

# JRC

## JMA-9800 Series Large-scale Marine Radar System



JRC's advanced technologies have been integrated into the large-scale marine radar system employing a 29" color display.

**JRC** *Japan Radio Co., Ltd.*

# JRC's advanced technologies have been integrated into the large-scale marine radar system employing a 29" color display.

The JMA-9800 series is a newly developed color radar system made possible by JRC's advanced technologies in pursuit of the ultimate in radar performance. The X/S-band, 2-unit/3-unit, 25/30 kW 29" system conforms to IMO (International Maritime Organization) specifications. The latest in high-performance processors brings about a highly software based radar system providing more functionality and superior radar performance.

## Features

### Enhanced Processing Software

Software signal processing has been attained by the latest high performance processors.

- High-performance signal processing that would be nearly impossible for hardware to handle, situation-based automatic adjustments for sea clutter and rain clutter, and an easy-to-see display.
- ARPA acquisition and tracking performance has been improved by applying image processing technology, thereby greatly reducing transfer or loss of the target and providing for stable target tracking.



### System construction featuring easy operation

Basic operations and major functions can be operated with the fewest number of carefully chosen direct keys. In addition, many other useful function keys can be accessed using simple operating procedures with the keys under the hidden cover or by making selections from the display menus. Furthermore, by utilizing the software buttons on the monitor, operation of the menu setting functions have been made easy, which is convenient for rapid response when necessary.

- Use of an optical, uniquely shaped, maintenance-free trackball eliminates unintentional movement of the cursor caused by ship vibrations and increases visual identification.
- An ergonomically designed trackball with the feel of a computer mouse.

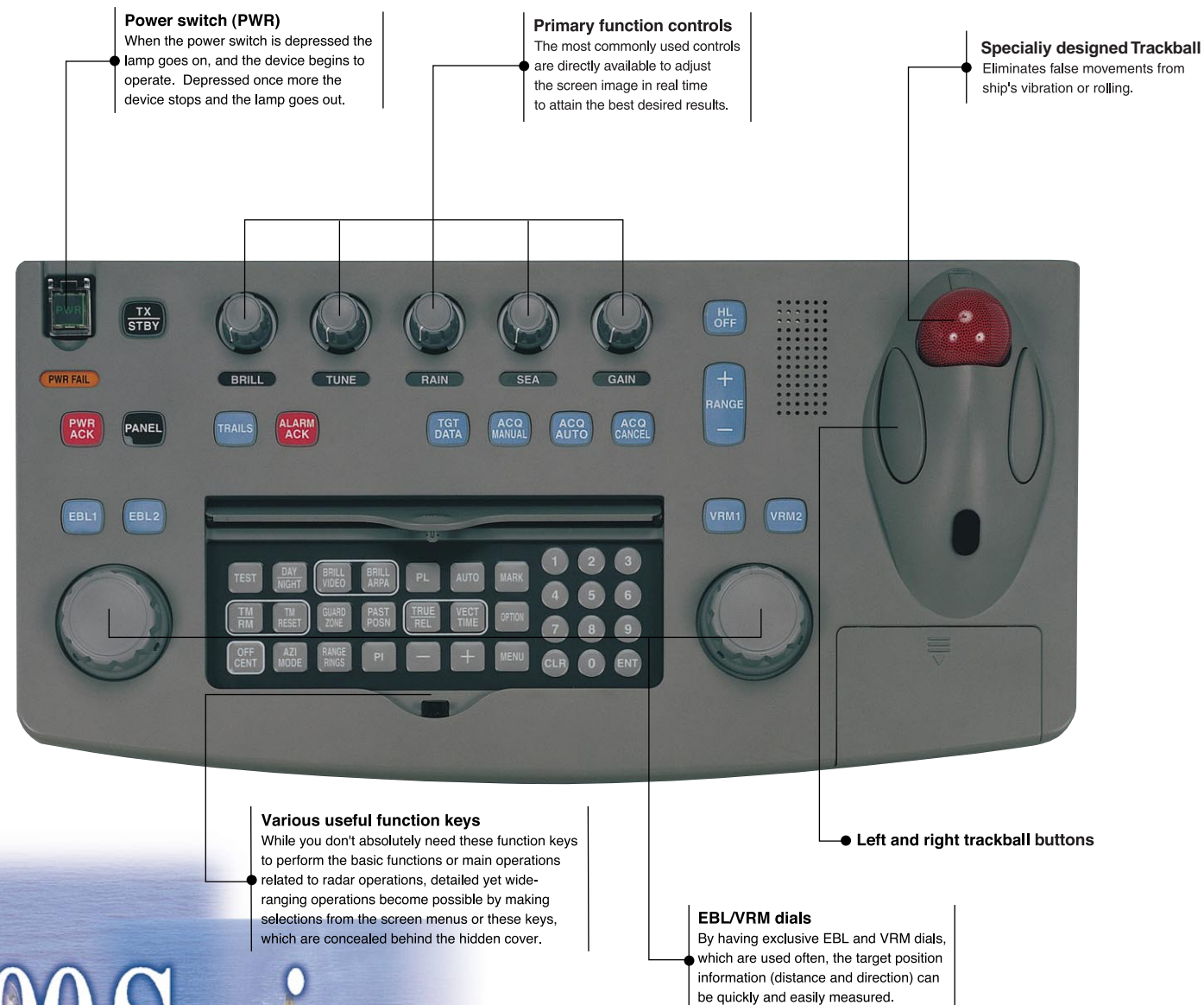
### Self-diagnostic/ Online maintenance diagnostics program Capability

All functions in the system are monitored by built-in self-diagnostic programs.

Also the data available from the self-diagnostic program can be used for JRC's Online Maintenance System.

### Bridge system accommodation

Ergonomic console conforming to IMO NAV45/6\*1 regulating the bridge equipment. It can be easily combined with the ECDIS and the Conning Display allowing for an IBS system.



# JMA-9800 Series

Large-scale marine radar system employing a 29" color display



\*It is possible to conform to the regulations by adjusting table position

# JMA-9822-6XA JMA-9822-9XA

X-band  
25kW transmitting output



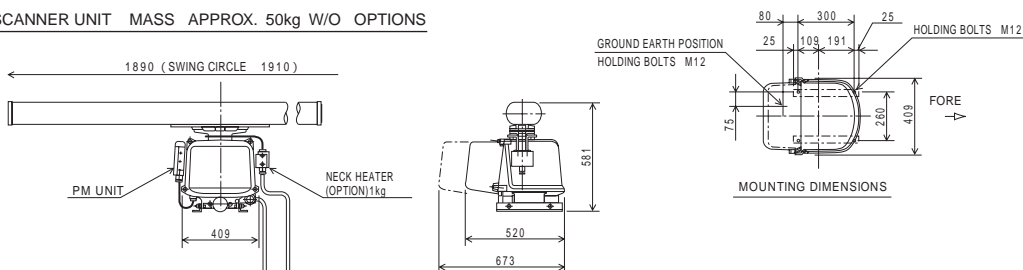
NKE-1052-6 (6 feet)



NKE-1052-9 (9 feet)

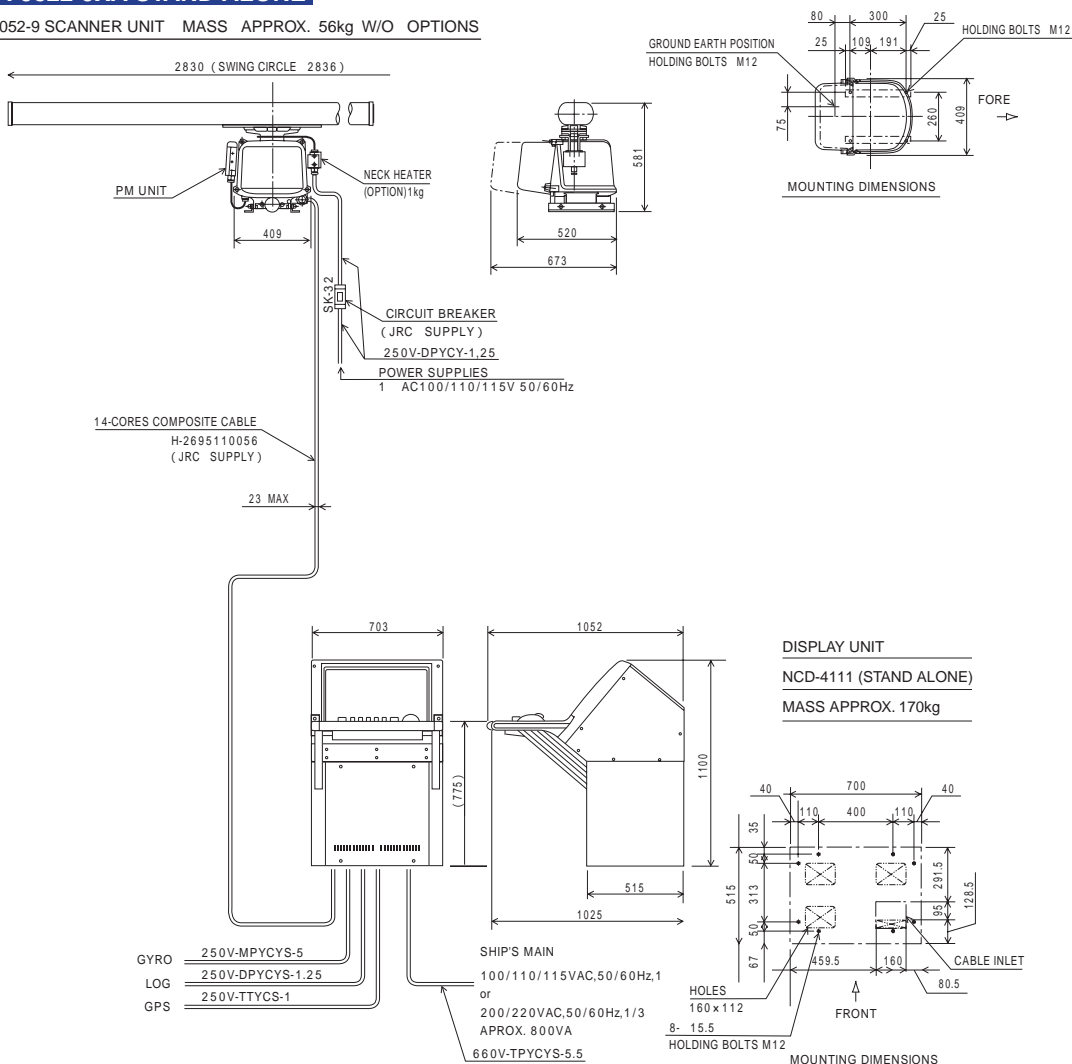
## JMA-9822-6XA STAND ALONE

NKE-1052-6 SCANNER UNIT MASS APPROX. 50kg W/O OPTIONS



## JMA-9822-9XA STAND ALONE

NKE-1052-9 SCANNER UNIT MASS APPROX. 56kg W/O OPTIONS



Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.

( UNIT : mm )

# JMA-9822-6XA JMA-9822-9XA

X-band  
25kW transmitting output



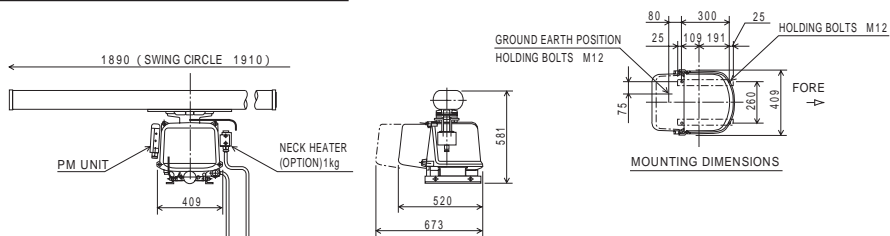
**NKE-1052-6 (6 feet)**



**NKE-1052-9 (9 feet)**

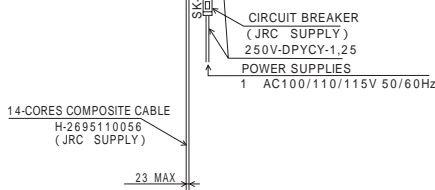
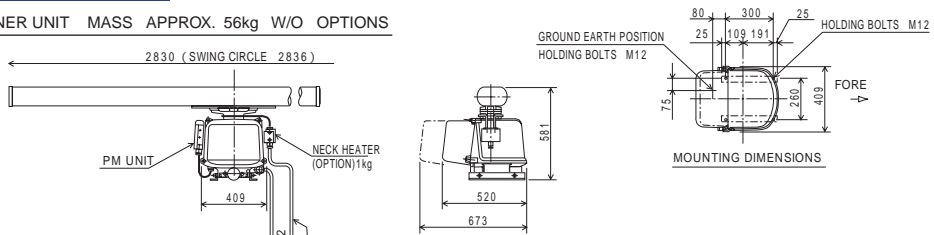
## JMA-9822-6XA DESK TOP

NKE-1052-6 SCANNER UNIT MASS APPROX. 50kg W/O OPTIONS

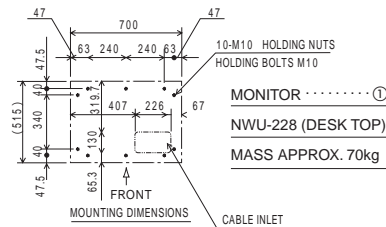


## JMA-9822-9XA DESK TOP

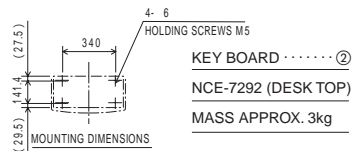
NKE-1052-9 SCANNER UNIT MASS APPROX. 56kg W/O OPTIONS



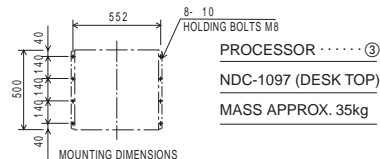
**DISPLAY UNIT**  
NCD-4111 (DESK TOP)  
(①+②+③)



**MONITOR** ..... ①  
NWJ-228 (DESK TOP)  
MASS APPROX. 70kg



**KEY BOARD** ..... ②  
NCE-7292 (DESK TOP)  
MASS APPROX. 3kg



**PROCESSOR** ..... ③  
NDC-1097 (DESK TOP)  
MASS APPROX. 35kg

Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.



( UNIT : mm )

# JMA-9823-7XA JMA-9823-9XA

X-band  
25kW transmitting output



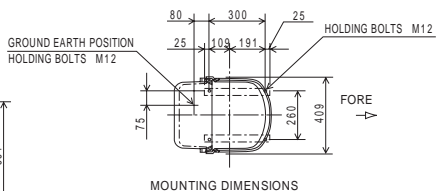
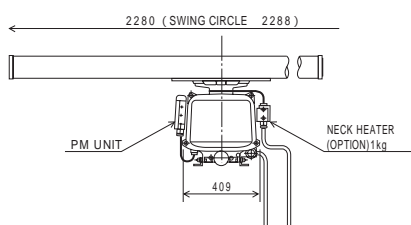
Transmitter/Receiver unit



**NTG-3027**

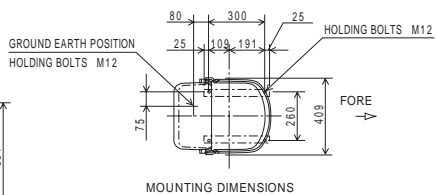
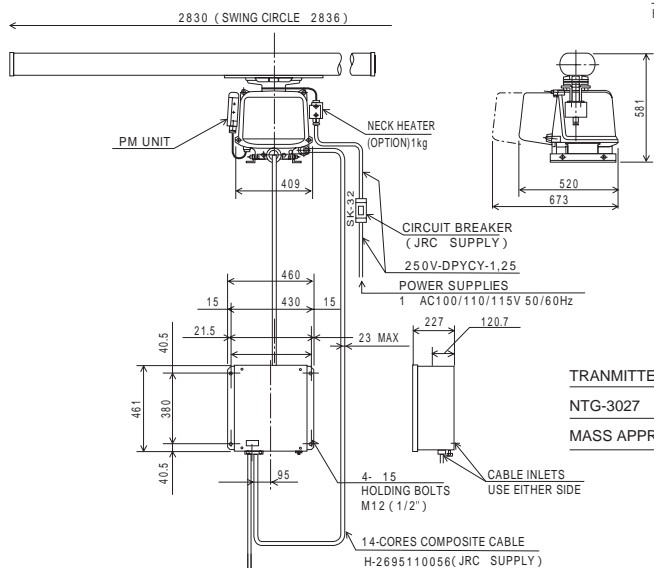
## JMA-9823-7XA STAND ALONE

NKE-1059-7 SCANNER UNIT MASS APPROX. 45kg W/O OPTIONS

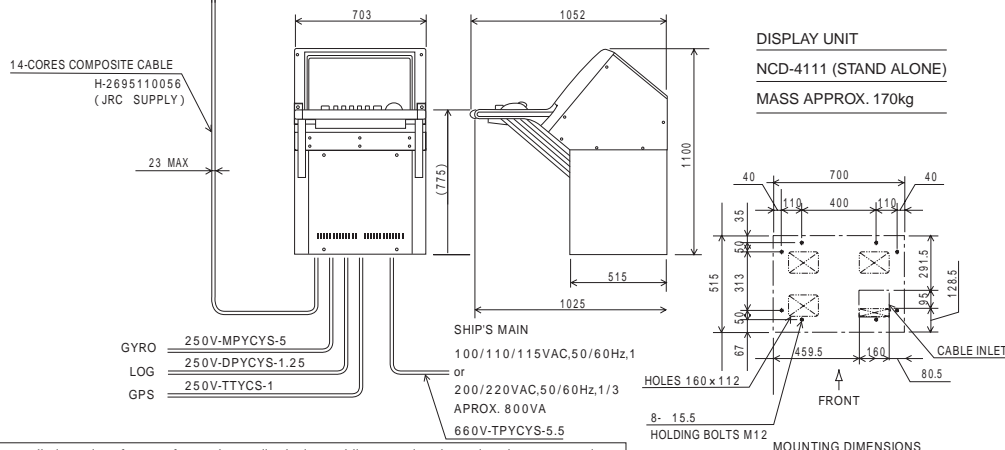


## JMA-9823-9XA STAND ALONE

NKE-1059-9 SCANNER UNIT MASS APPROX. 48kg W/O OPTIONS



TRANSMITTER-RECEIVER UNIT  
NTG-3027  
MASS APPROX. 19kg



Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.

( UNIT : mm )

# JMA-9823-7XA JMA-9823-9XA

X-band  
25kW transmitting output



**NKE-1059-7 (7 feet)**



**NKE-1059-9 (9 feet)**

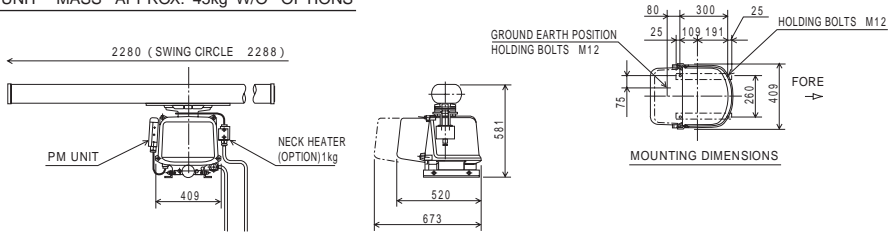
**Transmitter/Receiver unit**



**NTG-3027**

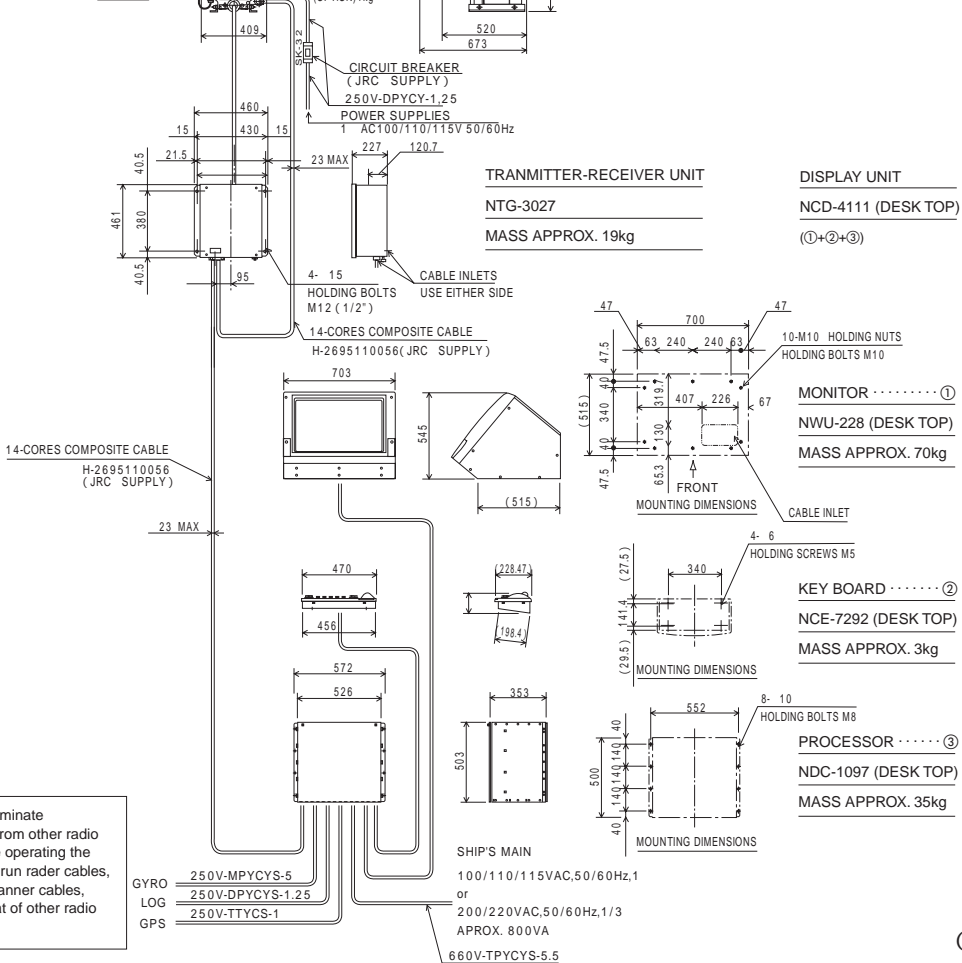
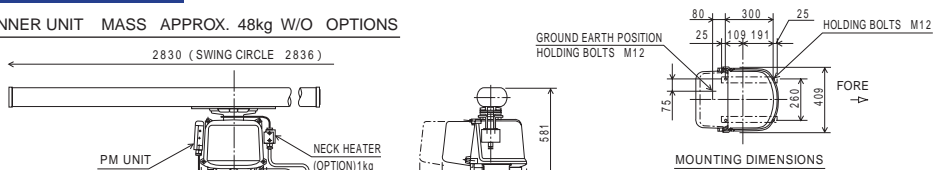
**JMA-9823-7XA DESK TOP**

NKE-1059-7 SCANNER UNIT MASS APPROX. 45kg W/O OPTIONS



**JMA-9823-9XA DESK TOP**

NKE-1059-9 SCANNER UNIT MASS APPROX. 48kg W/O OPTIONS



Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.

GYRO = 250V-MPYCYS-5  
LOG = 250V-DPYCY-1.25  
GPS = 250V-TTYCS-1

( UNIT : mm )

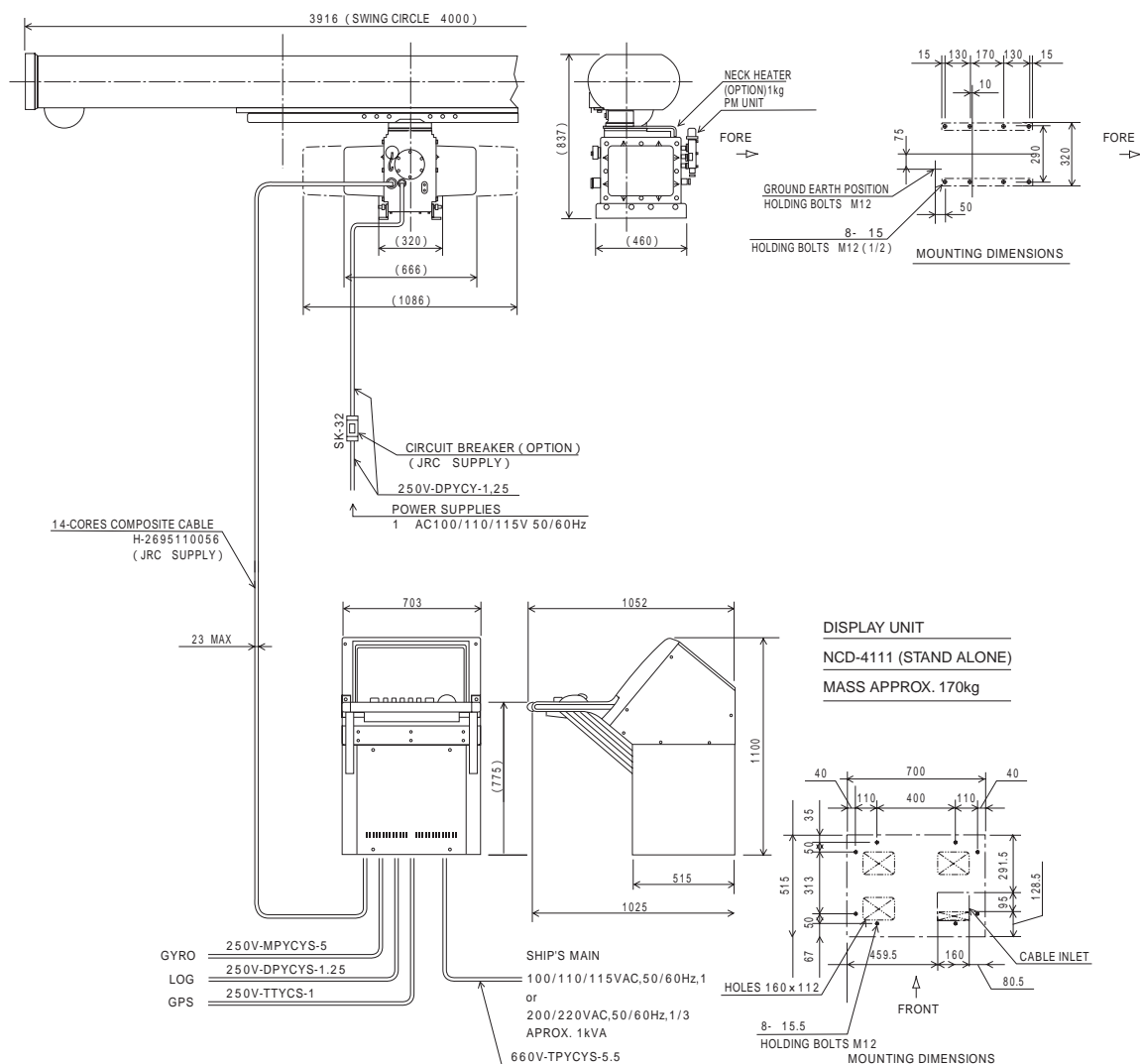
# JMA-9832-SA



NKE-1075 (12 feet)

## JMA-9832-SA STAND ALONE

NKE-1075 SCANNER UNIT MASS APPROX. 162kg W/O OPTIONS



Note : In order to eliminate interference from other radio devices while operating the radar, do not run radar cables, especially scanner cables, parallel to that of other radio equipment.

( UNIT : mm )

# JMA-9832-SA

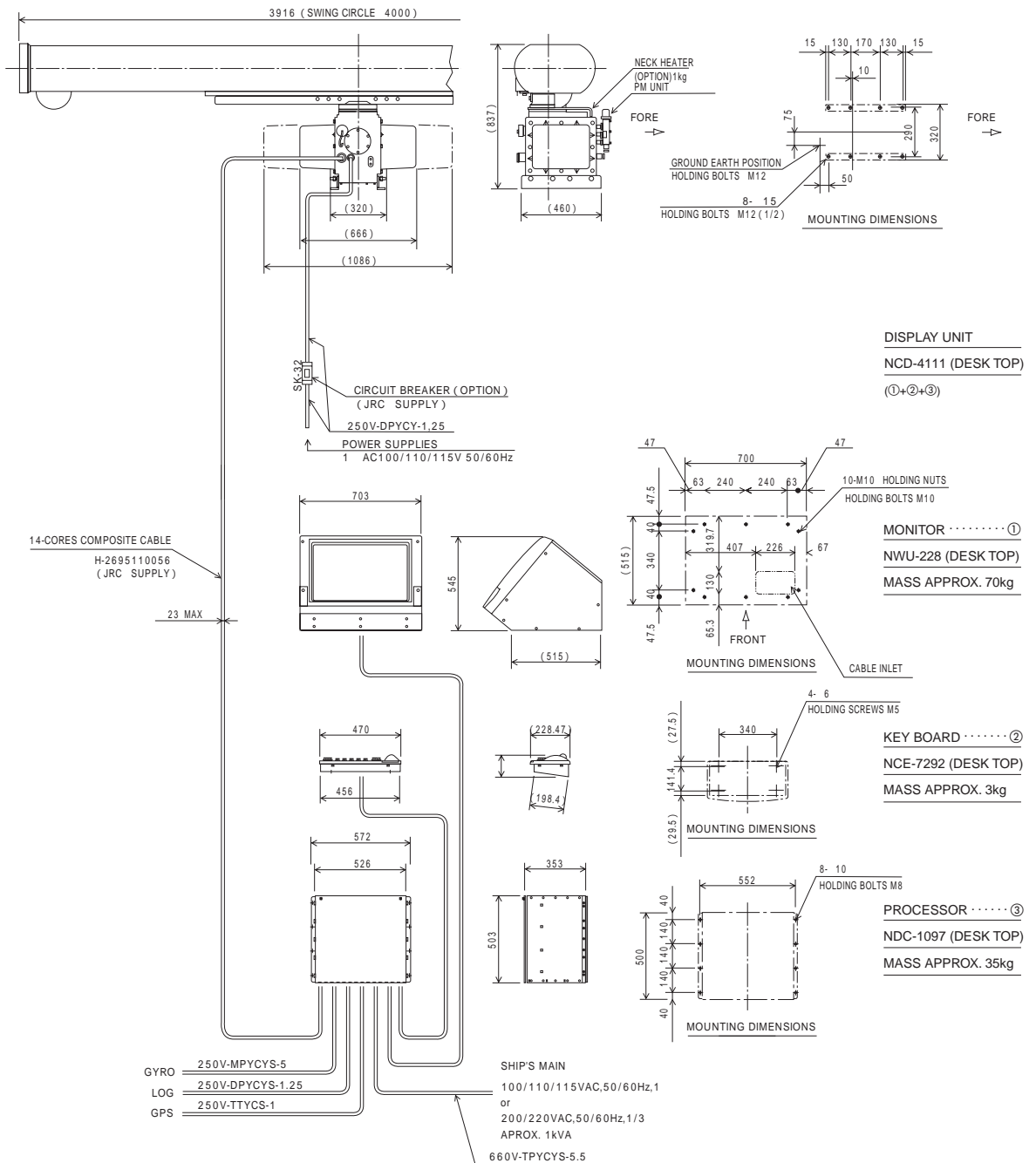
**S-band**  
**30kW transmitting output**



**NKE-1075 (12 feet)**

## JMA-9832-SA DESK TOP

NKE-1075 SCANNER UNIT MASS APPROX. 162kg W/O OPTIONS



Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.

( UNIT : mm )



# JMA-9833-SA



NKE-1079 (12 feet)

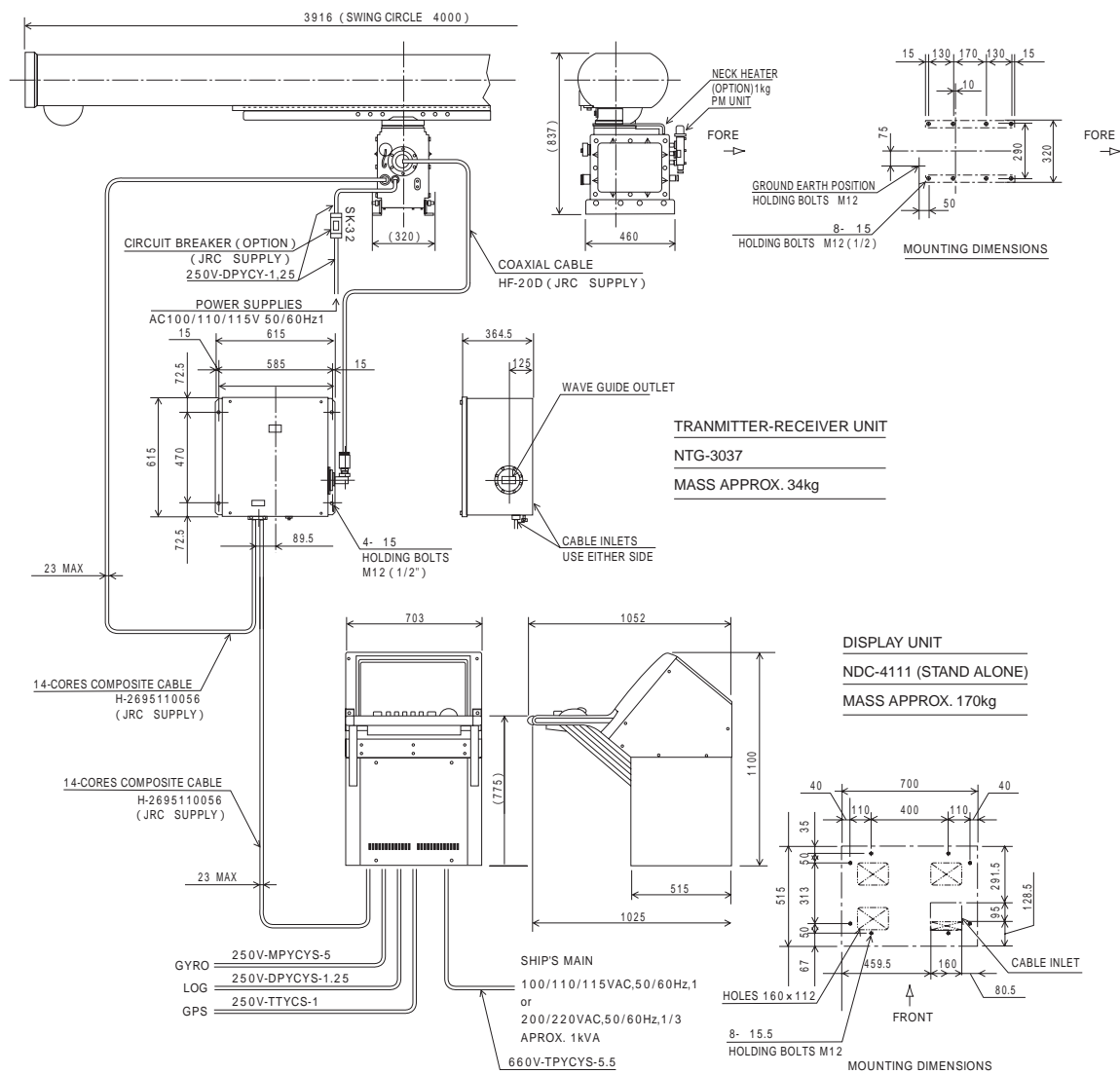
## Transmitter/Receiver unit



NTG-3037

## JMA-9833-SA STAND ALONE

NKE-1079 SCANNER UNIT MASS APPROX. 142kg W/O OPTIONS

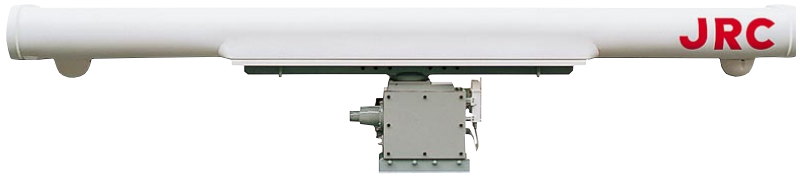


Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.

( UNIT : mm )

# JMA-9833-SA

S-band  
30kW transmitting output



**NKE-1079 (12 feet)**

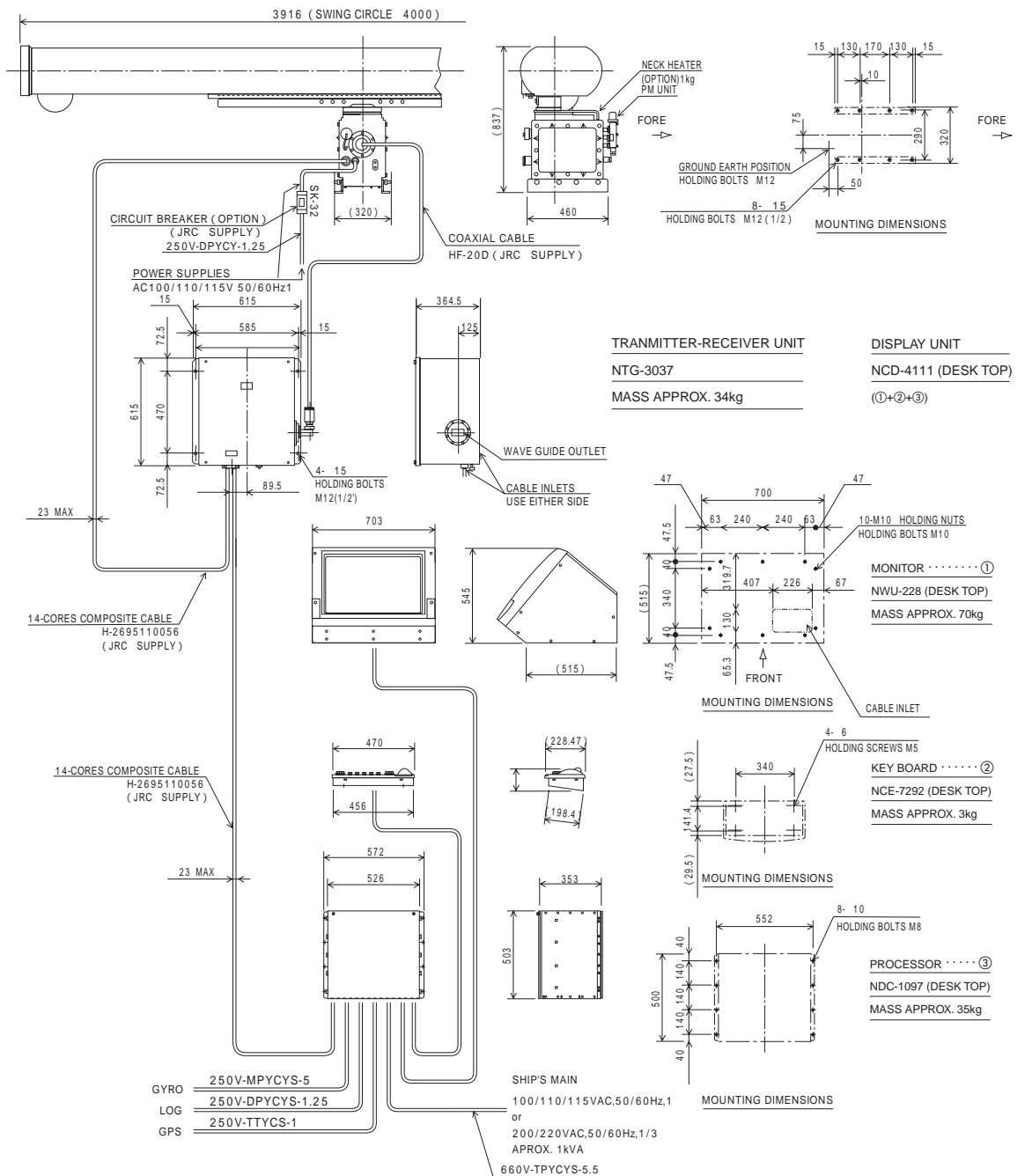
## Transmitter/Receiver unit



**NTG-3037**

## JMA-9833-SA DESK TOP

NKE-1079 SCANNER UNIT MASS APPROX. 142kg W/O OPTIONS



Note : In order to eliminate interference from other radio devices while operating the radar, do not run rader cables, especially scanner cables, parallel to that of other radio equipment.

( UNIT : mm )

# Specifications

## ■ Radar device list

Model	Band	Transmitting output	Scanner unit length	Ministry of Posts and Telecommunications authorization type	Ministry of Transportation approval type	
				Type one radar	First grade radar	Automatic collision prevention support device
JMA-9822-6XA	X	25kW	6ft	R00008	No.4348	No.4354
JMA-9822-9XA	X	25kW	9ft	R00009	No.4349	No.4354
JMA-9832-SA	S	30kW	12ft	R00006	No.4352	No.4354
JMA-9823-7XA	X	25kW	7ft	R00011	No.4350	No.4354
JMA-9823-9XA	X	25kW	9ft	R00007	No.4351	No.4354
JMA-9833-SA	S	30kW	12ft	R00010	No.4353	No.4354

Model	Specifications	Scanner unit	Transmitter/receiver unit	Display unit	Power supply	
JMA-9822-6XA	X-band 6-feet 25kW 29 inches ARPA	NKE-1052-6 Beam width: H1.0°, V25°  Rotation speed: 26rpm (60Hz), 21rpm (50Hz) Weight: 50Kg with out options Dimensions: 1890(W) X 581(H) X 520(D) mm	Transmission frequency: 9410MHz Output: 25kW Pulse width: 0.07, 0.10, 0.15, 0.2, 0.3, 0.6, 1.2μs	NCD-4111 29" Raster scan High-resolution color CRT Range scale: 0.125 to 120mm(or96nm) TM/RM North-up/Course-up/Head-up Track display (when navigation system is connected) Weight: 170Kg(Stand alone) Dimensions: 703 (W) X 1100 (H) X 1052 (D) mm ARPA specifications Conforming to IMO A422 Acquisition: Automatic/manual Number of targets: 50 max. Tracking range: 32nm Target data read: 2 targets simultaneously	100/110/115VAC, 50/60Hz,1 or 200/220VAC, 50/60Hz,1 /3 , 800VA	
JMA-9822-9XA	X-band 9-feet 25kW 29 inches ARPA	NKE-1052-9 Beam width: H0.8°, V25°  Rotation speed: 26rpm (60Hz), 21rpm (50Hz) Weight: 55Kg with out options Dimensions: 2830(W) X 581(H) X 520(D) mm				
JMA-9832-SA	S-band 12-feet 30kW 29 inches ARPA	NKE-1075 Beam width: H1.9°, V30°  Rotation speed: 26rpm (60Hz), 21rpm (50Hz) Weight: 162Kg with out options Dimensions: 3916(W) X 837(H) X 460(D) mm	Transmission frequency: 3050MHz Output: 30kW Pulse width: 0.07, 0.10, 0.15, 0.2, 0.3, 0.6, 1.2μs			100/110/115VAC, 50/60Hz,1 or 200/220VAC, 50/60Hz,1 /3 , 1kVA
JMA-9823-7XA	X-band 7-feet 25kW 29 inches ARPA	NKE-1059-7 Beam width: H1.0°, V25°  Rotation speed: 26rpm (60Hz), 21rpm (50Hz) Weight: 45Kg with out options Dimensions: 2280(W) X 581(H) X 520(D) mm	NTG-3027 Transmission frequency: 9410MHz Output: 25kW Pulse width: 0.07, 0.10, 0.15, 0.2,0.3, 0.6, 1.2μs Weight: 19Kg Dimensions: 460 (W) X 461 (H) X 227 (D) mm			100/110/115VAC, 50/60Hz,1 or 200/220VAC, 50/60Hz,1 /3 , 800VA
JMA-9823-9XA	X-band 9-feet 25kW 29 inches ARPA	NKE-1059-9 Beam width: H0.8°, V25°  Rotation speed: 26rpm (60Hz), 21rpm (50Hz) Weight: 48Kg with out options Dimensions: 2830(W) X 581(H) X 520(D) mm				
JMA-9833-SA	S-band 12-feet 30kW 29 inches ARPA	NKE-1079-2F Beam width: H1.9°, V30°  Rotation speed: 26rpm (60Hz), 21rpm (50Hz) Weight: 142Kg with out options Dimensions: 3916(W) X 837(H) X 460(D) mm	NTG-3037 Transmission frequency: 3050MHz Output: 30kW Pulse width: 0.07, 0.10, 0.15, 0.2,0.3, 0.6, 1.2μs Weight: 34Kg Dimensions: 615 (W) X 615 (H) X 365 (D) mm			100/110/115VAC, 50/60Hz,1 or 200/220VAC, 50/60Hz,1 /3 , 1kVA

Performance Monitor unit is included as a standard composition.

## ■ External input signals

### Ship's speed signal (log):

pulsed: (100, 200, 400, 800pulse/nm)  
sync: AC 50V to AC 115V  
90x, 180x, 360x  
NMEA0183 VBW (2-axis)

### Course signal (gyro):

stepped: DC 24V to DC 110V  
90x, 180x, 360x  
sync: AC 50V to AC 115V  
90x, 180x, 360x

### Navigation unit:

NMEA0183 GGL, GGA, VBW, VTG,  
RMA, RMB, RMC, ZDA

## ■ Option

Inter switch (max. 3 connectable): NQE-3015J

# JRC

*For further information, contact:*



*Since 1915*

***Japan Radio Co., Ltd.***

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Piraeus, Las Palmas**

19EM

ISO9001,ISO14001 Certified