USER MANUAL

Marine Display

NDU-190

NDU-240

NDU-260

NDU-XX0 UM.E 20250320-01

NOTICE TO USERS

- Thanks for purchasing this product NDU-190/NDU-240/NDU-260 marine display.
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- The product version may be some different from that described in this manual. Such differences will not affect the performance of the product. NSR reserves the right to continuous improvement on products both in software and in hardware without any prior notice.
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- Please read this manual carefully to ensure proper use before installation and use of the product.
- Please keep the manual for your future reference.

Safety Instructions for the Operator

	Warning Keep away from heat source or direct sunshine.
	Prohibition Don’t open the equipment. Only qualified personnel should work inside the equipment. Don’t disassemble or try to modify the equipment.
	Dangerous Turn off the power immediately when smoke or fire is emitted.

MODIFY RECORD

No.	Modify by	Date	Paragraph	Version	Reason
1	Q/A	2025/03/20		01	First edition

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1. OVERVIEW

NDU-190/NDU-240/NDU-260 (hereinafter NDU-XX0) can be used as displays for a wide range of applications such as ECDIS and radar. It complies with the standard of IEC 60945, etc.

The main features are as follows:

- Multi-size displays to satisfy different vessels.
- Large color LCD with touchscreen operation.
- Dual power supply (AC 110/220V, DC 24V), automatic switching.
- Brightness control on the panel, convenient for night navigation.

Equipment List of NDU-XX0:

No.	Item	Type	Q'ty	Remarks
1	Marine Display	NDU-190	1	One of three, standard
		NDU-240	1	
		NDU-260	1	
2	Table mounting bracket	NFB190	1	For NDU-190, optional
		NFB240	1	For NDU-240, optional
		NFB260	1	For NDU-260, optional

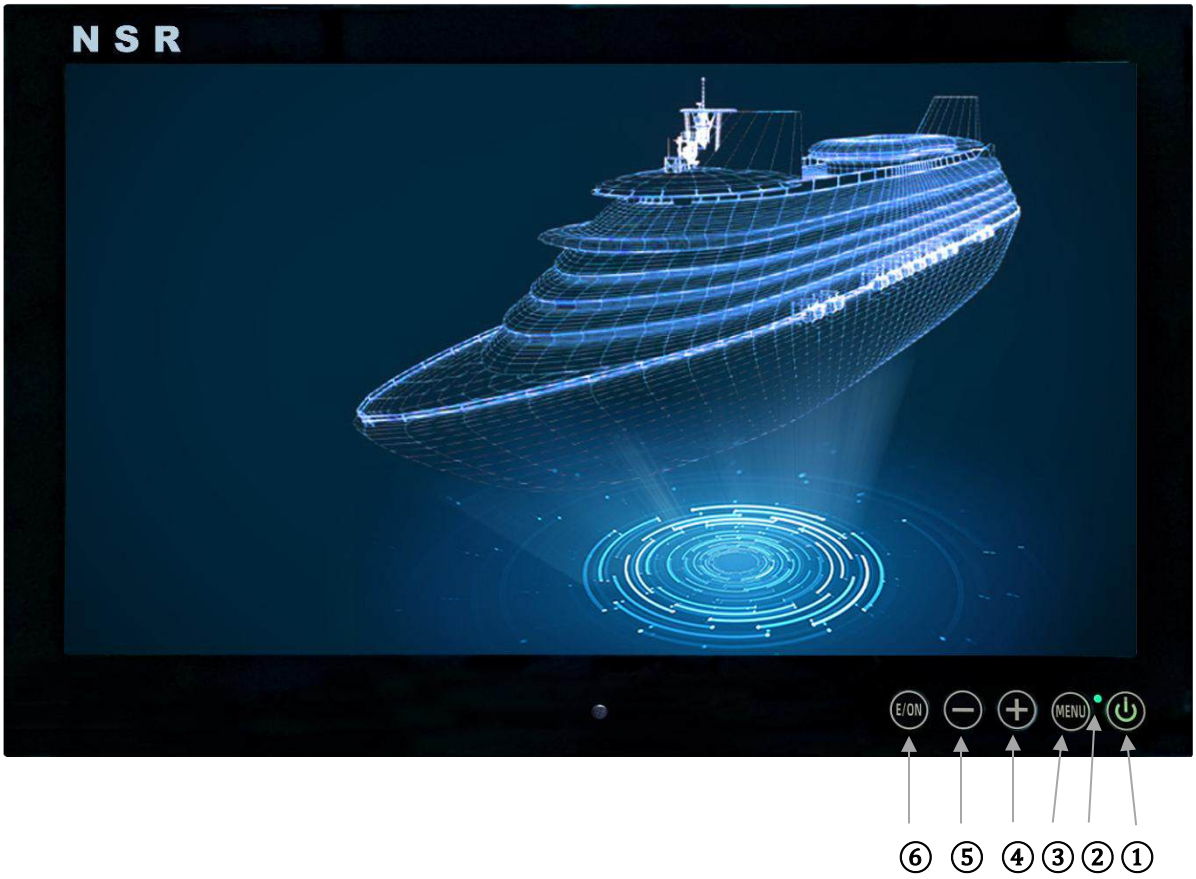
2. SPECIFICATIONS

ITEM	NDU-190	NDU-240	NDU-260
Display	19-inch color LCD	24-inch color LCD	26-inch color LCD
Active Display Area (width x height)	374.8 (w) x 299.8 (h) mm	527.0 (w) x 295.4 (h) mm	597.8 (w) x 336.3 (h) mm
Resolution (recommended)	SXGA (1280 x 1024)	HD (1920 x 1080)	HD (1920 x 1080)
Brightness	400 nits	600 nits	350 nits
Contrast	700:1		
View Angle	170		
Interface	RGB Analog x 1, DVI-D x 1, HDMI x 1, USB x 3, Audio Signal x 1, M/B x 1 (for restart)		
Power Supply	100-230VAC/0.5A, 30W 24VDC/1.5A, 30W	100-230VAC/0.6A, 40W 24VDC/2A, 45W	100-230VAC/0.5A, 30W 24VDC/1.5A, 30W
Weight (without bracket)	about 8.25kg	about 9.8kg	about 12.5kg
Environmental Conditions	Operating Temperature: -20°C ~ +70°C Storage Temperature: -25°C ~ +70°C Humidity: ≤90% RH (38°C)		

3. BASIC OPERATION

3.1 Display Description

NDU-XX0 display can be operated with keys on the panel or touch-screen.



No	Key / Indicator	Description
①	⏻	Power key. Please refer to Section 3.2. Light on: When the display is powered. Light in green: When a video signal is input. Light in red: When no video signal is input.
②	●	Input power indicator. Green (●): AC input only. Blue (●): DC input only. Cyan (●): Both AC & DC inputs.

No	Key / Indicator	Description
③	MENU	Menu and Enter key. Please refer to Section 3.4. Press to enter the menu window or the selected setting item in the menu.
④	+	● Brightness adjustment. Please refer to Section 3.3. ● Menu or setting item selection. Please refer to Section 3.4.
⑤	−	
⑥	E/ON	● ESC key: Press to Exit or return to the previous menu. ● Brightness quick adjustment (3-step). Please refer to Section 3.3. ● Main unit startup: Press and hold for 5 seconds to start the main unit, for example, ECDIS.

3.2 Power ON/OFF

- **Power On**

Press ⏻ key shortly to power on the display.

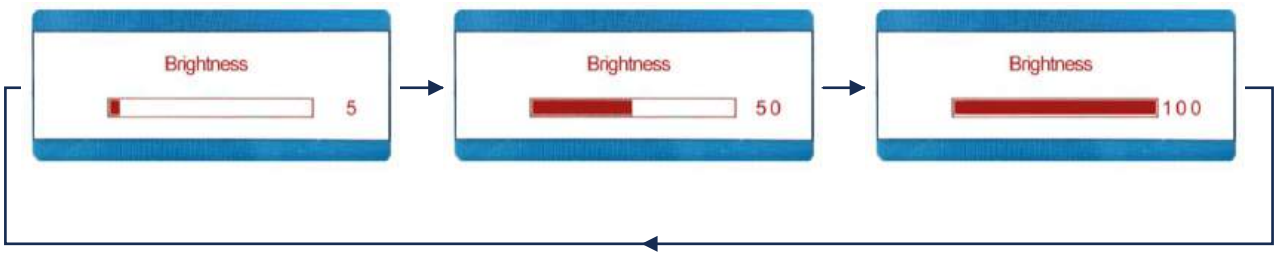
- **Power Off / Restart**

Press and hold ⏻ key for 3s to power off the display.

3.3 Brightness Adjustment

Press + / − key to open the screen brightness setting item directly and adjust the screen to brighten or darken.

Or, switch 5%, 50%, and 100% brightness quickly by pressing E/ON key as follows:



3.4 Basic Menu Operation

1) Press MENU key to enter the menu window. It includes [Luminance], [Image Setup], [Color Setup], [OSD Setup], [Reset], and [Extra] items. For example:

2) Press ⊕ / ⊖ key to select the desired menu, then press MENU key to enter the selected menu. You can also operate it with the touchscreen.

3) Press ⊕ / ⊖ key to select the setting item or parameter. Press MENU key to enter the selected item for setting. You can also operate it with the touchscreen.

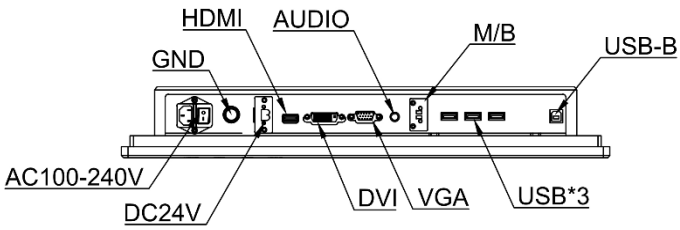
4) Press E/ON key to return to the previous menu.

4. INSTALLATION

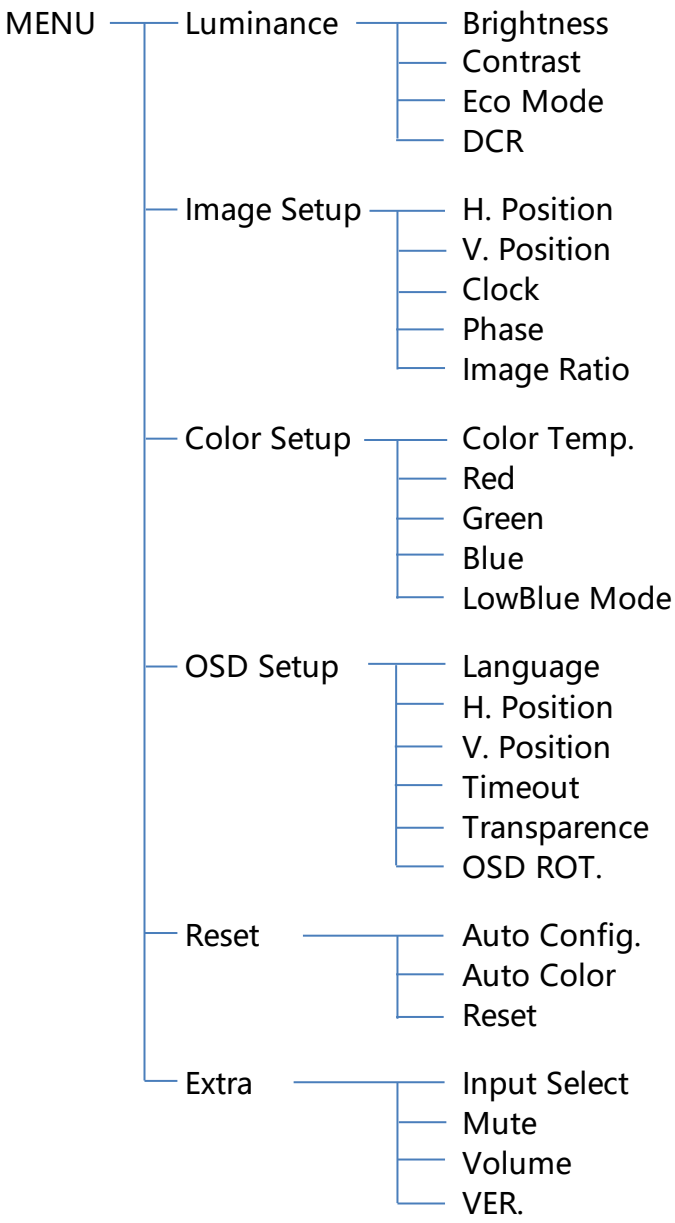
NDU-XX0 is a plug-and-play display. It can be installed on a table-top, or in flush-type. Refer to the outline drawings at the end of this manual for installation instructions. When selecting a mounting location, keep in mind the following points:

- Locate the unit away from exhaust pipes and vents.
- The mounting location should be well-ventilated.
- Mount the unit where shock and vibration are minimal.
- Locate the unit away from equipment that generates electromagnetic fields such as a motor or generator.
- Allow sufficient maintenance space at the sides and rear of the unit and leave sufficient slack in cables, to facilitate maintenance and servicing.
- Observe the following compass safe distances to prevent deviation of a magnetic compass. Standard compass: 0.5 m, Steering compass: 0.3 m.

NDU-XX0 interface:



APPENDIX I MENU TREE

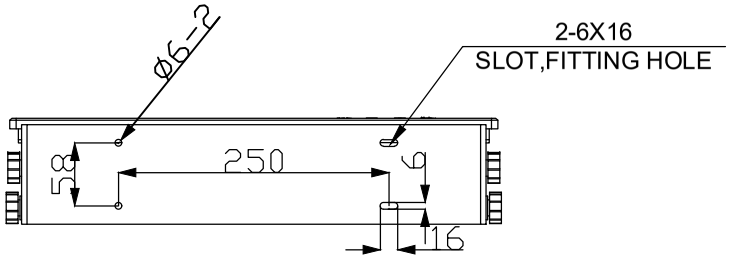


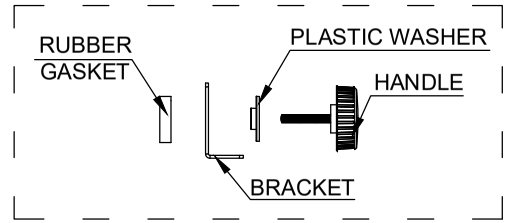
APPENDIX II INSTALLATION DRAWINGS

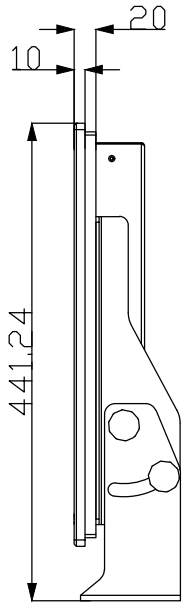
Drawing No.	Description
NDUXX0-ID-001	NDU-190 MARINE DISPLAY SIZE DRAWING
NDUXX0-ID-002	NDU-190 MARINE DISPLAY MOUNTING DRAWING
NDUXX0-ID-003	NDU-240 MARINE DISPLAY SIZE DRAWING
NDUXX0-ID-004	NDU-240 MARINE DISPLAY MOUNTING DRAWING
NDUXX0-ID-005	NDU-260 MARINE DISPLAY SIZE DRAWING
NDUXX0-ID-006	NDU-260 MARINE DISPLAY MOUNTING DRAWING

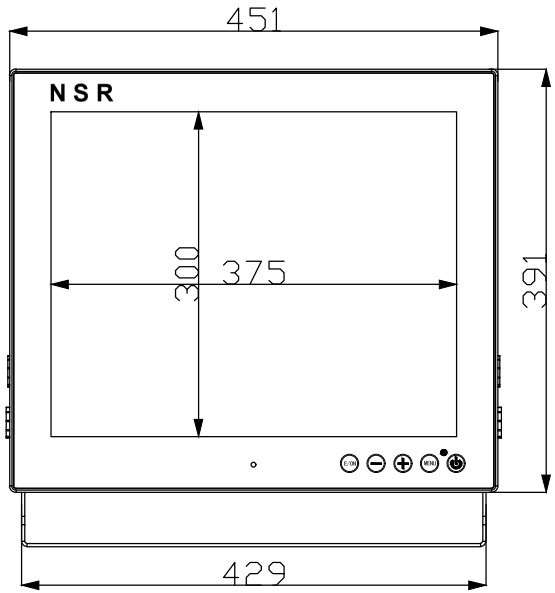
NO.	DATE	REVISION & DESCRIPTION	REVIEWED	CHECKED
0			SIGNATURE	

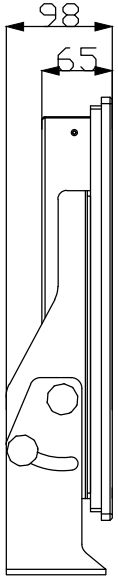
MARINE DISPLAY 19'

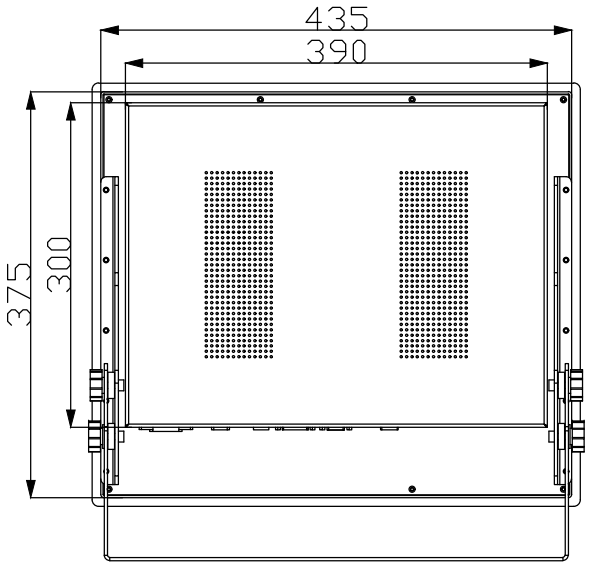


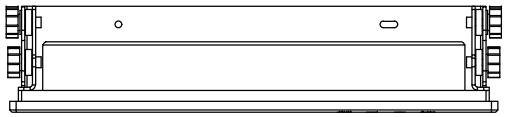


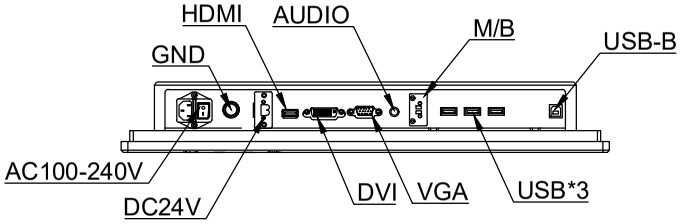












NOTE: TABLE TYPE

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CHECKED			NEW SUNRISE CO., LTD.
DRAWING			
DWG NO.	NDUXX0-ID-001		

NO.	DATE	REVISION & DESCRIPTION	REVIEWED / CHECKED SIGNATURE
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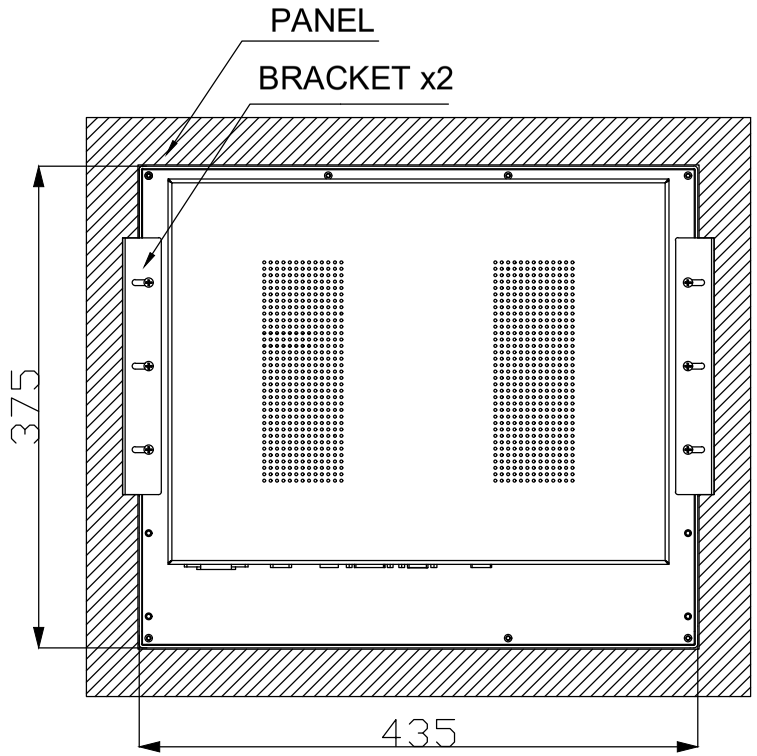
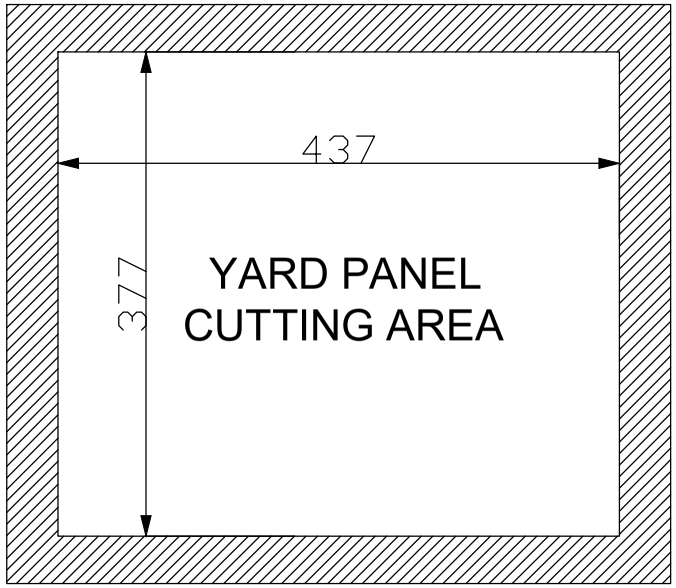
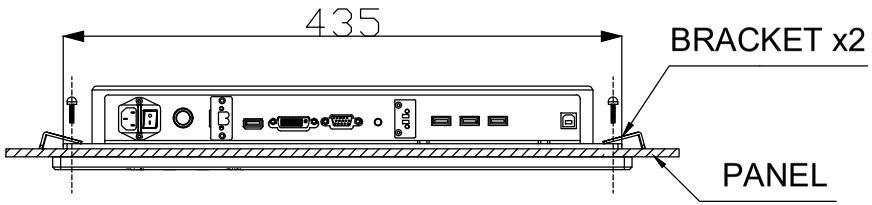
MARINE DISPLAY 19'







NOTE: FLUSH TYPE

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CHECKED		NSR	NEW SUNRISE CO., LTD.
DRAWING			
DWG NO.	NDUXX0-ID-002		

MARINE DISPLAY 24'

NO.	DATE	REVISION & DESCRIPTION	REVIEWED / CHECKED SIGNATURE
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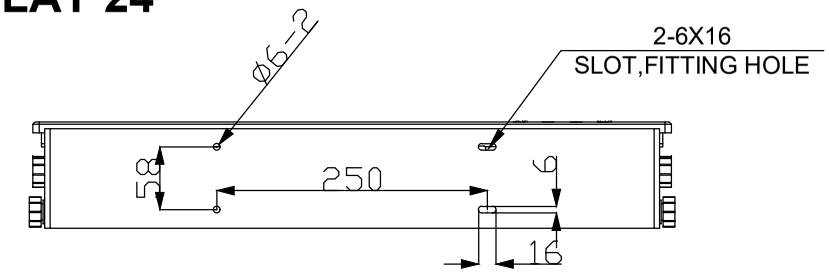

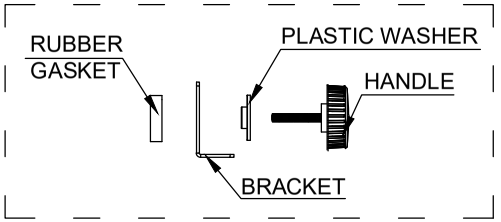

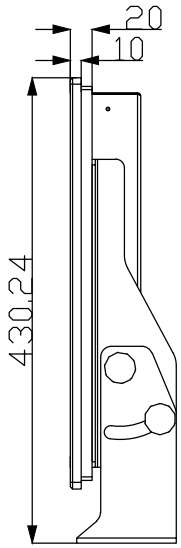

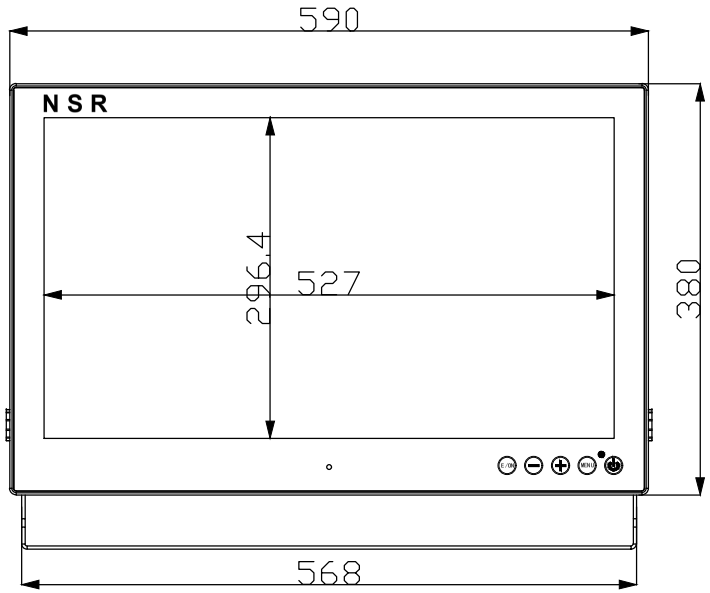

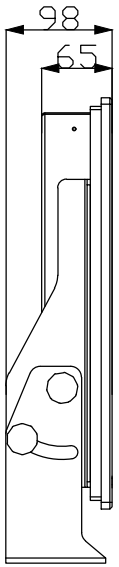

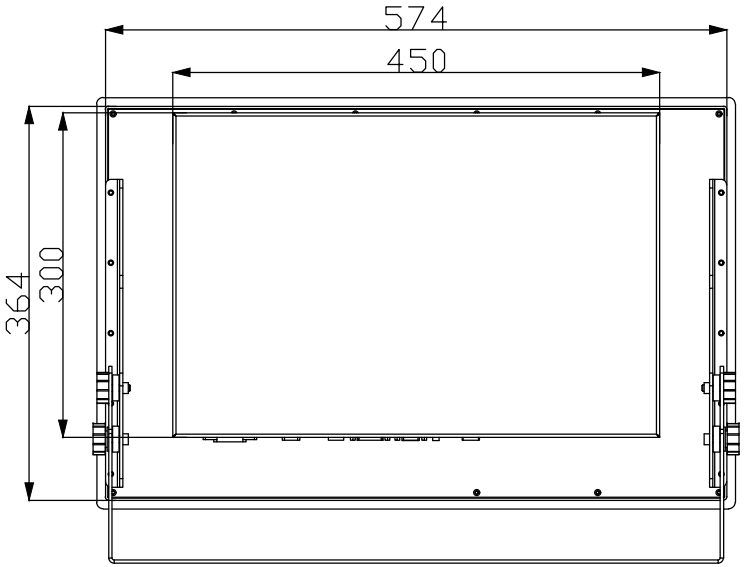

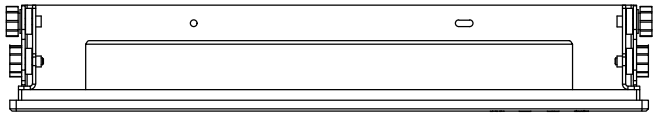

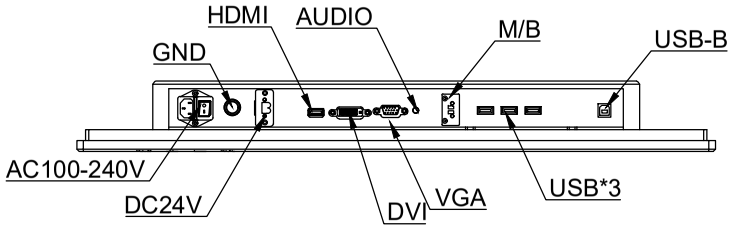

NOTE: TABLE TYPE

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DWG NO.	NDUXX0-ID-003
ITEM	
SCALE	N/S
UNIT	mm
SIZE	A4

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NO.	DATE	REVISION & DESCRIPTION	REVIEWED	CHECKED SIGNATURE
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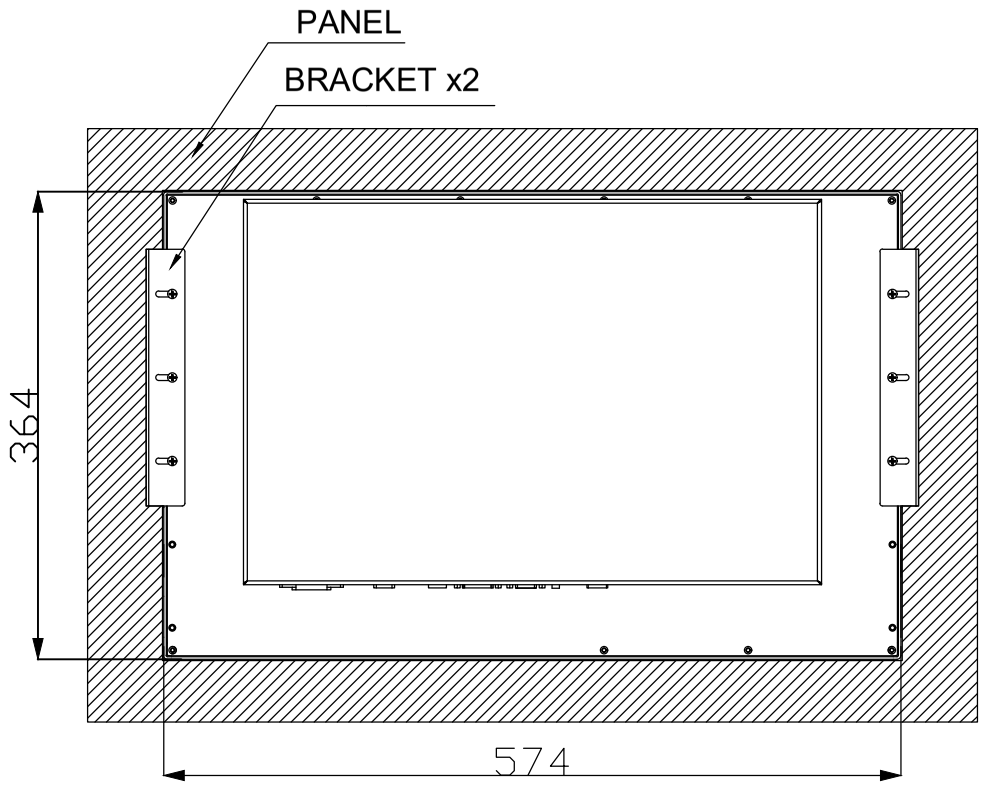
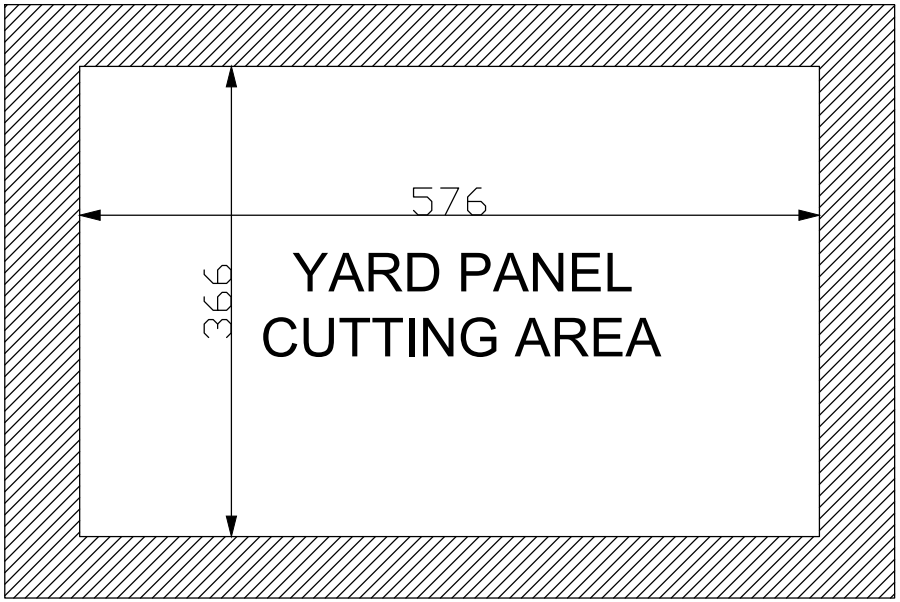
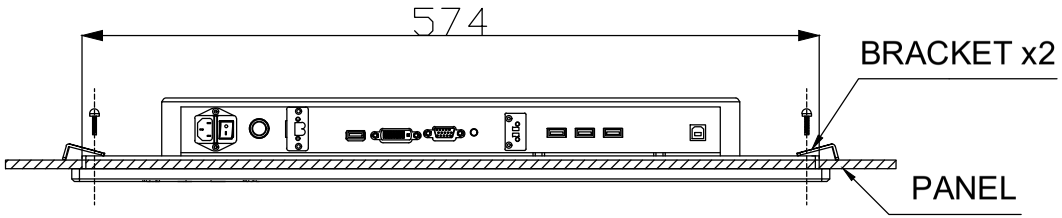
MARINE DISPLAY 24'







NOTE: FLUSH TYPE

APPLICATION	NDU-240 MARINE DISPLAY MOUNTING DRAWING		
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CHECKED		NSR	NEW SUNRISE CO., LTD.
DRAWING			
DWG NO.	NDUXX0-ID-004		

MARINE DISPLAY 26'

NO.	DATE	REVISION & DESCRIPTION	REVIEWED / CHECKED SIGNATURE
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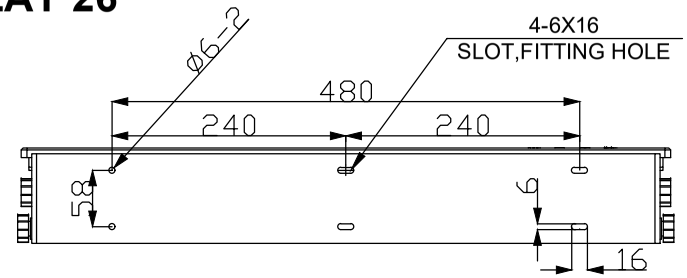

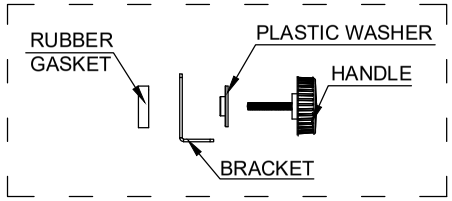

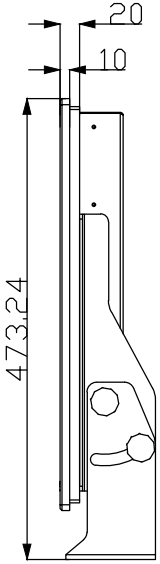

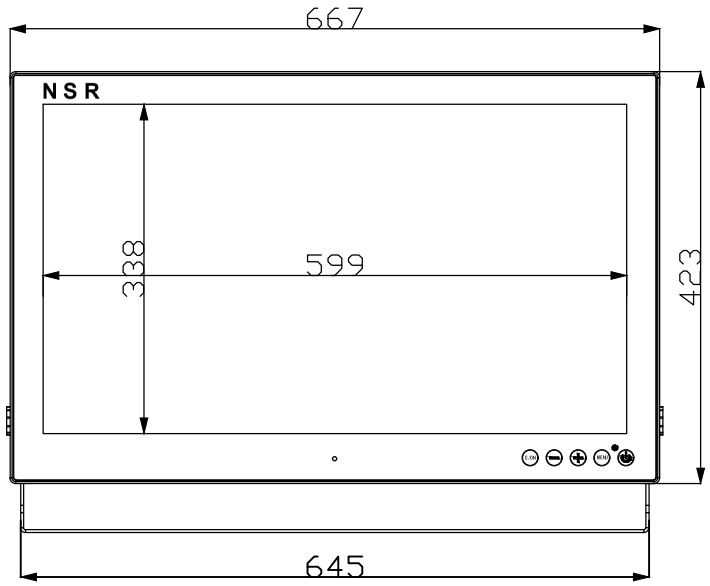

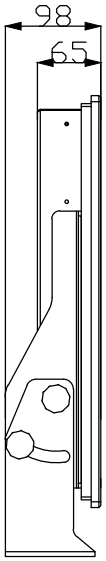

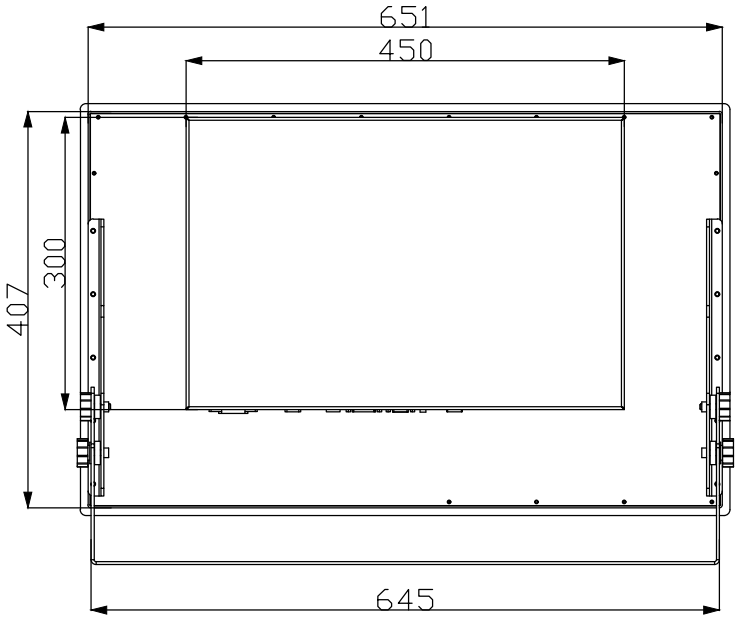

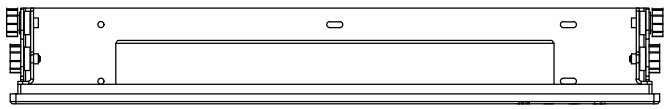

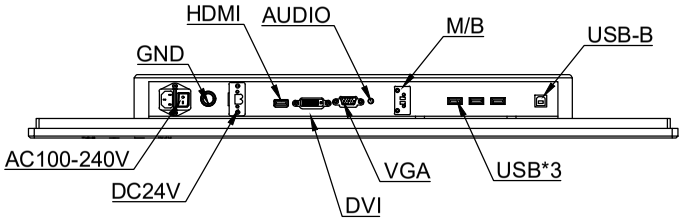

NOTE: TABLE TYPE

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APPROVAL	
CHECKED	
DRAWING	
DWG NO.	NDUXX0-ID-005
ITEM	
SCALE	N/S
UNIT	mm
SIZE	A4

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MARINE DISPLAY 26'

NO.	DATE	REVISION & DESCRIPTION	REVIEWED SIGNATURE	CHECKED SIGNATURE
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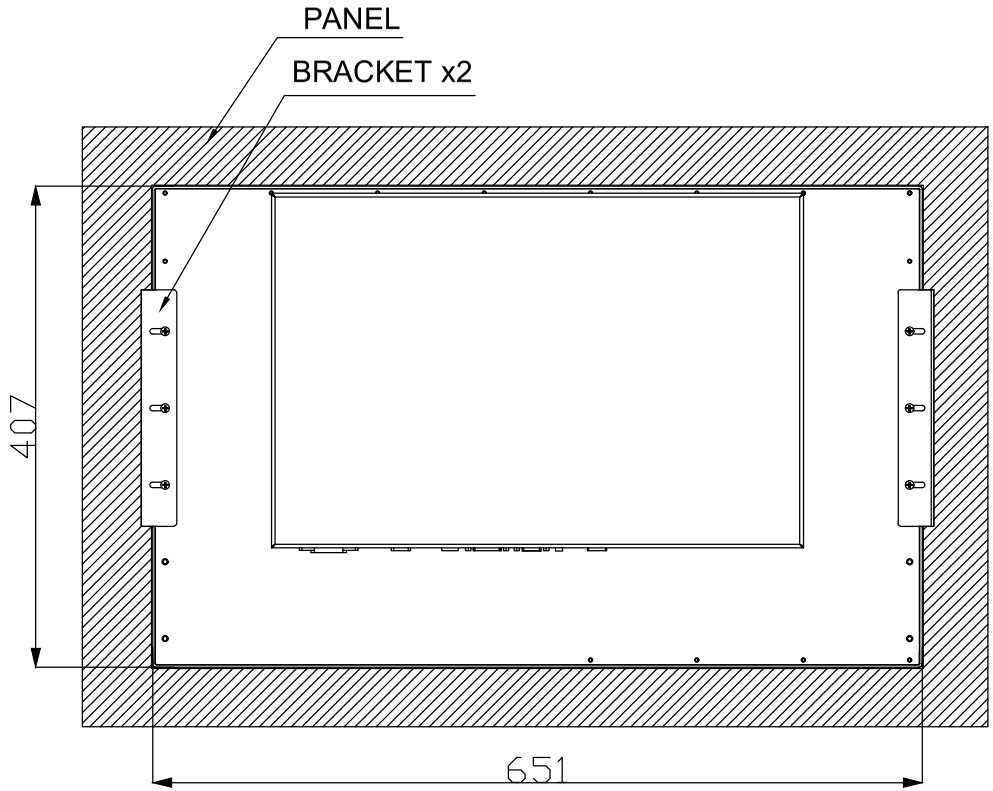

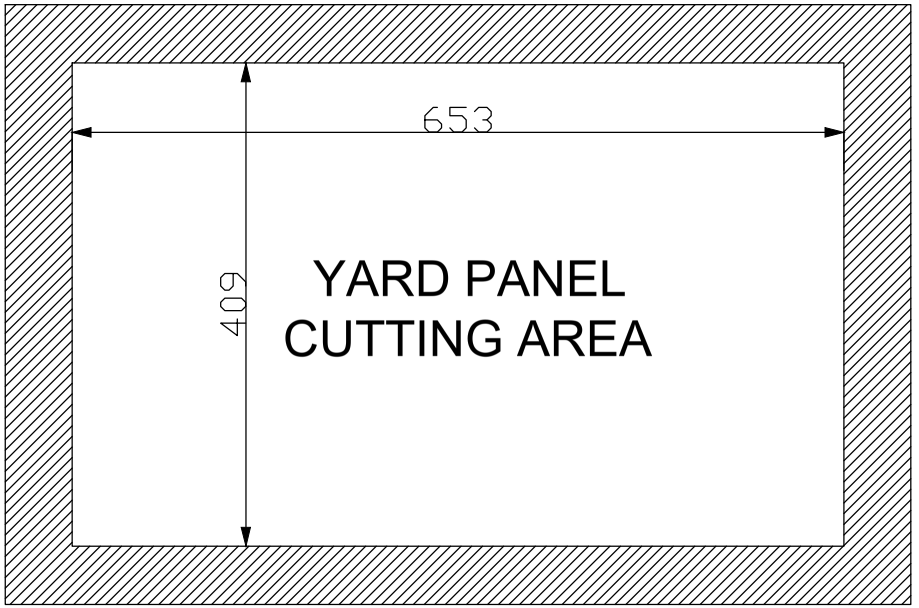

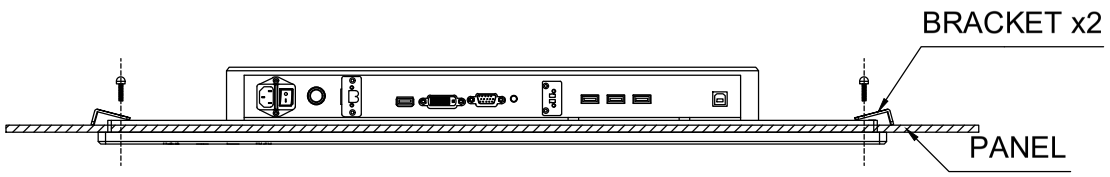

NOTE: FLUSH TYPE

APPLICATION	NDU-260 MARINE DISPLAY MOUNTING DRAWING		
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CHECKED			
DRAWING		NSR NEW SUNRISE CO., LTD.	
DWG NO.	NDUXX0-ID-006		

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March, 2025

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