

Electric Flight Safety

Ideally every electric aircraft you have should be equipped with an arming device on the craft itself (either an ESC switch or power interrupter plug) as well as having a throttle cut switch on your transmitter. Since electric motors can startup unexpectedly and inflict a lot of painful damage the double precaution can avoid some nasty injuries. Although an arming switch/plug on the aircraft ought to be sufficient on its own there are times when it is armed with the intention of flying but something distracts you and the aircraft is now vulnerable to a careless jog of the throttle lever, the transmitter becomes your last line of defense.

I have implemented a transmitter disable switch for all my aircraft (helis as well as conventional planes) this way the process is second nature to me. The idea is that whenever the aircraft is not expected to fly the transmitter switch is in the disable position. The moment before takeoff I switch it to enable, fly as required then the moment the aircraft touches down and I have completed taxiing it I *always* click the switch to disabled.

Some of the more advanced transmitters have the ability to set a throttle cut switch up within their menus however others need a little work to make it happen. Below I give the process needed to set up a Spektrum DX7, it is likely this technique can be used on other transmitters, it is well worth doing and if you are still unsure how try looking online for your particular transmitter.

In my case I use the switch at the top right hand corner of the transmitter as the kill switch, this seems to be a standard as far as I can tell, the DX7 does have a label saying HOLD for this switch (as well as Ruder D/R).

Setup Process For the Spektrum DX7 Transmitter:

From your selected plane setup menu (pressing **scroll** and **select** simultaneously) move to one of the mixing channels (I prefer to set this as mix 1 however any of them should work).

Select source and destination for the mix to be **THRO** (short for throttle), the display should show:

THRO -> THRO

Now move to the rate section and set both sections to **-100%** (you will be able to set one of them with the throttle stick down and the other with it up).

Move to the **SW:** section and set it to **MIX**

Move to the **OFFSET** section and set it to **-100%**.

If you toggle to switch at the top right of the transmitter you should see the text to the right of the **THRO -> THRO** change from **OFF** to **ON**, when this reads **ON** the throttle is disabled (this should be with the switch pulled toward you). Your mix screen should look like:

```
[PROG.MIX1]
  THRO->THRO    ON
    RATE: -100%
          -100%
  >SW:MIX
    OFFSET:-100
```

Carefully try this out with your model turned on, with the switch toward you it should not be possible to start the motor at all (even helis should be disabled despite the position of the idle up switch).

All that remains now is to cultivate the habit of ensuring the switch is in the disabled position whenever you pick up the aircraft and whenever it is not on the flying field.