K&F CONCEPT KF-V99 SE

K&F CONCEPT 99Wh V Mount Battery KF-V99 SE Instruction Manual

1. Introduction

Thank you for choosing the K&F CONCEPT 99Wh V Mount Battery KF-V99 SE. This high-capacity lithium-ion battery is designed to provide reliable power for various professional video and photography equipment, including cameras, camcorders, monitors, and LED video lights. Featuring PD 100W USB-C fast charging, multiple output ports, and an intelligent display, this battery offers versatile power solutions. Please read this manual thoroughly before use to ensure proper operation and maintenance.

2. Safety Information

To prevent damage to the product or injury to yourself and others, observe the following safety precautions:

- Do not disassemble, modify, or attempt to repair the battery.
- Keep the battery away from fire, heat sources, and direct sunlight.
- Avoid exposing the battery to water or high humidity.
- Do not short-circuit the battery terminals.
- Store the battery in a cool, dry place when not in use.
- Dispose of the battery according to local regulations.
- Use only compatible chargers and cables.
- Keep out of reach of children.

3. Package Contents

Verify that all items are present in your package:

- K&F CONCEPT 99Wh V Mount Battery KF-V99 SE x 1

- USB-C Charging Cable x 1
- User Manual x 1



Image: Contents of the K&F CONCEPT 99Wh V Mount Battery package, including the battery, USB-C cable, and user manual.

4. Product Overview

4.1 Components and Ports

The K&F CONCEPT 99Wh V Mount Battery features a compact design with multiple input/output ports for broad compatibility.



Image: Detailed diagram illustrating the versatile interfaces of the battery, including dual-side D-TAP, USB-C, USB-A, DC 12V output, BP electrode, battery level indicator, power button, and emergency night light.

- **Dual-side D-TAP Ports:** Two D-TAP ports for input and output, allowing power to and from compatible devices.
- **USB-C (PD 100W) Port:** A versatile port supporting bidirectional PD 100W fast charging for both input and output.
- **USB-A (24W) Output:** A standard USB-A port for charging smaller devices.
- **DC 12V Output (5.5x2.5mm):** A dedicated DC output for devices requiring 12V power.
- **BP Electrode Input/Output:** Standard V-mount contacts for mounting and power delivery.
- **Battery Level Indicator:** Displays the current battery charge level.
- **Power Button:** Activates the battery and checks the charge level.
- **Emergency Night Light:** Provides illumination in low-light environments.

4.2 Intelligent BMS System

The battery incorporates an intelligent Battery Management System (BMS) that provides multiple protections to ensure safe and reliable operation. These protections include:



Image: Visual representation of the built-in BMS intelligent battery management system, highlighting various protection mechanisms.

- Overcurrent Protection
- Short Circuit Protection
- Over-temperature Protection
- Overvoltage Protection
- Over-discharge Protection
- Over-charge Protection

5. Setup

5.1 Initial Charging

Before first use, fully charge the battery. Connect the provided USB-C charging cable to the battery's USB-C port and a compatible PD 100W power adapter. The battery level indicator will show charging progress. A full charge typically takes approximately 2 hours with a PD 100W charger.

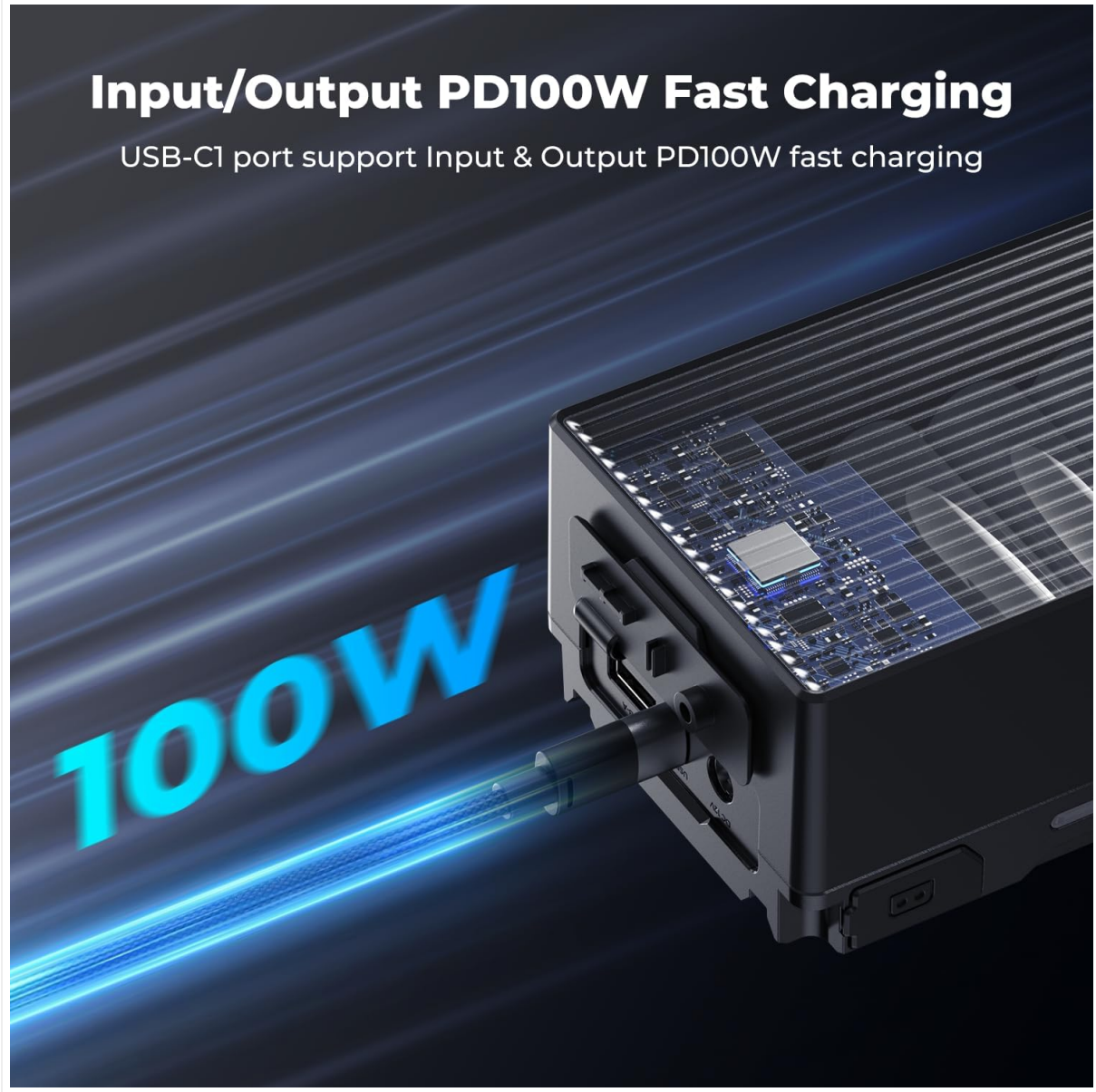


Image: The battery connected to a USB-C power source, demonstrating its PD 100W fast charging capability.

5.2 Mounting the Battery

To attach the battery to a device with a V-mount plate:

1. Align the V-mount plate on the battery with the V-mount receiver on your camera, camcorder, or other compatible equipment.
2. Slide the battery downwards until it clicks securely into place.
3. To remove, press the release button on the V-mount plate (if present on your equipment) and slide the battery upwards.

Video: Demonstration of attaching the K&F CONCEPT 99Wh V Mount Battery to a camera setup, showcasing its V-mount compatibility and secure attachment.

6. Operating Instructions

6.1 Powering Devices

The battery offers multiple output options to power various devices:

- **D-TAP Ports:** Connect D-TAP compatible cables to power studio lights, video monitors, or other accessories. The dual D-TAP design allows powering two accessories concurrently.



Image: The battery's dual D-Tap design, illustrating its capability to power two accessories simultaneously.

- **USB-C Port:** Use a USB-C to USB-C cable to power or charge laptops, tablets, or smartphones with PD 100W support.
- **USB-A Port:** Connect standard USB-A cables to charge smartphones or other small USB-powered devices.
- **DC 12V Output:** Connect devices requiring 12V DC power using a compatible 5.5x2.5mm DC cable.



Image: The battery connected to multiple devices (phone and tablet), showcasing its ability to fast charge several items simultaneously.

6.2 Battery Level Indicator

Press the power button once to activate the battery level indicator. The display will show the remaining charge level, allowing you to monitor power status during use.

6.3 Emergency Night Light

The battery features an integrated emergency night light. To activate or deactivate the light, press and hold the dedicated light button. This feature is useful for working in dark environments or for quickly locating the battery.

7. Maintenance

Proper maintenance ensures the longevity and performance of your battery:

- **Storage:** Store the battery in a cool, dry place (ideally between 10°C and 25°C) with approximately 50-70% charge if storing for extended periods. Avoid extreme temperatures.
- **Cleaning:** Wipe the battery exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive materials. Keep the ports free of dust and debris.

- **Charging Cycles:** For optimal battery health, avoid fully discharging the battery frequently. Recharge it before it completely depletes.
- **Inspection:** Regularly inspect the battery for any signs of damage, swelling, or corrosion. Discontinue use if any issues are observed.

8. Troubleshooting

If you encounter issues with your K&F CONCEPT V Mount Battery, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Battery not charging via V-mount charger.	This model primarily charges via its USB-C port. Some traditional V-mount chargers may not be compatible with its charging protocol.	Always charge the battery using the USB-C port with a PD 100W compatible charger and the provided cable.
Device not powering on when connected.	Battery is depleted; cable is faulty; device is incompatible; battery is not activated.	Check battery charge level and recharge if necessary. Ensure cables are securely connected and functional. Verify device compatibility with output voltage/current. Press the power button to activate the battery.
Battery indicator not lighting up.	Battery is completely depleted; power button not pressed correctly.	Charge the battery. Press the power button firmly. If still unresponsive, contact support.
Emergency light not working.	Light button not pressed correctly; battery is depleted.	Press and hold the light button. Ensure the battery has sufficient charge.

If the problem persists after attempting these solutions, please contact K&F CONCEPT customer support for further assistance.

9. Specifications

Feature	Detail
Model Number	KF-V99 SE
Battery Capacity	99Wh / 6700mAh
Voltage	14.8V
Battery Cell Composition	Lithium Ion
Input (USB-C)	100W (Max)

Feature	Detail
Input (BP)	16.8V 7A (Max)
Input (D-Tap)	16.8V 7A (Max)
Output (USB-C)	100W (Max)
Output (USB-A)	24W (Max)
Output (DC)	12V
Output (BP)	16.8V 12A (Max)
Output (D-Tap)	16.8V 12A (Max)
Charging Protocol	PD3.0, QC3.0, QC2.0, AFC, FCP, SCP, PPS, Apple
Dimensions	104 x 74 x 50 mm (approx. 4.09 x 2.91 x 1.97 inches)
Weight	525g (approx. 1.1 lbs)
Material	Fire-resistant PC
Airline Friendly	Yes

10. Warranty and Support

K&F CONCEPT products are manufactured to high-quality standards. For warranty information and customer support, please refer to the warranty card included with your product or visit the official K&F CONCEPT website. If you have any questions or require assistance, do not hesitate to contact our customer service team.