NEC

NEC Display Solutions of America, Inc.

MultiSync ME Series Large Format Installation Guide [Ver.1.0]

Contents:

Product Description:

Type:	LCD Display
Resolution:	3840 x 2160
Aspect Ratio:	16:9
EMI:	Class B

|	Dimensions (without stand)	Weight (without stand)	Power Consumption (Typical) (Max Brightness) (Absolute Max*)	BTU's (Typical) (Max Brightness) (Absolute Max*)
ME431	38.3 x 22.1 x 2.5 in. 973.0 x 561.2 x 62.6mm	13.9kg / 30.6lbs.	80W 95W 175W	272.99 BTU/hr 324.18 BTU/hr 597.17 BTU/hr
ME501	44.4 x 25.6 x 2.5 in. 1128.4 x 649.0 x 62.6mm	17.3kg / 38.1lbs.	85W 100W 210W	290.06 BTU/hr 341.24 BTU/hr 716.61 BTU/hr
ME551	48.9 x 28.1 x 2.5 in. 1241.8 x 712.6 x 62.6mm	19.8kg / 43.7lbs.	120W 155W 265W	409.49 BTU/hr 528.92 BTU/hr 904.29 BTU/hr
ME651	57.6 x 33.0 x 2.7 in. 1462.3 x 837.3 x 68.1mm	29.4kg / 64.8lbs.	165W 215W 320W	563.05 BTU/hr 733.67 BTU/hr 1091.97 BTU/hr

*Absolute Max refers to when the display is at full brightness with all slots active and volume at 100.

NOTES:

- This document is intended to be used as a reference guide to supply useful information for a design or installation. It is not intended to be a step-by step procedure for installation.
- Any ceilings or walls must be strong enough to support the monitor and the installation must be in accordance with any local building codes. All mounts should make secure contact to wood studs.
- Distances are in inches, for millimeters multiply by 25.4. Distances may vary ±5%.
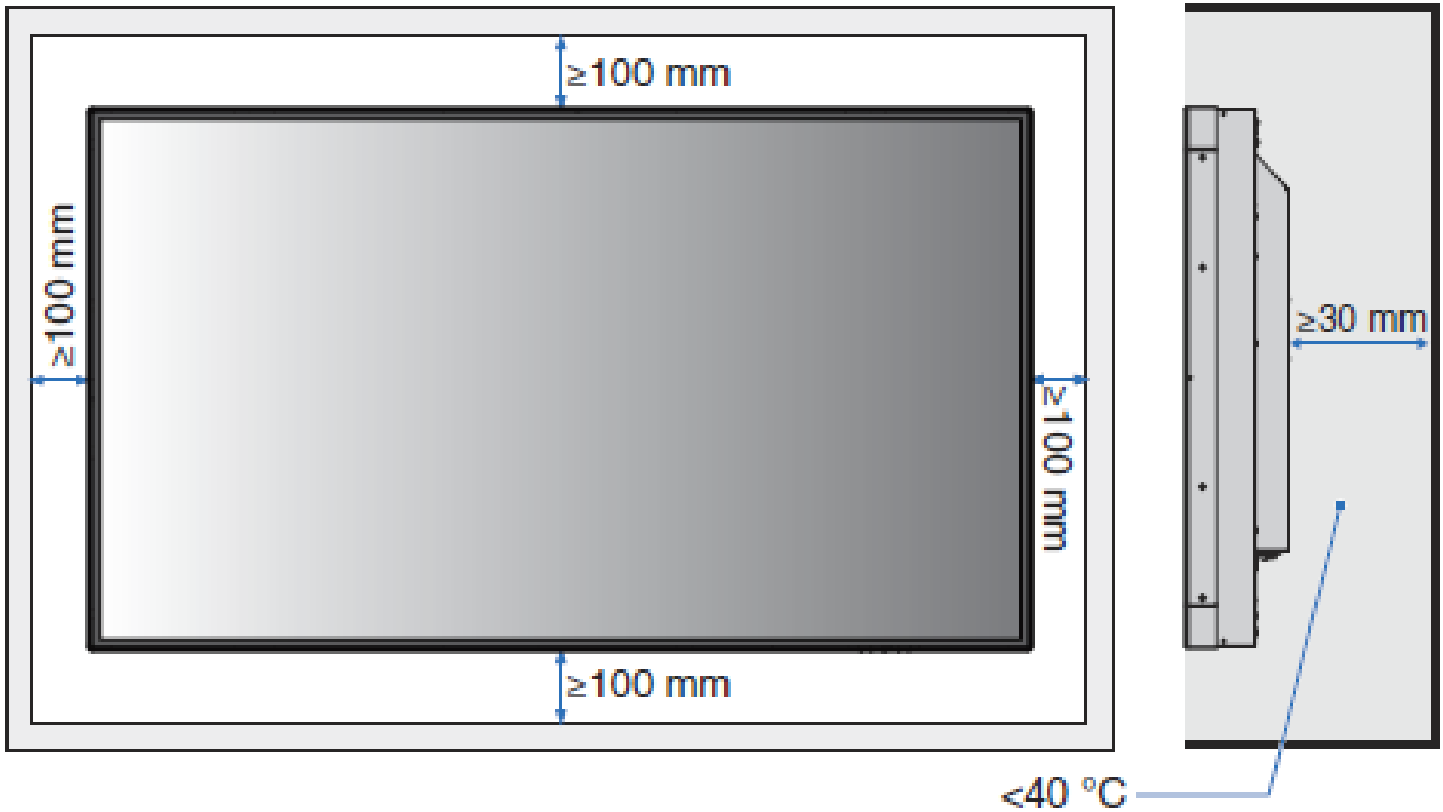
Rotation:

- If display is to be used in portrait orientation, rotation needs to be **counterclockwise**.
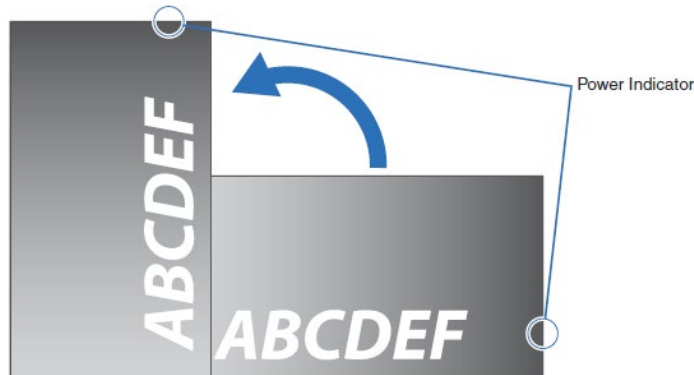
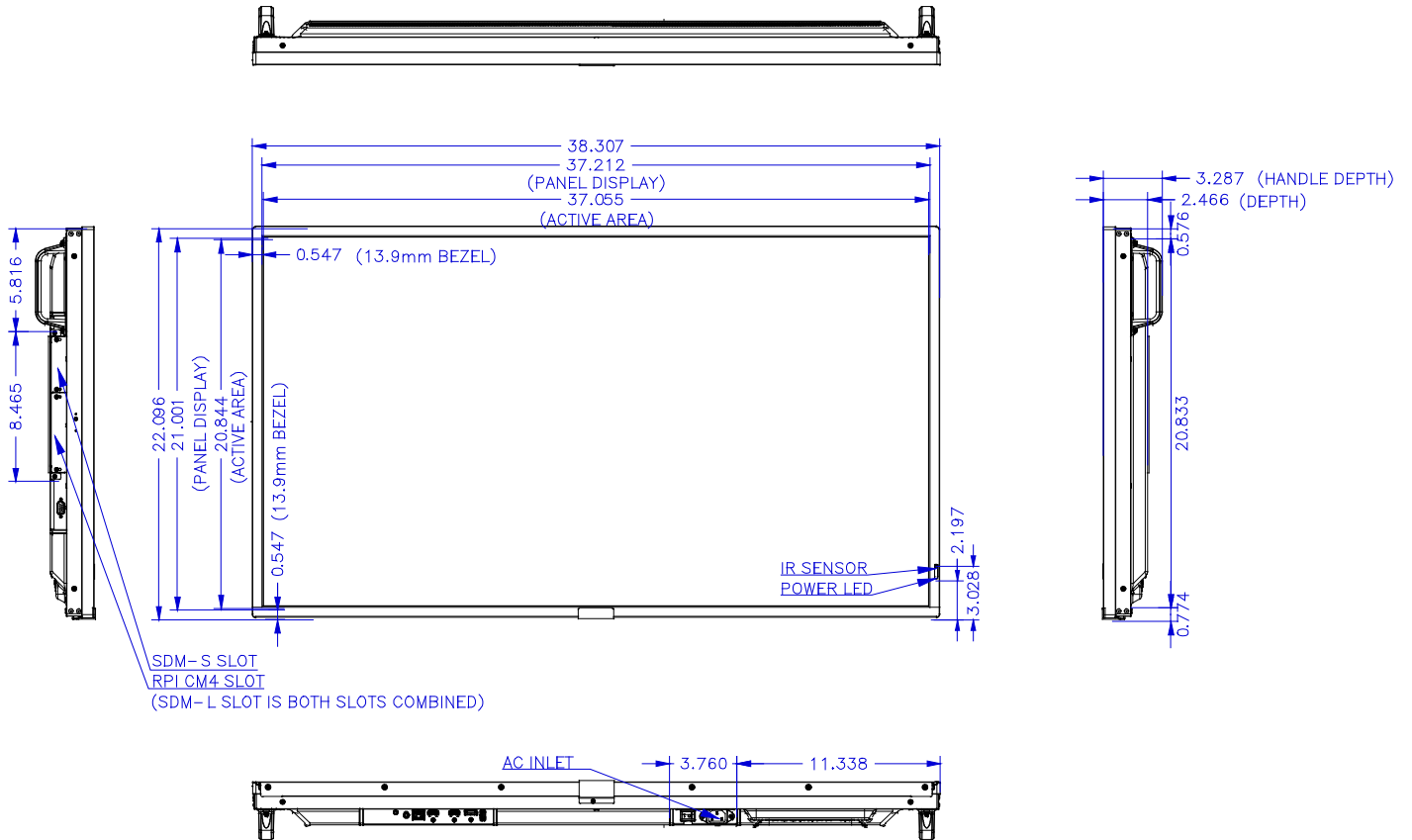
Ventilation Recommendations:

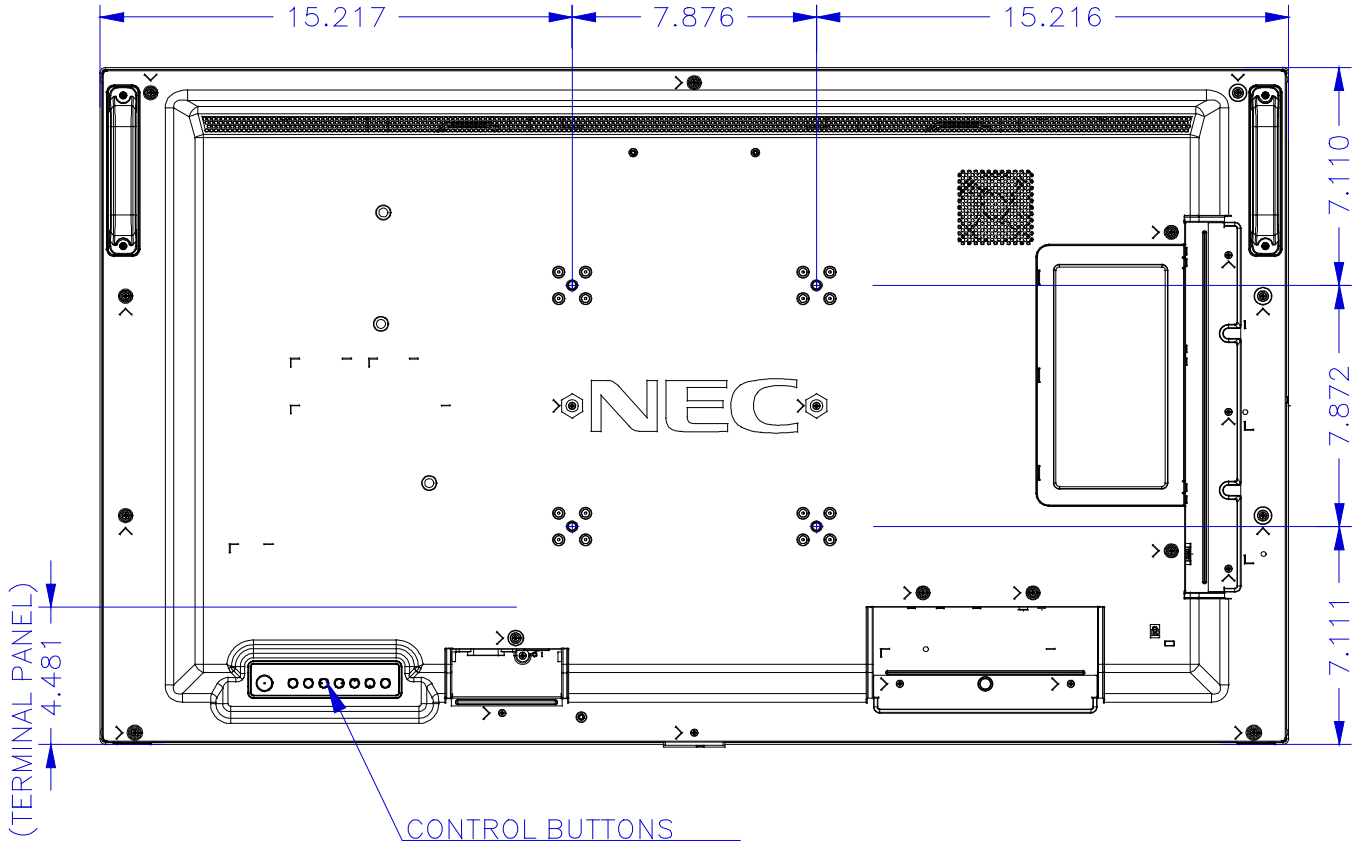Dimensions below are minimum recommended for proper ventilation.

NOTE:

- The above are recommendations in order to keep your display as cool as possible. If the distances are less than the 100mm, extra ventilation may be necessary. The ventilation space should not be covered or closed off at the front of the opening. If for some reason the opening needs to be covered, other means of ventilation will need to be incorporated into the design. Contact NEC for design review and recommendations.
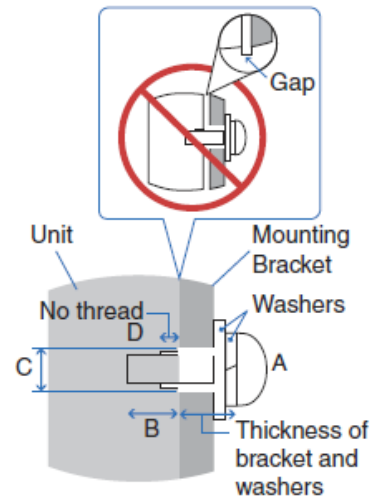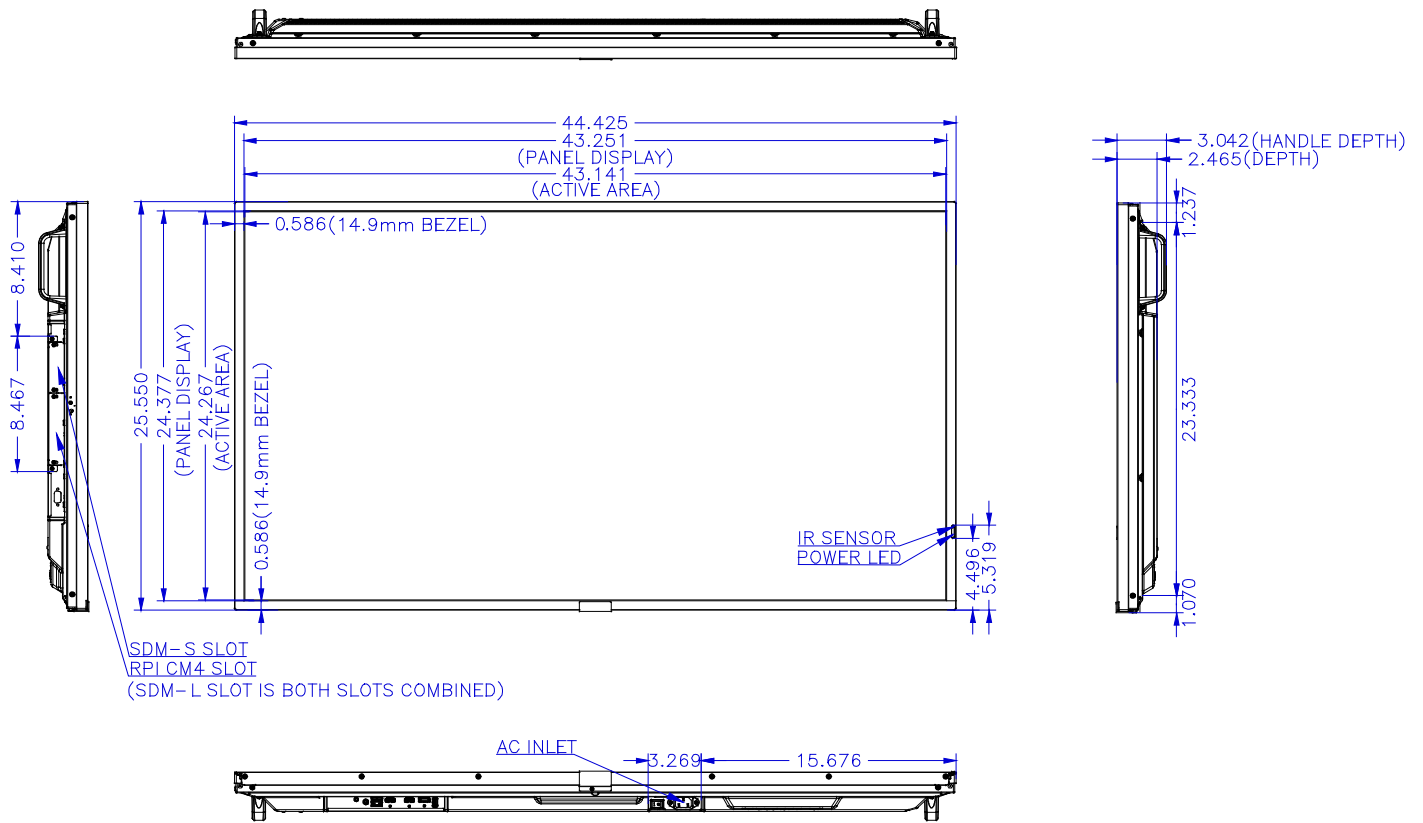
Display Dimensions – ME431:

38.307
37.212
(PANEL DISPLAY)
37.055
(ACTIVE AREA)

3.287 (HANDLE DEPTH)
2.466 (DEPTH)
0.576

0.547 (13.9mm BEZEL)

5.816

8.465

22.096
21.001
(PANEL DISPLAY)
20.844
(ACTIVE AREA)

0.547 (13.9mm BEZEL)

20.833

0.774

2.197
3.028

IR SENSOR
POWER LED

SDM-S SLOT
RPI CM4 SLOT
(SDM-L SLOT IS BOTH SLOTS COMBINED)

AC INLET
3.760
11.338

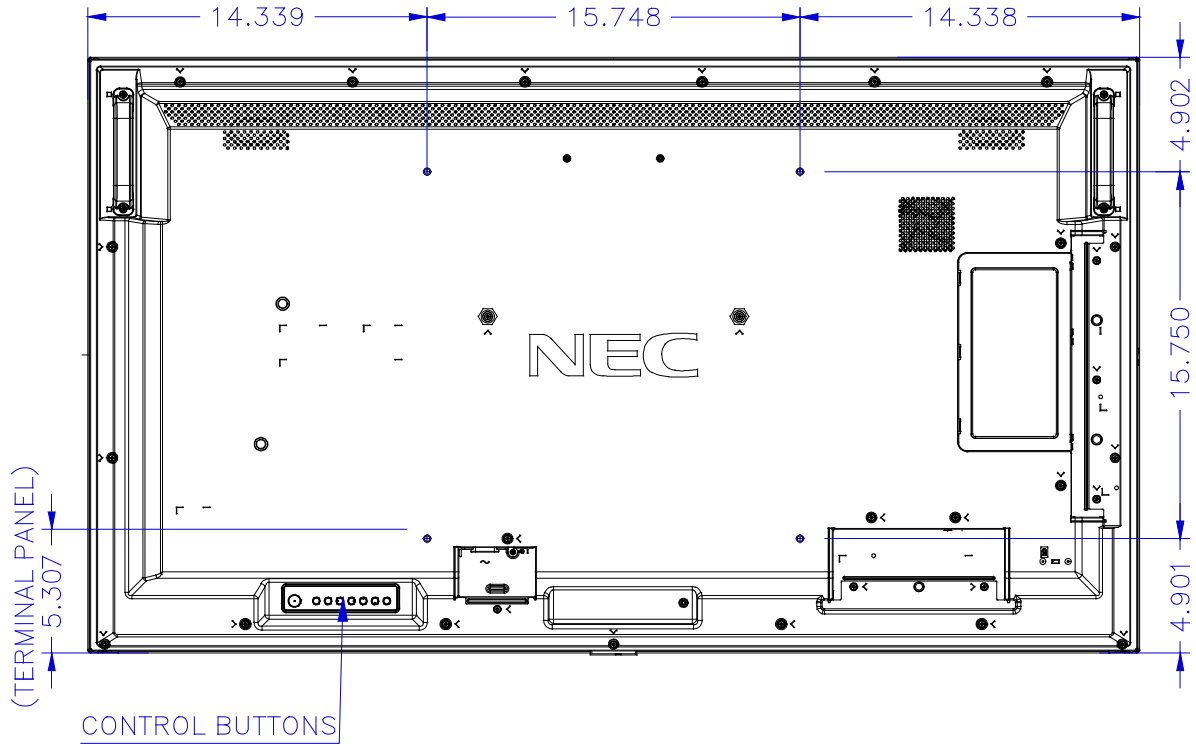**Display Dimensions – ME431 cont'd:**

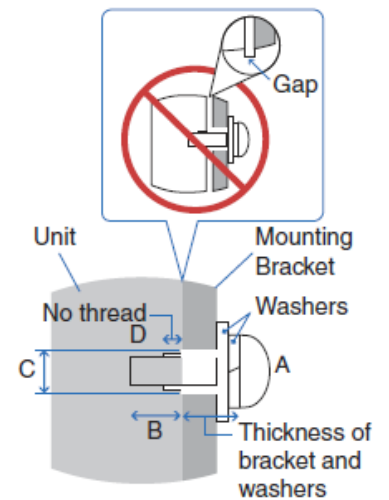NEC strongly recommends using size M6 screws (10-12mm + the thickness of the bracket and washers in length).

Display Dimensions – ME501:

Display Dimensions – ME501 cont'd:

NEC strongly recommends using size M6 screws (10-12mm + the thickness of the bracket and washers in length).

Display Dimensions – ME551:
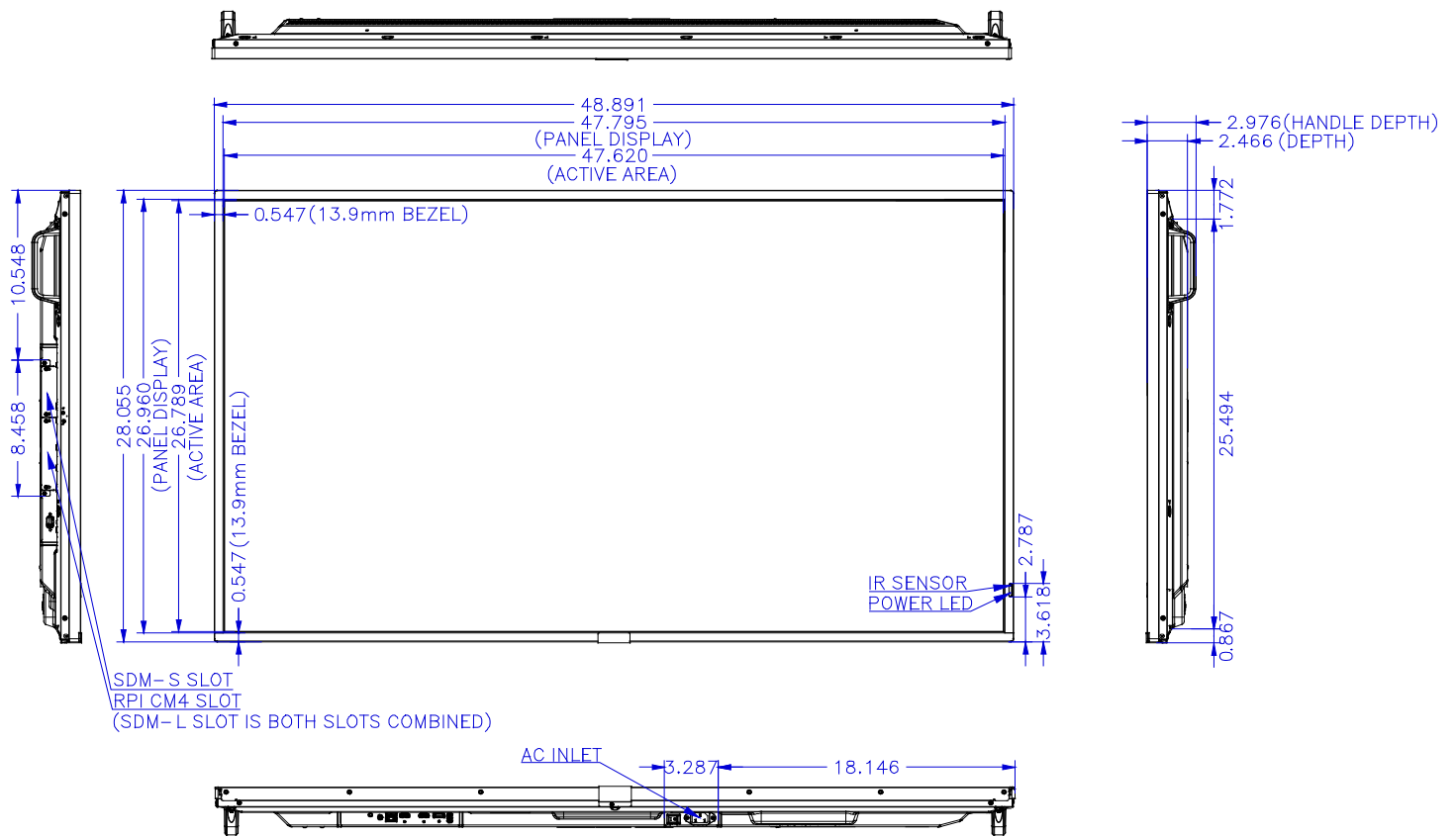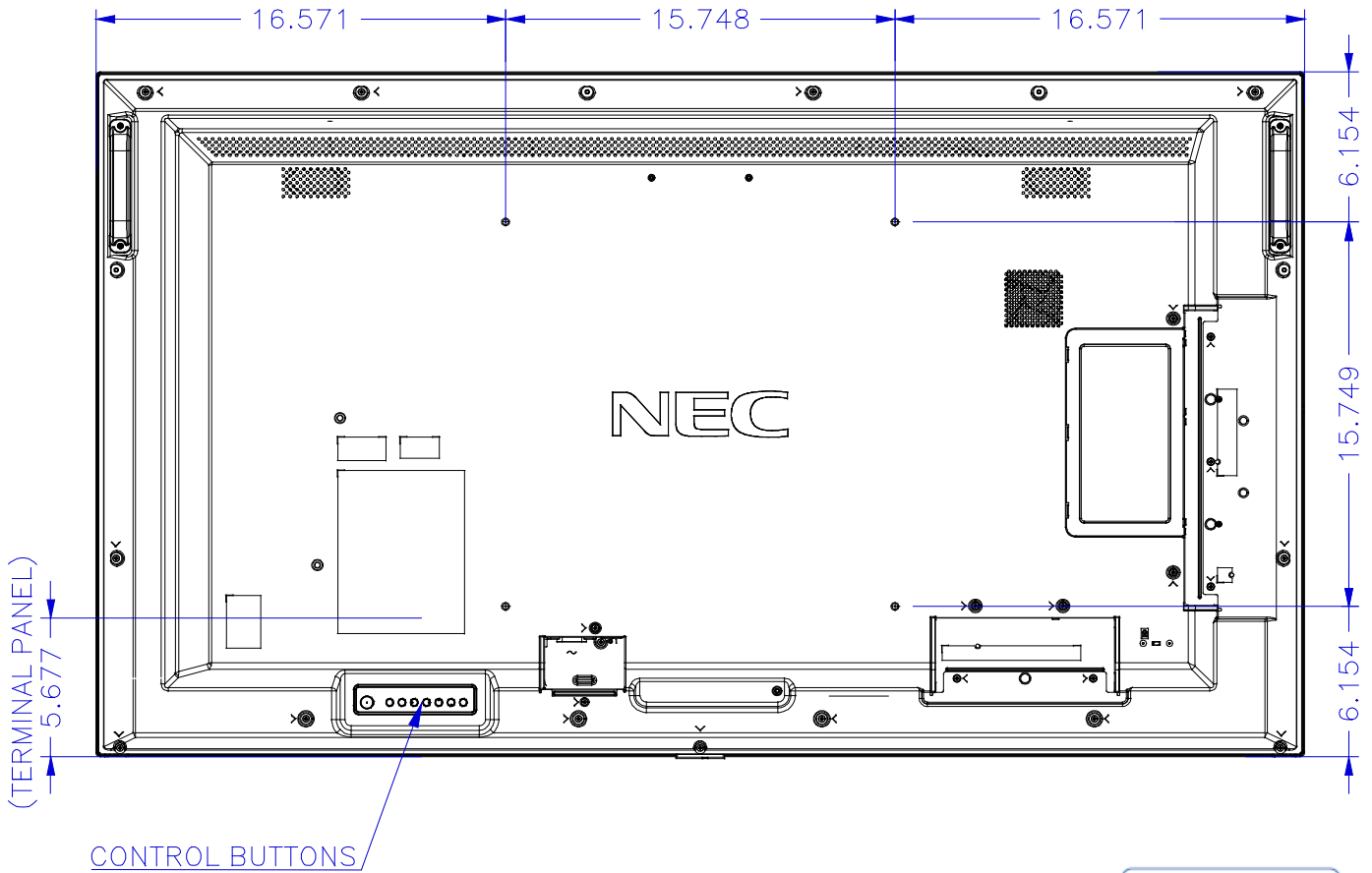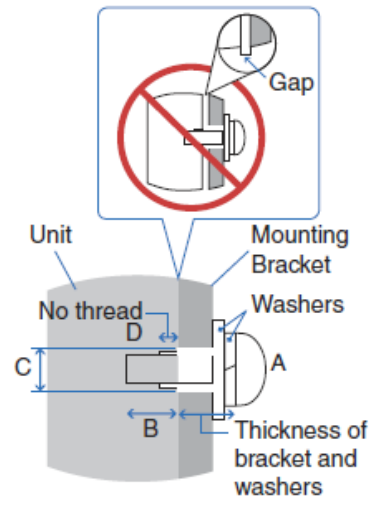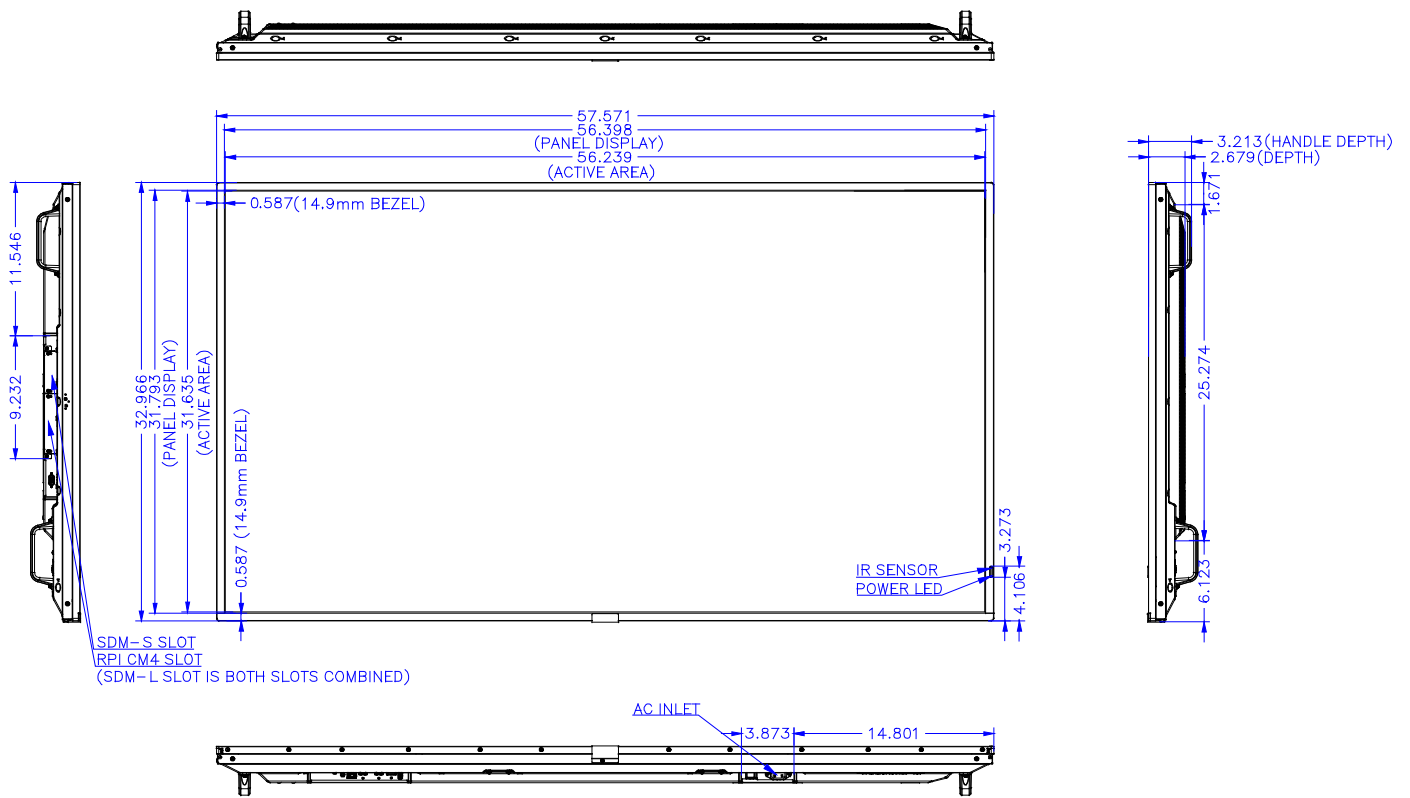
Display Dimensions – ME551 cont'd:

NEC strongly recommends using size M6 screws (10-12mm + the thickness of the bracket and washers in length).

Display Dimensions – ME651:

57.571
56.398
(PANEL DISPLAY)
56.239
(ACTIVE AREA)

0.587(14.9mm BEZEL)

3.213(HANDLE DEPTH)
2.679(DEPTH)
1.671

11.546

9.232

32.966
31.793
(PANEL DISPLAY)
31.635
(ACTIVE AREA)

25.274

0.587 (14.9mm BEZEL)

6.123

3.273

IR SENSOR
POWER LED

4.106

SDM-S SLOT
RPI CM4 SLOT
(SDM-L SLOT IS BOTH SLOTS COMBINED)

AC INLET
3.873 14.801

Display Dimensions – ME651 cont'd:
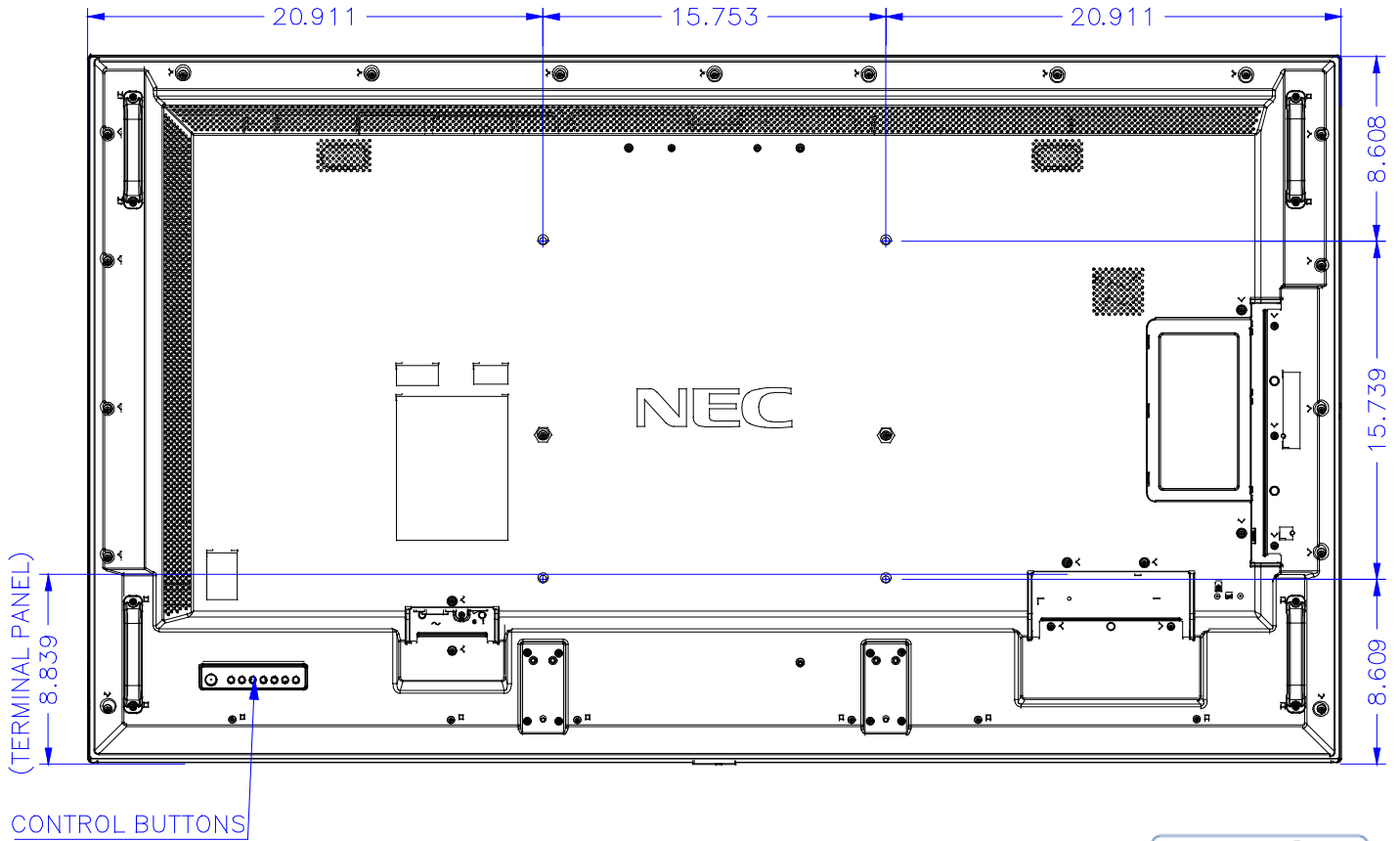
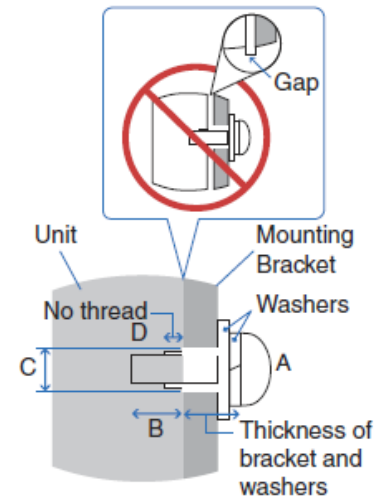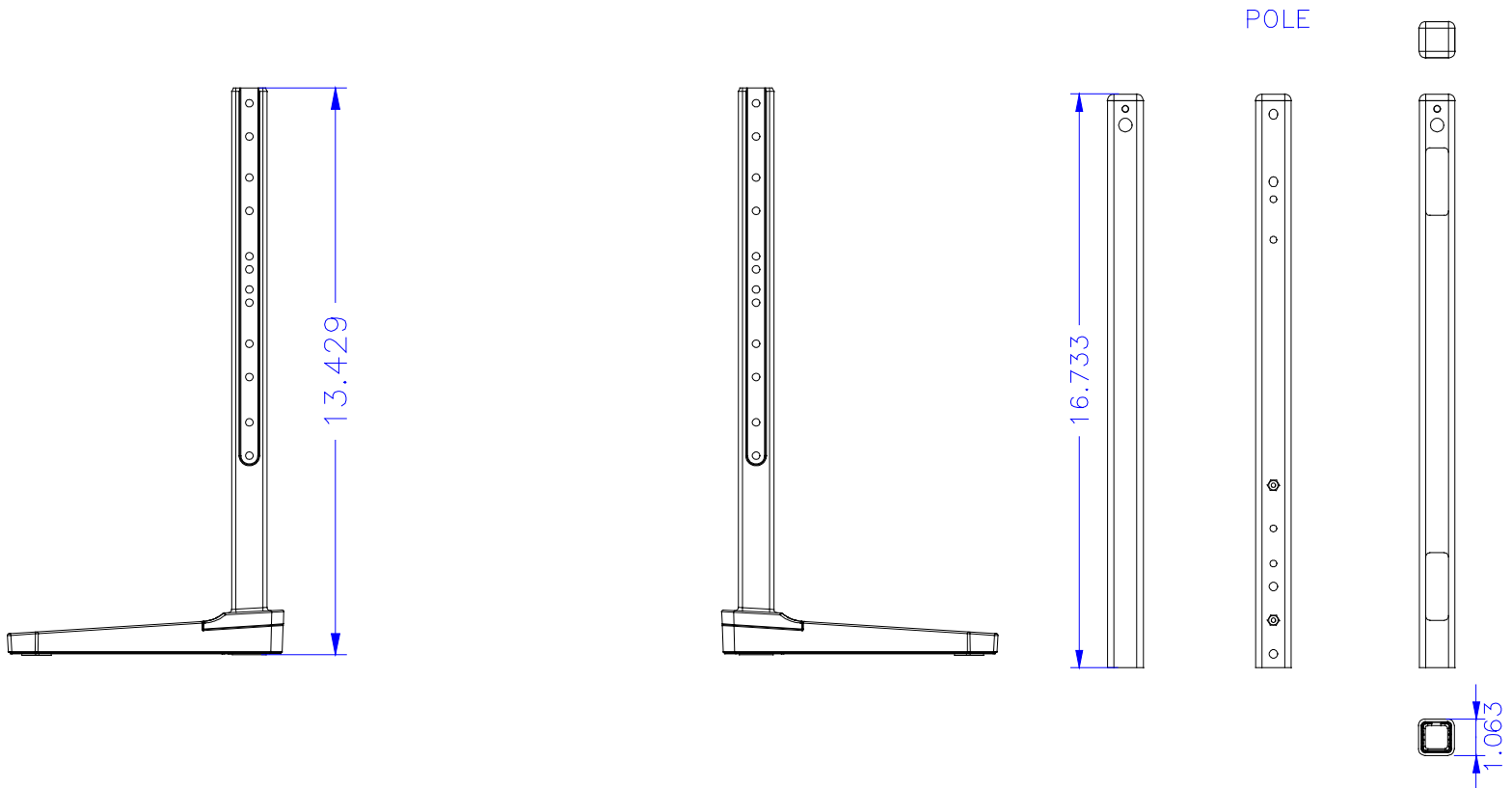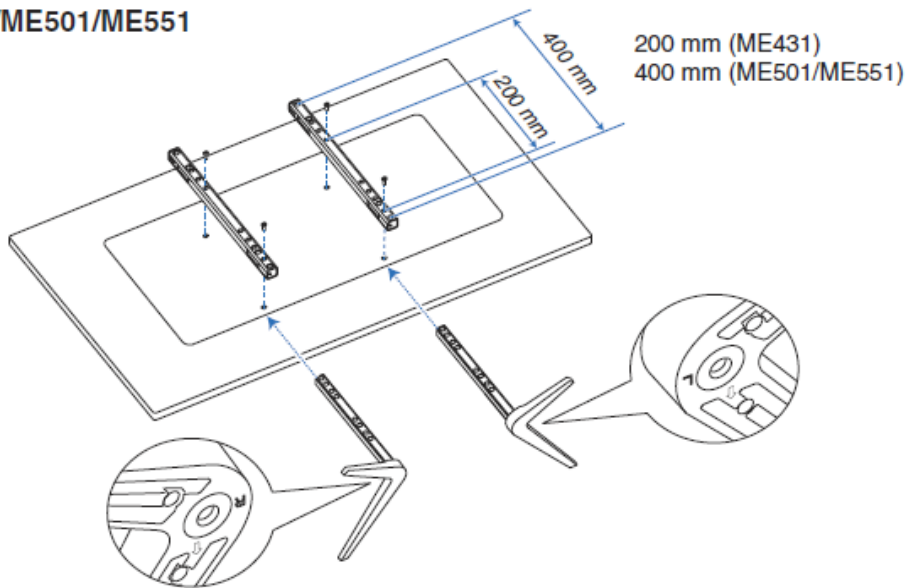NEC strongly recommends using size M8 screws (16-18mm + the thickness of the bracket and washers in length).

Table Top Stand Dimensions (ST-401 pictured below):

POLE

13.429

16.733

1.063

ME431/ME501/ME551

400 mm

200 mm

200 mm (ME431)
400 mm (ME501/ME551)

Note:
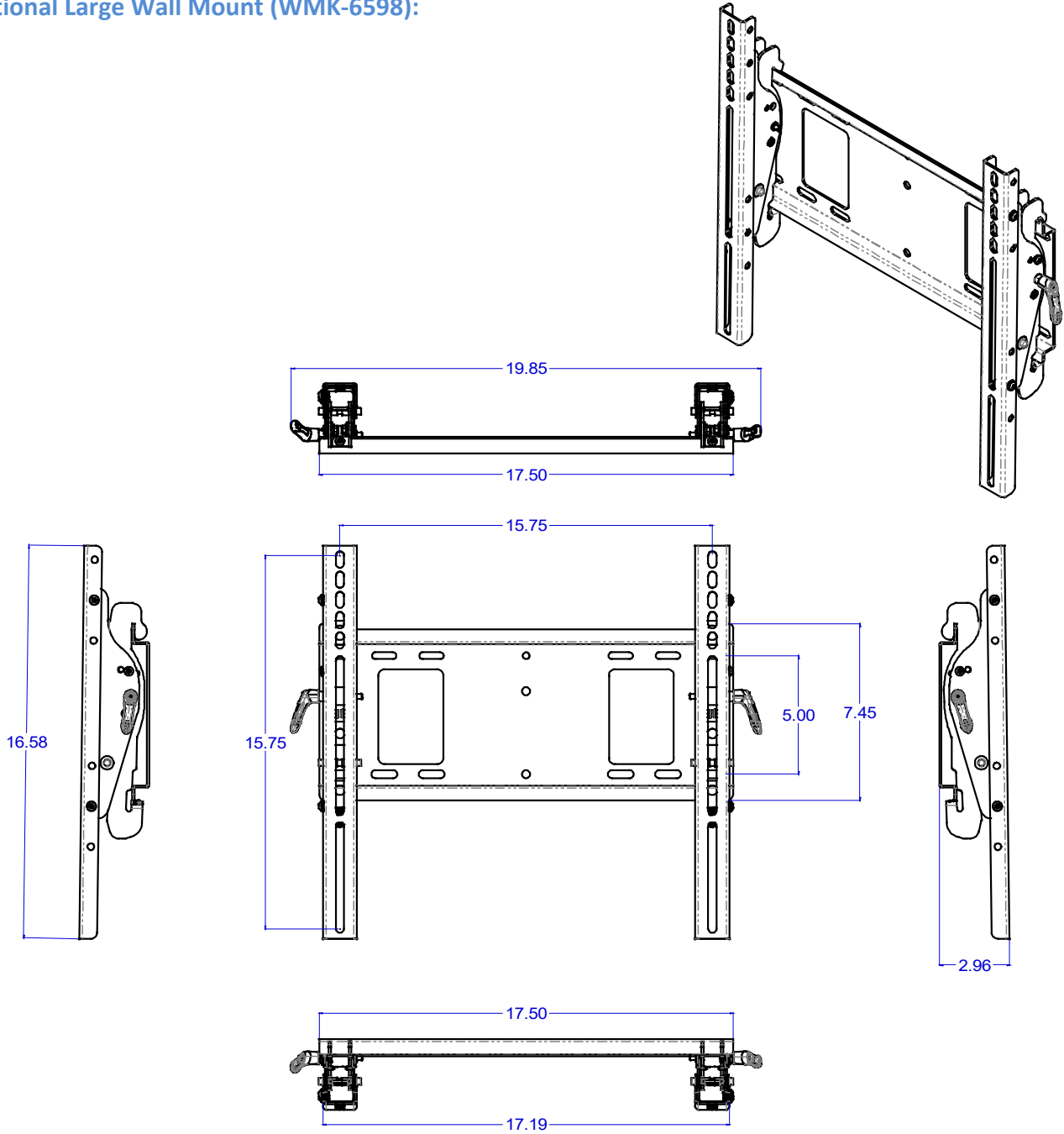**ST-43M** is compatible with the ME431, ME501 and ME551 and has the same design as the ST-401 but has additional holes to account for the 200mm x 200mm VESA hole pattern of the ME431
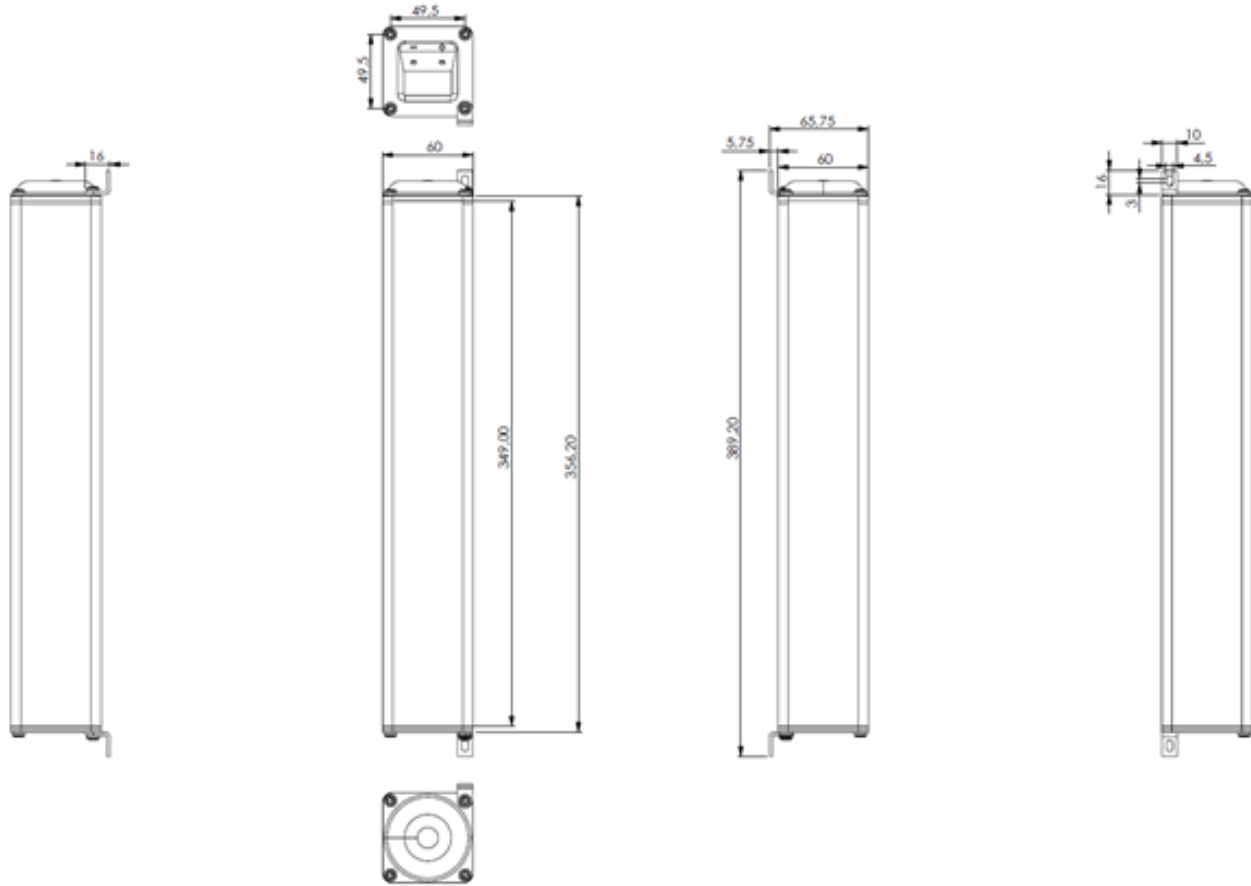**ST-401** is compatible with the ME501 and ME551
ST-65M is compatible with the ME651

Optional Large Wall Mount (WMK-6598):

19.85

17.50

15.75

16.58

15.75

5.00   7.45

2.96

17.50

17.19

## Optional Speaker Dimensions (SP-RM3a):

Intel® Smart Display Module Integration:

1. Place the monitor face down on a flat even surface that is larger than the monitor screen. Use a sturdy table that can easily support the weight of the monitor. To avoid scratching the LCD panel, always place a soft cloth, such as a blanket that is larger than the monitor's screen area, on the table before laying the monitor face down. Make sure there is nothing on the table that can damage the monitor.
2. Remove the SLOT COVER and the OPTION COVER. Note when using Intel® SDM-L type option board, slide the CENTER RAIL to the right and remove. Reverse the process to re-attach
3. Gently push in SDM-S or SDM-L module
4. Attach included Option Cover after installation of SDM device
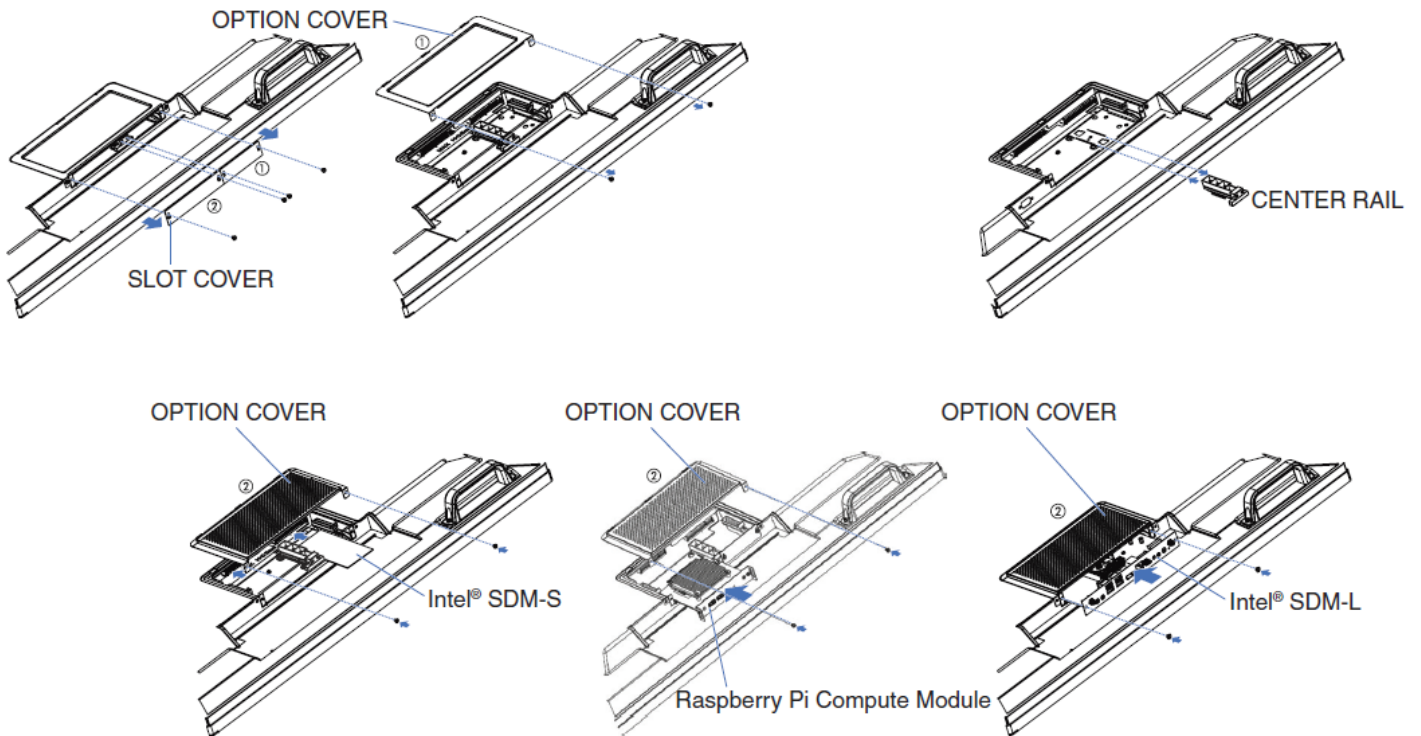
Compute Module Integration:

- Please see separate DS1-IF20CE installation guide for full integration. Image below may not represent actual back of unit but the concept is the same.
- Removing the OPTION COVER is necessary for installation
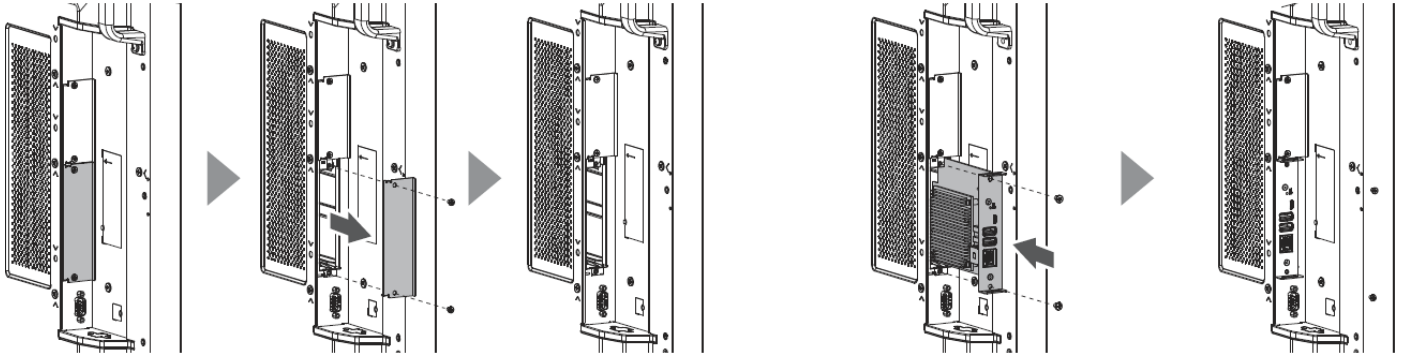
Final installed DS-IF20CE with RPI CM4 below

Input Panel:

Bottom

Side (Rotated)

ASCII Common Commands:

- This monitor supports common ASCII control commands with many other NEC projectors. For more information on this, please see our website.

Parameter

Input command

Input signal name	Response	Parameter
DisplayPort1	DisplayPort1	DisplayPort1 or DisplayPort
DisplayPort2	DisplayPort2	DisplayPort2
HDMI1	hdmi1	hdmi1 or hdmi
HDMI2	hdmi2	hdmi2
HDMI3	hdmi3	hdmi3
MP	mp	mp
OPTION	option	option

Status command

| Response	Error status
error:temp	Temperature abnormal
error:fan	Cooling fan abnormal
error:light	Inverter or backlight abnormal
error:system	System error

PD Comms Tool

- Please download PD Comms Tool and open the Communications Log by going to View → Communications Log. From here you can find any external control code necessary for your installation
- PD Comms Tool can be downloaded from here: https://www.sharpnecdisplays.us/faqs/pdcommstool/179

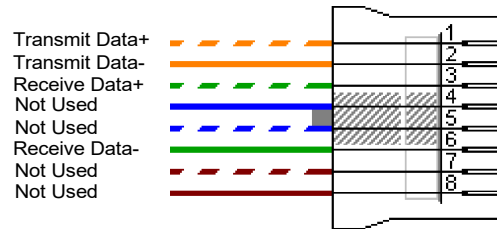## Cable Connection

Communication Protocol:

Interface: RS-232C
Communication System: Asynchronous
Baud Rate: 9600 bps
Data Length: 8 bits
Parity: None
Stop Bit   1 bit
Communication Code: ASCII
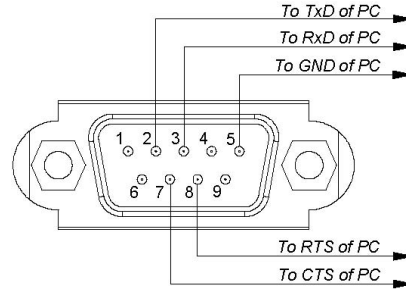
Interface: Ethernet (CSMA/CD
Communication System: TCP/IP (Internet Protocol Suite)
Communication Layer: Transport layer (TCP)
IP Address: 192.168.0.10 (default out of box)
Port Number: 7142 (Fixed)

To TxD of PC
To RxD of PC
To GND of PC
To RTS of PC
To CTS of PC

Transmit Data+
Transmit Data-
Receive Data+
Not Used
Not Used
Receive Data-
Not Used
Not Used

Browser Control:

Information and control can also be available through the HTTP browser control menu.
In order to accomplish this, type: **http://<the Monitor's IP address>/pd_index.html**
Note that the LAN Power needs to be turned on in order for the display to be controlled while the units are off.
All displays are set to the IP address 192.168.0.10 out of the box unless changed through the initial setup guide
Communicating network PC needs to be on the same subnet as display that is being communicated with

NEC   HDMI1

HOME
REMOTE CONTROL
PICTURE
ADJUST
AUDIO
SCHEDULE
MULTI PICTURE CONTROL
OSD
MULTI DISPLAY
DISPLAY PROTECTION
EXTERNAL CONTROL
ADVANCED OPTION1
ADVANCED OPTION2

NETWORK
MAIL
SNMP
AMX
CRESTRON
NAME
NETWORK PASSWORD
PD LIST
MEMO
UPDATE FIRMWARE
PORT
UPDATE FIRMWARE(ALL)

HOME

Welcome to the management and configuration web interface.
You can use the navigation menus on the left to access additional pages.

MONITOR INFORMATION

MODEL NAME	
SERIAL	45S00005TA

FIRMWARE VERSION

FIRMWARE1	0.017
FIRMWARE2	0.008
FIRMWARE3	0.011
FIRMWARE4	0.002

ETHERNET

MAC ADDRESS	58:C2:32:33:00:03
IPv4 ADDRESS	192.168.0.10
SUBNET MASK	255.255.255.0
DEFAULT GATEWAY	0.0.0.0
DNS PRIMARY	0.0.0.0
DNS SECONDARY	0.0.0.0

ID