# **VL-2** PLUS



# Sequential Quick Charger with AC Adaptor

# **Instruction Manual**

IDX Technology thanks you for choosing the VL-2PLUS and is sure that you will benefit from its unique features. Please utilize this instruction manual to best maximize and safely use your VL-2PLUS. If you have any additional questions, please contact the appropriate IDX office or visit our website http://www.idx.tv

## Description

As part of IDX's ENDURA System the VL-2PLUS offers 2 channel sequential charging combined with a 60W Camera Power Supply, in a compact and ultra lightweight design, ideal for traveling and those with limited space.

#### **Features**

- Can charge IDX ENDURA System Li-Ion batteries. (All IDX NP-Type Li-Ion / Ni-CD batteries via optional A-E2NP Charge Adaptor)
- Quick charging on both channels sequentially.
- Built in 60W Camera Power Supply.
- Auto safety & protection features for damaged or misused batteries.
- •Robust lightweight polycarbonate case, recessed power switch, built-in AC line spare fuse, convenient carrying handle.
- Automatic Universal AC input for world-wide use.
- Can be operated in either horizontal or vertical position.

## Charger Operation

The VL-2PLUS is a sequential quick charger that will charge any of the batteries mentioned above, in the approximate time shown in the table right. The unit will charge the first battery inserted whether in channel one or two, automatically charging the second battery, if connected, after the first is fully charged.

E-10/10S E-7/7S E-80/80S E-50/50S NP-L7/L7S NP-L50/L50S NP-23dx NP-1dx 220mins | 180mins | 190mins | 145mins | 180mins | 145mins | 75mins | 80mins

Notes: All times are approximate and per battery, times will differ according to a battery's remaining capacity at time of charging.

\* All IDX NP-Type Li-Ion / Ni-CD batteries can only be charged via optional A-E2NP Charge Adaptor.

# Operating Instructions

A) Connect AC power cord firmly

- B) Turn the rear mounted power switch ON (Power LED will light and show solid Amber)
- C) Basic operation:
  - ① Insert a battery: "Battery Check Mode" starts, the charge channel LED will show solid Red while the charger is checking the battery.
  - 2 Battery Check: After 3 seconds the LED will remain Red indicating that the VL-2PLUS is operating in quick charge mode, if the battery has a fault the LED will flash Amber. If a battery cannot initially enter quick charge a recovery program will start, during which time the LED will also remain solid Red. When the battery has successfully recovered, the VL-2PLUS will automatically change to a quick charge program. If a battery cannot be recovered or is detected to be over-charged, the LED will flash Amber indicating a battery fault.
  - 3 Charge Complete: When a battery has been fully charged the charge channel LED will automatically change to solid Green, indicating that the battery is ready for use.

#### **LED Colour Status List**

- Light Off ----- No Battery detected
- Solid Red ----- Battery Check / Quick Charge / Battery Recovery in progress
- Solid Green ----- Charge Complete

- Flashing Amber --- Battery Fault
- Flashing Red ----- Charger Fault

#### **AC Power Supply Operation**

In addition to charging batteries the VL-2PLUS can also supply power to a camera or other 12V DC

- 1) Remove batteries from the charger, the charge and AC adaptor functions of the VL-2PLUS cannot be operated at the same time.
- ② If batteries are left in charger, the VL-2PLUS will not supply power from the DC socket, likewise if DC power is being drawn from the VL-2PLUS and a battery is connected it will not charge until the DC cable is disconnected.
- 3 Connect male end of your XLR cable to the DC socket on the VL-2PLUS, then connect the female connector to your camera or other device. It is recommended that the equipment you are powering is switched off when connecting the DC cable.
- 4 When your camera, etc is switched on the VL-2PLUS will supply up to 60 Watts of DC power (4.3A @ 13.8V)

### Safety Features

The VL-2PLUS has built in safety features to protect the charger and batteries from serious damage in the event an attempt is made to charge a faulty battery. Low voltage batteries are detected prior to applying a quick charge current. If a battery is found to have a low voltage, it will not be quick charged until it reaches the acceptable quick charge level. This prevents any damage to the unit or to the battery. Batteries reaching an over voltage condition during the charge process will also be detected and charging will be stopped automatically.

### **General Notes and Safety**

- Do not attempt to open or modify this unit. All work should be carried out by IDX authorised service personnel only.
- Use only with compatible batteries listed in this manual. Charging non-compatible batteries may cause fire, electrical shock or other incidents.
- When connecting a battery be sure to insert the battery into the battery socket or connector firmly.
- When in use do not place anything on the charger and do not block ventilation holes. Use in a well ventilated area
- Do not expose to, use or place the unit in direct sunlight, extreme dust, water or other hazardous environments.
- During charging the temperature of the charger will rise, this is normal and not a malfunction.
- A short between the plus (+) and minus (-) charge pins may cause fire, electrical shock or other incidents. Make sure that the charge connector does not touch any metal parts when a battery is not connected.
- Stop charging immediately if the charging does not complete within the designated time. In case of abnormal smell, leak, colour change or case deformity during use turn the power off and unplug the cable from the socket to avoid possible injury.
- Only use the AC cable included with the charger or ones specified. If fused confirm the fuse rating capacity before use.
- For continued protection replace any fuses with specified type and rating.
- This unit contains no user serviceable parts.
- In case of fault or service, please contact your IDX dealer or appropriate IDX office.

# **Specifications**

• Compatible Batteries : All IDX ENDURA System Li-Ion batteries

(All IDX NP-Type Li-Ion / Ni-CD batteries via A-E2NP Charge Adaptor)

• Quick Charge Current: 2.3A (Li-Ion)/1.9A (Ni-CD)

•DC Output : 60W (4.3A @ 13.8V)

•DC Output Connector: 4-pin XLR (Pin No.1 negative / Pin No.4 positive)

•Input Voltage:  $100V \sim 240V AC 50/60 Hz Automatic$ 

•Operating Temperature :  $0^{\circ}$ C ~  $40^{\circ}$ C • Power Consumption: 140 VA max

Approx.  $151(W) \times 79(H) \times 212(D) \text{ mm}$ • Dimension : Approx.  $5.94(W) \times 3.1(H) \times 8.34(D)$  inches

• Weight: Approx. 950g (2.0 lbs)

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