

QuickStart SuperNeurone (Integrated)

The **SuperNeurone** may not detect all surrounding traffic or make errors in its detections. So don't make any decisions about your safety, or that of others, based solely on the information provided by the **SuperNeurone**.

Do not use the **SuperNeurone** until you have read and agreed to the terms of use available at:

<https://www.flyingneurons.com/legal/superneurone.html>



1 Fixing

Place the **SuperNeurone** in its holder.

Insert the harness into the **SuperNeurone**, making sure that it is oriented correctly.

Slide the assembly into the circular hole with a diameter of 57 mm from the back of the dashboard.

Secure the assembly using the 4 M3 screws provided.

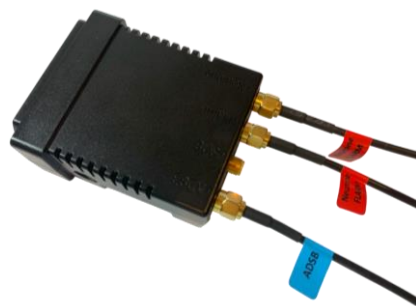
Note: To disconnect the harness, insert the extraction tool and pull the harness.



2 Connecting the antennas

The **SuperNeurone** has 4 SMA-type antenna connectors.

The antenna type of each connector is indicated on the top of the **SuperNeurone**.



The **SuperNeurone** has an internal GPS antenna. The GPS antenna external to the housing is therefore only necessary if the **SuperNeurone** is covered by a metal or carbon surface.

FLARM signals have low power and require a good antenna location. The ADS-B and Neurone signals, on the other hand, are strong and an antenna inside the aircraft is usually sufficient.

You can use antennas inside or outside the aircraft.

The **SuperNeurone** comes with indoor antennas.

Opt for outdoor antennas if the aircraft has large metal or carbon parts.



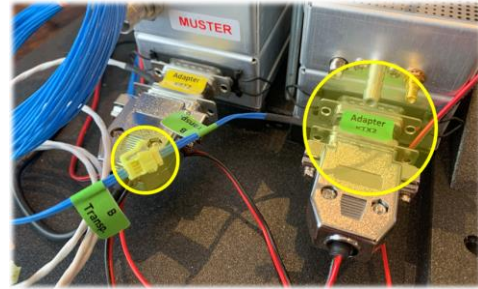
Take the following precautions:

- Do not start the **SuperNeurone** until you have connected the Neurone/ADS-L and FLARM antennas.
- Hold at least 30 cm between the Neurone/ADS-L and FLARM antennas.
- Maintain at least 1 meter between the ADS-B antenna and your transponder antenna.
- Respect the type of antennae written on the top of the **SuperNeurone**.
- The antennas must be placed vertically.
- Indoor antennas should not be attached to metal parts.
- They must have a good view of the outside.
- Most outdoor antennas must be fixed on a ground plane.

3 Connection to Power

Connect the Power **SmartConnector** to the output of a breaker.

Connect the **red connector** of the **SuperNeurone harness** to the **red connector** of the "**SmartConnector**".



The output voltage should be between 6 and 32 volts. The maximum charging current is 1 Ampere.

4 Transponder Connection

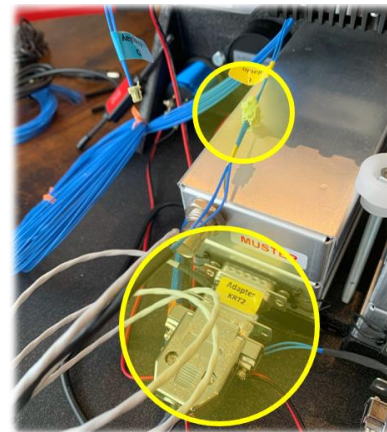
Disconnect the original harness from the transponder.

Connect the "**SmartConnector**" instead .

Reconnect the original transponder harness to the "**SmartConnector**".

Lock the whole thing.

Connect the **green connector** of the **SuperNeurone harness** to the **green connector** of the "**SmartConnector**".



5 Connecting to the radio

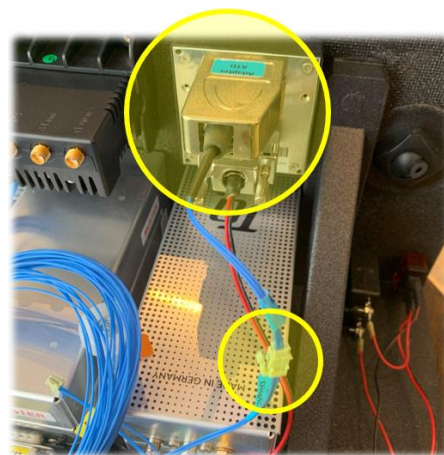
Disconnect the original harness from the on-board radio.

Connect the "**SmartConnector**" instead .

Reconnect the original harness of the radio to the "**SmartConnector**".

Lock the whole thing.

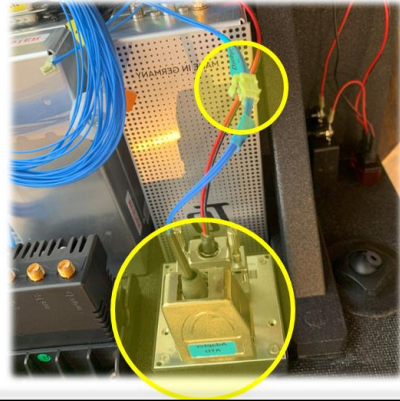
Connect the **yellow connector** of the **SuperNeurone harness** to the **yellow connector** of the "**SmartConnector**".



6 Connecting to a serial display

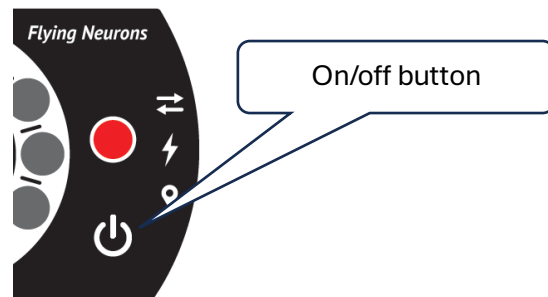
Connect the "**SmartConnector**" to the free connector on your display.

Connect the **blue connector** of the **SuperNeurone harness** to the **blue connector** of the "**SmartConnector**".



7 Starting the SuperNeurone

Press the ON button for 1s to turn on the **SuperNeurone**



8 Connect to the SuperNeurone with the SuperNeuroFly app

Download our **SuperNeuroFly** app for iOS or Android.



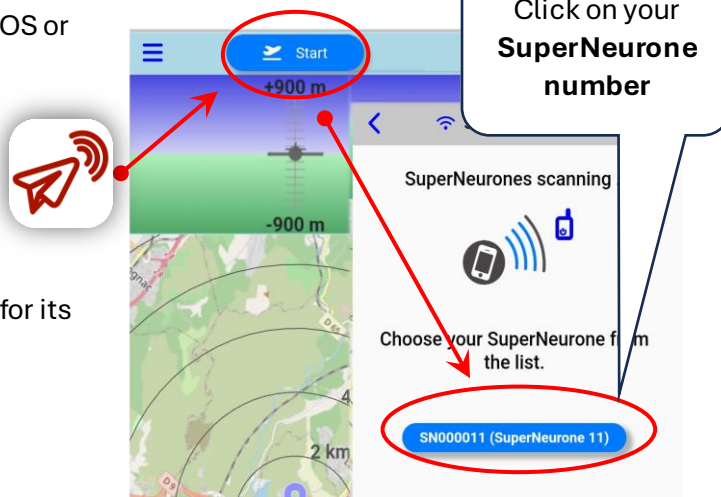
Launch **SuperNeuroFly**.

Accept all the authorizations requested for its proper functioning.

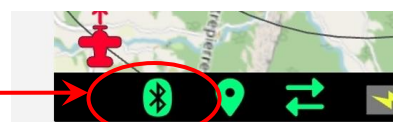
The first time, tap "**Start**."

The app searches for **SuperNeurones**.

Click on it in the list to connect.

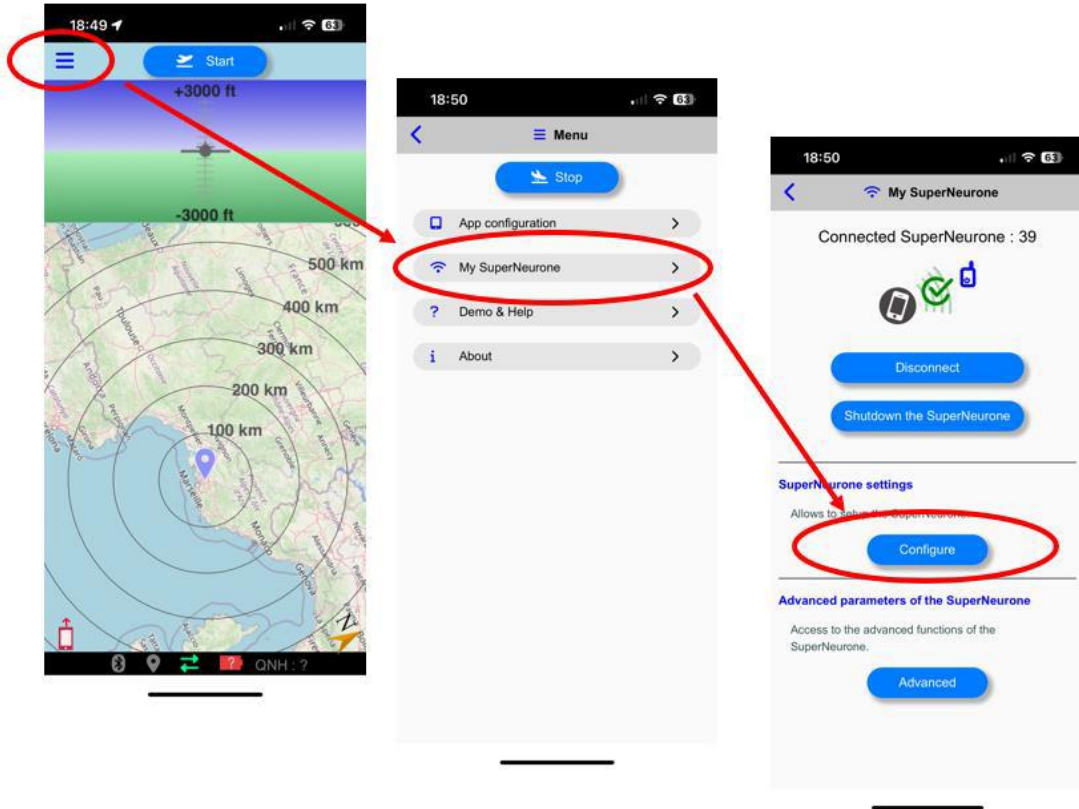


Green : connected !

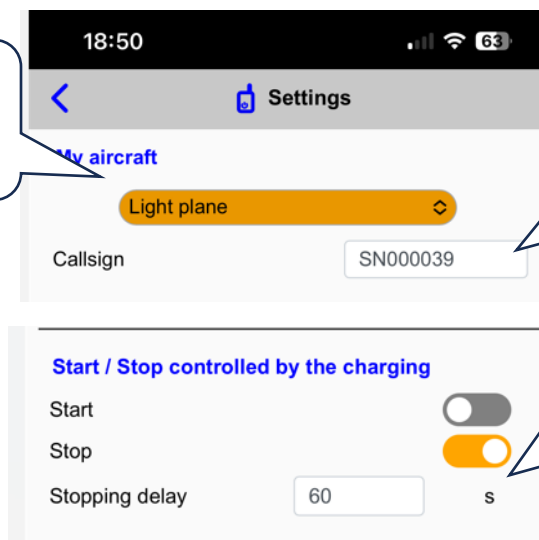


9 Configure the SuperNeurone

Go to the configuration menu:



Set your aircraft type for a correct collision risk calculation.



Enter your registration number to be clearly identified by other devices.

If checked, the device starts and/or stops as soon as the power is turned on or off (after a certain period of time for the shutdown).

Configure the SuperNeurone (continued)

If you know your ICAO address, stay in Manual mode and specify your address.

Otherwise, choose Automatic.

Transponder: Other / Unknown >
ICAO definition: Manual >
ICAO: 39ABCD
Connected as ADSB-Out:

Choose the type of transponder or "None" or "Other/Unknown"

If your transponder is "Other/Unknown" and connected via ADS-B Out, then enter the NMEA connection details as provided in your transponder specifications.

ICAO definition: Automatic >
ICAO by default: 39ABCD
Connected as ADSB-Out:
Flow rate: 38400 >
Select one or two NMEA fomats:
If exceeded, some messages will be omitted.
GPRMC:
GPGGA:
GPGLL:
GPVTG:
GPGNS:
PGRMZ:

If you are connecting the **SuperNeurone** to your transponder, check the box "connected via ADS-B-Out"

If you are connecting an external GPS antenna, select the correct choice from the list according to your antenna power supply.

Installation
External display: FLARM display >
Flow rate: 57600 >
Pressurized cabin:
QNH can be automatically determined
External siren:
GPS antenna: Internal
External with supply
External w/o supply
Front panel

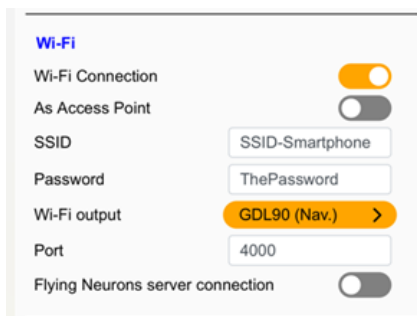
If you are connecting a traffic display, choose FLARM display and select the rate as provided in your display specifications

Other options are configurable (siren, LED intensity, etc.). See our detailed manual on our <https://www.flyingneurons.com> website for more information.

10 Wi-Fi Configuration

If you want to connect the **SuperNeurone** to a navigation software (SDVFR, EasyVFR, SkyDemon, etc...) via the GDL90 protocol or if you want to retrieve traffic from the Internet network (OGN, SafeSky, etc...), you need to configure the Wi-Fi.

- Set up your smartphone or tablet in "HotSpot" by going to the "settings" menu of your device.
 - Choose a network name.
 - Choose a password.
- In **SuperNeuroFly**, go to "My SuperNeurone/Configure"



- Wi-Fi ON
- Access Point: NO
- SSID
- Password
- Wi-Fi output = GDL90 (to connect to a browser software)
- FN Server Connection: Checked to retrieve network traffic

Note: if your smartphone or tablet cannot be shared with a personal hotspot, you can set the **SuperNeurone** as an access point and connect your smartphone or tablet to this access point.

11 Instrument Setup

Transponder Configuration

The transponder must be configured as ADS-B OUT. The serial link rate must be the maximum rate allowed by the transponder. Refer to the documentation of your transponder.

Radio Setup

Turn on the Auxiliary input on your radio.

Serial Display Configuration

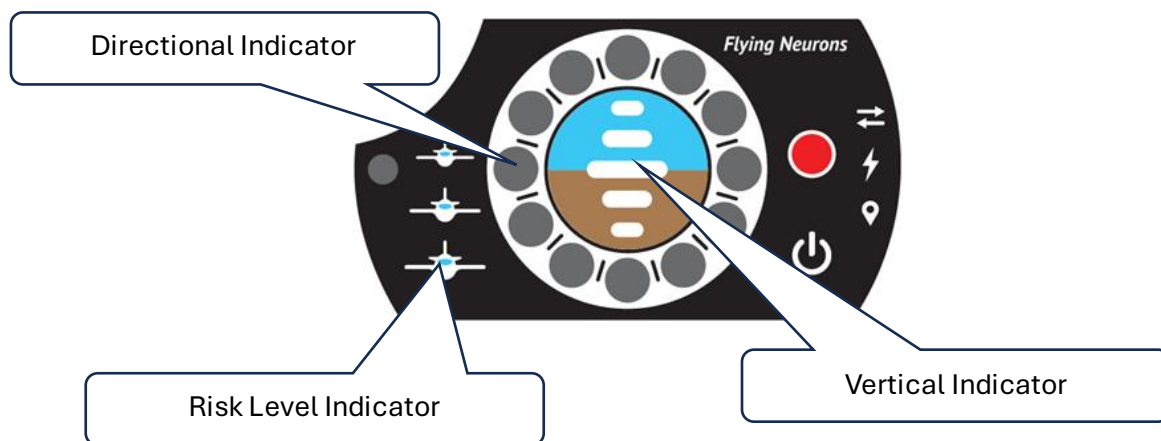
Set the input protocol to "PowerFlarm".

Set your screen rate to the same value as the rate set in the app.

Navigation App

Activate the traffic information via GDL90.

12 Visualizing traffic on the SuperNeurone



13 Traffic visualization on SuperNeuroFly

The yellow risk indicates that the aircraft is entering your potential hazard perimeter without posing a risk at this time.

The orange risk indicates that the aircraft's future path is close to yours within seconds.

The red risk indicates a proven risk of collisions in the coming seconds.



Example of a red alert

For a more detailed installation, refer to our manual at <https://flyingneurons.com/en/support/manuel.html>