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Tamiya TEU101BK / TEU103BK / TEU104BK / TEU105BK Connection

Differences
Although the photos below show the TEU101BK and the AR201 receiver, fitting is the same for the AR2/27 and AR2/40 receivers, and the TEU103BK, TEU104BK and TEU105BK units.

The TEU101BK, TEU104BK and TEU105BK operate the same. The only difference is that the 104 allows LiFe batteries to be used (not sold in the UK) and the 105 has support for some radio systems that do not have a "bec" circuit. If we have supplied you with the speed controller and radio, rest assured it will be compatable. The information below also applies to the TEU103BK twin motor version, although of course this has more wires going to motors.

Where to put the wires
The picture below shows the Tamiya TEU101BK ESC connected to a Acoms receiver, although the instructions below also apply to any receiver. If your ESC will not plug into your receiver, simply trim off the lug on the side of the ESC plug. It will then fit, although it's a tight fit.

Note the order of colours of the wires. The black wire from the ESC must go to the right hand side of the receiver. The red plug from the ESC goes into the right most two pins of the 3-pin battery socket. The plug for the steering servo goes into channel 1, the plug for the ESC into channel 2. The black wire from the servo again must go to the right hand side of the receiver. Refer to the picture above – if you plug it up any other way it will not work.

Please note that the TEU103BK, TEU105BK and TEU106BK do not feature a red plug, only the single black plug. With these, you should still plug in exactly as shown, but should have nothing plugged into the Battery socket – as with these units, the power is supplied down the signal lead.

You DO NOT NEED the on/off switch contained in the Acoms Radio set. It's not needed with this ESC. If you are using a HITEC radio, you DO need the on/off switch since the Tamiya Red Plug will not fit the receiver – so with the HITEC you plug the Red plug from the ESC into the Hitec On/Off switch and then plug the wire from the switch into the receiver. Make sure if you do this that the switch is set to ON (then tape it up so you don't confuse it with the other on/off switch on the ESC).

How to make it work
This is in fact very easy, but the Tamiya instructions make it sound hard – here's what you do:

Make sure you have fresh batteries in the hand set (the controller – the bit with the aerial that you hold) and that it is switched on. Make sure the sliding adjusters on the handset are both in the middle position. Find yourself a tool that you can press the recessed button on the ESC with and practice pressing the button.

Get a charged up battery for the car and fit it in the car. Do not plug it in yet.

Unplug one of the wires to the motor, since you don't want the car running away.

Switch the on/off switch on the ESC to the OFF position. Making sure that your hand set is still switched on, plug in the car battery to the ESC.

The next bit is time critical. You need to switch on the ESC and then within half a second you must press in the recessed button and HOLD IT DOWN for around a second. You should not hold the button down whilst switching on, you should only press it *after* switching on, but ideally almost immediately – this can take some practice. *Some versions of the TEU101/4 have slightly different software and the timing isn't critical on these.* When you have pressed it at the right time the light on the ESC will start to flash. If it doesn't switch off and back on to try again.

With the light flashing, move the throttle stick to the full forwards position. Hold it there and press the recessed button. The light should then start to flash more quickly.

Now move the throttle stick to the full reverse position. Hold it there and press the recessed button again.

At this point the ESC should be set up. You can test by plugging in the wire to the motor and trying to rev the motor and trying to reverse. Note that the car will not go from forward to reverse without stopping first, so you need to return the stick to the neutral position before trying to reverse.

Common Problems

Setup didn't work? Two things usually cause this – either you didn't press or hold the button down long enough at the first stage OR your transmitter is set to "SERVO REVERSE". You can check the transmitter by looking for switches marked N-R marked with CH2 (on the bottom front of an Acoms transmitter, hidden under a cover on some Hitec etc). It should be set to N for the ESC to work.

No Reverse? You can switch reverse on and off on this ESC. This is because you cannot usually use reverse in race events. To toggle it on and off, simply switch off the ESC, hold down the recessed button and whilst holding it down, switch on the ESC – then release the button.

If all else fails, our contact details are at the top of the page. One thing with the Tamiya ESCs that you can be sure of though is that the failure rate is less than 1 in 500 – so if it doesn't work, chances are it's setup rather than hardware that is at fault.