

JMA-1030 Radar



– the JMA-1030 is an easy to use radar that greatly supports your ship's handling by touch operation

7-inch wide VGA color touch display

Proprietary System-on-Chip technology

Simple and intuitive operation

AIS and MARPA+ as standard

Newly designed high performance scanners



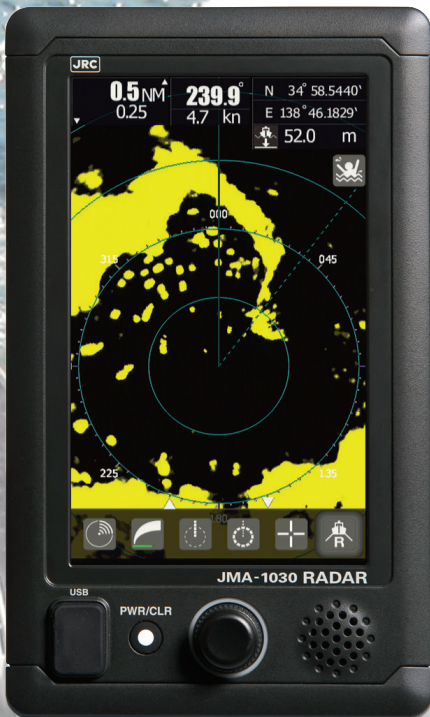
Japan Radio Co., Ltd.

since 1915

Features

Features

The new JMA-1030 radar series is JRC's very first touch operated radar with new dome scanners that provide you with highly accurate target clarity and ease of mind of your surroundings during night or intense fog.



7-inch color touch operation

The high definition 7-inch wide display has allowed JRC engineers to develop an exciting new software approach that offers an incredibly easy-to-use icon based navigation experience with simple menus and dedicated functions.

The set of icons has been carefully designed. We brought the elements and visual style of our commercial class Multi Function Display (MFD) to our most compact series of radars. Built with the proven quality you expect from us.

System-on-Chip technology

JRC engineers custom designed the System-on-Chip (SoC) inside the new JMA-1030 series to be an extremely powerful tool and at the same time makes the display compact and very power efficient.

AIS and MARPA™ standard

The new radar has the ability to display 50 AIS*1 symbols, and 10 MARPA™*2 tracking targets as standard. The high quality of the display provides outstanding target definition and discrimination.



Man overboard

A slippery deck or unexpected movement of the ship are situations in which a person may possibly fall overboard. The JMA-1030 integrates a single press MOB*3 button which instantly displays a dedicated symbol and remembers latitude and longitude to enable accurate search and rescue efforts.

*1 AIS requires ship's heading, position and AIS info

*2 MARPA™ requires ship's heading info

*3 MOB requires ship's position info

Operation

Favorite icons

While navigating it may be useful to have certain functions directly available on-screen without having to go into the menu. With the JMA-1030 you can. Simply hold any of the icons in the menu for about 2 seconds and the function will be placed at the bottom of the screen. Removing the icons works the same way.



Target visibility

The target visibility can be set in four different levels allowing target enhancement relative to the target size, a function normally not found on this type of radar.

Guard zone

This function allows the user to set a guard zone, providing a visual and audible alert for any vessel entering or leaving that area.



No flush mount kit

With JRC's new design approach, a flush mount kit is not required and screws are nicely concealed behind the front cover.

Display mounting

The processor is built into the display unit allowing for a flexible installation approach. This compact all-in-one unit allows flush mounting and includes a bracket for table mounting. Optionally available is a special bracket for ceiling mounting.

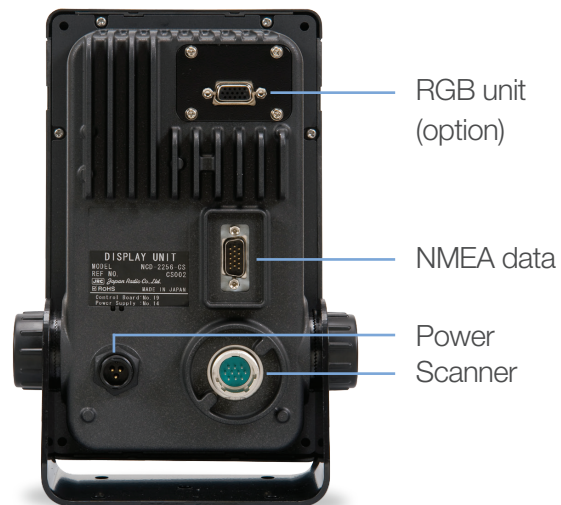
External monitor

An external monitor can be connected to the display using an optional RGB unit, specifically useful in situations where a bigger monitor is required at another place on the vessel.

Flexibility

Interfacing

The JMA-1030 has a 3 channel NMEA signal input allowing connections to navigation equipment such as GPS; for own position, waypoints and speed for MARPA tracking. It also allows a GPS compass connection for your heading (and MARPA tracking) and/or AIS for displaying targets.



Multi speed scanners

With this new radar, JRC introduces two new small and light weight 4kW multi-speed scanners available in a 1.5ft (450mm) and 2ft (620mm) radome. The supplied 10m*¹ cable allows you to install the dome on a mast, radar arch, or mounting on a pole. The scanners features a new high rate PRF*², which allows for a highly accurate short range detection.

Depending on vessel operations and user preferences, magnetron life can be extended by lowering the output power with the economy mode and/or user selectable transmitting intervals with the timed TX mode*³.

In the box

- Scanner 1.5ft or 2ft
- Display, Bracket, Sun cover
- Scanner cable (10m)
- Power cable (2m)
- Spare parts
- Manual

Options

- Scanner to display cable 15m CFQ9924-15
- Scanner to display cable 20m CFQ9924-20
- NMEA cable (1m) 7ZCRD1689
- Power supply NBD-865
- RGB unit NQA-2447
- LCD protection kits CML-883

*¹ Longer cables are optionally available

*² Pulse Repetition Frequency (PRF) resembles the number of pulses transmitted each second

*³ Reducing output power reduces radar sensitivity

*⁴ The standard scope of supply may vary depending on sales region

Weight and dimensions

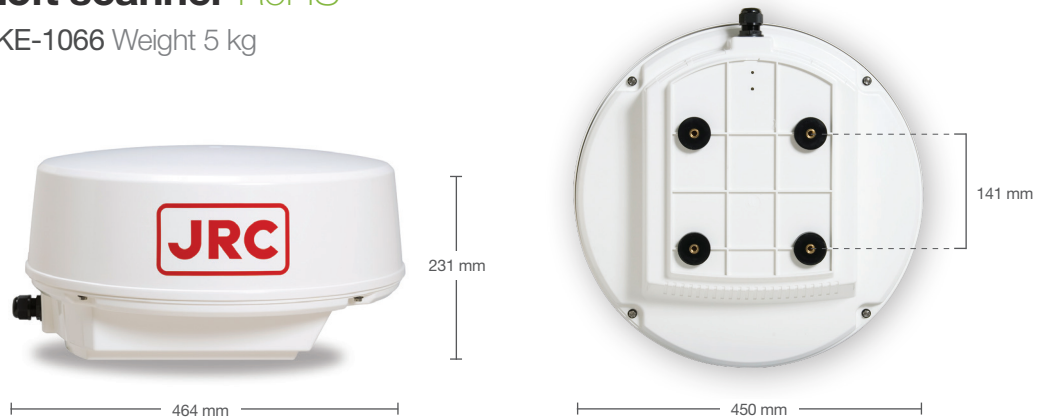
7-inch display RoHS

NCD-2256 Weight 1.7 kg



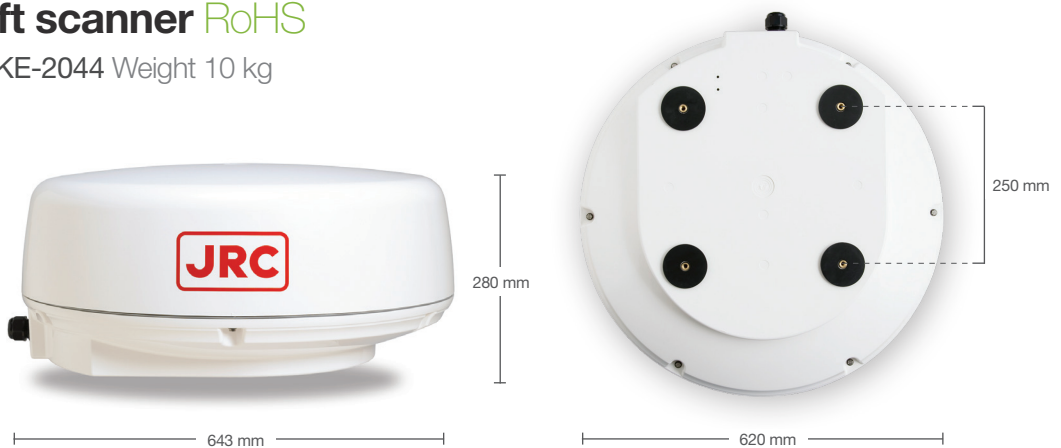
1.5ft scanner RoHS

NKE-1066 Weight 5 kg



2ft scanner RoHS

NKE-2044 Weight 10 kg



Specifications

	JMA-1032	JMA-1034
Display type	Raster scan PPI	
Scanners	NKE-1066	NKE-2044
Antenna length	1.5 ft (450 mm radome)	2 ft (620 mm radome)
Output power	4 kW	4 kW
Transmitting frequency	9410 ±30MHz	
Beam width	Horizontal 5.2°, Vertical 25°	Horizontal 4°, Vertical 25°
Rotation speed	16, 20, 24, 27, 30, 36, 42, 48 rpm	
Pulse width	0.08µs/4000Hz, 0.08µs/2250Hz 0.13µs/1700Hz, 0.25µs/1700Hz 0.5µs/1200Hz, 0.8µs/750Hz	0.08µs/4000Hz, 0.08µs/2250Hz, 0.13µs/1700Hz, 0.25µs/1700Hz, 0.5µs/1200Hz, 0.8µs/750Hz, 1.0µs/650Hz
Range scale	0.0625, 0.125, 0.25, 0.5, 0.75, 1.5, 3, 6, 12, 24, 48*1 NM	
Adding range scale	1, 2, 4, 8, 16, and 32*1 NM	
Display	7-inch wide VGA (WVGA) color LCD touch display (800 by 480 pixels)	
Operation	Touch, buttons and push/rotary knob	
Presentation mode	RM: Head/North/Course-up, TM: North/Course-up	
Trail indication	15 sec to 15 min, 30 sec to 30 min, 1 min to 1 hr, 30 min to 24 hr, continuous	
Off center	Move to 4 pre-defined coordinates from the default center position	
Guard zone	Built in	
Alarms	8x scanner, 6x display, 16x receive data	
Tracking targets*2	10 built-in (automatic tracking), Tracking range up to 20 NM	
AIS targets*2	50 built-in (stores up to 500 ship static data)	
Input sentences	GGA, RMC, RMA, GNS, GLL, VTG, DPT, DBT, MTW, VDM, VDO, ALR, MWV, VWT, VWR, RMB, BWC, BWR (navigation) THS, HDT, HDG, HDM (bearing), VBW, VHW (speed)	
Output sentences	RSD, OSD, TTM, TLL, TTD, GGA, RMC, GNS, GLL, VTG, THS, HDT	
Output signals	External buzzer, external monitor (optional RGB unit NQA-2447 required)	
USB	Copy/restore internal settings, software update	
Languages	English, Spanish, Turkish, Russian, Japanese, Indonesian, Thai, Malaysian, Vietnamese, Chinese, Korean	
Power/Consumption	12-24V DC -10%+30%, Maximum 50W	
Ambient conditions	Operation temperature: -25 to 55°C (scanner), -15 to 55°C (display) Relative humidity: 0% to 93% non-condensing Waterproof/dustproof: IP26 (scanner), IP55 (display)*3	

*1 Only available on the JMA-1034

*2 Data from other equipment required

*3 Optional RGB unit does not meet IP55