



**Gold Mount Intelligent Linking Battery System**

## **PAGLINK FOR BROADCAST, PRODUCTION & CINEMA**

**PAGlink is a revolutionary and innovative system of superior, intelligent Gold Mount Li-Ion batteries, that can be linked for charge or discharge. The system has been designed after consultation with leading camera manufacturers and broadcasting organisations to meet the demands of modern broadcast acquisition, video production and digital cinematography.**

- Up to 8 batteries, in any state of charge, can be linked for charge or discharge.
- Linking enables you to keep the camera running at vital moments by adding another battery.
- Linking allows you to hot-swap batteries for zero interruption to camera and accessory power.
- Linking allows capacities to be combined, greatly extending run-time.
- Linking increases the current draw capability to 12A, which is ideal for powering a camera and multiple accessories simultaneously. Sharing the load between batteries prolongs their overall life and provides a better return on investment.
- Linking allows you to fly with all the high-capacity power you need.
- Linking allows up to 16 batteries to be charged on a 2-position charger.

**PAGlink is the first intelligent battery system designed for today's increasingly computerized cameras; it makes other battery systems seem crude by comparison.**



## LINK MULTIPLE INTELLIGENT BATTERIES

PAGlink offers the most technologically advanced Gold Mount batteries in the industry. They are compatible with Anton/Bauer camera mounts and chargers which ensures an economic integration with your existing battery inventory.

PAGlink Gold Mount batteries are available in two capacities. The PL94 has a flight-friendly rating of 94Wh and is ideal for broadcasters as well as frequent flyers. The PL150 has a capacity of 150Wh and is ideal for cinematographers and rental companies. It has an air travel allowance of 2 per person. Even though it has 50% more capacity, the PL150 is identical in size to the PL94.

The PAGlink system allows up to 8 batteries, of any rated capacity and in any state of charge, to be linked in parallel for discharge or charging. Three 94Wh batteries, weighing less than 5lbs, have a combined capacity of 282Wh. Three 150Wh batteries have a combined capacity 450Wh. Combining capacities allows you to concentrate on creating the images you need without worrying about changing batteries.

Linked batteries form a network  
and communicate with each other

The combined state  
of charge is communi-  
cated to the camera

Batteries are linked  
intelligently and  
discharge together  
using available  
power efficiently



Power is delivered via  
a separate power rail

The battery connected to the camera becomes the Master. It communicates with the camera and controls the delivery of power. The Master automatically determines which batteries to bring online for discharge, based on their state-of-charge. The output is managed safely and efficiently. When batteries have a similar state-of-charge (within 20%) they will discharge together, sharing the load and providing up to 12A. The rear battery does not fully discharge first and there is no transfer of charge between batteries.

## LINK-UP & POWER-UP WITH PAGLINK

Linking batteries enables a higher current-draw for power-hungry camera set-ups that include multiple accessories such as a monitor, a transmission device and a camera light. Linked batteries will supply up to 12A, while individual batteries offer 10A. Sharing the load between batteries prolongs their overall life and provides a better return on investment. **PAGlink PL94 batteries are guaranteed for 3 years, and PL150 batteries for 2 years.**

If power is running low, PAGlink enables you to add another battery to the stack just to keep running. The ability to link a fully-charged battery to one that is almost totally discharged and maintain the delivery of power is one of the cleverest features of the PAGlink system. PAGlink also allows batteries to be hot-swapped to provide continuous power. Either way, PAGlink means no more time-wasting camera reboots at the crucial moment.



## HC-PL94T Battery

### Model 9306

- \_ 94 Watt-Hours, 14.8V 6.4Ah
- \_ Max discharge 10A (12A when linked)
- \_ Numeric Run-Time & Capacity Display
- \_ Charge Time 2 hours
- \_ 5" x 3.4" x 2.25" / 1.6lbs
- \_ Guarantee 3 years

## HC-PL150T Battery

### Model 9313

- \_ 150 Watt-Hours, 14.8V 10Ah
- \_ Max discharge 10A (12A when linked)
- \_ Numeric run-time and capacity display
- \_ Charge Time 2 hours
- \_ 5" x 3.4" x 2.25" / 1.7lb
- \_ Guarantee 2 years





## ACCURATE RUN-TIME AT YOUR FINGERTIPS

### Numeric Run-Time & Capacity Display

All PAGlink Gold Mount batteries feature PAG's accurate numeric Run-Time & Capacity Display, situated at the top of the battery for better visibility. Two button presses on-load shows remaining camera run-time in hours and minutes (1), to a resolution of 1 minute. When batteries are linked, the run-time figure given is for the entire stack. A single button press, on or off-load, shows individual battery capacity as a percentage, in 1% increments (2). The display maintains accuracy by tracking cell-performance and adjusting calibration values to compensate for cell-aging.



### Camera data system compatibility

PAGlink is the only battery system that supports multiple camera data systems. This enables linked batteries to provide their collective state of charge for display in the camera viewfinder or LCD. The batteries adapt automatically to each system they encounter, including the system that allows Anton/Bauer batteries to display capacity.





## CHOOSE THE MOST CONVENIENT CAPACITY FOR YOU

### Battery Capacity & Air Transportation

The PAGlink system has been conceived so that you can fly with all the high-capacity Li-Ion power that you need. Batteries that have flight-friendly capacities of 94Wh can be linked when you reach your location to create 188Wh or 282Wh batteries. Individual batteries that have capacities above 160Wh are banned from passenger flights.

PAGlink PL94 batteries are included in your personal allowance of 20 Li-Ion batteries rated 100Wh or less, along with personal devices such as your phone, tablet and laptop. In addition, you are allowed 2 batteries that have capacities between 100 and 160Wh, such as the PAGlink PL150.

***Remember, Li-Ion batteries must NOT be checked in with your hold luggage, they must be taken aboard in your carry-on luggage.***

All PAG Li-Ion batteries are tested to UN standards by an independent authority, in accordance with air transport regulations. All PAG batteries are labelled with the relevant UN Test Number and quantity allowance and supplied with a UN Test Certificate. A copy of the UN Test Report and a Material Safety Data Sheet can be obtained from PAG, if required by the carrier.



## POWERHUB FOR CAMERA ACCESSORIES

PAGlink has an innovative approach to powering camera accessories. Rather than providing outputs that are built into the batteries, PAGlink offers a separate, user-configurable power distribution plate called the **PAGlink PowerHub**. This lightweight, low-profile accessory draws power from the linking contacts of PAGlink batteries. It enables you to power multiple 12V DC camera accessories such as a monitor, a transmission device and a camera light. The PowerHub sits between two PAGlink batteries and, unlike built-in battery D-Taps, it enables you to keep accessories powered-up, even when batteries are hot-swapped.

The PowerHub offers users more outputs and a wider choice of connectors. It has 5 ports that accept a range of interchangeable plug-in options: D-Tap, Lemo (2-pin), Hirose (4-pin) and 2.1mm, suitable for 12V camera accessories. A USB output unit is also included, and can be used to power 5V accessories that draw up to 2A, or for charging your phone. The PowerHub is supplied with four D-Taps and a USB (2A) output as standard. Each output unit type is available to buy individually.





**NEW  
2A USB  
OUTPUT**

## CHARGE ALL YOUR BATTERIES ON ONE CHARGER

**PAGlink has consigned one-battery-per-channel-charging to history.** Linked charging was developed by PAG for the PAGlink system. Now your batteries can be stacked for overnight charging on one compact charger, putting an end to midnight battery swapping. It reduces the number of chargers required to manage your batteries, enabling you to travel light and save money.

Up to 8 PAGlink batteries can be linked for charging on each position of your charger. The 2-position **PAGlink PL16 Charger** will charge up to 16 batteries simultaneously. The PL16+ offers 4-positions for charging simultaneously a mix of PAGlink batteries and individual, non-linking Anton/Bauer batteries. This makes it ideal for broadcasters and rental companies that own batteries from both manufacturers. PAGlink Gold Mount batteries can also be charged using A/B chargers\*, ensuring an economic integration of PAGlink batteries with your existing inventory.

*\* The number of linked batteries that can be charged is dependent on the charger and firmware version.*







*Anton/Bauer Quad Charger*



*PAGlink PL16 Charger*



## ULTRA-COMPACT, LOW-COST & VERSATILE TRAVEL CHARGER

The **PAGlink Micro Charger** is the worlds smallest and most versatile broadcast battery charging kit. When you want to travel really light and charge PAGlink batteries on location, the Micro Charger is the answer.

Up to 4 linked PAGlink batteries can be charged simultaneously using one Micro Charger. One fully discharged 94Wh battery will be fully charged in approximately 4 hours. Two 94Wh batteries will be fully-charged in 8 hours. 150Wh batteries will take 50% longer. Charge times will be less if batteries are only partially discharged. The charge status of each battery is shown on its individual capacity indicator.

The charger can be powered using its plug-in AC Adapter/Power Supply Unit, which features interchangeable plug adaptors for use worldwide (AC input 100-240V). It is also possible to power the charger from 5-20V DC sources such as a 12V vehicle battery, via the cigarette lighter socket, or a 2A USB charger, using DC power cables that are also supplied in the kit.



## PAGLINK BATTERY SPECIFICATIONS & CHARGE TIMES

### **Battery Connection System:**

Gold Mount.

### **Voltage:**

14.8V nominal. 12 cells connected in series/parallel.

Each cell has a nominal voltage of 3.7V.

### **Capacity (HC-PL94T Battery Model 9306):**

Nominal 6.4 Ampere-hours (94 Watt-hours).

### **Capacity (HC-PL150T Battery Model 9313):**

Nominal 10 Ampere-hours (150 Watt-hours).

### **Output Current:**

The rated maximum continuous output current for linked batteries is 12 Amperes (10A individually).

### **Cells:**

Premium-grade, sealed, rechargeable, cylindrical Lithium-Ion cells.

### **Construction:**

High-impact polycarbonate injection mouldings designed to protect the cells from impact damage.

The battery case is sealed to maintain the integrity of the UN approved construction.

### **Latching Mechanism:**

The PAGlink contact assembly on the front of the battery

and and latching mechanism on the rear are separate to the battery case and can be replaced if damaged.

### **PAGlink Connection Feature:**

The PAGlink connection uses high-current pin contacts.

It is recommended that no more than 3 batteries are linked for use on-camera, although it is possible to link up to 8 batteries off-camera and for charging.

When linked, PAGlink batteries form a network, allowing the batteries to communicate with each other. They report to the camera or charger as one large battery.

The system automatically selects the most suitable batteries for discharge, according to their charge status. Batteries do not discharge into each other and the rear battery does not discharge first.

The PAGlink system ensures that the maximum output from linked batteries is kept to a safe level.

### **Protection:**

The battery incorporates a multi-layered electronic protection system that 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.

**Charging:**

PAGlink PL16 chargers will charge up to 8 linked batteries, from any state of charge, on each position. The charge times given are for fully-discharged 94Wh batteries to fully charged. 150Wh batteries will take 50% longer.

**PAGlink PL16 Charger & 94Wh batteries:**

	1	2 hrs	30 mins
(1 + 1)	2	3 hrs	
(2 + 2)	4	6 hrs	
(3 + 3)	6	9 hrs	30 mins
(4 + 4)	8	11 hrs	45 mins
(8 + 8)	16	24 hrs	

**PAGlink Micro Charger & 94Wh batteries:**

1	4 hrs
2	8 hrs
3	12 hrs
4	16 hrs

PAGlink Batteries can also be charged using Anton/Bauer Li-Ion chargers. Linked batteries may need to be within 40% state of charge of each other to be fully-charged.

**Operating Temperature Range:**

Charging: +32°F to +113°F (Optimum +50°F to +104°F)  
Discharging: -4°F to +122°F (Optimum +50°F to +104°F)  
Storage: +50°F to +86°F

**Viewfinder Information Display**

PAGlink batteries support the same camera data standard as Anton/Bauer batteries, which communicates capacity to the camera viewfinder and LCD.

**Firmware Updates:**

Battery firmware can be updated in the field by the user, in a matter of seconds, via the battery contacts.

**Dimensions (Models 9306 & 9313):**

5.00" (long) x 3.42" (wide) x 2.25" (deep)

**Weight:**

9306: 1.6lbs  
9313: 1.7lbs

**INTERNATIONAL PATENTS APPLY**



**POWER | INNOVATION | QUALITY**

PAG is one of the longest established global providers of high-end, portable power solutions for cameras and equipment used in broadcast acquisition, video production and digital cinematography. Founded in 1968, and based in the UK, PAG is the original designer and manufacturer of the most innovative and technologically advanced batteries, chargers and power adaptors. The company is best known for its intelligent linking battery systems which are the choice of camera professionals worldwide.

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**Distributor:**