



## B90HSCine Bi Voltage rechargeable li-ion stack able Battery

### USER MANUAL

**WE STRONGLY RECOMMEND THAT YOU READ THIS INSTRUCTION BEFORE USING YOUR BEBOB B90HSCINE BATTERY! PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE**

## Features

- A high capacity, Bi Voltage high load battery, which is compact and lightweight.
- Direct fitting to a camera or device via Bmount.
- Dual Voltage 14,4V/28,8V
- 14,4V /28,8V Hotswap
- Five-step LED power indicator (100% - 80% - 60% - 40% - 20%).
- Full Capacity Status LED (green over 80%; yellow between 60% and 80%; red under 60%)
- Enhanced Data Communication (Bmount Protocol)

## Safety instructions

- Only for professional use!
- Keep batteries out of reach of children and personnel that has not been instructed in the use of high capacity Lithium-ion batteries!
- Use only with recommended charger.
- Keep the battery dry and do not immerse in water.
- Never open the case of the battery.
- Do not expose to temperature over 60°C.
- Do not expose the battery to fire! May explode if thrown into fire!

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[www.bebob.de](http://www.bebob.de)

July 2020

- Maximum Load 20.0A (under 14,4V and 28,8V)
- Do not put the battery on a device when the red charging LED flashes.
- Handle with care! Do not throw! Do not drop!

## Charging

- Never load unattended
- Wait 30 Minutes after discharge before you put the battery on a charger.
- The bebob B90HSCINE battery can be charged with an external Bmount bebob charger (or equivalent).
- Approximate charge time may vary depending on charger and temperature.
- bebob B90HSCINE can be charged in ambient temperature for optimum performance at 10°C - 30°C.
- bebob B90HSCINE batteries can be recharged in any charge condition.
- Fuel Gauge Flashing led indicates State of Charge during Charging Process.

## Discharging

- Maximum load is 20.0A. When using the battery with video or lighting equipment, power consumption of the equipment must be 20.0A or below. For the protection of the battery, a load of 20.0A or over may activate the internal protection circuit and stop supply of power. In this case the Fuse will self-rest after a couple of minutes
- The battery can be used in ambient temperature of - 20°C - + 55°C.
- If a Bmount battery with more than 18% capacity is stacked at the back of the B90HS, the B90HS w
- Never connect several B90HSCINE in series

## Stack able Hotswap

- You can stack up to three batteries together.
- A 4<sup>th</sup> battery won't be identified by the system
- If a Bmount battery with more than 18% capacity is stacked at the back of a B90HS, the B90HS will behave as a Hotswap adapter, passing through the power of the back battery, without discharging itself.
- If the back battery turns under 18% of Capacity, the B90HS will switch on without interruption and will power the device. The Fuel Gauge flashes red.

## Storage

- Storage temperature range is - 20°C ~ + 35°C (<85% humidity).
- To store the battery for a long period (longer than 4 Weeks), the battery should be charged between 50% and 75%. The battery should be recharged every 4 Weeks.
- After storage some self-discharge will occur. Before re-use it is advisable to recharge the battery fully.

## Warranty

- The B90HSCINE is covered by a 2 years unconditional warranty on all parts, except the cells.
- The cells are covered by a 2-year warranty, 80% of the original capacity.
- For warranty issues or if you have any additional questions, please contact the appropriate bebob distributor listed at [www.bebob.de](http://www.bebob.de).

## Disposal

- The B90HSCINE battery has to be disposed within a dedicated collection container for used device batteries. Please be aware that only empty batteries are allowed for disposal in collection containers. In case the battery is not completely discharged, precautions against a potential short-circuit have to be taken.

## Specifications

Model	B90HSCINE
Mount	Bmount
Capacity	86Wh
Voltage	14,4V / 28,8V DC
Maximum Output Voltage	16,8 V / 33,6V DC
End Voltage	12,0 V /24,0V
Cells	Lithium-Ion Trimix HL made in Japan
Max. Discharge Current	20.0A
Twist D-Tap	13,2V max 2,5A
USB Port	5V, 1.0A
Fuel Gauge	5-Step LED
Status	Green: Full Capacity over 80% Yellow: Full Capacity between 60 and 80% Red: Full Capacity under 60%
Weight	0,66 Kg
Dimensions (WXHxD)	94x144x47mm
Chargers	Bebob Bmount or Equivalent
Charging time (bebob BS2/BS4)	6 Hours
Operating Temp. Range	Charge: + 10°C ~ + 30°C recommended Discharge:- 20°C ~ + 55°C Storage:- 20°C ~ + 35°C (<85% RH )

## Transport as of October 1<sup>st</sup> 2019

- This Summary reflects our current Knowledge.

### 1. Transport by Commercial Airline / Carry-on Luggage

- You can transport in your **carry-on luggage** a B90HSCINE attached to the camera or equipment it powers.
- You can transport in your **carry-on luggage** an unspecified number of spare B90HSCINE:
  - Put tape over the contacts.
  - Put each single battery in a plastic bag before packing it in your **carry-on luggage**
- **B90HSCINE do not need to be discharged to 30% SoC for transport as personal luggage, this is only a requirement of cargo shipments.**
- Carry a copy of the [bebob UN Transport Documentation](#)
- We recommend that you confirm with your carrier of choice, to determine any further restriction or local policies, before travelling.

### 2. Transport by Commercial Airline / Checked-in Luggage

- B90HSCINE are forbidden in your **checked-in luggage**

### 3. Transport as air-, road- and sea-freight

- Li-Ion batteries, and so bebob B90HSCINE, when shipped by air, road or sea are classified as dangerous goods class 9 and subject to special UN certified packaging.
- Air transport authority training and authorisation (PK 1/ PK 2) are required for packing B90HSCINE, for an air cargo shipment.
- **Li-Ion batteries for air cargo must have a state-of-charge of no more than 30% for shipping, means only one out of the five fuel gauge led lights up.**
- We recommend that you confirm with your carrier of choice, to determine any further restriction or local policies, before travelling.