



DLP™ LED Display Cube
70WE120
Product Specifications



Mitsubishi Electric Corporation
Kyoto Works

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70WE120 Specifications

1. Components

Model	Engine	Cabinet	Screen	Features
70WE120U	VS-WE120U	S-70HE75CA	SC-70HE75U	Black stripe screen
70WE120L2			SC-70HE120L	Fine cross screen No screen center screw No screen holding tabs

2. Imaging device and light source

Type	DLP™ chip (0.96" DLP™ 1 chip) with DarkChip3™ and BrilliantColor™ technologies
Native resolution	1920 x 1080 pixels
Light source	Redundant LED (RGB)
Light source average lifetime	100,000 hours in all modes

3. Optical specification (Typical values)

Model	70WE120U	70WE120L2	
Screen type	Black stripe screen	Fine cross screen	
Brightness	Bright	860 cd/m ²	440 cd/m ²
	Normal	610 cd/m ²	310 cd/m ²
	Eco	410 cd/m ²	210 cd/m ²
	Advanced eco	150 cd/m ²	70 cd/m ²
Viewing angle	Horizontal	1/2 gain: +/- 35°, 1/10 gain: +/- 57°	
	Vertical	1/2 gain +/- 10°, 1/10 gain: +/- 28°	1/2 gain +/- 33°, 1/10 gain: +/- 55°
Screen size	70" diagonal size (1548 mm x 870.5 mm)		(1549 mm x 871.5 mm)
Light output	1080 ANSI lumens in bright mode		
Contrast ratio	1500:1 (up to 3800:1 * ¹)		
Access direction	Rear maintenance		
Mullion size	0.2 mm or greater * ²		
Brightness uniformity	95 % ANSI 13		
Geometry distortion	0.2 %		
Lateral color shift	Red – Green	0.5 pixels	
	Blue – Green		

4. Electric specification

Power consumption / Thermal dissipation (typ.) at 25 °C		Power consumption	Thermal dissipation
		Bright	225 W
	Normal	137 W	117.8 kcal/h (468 BTU/h)
	Eco	97 W	83.5 kcal/h (331 BTU/h)
	Advanced eco	77 W	66.3 kcal/h (263 BTU/h)
Voltage range	AC 100 – 240 V +/-10 %, 50/60 Hz +/-1 Hz		
Operating current (100/240 V)	Single power	3.3/1.4 Amp.	
	Redundant power	3.4/1.7 Amp	
Inrush current (100/240 V)	30/60 Amp.		

(Continued)

Input signal terminals	Digital/ Analog	DVI-I (with HDCP) x1 Up to 50-meter long DVI cable supported *3 Analog YPbPr supported Analog Sync on Green supported
	Digital	DVI-D (with HDCP) x1 DisplayPort™ (DP1.2a) x1
Output signal terminal		DisplayPort™ (DP1.2a) x1 (for daisy chain)
Input frequencies	Resolution	VGA (640 x 480) – WUXGA (1920 x 1200)
	Horizontal	31.5 – 92 kHz
	Vertical	49 – 85 Hz
	Pixel clock	25 – 165 MHz
Control signals		RS-232C: D-Sub 9 pins LAN: RJ45 (10BASE-T/100BASE-TX) Wired remote: F3.5 Jack IR receiver
Communication between the monitors		Mitsubishi original control link: D-Sub 9 pins (input, output)
Optional input board slot		Intel® OPS slot x 1
Major functions		Daisy-chainable DisplayPort™ (DP1.2a) Up to 9 cubes, or Up to 4 cubes for a DisplayPort™ MST signal *4 Dynamic brightness balancing Up to 2 overlay windows per screen Input signal redundancy Redundant power supply (option) Color space control Digital gradation 12-bit dithering Self-diagnostic

5. Mechanical specification

	Product	Packing			
		Engine	Engine	Engine	
Dimensions	Width	1550 mm / 61.0"	870 mm / 34.3"	1615 mm / 63.6"	1710 mm / 67.3"
	Height	1145 mm / 45.1"	490 mm / 19.3"	1328 mm / 52.3"	1055 mm / 41.5"
	Depth	897 mm / 35.3"	530 mm / 20.9"	1000 mm / 39.4"	180 mm / 7.1"
Weight		102 kg / 225 lbs	33 kg / 73 lbs	93 kg / 205 lbs	25 kg / 55 lbs
Audio noise		29 dBA (typ.) (at 1m distance from the screen center)			
Accessories		Engine: user's manual, control link cable Cabinet: user's manual, chassis cover, parts for cube connection, bolts for engine fixation, seals for joint holes Screen: user's manual			

6. Environmental condition

For operation	10 °C – 35 °C (50 °F – 95 °F), 20 % – 80 % RH non-condensing
For storage	-20 °C – 50 °C (-4 °F – 122 °F), 20 % – 80 % RH non-condensing

7. Safety approval

Safety approval	UL60950-1, CSA C22.2 No.60950-1, EN60950-1, EN62311, GOST IEC60950-1, K60950-1, AS/NZS 60950-1
EMC	FCC Part15 Subpart B Class A, ICES-003 Issue No.5 Class A EN55032 Class A, EN55024, EN61000-3-2, EN61000-3-3, GOST 30805.22 Class A, GOST CISPR 24, GOST 30804.3.2, GOST 30804.3.3, KN32 Class A, KN35, AS/NZS CISPR 32 Class A, VCCI Class A, JIS C 61000-3-2
Environment	European Union RoHS, Turkish RoHS

8. Part average lifetime

DLP™ chip	100,000 hours
Cooling fans	100,000 hours

9. Options

Redundant power supply	S-WE120RPWR	
Remote control unit	R-XL51TX	
SDI input board	DP-1SDI-3G	
Spare LED unit	S-WE120LE	
Motorized adjustment tool	S-A70E	
Motor units for screen/mirror	S-MA70E	
Power cord (3 meters)	North America	JC-PC3MA
	Europe	JC-PC3ME
	Russia	JC-PC3MR
	Japan	JC-PC3MJ

*1: Full on/off contrast ratio

*2: It differs according to the cube configurations and environments.

The following gaps are recommended for large display walls to allow for seasonal environmental fluctuations.

70WE120U: 2.0 mm (horizontal direction) and 1.5 mm (vertical direction)

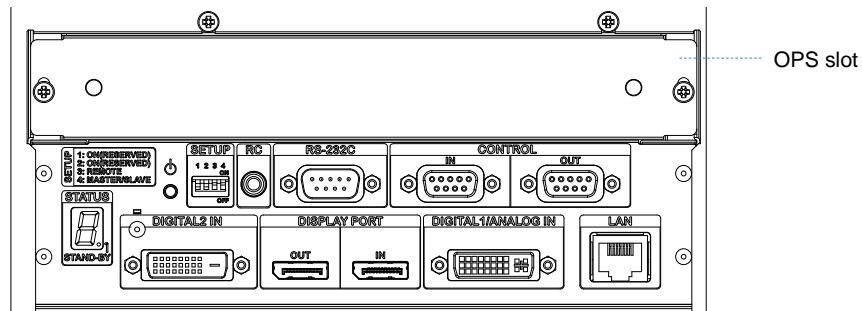
70WE120L2: 1.0 mm (horizontal direction) and 0.5 mm (vertical direction)

*3: The length varies depending on the quality of the source signals and the cables.

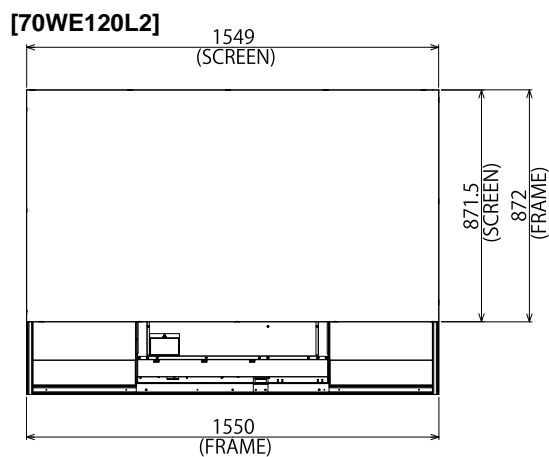
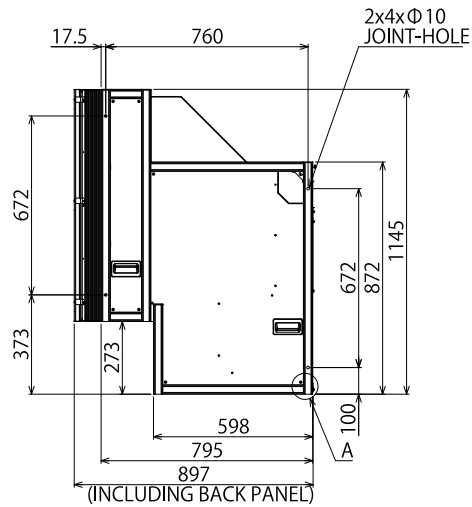
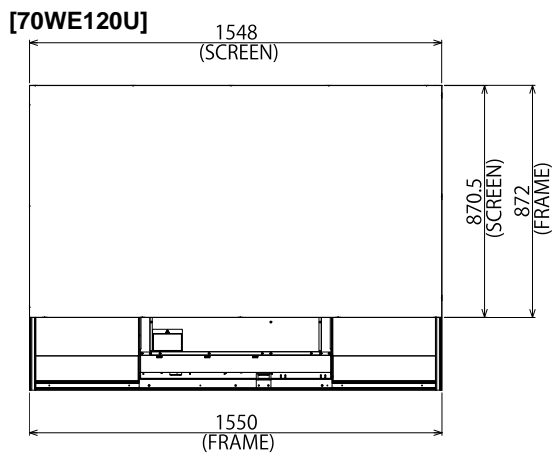
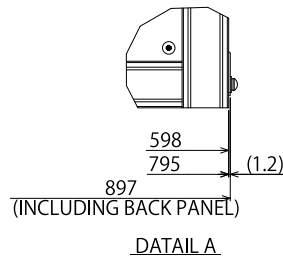
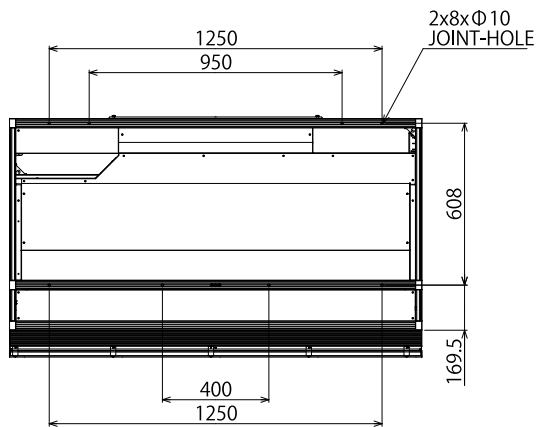
*4: Can receive a DisplayPort™ MST (multi-stream transport) signal with up to 4 WUXGA (1920 x 1200) video streams embedded. Each of the 4 streams can then be routed to individual cubes. For example, you can display a native 3840 x 2160 resolution MST signal on a 2x2 of cubes from a single source cable using daisy chaining.

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Terminals



External dimensions

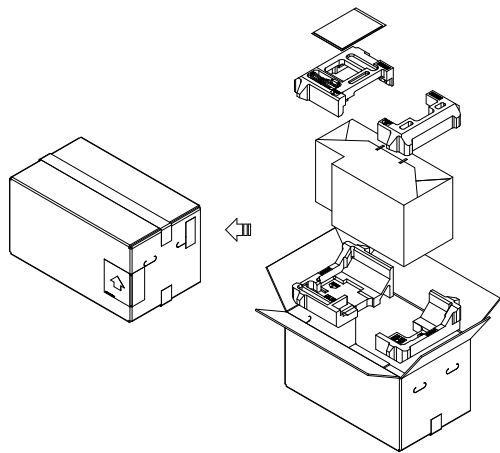


Rear view

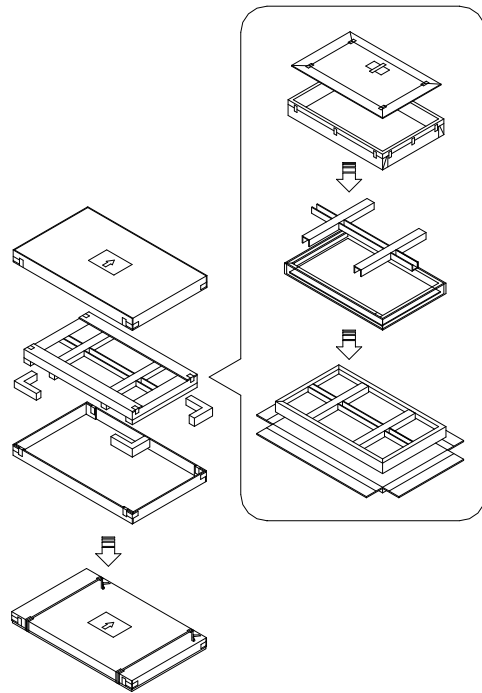


Packing specification

Engine



Screen



Cabinet

