

FLARM Device Configuration & Registration

Chicagoland Glider Council Presentation Series



By John DeRosa

Issue Date: March 9, 2026



PowerFLARM Fusion



LXNAV-PowerMouse



LX Navigation PowerFlarm Eagle



LXNav PowerFLARM Flex



LXNAV FlarmBat

PLEASE NOTE

This presentation **may have been recently updated** with new information, changes, and/or corrections.

Be sure to visit my presentation web site and download the latest version of this document.

It could make an important difference with your work!

<http://aviation.derosaweb.net/presentations>

Thank you, John (OHM Ω)



Basic FLARM Device Information

FLARM is a portmanteau of “FLight” and “ALarm”

Flarm is a proprietary electronic system used to selectively alert pilots to potential collisions between aircraft. It is not formally an implementation of ADS-B, as it is optimized for the specific needs of light aircraft, not for long-range communication or ATC interaction.

The installation of all physical Flarm Devices is approved as a "Standard Change", and the PowerFLARM Core specifically as a "Minor Change" by the European Union Aviation Safety Agency; and in addition the Minor Change also approves the PowerFLARM Core for its IFR and at night.

Flarm obtains its position and altitude readings from an internal GPS and then broadcasts this together with forecast data about the future 3D flight track. At the same time, its receiver listens for other FLARM Devices within range and processes the information received.

This information is used to predict potential conflicts for other aircraft and alert the pilot using visual and aural warnings.

Source: <https://en.wikipedia.org/wiki/FLARM>



Why is This Presentation Important?

The work detailed in this presentation is very important to the proper operation of your FLARM Device. It is not simply enough to physically install your Flarm and antennas.

Three things must happen;

1. The FLARM device must be configured.
2. To make your Flarm valuable to those other pilots flying with, or near you, you also need to register your unique FLARM Device.
3. Keep your FLARM device updated yearly.

PS – Sorry, this presentation does NOT show you how to install a FLARM Device into your aircraft.

Table of Contents

- 1) FLARM Device Information
- 2) Why is this Presentation Important?
- 3) “FLARM” versus “Flarm”
- 4) FLARM Hardware Requirements
- 5) Flarm Transmission & Reception Animation
- 6) Configuration Steps
 - a) FLARM Configuration File
 - b) Registering Your FLARM
 - c) FlarmNet Database File
 - d) Flarm Glidernet File
 - e) FLARM Registration With OGN
- 7) FLARM Display Devices
- 8) Miscellaneous How-To Details
 - a) FLARM Range Analysis
 - b) Transferring a FLARM device to a new owner
- 9) Miscellaneous Flarm Information



Meaning of “FLARM” versus “Flarm” Use Within this Document

- **“Flarm” (initial capitals only)**
 - This will refer to the Flarm system as a whole or parts thereof



- **“FLARM” (all capitals)**
 - This refers to the physical FLARM devices.





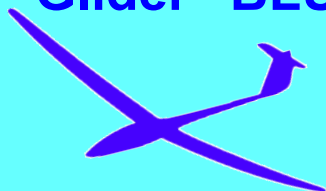
How does Flarm Transmission & Reception Work? An Animation

The following few slides shows an “animation” of the step-by-step process of how the Flarm system communicates between two aircraft (gliders).

**Step through the slides one at a time
or download & run the PowerPoint File
from the web site for more clarity**

Step 1 – Glider BLU's FLARM broadcasts its information

Glider "BLU"



FLARM
Config
File



Step 1b - Glider BLU's
FLARM continuously
broadcasts
its unique **Radio-ID*** and
its GPS position details

NOTE - NO
pilot info is
sent!
(e.g. Name,
Contest ID,
N#, etc.)

Step 1a - Glider BLU's
unique Radio-ID* is in the
configuration file (among
other things detailed in
another slide)

* The recommended FLARM's "**Radio-ID**" is
the aircraft's unique 6-digit ICAO number or
"Mode S Code". See details at
[https://registry.faa.gov/aircraftinquiry/search
/nnumberinquiry](https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry)

Glider "BRN"



Step 2 – Glider BRN's FLARM Receives "BLU's Flarm Data"

Glider "BLU"



FLARM
Config
File



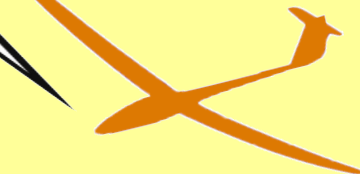
Step 1b - Glider BLU's
FLARM continuously
broadcasts
its unique **Radio-ID*** and
its GPS position details

**NOTE - NO
pilot info is
sent!**
(e.g. Name,
Contest ID,
N#, etc.)

Step 2 - Glider
BRN's FLARM listens
& receives
Glider BLU's Flarm
data including its
unique **Radio-ID*** and
GPS position details

Step 1a - Glider BLU's
unique Radio-ID* is in the
configuration file (among
other things detailed in
another slide)

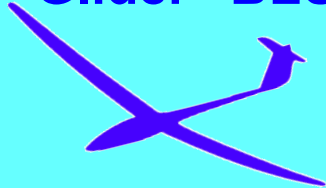
Glider "BRN"



* The recommended FLARM's "**Radio-ID**" is
the aircraft's unique 6-digit ICAO number or
"Mode S Code". See details at
[https://registry.faa.gov/aircraftinquiry/search/
nnumberingquiry](https://registry.faa.gov/aircraftinquiry/search/nnumberingquiry)

Step 3 – Glider BRN's FLARM sends Glider BLU's info to a Display Device

Glider "BLU"



FLARM
Config
File



Step 1b - Glider BLU's
FLARM continuously
broadcasts
its unique **Radio-ID*** and
its GPS position details

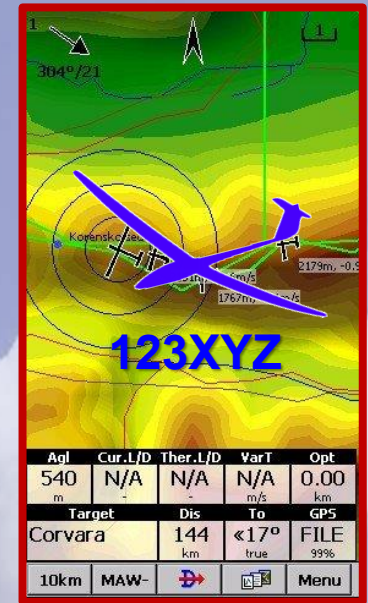
**NOTE - NO
pilot info is
sent!**
(e.g. Name,
Contest ID,
N#, etc.)

Step 1a - Glider BLU's
unique Radio-ID* is in the
configuration file (among
other things detailed in
another slide)

* The recommended FLARM's "**Radio-ID**" is
the aircraft's unique 6-digit ICAO number or
"Mode S Code". See details at
[https://registry.faa.gov/aircraftinquiry/search/
nnumberinquiry](https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry)

Step 2 - Glider
BRN's FLARM listens
& receives
Glider BLU's Flarm
data including its
unique **Radio-ID*** and
GPS position details

Glider "BRN"



Step 3 - Glider BRN's
FLARM sends **Glider BLU's**
Flarm data of **Radio-ID*** and
GPS position details to your
Flarm Display Device
(i.e. an Oudie) which
then displays a target.

Step 4 – Glider BRN's display device uses FlarmNet Database

Glider "BLU"



FLARM Config File



Step 1b - Glider BLU's FLARM continuously broadcasts its unique **Radio-ID*** and its GPS position details

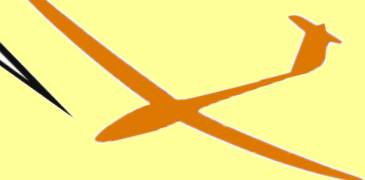
Step 1a - Glider BLU's **unique Radio-ID*** is in the **configuration file** (among other things detailed in an other slide)

NOTE - NO pilot info is sent!
(e.g. Name, Contest ID, N#, etc.)

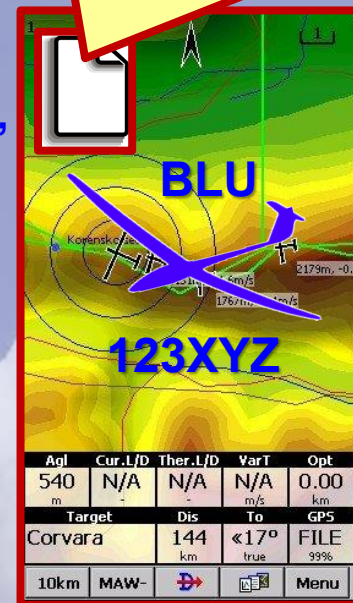
FlarmNet Database File >
"123XYZ" → "BLU"

Step 2 - Glider BRN's FLARM listens & receives Glider BLU's Flarm data including its unique **Radio-ID*** and GPS position details

Glider "BRN"



Step 3 - Glider BRN's FLARM sends Glider BLU's Flarm data of **Radio-ID*** and GPS position details to your **Flarm Display Device** (i.e. an Oudie) which then displays a target.

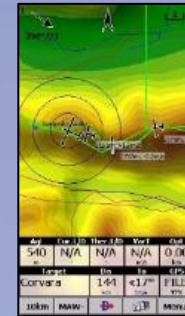


* The recommended FLARM's "**Radio-ID**" is the aircraft's unique 6-digit ICAO number or "Mode S Code". See details at <https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

All Flarm Data “Packet” Elements Sent Between the FLARM Device and the Flarm Display Device



<ID>
<IDType>
<AlarmLevel>
<RelativeNorth>
<RelativeEast>,
<RelativeVertical>
<Track>
<TurnRate>
<GroundSpeed>,
<ClimbRate>
<AcftType>

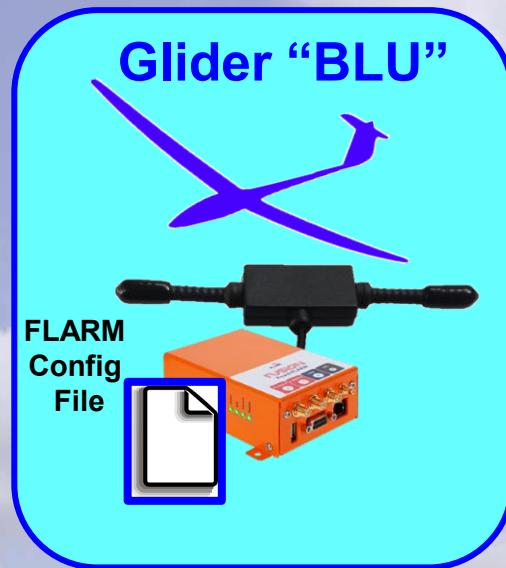


Source: Moshe Braner

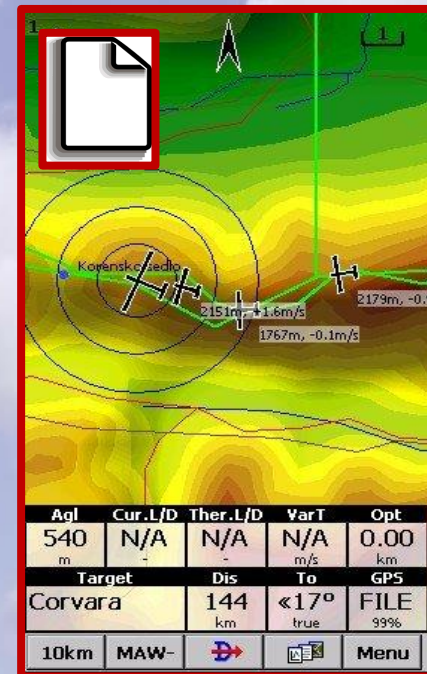
CRITICAL FIRST STEPS

Creation & Installation of ...

- > FLARM Configuration File
- > FlarmNet Database File



FlarmNet Database File



FLARM Setup Requirements

- **You will need three things;**

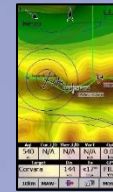
- A FLARM Device →



- Your Contest ID

- Your Radio ID*

- A Flarm traffic Display Device →



- **Steps you will need to take;**

1. Create a configuration file & download it to your FLARM Device
2. Register your FLARM Device on FlarmNet
3. Download the latest global FlarmNet user database to your Flarm Display Device
4. Register your FLARM Device on GliderNet (OGN)

*The recommended FLARM Radio-ID is the 6-digit hexadecimal ICAO address of your aircraft (also known as Mode S Code). In the USA look up the ICAO number for your aircraft at <https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

STEP 1

Creating and Downloading a FLARM Configuration File



Your FLARM device cannot operate properly without a configuration file for your glider. It is very important that the device configured correctly.

Use the flarm configuration tool to configure your Device. After selecting the desired options, the configuration file is downloaded and installed into your FLARM Device.

FLARM Configuration File



When installing FLARM in an aircraft, and before using a FLARM Device, it is very important that it is configured correctly.

Use the flarm configuration tool to create a flarmcfg.text file. After selecting the desired options, the configuration file is quickly downloaded to your FLARM device.

Use the FLARM Device Configuration File Creation Tool found at <https://www.flarm.com/en/support/tools-software/configurator/>

Continued on Next Slide

FLARM Configuration File

From Previous Slide

Enter your FLARM Device manufacturer and model

FLARM CONFIGURATION TOOL

When installing FLARM in an aircraft, and before using a portable FLARM, it is very important that it is configured correctly. Use the configuration tool below to configure your device. After selecting the desired options, the configuration file is instantly downloaded.

Note that the configuration tool only works with the latest released firmware version. Before configuring the device, you need to update to the latest firmware version, independently of when you did the last firmware update.

We take the privacy of your data seriously and you can find our Privacy policy [here](#).

My devices
Log in to see your devices

New device
Manufacturer: FLARM Technology

Device: PowerFLARM Fusion

START CONFIGURATION

CLICK ON

START CONFIGURATION

Continued on Next Slide

FLARM Configuration File

From Previous Slide

CLICK ON

Show advanced settings

Enter your ship's Mode-S
ICAO* Address

Enter your ship's Aircraft
Type

* In the USA look up your
"Mode S" Address at
<https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

Show advanced settings

ICAO 24-bit aircraft address

Official 24-bit ICAO aircraft address in hexadecimal notation, as issued by the local CAA. It consists of six hexadecimal characters (0-9, a-f) and can be obtained from the aircraft papers. Must match the address configured in the Mode-S transponder. If the aircraft does not have a Mode-S transponder, it's possible to leave the field empty to use the device specific radio id. Enter 0 (zero) for random id (not recommended, will make Search and Rescue (SAR) very difficult).

ABC123

Aircraft type

The configured aircraft type will influence motion prediction and collision risk algorithms and warnings for both the own aircraft as well as other aircraft.

Glider/motor glider

Data sentences on the 'RJ45' port

According to instructions from the display equipment manufacturer. For Garmin TIS, make sure to configure the

Navigation and FLARM (Default)

NOTE: Normally other settings can be left as the default values.

Continued on Next Slide

FLARM Configuration File

From Previous Slide

Enter your Name, Tail Number, Contest ID, etc. (NOTE: This information is **NOT** broadcast by the FLARM. It is **ONLY USED** within the IGC flight log file created by the FLARM device)

Continued on Next Slide

Remove obstacle database?
Delete the obstacle database?
 Yes
 No (Default)

NOTE: Other Flarm settings normally can be left as the default values.

Pilot name
Applicable for IGC flight recording.

Co-pilot name
Applicable for IGC flight recording.

Glider ID
Applicable for IGC flight recording.

Glider type
Applicable for IGC flight recording.

Competition class of glider
Applicable for IGC flight recording.

Competition ID
Applicable for IGC flight recording.

Stealth mode
Hides tactically relevant flight data for usage at competitions. Receiving stations may use the received tactical data to determine the position of the aircraft. Tactical data is not transmitted for more than 10 minutes.
 Enable
 Disable (Default)

NOTE: This information is **NOT** broadcast by the FLARM Device. It is **ONLY USED** within the IGC flight log file created by the FLARM device.

NOTE: Other Flarm settings normally can be left as the default values.

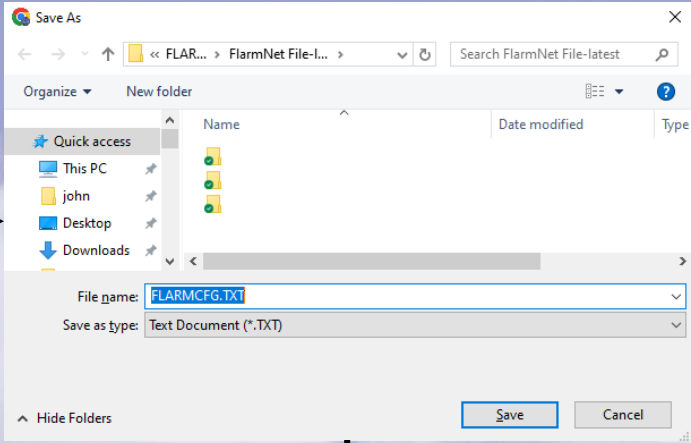
FLARM Configuration File

From Previous Slide

CLICK ON

CREATE CONFIG FILE

Save the FLARM configuration file to your computer



CLICK ON

Save



flarmcfg.text

Continued on Next Slide

FLARM Configuration File

From Previous Slide

Transfer the Flarm configuration file into your FLARM Device per the manufacturer's instructions.*



flarmcfg.text



- Typically, this is done by copying the flarmcfg.text file to a USB “thumb” drive or micro SD card.
- Then plug that drive into your FLARM device and turn on power to the device.

STEP 2

Registering Your FLARM Device At FlarmNet.org



Welcome to Flarmnet.org

FlarmNet is a community of users of FLARM®-compatible collision avoidance systems.

FlarmNet is a database, in which people can enter their Flarm®-Radio-ID, a unique identifier stored in all FLARM®-compatible devices. Additional information such as name, aircraft type or registration can be added as well. With FlarmNet-compatible devices you can see all the submitted information to the corresponding FLARM®-Radio-ID. This means you can see who is flying other aircraft, on which radio frequency he usually is and even more - all directly in the air in your cockpit. FlarmNet compatible devices are available from many different manufacturers.

Source: <http://flarmnet.org>

Flarmnet Registration



Enter the "Radio ID"* and other information for your FLARM Device at <http://flarmnet.org>

Radio id* *

ABCDEF

The Flarm™-Radio-ID is (if configured) the 6 digit hexadecimal ICAO aircraft address of your aircraft (also known as Mode S Code) or the 6 digit hexadecimal Flarm™-Radio-ID. It is NOT the serial number of the device!

Radio id type*

FLARM

Depending on the Radio-ID you enter it is either an ICAO aircraft id or the native FLARM id.

Pilot name

John Doe

Aircraft type*

GliderN12345

Registration*

N12345

Competition id

GR8

Radio frequency

123.3

Radio frequency that you usually use. Make sure it is entered in the correct format with three decimals, e.g. 118.275

Livetracking

Permit the usage of your data for livetracking services.

Region*

United States of America

Region, where this aircraft is usually operated in.

Register Cancel

CLICK ON

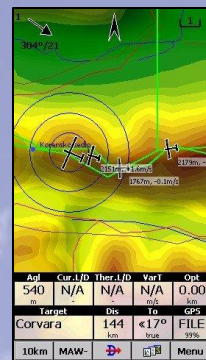
Register

Your FLARM Device has now been added to the flarmnet.org Global Database Which links your "Radio ID"* (only) to your Contest ID

*The recommended FLARM Radio-ID is the 6-digit hexadecimal ICAO address of your aircraft (also known as Mode S Code).
In the USA look up the ICAO number for your aircraft at <https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

STEP 3

Download and Install the Latest FlarmNet Database



The FlarmNet database contains a listing of all registered FLARM Devices and their associated information primarily ICAO & Contest ID.

Transfer the latest database to your FLARM display device so that this information (i.e. Contest ID) can be displayed next to the aircraft's icon on your display device.

FlarmNet Database File

Download/save to your computer the appropriate FlarmNet global database file for your particular FLARM Display Device from

<https://www.flarmnet.org/flarmnet/downloads/>*

Downloads
last successful data generation at: 2024-07-06 22:10:50Z

Air Avionics, Butterfly Displays (BFN Format)

- flarmnet_at_ch_fr_it_00bfc8.bfn
- flarmnet_at_de_00bfc8.bfn
- flarmnet_at_au_00bfc8.bfn
- flarmnet_america_00bfc8.bfn
- flarmnet_at_00bfc8.bfn
- flarmnet_be_fr_hu_nl_00bfc8.bfn
- flarmnet_no_se_fi_dk_00bfc8.bfn
- flarmnet_de_00bfc8.bfn
- flarmnet_at_de_00bfc8.bfn
- flarmnet_gb_ie_00bfc8.bfn
- flarmnet_east_europe_00bfc8.bfn
- flarmnet_oceania_00bfc8.bfn
- flarmnet_es_pt_00bfc8.bfn

Air Avionics, Air Traffic Display (ATD Version 1.1 or newer required!)

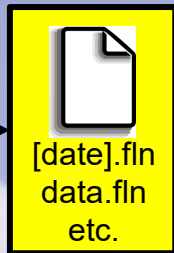
- Flarmnet.tdb

LXNAV and Naviter

- 20240706.fln
- glide_dec.fln

LXNavigation / XCSoar, WinPilot, LK8000, ClearNav

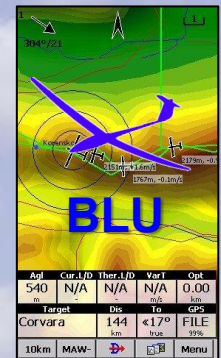
- data.fln



Transfer the new FlarmNet database file into pilot's display Devices using the manufacturer's instructions.

This allows viewing of flarm traffic's information (i.e. Contest IDs) on their displays *

* The FlarmNet database file is updated daily and should be re-downloaded and re-installed yearly or more often.



Step 4 - Glidernet - The OGN Database Is Now Accepting FLARM Registrations

There is an independent database at <http://ddb.glidernet.org> that is related to the OGN environment. Besides accepting OGN devices registrations it also accepts FLARM device registrations.

Note that the OGN (glidernet) database is not limited to Flarms, it includes other registered devices or aircraft IDs that may be broadcast by transponders, SPOT/Inreach, phone apps, etc. Sanity prevails as long as all devices in an aircraft use the same Radio-ID (ICAO number*).

Some people register with either the ddb.glidernet.org site, flarmnet.org site, or both. The two databases can even hold conflicting information about the same Radio-ID. One can also create their own personal data file based on information from both of those databases plus local observations.


Use <http://ddb.glidernet.org/download> to download that database as a text file.

Source: Moshe Braner


*The recommended FLARM Radio-ID is the 6-digit hexadecimal ICAO address of your aircraft (also known as Mode S Code). In the USA look up the ICAO number for your aircraft at <https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

STEP 4

Register Your FLARM Device At ddb.glidernet.org



Devices DataBase



30812 registered devices

[HOME](#)

[CREATE AN ACCOUNT](#)

Log in

Email address:

Password:

[SUBMIT](#)

This is the place to register your glider, towplane or other FLARM/OGN-equipped aircraft to the Open Glider Network. Registering has several advantages:

- You can influence how your glider is displayed on live.glidernet.org and other tracking sites
- In case of SAR, your glider may be easier to find
- You contribute to traffic-awareness among other pilots and ATC

The data is freely available under the [ODC-BY](#) license.

If you're not already a member, [Create an account](#)

Forgot your password ???, [Reset password](#)

Need help? contact@glidernet.org



Source: <http://ddb.glidernet.org>

Glidernet Registration

Log in at
<http://ddb.glidernet.org>



CLICK ON

ADD DEVICE

Enter Device Type as ICAO,
enter the Device ID*, and
other aircraft information

Your FLARM Device
has been added to
the ddb.glidernet.org
Global Database
Which links your
"Device ID"* to your
Contest ID

CLICK ON

SUBMIT

Register a device

Device type

ICAO

Device ID *

ABC123

Aircraft type

ASW-27

Registration

N12345

Competition Number

GR8

I don't want this device to be identified

I don't want this device to be tracked

Full participation

- Tracking applications that use the OGN DDB will mark the position with aircraft identification
- Aircraft registration and CN are published in the OGN Devices Database

I certify to be the owner of this device

SUBMIT

CANCEL

MY DEVICES		Update	Expiration	Delete	Device type	Device ID	Aircraft type	Regist.	CN	Tracking	Ident.
ADD DEVICE					Flarm	ABC123	ASW-27	N12345	GR8	✓	✓
CHANGE PASSWORD											

Database Search
<http://wiki.glidernet.org/ddb-list>

*The recommended Device ID (a.k.a Radio-ID) is the 6-digit hexadecimal ICAO address of your aircraft (also known as Mode S Code). In the USA look up the ICAO number for your aircraft at <https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

FLARM Software Updating

Flarm.com

Each Flarm Device must have its software updates annually.

General Aviation Drones Integration



Simply
Safe.

Downloads

www.flarm.com/en/support/downloads/

Here you will find the latest downloads for FLARM devices: Documents, manuals and firmware.

Firmware updates

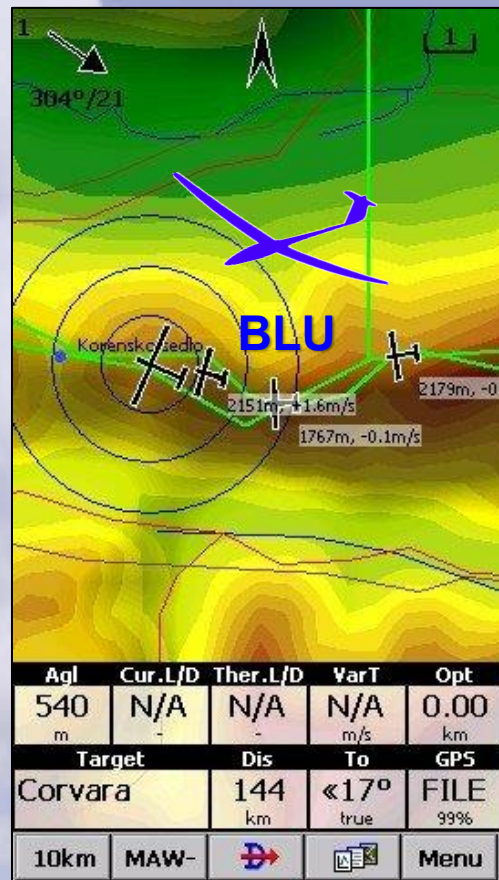
FLARM utilizes a rolling update process that regularly provides functional updates and bug fixes. Updates have not been mandatory since software version 7.40, but should be carried out in the interests of safety. FLARM updates can easily be combined with the aircraft's annual maintenance programme. This also takes into account the maintenance requirements of a safety-related system.

Manuals & documents

Below you will find all currently valid manuals and other documents for FLARM devices, as well as relevant documents for developers. For FLARM devices and displays produced by other manufacturers, please contact the manufacturer to obtain the latest manuals. Select your download options for the different products

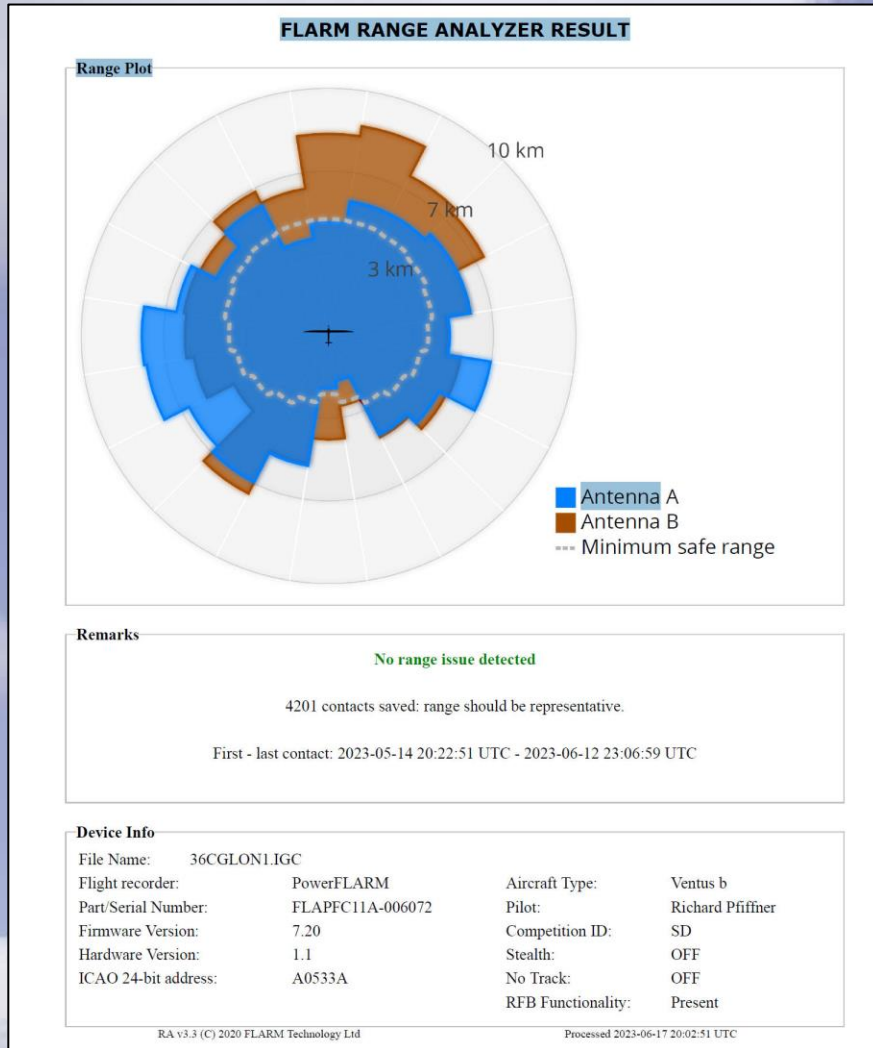
FLARM Display Devices

Now your FLARM Device is configured and registered. You will see all other FLARM equipped aircraft (and ADS-B traffic). Other pilots with a FLARM device and a configured database will see your aircraft information (i.e. contest ID). This provides critical collision avoidance even when the contest ID is not displayed.



Miscellaneous Flarm Information

FLARM Device Range Analysis



The Range Analyzer is an effective tool to verify the performance of an existing FLARM installation.

<https://www.flarm.com/en/support/tools-software/range-analysis/>

<https://gliding.lxnav.com/flarm-range/>


HOW TO...



- ***Transfer the ownership of a used FLARM Device***
- ***Transfer your FLARM device into a New Aircraft***

Transfer a Glidernet registered FLARM Device to a New Owner

Method #1






- Contact the previous owner
- Ask them to Log into their account on ddb.glidernet.org.
- Have them go to “My Devices”
- Have them find their FLARM device and click on the  **trash can** icon to delete it
- Register your new FLARM device as shown elsewhere in this presentation.

Method #2

- Use the IGC file proof of ownership method.
- See the next slide for details.

Method #3

- Glidernet registrations expire after one (1) year
- Once the registration expires re-register your FLARM device as shown in this presentation

Update	Expiration	Delete	Device type	Device ID	Aircraft type	Regist.	CN	Tracking	Ident.
			ICAO	ABC123	ASW-27	N12345	GR8		

Proof of IGC File Ownership Method to Transfer a FLARM Device to a New Owner

<https://www.flarmnet.org/flarmnet/device/transfer/>

Transfer existing device

If you have acquired a second-hand device and failed to register it with flarmnet due to it already being registered, you can invoke this "proof of ownership" process by providing the radio id and a current (not older than 30 days) igc flight record from the device. If both match we will immediately transfer the device to your account. Please be aware that all transfers are logged in an audit log to reconcile eventual fraud!

Radio ID*

IGC File*

Choose File No file chosen

Register

- Retrieve a recent **IGC log file** from your newly purchased used **FLARM** device
- Open the **IGC file** with a text editor
- Look for this line near the beginning of the file > "**LFLA192557ID 1 xxxxxx**"
- The last 6 digits (xxxxxx) is the **Radio ID**
- **Enter the Radio ID here**

- Choose (upload) the same **IGC file** you used to find the **Radio ID**

- **Click on Register**

Transferring Your FLARM Device Into Another Aircraft

FLARM CONFIGURATION TOOL

When installing FLARM in an aircraft, and before using a portable FLARM, it is very important that it is configured correctly. Use the configuration tool below to configure your device. After selecting the desired options, the configuration file is instantly downloaded.

Note that the configuration tool is independent of the aircraft's firmware version. Before configuring your device, please read the [privacy policy](#) here.

We take the privacy of your information very seriously. Please read our [privacy policy](#) here.

My device
Log in to

New device
Manufacturer:
FLARM Technology

Device:
PowerFLARM Fusion

START CONFIGURATION

See Full Details on using the [flarm.com](https://www.flarm.com) configuration tool in a group of slides within this presentation

1. Log into <https://www.flarm.com/en/support/tools-software/configurator/>
2. Find the ICAO* number for your new aircraft.
3. Go through the steps in the [flarm.com](https://www.flarm.com) configuration tool and enter your new aircraft's information.
4. Download the new `flarmcfg.txt` configuration file to your computer.
5. Upload the configuration file into the FLARM device you are transferring per the manufacturer's instructions.

*In the USA look up the ICAO number for your aircraft at <https://registry.faa.gov/aircraftinquiry/search/nnumberinquiry>

Flarm Informational Web Sites

- <https://www.cumulus-soaring.com/store/manufacturers/flarm>

Resources

- **PowerFLARM Tips - by Paul Remde of Cumulus Soaring, Inc.**
<http://www.cumulus-soaring.com/flarm/PowerFLARM-Tips.pdf>
- **Firmware Upgrades and Release Notes**
<https://www.flarm.com/en/support/downloads/>
- **Manuals**
<https://www.flarm.com/en/support/downloads/>
- **PowerFLARM Antenna Mounting Tips Application Note**
[FTD-041-Application-Note-FLARM-Antenna-Installation.pdf](#) - Scroll down to the Other Documents section
- **PowerFLARM Configuration File Generation Tools - Excellent!**
<https://shop.flarm.com/support/tools-software/flarm-configuration-tool/>
- **FLARM Range Analysis Tool**
This is a great resource. It allows you to upload a flight log that was recorded with any FLARM unit. The tool creates a top-view range analysis plot showing the maximum distance to FLARM targets in all directions. The flight log contains data location of other FLARM units received during the flight. Flights to be analyzed must have at least a duration of 30 minutes and contact with 5+ other FLARM equipped aircraft during the flight. Only FLARM traffic data is analyzed. ADS-B and Mode C/S transponder traffic is not analyzed.
<https://shop.flarm.com/support/tools-software/flarm-range-analyzer/>
- **Resources for Finding Your Sailplane's Mode S Address - to be entered in the PowerFLARM**
 - USA - <https://registry.faa.gov/aircraftinquiry/>
 - Canada - <http://wwwapps.tc.gc.ca/saf-sec-sur/2/ccarcs-riacc/RchSimp.aspx>

Flarm Informational Web Sites

- <https://nadler.com/GliderPilotUSAflarmWeb/Flarm-WhatDoesItDo.html>
- <https://www.flarm.com/en/>
- <https://www.flarm.com/en/support/faq/>
- <https://www.flarmnet.org/faq>
- <https://en.wikipedia.org/wiki/FLARM>
- <http://www.cumulus-soaring.com/flarm/PowerFLARM-Tips.pdf>

FLARM Configuration File (flarmcfg.txt) Command Options with Details

```
#####  
# PowerFLARM Configuration Key by Paul Remde of Cumulus Soaring, Inc.  
#####  
# This configuration file must be text only and reside in the top directory  
# of the USB stick, SD card or FLARM Tool.  
# This configuration file must be named FLARMCFG.TXT  
# If you wish to change the settings, you can revisit the online  
# configuration tool at any time: http://www.flarm.com/  
#####
```

Source: <http://www.cumulus-soaring.com/flarm/PowerFLARM-Tips.pdf>

FLARM flarmcfg.text

File to Reset Flarm Device To Factory Settings

```
#####  
# This configuration file must be text only and reside in the top directory  
# of the USB stick, SD card or FLARM Tool.  
# This configuration file must be named FLARMCFG.TXT  
# If you wish to change the settings, you can revisit the online  
# configuration tool at any time: http://www.flarm.com/  
#####  
$PFLAC,S,DEF
```

Sample Flarm Information found in an IGC Flight Log File– Page 1/2

LFLA19255707FRW 7.24
LFLA192557 STEALTH OFF
LFLA192557 NOTRACK OFF
LFLA192557ID 1 A1FB1D
LFLA192557OB
LFLA19255707OBSTEXP
LFLA19255707DEVNO FLAFUS10W-000790
LFLA19255707BUILD ab6c756fe
LFLA19255707RANGE 25500
LFLA19255707ACFT 1
LFLA19255707THRE 255
LFLA19255707CFLAGS 00
LFLA19255707RFTX 1
LFLA19255707MISC 00
LFLA19255707LOGINT 4
LFLA19255707NMEAOUT1 91
LFLA19255707BAUD1 2
LFLA19255707NMEAOUT2 1
LFLA19255707BAUD2 2
LFLA19255707VRANGE 2000

Sample Flarm Information found in an IGC Flight Log File – Page 2/2

LFLA19255707PCASPFLAU1 0
LFLA19255707PCASPFLAU2 0
LFLA19255707XPDR 0
LFLA19255707PCASRANGE 7408
LFLA19255707PCASVRANGE 610
LFLA19255707ADSB RANGE 65535
LFLA19255707ADSBVRANGE 65535
LFLA19255707PCASCALIBRATION 30
LFLA19255707MODESALT 1
LFLA19255707MODEC 1
LFLA19255707PCASBEEP 1
LFLA19255707ADSBWARNINGS 1
LFLA19255707CAL57DBM 0
LFLA19255707MSG 1
LFLA19255707ADSL 1
LFLA19255707CAP
DP2;USBH;XPDR;DLED;BARO;AUD;RFB;ENL;TIS;IGC;ADSR
LFLA19255707LIC AUD:1;ENL:1;IGC:1;RFB:1;TIS:1;ADSR:1

See My Other Presentations

- Glider Electrical Wiring
- Bailing Out Successfully
- Transceiver Troubleshooting
- Oxygen Systems
- Working with Glider Air Lines
- Trailer Chains
- Soaring Pilot Relief Systems
- Battery Testing
- Emergency Location Devices
- Survival Kits
- Spar Alignment Tool
- L'Hotellier Fittings
- Carbon Fiber Panels
- IGC Filename Decoding
- Blanik L-23 Strut Work
- Removing Painted Lettering
- Open Glider Network
- Instrument Knob Extensions
- Landing Gear Warning

<http://aviation.derosaweb.net/presentations>

Let me know of any comments!