MEDALLION INSTRUMENTATION SYSTEMS

VIPER CHART PLOTTING OPERATORS MANUAL
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MAP SCREEN

This manual will attempt to familiarize the operator with the features and functions of this system. The Medallion Navigation system uses GPS (Global Positioning System) satellites, and a map database to calculate and display route directions. The GPS is based on satellites which orbit the earth and continuously emit signals. The GPS receiver located on the boat receives those signals and calculates, based on the signals, its distance from the respective satellites. This information is used to calculate your current geographic position. The signals of at least three satellites are needed to determine the current location. When entering the Navigation system, the screen below is the first screen that is displayed.

**Main Map Screen**
When entering the Navigation area, this is the first screen that comes up. Each section of the screen is highlighted above and described below.

**CURRENT LOCATION** — This image shows the current location of the boat.

**ZOOM LEVEL** — This bar shows the zoom distance across the screen. In the example above the distance from the left of the screen to the right of the screen is 1 nautical mile. This can be adjusted from 0.1 to 4000 nautical miles by pressing the + or—buttons.

**GPS LOCATION** — This area of the screen shows the coordinates from the GPS antenna. This can be configured to display 1. Degrees, 2. Degrees, Minutes, 3. Degrees, Minutes, Seconds.

**GAUGE SCREEN** — This area of the screen shows up to seven informational gauge screens. This gauge screen section can be turned on or off in the SET UP menu (FULL/GAUGE).
Above is the main navigation menu screen. From here the operator can get to any area of the navigation system. Pressing the ENTER button will display the MAP screen. At the center of the screen is an image of the SQUASH PAD. Pressing the associated arrow on the squash pad will bring up that menu. The following pages will describe each area.
Starting at the Navigation Menu screen, the MAP screen can be adjusted to show the MAP on the entire screen or show gauge information along the right hand side of the display.

Underneath the words “MAP VIEW” are the words “FULL” and “GAUGE”. The word that is highlighted indicates how the MAP screen will be displayed.

Pressing the UP arrow on the squash pad will cause the highlight to change between “FULL” and “GAUGE”. Examples of “FULL” and “GAUGE” screens are shown above.

For more information on the GAUGE screens, see the SET UP menu options.
The MAP screen can be adjusted to orient the map with north always at the top of the screen, or with the boat heading at the top of the screen. Underneath the words “MAP ORIENT”, toward the top left of the screen, are the words “BEARING” and “NORTH”. The word that is highlighted indicates how the MAP screen will be oriented.

Pressing the UP/RIGHT arrow on the squash pad will cause the highlight to change between “BEARING” and “NORTH”. Examples of “BEARING” and “NORTH” screens are shown above. Note the compass heading in the lower right corner of the display rotates on the “BEARING” orientation.
Using the arrow buttons, highlight the “NEW COURSE” and press “ENTER”. A new name is not required, the generic name will be used if the following steps are skipped.

A new screen will appear, using the arrow buttons, highlight the “ENTER COURSE NAME”. A keyboard will appear. Use the arrows to highlight the letter desired and press “ENTER”. Once the course name is entered, highlight the “OK” and press “ENTER”. The new course name will appear in that window.

Highlighting the “ENTER WP NAME” will bring up the keyboard again. A new name is not required, but is optional. The generic name will be used if these steps are skipped.
SELECT COURSE
CREATING A NEW COURSE (cnt)

Using the arrow buttons, highlight the “SELECT WAYPOINT LOCATION”.

Using the arrow buttons, move the cursor (cross) to the beginning location of the desired course and press the “WAYPOINT” button.

A new window will appear showing the available waypoint options. Use the arrows to highlight the desired waypoint and press “ENTER”.

The map screen will be shown again with the waypoint in the location that the cursor was. Use the arrows to move the cursor to the next waypoint and press the “WAYPOINT” button. Repeat this for all of the waypoints desired.

NOTE: It is very important that the last waypoint be a “COURSE COMPLETE” waypoint.
Using the arrow buttons, highlight “NEW AUTO COURSE” and press “ENTER”.

A new screen will appear, using the arrow buttons, highlight the “ENTER COURSE NAME”. A keyboard will appear, use the arrows to highlight the letter desired and press “ENTER” to select it. Once the course name is entered, highlight the “OK” and press “ENTER”.

The new course name will appear in the “ENTER COURSE NAME” window. A new name is not required, but is optional. The generic name will be used if this step is skipped.

Position your boat where you would like this course to start. Highlight the “START COURSE RECORD” to begin tracking your course.
SELECT COURSE
CREATING A NEW AUTO COURSE (cnt)

After selecting “START COURSE RECORD”, the map will appear. Your location is the boat image (in the screen to the left it is within the blue box). The navigation software will track your movements until the STOP COURSE option is selected.

NOTE: Be sure to make the last waypoint the COURSE COMPLETE waypoint.
The FILTER menu allows the operator to adjust/change what is displayed throughout the various screens. From the Navigation Menu screen press the DOWN/RIGHT arrow on the squash pad to adjust the filters.

The screen above shows the objects that may be available to display. If there is an object that is not desired, remove the check box and that object will not be displayed in the map.
GPS STATUS

The GPS STATUS menu allows the operator to view up to a 16 position satellite signal strength graph on the right side of the display, and a 4 point compass graphic showing the relative position of each satellite on the left side of the display.

From the Navigation Menu screen press the DOWN arrow on the squash pad to access the GPS STATUS screen.
SETUP

From the Navigation Menu screen press the DOWN/LEFT arrow on the squash pad to access the SETUP menu.

The SETUP menu allows the operator to adjust, view and configure the navigation system through eight menus.
SETUP
SCREEN LEVEL

SCREEN LEVEL is the contrast adjustment menu. Highlight the SCREEN LEVEL and press the ENTER button. The screen below will appear.

Using the arrows, UP/DOWN changes between the low/high scale, Normal Mode, High Contrast, and Night View. The LEFT/RIGHT arrows control the slide on the Low to High brightness scale. Highlighting the EXIT and pressing ENTER will bring the display back to the MENU screen.
SETUP
TRANSPARENCY LEVEL

TRANSPARENCY LEVEL can be set to enable the user to see the map while viewing the menus. Highlight the TRANSPARENCY LEVEL and press the ENTER button. The screen below will appear.

Using the arrows, UP/DOWN changes between the transparency scale and the EXIT. The LEFT/RIGHT arrows control the slide on the transparency scale. Highlighting the EXIT button and pressing ENTER will bring the display back to the MENU screen.
GPS SETUP can be set to enable what data and accuracy the user wants to see on the map while operating the menu features. Highlight the GPS SETUP and press the ENTER button. The screen below will appear.

Using the arrows, UP/DOWN changes between the Coordinate styles and WAAS status options. Highlighting the EXIT button and pressing ENTER will bring the display back to the MENU screen.
SETUP

GPS STATUS MAP

GPS STATUS MAP will display the satellite signal strength. Highlight the GPS STATUS MAP and press the ENTER button. The screen below will appear.

The GPS STATUS menu allows the operator to view up to a 16 position satellite signal strength graph on the right side of the display, and a 4 point compass graphic showing the relative position of each satellite on the left side of the display.
SYSTEM SETUP

Any of the options listed above can be displayed in the gauge area of the MAP screen. Only seven items can be selected to be displayed at one time. Highlighting the EXIT button and pressing ENTER will bring the display back to the MENU screen.
SETUP

DEPTH LEVEL SETUP

DEPTH LEVEL SETUP will display the options for how to draw the mapped depth contours of the various waterways. Highlight the DEPTH LEVEL SETUP and press the ENTER button. The screen below will appear.

DEPTH CONTOURS

Depth Contour Level
- Depth Level 6 Feet
- Depth Level 12 Feet
- Depth Level 18 Feet
- All Depth Levels (255 Feet)

Safety Contour Level
- Depth Level 6 Feet
- Depth Level 12 Feet
- Depth Level 18 Feet

The options listed above will change how the waterways are to be displayed on the MAP screen. Depending on which setting is chosen will enable how much detail is drawn into each waterway. Highlighting the EXIT button and pressing ENTER will bring the display back to the MENU screen.
SETUP
SYSTEM UNITS SETUP

SYSTEM UNITS SETUP will enable the operator to change speed units between Knots and Miles Per Hour. This menu also allows the operator to change distance units between Nautical Miles and Miles. Highlight the SYSTEM UNITS SETUP and press the ENTER button. The screen below will appear.

The options listed above will change how the speed and distance are to be displayed on the MAP screen. Depending on which setting is chosen will enable the appropriate units. Highlighting the EXIT button and pressing ENTER will bring the display back to the MENU screen.
COLOR SETUP will enable the operator to change the color settings on most menu options. Highlight the COLOR SETUP and press the ENTER button. The screen below will appear.

The options listed above will change the color of that feature that is to be displayed on each screen. Highlight the desired option and press ENTER. This will display a dropdown box with the color options available. Highlighting the EXIT button and pressing ENTER will bring the display back to the MENU screen.
Highlighting the EXIT SETUP and pressing ENTER will bring the display back to the MENU screen.
From the Navigation Menu screen press the LEFT arrow on the squash pad to change the way the system navigates. There are three modes of navigation; MAP, COMPASS, and OFF.

**MAP** mode shows the Course name, Next Waypoint, and Destination.

**COMPASS** mode shows the compass rotating with the heading always at the top of the screen. This option also shows the Course name, Next Waypoint, Destination and distance to (POI) Point Of Interest along with the seven gauge screens (if selected).

**OFF** mode clears the Course name, Next Waypoint, and Destination from the display.
NAV BY
COMPASS

From the Navigation Menu screen press the LEFT arrow on the squash pad to change the highlight to COMPASS. This will change the top three options in the menu to the screen below.

POI NOTIFY (ON/OFF) — Indicates when you are near a Point Of Interest on the map.

TRACK TRAIL (ON/OFF) — Will leave a trail in the direction of where your last waypoint was.

ADJUST NOTIFY BAND — Pressing the UP/RIGHT arrow brings up a box that allows the setting of the notify distance to the next POI.

When “NAV BY” is set to COMPASS mode. The MAP screen will show the image to the right which shows the compass rotating with the heading always at the top of the screen. This option also shows the Course name, Next Waypoint, Destination and distance to (POI) Point Of In-