

IDX COMPANY LIMITED

...Xcellence in Power

INSTRUCTION MANUAL

Thank you very much for purchasing the VL-4 charger for IDX E-50S, 50, 80S & 80 Lithium Ion Battery Packs. We hope that its careful design will satisfy your battery charging needs. Please utilize this Operation Manual for help on how to use this charger. If you have any additional questions, please contact the appropriate IDX offices listed below.

VL-4

FOUR (4) CHANNEL SIMULTANEOUS FPC SYSTEM FAST CHARGER FOR IDX E-50S, E-50, E-80S & E-80 , LITHIUM ION BATTERY PACKS

FEATURES

- Simultaneous fast charging using FPC system.
- Auto safety features for damaged or misused batteries.
- Lightweight, compact, easy to carry for ENG, DNG and Field operation.
- Robust metal case, recessed power switch, built-in spare fuse, convenient carrying handle.
- Universal A/C power input for worldwide use.

FPC OPERATION

The ability of Lithium Ion to take a high initial fast charge as been utilized with a new maximum power balance charge program to ensure that the max, charge rate is always available to each battery. Any available power on one channel can be controlled for use on a second channel to reduce overall charge time. This is possible because the Full Power Charging method uses the on-board computer inside each Li-ion battery pack to communicate with the charger for the fastest charging available.

OPERATING INSTRUCTIONS

- A. Connect AC power cord firmly.
- B. Set the power switch ON (Power LED will light).
- C. Basic Operation:-
 - 1) Insert a battery - Charge mode: VL-4 Charge channels LED is RED.
 - 2) Charge End - When the battery is fully charged the LED will turn to GREEN, indicating that the battery is ready to use.
 - 3) Low voltage battery: - If a battery is low voltage, the VL-4 Charger will be in slow charge mode, until the battery reaches the fast charge capability. If the battery can not come up to fast charge capability within 90 minutes, the unit will show a battery fault by Flashing Orange LED. In this case the charger LED will be RED for 90 minutes and then it will go to Flashing Orange.
 - 4) Defective battery - If a defective battery is inserted, the unit will show a battery fault by Flashing Orange LED, immediately upon insertion.

LED COLOUR STATUS LIST

- Solid Red Quick Charge in progress**
- Solid Green..... Charge complete, battery ready**
- Flashing OrangeDefective battery**
- Flashing RedDefective charger**

PRODUCT DESCRIPTION

VL-4 chargers are lightweight, silent and compact chargers for IDX E-50S, 50, 80S & 80 Lithium Ion batteries. This charger is basically designed with mobility in mind and is the smallest Lithium Ion charger available. The unique feature of FPC simultaneous fast charging combines the size and lightweight advantages of sequential chargers with the speed of simultaneous chargers.

SAFETY FEATURES

The VL-4 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 controlled.

GENERAL NOTES

- a) The unit should be turned ON prior to inserting batteries to be charged.
- b) This unit is designed to charge only IDX E-50S, 50, 80S & 80 Lithium Ion battery packs. IDX NP-L50Lithium Ion batteries can also be charged via the optional A-E2NP adaptor.
- c) Do not attempt to charge any other battery in this unit
- d) During charging the temperature of the charger will rise, this is normal and not a malfunction.
- e) When connecting a battery, be sure to firmly plug it into the socket.
- f) Do not attempt to use faulty batteries or batteries with incorrect specifications.
- g) Do not expose the charger to direct sunlight, use in a well-ventilated place.
- h) Do not operate near equipment that might be influenced by noise such as TV, etc.
- i) Do not open unit or attempt to repair any malfunction by yourself, there are dangerous power supply circuits inside. There are no user serviceable parts
- j) While in use, do not place anything on the charger; do not block ventilation holes.

SPECIFICATION

Applicable batteries.....	E-50, E-50S, E-80S & E-80 IDX Lithium Ion Battery
Fast charge current	2A/16.8v
Input voltage	100 ~ 240V AC 50/60 Hz Automatic.
Power consumption	100 VA max.
Weight.....	2.4 Kg approx. (3.5 lbs)
Dimension	120 (w) x 163 (h) x 247 (d) mm
	4.4 (w) x 6.1 (h) x 9.6(d) inches