



Futaba FP-8UAF/FP-8UAP FAQ (Frequently Asked Questions)

by Dick Sutton

- What is the difference between the aircraft and heli versions of the 8UA?

Answer: The only difference between the aircraft and heli versions of the 8UA is the placement of the 3-position PMIX switch, snap-roll switches for the aircraft version, the servos provided, and the battery pack provided. In the aircraft version, this switch (Switch H) is located on the right top of the transmitter case; in the heli version, this switch is located on the left top of the case. In addition, the aircraft version has two snap-roll switches located on the lower right of the transmitter case (which are absent on the heli version since the snap-roll switches would be of no use to a heli pilot). It should also be noted that there is no difference between the FM (PPM) and PCM versions of the transmitter (except for the name plate). The name plate merely indicates which receiver was originally packaged with the transmitter. The same RF module (FP-TP-FM) is used for both the FM and PCM versions. In summary, if you prefer the 3-position switch on the left (as heli and some sailplane pilots do) or need the snap-roll switches then buy the FP-8UHF/FP-8UHP version; if you prefer the switch on the right, then opt for the FP-8UAF/FP-8UAP version. Also, Futaba packages 4 upgraded servos (S3001 vs. S-148's) with the PCM receivers and in the case of the PCM heli model, they package 5 S9202 servos which adds substantially to the price. The following table summarizes the available 8UA packages:

Model	Type	Servos	Battery	3-Position Switch	Snap-Roll Switches
FP-8UAF	Aircraft (FM)	(4) S-148's	500 mAh	right	yes
FP-8UAP	Aircraft (PCM)	(4) S-3001's	500 mAh	right	yes
FP-8UHF	Helicopter (FM)	(4) S-3001's	1000 mAh	left	no
FP-8UHP	Helicopter (PCM)	(5) S-9202's	1000 mAh	left	no

- I bought the Futaba FP-8UAF (FM version), now I want to add and use a PCM receiver. Do I have to get a PCM transmitter RF module?

Answer: No! The RF module supplied with the transmitter is all you'll ever need, unless you want to change transmitter frequency (see answer about differences in models, above). The

RF module supplied is PPM/PCM capable. You program the transmitter to match the type of receiver you are using on a model by model basis. So, for your 8 model memories, you can have any combination of FM and PCM airborne units. Just make sure that your receiver matches what you programmed in the transmitter!

- The 8 channel receiver (R-148D series) only has a battery connection and 7 places to connect servos. How and where do you connect the channel 8 servo?

Answer: The battery connection and channel 8 servo connection share the same port on the receiver. This 'sharing' is accomplished via a 'Y' cable. just plug the channel 8 servo in one side, the battery in the other, then plug the 'Y' cable connector into the battery slot.

- I want to cycle my transmitter's battery, but if I insert the plug into the side of the transmitter I cannot discharge (because it's diode protected) but I can charge. If I take the battery out to re-cycle my battery, won't I lose all my programming?

Answer: No! The programming for the model memories does not require the battery to maintain their values. As you know, most transmitters, today, are 'diode protected'. This 'feature' is there to protect the person who might inadvertently plug in the wrong charger and destroy the transmitter. For example, JR chargers employ reversed polarity connectors for the transmitter charge cord. Futaba very wisely replaced the old style internal battery connector with a standard 'J' connector on the 8UA series. Now you can easily remove the battery cover, unplug the battery and connect it to your re-cycler. When re-cycling is complete, simply reconnect the battery, replace the cover and your back in business (and ALL of your programming has remained intact).

- My new 8UA has digital trims. I see references to the TRIM display, TRIM RESET, TRIM STEP RATE, SUB-TRIMS, etc. I'm confused by all these things; how do they all relate?

Answer: Digital trims provide an incredible amount of flexibility in setting and adjusting the linkages on your airplane. To begin with, the slider switch of older transmitters is replaced by a 2 position rocker switch. You press the top of the switch and the trims advance; conversely, you press the bottom of the switch and the trims move in the opposite direction. If you press and hold the switch in a given position, the rate accelerates. A visual indication of the trim position is given on the LCD screen. This display can be customized for either normal display or reverse video display in the 'trim display' (DISP) menu. The amount of travel that the servo moves per 'click' is controlled by YOU in the 'trim step rate' (STEP) menu. You decide the resolution of the increments. If you get things really fouled up you can always set things back to the factory defaults by using the TRIM RESET function. The SUBTRM menu allows you to make fine adjustments to the servo's center position instead of taking off the servo arm and repositioning it one 'tooth' in one direction or another. This allows for much greater resolution than the 'one tooth' method. Just remember that a servo can only rotate so many degrees. If you make drastic movements in a servo's center position,

you are affecting the total 'throw' available in that direction. In other words, don't rob Peter to pay Paul. There's no substitute for setting your servos up properly in the first place. Then make fine adjustments with the transmitter.

- In the Advanced Menu, the PMIX setup has a reference to the LINK capability. The example is not clear as to what this capability is and why would I want to use it?

Answer: Generally, you mix a 'master' channel into a 'slave' channel with the PMIX function. Let's assume that we have a sailplane and you have set FLPRON mode (ailerons doing double duty as flaps). This requires that you plug the right aileron servo into channel 1 and the left aileron servo into channel 6. The transmitter will do the right thing for you and when you command left/right aileron: they work as expected. If you twist the channel 6 knob the flaps raise/lower appropriately, too. Now, let's say you want to control the flaps with the throttle stick. You would simply program a PMIX to mix channel 3 (throttle) with channel 6 (flaps). The problem is that when you test this, you find that when you move the throttle stick, only the left servo moves! This is because you are strictly mixing channel 3 with channel 6 and there is only one servo attached to channel 6 (the left aileron servo). What we need to do is tell the transmitter to look for other mixes that may be in effect that includes these channels. That's what the LINK option does: it tells the 8UA to 'link' to any other mix that may be in effect and associated with channel 6 (i.e. the FLPRON mix, in this example). Frankly, I haven't come up with a situation where I wouldn't want the LINK ON, but I'm sure that there must be a good example out there, somewhere.

- I fly sailplanes and want to use the throttle stick to control the flaps instead of the channel 6 (flap) knob. Can this be accomplished on the 8UA?

Answer: Yes! The 'trick' is to use a PMIX function. Generally, with a PMIX function, you mix a 'master' channel into a 'slave' channel. Let's assume that we have a sailplane and you have set FLPRON mode (ailerons doing double duty as flaps). This requires that you plug the right aileron servo into channel 1 and the left aileron servo into channel 6. The transmitter will do the right thing for you and when you command left/right aileron: in other words, they work as expected. If you twist the channel 6 knob the flaps raise/lower appropriately, too. Now, let's say you want to control the flaps with the throttle stick. You simply program a PMIX to mix channel 3 (throttle) with channel 6 (flaps). Now, as you move the throttle stick, the flaps move appropriately. Be sure to set the LINK option. This tells the 8UA to 'link' to any other mix (i.e. the FLPRON mix, in this example) that may be in effect and associated with channel 6. Of course, if you have one servo for flaps, then setting the LINK option may not be necessary unless you have some other mix that you want taken into account.

- I'm used to my old 6 channel transmitter which has a 3-position flap switch. There doesn't appear to be a way to set up this type of configuration on the 8UA. How can I get the effect

of a 3-position flap switch?

Answer: This scenario can be easily accomplished using the PMIX functions of the Advanced Menu. Usually, you mix a 'master' channel into a 'slave' channel. However, you will notice on the 8UA that you have the choice of channel 1 thru 8 and OFST (offset) for the 'master' selection. The 'trick' is to select OFST as the 'master' channel and channel 6 (Flaps) as the 'slave'. What this accomplishes is, whatever value you enter for the servo travel (on the slave channel) will simply act as a pre-set offset. Further along in the PMIX programming, you are given the opportunity to assign this mix to a switch. Let's say you select the three position Switch G on the right side. Simply select Switch G and then select 'CENTER' for the activation position. If you then repeat this process for another PMIX (say PMIX 2) with a different flap offset, you can then assign that mix to Switch G in the 'DOWN' position. Voila! You have a 3-position flap switch (up=>off, center=>x% flaps, down=>y% flaps).