

**SPECIFICATIONS OF FISH FINDER  
FCV-1900**

**1 GENERAL**

- 1.1 Transmitting frequency 15 kHz to 200 kHz, Free-synthesize
- 1.2 Output power 1, 2 or 3 kWrms
- 1.3 Transmitting rate 10 to 2700 pulse/min (5 to 3000 mm range, normal mode)
- 1.4 Transmitting mode Standard mode only
- 1.5 Pulselength 0.05 to 5 ms
- 1.6 External monitor (required specifications)
  - Display resolution XGA (1024x768), SXGA (1280x1024), SXGA (1024x1280), FHD (1920x1080)
  - Interface HDMI type-D or DVI-D  
(Vertical synchronous frequency for XGA: 70 Hz)

**2 PROCESSOR UNIT**

- 2.1 Color indication
  - Echo color 8, 16 or 64 colors according to echo intensity
  - Background color Select from 5 colors
- 2.2 Hue 7 steps (standard, Hue 1 to 5, customized)
- 2.3 Echo display mode Single mode (high/low frequency), Dual-frequency, Zoom, User 1/2  
User 1/2 available to use mixture, multi-gain, telesounder and external sounder display
- 2.4 Zoom display Bottom-lock expansion, Bottom zoom, Marker zoom, Discrimination zoom
- 2.5 Depth range 5 to 3000 m
- 2.6 Range shift 2000 m max.
- 2.7 Expansion range 2 to 200 m
- 2.8 Display advance speed 6 steps (Lines/TX: Freeze, 1/16, 1/8, 1/4, 1/2, 1/1, 2/1, 4/1)
- 2.9 Data recording (videos and screenshots)
  - Echo display and measured data can be recorded in the internal memory
- 2.10 Language Chinese, Danish, English, French, Japanese, Korean, Russian, Spanish, Norwegian

**3 INTERFACE**

- 3.1 Number of port
  - NMEA 3 ports, NMEA V1.5/2.0/3.0
  - LAN 1 port, Ethernet 100Base-TX (HUB required)
  - CIF 1 ports
  - Net sonde 1 port, (sonde marker/ sonde KP)
  - Video signal 1 port, HDMI type-D
  - External KP 1 port
  - Temperature sensor 1 port

- Echo data 1 port, for telesounder\* connection (Interface unit required)
  - USB 1 port, USB2.0 (specified monitor brilliance control available)
- \*: sold in Japan only.

### 3.2 Data sentences

- Input GGA, GLL, GNS, MTW, VHW, VTG, ZDA
- Output DBS, DBT, DPT, MTW, TLL

### 3.3 Output proprietary sentences

- PFEC SDbcd, SDflg, SDmrk, pidat

## 4 POWER SUPPLY

- 4.1 Processor unit 12-24 VDC: 8.3-3.9 A
- 4.2 Rectifier (RU-1746B-2, option) 100/110/115/220/230 VAC, 1 phase, 50/60Hz
- 4.3 AC/DC power supply unit (PR-240, option) 100-115/200-230 VAC, 1 phase, 50/60 Hz

## 5 ENVIRONMENTAL CONDITIONS

- 5.1 Ambient temperature -15°C to +55°C
- 5.2 Relative humidity 95% or less at +40°C
- 5.3 Degree of protection IP22
- 5.4 Vibration IEC 60945 Ed.4

## 6 UNIT COLOR

- 6.1 Processor/ Control unit N2.5