

## MARINE DGPS/WAAS NAVIGATOR

### Model GP-37

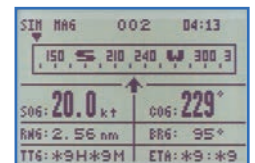
- n Automatic or manual selection of either WAAS or DGPS
- n 4.5" Silver Bright LCD display
- n Multiple display modes to suit a variety of navigational requirements
- n Up to 999 waypoints, 50 routes and 1,000 track points
- n One-touch waypoint entry
- n Customizable NavData Displays
- n Track Back feature stores waypoints at user defined intervals for early trace-back cruise
- n Waypoint & Route upload/download through RS-232C port



The GP-37 is an advanced GPS navigator designed for coastal ships, fishing boats and pleasure craft. It is equipped with a WAAS receiver and a DGPS receiver as standard supply. The powerful processor performs high-speed processing, position fixing and augmentation. It utilizes both WAAS and differential radio beacon correction methods.

This compact and cost-effective unit offers extremely accurate position fixes - 10 m for the basic GPS, 3 m where WAAS service is available and 5 m with DGPS. It should be noted that DGPS is more reliable and accurate, as the WAAS system is still currently under development. There is no guarantee of accuracy, integrity, continuity or availability of the WAAS signal. For that reason, the GP-37 runs with DGPS as the default setting in auto selection mode. If the DGPS signal can not be received for any reason, the WAAS mode is automatically selected. Manual setting is also available.

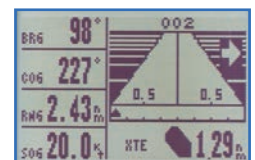
The Display modes include Plotter, two Customizable displays, Steering, Highway and Speedometer Mode. The Steering Display mode provides an intuitive indication of course to steer and cross-track-error (XTE). The Customizable display allows you to select the display layout so the navigation data you are interested in is displayed in large characters.



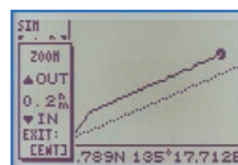
**Steering**



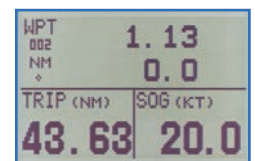
**Speedometer**



**Highway**



**Plotter**



**Customizable display**

### WAAS (Wide Area Augmentation System)

WAAS is a GPS navigation system which applies correction data by means of geostationary satellites. The US FAA has been testing this system and others using Satellite-Based Augmentation Systems (SBAS). As the WAAS utilizes the same frequency as the GPS, a single antenna can receive GPS and WAAS signals. At the moment two Inmarsat GEOs are available, i.e., AOR-W and POR. Similar systems are under development in Japan (MSAS: MSAT Satellite-based Augmentation System) and Europe (EGNOS: European Geostationary Navigation Overlay System). They are said to be fully interoperable and compatible. Major contributors of an error in a single frequency GPS system is a receiver clock drift and signal delays by refraction. The WAAS reference stations on the earth monitor the GPS constellation and route GPS error data to the WAAS satellite via the master earth station. The Inmarsat or communication satellite broadcasts the differential corrections to users.



For more info, visit the FAA web at <http://gps.faa.gov>

# SPECIFICATIONS OF GP-37

## GPS/WAAS

Receiver Type

**GPS Twelve discrete channels C/A code all-in-view WAAS receiver standard fitted in Display Unit**

Receive Frequency

**L 7 MHz**

Time to First Fix

**seconds typical Warm start**

Tracking Velocity

**nots**

Geodetic Systems

**WGS- and others**

## DGPS

Reference Stations

**Automatic or manual selection All DGPS stations in the world are in memory**

Frequency Range

**3 - 3 Hz all ITU regions Hz steps**

Coverage

**from approx a reference station**

Modulation and format

**Minimum Shift keying MS in RTCM SC format**

## Accuracy

**GPS m**

**DGPS m**

**WAAS 3 m**

## Display

**diagonal W H mm LCD pixels**

## Display Modes

**Plotter Highway Steering Display Na Data Display and Customizable Display Modes**

## Memory Capacity

**ships tra points waypoints with comments routes 3 waypoints/route**

## Alarms

**Arrial Anhor wath TE Speed WAAS/DGPS Time Trip Odometer**

## Language

**English Spanish French German Dutch Italian Portuguese Vietnamese Indonesian Japanese**

## Interface

**Output NMEA 3 or //**

**AAM AP OD WC GGA GLL GTD RMA RM RMC VTG TE DA**

## Input

**YMWPL YEOMAN wpt data in NMEA 3**

**DGPS data in RTCM SC or**

## ENVIRONMENT IEC test method

**Temperature Display Unit -C to C**

**Antenna Unit -C to 7C**

**Waterproofing Display Unit IP IEC**

**CFR USCG**

**Antenna Unit IP IEC**

## POWER SUPPLY

**- VDC 3 - 7 A**

## EQUIPMENT LIST

### Standard

**Display Unit**

**unit**

**3 Loop Antenna H-field with m able**

**set**

**Installation Materials and Spare Parts**

**set**

### Option

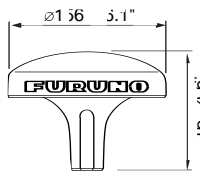
**Antenna base**

**CP- Pipe mount No 3-QA33 De mount**

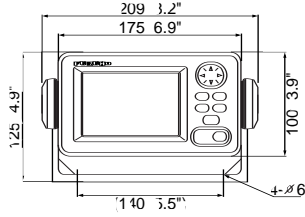
**No 3-QA3 Oset braet No 3-RC Handrail mount**

**Flush Mount it F type OP-/ or S type OP-7**

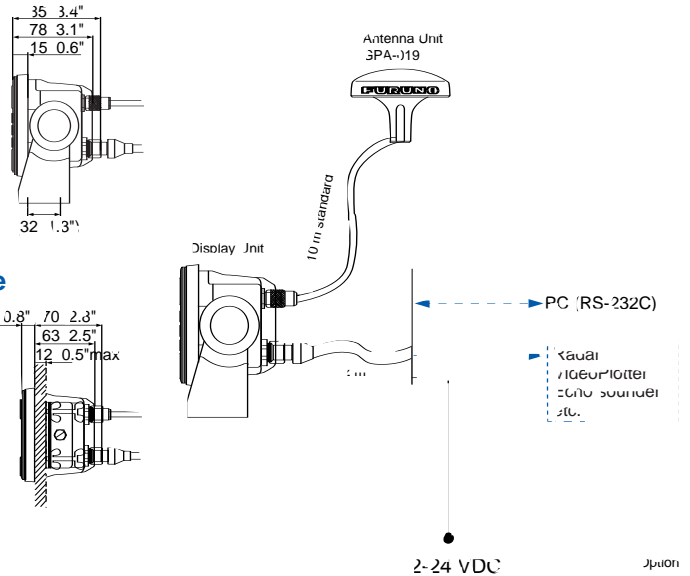
**Antenna Unit 3 g oz**  
**GPA-019 Loop Ant H-field**



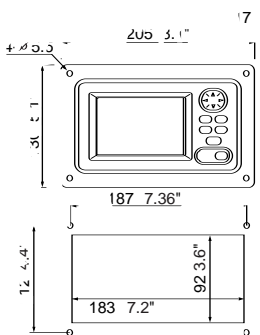
**Display Unit g lb**



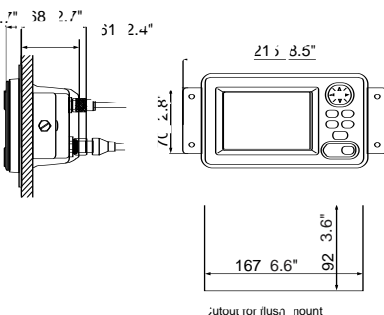
**Interconnection Diagram**



**Flush Mount Kit F-type**



**Flush Mount Kit S-type**



**SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

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