio flex channel assignments	Each channel can be configured as a mic / line input or as a line output (configured through Q-SYS Designer Software)	
Input frequency response (20 Hz- 20 kHz)	+0.5 dB / -0.5 dB	
Input THD+N@1 kHz	<0.006% @ 0 dB gain (+4 dBu Input)	
Input dynamic range (analog input to amplifier output)	>109 dB	
Input impedance (balanced) @1 kHz	10.5 K Ω	
Input sensitivity range (1 dB steps)	-30 dBu to +20 dBu	
Phantom power	48 V	
Mic preamp EIN (typical)	< -123 dBu	

SPA-Q Network Amplifiers

	Q-SYS SPA-Qf 60x2	Q-SYS SPA-Qf 60x4
Output frequency response (20 Hz – 20 kHz)	+0.5 dB / -0.5 dB	
Output THD	<0.005%	
Output impedance (balanced)	100 Ω @ 1 kHz	
Output level range (1 dB steps)	-40 dBu to +21 dBu	
Output dynamic range	>109 dB	
Sample rate	48 kHz	
A/D – D/A converters	24-bit	
MISCELLANEOUS		
Amplifier and load protection	Short circuit, open circuit, over current, over voltage, thermal, RF, DC fault shutdown, active inrush limiting, on/off muting	
AC Power Input	Universal Power Supply 100 – 240 VAC + / -10%, 50 – 60 Hz with PFC	
Operating Temperature Range	32° - 104° F (0° - 40° C)	
Storage Temperature	-4° - 158° F (-20° - 70° C)	
Cooling	Convection	
Product Dimensions (HWD)	1.75 x 8.7 x 11.25 in (44 x 221 x 286 mm)	
Shipping Dimensions (HWD)	3.54 x 13.5 x 15 in (89.9 x 342.9 x 381 mm)	
Shipping Weight	6.2 lb (2.81 kg)	6.4 lb (2.90 kg)
Agency Approvals (tentative)	UL, CE, RoHS / WEEE compliant, FCC Class B (conducted and radiated emissions), CCC, NOM	
Included Accessories	Rack / wall mounting kit and power cord	

*Power rating is after 100 mS, all channels driven



Q-SYS SPA-Qf 60x2



Q-SYS SPA-Qf 60x4



Included rack and mounting hardware



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FW-55BZ40L

55" Exceptionally bright 4K HDR professional display with unique Deep Black Non-Glare technology



Overview

Superlative picture quality. Made for professionals.

Engineered to perform flawlessly in demanding retail, corporate and educational environments, the FW-55BZ40L is a truly professional display. It's packed with Sony innovation – including the latest Deep Black Non-Glare technology – for impressively bright, high-contrast 4K HDR images with sumptuous colors and exquisite detail. Pro-friendly features simplify integration, easy operation and seamless content sharing in today's connected AV environments. And with generous customization options, the FW-55BZ40L is the premium LED display that fits right in with your business needs.

Features

Deep Black Non-Glare

Featured exclusively on BRAVIA BZ40L, Sony's Deep Black Non-Glare Coating combines anti-glare and low-reflection technologies. Reducing reflections and boosting contrast, it's the key to dynamic visuals bursting with true-to-life color and detail that inspire everyone, from corporate visitors and staff to shoppers and students.

Exquisite images that always stand out

Our 55" FW-55BZ40L grabs your audience's attention with extremely high 700 nit screen brightness for punchy, high-impact

visuals that are always seen clearly. Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra-wide viewing angle ensures that everyone in the room can enjoy clear, bright images wherever they're positioned.

Richer, more natural color

Sony's power-packed 4K HDR Processor X1 and TRILUMINOS Pro technology faithfully reproduces a phenomenal range of rich, true-to-life colors.

Finer detail

4K X-Reality PRO processing upscales pictures closer to true 4K quality. Images are sharpened and refined in real time, revealing extra detail from lower-resolution picture sources.

Smoother movement

Motionflow XR ensures smoother, more natural reproduction of rapidly-moving on-screen images.

Installation flexibility to suit every environment

The sleek, minimal design of the FW-55BZ40L Series brings impeccable style to any business environment. The display's elegant lines are further enhanced by practical touches for seamless integration in retail stores, colleges and corporate workspaces.

Wall-Mount Adjuster

BRAVIA comes supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation.

Side Mounted interfaces

Signal connections, networking and other interfaces are conveniently side mounted for easy installation and access when the display is in portrait position.

Discreet Logo

The Sony logo is discreetly positioned on the edge of the display's bezel – with nothing distracting your audience from immersive images.

Landscape, Portrait and Tilt

Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.

Round the Clock Reliability

Business never sleeps: BRAVIA is engineered for dependable 24/7 operation in the most challenging corporate and commercial environments.

Special settings for professional use

Pro Settings mode makes doing business even easier, allowing you to customize BRAVIA settings and operating modes to suit the demands of corporate or retail environments. Disable input or remote control functions, schedule on/off times, remove labels and block buttons to avoid tampering when the screen's being used in public spaces. Customize and store display settings, then copy them easily from display to display via USB flash memory.

Get great pictures fast

Forget fiddling with display settings – focus on getting amazing results without fuss. One Step Setting offers presets tuned to your environment, including meeting room, vivid signage, natural signage and graphics. Just pick a preset: BRAVIA instantly configures picture mode, input, control settings and more.

Easy multi-screen setup

Configuring multiple screens for large display applications is easier than ever. The Multi Display Setting (MDS) app helps you create stunning video walls with multiple BRAVIA displays “tiled” together.

Easy integration

FW-55BZ40L is made for today's connected world. There's seamless support for today's leading automation and control platforms, while open APIs simplify integration with other vendor solutions.

Large 32 GB internal storage

The internal memory on some other displays is eaten up by the operating system, leaving little space for your own apps and content. FW-55BZ40L doubles internal storage from 16 GB to a generous 32 GB – giving loads more room on board to hold apps, photos, videos and digital signage.

Signage made simple

Informing and guiding visitors with digital signage in retail stores and corporate spaces has never been simpler. Built-in support for HTML5 makes it easy to display interactive signage content on BRAVIA without the need for a dedicated set-top box, media player or PC. On-board BRAVIA Signage Free (BSF) software automatically plays out HTML content, video and photos when a USB stick memory is slipped into BRAVIA. It's that simple.

Wireless screen mirroring

Easily mirror content wirelessly from handheld device onto BRAVIA with in-built support for Apple AirPlay and Google Chromecast.

Meet more easily

Get Google Meet from Google Play Store, and pair BRAVIA with a compatible webcam for easy video meetings.

With BRAVIA, sustainability in every scene

With growing demand for ever larger display screens, there is also the risk of greater resource and energy use. However, Sony's sustainability commitments are realizing efficiency gains from product development right through to customers' viewing screens.

Specifications

General Features

Screen Size	55"
Brightness (cd/ft ²)	700
Contrast Ratio	1200:1
Dynamic Contrast Ratio	600,000:1
Response Time (Gray to gray, Typical, ms)	8
Display Resolution (H x V, pixels)	3840 x 2160
HDR (High Dynamic Range) Compatibility	Yes (HDR10, HLG, Dolby Vision)
Aspect Ratio	16:9
Portrait/Tilt Compatibility	Yes

Display Features

Dimming Type	Frame Dimming
Display Device	LCD

Panel Type	IPS
Backlight Type	Direct LED
TRILUMINOS Display	TRILUMINOS PRO
Color Gamut (DCI-P3)	92%
Picture Processor	4K HDR Processor X1
Operation Time	24/7
Deep Black Non-Glare Coating	Yes
Haze (%)	47%
Viewing Angle (Right/Left)	178 (89/89) degree (CR >10)
Viewing Angle (Up/Down)	178 (89/89) degree (CR >10)

Video Specification

Video Processing	4K X-Reality PRO
Motion Enhancer	Motionflow XR 240 (Native 60Hz)
HDMI Signal	4096 x 2160p (24, 60 Hz), 3840 x 2160p (24, 30, 60 Hz), 1080p (24, 30, 60 Hz), 1080i (60 Hz),

720p (24, 30, 60 Hz),
480p

Audio Specification

Speaker Position	Down Firing
Audio Power Output	10W + 10W

Professional Features

Pro Mode	Yes
HDMI Auto Wake-Up	Yes
HTML5 Platform	Yes
Multicast/IPTV	Yes
Operating System	Android TV
On-board Storage (GB)	32 GB

Network Specification

Wi-Fi Direct	Yes
Wi-Fi Certified	Yes
Wireless LAN	Integrated

Convenience Features

USB Playback Codecs	MPEG1:MPEG1 / MPEG2PS:MPEG2 / MPEG2TS (HDV, AVCHD):MPEG2, AVC / MP4 (XAVCS):AVC, MPEG4, HEVC / AVI:Xvid, MotionJpeg / ASF (WMV):VC1 / MOV:AVC, MPEG4, MotionJpeg / MKV:Xvid, AVC, MPEG4, VP8.HEVC / WEBM:VP8 / 3GPP:MPEG4, AVC / MP3 / ASF (WMA) / LPCM / WAV / MP4AAC / FLAC / JPEG
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On-screen Clock	Yes
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Sleep Timer	Yes
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On/Off Timer	Yes
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Chromecast Built-In	Yes
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Apple AirPlay	Yes
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Control Specifications

IP Control	Yes
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RS-232C Control	Yes
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HDMI-CEC	Yes
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Inputs and Outputs

HDCP	HDCP2.3 (for HDMI 1/2/3/4)
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Composite Video Input (s)	1(Side, Mini jack)
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HDMI Inputs Total	4 (4Side)
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Analog Audio Input (s) (Total)	1 (Side Analog Conversion)
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Digital Audio Output (s)	1 (Side)
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USB Ports	2 (Side)
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Ethernet Inputs	1 (Side)
-----------------	----------

Design Features

Frame Color	Black
-------------	-------

VESA® Hole Spacing Compatible	Yes
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VESA® Hole Pitch (W x H)	300 x 300 mm/11 7/8 x 11 7/8 inch
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Environment Specifications

Rated Power	
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Consumption	201 W
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Power Consumption (in Standby)	0.5 W
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Dynamic Backlight Control	Yes
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Power Saving Mode	Yes
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Measurements

Dimension of TV without Stand (W x H x D)	1243 x 721 x 71 mm / 49 x 28 1/2 x 2 7/8 inch
---	--

Dimension of TV with Stand (W x H x D)	1243 x 787 x 338 mm / 49 x 31 x 13 3/8 inch
---	--

Dimension of Package Carton (W x H x D)	1362 x 840 x 160 mm / 53 5/8 x 33 1/8 x 6 3/8 inch
--	---

Weight

Weight of TV without Stand	15.8 kg / 34.9 lb
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Weight of TV with Stand	16.7 kg / 36.8 lb
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Weight of Package	
-------------------	--

Carton (Gross) 23 kg / 50.7 lb

Accessories

Wall-mount adjuster
(Bundled) Yes (Depending on Region)

Table-top stand
(Optional) Yes (Depending on Region)

Related products



Pro BRAVIA BZ40L

Exceptionally bright 4K HDR professional displays with unique Deep Black Non-Glare technology. Available in multiple screen sizes

Gallery





FW-75BZ40L

75" Exceptionally bright 4K HDR professional display with unique Deep Black Non-Glare technology



Overview

Superlative picture quality. Made for professionals.

Engineered to perform flawlessly in demanding retail, corporate and educational environments, the FW-75BZ40L is the truly professional display. It's packed with Sony innovation – including the latest Deep Black Non-Glare technology – for impressively bright, high-contrast 4K HDR images with sumptuous colors and exquisite detail. Pro-friendly features simplify integration, easy operation and seamless content sharing in today's connected AV environments. And with generous customization options, the FW-75BZ40L is the premium LED display that fits right in with your business needs.

Features

Deep Black Non-Glare

Featured exclusively on BRAVIA BZ40L, Sony's Deep Black Non-Glare Coating combines anti-glare and low-reflection technologies. Reducing reflections and boosting contrast, it's the key to dynamic visuals bursting with true-to-life color and detail that inspire everyone, from corporate visitors and staff to shoppers and students.

Exquisite images that always stand out

Our 75" FW-75BZ40L grabs your audience's attention with extremely high 700 nit screen brightness for punchy, high-impact

visuals that are always seen clearly. Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra-wide viewing angle ensures that everyone in the room can enjoy clear, bright images wherever they're positioned.

Richer, more natural color

Sony's power-packed 4K HDR Processor X1 and TRILUMINOS Pro technology faithfully reproduces a phenomenal range of rich, true-to-life colors.

Finer detail

4K X-Reality PRO processing upscales pictures closer to true 4K quality. Images are sharpened and refined in real time, revealing extra detail from lower-resolution picture sources.

Smoother movement

Motionflow XR ensures smoother, more natural reproduction of rapidly-moving on-screen images.

Installation flexibility to suit every environment

The sleek, minimal design of the FW-75BZ40L Series brings impeccable style to any business environment. The display's elegant lines are further enhanced by practical touches for seamless integration in retail stores, colleges and corporate workspaces.

Wall-Mount Adjuster

BRAVIA comes supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation.

Side Mounted interfaces

Signal connections, networking and other interfaces are conveniently side mounted for easy installation and access when the display is in portrait position.

Discreet Logo

The Sony logo is discreetly positioned on the edge of the display's bezel – with nothing distracting your audience from immersive images.

Landscape, Portrait and Tilt

Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.

Round the Clock Reliability

Business never sleeps: BRAVIA is engineered for dependable 24/7 operation in the most challenging corporate and commercial environments.

Special settings for professional use

Pro Settings mode makes doing business even easier, allowing you to customize BRAVIA settings and operating modes to suit the demands of corporate or retail environments. Disable input or remote control functions, schedule on/off times, remove labels and block buttons to avoid tampering when the screen's being used in public spaces. Customize and store display settings, then copy them easily from display to display via USB flash memory.

Get great pictures fast

Forget fiddling with display settings – focus on getting amazing results without fuss. One Step Setting offers presets tuned to your environment, including meeting room, vivid signage, natural signage and graphics. Just pick a preset: BRAVIA instantly configures picture mode, input, control settings and more.

Easy multi-screen setup

Configuring multiple screens for large display applications is easier than ever. The Multi Display Setting (MDS) app helps you create stunning video walls with multiple BRAVIA displays “tiled” together.

Easy integration

FW-75BZ40L is made for today's connected world. There's seamless support for today's leading automation and control platforms, while open APIs simplify integration with other vendor solutions.

Large 32 GB internal storage

The internal memory on some other displays is eaten up by the operating system, leaving little space for your own apps and content. FW-75BZ40L doubles internal storage from 16 GB to a generous 32 GB – giving loads more room on board to hold apps, photos, videos and digital signage.

Signage made simple

Informing and guiding visitors with digital signage in retail stores and corporate spaces has never been simpler. Built-in support for HTML5 makes it easy to display interactive signage content on BRAVIA without the need for a dedicated set-top box, media player or PC. On-board BRAVIA Signage Free (BSF) software automatically plays out HTML content, video and photos when a USB stick memory is slipped into BRAVIA. It's that simple.

Wireless screen mirroring

Easily mirror content wirelessly from handheld device onto BRAVIA with in-built support for Apple AirPlay and Google Chromecast.

Meet more easily

Get Google Meet from Google Play Store, and pair BRAVIA with a compatible webcam for easy video meetings.

With BRAVIA, sustainability in every scene

With growing demand for ever larger display screens, there is also the risk of greater resource and energy use. However, Sony's sustainability commitments are realizing efficiency gains from product development right through to customers' viewing screens.

Specifications

General Features

Screen Size	75"
Brightness (cd/ft ²)	700
Contrast Ratio	1200:1
Dynamic Contrast Ratio	600,000:1
Response Time (Gray to gray, Typical, ms)	8
Display Resolution (H x V, pixels)	3840 x 2160
HDR (High Dynamic Range) Compatibility	Yes (HDR10, HLG, Dolby Vision)
Aspect Ratio	16:9
Portrait/Tilt Compatibility	Yes

Display Features

Dimming Type	Frame Dimming
Display Device	LCD

Panel Type	IPS
Backlight Type	Direct LED
TRILUMINOS Display	TRILUMINOS PRO
Color Gamut (DCI-P3)	92%
Picture Processor	4K HDR Processor X1
Operation Time	24/7
Deep Black Non-Glare Coating	Yes
Haze (%)	47%
Viewing Angle (Right/Left)	178 (89/89) degree (CR >10)
Viewing Angle (Up/Down)	178 (89/89) degree (CR >10)

Video Specification

Video Processing	4K X-Reality PRO
Motion Enhancer	Motionflow XR 240 (Native 60Hz)
HDMI Signal	4096 x 2160 p (24, 60 Hz), 3840 x 2160 p (24, 30, 60 Hz), 1080 p (24, 30, 60 Hz), 1080 i (60 Hz),

720 p (24, 30, 60 Hz),
480 p

Audio Specification

Speaker Position Down Firing

Audio Power Output 10W + 10W

Professional Features

Pro Mode Yes

HDMI Auto Wake-Up Yes

HTML5 Platform Yes

Multicast/IPTV Yes

Operating System Android TV

On-board Storage
(GB) 32 GB

Network Specification

Wi-Fi Direct Yes

Wi-Fi Certified Yes

Wireless LAN Integrated

Convenience Features

USB Playback Codecs	MPEG1:MPEG1 / MPEG2PS:MPEG2 / MPEG2TS (HDV, AVCHD):MPEG2, AVC / MP4 (XAVCS):AVC, MPEG4, HEVC / AVI:Xvid, MotionJpeg / ASF (WMV):VC1 / MOV:AVC, MPEG4, MotionJpeg / MKV:Xvid, AVC, MPEG4, VP8.HEVC / WEBM:VP8 / 3GPP:MPEG4, AVC / MP3 / ASF (WMA) / LPCM / WAV / MP4AAC / FLAC / JPEG
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On-screen Clock	Yes
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Sleep Timer	Yes
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On/Off Timer	Yes
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Chromecast Built-In	Yes
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Apple AirPlay	Yes
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Control Specifications

IP Control	Yes
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RS-232C Control	Yes
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HDMI-CEC	Yes
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Inputs and Outputs

HDCP	HDCP2.3 (for HDMI 1/2/3/4)
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Composite Video Input (s)	1(Side, Mini jack)
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HDMI Inputs Total	4 (4 Side)
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Analog Audio Input (s) (Total)	1 (Side Analog Conversion)
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Digital Audio Output (s)	1 (Side)
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USB Ports	2 (Side)
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Ethernet Inputs	1 (Side)
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Design Features

Frame Color	Black
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VESA® Hole Spacing Compatible	Yes
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VESA® Hole Pitch (W x H)	300 x 300 mm/11 7/8 x 11 7/8 inch
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Environment Specifications

Rated Power	
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Consumption	299 W
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Power Consumption (in Standby)	0.5 W
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Dynamic Backlight Control	Yes
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Power Saving Mode	Yes
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Measurements

Dimension of TV without Stand (W x H x D)	1686 x 969 x 72 mm / 66 1/2 x 38 1/4 x 2 7/8 inch
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Dimension of Package Carton (W x H x D)	1824 x 1114 x 187 mm / 71 7/8 x 43 7/8 x 7 3/8 inch
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Weight

Weight of TV without Stand	31.5 kg / 69.4 lb
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Weight of Package Carton (Gross)	94.8 lb (43 kg)
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Accessories

Wall-mount adjuster

(Bundled)

Yes (Depending on Region)

Table-top stand
(Optional)

No

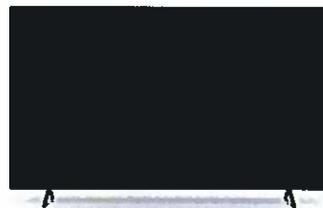
Related products



Pro BRAVIA BZ40L

Exceptionally bright 4K HDR professional displays with unique Deep Black Non-Glare technology. Available in multiple screen sizes

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FW-65BZ40L

65" Exceptionally bright 4K HDR professional display with unique Deep Black Non-Glare technology



Overview

Superlative picture quality. Made for professionals.

Engineered to perform flawlessly in demanding retail, corporate and educational environments, the FW-65BZ40L is a truly professional display. It's packed with Sony innovation – including the latest Deep Black Non-Glare technology – for impressively bright, high-contrast 4K HDR images with sumptuous colors and exquisite detail. Pro-friendly features simplify integration, easy operation and seamless content sharing in today's connected AV environments. And with generous customization options, the FW-65BZ40L is the premium LED display that fits right in with your business needs.

Features

Deep Black Non-Glare

Featured exclusively on BRAVIA BZ40L, Sony's Deep Black Non-Glare Coating combines anti-glare and low-reflection technologies. Reducing reflections and boosting contrast, it's the key to dynamic visuals bursting with true-to-life color and detail that inspire everyone, from corporate visitors and staff to shoppers and students.

Exquisite images that always stand out

Our 65" FW-65BZ40L grabs your audience's attention with extremely high 700 nit screen brightness for punchy, high-impact

visuals that are always seen clearly. Advanced Sony picture processing technologies ensure your content looks its very best. The panel's extra-wide viewing angle ensures that everyone in the room can enjoy clear, bright images wherever they're positioned.

Richer, more natural color

Sony's power-packed 4K HDR Processor X1 and TRILUMINOS Pro technology faithfully reproduces a phenomenal range of rich, true-to-life colors.

Finer detail

4K X-Reality PRO processing upscales pictures closer to true 4K quality. Images are sharpened and refined in real time, revealing extra detail from lower-resolution picture sources.

Smoother movement

Motionflow XR ensures smoother, more natural reproduction of rapidly-moving on-screen images.

Installation flexibility to suit every environment

The sleek, minimal design of the FW-65BZ40L Series brings impeccable style to any business environment. The display's elegant lines are further enhanced by practical touches for seamless integration in retail stores, colleges and corporate workspaces.

Wall-Mount Adjuster

BRAVIA comes supplied with a Wall-Mount Adjuster, giving extra flexibility for mounting the display centrally in portrait or landscape orientation.

Side Mounted interfaces

Signal connections, networking and other interfaces are conveniently side mounted for easy installation and access when the display is in portrait position.

Discreet Logo

The Sony logo is discreetly positioned on the edge of the display's bezel – with nothing distracting your audience from immersive images.

Landscape, Portrait and Tilt

Install BRAVIA in portrait or landscape orientation to suit any corporate or retail space. The display can also be tilted at an angle for even greater flexibility.

Round the Clock Reliability

Business never sleeps: BRAVIA is engineered for dependable 24/7 operation in the most challenging corporate and commercial environments.

Special settings for professional use

Pro Settings mode makes doing business even easier, allowing you to customize BRAVIA settings and operating modes to suit the demands of corporate or retail environments. Disable input or remote control functions, schedule on/off times, remove labels and block buttons to avoid tampering when the screen's being used in public spaces. Customize and store display settings, then copy them easily from display to display via USB flash memory.

Get great pictures fast

Forget fiddling with display settings – focus on getting amazing results without fuss. One Step Setting offers presets tuned to your environment, including meeting room, vivid signage, natural signage and graphics. Just pick a preset: BRAVIA instantly configures picture mode, input, control settings and more.

Easy multi-screen setup

Configuring multiple screens for large display applications is easier than ever. The Multi Display Setting (MDS) app helps you create stunning video walls with multiple BRAVIA displays “tiled” together.

Easy integration

FW-65BZ40L is made for today's connected world. There's seamless support for today's leading automation and control platforms, while open APIs simplify integration with other vendor solutions.

Large 32 GB internal storage

The internal memory on some other displays is eaten up by the operating system, leaving little space for your own apps and content. FW-65BZ40L doubles internal storage from 16 GB to a generous 32 GB – giving loads more room on board to hold apps, photos, videos and digital signage.

Signage made simple

Informing and guiding visitors with digital signage in retail stores and corporate spaces has never been simpler. Built-in support for HTML5 makes it easy to display interactive signage content on BRAVIA without the need for a dedicated set-top box, media player or PC. On-board BRAVIA Signage Free (BSF) software automatically plays out HTML content, video and photos when a USB stick memory is slipped into BRAVIA. It's that simple.

Wireless screen mirroring

Easily mirror content wirelessly from handheld device onto BRAVIA with in-built support for Apple AirPlay and Google Chromecast.

Meet more easily

Get Google Meet from Google Play Store, and pair BRAVIA with a compatible webcam for easy video meetings.

With BRAVIA, sustainability in every scene

With growing demand for ever larger display screens, there is also the risk of greater resource and energy use. However, Sony's sustainability commitments are realizing efficiency gains from product development right through to customers' viewing screens.

Specifications

General Features

Screen Size	65"
Brightness (cd/ft ²)	700
Contrast Ratio	1200:1
Dynamic Contrast Ratio	600,000:1
Response Time (Gray to gray, Typical, ms)	8
Display Resolution (H x V, pixels)	3840 x 2160
HDR (High Dynamic Range) Compatibility	Yes (HDR10, HLG, Dolby Vision)
Aspect Ratio	16:9
Portrait/Tilt Compatibility	Yes

Display Features

Dimming Type	Frame Dimming
Display Device	LCD

Panel Type	IPS
Backlight Type	Direct LED
TRILUMINOS Display	TRILUMINOS PRO
Color Gamut (DCI-P3)	92%
Picture Processor	4K HDR Processor X1
Operation Time	24/7
Deep Black Non-Glare Coating	Yes
Haze (%)	47%
Viewing Angle (Right/Left)	178 (89/89) degree (CR >10)
Viewing Angle (Up/Down)	178 (89/89) degree (CR >10)

Video Specification

Video Processing	4K X-Reality PRO
Motion Enhancer	Motionflow XR 240 (Native 60Hz)
HDMI Signal	4096x2160p(24,60Hz), 3840x2160p(24,30,60Hz), 1080p(24,30,60Hz), 1080i(60Hz),

720p(24,30,60Hz),
480p

Audio Specification

Speaker Position Down Firing

Audio Power Output 10W + 10W

Professional Features

Pro Mode Yes

HDMI Auto Wake-Up Yes

HTML5 Platform Yes

Multicast/IPTV Yes

Operating System Android TV

On-board Storage
(GB) 32 GB

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On-screen Clock	Yes
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Sleep Timer	Yes
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On/Off Timer	Yes
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Chromecast Built-In	Yes
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Apple AirPlay	Yes
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Control Specifications

IP Control	Yes
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RS-232C Control	Yes
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Digital Audio Output (s)	1 (Side)
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USB Ports	2 (Side)
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Ethernet Inputs	1 (Side)
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Design Features

Frame Color	Black
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VESA® Hole Spacing Compatible	Yes
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VESA® Hole Pitch (W x H)	300 x 300 mm/11 7/8 x 11 7/8 inch
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Environment Specifications

Rated Power

Consumption	229 W
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Power Consumption (in Standby)	0.5 W
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Dynamic Backlight Control	Yes
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Power Saving Mode	Yes
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Measurements

Dimension of TV without Stand (W x H x D)	1462 x 842 x 71 mm / 57 5/8 x 33 1/4 x 2 7/8 inch
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Dimension of TV with Stand (W x H x D)	1462 x 912 x 338 mm / 57 5/8 x 36 x 13 3/8 inch
---	--

Dimension of Package Carton (W x H x D)	1588 x 965 x 184 mm / 62 5/8 x 38 x 7 1/4 inch
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Weight

Weight of TV without Stand	21.4 kg / 47.2 lbs.
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Weight of TV with Stand	22.3 kg / 49.2 lb
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Weight of Package	
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Carton (Gross) 31 kg / 68.3 lb

Accessories

Wall-mount adjuster
(Bundled) Yes (Depending on Region)

Table-top stand
(Optional) Yes (Depending on Region)

Related products



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