



## DATA SHEET

# PAG AR Series 2 Chargers

PAGLOK & NP1 MULTI-CHEMISTRY CHARGERS



- Compact, and lightweight
- Automatic Charge Rate Selection
- Charge PAG Li-Ion batteries
- Charge Ni-Cd & Ni-Mh batteries
- Fast, efficient sequential charging
- Analytic Discharge/Charge Program
- Recovery Charge Program
- Worldwide Operation

## DESCRIPTION

Four channel PAG AR Series 2 chargers are designed for charging and managing Li-Ion/Ni-MH PAGlok batteries (AR124PLD) or Ni-MH NP1 batteries (AR124NPD).

The key to maximising battery life often lies in the charging. PAG AR Series 2 chargers are the most advanced microcomputer-controlled charging systems available, and will extend battery life beyond any others capabilities.

The chargers feature a Li-Ion charge program that is instigated by PAG Intelligent Li-Ion Batteries. For non-Li-Ion batteries, they feature Auto Charge-Rate Selection. The charge rate is determined by the battery's cell-chemistry, state-of-charge, capacity, condition and cycle history. The charger applies the best charge regime to achieve a fully charged battery with the maximum capacity and cycle life. Alternatively, the charge rate can be manually selected. This PAG developed technology is unique to PAG chargers.

PAG sequential chargers are so efficient that in some cases two batteries can be fully-charged in

less time than it takes a simultaneous charger, which shares current equally across the channels.

The analytic Discharge/Charge Program greatly benefits non-Li-Ion batteries which have been effected by repeated partial discharge. The available capacity of any battery is displayed on the charger's large backlit LCD. This user interface also provides information such as the current loaded and status for each channel, as well as discharge capacity and terminal voltage.

All models provide a manually selectable Recovery Charge program which can be activated to recover battery capacity or to reset Li-Ion batteries after a safety cut-out.

PP90 sockets are incorporated to increase the range of batteries that can be charged, via suitable PAG charging adaptors.

The latest high frequency switch-mode power supply technology adjusts automatically to enable worldwide operation.



## SPECIFICATION

### PAG AR124PLD Charger Model 9792

#### Battery Connections:

- 4 x PAGlok
- 4 x PP90 \*

### PAG AR124NPD Charger Model 9793

#### Battery Connections:

- 4 x NP1 pockets
- 4 x PP90 \*

\* PP90 (2.1mm) connectors (polarised connector suitable for 2.1mm coaxial DC power connectors. NOTE: centre pin negative).

#### Range of Batteries Charged:

- PAGlok Lithium-Ion batteries
- Nickel-Metal Hydride batteries having nominal voltages of between 4.8V and 14.4V, and nominal capacities of between 1Ah and 10Ah.
- Nickel-Cadmium batteries having nominal voltages of between 4.8V and 14.4V, and nominal capacities of between 1Ah and 10Ah.

#### Charge Adaptors:

Model 9617	PAG V-Mount Li-Ion/Ni-MH batteries
Model 9610	Sony V-Mount Li-Ion batteries

#### Main Charge Program

- Auto Mode: automatically selects correct charge current.
- Manual selection: 2A, 3A or 4A charge current.
- Li-Ion voltage-charge program: only available with PAG Li-Ion batteries or suitable PAG intelligent charge adaptor. PAG Li-Ion batteries automatically control their own charge regime.

#### Discharge-then-Charge Program

This program discharges the battery, automatically determining the fully-discharged condition, and then fully charges it. The discharge capacity and the subsequent charge loaded into the battery can be displayed on the screen.

#### Recovery Charge

This special program conditions the battery for a period of one hour. The charger will then automatically enter the main charge program, which will run until the battery is fully charged. This program also recovers PAG Li-Ion batteries when the internal safety protection circuit has tripped.

#### Maintenance Charge

A self-adjusting Maintenance Charge may be automatically entered after charging (not applied to PAG Li-Ion batteries).

#### Self Test Program

The internal microcomputer constantly monitors the battery under charge or process as well as the operation of the charger's own functions which will be shut down to a safe condition should any of the tests fail.

#### Mains Input

90-139V or 140-270V ~ autoselected.  
Frequency 47-63 Hz. Maximum power consumption 120W.

#### Output Protection

Charger protected against short circuit, open circuit, excess battery voltage and reverse battery voltage.

#### AC Mains Failure Protection

Should mains failure occur during a charging program, or whilst the charger is connected, it will shut down to a safe condition.

#### Safety

Designed to comply with electrical safety standard BS EN 60065. NOTE: U.K. mains leads are fitted with a 1" fuse to BS1362 rated 5A as standard.

#### European Union Directives

Complies with the following EU Directives:

- EMC Directive 89/336/EU.
- Low Voltage Directive 73/23/EU.

#### Operating Temperature Range

0°C to 40°C (+32°F to +104°F).

#### Dimensions (H x W x D):

AR124PLD: 82 x 168 x 240mm  
AR124NPD: 78 x 142 x 240mm

#### Weight:

AR124PLD: 1.23kg  
AR124NPD: 1.07kg



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