Open TX 2.1.8

Reference Section 2 General Settings

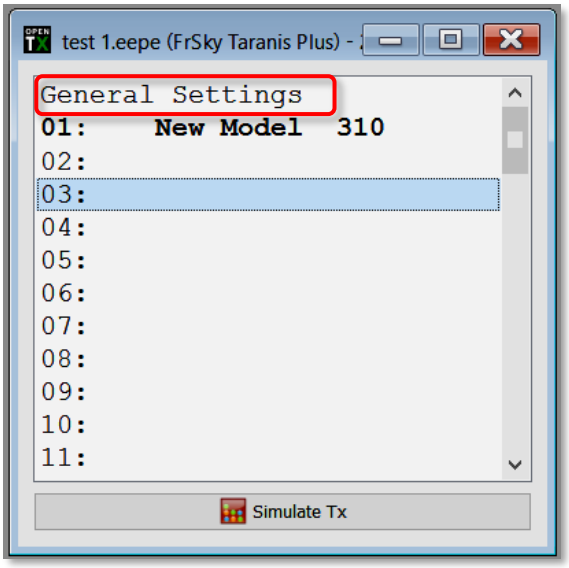
Contents

This reference section is split into four parts for downloading convenience. It uses the **OpenTX Companion** as the starting basis, with references made to the Taranis transmitter screen programming as appropriate. This was done to improve clarity. Also being able to see the whole screen on the **Companion** makes it easier to translate to the transmitter screen knowing that a particular feature will be found within that page, but maybe not visible on the screen at the opening of the page. This reference section covers **OpenTX** from version 2.1 onwards. It is NOT backward compatible as there are significant differences between this version and earlier versions. In particular the telemetry programming offered in 2.1 is completely different to earlier versions. **OpenTX** will work on other transmitters, and some functions may vary from the Taranis 9XD used here.

It is the sole responsibility of the user to ensure that the setting up of their transmitter functions as expected on the model.

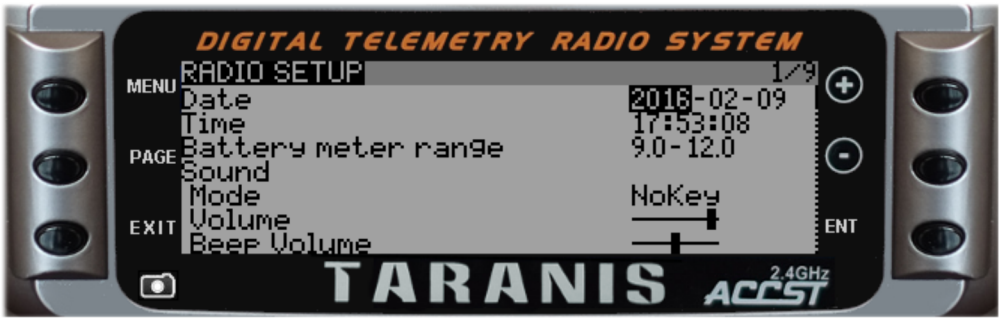
General Settings

The **General Settings** are accessed on the transmitter or from the **Companion** when opening an **Eepe** file as shown on the right. (The **Eepe** file is the file saved to the computer with all the model settings.) Double click on **General Settings** shown at the top of this window, and a new menu will open up, strangely called **General Edit**.



On the transmitter, it takes a long press of the **MENU** button to get the **RADIO SETUP**. You can scroll through the screens using short presses of **PAGE** to go forward and long presses to go backwards. **Exit** will leave the **RADIO SETUP**.

The transmitter has to be used to set or alter the date and time, but most other functions on screen 1 of the **RADIO SETUP** are the same whether the transmitter or **OpenTX Companion** is used.

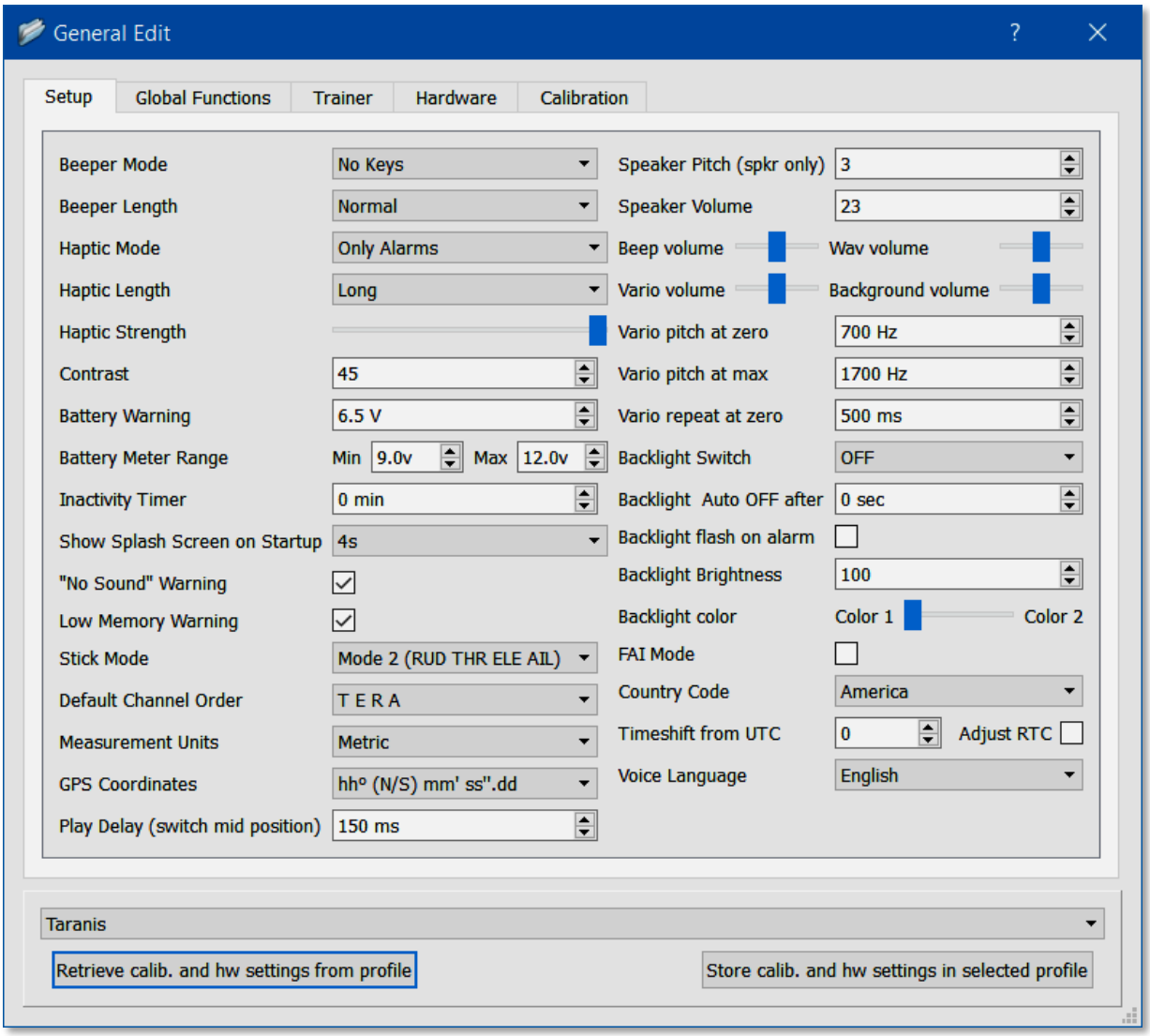


Screen 2 on the transmitter is for the SD Card, this is also not available on the **Companion**. See also the **How To** on flashing new firmware.

Screen 9 on the transmitter is also unique to the transmitter and allows the user to calibrate or recalibrate the joysticks and the sliders. The transmitters are supposed to be fully calibrated on leaving the factory, however it is wise to check the calibration with a new transmitter, and from time to time thereafter. Simply follow the instructions on the screen.

General Edit, The Setup Screen

On the radio, the setup screen is called **Radio Setup**. On the **OpenTX Companion** it is called simply **Setup**. Apart from the functions already mentioned, the functions on both are the same.



General Edit: The Setup Screen

Function	Options	Notes
Beeper Mode	Quiet Alarms Only No Keys All	No beeps at all. Only alarms (battery, radio off) Beeps but not on normal editing keys All beeps enabled
Beeper Length	X-Short Short Normal Long X-Long	
Haptic Mode	Quiet Alarms Only No Keys All	No vibration Only alarms (battery, radio off) Vibration but not on normal editing keys All vibrations enabled
Haptic length	X-Short Short Normal Long X-Long	
Haptic Strength		Alters “feel” of haptic.
Contrast	0 - 45	Alters the contrast of the transmitter screen.
Battery Warning		When fully charged, the NiMH battery supplied will read 8.4 volts. The bottom limit of useful charge is about 6.5v, therefore it is advisable to set the battery warning at 7.0v.
Battery meter range		Used to set the low and high ends of the range of the graphical radio (transmitter) battery meter on the main screens. This setting only affects the battery meter display. Set the first number to the voltage where you consider your transmitter battery “empty” the second number is the maximum voltage of your transmitter battery when it is “full”.

General Edit: The Setup Screen

Function	Options	Notes
Inactivity Timer		Gives a warning if the transmitter has been idle for the defined period of time. Set time to 0 to disable. Does not operate when in Bootloader mode.
Show Splash Screen on Startup	Range Off to 15 sec	Sets the time the initial splash screen is visible when first turning on the transmitter.
No Sound Warning		Tick to enable
Low Memory Warning		Tick to enable
Stick Mode	Modes 1-4	
Default Channel Order		On most transmitters this is predefined. **OpenTX** allows the user to select their own order for the sticks. TAER is the default for Spektrum/JR AETR is the default for Futaba/Hitec,
Measurement Units	Metric or imperial	The telemetry screen now allows users to select the units for each aspect of each sensor.
GPS Coordinates		DMS displays the coordinates in degrees, minutes, and seconds. NMEA displays the coordinates in degrees and decimal minutes
Play Delay	0 sec to 1 sec in ms	Delays playing wav files associated with the mid position of 3 position switches when switching from one position to another, unless the switch remains in the mid position for longer than the time specified in milliseconds.
Speaker Pitch	1 to 20	The higher the pitch the higher the voice will sound.
Speaker Volume	0 to 23	0 is off. This controls the overall volume of the transmitter. It can be overridden by the volume option in Special Functions.
Beep Volume		Sets the volume of the beep.
Wav Volume		Sets the volume of speech commands stored as WAV files.
Vario Volume		Sets the volume of the vario.
Background Volume		Sets the volume of the background music.

General Edit: The Setup Screen

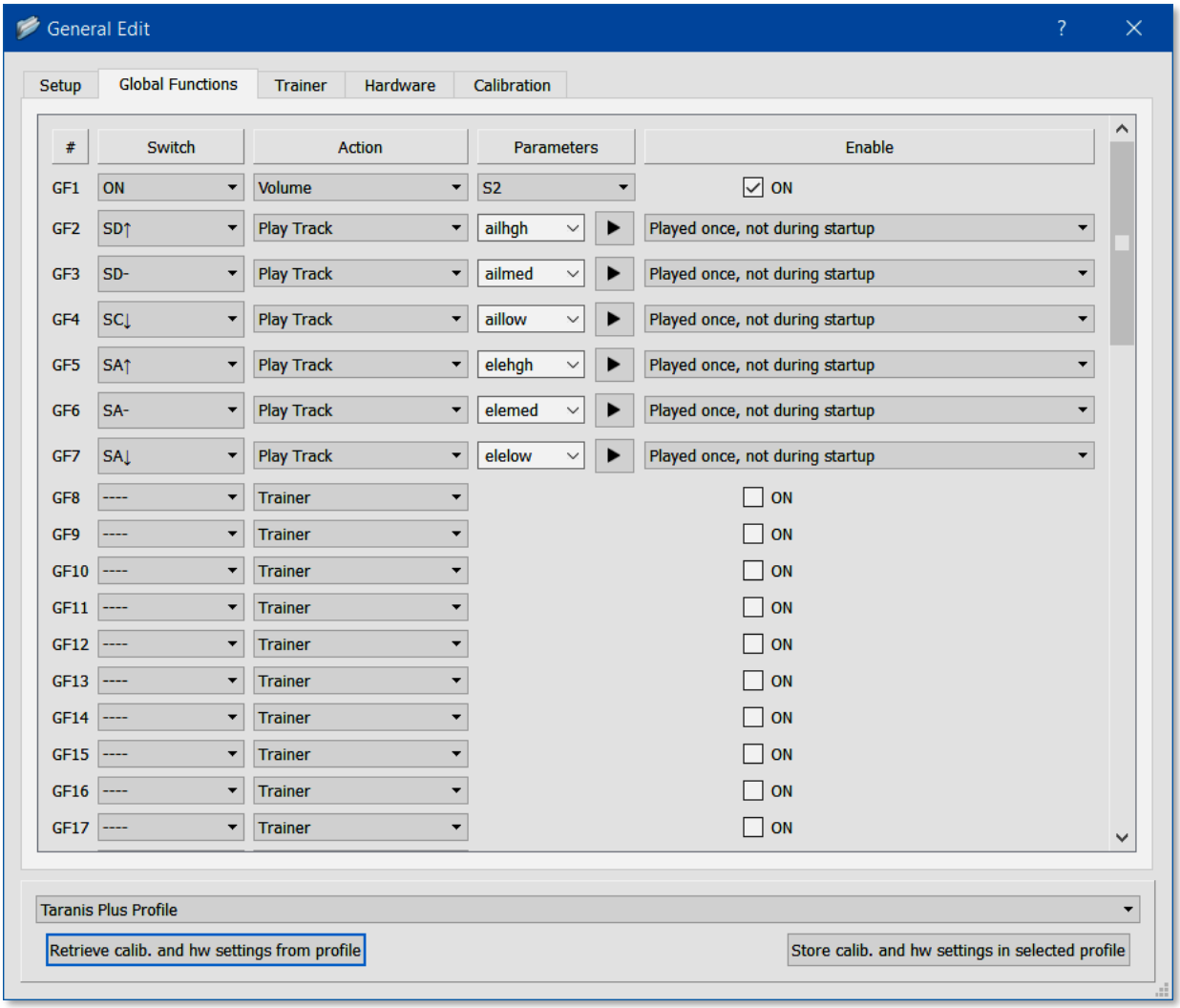
Function	Options	Notes
Vario pitch		Sets the pitch (how high the note is) for the vario.
Vario repeat at zero	200ms to 1sec	The delay between beeps.
Backlight Switch	Off	The backlight never turns on
	Keys	The backlight turns on any time you press one of the 6 menu buttons
	Sticks	The backlight turns on any time you move one of the sticks, or switches, but not the sliders or pots (S1 or S2)
	Keys + Sticks	The backlight turns on any time you press one of the 6 menu buttons or move a stick or switch.
	On	The backlight turns on and stays on. The backlight will drain the battery slightly faster.
Backlight Auto Off After		How long the backlight stays on.
Backlight Brightness	0 to 100	
Backlight Colour		Selects between the two colours, if available.
FIA Mode		Disables all telemetry except RSSI and battery voltage (RxBt) to comply with the FAI international rules for competition.
Country Code	America Japan Europe	Sets the radio to be compliant with the regulations in your region.
Timeshift from UTC		UTC = Universal Time Coordinated. This is the highly accurate time stamp sent out by GPS satellites. The time shift is essentially the time zone. For UK this is 0 in winter and 1 in summer.
Adjust RTC		RTC = Real time clock. Ticking this box will update the transmitter clock with the GPS time. (Needs GPS telemetry to be installed in a model.)
Voice language		More languages are gradually being offered.

General Edit: Global Functions

There are 64 global functions available. The idea of these is to save having to copy the same function into every model. There are some limitations on the availability of certain functions to prevent overriding any model specific functions. These global functions are particularly useful if one starts to standardise what particular switches and setting are required for personal use. These control function preferences can be can be given global names in the **Hardware** settings of **General Edit**. Examples of use:

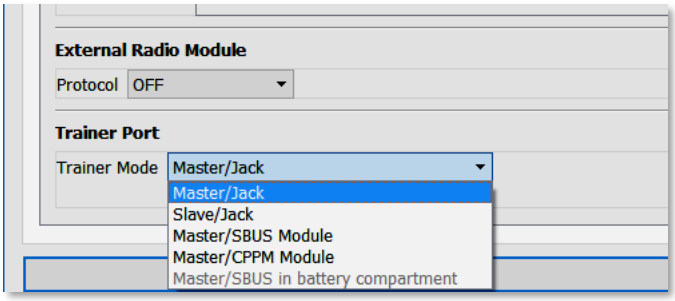
- To have a volume control on **S2** available for all models. (**GF1** above)
- To have voice alerts for standardised switches, e.g. **SD** for aileron triple rates and **SA** for elevator triple rates.

By default, **OpenTX** will play all the programmed voice alerts and messages when switched on. There are times when this is useful, and others when it is not. A particularly useful feature is the command line **Played once, not during startup** which ensures the message is only heard once when the condition is met. If switching across from high rates directly to low rates is met with the medium rates message, then increase the play delay on the **SETUP** Window.



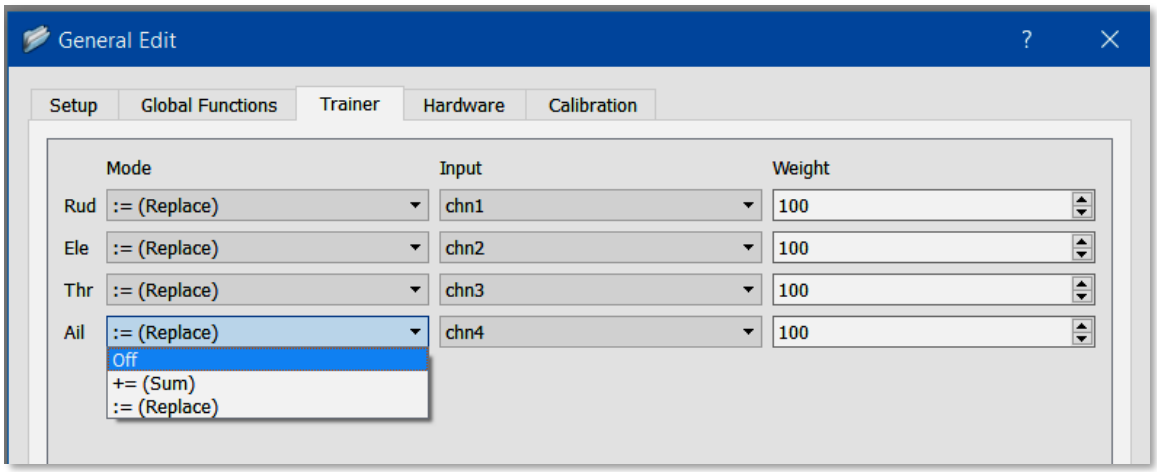
General Edit: Trainer

More information on setting up a buddy box system using **OpenTX** is in the **How To** section of this guide. Basically, one transmitter will be designated the **Master**, and one the **Slave**. It will be the **Master** transmitter which will transmit the signal to the receiver, and indeed, the transmitting signal should be switched off for the slave. At the bottom of the **Model Edit Setup Screen**, there is a trainer port option. Here the transmitter can be set to either **Master** or **Slave**. If using a 3.5mm jack lead then set as shown opposite.



The **Trainer Screen** of **General Edit** is for the basic setting up of the **Master** transmitter.

The **Trainer Screen** offers three basic options for setting up .



Mode

This gives the options of **Off**, **Sum**, or **Replace** for each of the four joystick inputs.

- **Off** means that function will not be used from the slave transmitter.
- **Sum** (**+=** on the tx screen) adds together the inputs of both master and slave units.
- **Replace** (**:=** on the tx screen) uses the slave transmitter values instead of the master transmitter's values.

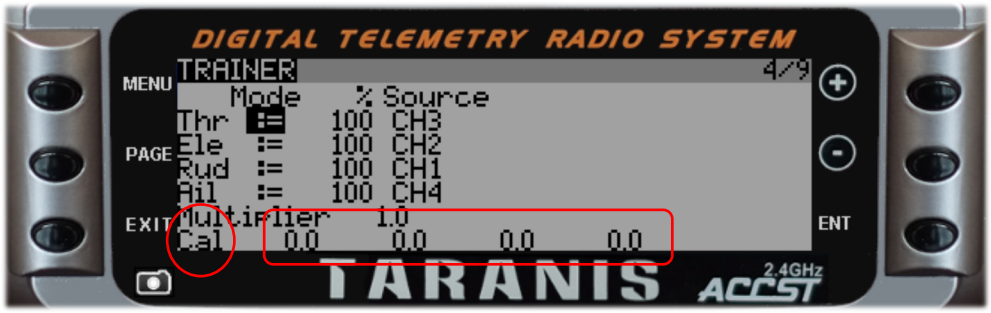
Clearly the normal modes will be either **Off** or **Replace**, though to temporarily disable a control the **ON** option in the **Special Functions** is probably a more elegant way of doing this.

Input

Input allows selection of which of the **Slave** units joysticks maps onto the **Master** unit. This means, say, that a trainer who uses mode 1 on the **Master** transmitter can easily train a student using mode 2. This option is best done on the **Master** transmitter itself with the **Slave** already connected unless one knows the **Slave** joystick order.

Weight

If required the weighting can be reduced.



It should be noted that any rates or expo set on the **Slave** transmitter will still operate.

Using the **Master** transmitter on the trainer screen above, by moving down to the **Cal** feature, this will centre the **Slave's** joysticks. The throttle must be as near as possible in mid point.

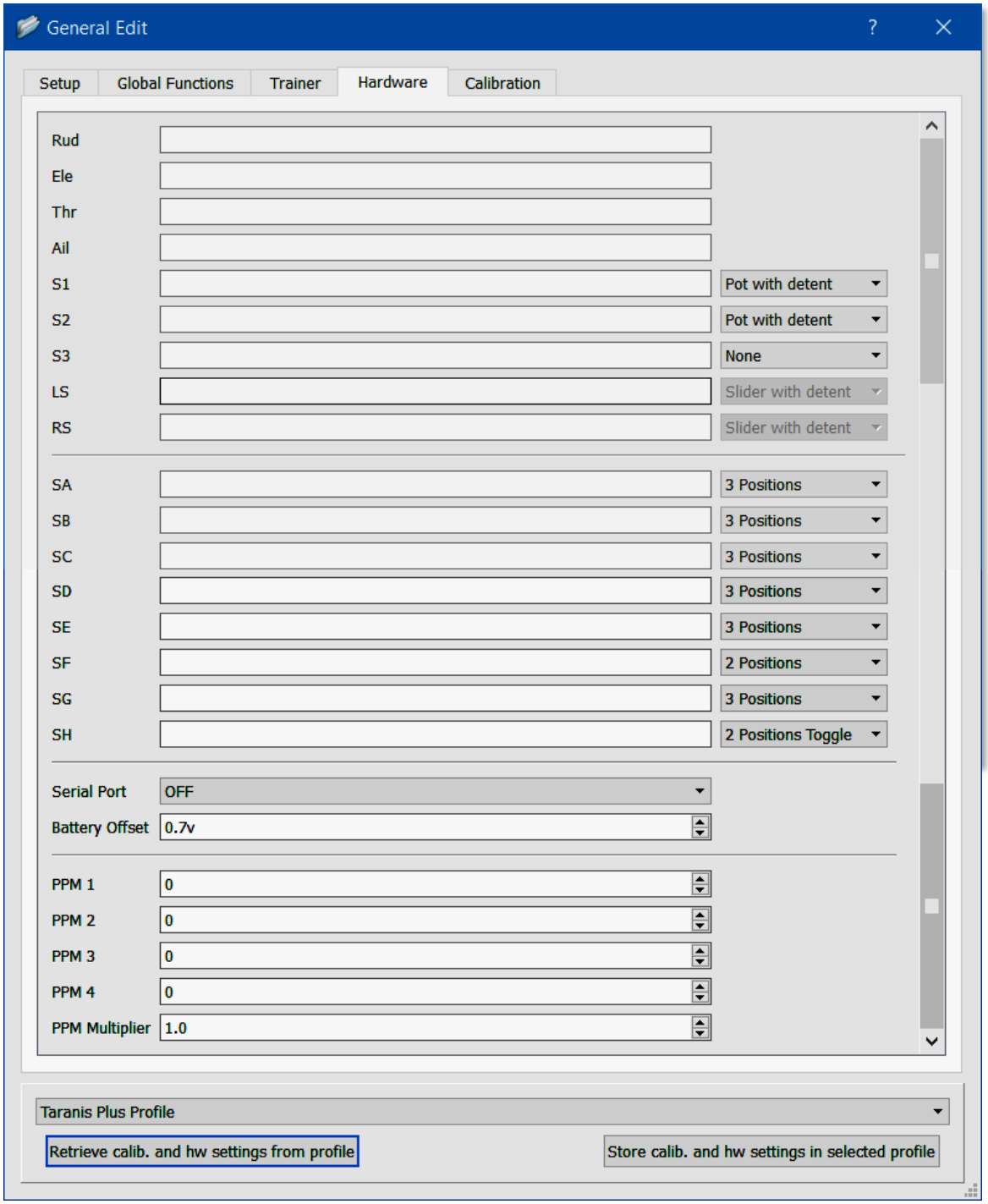
Check the throws of the **Slave** joysticks, these will show as the four number highlighted in the red box. If the throws go higher or lower than 100, then the multiplier will adjust all four throws.

Finally a switch, or switches to enable the **Slave** transmitter will need to be set up in the **Special Functions Screen**.

Always check the functions of the buddy box system on the ground with the model secured before attempting to fly.

General Edit: Hardware

This screen allows the controls to be given more appropriate names where they will be used globally. E.g. if switch **A** is designated as aileron rates for all your models, it could be labelled here. Sadly the name is limited to just 3 characters, so its use is somewhat limited. This screen also caters for those who want to physically alter the switches or pots fitted to the transmitter from those normally supplied with their transmitter.



General Edit: Calibration

This screen is not available on the transmitter and shows the calibration settings if they have been stored from the transmitter.