



# SNAP<sup>TM</sup> MIGHTY-i 45wh Battery Kit Instructional Manual

Includes SNAP-QRL QR Plate and 6" Ptap to BMD 12v DC Locking Pin

### 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.

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:

- On-Board Microprocessor stores: Name, Serial Number, Voltage, Temperature, Current, Chemistry Type, Charge Cycles, and Date of Manufacturing.
- Four Stage, accurate, LED power gauge.
- No memory effect.
- Temperature, current, and voltage protection.
- SNAP Linking feature to parallel charge/discharge the battery packs
- Up to 45w USB-C PD input connection for fast charging.
- Incorporated 2-pin 2x Ptap provides unregulated power
- Fixed 8v and 12v DC barrel outputs

# Operation:

### Charging the Battery:

• Individual Snap Mighty packs can be charged via USBC PD or via Ptap. When charging via Ptap, the packs **can not** be linked to charge.

#### • SNAP LINK Charge

- To charge the packs together, start by connecting one pack to USB-C PD and then add the others, making sure the packs are fully aligned both magnetically and electrically.
   Alternatively, you can stack the packs and plug into any of the USB-C PD ports.
- Once connected, the battery packs will assess the charge level of each pack. The system will first charge the lower-capacity packs to match the highest charged pack. Then, it will charge all the packs simultaneously to 100%.
- The battery packs 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.
- Charging and discharging simultaneously is not recommended.

### Discharging the battery:

- Maximum continuous discharge for the pack is 6.5A(90W).
- To discharge the pack, the USB-C PD connection functions as both an output and input, offering a voltage range of DC 5V-20V with up to 45W of I/O power.
- 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.
- The pack has two fixed voltage dc barrel outputs offering both 8v and 12v outputs that can be
  discharged at the same time as any other outputs. These ports can not be used for recharging the
  pack.

### SNAP Link Discharge

The Snap battery packs feature a unique linking discharge function, allowing you to add or remove packs for uninterrupted device power. When linking the packs, ensure they are aligned in the same orientation and securely connected to prevent power loss or accidental drops. It is recommended to link no more than three packs at a time on a camera rig to maintain connection integrity and avoid hazards during movement or accidental bumps.

The linking discharge operates as follows: when a load is connected, the packs assess each other, and the one with the highest charge is used first to power the device. Once the charge levels are balanced, the packs will discharge simultaneously.

For continuous power, it's suggested to start with one pack and, after it reaches 50% discharge, add another pack (or two). This allows the first pack to act as the 'hotswap,' ensuring uninterrupted power, while you can replace the second (and third) pack as needed.

The LED power gauge will light up when a load is applied, indicating which pack(s) is currently being discharged

### 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: 0-25% 2 Segment: 26-49% 3 Segment: 50-74% 4 Segment: 75%-100%

### SMBUS Communication:

The SNAP packs have SMBUS communication, providing real-time power data to the camera or device when used with SNAPIT plates for V and G-mt applications. Please check with your device manufacturer to confirm if the input supports SMBUS communication.

## **Mounting Points**

The SNAP packs are encased in a durable polycarbonate Nexcore shell, featuring a 1/4-20 attachment point and a lanyard loop. For additional mounting options, you can purchase the #SNAP-QRC plate, which provides quick-release functionality for easy attachment and removal of SNAP packs. The quick-release plate also includes a V-mount mechanical attachment for devices.

### **SNAP IT Adapter Plates**

The SNAP Mighty supports both V-mount and G-mount applications when paired with a V-SNAPIT or G-SNAPIT adapter plate (sold separately). These adapter plates convert the battery for use with V-mount or G-mount setups.

# Powering the BMD Camera Pro Dock and Smart Phone

Using the included SNAP-QRL plate and P-Tap cable, the SNAP Mighty can easily mount to and power the Pro Dock. Simply attach the SNAP-QRL plate to the bottom of the Pro Dock, then connect the cable to its power input. This setup enables simultaneous power and charging for the smartphone and any connected devices.

### **OPTIONAL Quick Release Plate:**

The SNAP Mighty kit includes a SNAP-QRL, a plastic quick release plate. For added versatility, an optional Quick Release Plate (#SNAP-QRC) is available. This metal plate features a 1/4"-20 thread for attaching under most cameras, as well as 1/4"-20 and 3/8" receptacles on the opposite side for tripod mounting. The plate can also be used to secure the pack to the side, top, or any area of a camera cage with a 1/4"-20 thread, in combination with a V-lock shoe. For best results, users should test the QR plate mechanism to confirm it can withstand camera pans and other movements. While strong, the mechanism can only support up to 5 lbs, and with longer lenses, the leverage and top-heavy accessories can create a weight imbalance that needs to be considered.

# Battery Firmware updates:

The SNAP packs can be firmware updates via it's USBC port 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

### SNAP Mighty 45wh Air Travel Compliance

The battery pack models listed above are suitable for air transport as a non-hazardous article under the regulations of the IATA, the ICAO, and the UN. According to IATA regulations, Lithium-ion batteries may not be checked into the hold of a passenger aircraft, however, the SNAP battery pack may be taken on-board in your carry-on baggage subject to the prior approval of your airline. Check with your airline's rules for specific limitations. Spare batteries should be individually protected to prevent the possibility of short circuits.

\* 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:**

PART: SNAP-MTY-i

Mount Type: SNAP Stacking Capacity: 45wh (14.8vdc, 3.1Ah)

Max Load: 6.5A @ 14v

Output Ptap: 2x ptap DC 11-16.8v USB-C PD Charge Input: Up to 45w USB-C PD Output: DC 5v/9v/12v/15v/20v DCBarrel: 2.1mm: 8v, 3A/2.5mm: 12v, 3A

Size: 4.46" x 2.83" x 1.38" Weight: 0.83lbs. 1.38"

# 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, 1 year 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.



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Covered by U.S. Patent Nos. 12,095,291 and 12,261,475. Additional patents pending.