

# LX 7007 pro IGC

## More Than Just One 7 More

### New hardware design

{ [HYPERLINK "http://www.lxnavigation.si/images/avionics/lx7007-proigcsd-lrg.jpg" \t "\\_blank"](http://www.lxnavigation.si/images/avionics/lx7007-proigcsd-lrg.jpg) }

The new LX 7007 system consists of two units: one 57 mm and one 80 mm unit. The highly developed and well proven 57 mm unit remains unchanged and is exactly the same as with the LX 7000 system. By contrast, the new 80 mm display unit has been completely redesigned to incorporate the latest development features of modern micro controller modules. The heart of the unit is so called "**embedded microcontroller core module**" whereby a high power microcontroller, 512 k B RAM (Random Access Memory) with back up power battery and 1MB flash memory is integrated into the system. These hardware features guarantee high reliability and availability. All system-critical data is stored in a non volatile flash memory virtually ensuring that a system failure is all but impossible. Even a failed back up battery will have an almost negligible influence on the functionality of the LX 7007. As with the previous LX 7000, the unit is **approved as an IGC flight recorder** without limitation.

*A completely new hardware design backed by numerous new firmware features*

### SD Card Interface - NEW!

SD Card interface makes LX 7007 absolute autonomous. All possible data transfers may be done by the standard SD card. There simply is no need to connect the laptop to your LX 7007 anymore. All units delivered after August 2006 are equipped with the card reader interface and one SD card. It is also available as a simple and cost effective upgrade of the existing LX 7007 units. As it is a non integrated device it may be installed anywhere in the cockpit.

The following SD Card data transfer functions are available:

{ [HYPERLINK "http://www.lxnavigation.si/images/avionics/sd-cardread-lrg.jpg" \t "\\_blank"](http://www.lxnavigation.si/images/avionics/sd-cardread-lrg.jpg) }

- Flight download
- TP/TSK upload and download
- Airport and Airspace database upload
- Flight info (declaration) upload and download
- Settings upload and download

### Three independent communication ports

Glider pilots today need to interface several units (flight recorders, PDAs) to the main vario-navigation system by the use of RS 232 communication. However, if the system has only one com

port a collision of data is a daily problem which can cause more than a little frustration to the user!

***With the LX 7007 a simple but radical solution has been adopted whereby three physically separated com ports are provided thus ensuring that any data collision during operation or data transfer become just a problem of the past!***

### Power and data output for PDA

**Adapter to power a PDA** is no longer needed as with the new LX 7007 a high efficiency DC/DC converter with a stable 5V output is integrated into the 80 mm unit. This feature makes the use of a PDA very simple and straightforward. The connection of the PDA to the the LX 7007 is literally plug and play via the cable delivered with the unit. The NMEA data output is fully compatible with SeeYou Mobile, Navigator and Winpilot. Using PDA programs like **ConnectMe, ConnectLx** or Downloader the use of laptop in the cockpit is reduced to the minimum. A PDA does the following jobs: download flights, upload and download of TP&TSK data, upload and download of flight declaration.

{ HYPERLINK "http://www.lxnavigation.si/images/avionics/lx7007-full-config-lrg.jpg" \t "\_blank" }

LX 7007 single seater full configuration

### Plug and play connection to Colibri and LX 20

Both the Colibri and the LX 20 flight recorders are **plug and play** with the LX 7007 providing power and bi-directional data exchange at any time on the ground (TP&TSK data transfer, flight declaration). In flight the flight recorders naturally operate independently as required by the IGC. All cables for connecting the Colibri or LX 20 are included with the LX 7007. Other types of flight recorders need special cables and you may need to contact the appropriate dealer for the required wiring.

### PC port

Laptop or PC can be connected at any time to the LX 7007 via the included 5P round connector that should be installed on the instrument panel. If other units (flight recorder, PDA) are connected to the instrument at the same time it will not matter as data transfer will still occur. The PC com port requires a 232 port or use of a 232 to USB adapter, if your laptop doesn't have a regular 232 port.

### User port (online tracking by GSM)

As its name implies, this port is user configurable. The connection is made with a 4P telephone type connector, where Tx, Rx and 12V DC power can be wired in. If this option is ordered a suitable cable will be supplied. The plug and play connection to the **LX navigation GSM modem** extends the system to the **on-line tracking** system of the glider, where the glider's position data is available **on the internet** using the LX freeware program and { HYPERLINK "http://www.naviter.si/" }.

{ HYPERLINK "http://www.flarm.com/index\_en.html" \t "\_blank" }

{ HYPERLINK "http://www.lxnavigation.si/avionics/products/lx7007proigc-flarm.cfm" }The LX 7007 provides the option of operating with **Flarm collision avoidance system**. This option includes a built in { HYPERLINK "http://www.lxnavigation.si/avionics/products/lx7007proigc-flarm.cfm" } module which includes a suitable transmitter, receiver and collision warning display. If you choose this option, the LX 7007 requires only one additional RF antenna connected at the rear side of the unit. The Flarm external display controlled from the LX 7007 is included with this option. LX 7007 also provides an additional graphic screen giving information about the traffic situation in the vicinity of the glider.

{ HYPERLINK "http://www.lxnavigation.si/avionics/products/lxvoice.cfm" }

### LX Voice Module - **NEW!**

The optional { HYPERLINK "http://www.lxnavigation.si/avionics/products/lxvoice.cfm" } makes LX 7007 even more user friendly as it generates voice warnings and information depending on the LX 7007 output. The Voice Module is plug and play connectable to LX 7007 system bus.

### New features for glider pilots *just a few points!*

The new LX 7007 offers **huge memory capacity** for program code and user memory, thus assuring a promising future of the LX 7007 that was designed to be fully compatible with the

{ INCLUDEPICTURE "http://www.lxnavigation.si/images/avionics/airspace-distance.jpg" \\* MERGEFORMATINET }

LX 7007 also indicates the **distance to the particular airspace**. This pilot selectable feature increases situational awareness during airspace avoidance and therefore minimizes the possibility to receive penalty points for penetrating the airspace. Voice information provided by the { HYPERLINK "http://www.lxnavigation.si/avionics/products/lxvoice.cfm" } make the navigation in the vicinity of the particular airspace even easier.

**Extended NMEA Sentences**, including task data, to drive LXMobile PDA program. This solution will reduce pilot manipulation of any PDA to a minimum.

{ INCLUDEPICTURE "http://www.lxnavigation.si/images/avionics/trafficinfo-sml.jpg" \\* MERGEFORMATINET }**Traffic information** graphic display informs Flarm users about the nearby gliders position.

An extended memory **capacity for airspace** allows uploading of nearly entire European airspace with the area of interest selectable by the pilot. If you travel from one country to another in Europe you merely need to select the relevant database.

Another important change is that after a firmware update nearly all system data remain in the LX 7007 (**Airspace, TP & TSK database, Airport data, flights, most settings**). This makes an update very simple and within the ability of many pilots.

Because of the new faster microcontroller, the **refresh time** after zoom change when in graphic display is now only around 2 seconds. Additionally a **bold line** is now used to visualize the CTRs.

{ **HYPERLINK "http://www.lxnavigation.si/avionics/products/lx7007proigc-specs.cfm"**  
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*LX 7007 - an impressive system*