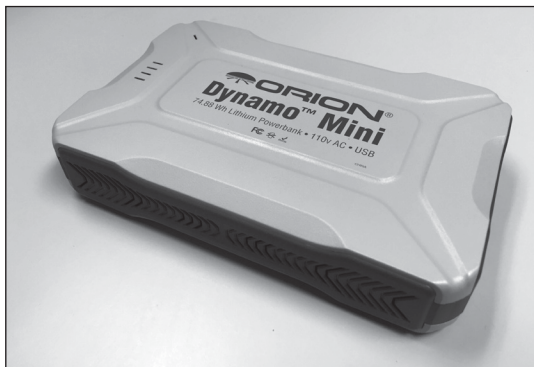


Orion® Dynamo™ Mini 74.88Wh AC/ USB Lithium PowerBank

#2306



Congratulations on your purchase of an Orion Dynamo™ Mini Lithium PowerBank. The generous 74.88 Watt-hour battery capacity provides power for any AC powered device, as well as USB charging power for USB accessories as well as phones and tablets. It includes two USB outputs (2.4A Max), and an 85 watt (100w max) AC output. All of this in a battery that weighs only 1.6 lbs, which makes it ideal for campers, hikers, and anyone looking for an extremely portable power supply! Peel back the two rubber covers over the top edge and side wall to expose the ports and power button.

1. Operation

Powering USB devices

The Dynamo Mini has two USB ports (**figure 1**) that can be used to power or charge USB devices such as smartphones and tablets, with a max output of 2.4A each. To use, simply plug the USB device into one of the two USB ports, and the Dynamo will automatically begin to charge the device (it is not necessary to press the power button to activate USB charging). Both USB ports can be used simultaneously to charge two devices.

Powering 110v AC devices

The Dynamo Mini also has a single 85w continuous/100w max 3-prong 110v AC output port (**figure 1**) for powering small electronic devices such as telescopes equipped with an AC adapter, lamps, televisions and laptop computers. Please note laptops can draw 65w (or more), so keep in mind that a computer can quickly deplete the 74.88Wh capacity of the Dynamo Mini. To use, plug in your 110v device to the AC port, then press and hold the power button (**figure 1**) for approximately 3 seconds until the green AC power indicator (**figure 1**) light turns on. If no device is detected on the AC output, the AC port will power down soon after in order to conserve power.



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Also note that the AC output waveform is a modified sine wave, not a pure sine wave. If you are plugging in an AC device with a direct AC motor (such as a fan, laser printer, or output voltage control device such as a dimmer, they may not work properly. Please check with the manufacturer for your AC device if it will work with modified sine wave AC.

2. Recharging the Dynamo Mini

The battery charge percentage is displayed as a series of LED lights on the side of the battery (**figure 1**). As the battery capacity is depleted, fewer of the lights will be lit. The battery can be recharged from an AC outlet using the included power adapter. Simply plug the included AC adapter into a wall outlet, and then plug other end of the AC adapter cable into the Micro USB charging input port on the Dynamo Mini (**figure 1**). As the Dynamo Mini charges, the status indicator lights will flash in succession, showing the charge level. When all four lights are solid, the unit is fully charged.

The Micro USB port is the only power charging input on the Dynamo Mini. DO NOT try to charge the device by connecting a wall outlet to the other two larger USB ports – they are for output only. Charge time with the included AC adapter is ~6 hours, but if a lower capacity 2A AC adapter is used, it can be up to 12 hours. It is recommended to only use the included AC charger. Do not leave the battery charging when in storage—charge until full and then unplug the AC charger.

3. Protection Mode

The Dynamo Mini will go into protection mode if it senses too much power being drawn through the outputs. If more than 100W is pulled through the AC output, protection mode will activate, shutting the unit down. Remove the device and either press the power button or recharge the Dynamo to reset the unit. Please do not overload the Dynamo Mini with devices that pull more power than the unit is capable of handling. Short circuits or overheating will also activate protection mode.

4. Storage and Maintenance

To optimize the life of the Dynamo Mini, several steps should be taken for proper storage and maintenance. Keep the unit stored in a dry, cool area when not in use. Fully charge the Dynamo Mini before putting it into storage. If you are going to store the Dynamo Mini for long periods of time, you should occasionally recharge it – once every three months for optimal storage and lifespan, and at LEAST once every 6 months.

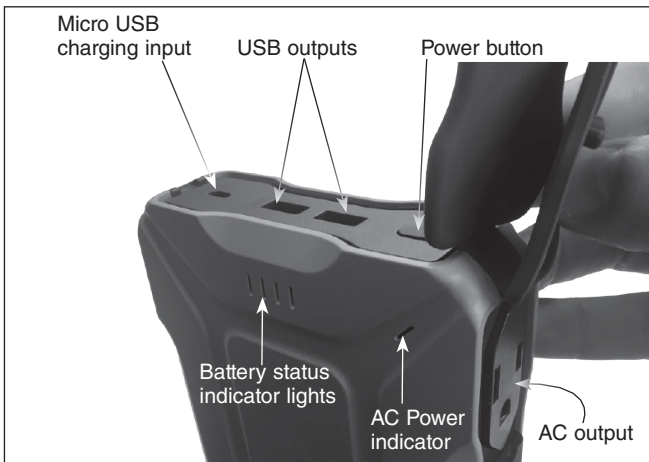


Figure 1.

The Dynamo Mini has a useful lifespan of at least 300 full charge cycles, and probably more with proper handling. At some point, as with all rechargeable batteries, the lithium ion cells inside will no longer be able to hold a full charge, and the capacity will decrease. After its useful life, please recycle this battery at a facility that can take used batteries. Please do not dispose of in the trash to avoid waste pollution. Most city and counties have recycling programs that can handle Lithium Ion batteries.

5. Safety

1. Do not use or charge the unit if the housing is cracked.
2. Do not ship the unit if the housing is cracked.
3. Do not attempt to short circuit the battery.
4. Do not heat the unit, or dispose of in fire, water or other liquids. Keep away from high temperatures (normal operating range: 32°F-113°F (0°C-45°C)).
5. Do not attempt to disassemble the unit.
6. Do not drop the unit or place heavy objects on top.
7. Children should be supervised when in proximity to the unit.
8. The unit may become warm when charging, this is normal.
9. Do not leave the charger plugged into the unit for prolonged periods of time after charging is complete.
10. Do not throw the unit away if it no longer works, recycle at an appropriate disposal facility.

6. Specifications

Capacity:	20,800mAh@3.6V/74.88Wh
Dimensions:	6.9" x 4.4" x 1.4"
Weight:	1.6 lbs.
Internal Batteries:	Lithium Ion
Recharging:	QC 18W adapter with Micro USB cable (included)
Full Charge Time:	~6 hours with included QC 18W charger
Output:	2x USB 5v/2.4A(max), 1x 110v AC 60Hz
AC output power:	Continuous 85W output, Modified Sine Wave
Power indicator bulbs:	LED indicators
Operating temp:	32°F–113°F (0°C-45°C)
Recharge lifespan:	>300 full cycles
Package includes:	Dynamo Mini AC power adapter User manual

One-Year Limited Warranty

This Orion product is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid. Proof of purchase (such as a copy of the original receipt) is required.

This warranty is only valid in the country of purchase.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights. It is not intended to remove or restrict your other legal rights under applicable local consumer law; your state or national statutory consumer rights governing the sale of consumer goods remain fully applicable.

For further warranty information, please visit www.OrionTelescopes.com/warranty.