

## **Flarm SD-Card manual**

Flarm software version 3.05 (December 2006) and newer supports the use of SD cards. Devices with versions prior to 3.05 must be updated with a serial cable and the PC software "FlarmTool" before the SD card can be used.

Flarm can currently use SD cards for the following functions:

- Update of Flarm firmware
- Update of obstacle database
- Download of flight records (IGC format files with G-record)

Update data files are available from the Flarm webpage. The files have the extension .fw for firmware and .obs for obstacles. (<http://www.flarm.com/support/updates/>)

The SD card must be formatted with the "FAT" file system (FAT16). Most cards come preformatted with this file system. Other file systems (NTFS, FAT32,...) are ignored by Flarm.

„Small“ cards will have plenty of capacity for most users. (a 32MB SD card can store about 150 flights...)

All files must be copied into the top level directory (no subdirectories!). You may not modify filenames, older datafiles with the same extension must be deleted.

To start an update / download, insert SD card into Flarm and interrupt power for at least 5 seconds. The SD card may remain in the device after updating and during operation.

### **Update of Flarm firmware**

The extension of firmware update files is .fw

The update takes about 50 seconds

**Important: when updating the Flarm firmware flight data may be lost! It is therefore important to download all flight data before updating.**

### **Update of obstacle database**

The extension of obstacle update files is .obs The same files as for the FlarmTool updates can be used.

The update takes some minutes, depending of obstacle database size. Progress is shown on the device.

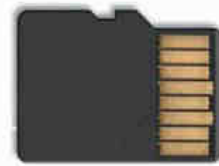
### **Download of flight records**

The last 20 flights stored in the internal memory are downloaded to the SD card at each startup.

Flarm may require much longer for startup, especially on first insertion of the SD card as many flights may be copied. To initiate the download of a flight after landing, the power supply must be interrupted for five seconds. Please wait a minimum of five minutes after landing before disconnecting power to allow for the proper recording of the landing.

## microSD Card with Flarm (Original-Flarm only)

Original Flarm Devices of hardware-version 2006 und newer may use flash memory cards of the type microSD (also known as TransFlash, but **not** miniSD). These cards have the size of a fingernail and are available at most photo- and mobile phone stores.



This side up!

### Insertion

The card must be carefully inserted "**upside down**" (metal contacts on top, horizontal), then push with the thumb until the card locks.

**No force should be required to insert or remove the card!**

### Removal

To remove the card push it into Flarm until it releases, then carefully pull it out. (Push-pull contact)



## Comparison SD Cards



SD Memory Card

miniSD

microSD

MicroSD cards may be used in SD-Card compatible devices with a mechanical adapter. These adapters are often delivered with the cards.