



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 A-Mount (Gold-mount compatible)
- 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 bebob ACine 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

- · Never load unattended!
- 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 (over bebob Acine Mount only). 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

A90RM CINE	
ACine Mount (Gold-mount compatible)	
6,0Ah; 89Wh	
14,8V DC	
16.8 V DC	
12.0 V	
Lithium-Ion Trimix HL made in Japan	
20.0A (over Acine-Mount)	
14.4V unreg. Max. 35W	
5V, 1.0A	
5-Step LED	
Green: Full Capacity over 80%	
Yellow: Full Capacity between 60 and 80%	
Red: Full Capacity under 60%	
0,82 Kg	
94x144x58mm	
bebob, antonbauer	
3 Hours	
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 <u>bebob UN Transport Documentation</u>.
- 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 <u>bebob UN Transport Documentation</u>.
- 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-lon 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-lon 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		тs	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

www.battery university.eu

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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.