

V2L DISCHARGER

USER MANUAL



CCS2_V2L_5KW



NACS_V2L_3.5/5KW



CCS2_V2L_7KW



NACS_V2L_7KW

1- Basic Parameters

Power	3.5KW	5KW	7KW
Gun Type	NACS	CCS2/NACS	
Input Voltage	DC 320-450V		
Output Sockets Standard	NEMA 5-15R 15A*2	EU 16A*2	EU 16A*1 CEE 32A*1
Operating Voltage	AC 120V 60HZ	AC 220V 50HZ	
Single Socket Output Current Max	15A	16A	32A/16A
Single Socket Output Power Max	1.8KW	3.5KW	3.5KW
Application	EV V2L discharger for vehicle-to-load power output		
Using Environment	Indoor / Outdoor		
Operating Temperature	14°F to +122°F (-10 °C~ +50°C)		
Cooling Method	Natural cooling		
Packing Size (L*W*H)	45 x 33 x 20 cm		
Weight (kg)	6.0 kg		
Mechanical Life	No-load plug in/out >10, 000 times		
Software Upgrading	Upgrade by USB Type C		
Input Protection	Input under voltage protection		
Output Protection	Output short circuit protection Over temperature protection Over current protection		
Applied Materials	Housing material: Aluminum-alloy Component materials: Thermoplastic, Rubber Flame retardant grade: UL94 V-0 Terminal: Copper alloy, silver plating		

2- Operation Steps

1. Connect to Vehicle.

Insert the charging connector into the vehicle charging inlet firmly.

2. Power on Device.

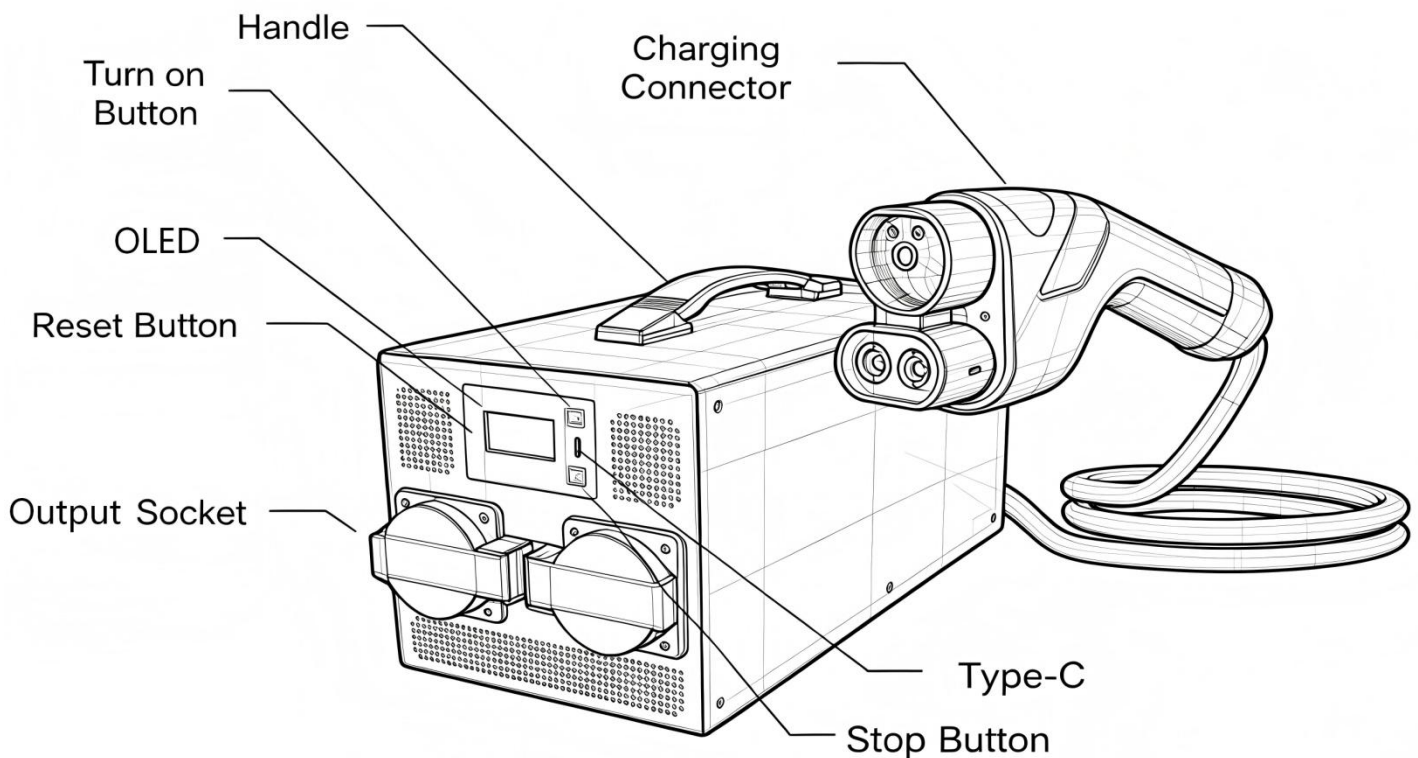
Press and hold the Turn-on Button for 2-3 seconds to turn on the V2L device.

3. Check Discharge Status.

Wait for the V2L OLED screen to display the vehicle discharge status. The device can only be used after the discharge signal is confirmed.

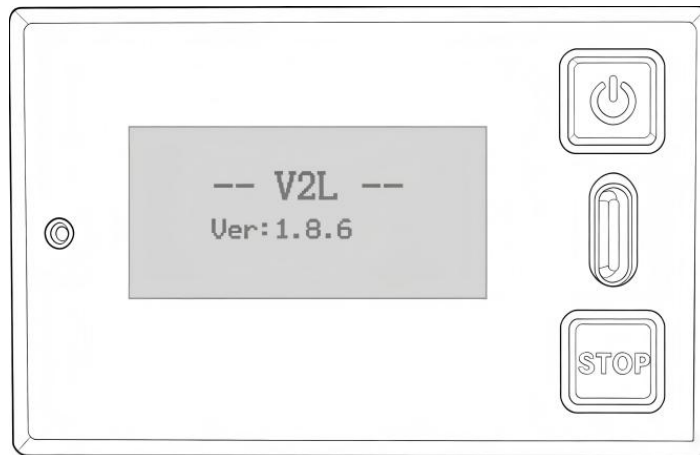
4. Stop Discharging.

To stop operation, first disconnect the load, then press the Stop Button to terminate the V2L function. Finally, remove the charging connector from the vehicle.

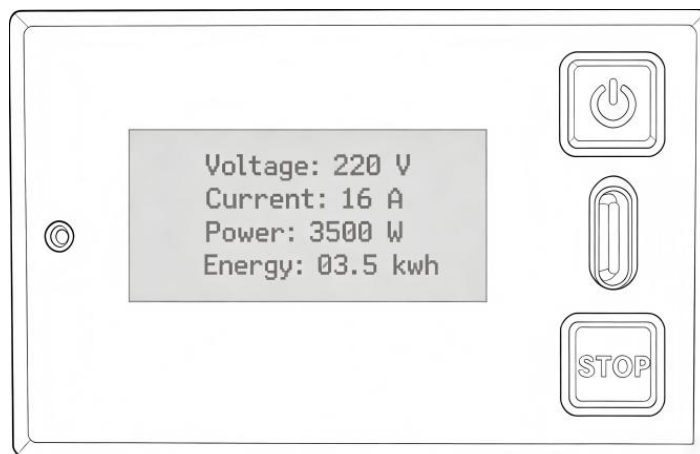


Notes:

1. Type-C port: Used for V2L firmware upgrade and debug, or charging the internal battery of the device.
2. Reset Button: If the V2L device malfunctions or freezes, insert a sturdy, non-breakable object into the reset button; the screen will then turn off. Press the Power Button again to restart the device.
3. LCD:
 - a. When the discharger is turned on successfully, the OLED first displays the discharger version.



- b. When the discharger starts discharging successfully, the OLED displays output voltage, current, power and other parameters.



3- Software Upgrade Steps

1. Obtain firmware file.

Download the latest firmware compatible with your region, V2L device and vehicle. You may obtain the file from our official website, local distributor, or contact our sales team via email.

2. Load firmware onto USB.

Ensure the USB flash drive is **empty** before **copying** the upgrade firmware to it.

Do not rename the file or allow your computer to add any suffix to the filename:

❖ The original upgrade file name is [My407DischargerCCS.bin](#)

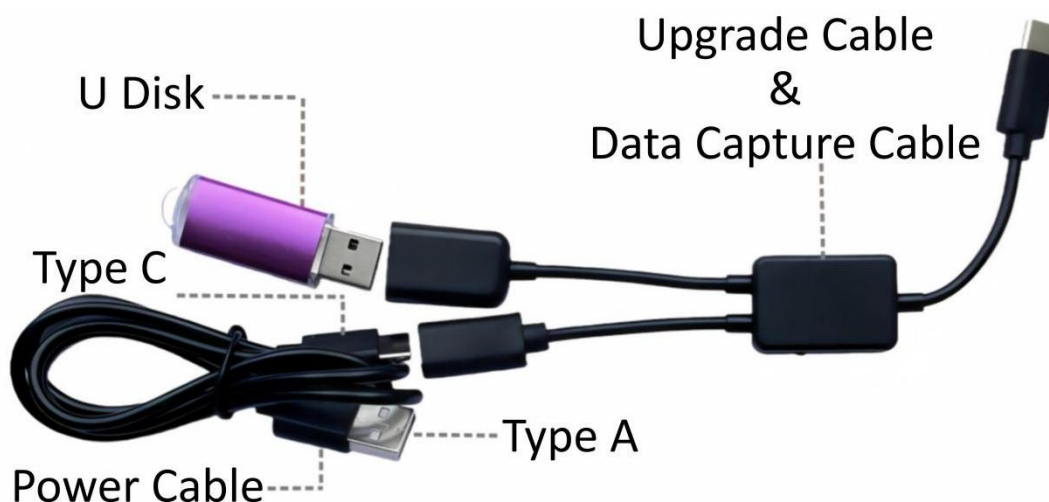
Extra suffixes, like My407DischargerCCS(1).bin, will invalidate the file and cause the upgrade to fail. Remove any such suffixes before use if present.

3. Connect USB to adapter.

Insert the USB flash drive (U Disk) into the upgrade cable, then connect the upgrade cable to the Type-C port on the V2L device.

4. Supply power for upgrade.

Connect the Type-A plug of the power cable to a computer USB port, phone charger, or power bank. Then connect the Type C plug of the power cable to the upgrade cable.



✓ During the upgrade, the light on the U Disk will flash several times and then turn off. After the light turns off, wait 3-5 seconds before unplugging the upgrade cable from the adapter. The upgrade is complete.

✗ If the light on the U Disk keeps flashing without turning off, the upgrade has failed. Review the steps and retry. If the problem persists, please contact our after-sales support team.

4- Debugging Data Capture Steps

1. Prepare the USB flash drive.

Ensure that the USB flash drive is empty and formatted as FAT32.

2. Connect the USB to the V2L device.

Insert the USB flash drive into the data capture cable, then connect the data capture cable to the Type-C port on the V2L device.

3. Supply power for data capture.

Connect the Type-A end of the power cable to an external power source (e.g., PC USB port, phone charger, or power bank). Connect the Type-C end to the data capture cable. Data logging will start automatically.

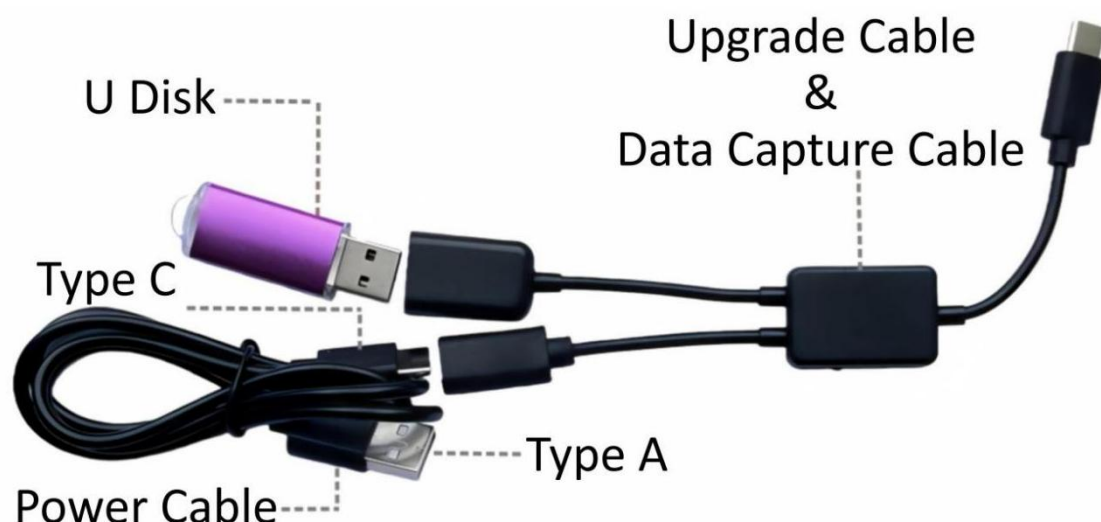
4. Monitor data capture.

During logging, the LED indicator on the USB flash drive will flash several times and then turn off. This confirms that the log data has been successfully saved.

5. Retrieve log files.

Once the light turns off, wait 3-5 seconds and perform the following:

- Unplug the power cable from both ends.
- Disconnect the data capture cable from the V2L device
- Connect the USB drive (or the data capture cable's Type-C end) directly to a PC or phone to retrieve the log files, and submit them to technical support.



Note:

If the USB indicator continues to flash without turning off, the data capture has failed. Please verify the connections and try again. If the issue persists, contact technical support.

5- Trouble Shooting

If the V2L device cannot be used for discharging, check the following possible causes or try upgrading the firmware.

If the vehicle still cannot discharge power, please contact us for assistance.

Possible causes include:

- **Poor connection.** The charger gun may not be fully seated in the vehicle's inlet. Please check connections and reinsert securely.
- **Low battery.** If the V2L device's internal battery is low, use the power cable to charge the internal battery. The internal battery voltage can be displayed on the OLED screen after the device is powered on.
- **Compatibility issue.** If the vehicle cannot use the discharge function properly, it may be because the vehicle does not support discharging.
- **Discharging restricted at low SOC.** If your vehicle battery is low, below 20% SOC, discharging may fail to start.

Warnings

- Before use, ensure that the rated power of the electrical appliance is within the output capacity of this product. Otherwise, the device may overheat, be damaged, or malfunction.
- Do not use this device in rainy environments to avoid damage.
- Do not expose the discharger to direct sunlight during operation; otherwise, the over-temperature protection may be triggered.
- During discharging, it is strictly prohibited to touch the metal terminals of the discharge socket and vehicle charging port.
- If any abnormality such as strange odor, smoke or abnormal noise occurs during discharging, stop using it immediately.
- Do not place the device in the trunk, on the vehicle roof or near tires during discharging. Avoid squeezing, dropping or stepping on the device during use.
- Personnel must be present when using this product. Long-term unattended discharging is strictly prohibited.
- The maximum discharge power of this product is 5 kW (16 A×2, 220 V). Do not block ventilation openings and fan heat dissipation outlets to prevent excessive heat generation.
- If the product will not be used for a long time, store it in a cool and dry place.
- Do not disassemble the metal housing. High-voltage hazard exists inside. Unauthorized disassembly of the main unit will invalidate all after-sales warranty.

- When the product has not been used for a long time, insufficient built-in auxiliary power may lead to startup failure. Use an external charger to charge the battery for half an hour before use to restore normal operation.
- Do not use the device if the cable becomes soft, worn, or has damaged insulation or other defects.
- Do not use the device if any part of the discharge gun has cracks, breakage or surface damage.

6- Communications Regulation

● Wireless and Electromagnetic Interference

The device described in this manual may cause wireless or electromagnetic interference. If the instructions in this manual are not followed correctly, the device may cause interference to wireless, television, or radio signals.

● Compliance with Standards

The device complies with the European Electromagnetic Interference standard: (LVD) 2006/95/EC and (EMC) 2004/108/EC.

The communication protocol is DIN 70121, ISO 15118.

● Errors and Omissions

If you find any errors or omissions in this manual, please notify us or your local distributor by email.

Please save these important safety instructions.

**(This document contains important instructions
and warnings that must be followed when using the device.)**

Users shall read and comply with all provisions set forth in this manual before using the product. The Company shall not be liable for any losses arising from improper operation.

The Company reserves the right of final interpretation of this product.