

FLARM Obstacle database update

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Version history

Date	Version	Author	Description
Feb 15, 2014	1.0	gwe	Initial revision
May 7, 2014	1.01	gwe	Additional LX info

1 Overview

Starting with **FLARM** firmware release 5.13 and **PowerFLARM** firmware release 3.40, **FLARM** offers licenced obstacle database updates for a moderate fee. This document explains how to obtain and install licenced obstacle database updates.

The database is now distributed in a `.ob2` file. This file contains:

- The obstacle database.
- A list of licences which unlocks the database for use with specific **FLARM** devices identified by device type and serial number.

The `.ob2` file can be obtained from our webshop at

<http://shop.flarm.com/>.

2 Supported devices and system requirements

The following devices currently support licenced obstacle database updates:

- Flarm05 and FLARM-IGC05 (LED strip, above/below indication)
- Flarm06 and FLARM-IGC06 (LED circle)
- **PowerFLARM Portable**



- **PowerFLARM Core**
- EDIATec ECW100
- lxnav flarmMouse
- LX navigation RedBox, MiniBox, Flarm Mobile, . . .
- Garrecht TRX-1500 and TRX-2000
- OzFLARM und MiniOz¹
- FLYTEC 6030/Br" auniger IQ-Compeo+
- lxnav LX80xx, LX90xx²

In all cases, both the basic and the IGC variant are supported. IGC devices typically have a pair of holographic stickers.

For the update, you need:

- **FLARM**: Software 5.13 or higher
- **PowerFLARM**: Software 3.40 or higher
- Update using a cable: flarmTool 3.00 or higher and cable
- Update without cable: Micro SD card or USB stick
- Computer and internet connection
- Credit card or PayPal account

PowerFLARM devices can only be updated via SD card or USB stick.

3 Continued use of the old database

FLARM software 5.13 no longer supports the old database (.obs format). **If you wish to continue to use an installed .obs database, do not update to 5.13.** This is possible until the next mandatory update in March 2015. The only exception are Flarm04 devices (see below).

If you update a device which has a .obs database installed to 5.13, it will issue an error B1 (no database licence; exception: Flarm04). Flarm05 and Flarm06 devices will flash the Power LED. **The error can be acknowledged by pressing the button or it will expire after 30 seconds.** Installation of the new .ob2 database or removal of the old database will clear the error.

¹Currently, no obstacle database is available for Australia.

²Supported from LX software version 4.04. Please make sure you use the internal FLARM serial number (menu Hardware-Flarm), *not* the serial number of the LX device. Please see the LX manual for details.



If you wish to use **FLARM** software 5.13 without any obstacle database, you can remove it by selecting “Flarm → Clear memory” in flarmTool.

Flarm04 devices (LED strip without above/below indication) do not support licenced obstacle database updates. They can continue to use the last free database version.

4 Licence expiry and follow-up updates

Obstacle database updates are valid for one flying season. After expiry, a warning message is issued. Obstacle warnings remain fully functional even with an expired database.

The webshop will store your device information and remind you by email when your database is about to expire.

5 Device type and serial number

In order to generate the .ob2 update file for your device(s), the webshop needs device type and internal serial numbers.

Note: Please make sure you're using the *internal serial number* of your device. It is not always identical to the one on the ID sticker.

LX devices with integrated FLARM: LX9000 shows the internal FLARM serial number under the menu Hardware-Flarm. For this and other devices, please consulte your LX manual or LX support.

Note: If you manually enter your serial number(s) in the webshop, we strongly recommend using **copy/paste (Ctrl-C/Ctrl-V)** to transfer the serial number from the flarmTool window. **FLARM** devices will reject licences with a wrong serial number. We cannot reimburse licences purchased with a wrong serial number.

Please determine your internal serial number as follows:

- Field “Serial No. (dec)” in flarmTool.
- All devices with SD card reader or USB connection: **FLARM** and **PowerFLARM** devices with recent software versions store their information in a file `FLARMDEV.CSV` on the card/stick on startup. The file is designed to contain information about an arbitrary number of devices.
- flarmTool version 3.00 or higher stores your devices' type and internal serial number in a `FLARMDEV.CSV` file on your computer.
- **PowerFLARM** Core or Portable: Here the internal serial number is identical with the one on the ID sticker, e.g. FLAPFC11E-02732.



If you plan to batch update a number of devices, we recommend to use the FLARMDEV.CSV file. Please ensure that the file contains information about all your devices before you buy the update in the webshop.

Some OEM devices offer an information page displaying the device type and serial number. Please consult the manual of your device.

6 Purchasing the database update

In order to purchase the first update, you must register your devices' types and serial numbers in the webshop. The webshop stores that information for future updates.

- Sign up in the webshop at <http://shop.flarm.com/>.
- Select the desired database update under FLARM or PowerFLARM.
- Add the required number of updates to your shopping cart.
- Click on "Checkout". You will be asked to enter device type and serial number for your devices.
- If you do a batch update of multiple devices, you can import your FLARMDEV.CSV file. Click on "My account", then "My devices". Select your FLARMDEV.CSV file and click on "Import". Then, click on "Checkout" again.
- Pay using your credit card or PayPal.
- The webshop will now create your update file (.ob2) and send a download link by email. The file contains the obstacle database and licences for each of your devices.

7 Installation of the database update

7.1 flarmTool

- Connect your **FLARM** to flarmTool.
- Select Flarm → Upload Obstacles.
- Select the .ob2 file.
- Select the transmission speed.
- After flarmTool indicates successful completion of the update, you can connect and update the next device.



7.2 Micro SD card/USB stick

- Copy the .ob2 file to the top level folder of the card/stick.
- Delete any other .ob2 files on the card/stick.
- Insert/connect the card/stick to your device.
- Apply power to the devices and wait for the update to complete (**PowerFLARM Portable**: Select Info → Update.)

Note: Flarm05, Flarm06 and OEM devices with a buzzer will acknowledge successful installation of the update by a triad sound. After the sound, you can update the next device.

The licence will be verified when the device is powered up the next time. Licence verification takes about two minutes, but can be done at a later stage.