

JRC

MULTI-FUNCTION RADAR JMA-3910 / JMA-3925

(3cm, 6ft antenna, 10kW, 15" display, 96 NM) (3cm, 6ft 9ft antenna, 25kW, 15" display, 120 NM)

For Merchant Ships

- Superb target detection and simple operation
- Sharp, blur-free display in stabilized course-up mode
- Radar-plotter combined mode suited for coastal navigation
- Most advanced radar designed to IMO-ATA/EPA



JRC Japan Radio Co., Ltd.

RADAR/ARPA MODE

(ARPA function is an option.)

● Superb target detection

Small targets in short to long ranges can be clearly detected and displayed.

The latest signal processing technology provides improved performance in sea clutter and rain/snow clutter, ensuring an extremely easy-to-see radar display.

● Stabilized course-up mode (Stabilized relative bearing display)

In the stabilized course-up mode, the radar presents no blurred echo due to the ship's turning or yawing, but a sharp echo video.

● One-touch operation by presetting parameters

Various parameters to match the sea situation are preset in the radar, so that the user can be released from complicated adjustment against sea and rain/snow clutter. The optimum video is available by one-button operation.

● Designed to IMO-ATA/EPA

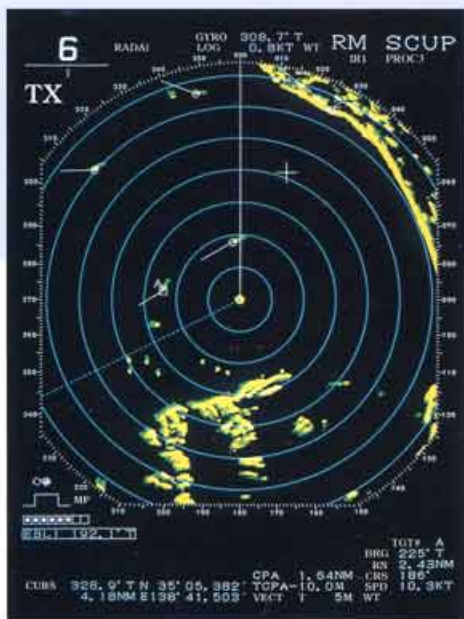
By fitting it with the optional ARPA unit (NCA-840), the radar can be operated as an ATA-specified ARPA (automatic radar plotting aid) system that enables automatic tracking of up to 30 targets.

● Ship's trail display (trail afterimage memory)

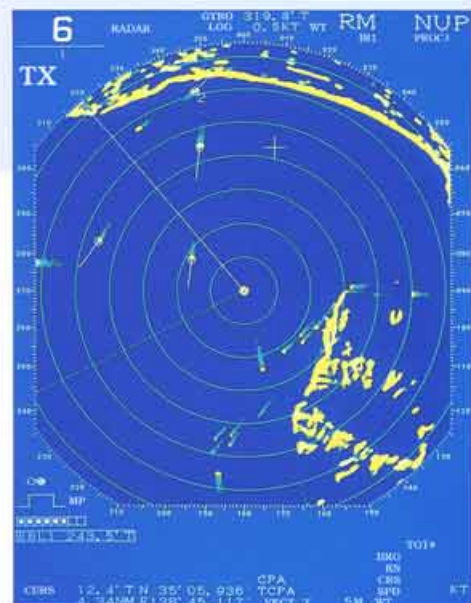
The movements of other ships can be monitored at a glance by display of real-time trails and afterimage trails.

● Easy operation

The operability of the radar is substantially improved by using a track ball and large control knobs for EBL (electronic bearing line) and VRM (variable range marker).



Display of trails of other ships in stabilized course-up mode



Display of trails of other ships in north-up mode

RADAR/PLOTTER-COMBINED MODE

(Plotter function is on option)

In the radar/plotter-combined mode, synthetic displays such as coastlines and other marks and symbols are overlaid on the radar video, so that all necessary navigational information can be displayed on a single screen. This combined mode is effective, especially in coastal navigation and entering or leaving a port.

● Overlay display of coastlines on radar video

By inserting the JRC coastline ROM card into the equipment, coastlines and depth contour lines can be overlaid on the radar video. This function can be used effectively not only in coastal navigation and entering or leaving a port, but also very useful to prevent the ship from stranding.

● Display of own ship's track

Own ship's track can be displayed in 7 colors and its memory capacity is 20,000 dots. This function is very effective to record own ship's tracks and for safety of navigation.

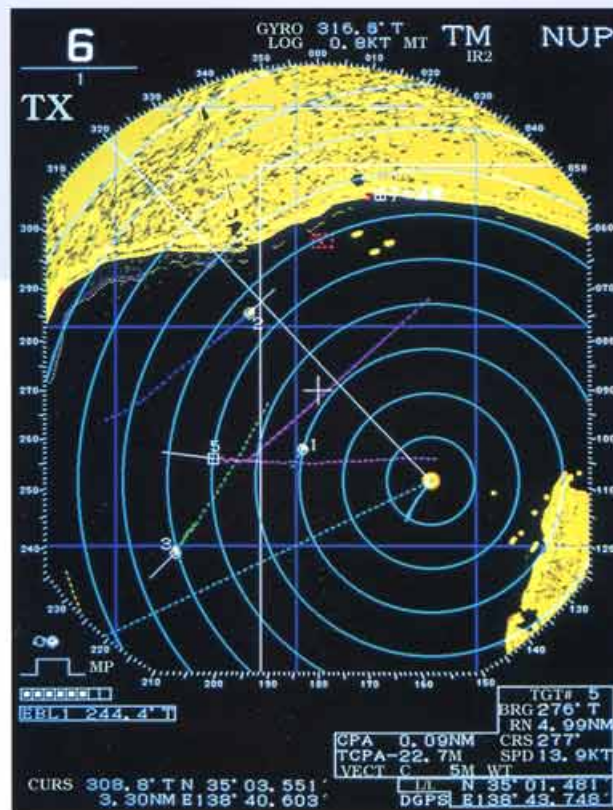
OPTIONAL EXPANDED PLOTTER FUNCTIONS

● Display of other ship's trail

The ARPA/Plotter function (option) enables the tracks of up to 10 other ships to be displayed by thin lines in 7 different colors with up to 800-dot tracks per ship. So the movements of other ships can be monitored at a glance.

● Route setting for safety of navigation

Up to 10 routes can be preset, and alarms for cross-track-error and arrival at destination can also be displayed. This function is different from the normal plotter mode and own ship can be maneuvered while monitoring the movements of other ships on the radar screen.



Overlay display of coastlines and other ship's tracks on radar display in ARPA/Plotter combined mode

PLOTTER MODE

(Plotter function is an option.)

● Highly accurate position fixing by DGPS

A JRC DGPS or GPS receiver can be connected directly to the radar equipment in order to fix the highly accurate own ship's positions.

● Coastline ROM

The coastline ROM stores names of places, navigational marks and signs, and depth contour lines. The detailed data as is equivalent to a chart can be displayed on the 15-inch high-resolution CRT display.



Display of coastlines in plotter mode

● Navigational data

The navigational data made up by the user can be stored in the internal memory with the capacity of 20,000 dots including own ship's track. This data will be useful for safe navigation and data management for ship maneuvering.

● Instant switching of up to 10 scales

In the plotter mode, 10-step scales preprogrammed independently from radar ranges can be selectively displayed. The smooth and continuous scaling of 1/1,000 to 1/10,000,000 are also available.



GPS receiver
GPS100
(Option)



Differential GPS receiver
DGPS200
(Option)



CHART ROM CARD



MEMORY CARD CDD-611



WORLD BACK GROUND
CARD CDD-630

Multi-function Radar

JMA-3910 / JMA-3925



Specifications

Specifications	Model	JMA-3910-6	JMA-3925-6	JMA-3925-9
General				
Frequency band		X band (3 cm)	X band (3 cm)	X band (3cm)
Antenna length		6 feet	6 feet	9 feet
Transmitting power		10 kW	25 kW	25 kW
Display type		15-inch color CRT	15-inch color CRT	15-inch color CRT
Maximum range		96 NM	120 NM	120 NM
Antenna Unit				
Model		NKE-1055-6	NKE-1056-6	NKE-1056-9
Beam width		Horizontal 1.2° Vertical 25°	Horizontal 1.2° Vertical 25°	Horizontal 0.8° Vertical 25°
Pulse length		0.08, 0.2, 0.4, 0.8 1.2 μs	0.08, 0.2, 0.4, 0.8 1.2 μs	0.08, 0.2, 0.4, 0.8 1.2 μs
Rotation speed		24 rpm	20 rpm	20 rpm
Weight		31 kg	38 kg	43 kg
Dimensions (mm)		W1890xH440xD437	W1890xH519xD506	W2830xH519xD506
Display Unit				
Model		NCD-3780		
Display type		15-inch square color CRT upright type (with automatic magnetic erasing) 180 mm or more		
Effective diameter				
Range scales		0.125 to 96 NM	0.125 to 120 NM	
Modes		Radar mode, radar/plotter-combined mode and plotter mode		
Presentation mode		True Motion (TM)/Relative Motion (RM)		
Bearing presentation		Head-p/Course-up/North-up/Stabilized course-up		
Coastline data		JRC coastline ROM card/C-MAP card		
Own ship's track		7 display colors and memory capacity of 20,000 dots		
Weight		34 kg		
Dimensions		W370 × H452 × D562 mm		
Power supply				
Power voltage		24 VDC		
Power consumption		230 W	250 W	
Rectifier unit		NBA-3308 (option) 100/11/150 VAC or 200/220/230 VAC, 50/60 Hz, single-phase		

Specifications

ARPA Unit, NCA-840 (Option)		Plotter Unit, NDB-32 (Option)	
Target acquisition:	Manual/automatic (by guard ring)	Chart display:	Mercators projection
Number of targets:	30 targets	Reduced scales:	1/1,000 to 1/10,000,000 in 10 steps or continuous
Tracking range:	32 NM	Memory capacity:	20,000 dots including own ship's track, marks and lines
Dangerous target alarms:	Audible/visual by setting CPA/ TCPA	Waypoints:	Up to 99 points, with arrival and cross-track error
Other ship's track:	Up to 10 ships, 800 dots per ship, in 7 different colors	Routes:	10 routes, approach and course deviation alarms