ELIOS MARINE SYSTEMS

THE ITX9000 MARINE QUICK START GUIDE

Produced by Elios Marine Systems

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INTRODUCTION:

The ITX9000M uses the same hardware platform as other members of the ITX9000 family. It is furnished with an installed Windows 10 Operating System and additional software to permit users to begin work with minimum effort, straight out of the box.

Installed software includes G-Star IV waterproof GPS receiver drivers, Polarview Navigation Software (with USA and selected worldwide databases), Open Skipper, and the LibreOffice suite which provides word processing, spread sheet, presentation, draw, database management and mathematical formulae creation programs.

In addition, media player, virus and spyware protection software is installed.

A 180W AC adapter and a heavy duty DC power cord are provided.

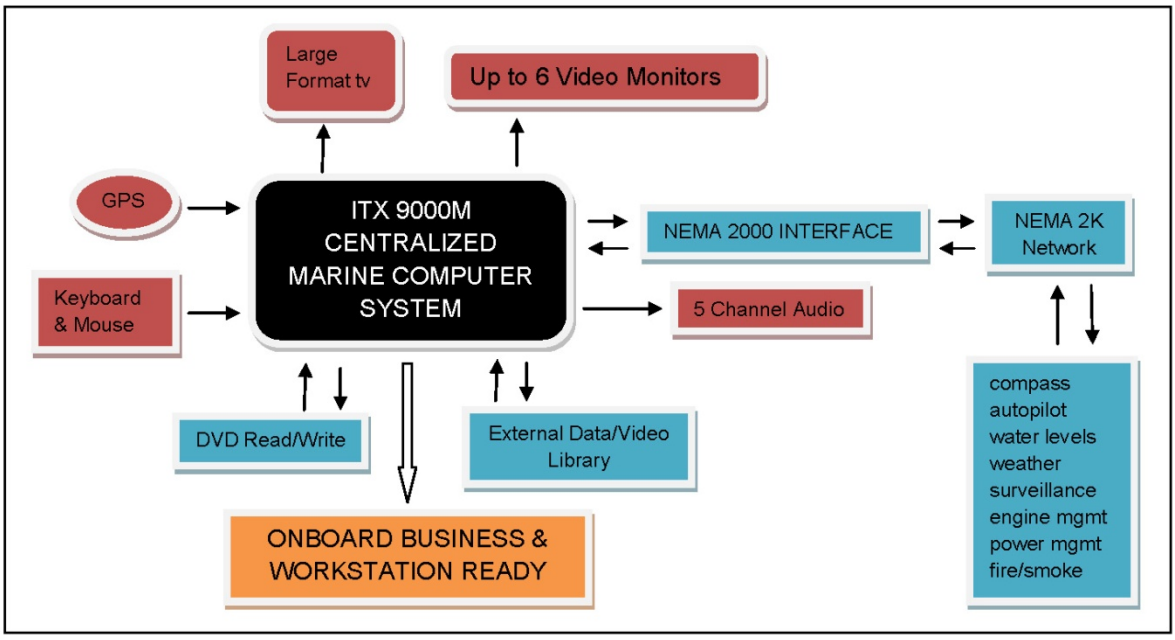
A summary of system specifications is shown in the table below.

ITX 9000M specifications

Dimensions	245mm (9.66in.) W x 274.5mm (10.81in.) D x 68.5mm (2.70in.) H
Weight	Approximately 4kg (8.8 pounds)
Corrosion Protection	6063 extruded and anodized aluminum case (elastomeric seals throughout) Stainless Steel rear interface panel Conformal coated electronics with added protection against salt spray
Installed software	Windows 10 Professional OS, G-Star IV drivers, Polarview, Open Skipper, Libre Office, VLC Media Player, Actisense Drivers & Reader, Avast Antivirus, Super Antispyware
Key Features	World Wide Navigation, NEMA 2000 sensor display and control, Remote Tablet Control, High resolution Video, 5.1 channel audio, Asus signature series motherboard, Intel I7-6700 series CPU, quiet no fan thermal system, fully operational out of the box
Integrated Functions	Wi-Fi 802.11a/b/g/n/ac, Bluetooth, smartphone/tablet support for ios7 and Android 4.0 systems, onboard overload and thermal protection systems for I/O and CPU
Back Panel I/O ports	1 x PS2 mouse/keyboard combo, 1 x HDMI, 1 x DVI-I, 1 x D-sub, 1 x Display Port, 1 x Optical S/PDIF Out, 1 x LAN (RJ-45), 6 x USB 3.0, 3 x Audio Jacks
Front Panel	2 x USB 3.0, Power Switch, HDD LED, Power On LED
Power Supply	Custom DC to DC digitally controlled PSU
RAM	8GB DDR3 installed, additional 8GB optional
SSD	250GB Samsung 850 series installed
External Optical Drive	24x read, 8x write. Provided.
VESA Mount	Four VESA Screws Provided. Mounting Plate Optional.
AC adapter	100-240VAC in/19vdc out, 180W provided.
Shock Isolation	Provided for PSU, motherboard/CPU, SSD

OVERVIEW:

This Quick Start Guide provides an overview of ITX9000 system components and instructions for connecting these components. Additionally, it provides guidance for initial startup and verification of GPS signal acquisition as well as verification of NEMA 2000 data streams as received from installed sensors (when the optional Acusense NGT-1 interface is connected to a NEMA 2000 network). Detailed safety, installation and operational information expands on these instructions and is included in the ITX 9000M User Manual and associated guides packaged with the ITX9000M.



☼ UNPACK, LOCATE AND CONNECT

UNPACK:

Carefully unpack all components shipped with the ITX9000M system. Many of these components have been tested and safely secured in the ITX9000M Custom Pelican Case. Other components such as the wireless keyboard/mouse, User Manual, DC power cable and optional NEMA Interface are packaged separately.

LOCATE:

The ITX9000M is a portable system that will centralize most ship navigation and instrument functions while also providing powerful computer capability.

The two primary conditions for locating the ITX9000M are to 1) keep the unit dry and 2) provide the unit with free air circulation. When onboard, the ITX9000M must be secured at all times. The included VESA mounting screws can be used in a user provided installation or heavy duty nylon straps can be installed to keep the unit secure while underway. The optional MP1 Mounting Plate can safely secure the unit when onboard while providing quick removal for transport to and from your vessel.

The ITX9000M is usually located at the Navigation station and can be mounted in any orientation. Alternatives are near the saloon table or in cabins. Multiple mount locations can be accommodated provided minimum wiring requirements are met. Provide sufficient clearance for wire connections at the rear panel and locate the following cables at the chosen use point(s).

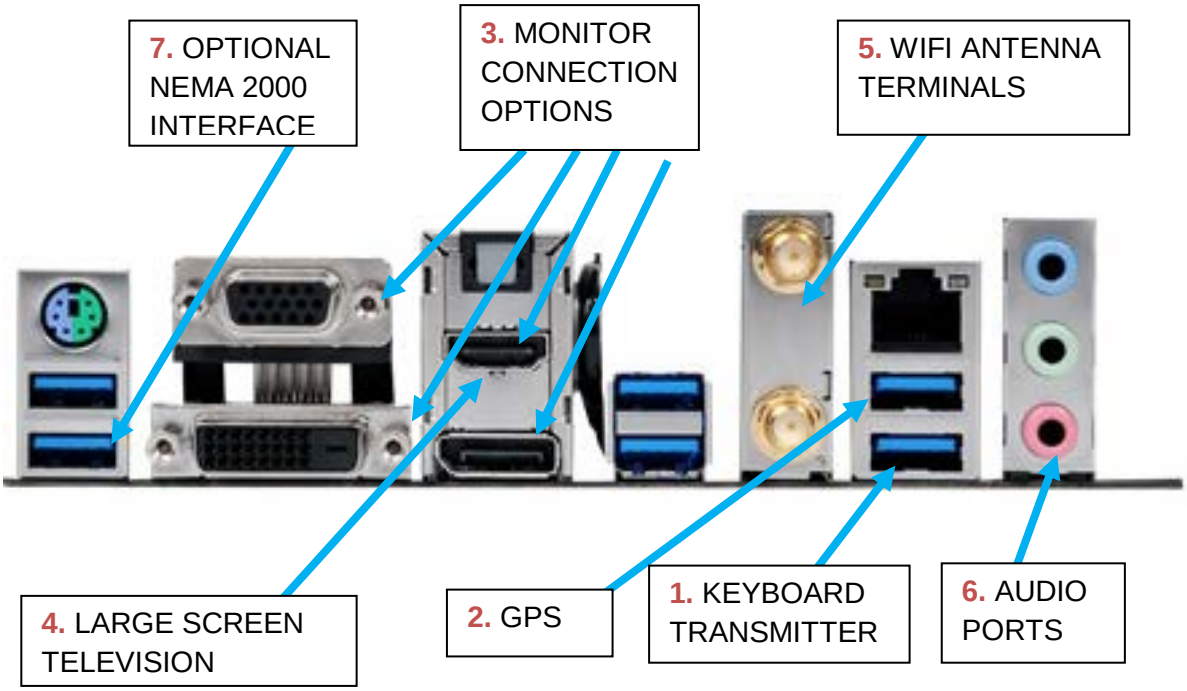
- DC Power Cable*
- Monitor Cable (VGA, HDMI, DVI-I, or Display Port)*

- GPS Cable*
- TV Cable (HDMI preferred)
- LAN Cable
- WiFi Antenna Cable
- Audio Cables
- NEMA 2000 drop cable

* indicates a cable connection necessary for operation

Securely locate and mount your Computer Monitor. If your AC power adapter for this monitor has a 19VDC output, you may prefer the optional PS1 DC to DC converter which uses 12VDC ship's power for monitor operation, thus eliminating safety issues associated with energized onboard AC supplies while underway.

CONNECT:



1. Connect the keyboard transmitter to the indicated USB port.

2. Connect the GPS USB cable to the USB port directly above the USB port used for the keyboard transmitter. This port is

designated as COM2 in software and is the only port to which the GPS should be attached.

3. The monitor (user supplied) can be attached to the VGA port, Display Port, HDMI port or DVI-I port. If the monitor accepts a Display Port connection, this would be preferred over all other alternatives. The Display Port can also be used with a Display Port to HDMI adapter which would then provide two HDMI port connections. If also connecting a large screen TV, leave the HDMI port free for this TV connection.

4. Connect a large screen TV to the HDMI port using a suitable HDMI cable. A high quality cable is preferred to assure good video and audio fidelity, particularly in high resolution installations.

5. Connect the WiFi antenna to the corresponding WiFi terminals. Connection to either terminal with either wire is acceptable.

6. Connect audio to the appropriate audio terminals. Do not connect speakers with power requirements greater than 2W unless a separate amplifier is used. Computer speakers with outputs greater than 2 watts typically have amplifiers integrated into their design. Use the Lime colored port for either headphones or a 2.1 channel stereo system. Refer to the User Manual for additional channel options.

7. Connect the Actisense NGT-1 NEMA 2000 Interface to the indicated USB 3.0 port if this option has been purchased. The NEMA 2000 cable extension on the NGT-1 connects directly to the NEMA 2000 bus via a NEMA 2000 drop cable.

☼ STARTUP

AT HOME:

- **Verify all necessary connections** have been made per the CONNECT instructions in the preceding section.
- **Insert the AC adapter** output cable male plug into the corresponding female DC input receptacle on the rear panel of the ITX9000M. Insert the adapter AC input cable into your local power outlet. The adapter accepts 50/60 Hz AC power of 100V to 240V. Power should now be available to the ITX9000M.
- **Press the Power Button** on the front panel of the ITX9000M. The unit will sequence through system integrity checks and start Windows 10 Professional. Use the Elios supplied temporary password included with your ITX9000M documentation. Press Enter. The Start Page should now be displayed.
- **Verify satellite acquisition** as follows:
  1. Double click on the "GPSInfo" icon
  2. Select "Prolific USB-to-Serial Comm Port (Com2)"
  3. Set baud rate to 4800
  4. Click "start GPS". A continuous data stream verifies receipt of GPS position data. Re-position the GPS receiver as required to improve signal strength.
- **Verify Navigation Program operation** by double clicking on the "Polarview" icon.
  a. The Main Chart Window will display. Note the Mouse Position Pointer on the chart corresponds to the Lat-Long position indicated in the upper left of the Main Chart Window.
  b. Go to the "Ship Menu" at the top of the screen and select "Live Ship Mode". This places your position (assumed ship position) on the chart.

c. Go to "Instruments" at the top of the screen and select "ship info". Time and your current position will display, verifying proper GPS operation and program processing.

ON BOARD:

- **Verify all necessary connections** have been made per the CONNECT instructions in the preceding section.
- Verify 12V - 24V Ship's power is available to the DC cable connector. Verify POLARITY IS CORRECT.
- **Press the Power Button** on the front panel of the ITX9000M. The unit will sequence through system integrity checks and start Windows 10 Professional. Use the Elios supplied temporary password included with your ITX9000M documentation. Press Enter. The Start Page should now be displayed.
- **Verify satellite acquisition** as follows:
  1. Double click on the "GPSInfo" icon
  2. Select "Prolific USB-to-Serial Comm Port (Com2)"
  3. Set baud rate to 4800
  4. Click "start GPS". A continuous data stream verifies receipt of GPS position data. Re-position the GPS receiver as required to improve signal strength.
- **Verify Navigation Program operation** by double clicking on the "Polarview" icon.

  a. The Main Chart Window will display. Note the Mouse Position Pointer on the chart corresponds to the Lat-Long position indicated in the upper left of the Main Chart Window.

  b. Go to the "Ship Menu" at the top of the screen and select "Live Ship Mode". This places your ship position on the chart.

c. Go to "Instruments" at the top of the screen and select "Ship Info". Time and your current position will display, verifying proper GPS operation and program processing. Also displayed is your Speed Over Ground and your Course Over Ground (T).

- **Verify NEMA 2000 NGT-1 Interface** operation by opening the Actisense NMEA Reader to view NMEA 2000 messages from an active NMEA bus. Field breakdown and description of selected messages is provided. The Actisense NGT-1 interface is optional.

☼ OPERATE

Many fully operational Programs have been integrated into the ITX9000M to enhance your onboard capabilities and experience. The User Manual as well as the many provided specialty manuals offer detailed information describing how to best use these programs to meet your voyaging needs.

We appreciate your decision to purchase the ITX9000M and welcome your feedback. We are committed to continuously improving our products.

The Elios Marine Project Team

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