

JMA-5200Mk2 R-Series Inland Edition Radar



– JRC's innovative JMA-5200Mk2 R-Series inland edition radar series: inland navigation has a new standard

Optimized signal processing for river use

Constaview™ digital signal processing

TEF™ multi-level target enhancement

High speed version available

Brushless antenna motors for extended lifetime

JMA-5200Mk2 R-Series

– developed for maximum ease of use

New keyboard design

With its new case design, the keyboard of the JMA-5200Mk2 R-Series allows you to carry out all radar operations simply by using the keyboard or on-screen by use of the trackball.



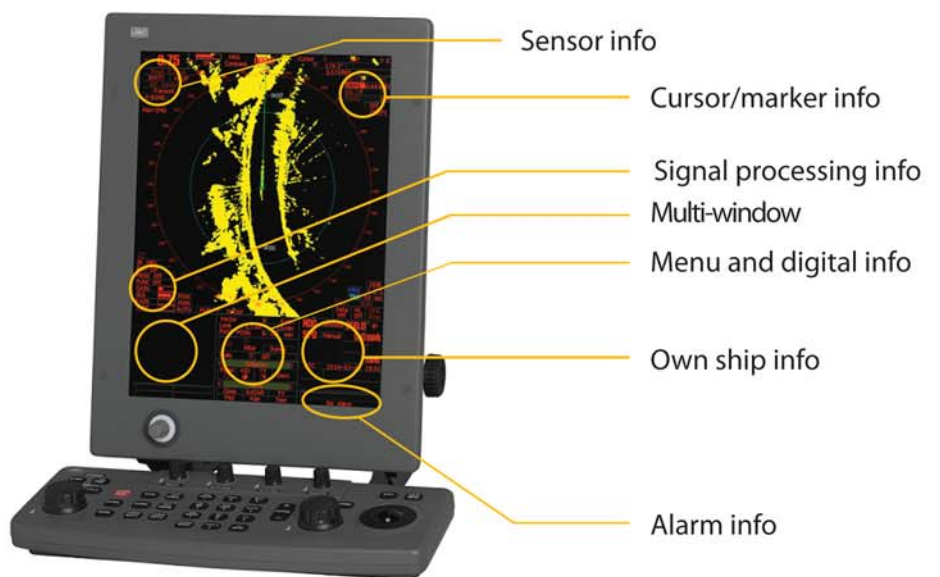
The JMA-5200Mk2 R-Series keyboard is solid and responsive, which allows for precise operation. It also integrates function keys for one-touch access to EBL, VRM, GAIN, SEA and RAIN. This makes it easy to navigate through all common used tasks.

Clear on-screen info

The JMA-5200Mk2 R-series make your radar images more brilliant than ever.

Designed with the operator in mind, a clear interpretation of the radar image is always possible due to simple operation and uncluttered display.

You can also select day and night background modes and adjust the brilliance at your own convenience.

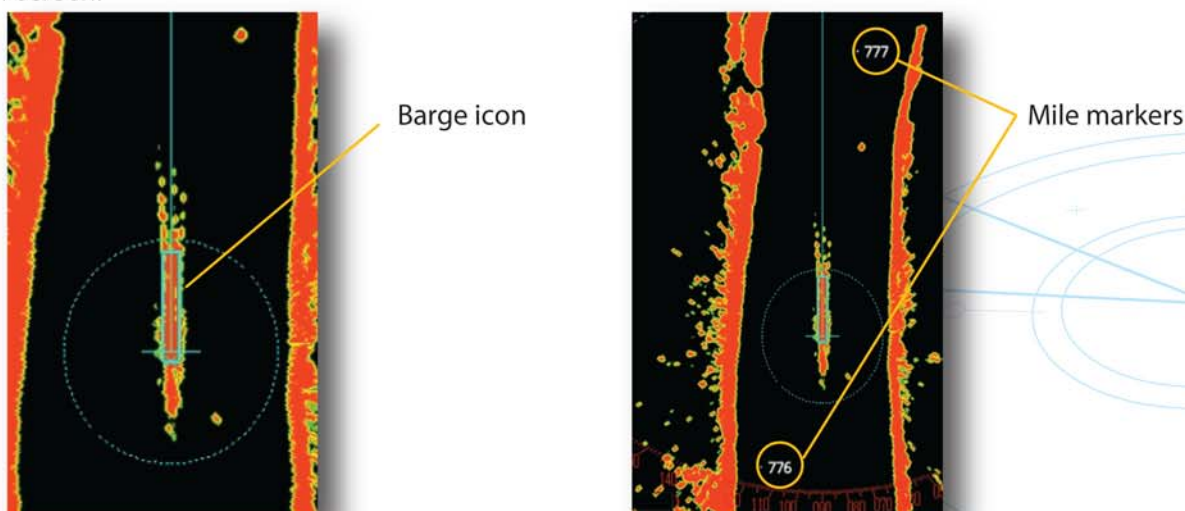


Barge Icon

The length and breadth of the total barge size can be displayed as a simple rectangle on the radar screen.

Mile Marker Display

With NDB-44 Plotter Option, the mile marker information (river ID and mile number) can be displayed on the radar screen.

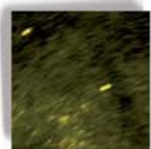
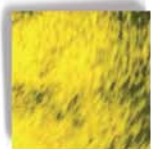


JMA-5200Mk2 R-Series

– system flexibility

Flexible black box configuration

The processor unit is the heart of the JMA-5200Mk2 R-Series, and shares the same simple configuration as its predecessor, contributing to an enhanced system configuration. Optional TT (Target Tracking) module and AIS interface can be built in.



• Saturation of noises on receiver

• Wide dynamic range

Wide dynamic range receiver

The new JMA-5200Mk2 R-Series integrates a wide dynamic range receiver that, compared to conventional models, significantly improves the differentiation of noise and targets under sea clutter.

More powerful than ever

The JMA-5200Mk2 R-Series incorporates three Tornado™ processors, which are exclusively developed and designed by JRC, bringing a new level of performance and reliability to radar operation. The new Tornado™ processors equal the power of twelve conventional processors.

Designed for inland use

This inland edition of the JMA-5200Mk2 radar is a result of listening carefully to river boat captains and owners, and developed specifically for the US river boat.

Our engineers went onboard river vessels to optimize the signal processing, resulting in preset functions for the Ohio and Mississippi rivers.

The JMA-5200Mk2 R-Series radar is based on real world experience, developed in the USA for US river fleets.



Standard interswitching

Basic L-type interswitching is standard on the JMA-5200Mk2 R-Series.



What's standard in the box?

	Which cables?	Std.	Max.
1. Display	Display to processor ¹	5 m	5 m
2. Scanner	Keyboard to processor	5 m	25 m
3. Keyboard	Scanner to processor ²	20 m	65 m
4. Processor	Power cable for processor	5 m	5 m
5. Cables	Power cable for display	5 m	5 m
6. Spare parts			
7. Manual (English)			

¹ not included in black box configuration

² total distance between scanner and processor must not exceed 65 m



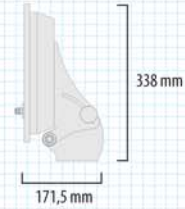
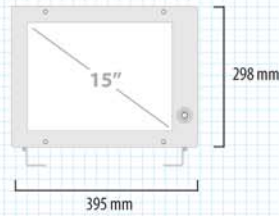
Japan Radio Co., Ltd.

JMA-5200Mk2 R-Series

– dimensions and weights

Dimension drawings - Display¹ (option)

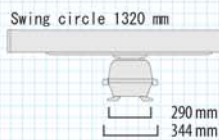
NWZ-164 Weight 5 kg



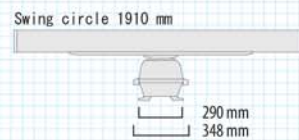
¹shown with optional bracket **cutout for panel mount** height 262 mm, width 368 mm, depth 150 mm

Dimension drawings - Scanners¹

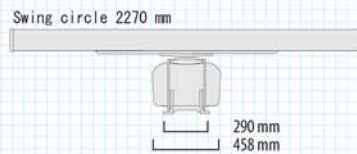
NKE-2103-4 Weight 38 kg



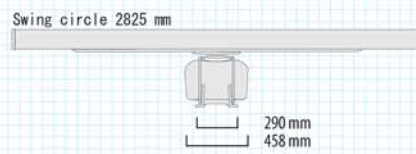
NKE-2103-6 Weight 40 kg



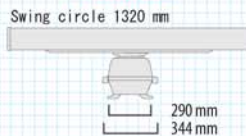
NKE-2254-7 Weight 58 kg



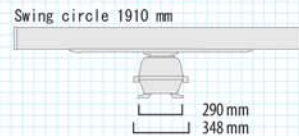
NKE-2254-9 Weight 60 kg



NKE-2103-4HS **highspeed** Weight 38 kg



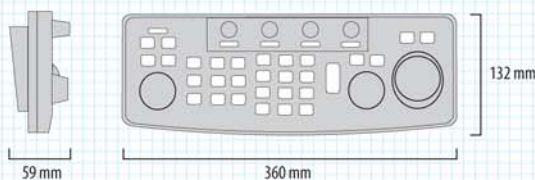
NKE-2103-6HS **highspeed** Weight 40 kg



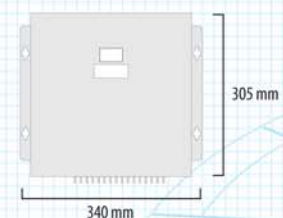
¹all scanners have a brushless motor and comply with 40dB/dec Spurious particulars

Dimension drawings - Keyboard, Processor

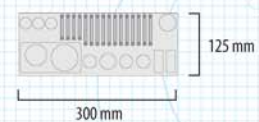
NCE-7699A Weight 1,3 kg



NDC-1460 Weight 6 kg



cutout for panel mount height 105 mm, width 340 mm, depth 20 mm



JMA-5200Mk2 R-Series

– specifications

Model	JMA-5212-4R	JMA-5212-6R	JMA-5222-7R	JMA-5222-9R	JMA-5212-4HSR	JMA-5212-6HSR
Display	colour raster scan PPI					
Range scale	0.125/0.25/0.5/0.75/1.5/3/6/12/24/48/96 NM					
Scanners						
Model	NKE-2103-4	NKE-2103-6	NKE-2254-7	NKE-2254-9	NKE-2103-4HS	NKE-2103-6HS
Antenna length	4ft.	6ft.	7ft.	9ft.	4ft.	6ft.
Transmitting power	10kW		25kW		10kW	
Transmitting frequency	9410MHz ± 30MHz					
Beam width 3db	Hor. 1.8°, Ver. 20°	Hor. 1.2°, Ver. 20°	Hor. 1.0°, Ver. 20°	Hor. 0.8°, Ver. 20°	Hor. 1.8°, Ver. 20°	Hor. 1.2°, Ver. 20°
Rotation speed	27rpm		24rpm		48rpm	
Pulse width (receive freq.)	0.08µs/2250Hz, 0.25µs/1700Hz, 0.5µs/1200Hz, 0.8µs/750Hz, 1.0µs/650Hz		0.07µs & 0.2µs/2250Hz, 0.4µs/1400Hz, 0.8µs/750Hz, 1.0µs/650Hz, 1.2µs/510Hz		0.08µs/2250Hz, 0.25µs/1700Hz, 0.5µs/1200Hz, 0.8µs/750Hz, 1.0µs/650Hz	
Duplexer	circular + diode limiter					
Tuning	automatic / manual					
Ambient condition	temperature -25° to 55°C, relative humidity 0% to 93% non-condensing					
Processor						
Model	NDC-1460					
Bearing indication	north-up / course-up / head-up					
Presentation mode	RM display with true trail, RM display with relative trail, TM display					
EBL	2 (EBL1/EBL2) (center/independent) 000.0° - 359.9°, digital display					
VRM	2 (VRM1/VRM2), 0.000 - 97.7 NM, digital display					
Trail indication	4 stages: short, middle, long, super long (e.g. short: off/0.25/0.5/1/3/6/10/15-min and continuous)					
Display						
Model	NWZ-164					
LCD	1024 by 768 pixels (XGA)					
Effective diameter	≥ 180mm					
Connection cable	5m (processor-monitor)					
Keyboard						
Model	NCE-7699A					
Connection cable	5m (processor-keyboard)					
Installation cable	CFQ-6912-20 standard L= 20m (optional up to 65m)					
Power supply (voltage)	24V DC (21.6V to 31.2V DC) 1) 110V to 230V AC					
Power consumption (at max wind load)	600W		680W		600W	
Ambient condition	temperature -15° to 55°C, relative humidity 0% to 93% non-condensing (processor, display, keyboard)					
Optional items						
2) NSK unit (gyro/log interface)	NCT-4106A					
ATA unit (30 targets)	NCA-877A					
Performance monitor	NJU-85					
AIS interface unit	NQA-2155					
Interswitch cable	CFQ-5251 (5m) + CFQ-5351					
Plotting function board	NDB-44					
AC rectifier	NBA-5111 - AC 100/110/120/220/230/240V					
Cable 10/15/20/30/40/50/65 m	CFQ-6912-10/15/20/30/40/50/65					

1) AC 100-115/220-240V (50/60Hz 1Ø), AC power requires rectifier NBA-5111

2) Required if no high speed NMEA available

All specifications are subject to change without notification.

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