

How To Convert The Herr LITTLE EXTRA ARF To Electric Power

Many modelers have asked for guidance on converting the popular Herr LITTLE EXTRA ARF (kit no. HRR600ARF) to electric power. The following instructions detail the installation of a MAXX Products brushless motor in the LITTLE EXTRA. The result is an excellent electric power package that provides flight performance equal to the standard glow powered version.

In addition to the LITTLE EXTRA ARF kit, you will need the following items to make this conversion:

- 1 - Maxx Products Himax HB2815-1400 Brushless Motor
- 1 - Maxx Products Clam Shell Motor Mount #ACC314
- 1 - 25 amp Brushless ESC (we used a Phoenix 25)
- 1 - APC 8 x 4E Thin-Electric Propeller #LP0804E
- 1 - Li-Poly Battery Pack, 3S, 11.1v, 1500mAh - 2100mAh
- 4 - 4-40 x 1/2" (or M3 x 15mm) Socket-Head Mounting Bolts
- 4 - 4-40 (or M3) Blind Nuts
- 1 - On/Off Switch (we used a Radio Shack 3 amp DPDT switch)

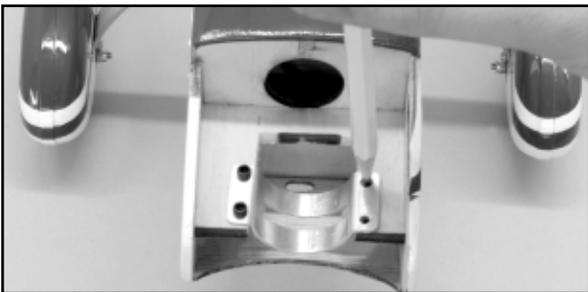
Note: Many electric flyers do not use an on/off switch, but simply plug in and un-plug their battery pack right before and after a flight. However, due to the fact that the battery in the LITTLE EXTRA can only be accessed by taking off the wing, we thought the addition of a switch would make life easier at the flying field.

1) The plywood engine mounting plate built into the front of the model will be used to mount the electric motor, however the opening between the beams of the plywood plate will have to be widened to 1-1/4" (31.8mm) to accommodate the Clam Shell Motor Mount.

Using the existing glow engine mounting holes as a guide to help maintain the proper side thrust angle, draw parallel cut lines just outside of the existing holes as shown. The spacing we are needing is 1-1/4" (31.8mm). Then use a razor saw or Dremel tool to cut away the unwanted plywood. Test fit the bottom of the Clam Shell Motor Mount to make sure it fits.



2) Hold the bottom half of the Clam Shell Motor Mount in place on the plywood plate while you mark the locations of the four new mounting holes that are needed in the plywood.



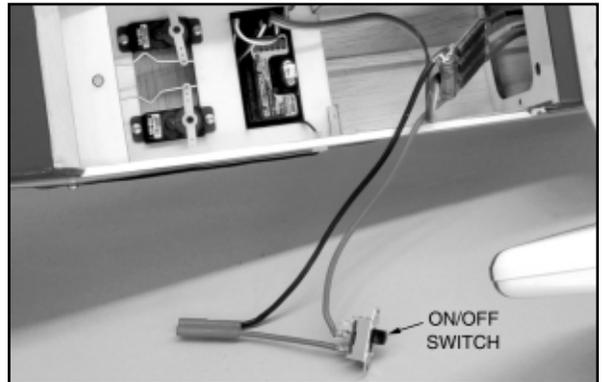
Next drill 9/64" (3.5mm) dia. holes completely through the plywood plate at the proper locations to accommodate 4-40 (M3) Blind Nuts. Mount the Blind Nuts on the bottom of the plywood plate, by using the 4-40 x 1/2" (M3 x 15mm) Socket-Head Bolts to draw the blind

nuts into the wood. Place a small amount of glue on the flanges of the blind nuts to keep them from coming out. Be careful not to get any glue in the threads of the blind nuts.

3) Connect the ESC to the electric motor, and then feed the ESC wires through the firewall back into the wing area. Mount the electric motor in place in the motor mount. Before the final tightening of the mounting bolts, slide the motor fore or aft as needed to make sure the propeller clears the fuselage sides by at least 1/8" (3.2mm).



4) Cut the positive lead to the ESC and solder the On/Off Switch in place between the ends.



5) Mount the On/Off Switch in the hole that already exists in the side of the fuselage for the normal radio on/off switch (which we aren't using).

6) To achieve proper balance of the finished model, the battery pack should be put in the nose of the airplane, as far forward as possible. Stuff scraps of soft foam rubber around the battery pack as needed to keep it in place.

