



Jump Pack User's Manual

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Table of Contents

Overview	1
Operating Instructions	2
Specifications	2
FAQs	3
Regulations	5
Terminology	5

ICON KEY

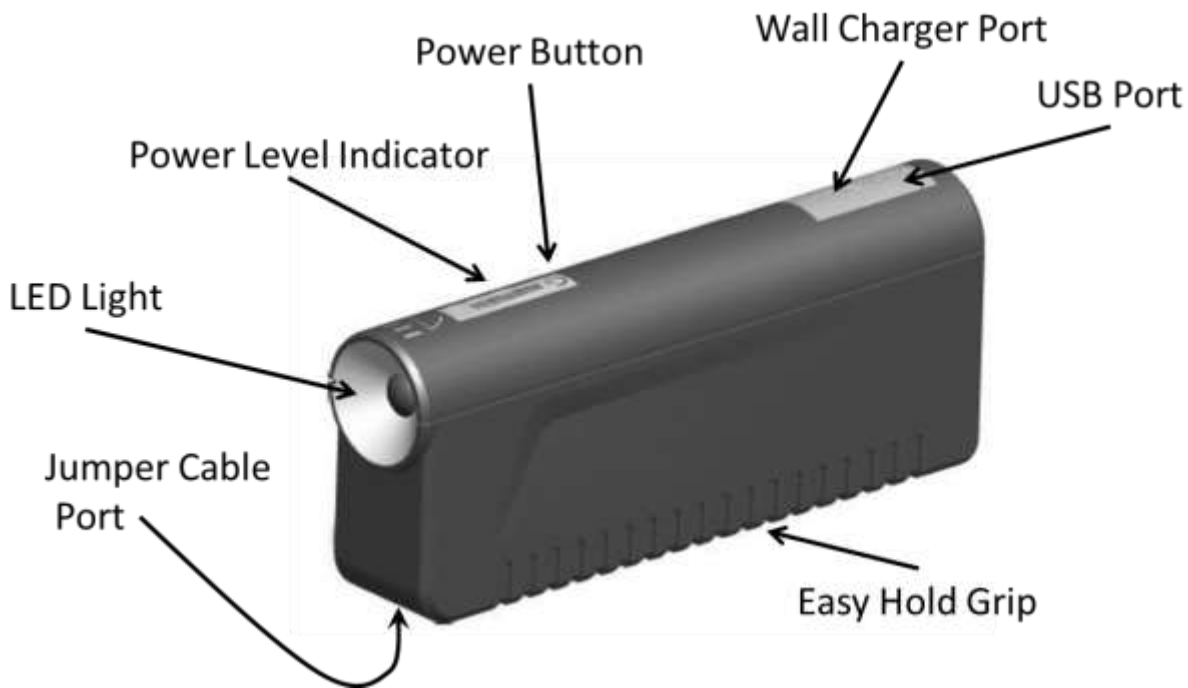
	Valuable information
	Caution

Overview

Thank you for purchasing an EarthX's Jump Pack. Our Jump Pack is light and compact so you can take it anywhere and start just about everything (car, boat, motorcycle, atv, and snowmobile, small aircraft, etc.). The EarthX Jump Pack is a rugged design for off road use featuring dust covers for all power and charge ports, plus an "easy hold" grip. And like our ETX series batteries, it uses robust Lithium Iron Phosphate (LiFePO4) cells, while others use cheaper Lithium Ion (Lithium Cobalt) cells.

Other features include:

- USB 5V/2.1A port to charge/power electronic devices (like iPad)
- High intensity LED flashlight
- Charge level indicator LEDs
- Reverse connection protection
- Built in electronics to protect the battery from over-discharge/over-charge
- Water-resistant carrying case



What's included:

- Jump start power pack
- Jumper cables
- Wall charger (100-240VAC 50/60Hz)
- Carrying case

Operating Instructions



Failure to follow these instructions may result in damage to the device!

JUMP STARTING

- Connect the red jumper cable clamp to the positive post of the vehicle battery
- Connect the black jumper cable clamp to the negative post of the vehicle battery
- Plug the jumper cable into the Jump Pack (connector fits one way only)
- Start the vehicle (repeat if necessary after 30 seconds)
- Disconnect negative clamp, then positive clamp after vehicle starts (recharge the Jump Pack after use)

USB Port for Charging/Power Electronic Devices

Press the On/Off button for 1 second, the charge level indicator should light-up which is an indication the USB port is on. The unit will automatically shut-off after a few minutes of non-use.

LED Flashlight

Press the On/Off button for 3 seconds to turn on/off the flashlight.

CHARGING

First, connect the 100-240VAC Wall Charger to outlet, second, connect the 5mm round charge port on top of the Jump Pack, the charge level indicator light should start to cycle which is an indication the unit is charging. When all the charge level indicator lights are lit, the unit is fully charged.

Indicator	1 LED	2 LED	3 LED	4 LED	5 LED
Remaining Charge (%)	20	40	60	80	100

Specifications

Model: ML-1

Peak "jump starting" Current	400A
Cranking Amps	220A
Battery Capacity mAh/Wh	2000mAh/26.4Wh
USB Output	5V @2.1A
Wall Charger Output	1A @15V
Max Jump Pack Recharge Time	2-3 hours
Weight (power pack only)	0.9 lb. (.4Kg)
Weight (complete with carrying case)	1.4 lb. (.65Kg)
Dimensions (power pack only)	6.5in (L) x 1.3in (W)x 2.6in (H)/(165mmX33mmX65mm)
Dimensions (complete with carrying case)	8.25in (L) x 2.6in (W)x 3.6in (H)/(210mmX66mmX92mm)

ETX SERIES LITHIUM BATTERIES

Environmental Rating (with case)	IP 52(dust and dripping water)
Operating Temperature	-30 °C to +60 °C
Storage Temperature	-40 °C to +70 °C



Ensure positive cable clamp and battery terminal does not touch any metal part of the vehicle



If the Jump Pack gets hot while charging, stop charging and discontinue use



Never expose the Jump Pack to fire or temperatures above 158 F (70 C)



Never disassemble the unit



Never allow the Jump Pack power pack to get wet

FAQs

Despite the simplicity of operation, you may encounter situations where the Jump Pack does not operate as expected. Here are some potential issues you may encounter with the appropriate troubleshooting procedures.

Q.

How to turn on the USB port?

A.

The Jump Pack needs to be “turned on” for the USB port to operate. To turn on the Jump Pack press the power on button for one second and verify the charge level indicator lights are lit. The Jump Pack (USB port) will shut-off automatically after a few minutes of no use.

Q.

How many times can the Jump Pack charge my phone before needing to recharge the Jump Pack (i.e. iPhone 5)?

A.

5-8 times

Q.

How many times can the Jump Pack, jump start, a vehicle before needing to be recharged?

A.

This depends on many factors like the vehicle’s battery condition, the vehicles’ required cranking amps, and the size of the vehicle battery. For motorsports vehicles it could be more than 20 times, whereas a car with a drained 100Ah battery maybe only 5 times.

ETX SERIES LITHIUM BATTERIES

Q.

How long does the Jump Pack retain a charge when in storage?

A.

It can retain a charge for more than one year, but it is recommended that it be recharged every 6 months.

Regulations

The ETX Lithium battery was tested to the following safety regulations as outlined in:

- IEC 62660-2
- IEC 61960:2011
- CE — EU consumer safety, health and environmental regulations. Signifies conformity with EMC directive (2004/108/EC)

These standards set the level of safety required for lithium batteries. The standard addresses normal and abnormal operating conditions.

Lithium batteries have special requirements for transportation (shipping) per UN 38.3 and Title (part) 49 of the Code of Federal Regulations or CFR's. Title 49 CFR Sections 100-185 of the U.S. Hazardous Materials Regulations (HMR).

Terminology

The following table describes the terminology used in this document.

Ah	Amp-Hour is a unit of measure of charge that can be stored in a battery.
BMS	The Battery Management System refers to the collection of electronics responsible for monitoring and controlling the cell charge level, providing over charge protection and over discharge protection
Cell	A single encased electrochemical unit (one positive and one negative electrode) which exhibits a voltage differential across two terminals.
Wh	Watt-Hour is a unit of measure of charge that can be stored in a battery.
IEC	International Electro technical Commission on safety standards.