

Surpassed NP-FP90

Surpassed NP-FP90 Li-ion Battery User Manual

For Sony DCR-HC Series Handycam Camcorders

1. INTRODUCTION

Thank you for choosing the Surpassed NP-FP90 rechargeable Li-ion battery. This battery is designed to provide reliable power for your compatible Sony Handycam camcorder models. Please read this manual carefully before using the battery to ensure safe and optimal performance.

Compatible Camcorder Models:

- Sony DCR-HC30E
- Sony DCR-HC32E
- Sony DCR-HC33E
- Sony DCR-HC35E
- Sony DCR-HC36E
- Sony DCR-HC39E



Image 1.1: Front view of the Surpassed NP-FP90 Li-ion battery, showing the label with specifications and safety warnings.

2. SAFETY INFORMATION

Observe the following safety precautions to prevent accidents, injury, or damage to the battery or camcorder:

- **Do not disassemble:** Attempting to disassemble the battery can lead to electric shock, fire, or explosion.
- **Do not dispose of in fire:** Exposure to high heat or fire can cause the battery to explode.
- **Do not store in high temperatures:** Avoid storing the battery in temperatures exceeding 60°C (140°F), as this can degrade performance and pose a safety risk.
- **Keep away from water:** Do not expose the battery to water or moisture.
- **Use compatible chargers:** Only use chargers specifically designed for Li-ion batteries and compatible with the NP-FP90 model.
- **Proper disposal:** Dispose of used batteries according to local regulations. Do not discard with household waste.

3. SETUP

3.1 Initial Charging

Before first use, fully charge the battery. Connect the battery to a compatible charger and plug the charger into a power outlet. Refer to your charger's manual for specific charging indicators and times. A full charge typically takes several hours.

3.2 Inserting the Battery

Ensure your camcorder is turned off before inserting or removing the battery.

1. Locate the battery compartment on your Sony Handycam camcorder.
2. Open the battery compartment cover.
3. Align the battery's contacts with the camcorder's terminals.
4. Gently slide the battery into the compartment until it clicks securely into place.
5. Close the battery compartment cover.



Image 3.1: Side view of the Surpassed Li-ion battery, showing the 'Li-ion BATTERY' text and general shape for insertion.

4. OPERATING

Once the battery is securely installed and charged, you can power on your camcorder and begin recording. The camcorder's display will typically show the remaining battery level. It is recommended to fully charge the battery

before important recording sessions.

This Li-ion battery features *no memory effect*, meaning you can charge it at any time without significantly impacting its overall lifespan or capacity.

5. MAINTENANCE

5.1 Charging Practices

- Always use the correct charger.
- Avoid overcharging for extended periods (e.g., leaving on charger for days after full).
- Charge the battery in a well-ventilated area.

5.2 Storage

- For long-term storage, charge the battery to approximately 50-60% capacity.
- Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures.
- Remove the battery from the camcorder if it will not be used for an extended period.

5.3 Cleaning

Wipe the battery's contacts with a clean, dry cloth periodically to ensure good connection with the camcorder and charger.

6. TROUBLESHOOTING

6.1 Battery Not Charging

- Ensure the charger is properly connected to a power source and the battery.
- Check for any visible damage to the battery or charger.
- Clean the battery contacts and charger terminals.
- Try a different power outlet or charger if available.

6.2 Battery Not Powering Camcorder

- Verify the battery is fully charged and securely inserted into the camcorder.
- Ensure the battery compartment cover is closed properly.
- Check if the camcorder itself is functioning correctly with another power source (e.g., AC adapter).

6.3 Short Battery Life

- Ensure the battery is fully charged before use.
- Operating in very cold environments can reduce battery performance.
- If the battery is old, its capacity may have naturally degraded over time.

7. SPECIFICATIONS

Battery Type	Li-ion
Voltage	7.4V
Capacity	2400mAh
Energy	19.0Wh
Compatibility	Sony NP-FP30, NP-FP50, NP-FP60, NP-FP70, NP-FP90 P Series

8. WARRANTY AND SUPPORT

This Surpassed NP-FP90 battery comes with a **1-year warranty** from the date of purchase, covering manufacturing defects. Please retain your proof of purchase for warranty claims.

For any questions, concerns, or technical support regarding your battery, please contact the seller or manufacturer directly through the platform where you made your purchase. We are committed to providing quality power products and excellent customer service.