



# PowerFLARM EAGLE

PowerFLARM Eagle (WiFi, 2022)  
PowerFLARM Eagle ADSB (WiFi, 2022)

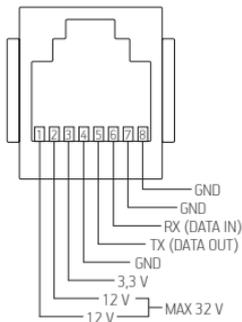
User's manual  
version 1.5

Made in Slovenia.  
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**DO NOT CONNECT ANY CAN (POWER & DATA) CABLES OR CAN DEVICES TO FLARM1/FLARM2 RJ45 PORTS AS IT CAN DAMAGE THE FLARM UNIT.**

**FLARM1/FLARM2 RJ45 PORTS ARE ONLY COMPATIBLE WITH OTHER FLARM DEVICES.**

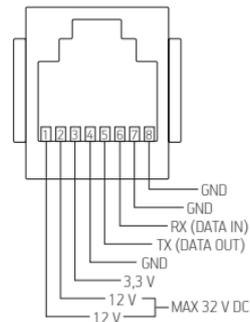
**FLARM 1**  
RJ45 FLARM data port



Standard FLARM RJ45 connector with power and data. Supports any type of data type and baud rate (NMEA, Garmin TIS).

FOR CONNECTING PILOT CAN USE:  
6 PIN 1:1 FLARM CABLE or  
8 PIN 1:1 FLARM CABLE  
**ALWAYS CHECK PIN-OUT, DO NOT USE ANY CAN UNITS ON FLARM PORTS**

**FLARM 2\***  
RJ45 FLARM data port



Standard FLARM RJ45 port with only DATA out (NMEA @ 19200), shared with built-in WiFi/Bluetooth module.

FOR CONNECTING PILOT CAN USE:  
6 PIN 1:1 FLARM CABLE or  
8 PIN 1:1 FLARM CABLE  
**ALWAYS CHECK PIN-OUT, DO NOT USE ANY CAN UNITS ON FLARM PORTS**



**Antenna connectors**  
SMA connectors are marked with antenna type

Always configure the LX FLARM Eagle before first use. Set your ICAO 24-bit address, aircraft type and transponder configuration (chapter 1.2).

### **PowerFLARM Eagle (WiFi, 2022)**

#### **IGC flight recorder**

(Anytime upgrade with license only - Buy at LX SHOP)

#### **ENL sensor**

(Anytime upgrade with license only - Buy at LX SHOP)

### **PowerFLARM Eagle ADSB (WiFi, 2022)**

#### **IGC flight recorder**

(Anytime upgrade with license only - Buy at LX SHOP)

#### **ENL sensor**

(Anytime upgrade with license only - Buy at LX SHOP)

#### **Diversity module** (Module and antenna integrated)

(Activate with license only - Buy at LX SHOP)

#### **Garmin TIS®**

(Anytime upgrade with license only - Buy at LX SHOP)

#### **When Garmin TIS® is activated:**

FLARM 1 port is Garmin data output at 9600 bps

FLARM 2\* port is FLARM/Navigation output at 19200 bps

## **1. Installation**

After unpackaging, use provided Power adapter to power the device with 9-36 V DC via RJ45, connect and install GPS antenna facing the GPS sign of the antenna towards the sky. Connect and install FLARM RF antenna, ADS-B antenna and Diversity (FLARM 2) antenna according to FTD-041 ([www.flarm.com](http://www.flarm.com)) and configure the unit.

### **1.1. Basic configuration of LX FLARM Eagle**

The LX FLARM Eagle can be configured by the use of the config file, stored on USB flash drive using downloadable web software FLARM TOOL

from [flarm.com](http://flarm.com) (can be found under Support/Firmware updates). Always use the latest version of FLARM TOOL program on your PC.

Default settings:

- Flight recorder logtime is set to 4 seconds.
- Communication baud rate is set to 19200 bps.
- Output data is set to "navigation & FLARM".
- Horizontal detection range is set to 25500 meters.

**SOME SETTINGS IN FLARM FIRMWARE WILL NOT WORK CORRECTLY OR WILL BE LIMITED IF YOU DO NOT USE THE LATEST FLARM FIRMWARE VERSION. ENSURE THAT LX FLARM EAGLE IS UPDATED AT LEAST ONCE PER YEAR.**

### **1.2 Advance configuration of LX FLARM Eagle**

The LX FLARM Eagle can be configured by the use of the config file, stored on USB flash drive using in-browser software FLARM CONFIGURATION TOOL

from flarm.com (can be found under Support/Tools and software).

Other option for advance configuration can be performed by connection a smart device to flarm's built in WiFi module (see section 5. FLARM WiFi portal) under subsection 'Configuration'.

### **2. Flights/logbook download**

Pilot can download flight via USB or via FLARM WiFi portal.

#### **2.1 USB download**

The most convenient way to download flights is via USB flash drive, as it is an automatic procedure. FLARM will store all finished flights from internal memory to USB flash drive (if it is inserted). Stored flights can be viewed on PC (.igc format).

#### **2.2 FLARM WiFi portal flight download**

See chapter 5.1. to connect to FLARM WiFi portal and select "Logbook" on the main "Dashboard" page.

#### **3.1 Updating LX FLARM Eagle via USB**

To update device, download the latest FW version at [www.lxnavigation.com/support/software](http://www.lxnavigation.com/support/software) and copy it to the root of USB flash drive. Insert the USB into the device and power it on. Wait 5 minutes and restart it. The LX FLARM Eagle is updated.

#### **3.2 Updating LX FLARM Eagle via FLARM WiFi portal**

See chapter 5.1. to connect to FLARM WiFi portal and select "Transfer" on the main "Dashboard" page. Select the desired transfer.

### **4. Completing the installation**

Connect any compatible FLARM display to your LX FLARM Eagle via RJ11 FLARM cable to get the full potential of the system. LX FLARM Eagle will provide the necessary power (12 V and 3,3 V) and data via single cable.

**ALWAYS CONFIGURE YOUR DEVICE PRIOR TO FIRST USE.**

## 5. FLARM WiFi portal

Each device has integrated FLARM WiFi portal which allows the pilot to manage his flarm device.

**Works with versions WiFi, 2022 or later.**

### 5.1 Connecting to FLARM WiFi portal

Every PowerFLARM Eagle a built-in WiFi/Bluetooth module.

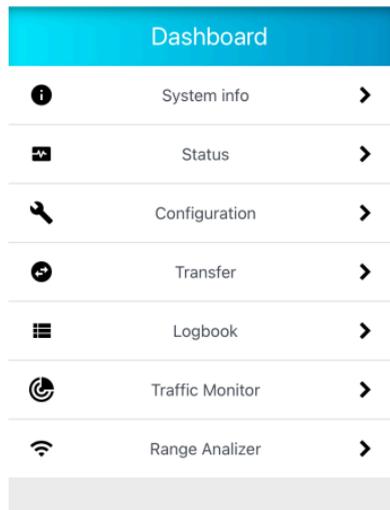
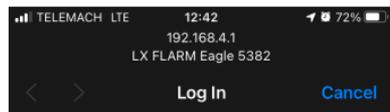
Power up the device and use any smart device to connect to Flarm's network and use the password which is written on the back of your device.

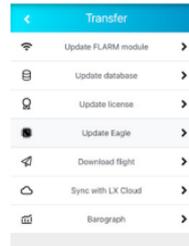
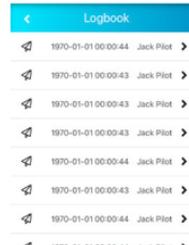
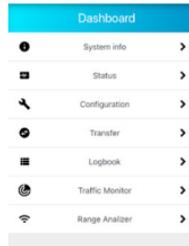
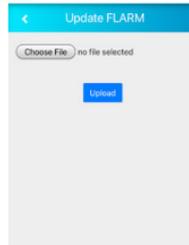
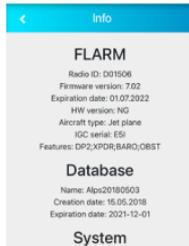
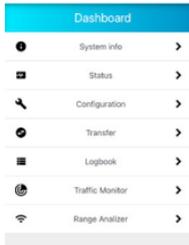
**If the "Dashboard" is not opened automatically, go to web browser on your smart device and write following URL: 192.168.4.1**

### 5.2 Functions

Access to all essential functions of your device and more:

- System info
- Status
- Configuration
- Transfer
- Logbook
- Traffic monitor
- Range analyzer





## End user license agreement

This agreement is made between the Customer (the person and/or company that bought the End Product, and all subsequent users and owners) and LX Navigation d.o.o., Tkalska ulica 10, SI-3000 Celje, Slovenia (hereinafter "LXN").

### Terms and termination of agreement

This agreement shall commence when the Customer receives the product.

By buying and using the End Product, the Customer has accepted the following terms and conditions.

If the Customer does not agree with the said terms and conditions, he can return the product if it is undamaged and without any sign of use, within 30 days of receiving it, and receive a full refund, thus terminating this agreement.

### General information

The Customer is hereby notified of the annual Flarm update scheme in its original form:

"From the March 2015 Update, every FLARM device needs to be updated to the latest firmware version at least once per year (rolling 365 days). This has to be part of the Aircraft Maintenance Program (AMP). The entry in the AMP is to be made during installation. If you have a FLARM installation that is not previously monitored by the AMP, an entry should be made as soon as possible."

Other legal and useful information can be found on FLARM official webpage ([www.flarm.com](http://www.flarm.com)).

### End user license agreement

By buying and using the End Product, the Customer has accepted the terms and conditions of FLARM EULA (FTD-019), found at [www.flarm.com/manuals-documents/](http://www.flarm.com/manuals-documents/).

## Warranty

LX FLARM Eagle, software, firmware, license keys, and data are provided on an “as is” basis without warranty of any kind — either expressed or implied — including, without limitation, any implied warranties of merchantability or fitness for a particular purpose. LXN does not warrant the performance of the device, software, firmware, license key, or data or that the device, software, firmware, license key, or data will meet your requirements or operate error free.

LXN warrants this device for a period of two (2) years after the original date of purchase against defects due to faulty workmanship or materials arising from normal use of the device. The warranty covers working parts that affect the function of the device. It does NOT cover cosmetic deterioration caused by fair wear and tear, or damage caused by accident, misuse or neglect. Any attempt to open or take apart the device (or its accessories) will void the warranty.

## Limitation of Liability

In no event shall LXN be liable to the Costumer or any party related to the Costumer for any indirect, incidental, consequential, special, exemplary, or punitive damages (including, without limitation, damages for loss of business profits, business interruption, loss of business information, loss of data or other such pecuniary loss), whether under a theory of contract, warranty, tort (including negligence), products liability, or otherwise, even if LXN has been advised of the possibility of such damages. In no event will LXN's total aggregate and cumulative liability to the Costumer for any and all claims of any kind arising hereunder exceed the amount of fees actually paid by the Costumer for the device, license keys or data giving rise to the claim in the twelve months preceding the claim. The foregoing limitations will apply even if the above stated remedy fails of its essential purpose.

## **Indemnification**

The Costumer will, at their own expense, indemnify and hold LXN, and all officers, directors, employees and resellers thereof, harmless from and against any and all claims, actions, liabilities, losses, damages, judgments, grants, costs, and expenses, including reasonable attorneys' fees (collectively, "Claims"), arising out of any use of a LX FLARM Eagle, software, firmware, license key, or data by the Costumer, any party related to the Costumer, or any party acting upon their authorization.

## **Amendments**

LXN reserves the right, in its sole discretion, to amend this Agreement from time to time by posting an updated version of the Agreement on [www.lxnavigation.com](http://www.lxnavigation.com), provided that disputes arising hereunder will be resolved in accordance with the terms of the Agreement in effect at the time the dispute arose. We encourage you to review the published Agreement from time to time to make

yourself aware of changes. Material changes to these terms will be effective upon the earlier of (I) your first use of the LX FLARM Eagle, software, firmware, license key, or data with actual knowledge of such change, or (II) 30 days from publishing the amended Agreement on [www.lxnavigation.com](http://www.lxnavigation.com). If there is a conflict between this Agreement and the most current version of this Agreement, posted at [www.lxnavigation.com](http://www.lxnavigation.com), the most current version will prevail. Your use of the LX FLARM Eagle, software, firmware, license key, or data after the amended Agreement becomes effective constitutes your acceptance of the amended Agreement. If you do not accept amendments made to this Agreement, then it is your responsibility to stop using the LX FLARM Eagle, software, firmware, license key, and data.

Return address:

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

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