

# ECDIS MANDATE

## MANTADIGITAL™ ECDIS



MantaDigital™ ECDIS bridge equipment from Kelvin Hughes is a truly multifunction navigation system providing ECDIS, chart radar, radar and conning on a single display and can be networked as part of a larger bridge system and receive ENC and chart updates from ChartCo.

### ECDIS

ECDIS (Electronic Chart Display and Information System) consists of a database of ENCs (Electronic Navigational Charts), together with the hardware and software needed to display simultaneously the charts and the ship's own position (obtained from a GPS or another positioning sensor). The ECDIS also allows the performing of navigational tasks such as route planning, route monitoring and measurement of distances.

The ongoing implementation to compulsory fit an ECDIS to passenger, tanker and cargo ships is over halfway through its timeline. From 2014 to 2018 existing tankers and cargo ships will be required to fit an ECDIS.

Kelvin Hughes can advise and supply everything you need to be SOLAS regulation V/19 carriage requirements compliant for shipborne navigational systems and equipment, through the MantaDigital™ ECDIS and radar hardware and software, and through the ChartCo ENC supply and update service. ChartCo will also provide advice on, deliver and manage your backup requirements.

### DISPLAY TECHNOLOGY

The MantaDigital™ multifunction navigation workstation provides ECDIS, chart radar, radar and conning functionality in a single station. The workstation is available in 22 inch or 26 inch display size and as console, desktop or pedestal mounting options with trackerball control and keyboard interface options.

The different type approved modes can all be displayed with a simple 'point and click' at the relevant screen icon.

### STATE OF THE ART TECHNOLOGY

MantaDigital™ ECDIS and the multifunction capability provides a host of easy to use and time saving features that enables safer operation of the ship and ultimately makes for safer seas.

Employing the latest state-of-the-art technology the MantaDigital™ ECDIS offers a vast array of advantages to the navigator, from immediate situation awareness to customised alarm management.

The MantaDigital™ ECDIS uses the same three button and trackerball interface concept that has been used successfully in Kelvin Hughes' products for nearly 30 years.

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## FEATURES

|                            |  |
|----------------------------|--|
| SITUATION AWARENESS        | DISPLAY SHIP'S NAVIGATION PARAMETERS, WITH OWN SHIP GRAPHIC, HEADING, TRACK AND ROUTE ON THE CHART   |
| ROUTE MONITORING           | MONITORING OF VESSEL'S POSITION AGAINST THE PLANNED TRACK<br>LOOK AHEAD IS ALSO PERFORMED WITH WARNINGS GENERATION   |
| NAVIGATION TOOLS           | RANGE AND BEARING CURSORS<br>ENLARGED SPYSCOPE<br>MANUAL FIXING AND TRADITIONAL ROUTE PLANNING TOOLS   |
| MAXIMISED CHART            | TOGGLE MAXIMISED CHART DISPLAY TO SEE MORE OF THE DISPLAY<br>MENU SYSTEM ALLOWS SELECTION OF FUNCTIONAL PANELS   |
| ROUTE PLANNING             | DRAG AND DROP WAYPOINTS<br>DEFINE CHANNEL WIDTHS, TURN RADIUS AND PLANNED SPEEDS FOR EACH LEG<br>CHECK PLANNED ROUTES AGAINST SAFETY PARAMETERS OF THE SHIP BEFORE ACTIVATION<br>RHUMB LINE, GREAT CIRCLE LENGTHS AND TRADITIONAL PLANNING TOOLS WITH RADAR TRANSFER |
| CHART MAINTENANCE          | MANAGE CHART DATA AND PERMITS EASILY WITH THE CHARTCO UPDATE SERVICE   |
| VESSEL POSITION PREDICTION | AID CLOSE QUARTER MANOEUVRING ON LARGE CHART SCALES, VESSEL GRAPHIC USED TO SHOW UP TO 6 MINUTES FORWARD PREDICTION OF POSITION  |
| ALARM FUNCTIONALITY        | INTEGRATED ALARM MANAGEMENT ALERTING NAVIGATOR IF SAFETY PARAMETERS CONTRAVENED OR FAILURE OF ANCILLARY SYSTEMS  |
| RADAR INTERLAY             | IMPROVE SITUATION AWARENESS BY INTERLAYING RADAR DATA WITH THE ENC CHART DATA (OPTIONAL FEATURE)   |
| TRACK CONTROL              | TYPE APPROVED TRACK CONTROL ALLOWING THE AUTOPILOT TO RECEIVE STEERING INSTRUCTIONS FROM THE ECDIS ACCORDING TO PRESET PARAMETERS<br>TRANSFER THE DATA TO THE RADAR TO ALLOW DISPLAY OF CURVED HEADING LINE SHOWING THE TURN TO BE PERFORMED                         |
| CONNING DISPLAY            | PROVIDES A CENTRALISED REAL TIME DISPLAY OF NAVIGATION PARAMETERS (OPTIONAL FEATURE)   |
| CHART FORMATS              | AVCS, JEPPESEN, PRIMAR, C-MAP  |
| RADAR FEATURES             | DUAL PPI<br>ETD (ENHANCED TARGET DETECTION)<br>ICE DETECTION<br>CHART RADAR AND DYNAMIC CLUTTER SUPPRESSION  |

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