ELIOS TECHNOLOGIES

THE ITX9000 CONSTRUCTION QUICK START GUIDE

Produced by Elios Technologies

Offices in the United States and Australia

www.eliostechnologies.com

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INTRODUCTION:

The ITX9000C 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 a G-Star IV waterproof GPS receiver, CoPilot Truck Navigation, Craftsman Construction Suite, Construction Contract Writer (50 state edition), Quickbooks Pro 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.
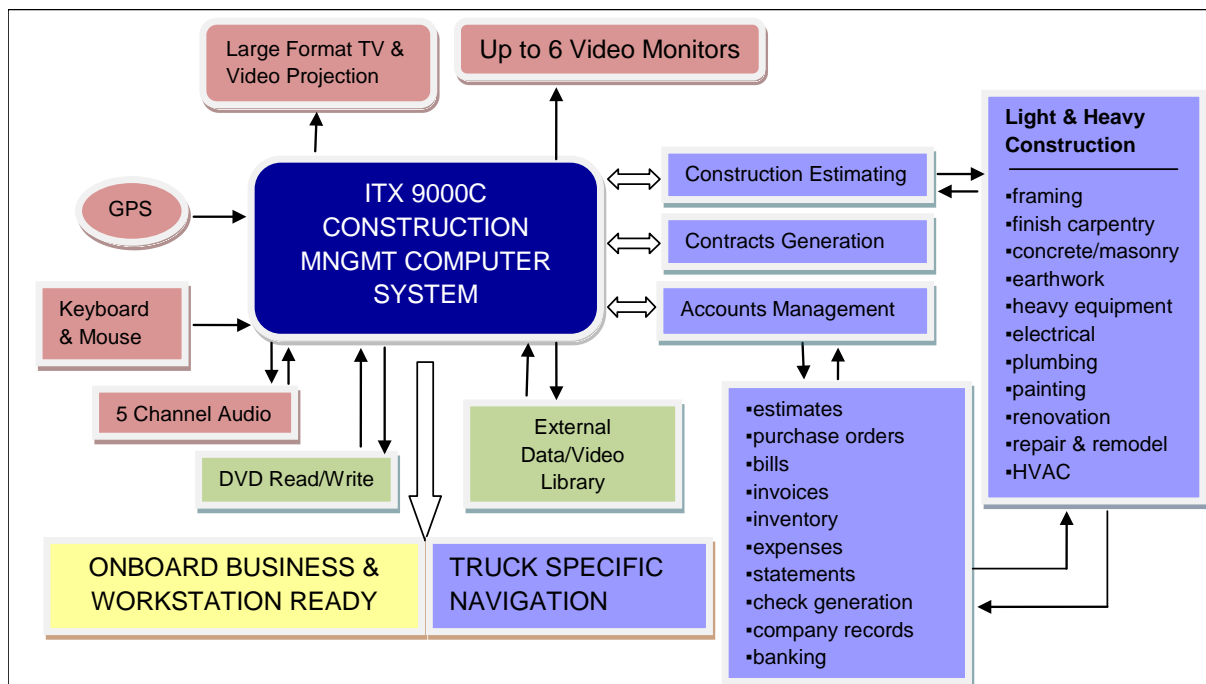A summary of system specifications is shown in the table below.

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

ITX9000C 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, CoPilot Truck, Craftsman Construction Suite, Construction Contract Writer, Quickbooks Pro, Libre Office, VLC Media Player, Avast Antivirus, Super Antispyware
Key Features	U.S./Canada Navigation, 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, 300W, 6-30VDC
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 ITX9000C system components and instructions for connecting those components. Additionally, it provides guidance for initial startup and verification of GPS signal acquisition as well as verification of proper operation of the integrated ITX9000C network. Detailed safety, installation and operational information expands on these instructions and is included in the ITX9000C User Manual and associated guides packaged with the ITX9000C.

☼ UNPACK, LOCATE AND CONNECT

UNPACK:

Carefully unpack all components shipped with the ITX9000C system. Many of these components have been tested and safely secured in the ITX9000C Custom Pelican Case. Other components such as the wireless keyboard/mouse, User Manual and DC power cable are packaged separately.

LOCATE:

The ITX9000C is a portable system that will provide vehicle navigation while also providing powerful and portable computing capability focused on enhancing business efficiencies for the construction professional.

The two primary conditions for locating the ITX9000C are to 1) keep the unit dry and 2) provide the unit with free air circulation. When in a moving vehicle, the ITX9000C 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 may also be appropriate to safely secure the unit. The MP1 provides for secure mounting and quick removal of the ITX9000C.

The ITX9000C is often located at a desk, table or cabinet within a construction trailer and can be mounted in any orientation. Multiple mounting 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).
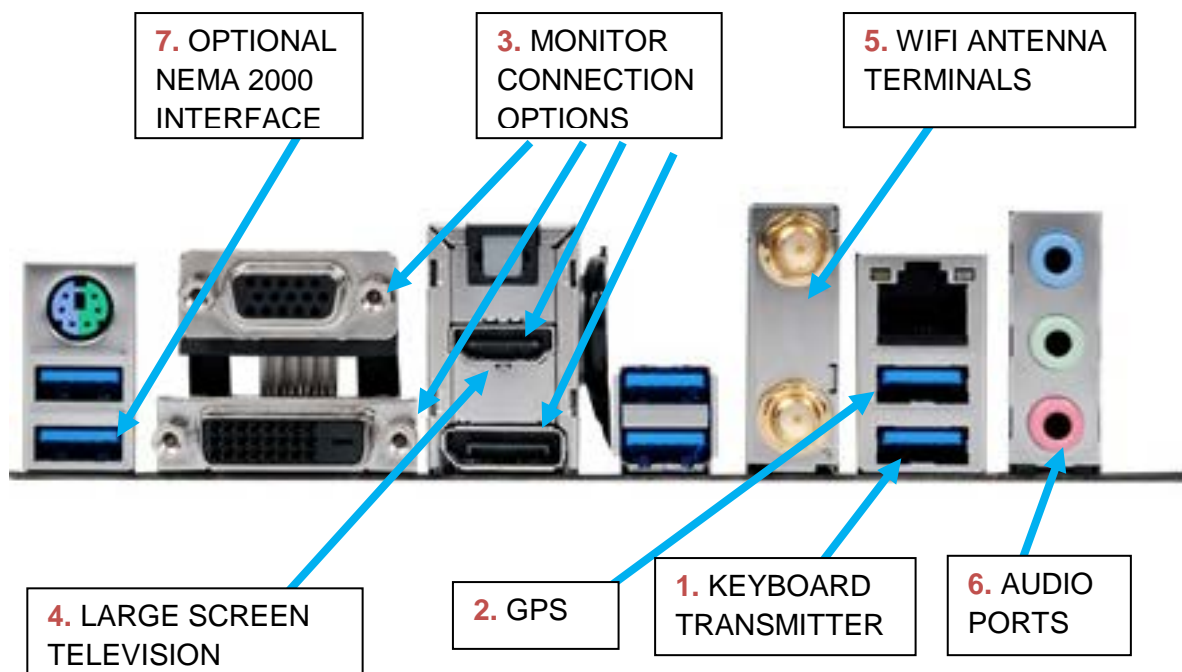
- DC Power Cable*
- Monitor Cable (VGA, HDMI, DVI-I, or Display Port)*
- GPS Cable*
- TV Cable (HDMI preferred)
- LAN Cable
- WiFi Antenna Cable
- Audio Cables

* indicates a cable connection necessary for operation

IMPORTANT: The GPS Receiver must "see" the satellites to acquire signals. Signals pass through glass, wood and fiberglass and are blocked by metals. Please keep this in mind when locating the unit. The receiver is waterproof and is IP67 rated for dust and water intrusion. The receiver can be used with the "active repeater" 10M extension cable provided with the unit to extend cable length or locate the GPS outdoors. See the Elios Technologies web site for purchasing details if additional length is needed. Two cables can be connected together for a total length of 20M.

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:

7. OPTIONAL NEMA 2000 INTERFACE

3. MONITOR CONNECTION OPTIONS

5. WIFI ANTENNA TERMINALS

4. LARGE SCREEN TELEVISION

2. GPS

1. KEYBOARD TRANSMITTER

6. AUDIO PORTS

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. The Vehicle DC Power Cable must be connected to a fused circuit of at least 15 amps. Some auxiliary power points within vehicles meet this requirement, however it is preferred that an independent power source connected directly to the vehicle's "fuse block" is used. Most vehicles have additional fuse block positions available. VERIFY POLARITY IS CORRECT before connecting the cable to the ITX9000C.

☼ STARTUP

IN THE OFFICE:

- **Verify all necessary connections** have been made per the CONNECT instructions in the preceding section.
- **Insert the AC adapter** cable DC male plug into the corresponding female DC input receptacle on the rear panel of the ITX9000C. 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 ITX9000C.
- **Press the Power Button** on the front panel of the ITX9000C. The unit will sequence through system integrity checks and start Windows 10 Professional. Use the Elios supplied temporary password included with your ITX9000C 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 Com 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 "CoPilot Truck" icon.
  a. When launching CoPilot for the first time. The Main Chart Window will display.
  b. Click on the lower left icon (the one with 6 yellow rectangular dots) to access the Main Menu. Click the large rectangular Main Menu icon to access navigation and route planning choices.
- Go to the ITX9000C Windows 10 start page. Note installed programs included with your new unit - antivirus software, spam filtering, word processing, spread sheets, video/audio processing and more.

CONSTRUCTION SITE/VEHICLE DC OPERATION:

- **Verify all necessary connections** have been made per the CONNECT instructions in the preceding section.
- Verify 12V - 24V vehicle power is available to the DC cable connector and that the polarity is correct.
- **Press the Power Button** on the front panel of the ITX9000C. The unit will sequence through system integrity checks and start Windows 10 Professional. Use the Elios supplied temporary password included with your ITX9000C documentation. Press Enter. The Start Page should now be displayed.
- **Verify satellite acquisition** as follows:
  1. Double click on the "GPSInfo" icon
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✿ OPERATE

Many fully operational Programs have been integrated into the ITX9000C to enhance your construction capabilities. These include extensive libraries of materials cost and labor data for the construction trades as well as sophisticated contract generation capability to protect you when concluding major contracts and defining work packages with subcontractors. The User Manual as well as the many provided specialty manuals offer detailed information describing how to best use these programs to meet your construction needs.

We appreciate your decision to purchase the ITX9000C and welcome any feedback you can provide. We are committed to continuously improving our products.

The Elios Technologies Project Team

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