JRC

ALPHATRON Marine



Radar

JMA-3400 series

Intuitive operation and excellent visibility

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Features

The newest addition to the JRC radar portfolio is the JMA-3400 series. This lightweight radar has user-friendly operation system and is specially designed for fishing boats, non-international trading vessels and workboats. The system can be completed by choosing from a variety of 2 ft, 3.9 ft, 4 ft and 6 ft scanners.



- 12.1-inch fully dimmable display
- High-visibility by glass-bonded display
- Chart overlay (NAVIONICS+)
- Real Time Head-up Function (Constaview)
- Variety of compact X-band scanner units
- High speed version available
- Brushless antenna motors for extended lifetime
- Light-weight design
- Latest technologies included
- Multi-Language



Display

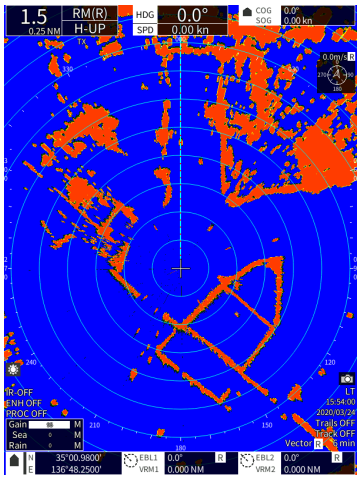
The 12.1-inch dimmable LCD provides excellent visibility and durability. It reduces reflection of sunlight and shows clear images of even the smallest targets. The ergonomic keyboard offers user customizable keys. Programming the USER keys give you instant access to your favourite functions.



The newly developed thin body is reduced till only 97.1 mm depth, so that it can be installed on small vessels where effective use of the limited space needs to be taken in account.

Radar overlay

By displaying the radar image and the NAVIONICS+[1] chart in an overlapping manner, you can grasp the relationship between the radar image and the coastlines simultaneously.



Daytime mode



Daytime mode (with NAVIONICS+)



Night mode (with NAVIONICS+)

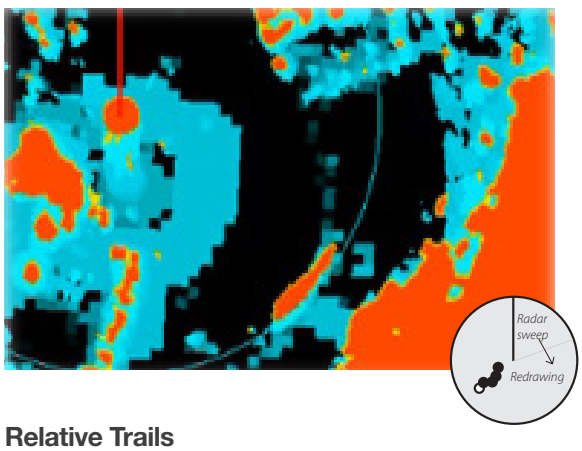
[1] For information regarding the NAVIONICS+ electronic chart, please contact JRC/Alphatron Marine.

Constaview

Naturally our patented real time Constaview functionality is incorporated into the new radar system, processing the radar image before being displayed, generating a smooth rotation when sailing in Head-Up mode. To use real-time Head-Up, own ship position information (GPS connection) and input of heading information (compass connection) is required. When changing to North-Up, the new radar image is displayed without any delay caused by the scanner rotation. By displaying the other ships moving with a tail and displaying the fixed objects such as land and buoys so that they do not pull the tail, the movements and fixed objects of other ships can be accurately read.

Real time Head-Up mode

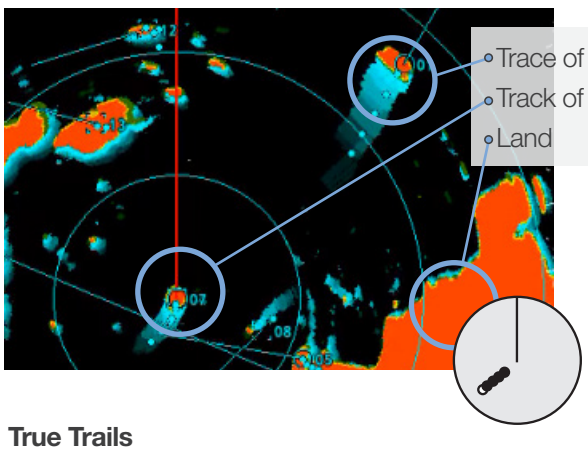
Conventional



Relative Trails

Traditional technology relies on several sweeps of the scanner to redraw the image. Trails are presented as relative.

Constaview



True Trails

Constaview refreshes the image every 16 ms. Despite heading changes trails are always true.

Scanners

A wide range of X-band scanners, varying from small and light radome type to open array type, are available depending on installation space and required performance, all with exceptionally reliable target detection capabilities. The latest leading technologies with a set of advanced features are integrated, allowing the radar to run images faster and more efficient than ever before. Also, the brushless antenna motors in the scanner guarantee for extended lifetime.

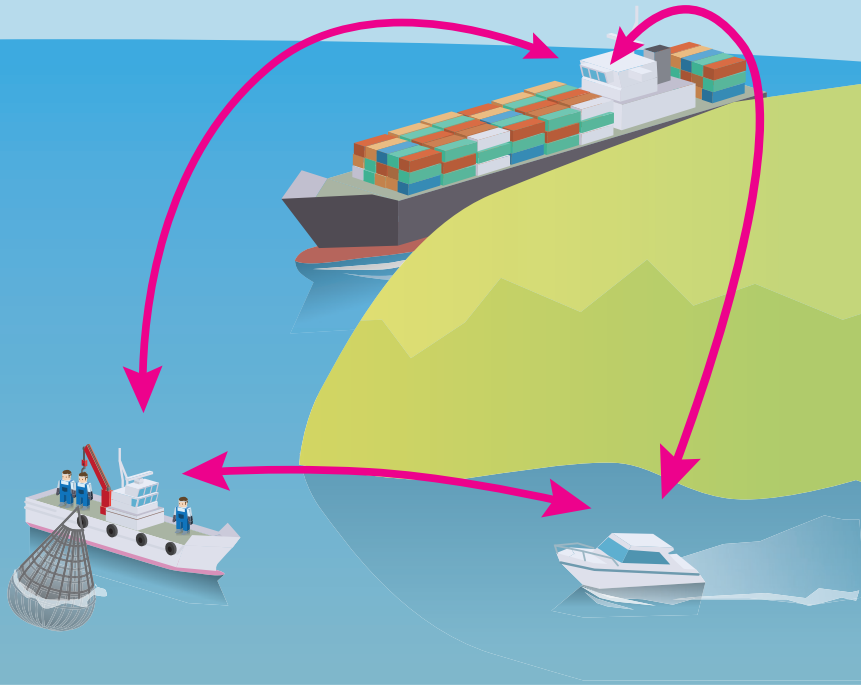




AIS

By connecting with AIS, it is possible to display ships on the island's shadow where radar waves do not reach, enabling safer navigation.

In order to use the AIS display function, it is necessary to input own ship position information (GPS connection), heading information (compass connection) and AIS information.

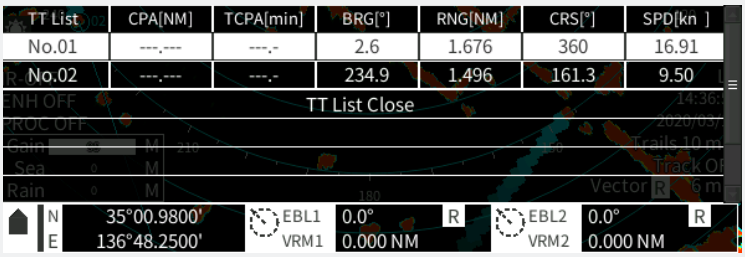


The JMA-3400 series is equipped with target tracking (TT) function and AIS display function.
To use the target tracking function, input of heading information (compass connection) is required.



AIS JHS-183

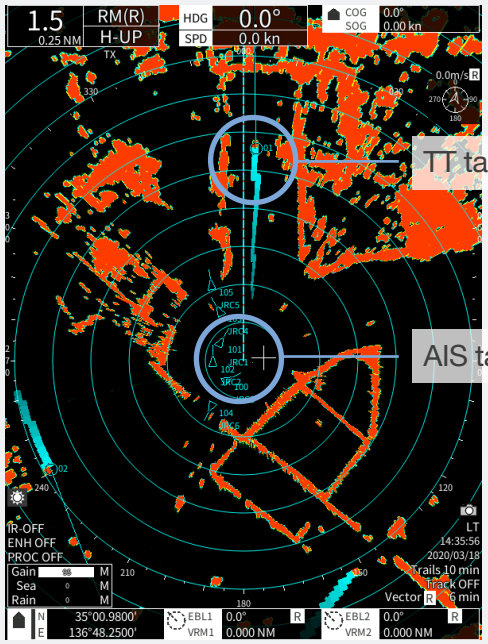




Target tracking can be up to 30 ships.



Up to 100 AIS displays can be displayed.



Tech Specs

Display unit

Display unit

NCD-2364 Weight 5 kg (11.02 lbs)







Scanners

2 ft | 16-48 rpm

NKE-2043 Weight 10 kg (22.05 lbs)



3.9 ft | 16-27 rpm | 27-48 rpm HS

NKE-2063A/HS Weight 21 kg (46.30 lbs)

Swing circle 1220 mm (48.03 in)



4 ft | 16-27 rpm | 27-48 rpm HS

NKE-2103-4/4HS Weight 34 kg (74.96 lbs)

Swing circle 1320 mm (51.97 in)



6 ft | 16-27 rpm | 27-48 rpm HS

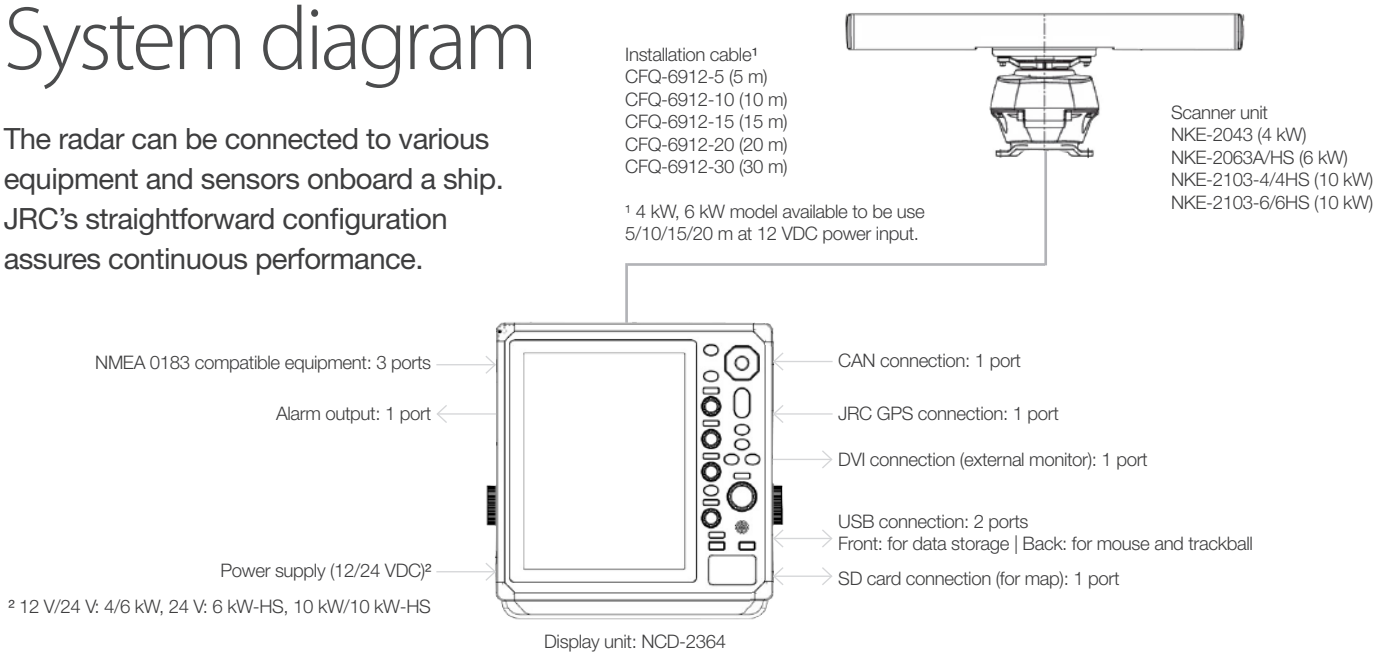
NKE-2103-6/6HS Weight 36 kg (79.37 lbs)

Swing circle 1910 mm (75.20 in)



System diagram

The radar can be connected to various equipment and sensors onboard a ship. JRC's straightforward configuration assures continuous performance.



Specifications

Model	JMA-3404	JMA-3406	JMA-3406HS	JMA-3411-4	JMA-3411-HS	JMA-3411-6	JMA-3411-6HS
IMO compliant	Non-SOLAS						
Frequency	X-band (9410 MHz)						
Range scale	0.0625, 0.125, 0.25, 0.5, 0.75, 1, 1.5, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, 64, 72 NM[3]						
Type	Dome	Open					
Scanner							
Model	NKE-2043	NKE-2063A	NKE-2063AHS	NKE-2103-4	NKE-2103-4HS	NKE-2103-6	NKE-2103-6HS
Antenna length	2 ft.	3.9 ft.		4 ft.		6 ft.	
Transmitting power	4 kW	6 kW		10 kW			
Beam width 3 dB	Hor. 4° Ver. 2.5°	Hor. 2° Ver. 30°		Hor. 1.9° Ver. 20°		Hor. 1.2° Ver. 20°	
Rotation speed	16-48 rpm	16-27 rpm	27-48 rpm	16-27 rpm	27-48 rpm	16-27 rpm	27-48 rpm
Pulse width / repitation frequency	0.08 µs/4000 Hz[4], 0.08 µs/2250 Hz, 0.13 µs/1700 Hz[4], 0.25 µs/1700 Hz, 0.5 µs/1200 Hz, 0.8 µs/750 Hz, 1.0 µs/650 Hz						
Power consumption (at max wind load)	60 W	180 W	230 W	210 W	360 W	210 W	360 W

[3] 72 NM is only 6 and 10 kW. | [4] Only JMA-3404 and JMA-3406/HS.

Presentation	
Screen size and resolution	12.1-inch SVGA color LCD,600x800 dot
Presentation mode	RM:North-UP / Head-UP / Course-UP | TM:North-UP / Course-UP
Gain	Auto/manual
Anti SEA/RAIN clutters	Auto/manual
Trail indication	OFF,15 s,30 s,1 min,2 min,3 min,4 min,5 min,6 min,10 min,15 min,All
Off center	2/3 radius of PPI
Target data and AIS	
Tracking target capacity	30 targets
Guard zone	2 zone (Auto TT: 1 zone)
Target data	True bearing,range,true course,true speed,CPA,TCPA
Alarms	CPA/TCPA,new target,lost,system error
AIS target capacity	100 targets

Interface	
NMEA 0183	3 ports
CAN	1 port
JRC GPS	1 port
DVI connection	1 port
USB connection	2 ports
NMEA 0183 input sentence	ALR, DBT, DPT, GGA, GLL, GNS, HDG, HDM, HDT, MTW, MWV, RMA, RMC, ROT, RSA, THS, VBW, VDO, VDM, VHW, VTG, VWT, VWR
NMEA 0183 output sentence	GGA, GLL, GNS, HDT, OSD, RSD, RMC, TLL, TTD, TTM, THS, VTG

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Product and/or specifications could change without notice

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To ask about this model or to buy

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