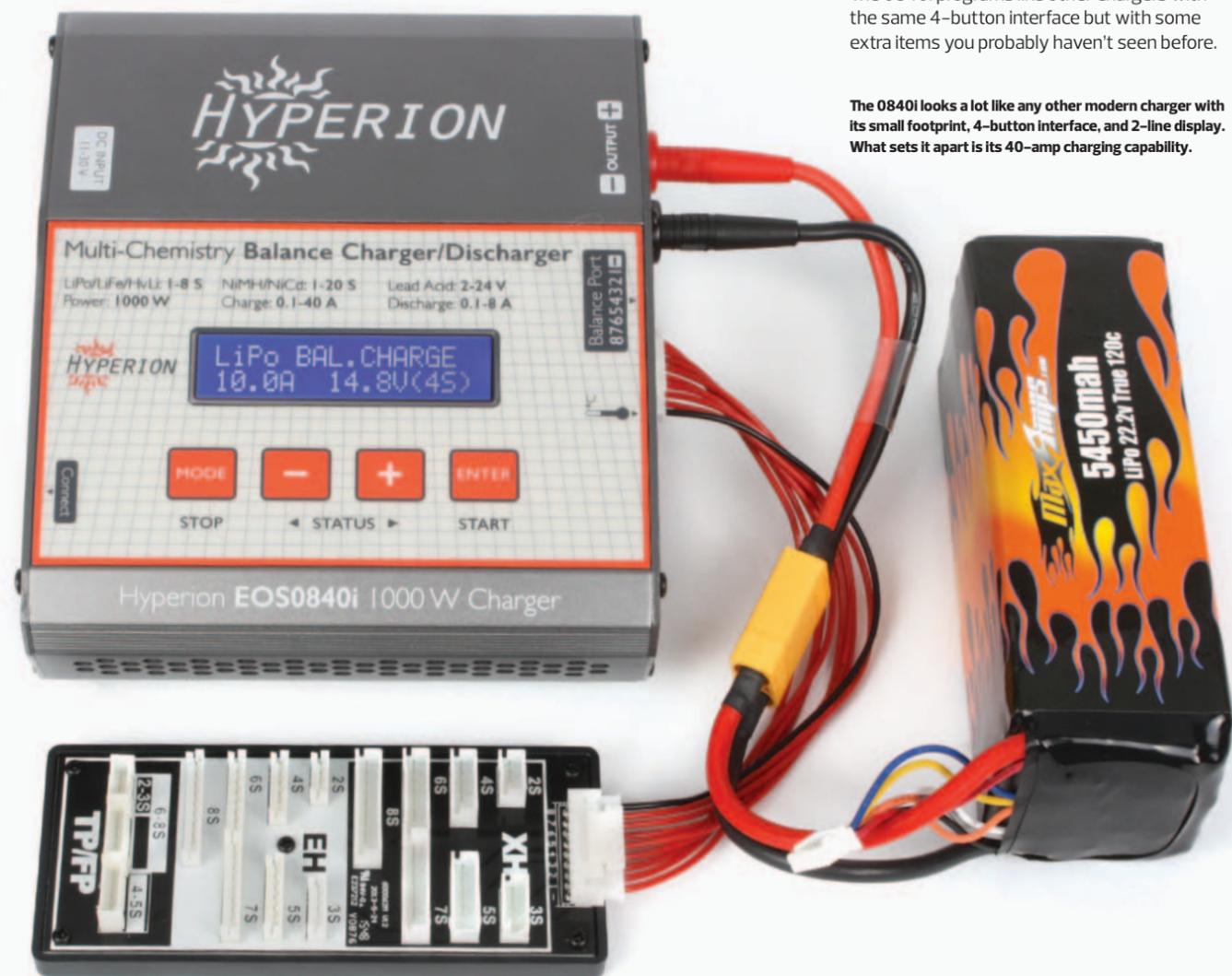


MAXAMPS HYPERION EOS 0840i 1000W CHARGER

This big-amp juice box is what you need for professional-grade charging

For most of us, a programmable charger that can pump 6-10 amps is plenty for all of our RC charging needs. But that's not enough for everyone! If you're filling up mega-capacity packs (as in 10,000mAh or more) or racing stock (where it's common to blast 2S batteries at 40amps), you need a real powerhouse on your bench. The MaxAmps Hyperion EOS 0840i is just that type of box, and delivers all the amp-pumping power any racer or hard-core electric enthusiast needs. The charger uses a 4-button interface and 2-line display that many RC'ers will find familiar, but it's what's inside the metal case (and the software) that makes the 0840i stand out. Here's what you get and what it can do.



SETUP

The 0840i arrives ready to jack into your power supply using 4mm banana plugs, or you can use a car battery to power the charger (you'll need to buy or fab up a connection solution, however; soldering 4mm sleeves to a set of alligator clips will do the trick). To exploit the 0840i's full-power 40-amp charging capability, you'll need to hook it up to a 24V power supply. MaxAmps offers one, which is what I used for testing. You'll notice that the power-supply hookup leads are wrapped around a chunky metal ring, which is a Ferrite EMI (electromagnetic interference) filter. You also get a balance board with jacks for 2S-8S packs with XH, EH, and TP/FP plugs. The default charging plug is an XT60, but when you order the 0840i at maxamps.com, you can specify any of the high-performance connectors available today, including less common types such as XT90, Castle 6.5, EC5, and more.

PROGRAMMING

The 0840i programs like other chargers with the same 4-button interface but with some extra items you probably haven't seen before.

The 0840i looks a lot like any other modern charger with its small footprint, 4-button interface, and 2-line display. What sets it apart is its 40-amp charging capability.

Testing

The 0840i was surprise-free in testing: plug in battery, select charging parameters, charge pack. The need for an external power supply eats up bench space, but that's what allows the charger to deliver such high output. And that output was definitely worth the bench space when charging, especially when juicing up monster packs like MaxAmps 9000mAh LiPos. Even at a charge rate of 1C, that's a 9-amp charge rate, which is more than most chargers can supply and pushes charge time past an hour. But with the 0840i, I could charge the packs at 4C (36 amps) to do the job in 15 minutes. If you're a stock racer, you already know the value of high-amp charging for lowering resistance and delivering peak performance, and the 0840i delivers the big amps you need. Heads-up for sport drivers: The extra performance is measured in hundredths of a second in lap times; you won't feel a difference in fun driving. And big-amp charging takes a toll on battery life. Stick with 1-2C charging for fun running.



A pair of fans keep the 0840i cool. The wire guards are a nice touch.

The unit lets you specify a DC power supply or battery for the power source. If you choose "battery," you can set current and voltage limits to prevent overdischarging the supply battery. When discharging with the 0840i, you can also select "regenerative charging." Instead of wasting discharge power as heat, the charger sends it back into the supply battery.

The 0840i also has voltage and resistance meters that are helpful in diagnosing pack health and identifying

PLUS

- ➕ Compact and powerful
- ➕ Easy, familiar programming
- ➕ PC and smartphone control options

MINUS

- ➖ Big power output = big price (compared to sport chargers, at least)

top-performing packs. Select "LI BATT METER" to show individual cell voltages and the charger will call out the highest and lowest cell voltages along with total pack voltage, or choose "BATT RESISTANCE" to see the resistance for each cell in milliohms. Handy.

You've got the latest high-voltage LiHV LiPos? The 0840i has a mode for them too (though MaxAmps calls it HVLi). Make sure that you use this mode only with

LiHV cells. Otherwise, choose LiPo, Li-Ion, or LiFe to suit whatever packs you've got.

COMPUTER AND WI-FI CONTROL

The 0840i's built-in interface is easy to use, but it's not the only way to operate the charger. You can connect the charger to your computer via a USB-A to micro USB cable, which works with the "EOS PC Tool" software you can download from maxamps.com. The software allows you to view charging data with real-time graphics, as well as program the charger and update firmware. If you add the optional Hyperion EOS Wi-Fi module (just \$25), you can operate the 0840i wirelessly via your Android or iOS device.

SPECS

- EOS 0840i**
- Price:** \$182.49
- LiPo/LiFe/LiHV:** 1-8 cells
- NiMH/Ni-Cd:** 1-20 cells
- Pb:** 2-24 cells
- Max charge current:** 40A/1000W
- Max current:** 8A/80W
- Memory:** 10 battery profiles
- DC input voltage:** 11-30V
- Temperature sensor:** Optional
- USB port:** Micro, for "EOS PC Tool" software and firmware update
- NiMH battery cycle:** Charge and discharge up to five times
- Display:** 2x16 backlit LCD
- Cooling system:** Built-in dual fans
- Case size:** 6.1 x 5.4 x 3 in. (156 x 138 x 76mm)
- Weight:** 1 lb. 11 oz. (1240g)

Includes

- 2-8S multiple balance board (XH, EH, TP/FP)
- Small ferrite EMI filter ring
- Large ferrite EMI filter ring
- Output plug, specified with order (XT60, XT90, Deans, Traxxas, etc.)

24V Power Supply

- Price:** \$180.00
- Input voltage:** 100V-240V AC
- Output voltage:** 24.3V DC
- Output:** 47A Continuous/1150W
- Connectors:** 4mm female, gold
- Dimensions:** 11 x 4.5 x 3.1 in. (279 x 114 x 79mm)

FINAL WORD

If you don't need to charge at more than 6-10 amps, there are certainly less expensive chargers with AC power that you can choose (and you can also get them at maxamps.com). But if you're a stock racer and/or enthusiast who puts high-capacity batteries to work in your cars, trucks, helis, drones, or planes, the Hyperion EOS 0840i will earn its keep on your bench. It's easy to program (especially if you're experienced with computerized chargers, but even if you're not), ruggedly built, and highly versatile—whatever you've got, the 0840i will charge. Be sure to confirm the maximum recommended charge rates of your batteries before you punch

up high settings, and prepare for faster charging and peak battery performance.

—Peter Vieira 🇵🇹

SOURCE
MaxAmps maxamps.com



If you're wondering why there's a big metal donut on the power leads, it's there to prevent electromagnetic interference.

Super-Powered Supply

If the 0840i were an AC/Dc charger it would need to be enormous to house a beefy power supply. Instead, it's DC, so the power supply is up to you. I kept it all in the family with MaxAmps' 24-volt monster. It's basically two 12v power supplies joined together, right down to dual AC plugs. It'll happily pump all the amps you need all day long, and if you don't need its full output, you can also run it as a 12v power supply.

