FURUNO

TruEcho CHIRP WITH UNIQUE FISH SIZE INDICATOR

Model **FCV-1900G**

High precision fish size graph
for efficient and sustainable fishing
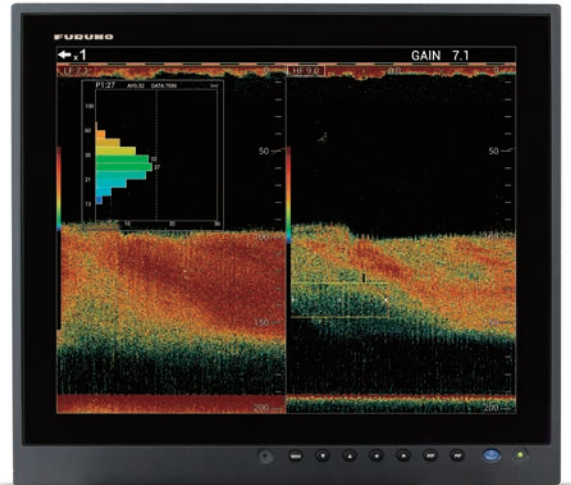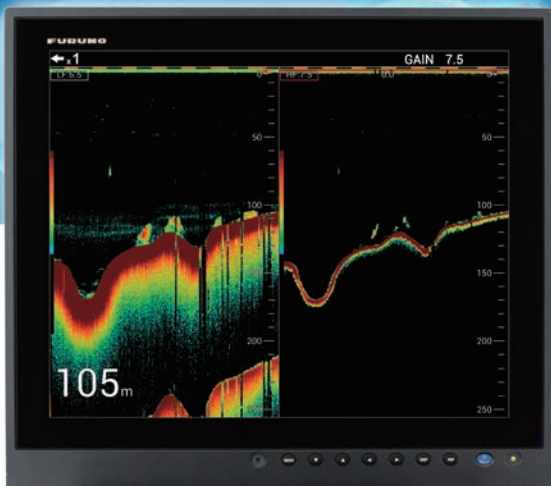
Photo: 19" Marine Display MU-190HD (Customer Supply)

HI-RES TruEcho CHIRP FISH FINDER

Model **FCV-1900B**

High resolution echoes
from shallow to deep waters

Photo: 19" Marine Display MU-190HD (Customer Supply)

TruEcho CHIRP   FDF FURUNO Digital Filter   ACCU-FISH   FFS   AUTO   BlackBox

www.furuno.com

HI-RES TruEcho CHIRP FISH FINDER
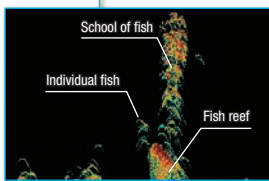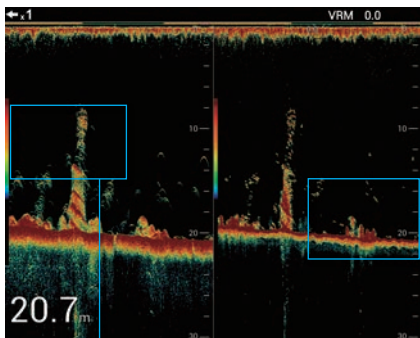
Model **FCV-1900B**

High resolution echoes from shallow to deep waters made possible with TruEcho CHIRP™ technology
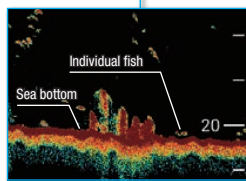
TruEcho CHIRP

FCV-1900B Hi-Res TruEcho CHIRP Fish Finder allows you to see echoes that would otherwise not have been visible.
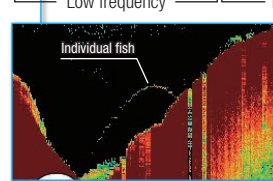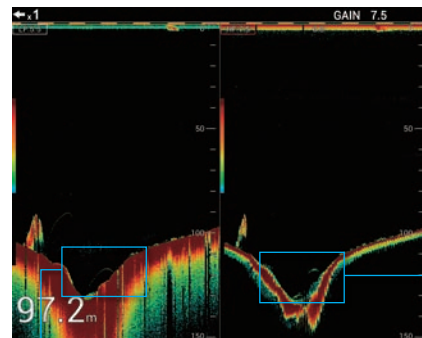
Sea bottom

Individual fish can be discriminated within schools of fish, for easy identication of size and species.

You can easily spot individual fish close to the sea bottom

Individual fish

— Low frequency — — High frequency —

With improved depth resolution, individual fish can be observed even at depths of 100 m and deeper. Fish are displayed in a distinct boomerang shape.

Near the surface

— Low frequency — — High frequency — — Mix display —
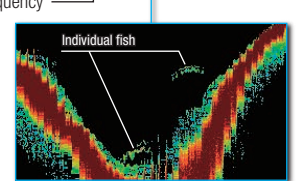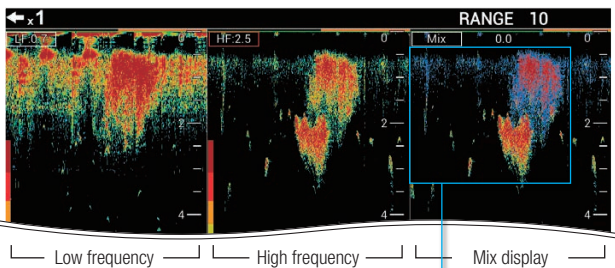
Fish are displayed clearly, even when it is close to the sea surface. In the mix display, bubbles are displayed in blue, and fish are displayed in bright red for easy target discrimination.
(Recommended transducer: CM275LHW)

Middle layer

— Low frequency — — High frequency —
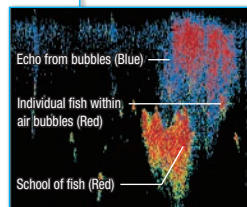
Spot the center of a school of fish simply by observing the color. Dense echoes are displayed in darker colors.

you can upgrade your FCV-1900 Fish Finder to
or a FCV-1900G TruEcho CHIRP with unique
ntact your local FURUNO national distributor.

TruEcho CHIRP WITH UNIQUE FISH SIZE INDICATOR

Model **FCV-1900G**
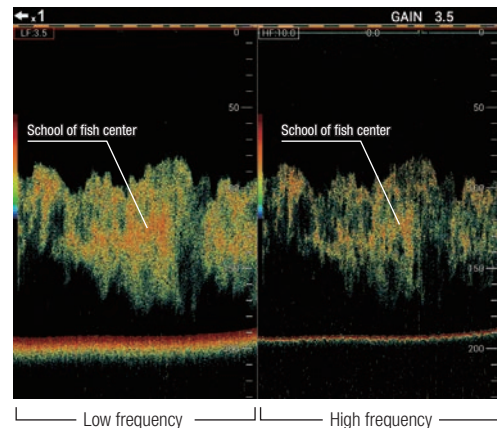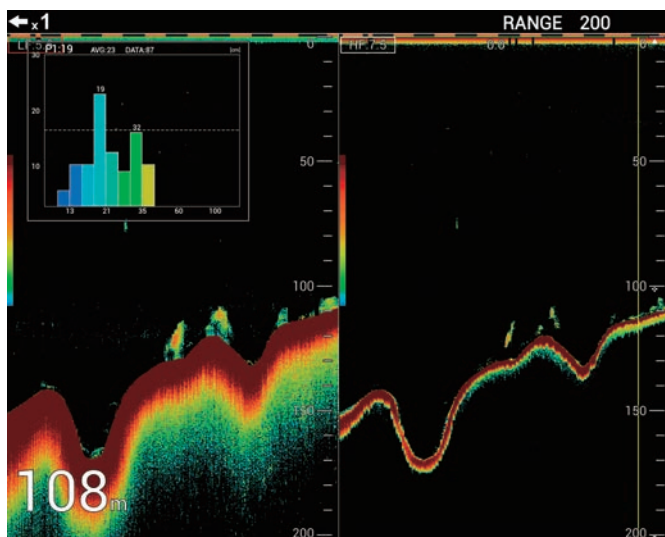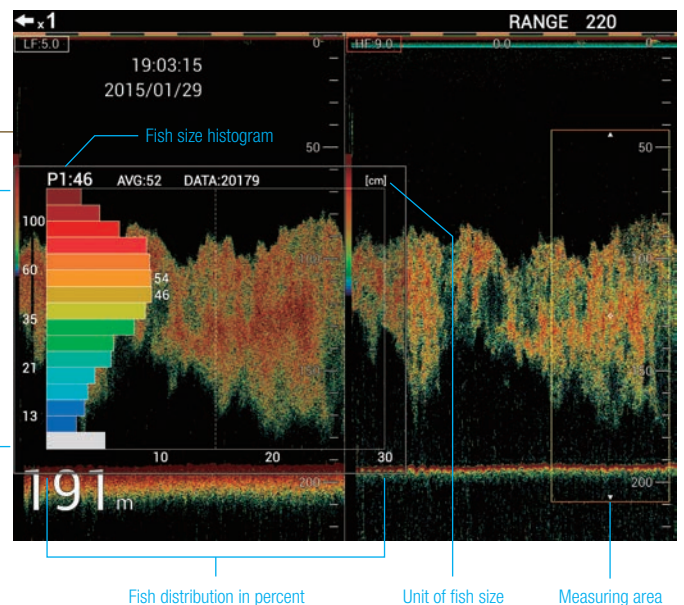
Efficient and sustainable fishing with fish size graph functionality

FCV-1900G features a unique fish size indicator that utilizes TruEcho CHIRP™ technology for precise estimations of fish size and size distribution in schools of fish. You can accurately analyze schools of fish all the way from shallow to deep waters.

Identify size and distribution with the fish size graph for increased efficiency at sea

With a quick glance at the simple and efficient graph, you can get all the information you need to identify fish size and distribution. Once you know the fish size and its distribution, you can use this information to estimate the species and whether it's a viable target or not. Together with the TruEcho CHIRP™ technology, the FCV-1900G allows you to choose the best position to throw your net. Then, based on the fish size graph, you can choose the right mesh size for efficient operation.

(Recommended transducers: CM265LH or CM599LH)

Fish size histogram

Fish size in cm/inches

Fish distribution in percent   Unit of fish size   Measuring area

Accurately judge which target to go after

Experience incredibly accurate echoes, even in deep waters thanks to our TruEcho CHIRP™ technology. The FCV-1900G is well suited for trawlers where accurate and reliable information about the sea bottom is necessary. Utilizing the fish size graph, choosing the right target is simple, allowing you to maximize your time at sea, while avoiding unnecessary bycatches.

School of fish close to the sea bottom.

SPECIFICATIONS

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 — TruEcho CHIRP™, Standard mode, CW mode
1.5 Pulselength — 0.05 to 5 ms
1.6 External monitor (required specifications)
Display resolution — Landscape XGA (1024x768), Landscape SXGA (1280x1024), Portrait SXGA (1024x1280)

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 — 5 to 200 m
2.8 Fish size histogram (FCV-1900G only) — 2 m depth or more, specified transducer required
2.9 Display advance speed — 6 steps (Lines/TX: Freeze, 1/4, 1/2, 1/1, 2/1, 4/1)
2.10 Data recording — Echo display and measured data can be recorded to internal memory
2.11 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 port
Net sonde — 1 port, (sonde marker/ sonde KP)
Video signal — 1 port, HDMI type-D
External KP — 1 port
Temperature sensor — 1 port
USB — 1 port, USB2.0
(specified monitor brilliance control available)

3.2 Data sentences
Input — GGA, GLL, GNS, MTW, VHW, VTG
Output — DBS, DBT, DPT, MTW, TLL
3.3 Output proprietary sentences
PFEC — afl, bcd, dat, mrk

4. POWER SUPPLY
4.1 Processor unit — 12-24 VDC: 8.3-3.9 A
Rectifier (RU-1746B-2, option) — 100/110/115/220/230 VAC, 1 phase, 50/60 Hz
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
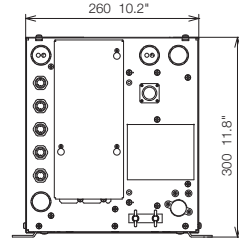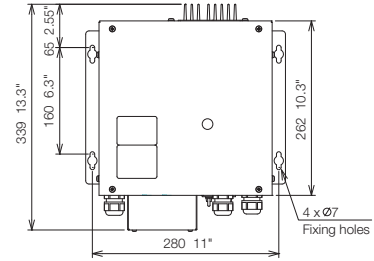5.4 Vibration — IEC 60945 Ed.4

EQUIPMENT LIST

Standard
1. Processor Unit (FCV-1901) ·············· x1
2. Control Unit (FCV-1902) ················ x1
3. Spare parts, Installation materials

Option
Transducer, Thru-hull pipe, Interface Unit (FCV-1903), Ethernet HUB, Junction box, Booster box, Temperature sensor, AC/DC power supply unit, Rectifier, Installation material, Cable assembly, Cable (for transducer extension), HDMI-M Cable
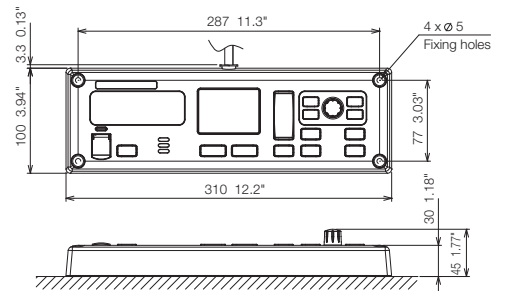
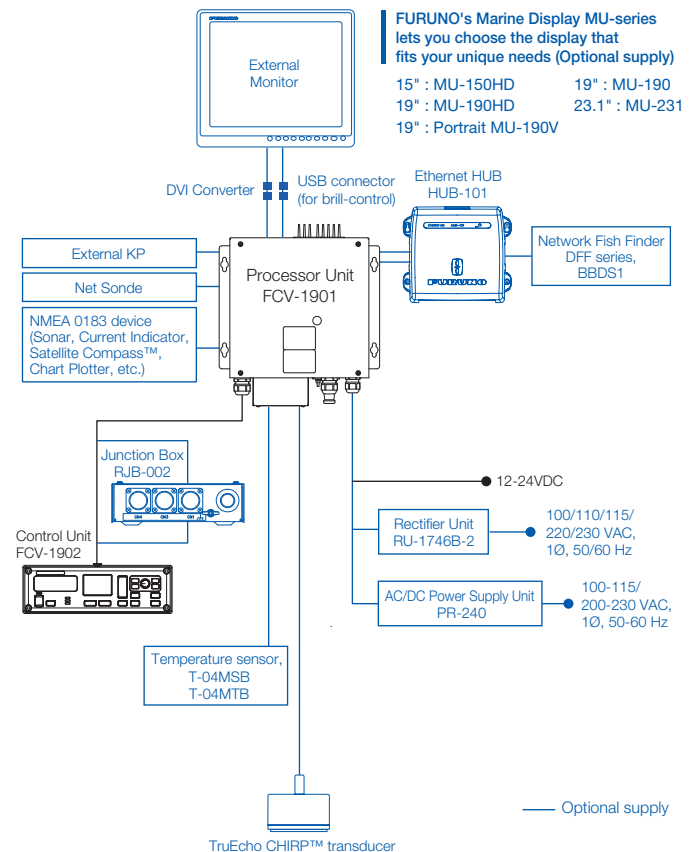## Processor Unit
FCV-1901
10.2 kg 22.5 lb

339 13.3" | 65 2.55" | 160 6.3" | 262 10.3"
280 11"
4 x Ø7 Fixing holes
260 10.2"
300 11.8"

Control Unit
FCV-1902
1.1 kg 2.4 lb

287 11.3" | 3.3 0.13" | 4 x Ø 5 Fixing holes
100 3.94" | 77 3.03"
310 12.2"
30 1.18"
45 1.77"

Interconnection Diagram

External Monitor

FURUNO's Marine Display MU-series lets you choose the display that fits your unique needs (Optional supply)
15" : MU-150HD — 19" : MU-190
19" : MU-190HD — 23.1" : MU-231
19" : Portrait MU-190V

DVI Converter — USB connector (for brill-control) — Ethernet HUB HUB-101

External KP
Net Sonde
NMEA 0183 device (Sonar, Current Indicator, Satellite Compass™, Chart Plotter, etc.)

Processor Unit FCV-1901

Network Fish Finder DFF series, BBDS1

Junction Box RJB-002
Control Unit FCV-1902
12-24VDC
Rectifier Unit RU-1746B-2 — 100/110/115/ 220/230 VAC, 1Ø, 50/60 Hz
AC/DC Power Supply Unit PR-240 — 100-115/ 200-230 VAC, 1Ø, 50-60 Hz
Temperature sensor, T-04MSB T-04MTB
TruEcho CHIRP™ transducer
—— Optional supply