Vento Solare Crew Training

How to Use & Control the B&G Instruments

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Vento Solare
J/109 - USA 266

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Introduction

- The B&G system has sensors (compass, roll, pitch, speed paddlewheel, depth transducer, wind direction / speed sensor, and the external GPS)
- The sensors are connected to the B&G H5000 Hercules Server - calibrated using the networked Laptop with corrections applied to use the best data possible
- The H5000 Server integrates data, performs calculations & corrections, and distributes data to the displays and other systems e.g. Autopilot, Chart Plotter, VHF Radio, WiFi Router, Computer, Remote Tablet or Phone
- The B&G displays are the primary method to display relevant sensor data used by the helmsman and crew
  - Important crew functions are start timer & start line ping
  - Crew may be asked to select available displays
- This presentation provides an overview of the displays, how we use them, and how they are adjusted

Display Operation

B&G Triton 2 & H5000 Graphic Displays

- Page Key:
  - Press to scroll through the enabled data pages
  - Press and hold to display a list of enabled pages from where you can select directly the page to display
  - Menu and dialog operation: Press to return to previous menu level or to exit a dialog.
- Arrow Keys
  - Press to move up and down in menus and dialogs.
  - Press to adjust a value.
- Enter Key
  - Press to select a menu option and enter the next menu level.
  - Press to activate/deactivate a menu/dialog option.
- Menu / Backlight Key
  - Press once to display the page menu.
  - Double-press to display the Settings menu.
  - Press and hold to show the Display setup dialog.

Triton 2 Display

H5000 Graphic Display

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Spray Hood Layout & Default Settings

- Left Display
  - Tide Magnitude & Direction
  - Boat Speed, Heading & Depth
- Center
  - Pre-Start: Start line and Race Timer (Crew will control pre-start)
  - After Start: Laylines, Waypoint Information, Performance Targets
- Right Display
  - Wind Strip Chart (True Wind Direction & Speed)

The Center Display will be used by Tactician after start

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Mast Display Layout & Default Settings

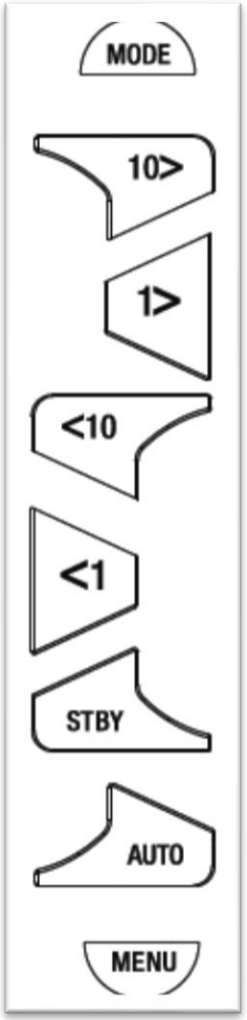
- Upper Display
  - Speed through Water (Paddlewheel)
  - Speed Over Ground (GPS) – may also display VMG wind or Target Boat Speed
- Middle Display
  - True Wind Angle
  - True Wind Speed – may display VMG waypoint or Polar performance
- Lower Display
  - Magnetic Heading (Compass)
  - Course Over Ground (GPS) – may also display waypoint BTW / DTW

Mast displays are typically not changed – only backlight is remotely controlled

H5000 Pilot Controller on Spray Hood

The H5000 Pilot Controller is operated by 8 keys to control the autopilot and adjust autopilot parameters.

- **MODE** Changes the autopilot mode / Scrolls up in menu options / Increases values. With active autopilot:
  Toggles between Wind mode and Auto mode
- **10º COURSE CONTROL STARBOARD (10º RIGHT)**
  Changes target course 10º Starboard
- **1º COURSE CONTROL STARBOARD (1º RIGHT)**
  Changes target course 1º Starboard / Activates Non Follow Up (NFU) mode when in Standby mode / Enter menu
- **10º COURSE CONTROL PORT (10º LEFT)**
  Changes target course 10º Port
- **1º COURSE CONTROL PORT (1º LEFT)**
  Changes target course 1o Port / Activates Non Follow Up (NFU) mode when in Standby mode / Exit menu
- **STBY** Disengages the autopilot
- **AUTO** Engages the autopilot
- **MENU** Enter the **Main menu** / Scrolls down in the menu options / Decreases values. Press and hold for 3 secs enters the lighting settings.



The H500 Pilot Controller is only used for short handed racing and delivery

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Start Timer on H5000 Graphic Display

- Press Page Key until Start Line Screen is Displayed
  - Default Timer should be 5:00 minutes

- Press Menu to display the menu

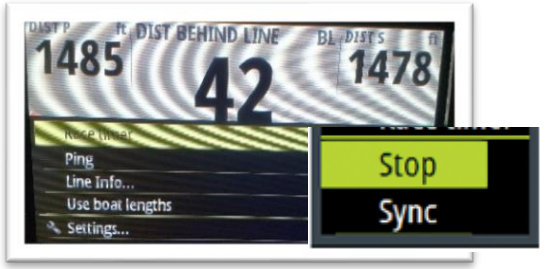
- Press Enter Key to select Race Timer

- Press Enter Key to start the timer – timer starts

- Press Page Key to return to Start Line Display

If Resync at 4 minutes needed Press Menu

- Press Enter Key to select Race Timer
- Press Down Arrow to highlight Sync
- At 4 minute signal press Enter Key to synchronize timer
- Press Page Key to return to Start Line Display



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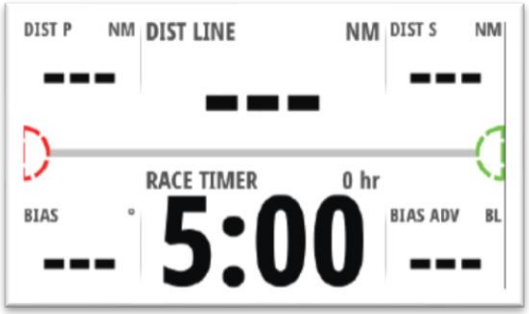
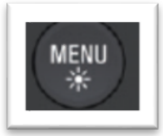
Ping Line on H5000 Graphic Display

- Press Page Key until Start Line Screen is Displayed

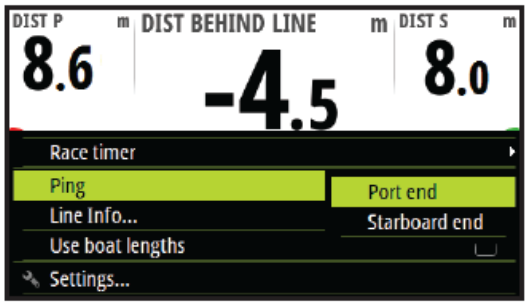




- Press Menu to display the menu

- Press Down Arrow to highlight Ping

- Press Enter Key select Ping



- Press Arrow Keys to highlight Port or Starboard end

- Press Enter Key when foredeck calls bow crossing line

- Repeat steps for opposite end of line

- Press Page Key to return to Start Line Display

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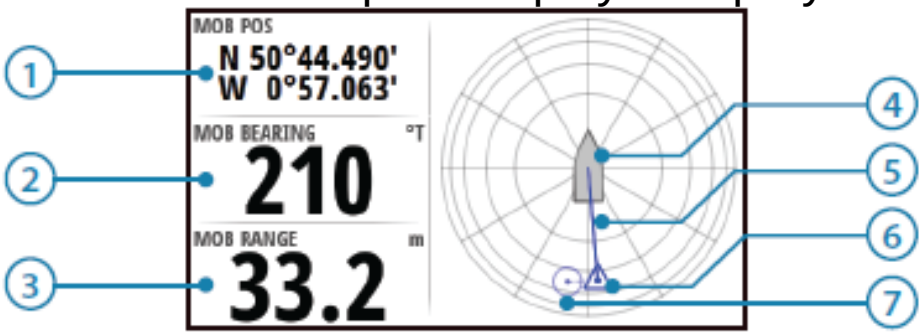
Man Overboard (MOB)

- Man Overboard (MOB) buttons located port & starboard side outboard helm
  - Press either one if a person goes overboard
  - H5000 Graphic Display on Spray Hood Automatically switches to MOB mode



No.	Description	No.	Description
1	Last known MOB position	5	Direction to MOB from vessel
2	Bearing to MOB	6	Dead reckoned MOB position
3	Range to MOB	7	Last known MOB position
4	Vessel (Always points up)		

- A waypoint becomes active at the MOB activation position indicated with a circular symbol. If the man over board event is activated via an AIS-SART then this position will update via the AIS-SART signal.
- The GPS longitude and latitude co-ordinates of the last known position are displayed with the bearing and range to MOB waypoint listed below
- The H5000 CPU performs dead reckoning calculations to provide the estimated position of the man over board displayed as a triangle symbol.
- To cancel the MOB event on the H5000 Graphic Display press **MENU** and select cancel

All Crew Members Should Know This

Navigation Terms for Reference