Addendum to the User and Installation Guide

Introduction

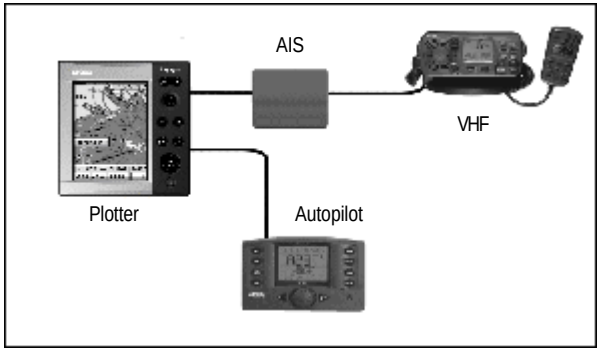
This document describes the specific features of the Automatic Identification System (AIS) and NAVIONICS Platinum Plus™ cartography.

For information on the installation, servicing and functions common to other units, refer to the User and Installation Guide supplied with the unit.

Connection to the AIS receiver

The AIS receiver is to be connected to the NMEA input on the GEONAV; this configuration requires the use of the built-in GPS receiver, in order to avoid overloading the NMEA input line.

It is also possible to connect more devices to the same NMEA input by means of a NMEA multiplexer, although in this case - given the increase of data to transfer to the same line - loss of data is likely to occur. This may be dangerous in case that the data lost concern one or more AIS targets.



AIS

The GEONAV allows a vessel equipped with an AIS receiver to display on a screen the information on all the vessels equipped with AIS transmitters, such as cargo ships or pleasure boats, monitor their movements, names and courses. AIS allows also receiving information useful for navigation.

A function called “collision alarm” warns if a vessel is navigating nearby, thus preventing possible collisions at sea.
This function increases considerably the safety of navigation, helping to avoid collisions at night and under poor visibility conditions, above all on busy waters.

WARNING: Small boats are not required to carry AIS, and cargo ships, although required to carry it, are not required to maintain it in operation. Therefore, do not take it for granted that AIS displays all the vessels in the vicinity. AIS data are meant to be used as complementary information, without replacing radar-based data. As usual, this system must be used with caution.

Operation

To enable the AIS function, select ACTIVATE from the SETUP AIS menu. AIS functions will always be available from the SETUP menu by selecting the AIS option.

Representing AIS targets

The figure shows some of the tracked AIS targets that can be displayed on the chart.

The graphical items available are listed below:

1 - MMSI

The MMSI (Maritime Mobile Service Identities) code consists of a series of 9 digits transmitted over the radio path in order to uniquely identify ship stations, ship earth stations, coast stations, coast earth stations and group calls.

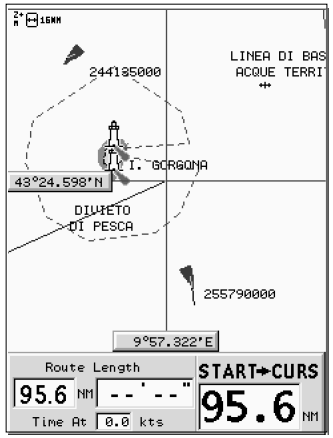
2 - Vector

Indicates the target current heading. The greater the vector length, the greater the target speed.

3 - Color

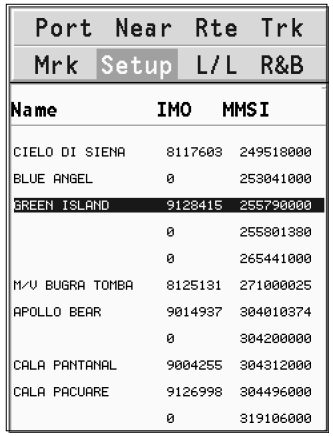
The target color provides information on the vessel type, as described below:

- Light gray: Dredger, dive vessel, vessel with antipollution, medical transport, ship according to RR resolution no. 18, Wing-in-ground.
- Dark gray: Unknown.
- Dark green: Cargo, tanker.
- Violet: High speed craft, port tenders, towing.
- Light green: passenger, fishing.
- Magenta: Tug, pilot vessel.
- Blue: Sailing.
- Brown: Navy, law enforcement.
- Red: ALARM on TARGET.



Information on AIS targets

To display the information on all the AIS targets located within the receiver range, select SETUP, AIS and then enable the TARGETS LIST option.
The window will show the information required.

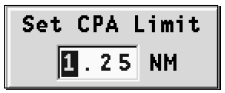


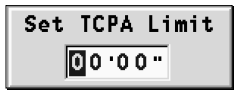
Information on a single AIS target

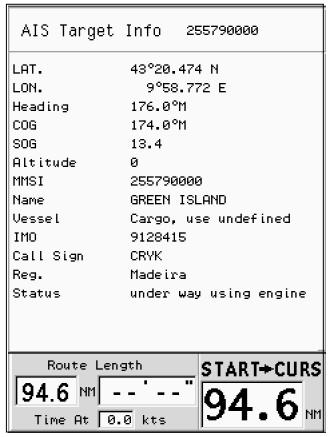
Move the cursor on a target and press **ENTER** to display all the information on the AIS target selected.

CPA/TCPA limits

Press the **GOTO** key, select SETUP and then the SET CPA/TCPA LIMIT option to set the CPA (Closest Point of Approach) and TCPA (Time to Closest Point of Approach) limits. As soon as the CPA or TCPA parameters of a target are lower than the limits selected, a warning message is issued. The target is shown with a blinking red light.



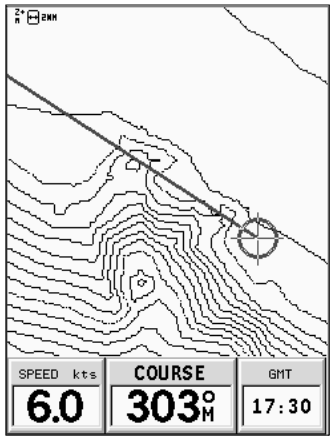




NAVIONICS Platinum Plus™ cartography

The additional functions provided by Platinum Plus™ cartography are described below. As for the functions common to NAVIONICS Platinum™ or Gold™ cartography, refer to the User and Installation Guide supplied with the unit.

- Overzoom
  In Overzoom mode, the chart scale values range from 4096 NM to 1/32 NM.
- Photos
  NAVIONICS Platinum Plus™ cartridges store high-resolution photos, up to max.1024x768 pixels.
- Display of aerial/satellite charts
  It is possible to set the Photo Overlay to LAND/2m/5m or FULL.
  The coverage on LAND, 2m or 5m depth contour depends on the setting of the SAFETY DEPTH option.
  The Photo Overlay function suspends the Chart Rotation function.
  NAVIONICS Platinum Plus™ cartridges store high-resolution aerial and satellite cartography, up to max. 0.25m per pixel.
- Fishing Bathy
  Once enabled, this option displays a series of settable-step depth contours showing the bottom contour.
  These depth contours are displayed in the 2D window if the chart scale ranges from 2NM to 1/32NM.
  Fishing Bathy contours, drawn by interpolating cartridge data, must be considered as fishing aids. Fishing Bathy contours do not ensure the safety of navigation.
  To enable and set the step range, select SETUP, FISHING BATHY and then the OFF, 5m, 10m, 20m, 30m, 50m or AUTO option.



ERRATA

GPS receiver

The GPS receiver might not be able to send the magnetic variation information. In this case, all bearing readings displayed by the plotter will refer to the TRUE bearing even if the bearing is set to MAGNETIC.

Automatic track

The automatic track no longer can be enabled manually by the user, but is enabled automatically by the ECS mode.

Chart details (STD/USER/ALL)

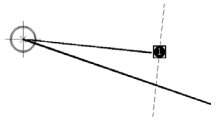
In USER mode, the user is enabled to activate or disactivate the functions, but not to disable the minimum details that ensure safety.

Standard display

To display the chart in ECS mode, press **GOTO** and **EXIT** simultaneously.

Time to reach the waypoint(s)

The time necessary to reach the target waypoint is calculated according to the time to reach the perpendicular to the route segment.



The time to reach the last waypoint in the route is calculated by adding the time to reach the target waypoint to the time to cover the distance to the other waypoints at the current speed.

Changing the target waypoint

It is possible to change the route by selecting a specific waypoint in two ways (function available in Navigation mode only):

1) Press the **ENTER** key while in Navigation mode, select the target waypoint by the cursor, and then press **ENTER** to confirm.

2) Press the **GOTO** key to enter the menu, select ROUTE by the cursor, choose the target waypoint, and then press **ENTER** to confirm.

GPS (INT/EXT)

Selects the built-in GPS receiver able to detect the WAAS/EGNOS differential satellite (if available), or an external GPS receiver connected to the NMEA input.

Switching on the Fishfinder

In order to be detected by the GEONAV, the Fishfinder must be switched on before the unit, or simultaneously.

FISHFINDER - CALIBRATION

The option DEPTH OFFSET was erroneously called TRANSDUCER DEPTH.