



V98micro rechargeable li-ion Battery User Manual

WE STRONGLY RECOMMEND THAT YOU READ THIS INSTRUCTION BEFORE USING YOUR BEBOB V98MICRO BATTERY! PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

Features

- A high capacity battery which is compact and lightweight. Direct fitting to a camera via V-Mount.
- Five-step LED power indicator (100% - 80% - 60% - 40% - 20%).

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!
- The maximum discharge current shall not be exceeded (see Specifications).
- The maximum charge voltage shall not be exceeded (see Specifications).
- 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
- Remove flammable material from the charging area and avoid high external thermal loads.
- Wait 30 Minutes after discharge before you put the battery on a charger.
- The bebob battery can be charged with an external bebob charger (or equivalent using the CC-CV method).
- The maximum voltage shall not be exceeded (see Specifications).
- Approximate charge time may vary depending on charger and temperature.
- Charge the battery only within the specified temperature range. bebob batteries can be charged in ambient temperature for optimum performance at 10°C - 30°C.
- bebob batteries can be recharged in any charge condition.
- Fuel Gauge Flashing LED indicates State of Charge during Charging Process.

Discharging

- The maximum discharge current shall not be exceeded (see Specifications).
- When using the battery with video or lighting equipment, power consumption of the equipment must be below specifications. For the protection of the battery, a load over or equal to the max discharge current may activate the internal protection circuit and stop supply of power. In this case the fuse will self-rest after a couple of minute.
- Remove flammable material from the discharging area and avoid high external thermal loads.
- The end of discharge voltage shall not fall below the allowed End Voltage (see Specifications).
- Charge the battery only within the specified temperature range. The battery can be used in ambient temperature of - 20°C - + 55°C.

Storage

- The battery shall be stored within the specified ranges for temperature, relative humidity and state of charge (see Specifications)
- 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 full.

Disposal

- The 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.

Camera Data Communication

- Blue leds: Arri/Sony Data Protocol
- Red leds: Red Data Protocol
- To switch between both status, press the Check button for 5s



Status LED

- Status led lighting Green: Full Capacity over 70% of New
- Status led lighting Yellow: Full Capacity between 50% and 70% of New
- Status led lighting Red: Full Capacity under 50% of New



Flash Light

- To switch On/Off press the Check Button Twice



Specifications

Model	V98micro
Mount	V-Mount
Capacity	6,6Ah; 95Wh
Voltage	14,4V DC
Maximum Output Voltage	16,8V DC
End Voltage	11,0V
Cells	Lithium-Ion
Max. Discharge Current	10,0A
Twist D-Tap	14,4V unreg.; 5A
USB Port	5V, 1.0A
Fuel Gauge	5-Step LED
Weight	0,55 kg
Dimensions (WxHxD)	75x101x48mm
Chargers	bebob, idx, sony, pag
Charging time (bebob VS2/VS4)	2 Hours
Operating Temp. Range	
Charge	+ 10°C ~ + 30°C recommended
Discharge	- 20°C ~ + 55°C
Storage	- 20°C ~ + 35°C (<85% RH)

Warranty

- The V98micro is covered by a 2 years unconditional warranty on all parts, except the cells.
- The cells are covered by a 1 year warranty, 70% 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.

Transport as of October 1st 2019

- This Summary reflects our current Knowledge.

1. Transport by Commercial Airline / Carry-on Luggage

- You can transport in your **carry-on luggage** a battery <100 Wh attached to the camera or equipment it powers.
- You can transport in your **carry-on luggage** an unspecified number of spare batteries <100 Wh:
 - Put tape over the contacts.
 - Put each single battery in a plastic bag before packing it in your **carry-on luggage**.
- Batteries <100 Wh **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 (www.bebob.de)
- 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

- Batteries <100 Wh are forbidden in your **checked-in luggage**

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

- Li-Ion batteries, and so bebob batteries <100 Wh, 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 are required for packing batteries <100 Wh, 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.**

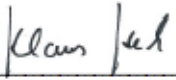
We recommend that you confirm with your carrier of choice, to determine any further restriction or local policies, before travelling.



DECLARATION OF CONFORMITY UN38.3

We herewith confirm that each battery of this type is proved to meet the requirements of applicable tests in the UN Manual of Tests and Criteria ST/SG/AC.10/11/Rev.6/Corr.1, Part III, Sub-Section 38.3.

In the following, lithium battery test summary according to Sub-Section 38.3.5

(a), (b) Manufacturer:	bebob factory GmbH Höglwörther Str. 350 81379 München Germany	Phone: +49 (0)89 8563 485-18 Fax: E-Mail: norbert.hans@bebob.de Webpage: www.bebob.de
Customer:	bebob factory GmbH Höglwörther Str. 350 81379 München Germany	Phone: +49 (0)89 8563 485-18 Fax: E-Mail: norbert.hans@bebob.de Webpage: www.bebob.de
(c) Test laboratory:	Batteryuniversity GmbH Am Sportplatz 30 63791 Karlstein am Main Germany	Phone: +49 (0)6188 – 99410-0 Fax: +49 (0)6188 – 99410-20 E-Mail: mail@bu-lab.eu Webpage: www.bu-lab.eu
(d) Report reference no.:	TZ_000176_UN	
(e) Date of test report:	February 08, 2019	
(f) Description of devices under test:	(i) Type: (ii) Mass: (iii) Watt-hour rating: (iv) Physical description: (v) Model numbers:	Lithium-ion batteries 544 g 95.04 Wh 4S2P NCR 18650GA V98micro
(g) Performed tests:	T.1 Altitude simulation: T.2 Thermal test: T.3 Vibration: T.4 Shock: T.5 External short circuit: T.6 Impact/Crush: T.7 Overcharge: T.8 Forced discharge:	Passed Passed Passed Passed Passed Not performed Passed Not performed
(h) Reference to assembled battery testing requirements:	Not applicable	
(i) Applied standard:	UN ST/SG/AC.10/11/ Rev.6/Corr.1 Recommendations of the TRANSPORT OF DANGEROUS GOODS, Manual of Tests and Criteria, Part III, section 38.3, Lithium metal and lithium ion batteries	
(j) Signature:	April 12, 2021	 Klaus Heck, Managing Director

Note: This confirmation is valid only in connection with the report reference