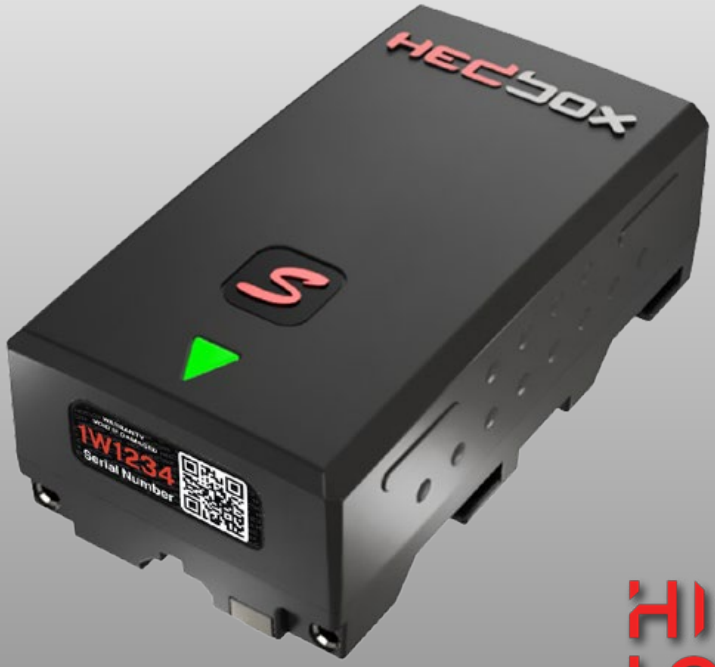
Li-Ion Battery Pack

HED-NPF665



HIGH LOAD

HEDBOX

User Manual

EN English

Operating Instructions

Before operating the unit, please read this manual thoroughly and save it for future reference.
• Please consult the store where you purchased this battery pack or your sales representative before using the battery pack in a product whose Operation Manual/Operating Instruction does not explicitly state that the battery pack can be used, or before using the battery pack in conjunction with another power supply. Inappropriate use of the battery pack may result in unit misoperation.
• Use the battery pack only with equipment whose operating instructions recommend its use.

Important Safety Instructions

• If the battery pack is mishandled, the battery pack can burst and cause a fire.
• Do not disassemble and never attempt to open the battery pack.
• Do not crush and do not expose the battery pack to any shock or force such as hammering, dropping or stepping on it, avoid mechanical shock.
• Do not short circuit and do not allow metal objects to come into contact with the battery terminals.
• Do not expose to temperatures higher than 60°C (140°F) direct sunlight or in car parked in the sun.
• Do not incinerate or dispose of in fire.
• Be sure to charge the battery pack using a genuine Hedbox battery charger or a device that can charge the Li-Ion battery pack.
• Keep the battery pack out of the reach of small children.
• Keep the battery pack dry and clean only with a dry cloth.
• Do not use this battery pack near water, or expose the battery pack to rain or moisture.
• Do not install near any heat sources such as radiators, heat registers, or appliances that produce heat.
• Unplug this battery from the supply unit during thunderstorms or when unused for long periods.
• Refer all servicing to qualified service personnel only.
• Servicing is required when the battery pack has been damaged in any way, such as power plug damage, IDR Puch Button damage, the battery has been exposed to rain or high moisture, does not operate normally, or has been dropped, and the battery housing damaged significantly.
• This battery pack uses Lithium-Ion battery cells.
• A large discharge amount may accelerate the deterioration of the battery pack's internal cells.
To prevent this, use the battery pack with a discharger amount of about 3 A or less.
Continuous use at levels beyond the maximum discharge level may cause the protection circuit to shut off the current to protect the internal cells.

Charging the battery pack

• You don't have to discharge the battery pack before recharging.
• Charging while some capacity remains does not affect the original battery capacity.
• To charge the battery efficiently, fully charge it in an ambient temperature of 10°C - 30°C (50°F - 86°F).
• The battery pack discharges naturally over time. To extend battery life, it is recommended that you fully charge the battery pack before using it.
• The battery pack may become warm while used or being charged. This is normal.
• Battery pack performance decreases in low-temperature surroundings.
• To conserve battery power, we recommend that you keep the battery pack dry and warm, and only insert it in your electronic device just before use.
• If the power goes off even though the remaining battery time shows that it has enough power to operate, charge the battery pack fully again so that the correct remaining battery time is shown.
• Note that the remaining battery time is sometimes not restored if used in high temperatures for a long time or left in a fully charged state, or if the battery pack is frequently used.
• Remaining battery time is shown as the approximate recording time.

EN English

Important Information

Battery life

• Battery life may be shortened due to storage or operation in high temperatures.
• The performance and operating time of the battery may drop under cold conditions.
• Replace the battery pack when the operating time with a completely charged battery pack becomes noticeably short.
• The battery life is limited and varies in each battery pack according to the storage, operating conditions, and working operational environment.

If you can't charge the battery pack

• If the charging process encounters no response under the following conditions:

- During the initial attempt to recharge the battery.
- After the battery has been idle for an extended period.
- When the battery has been left inside the camera for an extended duration.
- Right after the purchase.

In such instances, disconnect the battery from the charger and then reconnect it.

• If the second attempt at charging proves unsuccessful, there could be a potential issue with either the battery or the charger. Stop using them and reach out to your authorized Hedbox dealer, or contact us at support@hedbox.com for assistance.

• If the battery pack terminals become dirty or dusty, clean them with a soft cloth.

How to store the battery pack

• Store the battery pack in environment that is dry at temperatures between 0°C to 23°C (32°F to 73°F).
• If the battery pack is to be stored for a short period (approximately more than 24 hours and a month or less), discharge or charge it to 90% of its total capacity to prevent deterioration of its internal cells.
• When storing the battery pack for an extended period (more than a month) it is recommended to discharge or charge it to about 60% of its full capacity. The 60% capacity provide the best number of cycles-to-usage ratio. In this case charge it until the capacity reaches 60% once every six months.

How to transport the battery pack by Airplane

When traveling by airplane and intending to carry Hedbox batteries, it is essential to adhere to specific air transportation regulations. To ensure compliance with safety guidelines, travelers must take special precautions.These include

• Ensure the battery is discharged to less than 30% of its total capacity.
• Store the battery in your carry-on baggage during check-in.
• Inform the airport security officer about the battery in your baggage.
• You are allowed to carry a maximum of for (4) batteries per trip.

Compliance Statements

EUROPEAN UNION COMPLIANCE STATEMENTS

Hedbox declares that the radio equipment described in this document comply with the EMC Directive 2041/30/EU & RoHS 2011/65/EU and the amendment directive (EU) 2015/863

European standards:
• EN 55032:2015: Electromagnetic Interference (Emission)
• EN 55035:2017: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environments:
E1 (residential),
E2 (commercial and light industrial),
E3 (urban outdoors),
E4 (controlled EMC environment, ex. TV studio).

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

The Waste Electrical and Electronic Equipment (WEEE) mark applies only to countries within the European Union (EU). This symbol on the product means that used electrical and electronic products should not be mixed with general household waste. For proper treatment recovery and recycling, please take this product to designated collection points where it will be accepted.

Ensuring that these batteries are disposed of correctly will help prevent potentially negative consequences for the environment and human health, which could otherwise be caused by inappropriate battery waste handling.
The recycling of the materials will help to conserve natural resources.
To ensure that the battery will be treated properly, hand over the product at the end of its life to the applicable collection point to recycle electrical and electronic equipment.

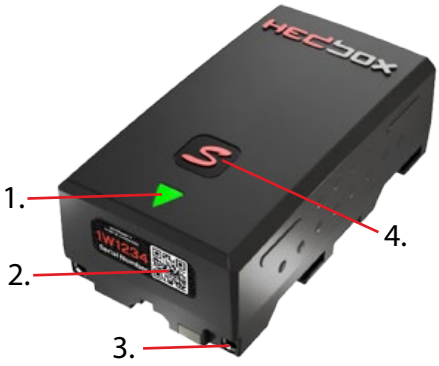
• Hand the battery to the applicable collection point to recycle waste batteries.
• For more detailed information about recycling this product or battery, please contact your local Civic Office, your household waste disposal service, or the shop where you purchased the product.

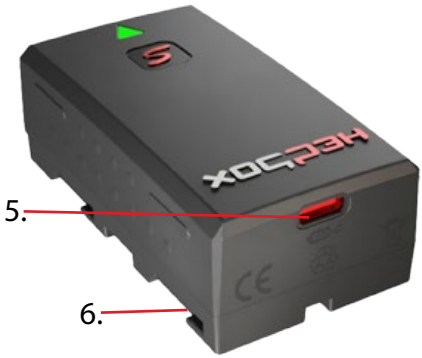
UN38.3 CERTIFICATION FOR SAFE BATTERY TRANSPORTATION

The Li-ion Battery Pack had passed the UN 38.3 test and is classified as non-dangerous goods and also complies with the UN Recommendations on the Transport of Dangerous Goods; IATA Dangerous Goods regulations, and applicable U.S. DOT regulations for the safe transport of Li-ion Battery Pack. The Li-ion Battery Pack is transported according to the PACKING INSTRUCTION 965 Section B of IATA DGR 65rd edition (Proper shipping name and UN ID number: LITHIUM ION BATTERIES, UN No.: UN3480).

Related laws and regulations are, however, subject to change. For detailed conditions regarding the transport of battery packs, please consult your chosen shipping transport company.

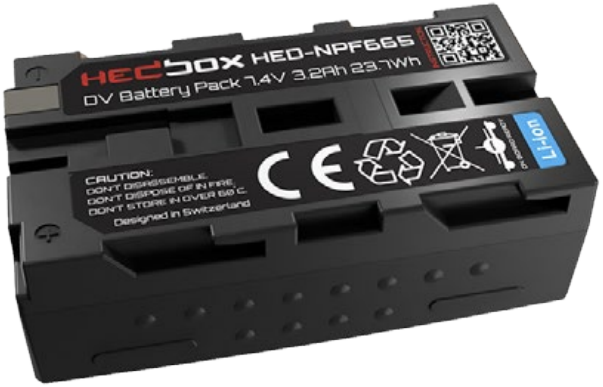
Overview





Product Components:

1. IDL Identificational Display LED
2. Hologram Security QR Serial Number label
3. Main Battery Power socket
4. Battery Size Mark Label
5. USB-C ... Power In QC 2.0 /5V - 10W
6. Info label with QR Code User manual

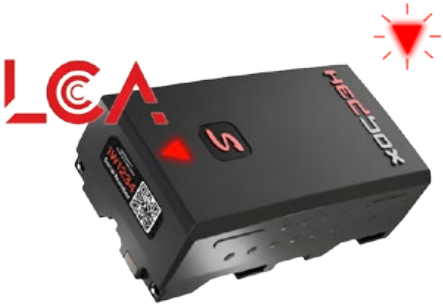


LCA - Low Capacity Alarm

Battery has a revolutionary early warning system for low battery capacity.

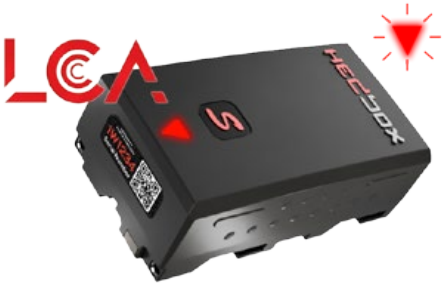
The Low-Capacity Alarm (LCA) continuously monitors the battery's capacity 24/7. When triggered, it provides visual alerts only—flashing the IDL LED—without any audible sound. This fully automated system allows the battery operator to rely on the power supply with confidence, without concern for unexpected depletion.

STAGE I - Automatic Battery Low Capacity ALARM < 10% Battery Capacity



- When the battery capacity drops below 10%, the IDL led light emergency alarm activates.
- The IDL led flashes red in silent mode (no buzzer), indicating that the battery level has fallen below 10%.
- This visual warning continues until the battery capacity decreases to 5%.
- Once the battery capacity drops below 5%, the LCA activates Stage II (second stage).

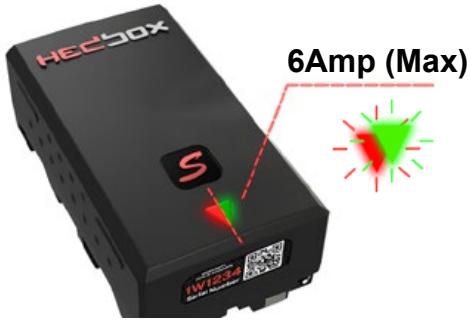
STAGE II - Automatic Battery Low Capacity ALARM < 5% Battery Capacity



- When the battery capacity drops below 5%, the IDL led light emergency alarm activates.
- The IDL led flashes stroboscope red in silent mode (no buzzer), indicating that the battery level has fallen below 5%.
- This visual warning continues until the battery capacity totaly decreases to 0%.

NOTE:
The Low-Capacity Alarm (LCA) functions continuously, 24/7, with ultra-low power consumption, ensuring uninterrupted operation of the battery's primary load.
The LCA's draw is negligible, enabling the battery to maintain capacity monitoring in standby/shelf conditions for >180 days without significant self-discharge or interference with connected equipment.

Battery System Overload Alarm (6A)

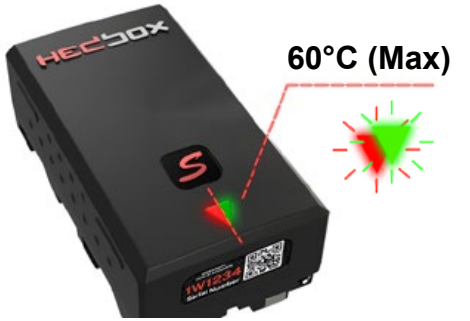


• If the battery output exceeds 6 A, the BMS will temporarily shut down to protect its integrity. The IDL LED will flash green and red alternately.

• During this condition, the battery may continue supplying power, but prolonged use is not recommended, as it could compromise safety.

• If the battery output exceeds 7 A, the BMS will fully shut down to safeguard the battery's integrity.

Battery System High-Temperature Alarm 60°C

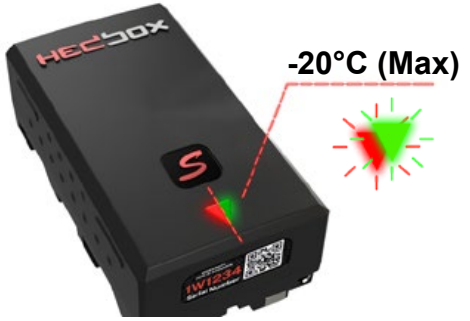


• If the battery during regular operation exced 60°C the High-Temperature Alarm will activate. The IDL LED will flash green and red alternately.

• During this condition, the battery may continue supplying power, but prolonged use is not recommended, as it could compromise safety.

• If the battery temperature exceeds the 70°C, the BMS will fully shut down the battery to safeguard the battery's integrity.

Battery System Low-Temperature Alarm -20°C



• If the battery during regular operation exced -20°C the Low-Temperature Alarm will activate. The IDL LED will flash green and red alternately.

• During this condition, the battery may continue supplying power, but prolonged use is not recommended, as it could compromise safety.

• If the battery temperature exceeds the -25°C, the BMS will fully shut down the battery to safeguard the battery's integrity.

ACI - Automatic Capacity Identification

The battery features a groundbreaking, world-first Auto Capacity Indication (ACI) system.
This revolutionary technology automatically displays the battery's capacity status as soon as it is placed on the unit—without the need to press any buttons or manually activate the feature.
Fully autonomous and self-operational, it provides hands-free convenience for the operator, allowing a quick glance at the battery's IDL to access essential information instantly.

Battery Capacity from 0 to 20%
• When the battery level is between 0% and 20%, the ACI LED light flashes red color once per cycle, repeating a total of 5 times.

Battery Capacity from 20 to 40%
• When the battery level is between 20% and 40%, the ACI LED light flashes red twice per cycle, repeating for a total of 5 cycles.

Battery Capacity from 40 to 60%
• When the battery level is between 40% and 60%, the ACI LED light flashes green three times per cycle, repeating for a total of 5 cycles.

Battery Capacity from 60 to 80%
• When the battery level is between 60% and 80%, the ACI LED light flashes green for times per cycle, repeating for a total of 5 cycles.

Battery Capacity from 80 to 1000%
• When the battery level is between 80% and 100%, the ACI LED light flashes green five times per cycle, repeating for a total of 5 cycles.

Battery USB-C Charging Port

Battery Charging Port USB-C (2A/10W)

• The battery is equipped with a USB-C charging port (20W max) located on the top.
This port is for charging only and supports 5V 2A 10W QC 2.0.

Please note: It cannot be used as a power supply.

Battery Charging IDL Display

• Upon connecting the battery to the battery charger through the Main or USB-C charging port. The IDL LED display indicates the progress of the battery charging process.

Battery Charging Process

• During the charging process, the IDL LED flashes red to indicate that charging is in progress.

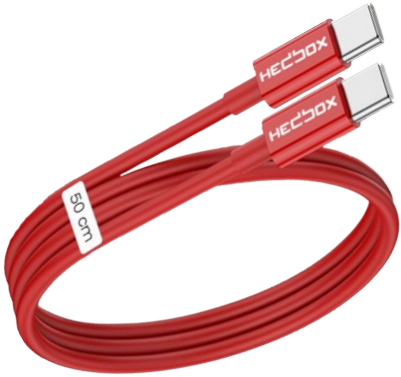
Battery Fully Charged

• When the battery reaches 100% capacity, the IDL LED remains constantly illuminated in green.

Charging Disconnected

• When the battery is removed from the main or USB-C charging port, the IDL LED turns off.

Supplied USB-C power cable

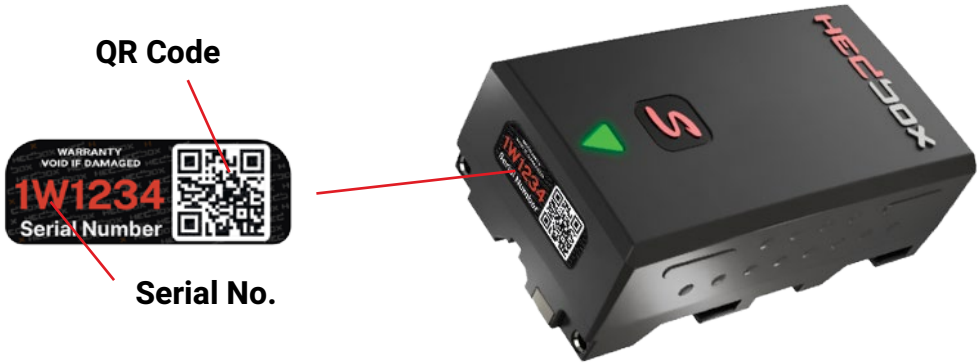


USB-C Power Cable 50cm

• For best USB-C battery charging and power supplay capabilities, please use supplied USB-C / USB-C power cable

– Cable Lenght: 0.5m / 1.65 ft
– Cable Type: USB-C to USB-C
– Qualcomm Quick Charge 2.0 protocol
– Super fast charging 2.0 and PPS 20W

Security QR Holo Serial Number Label



Multy level High Security QR Hologram product authentication Label

- The product is marked with the Security QR Holo serial number label on the bottom of the battery.
- The QR Holo Label serves as the primary means for confirming the product's authenticity and originality.
- The label incorporates multi-layer high-definition protection including 365 Nm mark.
- It features a distinctive security holographic protection.
- The product has a unique serialization linked to the global Hedbox database.
- Durable, robust, self-adhesive label material; kindly refrain from attempting to peel off the label.

NOTE:
Attempting to remove the security label will cause it to self-destruct, resulting in the forfeiture of the product warranty in this particular case.

Product registration and verification

To verify your product and proceed with registration, please follow the next steps

- Go and visit the verification section on the Hedbox web page at **www.hedbox.com/verification**.

- Follow the verification procedure

Specification

Model:	**HED-NPF665**
Mount Type:	Sony NP-F / L style
Battery Capacity (mAh):	**3200 mAh**
Battery Capacity (Wh):	**23.7 Wh**
USB-C Charging:	QC 2.0 **5V** up to **4A / 20W** (Max)
Nominal Voltage:	**7.4V**
Cell Chemistry:	**Lithium - Ion**
IATA Transportation:	**UN38.3 / UN3480, Class 9**
Information Notification:	**IDL - Identificational Display LED**
Recomend Charging On:	**HED-DC55, HED-DC45, HED-DC10, RP-DC50**
Operating Temperature:	**–20°C to +45°C (–4°F to +113°F)**
Dimensions (W/H/D):	**22 x 70 x 36 mm | 0.86 x 2.75 x 1.57 in**
Net Weight:	**110 g | 3.88 oz**

No reimbursement for the recorded content.

• Compensation for the recording content is not feasible in the event of a malfunction in the battery pack on other devices, preventing shooting or reproduction.
• Please note that design and specifications may change without prior notice.

If you want to know more about HEDBOX Products please visit our website: **www.hedbox.com**

DISCLAIMER

Hedbox has made every effort to provide clear and accurate information in these User's Manual. All the data of this User's Manual (e.g. illustrations, text, specifications and data) are based on the latest information available and every care has been taken in compilation of the contents herein and in verification of its accuracy at the time of printing. As the aim of Hedbox is to give customers the most updated and state-of-the-art products, it may operate some technical modifications and improvements in time. Hedbox may consequently alter the information contained in this User's Manual without notice.

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If you find that some technical features or external appearance of your product differ from the ones inserted in this User's Manual, please send a detailed e-mail to support@hedbox.com.

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Note:
Always ensure that the unit is operating properly before use.
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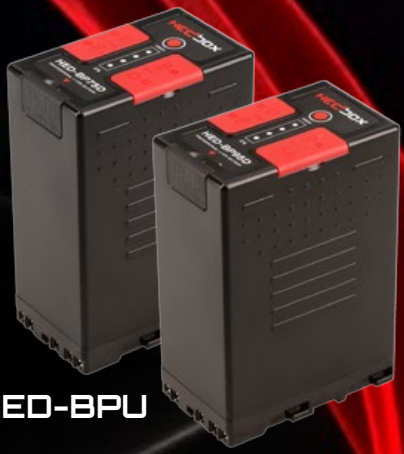
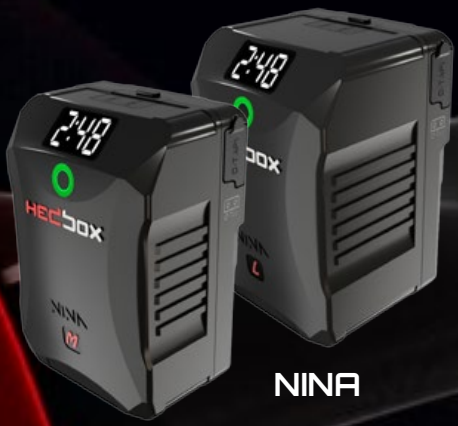
HEDBOX

We Power Your Bussines



HED-BPU



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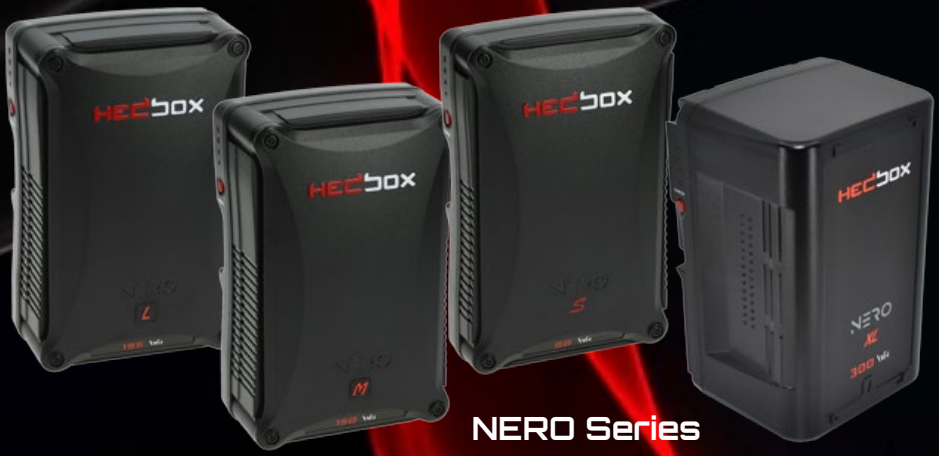


NERO Series

BATTERY CHARGERS

RP-VBD78

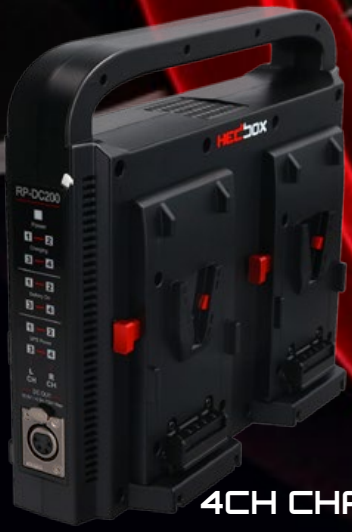
HED-A60

RP-BP975

RP-LPE6H

UNIX

HOLD II



4CH CHARGER