

# IDX TECHNOLOGY

## JL-2Plus

### SEQUENTIAL MULTI-SYSTEM FAST CHARGER WITH BUILT-IN AC ADAPTOR POWER SUPPLY

*IDX Technology wants to thank you for purchasing the **JL-2Plus**, and hopes that its compact and careful design will satisfy all your NP type battery charging needs. Please utilize this Operation Manual for help on how to best use the **JL-2Plus**. If you have any additional questions, please contact the appropriate IDX office listed at the end of this manual.*

## FEATURES

- Multi-System Charge capability – can charge IDX NP Type Lithium Ion(Li-Ion), Nickel Cadmium ( NiCd) and IDX NP Type Nickel Metal Hydride (NiMH)
- Automatic battery sensing i.e. if it is Lithium Ion, NiMH or NiCd
- Can charge different batteries on different channels.
- Fast charging on both battery channels sequentially
- Built-in 60W Camera Power Supply
- Auto safety features for damaged or misused batteries.
- Universal A/C input for world-wide use.

## CHARGER OPERATION

The JL-2Plus is a sequential fast charger that will charge a completely discharged IDX NP type Lithium Ion Battery in approx. 2 and ½ hours. It can also charge NP type NiCd batteries in approx. 70 minutes. It can charge 2 batteries sequentially in any combination i.e. can charge NP-L50 (Li-Ion) on channel one and NP-23dx (Ni-Cd) on channel two etc. The sequence for battery charging is called the charging sequence loop. The charging sequence loop charging starts at channel 1 then progresses through to channel 2 and then back to channel 1 again (1,2,1,2,...). The charger automatically searches each channel for a battery to charge, in a continuous loop. The charging sequence loop is interrupted only by the detection of a valid battery to be charged. The JL-2Plus charger automatically checks a battery if it is a Li-Ion or NiMH or NiCd batteries and starts charging accordingly.

## OPERATING INSTRUCTIONS

- A. Connect AC power cord firmly.
- B. Turn the rear mounted power switch ON (Front panel Amber LED will light).
- C. **Basic Operation:-**
  - 1) Insert a battery
    - Battery check mode, JL-2PLUS Charge channel LED is Red, while the charger is checking the battery if it is Li-Ion, Ni-MH or Ni-Cad
  - 2) Battery Check
    - After 5 seconds the LED will remain Red indicating that the JL-2 Plus Charger is in fast charging mode or if the battery is faulty the LED will flash Orange. If a battery cannot enter fast charge

initially a recovery program will start and the charge LED will also remain red. If the battery has then been successfully recovered then the charger will automatically enter fast charge program. If the battery cannot be recovered or if a battery is over charged then the LED will start flashing Orange indicating Battery Fault.

- 3) Charge End - When the battery is fully charged the LED will turn to Green, indicating that the battery is ready to use.

## AC POWER SUPPLY OPERATION

The JL-2Plus can also supply power to a camera or other 12v DC equipment. Insert the 4-pin XLR connector of the DC-DC power cord into the XLR connector on the JL-2Plus front panel. When the connector on the other side of the power cord is connected to your camera, monitor etc., the JL-2Plus will supply up to 60 Watts of DC power (4.3A @ 13.8V).

The charger and AC adaptor function cannot be operated at the same time.

*Important: To operate the DC OUT function the batteries must be removed from the charger.*

## LED COLOUR STATUS LIST

- Solid Red .....Fast Charge in progress**  
**Solid Green .....Charge complete, battery ready**  
**Flashing Orange .....Defective battery**

## SAFETY FEATURES

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

## GENERAL NOTES

- a) While in use do not place anything on the charger, do not block ventilation holes.
- b) During charging the temperature of the charger will rise, this is normal and not a malfunction.
- c) When connecting a battery be sure to insert it into the battery socket firmly.
- d) Do not attempt to use faulty batteries or batteries with incorrect specifications.
- e) Do not expose the charger to direct sunlight, use in a well ventilated place.
- f) Do not operate near equipment that might be influenced by noise such as TV, etc.
- g) Do not open unit or attempt to repair any malfunction, there are dangerous power supply circuits inside. There are no user serviceable parts inside.
- h) The unit should be turned on prior to inserting batteries to be charged.

## SPECIFICATION

Applicable batteries	IDX NP Type Lithium Ion Batteries, (14.4v, 2 ~ 5Ah) NP Type NiCd (12 ~ 13.2v, 1~ 5Ah) & IDX NP Type NiMH Batteries (12 ~ 13.2v, 3~ 5Ah)
Fast charge current	Li-Ion, NiCd and NiMH 2.0A
DC Output	60W (4.3A @13.8V)
DC Output Connector	4-pin XLR (Pin 1 negative, Pin 4 positive)
Input voltage	100 ~ 240V AC 50/60 Hz Automatic
Power consumption	170 VA max.
Weight	1.4 Kg approx. 3.1lbs approx.
Dimension	140 (W) x 70 (H) x 190 (D) mm 5.51(W) x 2.76(H) x 7.48(D) inches