



# **AIS Viewer 3.5**

## **User Manual**

**Version 1.1**

**Alltek Marine Electronics Corp**

7F, No. 605, Ruei-Guang Road

Neihu, Taipei, Taiwan 11492

TEL: +886 2 2627 1599

FAX: +886 2 2627 1600

Email: [service@alltekmarine.com](mailto:service@alltekmarine.com)

Website: [www.alltekmarine.com](http://www.alltekmarine.com)



## **COPYRIGHT**

The entire contents of this instruction manual, including any future updates, revisions, and modifications, shall remain the property of AMEC at all times. Unauthorized copies or reproduction of this manual, either in part or whole, in any form of print and electronic media, is prohibited. The contents herein can only be used for the intended purpose of this manual.

## **DISCLAIMER**

AMEC is devoted to publish and maintain this product manual. As we continue to improve our AIS products to satisfy all customers' needs, information in this document is subject to change without notice. AMEC does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.



## Table of Contents

---

<b>1.</b>	<b>What is the AMEC AIS Viewer? .....</b>	<b>1</b>
<b>2.</b>	<b>System Requirement .....</b>	<b>2</b>
<b>3.</b>	<b>AMEC AIS Viewer Software Installation.....</b>	<b>2</b>
<b>4.</b>	<b>Starting AMEC AIS Viewer.....</b>	<b>6</b>
<b>5.</b>	<b>Using AIS Viewer .....</b>	<b>7</b>
5.1.	Block 1: Chart .....	8
5.1.1	Chart View.....	8
5.1.2	Vessel List .....	10
5.2.	Block 2: Main Menu .....	11
5.2.1	File.....	11
5.2.2	Edit .....	12
5.2.3	View.....	13
5.2.4	Connection .....	14
5.2.5	Config .....	16
5.2.6	Help .....	21
5.3.	Block 3: Tool Bar .....	21
5.4.	Block 4: My Vessel's Position Information .....	22
5.5.	Block 5: Ship List.....	22
5.6.	Block 6: Vessel Information.....	23
5.6.1	Dynamic Information .....	23
5.6.2	Static Information .....	24
5.7.	Block 7: Status Bar .....	25
	<b>Appendix How Determine Serial Port.....</b>	<b>26</b>



## 1. What is the AMEC AIS Viewer?

The AIS Viewer is a complementary charting software for the purchasing of AMEC AIS CAMINO-108 transponder or CYPHO-150 receiver series. This software enables users to monitor the surrounding AIS traffics on a PC without connecting to a chart plotter.

This powerful tool allows users to display AIS targets either on a basic line map or in an alphanumeric vessel list. It transforms your PC to a user-friendly AIS data logger and can trace other vessels with voyage track. Besides, the software offers various safety features to help users be alerted during their voyage.

Please notice that the coastal map in AIS Viewer has limited details and the software itself should not be compared with a commercial ECS system. If user needs more complete functions, an advanced ECS or chart plotter device should be considered. The AIS Viewer is designed to work with AMEC AIS device, if user connects this AIS Viewer to non-AMEC AIS equipment, AMEC is not liable for any resulted incompatibilities.

If you have any questions or comments for this AIS Viewer software, you are welcome to contact us at [service@alltekmarine.com](mailto:service@alltekmarine.com).

### NOTICE



#### RELIABLE VHF RECEPTION

The AIS Viewer relies on the AIS messages received by the AIS device. Please ensure the AIS device has a good VHF reception for AIS messages.




## 2. System Requirement

The minimum system requirements are:

- Operating System: Windows XP or above.
- CPU: 1GHZ.
- Memory: 128MB.
- Hard drive space: 100 MB.

## 3. AMEC AIS Viewer Software Installation

To install AMEC AIS Viewer, please find the AMEC AIS Viewer program in the CD-ROM accompanied with your AMEC product. Use the following guidelines to install the viewer program.

- Step 1.** Double click on the AIS Viewer installer file.  **AMEC AIS Viewer.exe**
- Step 2.** The setup welcome window appears. Click **Next** to continue.

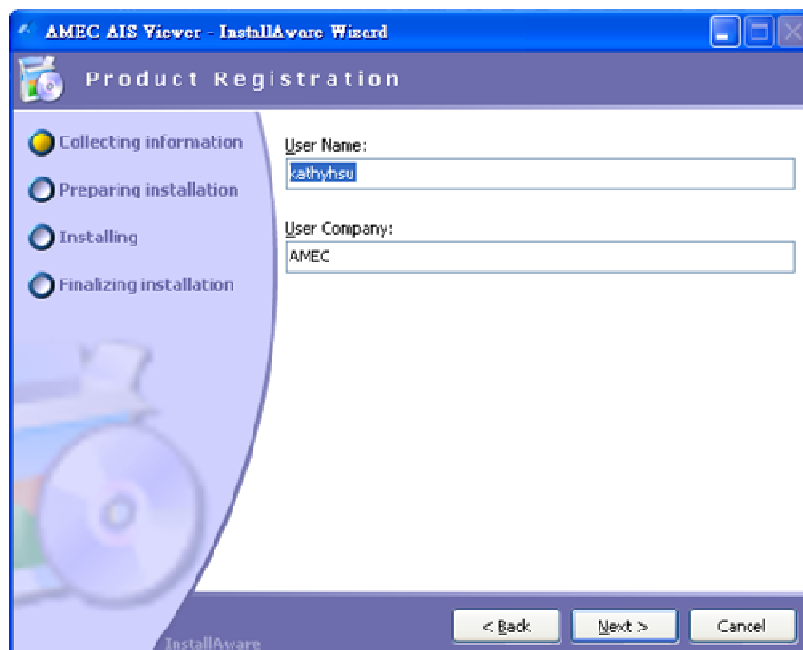




**Step 3.** Please read and agree the license agreement, then click **Next** to proceed.

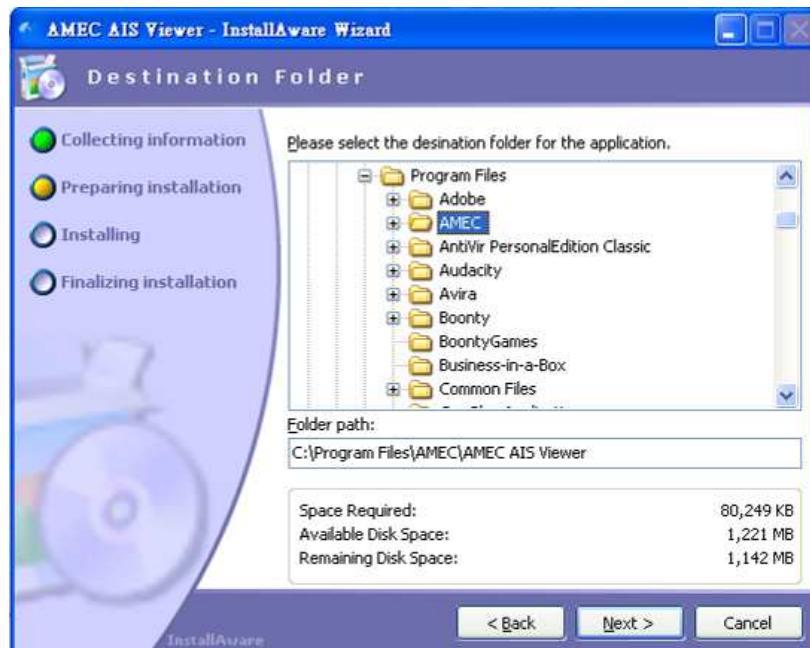


**Step 4.** Fill the required user information and click **Next** to proceed.

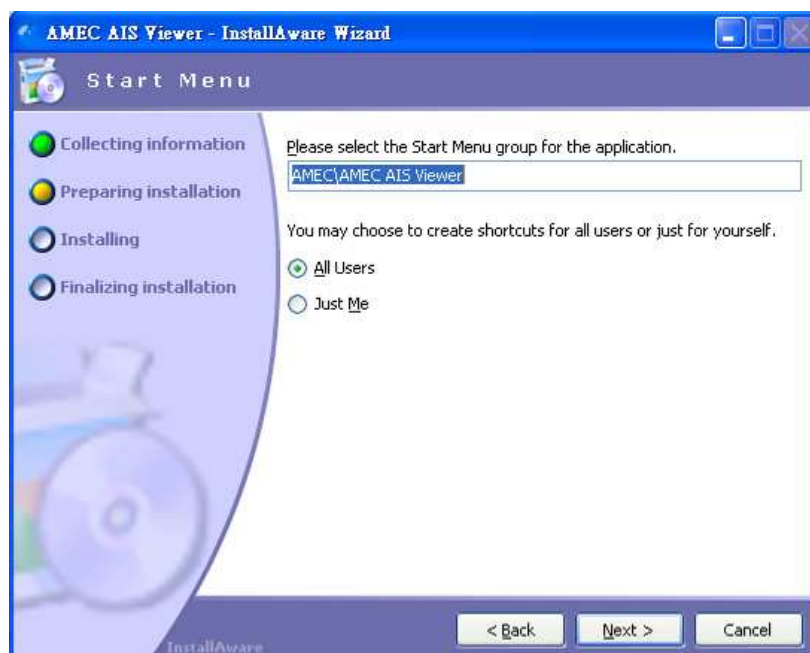




**Step 5.** Choose a folder to install this application, and then click on **Next** to proceed.

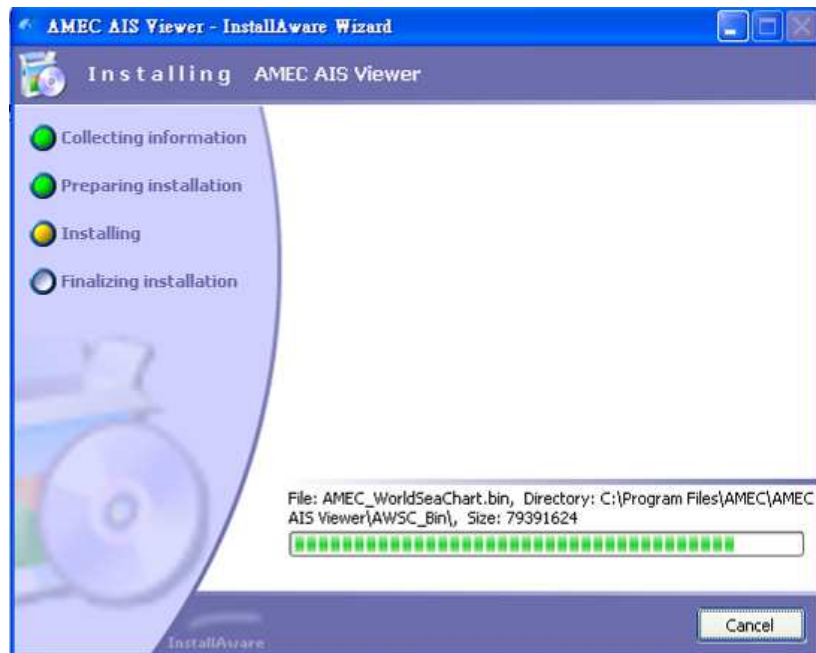


**Step 6.** Select your option for the shortcut preference and click **Next** to proceed with the installation.

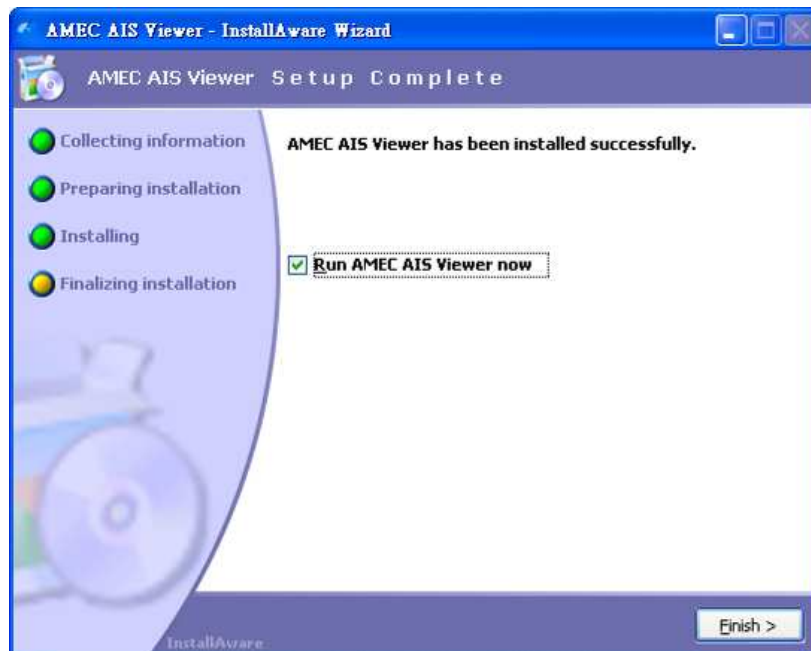




**Step 7.** Installation takes couple of seconds to complete.



**Step 8.** When the installation is completed, you may select to start AIS Viewer after clicking Finish to exit.





#### 4. Starting AMEC AIS Viewer

The AIS Viewer replies on the AIS messages received by the AIS device. Therefore it is essential the AIS device having a good VHF reception receiving AIS messages.

When the application started, you are required to configure the settings for serial port and baud rate.

You may use either manual or auto configuration to establish connection to the AIS device.

- **Automatic:** the system will identify and show the serial port number and baud rate automatically.\* (See note below)
- **Manual:** select appropriate serial port and baud rate manually. If the serial port is not listed, you may key in the serial port number directly. To determine the correct serial port, please refer to [Appendix How Determine Serial Port](#).

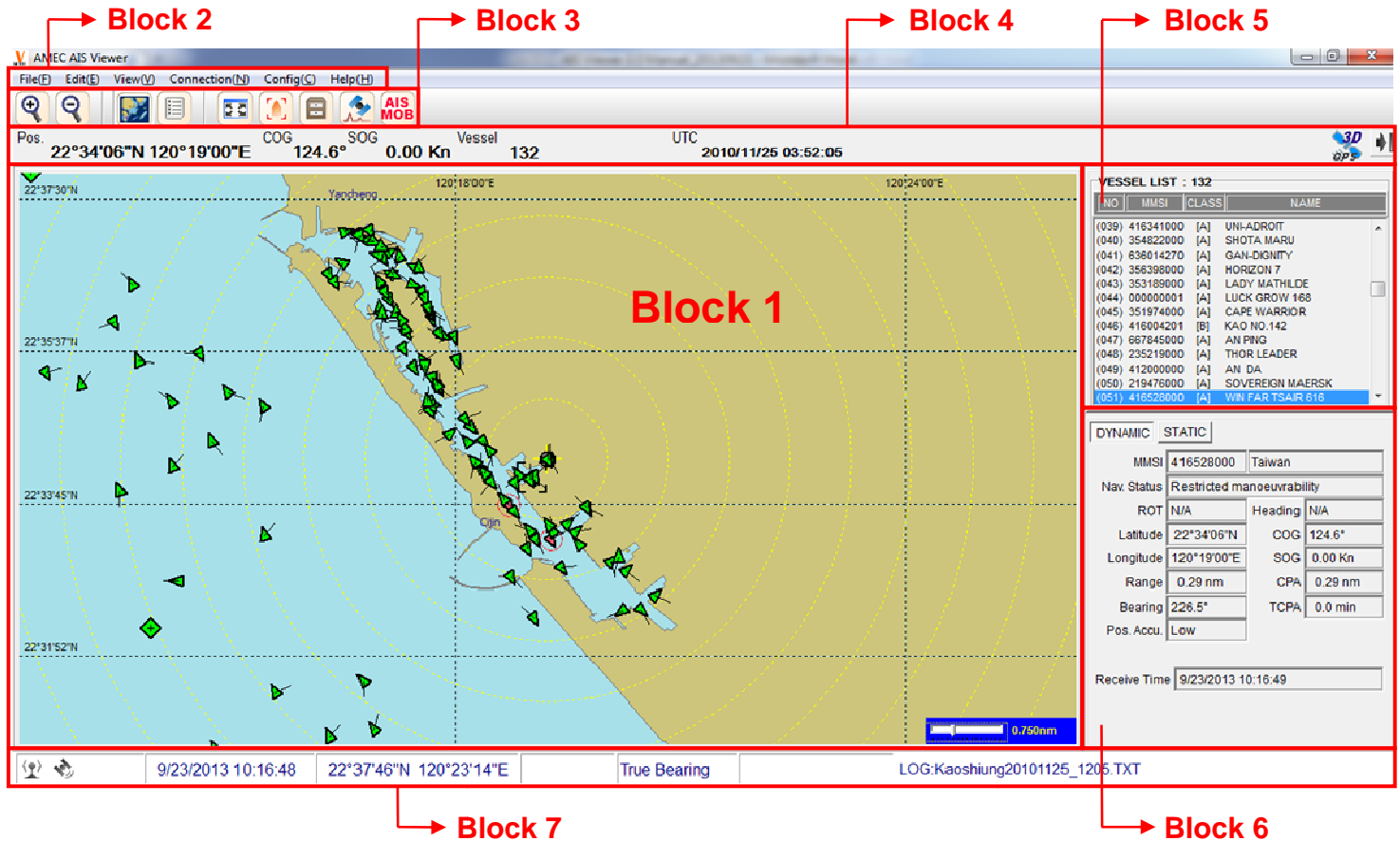


**Note:** Some devices may not support auto connection setup.

You may skip the connection setup using the **Close** button and configure later through AIS Viewer's option. See [Section 5.2.4 Connection](#).

## 5. Using AIS Viewer

The user interface of AIS Viewer is divided into 7 function blocks.



### Block 1: Chart

This is the display area of chart view or vessel list.

### Block 2: Main Menu

Main menu items are File, Edit, View, Connection, Config, and Help.

### Block 3: Tool Bar

Frequently used icons: Zoom In/Out, Switch between chart view or vessel list, GPS satellite signals, AIS MOB list etc.

### Block 4: My Vessel's Position Information

Display the dynamic information of your vessel.

### Block 5: Ship List

List all vessels within AIS receiver range. The vessel data of selected ship is shown in Block 6.

### Block 6: Vessel Data

This area shows the ship information of the selected ship in Block 5.

### Block 7: Status Bar

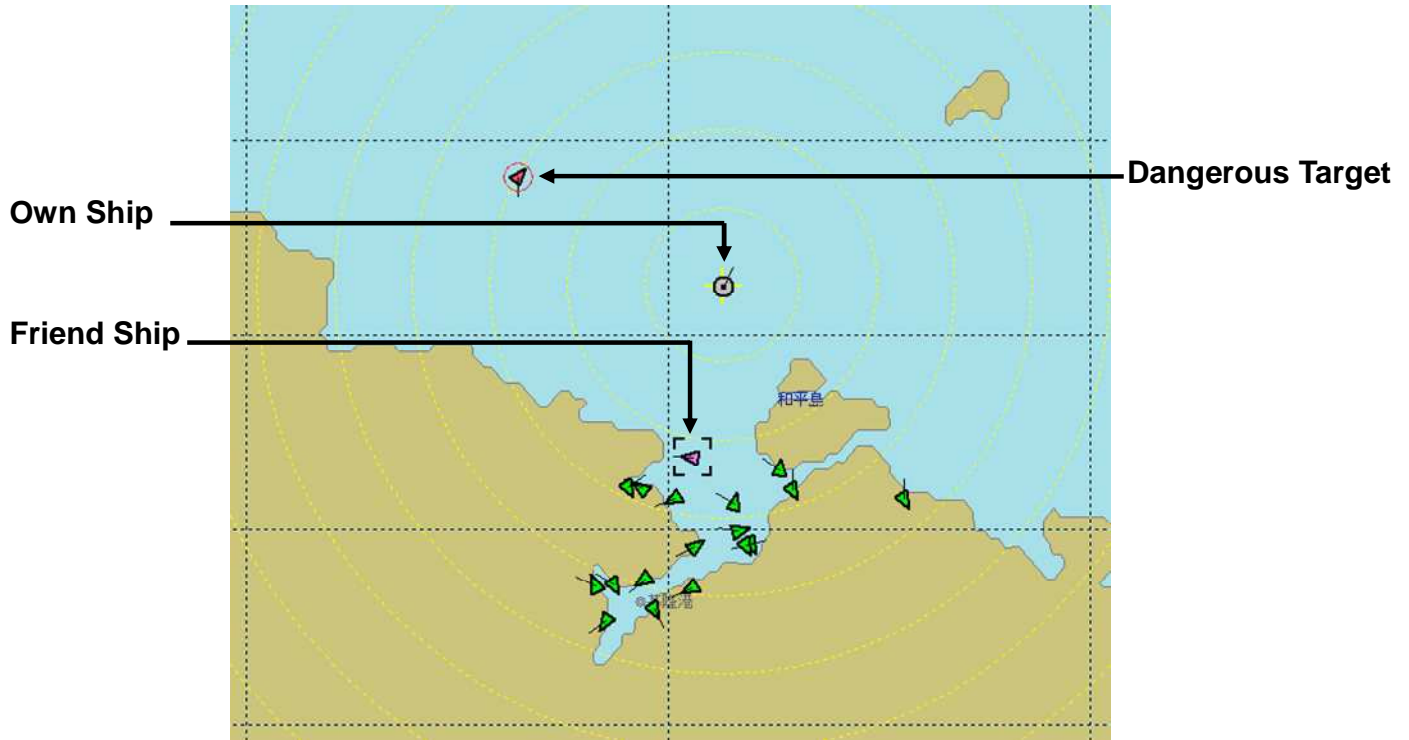
This area shows the current AIS & GPS connection status, the system time, cursor location, type of bearing and running log file

## 5.1. Block 1: Chart

AIS Viewer provides two chart modes: Chart View and Alphanumeric View.

### 5.1.1 Chart View














The AIS targets are displayed on your PC screen in the form as shown below. Under this viewing mode, all targets will be displayed on the Radar display.



The Chart view shown above has the following characteristics: Each AIS ship has the shape of a triangle.

- With normal GPS reception, your vessel is centered in Chart View mode.
- During times with no GPS reception, you can manually set the ship's coordinates or the viewer can use previous recorded coordinates to presume current position.
- The Viewer at one time can display a maximum of 500 AIS targets.
- The straight line extended from AIS target represents the course of the ship.
- In the cases of having NO GPS input, double click anywhere on the chart to make it the center. Please refer to **Section "Center View"** to center the chart on your ship.
- Change viewing scale (lower right corner) if needed. Available scales are 800, 400, 200, 96, 48, 24, 12, 6, 3, 1.5, 0.75, 0.5, 0.25, 0.125 and 0.05 (nm).

AIS target symbol description: Symbol for each AIS target displayed on the radar plotter is as described below.

My Vessel		GPS Reception: Normal / Color: Grey Under normal GPS reception, own ship is located in the center of the chart view.
My Vessel		GPS Reception: No GPS / Color: Grey With no GPS reception, ship needs to be located manually.
AIS Target		Color: Green Ship equipped with AIS system in the surrounding sea will appear on the chart view as an AIS target.
Selected Target		Color: Green / Flashing Black Frame Use the arrow keys to select any target on the chart view. After selected, press <ENT> and the detailed information on each target can be viewed.
Dangerous Target		Color: Red / Circled Frame When distance to a ship is smaller than CPA/TCPA, the target will be circled in RED. Use the arrow keys to select the dangerous target and to view its detailed information.
Friend Ship		Color: Magenta If any pre-stored Friend Ship is nearby, the Friend Ship will appear in Magenta on the chart view.
Lost Signal Target		Color: Green / Crossed If reception of an AIS target is lost over 10 minutes, an "X" will be displayed over it. The target will disappear from the Chart view when its reception is lost for one hour.
AtoN (Real)		Color: Green / Plus Sign The icon will be displayed if any AIS AtoN (Aids to Navigation) Real is in the range of reception.
AtoN (Virtual)		Color: Green / Plus Sign and Undercut The icon will be displayed if any AIS AtoN (Aids to Navigation) Virtual is in the range of reception.
AtoN(Off position)		Color: Red / Plus Sign The icon will be displayed if any AIS AtoN (Aids to Navigation) is in off position status.
SAR		Color: Black The icon will be displayed if any air plane is in the range of reception.
SART		Color: Red / Cross The icon will be displayed if any SART message is sent out.
Base Station		Color: Green The icon will be displayed when any base station is in the range of AIS.

**Note:** The straight line extended from the ship triangle symbol represents the course of the ship.



### 5.1.2 Vessel List

Under this mode, all ship details will be displayed alphanumerically. To browse the entire information, please use the scroll bar on the screen to navigate through the table.

NO	MMSI	CLASS	RX COUNT	MSG #	NAME	CALL SIGN	RANGE	BEARING	SOG	COG	HEADING	CPA	TCPA	LAT	LOA	ROT	LENGTH	BEAM	DESTINATION	ETA	SHIP TYPE	CARGO
Own	000000000	[N/A]	0	0		N/A	0.00 nm	0.0°	0.00Kn	0.0°	N/A	N/A	N/A	22°28'11"N	70°02'34"E	N/A	0m	0m	N/A	N/A	N/A	N/A
1	419090700	[A]	30	1	MARIGOLD	AVCF	14.51 nm	N/A	0.40Kn	203.1°	286.0°	N/A	N/A	22°30'41"N	69°47'06"E	>5°/30s	137m	10m	MUMBAI	9/26 12:00	(31)Vessel-Tow	(31)Unknown C
2	370864000	[A]	21	1	GINGA LEOPA		16.66 nm	N/A	0.00Kn	79.0°	275.0°	N/A	N/A	22°31'09"N	69°44'49"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
3	477093100	[A]	25	1			20.04 nm	N/A	6.80Kn	28.5°	282.0°	N/A	N/A	22°47'52"N	70°00'45"E	>5°/30s	10m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
4	419745000	[A]	31	1			15.42 nm	N/A	7.10Kn	315.0°	331.0°	N/A	N/A	22°31'41"N	69°46'29"E	>5°/30s	10m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
5	258960000	[A]	2	5	BOW SAGA		17.00 nm	N/A	0.00Kn	217.2°	270.0°	N/A	N/A	22°30'41"N	69°44'21"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
6	000123123	[A]	22	1	GSFC SIKKA		11.71 nm	N/A	0.00Kn	0.0°	N/A	N/A	N/A	22°26'47"N	69°49'59"E	N/A	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
7	370515000	[A]	3	3	ROYAL FLOS		11.25 nm	N/A	0.00Kn	72.0°	131.0°	N/A	N/A	22°29'43"N	69°50'30"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
8	371604000	[A]	23	1	STAR EXPRE!		24.12 nm	N/A	10.30Kn	234.0°	235.0°	N/A	N/A	22°52'16"N	70°07'33"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
9	419426000	[A]	22	1			12.37 nm	N/A	0.00Kn	0.0°	N/A	N/A	N/A	22°25'51"N	69°49'25"E	N/A	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
10	312583000	[A]	3	5	CORAL		24.22 nm	N/A	0.00Kn	17.0°	309.0°	N/A	N/A	22°44'21"N	69°43'02"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
11	419542000	[A]	6	1			24.43 nm	N/A	0.00Kn	344.0°	308.0°	N/A	N/A	22°44'31"N	69°42'52"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
12	565174000	[A]	20	1			22.24 nm	N/A	10.20Kn	34.7°	29.0°	N/A	N/A	22°49'50"N	70°05'21"E	0.0°	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
13	419292000	[A]	9	1	RELTUG SIX		14.21 nm	N/A	0.00Kn	0.0°	N/A	N/A	N/A	22°38'38"N	69°50'11"E	N/A	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles
14	636014602	[A]	19	1	SOUND FUTU		24.38 nm	N/A	11.70Kn	56.4°	N/A	N/A	N/A	22°51'45"N	70°07'18"E	N/A	0m	0m		0/0 00:00	(0)Undefined sh	(0)N/A; Harmles

MMSI	Marine Mobile Service Identity
CLASS	AIS Message class types [A] Class A AIS [B] Class B AIS [N/A] Unknown [AtoN] Aids to Navigation
RX COUNT	The numbers of receiving messages
MSG #	The message ID should identify the message type
NAME	Ship Name
CALL SIGN	Ship's Call Sign
RANGE	The distance between target ships to own ship. The unit of range is "nm" (Nautical Mile).
BEARING	The relative angle between target ship and own ship.
SOG	Speed Over Ground, the unit of SOG is "kn" (knot).
COG	Course Over Ground
HEADING	The heading of the target ship.
CPA	Distance to Closest Point of Approach, the unit of CPA is "nm" (Nautical Miles)
TCPA	Time to Closest Point of Approach, the unit of TCPA is "min" (Minutes).
LON	Longitude of the target ship.
LAT	Latitude of the target ship.
ROT	Rate of Turn
LENGTH	The length of the target ship, the unit of LENGTH is "m" (meters).
BEAM	The beam of the target ship, the unit of BEAM is "m" (meters).
DESTINATION	The destination of the target ship.
ETA	Estimated Time of Arrival, (Month/Date/Hour/Minutes)
SHIPTYPE	Ship type of the target ship.
CARGO	Cargo information.



## 5.2. Block 2: Main Menu

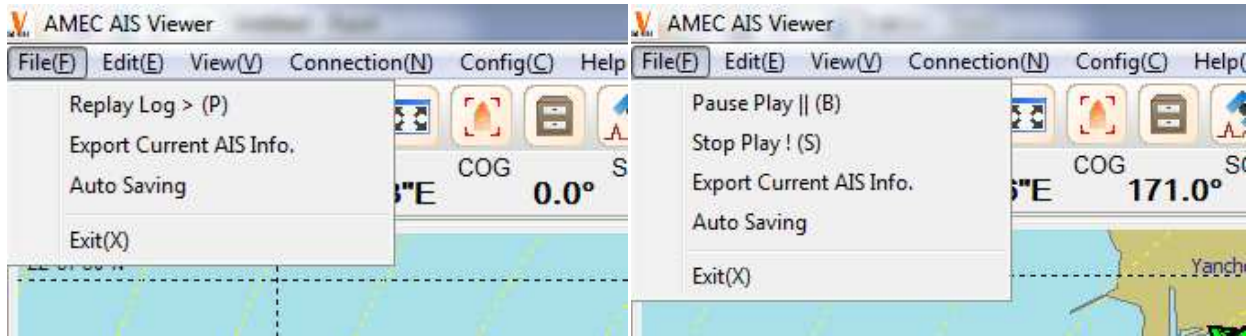
Holds **File**, **Edit**, **View**, **Connection**, **Config**, and **Help** menu items.

### 5.2.1 File

The file menu item enables saving or replaying previous saved log files.

**Note:** replaying the log data requires the disconnection of both AIS device and GPS receiver.

**Note:** During log play mode the menu will be changed to such as the right screenshot shows below.



#### 5.2.1.1 Replay Log

Replay a previously saved data

Additional log operations during log playing. You may set preferences for auto log saving.

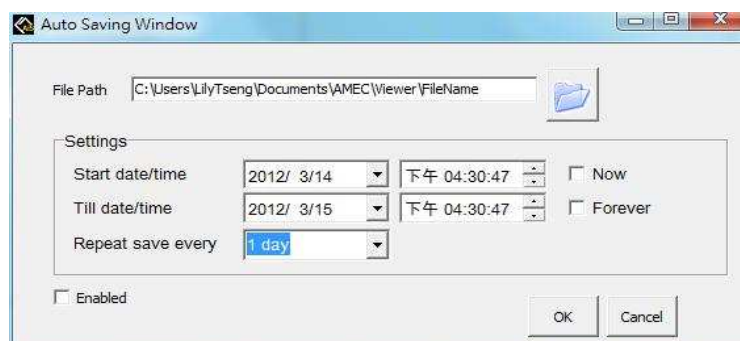
<b>Pause Play   </b>	Pause log playing
<b>Stop Play !</b>	Stop log playing

#### 5.2.1.2 Export Current AIS Info

Export the AIS data as an AIS snap shot to a comma-separated value file format (.csv)


#### 5.2.1.3 Auto Saving

Enable auto-saving function. User can set file path, time settings in the window (See screenshot below). We recommend users to enable the Auto Saving function, when the AIS Viewer is running for longer than 2 days during the voyage.



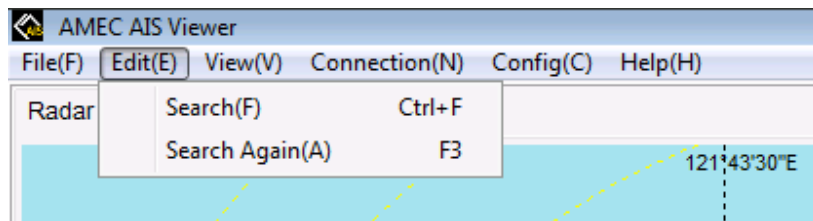
#### 5.2.1.4 Exit

Close the AMEC AIS Viewer program

NOTICE	
	<b>REPLAYING LOG</b> replaying log data requires disconnection of AIS. To disconnect go to “Connection”→ “Disconnect AIS” to disconnect AIS.

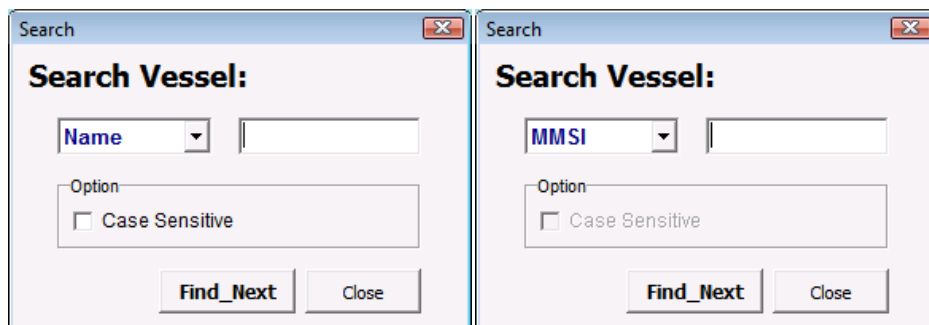
#### 5.2.2 Edit

This menu item enables searching desired MMSI and vessel name.



##### 5.2.2.1 Search

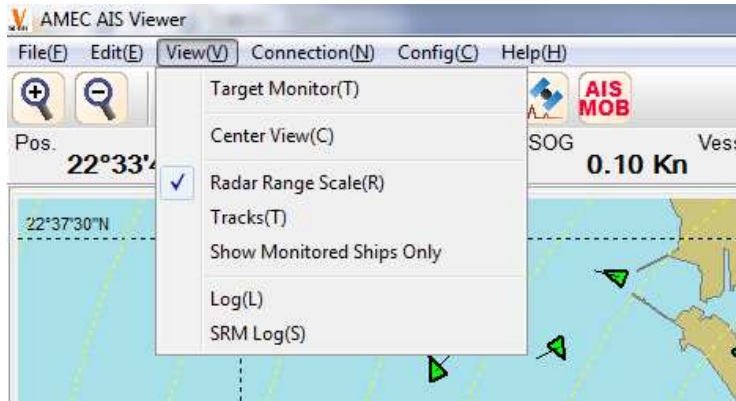
The search window provides vessel MMSI or Name searching capabilities.



##### 5.2.2.2 Search Again

Repeat previous search using previous searched criteria.

## 5.2.3 View



### 5.2.3.1 Target Monitor

Monitor vessel information on the selected target. This function is useful to observe the data of a certain vessel, especially when there are lots of vessels in the region and the AIS data is refreshing constantly. The function can also be activated, when simply clicking on a certain vessel in the vessel list or on the chart view.

### 5.2.3.2 Center View

Only when GPS is off, Center View can center the chart based on your vessel's last known coordinates. Moreover, the chart can be centered on a manually entered coordinate as well.

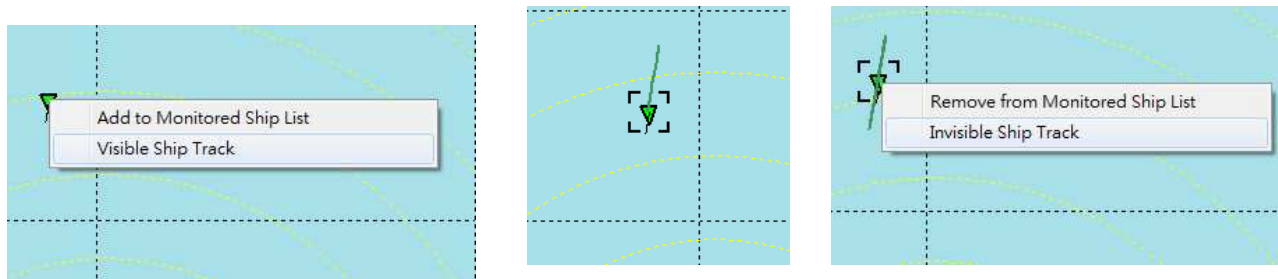
**Note:** When is GPS is available, Center View has not effect on chart viewing. Chart will always be centered on your vessel.

### 5.2.3.3 Radar Range Scale

Show the radar range scale on the chart view.

### 5.2.3.4 Tracks

This function enables viewing vessel tracks. Requires the enabling of an individual vessel track by right clicking the target and set the track visible/invisible.

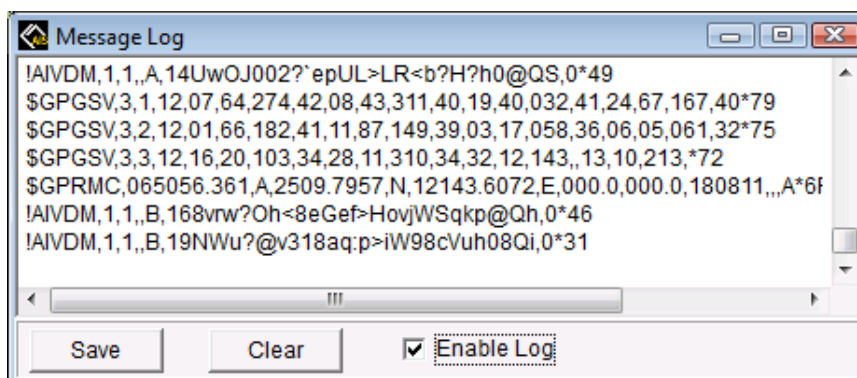


### 5.2.3.5 Show monitored ships only.

Please refer to 5.2.5 Config for more information about ship monitoring.

### 5.2.3.6 Log

Enable the log window. To start logging, enable **Enable Log**. You may save the log session or clear the log window.

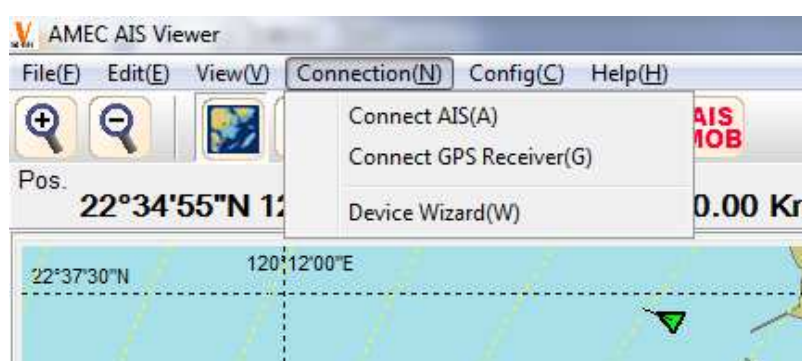


### 5.2.3.7 SRM Log

The SRM log displays the received SRM messages.

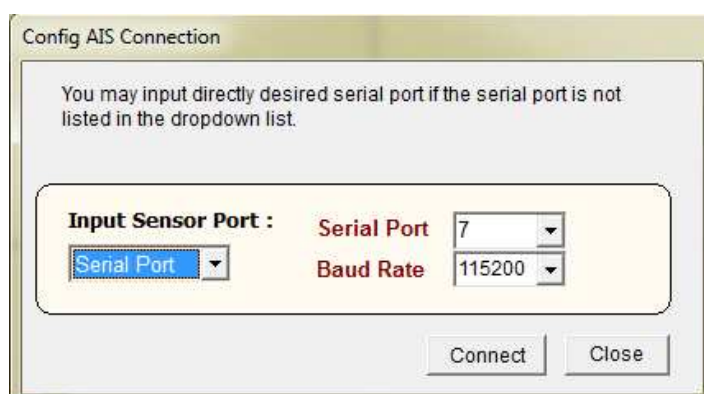
## 5.2.4 Connection

This menu item enables and disables the connection for AIS device and GPS receiver.



### 5.2.4.1 Connect AIS

Your AIS device can be connected to PC either through “Serial Port” by assigning the serial port and baud rate, or “TCP”, when the device supports Wi-Fi function. Just draw down the manual of the “Input Sensor Port” to pick the option.





For the “TCP” option, the default IP address (192.168.2.1) and Port (3333) information of AMEC AIS devices is already saved in AIS Viewer, so just click on „Connect” to start the device connection.

Config AIS Connection

Please input IP Address, and then click the connect button to start the device connection.

**Input Sensor Port :** **IP Address** 192 168 2 1 **Port** 3333

TCP

Connect Close

#### 5.2.4.2 Device Wizard

The Device Wizard of AIS Viewer enables users to connect their AIS device to PC either by serial port or wirelessly. In the drawdown window of the Wizard you can choose between the both connection options. When the serial port is selected, the connection can be established either manually by assigning appropriate serial port and baud rate or with automatic mode. Please refer to Appendix about how to determine serial port. By Automatic mode, the software will scan all available serial ports and baud rates and establish the connection automatically.

AMEC AIS Viewer  
Device Wizard

1. Before connecting the serial port, please ensure that the device is connected to your computer and turned on.  
2. Select appropriate serial port and baud rate, and then click the connect button to start the device connection.  
Notice: You may input directly desired serial port if the serial port is not listed in the dropdown list.

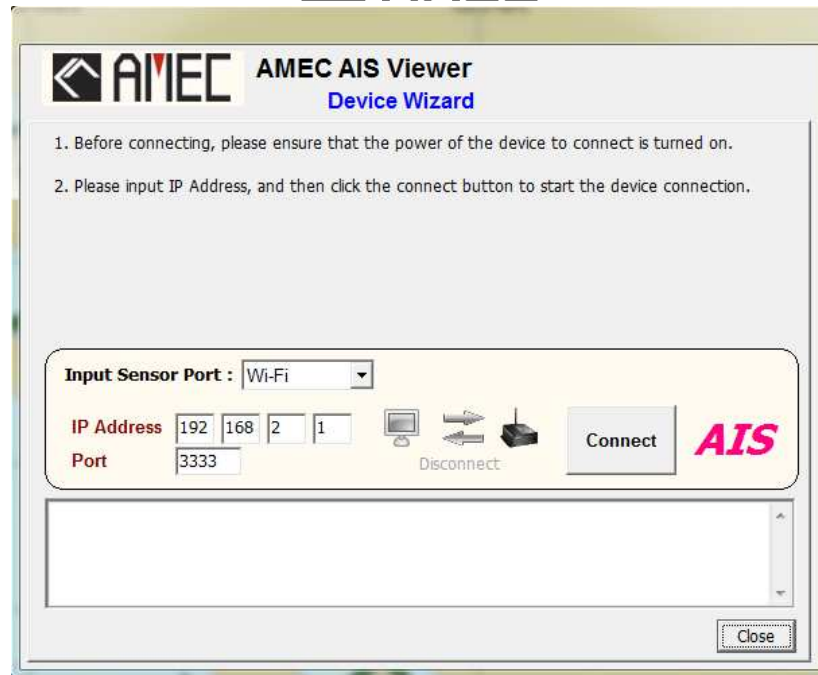
**Input Sensor Port :** Serial Port

☒ Manual **Serial Port** **Baud Rate** ☐ Auto 7 115200

Connect Disconnect AIS

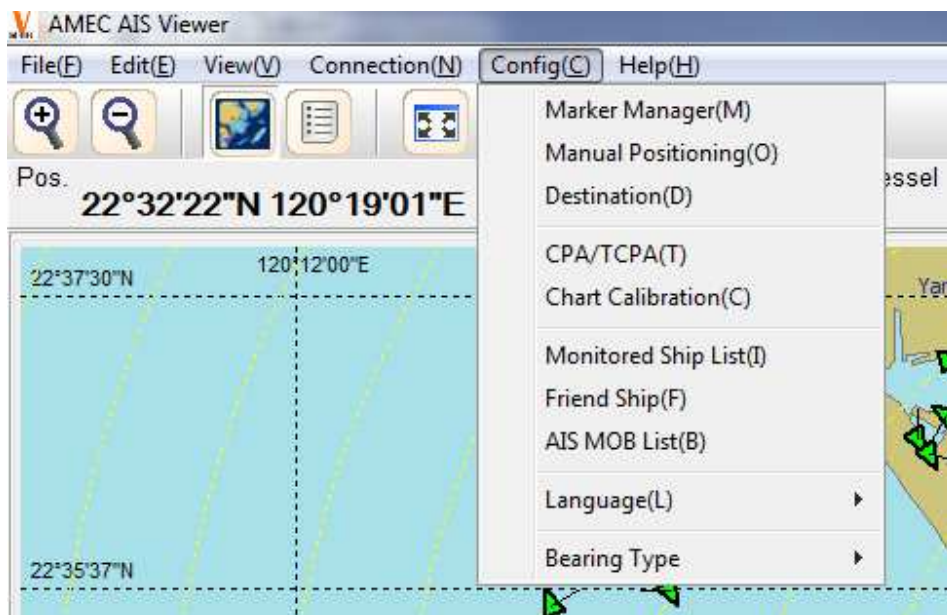
Close

When your AMEC AIS device is Wi-Fi capable, the connection to PC can be established wirelessly. The default IP address (192.168.2.1) and Port (3333) information of AMEC AIS devices is already saved in AIS Viewer, so just click on „Connect” to start the device connection.



### 5.2.5 Config

The configuration menu item provides preference settings.

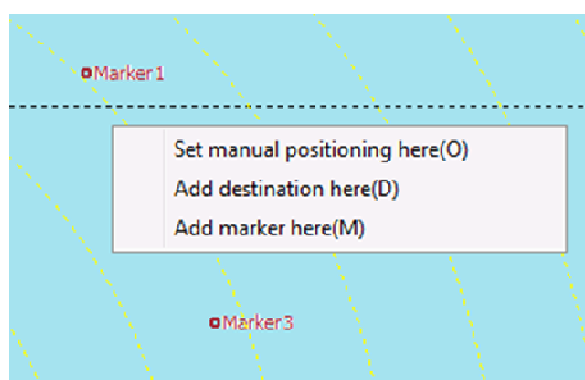
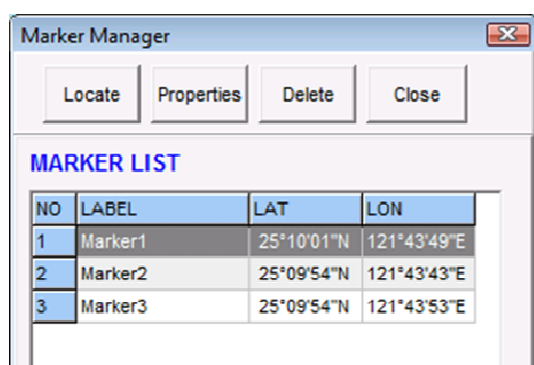


### 5.2.5.1 Marker Manager

Marker Manager enables an overview in the marker list. It provides further functions to trace and edit the existing markers:

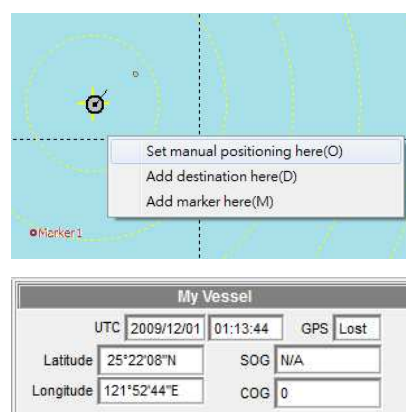
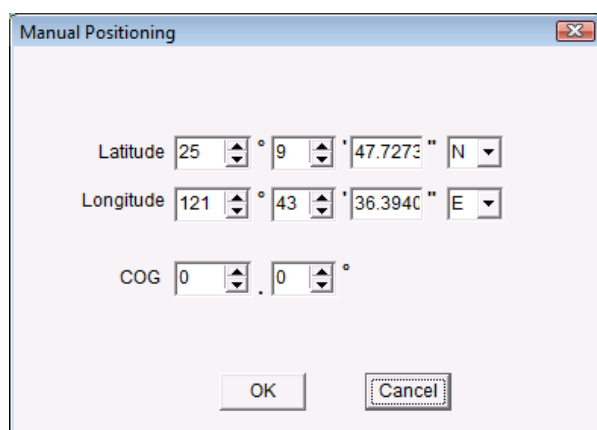
<b>Locate</b>	The selected marker will be centered on the display
<b>Properties</b>	To edit the selected marker's name and positions in this window.
<b>Delete</b>	To delete the selected marker in this window.
<b>Close</b>	To close the Marker Manager.

To note a new marker, right click on anywhere on the chart and click **"Add marker here"**.



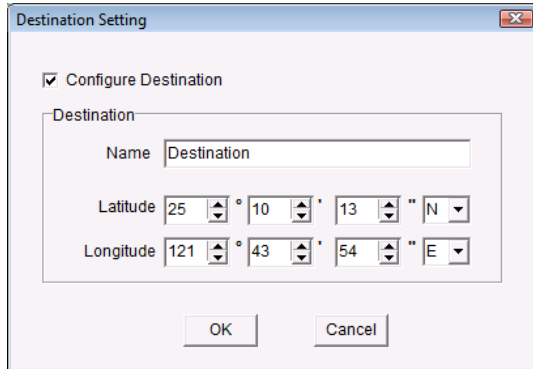
### 5.2.5.2 Manual Positioning

When GPS is unavailable, use Manual Positioning to enter your vessel coordinates and set it as the chart's center. You may also right click on the chart and access the context menu to set center of the chart.



### 5.2.5.3 Destination

Set your voyage destination on AIS Viewer. Enabling **Configure Destination** checkbox, coordinates of the destination can be entered. Hit OK to save the location and the place will be marked with a red pin.



Destination Setting

☒ Configure Destination

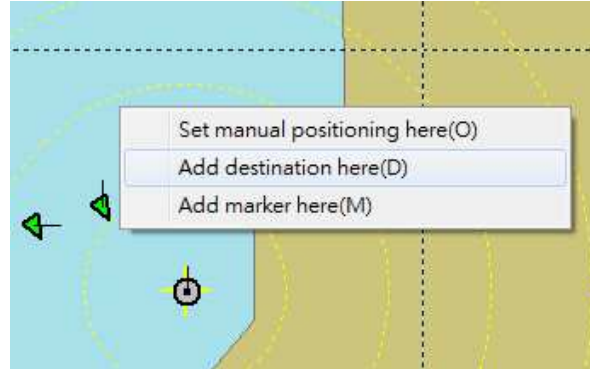
Destination

Name: Destination

Latitude: 25° 10' 13" N

Longitude: 121° 43' 54" E

OK Cancel

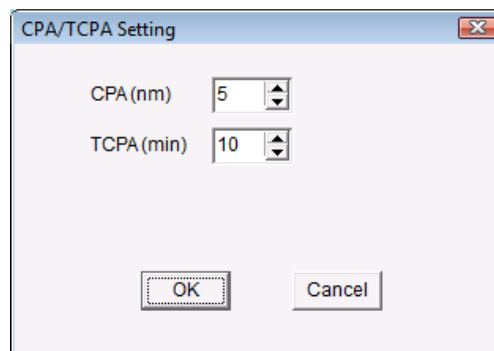


**Note:** The destinations are used as references only on AIS Viewer and would not be transmitted via AIS signal. By the AIS standard, Class B transponder does not support destination setting. So the destination setting on the Viewer will not be sent out.

### 5.2.5.4 CPA/TCPA

(Distance to Closest Point of Approach/ Time to Closest Point of Approach)

Setting up CPA and TCPA is a practical tool to avoid collision. When a ship is entering the alerted area, it would be marked in red color on screen. (Refer to Section "Chart view").



CPA/TCPA Setting

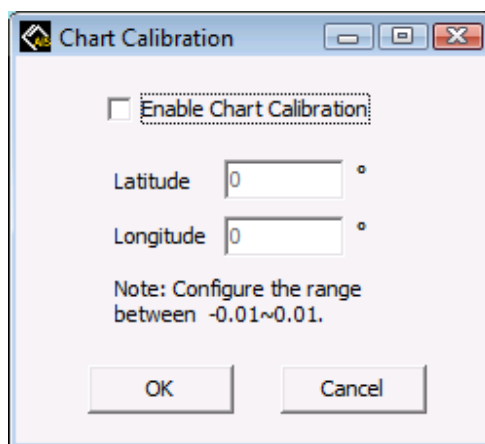
CPA (nm): 5

TCPA (min): 10

OK Cancel

### 5.2.5.5 Chart Calibration

User can fine tune the calibration of the chart. To calibrate, enable the **Enable Chart Calibration** button with adjustments.

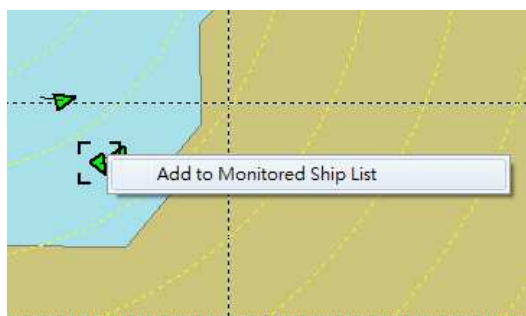
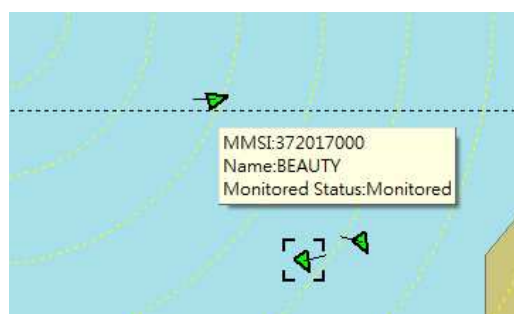


### 5.2.5.6 Monitored Ship List

This function allows users to view the monitored ship list.

**Note:** user can view vessel information through cursor tooltip.

Monitored Ship List		
DELETE		
NO	MMSI	SHIP NAME
1	1193046	NAUTICAST
2	416003449	CHUNG YU NO. 10
3	412072700	TAI FU NO.8
4	356799000	FU TAI



### HINT

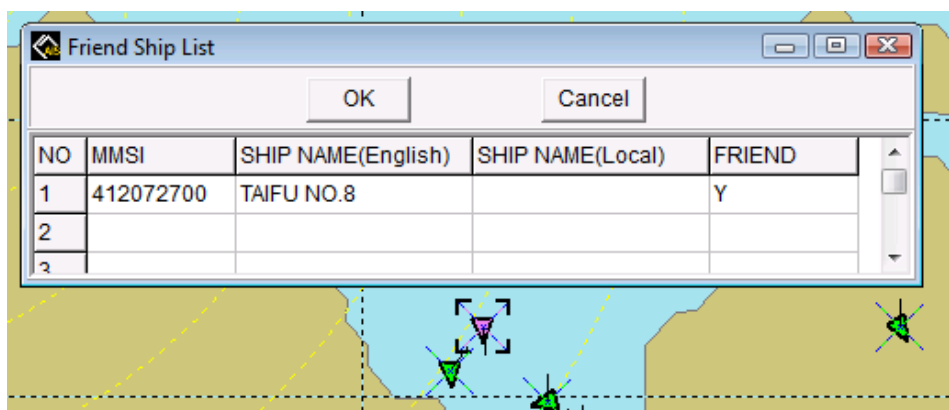


#### SELECT A VESSEL TO MONITOR

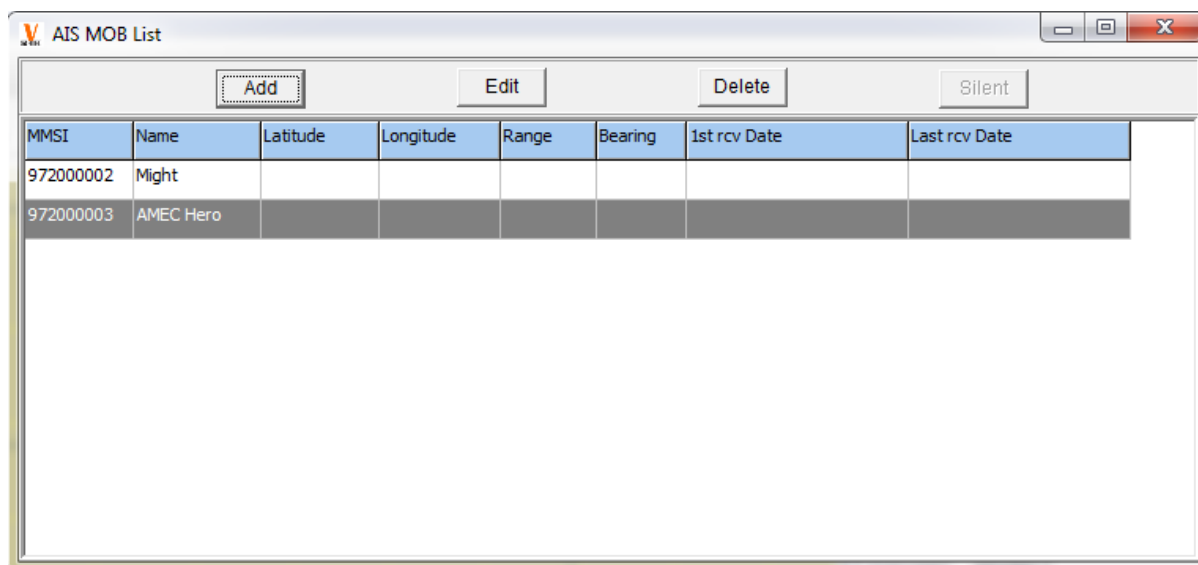
Right click on a vessel and select **Add to Monitored Ship list**. To remove a vessel from monitoring, right click and select **Remove from Monitored Ship List**.

### 5.2.5.7 Friend Ship

Any vessel with a valid MMSI number can be set as a friend ship. To do it simply entering the MMSI number and a “Y” at “Friend” column; the icon of the selected targets will turn to pink in the Radar display (Refer to **Section “Chart view”**). Click on “OK” to complete the setting.



### 5.2.5.8 AIS MOB List



When AIS MOB List is set up, it’s easy to trace the board and crew members who are equipped with AIS MOB devices.

Add	Add a new member to the list with the person’s name and MMSI No. of the AIS MOB device
Edit	Edit the existing entry
Delete	Delete an existing entry
Silent	As soon as an AIS MOB device is activated whose MMSI No or name is registered in the AIS MOB list, the PC will trigger an alarm to warn the crew onboard. Press “Silent” to stop the alarm.

### 5.2.5.9 Language

Change AMEC AIS Viewer to another language. Currently available languages are English and Traditional Chinese.



### 5.2.5.10 Bearing Type

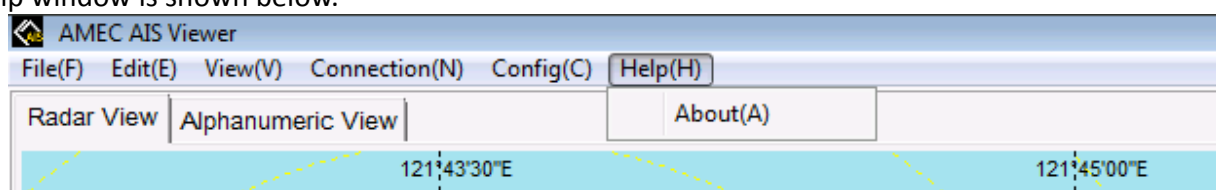
User may set either True Bearing or Relative Bearing.

<b>True Bearing</b>	Use north direction to calculate all vessel bearings
<b>Relative Bearing</b>	All ship bearings are based on your vessel's COG

**Note:** The bearing status will be shown on the bottom of the Viewer window. To check the bearing value, refer to **Vessel Information**.

### 5.2.6 Help

The help window is shown below.



#### 5.2.6.1 About

Version Information about AMEC AIS Viewer








### 5.3. Block 3: Tool Bar

	Zoom in / Zoom out of the chart view. You can also zoom in / zoom out by scrolling the scroll wheel of the mouse.
	Switch between chart view and vessel list
	Expand to full screen by blending out main menu and windows task bar
	The my vessel will be centered on the display
	Open marker manager
	This option shows the GPS satellite status. Green indicates satellite being used for GPS fix, while Red indicates satellites not being used. The number on the bar shows the strength of GPS signal
	Open AIS MOB list

## 5.4. Block 4: My Vessel's Position Information

User's own ship information is displayed in this block.

Pos.	22°33'59"N120°17'40"E	COG	234.3°	SOG	0.10 Kn	Vessel	129	UTC	2010/11/25 03:46:26	TX	ON		
------	-----------------------	-----	--------	-----	---------	--------	-----	-----	---------------------	----	----	---	---

<b>Position</b>	Current Latitude and Longitude of the selected vessel
<b>COG</b>	Course Over Ground of the selected vessel
<b>SOG</b>	Speed Over Ground of the selected vessel
<b>Vessel</b>	The total vessel amount based on the in range received AIS data
<b>UTC</b>	Coordinated Universal Time input from GPS satellites
<b>TX ON</b>	The icon indicates that the computer is connected with a transmission capable AIS device. This icon will not appear when the computer is connected with a receiver.
<b>GPS</b>   	When the AIS transponder receives GPS message from more than 4 GPS satellites, the AIS device works at a higher accuracy which is shown here as "3D GPS". When the GPS message source is less than 4 satellites, 2D GPS will appear. When there is no GPS message available, you will see the red cross on the icon.
	Hide or display the windows of Ship List/Vessel Data.

## 5.5. Block 5: Ship List

Received vessels and AtoNs are listed here by their MMSI, class type, and names.

VESSEL LIST : 135			
NO	MMSI	CLASS	NAME
(075)	373870000	[A]	YM PEOPLE
(076)	477218300	[A]	SHIN CHUN
(077)	440872000	[A]	DL FREESIA
(078)	636090652	[A]	MOSEL N
(079)	355100000	[A]	F.D.JACQUES GRAUBART
(080)	218153000	[A]	E. R. SEOUL
(081)	416573000	[A]	LIAN CHICHENG NO.3
(082)	355513000	[A]	SPICA
(083)	370388000	[A]	YC CLOVER
(084)	636090143	[A]	ALTAVIA
(085)	354683000	[A]	EITA MARU
(086)	538003328	[A]	SAMHO CORDELIA
(087)	353075000	[A]	DERYOUNG SKY

<b>No.</b>	Order number of the received targets.
<b>MMSI</b>	Maritime Mobile Service Identity of the target.
<b>Class</b>	AIS class types <div> <div>[A] Class A AIS</div> <div>[B] Class B AIS</div> <div>[N/A] Unknown</div> <div>[AtoN] Aids to Navigation</div> </div>
<b>Name</b>	Name of the target ship.

## 5.6. Block 6: Vessel Information

Information of the selected vessel or AtoN in the ship list is shown here, which includes dynamic and static vessel data.

### 5.6.1 Dynamic Information

DYNAMIC		STATIC	
MMSI	667003022	Sierra Leone	
Nav. Status	Under way using engine		
ROT	N/A	Heading	99.0°
Latitude	22°34'59"N	COG	234.3°
Longitude	120°17'40"E	SOG	0.10 Kn
Range	1.58 nm	CPA	Pass
Bearing	293.7°	TCPA	Pass
Pos. Accu.	Low		
Receive Time 9/23/2013 13:48:15			

<b>MMSI</b>	Maritime Mobile Service Identity of the target ship and its country code.
<b>Nav. Status</b>	Navigational status of the target ship.
<b>ROT</b>	Rate of Turn
<b>Heading</b>	The direction of the target ship's stem.
<b>Latitude</b>	Current latitude of target ship.
<b>Longitude</b>	Current longitude of target ship.
<b>COG</b>	Course Over Ground
<b>SOG</b>	Speed Over Ground
<b>Range</b>	Range between the selected target and own ship.
<b>Bearing</b>	The related position between own ship and target ship. The unit of bearing is degree (°).
<b>CPA</b>	Distance of Closest Point of Approach between own ship and target ship.
<b>TCPA</b>	Time to Closest Point of Approach between own ship and target ship.
<b>Pos. Accu</b>	Position Accuracy; related to the GPS device used.
<b>Received Time</b>	The latest received time of the target ship.

## 5.6.2 Static Information

DYNAMIC

STATIC

IMO

0

Call Sign

HP6434

Name

HORIZON 7

Ship Type

(90)Other

Cargo

(90)N/A; Harmless

Destination

ETA

0/0 24:60

EPFS Type

GPS

Draught

N/A

Dimension

A:18m,B:14m,C:3m,D:4m

Length

32m

Beam

7m



Receive Time



9/23/2013 13:52:58



<b>IMO</b>	International Marine Organization Number and its country code.
<b>Call Sign</b>	The call sign of the target ship.
<b>Name</b>	The name of the target ship.
<b>Ship Type</b>	The type of the target ship.
<b>Cargo</b>	Cargo information of the selected target ship.
<b>Destination</b>	Destination of the selected target ship.
<b>ETA</b>	Estimate Time of Arrival
<b>EPFS Type</b>	Type of Electronic Position Fixing device
<b>Draught</b>	The draught of the target ship.
<b>Dimension</b>	The dimension of the target ship.
<b>Length</b>	The length of the target ship.
<b>Beam</b>	The width of the target ship.
<b>Receive Time</b>	The latest received time of the target ship.

## 5.7. Block 7: Status Bar

The Status Bar displays the connection status of your AIS device, the system date/time, cursor location

 	9/23/2013 14:34:33	22°31'56"N 120°19'23"E	Relative Bearing
---	--------------------	------------------------	------------------

The icon  shows that your AIS device is receiving AIS messages from VHF antenna; otherwise, the icon is in gray .

The icon  shows that your AIS device is receiving GPS messages from GPS antenna; otherwise the icon is in gray .

System Date and time: shows the date and time of your computer with which the AIS device is connected.

Cursor location: shows the coordination of the cursor

Bearing: shows the current bearing type. Please refer to 5.2.5.9 for more details.

## Appendix How Determine Serial Port

If you PC/laptop does not have available serial port, you may use a RS232-to-USB adapter. To find out the proper serial port for connection use the following instructions.

### Windows 7 or VISTA version:

Click on “Start” → Select “Control Panel” → Select “Device Manager” → Click Port (COM&LPT)

### Windows XP version:

Click on “Start” → Select “My Computer” → Click “Control Panel” → Select “System” → Choose “Hardware” → Select “Device Manager” → Click Port (COM&LPT)

In the example screenshot below, the serial port number is 30.

