

## **DATA SHEFT**

# L90 Slim V-Mount Battery

PAG-9307V / EAN 5060854320070

- Rechargeable Lithium-Ion.
- 90 Watt-hours, 14.8V 6.1Ah.
- High-current cells with a continuous 10A capability.
- Slim form factor and an ultra-compact, lightweight design.
- Higher energy density than most full-sized 90Wh V-Mount Li-lon batteries.
- D-Tap output.
- Designed to withstand the vibration of UAVmounted applications.
- The industry's first reorienting battery Run-Time, Charge Status & Data Display.
- Intelligent battery that manages its own charge and discharge safely.
- Auto-compatible with camera data systems and viewfinder displays.
- Battery software can be updated externally.
- Reveals status and usage data stored in microprocessor, for easier battery management.



- Charges on PAG or Sony V-Mount Li-Ion chargers.
- Independently tested to UN standard to meet air transport regulations.
- 2 year warranty with unlimited cycles during that period.



# Slim & Light

PAG has developed a battery that offers a slim form factor and a weight of only 567g. It has been designed to power the new generation of smaller digital cinema cameras, such as the Arri Alexa Mini, and is the ideal choice when cameras are mounted to gimbals or drones.

# **High-Current**

The L90 Slim features the latest high-current Li-lon cells that contribute to the battery's low-profile design. It has a capacity of 90Wh, and a continuous current-draw capability of 10A, giving it a higher energy density than most full-sized V-Mount Li-lon batteries of similar capacity.

## **D-Tap Output**

The battery features a built-in D-Tap output, enabling a 12V accessory to be powered in addition to the camera.



## **Intelligent Battery**

PAG-designed firmware is incorporated, making it an intelligent battery that manages its own charge and discharge safely. It can be charged using any reputable V-Mount Li-Ion charger. Reliability, durability and longevity are integral to the battery design, providing an unbeatable return on investment.

## **Safety First**

PAG has incorporated its own proven and tested electronic protection system, to ensure the highest possible level of safety. All PAG Li-lon batteries are tested to UN standards by an independent authority in order to meet Air Transport regulations. Each battery is labelled with the UN test number. An Air Safety document is available to download from the PAG website. In addition to UN testing, a capacity below 100Wh ensures that the battery is flight-friendly and suitable for transport on aircraft, with a quantity restriction of 20 units per person.



Designed for use on unmanned aerial vehicles.

## **Designed for UAV Use**

An important consideration in the design of the cellpack was ensuring that it could withstand the vibration caused when mounted to multi-rotor aerial platforms. PAG has incorporated spacers between the cells to prevent the negative affects of vibration.



# Run-Time, Charge Status & Data

Another unique feature is the orientation-sensing Run-Time, Charge Status & Data Display, positioned on the side of the battery. The display's numeric characters rotate automatically according to the battery's orientation, to ensure legibility. Recently, the display has been enhanced, so that it is easier to read in strong sunlight. Run-time is displayed, on-load, to a resolution of 1 minute. Capacity is displayed in 1% increments. Usage and status information, stored in the battery's microprocessor can be revealed when you enter data mode. This includes battery voltage, temperature in degrees Celsius, the number of charge/discharge cycles, and the software version.

## Camera Communication

In keeping with the latest PAG-developed technology, the L90 communicates automatically with different camera data systems and displays its remaining capacity in the camera viewfinder and LCD.

## **Future-Proof**

The battery is future-proof to accommodate changes in charger and camera technology. Firmware can be updated easily in the field, via the battery contacts.

## **Tough Construction**

The battery case injection-mouldings are manufactured from a high-impact material which is inherently very strong. Additionally, the internal case design protects the cell-pack against damaging impact.

The battery features a multi-level electronic protection system which is fail-safe and guards against conditions that reduce battery life. The circuits are coated to protect them and ensure the operation of the safety systems in the event of damage to the battery.



# SPECIFICATION

Connector: V-Mount.

Run-Time, Charge Status & Data Display: A numeric display that senses the orientation of the battery and adjusts accordingly, for legibility. It shows a run-time prediction on-load, to a resolution of 1 minute. State of charge is displayed in 1% increments.

The following data can be displayed via the menu system: the battery voltage; temperature in degrees Celsius; the number of charge/discharge cycles; and software version. The menu also includes a reset function.

**Construction:** High-impact injection-mouldings designed to protect the cells from impact damage. Inter-cell separation offers additional protection.

**Cells:** Premium grade, high-capacity, high-current, sealed Lithium-lon rechargeable cells.

**Voltage:** 14.8V nominal. 8 cells connected in series/parallel. Each cell has a nominal voltage of 3.7V.

**Capacity:** 90 Watt-hours, nominal 6.1 Ampere-hours.

Output Current: The rated maximum continuous output current is 10 Amperes.

#### **Output Connector:**

1 x D-Tap output suitable for 12V camera accessories (unregulated).

Charge Voltage: 16.8V.

#### Protection:

The multi-layered electronic protection system guards against over-current, over-voltage, under-voltage, over-temperature and under-temperature. The protection system circuit is conformally-coated to protect it, and ensure operation of the safety systems in the event of damage to the battery.

## Temperature Range:

## Charging:

 $0^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ (Optimum +10°C to +30°C). +32°F to +104°F (Optimum +50°F to +86°F).

## Discharging:

-20°C to +50°C (Optimum +5°C to +40°C). -4°F to +122°F (Optimum +41°F to +104°F).

#### Storage:

+10°C to +30°C (+50°F to +86°F).

#### Dimensions:

**Length:** 140mm (5.5"). **Width:** 85mm (3.3"). **Height:** 35mm (1.4").

## Weight:

0.567kg (1.25lbs).

85mm



140mm









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