



A90RM CINE rechargeable li-ion Battery USER MANUAL

WE STRONGLY RECOMMEND THAT YOU READ THIS INSTRUCTION BEFORE USING YOUR BEBOB A90RM CINE BATTERY! PLEASE KEEP THIS MANUAL FOR FUTURE REFERENCE

Features

- A high capacity, high load 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 80%; yellow between 60% and 80%; red under 60%)
- Full Data Communication with the Camera (Info Li, Digiview,...)

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 20.0A. (Over CINE GM-Mount)
- Do not put the battery on a device when the red charging LED flashes.
- Handle with care! Do not throw! Do not drop!

Charging

- Wait 30 Minutes after discharge before you put the battery on a charger
- The bebob A90RM CINE 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 A90RM CINE can be charged in ambient temperature for optimum performance at 10°C - 30°C.
- bebob A90RM CINE batteries can be recharged in any charge condition.

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.

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 A90RM CINE is 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.

Disposal

- The A90RM CINE 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	A90RM CINE
Mount	Gold Mount
Capacity	6,0Ah; 89Wh
Voltage	14,8V DC
Maximum Output Voltage	16.8 V DC
End Voltage	12.0 V
Cells	Lithium-Ion Trimix HL made in Japan
Max. Discharge Current	20.0A (over CINE GM-Mount)
Twist D-Tap	14.4V unreg. Max. 35W
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	0,82 Kg
Dimensions (WXHxD)	94x144x58mm
Chargers	bebob, antonbauer
Charging time (bebob VS2/VS4)	3 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 1st 2016

- This Summary reflects our current Knowledge.

1. Transport by Commercial Airline / Carry-on Luggage

- You can transport in your **carry-on luggage** a A90RM CINE attached to the camera or equipment it powers.
- You can transport in your **carry-on luggage** an unspecified number of spare A90RM CINE:
 - Put tape over the contacts.
 - Put each single battery in a plastic bag before packing it in your **carry-on luggage**
- **A90RM CINE 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,**

2. Transport by Commercial Airline / Checked-in Luggage

- You can transport in your **checked-in luggage** a A90RM CINE attached to the camera or equipment it powers and a maximum of 3 A90RM CINE spare packed in the same piece of luggage
- **A90RM CINE 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,**

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

- Li-Ion batteries, and so bebob A90RM CINE, 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 A90RM CINE, 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,**

**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. 5, Amend. 2

REPORT NO.:	BU-2016-04659-3-B1
Product:	LITHIUM ION BATTERY
Designation:	4S3P UR18650RX (14.4V/6Ah/86.40Wh)
Article Number:	9074 /A90RM-CINE
Manufacturer:	bebob factory GmbH Höglwörthstr. 350 · D-81379 München · Germany

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

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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.