



# Craggy Aero Ultimate Le 5.7®

Craggy Aero, LLC 3901 River Court Hornbrook, CA 96044 USA Craggy Aero Ultimate Le® Manual Table of Contents

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1.0 Introduction

The Craggy Aero Ultimate Le is an Embedded Flight Computer and Display running state of the art hardware and software.

It offers:

- Excellent Sunlight readability that sets the standard.
- SeeYou Mobile PNA, StrePla, LK8000. The SeeYou Mobile, StrePla, and Software Manual is a companion manual for this instrument.
- Connection with many existing Hardware Variometers, GPS, and IGC GPS Loggers.
- Easy to use Ray Laser Stick Controller, Laser Controller, Micro Optical Ball Track Mouse Input usable with either hand.



The Yellow Triangle is shown for part of the manual which should be read very carefully



Note with red triangle describe procedures which are critical and may result in loss of data or any other critical situation

Bulb icon is shown, when useful hint is given for the reader



#### 2.0 Technical Specifications

- High Performance Dual Core Embedded Technology 1 GHz Processor
- Sunlight readable screen 5.7" Diagonal VGA 640 X 480 resolution, true VGA
- Input Device Ray Laser Stick Controller, Laser Controller, MicroTrack handheld trackball mouse.
- Power Draw 450mA
- No exposed wiring board on the back of the instrument.
- Connectors include RJ45 serial input for a Serial GPS or Flight recorder. DB15 male for power. Dual USB A connectors for Input Device and Panel Mount USB extension.
- 3.5 mm speaker socket
- Temperature range -45C to 85C (-49F to 185F)
- Weight 15.7 oz

- 2.1 Interfaces
  - RS232 interface RJ45
  - USB for Input Device
  - USB for data transfer using USB memory stick
  - Audio Speaker Connector

3.0 Compatible Devices and Software

- CAI 302, LX1600, LX 1606, LXNAV V7 Vario
- IGC Approved Flight Recorder with Serial NMEA output
- Serial GPS, NANO, Colibri II, PowerFlarm, Butterfly Vario
- Software SeeYou Mobile PNA, Pocket StrePla, LK8000, Pocket FMS

4.0 System Components

- Display
- Panel Mount USB Port
- Speaker
- Optical Trackball Mouse

5.0 Installation

5.1 Size 106.2mm X 157.6mm X 32.8mm, 6-32 standard instrument mounting screws.



5.2 USB Panel Mount

Drill a hole in the panel and install the USB panel mount, plug the other end into one of the USB ports on the Ultimate Le 5.7.

### 6.0 Operation

6.1 Operating the Ray Laser, Laser Controller, Optical Ball Track Mouse



Stick Controller PPT on the right and Optional Taster Red button on the Left. The Stick Controller laser ball track mouse plugs into either of the USB ports on the back of the Ultimate Le. It has three usable inputs, mouse trigger (actuated with the index finger), ball to position the mouse arrow, right PPT button, left optional taster momentary switch depending on software.



- **BASF Composite with UV Resistance**
- Laser Optical Trackball
- Trigger for Mouse Arrow Select
- **PTT** Mic Momentary switch
- Additional Switches available
  - Motor Start
  - Climb/Cruise
- 19.3mm 3/4" DG LAK
  20mm 785 SH LS Stomme /
- 20mm .785 SH, LS, Stemme, Apis, EB29
- 24mm .9948 Schleicher, Pipistrel Taurus, Alisport Silent
- 24.5mm 1.00" JS

### Laser Controller



Laser BallTrack Mouse with click actuator button. No hard to use controller with button arrows menu

## **Ball Track Mouse**



The hand held ball track mouse plugs into either of the USB ports on the back of the Ultimate Le. It fits nicely in either hand. It has three usable inputs, trigger (actuated with the index finger), ball to position the mouse arrow, right button depending on software.

- Thumb Ball moves the mouse arrow on the screen
- Trigger selects items and menu functions
- Holding the trigger and moving the mouse button is used to move Nav Boxes and the Pan and GOTO functions depending on software used.
- Left Button not used.
- Right Button not used



Don't hold the mouse tight. Move the ball with your thumb to place the arrow. Take you thumb off the ball and it quits moving and it will not move in turbulence. Place arrow on item and click trigger to select.

The hardest task is to turn the glider in the simulator. Position the arrow on the glider. Click trigger and hold turn the arrow around with the ball.

6.2 Power the Ultimate Le, it takes about 2 to 3 seconds for the Ultimate Le 5.7 to boot. The Windows Screen will appear. The menu bar is hidden at the bottom of the screen, Move the mouse arrow to the bottom left of the screen and the start button will appear. Click the Icons on the Desktop to start your programs.



Click the SeeYou Icon to start the Program.



Program Updates, Aviation Data, terrain maps and user waypoints are downloaded to you Desktop PC and transferred to the USB Flash Drive.



All programs, Aviation Data, terrain maps and user waypoints are stored in the FlashDisk Folder of the Ultimate Le.

Files can be copied using the File Explorer resident in the Ultimate Le from the USB Flash. Access this by double clicking on the My Device icon on the Ultimate Le DeskTop. The File Explorer with appear. Cut and paste files from the USB drive.

Specific User turn points, Aviation Data and terrain maps should be copied to the FlashDisk folder on the Ultimate Le.

User Turn points can be downloaded from <u>http://soaringweb.org/TP</u> Copy the specific turnpoint .cup file to the flashdisk.

## **Program Update Instructions**

Instructions:

- 1. Go to http://www.naviter.com/products/seeyou-mobile/
- 2. Download to your PC SeeYou Mobile PNA-Zip package
- 3. File will be CopyToStorageCard.PNA.zip
- 4. Create a folder on your USB Traveler AutoCopy
- 5. Create another folder under AutoCopy/FlashDisk
- 6. Unzip CopyToStorageCard.PNA.zip to the FlashDisk Folder
- 7. Place USB Traveler Drive in your Ultimate Le
- 8. Power Up the Ultimate Le
- 9. Files will AutoCopy to you Ultimate Le
- 10. Remove the USB Traveler and delete the files on the traveler. If you don't it will autocopy every time you connect to the Utlimate Le.
- 11. Any file on the FlashDisk that is not on the update USB will remain, like your profiles, maps, airspace and waypoints.
- 12. Start SeeYou Mobile
- 13.Go Menu About
- 14. Check your Key and reenter if necessary
- 15. Figure below show the structure of your USB Stick 'STORE N GO(X:)"



To Enter SeeYou Mobile Key

- 1. Place cursor in the Name field
- 2. Click the keyboard icon the bottom of the screen
- 3. Enter your name as shown on the Key email
- 4. Click OK
- 5. Place Cursor in the Registration Key field
- 6. Enter the key (make sure and enter the dashes)
- 7. Click OK
- 8. Click Register
- 9. Click OK
- 10. Exit SeeYou Mobile

The page should show:

Program serial number: xxxxxxxx

Free upgrades until: xx/xx/xx

Exit SeeYou Ultimate Le

Before you shut down the Ultimate Le You may need to save the registry so you Name and Key will be remembered !!!!

!!!!! Go Start - Programs - Colibri Tools-Save Reg before shutting down the Ultimate Le, The will set your SETTINGS folder if it was changed and save the screen rotation set in the SeeYou Mobile Program.

### 8.0 Wiring

RJ45 Connector.



1 2 3 4 5 6 7 8



RJ45 Plug is not designed to IGC Standards. It can be used only with a dedicated cable. Do not plug an unknown cable as it may damage the Ultimate Le.

Pin Number	Description
1, 2	Ground
3	RX Data TO
4	TX Data From
5	NC
6, 7, 8	NC

Cables are available to connect almost any GPS source or vario input. Including PowerFlarm, LXNAV V7, Butterfly Vario, LX1606.

#### 8.1 Connectors

- 2 USB Connectors on the back of the instrument. Input Device and Panel extension.
- Speaker 3.5 mm jack connect 8 ohm speaker.
- DB15 Connector Power for the Ultimate Le +12V
- RJ45 . NMEA Data from GPS or Vario Data, RX, TX and Ground.

#### 9.0 Warranty

The Ultimate Le system is designed for VFR use only as an aid to prudent navigation. All information is presented for reference only. Terrain, airports and airspace data are provided only as an aid to situation awareness.

This product is warranted to be free from defects in materials and workmanship for one year from the date of purchase. Within this period Craggy Aero, LLC will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts and labor; the customer will be responsible for any transportation costs. This warranty does not cover failures due to abuse, misuse, accident, or unauthorized alterations or repairs.

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