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SSL-VBG50



7.4V/4900mAh Lithium Ion Battery for Panasonic

Instruction Manual



Thank you for purchasing the Li-ion Battery for Panasonic professional video camera with secured model. Prior to using the battery, recommend to read this Instruction Manual on how to best use the battery and recommend to keep this manual for future reference. If you have any additional questions, please contact the appropriate IDX office listed at the end of this manual.

Caution for safety use

Li-ion Battery is improperly handled, explosion, fire, smoke, heat, leakage, or cause performance degradation or failure. Please be sure to observe the following precautions and prohibited.

A DANGER

May cause sudden serious injury and death

- Charge with IDX battery charger only.
- Use with professional video cameras or other video equipment. Please contact IDX for more information.
- Do not short the contact pins with any metal object.
- Do not carry or store with metal equipment.
- Do not throw the battery in a fire.
- Do not immerse in water. Keep the battery dry and away from excessively dry or humid environments.
- Do not expose the battery in excessive heat such as in a car or under the direct sun light.
- Do not solder on the contact pins directly.
- Do not attempt to open the outer casing or break apart the bettary.
- Do not subject the unit to physical impact, pressure or place any object across the terminals that could cause it to short.
- Do not pierce or drill into the outer casing of the unit.
- Do not use if any damage were found.
- Do not use a battery in a corrosion environment. (Damage from salt water, seawater, acid, alkali, corrosion gas, etc.) and do not use it in the extreme high humidity environment, and lease do not keep it.

AWARNING

May cause serious injury and death

- Outer case maybe heated up when the battery used in the environmental temperature at more than 45°C with high load.
- Stop charging immediately if the battery fails to chage within the designated time limit.
- Do not use if the battery displays an unusual appearance during charge, discharge and/or while in storage. Example: Smell. Heat. Discolor etc.
- Keep away from fire if the battery leaks fluid or has an unusual smell.
- In case of leak, wash your hands and face thoroughly with clean water immediately.
- In case of fluid gets into eyes, wash your eyes thoroughly with water immediately and check with your doctor.

ACAUTION

May cause injury or damage other equipment

- Follow instructions on charging and discharging.
- Store in cool and dry conditions.
- Do not leave the battery attached to the camera unused for long periods of time.
- Do not use, store or place in an electrostatic area.
- Always keep the connectors clean.

Charging

- The Li-ion Battery product should only be used with the recommended IDX Li-ion charger. Refer to the manual of the IDX charger for specification and charging procedure.
- The battery can be charged in an ambient temperature range of 0 to 40°C. For optimum charging performance 10 to 30°C is recommended.
- If the ambient temperature is below 0°C, it will not fully charge even if the designated charging time has passed. The battery must be charged within the specified temperature range.
- The battery will exhibit a small amount of self discharge. IDX recommend charging before use.

Battery capacity LEDs

• Remaining battery capacity is shown by a built-in LEDs. The F light indicates the battery is fully charged. If indicates E, battery is empty and need to be recharged.

(PUSH

Battery capacity

• LED lights while pressing button.

- Remaining indication in EVF shown as battery icon only.
- LED indication is approximate capacity of battery when it is not in used.
- LEDs check • LED may not light even push the check button when it is brand new and/or leave for long period after used. This is a functionality of battery that turned in to the sleep mode for own protection. IDX recommend to recharge the battery as soon as possible.

Storing

- Deterioration of battery performance is accelerated when the battery is stored in a higher ambient temperature, and also if the battery is stored for long period of time without use. IDX recommend 20°C or below when the battery is stored for longer than 1
- To store the battery for a longer period of time (more than two months), the battery should be charged until at least one LED appears on the capacity indicator display. This should be repeated every two months.

Specifications

• Cell chemistry: Li-ion

• Maximum voltage: 8.4V DC • Nominal voltage: 7.4V DC

 Capacity: 4900mAh / 37Wh *1 • Charge current: 2500mA

Charge voltage: 8.4V Discharge current: 2500mA

Battery protection circuit :

Over-charge, Over-discharge, Over-current *2

• Ambient temperature :

To charge: 0 to 40°C (10 to 30°C recommended)

To discharge: -20 to 60°C

To store: -20 to 40°C (0 to 20°C recommended)

• Dimensions:

 $36.5(W) \times 81.5(H) \times 65.5(D) \text{ mm}$ $1.44(W) \times 3.21(H) \times 2.58(D)$ inches

- Weight: approx. 250 q / 0.55 lbs
- *1. IDX measures capacity of Lithium Ion batteries as a minimum capacity.
- *2. If the current fuse is blown for use at high load, charging and discharging will not function.

Recycle of battery

This Li-ion battery can be recycled. Please follow the regulations in your country or contact your local IDX office for further details.

General Notes

VBG50 has similar discharge time compare with Panasonic battery however characteristic of discharge curve is quite different in between. IDX recommend for replacing to new battery immediately when the battery warning start blinking.

Li-ion Battery Air Transport Compliance

IDX battery are suitable for transport by air as unrestrcted articles under the regulations of the International Air Transport Association (IATA), the International Civil Aviation Organization (ICAO). The test for United Nations recommendations on the Transport of Dangerous Goods have also passed the product. Consequently, this battery may be brought as carry-on baggage. It may not be brought as checked baggage. IDX products can be transported in accordance with the above regulations, but IDX recommends that customers confirm with their carrier of choice to determine any local rules and policies before traveling.

For carry-on baggage

Extract from 2.3.5.9.1 for IATA Dangerous Goods Regulations (Produced in consultation with ICAO). Consumer electronic devices (watches, calculating machines, cameras, cellular phones, lap-top computers, camcorders, etc.) containing lithium metal or lithium ion cells or batteries when carried by passengers or crew for perspnal use, should be carried in carry-on baggage. Spare batteries must be individually protected to prevent short circuits by placement in the original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch, and carried in carry-on baggage only. In addition, each installed or spare battery must not exceed the following: (b) for lithium ion batteries, a watt-hour rating of not more than 100Wh.

- 1. Following the requirement in Sectio II of the PACKING INSTRUCTION 965 for IATA Dangerous Goods Regulations (Produced in consultation with ICAO). This applies to lithium ion or lithium polymer cells batteries (UN 3480) on passenger and Cargo Aircraft Only.
- 2. Fill in the air way bill as below:
- Lithium ion battery, NOT RESTRICTED as per PI 965 Section II
- Considering the package must be nandied with care and flammability hazard exists, if the package is damaged, indicate as in the following
- e.g.) "The package must be handled with care and flammability hazard exists, if the package is damaged.
- Write handling procedures, etc. in case the package is damaged, according to applicable Packing instruction
- e.g.) "Do not damage or mishandle this package. If package is damaged, batteries must be protected so as to prevent short circuit.
- Write a telephone number for additional infomation.
- e.g.) Contact TEL Number: +1-800-xxx-xxxx (US) / +44-xx-xxxx-xxxx (UK) etc 3. Each package must be labeled with a lithium ion battery handling label
- indicating "Lithium ion battery". When affixing Lithium Battery Labels with IATA DGR7.4.8 FIGURE 7.4.1 specifications, they must not be folded or affixed in such a manner that parts of the same label appear on different
- 4. As for lithium ion battery (100Wh and below), it is necessary to indicate Watt-hour rating on the battery case exterior. However, for lithium ion batteries manufactured before December 31st, 2008, indication watt-hour rating is exempted indefinitely.
- 5. Each package must be 10kg (22lbs) and below.
- 6. Use packaging that has passed the drop test (1.2m). Retain the results of the test. If there is a trouble or if an incident/accident occurs, you may be asked to submit the test results by the carrier or the competent authority

Replace battery with (battery Recognized Company or end product manufacturer's name, part number) only. Use of another battery may present a risk of fire or explosion



Design and specification are subject to change without notice.





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