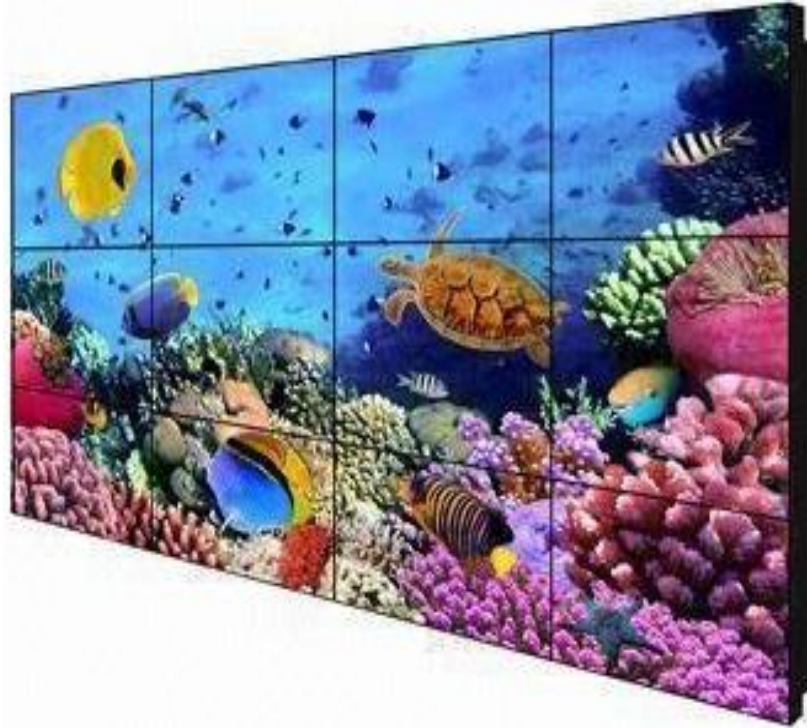# 55" Recessed multi screens application Video walls (3x3)

February 2014

General screen mount Information

● Main Features

- ◦ "A" grade DID exclusive TFT-LCD panels – Super Narrow Bezel.
- ◦ Maximizing life time and reliability by using qualified reliable main parts of display.
- ◦ Display vivid High Definition (Full HD) digital and analogue images by applying superior image scaling & processing technologies through various inputs of Composite BNC, PC RGB(D-Sub 15p) and HDMI.
- ◦ Display one extended high definition image on the overall Video wall by using HDMI input & output ports and exclusive display control program without any additional processor.
- ◦ User friendly multi-functional exclusive display control software.
- ◦ Easy maintenance from the front of Video wall screen by using the front opening mechanism.
- ◦ Easy installation, screen setting and cabling from the front of Video wall.
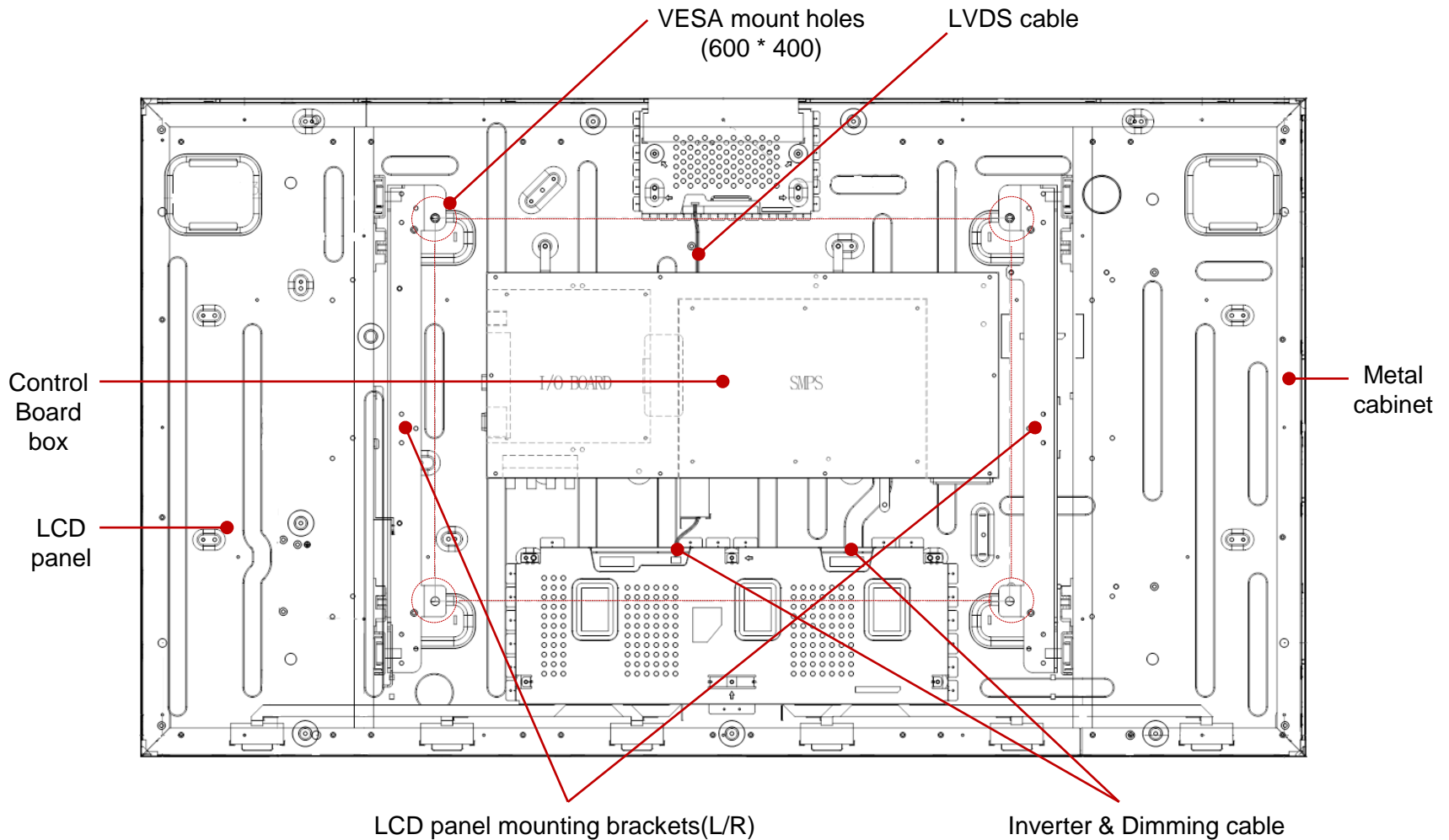
● Product images (Mount included)

Metal cabinet

Control board box

LCD panel

Front view   Rear view
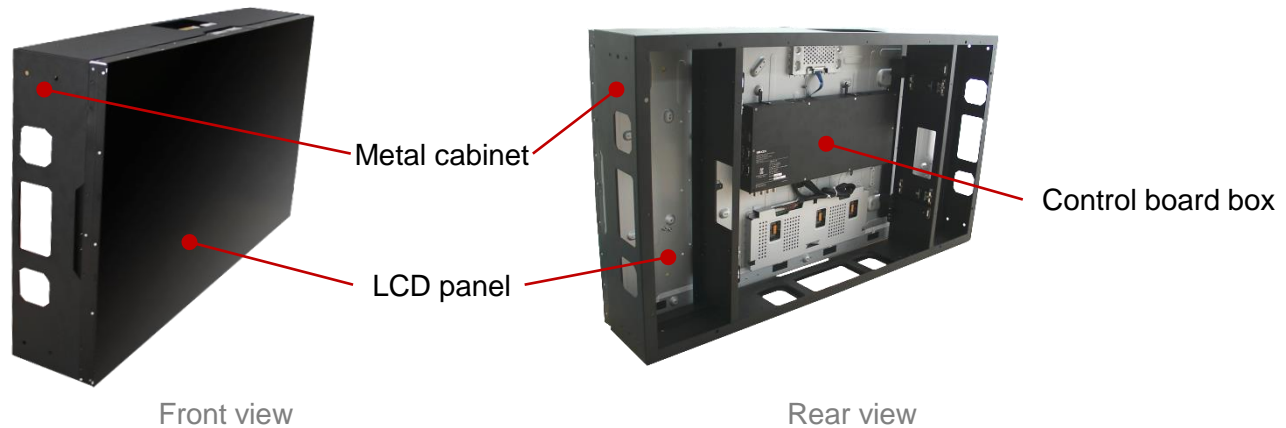
Screen measurements
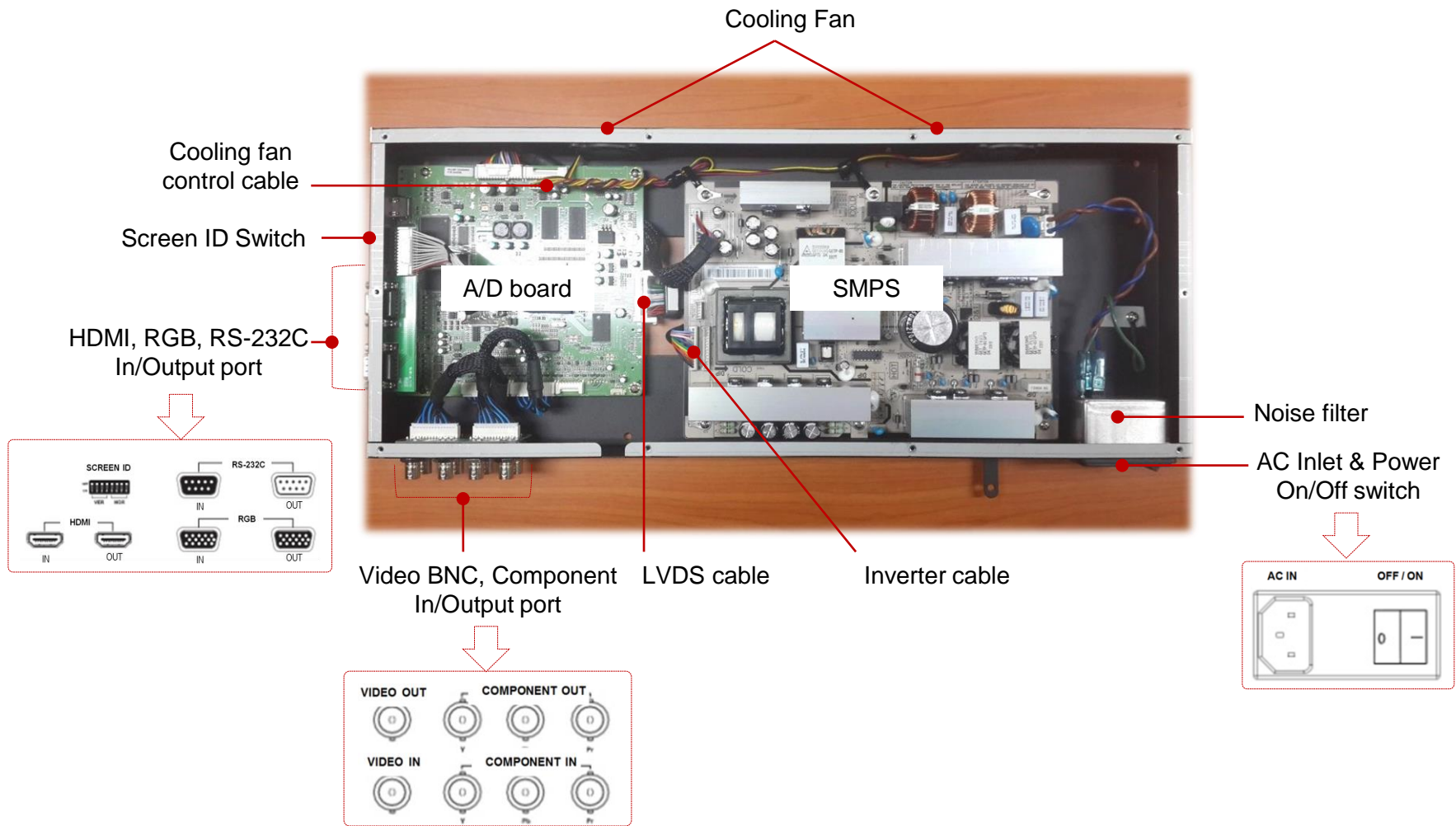
< NBM-S5531D Series >
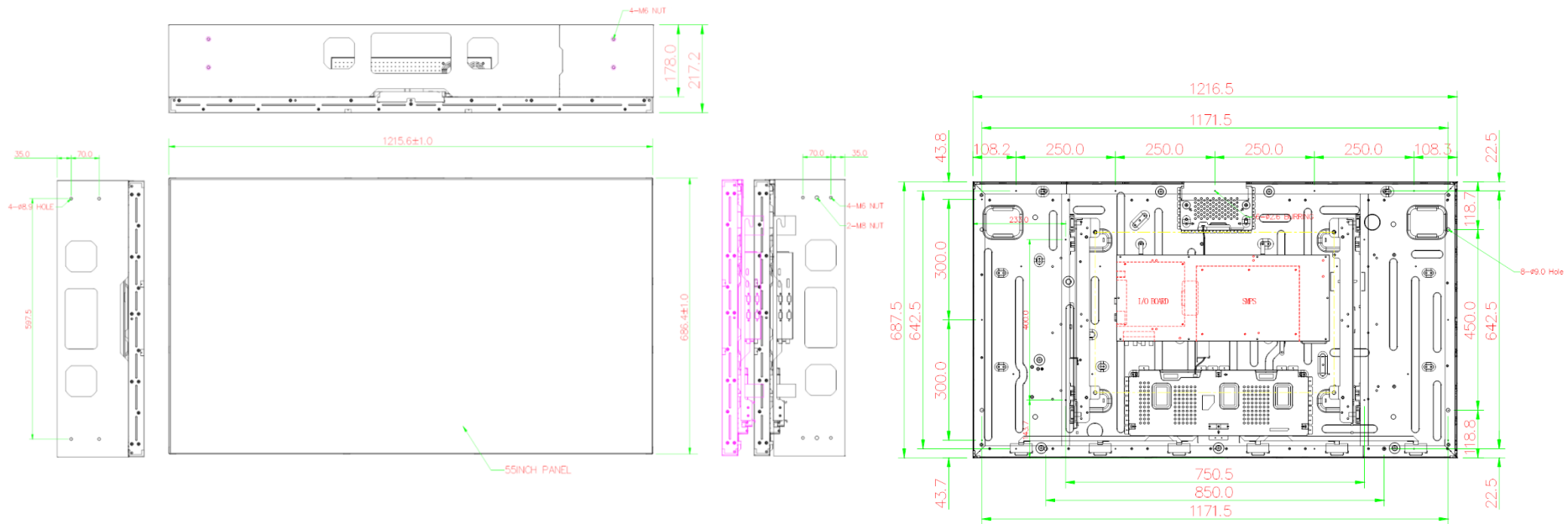
NOTE : All drawings are not necessarily to scale.
Some dimensions are subject to change without prior notice.
Refer to the dimensions prior to performing installation of your Video wall.
Not responsible for typographical or printed errors.

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● Main components

VESA mount holes (600 * 400)

LVDS cable

Control Board box

Metal cabinet

LCD panel

I/O BOARD

SMPS

LCD panel mounting brackets(L/R)

Inverter & Dimming cable

Control board box

Cooling Fan

Cooling fan control cable

Screen ID Switch

A/D board

SMPS

HDMI, RGB, RS-232C In/Output port

Noise filter

AC Inlet & Power On/Off switch

SCREEN ID

VER   MOR

RS-232C

IN

OUT

HDMI

RGB

IN   OUT

IN

OUT

Video BNC, Component In/Output port

LVDS cable

Inverter cable

AC IN   OFF / ON

VIDEO OUT   COMPONENT OUT

VIDEO IN   COMPONENT IN

Mechanical Functions

● Screen ID switch

Every screen should be set it's own Screen ID with the Screen ID switch for RS-232C control.

Screen ID setting for 3 by 3 video wall configuration.

OFF = 0

ON = 1

Vertical   **Horizontal**
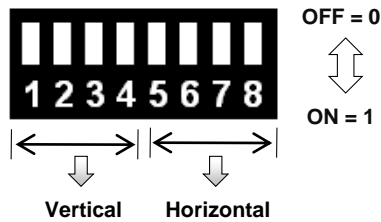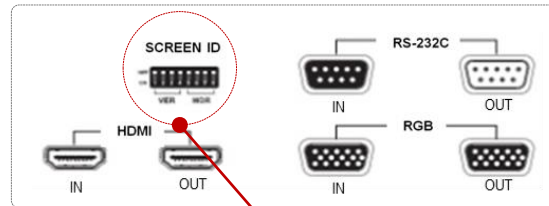
Screen ID number

ID 1 0.0	ID 2 0.1	ID 3 0.2
ID 4 1.0	ID 5 1.1	ID 6 1.2
ID 7 2.0	ID 8 2.1	ID 9 2.2

● Front opening mechanism process

Release four(4) screw bolts out with a screw driver.

Spring lock (L/R)
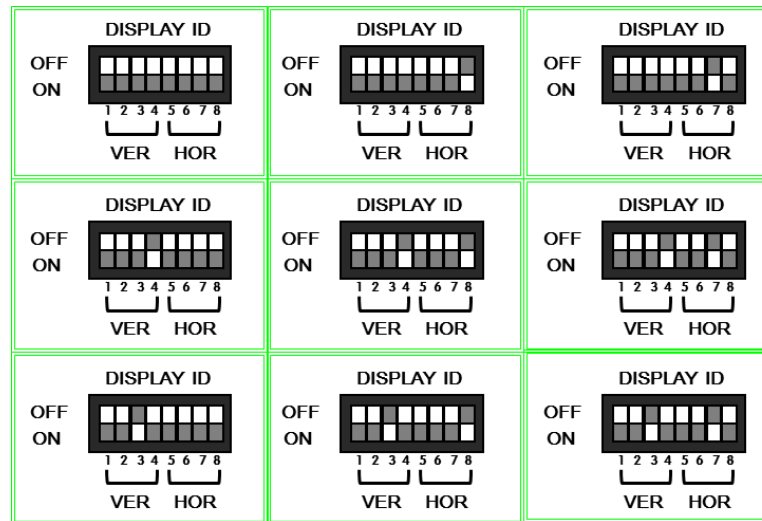
● LCD panel and Metal cabinet assembly

LCD panel mounting brackets(L/R)

Metal cabinet

Control board box

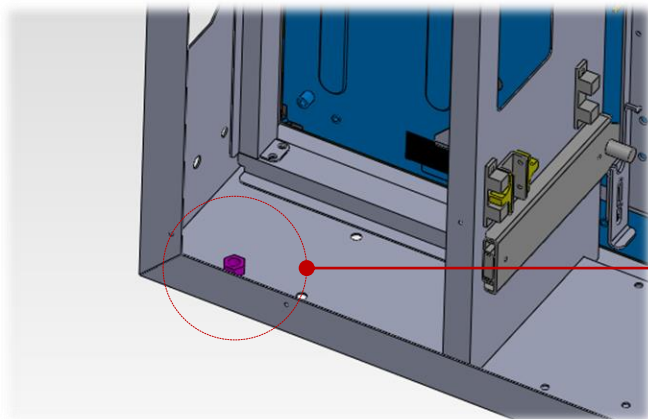LCD panel with Control board box

Extendable rail with hook
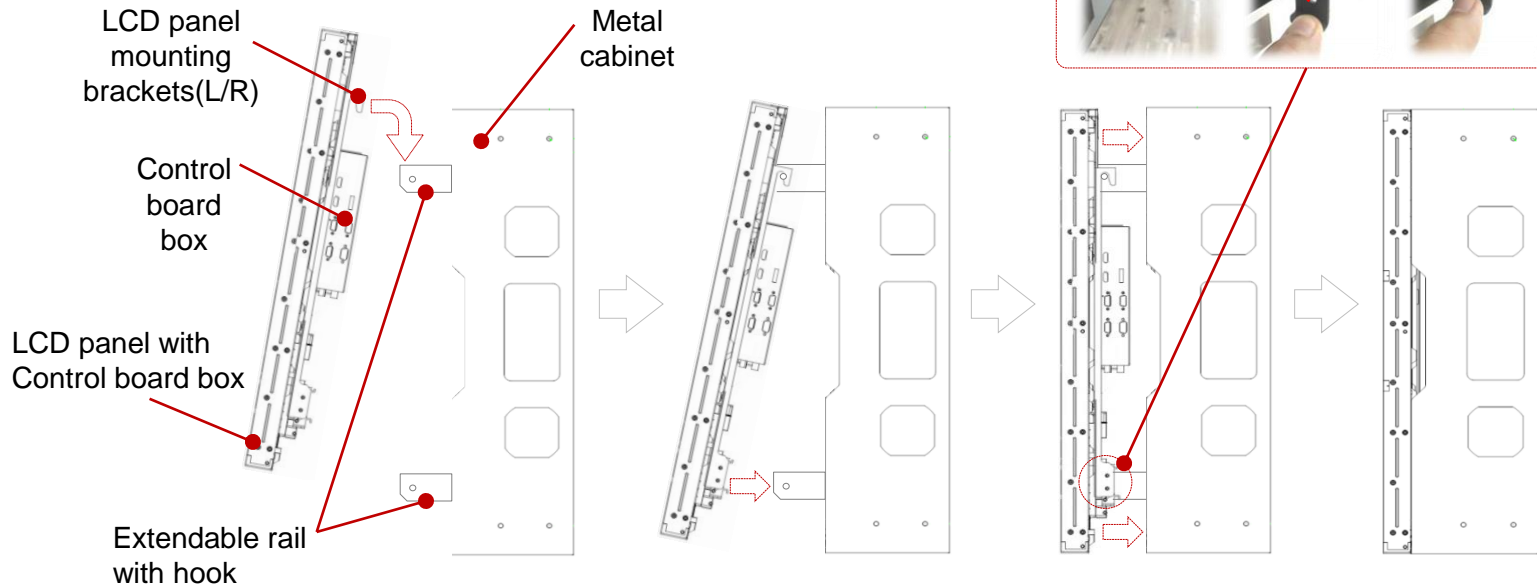
Individual screen position tuning
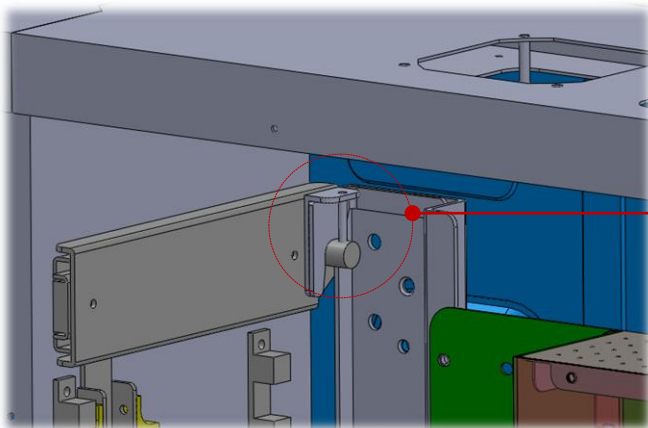
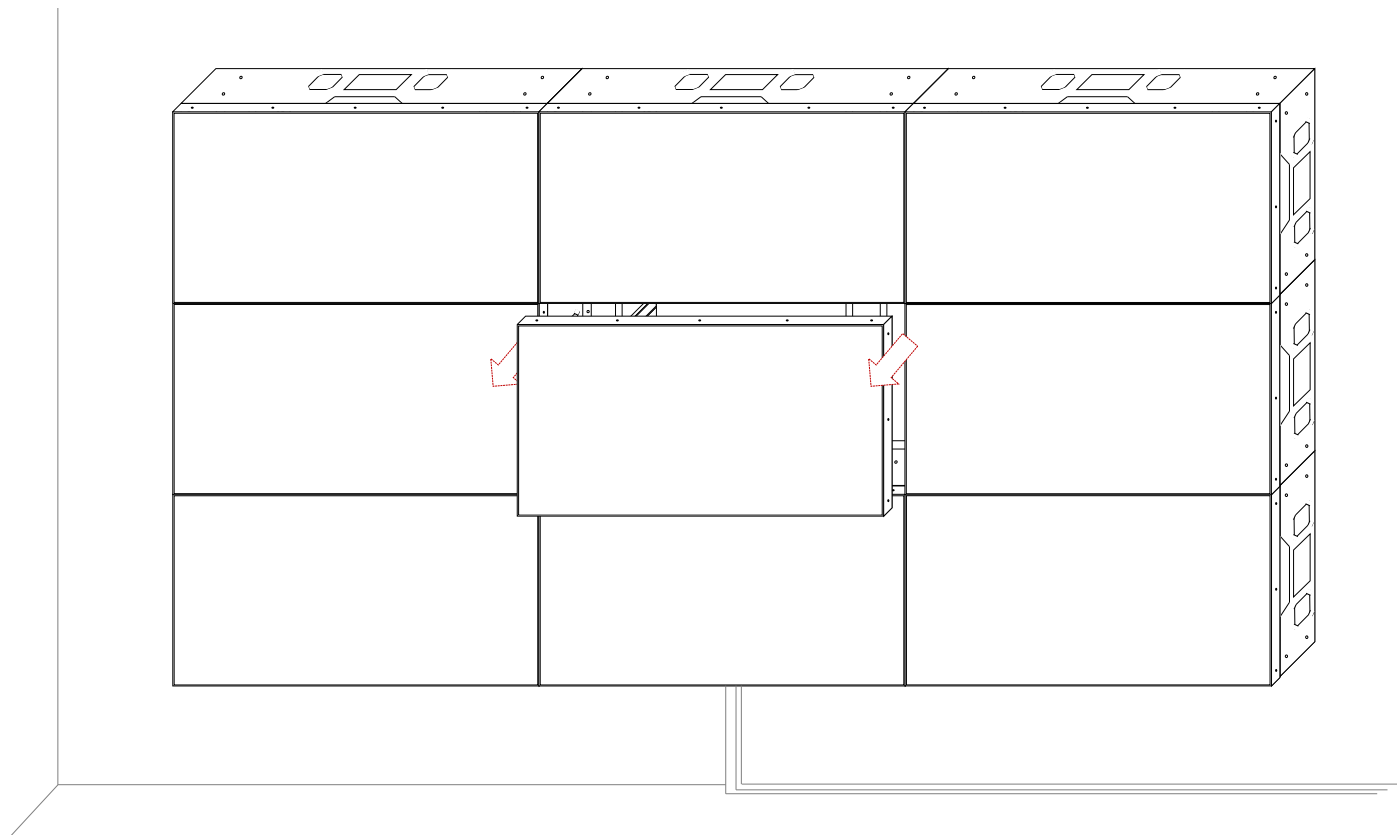LCD panel position adjusting bolt (at Left / Right)

- Adjust LCD panel position to the Upside

Metal cabinet position adjusting bolt (at Left / Right)

- Adjust Metal cabinet position to the Upside

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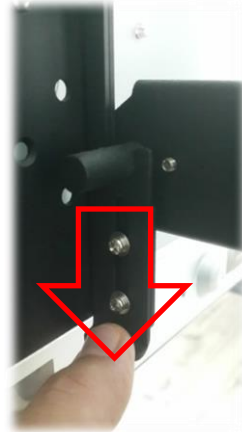● Separate LCD panel assembly from Video wall

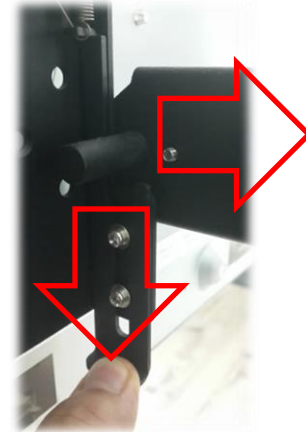Pull out the LCD panel assembly which need to be repaired.

● Separate LCD panel assembly from Video wall

Two(2) hook locks
(Left & right at bottom)

① Push down the hook lock with a finger.

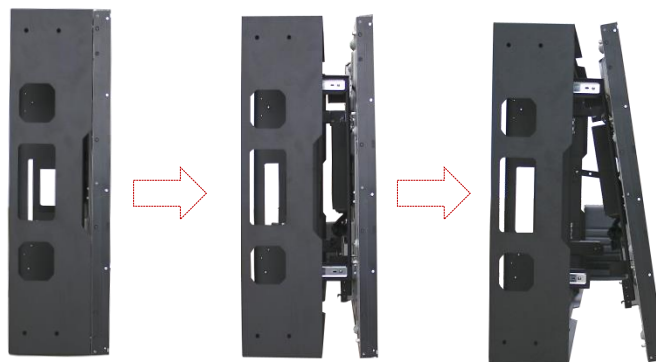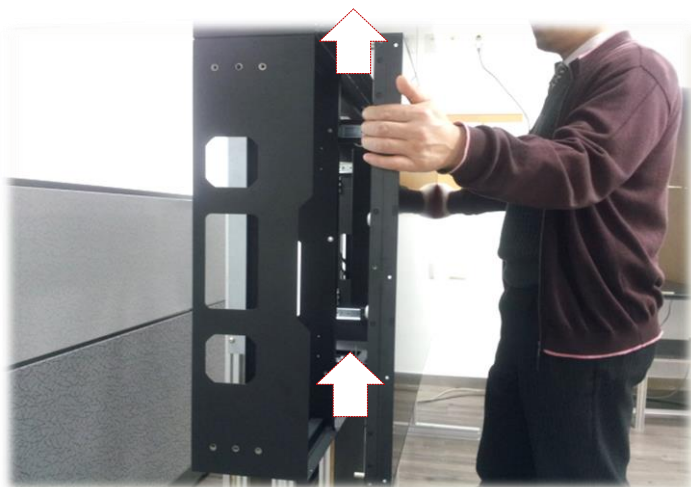② Pull the LCD panel to the front.

③ Take the finger off

④ LCD panel is released from the hook lock.

● Separate LCD panel assembly from Video wall

The front opening
Mechanism process
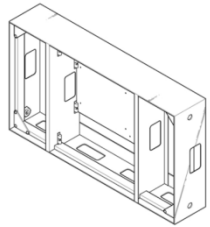
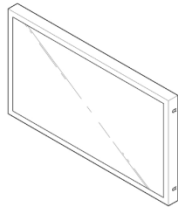① Lift up the LCD panel assembly with special care.　　② Take the LCD panel assembly out with special care.

* Two person work recommended.
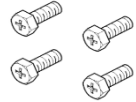
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5. Product Composition

● Standard accessories & packages per a unit

1. Metal cabinet

2. TFT-LCD panel
   with Control board box
   (LCD panel assembly)

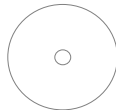3. M6/15 bolt * 8EA
   M8/20 bolt * 2EA

4. HDMI cable

5. RS232C cable
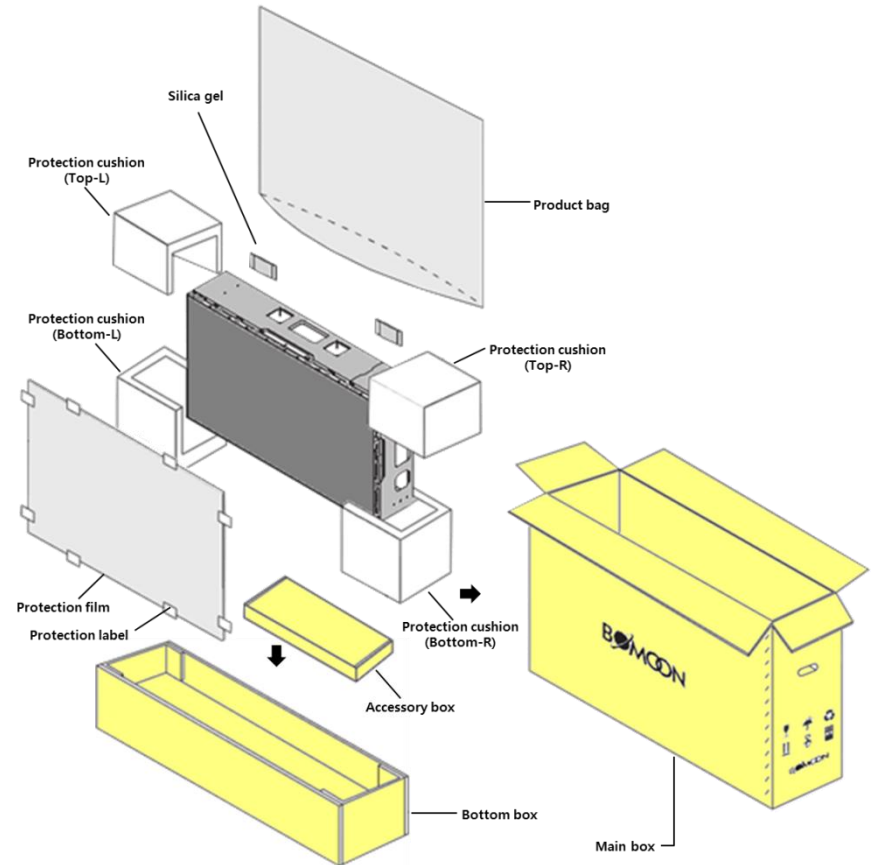
6. AC Power cable

Customized
bracket

7. Wall mounting
   bracket (Option)

8. Control Program &
   User Manual

Silica gel

Protection cushion
(Top-L)

Product bag

Protection cushion
(Bottom-L)

Protection cushion
(Top-R)

Protection film

Protection label

Protection cushion
(Bottom-R)

Accessory box

BOMOON

Bottom box

Main box

55 inches 3x3 Dimension

3650mm (NBM-S5531D)

217mm (depth)

2063mm (NBM-S531D)

LCD panel position tuning (L/R, U/D)

5.5mm [L/R] (Bezel open)

5.5mm [U/D] (Bezel open)
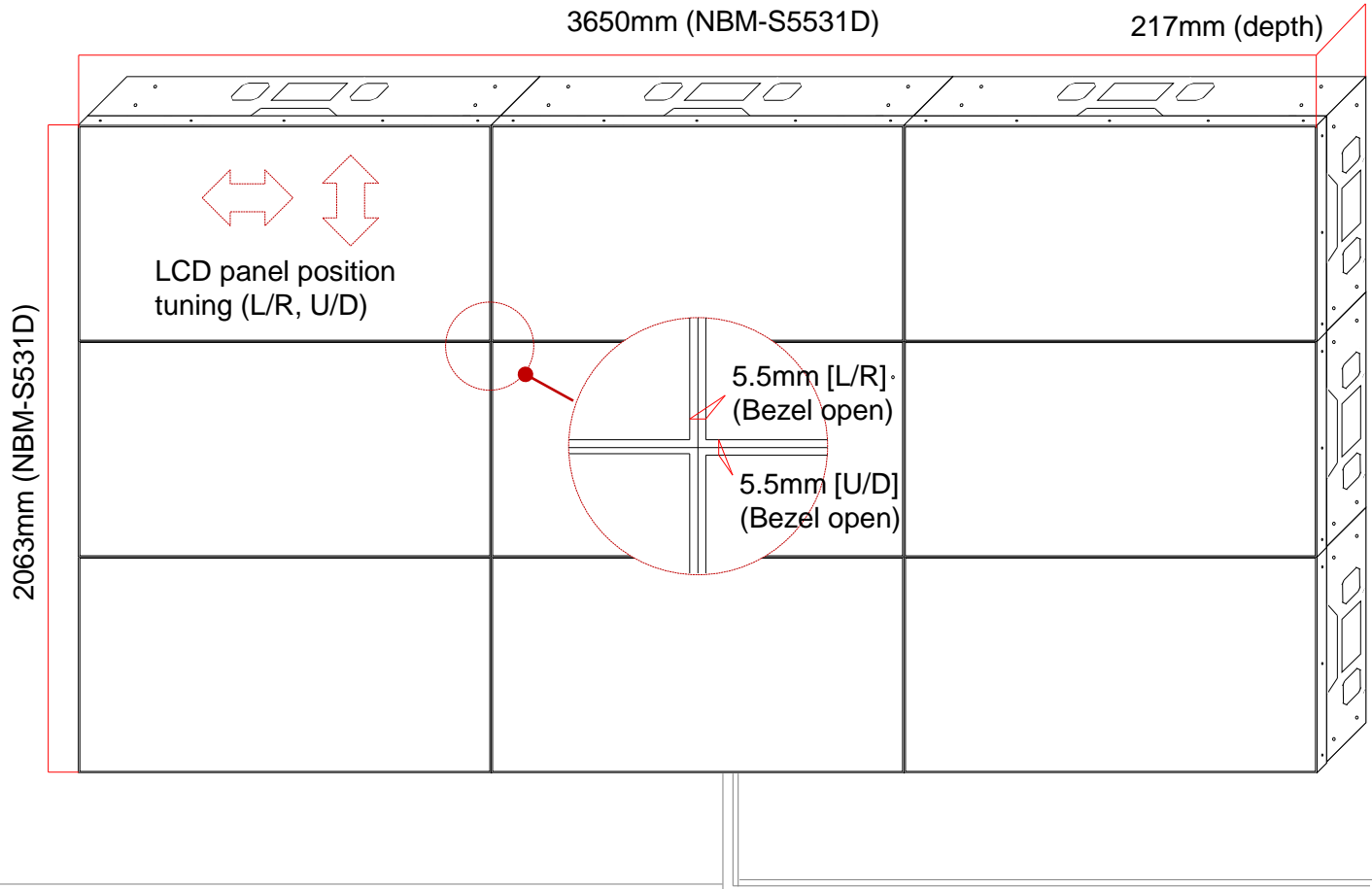
Recessed wall Installation

● Step 1.

3 by 3 Video wall

Metal frame
50 * 100 mm
Square metal pipe

5mm bigger than Video wall

Additional
Built Wall

5mm bigger than Video wall

5mm bigger than Video wall

Size of the metal frame needs to
be 10mm bigger than Video wall size.

5mm bigger than Video wall

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Step 2

Open space for Video wall
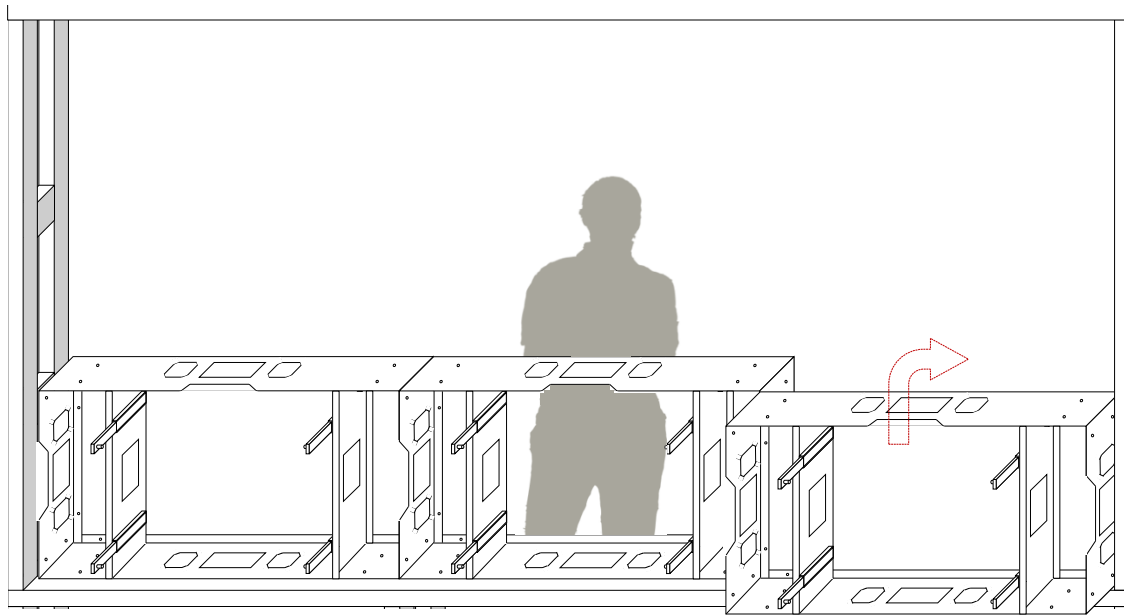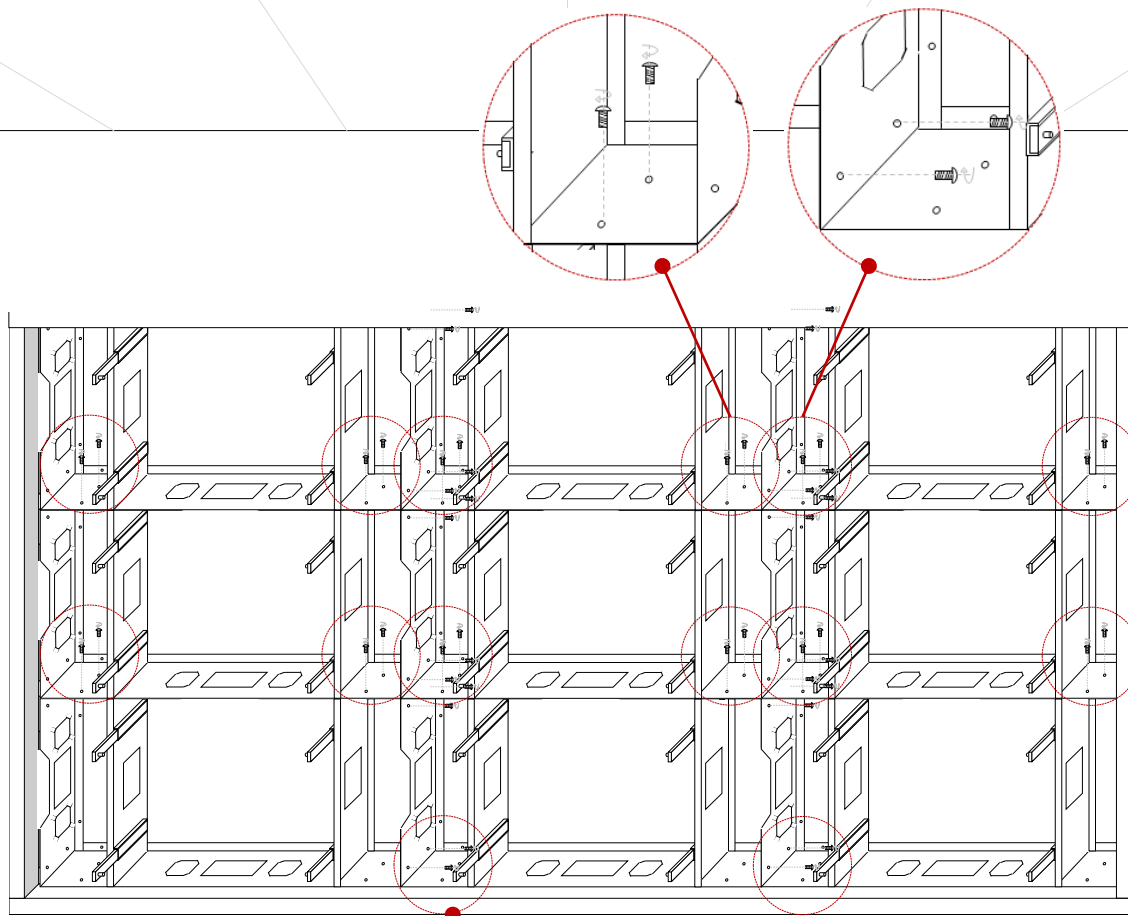
Additional
Built Wall
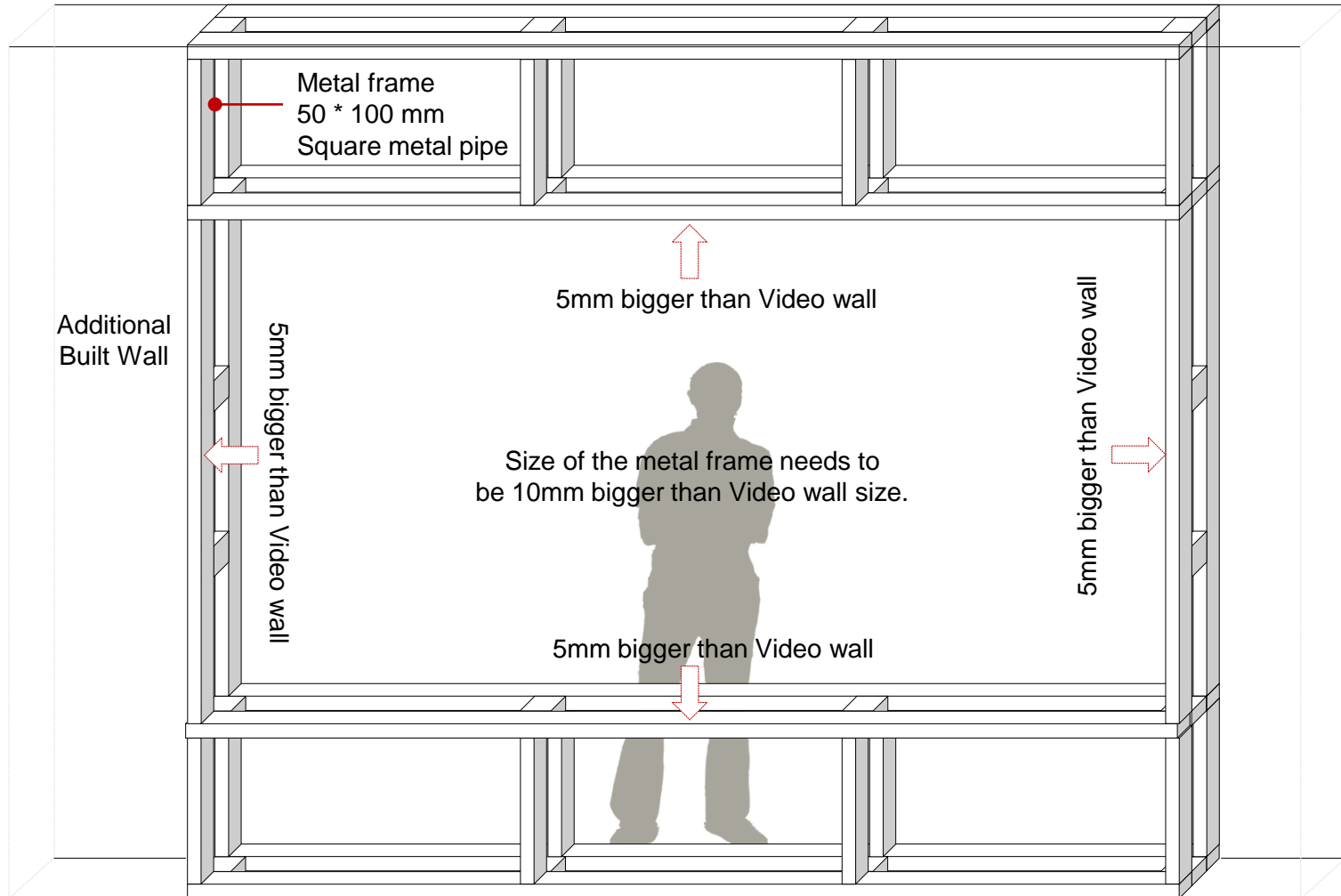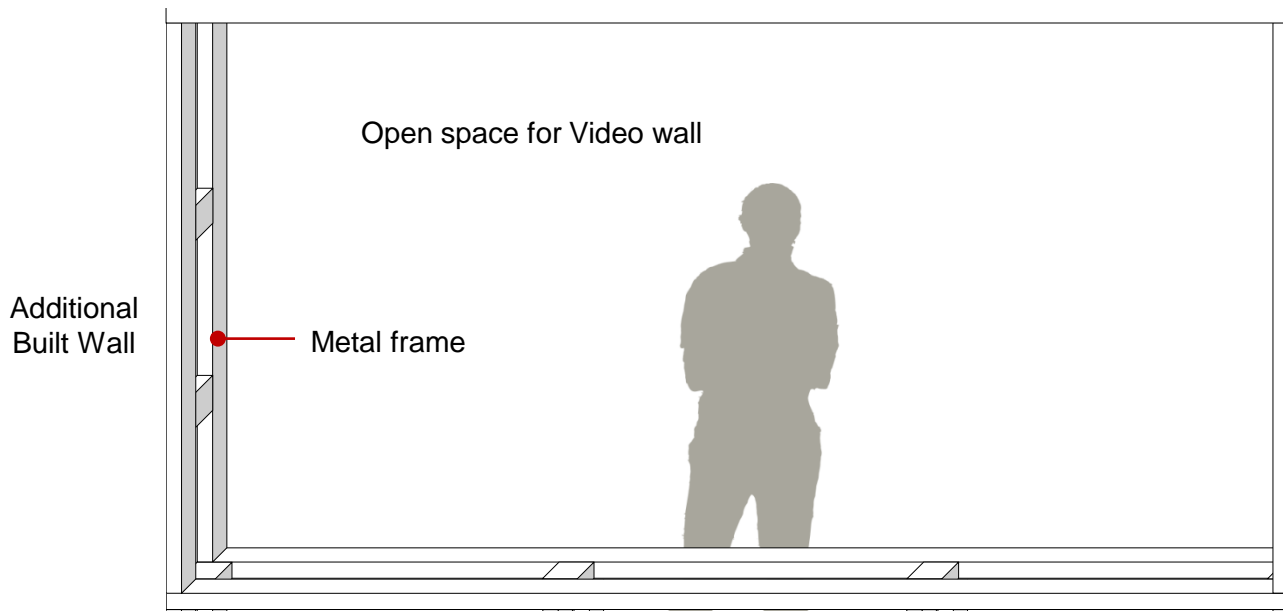
Metal frame

Step 3.

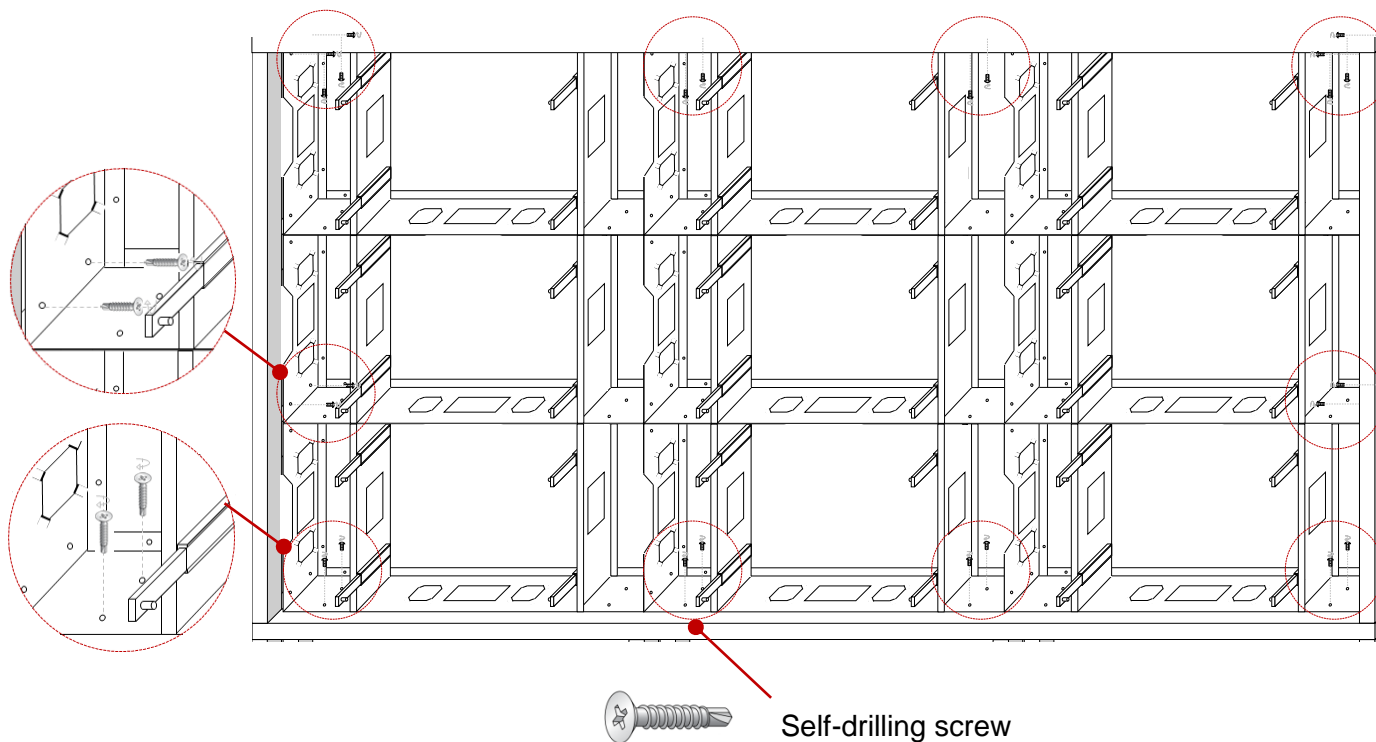Put the metal cabinets on the metal frame from the bottom line.

● Step 4.

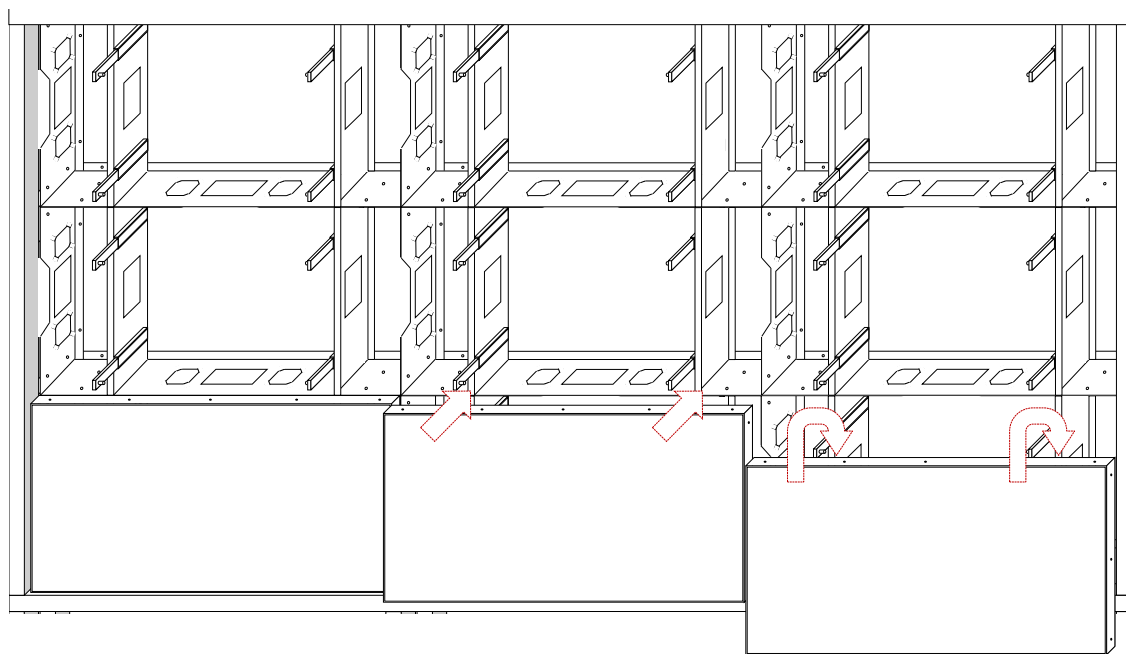M6 bolt (For binding each metal cabinet between
Up/Down and Left/Right screens.)

Step 5.

Fix the bound whole metal cabinet to the metal frame with self-drilling screws.

Self-drilling screw

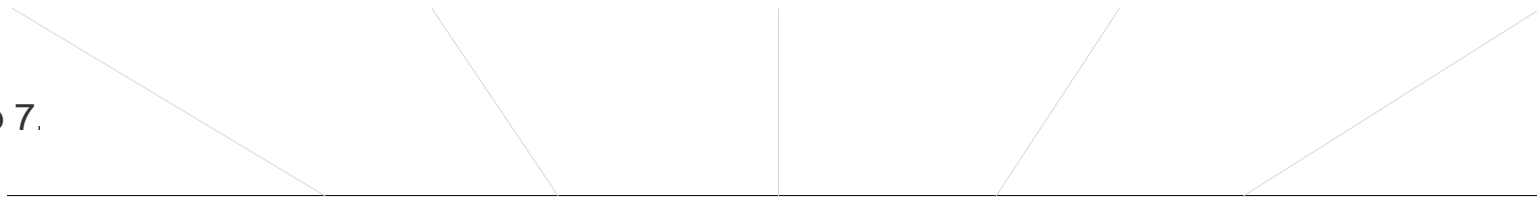## ● Step 6.

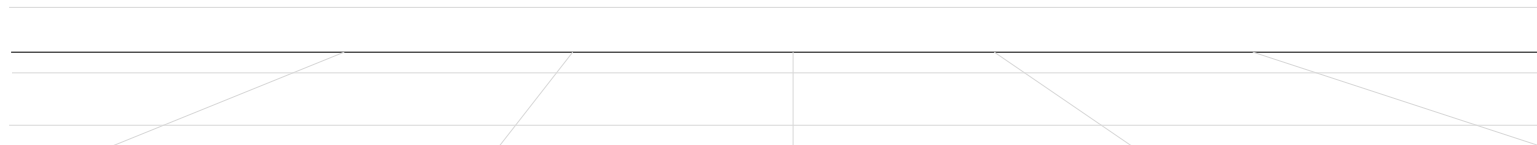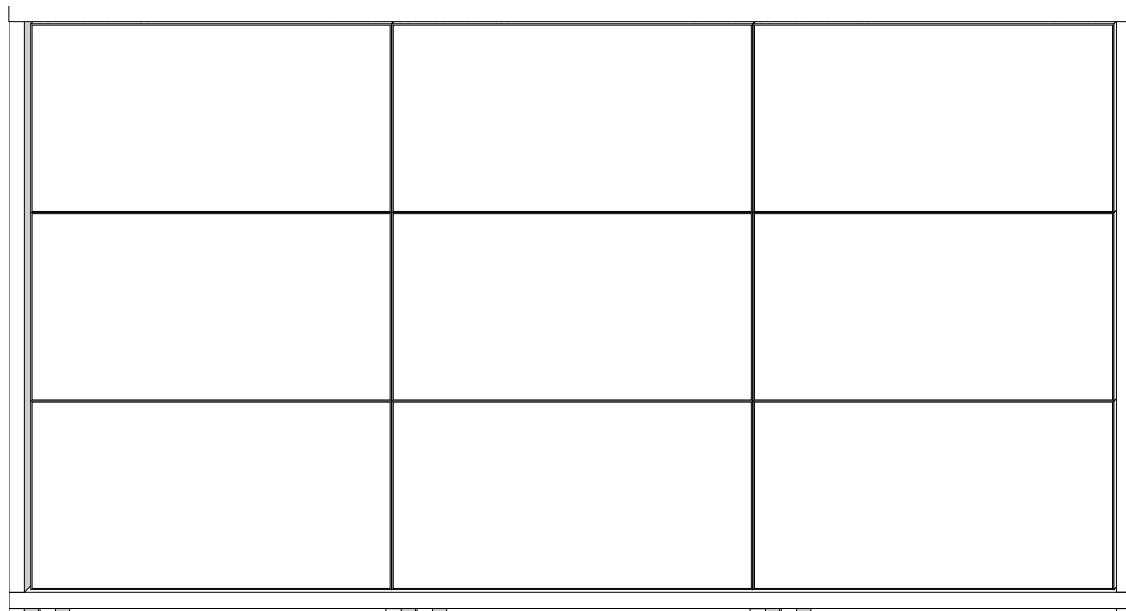Hang the LCD panel assemblies onto the metal cabinets and then close them.
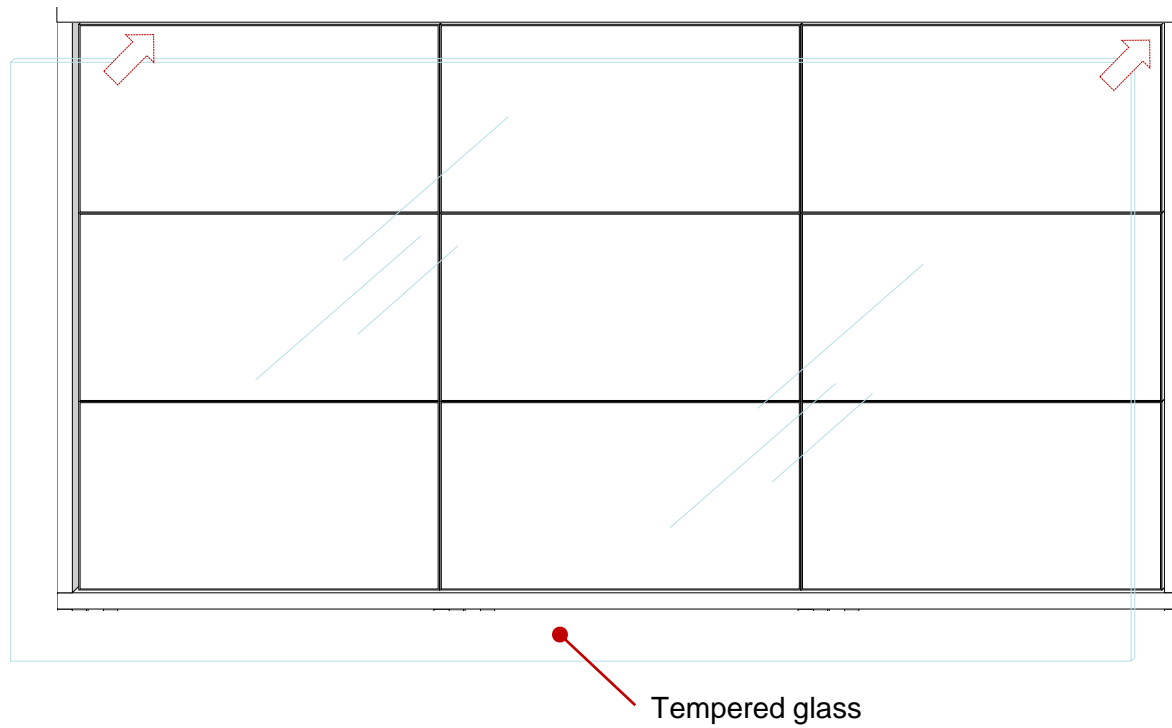

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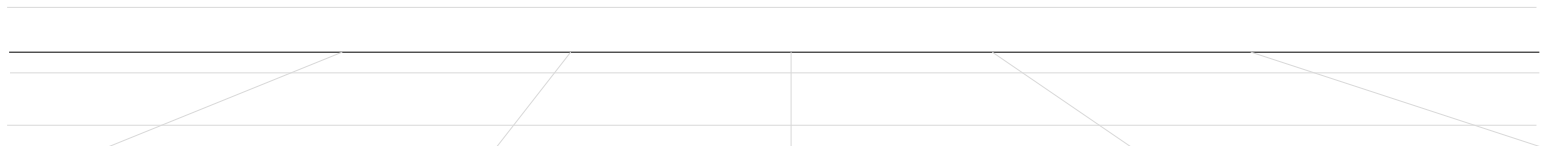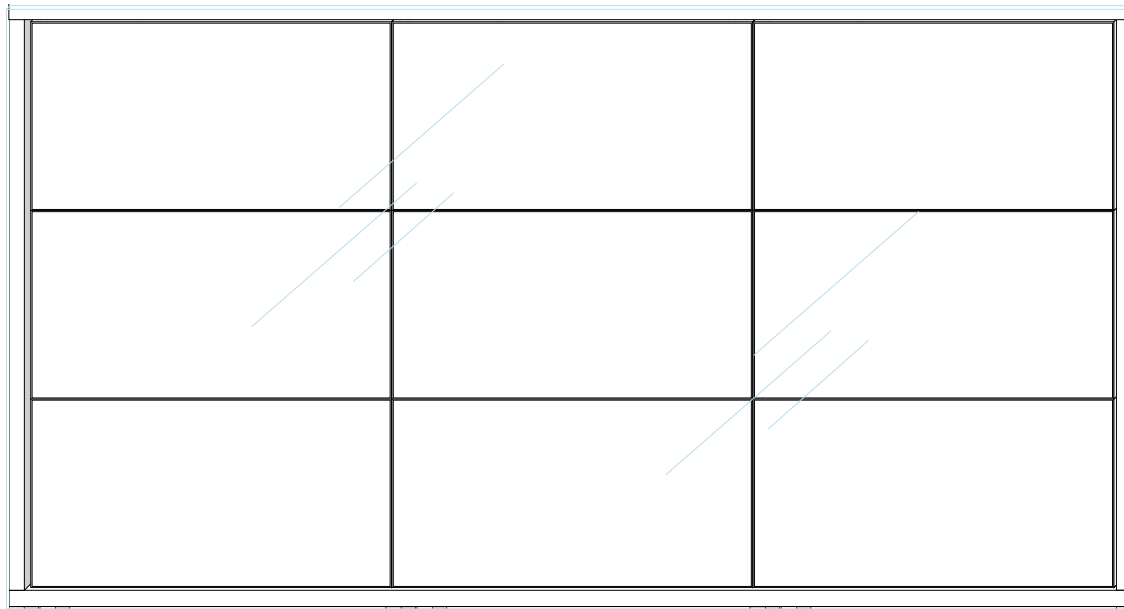# Step 7.

Cabling works from the rear side of Video wall.

Step 8.

Tempered glass can be sealed onto the metal frame.

Tempered glass

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Step 9.

The rear side of Video wall needs to be opened for cooling and ventilation.

● Specification sheet

Model Name	NBM-S4631D	NBM-S4633D	NBM-S5531D	NBM-S5532D
TFT-LCD size (Diagonal)	46inch	46inch	55inch	55inch
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Brightness	700cd/m2 (Direct LED)	450cd/m2 (Direct LED)	700cd/m2 (Direct LED)	450cd/m2 (Direct LED)
Contrast Ratio	3500:01:00	3500:01:00	3500:01:00	3500:01:00
Frame (One Side, Bezel)	H:1.8mm / V:3.7mm	H:1.8mm / V:3.7mm	H:1.8mm / V:3.7mm	H:1.8mm / V:3.7mm
Viewing Angle	178°/ 178°(Horizontal / Vertical)			
Lifetime	50,000 Hours			
Features	Frame rate conversion, On-chip versatile OSD engine			
High-Quality Advanced Scaling	Fully programmable zoom & shrink ratios / Independent horizontal & vertical and zoom & shrink / Variable sharpness control			
DVI Input / Output Port (HDMI)	Supports up to WUXGA (1920x1080, 60Hz), supports up to HDTV signal (720p, 1080i)			
Analog RGB PC Input / Output Port (15pin D-sub female)	Supports up to WUXGA (1920x1080, 60Hz), supports up to HDTV signal (720p, 1080i)			
Component Input / Output Port (BNCX3)	Supports up to HDTV signal (720p, 1080i)			
Video Input / Output Port (BNC x1)	Motion adaptive noise reduction - improves picture quality for off-air material Per-pixel motion adaptive de-interlacing Adaptive 4H comb filer for the best image quality. Supports to NTSC, PAL/SECAM			
Auto Configuration and Auto Detection	Phase and image positioning, Input format detection. Compatibility with all graphic cards and standard VESA mode			
SetSystem Control (RS-232C) input/output port (9 pin D-Sub)	Source Select, Magnification ratio change, Color Brightness, Contrast, Picture Position - Up / Down / Left / Right, Function reset, LCD Panel Light On / Off, Display Mode (Text / Video) Set.			
Power Consumption (Max, Watt)	220	180	250	200
LCD Panel + Scaler board (MAX)	Free Voltage (AC 85V~243V)			
Dimension (H x V x D, mm)	1,023.98 x 578.57 x 216	1023.98 x 578.57 x 216	1215.3 x 686.1 x 217	1215.3 x 686.1 x 217