

# Split-beam Echosounder FCV-38

# AFAS2021

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### **Overview**

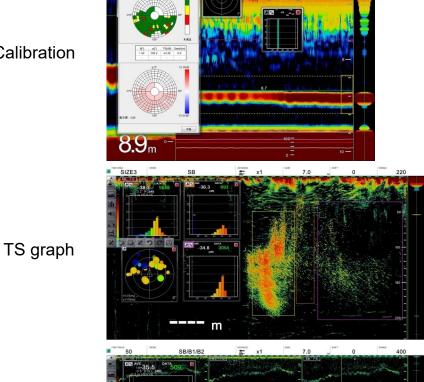
### Concept

Split-beam echosounder with Stabilized Echograms and TS estimation

### **Features**

- Sphere Calibration Function
- Output netCDF4 data
- > TS histogram and target trace graph
- Beam Stabilizer
- Heave Compensation
- Easy and quick operation
- Deep Sea Mode
- Multi-beam directions

Calibration

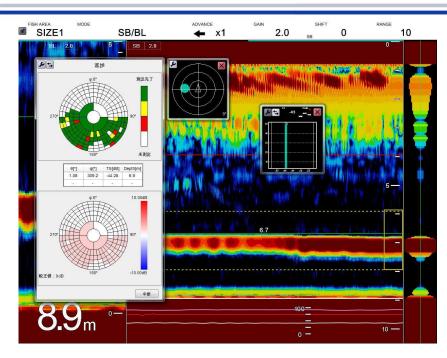


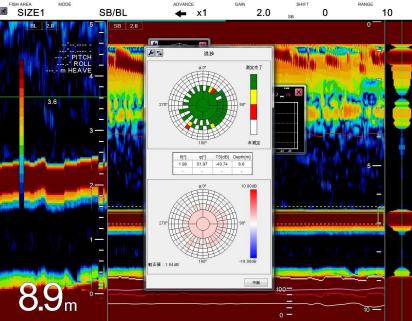
269

Multi-beam directions

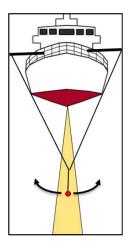
## Calibration

- Two different calibration Mode available
- The "Manual Mode" is the standard method
- The "Auto Mode" is searching the sphere and controlled the beam automatically by beam forming technology

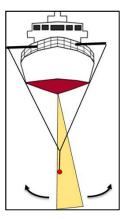




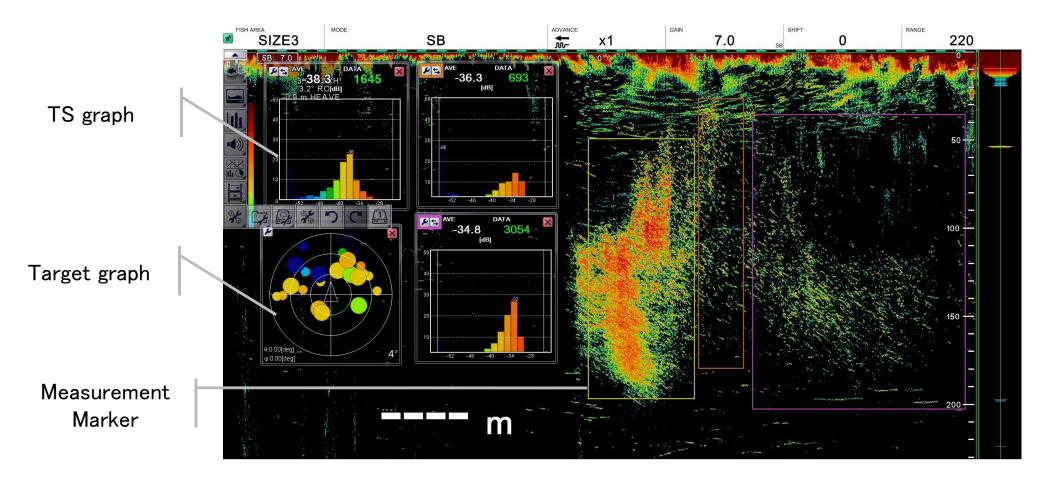
#### Manual Mode



Auto Mode





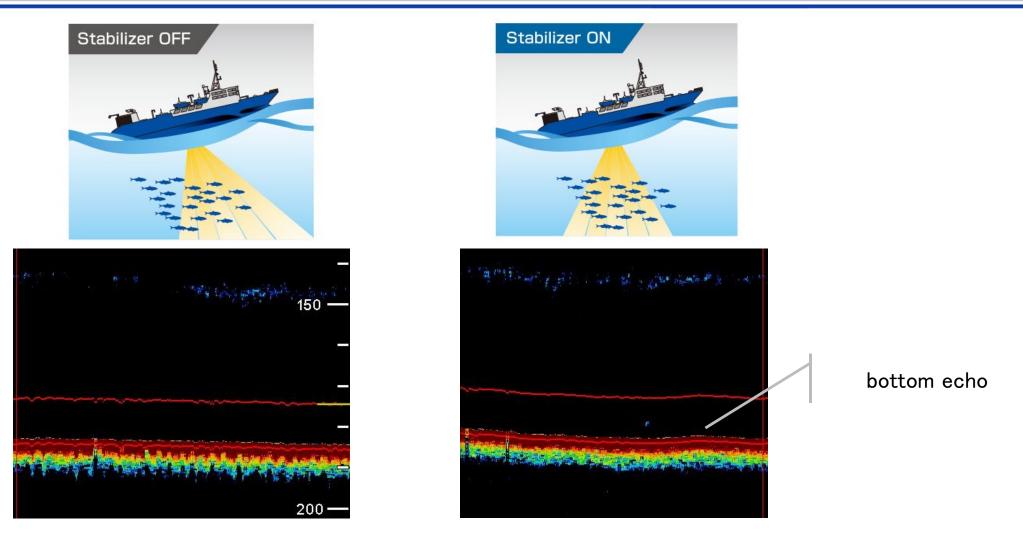


#### > Up to 3 TS graphs available

"Target graph" will detect the targets moving

### **Beam Stabilizer**

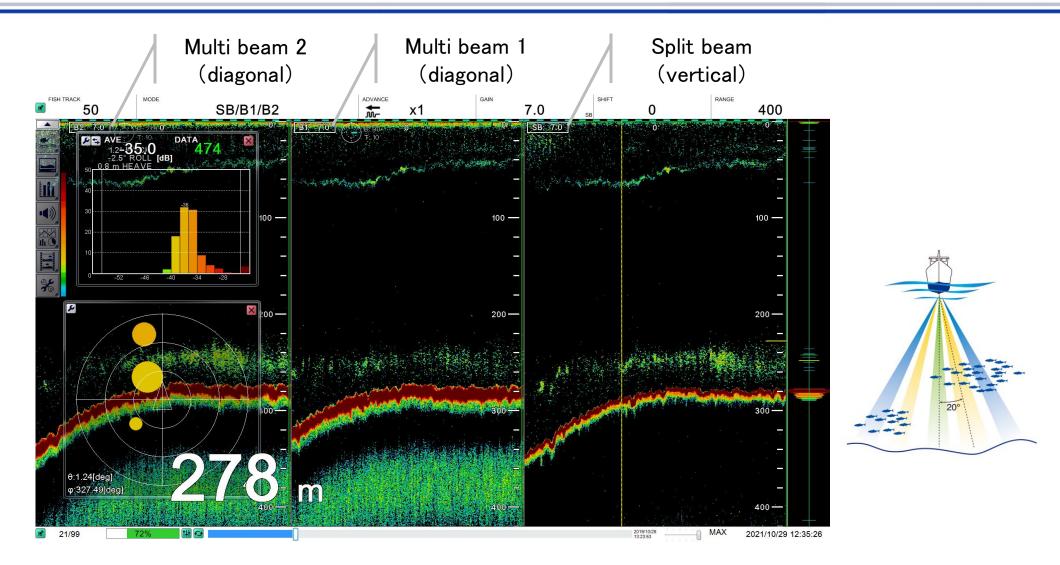




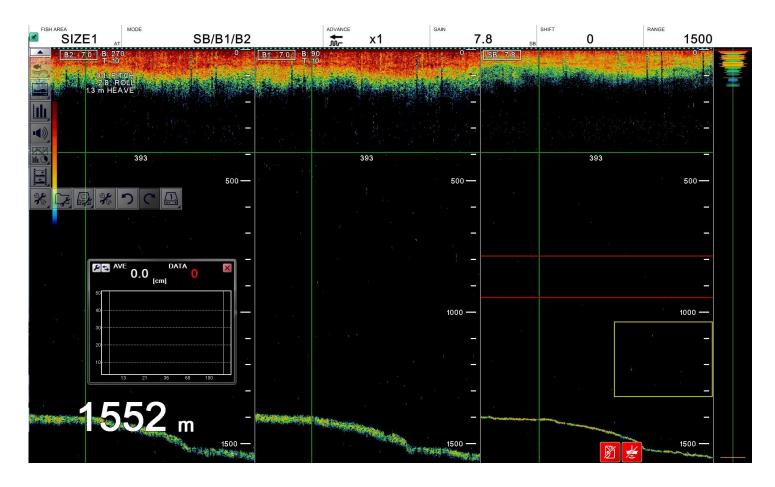
FCV-38 can stabilize both TX and RX beams independently

### Multi-beam Mode

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- > Up to 5 different beams available
- Selectable tilt angle within 20 degrees



Long Transmitting Pulse available by "Deep sea Mode"

### **User Interface**

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Easy and quick operation



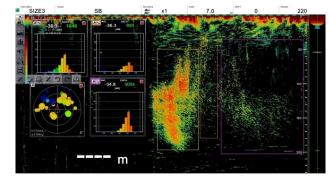
Trackball controll unit





#### Comparison with FCV-30(old model)

function	FCV-38	FCV-30
Frequency	38 kHz	38 kHz
Beam Width	7.0°	7.0°
TS Graph	Max 3 Graphs	1 Graph
Beam Stabilization	Yes	Yes
	Built-in Motion sensor	Motion sensor is optional
Heave Compensation	Yes	Yes
Deep sea Mode	Yes	Yes
Multi beam directional	Max 5 beams	Max 5 beams
Record/Play	Yes	Yes
Output Data format	netCDF4	Furuno Original/HAC





### Summary

- > The "Auto Calibration Mode" can get the calibration value automatically
- The recorded raw data by netCDF4 format can be imported into "Echoview<sup>®</sup> 12" for data analysis
- > 3 "TS histogram graphs" and "target trace graph" available
- Built-in motion sensor and signal processing provide correct TS in rough sea conditions
- Deep sea detection by "Deep sea Mode"
- > 5 different multi-beam echoes are useful to get underwater information

