

The Telemaster 40 kit has a 73 inch wingspan, and typically come in around 6 pounds, ready to fly, with a 2-stroke .40 glow engine for power. By the time you figure the weight of a .40 glow engine, muffler, fuel tank full of fuel and a throttle servo, an electric power system that makes the same amount of power, with a motor, battery and ESC, usually weighs about the same as the full glow power system. This would make the finished weight of an electric version around the same 6 pounds.

A .40 size aircraft can usually be flown with a 4-cell battery, and a 4-cell 4000mah is a very common size to use. Based on that, with an estimated 6-pound flying weight, the Telemaster 40 really only needs about 600 watts of power to fly well. I looked online and found a set of plans for the Telemaster .40 and they show a 13" prop on the plans plenty of ground clearance, so a motor with a 12 or 13 inch prop will work well.

In our BadAss line, the best motor for this plane would be the BA-3520-790. It does very well on 4 LiPo cells with 12 and 13 inch props. You can start with a 12x6-E and then also try a 13x5.5-E or 13x6.5-E prop. Our BadAss 12x6 and 13x6 props would also be good to use on this motor.

With the ACC 12x6-E prop on 4 cells, this motor gives you the following performance numbers.

Volts - 14.8
Amps - 44.4
Watts - 657
RPM - 9820
Thrust - 99 ounces (6 pounds 1 ounce)
Speed - 56 MPH

With the 4 APC 13x5.5-E prop you get these full throttle performance numbers.

Volts - 14.8
Amps - 47.6
Watts - 705
RPM - 9734
Thrust - 114 ounces (7 pounds 2 ounces)
Speed - 51 MPH

With that prop you only pull 3 more amps of current, but get an extra pound of thrust, with a 5 MPH lower top speed.

If you wanted extra power to use the plane as a glider tug, or wanted to pull a banner with it at an airshow, this motor will also take a 14x6 prop, and you would have enough ground clearance as well. With that prop you would get these performance numbers.

Volts - 14.8
Amps - 57.4
Watts - 849
RPM - 9390
Thrust - 133 ounces (8 pounds 5 ounces)
Speed - 53 MPH

This motor has a max current rating of 70 amps, so it would be best to team it up with one of our BadAss Rebel V2 80-amp ESC's. This ESC comes with the correct 4mm bullet connectors for the motor and XT90 connector to fit our batteries pre-soldered onto it.

Our BadAss wood electric props give similar performance to the APC Props, they just look way nicer with the glossy black paint job and white prop tips.



Below are links to all of the items described above.

BA-3520-790 Motor: <https://innov8tivedesigns.com/badass-3520-790kv-brushless-motor.html>

BadAss 80-amp Rebel V2 ESC: <https://innov8tivedesigns.com/badass-rebel-v2-series-brushless-esc-80a.html>

BadAss 4-cell 4000mah LiPo Battery: <https://innov8tivedesigns.com/badass-45c-4000mah-4s-lipo-battery.html>

APC E-Series Props: <https://innov8tivedesigns.com/products/propellers/apc/apcblackeseriesprops.html>

BadAss Wood Props: <https://innov8tivedesigns.com/products/propellers/badass-wood-props/normal-rotation.html>

If you need a spinner for your aircraft, we have a full range of sizes and 5 different colors available at this link.

<https://innov8tivedesigns.com/products/spinners/plastic-spinners.html>