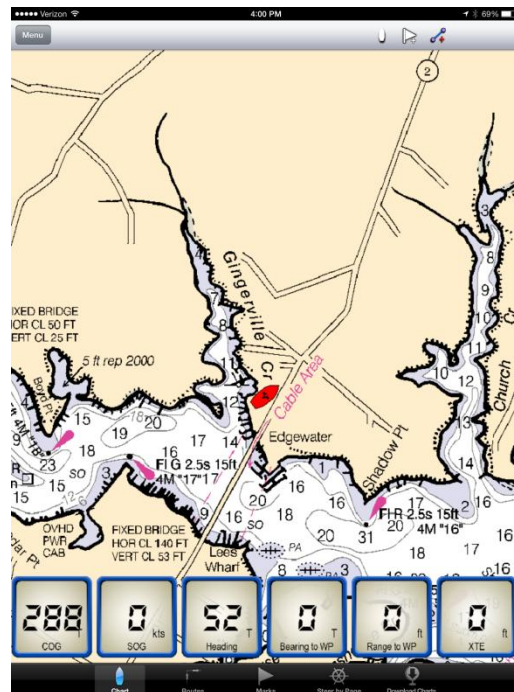# Maptech iPlot Features and Instructions

Thank you for purchasing the Maptech iPlot navigation app. This app was designed by boaters so it works like you would expect it to. The Maptech iPlot is extremely easy to use, with great functionality. Features include:

Uses NOAA Raster Charts (RNCs)
Lightening fast chart quilting engine
Unlimited custom routes and marks creation
Index of all routes and marks
Place Mark at vessel function for MOB or an anchor alarm
Instant waypoint with a touch of the finger
Full route list of all waypoints showing instant DTW, BTW and ETA to each
Full mark list showing instant DTW, BTW and ETA to each
Record Tracks by Time, Distance or Course Change
Reverse route function
Import and export routes, marks and Tracks with Maptech's PC programs

Maptech's complete marine facility database
displaying AIS targets through WiFi Capable of
Unique route steering display page
Adjustable waypoint arrival time
Easy to read data windows for COG, SOG, HDG, BTW, RTW, XTE
Easy locate vessel button
Orientations include heads up, north up, look ahead
Choose bearings true or Magnetic
Charts updated yearly

Once you have downloaded the iPlot app press the iPlot icon on the desktop and the app will open up with your current position over a small scale world map (see getting position from the GPS). At this time you may download the free US small scale planning charts (Region 99). This will give you a good idea how the app operates without purchasing additional chart regions. If you would like to use larger scale detailed charts for navigation, you will need to press the "Download Charts" function at the bottom right of the GUI. It will connect to the server and you can choose what chart coverage you would like to download. **Please make sure you are connected to Wi-Fi to download charts. You must download the free region 99 first.**

US Chart Regions
```
Region 02 - Block Island, RI to the Canadian Border
Region 03 - New York to Nantucket and Cape May, NJ
Region 04 - Chesapeake and Delaware Bays
Region 06 - Norfolk, VA to Florida including the ICW
Region 07 - Florida East Coast and the Keys
Region 08 - Florida West Coast and the Keys
Region 10 - Puerto Rico and the U.S. Virgin Islands
Region 12 - Southern California: Point Arena to the Mexican Border
Region 13 - Lake Michigan
Region 14 - San Francisco to Cape Flattery
Region 15 - Pacific Northwest: Puget Sound to the Canadian Border
Region 17 - Mobile, AL to the Mexican Border
Region 22 - Lake Superior and Lake Huron (U.S. Waters)
Region 24 - Lake Erie (U.S. Waters)
Region 26 - Lake Ontario (U.S. Waters)
Region 30 - Southeast Alaska
Region 32 - South Central Alaska: Yakutat to Kodiak
Region 34 - Alaska: The Aleutians and Bristol Bay
Region 36 - Alaska: Norton Sound to Beaufort Sea
Region 40 - Hawaiian Islands and U.S. Territories
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Region 99 – U.S. Small scale planning charts (Free)
More to come for international regions

GPS Position:

If your device has a built in GPS, you may use this for tracking the vessel position in the iPlot app. Just make sure you have it turned on in the settings menu of your device.

There are two methods of turning off location services on an iPad using OS earlier than 7.. The location services for a single app can be switched off, or all services for all apps can be turned off. Thankfully, you can accomplish either of these tasks in the same place.

The iPad either uses GPS (for 3G/4G models) or Wi-Fi hotspots and cell tower triangulation (for all other models) to determine the location. Turning off location services will not only prevent an app from determining the iPad's location, it can also save battery power.

1. First, go to the iPad's settings by touching the setting icon. It looks like gears in motion.
2. Next, choose Location Services from the left-side menu.
3. In the main window, turn the top switch to off to restrict all apps from using GPS or Wi-Fi hotspots to determine the iPad's location. If you just want to turn it off in a single app, scroll down the list until you see the app's name and turn the switch to off.

If your iPad is using OS 7 or later you will need to go into setting then select General on the left side then on the right you will need to enable restrictions and then go down to under Privacy and select location services. In the main window, turn the top switch to off to restrict all apps from using GPS or Wi-Fi hotspots to determine the iPad's location. If you just want to turn it off in a single app, scroll down the list until you see the app's name and turn the switch to off.

Using an external GPS such as Bad Elf:
You may use external GPS devices, just make sure they are compatible with your device and that you have selected the external device under the location settings. If it is a Bluetooth GPS make sure you have paired it with your device.

Using the Maptech iPlot App:
Tap the desktop Maptech iPlot icon and it will open and place the Red vessel at your current position provided you have your location services on for this app. As you move with your iPad with the app open, the vessel moves along the map always showing your current position as the red vessel icon. Notice as you turn the iPad, the vessel will always point in the direction you are headed.

Please Note: While using the app and you find that your screen is turning off after non interaction with the app for a time you may want to adjust the Auto-Lock feature under General in the Settings menu.

Zooming In and Out:
To zoom out on the chart page simply take two fingers place them apart on the screen and bring the fingers together while constantly touching the screen. This will cause the chart to zoom out and change the charts to a smaller scale.

To zoom in on the chart page simply take two fingers touching each other and touch the screen and separate your fingers while keeping them on the screen. This will cause the charts to zoom in and change to a larger scale.

Panning the chart:

To move the chart on the chart page simply take your finger and drag it across the screen pulling into view the area you want to see. The screen will snap back to the vessel after 15 seconds from the last touch, if you would like to get back to the vessel sooner tap on the vessel icon in the top right corner of the screen.

Orientation:

By clicking on the Menu button in the top left of the chart page you will be able to select your map orientation. North Up will leave the chart oriented north up while the vessel will turn on top of the chart. Course Up leaves the vessel pointing up on the screen and moves the chart around the vessel so what is actually on your right and left side matches up with what is on the right and left of the vessel on the chart. Position Center places the vessel in the middle of the chart and Look Ahead places the vessel with maximum chart ahead in the direction the vessel is headed.

Position Format:

Three choices for position format are available: DDD.dddd, DDD MM.mm, and

DDD MM SS.ss . To choose between formats, from the Chart page tap the Menu button and under Mapping tap the Lat/Lon/ Format then choose your preference. The position format that appears in the settings menu is the current position format.

Bearings True or Magnetic:

To change between bearings true and magnetic, from the chart page tap the Menu button then under Mapping tap on HGD/BRG line select and choose either bearing true or magnetic.

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Finding Vessel Location:

If at anytime you want to get back to the vessel's position simply tap the vessel icon at the top right of the screen and you will go back to the vessel. The screen will snap back to the vessel after 15 seconds from the last interaction with the screen. If you do not want to have the position to snap back to the vessel position on the chart page tap on Menu and slde the Auto Return to Vessel to the off position (left).

Other Menu Items Explained:

Auto-Dismiss: When it's on, it will automatically dismiss the Menu when you make a settings change from the Menu

Auto Return to Vessel: When it's on and you are panning the chart, will automatically snap the chart back to the vessel position after 12 seconds

Operation Manual: Brings up this operating manual

Advance Settings: To only be used if instructed to do so by tech support

About: Gives you iPlot version number and credits

Disclaimer: Shows our disclaimer

To go back to the menu at anytime while in a menu item tap Settings at the top left corner

Marks:

To place a Mark on the chart, from the chart page tap the flag icon at the top right of the screen then select Add Mark, (will turn red). Now drag the chart to the location of where you would like to place the Mark. Once you are at the spot you want to place the Mark, touch and hold your finger at that spot for 3 seconds then lift you finger from the screen. The Mark will appear with a dialog box showing the Marks exact position and the default name which is the time and date in which it was created. This dialog box allows you to alter the position of the Mark. To do so tap the Latitude or Longitude and using the pop up keyboard type in the position you desire. You can also change the name of the Mark by tapping on the name and using the pop up keyboard, type in the name you desire. When finished tap on the blue Done button.

To Place a Mark at the Vessel, from the chart page tap the flag icon at the top right of the screen then select Add Mark at Vessel. A blue Mark is automatically placed at the vessels current position.   It is given the name Vessel Mark and you can treat it just like a Mark as explained above. This can be used as a Man Overboard Mark, or a way to see if your anchor is holding or if you wanted to mark a point of interest to come back to.

Reposition Mark: to reposition the Mark you can touch the Mark with your finger on the chart page and drag the mark on the chart or tap on the Mark and dial in a new Latitude and Longitude by taping on the Latitude or Longitude and dialing in the desired position. When desired position is dialed in tap on the arrow back Edit Mark in top left of dialog box and then tap on the blue Done button when finished.

Goto Mark: to get range and bearing to a Mark from the vessel's position, tap on the desired Mark on the chart page and select Goto. This will turn the Mark green and draw an active green route line from the vessel to the Mark, providing range and bearing in the data windows and on the Steer by Page.

Hide a Mark: to hide the Mark, tap on a Mark on the chart page and select Hide and it will be hidden on the chart. You can also go into the Mark list by selecting the Mark icon at the bottom of the screen and find the Mark you want to hide and tap on it and the check to the right will disappear and your Mark will be hidden.

Show Mark: to show hidden Marks, tap on the Mark icon ![Marks icon] on the bottom of the screen and find the Mark in the list and tap on it and a check will appear to the right. If you want to see the Mark on the chart touch and hold the Mark for 3 seconds and the chart will appear centered on the chart.

To Delete Mark: there are two ways to delete a Mark. First you can simply tap on a mark on the chart page and in the dialog box, tap on the trash can symbol and the Mark will be deleted from the chart and the database. The second way to delete a Mark is to go into the Mark list by selecting the Mark icon ![Marks icon] at the bottom of the screen and then tap the Blue Edit button at the top right corner. Now tap the red circle next to the Mark you want to delete and then tap the Delete button to the right.

Renaming a Mark: There are two ways to change a name of a Mark. The first way is to tap on a Mark on the chart page, and in the dialog box tap Name and using the pop up keyboard type in the name of the Mark. The second way is to go into the Mark List by hitting the Marks icon ![Marks icon] at the bottom of the page and then tap the blue edit button on the top right of the screen. Now just select the Mark you want to rename and using the pop up keyboard type in the name of the Mark.

Routes:

Creating a Route: To create a route, from the chat page tap the route icon ![route icon] in the upper right corner of the screen then in the drop down menu select Create New Route. Now place your finger on the chart where you want to place the first waypoint and hold your finger to the screen for 3 seconds then lift your finger, you will see a purple waypoint. Now place your finger where you want to place your second waypoint and hold your finger on the screen for 3 seconds, when you lift your finger you will see a purple waypoint with a blue line connecting this waypoint to the last waypoint you laid down. Continue doing this until you have finished. When you have finished creating a route tap the rout icon in the upper right corner ![route icon] of the screen so it is not highlighted and this will take you out of route mode. All routes are saved in the route list which can be accessed by selecting the Routes icon ![Routes icon] at the bottom of the screen. All routes are saved with the default name of the time and date it was created. To edit the name of the route you will need to goto the Routes page then tap on the route you want to rename and tap the blue edit button in the upper right hand corner then tap on the route again. When the edit dialog box comes up you can use the popup keyboard to enter a new name. When finished tap the blue done button in upper right corner.

Adjusting Waypoints on existing Routes: On the chart page, once a route has been created and the route icon on the top right of the screen is not highlighted you may move individual waypoints by touching a waypoint and dragging it to where you want it. You may also tap on a waypoint and dial in a latitude and longitude by taping on the Latitude or Longitude and dialing in the desired position. When desired position is dialed in,tap on arrow back Edit Waypoint on top left of dialog box then tap Done.

Add Waypoints to a Route: To add waypoints to a route make sure the route is displayed on the chart page and tap on the Route icon on the top right of the screen, and select Add Waypoints to Route from the pull down menu. Then simply touch the screen for 3 seconds at the spot you want to lay down your additional waypoint. Repeat this for every additional waypoint you want to lay down. When finished tap the Route icon so it is not highlighted.

Delete Waypoints from a Route: From the chart page, to delete a waypoint from a route simply tap the waypoint and when the dialog box comes up tap the trash can and the point will be deleted and the route line will adjust accordingly.

Activate a route: From the chart page, to activate a route tap on the waypoint you want to goto and tap Goto. This will draw a green bearing line from the vessel to the green active waypoint. Range and bearing information will be displayed in the data windows and on the Steer by Page. Once the active waypoint has been reached the next waypoint on the route will be activated and the range bearing info updated accordingly. This will continue until the last waypoint on the route has been reached. (if you activate the last waypoint on the route it will reverse the route direction)

Skip Active Waypoint: When there is an active route on the chart page you can skip the active waypoint and continue to the next waypoint by tapping the Route icon on the top right corner of the screen and selecting Go to Next Waypoint. This will deactivate the current active waypoint and activate the following waypoint while updating the range and bearing information accordingly.

Instant Waypoint: From the Chart Page you can lay down one instant waypoint by tapping the route icon on the upper right corner of the screen and selecting Instant Waypoint. Then drag the chart where you want to place the waypoint and touch and hold your finger to the screen for three seconds and lift, a green active waypoint with a green active route line to the vessel will be shown with range and bearing information shown in the data windows and the Steer by Page. Like any waypoint you can adjust the position by dragging it on the screen with your finger or type in the latitude and longitude in the dialog box with the pop up keyboard. Also like any waypoint you can delete the instant waypoint by tapping on it and selecting the trash can symbol in the dialog box this will cause the point to disappear and the range and bearing information will disappear as well. Unlike Routes and Marks, Instant Waypoints can not be saved or named.

Cancel Goto: On the Chart page when there is an active goto to either a waypoint, instant waypoint or a Mark you can tap on the route icon in the upper right corner of the screen and select Cancel Goto. This will deactivate the current goto and remove any range and bearing information from the data windows and the Steer by Page.

Renaming Route: All routes are saved in the route list which can be accessed by

selecting the Routes icon at the bottom of the screen. All routes are saved with the default name of the time a date it was created. To edit the name of the route, you will need to goto the Routes page then tap on the route you want to rename and tap the blue edit button in the upper right hand corner then tap on the route again. When the edit dialog box comes up you can use the popup keyboard to enter a new name. When finished tap the blue done button in upper right corner.

Reversing a Route: You can reverse any route by tapping on the last waypoint on the displayed route and selecting goto in the dialog box.

View list of Waypoints of a Route: You can view the waypoint list for any route by tapping on the Routes icon on the bottom of the screen and then tap on the arrow to the right of the route you want to view the waypoint list for. Each waypoint is listed with its latitude and longitude. The first waypoint listed will show the distance, bearing and if there is SOG, ETA to the first waypoint. The second waypoint to the last waypoint will show distance and bearing between waypoints and ETA between waypoints if there is SOG. So the last waypoint will provide total distance and ETA, if there is SOG, for the entire route.   If the route is an active route, the active waypoint will be highlighted in green and based on the speed of the vessel the distance, bearing and ETA to the next waypoint will be displayed. If the route is active, the last waypoint will show total distance left and ETA (if there is SOG) to the last waypoint. To go back to the list of routes, tap on the grey Routes button on the top right of the screen.

Adjusting the Waypoint Arrival: When the vessel reaches an active waypoint, the next waypoint in succession will become activated and the range and bearing information will be updated for the new active waypoint. You can control how soon you want the next waypoint to be activated as you are arriving at the current active waypoint by tapping the Menu button on the chart page and using the WayPoint Arrival slider bar to adjust, in seconds (from 1 sec to 30 sec), how soon you want the next waypoint activated. Because this adjustment is based on time, the faster you are going the farther away you will be from the current active waypoint when it activates the next one and the slower you are moving the closer you will be to the current waypoint when the next waypoint is activated.

Tracks:

If you would like to leave a track behind your vessel simply hit the tracks icon on the top of the Chart Page and it will leave a track according to the settings under menu. To stop recording tap the tracks icon on top the Chart Page once again so that it is no longer highlighted. To set the criteria for recording a track tap Menu on top left of Chart page and then scroll down to the Tracks section. You can set the track to record based on time, distance or course change. Under this selection you can set the interval for recording time and distance by tapping on the selection you want to adjust and dialing in the value you desire. Please note that depending on your iPad model, recording a track with a small time interval will eventually slow down the operation of your iPad. Each track ball records Position, Name, Date with time, Course Over Ground and Speed Over Ground. This info can be accessed by tapping on any track ball.

Renaming a Track: Each track is saved given the name of the date and time it was started as default. To rename a track tap the Tracks icon at the bottom of the Chart page and tap Edit in upper right corner and select the track you want to rename and type the new name in the dialog box and hit Continue and then tap Done in the upper right corner.

Showing a Recorded Track: To show a track simply tap the tracks icon on the bottom of the Chart page and from the list of track select the track you want to show. Only one

track at a time can be shown. To go directly to that track press and hold it until the Chart page appears and you will see the track you selected. Make sure the track you want to see is checked on the track list so it shows up when you press and hold it.

Deleting a Track: To delete a track, tap the tracks icon on the bottom of the chart and from the track list select Edit from the upper right corner and then select the red circle to the left of the track you want to delete then tap Delete to the right when it pops up. Tap Done in upper right corner when finished.

Importing Routes, Waypoints, Marks and Tracks from Offshore Navigator

To import the routes, waypoints, marks and tracks from Offshore Navigator you must first export them out of Offshore Navigator. To do that, open Offshore Navigator and select the pull down File menu at top left. Select Export Data to File. Check routes, waypoints, marks and/or tracks or any combination. Then choose the directory where you want to export the data to then tap on the Export button. You can also right click on the Route if it is displayed on the chart, and select Route Plan then tap the Export function. Only choose the "rxf" file for routes and the "mxf" file for marks.

Now simply attach the file to an email and address the email to yourself. After sending the email open the email app on your iPad and open the email that has the data you want to import. Press on the attachment and hold until the dialog box with the installed apps appears, then select Copy to Maptech iPlot. It will then be imported into the routes or marks database. Remember that you may have to send 1 data file at a time as iPad cannot unzip files.

Exporting Routes, Marks and Tracks from iPlot to Offshore Navigator

To Export routes, marks and tracks from the iPlot to Offshore Navigator, go to either the routes, marks or tracks page (depending on which you desire to export). Select the box with an arrow pointing up symbol next to Edit at top right of the page. Choose the email app and address the email to yourself.   Open up your email program on your PC, that has Offshore Navigator loaded, and download the data file. You can export individual routes by going to the route plan of the route you wish to export and selecting the at the top of the page and than selecting the email app. You can use other apps to import and export such as Drop Box, Air Drop and alike.

In Offshore Navigator select the File pull down menu and select Import Data from File, Select Terrain Navigator for the Origin of Data and browse to the file where you downloaded the data file from iPlot. Select the data types you want to import and select Import. Select the marks, tracks and/or routes you wish to import and select Import. They will be placed in the routes, marks or tracks database in Offshore Navigator for you to use.

(Be sure to keep the folder you use to import and export data clean from old data files or you will end up with duplicate routes and marks)

<u>**Marine Facilities**</u>:

On the chart page you will notice little sailboat icons some colored ⚓ and others are black and white ⚓. These are marine facilities. The colored icons have live website links that when tapped, if you are connected to the internet, will take you to that marine facility's website. These facilities also have advertisements in the Maptech Embassy Guides. The black and white icons do not have live links to the facility's website. Both when tapped will give you a scrolling list of all available details about that facility. If you want to search for a certain marine facility tap the sailboat icon on the top right of the chart page ⚓ a horizontal scrolling bar will appear with a distance in miles displayed to the right. This is the radius from screen center that defines your search area. When you scroll to the right the distance will increase from 1, 5, 10, 25, 50 miles to showing ALL the marine facilities. Each distance value will list marine facilities within the radius selected in alphabetical order. You may need to scroll down to see all the facilities. When ALL is selected the entire list is shown in alphabetical order. To go to a facility from this list, simply tap on it and the chart will center on its' location icon in max detail.

You can turn off the marine facilities by going to the chart page and select Menu and sliding the Show Facilities button to the left.

Data Windows Explained:

COG: Current Course Over Ground. Can be displayed in bearings tru or magnetic

SOG: Current Speed Over Ground. Displayed in knots per hour.

Heading: Current direction in degrees. Can be displayed in bearings true or magnetic.

Bearing to WP: When there is an active route or goto the bearing to steer to reach that goto will be displayed here. Can be displayed in bearings true or magnetic.
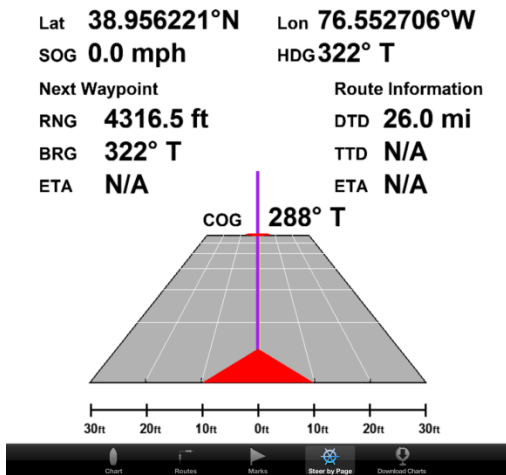
Range to WP: When there is an active route or goto, the distance to the end of the current active leg is displayed here in miles for distances over .3 miles and feet when under .3 miles

XTE: Cross track error. When there is an active route or goto this window displays how far off on either side of the current active route line the vessel position is. If the vessel position is to the left of the active route line the XTE will appear as negative. If the vessel position is to the right of the active route line the XTE will appear as positive. Units are in feet and miles. This can be reset if you tap the active waypoint or mark and tap on Goto. This resets the XTE to zero.

Using the Steer By Page: Steer by Page

The Steer By Page will show Latitude and Longitude of the vessels current position, current SOG, Current heading and the current COG. When there is an active route or goto, the Steer By Page will display the range(RNG) to the next waypoint, bearing (BRG) to next waypoint and the ETA (Estimated Time of Arrival) to the next waypoint. Furthermore, total route information will be displayed. This would include the DTD (Distance To Destination), TTD (Time To Destination) based on current SOG, and the ETA (Estimated Time of Arrival) based on current SOG. The destination in this situation is defined as the last waypoint on the active route.

The 3D graphic with the red triangle at the base is a steer by tool that helps you stay on the active route line. The numbers at the base is the XTE left and right of the active route line. The triangle points in the direction of the active waypoint or mark. The line that extends from the triangle is the current heading line. To steer directly to the next active waypoint or mark you should have a heading or COG that matches the bearing to next waypoint or mark. When vessel's COG is within a degree of either side of the current BRG the line will thicken and turn purple letting you know that you are on the right COG to reach the next waypoint or mark. Remember that every time a new goto is activated the new information will be displayed and the XTE will reset to zero.

Receiving AIS:

iPlot can receive AIS targets through WiFi. For iPlot to receive AIS you will need an AIS receiver that outputs via WiFi like the Vesper XB-8000. Once your WiFi AIS is up and running set your iPads Wi-Fi to connect to the AIS WiFi device. To do this go into

your iPad Settings and tap on the Wi-Fi hot key, make sure the Wi-Fi is turned on and look on the device list below and select the AIS Wi-Fi device. If necessary, put in the correct security key and click on Join. Open the iPlot app and tap on the Menu and select AIS Settings. Type in the WiFi device's correct IP address. The Vesper XB-8000 Ip address is: 192.168.15.1. Then type in the Port number. The Vesper XB-8000 Port number is 39150. Once finished, slide the Show AIS Targets switch to on.

AIS Expalined:

Once you have the AIS feature up and running, you should start to see purple and green

isosceles triangle targets. The purple ▲ targets are vessels that are commercial and

vessels longer than 70 feet. The green targets are ▲ pleasure boats under 70 feet (some could be commercial). Targets will eventually have names appear adjacent to it. If a target is moving faster than 2 MPH it will project a heading vector from the tip of the triangle extending out 3 minutes. This means that the target will reach the spot where the end of the vector is at a given point in 3 minutes. So the slower a target is moving the longer the heading vector and vice versa. At the end of the heading vector COG and SOG will be displayed. To get all the AIS information a target is broadcasting simply tap on the target and a scroll box containing all the information will be displayed. To clear the box tap on the screen outside the display box. The AIS information capable of being displayed is: Position, COG, SOG, Name, MMSI, Call Sign, LOA, Beam, Draft, Type, Destination and ETA. Targets will disappear from the screen after not receiving a signal for 5 minutes. To turn off all targets go back to the Menu on the Chart Page and select AIS Settings and slide the Show AIS Targets switch to off.

Tech Support:
You may call tech support from 9am to 5pm Eastern Monday through Friday at 410-266-9494 ext 1#

You also may email your issue at reelhunter@aol.com.