Clear view 5.6-inch color LCD
COLOR LCD GPS PLOTTER SOUNDER
with DGPS capability

Model GP-1610CF

- 5.6-inch, clear-view color LCD (TFT)
  234(H) x 320(V) dots
- High Performance 8-channel integral GPS receiver
- DGPS ready receiver
- Built-in 300-Watt dual frequency multi-mode Echo Sounder
- Combined display of vessel’s plotted tracks, waypoints, planned routes, and sounding depths on an electronic chart
- Use of FURUNO and NAVIONICS chart cards
- Built-in worldwide base chart
- Chart plotter with advanced graphic nav data displays
- Display of target data from radar outputting TLL data
- North-up or Course-up chart display
- Low power consumption
- Waterproof display
New Generation of All-In-One Plotter

The GP-1610CF is a new high-performance GPS plotter integral with a high-accuracy GPS receiver and a dual-frequency color echo sounder. It improves the safety and economy of navigation for small fishing boats and pleasure craft. It displays your vessel’s planned route, actual tracks, waypoints and electronic charts as well as detecting fish and seabed. This is all shown on a vivid 5.6-inch color LCD (TFT) screen.

A high sensitivity, eight-channel GPS receiver is incorporated to provide accurate and continuous updates of your vessel’s position and speed data.

You may work on Furuno or Navionics charts. Furuno’s cartography enables a chart to be displayed in course-up in addition to north-up modes. The orientation of the chart can be locked with course data from the GPS so that the top of the display indicates your intended course. This is a very useful feature associating the head’s up, over the bow view with the displayed chart. Using the north-up mode may require changing the operator’s orientation to obtain the same view, compared to what you are looking at through the forward bridge windows.

The GP-1610CF presents a variety of easy to use combined plotter and echo sounder display modes: Plotter, Sounder, Highway Display, Compass Rose and Nav data. In the Plotter mode, navaid information as well as own ship navigational data is displayed by placing the cursor on a lighthouse or lighted buoy mark. In the Highway Display mode, the next waypoint is displayed on the nav lane. You can instantly see the best course to steer and where the targeted waypoint is located relative to your ship. In the Sounder mode, fish and underwater information is obtained with the integral 50/200 KHz 300 Watt echo sounder. Frequency selection is easily done on the menu.

The GP1610CF has one port for connection of an external DGPS beacon receiver with RTCM SC104 format for those who require extremely high position accuracy.

The new compact display unit is completely waterproof, making it appropriate to install anywhere on the vessel’s fly bridge.
DISPLAYED DATA

- Sector info for lighthouse
- Course line
- Depth contours
- Ship's position
- Navaid information
- Change of color

On the below 1/4 of the screen, navigation data is displayed. When connected with an echo sounder outputting data in NMEA0183 format, water temperature and depth data can also be displayed.

Sounder Display

The GP-1610CF has a 50/200 kHz dual-frequency echo sounder with functions that most modern echo sounders have: Marker Zoom, Bottom Zoom and Bottom Lock and A-scope.

Course-up Mode

Normally a chart is displayed in North-up. With a FURUNO chart, you can change the display to Course-up without alphanumeric data being rotated.

Easy Route Planning

1. Press the [GOTO] key
2. Select the [Cursor/Route plan]
3. Move the cursor to where you wish to go and press the [ENTER] key.
4. Repeat the same procedure for the next waypoint and so on.
5. Press [ENTER] key again to finish.

On the below 1/4 of the screen, navigation data is displayed. When connected with an echo sounder outputting data in NMEA0183 format, water temperature and depth data can also be displayed.
SPECIFICATIONS OF GP-1610CF

DISPLAY UNIT
- 5.6-inch color LCD (TFT), 234 (H) x 320 (V) dots

DISPLAY MODES
- Plotter, Plotter + Echo Sounder, Echo Sounder, Compass Rose, Highway, and Nav Data

RECEIVER CHARACTERISTICS
1. Receiver Type
   - Eight discrete channels, C/A code, all-in-view
2. Receive Frequency
   - L1 (1575.42 MHz)
3. Accuracy:
   - Horizontal dilution of position (HDOP) ≤ 4 (15 m, SA off)
   - 50 m, 95% of the time
4. Time to First Fix
   - 20 seconds typical (Warm start)
5. Tracking Velocity
   - 900 knots
6. Geodetic System
   - WGS-84, NAD-27, and others
7. DGPS Capability
   - External DGPS beacon receiver required
   - RTCM SC104 v.2.0 format in RS422 level from an external beacon receiver
   - 5 m, 95% of the time

PROCESSOR/DISPLAY CHARACTERISTICS
1. Chart Data
   - Chart ROM card (FURUNO or NAVIONICS)
2. Scale
   - Scale: 0.07 to 3071 nm
3. Plot Interval
   - 1 s-99 min 59 s or 0.01-99.99 nm
4. Memory Capacity
   - 2,000 points total for ship's track and marks including 100 event marks, 199 waypoints, 20 routes (containing 30 waypoints/ route), 1 MOB
5. Voyage Plan
   - Waypoint navigation or route navigation
6. Alarms
   - Arrival/anchor watch, XTE, speed, temperature* and trip *Temp sensor or Triducer required
7. Interface
   - (NMEA0183) - : any talker

ECHO SOUNDER
1. Display
2. Frequency
   - 50 or 200 kHz (selectable in menu)
3. Basic Range
   - 5, 10, 20, 40, 80, 160, 300 m (ft/fa available)
4. Range Phasing
   - Up to 600 m (max depth)
5. Pulselength
   - 0.1 to 3.0 ms depending on range scale
6. Output Power
   - 300 W
7. Alarms
   - Fish, bottom

ENVIRONMENT
- IEC945 test method
- Temperature: -15°C to +55°C (display unit)
- -25°C to +70°C (antenna unit)
- Water resistance: • IPX5 (IEC529)
- • CFR-46 (USCG standard)

POWER SUPPLY
- 12/24 VDC, 20 W

EQUIPMENT LIST
Standard
1. Display unit
2. Antenna unit GPA-016 with 15 m cable
3. Protection cover for display unit
4. Installation materials and spare parts

Optional
1. Chart ROM card (FURUNO or NAVIONICS)
2. NMEA cable 5 m or 10 m
3. GPS antenna cable 30 m or 50 m
4. Antenna fixing base
5. DGPS cable 5 m
6. Rectifier PR-62 for 115/230 VAC mains
7. Temperature sensor T-02MTB/T-03MSB
8. Speed/Temperature sensor ST-02MSB/ST-02PSB
9. Connection kit for connection of temp or temp/speed sensor

TRANSDUCER (specify when ordering)
- 520-5PSD (Plastic Thru-hull), 520-5MSD (Bronze Thru-hull)
- 520-5PWD (Plastic Transom), 522ST-MSD (Bronze Thru-hull with speed/temperature sensor)
- 520ST-PWD (Plastic Transom with speed/temperature sensor)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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