FURUNO

SOLID STATE DOPPLER RADAR

Model DRS6A-NXT
Model DRS4D-NXT





















The MXT chapter in Radar

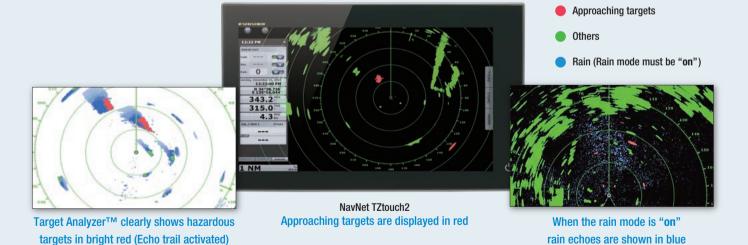




Target Analyzer™ function utilizing Doppler technology spots hazardous targets instantly!

The DRS4D-NXT and the DRS6A-NXT are the first radars in the world to use FURUNO's exclusive Target Analyzer™ function. Targets that are approaching your vessel automatically change color to help you identify potentially dangerous targets. Green echoes are targets that stay stationary, or are moving away from you, while red echoes are hazardous targets that are moving towards your vessel. Echoes dynamically change colors as targets approach, or get farther away from your vessel. Target Analyzer™ improves situational awareness and can increase safety by showing you which targets to look out for. Additionnaly, when the rain mode is activated, rain echoes are shown in blue. This mode is particularly useful as it has the capability to detect targets masked by rain clutters.





- ➤ Solid-State pulse compression Doppler Radar
 No preheating time, low energy consumption (no use of a magnetron)
- ► Revolutionary Target AnalyzerTM function instantly identifies hazardous targets
- ► Fast Target TrackingTM and Auto Target Acquire function, up to 100 targets
- ► RezBoostTM beam sharpening to increase the resolution

- Effective horizontal beam*
 - Can reach a value of 0.7° with DRS6A-NXT (XN13A), and 2.0° with DRS4D-NXT (when using RezBoost 1M) *the lower the better
- Bird Mode to find the best fishing grounds by tracking birds
- Simple installation, no need to open the radome (DRS4D-NXT only), external PSU is not required
- New smart-connector cable for retrofitting existing DRS cable installations (DRS4D-NXT only)

technology!

FURUND



DRS6A-NXT Open array type

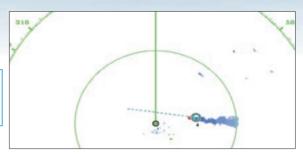
*3 antenna lengths: 3.5 ft (XN10A), 4 ft (XN12A), 6 ft (XN13A)

Fast Target Tracking™ and Auto Target Acquire function

With **Fast Target Tracking™** activated, it only takes a few seconds for a vector to be displayed once the target is selected, manually or automatically with the **Auto Target Acquire function**.

When the **Auto Target Acquire** function is **on**, approaching targets within 3NM range from own ship, which are potentially hazardous, are automatically acquired by Doppler calculation and will trigger an alarm*.

Together, Up to 100 targets can be acquired simultaneously, increasing considerably the safety and simplifying estimation of other vessel's course and speed.



Approaching vessel with target vector and trail

*TCPA setting required

RezBoost™ beam sharpening

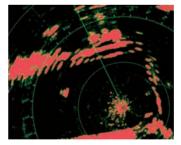


FURUNO's exclusive RezBoost™ technology has been incorporated into our Radar units for enhanced resolution and impressive performance.

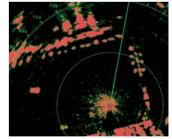
With RezBoost™ set to MAX, the sharpness

offers an incredibly detailed image with more targets and less clutter.

(the pictures show images captured by the DRS4D-NXT with Standard RezBoost $^{\text{TM}}$ and Max RezBoost $^{\text{TM}}$)

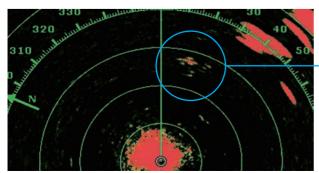


RezBoost™ standard (DRS4D-NXT)



RezBoost™ Enhanced, MAX setting (DRS4D-NXT)

Bird Mode



Bird echoes



feature a new Bird Mode that helps you identify birds gathering around schools of fish at the sea surface. The Bird Mode adjusts the gain and sea settings automatically for optimal visibility.

DRS6A-NXT and DRS4D-NXT

SPECIFICATIONS OF

FURUNO

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Model DRS6A-NXT/Model DRS4D-NXT

ANTENNA

DRS6A-NXT Slotted waveguide array

Vertical beam width 2.3° (XN10A), 1.9° (XN12A), 1.4° (XN13A) Horizontal beam width Antenna rotation speed 24/36/48 rpm range coupled or 24 rpm fixed

DRS4D-NXT Radome (24") Vertical beam width 25°(-3dB)

 3.9° (-3dB) Adjustable between 2.0° and 3.9° Horizontal beam width

(effective with RezBoost control)

Antenna rotation speed 24/36/48 rpm range coupled or 24 rpm fixed (select)

RADAR FUNCTION

Tx frequency 3 channel, auto/manual selectable

Channel	PON (MHz)	Q0N (MHz)
1	9380	9400
2	9400	9420
3	9420	9440

Output power 25 W

Pulse Length, Pulse Repetion Rate and Range Scales

	DRS6A-NXT	DRS4D-NXT
Range Scales[NM]	0.0625-72	0.0625-36
Pulse length(P0N)[us]	0.04-1.2	0.08-1.2
Pulse length(Q0N)[us]	5-48	5-18
PRR[Hz]	700-2000	1100
Tx frequency[MHz]	9380-9440	

DRS6A-NXT: 10 m, DRS4D-NXT: 20 m Minimum range DRS6A-NXT: 10 m, DRS4D-NXT: 20 m Range resolution

1% of range in use or 10 m, whichever is the greater Range accuracy

Bearing accuracy

INTERFACE

Number of ports LAN: 1 port, Ethernet, 100Base-TX, RJ45

IEC61162-1/2 Data sentences

GGA, GLL, GNS, HDG, HDM, HDT, RMA, Input

RMC, THS, VHW, VTG

DRS6A-NXT: 12/24 VDC: 9.5/5.0 A max. **POWER SUPPLY**

DRS4D-NXT: 12-24 VDC: 2.5-1.3 A

ENVIRONMENT

Ambient temperature -25 °C to +55 °C (storage: -30 °C to +70 °C)

Relative humidity DRS6A-NXT: 95% or less at +40 °C

DRS4D-NXT: 93% or less at +40 °C

Degree of protection DRS6A-NXT: IP56

DRS4D-NXT: IP26

IEC 60945 Ed.4 Vibration

EQUIPMENT LIST

DRS6A-NXT

Standard Scanner Unit (RSB-137-119),

> Radiator, Installation Materials, Spare Parts LAN cable 2/5/10 m, Joint Box (TL-CAT-012)

DRS4D-NXT

Option

Standard Radar Sensor (RSB-135-115), Installation Materials,

Spare Parts

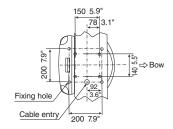
Option Radome Mount (OP03-208),

(OP03-239)LAN cable 2/5/10 m, Joint Box (TL-CAT-012)

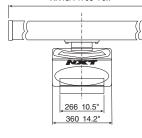
Antenna Unit

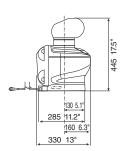
DRS6A-NXT

XN10A 20 kg 44.1 lb XN12A 21 kg 46.3 lb XN13A 23 kg 50.7 lb



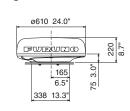
XN10A 1036 40.8" XN12A 1255 49.4" XN13A 1795 70.7"

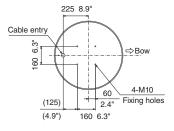




DRS4D-NXT

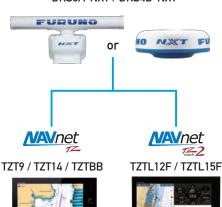
7.3 kg 16.1 lb





Interconnection Diagram

Radar Sensor DRS6A-NXT / DRS4D-NXT



Ethernet

DRS6A-NXT compatible software version: 5.0.1 or later (TZT/TZT2) DRS4D-NXT compatible software version: 4.2.1 (TZT), 3.0.1 (TZT2) or later

Beware of similar products

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