

JUMPSTARTER12K

JUMPSTARTER21K

MODEL: JP12000

MODEL: JP21000

by  **powercases**
Portable Power Solutions

USER MANUAL

Thank you for choosing the Jump Starter 12K/21K by Powercases. Always follow basic safety precautions when using electrical appliances. Before operating your new device, please read this user's manual carefully. Please keep this instruction manual for easy reference.

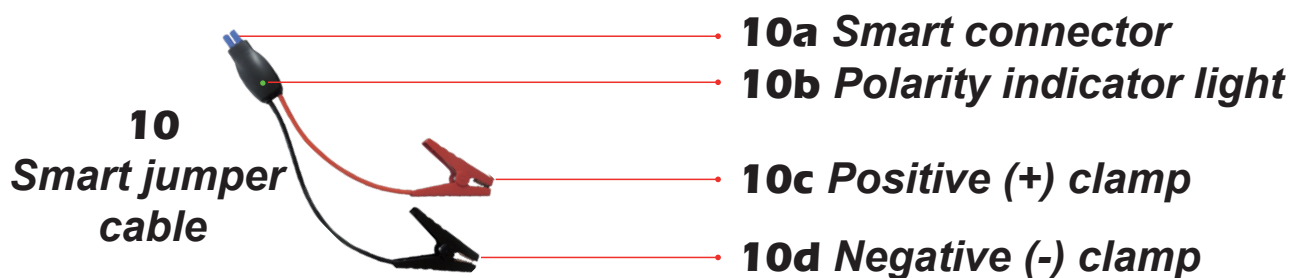
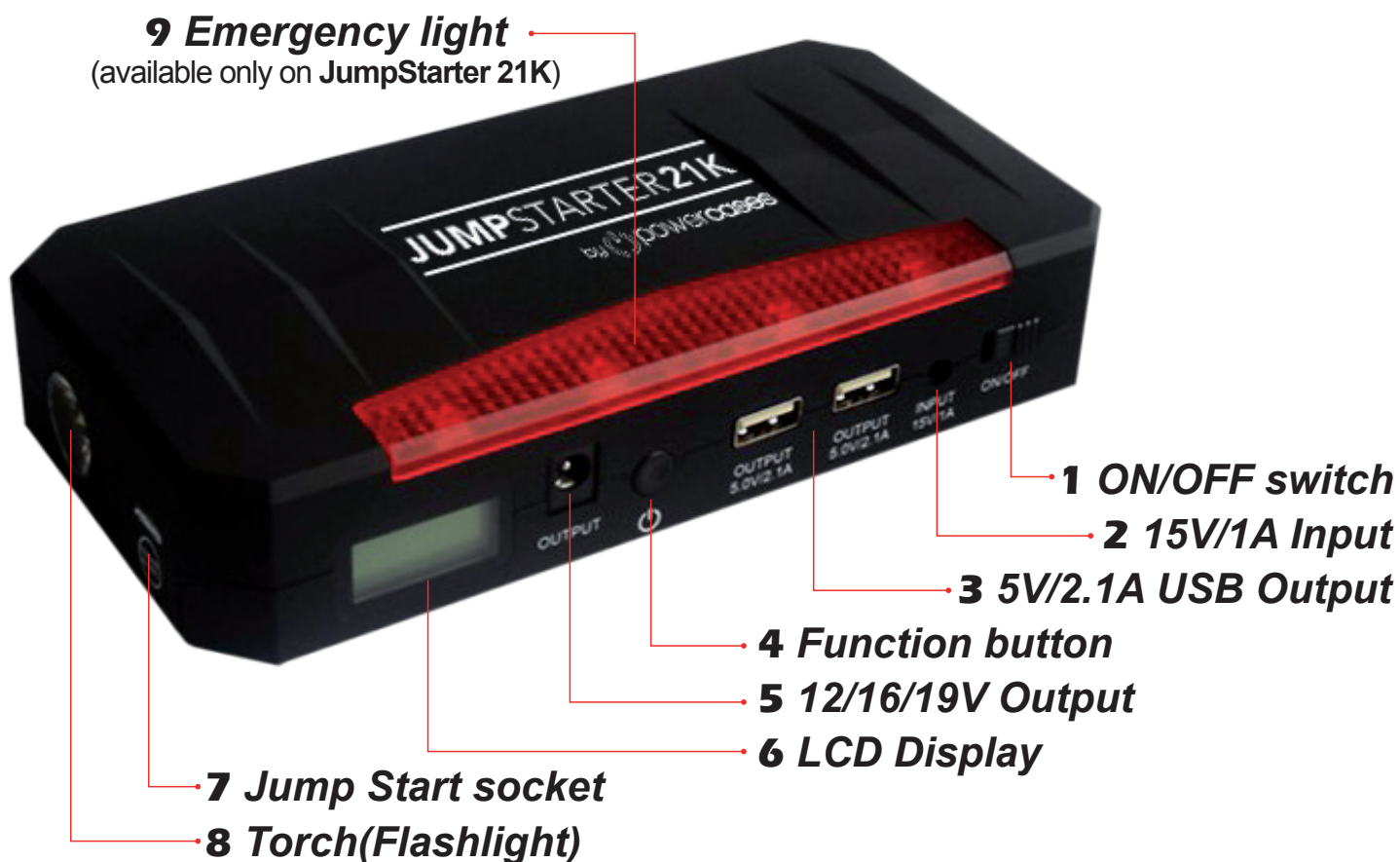


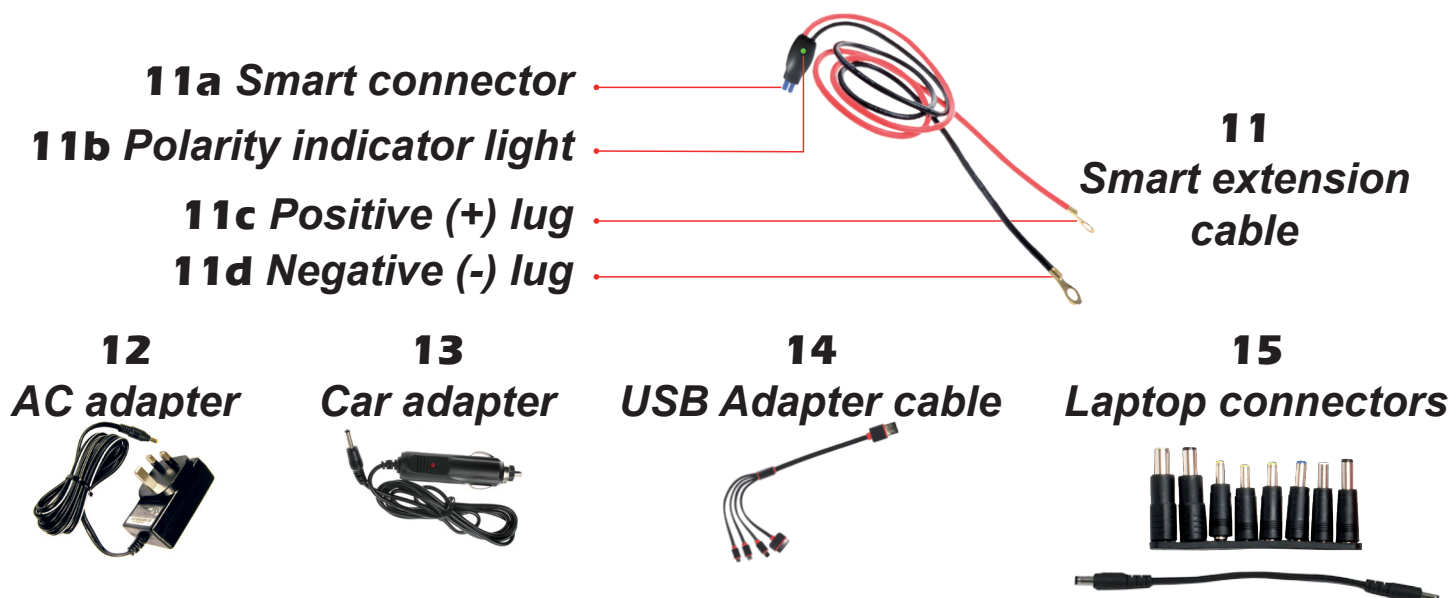
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A. JUMP STARTER DIAGRAM





B. USAGE INSTRUCTIONS

1. Check the current-charge capacity of the Jump Starter

Slide the **1 ON/OFF switch** to On position to turn on the power, the current-charge level will be displayed in percents on **6 LCD Display**.

When charging, the percentage shown on **6 LCD Display** will slowly increase in time up to 100. When charging is complete, **6 LCD Display** will show 100%.

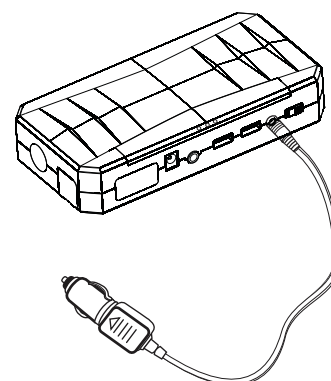
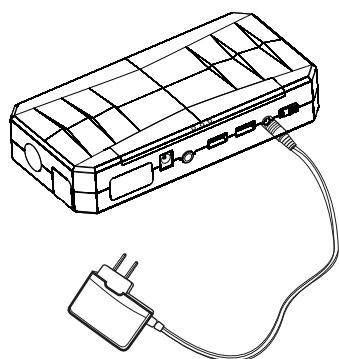
2. Charging the Jump Starter

1. Plug the **12 AC adapter** into the wall socket.

2. Connect the round end of the **12 AC adapter** to the **2 15V/1A Input** port of the Jump Starter.

1. Plug the **13 Car adapter** into the cigarette lighter socket in your car/truck/boat.

2. Connect the round end of the **13 Car adapter** to the **2 15V/1A Input** port of the Jump Starter.



3. Jump starting a vehicle



Make sure that the current-charge capacity of the Jump Starter is not less than 30%.



The Jump Starter is intended to be used with 12V automotive or marine batteries.

1. **Connect clamps to battery**

Connect the **10c Positive (+) clamp** of the **10 Smart jumper cable** to the vehicle's positive (+) battery terminal and connect the **10d Negative (-) clamp** of the **10 Smart jumper cable** to the vehicle's negative (-) battery terminal.

2. **Connect cable to Jump Starter**

Plug the **10a Smart connector** end of the **10 Smart jumper cable** into the **7 Jump start socket**.

- a) If you have correctly attached the **10 Smart jumper cable**, the **10b Polarity indicator light** will be solid green. Please proceed to step 3.
- b) If you have accidentally reversed the connection of the cable clamps, the **10 Smart jumper cables** will sound an audible alarm (beep) and the **10b Polarity indicator light** will be solid red. Please return to step 1 and correct the polarity of the **10 Smart jumper cable** clamps.
- c) If you have not securely connected the clamps to your vehicle's battery terminals, the **10b Polarity indicator light** will flash red and green. Please return to step 1 to ensure secure connection of the **10 Smart jumper cable** clamps.

3. **Start your engine**

Now attempt to start the engine.

- a) If the engine starts, proceed to step 4.
- b) If engine does not start, wait 10 seconds before attempting to start the engine again.

- c) Do not continue to attempt jump starting if the vehicle will not start after 5 attempts. In this instance, have the vehicle serviced by a mechanic as the problem is likely beyond a discharged battery.


4. Disconnect cable from Jump Starter

Once the engine has been successfully started, then disconnect the **10a Smart connector** from the Jump Starter.

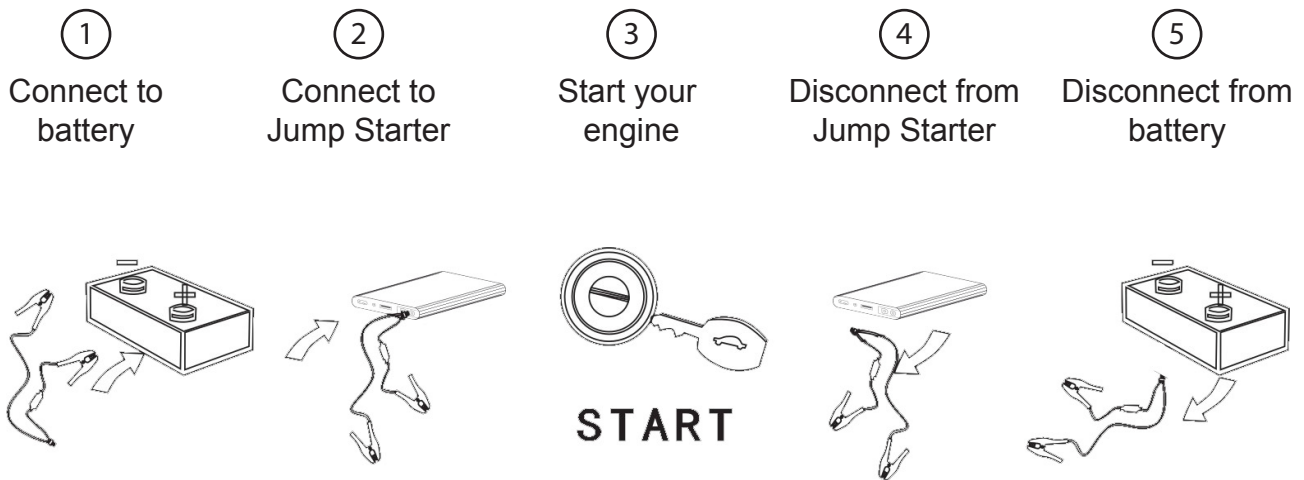
- a) If your engine is still running after disconnecting the Jump Starter, and you are aware of the reason why your main battery was drained, drive your vehicle as normal and your alternator should recharge your main battery. On the other hand, if you are unaware as to the reason your main battery lost its charge, please drive your vehicle directly home or to a service station. Proceed to step 5.
- b) If your engine stops running immediately after removing the **10 Smart jumper cable**, it is likely that your main battery is no longer able to hold a charge, or that you do not have a properly functioning alternator. In this instance, you may use the Jump Starter as a temporary replacement for your main battery. Leave the Jump Starter connected to your main battery, and drive your vehicle directly home or to a service station. Depending on the size of the vehicle and the electrics in use, you can expect to drive over 60 miles (100 KM) with a fully charged Jump Starter.

5. Disconnect clamps from battery

First disconnect the **10d Negative (-) clamp** and then finally the **10c Positive (+) clamp** from battery terminals.

 Please be aware that the Jump Starter is not intended to be used as a permanent replacement for your main battery. Lastly please note that your vehicle's alternator will not recharge the Jump Starter.

4. Easy steps to jump start your vehicle.



5. Smart extension cable

The new **11 Smart extension cable** makes jump starting super easy even if your vehicle's battery is located in an area that is difficult to access.

The **11 Smart extension cable** is a 1 meter (3 foot) long cable which can be hard-wired to the battery terminals for ease of access.

1. Examine the engine compartment firewall and locate a suitable wire loom opening large enough for the **11 Smart extension cable** to pass through.
2. Feed the **11 Smart extension cable** through the firewall, from the engine compartment and connect the eyelets (lugs) to the battery terminals.
3. Locate the **11a Smart connector** in an accessible place for your convenience (i.e. glove box, luggage compartment).

6. Charging mobile phones and tablets

1. Make sure the electronic device is 5V powered.
2. Connect the **14 USB adapter cable** to the **3 5V/2.1A USB Output** port on the Jump Starter.
3. Attach the compatible charging adapter to the electronic device.
4. Slide the **1 ON/OFF switch** to the On position to start charging.

7. Torch (Flashlight) function

1. Slide the **1 ON/OFF switch** to the On position.
2. Press and hold **4 Function button** for 3 seconds to turn on the **8 Torch(Flashlight)**. Press and hold again for 3 seconds to turn off.
3. Press **4 Function button** once for flashing mode.
4. Press **4 Function button** once again for SOS mode.
5. Press **4 Function button** one more time to turn off **8 Torch(Flashlight)**.

8. Emergency light function (feature only available on **JumpStarter 21k**)

1. Slide the **1 ON/OFF switch** to the On position.
2. Double-press **4 Function button** to turn on **9 Emergency light**. Double press again to turn off.

9. Charging laptops

1. Slide the **1 ON/OFF switch** to the On position.
2. Press **4 Function button** repeatedly to cycle through the power output options; your selection will appear on the **6 LCD Display**. Select either 12V, 16V, or 19V according to your laptop model.
3. Use the appropriate **15 Laptop connector** to connect your laptop to the Jump Starter's **5 12/16/19V Output** port.

C. FAQ

Q. How many times can the Jump Starter charge a mobile phone?

A. It depends on the size and current charge level of your mobile phone. However for example, it can fully charge an iPhone approximately three times.

Q. How many times can the Jump Starter on a full charge start my vehicle?

A. This depends greatly on the temperature and the size of the engine being started. However, for example a small car can be started 20 times, and a motorcycle 50 times.

Q. How long will the Jump Starter hold it's charge without use?

A. The Jump Starter will lose approximately 10% of it's charge every month, we recommend recharging the unit every 6 months.

Q. Will reversing polarity connections of the jump starter cable damage the vehicle?

A. No, the Jump starter is very safe as it is equipped with a **10 Smart jumper cable** that will prevent applying the wrong polarity to your vehicles battery. If you have accidentally connected the red and black cable clamps to the wrong polarity terminals, the **10 Smart jumper cable** will sound an audible alarm (beep) and the indicator light will be solid red. Simply correct the connection of the jumper cable clamps polarity.

Q. What if it doesn't jump start the vehicle?

A. Check that the clamps are well-connected to the battery terminals. If the vehicle does not start, remove the clamps, clean the terminals, reconnect, and try again.

D.TECHNICAL SPECIFICATIONS

Jump Starter Specifications

12K

21K

Features

Emergency Jump Starting	Yes	Yes
On-Off Switch	Yes	Yes
Jump Start Setting	Automatic	Automatic
USB Ports	2	2
Laptop Port	Yes	Yes
Hazzard Lights	No	Yes
Inverter	No	No
Vent/Cooling Fan	No	No
Flashlight(Torch)	Yes	Yes
Built-in Charger	No	No
Digital Readout	Yes	Yes
Charge Indicator	Digital	Digital
% of Charge Indicator	Yes	Yes
Volt Meter for Internal Battery	Digital	Digital

Battery

Type	Lithium Iron Phosphate ("LFP", LiFePO4)	Lithium Iron Phosphate ("LFP", LiFePO4)
Size	12,000 mAh	21,000 mAh
True (Usable) Capacity	12,000 mAh	21,000 mAh
Energy	0.144 kWh	0.252 kWh
Volts	12 V	12/24 V
Lifetime	1000+ cycles	1000+ cycles
Working Temperature	-20C to 60C	-20C to 60C
Charge Hold Time (to 50%)	6 Months	6 Months

Jump Starter Performance

Cranking Amps (CA)	600 A	750 A
Cold Cranking Amps (CCA)	560 A	600 A
Starting Current	400 A	500 A
Peak Current	600 A	750 A
Alternator Voltage	Specs	Specs
Power output (12 V)	7.2 kW (6.7 kW cold)	9 kW (7.2 kW cold)
Power output (24 V)	N/A	18 kW (14.4 kW cold)
Largest Engine Starting Capability		
Gasoline (Petrol)	6.0 L (200 HP)	7.2 L (600 HP)
Diesel	3.0 L (160 HP)	4.0 L (400 HP)
Typical Application	Large Cars and Small Trucks/Vans	Class 6 Trucks and Mid-size Construction/Industrial Equipment

Charging Outputs

USB 1	5 V, 1 A	5 V, 1 A
USB 2	5 V, 2.1 A	5 V, 2.1 A
4 in 1 USB cable	Yes	Yes
Laptop	16/19V, 3.5 A	16/19V, 3.5 A
Laptop Adapter cable	Yes	Yes

Charging

Input	15 V, 1 A	15 V, 1 A
Time from full discharge	3.5 Hours	4.5 Hours
AC Charger	90 to 250 V	90 to 250 V
Car Charger	12 V	12 V

Cables

12 Volt Smart Alligator Clamps	12 inches, 8 AWG, Audible reverse polarity warning, Overheating protection	12 inches, 8 AWG, Audible reverse polarity warning, Overheating protection
12 Volt Smart Extension Cables	3 feet, 8 AWG, Audible reverse polarity warning, Overheating protection	3 feet, 8 AWG, Audible reverse polarity warning, Overheating protection

Inverter

Outlet	N/A	N/A
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Physical Enclosure


Material	Painted Rubber, HDPE	Painted Rubber, HDPE
Size (L x W x H)	18 x 9 x 4 cm	18 x 9 x 4 cm
Weight	420 g	573 g
Waterproof	No	No

Packaging	Soft Zip Case	Soft Zip Case
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E. PARTS LIST

#	Parts name	QTY	#	Parts name	QTY
1	Jump Starter	1	5	Jumper cable	1
2	4 in 1 USB cable	1	6	Extension cable	1
3	AC adaptor	1	7	User manual	1
4	Car adaptor	1	8	Soft zip-case	1
			9	Laptop connectors / cable	1

F. SAFETY WARNINGS

 Failure to obey the safety warnings may result in electrical fire, electrical shock and damage to your vehicle.

1. If the product appears abnormal in shape, immediately stop usage and disconnect all electronic devices.
2. Keep the product away from children at all times. The product is NOT a toy for children to play with.
3. Use only the supplied AC adapter and DC adapter to charge the product.
4. Charge only at ambiental temperatures between -30° C and 60° C
5. Do not store in locations where the temperature may exceed 70°C
6. Do not operate the appliance in explosive atmospheres, such as in presence of flammable liquids, gases or dust.
7. Do not allow the appliance to become wet.
8. Do not modify or disassemble the Jump Starter. Only authorized parties may repair this unit.
9. At the end of it's useful life, discard the appliance with due care for our enviroment.

G. PRODUCT WARRANTY

We offer a limited warranty for this product against any defects in material and workmanship for a period of 12 months from the date of consumer purchase. The conditions of the warranty are as follows:

1. The warranty is only valid upon presentation of the original receipt (from dealer/retailer) by the original purchaser with the product to be repaired or replaced.
2. The warranty is void if the serial number, date of purchase and label has been removed or tampered with.
3. The warranty does not cover damage or product failure resulting from normal wear and tear, physical abuse, improper installation, misuse, modification or repairs by unauthorized third parties.
4. We do not assume responsibility for any loss or damage incurred during shipment or as a result of a force majeure.
5. We are not liable for any incidental or consequential damages arising from the use or misuse of this product.
6. All warranty claims are limited to repair or replacement of the defective product and is at our sole discretion.
7. If we repair or replace the product, the product will be covered for the remaining time of the original warranty period. Repair or replacement may involve the use of reconditioned units which are equivalent in function. Replaced part or product becomes our property.

H. CONTACT INFORMATION

info@powercases.com

Electronic version of this user manual is available at
www.powercases.com/manuals/jp1221000.pdf