

DLP™ LED Display Cube
70WEF120
Product Specifications



Mitsubishi Electric Corporation
Kyoto Works

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70WEF120 Specifications

1. Components

| Model | Engine | Cabinet | Screen | Features |
|-----------|-----------|-------------|-------------|---------------------|
| 70WEF120U | VS-WE120U | S-70HE75CAF | SC-70HE75UF | Black stripe screen |
| 70WEF120L | | | SC-70HE75LF | Fine cross screen |

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 | 70WEF120U | 70WEF120L | |
|-----------------------|--|---|---|
| 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) | | |
| Light output | 1080 ANSI lumens in bright mode | | |
| Contrast ratio | 1500:1 (up to 3800:1 * ¹) | | |
| Access direction | Front maintenance | | |
| Mullion size | 1.0 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 | Cabinet | Screen | |
| Dimensions | Width | 1551 mm / 61.1" | 870 mm / 34.3" | 1615 mm / 63.6" | 1710 mm / 67.3" |
| | Height | 1147 mm / 45.2" | 490 mm / 19.3" | 1328 mm / 52.3" | 1055 mm / 41.5" |
| | Depth | 962 mm / 37.9" | 530 mm / 20.9" | 1000 mm / 39.4" | 180 mm / 7.1" |
| Weight | | 107 kg / 236 lbs | 33 kg / 73 lbs | 95 kg / 209 lbs | 27 kg / 60 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, bracket and bolts for engine fixation, seals for joint holes, cable ties Screen: user's manual | | | |

6. Environmental condition

| | |
|---------------|---|
| For operation | 10 °C – 30 °C (50 °F – 86 °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 | |
| 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.

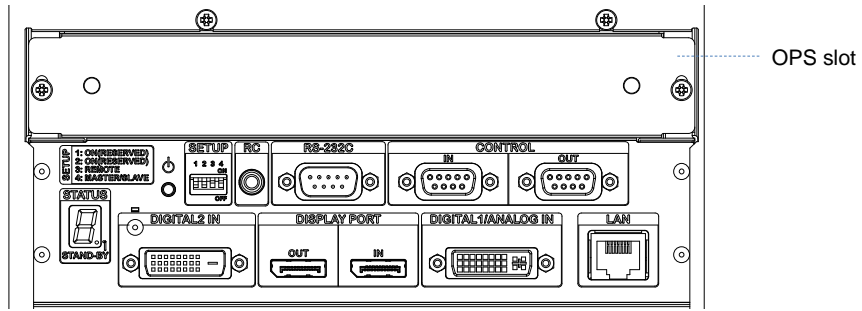
The following gaps are recommended for large display walls to allow for seasonal environmental fluctuations.
3.0 mm (horizontal direction) and 2.5 mm (vertical direction)

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

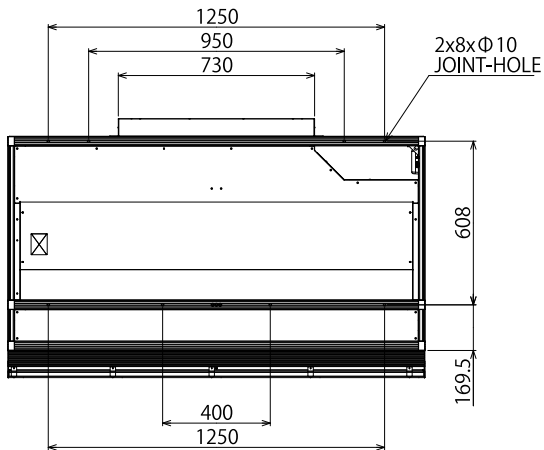
*4: Can receive a DisplayPort™ MST (multi-stream transport) signal with up to 4 WUXGA (1920 x 1200) video streams embedded. Each of the 4 streams can then be routed to individual cubes. For example, you can display a native 3840 x 2160 resolution MST signal on a 2x2 of cubes from a single source cable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

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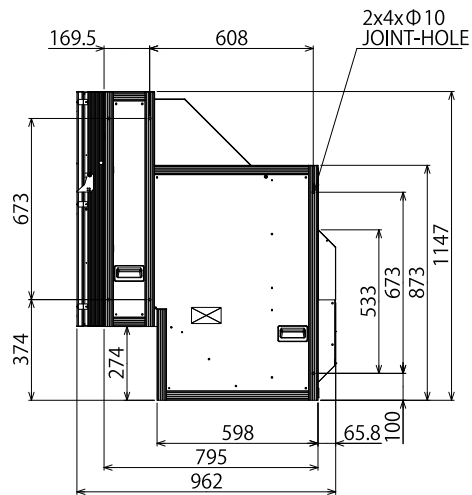
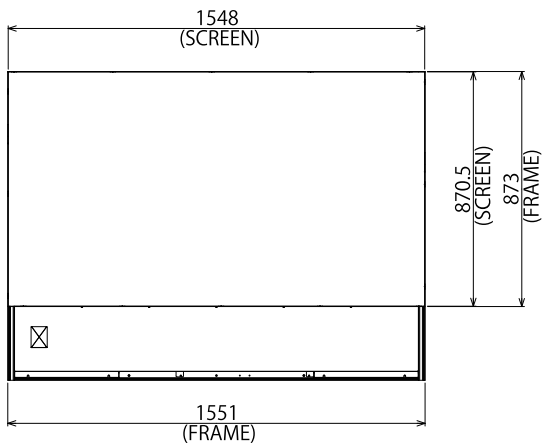
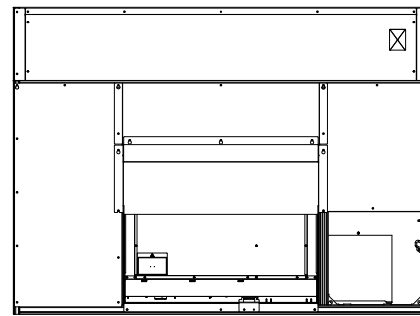
Terminals



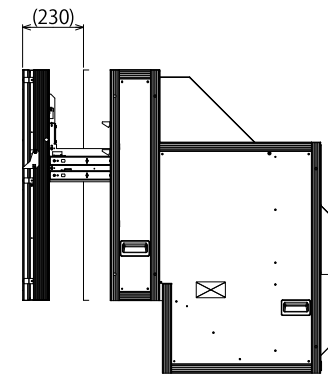
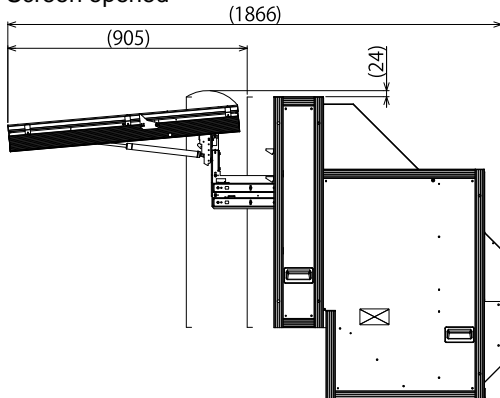
External dimensions



Rear view

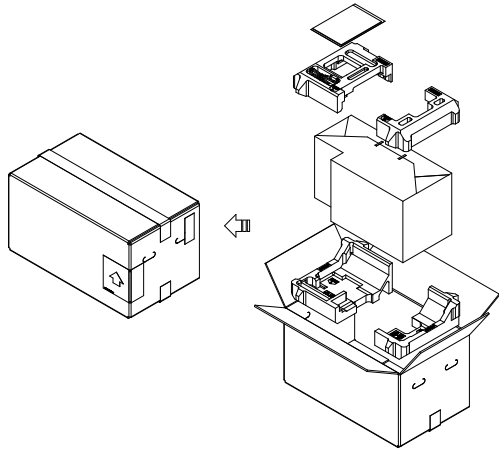


Screen opened

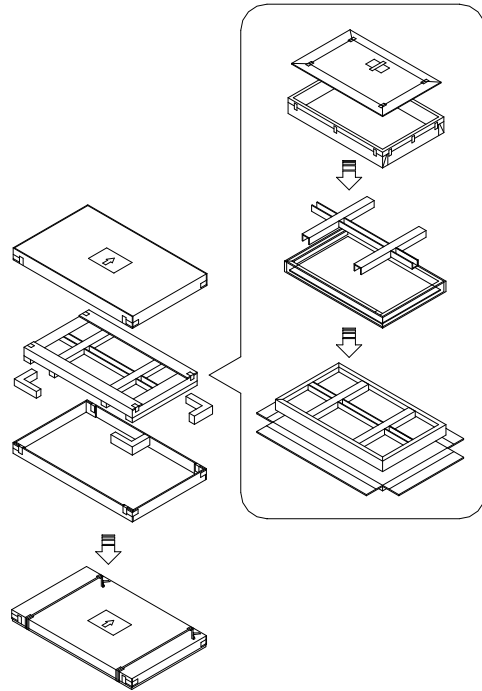


Packing specification

Engine



Screen



Cabinet

