



Helix Max Ultra 395wh Battery Pack Instructional Manual V, G, B-Mount

#### THIS BATTERY SHIPS IN STORAGE MODE.

Press the LED button to awaken the battery pack. You may also charge the battery pack full to awaken. Keep in mind some 3<sup>rd</sup> party chargers will not charge the pack when in storage mode. If the battery is in storage mode(LCD blank), the battery pack is functional, but no smart data transmission will occur.

Thank you for your choice in purchasing a Core SWX battery. The battery is designed to improve and assist you in your mobile powering requirements. This product is at the pinnacle of technological advancements, offering the features and performance of several different products, making it the most advanced battery product in the industry.

Please read this manual to help you understand and capitalize on the features of this battery.

#### Features:

- Helix Dual Voltage output(14v/28v)
- On-Board Microprocessor stores: Name, Serial Number, Voltage, Temperature, Current, Chemistry Type, Charge Cycles, and Date of Manufacturing.
- Five Stage, accurate, LED power gauge.
- Runtime backlit LCD
- No memory effect.
- Temperature, current, and voltage protection.
- Nexcore<sup>™</sup> Casing
  Up to 100w USB-C PD input connection for fast charging.
- Up to 185w PDPRO output offering wide range power from 5v-28v DC
- Incorporated 2-pin powertap provides unregulated power (10A)
- Voltbridge<sup>™</sup> ID RFID chip

\*contact Core SWX for confirmation of battery charger compatibility if using other chargers.

## Operation:

#### Charging the Battery:

- CoreSWX batteries are designed to be used with CoreSWX chargers. Any other charger may damage the battery and/or the charger. Please contact us before using other chargers.
- CoreSWX batteries can be recharged in any charge condition.
- Charge the battery in ambient temperature range of 0°C and 45°C. For best results charge in an environment between 10°C and 35°C. Charging in conditions outside the aforementioned ranges may inhibit the pack from reaching maximum charge capacity.

### Discharging the battery:

Maximum continuous discharge for the pack is 20A(240W).

# Backlit LCD Display:

To activate the LCD backlight, simply press the button on the side of the pack, or let it turn on automatically when the pack is charging or discharging. The display refreshes every 3-5 seconds, offering real-time data based on the current charge or discharge rate, ensuring you have accurate power management during your projects.

The display information can also be resized and reoriented. When the pack is in standby mode (neither charging nor discharging), hold the LED backlight button for 10 seconds. Once you release the button, the display will switch to a different orientation. There are three orientations available, and the process cycles back to the original setting using the same method.

#### Wraparound LED Power Gauge:

The pack's LED power gauge will automatically display once the pack is being used. When not in use, press the button on top of the pack to check charge capacity status.

#### **Battery Charge Level:**

1 Segment: 0-20% 2 Segment: 21-39% 3 Segment: 40-59% 4 Segment: 60%-79% 5 Segment: 80-100%

Over time the RunTime LCD and power gauge's accuracy is dependent upon a full charge and discharge. At least once every 2 months the battery should be fully cycled(discharged and charged) so the battery can relearn the capacity of the battery.

#### **RGB LED Function:**

The Helix Max Ultra packs feature an RGB LED array, enabling you to customize the LED color for easier pack identification. You can change the LED color in two ways: using the backlit LCD side button sequence or through the VoltBridge ID app. To change the color using the button sequence, quickly press the side button three times; the LED array will start flashing. Then, a single quick press will cycle through the available colors (green, blue, red, yellow, LED OFF). A long press will confirm your chosen color.

#### Camera Communication:

Once connected to a camera which supports SMBUS or single-line data communication, the battery will convey, in real time, power data to the camera.

# Nexcore<sup>™</sup> Casing:

Helix Max Ultra batteries are housed in a robust polycarbonate Nexcore casing. This compact casing safeguards protects its internals from the world of cinema production. For gentle cleaning, use a soft, lint-free microfiber cloth to gently wipe the surface of the polycarbonate casing. Avoid abrasive materials or harsh chemicals, as they may cause scratches or damage to the protective layer. In general, the casing protects against impacts and vibrations as well as being weather resistant to accommodate for versatile shooting conditions.

### VoltBridge RFID Function:

Helix Max Ultra batteries have an integrated RFID tag which communicates with compatible NFC reading devices like your mobile phone. To read your battery packs' vitals simply use an NFC app and touch your phone to the 'ID' icon on the front of the pack. Additional functionality with the VoltBridge ID app(available for iOS and Android) will allow you to store and analyze battery data.

#### Aux Connections:

The integrated PDPRO™/USB-C PD connection functions as both an output and input, offering a voltage range of DC 5V-28V with up to 185W of I/O power. The primary Green PD Pro connection can output up to 140W, while the secondary connection supports up to 45W output. These connections are fully compatible with USB-C PD. To optimize functionality, please review the available PD Pro cables.

Charging via USB-C PD is fast and efficient through the PD PRO ports, and the pack is compatible with any USB-C PD charger and cable. Note that the pack cannot be charged and discharged simultaneously.

The battery's integrated P-tap power solution also delivers DC 11-16.8V of power output and supports charging input. The P-tap is fused according to the battery pack's overall output capabilities.

# Helix High Voltage Output:

When a Helix pack is placed on Helix Mount plate(V/G/B) the LCD's "HV" icon will illuminate in the lower right corner of the LCD. Additional device which support Helix's protocol are the RED V-Raptor XL camera as well as B-mount plates configured for High Voltage pass through such as the Alexa S35's B-mount plate.

When the HV icon is present on the LCD the battery natively switched to high voltage output so that DC 22-33.6v(dependent on charge capacity) is being supplied to the device.

Once the pack is removed from the Helix-supported device, the HV icon will disappear signifying the pack has switched back to native 14.4v (DC 11-16.8v dependent on charge capacity).

The ptap output on the pack when the pack is native 14.4v is unregulated(DC 11-16.8v dependent on charge capacity). When the pack is put into HV mode, the ptap is regulated for up to 5A output at 15v DC. The USB output of the pack is consistently regulated at DC 5v 3A no matter the phase of the battery pack.

### Battery Firmware updates:

The Helix Max Ultra packs can be firmware updates via it's PDPRO/USBC ports via a PC or Mac. For more information, please contact support@coreswx.com.

# Battery Storage:

In the event the battery pack won't be used for an extended period of time, store the battery pack at 40% charged in an environment between 10°C and 35°C. Every two months the battery pack should be fully cycled to reduce the change of self-discharge and capacity loss.

#### Notes On Use:

- An increase in temperature is normal during charging and discharging.
- Make sure to keep battery contacts clean.
- Do not attempt to disassemble the battery. Please contact Core SWX for any service issues.
- Keep batteries seperated when transporting.
- Keep battery pack dry and avoid use in humid environments

#### HelixMax Ultra 395wh Air Travel Compliance

The battery pack models listed above contain more than 8 grams of equivalent lithium content. They are not permitted via commercial airliners.

Per IATA regulations, lithium-ion batteries with a capacity exceeding 160Wh are strictly prohibited from being transported as either carry-on or checked baggage. These packs must be shipped as cargo under specific packaging and labeling requirements in compliance with UN3480, Section IA of the IATA Dangerous Goods Regulations. Travelers should consult with their airline and shipping carrier for proper procedures.

\* Section A45-2: Lithium cells and lithium batteries are not subject to these instructions if they meet the following requirements: For a lithium ion battery the aggregate equivalent content is not more than 8g.

# **Specification Data:**

HLX-400UMXV: V-mount Connection HLX-400UMXG: G-mount Connection HLX-400UMXB: B-mount Connection

Capacity: 395Wh (14.8v, 26.7Ah)

**Size:** 3.5" x 6.3" x 3.6"

Weight: 3.6lbs.

**Normal Runtime:** (25w) 15.8hrs. **Load:** 20A @ 16.8v, 10A @ 33.6v

# Warranty:

This product is warranted to the Original Purchaser against all defects in material and or workmanship for the period herein.

The warranty period shall be, 2 years for parts and labor, unless otherwise noted. Core SWX agrees to pay equal return freight costs to return the product the same method it was received. In the event of an issue, purchaser agrees to the below RMA procedure.

Procedure:

- 1. Go to http://www.coreswx.com/repairsreturns and fill out the online form
- 2. Print the RMA number confirmation, and ship the product needing service to Core SWX, LLC. along with RMA number confirmation, and copy of bill of sale.
- 3. All shipments must be done either through UPS or FEDEX, and insured if necessary
- 4. Core SWX, LLC. is not responsible for any lost shipments.

Core SWX reserves the right to repair or replace any defective product under warranty after Core SWX determines which is more practical.

If Core SWX receives defective product for warranty repair and they are found to be defective as a result of misuse or other damage, not caused by normal wear and tear, Core SWX will notify the customer of an estimate of repair. Customer will incur costs. There are no further warranties, either expressed or implied, including warranties of merchantability or fitness for a particular purpose that has any bearing upon this transaction.



91B Commercial St. Plainview NY 11803 USA

Tel: +1 516-595-7488 Fax: +1 516-595-7492

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