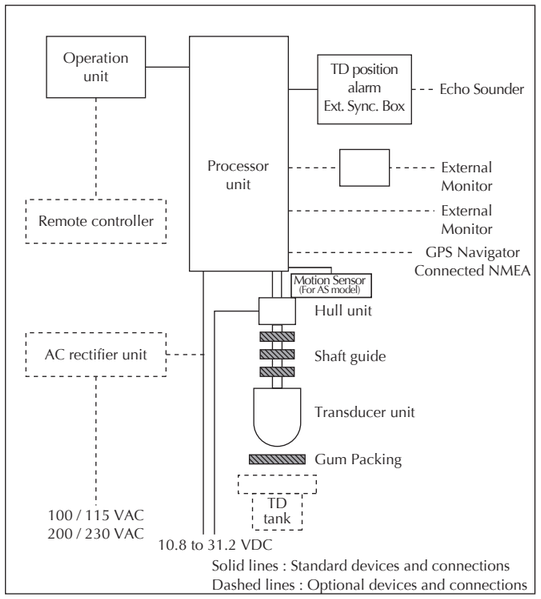
## SPECIFICATIONS

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | KDS-6000BB | | | | | | | | | | | |
| Output power (RMS) | 1.5 kW | | | | | | | | | | | |
| Transducer | DHU-6302-80 kHz | | | | | | DHU-6302-BRD.B / BRD.B(AS) | | | | | |
| Output frequency | 80 to 90 kHz (0.1 kHz step) | | | | | | 130 to 210 kHz ( 0.1 kHz step) | | | | | |
| Tilt angle | 5° to -90° (1°step) | | | | | | | | | | | |
| Beam angle | 8° to 12° | | | | | | | | | | | |
| TD stroke | 150 to 380 mm (Recommended value 150 mm) | | | | | | | | | | | |
| Display size and type | Any monitor with VGA resolution (Owner supplied) | | | | | | | | | | | |
| Basic ranges | 10 to 1000 (m), 30 to 3000 (ft), 10 to 600 (fm),10 to 700 (l.fm) (8 ranges can be set to users choice) | | | | | | | | | | | |
| Range units | m, ft, fm, l.fm | | | | | | | | | | | |
| Scanning sector angles — Sonar mode | 5°step: 5°, 25°, 45°, 85°, 125°, 165°, 205°, 360°<br>10°step: 10°, 30°, 50°, 90°, 130°, 170°, 210°, 360°<br>15°step: 15°, 45°, 75°,105°, 135°, 165°, 225°, 360°<br>20°step: 20°, 60°,100°,140°, 180°, 220°, 260°, 360° | | | | | | | | | | | |
| Bottom scan mode | 3°step: 3°, 27°, 45°, 63°, 93°, 117°, 147°, 177°<br>5°step: 5°, 25°, 45°, 65°, 95°, 115°, 145°, 175° | | | | | | | | | | | |
| 360° Scanning time (extracts) — Scanning range (m) | 20 | 40 | 60 | 80 | 100 | 120 | 160 | 180 | 200 | 240 | 400 | |
| Scanning time (sec.) 5° step | 6.3 | 8 | 10 | 11.8 | 14 | 15.8 | 19.5 | 21.6 | 23.5 | 27.5 | 43.3 | |
| Scanning time (sec.)10° step | 3.7 | 4.7 | 5.6 | 6.5 | 7.6 | 8.6 | 10.6 | 11.5 | 12.5 | 14.4 | 22.4 | |
| Scanning time (sec.)15° step | 3.3 | 3.7 | 4.3 | 4.9 | 5.7 | 6.4 | 7.9 | 8.2 | 8.9 | 10.3 | 15.7 | |
| Scanning time (sec.)20° step | 3.3 | 3.4 | 3.8 | 4.2 | 4.8 | 5.2 | 6.4 | 6.6 | 7.3 | 8.1 | 12.2 | |
| Bearing center | 1 °step | | | | | | | | | | | |
| Presentation modes | Sonar, Off-center, Bottom scan, Echo sounder, 2 Mode Display, One line | | | | | | | | | | | |
| Off-Center | Fore, Back, Left, Right | | | | | | | | | | | |
| Target lock | Reverse, Horizontal, Horizontal + Vertical, Marker + Horizontal, Marker + Horizontal + Vertical | | | | | | | | | | | |
| Presentation colors | 8 colors, 16 colors | | | | | | | | | | | |
| Functions | TVG , Color rejection, Dynamic range, Compass display, Pulse width, Output power control, Noise reduction, A-scope, CM key, Frequency bandwidth, Image correction, Bearing display, TD auto up, Sona-Tone™ | | | | | | | | | | | |
| Language | English, Japanese, Korean, Spanish, Thai, Traditional Chines, Greek, Italian, Portuguese, Burmese | | | | | | | | | | | |
| Input data format and sentences | NMEA0183<br>GGA, GLL, HDG, HDM, HDT, RMC, THS, VTG, ZDA | | | | | | | | | | | |
| Output data format and sentences | NMEA0183<br>DBT, DPT, GGA, GLL, MTW, RMC, TLL, VTG, ZDA | | | | | | | | | | | |
| NMEA ports | Total 1 : input / output | | | | | | | | | | | |
| Power supply — Processor unit | 10.8 to 31.2 VDC | | | | | | | | | | | |
| Hull unit | 10.8 to 31.2 VDC | | | | | | | | | | | |
| Power consumption — Processor unit | 70 W or less (24 VDC) | | | | | | | | | | | |
| Hull unit | 70 W or less (24 VDC) | | | | | | | | | | | |
| Operating temperature | -15 °C to + 55 °C | | | | | | | | | | | |
| Water protection | - | | | | | | | | | | | |

## CONNECTIONS




## EQUIPMENT LIST

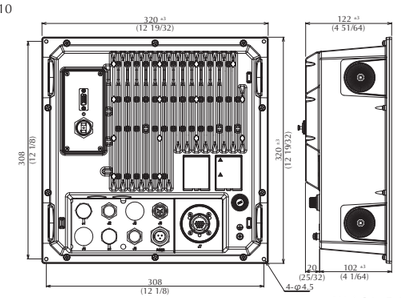
| | | |
|---|---|---|
| Standard equipment | Processor unit | 1 |
| | Operation unit | 1 |
| | Hull unit (Normal stroke / Short stroke) | 1 |
| | Accessories for Processor unit | 1 |
| | Installation materials for Hull unit | 1 |
| | TD position alarm / Ext. Sync. Box | 1 |
| | DC power cable | 1 |
| | Operation manual, Installation manual, Quick Reference | 1 |

| | |
|---|---|
| Options | Remote controller, PVC TD tank, FRP TD tank, Shaft guide for FRP tank<br>AC rectifier unit, Connecting cable, 17 inch LCD monitor |

## DIMENSIONS AND WEIGHT

**Processor unit** — **unit: mm (inch)**

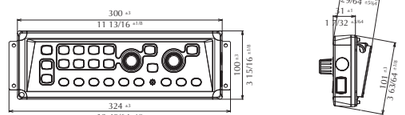
DPU-610




**Weight : 5.1kg (11.5lb)**

**Operation unit**

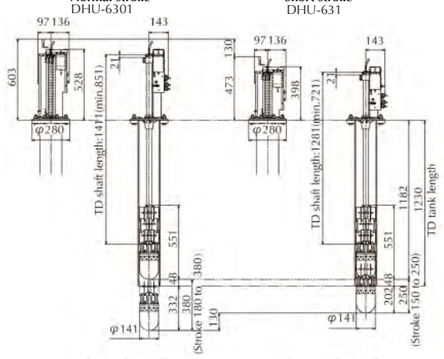
DOU-620




**Weight : 1.1kg (2.5lb)**
**With base and 5M connecting cable**

**Hull unit**

**Normal stroke** DHU-6301




**Weight : 41kg (91lb)**

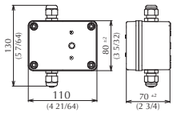
**Short stroke** DHU-631




**Weight : 40.8kg (90lb)**

**TD position alarm / Ext. Sync. Box**

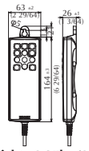
JB-36




**Weight : 0.25kg (0.56lb)**
**Without cable**

**Remote controller**

RCW-14 (Option)




**Weight : 0.25kg (0.56lb)**
**Without cable**

• Design and specifications are subject to change without notice.


KODEN Koden Electronics Co., Ltd.

Tamagawa Office:
2-13-24 Tamagawa, Ota-ku, Tokyo, 146-0095 Japan
Tel: +81-3-3756-6501 Fax: +81-3-3756-6509
Uenohara Office:
5278 Uenohara, Uenohara-shi, Yamanashi, 409-0112 Japan
Tel: +81-554-20-5860 Fax: +81-554-20-5875

overseas@koden-electronics.co.jp

www.koden-electronics.co.jp


**Safety precaution** | To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

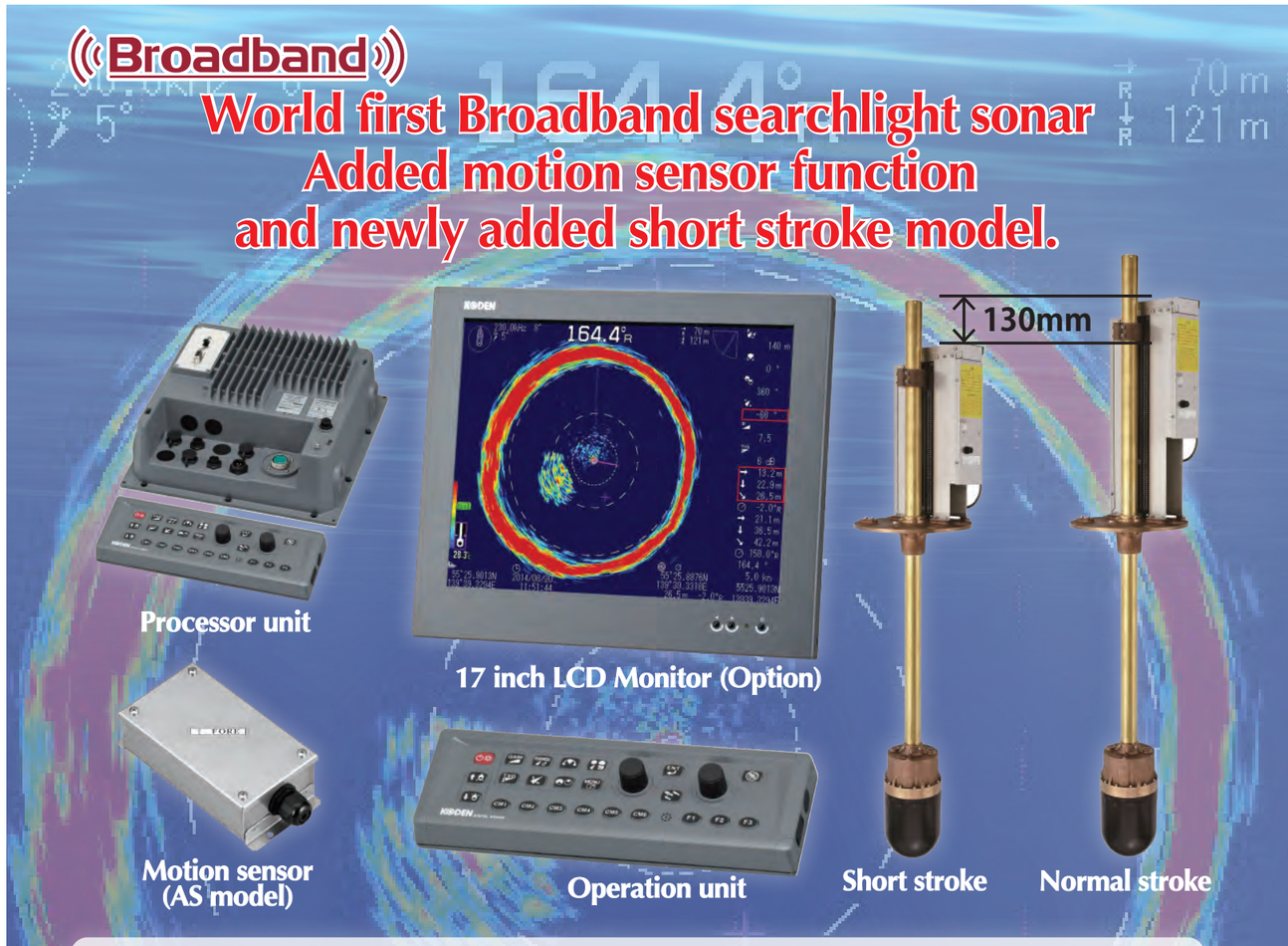
For details, please contact:

22-09, Printed in Japan

KODEN

Digital Sonar

# KDS-6000BB




## Features

- Change frequency on the go with our advanced Broadband Technology
- Massive improvement in scan speed, making detection of fish schools much faster
- Clearest possible images with our digital signal processing
- All setup and user settings changed instantly by utilizing Conditional Memory function
- Black Box sonar with 17 inch LCD Monitor available (Option)
- Short stroke Hull unit available for small space
- The stabilizer function reduces the disturbance of sonar display caused by the pitch and roll of the vessel (For AS model)

# Digital Sonar

# KDS-6000BB

## ● Advanced Broadband Technology

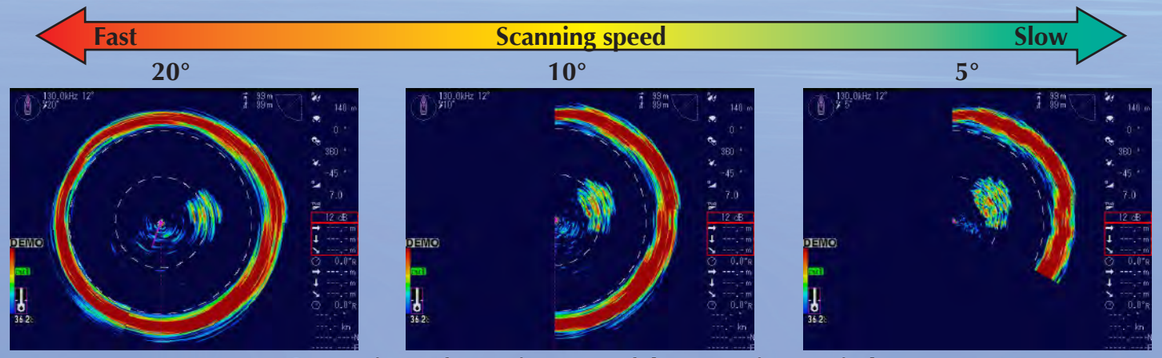
KDS-6000BB is world first Broadband searchlight sonar. The 80 to 90 kHz frequency or 130 to 210 kHz frequency can be selected depending on the Transducer. The most suitable output frequency can be selected in 0.1 kHz step depending on the fishing method and the target species from closer range to longer range. Selection of frequency is as easy and quick as tuning a radio.
Flexible selection of frequency enables the user to stay away from interference with the sounders on the other vessels.

## ● Clearest possible images with our digital signal processing

Both of high resolution in closer range and noise reduction performance in longer range are materialized at high level with newly-developed digital signal processing, KDP V.

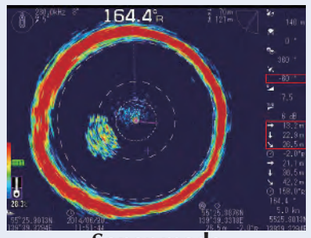
## ● Massive improvement in scan speed

Scanning speed is remarkably increased by adding 15° and 20° in scanning sector angle steps. It can detect surrounding fish schools quickly.

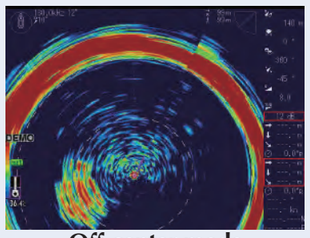



Comparison of scanning area of the same time period　　Range:140m

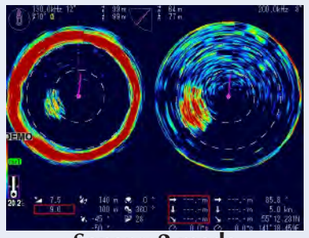
## ● Six different presentation modes



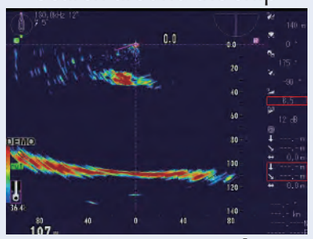
**Sonar mode**
Search around the ship



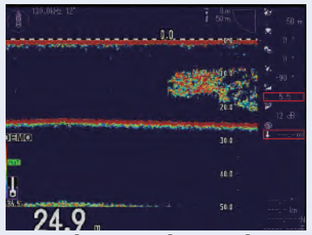
**Off-center mode**
Show more information of ahead



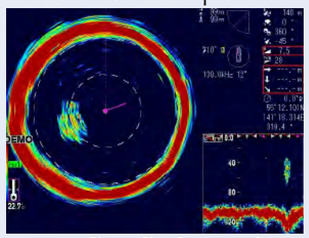
**Sonar x 2 mode**
Two different frequencies



**Bottom scan mode**
Reflected echo
from underwater and sea bottom



**Echo sounder mode**
Image like Echo sounder



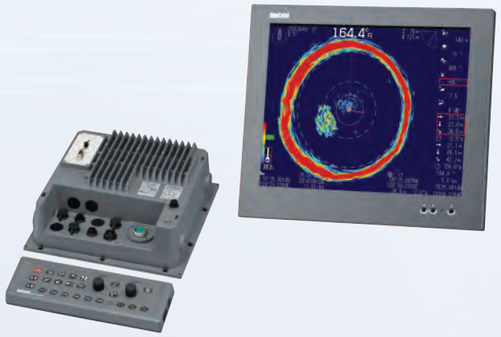
**One line display mode**
Show vertical Sonar image like an echo sounder image in the Sub-screen

## ● CM keys


Six of CM keys

Six of CM (Condition Memory) keys offer the user to preset all the current settings and recall them instantly.
It is like six sonars in one unit.

## ● Black box type



KDS-6000BB comes in black box. The user can select a monitor from the market or the optional 17 inch LCD monitor

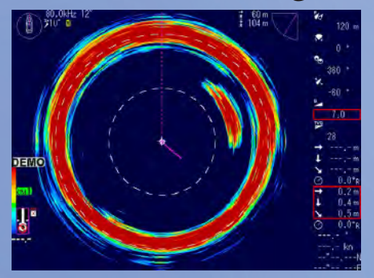
## ● Space-saving Hull unit


Short stroke Hull unit available for small space

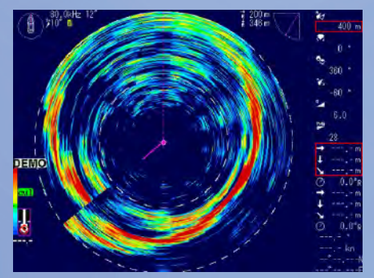
## ● Motion sensor

The stabilizer function reduces the disturbance of sonar display caused by the pitch and roll of the vessel. (For AS model)

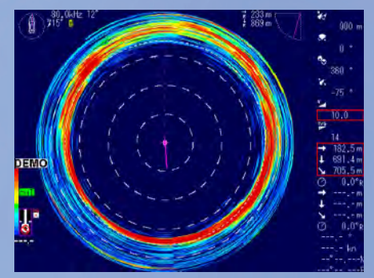
## ● 80 kHz screen images



**Sardine at 80.0 kHz**



**Red bream at 80.0 kHz**



**Depth of 680m at 80.0 kHz**