

SPECIFICATIONS: TECDIS 2424

TECDIS 2424 is an all-in one ECDIS computer.

It is type-approved according to IMO regulations, allowing paperless navigation¹.

The integrated design makes it perfect for retrofit installation.



STANDARDS COMPLIANCE

TECDIS 2424 conforms to the following standards:

Marine Equipment Directive 2014/90/EU of the EC council.

Regulation (EU) 2018/773:	Item No. MED/4.30
SOLAS 74 as amended	Regulations V/18, V/19 & X/3
IMO Resolutions	A.694(17) MSC.36(63) MSC.97(73) MSC.191(79) MSC.232(82) MSC.302(87)
IMO Circulars	MSC.1/Circ 1503
IEC Standards	Performance testing – IEC 61174 (2015) Performance testing, presentation – IEC 62288 (2014) Environmental testing – IEC 60945 (2002) Serial interface testing – IEC 61162 (2010)

GENERAL SPECIFICATIONS

Usable Charts	S-57 ed.3 S-63 (including Primar and AVCS) CM-93/3 (C-Map ENC / ENC+ / CAES / Professional+ ²)
Display	24-inch TFT LED display with Full HD resolution. Integrated in the unit.
Operating system	Windows 7 32-bit, English
Processor	Intel Celeron P4505 – 1.86Ghz
Chipset	Intel BD82QM57
Memory (RAM)	2 GB
Storage	80 GB SSD (approximately 50GB free)

¹ Paperless navigation requires a dual ECDIS installation.

² C-Map Professional+ is not an official chart service, it does however provide world scale charts

Display of data

Own Ship:	GPS Position, COG, HDG, SOG, STW
Route:	Active route name, DTG, ETA, and CTS-, DTG-, TTG to selected WP
ARPA targets:	BRG, DIST, COG, SOG, POS User selectable: ARPA Target color, ARPA target track color, «Save» ARPA target track.
Others:	EBL, VRM, EBL list, Parallel index lines, Cursor position, True or relative cursor bearing
Maritime Calculation	Can calculate Range/Bearing to or from a position, with Rhumb-line or Great Circle routes, distances selectable in meters or NM. TTG, ETA, datum conversion
Route monitoring	Off track, Waypoint, Arrival, Grounding, Depth
1-click chart loading	Available for charts from the following providers: Navtor, ChartCo, Nautisk Forlag
Alarms	Off track, Index Lane, Channel limit, Waypoint approach, Depth, Non ENC dangers, Restricted Areas, Cautions Areas, Possible danger, Harbour Mode
Autopilot output	Output of: APB, RMB, RMC, RTE
AIO overlay	Show Temporary and Preliminary Notices as an overlay on the chart, with the Admiralty Information Overlay (AIO) service by UKHO.
Other Functions	<ul style="list-style-type: none"> • Night/Day presentation • MOB • SAR • Log w/replay functionality • docking Conning display • Tooltip • User defined chart presentation, easy transfer of installed configuration to replacement cold standby unit • Easy screen dump facility when in navigation mode.

Optional features

The following options are available for purchase with a perpetual license (onetime fee):

Radar Overlay	Display of radar echoes from Furuno radars: 2xx7, 2xx8, 15xx
Seismic streamers	Streamer configuration with up to 24 streamers displayed graphically in chart.
Navtex	Connects to all Navtex receivers sending in the NRX format. You can display Navtex messages with position references.
Weather overlay	Advanced weather overlay feature using top quality commercial maritime weather forecast data available as a subscription service from C-Map.
Piracy overlay	Piracy Information is available as an overlay on top of C-MAP charts in OceanView. The C-Map OceanView navigation planning tool visualizes information to help navigators and operators identify, understand and manage risks posed by maritime crime.

TELCARE

TELCARE gives power to the TECDIS users.

TELCARE is a subscription service for new features in TECDIS. The following features are only available with a valid TELCARE subscription:

TotalTide	Show Tides from Admiralty TotalTide in the chart. Requires a TotalTide subscription from UKHO.
Rendevous	<p>With Rendevous TECDIS will predict where on your route you will meet that target. This function works for targets within 1 NM of your route, and predicts where the target will meet your vessel (assuming the target will move along the same path your route shows)..</p> <p>Rendevous supports up to 8 targets simultaneously, and the prediction is updated every second.</p>
Transit conning	The most important sensor and voyage information is displayed with bigger text, in a clear and very readable conning window. The conning window can be moved around on the screen.
Edit route lane	Edit the route corridor and turn radius visually in the chart with the cursor.
1-click chart loading	Available for Global Navigation Solutions – GNS

Power Supply

Power supply	Multipower - 115 to 230 VAC, 50 ~ 60 Hz + 24 VDC
Power cons. max	125W
Power cons. typ.	50W

HW Connections

No. of serial ports	1x RS 232 (non-isolated) 1x RS422/485 (non-isolated) 4x NMEA RS422 (with phoenix 5-pin connectors)
Monitor	1x DVI and 1 ea. VGA (DB15F)
Ethernet	2x 10/100Mbps (RJ-45)
USB ports	3x USB 2.0 ports 1x USB 1.1 port
Keyboard port	1x PS/2 (Standard PS/2 mini DIN connector)
Audio ports	1x Mic. in (3.5mm jack) 1x Line in (3.5mm jack) 1x Line out (3.5mm jack)

Port description

Sensor	Sentences	IP	IEC 61162-1 Ed 4.0	Proprietary
Position 1:	GNS, GGA, GLL, RMC		✓	
Position 2:	GNS, GGA, GLL, RMC, VDO	✓	✓	
COG/SOG1:	VTG, RMC, OSD, VDO		✓	
COG/SOG1:	VTG, RMC, OSD, VDO	✓	✓	
Heading 1:	HDT, OSD, VHW, VDO, THS		✓	
Heading 2:	HDT, OSD, VHW, VDO, THS	✓	✓	
Water speed:	VHW, OSD, VBW	✓	✓	
Radar ARPA 1:	TTM	✓	✓	
Radar ARPA 2:	TTM	✓	✓	
Radar cursor 1:	RSD	✓	✓	
Radar cursor 2:	RSD	✓	✓	
AIS (In- and output):	Aixxx	✓	✓	
Depth:	DPT, DBT	✓	✓	
Rel. wind:	MWV	✓	✓	
Route:	WPL + RTE	✓	✓	
Alarm ctrl. (In- and output)	ALR + ACK		✓	✓
Navtex	NRX	✓	✓	
Search	FLIR		✓	
Option 1		✓	✓	✓
Option 2		✓	✓	✓
Option 3		✓	✓	✓
Option 4		✓	✓	✓
Printer:	USB port printer connection only			

Equipment List

Standard

1. Computer, HD 24T21 MEC or EEC
2. TECDIS code plug
3. Accessories Box
 - a. TECDIS Installation Manual
 - b. TECDIS User Guide
 - c. USB extension cable 1.0m
 - d. CD-bag
 - i. Driver CD from Hatteland
 - ii. Chart database DVD C-Map Professional+
 - iii. Chart database DVD C-Map CAES
 - iv. TECDIS Service Key (USB memory stick)
 - e. AC power cables 220 VAC/50Hz euro type F and 115 VAC/60Hz US type B power cable
4. Cherry G84-4100LCMGB-2, keyboard
5. Logitech TrackMan Marble ELK, mouse
6. Declaration of Conformity

Options

1. Mounting brackets incl. screws for console mount
2. Mounting brackets incl. screws for table mount
3. External CD/DVD-drive via USB
4. Telko Alarm Interface TEA-01

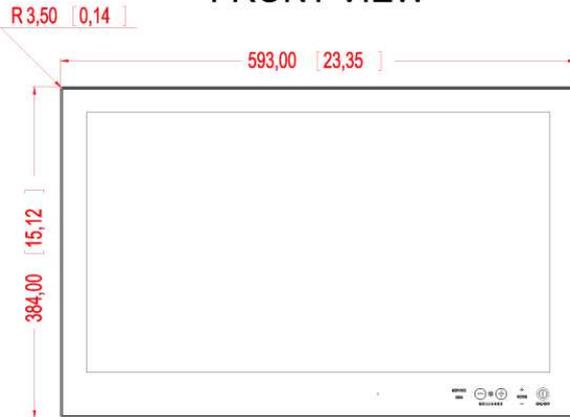
Software options

- | | |
|--------------------------------|--|
| 1. Conning software | Custom software for each vessel.
Requires design and programming. |
| <hr/> | |
| 2. Track Control System | |
| 3. Seismic streamers | TECDIS SW option |
| 4. Navtex | programmed in |
| 5. Weather overlay | code plug |
| 6. Piracy overlay | |
| 7. Radar Overlay | |

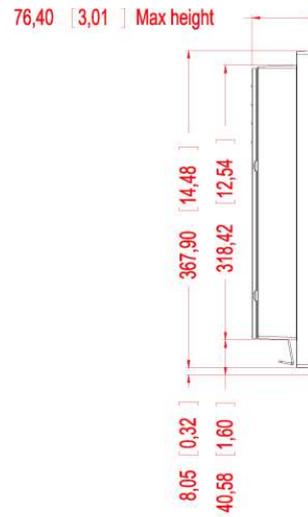
Document revision history

1.0	22 nd August 2013	Initial release	CH
2.0	04 th January 2018	Second release. Completely rewritten.	CH
3.0	20 th August 2018	Third release. Updated technical drawing presentation and template design.	CH
4.0	25 th April 2019	Fourth release. Added section on TELCARE. Updated section for optional features.	CH

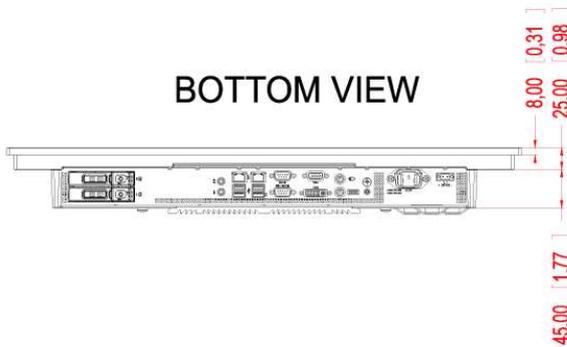
FRONT VIEW



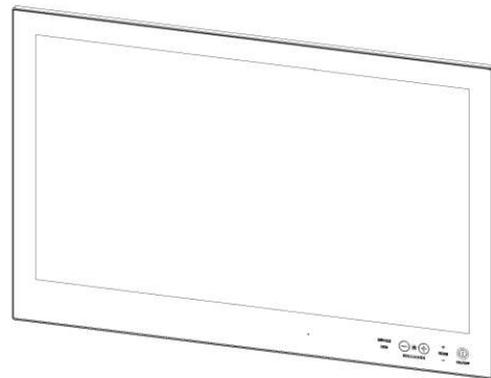
SIDE VIEW



BOTTOM VIEW



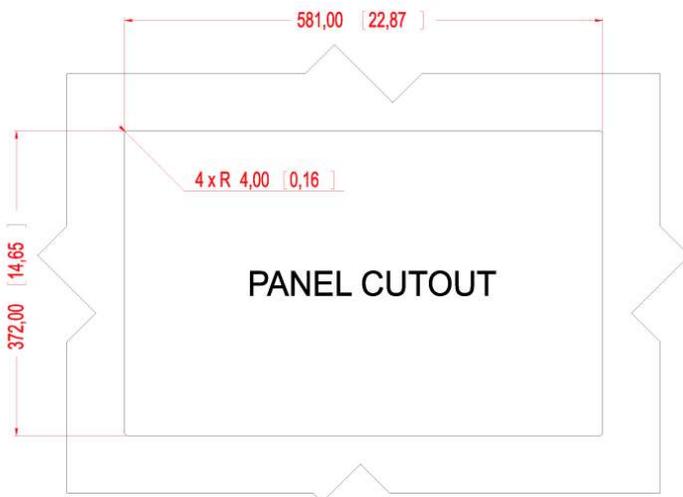
DIMETRIC VIEW



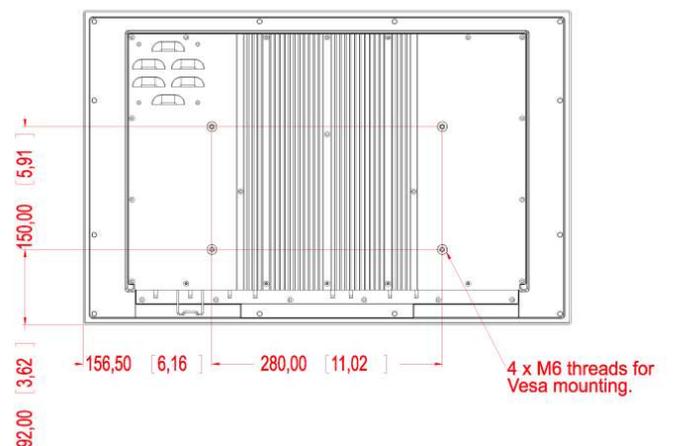
TOP VIEW



PANEL CUTOUT



BACK VIEW



Units: mm [inches]