FrSky Taranis SD Card, EEPROM, and Firmware Storage

When you connect the Taranis to a PC using either the STM32 bootloader (transmitter off) or using OpenTX 2.0 Taranis Bootloader (three finger boogie – transmitter on) you'll see two volumes mount on the computer as removable drives. One is the SD card and one is called "Taranis". The SD card can have a variety of different names such as "removable drive" but the contents make it obvious. The other volume is always called "TARANIS". **The Taranis volume is a Don't Touch** feature. Basically – leave it alone as there is nothing in the Taranis volume for the user to change directly.

TARANIS

Contains two **no touchy** files. EEPROM.bin and FIRMWARE.bin. These files are stored in memory in the transmitter hardware, not on the SD card. These files are only altered through Companion.

EEPROM.bin: This file contains the Transmitter and model settings. When, in OpenTX Companion, you choose "Write Models and Settings to Radio" you are changing the EEPROM.bin but not the SD card.

FIRMWARE.bin   This file is the current version of OpenTX you have installed. When you choose "Write Firmware to radio" you are writing to the Taranis Volume and not the SD card.

SD CARD   You don't need the SD card to operate the Taranis –without it you lose sounds, logging, and model icons.

BMP: Contains model image files. Files must be.bmp files which are 4 bit and 64px by 32px. These files are accessed and assigned to specific models in the Model Setup screen. Files are limited to 8 characters + .bmp

FIRMWARES: Used by the Taranis Bootloader to flash firmware versions. Name length is limited to 28 characters or 32 characters including the ".bin".

LOGS: Transmitter will save .csv files here when logging is enabled in Custom Functions. The csv files can be used in companion for analysis of all gimbal controls, switch positions, and telemetry readings. Log frequency can be set as low as one sample every 0.1 second.

MODELS: Model Templates can be stored here which can be used when creating a new model in the model selection screen by choosing "Restore Model" when on an empty model. New templates can be created in the Model Selection Screen by choosing "Backup Model" when on the selected model.

Text files may also be stored in the models folder. If the text file has an identical name as a model (no spaces) this text file will be opened when choosing the model if "**Display Checklist**" is ticked in the Model Setup. Model specific text file can also be accessed by long pressing the ENT key and then choosing "View Notes". Any text file can be viewed whether from that model or not by long pressing the MENU Key and then short press PAGE to get to SD-HC Card Screen and navigating to the text file you wish to view.

SCRIPTS: Contains Lua files. Lua is a programming language that allows all sorts of custom programs to be executed by the transmitter. The TX model creation wizard is included on the Plus and on the SD card I have for download.

SOUNDS: Sound files must be .wav files @ 32KHz or 16KHz. Names are limited to 8 characters + .wav. In my example the "**en**" will be replaced with the abbreviation of the appropriate language (fr, it, de, se, cz, es, pl, pt)

\SOUNDS\en – Contains files that you can select in the Special Functions to "Play Track" or "BGMusic".

\SOUNDS\en\system – Contains files which are called by the Taranis firmware for specific purposes such as the startup sound is Tada.wav and also switch warning, numbers….etc.

SOUNDS\en\model_name – Contains sounds which are played for a <u>specific model which has the exact same name as this folder</u>. Sounds must follow a specific naming scheme to be played by pre-

defined circumstances. Examples are L1-on.wav (logic switch 1), SA-down, SA-mid, SA-up (Switch A down, mid, and up).

Model Specific Sound Names

Wave files assigned a specific names will play when the function associated with that name occurs. The files must be in a folder that's named the same as the model name. Neither the folder nor the model name can include have a space.

Switches: "S" followed by switch name (For Switches A-H) and then position (F and H only have up and down)
S**A**-up.wav
S**A**-mid.wav
S**A**-down.wav

Multipos switches: "P" followed by: first digit is switch number and second digit is switch position
P**11**.wav
P**26**.wav

Logical switches: L followed by logical switch number and condition
L**1**-off.wav
L**1**-on.wav

Flight Modes: Flight mode name followed by condition. No spaces in the flight mode name.
Mode_name-off.wav
Mode_name-on.wav

My (Scott Page) SD card can be downloaded from:
https://dl.dropboxusercontent.com/u/17847149/TaranisMicroSD.zip. It contains two additional folders not found in the OEM version:

A. **Splash Screens:**   These are splash screens which can be used as is or modified for use on Taranis startup.

B. **Resources for the user – not used directly by Taranis:** For use on the PC – not the transmitter.