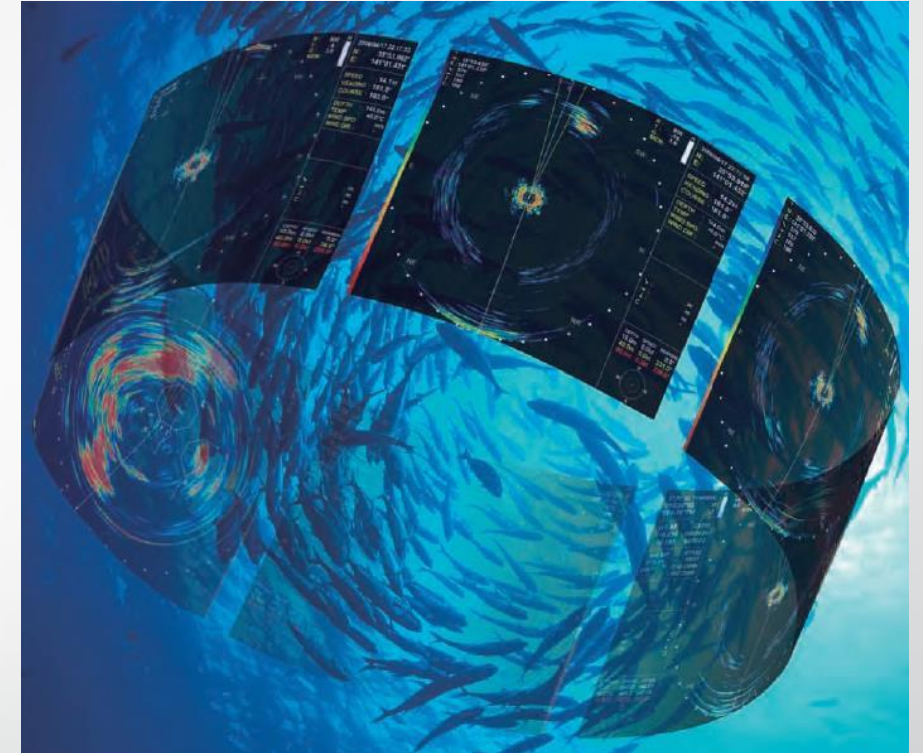
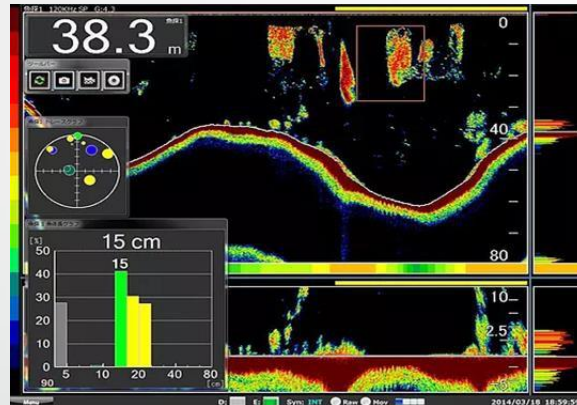


SONIC CORPORATION

SONIC CORPORATION
SINCE 1948 KAIJO DENKI



FISHERIES PRODUCT RANGE

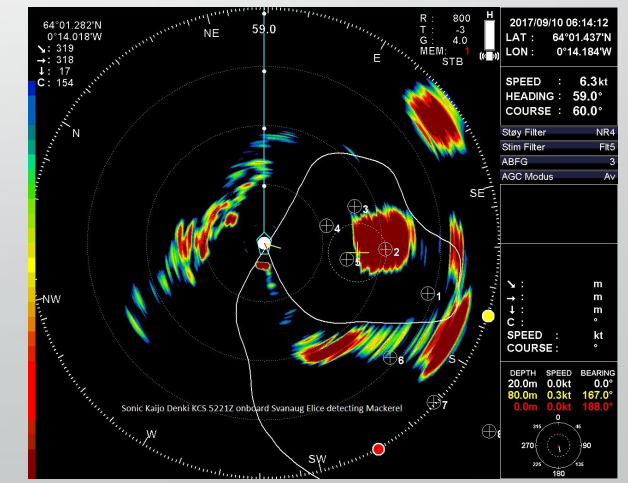
MARINTEC LTD
marine & industrial technology

www.marintec.co.nz

The culmination of technical prowess
built up by KAIJO DENKI since 1948!

KAIJO DENKI ORIGINS

- KAIJO DENKI CORPORATION was founded in 1948
- Initially designed & manufactured military acoustic technology for detection & avoidance of explosive underwater naval mines
- Soon thereafter went on to develop a range of ultrasonic technology for commercial fishing
- Almost 70 years history designing, developing & manufacturing acoustic systems
- Interesting fact: Company established same year as SONY!

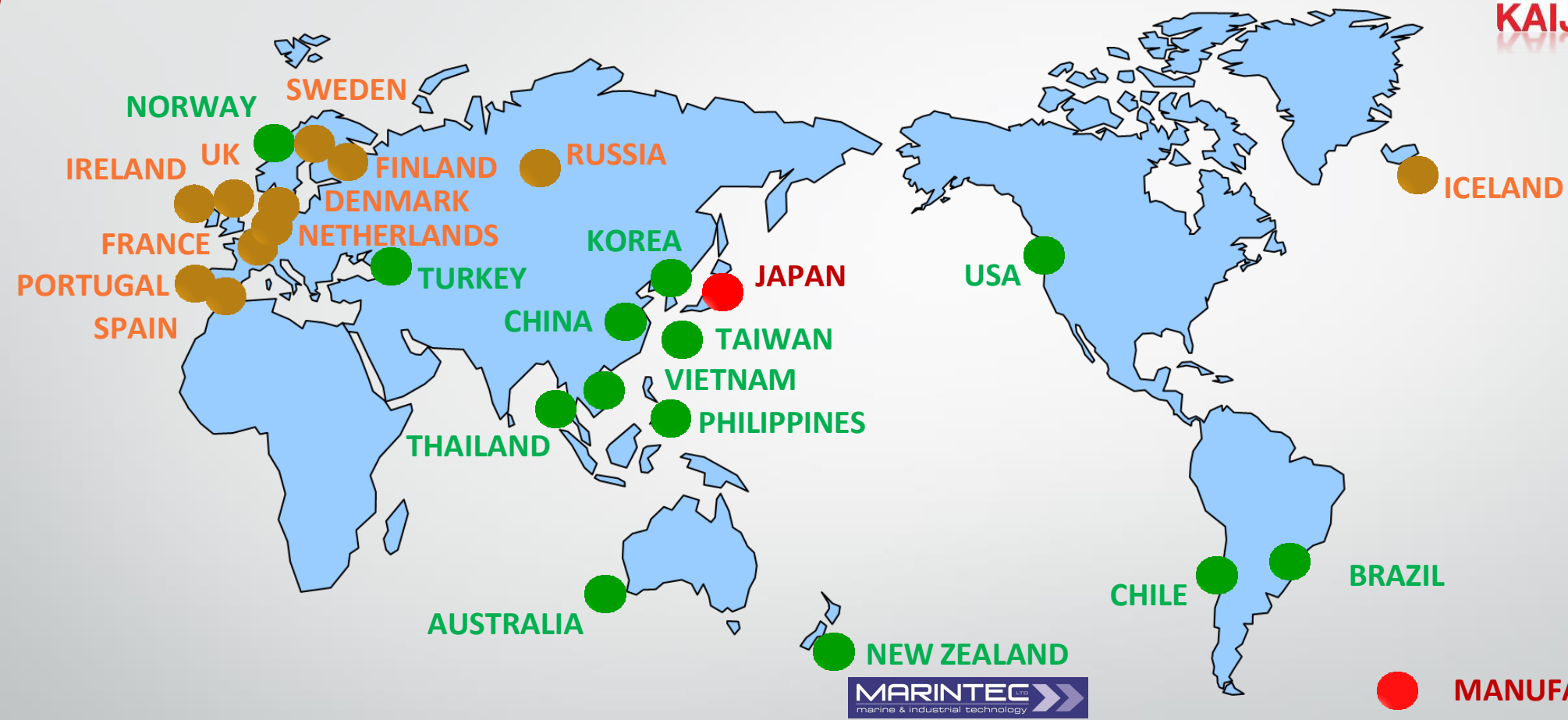




Company Timeline

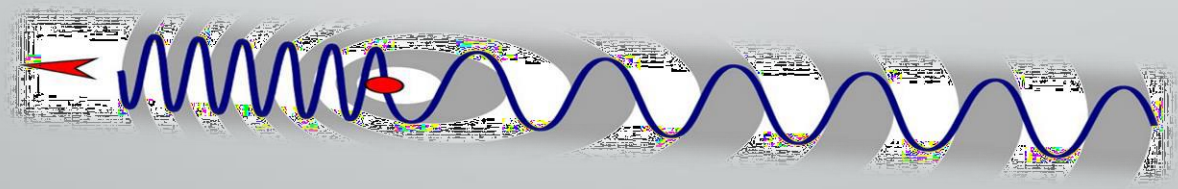
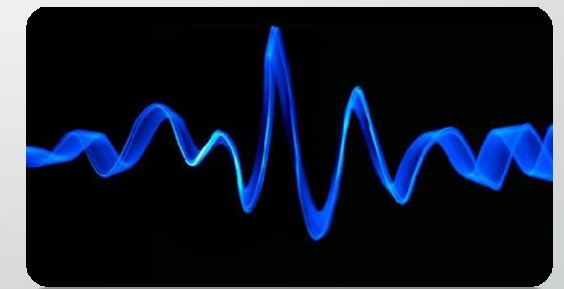
- July 21, 1948 **Kaijo Denki Corporation** was founded
- Nov. 1, 1991 Company name changed to **Kaijo Corporation**
- Oct. 1, 2003 Company separated from Kaijo Corporation and renamed as **Kaijo Sonic Corporation**
- Sept. 30, 2006 Became independent of Kaijo Corporation and joined Tachyonish Group
- April 1, 2009 Company renamed **Sonic Corporation**

International Sales Network



- MANUFACTURER
- DISTRIBUTOR
- SUB-AGENT

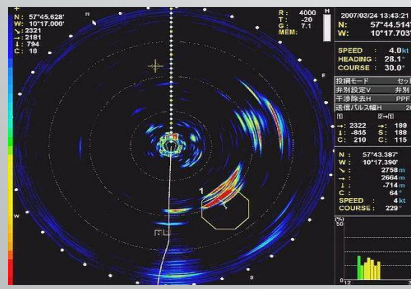
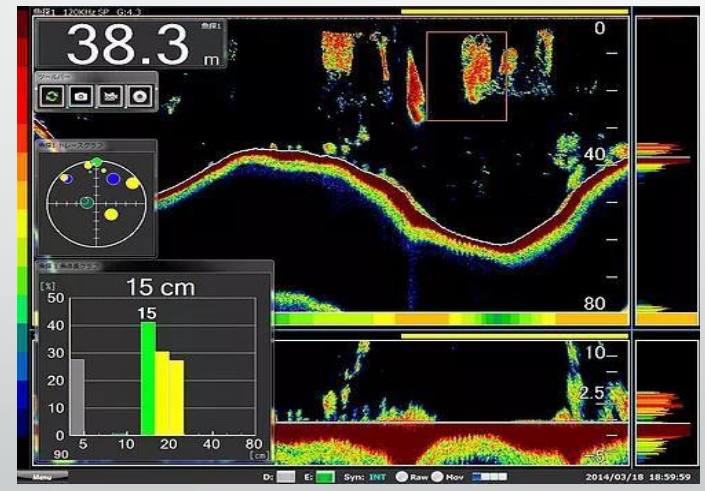
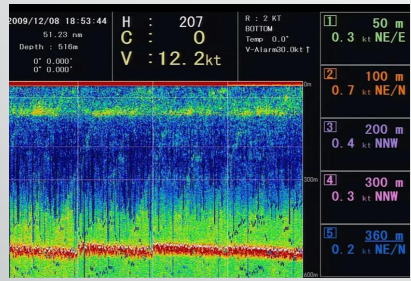
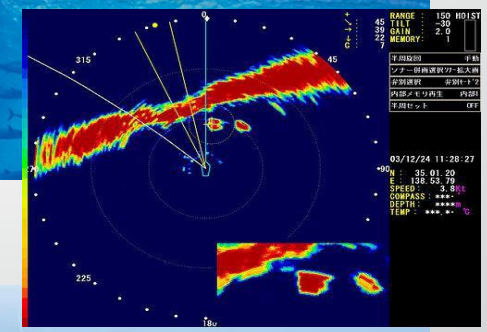
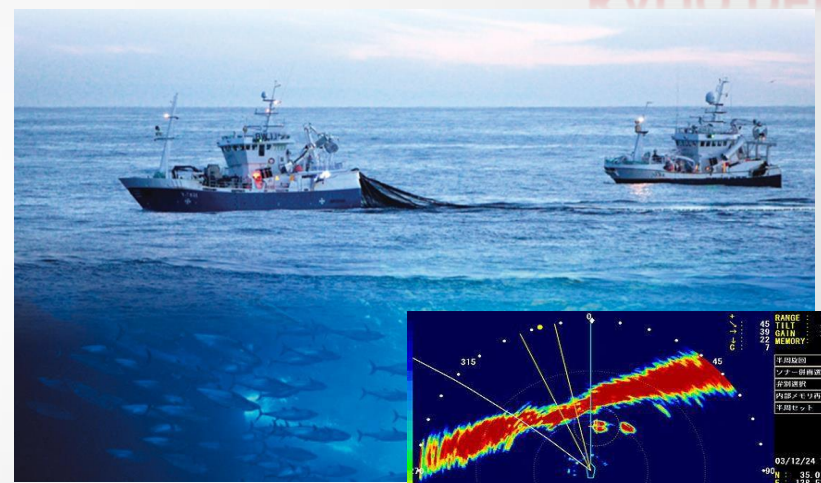
As an **acoustic specialist** SONIC CORP design, develop & manufacture ultrasonic systems for **FOUR** key markets...

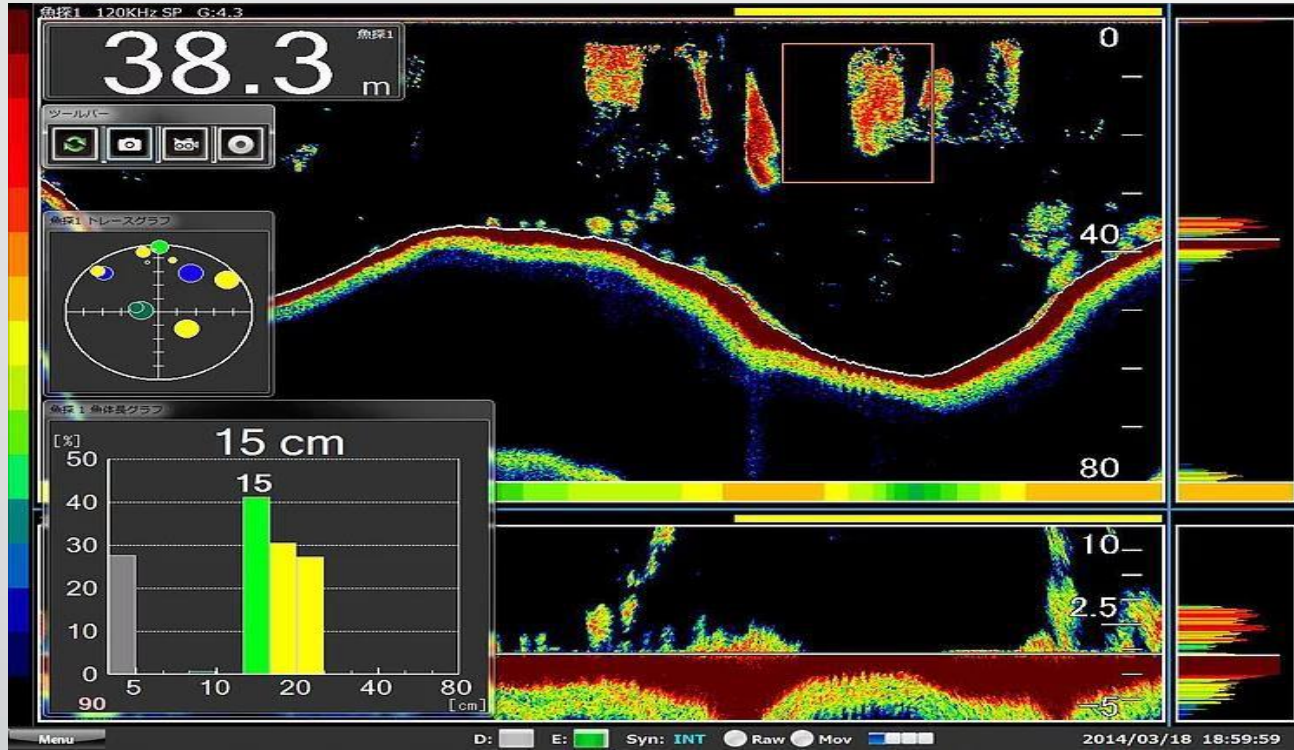


SONIC CORPORATION
SINCE 1948 KAIJO DENKI

FISHERIES PRODUCTS:

- Single Beam Echo Sounders
- Split Beam Echo Sounders
- Omnidirectional and Half-Scanning Sonar
- Doppler Water Current Meter
- Net-Finding Equipment



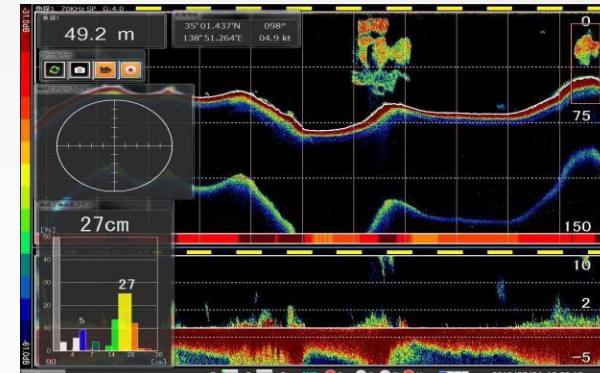
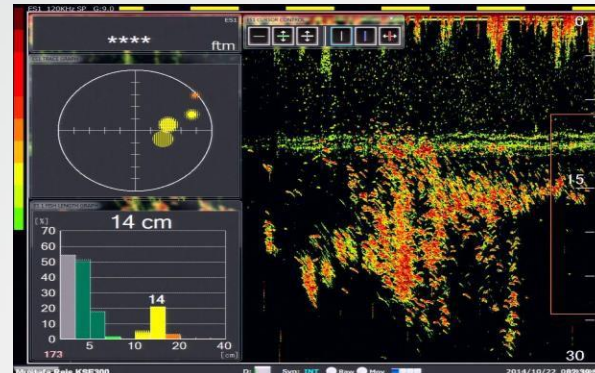
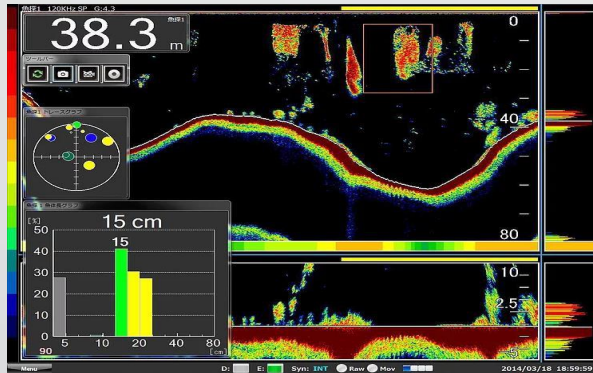


SONIC

ECHO SOUNDER

The culmination of technical prowess
built up by KAIJO DENKI since 1948!

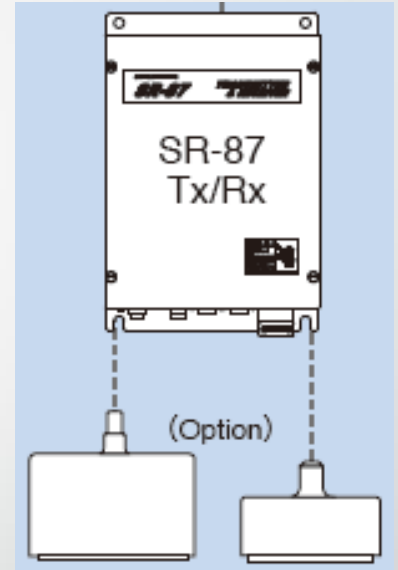
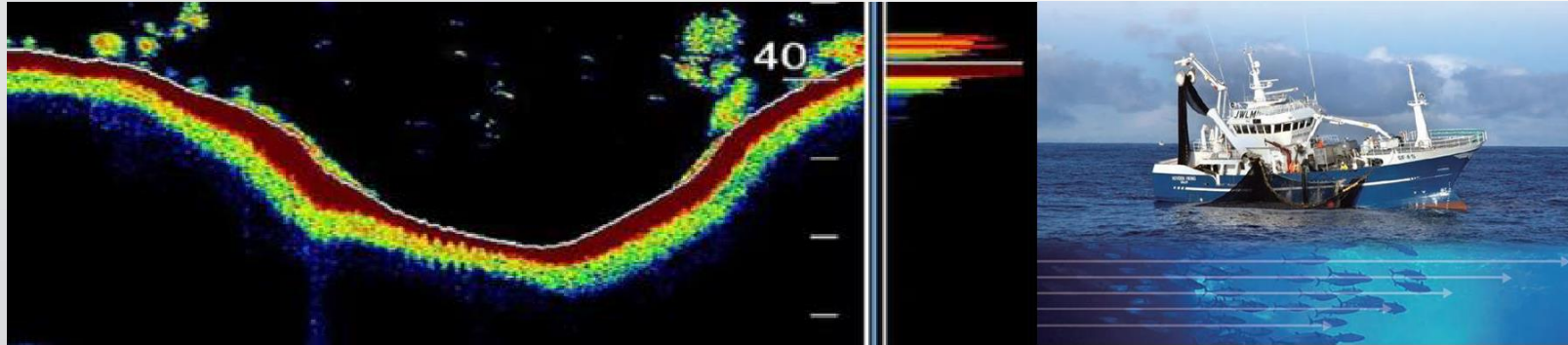
KSE-310 SPLIT BEAM SOUNDER



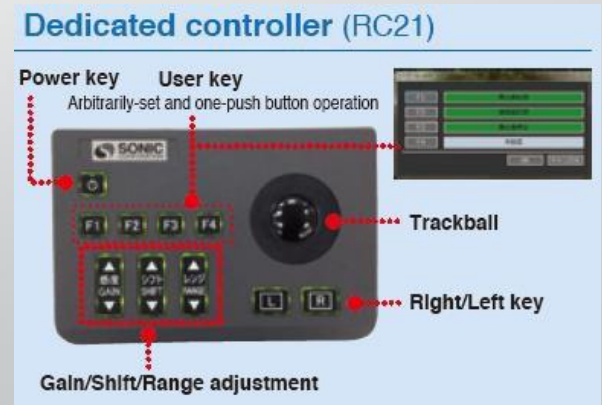
- Black Box Split Beam Biomass Sounder with Dual Video output
- Available in 3 frequencies: 38 kHz (3kW) / 70 kHz (3kW) / 120 kHz (1.5kW)
- High resolution (1280 x 1024, SXGA) 64-Colour display
- Raw data recording & output via USB drive (Echoview compatible)
- Multiscreen layout (display up to 5 screen options simultaneously on a single display)
- Fish Size Graph & Trace Graph for Live fish size (length) assessment & distribution (high accuracy)
- Ultra-High Precision Digital TVG (leading-edge technology for interference elimination and target discrimination)
- Kaijo's own Transducer design offers superior clarity, resolution and accuracy.
- Multiple frequencies of either split or single beam can be run at the same time. Up to four frequencies can be displayed simultaneously, they can also be 'mixed' to offer the best clarity.
- Dedicated wired Remote Controller (with optional 2nd station)

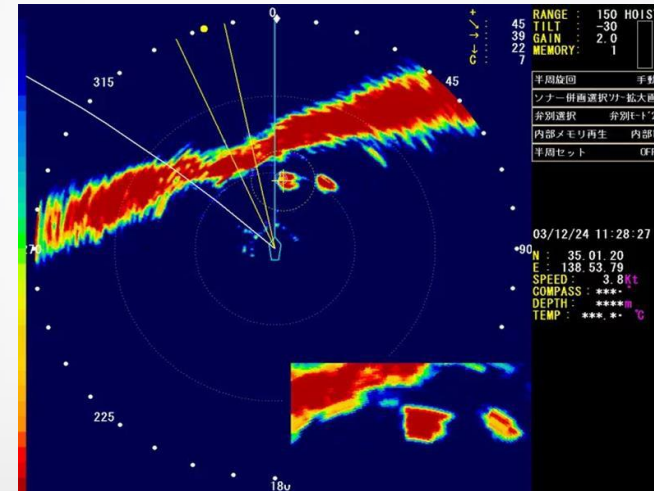
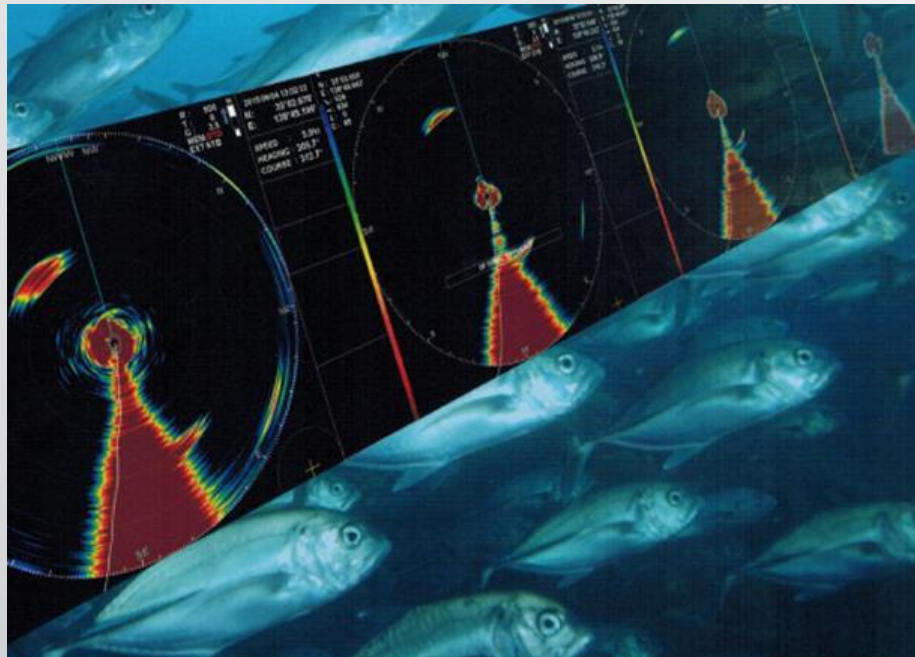


KCE-310 SINGLE BEAM SOUNDER



- Black Box Sounder, with Dual Video output
- Various frequency options: 15 / 24 / 50 / 75 / 200 kHz
- 2kw TX Output
- High resolution (1280 x 1024, SXGA) 64-Colour display
- Multiple transducers can be employed (max 2 per processor)
- Dedicated wired Remote Controller (with optional 2nd station)





SONIC

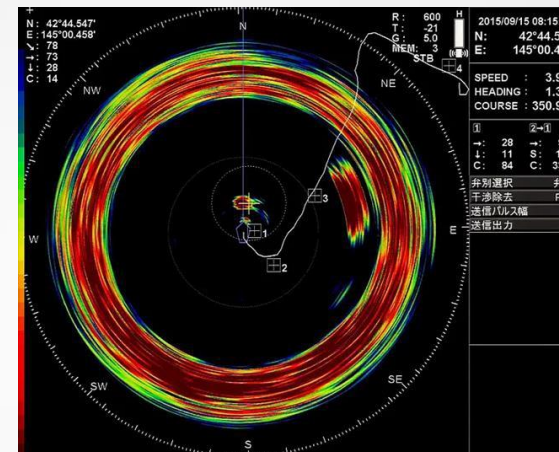
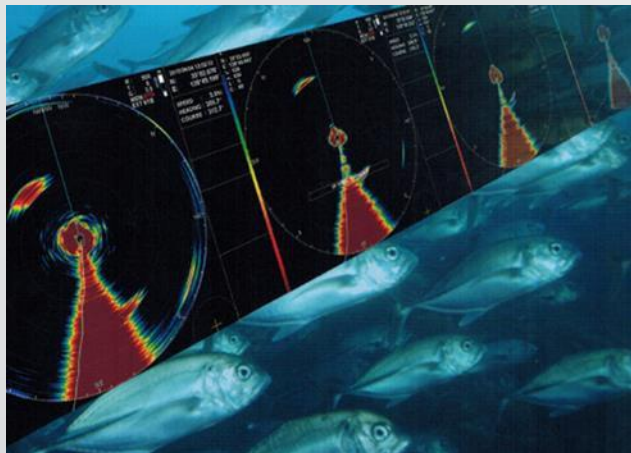
SONAR

The culmination of technical prowess
built up by KAIJO DENKI since 1948!

Kaijo Sonar systems are unique in that they all use a **robust stainless steel soundome** meaning lower maintenance, longer life, and **superior long range detection** of small targets.



NEW: KCS-6o OMNI Directional Sonar, 62kHz



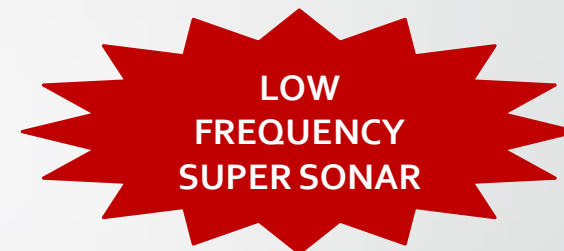
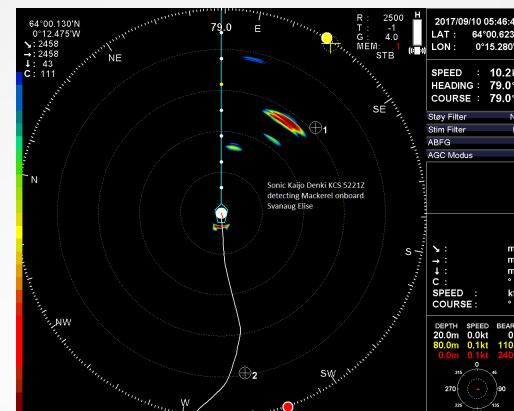
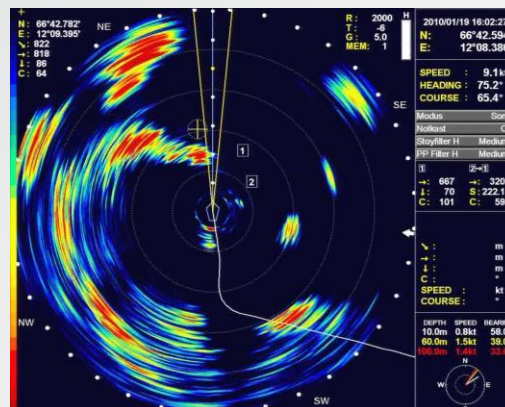
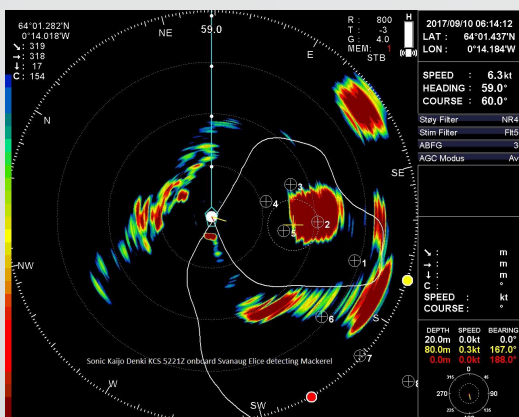
SONIC
KAIJO DENKI

- Compact Full-Circle Scanning OMNI Directional Sonar with Fish Sizing function , 62Khz
- World-first compact sonar with all-directions TX/RX Stabilization
- Straight Amplifier, Digital beam forming
- Transducer incorporates 512 Elements. Transmit Beamwidth: 360x7°; Receive Beamwidth: 19x12°
- This sonar offers extreme clarity, large interfacing options, fish sizing of distant targets
- Tilt angle: +5° to ~ -60°, Stabilization (±20° compensation)
- Kaijo standard stainless steel dome assembly (extremely rugged)
- High resolution 32-colour display (1024 x 1280, SXGA)
- Maximum range: 5000m
- 24VDC Power
- Display Modes: Horizontal, Full Screen, Multi-Screen

**COMPACT
SONAR**

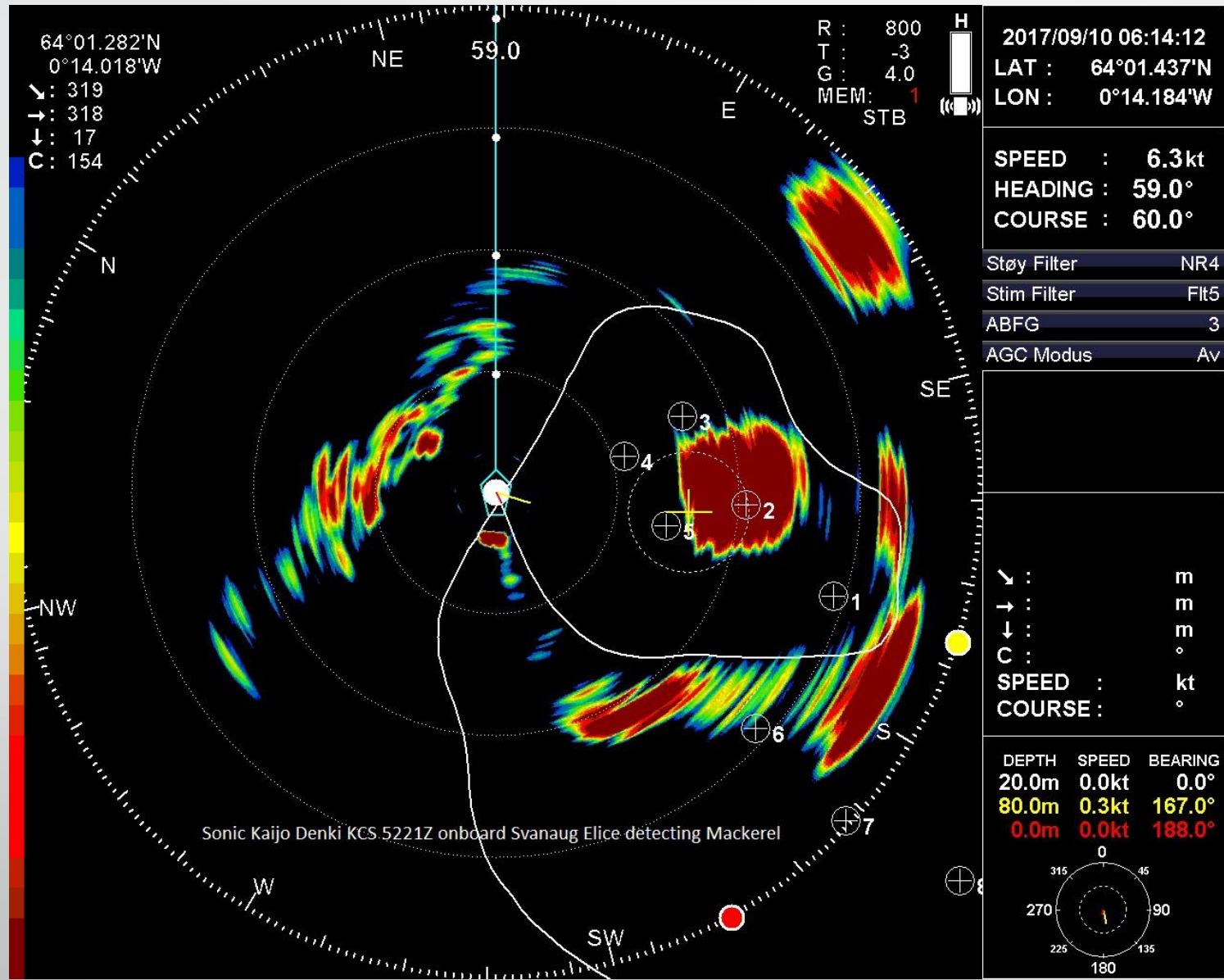
SONIC

KCS-5221Z Full Circle OMNI Sonar, 21 / 24 / 28kHz

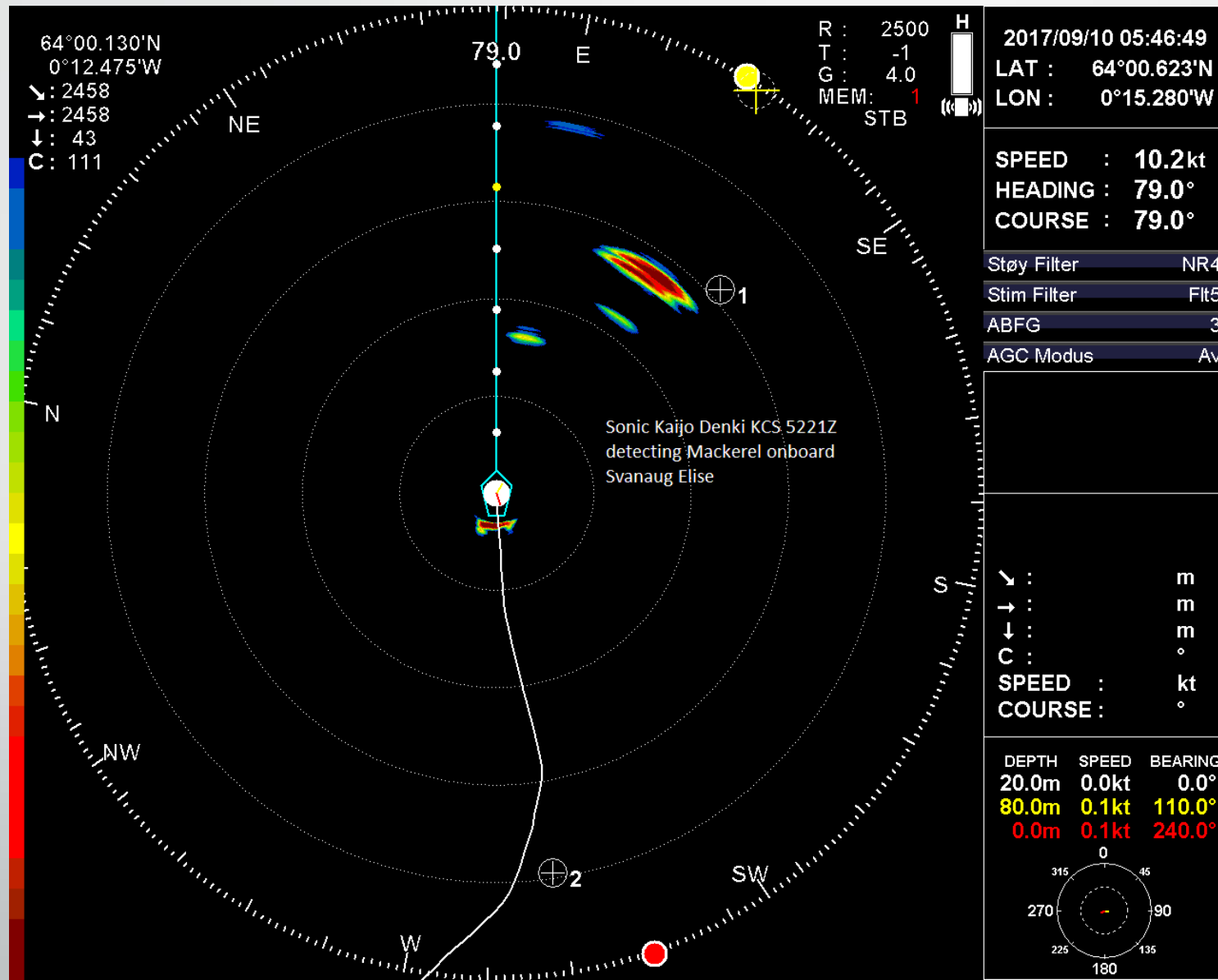


- Full-Circle Beam Forming OMNI Super Sonar, 21 / 24 / 28kHz (specify on ordering)
- TX Method: OMNI, RDT; RX Method: Super Heterodyne; 768 Transducer Elements
- 360x6° Horizontal & 11x11° Vertical Transmit Beamwidth; 9x9° Horizontal & 11x11° Vertical Receive Beamwidth
- Offers superior target detection (minimisation of side lobes), meaning even at low tilt angles the sea-surface is not detected, only fish schools
- With either sectional or omnidirectional modes this sonar can detect small targets up to 5000m - Maximum range 10,000m
- With a ring guide hull unit, and a stainless steel transducer, this sonar is suited to larger vessels and is very robust
- Tilt angle: +20° to ~ -60° ; Stabilization (±20° compensation)
- High resolution 32-colour display (1280 x 1024, SXGA)
- Display Modes: Horizontal, Full Screen, Multi-Screen, Split Screen, Vertical Screen (with simultaneous screen mode capability)
- This sonar is truly designed for long range detection. The image above (left) shows a school being tracked at 2181Mtr, and the sizing graph shows fish sized from just 15 to 20CM in length!

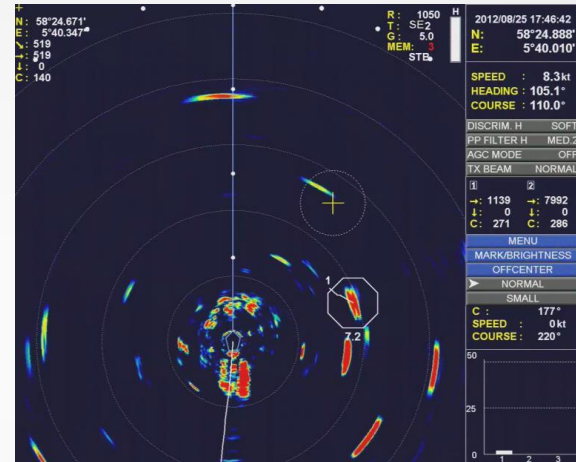
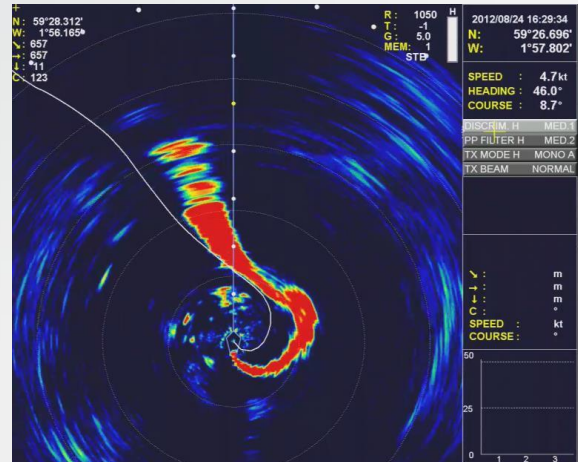
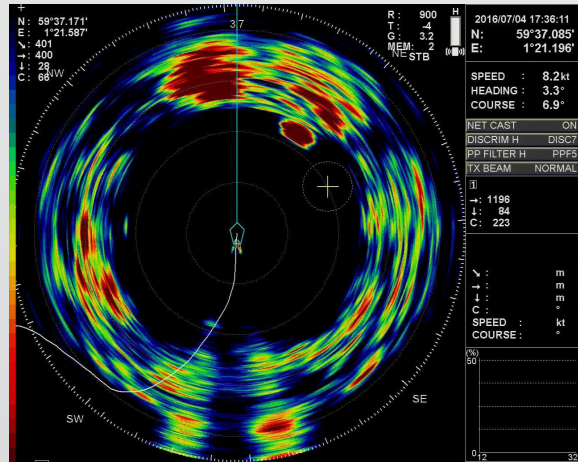
KCS5221Z Example: Mackerel 800m Range



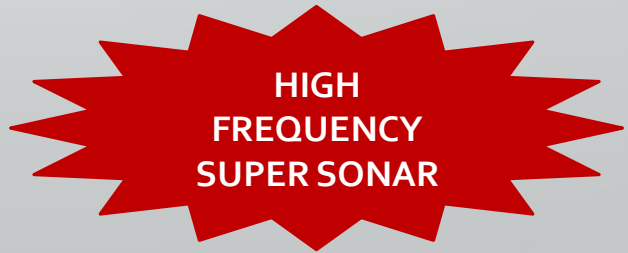
KCS5221Z Example: Mackerel 2,500m Range



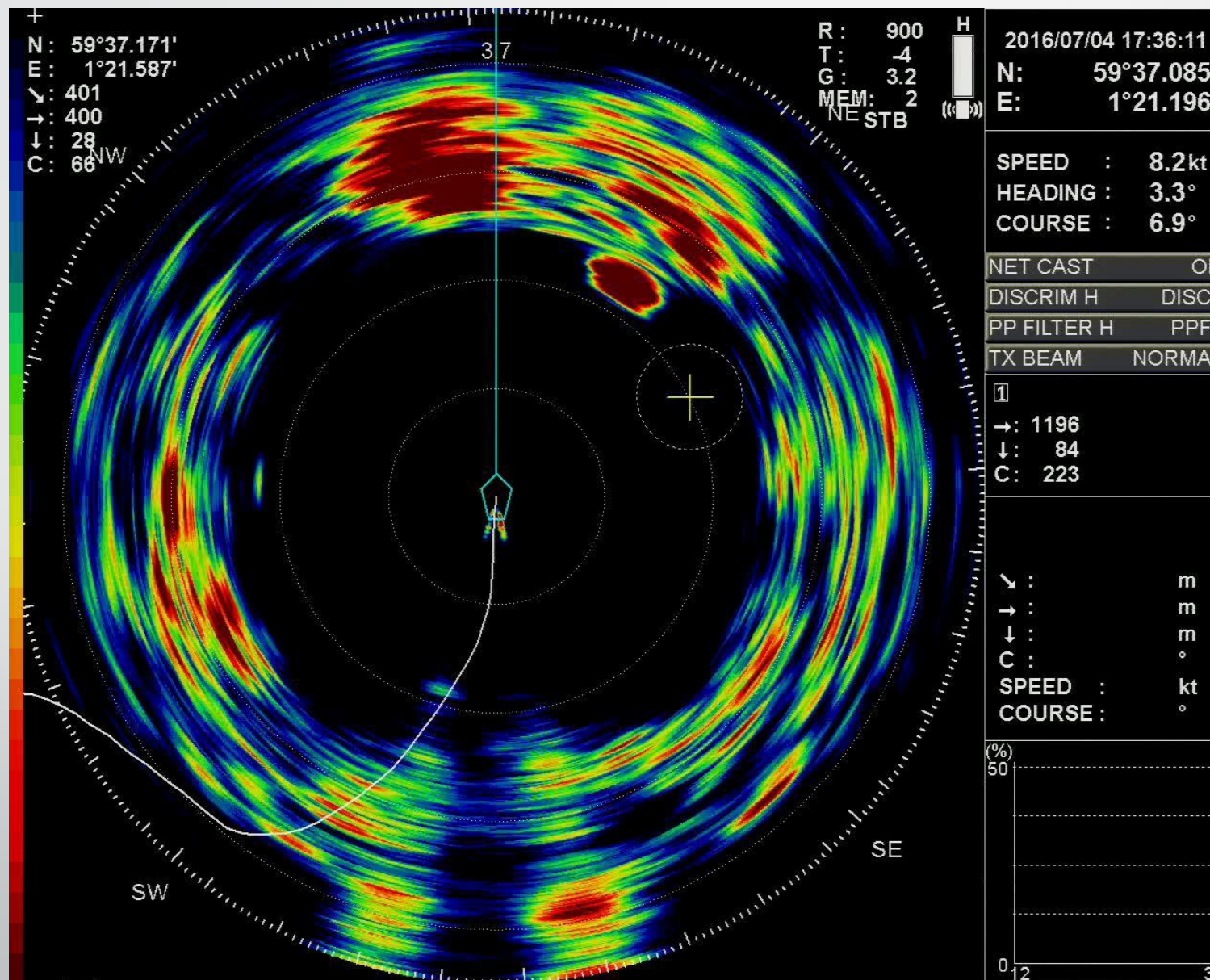
KCS-5885Z Full Circle OMNI Sonar, 88 / 94 kHz



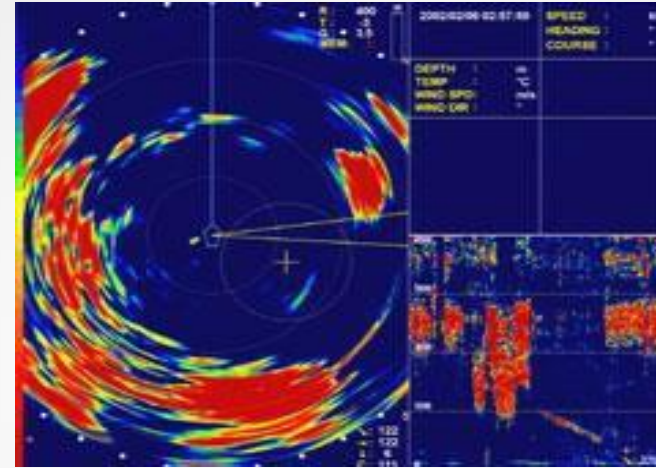
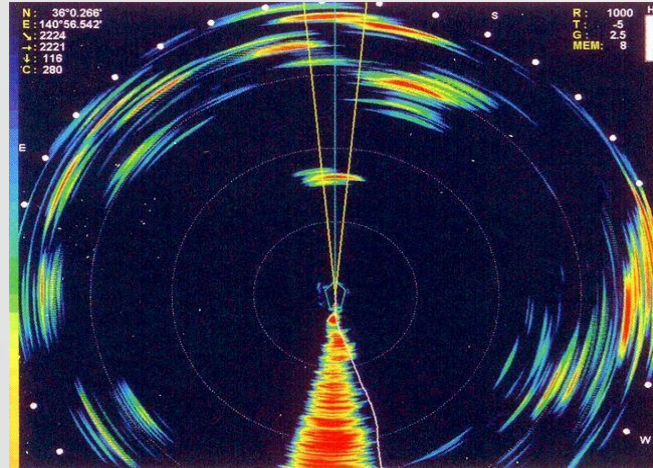
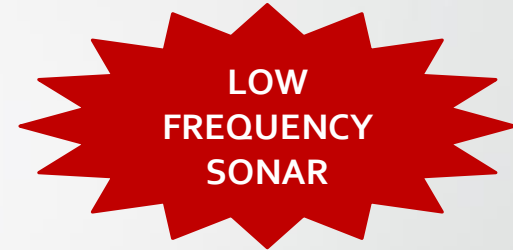
- Full-Circle Beam Forming OMNI Super Sonar, 88 / 94 kHz (specify on ordering)
- OMNI TX and Super Heterodyne RX for extremely clear, detailed, high resolution, accurate sonar image
- 960 Transducer Elements
- 360x6° Horizontal & 11x11° Vertical Transmit Beamwidth; 8x8° Horizontal & 11x11° Vertical Receive Beamwidth
- Maximum range 10,000m
- Fish Sizing Graph of a selected area anywhere in the sonar display, ensuring maximum catch determination
- With a horizontal 360x60° & 12x60° sectional transmission, this sonar offers amazing performance and a 10000Mtr range!
- With a ring guide hull unit, and a stainless steel transducer, this sonar is suited to larger vessels and is very robust
- Tilt angle: +20° to ~ -60° ; Stabilization (±20° compensation)
- High resolution 32-colour display (1280 x 1024, SXGA)
- Display Modes: Horizontal, Full Screen, Multi-Screen, Split Screen, Vertical Screen (with simultaneous screen mode capability)



KCS5885Z Example: Horse Mackerel



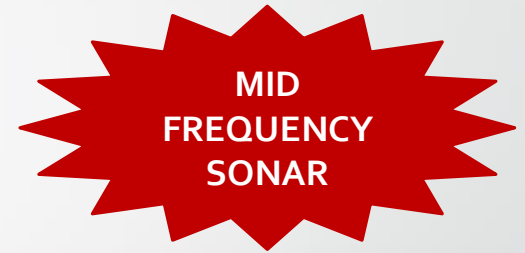
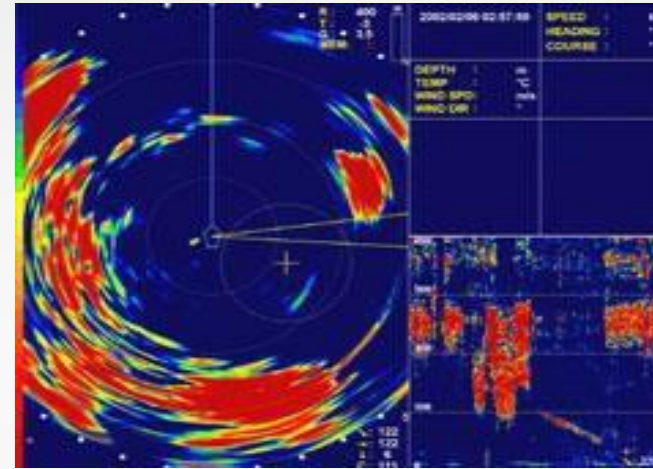
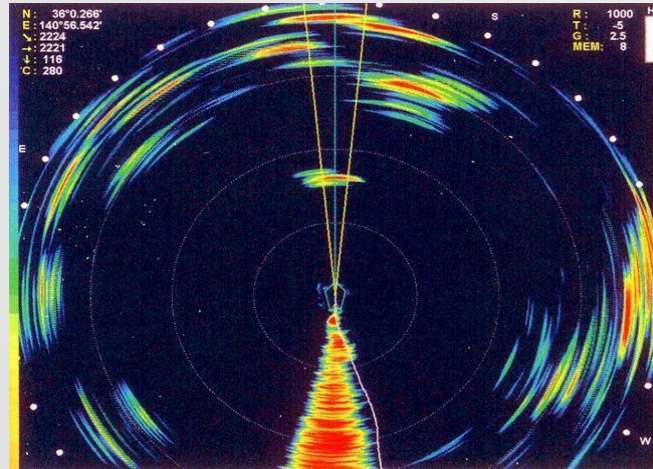
KCS-5200 Full Circle Scanning Sonar, 24 / 28 kHz



- Full-Circle Beam Forming OMNI Super Sonar, 24 / 28kHz (specify on ordering)
- TX Method: OMNI; RX Method: Super Heterodyne
- Beamwidth: 360×10^0 (TX); 14×12^0 (RX)
- Maximum range: 10,000m
- Tilt angle: $+3^0$ to $\sim -60^0$
- High resolution 32-colour display (1280 x 1024, SXGA)
- Display Modes: Horizontal, Full Screen, Multi-Screen



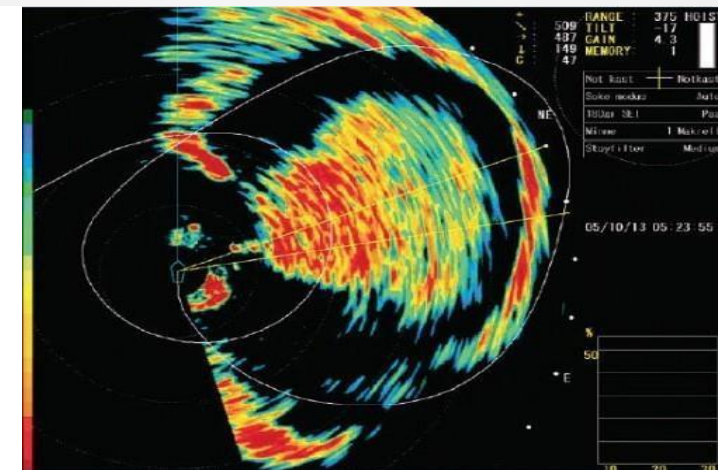
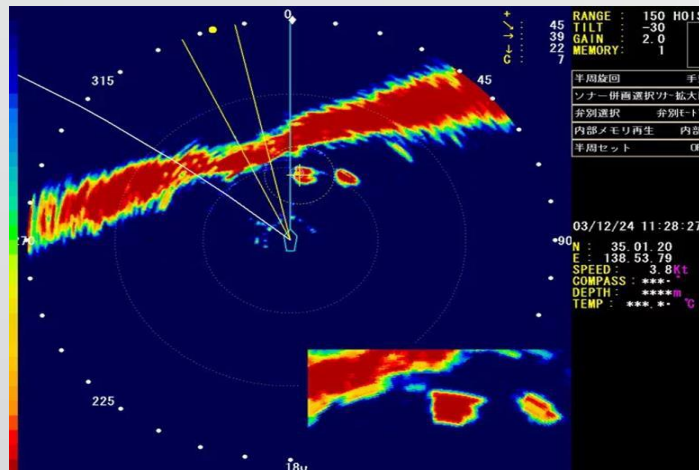
KCS-5500 Full Circle Scanning Sonar, 43 / 50 kHz



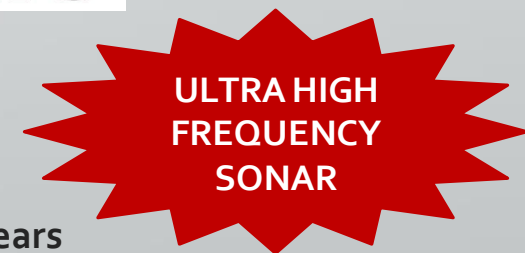
- Full-Circle Beam Forming OMNI Super Sonar, 43 / 50kHz (specify on ordering)
- TX Method: OMNI; RX Method: Super Heterodyne
- Beamwidth: 360×10^0 (TX); 14×12^0 (RX)
- Maximum range: 10,000m
- Tilt angle: $+3^0$ to $\sim -60^0$
- High resolution 32-colour display (1280 x 1024, SXGA)
- Display Modes: Horizontal, Full Screen, Multi-Screen

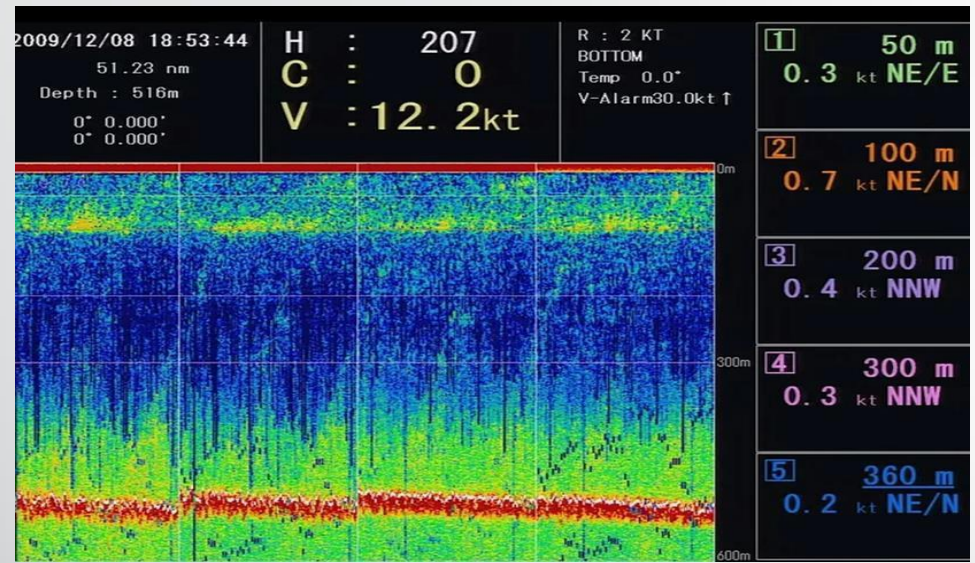


KCH-5180 Half Scanning Sonar, 164/174/184Khz



- Unique OMNI Half-Circle Colour Beam Scanning Sonar, 164/174/184Khz (specify on ordering)
- TX Method: OMNI, RDT; RX Method: Super Heterodyne
- 180° Transducer array; meaning at any given time a full half display of targets can be seen
- Also offers short pulse chirp technology to allow individual target detection almost on the seafloor
- Transmit Beamwidth: 36x6°; Receive Beamwidth: 6x6°
- Tilt Angle: +0° to ~ -90°; Swivel angle: ~175°
- High resolution 32-colour display (1280 x 1024, SXGA)
- Display Modes: Horizontal, Full Screen, Multi-Screen, Off-Centre
- Maximum range: 5,000m
- Unique guide rings for the hoist unit, ensuring trouble free operation for many years

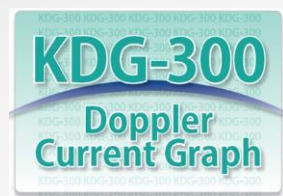
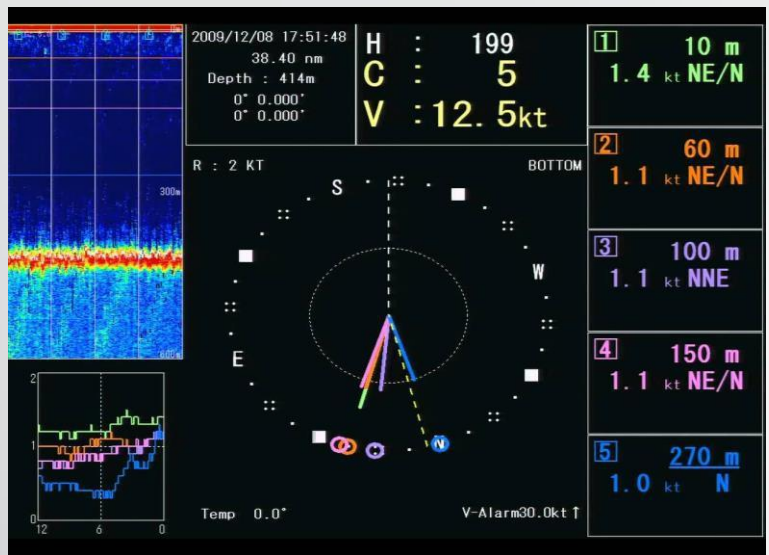




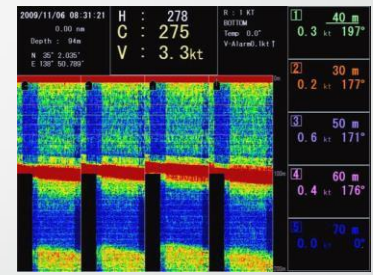
CURRENT INDICATOR

The culmination of technical prowess
built up by KAIJO DENKI since 1948!

KDG-300 Doppler Current Meter, 140kHz



1	50 m	0.8 kt	45°
2	100 m	0.4 kt	11°
3	150 m	0.6 kt	17°
4	200 m	0.4 kt	74°
5	250 m	0.2 kt	125°



- 140Khz Doppler Current Meter
- Offers 4 independent beams, allowing a Forward, Aft, Port, and Stbd view of the seabed and water column targets
- Can track up to 5 independent water layers, and can detect seafloor to 600m
- This unit also offers a unique '3D' view of a descending object and the approximate fall trajectory through the water to the seafloor
- Using two identical, separate transducers mounted at 90° to each other (mills-cross design) the current indicator can detect water currents very effectively
- High resolution (1280 x 1024, SXGA) 64-Colour display



SONIC

NET FINDER

The culmination of technical prowess
built up by KAIJO DENKI since 1948!

KNF-200 NET FINDER



- Assists Fishing Master in monitoring the seine net when setting/hauling
- Display options: Net depth, Signal level, Depth Adjustment, Net Speed, Depth Alarm, Battery Voltage, Water Temperature (switchable)
- Frequencies available: 35, 45, 55 & 65kHz; Channels available: 10 (change via dip switch)
- Ranges: 0~100; 0~200 & 0~360Mtr (switchable)
- Rugged durable Net Sensors (Transmitter)
- Max Sensor Range: 1000m
- Max Sensor Depth: 500m
- Easy to use and monitor, even from wide viewing angles
- Can be connected to Kaijo Sonars and Echo sounders
- The transceiver which added to the durability is reliable.
- Rapid battery charger with charge status



**Respected New Zealand Distributor & Service Agent of
Quality Electronic Equipment and Services**



Experts in **Marine** and **Industrial Electronic** Technology



- Over 200 years collective experience
- Highest level of technical support
- SIX Qualified electronic technicians
- Array of workshop and mobile test equipment
- Ability to perform diagnosis on site or in our workshop
- Ability to facilitate urgent same day repairs



Test Equipment

- ✓ Cable Analyzers
- ✓ Wattage Meters
- ✓ Frequency Counters
- ✓ Signal Generators
- ✓ Impedance Meters
- ✓ Proprietary Manufacturers' Test Equipment
- ✓ Transducer Analyzer
- ✓ Antenna Analyzers
- ✓ Digital Storage Scopes
- ✓ Depth Sounder Test Set