



**12/24v Li-Polymer Jump Starter Pack  
Part No. 0-649-35**



**GENERAL**

DURITE's innovative 12/24v Li-Ion Jump pack. Super light and compact with capability to jump start all petrol vehicles and diesel vehicles with upto 13.0L engine capacity. For 12v application this product outputs 500A Starting Current and 1000A Peak Current, for 24v application this product outputs 250A Starting Current and 500A Peak Current.














**WARNING!**

**Before using this unit please read these instructions carefully.**

**Take special care to follow the warnings and safety suggestions listed throughout this manual.**

**Keep these instructions for future reference.**

## **WARNING!**

-  Always take care the appliance while using it.
-  Do not use by any child or infant
-  Do not use as a toy
-  Do not allow the appliance to become wet
-  Do not immerse the appliance in water
-  Do not operate the appliance in explosive atmospheres, such as in the presence of flammable liquids, gases or dust
-  Do not modify or disassemble the appliance Only a repair technician may repair this unit
-  Do not expose the appliance to heat
-  Do not storage it in locations where the temperature may exceed 70 °C
-  Only Charge it at ambient temperatures between 0 °C and 40 °C
-  Only Charge it with the charger provided with the appliance.
-  Under extreme conditions, battery leakage may occur. Carefully wipe the liquid off with cloth , and Please avoid skin contact when you notice liquid on the battery. In case of skin or eye contact, rinse immediately with clean water and seek medical attention
-  At the end of its useful life, discard the appliance with due care for our Environment

1. Check before using the product that there are more than 3 lights available on the battery indicator (60% charge state). If there is not do not attempt to start the vehicle until the unit is fully charged.
2. Do NOT crank the engine for more than 3 seconds using the product.
3. Please wait at least 15 seconds before trying to crank the engine again if it does not start.
4. Make sure the voltage is selected before connecting to a vehicle battery
5. Do not connect a RED Clamp to the earth terminal on battery and vice versa as this will lead to short circuit. It could damage the product and further be dangerous to the user.
6. Remove the jump starter immediately on starting the vehicle.
7. Always check that the jumper clamps are connected correctly. Check the vehicle battery terminals to ensure they are not rusty/dirty. If so clean before attempting to connect and jump this vehicle.
8. If the vehicle does not start on the third attempt please do not try again as this will damage the unit and will void the warranty.
9. If the unit enters its 'protected state' please press and hold the 'test' button to reset the unit.
10. This unit has no serviceable parts inside. Please do not try to open/disassemble the unit as this could be dangerous and will void the warranty.
11. **MUST NOT BE USED TO JUMP START ANY VEHICLE WITH A LITHIUM ION BATTERY INSTALLED - RISK OF DAMAGE OR INJURY!**
12. Do not use the unit if it has been dropped or damaged.
13. Do not charge for more than 8 hours. Remove from charge once all status LED's are no longer illuminated.

## VOLTAGE DETECTION

### What is the lowest and highest voltage to be detected by the jump pack to know it is operating a 12v system?

There are some voltage ranges for 12V system :  $0 < 3V < 8.1V < 12V < 13.5V$ .

0--3V: When the car battery is in this range the Jump pack will not react .

3V-8.1V: The 12V Led light will flash, meaning the vehicle battery is weak, the jump pack will need manual operation by pressing the 12V button when the 12v system cannot be automatically recognized.

8.1V--12V: In this range the 12V system can automatically recognize the 12V battery, it will automatically begin to work and output current.

12V--13.5V: In this range the vehicle battery has enough power to start the engine, in this situation the 12V led will be on but no output will occur.

### What is the lowest and highest voltage to be detected by the jump pack to know it is operating a 24v system?

There are some voltage ranges for 24V system :  $13.5V < 14.4V < 16.2V < 24V$

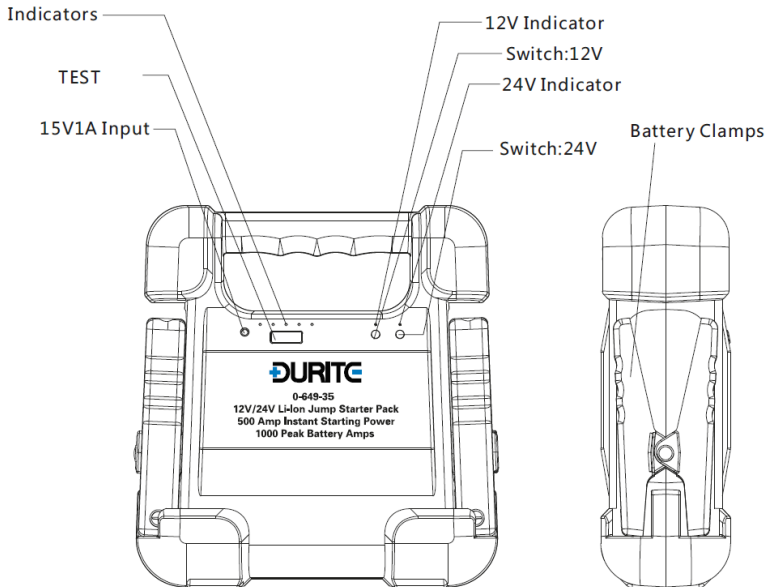
13.5V--14.4V: The 12V and 24V led will flash and alternate. No output will be offered, you need to manually operate and press the 24V button to engage the jump pack.

14.4V--16.2V: 24V led will flash, no output will occur, the jump pack will need manual operation by pressing the 24V button to engage the jump pack.

16.2V--24V: 24V led will be on and the 24V system can automatically recognize the 24V battery , will begin to work immediately.

24V: In this range the vehicle battery has enough power enough to start the engine, in this situation the 24V led will be on but no output will occur.

## PRODUCT LAYOUT



## **OPERATION GUIDANCE**

### **Switch Instruction:**

Switch #1 (TEST) Check the battery's storage level and turns the product on.  
Switch #2 (12/24V) Selects required voltage. Press 12V for 12V vehicles. Press 24V for 24V vehicles.

### **Storage Level Indicators**

Press the switch to check the battery level of Jump Starter.

Indicator	Unlit	5 Flashing	1 solid	2 solid	3 solid	4 solid	5 solid
Storage level	0%	10%	20%	40%	60%	80%	100%

The indicator will flash one by one during the period of charging. Different numbers of solid indicators show different storage level of Jump Starter. All indicators lights turn off when the charging is completed and the unit's battery is full.

### **Charging the Jump Starter:**

1. Plug the domestic charger into the 240v socket (or in car charger to 12v socket).
2. Connect the other end of the charger to 15V 1A input port of Jump Starter.
3. Remove from charge once LED status lights turn off or after 8 hours (max.)

### **Jump Start Vehicle Instructions:**

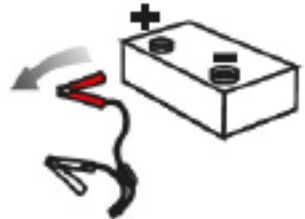
1. Make sure the unit has more than 3 light indicators available before attempting to jump start the vehicle.
2. Connect the RED clamp to the vehicle's battery positive(+) terminal and connect the BLACK clamp to the vehicle's battery negative(-) terminal.
3. The product will automatically identify the 12v/24v voltage via its unique intelligent identification function.
4. Start the vehicle.
5. When the vehicle is started remove the jumper cables from the vehicle's battery.
6. Leave the vehicle engine running.



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**If there is no jump start reaction please check the following:**

1. Check to see that the battery clamps are connected correctly.
2. If the clamps are connected correctly but there is still no power please check the vehicle's battery to ensure it has not failed.
3. If the above has been fulfilled then the vehicle will need to be inspected by a professional who can assess the vehicle for the further fault.

### PARTS LIST

- 1 x 24v Li-Polymer Jump Pack
- 1 x 230v UK Charger
- 1 x 12v In car charger
- 1 x User Manual

### TROUBLESHOOTING

12/24v indicators are flashing frequently -The appliance will lock itself for self protection from short circuit if it is detected. Unlock the unit by pressing and holding the on/off switch for 5 seconds.

12/24v indicators twinkle frequently when connecting to the vehicle's battery. Check to see that the product clamps are connected to the correct terminals on the battery.

### TOXIC AND HARMFUL SUBSTANCES

Pb	Hg	Cd	Cr(VI)	PBB	PBDE
0	0	0	0	0	0

O : Indicate all homogeneous materials' hazardous substances content are below the MCV limit specified in the Standard 2002/95/EC (RoHS).

## **Specification**

Capacity .....	24,000mAH (88.8Wh)
Battery Cell .....	LI-Polymer
Output Voltage .....	12/24v
Start Current.. .....	500A@ 12V / 250A @24V
Peak Current.. .....	1000A@ 12V / 500A@ 24V (3 Seconds)
Charge Input.. .....	15V, 1A
Full ChargingTime .....	8 Hours
OperatingTemperature .....	-20° C to 60° C
Dimensions .....	235*225*80mm
Weight.. .....	1.65Kg
Certification .....	CE