

JRC MARINE RASTER-SCAN RADAR

JMA-3806/JMA-3810

(3cm, 4/6ft, 6kW)
12in, 48nm

(3cm, 4/6ft, 10kW)
12in, 72nm

*For higher performance and
enhanced navigation capabilities*



Japan Radio Co., Ltd.

The JMA-3806/3810 Radar features easy-to-see video display and easy-to-use, advanced functions for safe navigation of fishing boats.



4-ft Scanner Unit



6-ft Scanner Unit

FEATURES

● Higher fundamental performance of radar

The pulse width and repeated frequency settings in four steps and the reception band width setting in three steps for the selected range scale provide higher fundamental performance of radar to implement a clear and high quality image.

● MARPA(Mini-ARPA) essential for safety navigation

The features of the automatic radar plotting aid(ARPA) used for large ships is standard in this radar. The MARPA automatically tracks up to six other ships and provides data on their courses and speeds as well as their bearings and ranges in vector or numeric forms. The movements of acquired targets can be readily observed, thus providing safer navigation.

● Easy discrimination through TM display(true motion display)

TM display allows fixed and moving targets to be easily discriminated. Moving targets are displayed as images as if they were being viewed from the above which is very helpful for safety navigation.

● Observe own ship position and destination

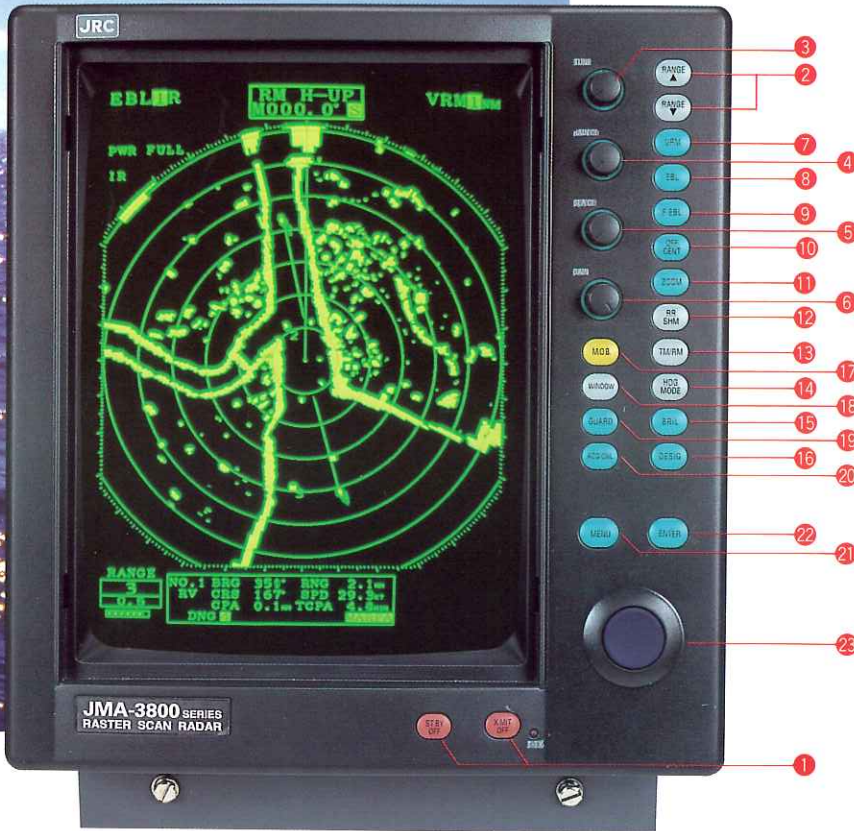
This radar can be connected with navigation equipment such as GPS to display the position and the waypoint mark of your ship on the screen. You can see the presence of obstacles on the navigating course at a glance.

● Storing the current position immediately

Single touch button operation will store the current position into the memory instantly. As own ship moves, the radar indicates a mark for that point and plots a dotted line to that position with the orientation and range displayed as values. For example, Man-Over-Board, when an object is dropped into the water, or for a net casting point etc., it is displayed on the screen.

● Use of custom range

The desired range scale can be selected by the menu. For example, when a target to be observed spans over two ranges, the range scale can be freely selected in specific range marker pitches to obtain more accurate image information.



CONTROL PANEL

- 1 Stand-by/OFF
Transmit/OFF
- 2 Range scale UP
Range scale DOWN
- 3 Tune Control
- 4 Rain clutter Control
- 5 Sea clutter Control
- 6 Gain Control
- 7 VRM Enable/Select
- 8 EBL Enable/Select
- 9 Free Floating EBL Enable
- 10 Display OFF Center
- 11 Display Zoom Enable
- 12 Range Rings ON/OFF
and Ship's Heading Marker OFF
- 13 True Motion/Relative Motion
- 14 Heading Mode Selection
- 15 Brilliance Level Selection
- 16 MARPA designate target
Information
- 17 Man Over Board
- 18 Non Operational
- 19 Guard Zone Select
- 20 MARPA Acquire/Cancel
- 21 MENU Recall
- 22 Enter Data
- 23 TRACK PAD

SPECIFICATIONS

SCANNER UNIT

Scanner length	4 ft or 6 ft
Polarization	Horizontal
Beamwidth	Horizontal 2.0° (4ft) 1.2° (6ft) Vertical 30° (4ft) 25° (6ft)
Rotation speed	Approx. 24 rpm
Wind velocity	51.5m/s(100kt)
Transmitting frequency	9410 MHz
Peak power	6kW(JMA-3806), 10kW(JMA-3810)
Pulse length/PRF	0.08μs/2000Hz(0.125 - 1.5nm) 0.4μs/1500Hz(1.5, 3, 6nm) 0.8μs/750Hz(3, 6, 12, 24nm) 1.2μs/500Hz(12, 24, 48, 72nm)

DISPLAY UNIT

CRT type	12-inch square, monochrom(green)
Video	8 levels, quantized
Display resolution	928 dots×698 lines
Standard range scale	0.125, 0.25, 0.5, 0.75, 1.5, 3, 6, 12, 24, 48 (JMA-3806) 0.125, 0.25, 0.5, 0.75, 1.5, 3, 6, 12, 24, 48, 72 (JMA-3810) Plus 25 custom range scales (user selectable)
Motion	RM(Relative motion)/ TM ^{※2} (True motion)
Bearing presentation	Head-up, Course-up ^{※1} , North-up ^{※1}
VRM	Dual VRM's with 4 digit readout
EBL	Dual EBL's with 4 digit readout Free EBL Available
Tuning	Manual/Automatic
Guardzone alarm	IN/OUT
Off-Center	Up to 2/3 radius(except maximum range)
Zoom	×2(Enlargement)(except 0.125nm) Available
Interference reject	Available
Wakes	OFF, 0.5, 1, 3, 6 min and continuous
Timed TX	Transmit period(10, 20, 30 scan) Sleep period(3, 5, 10, 15min)
MOB	Man over board:position/Bearing/ Distance/Time ^{※2,3}

Digital display

Range, Range rings, EBL's, VRM's
Ship's course^{※1}, speed^{※2}, position^{※3}
Waypoint position^{※4}, Cursor position^{※2,3}
MARPA^{※2}

Interface

NAV Aids:NMEA0183(GLL, GTD, VTG, BWC,
ZTG, RMA&RMB, RMB&RMC)
NMEA0182, JRC format
Electronic compass:NMEA0183

Power supply

(HDG, HDM, HDT, VHW)
10.8-42.0 VDC, approx. 120W(JMA-3806)
approx. 130W(JMA-3810)
AC operation:optional with the NBA-797A
rectifier unit

MARPA^{※2}

Acquisition	Manual(6 targets max)
Cancellation	By 1 target each or all targets
Tracking	Automatic, up to 14.8nm
Vector mode	Relative/True
Vector length	1, 3, 6, 12 min.
MARPA alarm	Very dangerous target/Lost target
Numerical display	Bearing/Range/True course/ True speed/CPA/TCPA
Intercept mode	Intercept course/Intercept speed/Intercept time

OPTIONS

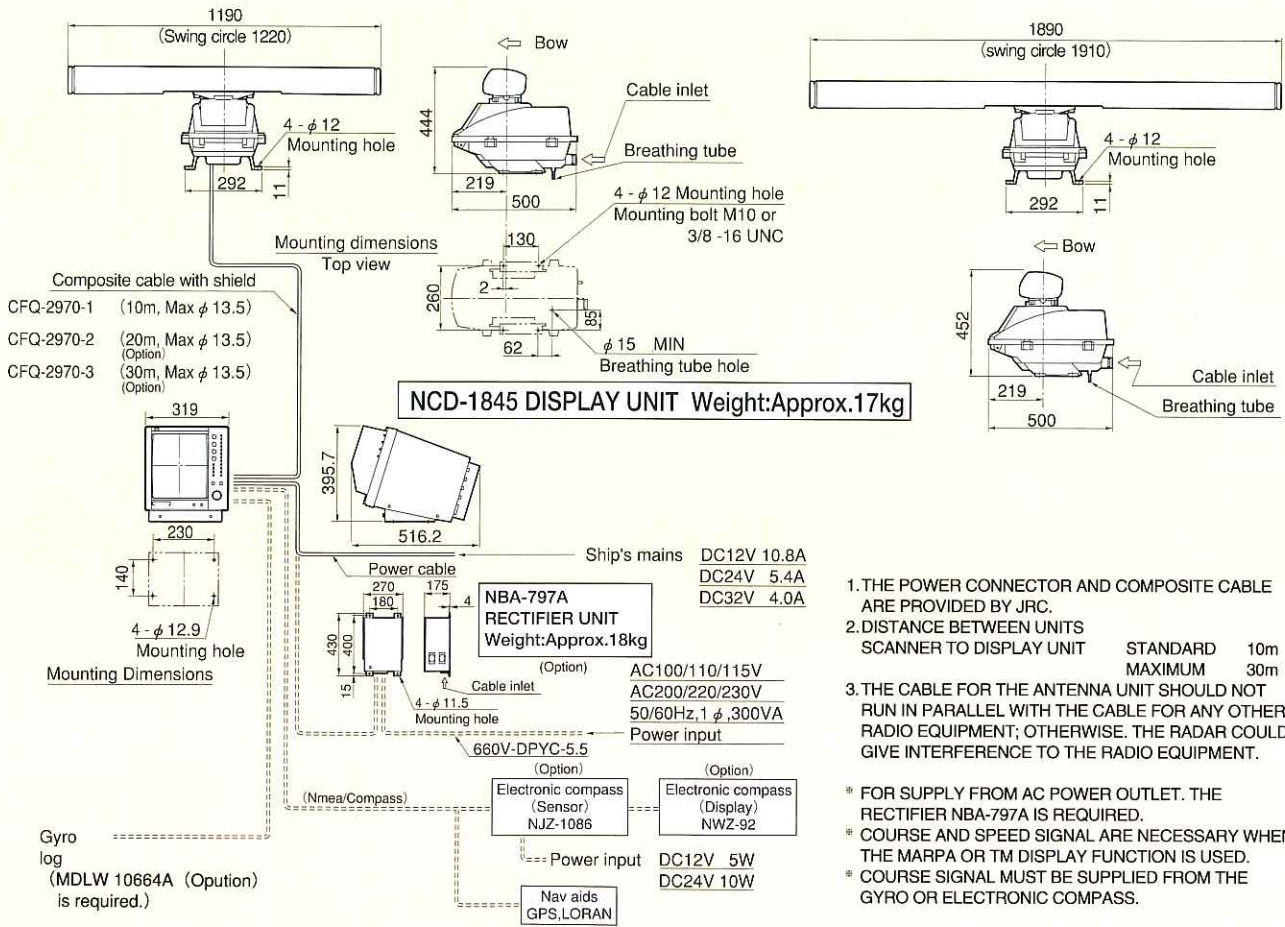
Gyro Log Interface kit	MDLW10664A
Rectifier unit	NBA-797A

- ※1 Course information from gyrocompass or electronic compass is necessary.
 ※2 Course information from gyrocompass or electronic compass and speed information from log or GPS are necessary.
 ※3 Position information (L/L) from navigator is necessary.
 ※4 A navigator capable of outputting the destination is required.

CONNECTION DIAGRAM

NKE-1041/1042-4 SCANNER UNIT Weight:Approx.29kg

NKE-1041/1042-6 SCANNER UNIT Weight:Approx.33kg



※Specifications subject to change without notice.

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ISO 9001

Certificate No. JQA-0519

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