

VL-2000S

2ch Simultaneous Quick Charger with AC Adapter



Instruction Manual

Thank you for purchasing the VL-2000S. VL-2000S is a 2-channel simultaneous quick charger for V-Mount Lithium Ion batteries with the AC adapter. Prior to using the charger, IDX recommends to read this Instruction Manual and keep this manual for future reference.

⚠ WARNING

May cause sudden serious injury and death

- Do not connect to an AC power source that exceeds the voltage specification stated on the unit.
- Use only with the compatible batteries listed in this manual.
- Do not short the contact pins with any metal object.
- Do not carry or store with metal equipment.
- Do not immerse in water.
- Do not attempt to open the outer casing or break apart.
- Do not subject the unit to extreme physical impact or pressure, or place any object across the terminals that could cause it to short.
- Do not attempt to use if damaged.
- Protect the power cord from any damage.

⚠ CAUTION

May cause injury or damage other equipment

- The unit should be used under the conditions listed in this manual.
- Do not expose the unit to extremely high temperatures.
- Use the approved power cord / appliance connector / plug conforming to the proper ratings (voltage, ampere) and safety regulations of each country if applicable.
- Keep the unit away from excessively dry or humid environments.
- Do not cover the ventilation holes & Waste heat fan.
- Please do not carry while stacked
- Stop charging immediately if the charging does not complete within the designated time.
- In case of abnormal smell, leak, color change or case deformity during use, turn the power off and unplug the cable from the socket to avoid possible injury.
- This is a class A product in a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

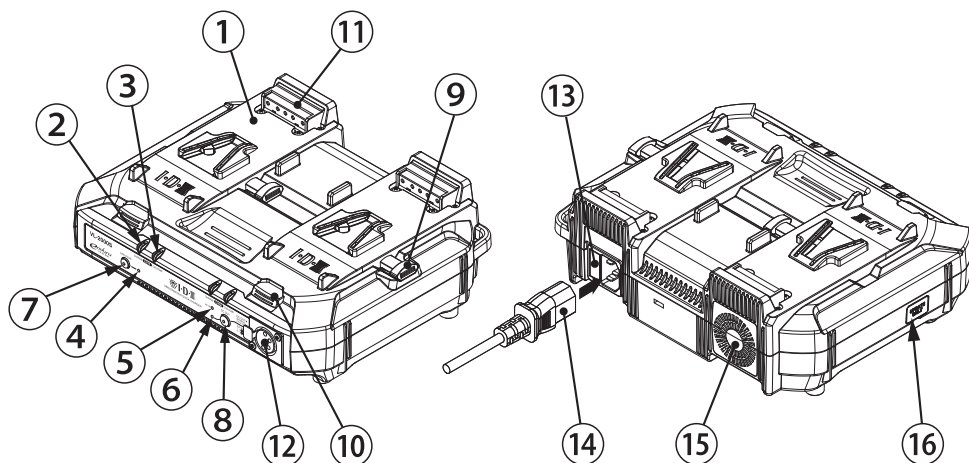
Features

- Universal AC input for world-wide use.
- 2ch simultaneous quick charge.
- Auto safety & protection features.
- Recovery charge mode for low voltage batteries.
- Auto-stop charging if battery fails to reach 100% within the designated time.
- Over voltage protection stops charging when the battery voltage exceeds the designated charge level.
- Protection circuitry activates when a battery fault is detected.
- Connect the XLR cable to supply power to devices such as cameras.
- If charged batteries are connected, Power Base Function prevents power interruption if AC supply fails.
- Batteries are charged even when AC adapter is used but at a reduced charge rate.
- NP Type Lithium ion batteries can be charged via optional A-E2NP charger adapter.
- LIFE PLUS mode extends battery life by applying a special charging algorithm.

Specifications

- Recommended batteries : IDX V-Mount Lithium Ion batteries
IDX NP Type Lithium Ion battery (Using A-E2NP)
- Input voltage : AC100V-240V 50 / 60Hz Automatic
- Power consumption : 130VA/100V 140VA/240V
- Operating temperature : 0~40°C / 32~104°F
- Operating humidity : 20%~90% RH
- Charging method : Constant current / Constant voltage
- Charging output : 16.8V / 16.4V MAX 6A
- Recovery charge current : approx 140mA / 200mA / 300mA / 480mA
- DC output : 14.5V \pm 6.7A (MAX 97W)
- Battery protection timer : Recovery charge approx 120 min
Quick charge approx 510 min
- Dimensions : approx. 231(W)x82(H)x182(D)mm
approx. 91.98(W)x32.29(H)x71.68(D) inches
- Weight : Charger body approx. 1240g / 2.74 lbs
- Charge time standard :
For the latest charging time information, please visit our website
(<http://www.idxtek.com/charging-times>)

Location and Function of Parts



- 1 Charger body
- 2 Charge LED (CHARGE)
- 3 Charge complete LED (CHG. COMP.)
- 4 LIFE PLUS LED
- 5 AC IN LED
- 6 DC OUT LED
- 7 LIFE PLUS button
- 8 DC OUT button
- 9 Battery release button (Side)
- 10 Battery release button (Front)
- 11 Battery charge terminal
- 12 DC OUT (XLR connector 4pin female)
- 13 AC Inlet
- 14 AC plug / Power cable
- 15 Waste heat fan
- 16 Farm up USB (No power supply)

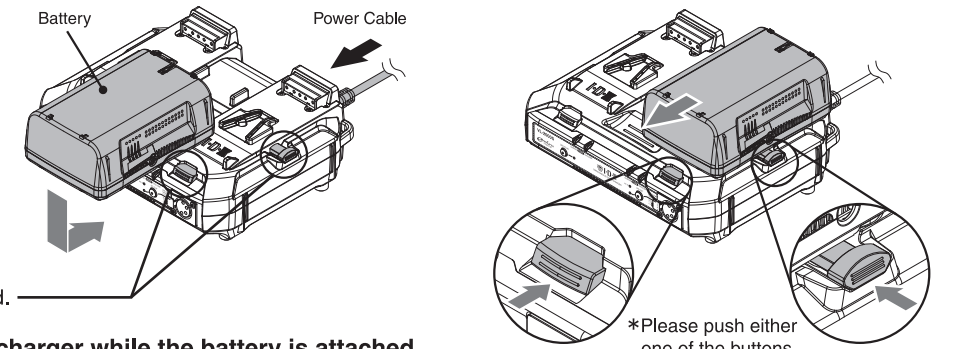
Safety Features

- VL-2000S is equipped with various Internal Safety Features that protect both the battery and charger from serious damage.
- The charger starts recovery charging if the voltage of mounted battery is under 12V. (Solid Red)
- The charger will stop charging if the battery voltage does not reach 12V after 120mins of charging. (Flashing Red)
- The charger stops charging automatically if the battery is not fully charged after 510mins from quick charging state. (Flashing Red)
- The charger stops charging if the mounted battery is unusual. (Flashing Red)
- The over-current protection is activated, and the output is stopped. (Batt.LED : Flashing Blue)

Operating Instructions

1 Charger Operation

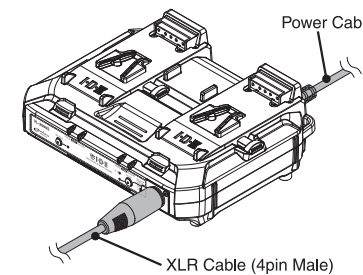
- 1 : Insert the power cable to the charger body before plugging into an AC outlet
 - 2 : Install the battery as shown.
 - 3 : When the battery pack is mounted, a status LED will turn ON. If the condition of the battery is OK, charging will automatically start.
 - 4 : Charging will automatically stop when the battery is fully charged.
 - 5 : When removing the battery from the charger, firmly press the release button while lifting the battery straight up.
- *Please mount the battery until the battery release button is firmly locked.
- *For your safety, Do not carry the charger while the battery is attached.
- *Please push either one of the buttons.



2 DC output Operation

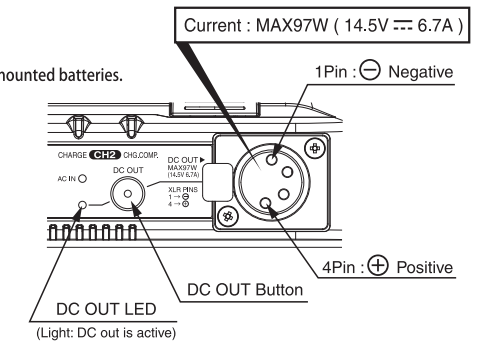
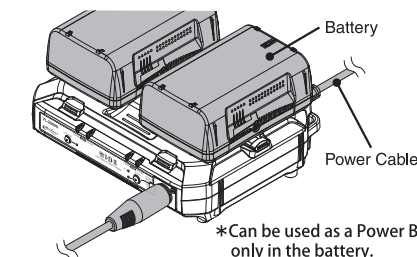
- Insert the XLR Cable to DC OUT and push "DC OUT" button to supply power to the connected device.
- If a load/power draw is absent for 1 hour, the DC output will automatically shut off. Press the 'DC OUT' button to reactivate the DC output.
 - Manually turn off the DC output by pressing the 'DC OUT' button for 2 seconds.

- When used as an AC Power Supply



- When used as an uninterruptible power supply

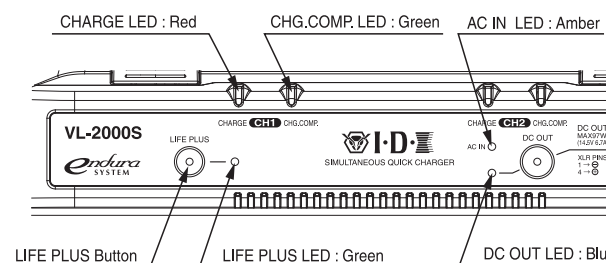
*If the AC becomes disconnected, power will be supplied from the mounted batteries.



- * Please ensure that the mounted batteries meet the power requirements for the device connected (MAX DC output is 97W/6.7A).
- * When the charger is being used as an AC adaptor while charging batteries, the charge amperage applied to the batteries is reduced to maintain power to the device connected to the XLR DC Output. If the device connected to the XLR DC Output has a significant power draw, the batteries will be put on standby for charging until that load is reduced enough for the charger to charge the batteries.
- * If the over-current protection activates, please remove the device from the XLR connector and push the 'DC OUT' button to reset the over-current protection.
- * In Power Base mode, the CHARGE LED will flash RED is the battery capacity becomes low.

3 Status LED Indicator

- When the battery is set, CHARGE LED will turn solid red.
- When charging is completed, CHG.COMP. LED will turn solid green.
- If the charger detects a fault, the CHARGE LED will flash red and stop charging.



- When press and hold "LIFE PLUS" button, the Green LED lights up and the LIFE PLUS mode becomes active.
(*LIFE PLUS: IDX's new charging algorithm that extends battery life).

LED indicator states

LED	Indication	Status
CHARGE LED	Solid Red ●	Recovery / quick charge in progress
	Flashing Red ⚡	Charger fault Battery capacity is low in the DC OUT
CHG.COMP. LED	Solid Green ●	Fully Charged
	Light Off ○	Battery capacity detected while DC Output is in use
LIFE PLUS LED	Solid Green ●	LIFE PLUS charging (16.4V charge)
	Light Off ○	Normal charging (16.8V charge)
AC IN LED	Solid Amber ●	AC is plugged in
DC OUT LED	Solid Blue ●	DC OUT is active
	Flashing Blue ⚡	Over voltage protection circuitry activated
CHARGE LED AC IN LED DC OUT LED	Red/Amber/Blue Simultaneously flashing ⚡	When a fault is detected *Reset the protection by removing and reinserting the AC cable

*Please contact IDX or your local IDX representative for service and repairs.

Design and specifications are subject to change without notice.

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