# ECDIS 24

Electronic Chart Display and Information System Raytheon Anschütz Retrofit ECDIS



# ECDIS 24 – Make Your ECDIS Refit A Success

To comply with the new SOLAS carriage requirements, your vessel should be equipped with one or two ECDIS. With the regulations effective on a rolling timetable from July 2012, owners and operators urgently need to assess the implications for their fleets and make plans to integrate digital navigation into bridge procedures.

Especially for the needs of ECDIS retrofit, Raytheon Anschütz has developed ECDIS 24 as a basic solution which combines advanced functionality with cost-efficient hardware setup.

### ECDIS 24 Features

Raytheon Anschütz ECDIS 24 is a perfect electronic chart display and information system special made for stand-alone retrofits. It provides all necessary information and offers helpful functions for the planning and the monitoring of routes which account for the safety at sea.

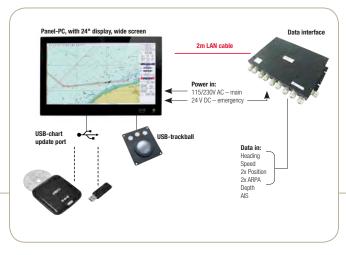
ECDIS 24 comes with an extreme flat 24" TFT-panel-PC (less than 80mm), stainless steel track ball and a separate interface box with cables and brackets for easy flush desk mount installation. A mobile DVD-drive for chart uploads is also included.

ECDIS 24 can read the ENC, C-Map and BA-ARCS chart standards. Chart updates are possible via USB stick or an external DVD drive. In a double ECDIS installation and in case of an optional ethernet connection, ECDIS 24 shares routes and charts automatically.

As a variety of our Synapsis ECDIS product line also ECDIS 24 is based on clear display design, easy-to-operate menu structures and comfortable functionalities. The comprehensible and intuitive handling is supported by the use of the well-known menu structure of windows applications.

Important functions are available quickly through shortcuts, and a configurable conning panel can show relevant navigation and track information as well as calculated ETA for dedicated waypoints at a glance. Five different ranges of color are available. ECDIS 24 features an integrated environmental database of tides and currents, several mariner tools and provides a 24h log of data. In addition, ECDIS 24 offers advanced functions regarding route and voyage planning that not only improve safety and ship's efficiency but also reduce workload for the operator.

The automatic route planning (using C-Map professional + database) allows easy and optimal safe route planning. AIS target and ARPA target integration provide a better overview of traffic situation. Weather overlay (option) integrates the current weather information and weather forecast symbols to optimize route and voyage planning with regards to fuel efficiency, avoidance of hull and load damages, sea sickness of passengers and on-time arrivals.



#### Stand alone ECDIS 24

# Your Benefit<sup>®</sup>

- TFT display with LED illumination, IP66 glass surface and touch on/off switch at the front
- Low noise fan for silent bridge operation
- Long life solid state disk (SSD) memory (no moving hard disk)
- 115 & 230 V AC and 24V DC input (max. 125W max. backlight) 50W typ. (This makes it possible to use AC power as primary power and a 24V battery buffered secondary power supply eliminating the need for expensive UPS systems)
- Separate interface box with a total of 8 in- & outputs according to IEC61162-1/-2/-4, example to gyro, echo sounder, GPS, AIS, and ARPA target integration
- If a double ECDIS is required, data exchange is easy possible via an integrated LAN interface

## **Paperless Navigation**

To fit out a vessel with two ECDIS offers, depending on the flag state and the area of operation, the benefit of paperless navigation. This means:

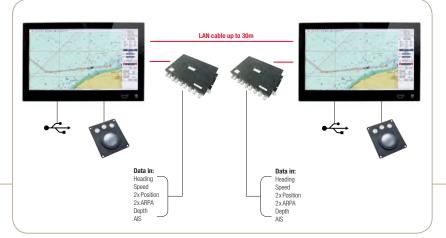
- · Save money without paper charts
- Save overtime and manual chart corrections
- Save fuel / costs by optimizing your routes through automatic route planning and weather overlay
- · Avoid trouble with port state control and delays
- · Makes you vessel attractive also for charterers

# System Package

- 24,0 inch TFT-panel-PC (16:9) with glass front and LED-backlight
- · Serial data interface box with cable inlets
- Track ball with 50mm ball and operational keys
- External DVD-drive with USB connector for chart/software upload
- AC-Power cable, 2m
- LAN-cable for serial data interface box, 2m
- USB-extension cable, 2m
- Panel-PC bracket kit for console/panel mount
- Manual

#### Options:

- · Panel-PC bracket kit for table mount
- Weather overlay
- · Radar video overlay
- 30m LAN patch cable for double ECDIS 24





#### Dual ECDIS 24 system

# **ECDIS Carriage Requirements**

The IMO has recently defined new carriage requirements for ECDIS. Depending on vessel's type, size, and date of construction, it will be required to install at least one ECDIS on the bridge. We recommend to fit your vessel with two ECDIS. Depending on the flag state and area of operation you will be ready for paperless navigation.

# **ECDIS** Training

In addition, to a "Generic ECDIS Training", navigators now have to pass a manufacturer-specific ECDIS training for each ECDIS model before using the specific model onboard. Raytheon Anschütz offers ECDIS training ashore together with a large number of professional maritime training centers around the world and also approved ECDIS online-training courses. Visit our website for more information: www.raytheon-anschuetz.com/ecdistraining/

# **Technical Data**

#### ECDIS 24 system

#### 24" Panel-PC:

- Dimension: 593(W) x 384(H) x 76,4(D) mm
- Weight: app. 12kg
- Power supply: 115 / 230 V AC and 24 V DC / 50W typ., max.150W for max. brightness
- Magnetic safe distance: 1,15m/0,7m
- Type of enclosure acc. To IEC/EN 60529: IP22 / IP66 front sided
- Interface: 2x LAN, 4x USB, 2x PS/2

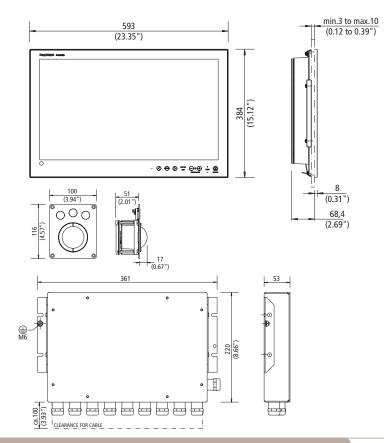
#### Track ball:

- Dimension: 100(W) x 116(H) x 50(D) mm
- Weight: app. 0,6kg
- Power supply: via USB-connection cable from panel-PC
- Magnetic safe distance: 0,45m
- Type of enclosure acc. To IEC/EN 60529: IP68 front sided
- Interface: USB

#### Interface box:

- Dimension: 360(W) x 52(H) x 247(D) mm
- Weight: app. 1,7kg
- Power supply: 9 to 36V DC / 2W
- Magnetic safe distance: 0,4m
- Type of enclosure acc. To IEC/EN 60529: IP54
- Interface: 1x LAN, 8x in/out acc. IEC61162-1, 2x RS232 selectable

SHIP TYPE SHIP SIZE CONSTRUCTION DATE REQUIREMENT FCDIS PASSENGER July 2012 since July 2012 > 500gt July 2014) 500gt before July 2012 TANKFR July **2012** since July 2012 > 3,000gt July **2015** > 3,000gt before July 2012 CARGO July **2013** ( since July 2013 >10,000gt July **2014** since July 2014 > 3,000gt >50,000gt before July 2013 July 2016) before July 2013 >20,000qt >10,000gt before July 2013



Raytheon Anschütz GmbH Headquarters D-24100 Kiel, Germany Tel +49(0)431-3019-0 Fax +49(0)431-3019-291 Email sales-commercial@raykiel.ct

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