



## CUBE 1200 rechargeable Li-Ion Battery USER MANUAL

**WE STRONGLY RECOMMEND THAT YOU  
READ THIS INSTRUCTION BEFORE USING  
YOUR CUBE 1200 BATTERY! PLEASE KEEP  
THIS MANUAL FOR FUTURE REFERENCE**

### Features

- A high-capacity, high-load on-ground battery with integrated charger
- 1172 Wh – 81,6 Ah
- Multivoltage (5,0V - 14,4Vnom - 24,0V - 48,0V)
- For cinematography cameras and lighting
- Recellable

### Safety Instructions

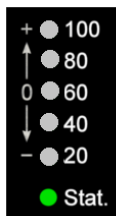
- Only for professional use! Keep batteries out of reach of children and personnel that has not been instructed concerning the use of high-capacity Lithium-Ion batteries!
- Use only with integrated charger.
- Keep the battery dry and do not immerse in water.
- Never open the case of the battery.
- Do not expose the battery to temperatures over 60°C.
- Do not expose the battery to fire! May explode if thrown into fire!
- Maximum load 500W.
- Handle with care! Do not throw! Do not drop!

## Charging

- Never load unattended
- Wait 30 Minutes after discharge before charging your battery.
- The bebob CUBE 1200 battery can be charged via the internal charger.
- Charging time ~ 8,5h
- Approximate charging time may vary depending on charger and temperature.
- For optimal performance, the bebob CUBE 1200 should be charged in ambient temperature around 10°C - 30°C.
- The bebob CUBE 1200 can be recharged in any state of charge.
- Charger input: AC IN 90-240V – 50-60Hz
- Input fuse: 1x5AT – 1 spare fuse
- Charging current 10A internal

## AC Adapter

- The bebob CUBE 1200 battery can be used as an 150W AC adapter when plugged into AC.
- When the device powered needs more than 150W, the overload gets compensated through the battery until the battery is empty.
- When the device powered needs less than 150W, the free power will be charged into the battery.
- When the AC Adapter is on, the Status led will light green



## Discharging

- 5,0V: 2x USB.1x 2A self-resetting fuse
- 12V (unreg 12 to 16,8V)): 2x XLR4 10A, 1x Twist D-Tap 10A, electronic fuses
- 24V (28,0V+/- 5V adjustable): 2x XLR3 16A, electronic fuses
- 48V (48,0V +/- 3V adjustable): 1x XLR10 10A electronic fuse
- The battery can be used in ambient temperature of - 20°C to + 55°C.

## Status LED

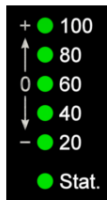
- Status LED lights up for 3 seconds after switch off:



- green: full capacity over 80%
- yellow: between 60% and 80%
- red: under 60%

- Status LED lights green when the CUBE is plugged into AC.

## Fuel Gauge



- Five-step LED power indicator
- Flashes while charging
- Lights up while discharging
- Last LED (20%) flashes when the capacity comes under 10%.

## Outputs LED's

- 12V/24V LED light up green when the CUBE is switched ON at 24V.
- 12V/48V LED light up green when the CUBE is switched ON at 48V.
- 12V/24V/48V LED are off when the CUBE is switched OFF.
- 12V/24V/48V LED turn first yellow and then red after 5s when overloaded (more than 10A). The output is locked. Remove or reduce load!
- 24V/48V LED flash red when the internal temperature of the CUBE reaches 90°C. 24V/48V output is locked. Remove or reduce load!

## Storage

- Storage temperature range is - 20°C to + 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 fully recharge the battery.

## Warranty

- The CUBE 1200 is covered by a 2 years unconditional warranty on all parts, except the cells.
- The cells are covered by a 2 year warranty, for 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.tv](http://www.bebob.tv).

## Voltage Selection

- Main Switch on Position OFF: No Voltages available



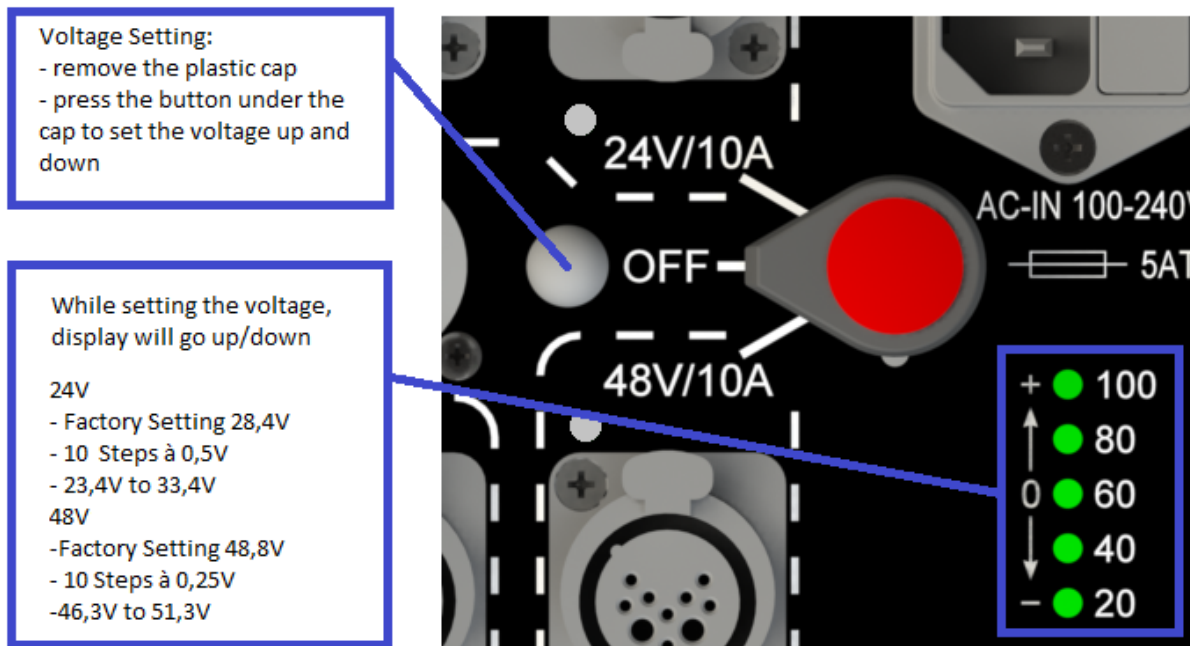
- Main Switch on Position 24V: 5, 12 and 24V Voltage available



- Main Switch on Position 48V: 5, 12 and 48V available



## Voltage Setting



## Disposal

- The CUBE 1200 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	CUBE 1200
Capacity	1172 Wh – 81,6 Ah
Voltage	5,0V DC 14,4V DC (12,0V to 16,8V unreg.) 28,0V DC (adjustable +/-5V) 48,0V DC (adjustable +/-3V)
Cells	Lithium-Ion Trimix HL made in Japan
Max. Discharge Power	500W
Fuel Gauge	5-Step LED
Status	Green: Full Capacity over 80% Yellow: Full Capacity between 60 and 80% Red: Full Capacity under 60%
Weight	8,95 Kg
Dimensions (WXHxD)	208x356x167mm
Charger	Integrated
Charging time	8,5 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

- The CUBE 1200 is forbidden in your **carry-on luggage**.

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

- The CUBE 1200 is forbidden in your **checked-in luggage**.

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

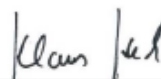
- Li-Ion batteries, including the bebob CUBE 1200, when shipped by air, road or sea are classified as dangerous goods class 9 and subject to special UN certified packaging.
- Air transport authority training and authorisation (PK 1/ PK 2) are required for packing the CUBE 1200 for an air cargo shipment.
- **Li-Ion batteries for air cargo must have a state-of-charge of no more than 30% for shipping – meaning 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. **You will find the actual regulations of your carrier of choice in the bebob transport information system [www.fly-lithium.com](http://www.fly-lithium.com).**



## UN 38.3 TEST REPORT SUMMARY

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.7, Part III, Sub-Section 38.3.

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

(a), (b) Manufacturer:	BMZ Batterien-Montage-Zentrum GmbH Zeche Gustav 1 63791 Karlstein am Main Germany	Phone: +49 (0) 6188 – 9956-0 Fax: +49 (0) 6188 – 9956-900 E-Mail: kontakt@bmz-group.com Webpage: www.bmz-group.com
Customer:	bebob factory GmbH Höglwörther Straße 350 81379 München Germany	Phone: +49 (0) 89 8563 485 E-Mail: info@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.:	BU-20200077-B1	
(e) Date of test report:	April 15, 2020	
(f) Description of devices under test:	(i) Type: Lithium ion batteries (ii) Mass of battery: 2.60 kg (iii) Watt-hour rating: 587.52 Wh (iv) Physical description: 2x 4S6P NCR18650GA (v) Model numbers: Cube 1200 Zellenpack	
(g) Performed tests:	T.1 Altitude simulation: Passed T.2 Thermal test: Passed T.3 Vibration: Passed T.4 Shock: Passed T.5 External short circuit: Passed T.6 Impact/Crush: Not performed T.7 Overcharge: Passed T.8 Forced discharge: Not performed	
(h) Reference to assembled battery testing requirements:	Not applicable	
(i) Applied standard:	UN ST/SG/AC.10/11/Rev.7 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 15, 2020  Klaus Heck, Managing Director	

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