



VDR JCY1900/1950 RETROFIT BRACKETS (NETWAVE)



PREMILINARY 1

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1. COMPARISION WITH NETWAVE VDR

Netwave VDR Versus JCY-1900/1950 Comparison Table

Standard specifications

Item	JCY-1900/1950	NW-4000 VDR/SVDR
Capsule	Fixed Protective Capsule Unit · <u>48 hours recording</u>	Hardened Storage Server (HSS) · 12 hours recording**
	Float-free Capsule Unit · <u>48 hours recording</u>	None
	<u>Internal storage for long term recording</u> · <u>720 hours (30 days) recording (Unremovable)</u>	
Sensor recording	LAN: 1 port (IEC61162-450, RMS) Number of connectable units: 24ch	NMEA adaptor: 8ch/ adapter Digital adaptor: 8ch/ adapter Analog adaptor: 4ch/ adapter
	Serial: 24ch IEC61162-2: 2ch (4800~38400bps) IEC61162-1: 22ch (4800bps)	
Audio recording	Bridge audio (microphone) 6 tracks x 2ch/track = 12ch VHF audio 2 tracks x 2ch/track = 4ch	Audio adapter: 4ch/ adapter Max. Mic audio: 4ch/ adapter Max. VHF audio: 1ch/adapter
Image recording	Input signal: <u>LAN(IEC61162-450)</u> Number of available inputs: 6 screens Number of screens for recording: 3 screens (standard)→ 6 screens are selectable for recording.	Input signal: RGB Radar Video adapter: 1ch/ adapter
Electric power failure	Operation continues for 2 hours with UPS. * Only bridge audio is recorded during power failure. * After power restoration, VDR automatically returns to the normal operation.	Same as JCY-1900
Operation Panel Unit	Display: <u>LCD (Character display)</u> Operation: Touch Panel * Meets the performance test demanded.	Display: LCD (Dot Matrix) Operation: Buttons. NMEA input: 2 Lan port
Stopping/restarting Recording	Operation by the Operation Panel Unit. · <u>Ensures security with a password</u>	Operation by the Bridge Control Unit
Performance test	<u>Checking the latest recorded data is available through the Operation Panel Unit.</u>	Checking the latest recorded data is available through the Bridge Control Unit.

Item	JCY-1900/1950	NW-4000 VDR/SVDR
Microphone test	Automatic test is conducted every 12 hours. Manual test is available with the Operation Panel Unit.	Automatic test is conducted every 12 hours.
Alert output	Output port: Dry contact, serial, LAN	Output port: Serial
Taking recorded data	Download software is attached. · Can select the recorded data to be downloaded from the internal storage by specifying the time span. · Recorded data of 12 hours' worth can be taken within 2.5 hours.	Recorded data of 12 hours*** · Download software is attached. · Can select the recorded data to be downloaded from the internal storage by specifying the time span.
Playback	Playback software is attached.	Playback software is attached.

* The underlined parts in JCY-1900 column meet the demands of the new specifications.

** Data items which are older than this may be overwritten with new data.

*** The data is stored for a rolling 12 hours period so that in the event of an incident, the capsule can be recovered, and an analysis of the event be conducted. Data is recorded until ship's power to the VDR fails, and then selected data is recorded for a further 2 hours.

Option specifications

Item	JCY-1900/1950	NW-4000 VDR/SVDR
RGB input of the image recording signal	Input is possible with the optional Frame Grabber Unit (FGU). Number of RGB inputs: 2ch Connectable maximum number of FGU: 3 units * 2ch/unit x 3 units	Possible with Video adapter VW-4445.
Dry contact signal Input *	Input is possible with the optional Digital Signal Converter (DSC). Number of input dry contacts: NCT-82: 32ch NCT-83: 64ch	Possible with optional Veiland DCU.
Analog signal input **	Input is possible with the optional A/D Convert Board (ADC). Number of channels: 8ch * Can mount on Digital Signal Converter (DSC).	Possible with optional Veiland DCU.
Sensor input expansion	Expandable with the Data Acquisition Unit (DAU). IEC61162-2: 2ch IEC61162-1: 8ch	Expandable with additional NMEA/ Digital adapter
Gyro input	Input is possible with the Gyro I/F Board (GIF).	

Equipment Comparison

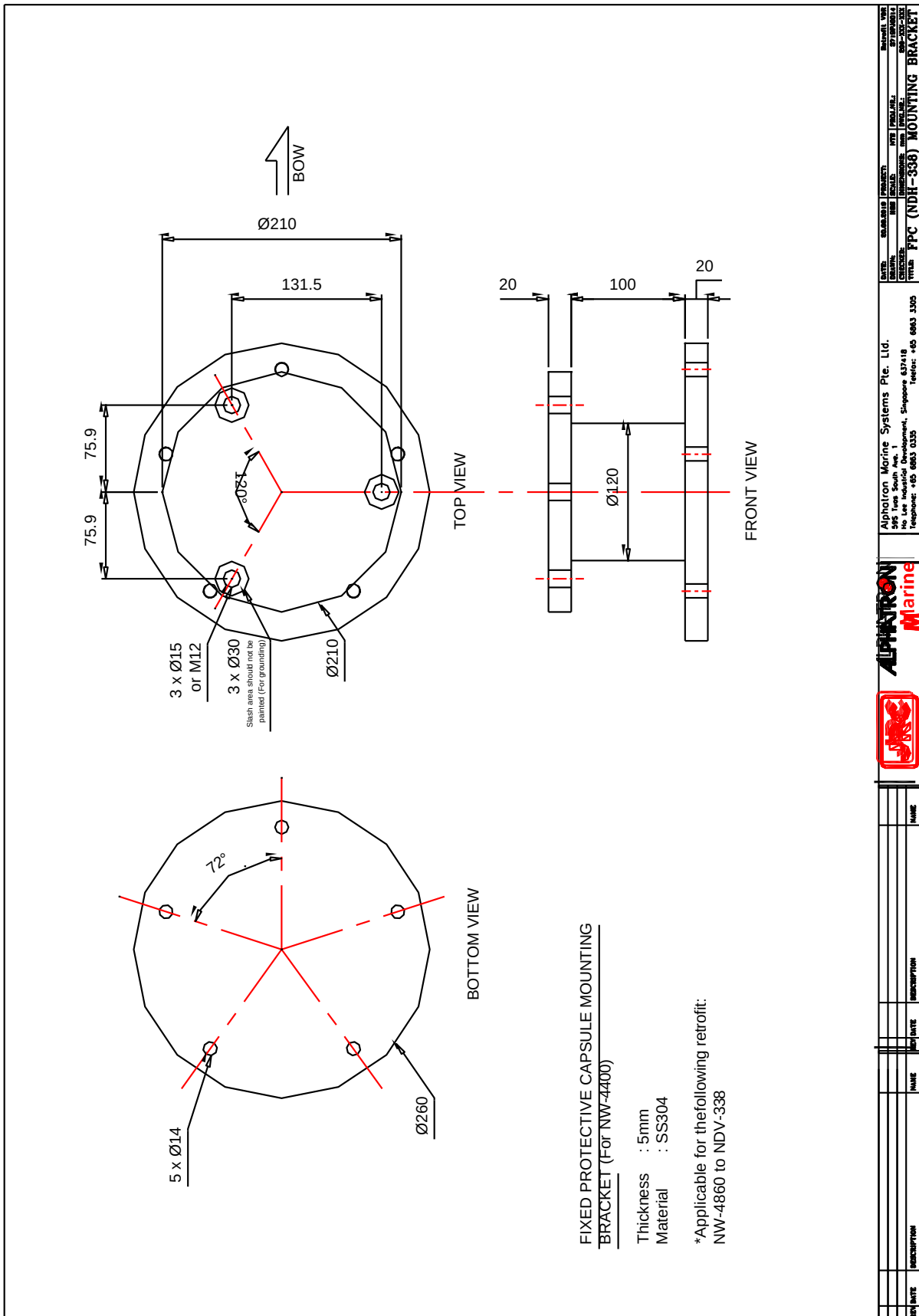
*Standard and option specification

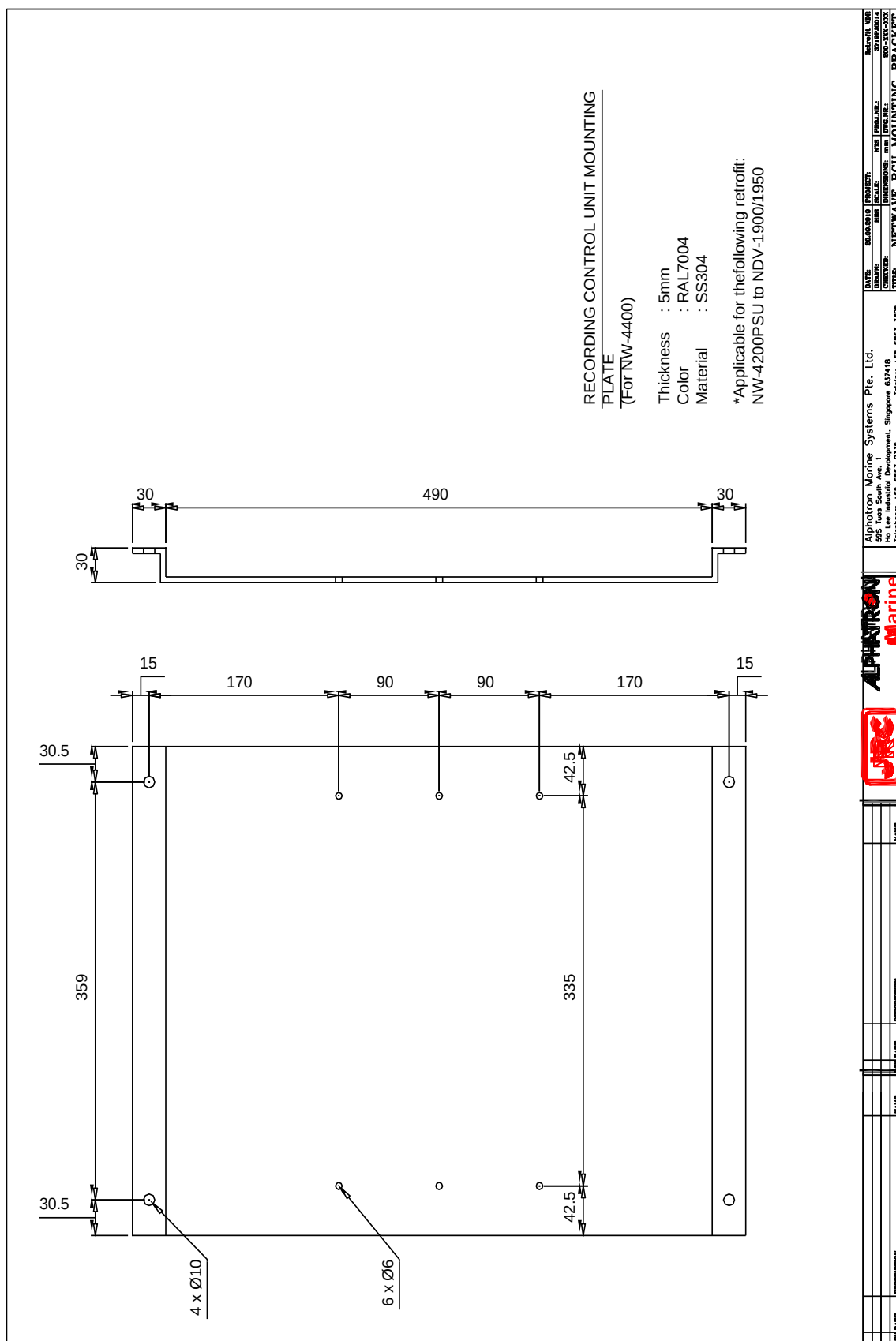
ITEMS	JCY-1900	JCY1950	NW-4000 VDR/SVDR
Fixed Protective Capsule Unit (PFC)	NDH-338	NDH-338 or NDH-339	NW-4800
Float Free Capsule Unit (FFC)	NDH-339		
Junction Box	NQE-770A		
Recording Control Unit (RCU)	NDV-1900	NDV-1950	NW4860-1000
Operation Panel Unit (OPU)	NCG-1900	NCG-1950	NW4010
Microphone Unit	NVT-181		NW-4420
Waterproof Microphone Unit	NVT-182		NW-4422
Digital Signal Converter (DSC)	NCT-82 (32ch) or NCT-83 (64ch)		NW-4400
Data Acquisition Unit (DAU)	NCT-84		NW-4400
Frame Grabber Unit (FGU)	NWP-69		
NSK Interface Unit			
Radar Interface Unit			
WaveNet Bus Coupler			

Not Applicable
 Bracket/ Plate Needed
 No Bracket/ Plate Needed
 New Installation (Same location)

JCY-1900/1950	NW-4000 VDR/SVDR
Fixed Protective Capsule	Bracket Needed
Float Free Capsule	New Installation
Recording Control Unit	Bracket Needed
Operation Panel Unit	New Installation
Microphone Unit	New Installation
Waterproof Microphone Unit	New Installation
Digital Signal Converter	New Installation
Data Acquisition Unit	New Installation
Frame Grabber Unit	New Installation

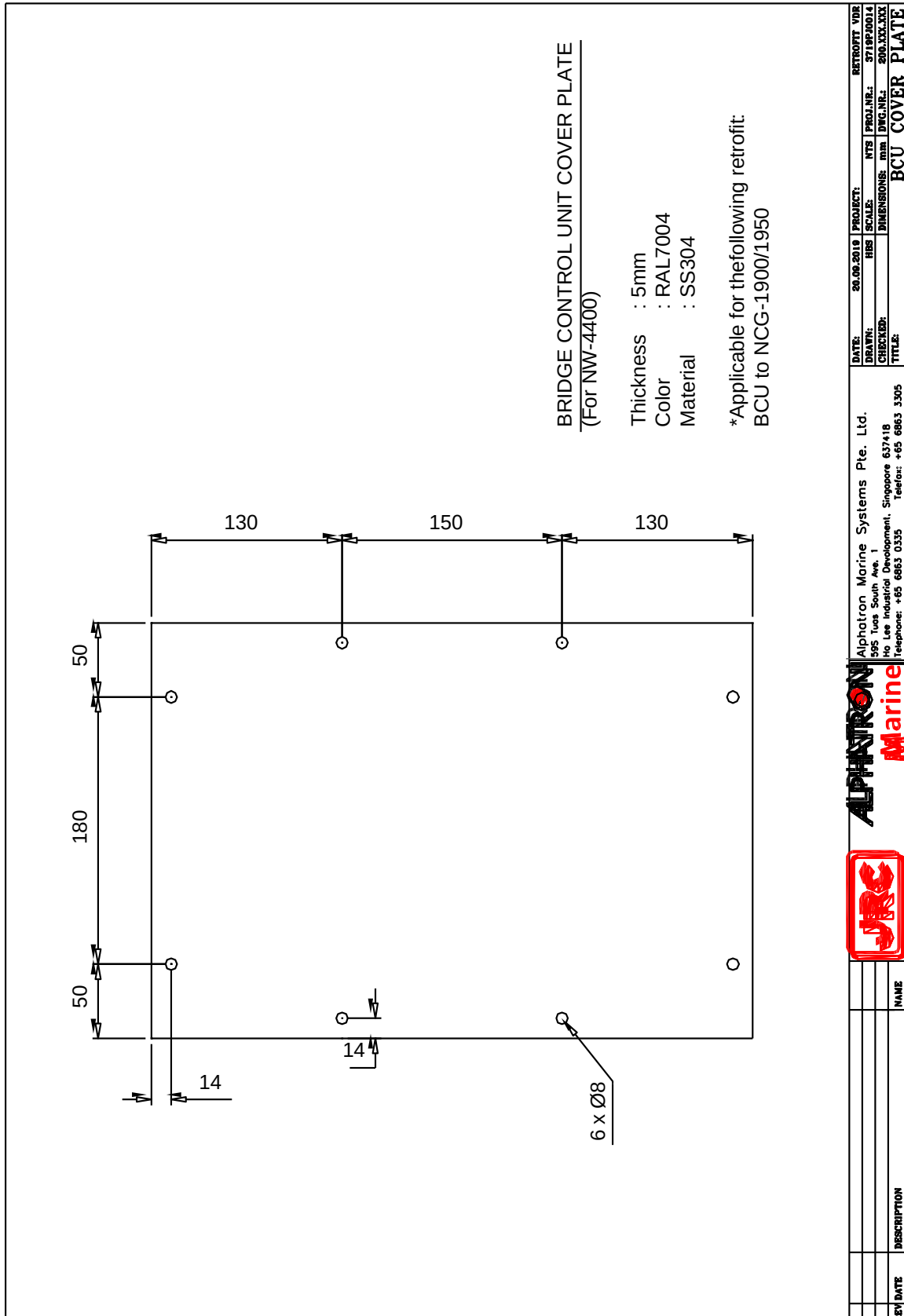
Fixed Protective Capsule (NDH-338) Mounting Bracket





Bridge Control Unit Cover Plate

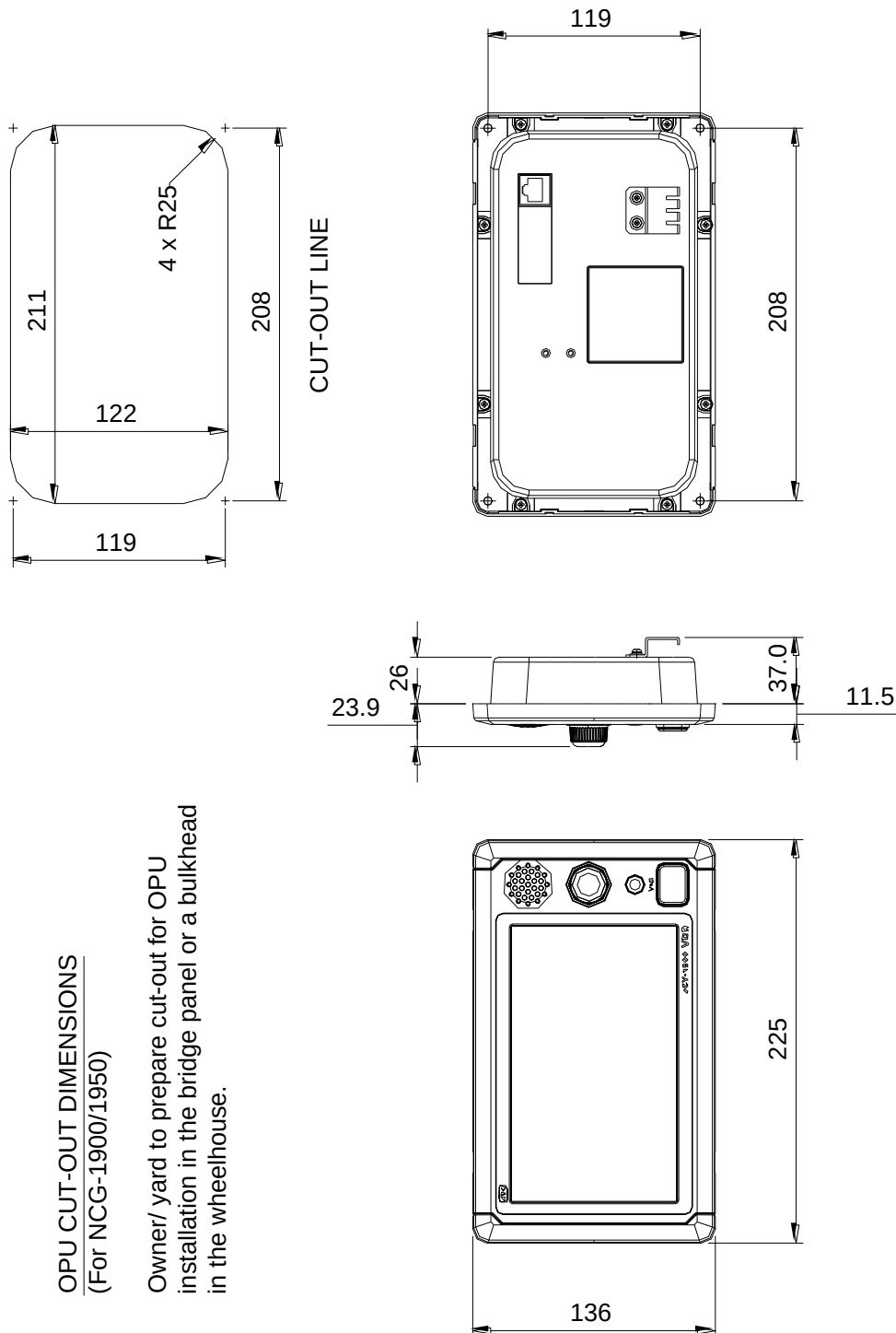
After removing BCU, use below plate to cover existing cut-out.



Operation Panel Unit Cut-Out

OPU CUT-OUT DIMENSIONS (For NCG-1900/1950)

Owner/ yard to prepare cut-out for OPU installation in the bridge panel or a bulkhead in the wheelhouse.



REV	DATE	DESCRIPTION	NAME	DATE	20.09.2019	PROJECT:	DATE:	REVISION
						HBS	3719PJ0014	
						NTS	3719PJ0014	
						SCALE:	3719PJ0014	
						CHECKED:	3719PJ0014	
						DIMENSIONS:	3719PJ0014	
						TITLE:	3719PJ0014	
						OPU (NCG-1900/1950) CUT-OUT	3719PJ0014	

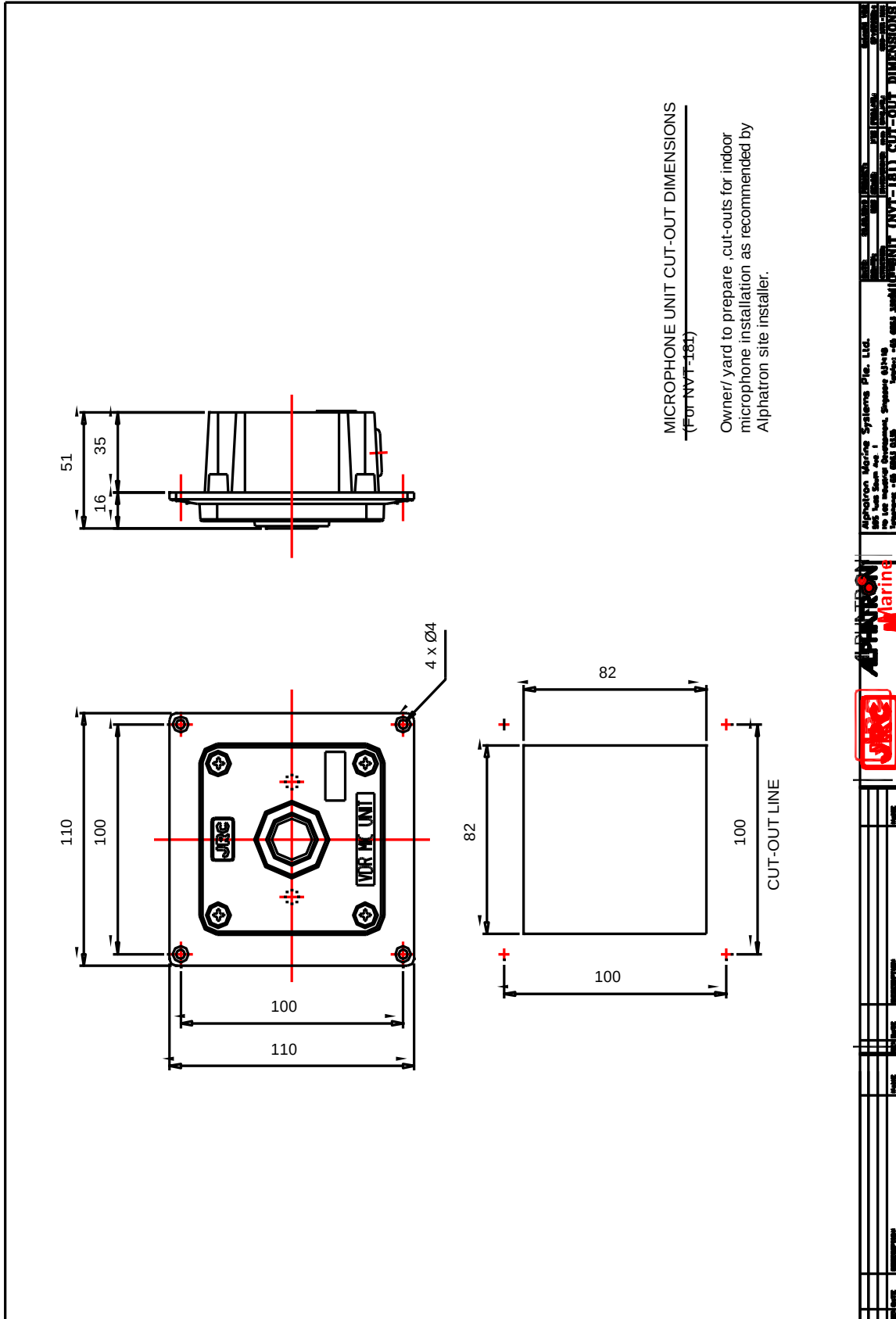
ALPHATRON
Marine



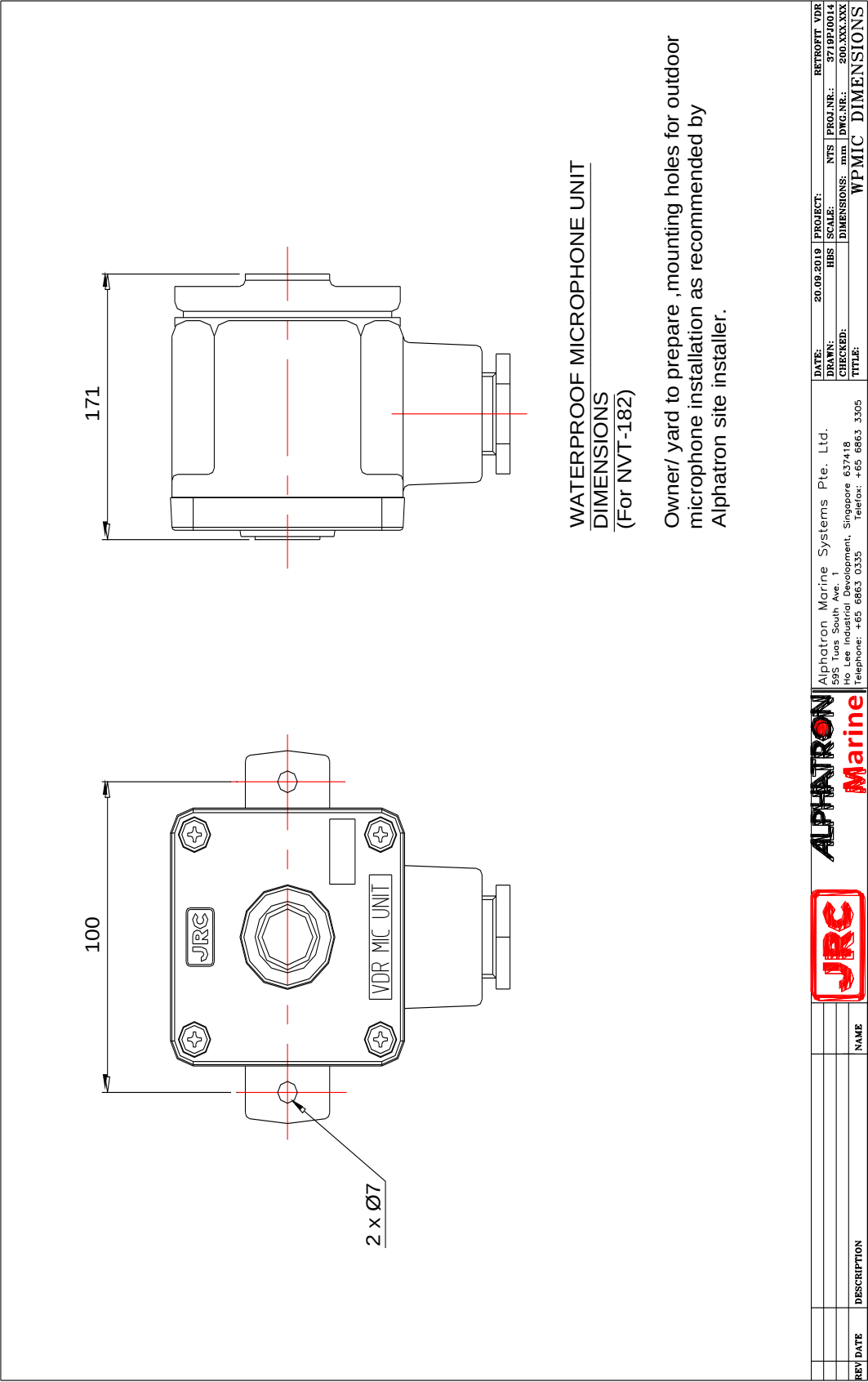
Alphatron Marine Systems Pte. Ltd.
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H-1 Lee Industrial Development, Singapore 637418
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Indoor Microphone Cut-Out

After removing flush mount or bulkhead mount microphone, new cut-out to be made over existing location.

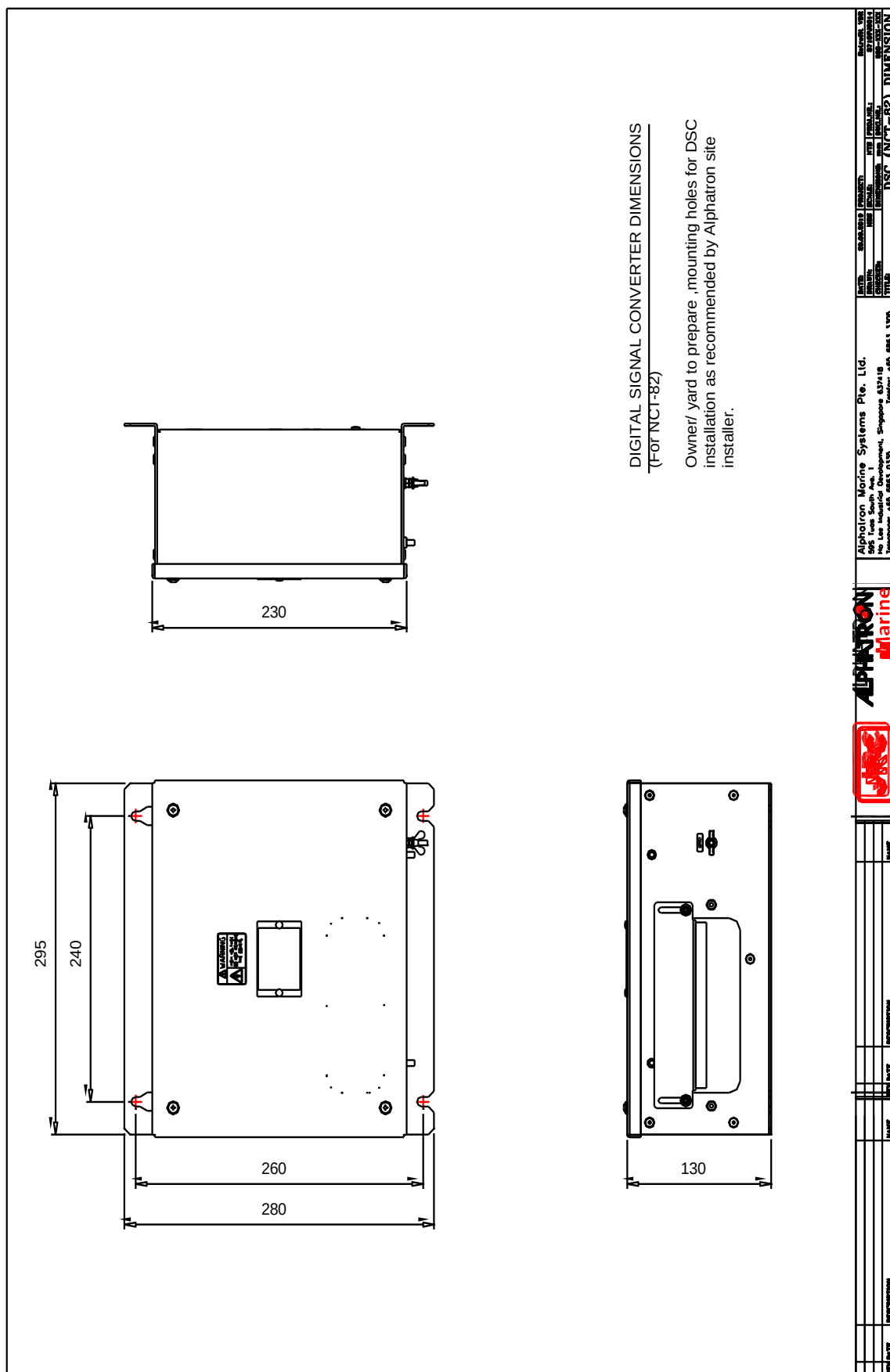


Indoor Microphone Cut-Out



DIGITAL SIGNAL CONVERTER DIMENSIONS (For NCT-82)

Owner/ yard to prepare ,mounting holes for DSC installation as recommended by Alphantron site installer.



Digital Signal Converter (NCT-83) & Data Acquisition Unit (NCT-84) Dimensions

