

Rechargeable Lithium-ion Battery Pack

Model: BVM0002

(Replaces BP-L40 / BP-L60 / BP-L90 / BP-L60A / BP-L90A E-50 / E-50S / E-80 / E-80S)

User Manual

Thank you for purchasing this rechargeable Lithium-ion battery pack. We recommend that you read this User Manual with care before using the battery and keep this manual for your future reference.

Features

- High capacity, compact and light-weight.
- Five-step LED indicator for easy battery capacity check.

Specifications

Type:	BP-type Li-ion rechargeable battery
Maximum Voltage	DC 16.8V
Nominal Voltage:	DC 14.4V
Nominal Capacity:	7.8Ah 112Wh
Battery Protection Circuit:	Over-discharge, over-charge and over-current
Maximum Discharge Current:	6.0A
Operation Time to shoot without a Light:	Approx 200min
Internal Resistance (maximum):	260mΩ
Power Indicator	5-LED Power Status
End Voltage:	11V
Operating Temperature:	
Charging:	0°C to 45°C (-10°C to 30°C recommended)
Discharging:	-20°C to 50°C
Storage:	-20°C to 60°C (-0°C to 20°C recommended)
Dimension:	Approx. 85(W)X141.8(D)X66(H)mm
Weight:	Approx. 718g

Charge

- Charge time may vary depending on different conditions and charger used.
- Operating temperature range of 0°C–45°C. For optimum charging performance 10°C–30°C is recommended
- If the temperature of the battery is below 0°C, the battery will not fully charge even if designated charge time has lapsed. The battery must be charged within the recommended temperature range.

Discharge

- Maximum continuous discharge current is 6.0A
(Note: When using the battery with video or lighting equipment power consumption of the equipment must be 6.0A or below. For the protection of the battery, a load of 6.0A or over may activate the internal protection circuit and terminate the supply of power.)
- The normal operating temperature should be in the range of -20°C–50°C. If the temperature drops below -20°C, discharge may stop.
- The operating voltage range of this battery is 13V–16V. At the end of discharge and when its voltage reached 13V and beyond, the voltage will drop sharply. (For battery voltage alarm setting, please refer to camera manual)

Part Description

Front View

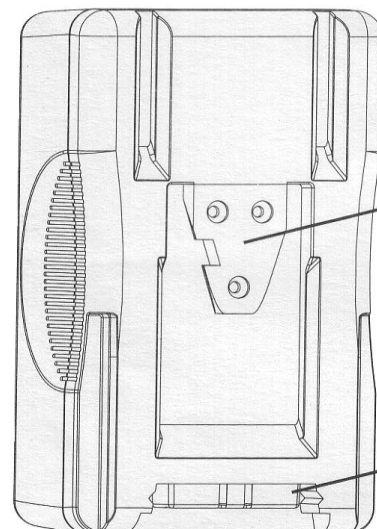
Capacity Check Button



Back View

V-Lock

Connector



Storage

- Storage temperature range -20°C~60°C.
For prolonged battery life, store at 0°C~20°C is recommended.
- To store the battery for a short period, the battery should be stored in discharged condition.
- To store the battery for a long period, charge the battery for about 20 minutes every five months.
- Before re-use it, it is advisable to re-charge the battery fully.

Battery Capacity Status LED Indication

LED indicators	Battery Capacity
● ● ● ● ○	Below 20%
● ● ● ○ ○	Below 40%
● ● ○ ○ ○	Below 60%
● ○ ○ ○ ○	Below 80%
○ ○ ○ ○ ○	100% charged

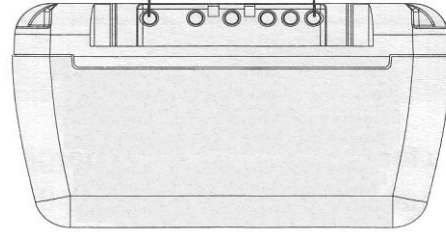
● OFF ○ ON

Battery Protection Circuitry

- **Over-charge protection:**
If during charge the battery voltage exceeds a preset level, charging is automatically stopped to prevent the battery from being overcharged. The charger will show a charging fault, though the batteries LEDs will continue to show the battery charge capacity. If this happens contact your supplier.
- **Over-discharge protection:**
If the battery voltage reaches 9.2V during discharge, the protection circuit will operate. Then the LED indicators will not operate. When the battery is re-charged and the voltage reaches 12.0V, the LEDs will reset and operate again.
- **Over-current protection:**
When exposed to a high discharge current, large in-rush current or an external short circuit, the protection function is activated preventing battery discharge. Then the LED indicators will not operate. The over-current protection is automatically reset by disconnecting the battery from equipment in use.
- **Thermal protection:**
If the internal temperature of the battery pack exceeds preset level, the thermal fuse will activate and power supply will be terminated. In such cases the battery cannot be reset. If this happens contact your supplier.

Terminals

⊖ Negative ⊕ Positive



Caution

- Do not puncture or short-circuit the battery.
- Do not burn the battery pack or immerse it in water.
- Always keep the battery in dry place and stay away from humid.
- Do not attempt to break or dismantle the battery pack.