

# SONY®

## Power Supply Systems





## ADVANTAGE OF SONY POWER SUPPLY SYSTEMS

### *Durable, Reliable, and Convenient Operation with Sony Professional Power Supply Systems*

*As a leading manufacturer in the professional A/V industry, Sony has offered a wide range of power supply products to best accommodate its professional product line.*

*The BP-L Series lithium-ion battery, introduced in 1994, set a milestone in the history of professional battery products with its large capacity, lightweight, and virtually maintenance-free characteristics. The use of Sony's V-mount mechanism in this battery series offered a new level of durability and reliability by providing direct-attachment capability to a range of Sony professional products, from camcorders and portable VTRs to video monitors.*

*Building on this legacy, Sony continuously strives to enhance its professional line of power supply products for even greater convenience and reliability. The all-new professional "INFO" feature equipped on "INFO" batteries, intelligently communicates battery status data when connected to compatible Sony portable equipment. This allows camera crews, for example, to accurately identify the remaining battery capacity on their camcorder viewfinders. This "INFO" feature also allows the indication of other important battery information for better and more efficient power management.*

*Six models are offered in Sony's professional battery line to best accommodate different user needs depending on the battery capacity, price, and equipment they are using. Two types of portable chargers, three AC adaptors, and convenient accessories are also available for effective support in field operations.*

*Combining high reliability, convenient features, and a wide variety to choose from, Sony power supply systems support the demanding applications in professional A/V field operations.*

### **Large Capacity, Lightweight, and Safe Lithium-Ion Batteries**

The BP-GL/IL/L Series lithium-ion batteries offer the benefits of large capacity and light weight packed into a small, but very durable body. These factors make them very suitable for camera crews that have a critical need for long operating times and mobility. Users can choose from a wide range of batteries to meet their required capacity and the type of camcorder they are operating. The BP-GL95 has the largest capacity of 95 Wh and weighs only 760 g (1 lb 10 oz), providing the best combination of operating time and mobility. Despite its very large capacity, the BP-GL95 follows IATA (International Air Transport Association) transport regulations for regular aircraft transportation. Moreover, all Sony batteries are equipped with a multiple protection circuit, which maintains a high level of safety and is confirmed in accordance with the Manual of Tests and Criteria of the UN Recommendations on the Transport of Dangerous Goods, Part III, sub-section 38.3\*.

\*The BP-GL/IL/L Series batteries are also in compliance with U.S. Department of Transportation and FAA safety guidelines. Ultimately the decision to carry or not to carry is at the discretion of the carrier.

### **Eco-Friendly Design**

The BP-GL/IL/M batteries, BC-M150 charger and the AC-DN10/DN2B AC adaptors have been designed to be environmentally friendly.



**BP-GL95, BP-GL65, BC-M150, AC-DN10**

Lead-free solder is used for soldering.  
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

**BP-IL75**

Lead-free solder is used for soldering certain parts.  
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

**AC-DN2B**

Lead-free solder is used for soldering.

**BP-M100, BP-M50**

Lead-free solder is used for soldering certain parts.

### **Intelligent "INFO" Function\***

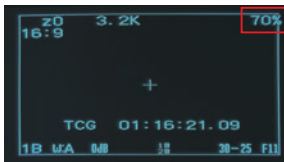
An intelligent battery-management function allows operators to monitor the battery status easily and accurately. This is because "INFO" batteries digitally communicate status parameters to "INFO"-compatible equipment. This function allows highly efficient battery exchange and recharging by relieving operators from the risk of a power failure during a critical shoot.

\*The "INFO" function is available with the following camcorders and battery combinations:

Camcorders: XDCAM™ PDW-530/530P/510/510P, MPEG IMX™ MSW-900/900P, HDCAM™ HDW-750/750P/730/730S and future new products  
Batteries: Lithium-ion battery BP-GL95/GL65/IL75, Nickel metal-hydride battery BP-M100/M50

## Battery Remaining Display on Viewfinder

With an "INFO" battery, the remaining capacity is automatically detected and transmitted to the compatible Sony camcorder. The remaining capacity is indicated in the camcorder viewfinder in 10% steps.



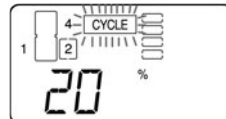
## Battery Status Display on Charger

When "INFO" batteries are attached to a BC-M150 "INFO" battery charger, a variety of information – including the remaining capacity, remaining charge time, and number of charge/discharge cycles – is indicated on the LCD display for easy recognition of each battery's condition.

BC-M150 LCD Indication



Remaining charging time (min.)



Charge/Discharge Cycle

## Four-Step Remaining Capacity LED Display

The four-step LED display on the side of the battery provides an accurate indication of remaining capacity at the touch of a button (more than 80%, 60%, 40%, or 20%). In addition, the BP-GL95/GL65 can indicate the remaining capacity in more detail when it falls below 20%.



80 to 100%



15 to 19%

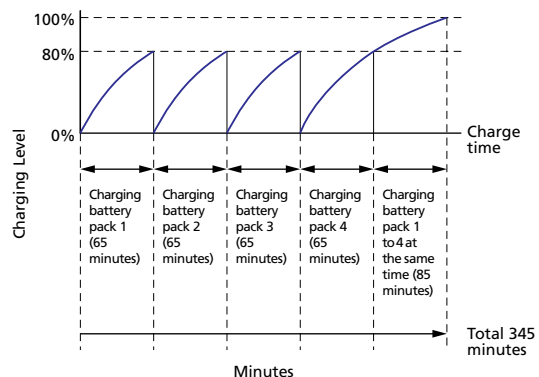
## Reliable and Durable V-mount Attaching Mechanism

All batteries offered in the BP-GL/L/L/M Series use Sony's V-mount mechanism, allowing quick and convenient attachment/detachment to Sony-compatible equipment. This innovative mechanism offers extremely high durability and reliability, suitable for the harshest environments encountered in ENG operations. Since no external cable connections are required in this system, batteries can be attached and detached through one quick action. Sony V-mount batteries can be directly attached to most Sony professional camcorders including XDCAM™, MPEG IMX™, DVCAM™, Digital Betacam™, Betacam SX™, and HDCAM® series, plus some portable VTRs and video monitors.



## Efficient Charging System

The BC-M150/M50 chargers use an efficient charging method when charging lithium-ion batteries. When the batteries are attached, they charge each battery one by one to 80% capacity. After all batteries have reached 80% capacity, the BC-M150/M50 simultaneously supplies charge power to all batteries. This efficient charging system enables the BC-M150 to charge four BP-GL95 lithium-ion batteries within 345 minutes.



BC-M150 Efficient Charging Method (Charging four BP-GL95 batteries)

# BATTERIES

## BP-GL95 Lithium-ion Battery



### FEATURES

- Large capacity of 95 Wh
- "INFO" function
  - Remaining capacity indication on viewfinder (in 10% steps)\*
  - Remaining capacity/remaining charge time/battery life indication on LCD display of the BC-M150
- V-mount attaching mechanism
- Four-step LED display
  - Remaining capacity indication in 20% steps with green LED (more than 80%, 60%, 40%, 20%)
  - Remaining capacity indication in 5% steps with orange LED after capacity falls below 20%

\*Remaining capacity indication on the camcorder viewfinder is available with the PDW-530/530P/510/510P, MSW-900/900P, HDW-750/750P/730/730S camcorders and future new products.

## BP-GL65 Lithium-ion Battery



### FEATURES

- 65 Wh capacity
- "INFO" function
  - Remaining capacity indication on viewfinder (in 10% steps)\*
  - Remaining capacity/remaining charge time/battery life indication on LCD display of the BC-M150
- V-mount attaching mechanism
- Four-step LED display
  - Remaining capacity indication in 20% steps with green LED (more than 80%, 60%, 40%, 20%)
  - Remaining capacity indication in 5% steps with orange LED after capacity falls below 20%

\*Remaining capacity indication on the camcorder viewfinder is available with the PDW-530/530P/510/510P, MSW-900/900P, HDW-750/750P/730/730S camcorders and future new products.

## BP-IL75 Lithium-ion Battery



### FEATURES

- 77.8 Wh capacity
- "INFO" function
  - Remaining capacity indication on viewfinder (in 10% steps)\*
  - Remaining capacity/remaining charge time/battery life indication on LCD display of the BC-M150
- V-mount attaching mechanism
- Four-step LED display
  - Remaining capacity indication in 20% steps with green LED (more than 80%, 60%, 40%, 20%)

\*Remaining capacity indication on the camcorder viewfinder is available with the PDW-530/530P/510/510P, MSW-900/900P, HDW-750/750P/730/730S camcorders and future new products.

### SPECIFICATIONS

Battery type	Lithium-ion rechargeable battery
Maximum voltage	DC 16.8 V
Nominal voltage	DC 14.4 V
Capacity	95 Wh
Operating temperature	-20 to +45 °C (-4 to +113 °F)
Dimensions (W x H x D)	4 x 6 3/4 x 1 1/2 inches (101 x 169 x 37 mm)
Weight	Approx. 1 lb 10 oz (760 g)
Supplied accessory	Operation manual

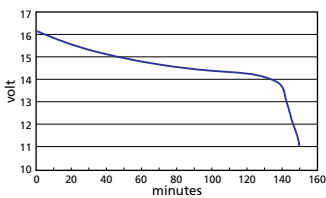
### SPECIFICATIONS

Battery type	Lithium-ion rechargeable battery
Maximum voltage	DC 16.8 V
Nominal voltage	DC 14.4 V
Capacity	65 Wh
Operating temperature	-10 to +45 °C (14 to +113 °F)
Dimensions (W x H x D)	3 5/8 x 5 1/2 x 1 5/8 inches (92 x 138 x 41 mm)
Weight	Approx. 1 lb 3 oz (550 g)
Supplied accessory	Operation manual

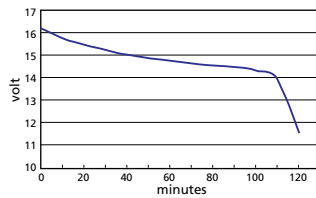
### SPECIFICATIONS

Battery type	Lithium-ion rechargeable battery
Maximum voltage	DC 16.8 V
Nominal voltage	DC 14.4 V
Capacity	77.8 Wh
Operating temperature	-20 to +45 °C (-4 to +113 °F)
Dimensions (W x H x D)	4 x 6 3/8 x 1 1/2 inches (101 x 168.7 x 37 mm)
Weight	Approx. 1 lb 15 oz (900 g)
Supplied accessory	Operation manual

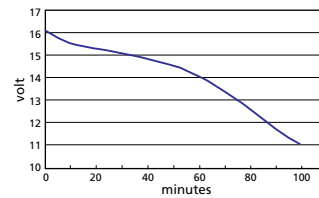
### TYPICAL DISCHARGE CURVE (at 30 W load)



### TYPICAL DISCHARGE CURVE (at 30 W load)



### TYPICAL DISCHARGE CURVE (at 40 W load)



## BP-L40A Lithium-ion Battery



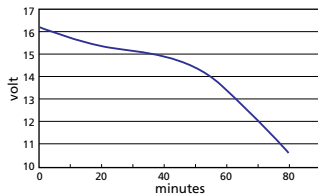
### FEATURES

- Lightweight and small size with 43.2 Wh capacity
- V-mount attaching mechanism
- Four-step LED display
  - Remaining capacity indication in 20% steps with green LED (more than 80%, 60%, 40%, 20%)

### SPECIFICATIONS

Battery type	Lithium-ion rechargeable battery
Maximum voltage	DC 16.8 V
Nominal voltage	DC 14.4 V
Capacity	43.2 Wh
Operating temperature	-10 to +45 °C (14 to 113 °F)
Dimensions (W x H x D)	3 5/8 x 5 1/2 x 1 11/16 inches (92 x 138 x 42 mm)
Weight	Approx. 1 lb 2 oz (530 g)
Supplied accessory	Operation manual

### TYPICAL DISCHARGE CURVE (at 30 W load)



## BP-M100 Nickel Metal-Hydride Battery



### FEATURES

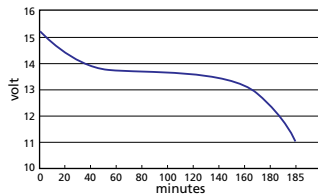
- Large capacity of 98 Wh
- "INFO" function
  - Remaining capacity indication on viewfinder (in 10% steps)\*
  - Remaining capacity/remaining charge time/battery life indication on LCD display of the BC-M150
- V-mount attaching mechanism
- Four-step LED display
  - Remaining capacity indication in 20% steps with green LED (more than 80%, 60%, 40%, 20%)

\*Remaining capacity indication on the camcorder viewfinder is available with the PDW-530/530P/510/510P, MSW-900/900P, HDW-750/750P/730/730S camcorders and future new products.

### SPECIFICATIONS

Battery type	Nickel metal-hydride rechargeable battery
Maximum voltage	DC 15.6 V
Nominal voltage	DC 13.2 V
Capacity	98 Wh
Operating temperature	-10 to +45 °C (14 to 113 °F)
Dimensions (W x H x D)	4 x 6 3/8 x 2 3/8 inches (101 x 168.7 x 60 mm)
Weight	Approx. 3 lb 4 oz (1540 g)
Supplied accessory	Operation manual

### TYPICAL DISCHARGE CURVE (at 30 W load)



## BP-M50 Nickel Metal-Hydride Battery



### FEATURES

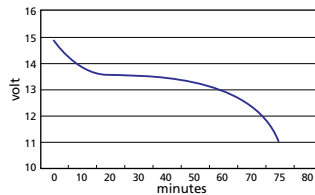
- Small size with 49 Wh capacity
- "INFO" function
  - Remaining capacity indication on viewfinder (in 10% steps)\*
  - Remaining capacity/remaining charge time/battery life indication on LCD display of the BC-M150
- V-mount attaching mechanism
- Four-step LED display
  - Remaining capacity indication in 20% steps with green LED (more than 80%, 60%, 40%, 20%)

\*Remaining capacity indication on the camcorder viewfinder is available with the PDW-530/530P/510/510P, MSW-900/900P, and HDW-750/750P/730/730S camcorders and future new products.

### SPECIFICATIONS

Battery type	Nickel metal-hydride rechargeable battery
Maximum voltage	DC 15.6 V
Nominal voltage	DC 13.2 V
Capacity	49 Wh
Operating temperature	-10 to +45 °C (14 to 113 °F)
Dimensions (W x H x D)	101 x 168.7 x 37 mm (4 x 6 3/8 x 1 1/2 inches)
Weight	Approx. 1 lb 13 oz (830 g)
Supplied accessory	Operation manual

### TYPICAL DISCHARGE CURVE (at 30 W load)



# CHARGERS

## BC-M150 Four-channel Charger/Power Supply



### FEATURES

- Compact and lightweight four-channel portable charger
- Can charge any Sony V-mount type battery
  - Lithium-ion battery: BP-GL95/GL65/IL75/L40A/L90A/L60A
  - Nickel metal-hydride battery: BP-M100/M50
- Quick and efficient charging
  - One BP-GL95 battery can be fully charged within 145 minutes
  - Four BP-GL95 batteries can be fully charged within 345 minutes
- Battery information display on LCD\*
  - Displays remaining capacity, remaining charge time, charge/discharge cycles

\*Battery information display is only available for BP-GL95/GL65/IL75/M100/M50 batteries

### SPECIFICATIONS

Power requirements	AC 100 to 240 V, 50/60 Hz
Power consumption	Approx. 160 W
DC output	Max. 16.8 V, 6 A (for charging the lithium-ion battery or supplying power to external equipment) Max. 19.5 V, 5 A (for charging the nickel metal-hydride battery)
Operating temperature	0 to +40 °C (32 to 104 °F)
Dimensions (W x H x D)	6 1/8 x 4 3/4 x 13 inches (155 x 120 x 330 mm)
Weight	7 lb 11 oz (3.5 kg)
Supplied accessories	Operation manual, AC power cord, plug holder

### CHARGE TIME

Model name	Capacity	Approximate charging time (minutes)	
		1 battery, 100%	4 batteries, 100%
BP-GL95	95 Wh	145 (65)	345 (260)
BP-GL65	65 Wh	155 (70)	365 (280)
BP-IL75	77.8 Wh	140 (65)	340 (260)
BP-L40A	43.2 Wh	125 (60)	305 (240)
BP-M100	98 Wh	100 (-)	400 (-)
BP-M50	49 Wh	70 (-)	280 (-)

## BC-M50 Two-channel Charger



### FEATURES

- Compact and lightweight two-channel portable charger
- Can charge any Sony V-mount type battery
  - Lithium-ion battery: BP-GL95/GL65/IL75/L40A/L90A/L60A
  - Nickel metal-hydride battery: BP-M100/M50
- Quick and efficient charging
  - One BP-GL95 battery can be fully charged within 245 minutes
  - Two BP-GL95 batteries can be fully charged within 400 minutes
- Refresh function for BP-M100/M50 nickel metal-hydride battery

### SPECIFICATIONS

Power requirements	AC 100 to 240 V, 50/60 Hz
Power consumption	Approx. 49 W
DC output	Max. 16.8 V, 2.2 A (for charging the lithium-ion battery) Max. 20 V, 1.8 A (for charging the nickel metal-hydride battery)
Operating temperature	0 to +40 °C (32 to 104 °F)
Dimensions (W x H x D)	2 3/8 x 7 5/8 x 5 1/8 inches (60 x 191 x 130 mm)
Weight	2 lb 6 oz (1.1 kg)
Supplied accessories	Operation manual, AC power cord, plug holder

### CHARGE TIME

Model name	Capacity	Approximate charging time (minutes)	
		1 battery, 100%	2 batteries, 100%
BP-GL95	95 Wh	245 (155)	400 (310)
BP-GL65	65 Wh	190 (100)	290 (200)
BP-IL75	77.8 Wh	220 (130)	350 (260)
BP-L40A	43.2 Wh	150 (70)	220 (140)
BP-M100	98 Wh	240 (-)	480 (-)
BP-M50	49 Wh	120 (-)	240 (-)

## AC ADAPTORS

### AC-DN10 AC Adaptor/Charger



#### FEATURES

- Max. 100 W DC power supply
  - V-mount mechanism for direct attachment to compatible camcorders
  - XLR-4-pin output for attachment to other equipment
- Compact and lightweight
- Charging capability of Sony V-mount lithium-ion batteries (full charge)
  - BP-GL95/GL65/IL75/L40A/L90A/L60A
- Quick charging
  - The BP-GL95 can be fully charged within 145 minutes
- Can charge batteries while supplying AC power to other equipment

#### SPECIFICATIONS

Power requirements	AC 100 to 240 V, 50/60 Hz
DC output	16.7 V, 6 A
Operating temperature	0 to +40 °C (32 to 104 °F)
Dimensions (W x H x D)	4 x 6 3/8 x 1 1/2 inches (101 x 160 x 37 mm)
Weight	1 lb 12 oz (800 g)
Supplied accessories	Operation manual, AC power cord

#### CHARGE TIME\*

Model name	Capacity	Approximate charging time (minutes)
BP-GL95	95 Wh	145
BP-GL65	65 Wh	155
BP-IL75	77.8 Wh	140
BP-L40A	43.2 Wh	125
BP-M100	98 Wh	N.A.
BP-M50	49 Wh	N.A.

\* when using the charging function only

### AC-DN2B AC Adaptor/Charger



#### FEATURES

- Max. 150 W DC power supply
  - V-mount mechanism for direct attachment to camcorders
  - XLR-4-pin output for attachment to other equipment
- Charging capability of Sony V-mount lithium-ion batteries (by 85% capacity)
  - BP-GL95/GL65/IL75/L40A/L90A/L60A

#### SPECIFICATIONS

Power requirements	AC 100 to 240 V, 50/60 Hz
DC output	16.7 V, 9 A
Operating temperature	0 to +40 °C (32 to 104 °F)
Dimensions (W x H x D)	4 x 6 3/4 x 2 7/8 inches (101 x 169 x 70 mm)
Weight	2 lb 2 oz (950 g)
Supplied accessories	Operation manual, AC power cord, DC cable

#### CHARGE TIME

Model name	Capacity	Approximate charging time (minutes)
		1 battery, 85%
BP-GL95	95 Wh	155
BP-GL65	65 Wh	100
BP-IL75	77.8 Wh	130
BP-L40A	43.2 Wh	70
BP-M100	98 Wh	N.A.
BP-M50	49 Wh	N.A.

### AC-550/550CE AC Adaptor



#### FEATURES

- Max. 94.5 W DC power supply
  - XLR-4-pin output
  - 26-pin (CCZ-type) connector for supplying power to Sony portable VTRs
- Video output for monitoring

#### SPECIFICATIONS

Power requirements	AC-550: AC 110 to 120 V/220 to 240 V ±10% selectable, 60 Hz
	AC-550CE: AC 110 to 120 V/220 to 240 V ±10% selectable, 50Hz
Power consumption	Max. 130 W
DC output	13.5 V, 7 A
Input/output connectors	CAMERA: CCZ-type 26-pin VIDEO OUT: BNC type MIC OUT: XLR-3-31 type DC OUT: XLR-4-31 type EXT VBS: BNC type
Dimensions (W x H x D)	8 5/8 x 3 5/8 x 12 7/8 inches (217 x 91 x 327 mm)
Weight	8 lb 6 oz (3.8 kg)

## ACCESSORIES

### BKW-L601 V-mount Battery Adaptor



#### FEATURES

- Enables non V-mount camcorders to mount Sony V-mount batteries
- V-shoe attachment for quick and easy battery change

#### SPECIFICATIONS

Dimensions (W x H x D) 3 5/8 x 5 5/8 x 9/16 inches  
(89 x 141.4 x 14.2 mm)

Weight 4 oz (110 g)

Supplied accessory Operation guide

### BKW-L404 Battery Adaptor



#### FEATURES

- Belt-type power supply adaptor
- Supplies power from Sony V-mount batteries to portable video equipment through an XLR-4-pin connector
- Max. 100 W DC power supply

#### SPECIFICATIONS

Dimensions (W x H x D) 6 7/8 x 3 5/8 x 1 7/16 inches  
(173 x 89.9 x 35 mm)

Weight Approx. 16.5 oz (465 g)  
with carrying belt

Supplied accessory Carrying belt

### BKP-L551 Battery Adaptor



#### FEATURES

- Enables Sony portable cameras to mount Sony V-mount batteries
  - Applicable camera adaptors: CA-570/570P/550/550P/57A/57AP/55A/55AP/50A/50AP or HDCA-750/750P, HDC-950/930

#### SPECIFICATIONS

Dimensions (W x H x D) 3 7/8 x 5 3/4 x 15/16 inches  
(98 x 143 x 23.5 mm)

Weight 7 oz (200 g)

## REFERENCE CHART: Approximate Operating Time\*1

Model name	Power consumption	Batteries					
		BP-GL95 95 Wh	BP-GL65 65 Wh	BP-IL75 77.8 Wh	BP-L40A 43.2 Wh	BP-M100 98 Wh	BP-M50 49 Wh
HDW-F900	42 W	120*2	80*2	85	-	115*2	-
HDW-750/750P	38 W	135	85	90	-	120	-
DVW-790WS/790WSP	32 W	160*2	110*2	105	-	155*2	-
MSW-900/900P	27 W	190	130	135	-	180	-
PDW-530/530P/510/510P	37 W	135	85	90	-	120	-
DNW-9WS/9WSP	31.5 W	165*2	110*2	105	-	155*2	-
DSR-570WS/570WSP	26.1 W	205*2	135*2	140	70	200	90
DSR-390/390P	22.1 W	245*2	160*2	180	80	230	100

\*1 The above operating time may change according to operating conditions.

\*2 The battery remaining indicator on the camcorder LCD may not be accurate. The battery alarm may not function properly. Please contact your local Sony office or authorized dealer for changing the battery alarm setting.



BP-GL95, BP-GL65, BC-M150, AC-DN10  
Lead-free solder is used for soldering.  
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

BP-IL75  
Lead-free solder is used for soldering certain parts.  
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

AC-DN2B  
Lead-free solder is used for soldering.

BP-M100, BP-M50  
Lead-free solder is used for soldering certain parts.

# SONY

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V-2203  
MK10080V1

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