

## Open TX/EdgeTx for dummies

If you have a multi-protocol radio, then chances are it is using OpenTx or its newer cousin EdgeTx.

While the screens look a little different on different radios, I believe the concepts are the same.

### Part 1 – overview and key points

#### Menus

There are several sets of menus. They include...

1. SYSTEM
2. TELE
3. MODELS
4. MODEL SET UP

#### SYSTEM

This set of menu allows you to set up your radio **system**. Normally this is only done once but you might wish to tweak some part of the system as you become more familiar with your radio.

You access this set of menus by pressing the **SYS** button.

It has a number of menus, but the one of most interest is the RADIO menu. This allows you to set up whether it is mode 1 or 2, the current date, how bright the screen is, how loud the loudspeaker is, etc.

#### TELE

The menu set allows you to set up “widgets” that display on the screen for each model.

Things like a timer for how long you have been flying this model, the battery voltage in the transmitter, the amount of throttle currently in use – either as a number or a bar or both.

Access this with the **TELE** button. Picture type widgets do not display on the smaller black and white screens like the RadioMaster Zorro.

#### MODELS

The **MOD** button opens the MODELS menu.

This allows you to select a model to fly or to edit, to duplicate(clone) a model, to create a new model, to delete a model etc.

#### MODEL SET UP

This is opened when you choose a model in the MODELS menu above.

This set of menu pages allow you to set up how the radio will control the plane.

You can choose

- Which outputs you need i.e. does the plane have a rudder or flaps etc.

- The direction the control surfaces move. E.g. will the rudder move left or right when you push the Rudder stick fully to the right. (Varies with servo placement.)
- Which switch will turn the gyro/stabilizer on/off.
- The maximum output you can apply to a control surface. E.g. do you want the rudder to move all the way or just part of the way when you push the Rudder stick fully to either side.
- And lots more – many of which you will not need for many models.

### Moving around the screens

- Use the **PAGE>** and **PAGE<** buttons to move between menu pages.
- Use the scroll wheel (or up down buttons) to move up/down a list of menu items/lines.
- Use the scroll wheel to move right/left along a menu line (where there is more than one item on a line)
- Set a value by pressing **ENTER** – this is a quick press on the bottom of the scroll wheel. [Some older radios have an **ENT** button.
- In some areas, a long press (3 seconds) on the **ENTER**, displays options you can select.
- When you have finished a task, press the **RTN** button (sometimes more than once) to return to the previous screen/page.

### Flying your model

When you start up your radio, you will be on what I think of as, the “flying display”.

This screen displays one of “widget” pages you set up for the selected model.

Personally, I like the CHANNELS MONITOR screen. This shows you the amount of output for each control surface i.e. how much throttle is currently set, the amount and direction of the rudder output etc. I find this very useful for my initial check of the radio and control surfaces before I start flying the plane.

**FYI** When you turn on the radio or select a new model, a warning may show up e.g. “Throttle not idle”. Fix that issue(s) before you continue.

### VERY IMPORTANT 1,2,3,4,5

Before you launch your plane, count to 5 where each number relates to a specific item (switch) on **your** pre-flight check list. Mine looks like this.

1. Do the sticks move the control surfaces in the expected direction!
2. Throttle Cut
3. Gyro On/Off (if applicable)
4. Flaps (if applicable)
5. Rates

For example, if you have unintentionally turned OFF the gyro, then chances are it will be a short flight with an unhappy ending!

The way I set up radios, the 4 most important switches are items 2~5 going bottom left through to bottom right.

***It is very helpful if you keep the same switches for the same functions for all your models both for the check list purposes and so you remember which switch is which.***

Adding audible prompts when you alter a switch setting is also very helpful! E.g. the radio can say “Throttle Cut” and “Throttle Active” when you alter the Thr cut switch positions.

## Part 2a – setting up a model

### IMPORTANT

Radios use “channels”.

With one channel per function. E.g., for multi-protocol radios, channel 3 is the Throttle channel.

As you are using a multi-protocol transmitter, when setting up a model, ***you must use the following order for the first 4 channels.*** After that you must match the output channel number of the radio to the related channel number on the receiver, e.g., Volantex models use channel 5 for gyro mode/settings.

Channel	Symbol	Control
1	A	Aileron
2	E	Elevator
3	T	Throttle
4	R	Rudder

- This is known as “AETR” order.
- The multiprotocol transmitter will automatically rearrange that order to match the receiver you have selected for this model.

Set your OUTPUTS to that order, and it then makes sense to also set the INPUTS and MIXES to the same order. (See below.)

### Editing a model

Select the model as described in “MODELS” above.

- Once it is selected, you will see a notation (top right) that says you are on page 1 of 11 (or similar).
- Each of those 11 (or so) pages allow you to set/adjust various aspects of the model set up. Normally you will only use a few of those pages.
- These pages are very similar across all planes.

### The 4 key pages are summarised

#### SETUP (p2/11)

- set up for the receiver in this plane
- make sure to set a “fail safe” which will save the plane if it loses radio contact. Note: Some receivers do not support this functionality.

## INPUTS (p4/11)

- select the physical inputs you wish to use (use [AETR](#) – see above)
- set up rates for each input and allocate a switch for the rates (How far the control surface moves with the stick movement)
- set up expo for each input

## MIXES (p5/11)

- Create a mix for each output i.e. for Thr, Ele etc
- A mix may contain a single Input e.g. Thr or
- a mix of inputs e.g. Rud *input* plus 40% Ail *input* combine to control the Rud *output*

## OUTPUTS (p6/11)

- Here you can label the outputs making it easier to set up the Mixes page
- You can invert an output (Direction)
- Set the maximum and minimum output levels to suit this plane

## Part 2b creating a new model

### Options

Some radios come with sample model set ups you can copy then edit to suit your needs.

Or you can simply select “Create a New Model” and follow though the simple set up options that it provides.

You can do it directly on the radio or you can do this on your personal computer using “Companion” software then transferring your model set ups to your radio. This document is focuses on the ‘on the radio’ option.

If you are new to this, then you may choose to ask someone who is familiar with your radio, to set up a template of two for you. Then making a new model is much simpler as you can copy/clone one model to create a new one.

If you do that you must give the new model

1. A suitable name
2. An appropriate protocol to match the receiver. There are a number of set up documents available from the Indooraviation.com web site for commonly flown indoor planes.
3. A UNIQUE receiver number. Do **NOT** have two models with the same receiver number!

### Create a **New** Model

The simplest way by far is to use the DUPLICATE option from the MODELS screen.

1. Select the model to duplicate.
2. Move the cursor to the then end of the model list to a blank line then press ENTER.
3. The edit the model to suit. See previous section.

OR to create a new model from scratch.....

1. Start on the main screen. A few presses of *Return* should get you there.
2. Press the *Models* button.
3. Long press (3 seconds) on the *Enter* button/scroll wheel).
4. This brings up a menu.
5. Highlight the *Create New Model* option using the up/down buttons or scroll wheel.
6. Select this option with a quick press on the *Enter* button/scroll wheel.
7. Answer the question(s) on the first page e.g. what basic plane type is it.
8. Using the *page* forward button, go to the next screen in this set up 'wizard'.
9. Choose appropriate option(s) by pressing the *Enter* button/Scroll wheel.
10. When done, move forward to the next page.
11. Etc.
12. When finished, close the final screen to go back to the main menu.

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Part 1 will look at moving around on the screen and part 2 will look at the commonly use menu items.

There is an appendix for several of the more commonly used radios. It will show you which buttons/controls are used for what purposes.

OpenTx/EdgeTX has a number of pages(screens).

These pages are menus with lines(elements) that you can select then set or update e.g. amount of Expo.

To move to the next/previous menu page use the

- Page Right (pag>) and
- Page Left (page<)

To move up and down in a menu page use

- Scroll Wheel

When a menu line has a single item to update/edit select with

- 'Enter' (click bottom part of scroll wheel)

When a menu line has multiple items to edit, select the line with

- 'Long click' (3 seconds) on bottom part of scroll wheel)

To move across items in a menu line use

- Scroll Wheel

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To move between pages (Menus) you use the

- Page Right (page>) and
- Page Left (page<)

buttons.

Note: For the next section: the 'Enter' button is actually the lower part of the scroll wheel. You can move up and down the list of elements with the scroll wheel.

To select an element to edit, press Enter.

The menu will show options you can select from, then they will appear as a list.

Move up and down the list with the scroll wheel, then press Enter on the list item you wish to edit.

Some lines have several different elements

To select one of these multi element lines for editing, you need a long press (3 secs) on Enter.

Then move to the element you want to alter with the scroll wheel.

When you have finished on a page (menu) use the Return ('RTN') button. Sometimes you will need to press this several times.

The *main* menus that you will use are

1. System Setup
2. Models Setup

Once your radio is set up, you will not normally need to access System menu items, so this document will concentrate on the Models Set Up menu.

### Part 1 – moving around on the screen – see relevant appendix for your radio

Both the System Setup and the Model Setup screens have multiple pages (menus).

Next menu page, previous menu page

Up/Down within menu

left/right within menu item

There are controls for a....

- next page ("*page >*")
- previous page ("*page <*")

These enable you to move to another menu from left to right and visa versa

e.g. within the Model Set up area, you can move from the *Inputs* set up screen to the *Mixes* set up screen.

Once on a menu, you can

- move up
- move down

with either

- A jog/scroll wheel or
- Up and down buttons

This allows you to find an item to update, within that Model's set up screen e.g. the amount of expo.

To update an item, find the item then use the

- *Enter* button

This might be a quick click on the jog/scroll wheel or a specific switch

Once you have finished the alteration, press the *Enter* button to save the change.

Once you have finished with this menu, press the *Return* (Rtn) button to go back to the start of this menu page. From there you can go forward or backwards to the next menu page, or another press of *Return* takes you back to the main screen.

Edit the *Model Setup* for this model

Getting to the model so you can edit it.

Turn on the radio.

Return to the main screen - usually the CHANNELS MONITOR screen.

The radio has 5 main pages/screens. You can move through them with the PAGE buttons. I prefer the OUTPUTS page as it allow me to that all the controls are behaving as expected. Especially useful for checking rate and mixes.

If you are not on the main screen then you may need to press the RTN button a few times.

**Now**, press the MDL (model) button.

This should bring up a list of your models.

If it does not, then you need to return to the main screen first (as above). Then you can press the MDL (model) button.

Scroll up or down with the scroll wheel until to you highlight the model you want.

Press Enter (scroll wheel bottom).

On the pop-up list, scroll up to "Select model" option.

Press Enter.

If any warning shows up e.g. "Throttle not idle" fix the that issue(s).