

TIMEZERO Modules compatibility with:

	 Targets (AIS/ARPA)	 Routing	 Radar	 Sounder	 PBG	 WASSP	 DFF3D	 Trawl Positioning	 Bottom Hardness	 S-63	 VDR
TZ NAVIGATOR	✓	Optional	Optional	Optional	⊘	⊘	⊘	⊘	⊘	⊘	⊘
TZ PROFESSIONAL	✓	Optional	✓	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional

Base Software Features:	TZ NAVIGATOR v4 (1)	TZ PROFESSIONAL v4 (2)
Supported PC Operating Systems: Windows 7, Windows 8 and Windows 10	✓	✓
Connection to Instruments: NMEA0183, NMEA2000 (via Actisense NGT1-USB) or Furuno NavNet Network (for Navigation Data Only)	✓	✓
Autopilot Output Connection (3)	✓	✓
Exclusive TIMEZERO Chart Engine (2D and 3D View with Seamless Chart Redraw without limited range presets)	✓	✓
Advanced Professional User Interface	⊘	✓
Friendly Touch Screen compatible User Interface	✓	⊘
"Quick Action" NavData allows to configure any actions to a button	⊘	✓
Day, Dusk and Night Mode	✓	✓
Worldwide Planning Charts (base map)	✓	✓
Worldwide 3D Database (base map)	✓	✓
mm3d Raster or Vector chart compatibility (from various manufacturers such as C-MAP, Navionics or MapMedia)	✓	✓
Import 557 Charts (NOAA ENC)	⊘	✓
Exclusive TIMEZERO PhotoFusion (intelligent mix of satellite photos and nautical charts)	✓	✓
Depth Shading (color according to depth overlaid on the chart)	✓	✓
Custom Depth Shading (user selectable colors according to depth)	⊘	Optional
Profile Window on Divider and Tracks	⊘	Optional
Custom Contour Lines	⊘	Optional
Worldwide Tide Database	✓	✓
Tidal Currents for North America	✓	✓
Optional Western European High Resolution Tidal Current (refer to chart catalog for availability)	Optional	Optional
Optional Accurate High Resolution Satellite Photos for Bahamas and Europe (refer to chart catalog for availability)	Optional	Optional
Multi-level Undo & Redo	✓	✓
Unlimited Track Recording (with track recall feature)	✓	✓
Track Line Coloring (according to SST, Speed, Depth...)	⊘	✓
Advanced Route Planning Wizard (Route Departure Time Optimization according to Tidal Current)	✓	✓
Search & Rescue (SAR) route Patterns	⊘	✓
Anti-Grounding Cone	✓	✓
Planning Route Safety Check	✓	✓
Lost Sensor Alarm	✓	✓
Print Route Feature	✓	✓
Odometer NavData (Duration, Distance, Max Speed, Average Speed)	✓	✓
Marks, Waypoints, Routes Boundaries, Lines, Annotations & Photos (User Objects)	✓	✓
Synchronization of User Objects (Local and Cloud synchronization) among compatible TIMEZERO Platforms	✓	✓
Unlimited User Objects (4)	⊘	✓
Layer and Marks Management (including presets allowing customer to create "group" of layers)	⊘	✓
Advanced Events Management	⊘	✓
Event NavData allows to quickly drop event with the mouse	⊘	✓
Loran C & Decca grid	⊘	✓
Worldwide Place Name Search	✓	✓
POIs: Import your own Photos ("My Pictures") with Automatic Geolocation	✓	✓
POIs: ActiveCaptain (Interactive Cruising Guidebook)	✓	✓
Weather Data Service (Rain, Cloud, Air Temperature, Wind, Waves, Oceanic Currents, Pressure)	✓	✓
Ocean Data Service (Sea Surface Temperature, Plankton, Altimetry, etc.)	⊘	✓
Ocean-O Premium Data Service (Higher Resolution, Multi-Layer Data and Custom Filters)	⊘	Optional
Weather Forecast, Tides and Currents Animation	✓	✓
Alarms (Anchor Alarm, CPA/TCPA Alarm, Depth Alarm, and more...)	✓	✓
Alarm Zone NavData (know at any time the closest alarm zone)	⊘	✓
Own Ship and Targets (AIS and ARPA) Alarm Zones	⊘	✓
AIS and MARPA Target Display (with targets list)	✓	✓
AIS and MARPA Graphic CPA	✓	✓
Target Track Recording	✓	✓
AutomaticTarget Trail	⊘	✓
Advanced AIS Management (Target Activation)	⊘	✓
AIS MKD allowing to set Voyage Data and Navigational Status (Moored, Navigation...)	⊘	✓
AIS messages can be sent and received (addressed "normal" and "safety" messages)	⊘	✓
AIS Marine Traffic compatibility (Global AIS feed through an Internet connection)	✓	✓
Digital Selective Calling (DSC) and Man Over Board (MOB)	✓	✓
Fleet Tracking ("PosRep" files support)	⊘	✓
Fishing Buoys	⊘	✓
AXIS IP Cameras and Video Converter Support (Control and Tracking)	⊘	✓
FLIR Thermal Camera Integration (M-Series Control and Tracking)	⊘	✓
Generic Fixed H264 Network Camera (video only, no Control nor Tracking)	⊘	✓
Augmented Reality	⊘	✓
Dual or Triple monitors extended mode	⊘	✓
Fuel Management (Fuel Range Ring, Route Warning, Distance to Empty, Time to Empty)	⊘	✓
High Resolution 3D bathy (on selected area only)	⊘	Optional
Modules available as options:	TZ Navigator v4	TZ Professional v4
TZ Radar Module (with Furuno Ethernet Radar) includes:	Optional	✓
DRS and FAR Radar network connection (view and control the radar) Shared Charts Licensing with NavNet MFDs User Objects and Active Route Synchronization with NavNet TZtouch2 (v7) Route Synchronization with NavNet 3D and NavNet TZtouch Full Screen Radar Work Space and Chart Radar Overlay Local ARPA Algorithm with Automatic ARPA acquisition (guard zone)		
TZ Sounder Module (with Furuno Ethernet Sounder) includes:	Optional	Optional
Sounder network connection (view and control the sounder) Full Screen Sounder Work Space with echogram history		
TZ Routing Module includes:	Optional	Optional
Routing according to wind, waves and currents Isochrones with SailSet overlay Routing calculation automatically avoiding the coastline and shallow water (possibility to set the depth limit) Dual Route calculation sail/motor (depending on the wind and theoretical speed limit) Expected wind conditions display along the track Alternate routing Routing Detail (List) Routing and Weather Animation Laylines (requires wind sensor) Polar workspace : to display and modify Wind and SailSet Polar files Polar % modification Adjusting Weather files Routing variability calculation and display		
TZ PBG Module includes:	⊘	Optional
Fishing WorkSpace allowing to customize depth shading and contour lines 3D WorkSpace		
TZ WASSP Multi-Beam Module (5)	⊘	Optional
Connect to WASSP G1 or WASSP G2 or WASSP G2 survey or WASSP G3 Record depth and backscatter data Navigation data (not available with WASSP G1) Display various sonar screens such as Section, Multi-Sounder, Side Scan or Water Column (only available with WASSP G3)		
TZ DFF3D Module (5)	⊘	Optional
Connect to DFF3D multibeam sounder Display various sonar screens such as Section, Multi-Sounder, Side Scan or Water Column		
TZ Trawl Positioning Module	⊘	Optional
Connect to Marport Trawl Positioning system (single net system with 2 doors) Display the net in 2D or 3D directly on the chart Display Doors trail and Doors COG predictor		
TZ Bottom Hardness Module (5)	⊘	Optional
Record (via NMEA0183) the Bottom Hardness output by: Furuno FCV295 and FCV1150 (\$PFEC.SDbh sentence) Simrad ES70 and ES80 (\$PSIMDHB sentence) Koden CV5-FX series (\$PKODS sentence) Hondex HE-7300 Di and HE-1500 Di (\$PHDX sentence) JRC JFC-130 series (\$PJRCs sentence) Seascan (\$SPSAP sentence)		
TZ VDR (Voyage Data Recorder) Module	⊘	Optional
TZ S63 ENC Module	⊘	Optional

Notes:

- (1) - TZ Navigator can be installed on two computers
- (2) - TZ Professional can only be installed on one computer
- (3) - Connection to the Pilot can be done using NMEA0183 (via a Serial COM Port) or using NMEA2000 (via Actisense NGT1-USB Gateway)
- (4) - TZ Navigator restricted to 30,000 marks, 200 routes (of 500 waypoints each) and 100 boundaries
- (5) - You must have the PBG Module first, in order to be able to acquire the WASSP or DFF3D or Bottom Hardness module.

The following system requirements must be fulfilled to run TZ Navigator:

- Microsoft® Windows® 7 SP1, or Windows® 8.1 or Windows® 10
- CPU 1.5 GHz
- 4GB of RAM
- Video Board:
 - Minimum - Intel HD Graphic Chipset
 - Recommended - Dedicated Video Board with 1 GB VRAM or Intel HD 4th generation or above
- Screen Resolution: 1024 x 600 or higher (1280 x 800 or above recommended)
- Hard Disk: 30 GB of free space
- USB or Serial Port for connecting instruments via NMEA0183, Actisense USB NGT-1 for connecting instruments via NMEA2000 or 100 Base-T Network Adapter for Furuno Ethernet Sensors

The following system requirements must be fulfilled to run TZ Professional:

- Microsoft® Windows® 7 SP1, Windows® 8.1 or Windows® 10 (64-bit operating system)
- CPU 2 GHz Intel® Core™ i5 4th generation or equivalent
- 4GB of RAM (8GB recommended)
- Video Board:
 - Minimum - Intel HD4400 Graphic Chipset (i5 4th generation with HD4400 or above)
 - Recommended (for PBG and Multi monitor) - Dedicated Video Board with 1GB VRAM
- Screen Resolution: 1024 X 768 or higher (1280 x 800 or above highly recommended)
- Hard Disk: 40 GB of free space
- USB or Serial Port for connecting instruments via NMEA0183, Actisense USB NGT-1 for connecting instruments via NMEA2000 or 100 Base-T Network Adapter for Furuno Ethernet Sensors