



## A98 rechargeable li-ion Battery User Manual

**WE STRONGLY RECOMMEND THAT YOU READ THIS INSTRUCTION BEFORE USING YOUR BEBOB A98 BATTERY! PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE**

### Features

- A high capacity battery which is compact and lightweight. Direct fitting to a camera via Gold Mount.
- Five-step LED power indicator (100% - 80% - 60% - 40% - 20%).
- Full Capacity Status LED (green over 70%; yellow between 50% and 70%; red under 50%)

### 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!
- Maximum Load 8.0A.
- Do not put the battery on a device when the red charging LED flashes.
- Handle with care! Do not throw! Do not drop!

### Charging

- The bebob A98 battery can be charged with an external bebob charger (or equivalent) with Lithium-ion (Li-ion) charging ability.
- Approximate charge time may vary depending on charger and temperature.
- bebob A98 can be charged in ambient temperature for optimum performance at 10°C - 30°C.
- bebob A98 batteries can be recharged in any charge condition.

bebob factory GmbH – Höglwörtherstr. 350 – D-81379 München – Tel.: +49 89 27818282  
[www.bebob.de](http://www.bebob.de)

## Discharging

- Maximum load is 8.0A. When using the battery with video or lighting equipment, power consumption of the equipment must be 8.0A or below. For the protection of the battery, a load of 8.0A or over may activate the internal protection circuit and stop supply of power. In this case the status led will turn red.
- The battery can be used in ambient temperature of - 20°C - + 55°C.

## 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 A98 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](http://www.bebob.de).

## Disposal

- The A98battery 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	A98
Mount	Gold Mount
Capacity	6,8Ah; 98Wh
Voltage	14,4V DC
Maximum Output Voltage	16.8 V DC
End Voltage	12.0 V
Cells	Lithium-Ion Trimix made in Japan
Max. Discharge Current	8.0A
Twist D-Tap	14.4V unreg. Max. 35W
USB Port	5V, 1.0A
Fuel Gauge	5-Step LED
Weight	0,63 Kg
Dimensions (WXHxD)	94x144x39mm
Chargers	bebob, antonbauer
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 )

## Transport as of April 1<sup>st</sup> 2016

- This Summary reflects our current Knowledge.

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

- You can transport in your **carry-on luggage** a A98 attached to the camera or equipment it powers.
- You can transport in your **carry-on luggage** an unspecified number of spare A98:
  - Put tape over the contacts.
  - Put each single battery in a plastic bag before packing it in your **carry-on luggage**
- **A98 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. **You will find the actual regulation of your carrier of choice in the bebob transport information system [www.fly-lithium.com](http://www.fly-lithium.com),**

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

- You can transport in your **checked-in luggage** a A98 attached to the camera or equipment it powers and a maximum of 3 A98 spare packed in the same piece of luggage
- **A98 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 local restriction or policies, before travelling. **You will find the actual regulation of your carrier of choice in the bebob transport information system [www.fly-lithium.com](http://www.fly-lithium.com),**

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

- Li-Ion batteries, and so bebob A98, 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) are required for packing any more than 2 A98, 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 local restriction or policies, before travelling. **You will find the actual regulation of your carrier of choice in the bebob transport information system [www.fly-lithium.com](http://www.fly-lithium.com),**

**www.battery  
university.eu**

## CONFIRMATION UN 38.3 TESTING

WE HEREWITH CONFIRM THAT EACH BATTERY OF THIS TYPE IS PROVED TO MEET THE REQUIREMENTS OF EACH APPLICABLE TEST IN THE UN MANUAL OF TESTS AND CRITERIA, PART III, SUB-SECTION 38.3, Rev.6, Corr. 1

<b>REPORT NO.:</b>	<b>BU-2017-05301-0-B1</b>
<b>Product:</b>	<b>LITHIUM ION BATTERY</b>
<b>Designation:</b>	<b>4S2P NCR18650GA (14.4V/6.8Ah/97.92Wh)</b>
<b>Article Number:</b>	A98/9071 ·
<b>Manufacturer:</b>	<b>bebob factory GmbH</b> Höglwörthstr. 350 · D-81379 München · Germany

PERFORMED TESTS	RESULTS
38.3.4.1 <b>Test 1: Altitude Simulation</b>	passed
38.3.4.2 <b>Test 2: Thermal Test</b>	passed
38.3.4.3 <b>Test 3: Vibration</b>	passed
38.3.4.4 <b>Test 4: Shock</b>	passed
38.3.4.5 <b>Test 5: External Short Circuit</b>	passed
38.3.4.6 <b>Test 6: Impact/Crush</b>	not applicable
38.3.4.7 <b>Test 7: Overcharge</b>	passed
38.3.4.8 <b>Test 8: Forced Discharge</b>	not applicable

**www.battery  
university.eu**  
Batteryuniversity GmbH  
Am Sportplatz 30 · D-63791 Karlstein am Main  
Telefon+49 6188 99410-0 · Fax+49 6188 99410-20  
mail@batteryuniversity.eu · www.batteryuniversity.eu

16.08.2017

Date of issue

Signature: Dr. Jochen Mähliß, Director

This confirmation is only valid in connection with the report mentioned above, and thus without signature. The listed regulation reflects the status at the time of the release of this confirmation.