8M-B120C

120" 8K UV^{2}A LCD electronic display
for professional use

SHARP

Be Original.

Life-size images. Lifelike quality.

Showcase products and highlight every little detail like never before with the world's largest 8K display for professional use.
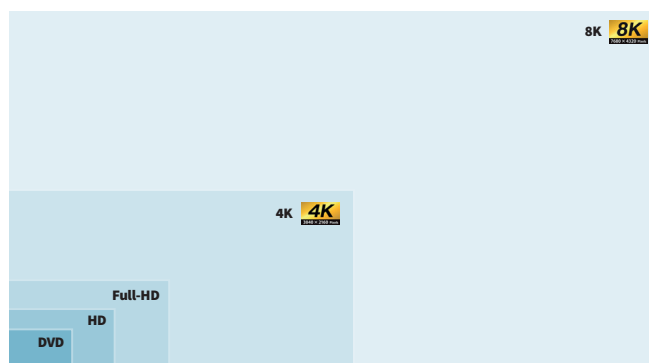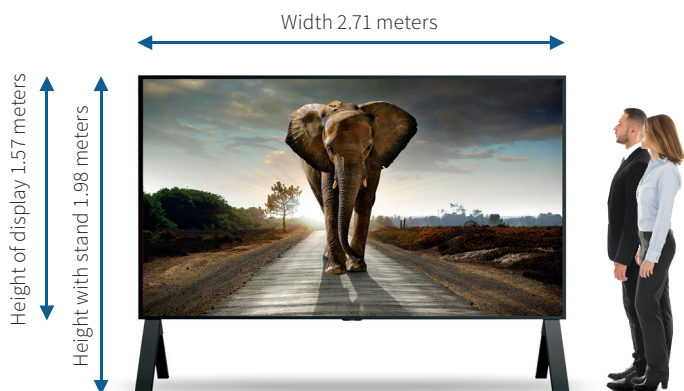
The 120" 8M-B120C is the largest Sharp 8K UV^{2}A LCD electronic display for professional use. At the very leading edge of the pro-display market, it allows commercial, manufacturing, financial, media, medical and government organisations to deliver the ultimate in image precision and clarity.

It produces beautiful, largescale images with a stunning 8K resolution, setting a new benchmark for image quality, while also ensuring that fine text is precise and legible. Images are displayed large enough to accommodate big objects, up to 265cm wide, making it possible to showcase things like a life-size, striking new motorcycle model in lifelike 8K resolution with HDR10 expanded contrast and colour.

See everything much more clearly

With its huge 4m^2 LCD panel the 8M-B120C can display the equivalent of 4x 60" 4K or 16x 30" Full-HD images on a single display. So it takes up less wall area or room space and fewer displays are required to show the same amount of information, which reduces costs and enhances operational efficiency.

The native 8K 7680x4320 pixel display is also at the absolute leading edge of professional display capabilities, setting a new standard for image precision. It dramatically improves the picture quality as it is 16x times the resolution of today's Full-HD 1920x1080 (or 4x the resolution of 4K 3840x2160). So it gives very high-end professional users unsurpassed image quality with lifelike detail like nothing else available today.

Width 2.71 meters

Height of display 1.57 meters

Height with stand 1.98 meters

8K 7680 × 4320 Pixels   **HDR** HIGH DYNAMIC RANGE

8K **8K** 7680 × 4320 Pixels

4K **4K** 3840 × 2160 Pixels

Full-HD

HD

DVD

8K is 16x the resolution of today's Full-HD or 4x that of 4K.

Exceptional precision on a large scale

With 600 cd/m² brightness (or up to 1000 cd/m² Peak Level) and HDR10 (High Dynamic Range technology) the 8M-B120C expands the contrast and colour range significantly. It means that the bright parts of an image get brighter, adding greater depth, and colours are more saturated and natural-looking. So images, films and computer-generated graphics look incredibly realistic, creating a more immersive experience than was ever possible before.

Its 10-Bit Extended Colour Range also covers 80% of the BT2020 colour gamut, so it delivers superior image realism and significantly enhanced colour accuracy. It increases the range of possible colour values in each pixel up to 1.07 billion colours to deliver superior image realism and significantly enhanced colour accuracy. This is especially important in many manufacturing processes. For example, when designing and testing how products will look to the consumer, in automotive and aerospace design when matching colours of different body panel sections, and when recreating very high-resolution photography of high-end motorcycles for sales showrooms.
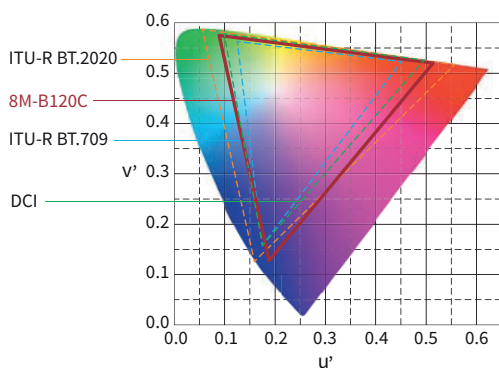
Chromaticity diagram of ITU-R BT.2020 (UHDTV) color space showing Sharp 8M-B120C 8K LCD display covers 80% of the colour gamut.

In addition, the 8M-B120C's Local Dimming backlight system has 2048 zones – five times more than first generation Sharp 8K displays. It analyses the source content images and dims or brightens the areas that need it. By improving the contrast level between dark and bright areas it provides the vital extra image and text clarity needed in information critical environments.
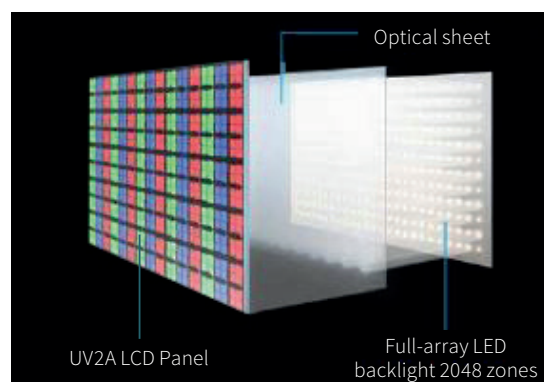

So it gives high-quality video production images more realism, trading rooms greater differentiation between lines and legibility of fine text for large screens of stocks data, museums more impressive visual exhibits and surveillance images greater detail.

Always pure 8K content, easy connection via a single 8K HDMI cable

The monitor supports 7,860 x 4,320p 60Hz and 3,840 x 2,160p 60 Hz, as per the newest HDMI2.1 specifications. So you can display end-to-end 8K signals without the need to upscale 4K content. Broadcast and video production studios working on sports events can zoom to a 'region of interest' by up to 16x whilst retaining Full HD image quality.

It is also future-proofed for the 8K HDMI transmission standard to display content at 60fps of uncompressed newest HDMI specification features including 8K video with HDR.
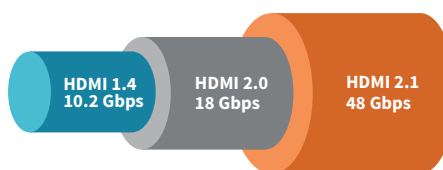

Supports the full range of uncompressed HDMI 2.1 Specification features including 8K video with HDR.

Making a real difference.

The ability to quickly create or analyse extremely precise data is critical to enhancing productivity and enabling more effective decision-making.

The 8M-B120C 8K UV^{2}A display's exceptional size and image realism, with clear colours and sharper definition, delivers significant benefits in some of the world's most information and data intensive professional environments.
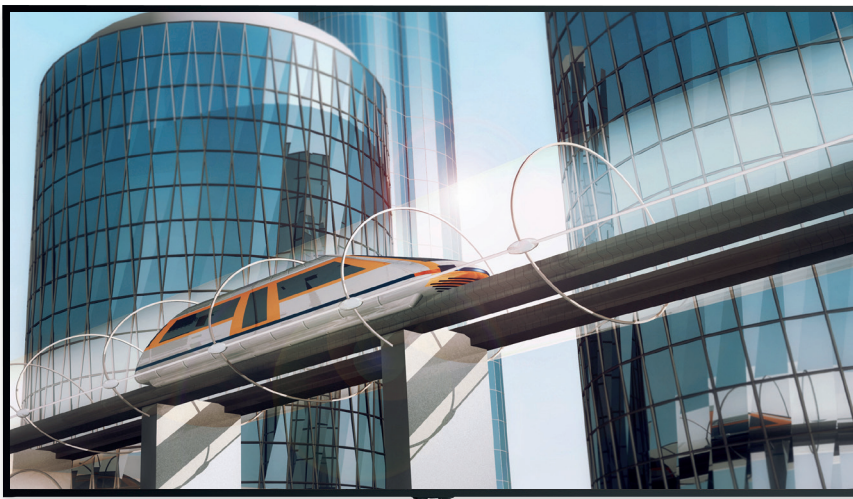
Fast, precise data analysis
Speed is essential in high pressure commercial environments like energy businesses, financial centres and commodities trading floors. Every day bankers and dealers have to rapidly digest an endless stream of graphs, images and screens full of small text. But one simple mistake in reading all of this complex information, like a missed digit, can result in potentially huge losses. So the ability to process a large amount of information, which is both clear and extremely legible, on one screen not only enhances productivity, but also reduces the level of risk.

Clearly better designs
Businesses are creating increasingly sophisticated digital drawings, designs and blueprints using Computer Aided Design (CAD) or Computer Aided Manufacturing (CAM) applications. The one limiting factor has been the ability to display this information at a very large scale with exceptional clarity and precision – until now.

With the 8M-B120C even the most complex designs can be created and examined in minute detail. And its lifelike realism is also facilitating the use of virtual reality, making it much easier to assess how new products or machinery will look and perform in the real world.

Bringing images to life
High quality video production is obviously essential in the TV and Broadcasting industry. So the 8M-B120C allows businesses to edit extremely high-resolution graphics and video and create incredibly realistic content.

It also provides vital extra clarity in information critical environments. For example, being able to assess extremely accurate medical images side-by-side enables doctors to make better visual comparisons and informed decisions about their patients' healthcare. And it offers real benefits for the forensic examination of very high-resolution images, like ancient artefacts in museum exhibits.

More detail, more control

For some professionals, the ability to monitor vital information can literally be a matter of life or death. So being able to quickly view a large number of high-quality images can aid fast, safe decision-making.

For example, with today's busy roads and sea lanes, road transport operators, traffic management agencies and port control authorities need to accurately track thousands of vehicles that are represented by multiple lines and symbols. Similarly, defence organisations have to closely control military operations involving the movement of many different military units, vehicles and supplies often across a large area.

In everyday life, surveillance operators at sporting events and emergency services workers have to monitor large numbers of CCTV camera images on one screen. So the greater the resolution the less risk there is of incidents being missed and the easier it is to positively identify specific individuals by their clothing and facial features. In addition, public transport companies actively follow the movement of multiple vehicles simultaneously, so there is less confusion and possible delays.

High performance, low cost.

Enhancing productivity is one thing. Doing it efficiently and cost-effectively is a real business bonus.

As well as providing exceptional image clarity on a massive scale, the 8M-B120C 8K UV²A display also helps businesses to reduce costs, enhance operational efficiency and work more productively.

Its 120" 8K UHD 7680×4320 LCD panel makes it possible to display up to 4x 60" 4K 3840×2160 or 16x 30" Full-HD 1920x1080 images on one screen, but even fine text and images are still crystal clear. Especially as it has a **static contrast ratio of 3500:1**, which maximises image clarity and makes images appear more three dimensional, making the background more realistic and accentuating fine details. Also **a 120Hz frame rate doubler**, displaying up to 120 images per second, which significantly reduces motion blur, making fast panning or moving subjects retain their integrity and scenes look lifelike.

As a result, fewer displays are required to show the same amount of content, or even more, without sacrificing image quality. And that means less wall or room space is needed, lowering costs and enhancing operational efficiency.

Urban-development project

Designed to perform

The 8M-B120C display is compatible with the Cinergy Daniel2 Codec for 8K. Unlike traditional "industry standard" video codecs, which were defined by PC chip makers and not software developers, Daniel2 is designed to exploit the power of modern graphics processors like those from NVIDIA. It is a massively multi-threaded parallel processing software codec that runs extremely fast on CPUs and even faster on GPUs with their thousands of parallel cores and ultra-fast RAM, making it the world's fastest acquisition and production code

Pushing back the boundaries of 8K

Sharp has a vision to change the way the world is viewed, with a level of detail and realism never previously experienced. We're developing a full 8K ecosystem with a line-up of 8K solutions that will allow you to create, store and display stunning 8K images and video content – all on native 8K equipment and screens.

Since the launch of the LV-70X500E 70" 8K 1st generation display in 2018 and the 2nd second generation 8K 8M-B80AX1E in 2019, we have been developing a continually expanding range of large format 8K displays for professional use, videowalls, cameras and 5G transmission solutions. The 8M-B120C 120" 8K UV2A LCD enters the Sharp 8K line-up for 2020 as the world's largest LCD electronic display for professional use.
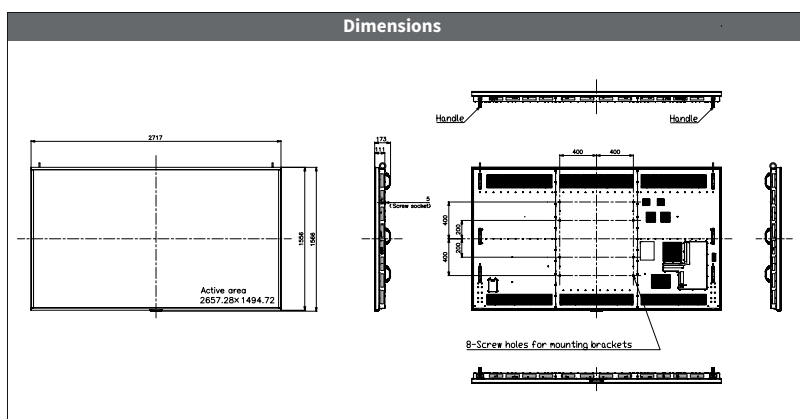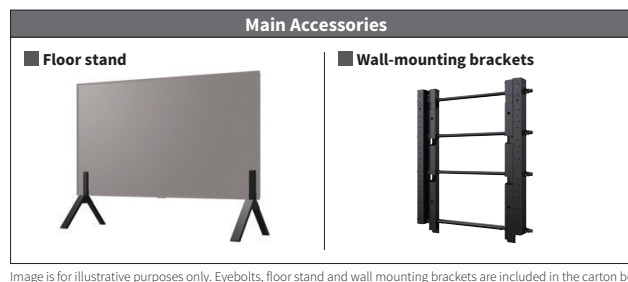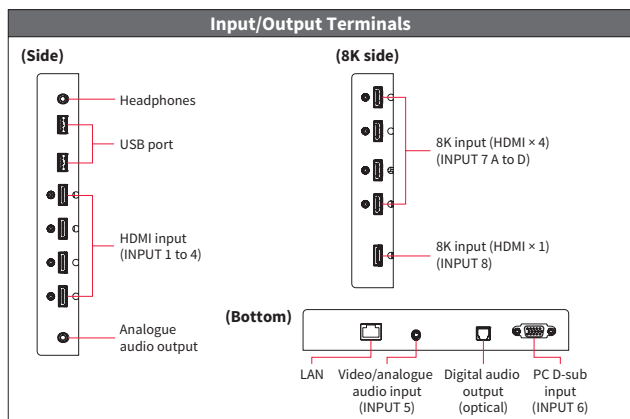
Compatibility

Compatible Signal Timing (PC)

Screen Resolution	Horizontal Frequency (kHz)	Vertical Frequency (kHz)	HDMI			
			Input 1	Input 2 / 3 / 4	Input 7	Input 8
4K 3,840 x 2,160	54	24	✓	✓	✓	✓
	56.3	25				
	67.5	30				
	112.5	50				
	135	60				
8K 7,680 x 4,320	108	24	-	-	✓*7	
	110	25				
	132	30				
	220	50				
	264	60				

Compatibility Signal Timing (AV)

Screen Resolution	Frequency (kHz)	HDMI			
		Input 1	Input 2 / 3 / 4	Input 7	Input 8
4K 3,840 x 2,160	24	✓	✓	✓	✓
	25				
	29.97				
	30				
	50				
	59.94				
	60				
8K 7,680 x 4,320	50	–	–	✓*7	✓
	59.9				
	60				

*6: Use a 3-pin compatible power outlet. *7 Uses Mode 2 display mode. Input 7's A to D connectors each support input signals of 3,840 × 2,160 resolution.

Input/Output Terminals

(Side)
- Headphones
- USB port
- HDMI input (INPUT 1 to 4)
- Analogue audio output

(8K side)
- 8K input (HDMI × 4) (INPUT 7 A to D)
- 8K input (HDMI × 1) (INPUT 8)

(Bottom)
- LAN
- Video/analogue audio input (INPUT 5)
- Digital audio output (optical)
- PC D-sub input (INPUT 6)

Main Accessories

■ **Floor stand**

■ **Wall-mounting brackets**

Image is for illustrative purposes only. Eyebolts, floor stand and wall mounting brackets are included in the carton box.

Dimensions

2717

Active area 2657.28× 1494.72

1566

Handle   Handle

173

Screw socket

400   400

8-Screw holes for mounting brackets

Specifications

Model name	8M-B120C
Installation	Landscape

LCD Panel	**Panel Size**	120-inch class (120-inch [304.8 cm] diagonal) UV²A*¹ LCD
	Backlight	Full-array LED
	Max. Resolution	7,680 × 4,320 pixels
	Max. Display Colours (approx.)	1.07 billion colours
	Pixel Pitch (HxV)	0.346 × 0.346 mm
	Brightness*²	600 (peak 1,000) cd/m²
	Contrast ratio	3,500:1
	Viewing Angle (H/V)	176°/176° (CR 10)
	Active Screen Area (W×H)	2,657.2 × 1,494.7 mm
	Response Time	6 ms (grey to grey, avg.)
Computer Input	**Video**	Analog RGB (0.7 Vp-p) [75Ω], HDMI compliant
	Syncronisation	Horizontal/vertical separation (TTL: positive/negative)
	Plug & Play	VESA DDC2B
	Input Terminals*³	HDMI: (INPUT 1: HDR [PQ/HLG] compatible, INPUT 2: ARC compatible) × 4
		HDMI (for 8K): (INPUT 7: HDR [PQ/HLG] compatible, HDMI x 4) × 1
		HDMI (for 8K): (INPUT 8: HDR [PQ/HLG] compatible, HDMI x 1) × 1*4
		PC analog: Mini D-sub 15-pin × 1; USB (photos, music, video) × 2; 3.5 mm-diameter mini stereo jack × 1
	Output Terminals*³	Digital audio (optical) × 1; analog audio (3.5 mm-diameter mini stereo jack) × 1; headphones (3.5 mm-diameter mini stereo jack) × 1
	Input/Output Terminals*³	LAN port (10Base-T/100Base-TX) × 1
	Speaker Output	70 W (10 W + 10 W + 10 W + 10 W + 15 W + 15 W)
	Mounting	VESA (8 points); pitch: 800 × 800 mm, 800 × 400 mm; M8 screw
	Power Supply	When using 200 V: 200 V to 240 V, 50/60 Hz
	Continuous Operation	16/7
	Power Consumption	When using 200 V: 1,520 W (standby 0.5 W)
Environmental Conditions	**Operating Temperature***⁵	0°C to 40°C
	Operating Humidity	20% to 80% RH (no condensation)
Dimensions (W × D × H) (approx.) (not including protrusions)		Display only: 2,717 × 173 × 1,566 mm With floor stand: 2,717 × 805 × 1,979 mm
	Weight (approximate)	Display only: 187 kg (412.3 lbs); With floor stand: 206 kg (454.2 lbs)
	Main Accessories	200 V AC power cord (3 meters, 3-pin*⁶), AV connector conversion cable, remote control unit, battery (AAA size) × 2, set-up manual, cable clamp × 5, floor stand, wall-mounting brackets, eyebolt cover and screws for eyebolt cover (2 sets)

8K 7680 × 4320 Pixels | HDR HIGH DYNAMIC RANGE | HDMI® HIGH-DEFINITION MULTIMEDIA INTERFACE | DOLBY AUDIO™ | Cd | A↑G G | daniel2
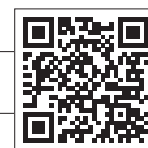
*1: UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *2: Brightness depends on input mode, power source, and other picture settings. Brightness level will decrease slightly over the lifetime of the product. Due to the physical limitations of the equipment, it is not possible to maintain a precisely constant level of brightness. The factory default brightness is 250 cd/m². *3: Use a commercially available connection cable for PC and other video connections. *4: Supports input via one HDMI cable (7,680 × 4,320p 60 Hz and 3,840 × 2,160p 120 Hz, as per the HDMI 2.1 specifications.) *5: Temperature conditions may change when using the monitor together with optional equipment. In such cases, check the temperature conditions specified by the optional equipment. Also, the operating temperature range may change depending on installation conditions. VESA: Video electronics Standards Association. DDC: Display Data Channel. The OSD (on-screen display) is in English only. Design and specifications are subject to change without prior notice. The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the U.S. and other countries. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories. All other brand names and product names may be trademarks or registered trademarks of their respective owners. All trademarks acknowledged. E&OE. All screen images appearing in this brochure are simulated. Sharp Corporation October 2020. Ref: 20557 8MB120C 8pp Brochure.

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