General Radio Settings

Introduction

If you have been following the lessons in order, you should have completed the **Beginning Radio Setup** class and are ready to find out what's on the remaining General Radio Settings screens.

Lesson Goals

The goal for this lesson is to develop an understanding of the remaining **Radio Setup** screens in the **Radio Setup** group and how to use them.

Prerequisites

To complete this lesson, you should:

1. Have a charged battery in your transmitter
2. Have OpenTX version 2.0x flashed to your transmitter
3. Read the **Taranis Quick Start Guide** and understand basic menu navigation.
4. In addition we recommend that you complete the **Checking Out Taranis** and **Beginning Radio Setup** classes before moving on to this class.

Background

Now that you finished the Beginning Radio Setup class, I'll bet you are eager to find out what's on the other screens in the Radio Setup group. You may even have taken a look. Great! I'll wager a couple of the screens look familiar. That's because as part of **Checking Out Taranis** class you will have visited the **Analog Inputs** and **Calibration** screens. You are finished with Calibration, but the Analog Inputs has more to offer as we shall see.

> **NOTE:**
> Menu navigation is performed by pressing the menu keys. Some actions require a long press **LP** of the menu key others a short press **SP** of a menu key. In this and the lessons that follow menu key actions will be in the form of **LP** or **SP** and the key name: **MENU, PAGE, EXIT, +, -, or ENT.**
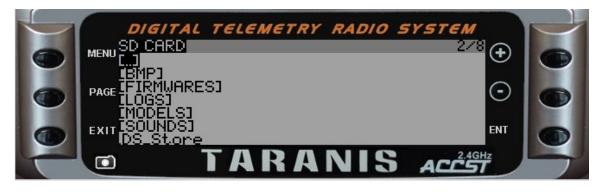
SD CARD

From the **Radio Setup** menu **SP PAGE** and you will find yourself on the **SD CARD** screen.

From this screen you can access the sounds, images, text files, and binaries stored on the SD card that is installed in your Taranis.

The names encased in square brackets [ ] are directories. The square brackets with 2 dots [..] take you up to the previous directory.
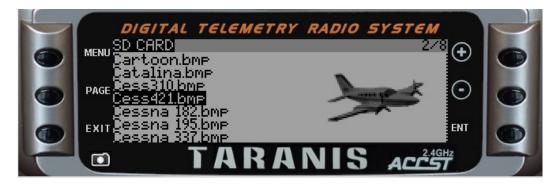
NOTE:

Normally you will not see [..] on the main SD CARD page, but the image above was made from Companion and an image of the SD card on my computer where there is a directory above this one. Because the images come from a computer and not directly from the Taranis, they may occasionally have "artifacts" from my computer on them. Where this is the case, I'll point them out.

Note: Please ignore the .DS_Store file it's one of those artifacts from my computer.

BMP

The BMP directory contains pictures of models for use in the **Model Selection** menus. The pictures are in BMP format hence the folder name.

Scroll up and down through this directory to see all the models available on your Taranis.

Press **EXIT** to go to **[..]** then press **ENT** to go to the main SD Card screen.
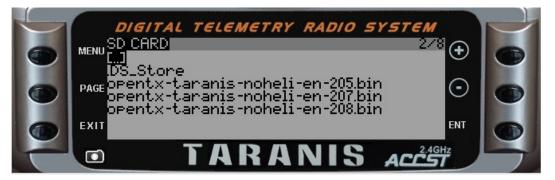
NOTE:

If you don't have the model you need in your **BMP** folder, go to the **Hints & Tips** section in the OpenTX University Library for a link to the Model Artwork for Taranis section of OpenRC forums. There you can find hundreds of models for you to download and install.

FIRMWARES

The FIRMWARES directory is where you should put the firmware binary files downloaded from Companion. Firmware names are limited to 28 characters plus the .bin extension.

If you select a file in the FIRMWARES folder and then press **ENT** you will be presented with a pop-up menu like the one below.
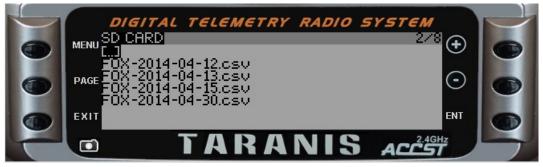
Flash Bootloader
Delete

If you click on Flash Bootloader the Taranis will immediately load the new bootloader. You can not update the Taranis firmware from this menu. You can only see what is available, update the bootloader or delete a file.

Press **EXIT** to go to **[..]** then press **ENT** to go to the main SD Card screen.

LOGS

The LOGS folder contains the telemetry log files stored in Comma Separated Values (CSV) format, with file naming using model name and date. Telemetry data logging is enabled through the **Special Functions** menu, using the **Start Logs** function. Selecting a log file gives you the option of deleting the file. There is nothing else you can do with a log file within the Taranis.
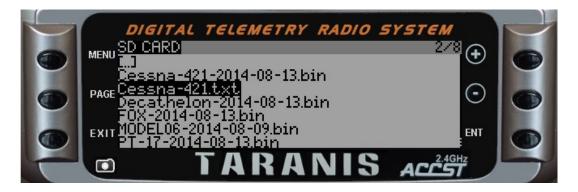

Press **EXIT** to go to **[..]** then press **ENT** to go to the main SD Card screen.

MODELS

The MODELS folder holds the binary copies of models that have been backed up using the **Backup Model** function in the **Model Selection** menu, and text (.txt) files that provide model specific information such as switch setup or a preflight checklist. Binary files of "backed up" models can be used as templates for new models, and even shared. When creating a new model in the transmitter you have the options of **CREATE MODEL** or **RESTORE MODEL**.

Creating a model creates a blank model. **RESTORE MODEL** gives you a menu of the contents of the MODELS folder, and you can choose any of the .bin files to restore as a template.

In the **MODELS** folder selecting a text file and pressing enter gives the following options:

View Text
Delete

Selecting a binary file and pressing enter gives the following options:
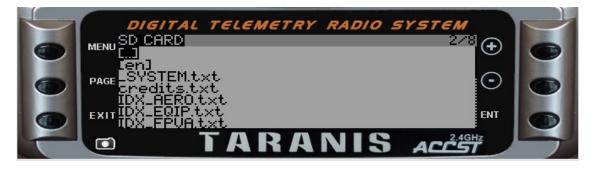
Flash Bootloader
Delete

NOTE:

The Flash Bootloader option is a bug in version 2.08. Ignore it. It appears, presumably, because the model files end in .bin. Delete is the only working option in this menu.

Press **EXIT** to go to **[..]** then press **ENT** to go to the main SD Card screen.
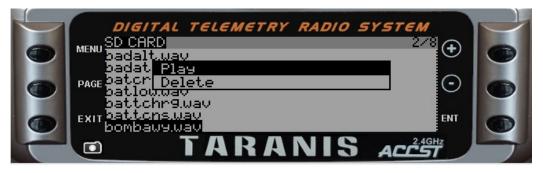
SOUNDS

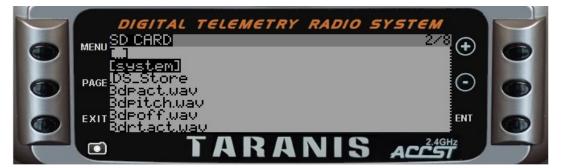The SOUNDS folder contains all the sounds played by the Taranis.

The **en** folder contains all the English language sounds. The .txt files describe the sound files available.

Additional language files are available for download via Companion. The additional languages are: French- fr, German – de, Swedish – se, Czechoslovakian – cz, Slovak – sk, Polish – pl, Portuguese – pt, Spanish – es, and Hungarian – hu. English is the default language, and the only one installed on the SD Card as it comes from FrSky.
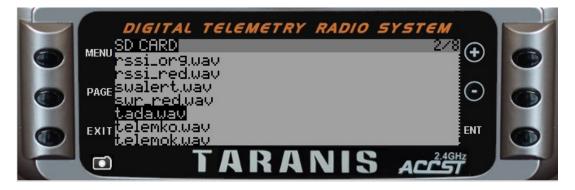
When you highlight a wav file and **SP ENT** you are given the option to play the file or delete it. Go ahead, give it a try. Play some sounds, an hear what they sound like. There are a lot of sounds to choose from. The one selected below says "Bombs Away!".

In addition to sound files, the **en** folder also contains the **system** folder.

The **system** folder contains all the system sounds including numbers, alerts (such as "Telemetry Lost"), and one special sound: tada.wav. Tada is the sound you hear when you turn on the Taranis.
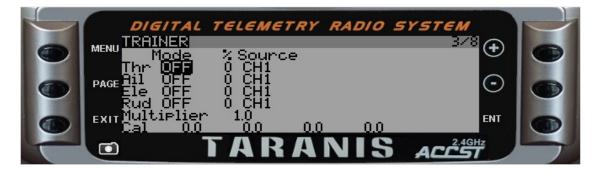
From the **SD CARD** menu **SP PAGE** and you will find yourself on the **TRAINER** menu.
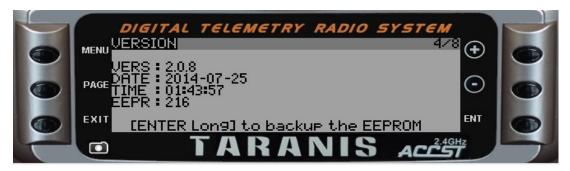
TRAINER

This menu shows the mode settings for the Master transmitter in a "Buddy Box" setup. Trainer mode is activated by setting **Trainer Mode** to **Master** in the **MODEL SETUP** menu. Configuring the Taranis as both Master and Slave transmitter is covered in detail in the **Buddy Boxing** course.

From the **TRAINER** menu **SP PAGE** and you will find yourself on the **VERSION** screen.
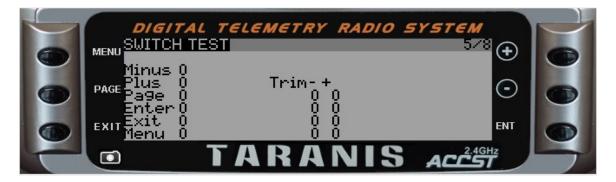
VERSION

The VERSION screen shows you the firmware version number, release date and time, and the firmware version number stored in the EEPROM. **LP ENT** to backup the entire EEPROM to the SD card. The bootloader version is not displayed on the VERSION screen or anywhere on the Taranis.

> **NOTE:**
> As it comes from the factory, the Taranis SD card is about 99% empty. There is plenty of
> room to make backups of your EEPROM. Doing so every once in a while is a good practice.

From the **VERSION** menu **SP PAGE** and you will find yourself on the **SWITCH TEST** screen.
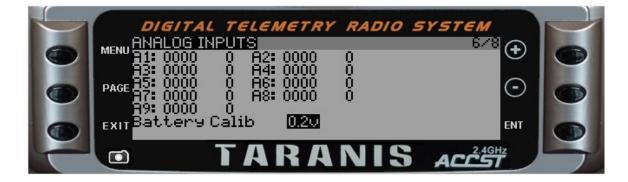
SWITCH TEST

The SWITCH TEST screen allows you to test the six menu navigation buttons and the four
trim switches on the Taranis. When a button or switch is pressed the corresponding entry on
the screen will change from 0 to 1. When the switch is released the value will return to 0.

When the **PAGE** button is pressed the Page entry will change to 1 and then the screen will
quickly change to the ANALOG INPUTS screen. **LP PAGE** to return to SWITCH TEST.
Correspondingly pressing **EXIT** will cause the Exit entry to change to 1 then quickly take you
back to the model screen you were at before you entered RADIO SETUP. **LP MENU** then **SP
PAGE** 4 times to get back to ANALOG INPUTS.

From the **SWITCH TEST** menu **SP PAGE** and you will find yourself on the **ANALOG INPUTS**
screen.

ANALOG INPUTS

If you completed the **Checking Out Taranis** course, then you will have seen the ANALOG
INPUTS screen before. It is where you entered your battery calibration value. This screen is
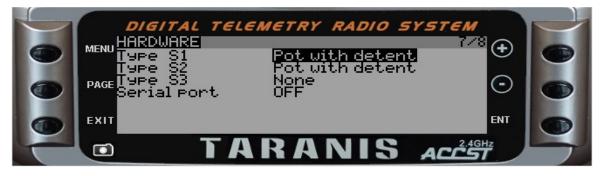
also where you can see the value of the raw data the Taranis outputs as a result of moving one of it's analog devices: gimbals, sliders, and pots. A1 – A4 are the gimbals, A5 & A6 are the pots, and A8 & A9 are the sliders. The entry on the left is the raw data, and on the right is the value -100 to 100 of the analog input. Do not fret that the raw value varies by 1 or 2 units. The variance you see is way to little to be of any consequence.

> **NOTE:**
> As of version 2.08, moving the right pot causes both A6 and A7 to vary, but not equally. A6 is the correct value for the right hand pot. A7 is for an additional analog input available on the back board of the Taranis Plus. Why it varies when the right pot is moved, we don't know.

From the **ANALOG INPUTS** menu **SP PAGE** and you will find yourself on the **HARDWARE** screen.

HARDWARE

The HARDWARE screen shows the installed pots, and the status of the serial port (located in the battery compartment). There is no third pot on the Taranis. The Taranis Plus has a connector for a third pot on the back board. Is this the mysterious A7 analog input? We believe so.

From the **HARDWARE** menu **SP PAGE** and you will find yourself on the **CALIBRATION** screen.

CALIBRATION

You should already know what this screen does. If you don't, then you didn't complete the **Checking Out Taranis** course and your transmitter is not calibrated. Performing calibration is necessary so that the Taranis knows exactly where the center and limits of each gimbal, pot, and slider is.

Press **ENT** to start the calibration process.

Now center both sliders, both pots. Now move the throttle stick to the CENTER of it's range, and make sure the other sticks are centered as well. Then press **ENT**, and you are done. The Taranis is now calibrated.

CONGRATULATIONS!

That's every screen in the Radio Setup group of screens. You now know how to configure the global radio settings, navigate the SD card, view model images, play sounds, backup the EEPROM, Calibrate the gimbals and sliders and pots, test the menu buttons and trim switches, find out what version of firmware is running on your Taranis, and a whole lot more.