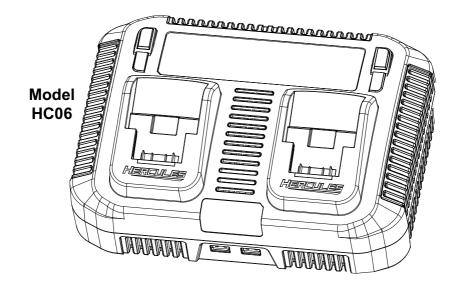


# Owner's Manual & Safety Instructions

23c





# 20V/12V Lithium-Ion Dual Port Charger with USB

**AWARNING:** To prevent serious injury, User must read and understand Owner's Manual. SAVE THIS MANUAL.

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible. Reference 56224.

## IMPORTANT SAFETY INFORMATION

## **AWARNING**

Read all safety warnings and all instructions.
Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.
The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur.

It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

The battery Charger gets hot during use. The Charger's heat can build up to unsafe levels and create a fire hazard if it does not receive adequate ventilation, due to

an electrical fault, or if it is used in a hot environment. Do not place the Charger on a flammable surface. Do not obstruct any vents on the Charger. Especially avoid placing the Charger on carpets and rugs; they are not only flammable, but they also obstruct vents under the Charger. Place the Charger on a stable, solid, nonflammable surface (such as a stable metal workbench or concrete floor) at least 1 foot away from all flammable objects, such as drapes or walls. Keep a fire extinguisher and a smoke detector in the area. Frequently monitor the Charger and Battery Pack while charging.

- 2. Charge only designated battery packs; others may overheat, leak, or burst.
- 3. Follow charging instructions.
- 4. Do not insert damaged battery pack.
- 5. Check frequently while charging.
- 6. Wear ANSI-approved safety goggles during use.
- 7. Use chargers only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 8. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery pack terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery pack; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery pack may cause irritation or burns.

- 10. Do not expose to rain or wet conditions. Indoor use only.
- 11. Inspect before every use; do not use if parts are loose or damaged.
- 12. Use as intended only.
- Unplug after use and before service, cleaning or storage.
- 14. Maintain labels and nameplates on the Charger. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- This product is not a toy. Keep it out of reach of children.
- 16. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should properly maintain and inspect to avoid electrical shock.

#### Lithium Battery Safety Warnings





LITHIUM BATTERIES STORE A LARGE AMOUNT OF ENERGY AND WILL

#### VENT FIRE OR EXPLODE IF MISTREATED:

- 1. Keep Battery Pack dry.
- 2. DO NOT DO ANY OF THE FOLLOWING TO THE BATTERY PACK:
  - · Open,
  - Drop,
  - · Short-circuit.
  - · Puncture,
  - · Incinerate, or
  - Expose to temperatures greater than 140°F.
- 3. Charge Battery Pack only according to instructions.
- Inspect Battery Pack before every use; do not use or charge if damaged.



#### Grounding

## **AWARNING**

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING: Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the charger. Do not use the charger if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

#### **Extension Cords**

Extension cords must not be used with this Charger.

## Warning Symbols and Definitions

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING** 

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**ACAUTION** 

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

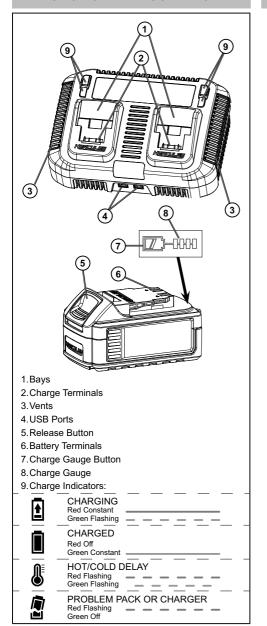
NOTICE

Addresses practices not related to personal injury.

#### Symbology

V	Volts
	Direct Current
~	Alternating Current
Α	Amperes
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.
(in	Read the manual before set-up and/or use.
	WARNING marking concerning Risk of Fire. Do not cover Charger ventilation ducts. Charge on fireproof surface only.
	WARNING marking concerning Risk of Explosion. Do not puncture, short, or open battery packs and do not charge damaged battery packs.
A	WARNING marking concerning Risk of Electric Shock. Properly connect Charger's power cord to appropriate outlet.

## **FUNCTIONAL DESCRIPTION**



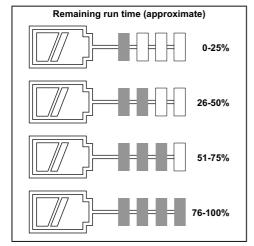
#### **SPECIFICATIONS**

Input Rating	120VAC / 60Hz	
Output Rating	22VDC or 13.5VDC / 4.0A	
Battery Type	Hercules Li-ion 20V or 12V (sold separately)	
USB Output	5VDC	

#### **BATTERY PACK OPERATION**

#### Charge Gauge

Press the Charge Gauge Button on the Battery to check its remaining run time.



Note: If the Charge Gauge does not display when the Charge Gauge Button is pressed, charge the Battery Pack.

The Battery Pack will shut itself off once it is fully discharged. Charge the Battery Pack when this happens.

#### **Cold Weather**

To warm up a Battery Pack that is very cold, operate the tool slowly or in a light application for a few minutes until the Battery Pack warms-up.

#### **Battery Storage**

## **AWARNING**

To prevent serious injury, do not do any of the following to the Battery Pack:

- · Open,
- · Drop,
- · Short-circuit,
- · Puncture.
- · Incinerate, or
- · Expose to temperatures greater than 140°F.
- Store batteries in a dry, indoor area at room temperature out of reach of children and away from metal objects (i.e., paperclips, coins) to prevent shorting.

**<u>NOTICE:</u>** Battery may be damaged if stored at high temperatures (over 120° F).

2. Recharge the Battery Pack at least once a year.

#### CHARGER OPERATION



Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

#### When to Charge

- 1. Charge the Battery Pack when convenient.
- The Battery Pack does not need to be completely discharged before charging. It will not develop a "memory" if charged while still partially full.
- To help protect the Battery Pack, it must be charged when the charge level is near empty. If a Lithium-Ion battery is allowed to discharge completely, it can be ruined.

## **Charging Battery Packs**

<b>1</b>	CHARGING Red Constant Green Flashing
	CHARGED Red Off Green Constant
	HOT/COLD DELAY Red Flashing
	PROBLEM PACK OR CHARGER Red Flashing — — — — — — — — — — — — — — — — — — —

Figure A: Charge Indicators

 Place the Battery Pack on a dry fireproof surface in a room where the temperature is between 50–104° F.

<u>Note:</u> If recharging a newly spent Battery Pack, allow it to cool completely before charging.

- Examine the Battery Pack. It must be undamaged, and a 12 or 20 volt, Lithium-Ion type Hercules Battery Pack. Do not charge a cracked, open, or leaking Battery Pack, or charge a non-recommended type of Battery Pack.
- The Battery Pack's terminals are designed to fit this Charger specifically. If the Battery Pack does to not fit the Charger properly, do not try to insert it.
   Do not force a Battery Pack into the Charger.
- Plug the Charger into a grounded, 120VAC, 60Hz receptacle.

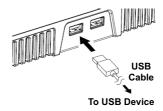
- Slide the Battery Pack onto the Charger until it clicks in. Two Battery Packs may be charged at the same time.
- A fully discharged 12V Battery Pack will take about 50 minutes to fully charge.
- A fully discharged 20V 2.5 Ah Battery Pack will take about 62 minutes to fully charge.
- A fully discharged 20V 5.0 Ah (XP) Battery Pack will take about 118 minutes to fully charge.

Note: If the Battery Pack is hot or cold, the Charge Indicators may both flash, indicating that the Charger is waiting for the temperature to normalize before Charging. Charging will start automatically once the Battery Pack reaches the correct temperature.

- While charging, the Battery Pack and Charger may become warm to the touch. This is normal, and does not indicate a problem.
- 7. The red LED will light constantly and the green LED will flash when the Battery Pack is charging. The green LED will light constantly and the red LED will turn off when the battery is charged. Unplug the Charger and disconnect it from the Battery Pack when finished.
- Allow the Battery Pack to cool completely before using it.
- Press the Release Button to release Battery Pack from the Charger.

## **Charging USB Devices**

- USB devices (sold separately) may be charged at the same time as charging Battery Packs.
- Connect one end of a USB cable (sold separately) to USB device (i.e. cell phone, tablet).
- Connect other end of USB cable to one of the Charger's USB ports.



When finished, disconnect the USB cable and unplug the Charger.

#### **CHARGER MAINTENANCE AND SERVICING**



Procedures not specifically explained in this manual must be performed only by a qualified technician.

## **AWARNING**

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Remove the Battery Pack and unplug the charger before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment. If damage is noted, have the problem corrected before further use.

- BEFORE EACH USE, inspect the general condition of the charger. Check for:
  - · loose hardware,
  - · misalignment or binding of moving parts,
  - · cracked or broken parts,
  - · damaged electrical wiring, and
  - any other condition that may affect its safe operation.

- AFTER USE, wipe external surfaces of the charger with clean cloth.
- Li-lon BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY. Do not short, incinerate or open battery.
- Disconnect Power Cord, Battery Pack(s) and USB cable(s). Store Charger and any Battery Packs in a dry, indoor area at room temperature out of reach of children and away from metal objects (i.e., paperclips, coins) to prevent shorting.

WARNING! TO PREVENT SERIOUS INJURY AND DEATH FROM ELECTRIC SHOCK:
Do not open Charger. Do not service internal parts.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Record Product's Serial Number Here:	

Note: If product has no serial number, record month and year of purchase instead.

Replacement parts are not available.

#### 3-YEAR LIMITED WARRANTY

This Hercules tool is warranted to the original purchaser to be free from defects in materials and workmanship for a period of three (3) years beginning on the date of purchase. To obtain warranty service, visit your local Harbor Freight retail store. Warranty registration is not required. The product or part must be returned to us with proof of purchase (e.g. in-store receipt or packing slip/invoice) and may require shipment by purchaser to a service center at purchaser's expense. If our inspection verifies a covered defect in materials or workmanship during the warranty period, we will, at our option, repair or replace the defective product. We will return repaired products within a reasonable time at our expense, but if we determine that there is no defect, or that the defect resulted from causes not within the scope of our warranty, then we will return the product to you if you pay return shipping costs.

This warranty does not cover any failure or damage that we determine is due directly or indirectly to normal wear and tear, misuse, use not for the intended purpose or not in accordance with the product manual, abuse, accident, rental, modification or alteration, unauthorized repair, improper installation, neglect, lack of maintenance, or any other failure not arising from defective materials or workmanship. Fraudulent returns or claims will be denied. The repair or replacement described in this warranty shall be your sole and exclusive remedy. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES, WRITTEN OR ORAL, AND ANY IMPLIED WARRANTIES ARE DISCLAIMED TO THE EXTENT PERMITTED BY LAW AND OTHERWISE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. HARBOR FREIGHT SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR COSTS ARISING FROM THIS WARRANTY OR THE USE OF THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THESE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

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Email our technical support at: productsupport@harborfreight.com
For technical questions, please call 1-888-866-5797

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26677 Agoura Road • Calabasas, CA 91302 • 1-888-866-5797