

FURUNO

Half-Circle Color Scanning Sonar

Model

FSV-75

Unparalleled Image Detail



19" MU-190HD Display Unit
(Sold separately)



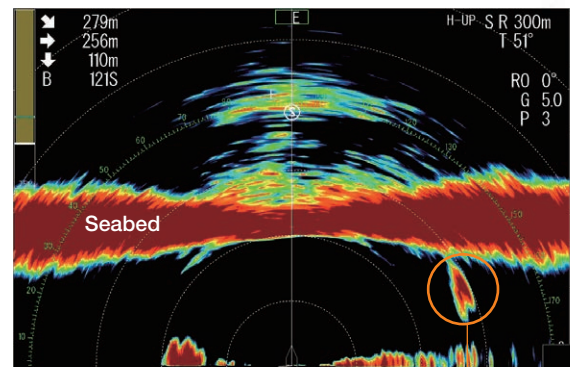
More details on
www.furuno.com



The most advanced half-circle sonar for shallow water detection.

► A Wider scanning range near the seabed for enhanced detection capabilities.

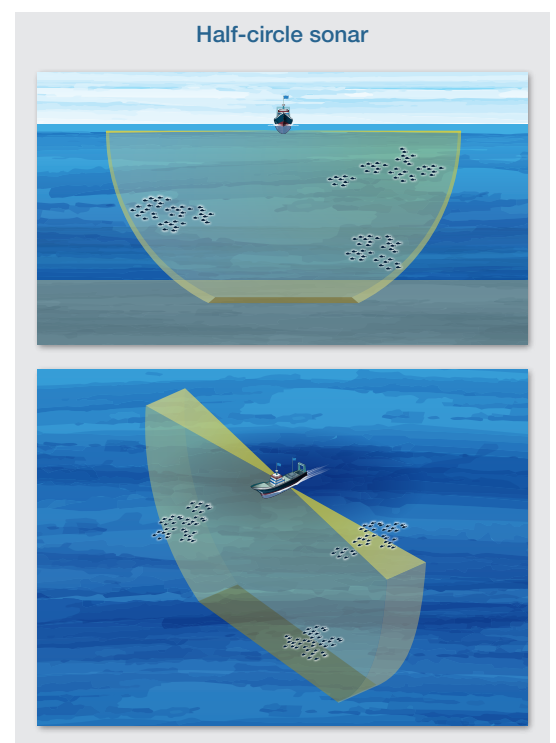
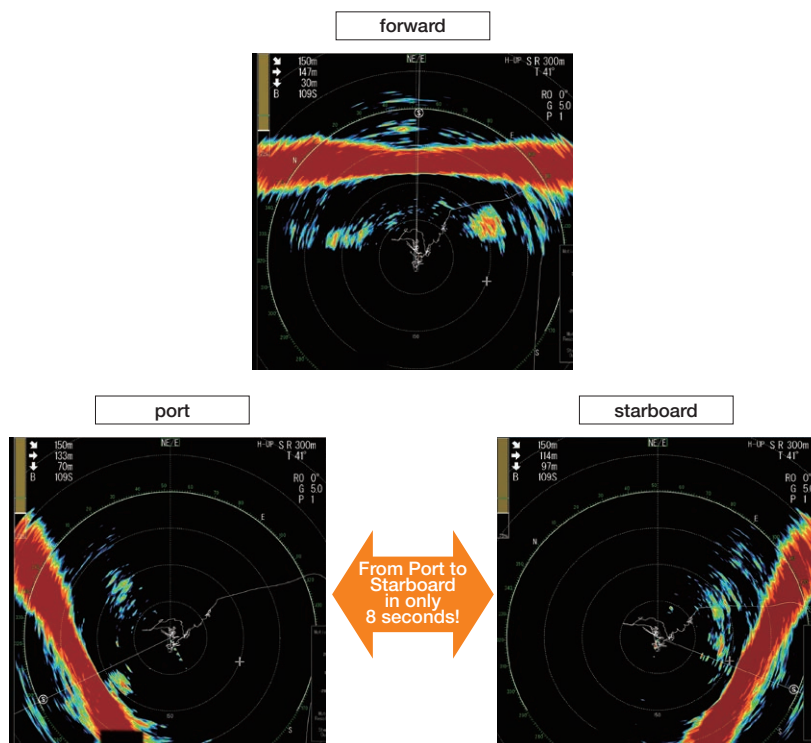
The adoption of innovative signal processing technology dramatically increases the sensitivity of the sonar and allows detection and tracking of fish schools over a considerably larger area.



● Fish school

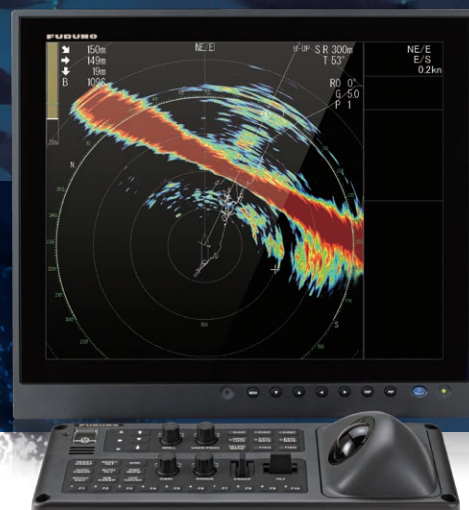
► A unique fan-shaped beam that scans from the sea surface to the seabed!

Thanks to a unique fan-shaped beam, increasing the scanning speed more than twice than that of previous models, and an extended detection range helping reduce the amount of fish that go undetected, the performance of half-circle sonar have been taken to a whole new level.



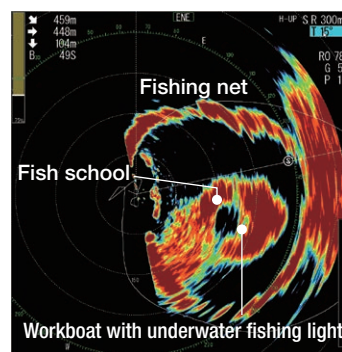
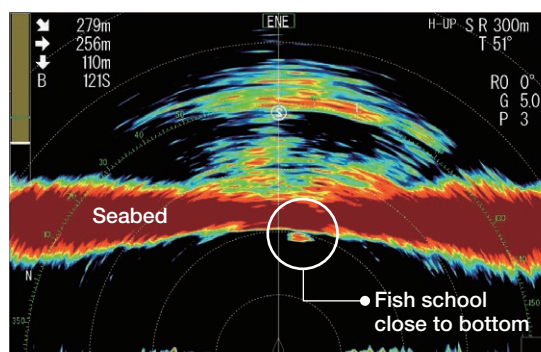
Half-circle Color Scanning Sonar

Model **FSV-75**



- **High frequencies (180 kHz)** allow clear and easy distinction between fish, seabed and nets!

The Furuno FSV-75 Sonars use high frequencies (180 kHz) which, unlike low and middle frequencies, can easily detect fish tight on the bottom or nets.

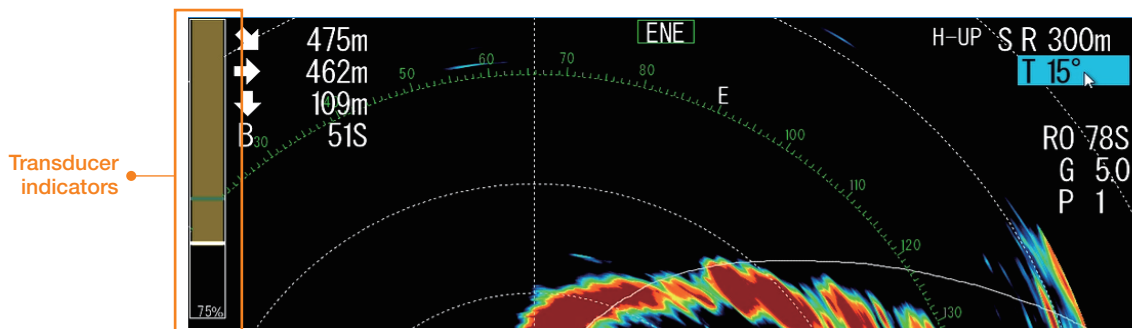


- **Perfect to search for fish with rapid, erratic movement** such as skipjack or tuna

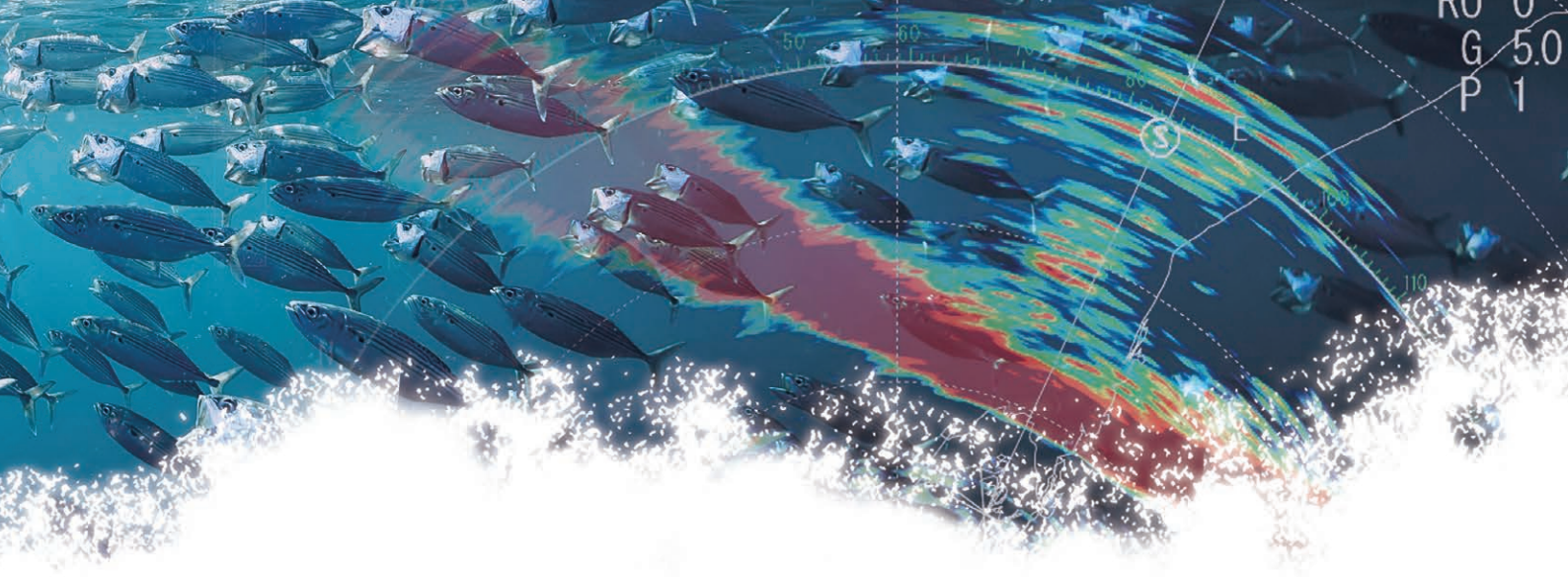
At short ranges, half-circle sonars can swipe faster than full-circle sonars as they can receive faster. It is particularly useful when searching for fast moving fish.

- **On screen "Retract Transducer" indicator** for quick adjustment and damage prevention.

In the presence of close marine objects, which could potentially damage the transducer, it is useful to know the degree of retraction for quick adjustment when necessary.



Instantly spot if and how much the transducer is lowered or retracted, helping you prevent damage to transducer and increase the safety at sea.

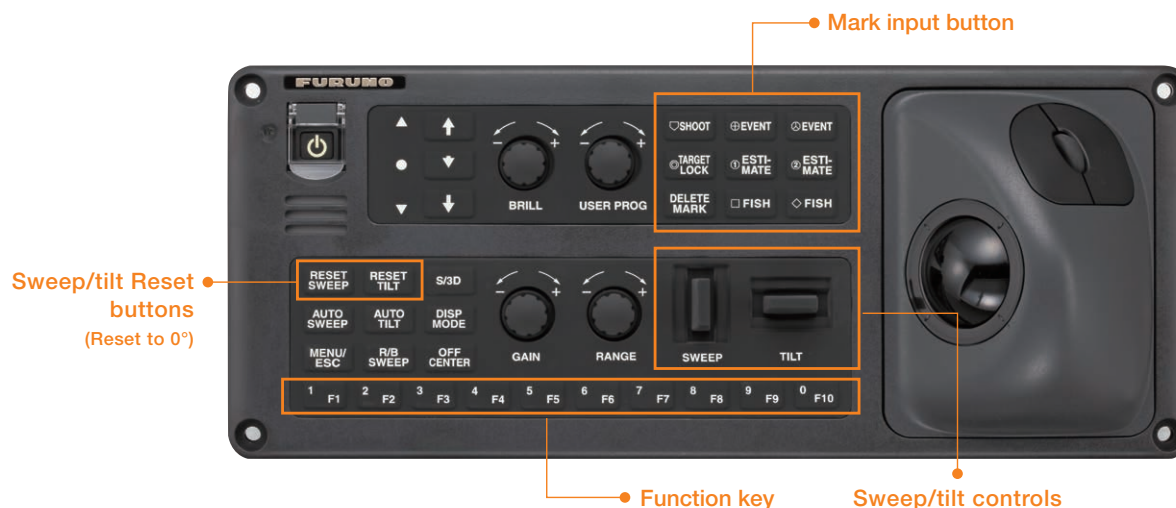


► Quick and secure operation!

Thanks to a control panel specially designed for Half-circle sonars, all operations allowing fish search and tracking, such as adjusting the sonar rotation parameters or tilting, can be performed simply and efficiently.

This control panel comes with 10 of the most popular function keys among the current FSV series sonars, and it is possible to register your favorite functions from 40 available functions.

A convenient one-click delete button is also included.

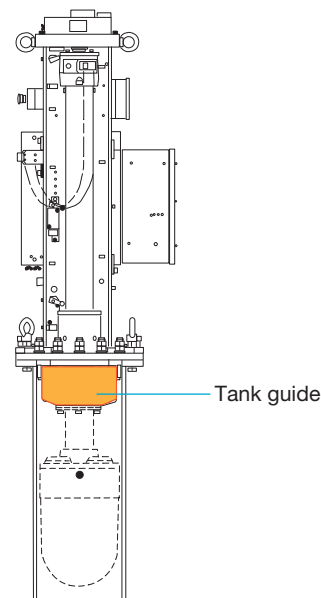


► Tank guide for a robust Hull Unit.

Thanks to a "Tank Guide" mechanism, the transducer is protected from vibrations and impact, which considerably improves the stability and durability of the sonar.

► Shorter lowering/retracting time.

The transducer can be deployed and retracted in 11 seconds (1100 mm), it's half the time of current Sonar models.



Specifications

GENERAL

Scanning method: Full digital beam forming
Frequency: 180 kHz
Pulse length: 0.5 to 40 ms
Range: 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 1000, 1200, 1600, 2000 m
Audio search: Frequency: 1 kHz, Output 10 W (optional speaker required)

PROCESSOR UNIT

Orientation: Head-up, North-up* and Course up*
(*: sensor required)
Presentation mode: Slant, Vertical combination scan*, Echo sounder combination*, Vertical and echo sounder combination*
(*: future use)
Marks: Own ship, Bow line, Bearing/Distance, Event, Fish school, EBL, Tracking, Current, Sonde
Information: Scan (Bearing/Distance), Cursor (Distance/Depth/Bearing), Event, Fish school (Position/Bearing), Own ship's location, Speed/Bearing
Features: Water temperature, Wind speed/bearing, Interference rejecter, Afterglow, Noise limiter, Delete color, Automatic target tracking, Auto-retraction, Fish school alarm
Resolution: 1280 x 1024 (SXGA)
Picture color: 32 colors (sonar pictures), 6 colors (marks)
HULL UNIT
Transducer travel: 800 mm or 1100 mm
Raise/lower time: 8 s (800 mm travel), 11 s (1100 mm travel)
Tx beam width: Horizontal: 180°, Vertical: 6° (-3 dB at 180 kHz)
Rx beam width: Horizontal: 6°, Vertical: 6° (-3 dB at 180 kHz)
Scanning angle: -175° to +175°
Elevation angle: 0° to 90° (downward)
Ship's speed allowance: 18 kn (15 kn for raise/lower operation)

INTERFACE

Number of port: Video output: 2 ch, HDMI, SXGA
NMEA0183: 5 ch, V1.5/2.0/3.0/4.0/4.1
External KP: 1 ch, current loop or contact closure (Input: 5-15 V, Output: 12 V)
Voice output: 1 ch, 10 W, 4 ohms, monaural
Gyrocompass: 1 ch, AD-10
Echo sounder input: 1 ch, VI-1100A analog
Contact closure: 1 ch, for external switch
USB: USB2.0: 2 ch, USB3.0: 2 ch
LAN: 2 ch, Ethernet, 1000Base-T

Data sentences: Input: CUR, DBS, DBT, DPT, GGA, GLL, GNS, HDG, HDM, HDT, MDA, MTW, MWW, RMC, THS, VBW*, VDR, VHW, VTG, VWR, VWT, ZDA
Output: TLL

*: fore-aft/port-stbd speed data required

Output proprietary sentence:

PFEC: evt, fkv, fmg, fvc, pidat, sht, tfm, tlm, tqm

POWER SUPPLY

Transceiver unit: 100/110/115/220/230 VAC, 2.5 A max., 1 phase, 50-60 Hz
Processor unit: 12-24 VDC: 4.0-2.0 A
Hull unit: 200-220 VAC, 4 A max., 3 phase, 50/60 Hz
Rectifier (RU-1746B-2, option): 100/110/115/220/230 VAC, 1 phase, 50/60Hz

ENVIRONMENTAL CONDITIONS

Ambient temperature:

Processor unit: -15°C to +55°C
Transducer: -5°C to +35°C
Transceiver unit: 0°C to +50°C
Matching box: 0°C to +50°C
Hull unit: 0°C to +50°C
Control unit: -15°C to +55°C

Relative humidity: 93% or less at +40°C

Degree of protection:

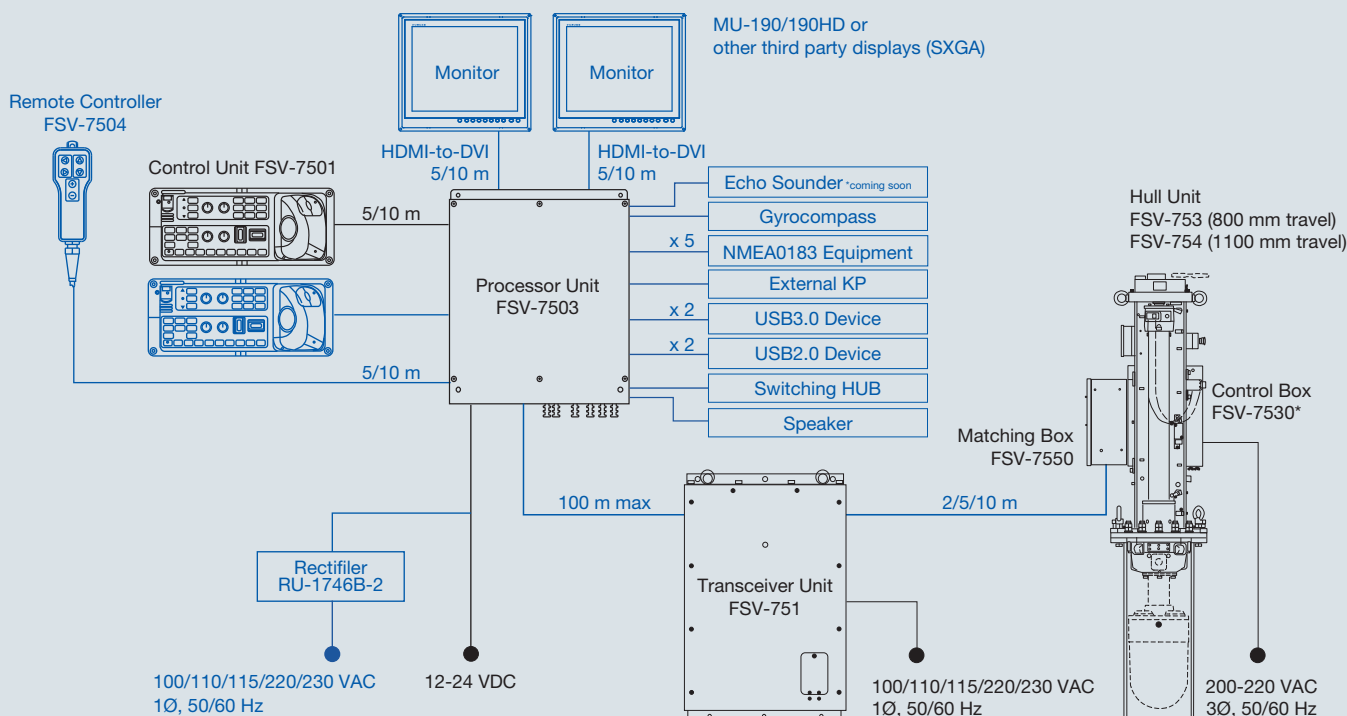
Transducer: IPX8
Control unit: IP22 (panel), IP20 (chassis)
Processor unit: IP22
Transceiver unit: IP22
Matching box: IP22
Hull unit: IPX2
Vibration: IEC 60945 Ed.4

Vibration:

UNIT COLOR

Processor unit: N2.5
Transceiver unit: N2.5
Control unit: N2.5
Hull unit: 2.5G7/2

SYSTEM CONFIGURATION

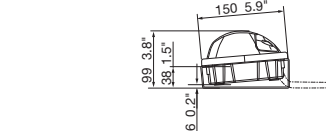
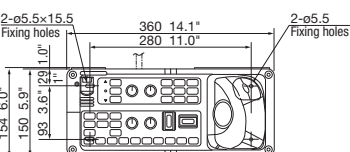
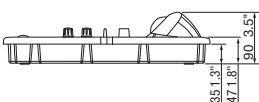
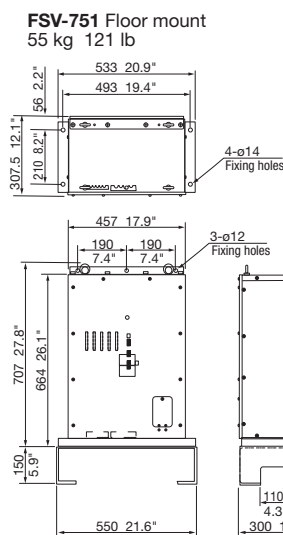


— : Standard supply
— : Option or local supply

*: When mounting the control box separately from the hull unit, use the optional extension box.

Model **FSV-75**

Technical drawing of the front view of the control panel. Dimensions are provided in inches (") and millimeters (mm). The overall width is 360" (9144 mm) and the overall height is 150" (3810 mm). The panel features a control interface with buttons and a display, and a large circular component on the right side. Mounting holes are indicated with dimensions 37" (954 mm) and 145" (3683 mm) for the top left, and 286" (7276 mm) and 112" (2845 mm) for the top right. A 4xM4 fixing screw is shown with a 27" (686 mm) dimension. The bottom right corner has dimensions 96" (2438 mm) and 59" (1499 mm).

[illegible]

18 kg 39.7 lb

369 14.5"

184 7.2"

2-ø12x17

180 7.0"

570 22.4"

494 19.4"

37 1.4"

184 7.2"

12 0.4"

2-Fixing Notch

[illegible][illegible]

Catalogue No. CA000001369
1-A-19093SK