



## ADL110B ADL120 ADL130 ADL140

### How to use ADL messaging

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## **1 General Description**

The ADL devices are designed to bring you in flight data link weather. But besides this core feature the devices can also be used to transmit short messages to the ground. This manual will guide you through the special aspects of ADL satellite messaging.

## **2 Text / SMS messages**

The ADL devices are able to transmit test/SMS messages to mobile phones on the ground. Those messages are transmitted as pure data over the satellite network. On the ground our server will forward those messages as conventional cellular SMS messages. This means the ADL devices actually have no real Iridium phone number but the whole SMS part is handled by our server on the ground. Thus, SMS messages you receive will originate from a standard German phone number.

### **2.1 Outgoing SMS**

You compose the SMS message using the ADLConnect app. Please note that you have to specify the full receiver mobile phone number starting with + and the full country code. The message will then be transmitted as data over the Iridium satellite network and forwarded to the mobile phone network by our server. At this point the sending number +4915776418678 will be added to the message.

At this moment a copy of the SMS is sent by email to the email address associated with your ADL device for reference purposes. Please note you can not answer to this reference email message.

We operate with different SMS gateway providers but with hundreds of global cellular networks we have seen from time to time SMS messages not arriving or arriving with scrambled sender numbers. Please notify us if this happens and we will try to adapt our international SMS provider routing mechanism.

### **2.2 Incoming SMS**

After reception of an ADL originated SMS it is possible to answer. The answer must be sent to our number +4915776418678. Usually you can just press the answer button on your mobile phone but in the rare cases where the sender number was not transmitted properly the above number has to be used.

Every incoming SMS must be an answer to previous ADL originated SMS. As we use this single number for all ADL devices the system can only allocate the incoming SMS based on the database of past communication and the sender phone number to the right ADL device.

After reception of the SMS a confirmation message similar to the one for outgoing SMS will be sent to the email address of the ADL device. Again this is for reference purposes only and you can not answer to this message.

Then the message is forwarded to the Iridium satellite network and received by the ADL device. If the ADL device is currently switched off the messages are stored for approximately five days. If the ADL device has got no satellite reception when the message comes in it will be transmitted at the next transmission occasion together with the next weather download or tracking update.

### **3 Email messages**

In addition to the test /SMS messages we run an experimental email system. This will be expended in future software releases. Currently the mails are transmitted as pseudo SMS t use the existing infrastructure.

#### **3.1 Outgoing Email**

Compose an SMS to our special number +999000. In the Text of the SMS enter the target email address first followed by a space and the actual message text.

The email will then be transmitted as data over the Iridium satellite network and sent of as a regular email from our server. Again a reference copy will be email to your email address.

#### **3.2 Incoming Email**

To avoid SPAM and other unwanted messages the recipient can not answer to the received email directly. At the bottom of the email the recipient will find a special link which allows entering a response through a web based form. The answer is then transmitted back to the ADL system. Again you will receive an email confirmation of the incoming message.

### **4 Air to Air Messages**

Besides SMS and email massaging you can also send messages between different ADL device in flight. You will have to know the serial number of the other ADL device. It is printed on the box or the owner can see it at the right top corner of the customer portal website when logged in.

Then the messg eis transmitted using the SMs user interface to an artificial SMS number which is #999<serial number of the target ADL device>. So for example when sending and air 2 air message to device 0123 it should be directed to +9990123.

The recipient will see the air2air number of the sending device and can answer directly. Again confrmation email or each message will be sent to the device owner for later reference.

### **5 Outlook**

We are actively working on the messaging system adding new features and optimizing the user interface of the ADLConnect app. In case you need special features like sending fax messages from the ADL device etc. please contact us.

## **6 Contact**

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