TELchart

Model 2023/2025

The TELchart electronic chart system is developed in close cooperation with users in the coastguard, sea rescue, fishery and the merchant fleet. On that basis the system has been tailormade for navigation and for use as plotter.

The TELchart electronic chart system is based on vectorized charts (C-Map CM93) The system is developed with an eye to simple operation and logical structure. At the same time it covers a wide variety of functions to satisfy requirements from demanding navigators.

TELchart is delivered with world wide coverage charts. It is up to the user to select which area to be opened. Charts can be purchased or bought on subscriptional basis, with regular chart updates.

TELchart can be interfaced to various external sensors eg. sea temperature, echo sounder, gyro, ARPA targets and VRM/EBL(cursor) from radar.

TELchart includes split-display functionality, allowing the user to view two charts simultaneously (for example: harbour and approach charts).The vessel symbol is placed on both chart windows. Tide almanac is standard and will provide the user with tide and sunset/sunrise tables world wide.

The TELchart is very easy to operate. Complete operation of the system is done by trackball moving the mousepointer on the screen. All functions are enabled/disabled using buttons located at the top of the screen. No computer experience is needed to operate the system.

FURUNO NORGE A/S

The System

The navigational safety of SOLAS ships can be greatly increased through the use of electronic charting system.C-MAP is one of the worlds largest suppliers of nautical charts in digital format. C-MAP has responded to the requirements of the professional market, and is the first digital chart producer to deliver a world-wide vectorized ECS database, based on more than 14000 charts.

C-MAP CM-93

Vectorized cartography makes it possible to move from one chart to another without having to change chart display or storage media. All data is corrected to a common chart datum, WGS 84 as required by IMO and nescessary when using GPS as a position reference system.
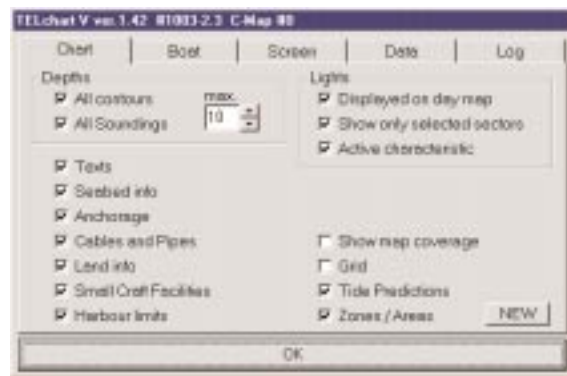
C-MAP CM-93

The TELchart ECS system makes use of the CM-93 chart presentation software developed along with the CM-93 database itself. It is important to notice that this increase the reliability and functionality in the computer system considerably by means of fast accessing of cartography and minimised demand of computer resources when displaying chart.
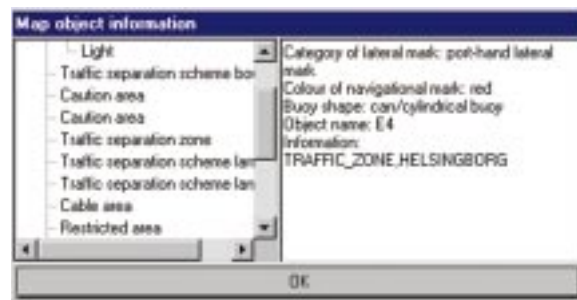
Chart information

An important element of the powerfull structure of TELchart/CM93 is the information database, where all the elements of nautical chart are represented in terms of objects and related attributes. The user is able to customize the chart display by selecting what kind of information to be displayed. White light house sectors are displayed with full range in twilight and night modus. The lighhouses can also be displayed with active characteristics including realtime animation of colour and phase.

Info

This tool allows the user to access detailed information about any position in the chart display, including orginating chart material, last update information, area warnings, and more. By pressing this button on the toolbar and selecting a location in the chart display, the information is displayed in the following dialog.

Self stored information will also be available to display with this function.

Extra Chart

This button displays an extra chart in upper right part of the screen. Initially this chart is shown in one scale layer above the main chart. Scale and location can be adjusted separately for the two chart windows. Vessels position and track are shown in the extra chart window.

Route/Voyage planning

A route is a set of navigational points, waypoints, that make a route for planned voyage. Voyage planning and selection of routes are very easy and routes can be stored with names and additional text. Voyage index corridors with adjustable width can also be displayed.

Steering information:
Course to next waypoint, next course(from next to second waypoint), distance to next waypoint, and route leg deviation is displayed. Route leg deviation is also displayed graphically below the numeric information(green bar graph to starboard and red to port). If the route leg has an index corridor, it is shown with grey bars. Distance to end of route and ETA with current speed is also shown

ETA: 18:43
7.9   Nm.
Wp. 4 m. 15 s.

289.0 ° [291.3 °] tur 0.85 Nm   0.01 port

Symbols Lines/ Areas

The plotter function in the TELchart system enables the user to store numerous different symbols/lines/areas. If the TELchart system is connected to a keyboard, text and remarks can be stored. Symbols/lines/areas can also be marked with date/time and remarks.
When uploading stored data ,selection can be done both on time and colour. Storage of data can be done on hardrive or diskette.
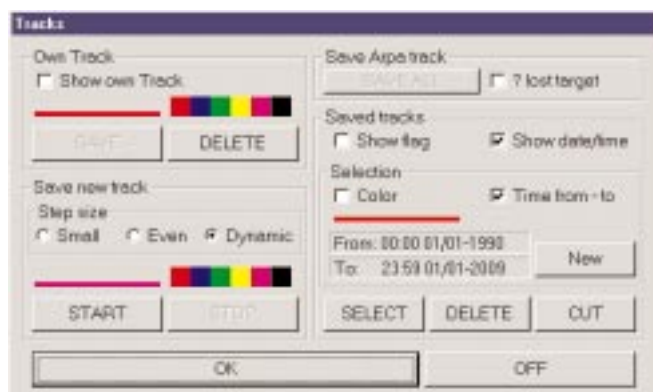
Plot chart

This function replacing standard chart with a gridded plotting screen.
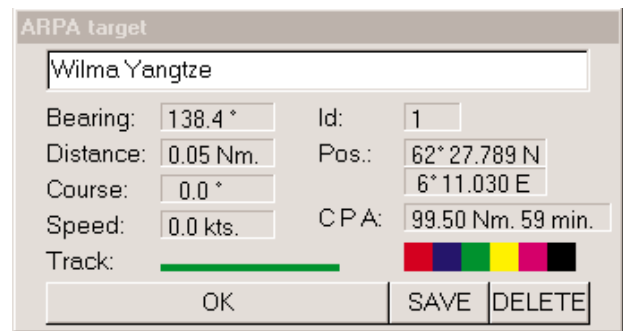
Track

Own vessels track is always maintained. Track lines can be shown or hidden, and can be saved with selectable colour, text time and date. In addition tracks can easily be converted to routes.
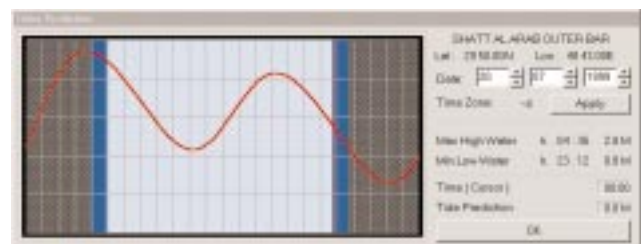
ARPA

When the ECS is connected to an ARPA radar(Automatic radar plotting aid) TELchart displays selected ARPA targets.
ARPA-targets will be shown with tracks and course vectors.

ARPA target

Wilma Yangtze			
Bearing:	138.4 °	Id:	1
Distance:	0.05 Nm.	Pos.:	62° 27.789 N
Course:	0.0 °		6° 11.030 E
Speed:	0.0 kts.	C P A:	99.50 Nm. 59 min.
Track:			
OK		SAVE	DELETE

Placing the cursor on an ARPA-target and pressing the left button, an information window for the selected ARPA target will appear. Target name can be registered in this window. ARPA-tracks can also be stored with date and selected colour.

Tidal information

To activate this function tide predictions must be selected in the dialogue for chart information. The tidal stations are marked violet in the chart.
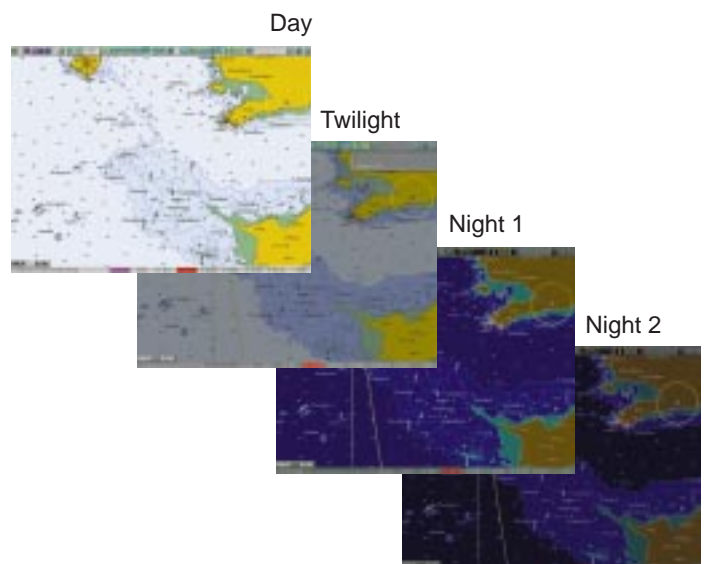
Query cursor on the diagram reports standard time and predicted tide. The background indicates daylight, twilight and night. To see prediction for another date specify date and press apply.

Screen brightness

With these buttons the screen colour can be adjusted for varying light conditions. Night position will darken the colours to protect night vision. White light sectors are shown in the dimmed positions.(not by daylight)

Day

Twilight

Night 1

Night 2

Specifications.

T-2023

Containing:
TELchart Windows ECS system.
TELchart V vector software reading
C-Map CM93.
2 Serial data ports.
Floppy disk drive for backup
Trackball operation unit
NMEA interface GPS / Autopilot
Operating current 16 – 32 V DC,
Optionally 10 – 16 V DC
Option: External CD-Rom player.

T-2025

TELchart ECS system.
Including(in addition to 2023):
Windows NT
More RAM memory and better CPU
4 extra Serial data ports. (total 6)
CD-rom.
Extra NMEA interface (ARPA).
NT network card.
Sound card for alarms.

Charts.

CM-93 charts can be purchased as areas(ex. English channel,
West Germany), as zones (ex. Northern-Europe,Mediteranean)
or as 4x4 degrees cells.
Charts can also be purchased on subscribtional basis incl.
3 yearly uppgrades.(Number of uppgrades a year is up to the
customer)

SKSK fishery database(Norwegian fishery database) and
Bathymetric database(Russian Fishery database) is also
available.

Operation unit/Trackball

Standard operating unit:

Marine Electronics FURUNO

Dealer/Agent:

Havnevik Trykkeri AS.