



# Document information

## 0.1 Abstract

This document contains release notes for the LX iris EFIS. The user manual, installation manual, dataport and additional info can be found on [www.lxnavigation.com](http://www.lxnavigation.com).

## 0.2 Document status

**Document status: PUBLIC**

Document status	Explanation
Internal	Intended only for LX navigation staff
Public	Available publicly to all
Personal	Intended for a specific person and/or company, noted on this page
Dealer	Intended for a specific dealer, noted on this page
Manufacturer	Intended for a specific manufacturer, noted on this page

## 0.3 List of applicable products

Device	Version
LX iris EFIS 57	V2.0
LX iris EFIS 80	V2.0

## 0.4 Revision history

Document name	Document revision	SW version	Date	Revised by	Approved by	Notes
LX_EFISRN	R1	2.0	12.4.2021	L.R.	N.S.	Up to version 2.0.422

# Release notes

## 1.1 1.0.422/7111 (2021-03-24)

- Minor fix for Question dialog position
- Minor fix - checking if differential pressure data is valid before Vne warning is shown.
- Ball slip indicator added to iris EFIS AHRS page + heading indicator implemented with image to save some RAM space
- Added setting for showing ball slip indicator or brick under pyramid
- Fixes for not setting bug on left rotary press and long press if heading stripe not shown
- Fix for initializing MapGraphics settings
- Fix for TCP communication not working (problem with Mode TCP/or UDP setting) + LXBC,AHRS default interval increased to 1s
- Fixes for network setup (SSID appearing both under connected and available, hiding connected title if not connected, disconnect submenu on connected SSID click)
- 2nd rotary jumps for 5 in keyboard widget (before didn't have function)
- Reenabling DB sync (1st > 2nd seat)
- Sync Airspeed 1st -> 2nd seat
- Fix for flap position text (if 4 bytes long) shown in NavBox
- Vne warning depends on TAS instead of IAS
- Fix for joy not working correctly in menu after question popup shown
- Hide Network menu and Cloud Info on 2nd seat
- Accessing Cloud Info from Cloud setup
- "AHRS with GPS" changed to "AHRS" in CAN unit info
- Ignore Copilot on import pilot
- Say Airport ICAO code, elevation and 2nd RWY on APT selected
- Joy handle long press
- Fix for Cloud DB sync filename length issue
- Airspace preview airplane icon according to settings
- Minor fix for canceling warnings on init page
- Added popup messages during sync from Cloud
- Disabling Cloud Sync DB, Flight upload, SW update etc during flight
- Fixed slovenian translations for Cloud menu
- Greying out Username and status in Cloud Info
- Storing WiFi passwords by BSSID and SSID (to overcome issues of forgetting mobile hotspots due to mobiles changing BSSID every time hotspot is turned on)
- Fix for parsing flarm NMEA sentences version 8 and 9



## **1.2 1.0.389/7038 (2021-02-26)**

- Minor changes on AHRS, G force and TA pages due to RAM optimizations.
- Implementation of Flarm features.
- Fix for Slip and G-force orientation.
- Added one short beep on printscreen grab.

## **1.3 1.0.377/7015 (2021-02-19)**

- New LX logo
- New AHRS module (g-micro) orientation

## **1.4 1.0.372/7001 (2021-02-16)**

- Fix for WiFi module stop working after connecting Era to Zeus

## **1.5 1.0.308/6845 (2020-12-10)**

- Minor fix on logbook dialog (when moving to the last flight can not return all the way back to the title item)
- Added Gforce license
- Fix for DeleteAllBin password feature - ignoring letter case
- Implemented preserving private key on internal SD format

## **1.6 1.0.257/6760 (2020-10-23)**

- Extended red cross timeout.
- Limiting slip value to +-10 degrees.
- Fix in LicenseManager (there was a problem if value 0 was in MD5 byte array).

## **1.7 1.0.229/6697 (2020-10-02)**

- Fix for wrong gMicro orientation on 80mm devices.
- Fix on G-Force page - knob 1 not working in sub menu.
- Fix for deselecting ATP/TP/AS.
- Workaround for problem with settings corruption on update from older versions.
- Possible fix for Horizon file corruption problem.
- TE compensation removed from Altitude calculation (fix for wrong altitude indication reported by Leoš).
- Fix for wrong AGL navbox indications.
- Omitting polar line in IGC file.
- Send to email reenabled.
- Added commands for set/reset magnetic calibration (gMicro)
- Added toggle between heading/track on left rotary long press (set current heading bug on short press)
- Added constraints on settings structures size (this has no effect on user functionalities).
- Implemented methods for handling Joy's third function button. Still need to define actions.



### 1.8 1.0.191/6622 (2020-09-01)

- SENS broadcast sentences (LXBC) not being send out on BT
- Fix for setting QNH via LXDT,SET,MCBAL which was causing device crash
- Fix for broadcasting LXDT,ANS,SENS instead of LXBS,SENS via Bluetooth.
- SSL certificates implemented on Odin. Certificate files are included in LXU from this version on.

### 1.9 1.0.171/6550 (2020-08-05)

- Minor fix for showing warnings on init page
- Fix for wifi status icon not shown on white theme
- Showing build number on init page and in CAN device info
- Email length expanded from 30 to 60 characters
- Removed Mail settings (will be only settable in Cloud)
- Added SENS broadcast to LX NMEA 2.0 protocol (OAT, voltages, inputs, SC)
- Added IGC file size parameter to LXDT,GET,FLIGHT\_INFO

### 1.10 1.0.160/6522 (2020-07-22)

- Added password for changing Hw version
- Fixed sync APT to 2nd seat if received over user port (LXDT)

### 1.11 1.0.155/6519 (2020-07-17)

- Improvements of User port protocol (sentence for setting navigation destinations, sentence for getting and setting broadcast intervals)
- Added "Reboot now?" question when changing theme in Graphic setup.

### 1.12 1.0.151/6508 (2020-07-14)

- Displaying "Select from the list" instead of empty field for Select TP/APT/AS item in Transfer menu

### 1.13 1.0.142/6504 (2020-07-06)

- Added Watchdog reset to waypoint sort loop on NRST page (possible fix for NRST page crashes)
- Delete route on 2nd seat if deleted on 1st and vice versa if Sync on change is enabled.
- Fix for APT freq. voice not being played if new APT received from 2nd seat (sync)....
- Total and remaining distance show "—" instead of 0.0 (when route not selected)
- Fix for Odin update screen orientation

### 1.14 1.0.136/6495 (2020-07-02)

- Fix for BT and WiFi status icons not being shown correctly on secondary units (including digital vario indicator)
- Odin version in device info production page
- Additional RAM space optimizations



- Fix for Odin update progress screen wrong orientation
- Fix for Brightness setting. Before it was being synchronized between 1st and 2nd seat device. Now each has individual setting. This is a bug introduced while implementing brightness settings on iris.

### **1.15 1.0.119/6478 (2020-06-15)**

- Temporarily disabling Vs and Vne warnings
- Optimizing Setup menu for saving RAM space (dividing menu into two views)
- Added language Italian

### **1.16 1.0.112/6457 (2020-06-10)**

- Fix for black box (line editor) staying on screen after filter/sort item is finished editing
- Fixes for sending data in wrong unit (if currently user unit is not default) over user port protocol
- protocol extended with additional navigation and sensor data as requested by LK8000 and XC Soar developers

### **1.17 1.0.110/6453 (2020-06-08)**

- Added password for formatting internal SD
- Fix for updating CAN units does not start if maps are disabled in settings.

### **1.18 1.0.102/6446 (2020-06-02)**

- Fix for WiFi BT Server name (SSID) default value longer than max size in settings (issue reported by Marco)
- Fix for crashes on airspace preview

### **1.19 1.0.100/6441 (2020-06-02)**

- Fix for "Delete all files" password not deselecting DB files.
- Fix for wrong SW version in CAN unit info
- Changed conditions for secondary device shutdown - now it shuts down only if not in flight and without power supply.
- Shutdown implemented with NVIC\_SystemReset instead of while(1)
- Added Setting to disable maps
- Added languages: German, Danish, Norwegian, Dutch

### **1.20 1.0.90/6423 (2020-05-27)**

- Potential fix for OAT problems. Indicating N/A when sensor data is not available.
- Temporary disabling Sync DB due to problems with reliability

### **1.21 1.0.86/6410 (2020-05-25)**

- Potential fix for Odin update problems - added some delay after update.
- Fix for Network module error showing if wireless mode set to Off



- Fix for updating with LXU files
- Fix for license files transfer - case insensitive MD5 comparison
- Fix for Airspace page List empty line blinking on Cancel button pressed
- Common text file for Eos80, Era, 10k, TM and Horizon
- Fix for importing pilot not working
- Fixes for Sync DB and SD card corruption problem
- Fix for false SD card error detection
- Fix for pilot name longer than 11 chars in \$LXDT,SET,PILOT
- Fix for Eos80/Era/10k/TM/Horizon crashing on knob 2 rotate when selecting Sort type in APT/TP select dialog

### **1.22 1.0.70/6381 (2020-05-12)**

- (Potential) fix for Becker radio communication problem
- Fix for not keeping power on (on stand alone versions) during LxDecompressUpdater (updating with lxc file over CAN)
- Fix for showing warning while another warning shown

### **1.23 1.0.37/6367 (2020-05-07)**

- AHRS page renamed to PFD in Setup
- Added unit mbar
- Fix for Sort by ICAO
- Added "+" and "," signs to basic keyboard
- Warning if Odin is bricked
- Fix for Internal SD card error warning not being shown
- Fix for update more than one device over CAN
- Fix for line editor staying on screen in setup menu after edit mode finished

### **1.24 1.0.7/6345 (2020-04-28)**

- Long file names enabled.
- KML exported file name changed to Flight\_date\_time.
- License manager implemented.
- Only AHRS and Setup page is accessible without license.
- Added "This list is empty" text to Airspace and Logbook page if list is empty.
- End flight interval reduced to 15s (same as on Salus).
- Renamed to LX iris EFIS (pro) on init page.
- Added Flight Manager class for detection of flight phases and landings + corresponding NavBoxes.

### **1.25 Automated builds (2020-04-06)**

- Fix on quick settings for rounding values if non-default units
- LX NMEA 2.0 supported on BT
- Radio commands and data output supported in LX NMEA 2.0 protocol.
- Restoring Levil G-Micro sentences and forwarding it to user port/bluetooth
- Added password for GPS last fix set to currently selected TP location

## 1.26 Automated builds (2020-03-30)

- LX NMEA 2.0 protocol: added outputs for AHRS.
- Setup menu optimization (releases some heap and fixes random crashes)

## 1.27 (2020-03-23)

- Sending QNH and Brightness as MCS Broadcast.

## 1.28 (2020-03-16)

- Minor fix for sync APT

## 1.29 (2020-03-09)

- Fix for Horizon showing white lines (revalidation problem) if device is placed with exactly 0 deg bank and changing pitch

## 1.30 (2020-03-02)

- Fix for AHRS invalid indication

## 1.31 (2020-02-24)

- ICAO code shown on APT/TP details page
- Additional info added to exported KML file
- Fix for corrupting logbook if Setup page exited while in pilot menu...
- Warnings reenabled
- Fixed Altitude graph (line width, correct units, correct value, altitude over elevation)
- Airspeed alive threshold lowered from 36 to 10 km/h
- Fix for showing correct units for Thermal gain and max in navboxes (TA page)

## 1.32 (2020-02-17)

- Added navboxes: Time Local, Total RTE distance, remaining RTE distance, Leg distance, ETE, ETA UTC, ETA Local, Magnetic heading, Leg ETE, Leg ETA UTC, Leg ETA Local, Elevation, Density alt.
- Heading bug color changed to turquoise
- Long press on left rotary knob sets current heading as bug value
- Fix for selected TP flickering
- Fixed drawing tail
- Fixed map background color according to selected theme
- Default map colors set to more visible on both white and black theme
- Wind widget re-enabled
- Airspace and Info page reenabled
- Added remove pilot feature
- Added reverse route button

### 1.33 (2020-02-10)

- Added APT page
- Bug sync added
- Fixed bug for Horizon not shutting down
- Optimized WidgetRoll
- FG replaced with surface in Waypoint details
- Irrelevant navboxes removed, others renamed
- Secondary unit supported
- Sync bug between main and secondary unit
- Automatic activation of task/route
- Sync Airspeed, APT/TP/AS files, QNH, Pitch, Brightness
- Added default page setting
- Changed motorized airplane image on map
- Fixes for glitches on white theme

### 1.34 (2020-02-03)

- Exporting KML
- Selecting Pilot in init setup
- Disabled alt. offsetting before flight is started
- Setup Logbook not showing Enter page
- Disabling password for update
- Horizon bootloader implemented
- Clean view settings
- Club mode reenabled
- Smoother appearance in Demo mode
- Added data invalid lines (red cross) over widgets on AHRS page
- Rate one turn indicator implemented
- Pitch and brightness setting in quick setup
- Letter M shown in heading tape when magnetic heading is shown.

### 1.35 (2020-01-27)

- Added pitch setting in quick setup.
- Added FPM unit for VS.
- Cage/Uncage functions in menu.
- Altitude in feet and VS in FPM rounded to 10.
- Sending altitude and airspeed data to gmicro.

### 1.36 (2020-01-14)

- Initial version





# Contact

## Headquarters

LX navigation d.o.o.  
Tkalska ulica 10  
SI-3000 Celje  
Slovenia

## VAT ID

Company is registered in Slovenia,  
EU under the VAT ID: SI40539601

## Webpage

[www.lxnavigation.com](http://www.lxnavigation.com)

## Phone

+386 (0)3 490 46 70

## Fax

+386 (0)3 490 46 71

## Sales

[sales@lxnavigation.com](mailto:sales@lxnavigation.com)

## Support

[info@lxnavigation.com](mailto:info@lxnavigation.com)