



ADL140

User Manual

Version 1.00

20.08.2016

1 General Description

The ADL140 is a portable satellite weather receiver.

2 The Iridium satellite service

Before you can use the ADL140 you have to subscribe to one of our Iridium satellite service plans. Please login to the ADL customer portal to order the different service plans:

<https://www.ing-golze.de/login.jsp>

If you have no login yet please contact us by email at adl@ing-golze.de.

PLEASE NOTE: The ADL140 will show satellite signal even without an active satellite service plan and will be able to transmit data. But this data will not be processed and the device will receive no answer.

3 Powering up the ADL140

The easiest way to power up the ADL140 is connecting it to a 7-36 Volt cigarette lighter sockets with the supplied cable. For a first test experience has shown that you can get good results by parking your car on a parking lot which a good view to the sky and powering the ADL140 using the cigarette lighter socket of your car.

The green LED on the side of the ADL140 enclosure will illuminate if power is supplied.

If using the cigarette lighter socket, please make sure you have a continuous power supply. We had reports of loose or broken sockets causing the ADL140 to reboot from time to time.

The USB micro socket on the side of the ADL140 will not power up the device. It is used for firmware updates only. Connecting a device through the USB port will deactivate the ADL140 WiFi and it will enter the update mode.



Figure 1 Supplied ADL140 power cable

4 The Iridium antenna

The ADL140 comes with an integrated Iridium antenna. This antenna only transmits to the upper side of the device. As a result the device must be placed close to horizontal as show below. The device can be rotated around its vertical axis without degradation of signal quality.

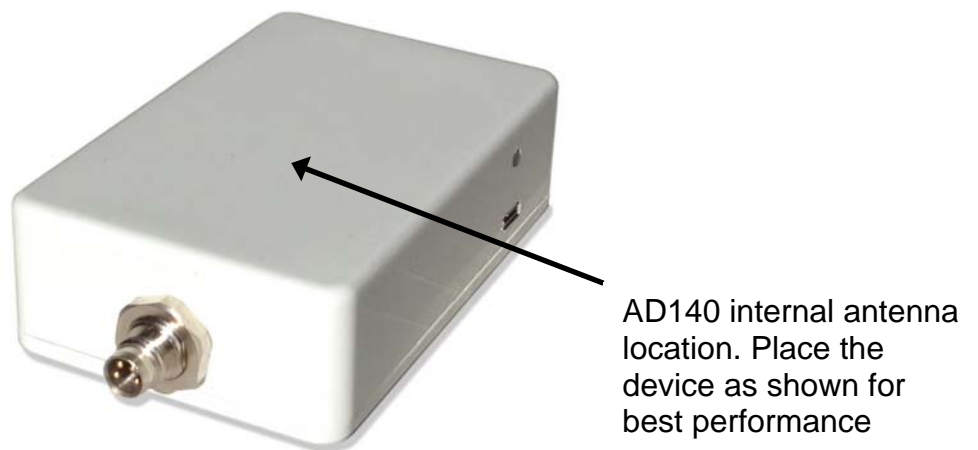


Figure 2 ADL140 orientation

5 Connecting your iPad/iPhone/Android device to the ADL140

After powering up the ADL device you have to connect your portable device to the WI-FI access point provided by the ADL device. Go to the setting screen of your device. We show this step for the Apple iPad but other devices will work in a similar way. Choose “Wi-Fi” on the left side. Then on the right side you will see the network “ADLConnect”. Choose this network and make sure the iPad really connects to the ADLConnect wireless network.



Figure 3 iPad Wi-Fi settings

6 Installing the ADLConnect App

Before you can start to use the ADL devices with your mobile device, you have to install the ADLConnect iPad App. On Apple devices open the app store and search for “ADLConnect” and install the free app. On Android devices please open the Google play store and also search for “ADLConnect”.

7 Starting the ADLConnect app

Start the ADLConnect app. The top status bar will indicate if the app is connected to your ADL device. When connected the Iridium and GPS signal quality will be displayed in the top left corner.

If the app displays “Internet mode”, "WWW" or "Offline" in the top status bar it is not properly connected to the ADL140. Please check your WiFi settings.

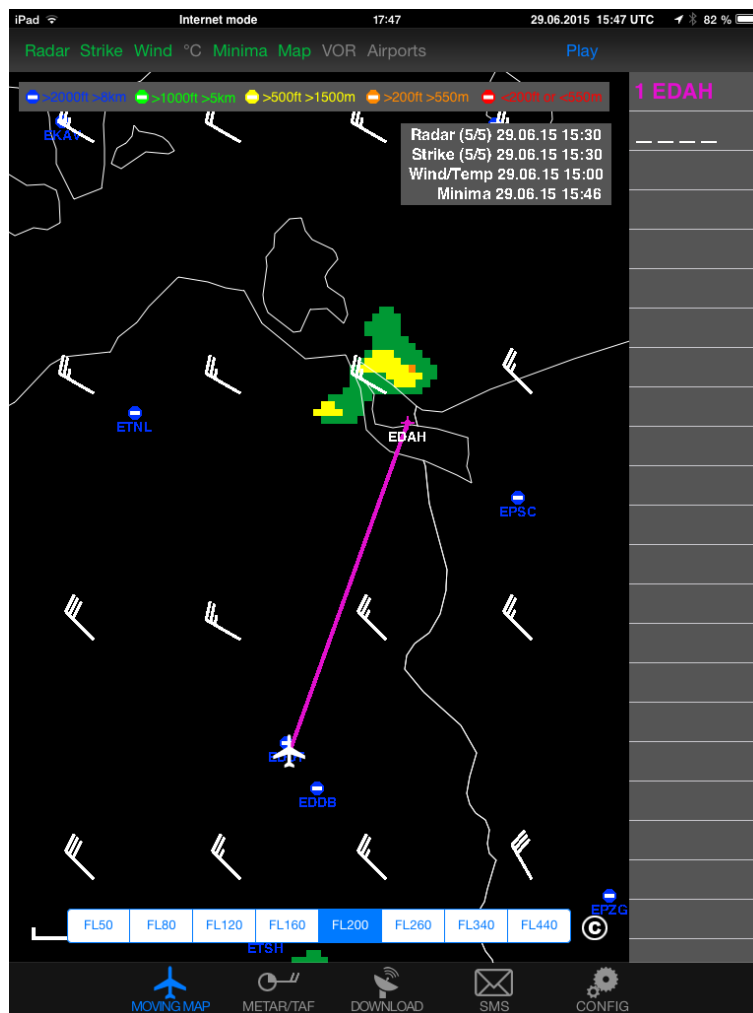


Figure 4 iPad ADLConnect user interface

8 Entering your login from Deutscher Wetterdienst

At the top part of the Config page you have to enter your login from Deutscher Wetterdienst. For details on how to get these please refer to the separate manual “DWD Subscription Guide” available on <http://www.ing-golze.de> in the “Support” section.

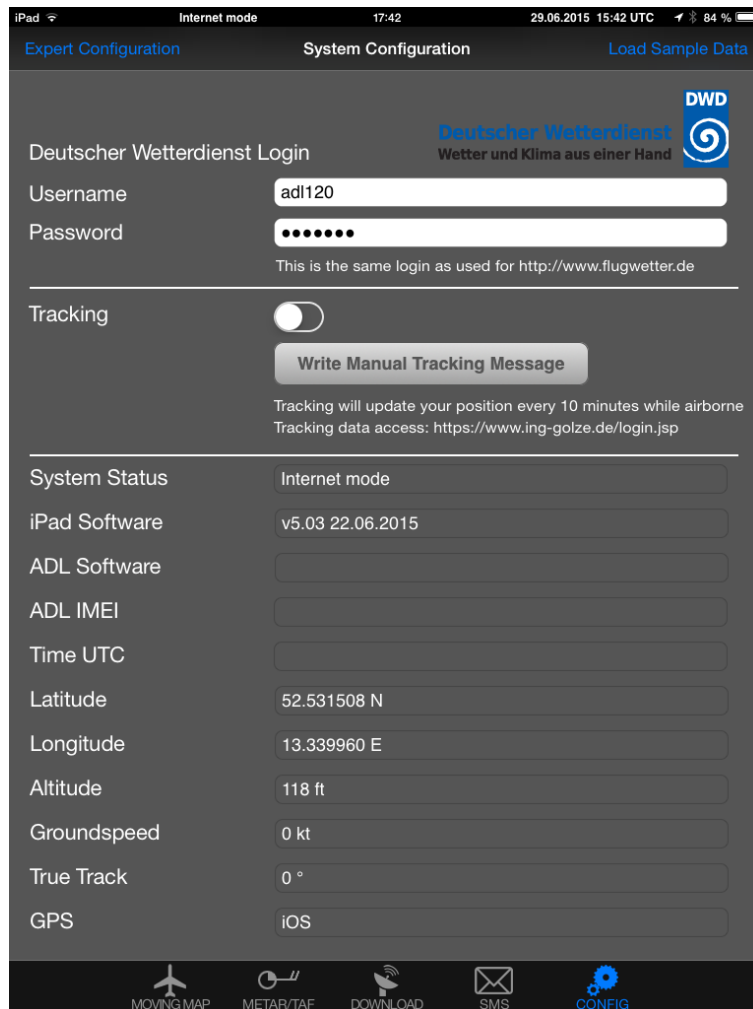


Figure 5 Entering the DWD login on the Config page of the iPad app

9 Your first weather download

Go to the Download page. Select Radar: FPL MQ, Strike: FPL, Wind/°C: FPL, Minima: FPL and enter the ICAO code of an international airport below (for example EDDB).

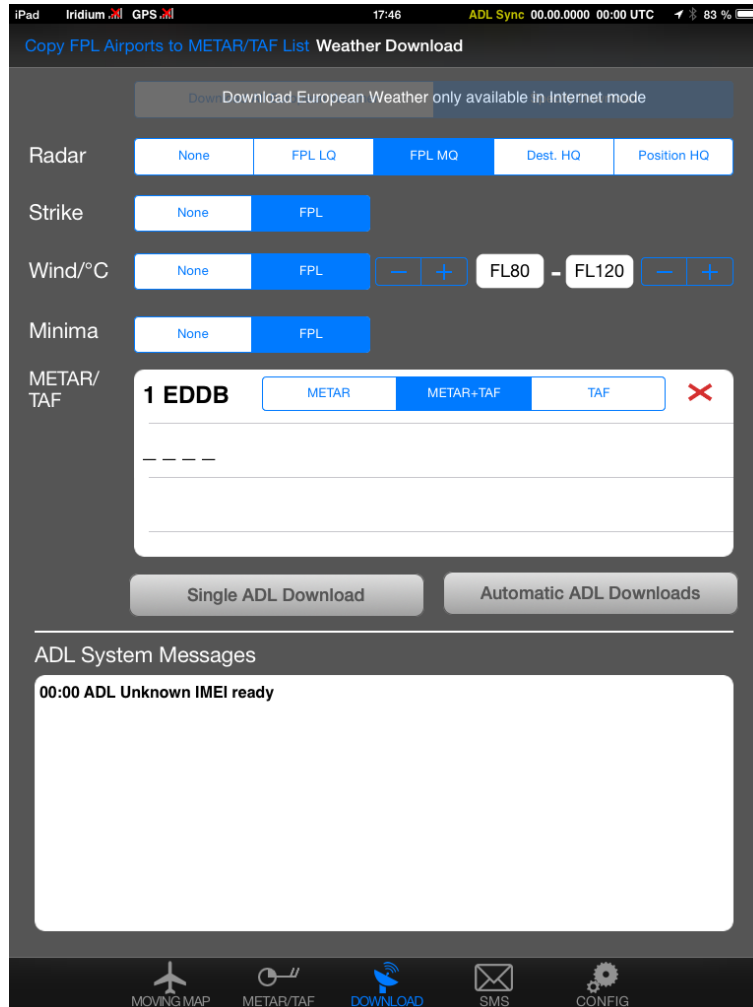


Figure 6 SAT Page

Below press the button "Start ADL Download" and confirm you want to start the download. You can see the status messages of the ADL device below. If you have good satellite reception and your DWD login is correct you will soon have downloaded the weather data. Finally go to the MOVING MAP and METAR/TAF page, where you will find your downloaded weather information.

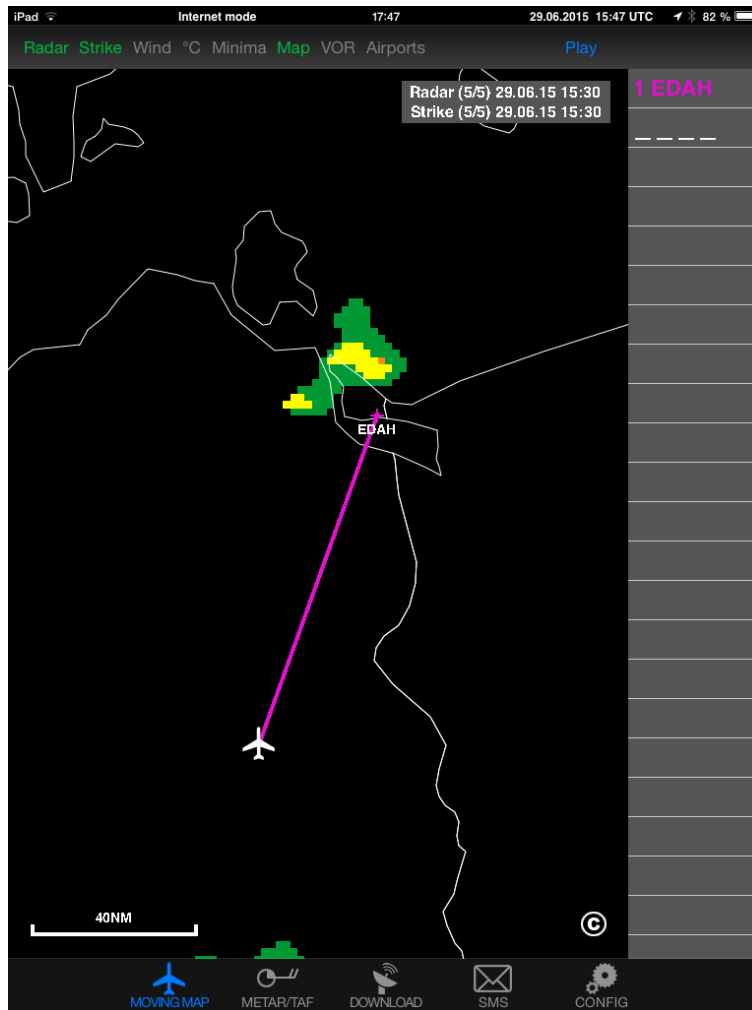


Figure 7 Latest radar information shown on the moving map.

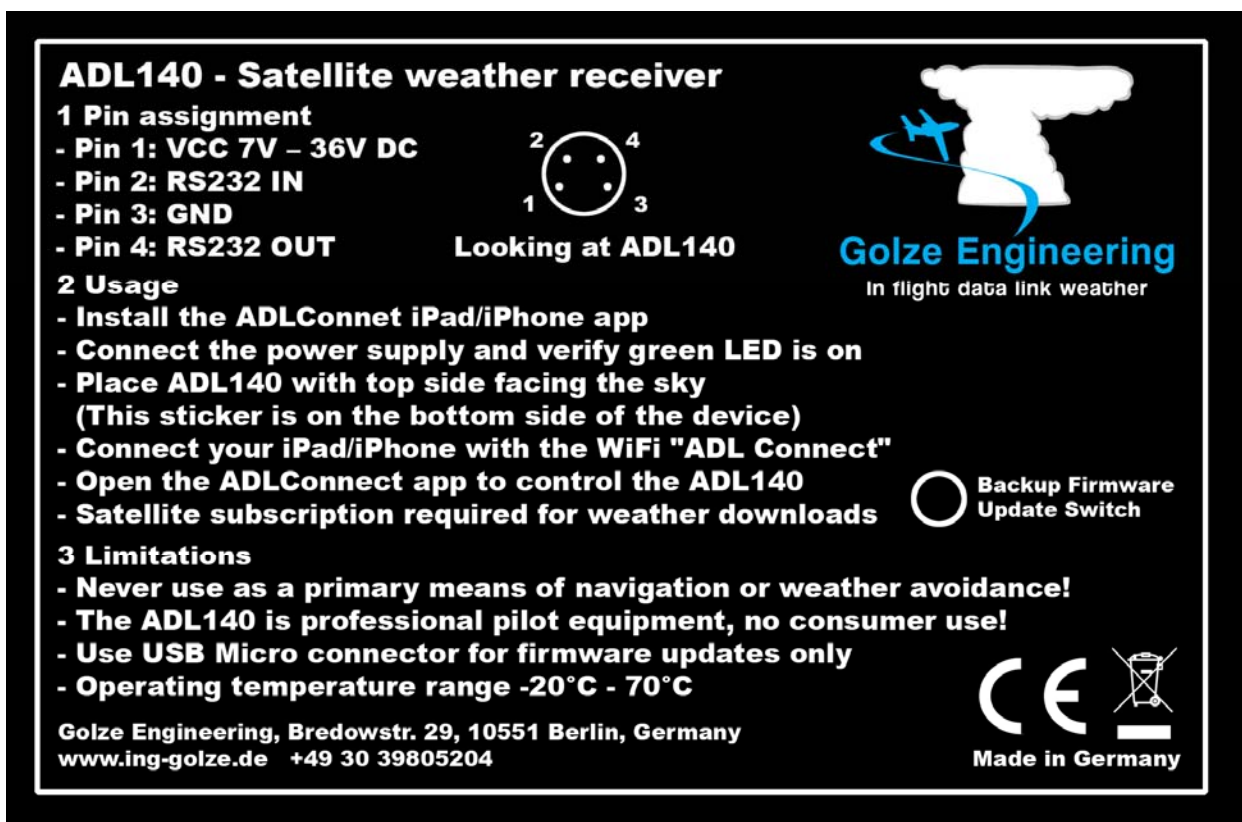
For a more detailed description please consult our tutorial video showing how to use the ADLConnect which is available from the website <http://www.ing-golze.de>

10 ADL140 Technical data

- WiFi Interface for iPad/iPhone interconnect
- Must be placed with direct view to the sky on the glareshield
- No battery, external power supply (7-36V, 5W) required
- Dimensions: 84 x 55 x 26mm
- Mass: 140g

11 ADL140 Label

Below is a copy of the label printed on the bottom of every ADL140 device for reference



ADL140 - Satellite weather receiver

1 Pin assignment

- Pin 1: VCC 7V – 36V DC
- Pin 2: RS232 IN
- Pin 3: GND
- Pin 4: RS232 OUT

2 Usage

- Install the ADLConnet iPad/iPhone app
- Connect the power supply and verify green LED is on
- Place ADL140 with top side facing the sky
(This sticker is on the bottom side of the device)
- Connect your iPad/iPhone with the WiFi "ADL Connect"
- Open the ADLConnect app to control the ADL140
- Satellite subscription required for weather downloads

3 Limitations

- Never use as a primary means of navigation or weather avoidance!
- The ADL140 is professional pilot equipment, no consumer use!
- Use USB Micro connector for firmware updates only
- Operating temperature range -20°C - 70°C

Golze Engineering, Bredowstr. 29, 10551 Berlin, Germany
www.ing-golze.de +49 30 39805204

Looking at ADL140

Golze Engineering
In flight data link weather

Backup Firmware Update Switch


CE  Made in Germany

Figure 8 ADL120 Label

Contact

Golze Engineering
Bredowstr. 29
10551 Berlin

<http://www.ing-golze.de>

adl@ing-golze.de
+49 30 39805204