

Main Features

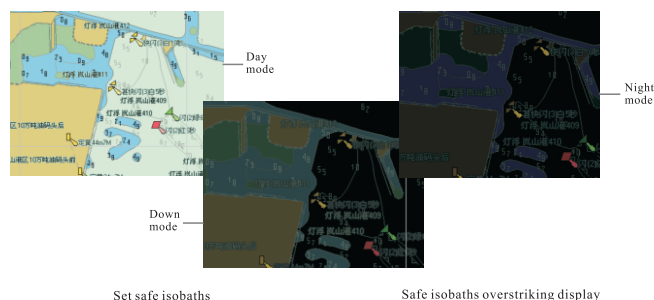
SPHT-1000A electronic chart system (ECS) can support S-57 and S-63 data formats and meet S-52 display standards, integrated functions like electronic chart display & information system, general navigation and safety system, etc.

Product design and test satisfy the international standards like IEC60945, IEC-62288, IHO S-52, IHO S-57, IHO S-60, IHO S-61 and IHO S-63, etc. and the product has already passed CCS Model certification.

Product possesses Comprehensive functions, stable performance, man-machine engineering design and convenient operation.

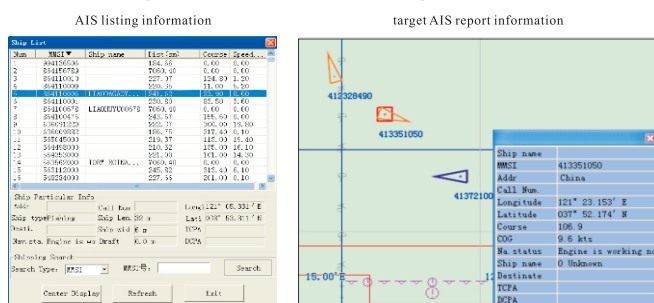
Flexible and convenient chart display & control; freewill selection of charts; freewill map zoom in or zoom out, cruise and selection of display background/content.

General functions

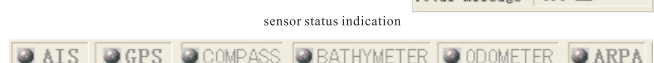


Provide 3 display modes as day, down and night; the chart display can be set as traditional symbols or simplified symbols; the safe draft draught, depth of shoal water zone and abyssal zone of the ownship can be set.

AIS target display: dynamic examining the static and dynamic information of surrounding vessels via receiving AIS signals, and real-time calculating DCPA and TCPA between target ship and ownship.

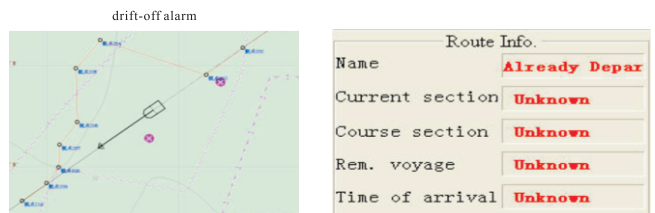


Real-time display the position, heading, speed, depth of water and milestone, etc. via receiving the data like GPS, AIS, heading sensor, sounder, odometer and APRA radar, etc. from the external sensors. The status of the external sensors can be observed through different colors.

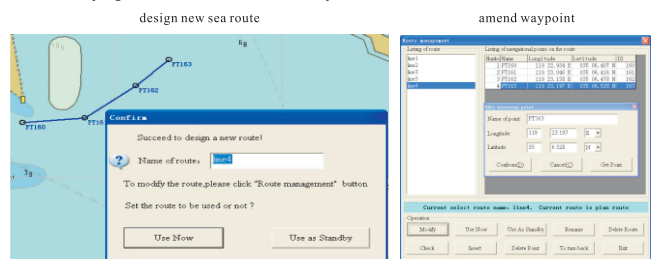


Alarm function: there are various pre-caution parameters can be set including closing to the safe isobaths, closing to the isolating danger, drift off the course, DCPA and TCPA, etc. The equipment can

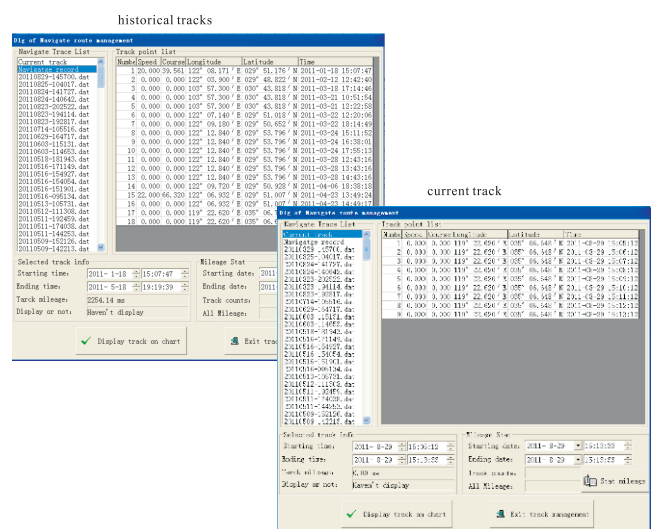
automatically trace out the ship sailing status on the chart, judge various pre-caution parameters via making comparison with the planned route and make acousto-optic alarm to assist the navigator sailing.



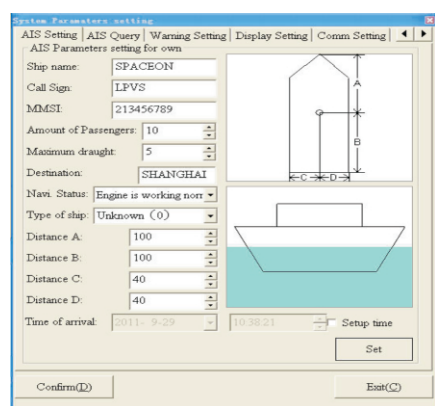
Sea route management: make sailing plan and back-up sea route via mouse clicking on the chart. By using sea route management menu, the operations like delete waypoint, amend waypoint, insert waypoint and return voyage can be fast and easily carried.



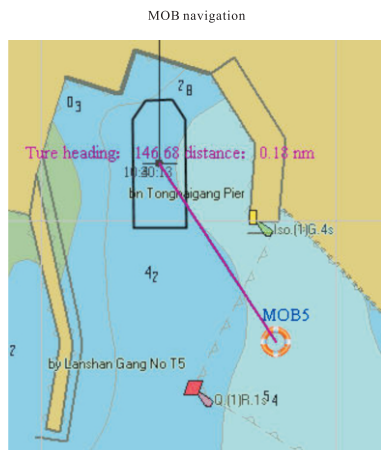
Track record and statistics: real-time display the actual tracks in the latest 12 hours, preservation of 200 track items and independent sailing records in the latest 3 months. The sailing milestones can be counted according to the time intervals.



Ownship parameter setting: the parameters like size of the ship, draft draught, ship type and sailing status can be set.



MOB management: the equipment provides fast and easy MOB label ways that one can directly label the current position or label the target by clicking the mouse. After being labeled, MOB symbol would appear at the corresponding place in the chart. Once choosing a MOB for labeling navigation, the equipment would real-time display the direction and the distance between the ownship and MOB, which aids a lot in quick searching and rescue activities.



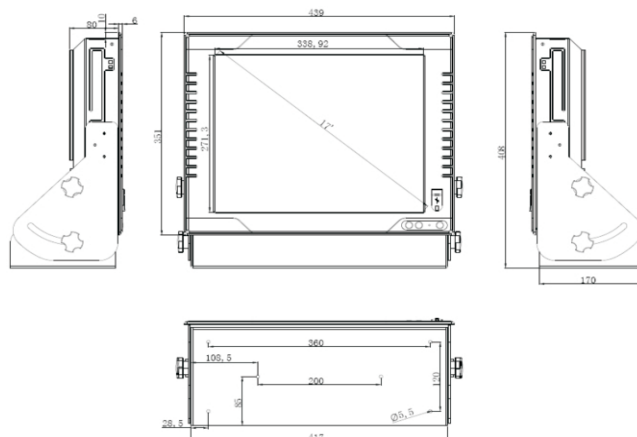
MOB management

Nu...	Name	Longitude	Latitude
1	MOB1	122 08 220 E	029 52 350 N
2	MOB2	122 08 580 E	029 50 712 N
3	MOB3	122 04 020 E	029 49 224 N
4	MOB5	119 19 620 E	035 05 106 N
5	MOB5	119 22 740 E	035 06 498 N

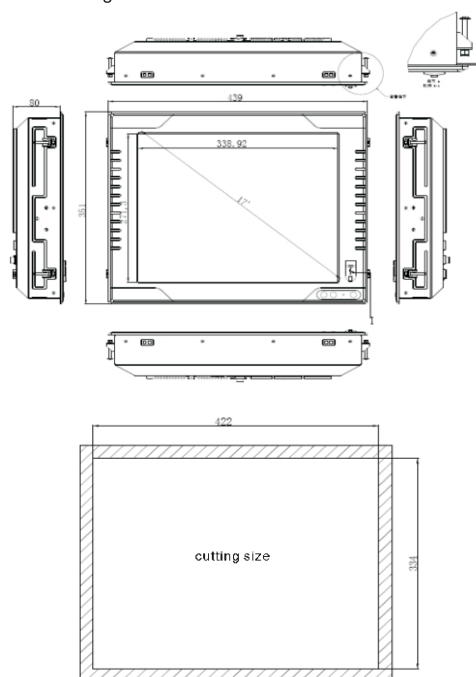
Position Label	Mouse Label
Modify Label	Delete Label
Navigate MOB	Cancel Navigatgation
Center Display	Exit

Product Size

Desk type mounting



Embedded mounting



Technical Specifications

technical parameter		display data		
Display unit	17' LCD monitor	Display mode	North ahead/heading up	
Operation system	Windows XP	Ownship	Position, SOG, COG, heading, depth of water	
Resolution	1280×1024	Sea route	Sea route plan, sea route monitoring & controlling	
Power	9-32 VDC	Others	EBL, VRM and etc.	
Chart format	IHO S-57、IHO S-61	Scale	1:2000-1:76 000 000	
Interface introduction		Environment		
Digital GPS	IEC61162-2	Operation temperature	-15℃ ~ 55℃	
Heading sensor(electric gyrocompass)	IEC61162-1	EMC	IEC60945	
Detector	IEC61162-1	Humid	IEC60945	
Odometer	IEC61162-1	Vibration	IEC60945	
ARPA	IEC61162-1	Equipment list		Number
Automatic Identification system	IEC61162-2	Standar dallocation	ECS	1
Audio interface	1		Mouse keypad	1
USB	4		Power cable	1
LAN	1		Mounting frame (desk type)	1
10M/100M Network Ethernet	1	Optional accessories	Mounting frame (embedded mode)	1