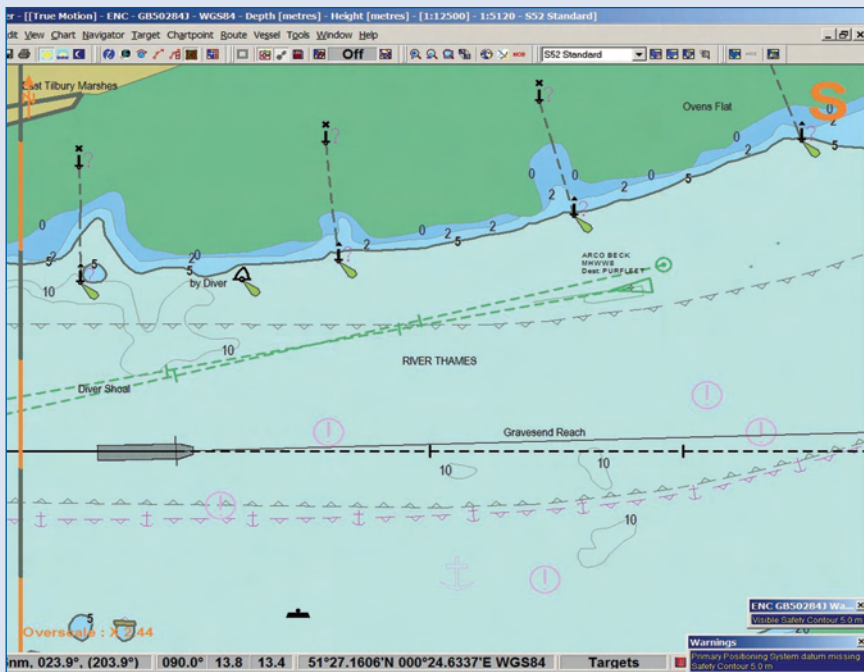


# Navmaster<sup>®</sup> ECS

▶ Navmaster ECS is an electronic chart system developed to the IMO ECDIS specification and compliant with the draft International Standard for ECS, IEC62376.

It provides the full range of ECDIS navigation tools without the expense of Type Approved software and hardware. Easy to install and operate, Navmaster ECS software can be loaded onto standard PCs and interfaced via NMEA to onboard instruments.

Developed with feedback from customers over almost ten years and now installed on vessels operating in regions all over the world, Navmaster ECS is ideally suited to retro-fit and to newbuild vessels which do not require ECDIS.



Own ship sailing down river with another vessel position shown plotted from both ARPA & AIS.

## Key Benefits:

- Automatic plotting of own vessel, ARPA & AIS targets
- Excellent route planning, with detailed plan documentation
- Interfacing with all standard bridge instruments
- Remote diagnostics feature for rapid and low-cost support
- Based on Type Approved ECDIS software, with additional features
- Voyage data recording of own and other vessel data - useful for vessels not required to carry type approved VDR and for incident analysis

## Optional features:

- Radar video overlay with PC Radar card
- TotalTide integration for worldwide tidal height & stream
- Tidal atlas display (UK continental shelf)
- Upgrade to Type Approved ECDIS
- Panel PC option for a combined hardware and software solution

## Navmaster ECS features:

### Charts

- Easy chart operations: automatic folio management, automatic scaling, zooming, information layers On/Off, context-sensitive information on chart objects, automatic updating, manual corrections, GoTo any position, etc
- Multi chart windows, with separate controls
- North up, course up, head up, True/Relative motion, rotation clockwise/anticlockwise

### Route planning

- Efficient route creating - no need to plot the same waypoint several times, just click to post it into a new route
- Notes can be stored for each waypoint which will be transferred into routes using that waypoint
- Check route for dangers - alarms & warnings are generated to ECDIS standards
- Add your own marks, lines, zones & set up alarms - useful for raster charts
- View multiple and alternate routes
- Complete range of graphical chartwork tools - R&B, VRM, EBL, parallel indexes, MOB, event marker, position mark, position line, transferred position line etc
- Routes can be exported/shared

### Passage Plans

- Automatically created with all relevant information
- Documentation can be used to conform to ISM & company quality requirements
- Plan incorporates navigator's instructions & notes
- Reports can be customised with company name & logo
- Export and email plans direct from Navmaster ECS position line etc

### Route Monitoring

- Automatic display of primary and secondary ship position
- Continuous display of heading, COG, SOG, speed, depth

### Route Monitoring (cont.)

- Own ship true scale outline
- Guard zones
- Warnings & alarms: safety contours, off-track, wheelover, critical point, chart status, sensor alarms, system integrity etc
- ARPA & AIS target tracking with quick access to additional information
- Dead reckoning option

### Log and playback

- Automatic logging of all navigation events for own ship, ARPA & AIS targets
- All data written to a secure file every 60 minutes
- Manual entry option
- Stored data can be replayed at any time using the same software

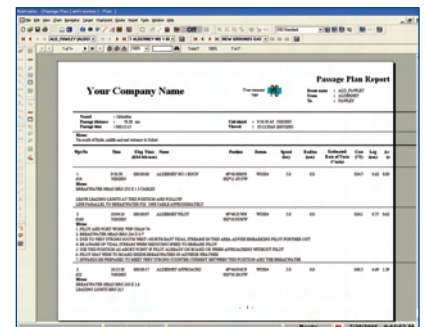
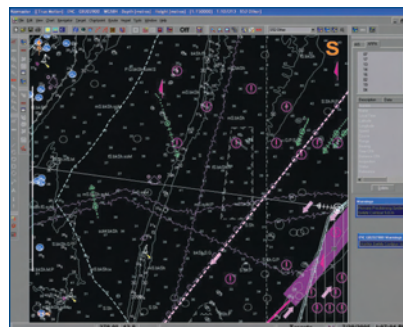
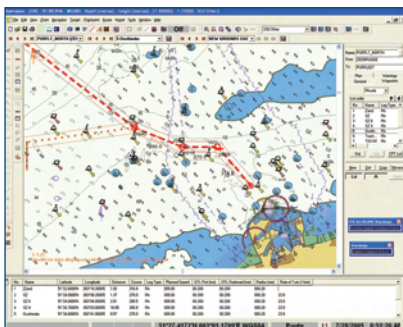
### Electronic charts

Compatible with ENC, CM-ENC, ARCS, BSB, Seafarer, C-Map CM93/3 electronic charts.

### Aftercare and service

PC Maritime's aim is to provide customers with first-class support. Although not often considered at initial purchase, experience has shown that the quality of subsequent support and maintenance is very important to customers and can significantly reduce running costs.

- Remote diagnostics function in Navmaster ECS for fast, cheaper problem-solving - engineer visits are rarely necessary
- Knowledgeable PC Maritime staff available to give personal support, also when supply is via a third party
- Practical hands-on training available onboard ship or at a shore-based location
- Upgrade & Support contract provides technical support by phone or email & automatic issue of upgrades, to allow for predicted changes in electronic chart delivery mechanisms over the next few years and for further regulatory changes as they occur



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**VEINLAND GmbH**

PC Maritime, a Charente Group company, has a record of firsts in marine software development and marketing. The Company has won four UK Government SMART Awards, a SPUR Award and the Seatrade Award for Safety at Sea.

INTELLIGENT NAVIGATION SOLUTIONS