### FURUNO

## **MARINE RADAR**

# Model FR-10/FR-12

















## **Navigate Safely By Identifying Risks**

The FR-10 and the FR-12 10.4"/12.1" Color LCD Radars are Marine Radar displays consisting of a dedicated vertical display unit that can be freely combined with Furuno's extensive DRS Series Antennas to meet a wide variety of detection needs. These Radars feature the latest technologies including Risk Visualizer™, a new function that provides visual information on potential collision areas and movement of all surrounding vessels, as well as Echo Average, Target Analyzer™, Fast Target Tracking™, RezBoost™ and many other great functions to help you keep track of any target for your navigation and operations such as Custom AIS, User-Programmable function keys and Multi-language support.

#### Compatible with Furuno's powerful antenna line-up

The FR-10 and FR-12 are compatible with most of the DRS Series Antennas, allowing for a variety of configurations. By selecting the detection range (power output), screen size and antenna type & size based on what you want to accomplish, you can build the Radar that best meets your needs.

SOLID STATE DOPPLER RADAR



#### Radome type

Model DRS2D-NXT Model DRS4D-NXT

#### Open Array type

Model DRS6A-NXT Model DRS12A-NXT Model DRS25A-NXT



New

X-CLASS

Radome type

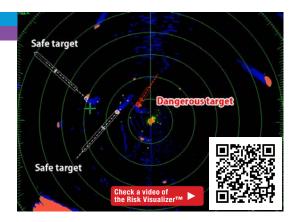
Model DRS4DL+

#### Open Array type

Model DRS6A X-Class Model DRS12A X-Class Model DRS25A X-Class

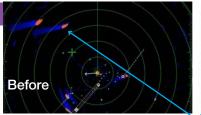
#### Risk Visualizer™

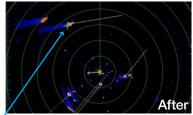
Risk Visualizer<sup>TM</sup> is a technology that shows potential collision areas based on the current position and movement of all surrounding vessels. Thanks to the on-screen display, it is easy to get a quick and intuitive overview of the situation around your ship. Additionally, color-coded alerts according to the threat of a collision, from green (normal) to red (hazardous), will help you assess the level of danger and plan your next move. This is our first commercial mid-range Radar to incorporate this feature, which contributes to the continuous improvement of safety at sea.



#### Fast Target Tracking™

Fast Target Tracking™ is a technology that instantaneously displays a vector indicating the speed and heading of the target. The targets are automatically tracked from the beginning, making it possible to immediately calculate the target's trajectory and display the velocity vector.





Target acquired



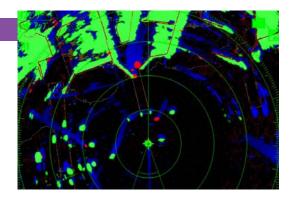
Model FR-10 10" Color LCD Marine Radar Display **GOOD DESIGN AWARD 2021** 

https://www.g-mark.org/

Model FR-12 12" Color LCD Marine Radar Display

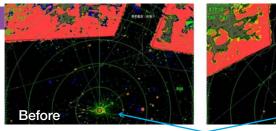
#### Target Analyzer™

Target Analyzer™ is a technology that analyzes targets and identifies the dangerous ones that are likely to collide with your ship, using different colors according to the degree of danger. The display of potentially dangerous targets in different colors allows an operator to understand threats to safe navigation at a glance.



#### **Echo Average**

Echo Average is a feature that attenuates irregular echoes, such as reflections from the sea surface and precipitation, and stabilizes echoes from fishing gear and other vessels. It makes it easier to see what you want to see, even in poor weather conditions such as high waves, precipitation or dense fog.

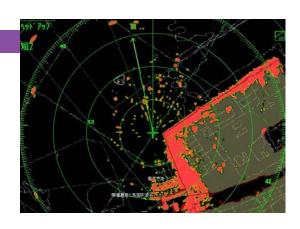


**Clear Echo Attenuation** 

#### Radar overlay on charts/Share points and lines

The FR-12 can show Radar echoes overlaid on MapMedia MM3D charts. Additionally, when connected to the GP-3700/F\* via Ethernet, marks and lines can be displayed.

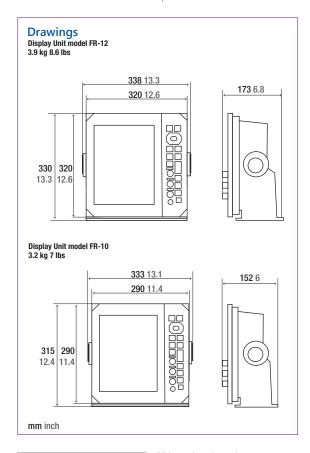
\*FR-12 only. This function requires the optional RP board kit OP03-266-E to be installed in the FR-12.

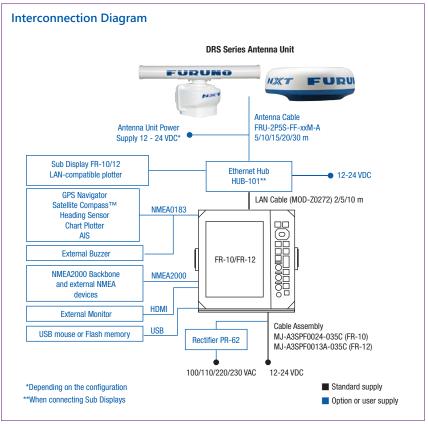


#### Model FR-10/12

#### **Specifications**

Display Unit	Model FR-10	Model FR-12
Screen size	10.4-inch color LCD	12.1-inch color LCD
Resolution	800 x 600 (SVGA)	1024 x 768 (XGA)
Antenna Unit		
Range scale	0.0625 to 36 NM (DRS4DL+)	
	0.0625 to 48 NM (DRS2D/4D-NXT)	
	0.0625 to 72 NM (DRS6A-NXT) 0.0625 to 96 NM (DRS6A/12A/25A X-Class, DRS12A/25A-NXT)	
Compatible Antenna Unit		
Model	DRS4DL+, DRS2D/4D/6A/12A/25A-NXT, DRS6A/12A/25A X-Class	
Output	Depending on the selected Antenna Unit	
Display Mode		
	Head-up, Course-up, North-up, True motion, Stern-up	
Main Functionalities		
Risk Visualizer™	Available	
Target Analyzer™	Available *Solid-State Sensors only	
Target Tracking™	Available *Fast Target Tracking	
True Echo Trail	Available	
Echo Average	Available	
Sub Display Unit	Available *2 units max	
AIS Display	Avail	
Radar overlay on charts	Not available	Available
Interface		
Available ports	NMEA0183(x3), NMEA2000(x1), LAN(x1), HDMI(x1), USB(x1), Contact closure(x1)	
Power Supply		
	12-24 VDC: 1.1-0.6 A	12-24 VDC : 1.7-0.9 A
Environmental Conditions		
Ambient temperature	-15°C to +55°C	
Degree of protection	Front Panel: IP55, Rear Panel: IP22	





Beware of similar products

All brand and product names are registered trademarks, trademarks or service marks of their respective holders.

#### SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

FURUNO ELECTRIC CO., LTD.
Japan | www.furuno.com
FURUNO U.S.A., INC.
U.S.A. | www.furunousa.com
FURUNO PANAMA S.A.
Republic of Panama | www.furuno.com.pa
FURUNO (UK) LIMITED
U.K. | www.furuno.co.uk
FURUNO NORGE A/S
Norway | www.furuno.no

FURUNO DANMARK A/S
Denmark | www.furuno.dk
FURUNO SVERIGE AB
Sweden | www.furuno.se
FURUNO FINLAND OY
Finland | www.furuno.fi
FURUNO POLSKA Sp. Z o.o.
Poland | www.furuno.pl
FURUNO DEUTSCHLAND GmbH
Germany | www.furuno.de

FURUNO FRANCE S.A.S.
France | www.furuno.fr
FURUNO ESPAÑA S.A.
Spain | www.furuno.es
FURUNO ITALIA S.R.L.
Italy | www.furuno.gr
FURUNO HELLAS S.A.
Greece | www.furuno.gr
FURUNO (CYPRUS) LTD
Cyprus | www.furuno.com.cy

FURUNO SHANGHAI CO., LTD. China | www.furuno.com/cn
FURUNO CHINA CO., LTD. Hong Kong | www.furuno.com/cn
FURUNO KOREA CO., LTD Korea
FURUNO SINGAPORE

PT FURUNO ELECTRIC INDONESIA Indonesia | www.furuno.id FURUNO ELECTRIC (MALAYSIA) SND. BHD. Malaysia | www.furuno.my