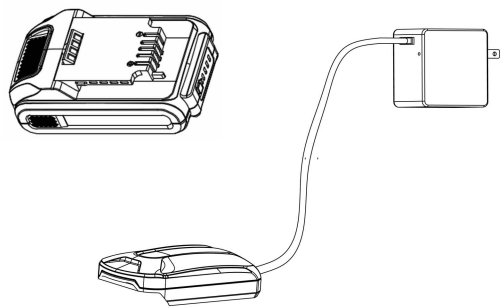
PRORUN®

20V/// Lithium-Ion

Operator's Manual

CHARGER
MODEL: PC120

BATTERY
MODEL: PB12020
MODEL: PB12040



Before charging, read the instructions.

⚠ **IMPORTANT - READ CAREFULLY BEFORE USE**

⚠ **IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS**



WARNING: To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.

Please let us know what you think.
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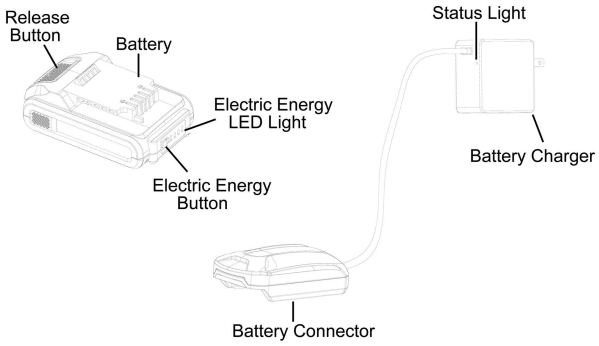
1-844-905-0882, info@proruntech.com

1.SYMBOLS

	Safety Alert	Indicates a potential personal injury hazard.
	Read the Operator's Manual	To reduce the risk of injury, user must read operator's manual.
	Recycle Symbols	This product uses lithium-ion (Li-ion) batteries. Local, state, or federal laws may prohibit disposal of batteries inordinary trash. Consult your local waste authority for information regarding available recycling and/ or disposal options.
	Indoor use only	Use and store battery charger only indoors.
	Waste	Symbols on the product or its packaging indicate that this product cannot be handled as domestic waste. This product must be deposited at an appropriate recycling facility.
	Class II tool	Battery charger is belong to Class II tools. It intended for charging Li-ion batteries, and having an output at safety extra-low voltage.
	Fuse	T3.15A time-lag miniature fuse-link
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency(cycles per second)
W	Watts	Power
Wh	Watt Hours	Energy Storage Capacity
Ah	Amp Hours	Current Capacity

2.BATTERY AND BATTERY CHARGER

This section describes the battery and battery charger safety for your battery product. Only use PRORUN® 20V original batteries for PRORUN products and only charge them in an original battery QC charger from PRORUN. The batteries are software encrypted.



● Importation safety instructions

Battery charger

The battery chargers are only used for charging of PRORUN replacement batteries.

The battery chargers, are only used for fast charging of replacement batteries.

Before using battery charger, read all instructions and cautionary markings on battery charger and product using battery.

CAUTION! Charge only PRORUN Li-on Batteries. Other types of batteries may burst causing personal injury and damage.

NOTE! The specifications of the plugs can be different by country, the picture is only for reference. If the shape of the plug does not fit the power outlet, use an attachment plug adapter of the proper configuration for the power outlet.

⚠**WARNING!** Minimise the risk of electric shock or short circuit as follows:

- Never insert any object into the charger's cooling slots. Do not try to dismantle the battery charger.
- Never connect the charger terminal to metal objects as this can short circuit the battery charger.
- Use approved and intact wall sockets.

⚠**WARNING!** This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants consult their physician(s) and the medical implant manufacturer before operating this machine. Do not use product when a thunderstorm is approaching.

Regularly check that the battery charger connection power cable is intact and that there are no cracks in it. Never carry the battery charger using the power cable and never pull out the plug by pulling the power cable.
- Keep all power cables and extension cords away from water, oil and sharp edges.
- Make sure the power cable is not pinched in doors, fences or the like. Otherwise, it can cause the object to become live.
- Never clean the battery or the battery charger with water.
- Never allow the children to use the battery charger.
When charging, the charger must be placed in a well ventilated area and under a roof to keep out moisture.

⚠**WARNING**! Do not charge non-rechargeable batteries in the battery charger or use them in the machine.

⚠**WARNING**! Do not use the battery charger close to corrosive or flammable materials. Do not cover the battery charger. Pull out the plug to the battery charger in the event of smoke or fire.

● Battery safety rules

1. Do not dismantle, open or shred battery.
2. Do not expose battery to heat or fire. Avoid storage in direct sunlight.
3. Do not short-circuit a battery. Do not store battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
4. Do not remove battery from its original packaging until required for use.
5. Do not subject battery to mechanical shock.
6. In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
7. Do not use any charger other that specifically provided for use with the equipment.
8. Observe the plus(+) and minus(-) marks on the battery and equipment.
9. Do not use any battery which is not designed for use with the equipment.
10. Do not mix cells of different manufacture, capacity, size or type within a device.
11. Battery usage by children should be supervised.
12. Seek medical advice immediately if a battery has been swallowed.
13. Use the PRORUN PC12020 or PC12040 batteries with your equipment.
14. Keep battery clean and dry.
15. Wipe the battery terminals with a clean dry cloth if they become dirty.
16. Secondary batteries need to be changed before use. Always use the correct charge and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
17. Do not leave a battery on prolonged charge when not in use.
18. After extended periods of storage, it may be necessary to charge and discharge the battery several times to obtain maximum performance.
19. Retain the original product literature for future reference.
20. Use only the cell or battery in the application for which it was intended.
21. When possible, remove the battery from the equipment when not in use.
22. Dispose of properly.
23. Use the battery charger only when the surrounding temperature is between 37.4 °F (3 °C) and 107.7 °F (42 °C).
24.Use the charger in an environment which is well ventilated, dry and free from dust.

Do not use:
- A faulty or damaged battery charger.
- The battery in the battery charger outdoors.

Do not charge:
- Or never use a faulty, damaged or deformed battery.
- The battery in the rain or wet conditions.
- The battery in direct sunlight.

3. BATTERY AND CHARGER OPERATION

⚠**WARNING**! Risk of electric shock and short circuiting. Use approved and intact wall sockets. Make sure that the power cord is not damaged. Replace power cord if it appears to be damaged in any way.

● Connect the battery charger

Connect the battery charger to the voltage and frequency specified on the rating plate.
– Put the electric plug in an earthed or grounded socket-outlet.
– The charging indication LED will shine green indicating that the charger is working correctly.
– After 5 second, the light will turn off if no battery in the charger.
The battery must be charged before using it the first time. The battery is only 30% charged when delivered.
NOTE! Monitor the charging process while charging a battery. It is recommended to remove the battery from the battery charger when the battery is full charged, or the charger is disconnected from the power supply.
– Align the raised ribs of the battery pack with the mounting slots in the charger; slide the battery battery into the charger and engage the battery with the charger's electrical terminals.
– The charger will communicate with the battery pack to evaluate the condition of the battery pack.
– While the battery pack is charging, the charger's indication LED will shine as follows to indicate the charging process and levels:


The charger's indication LED light shines consistently red when the battery is charging.


The charger's indication LED light shines consistently green when the battery is fully charged.


The battery will not be charged if the battery temperature is deviation. In that case the charger's indication LED light shines consistently green until the battery cool down or heat to normal temperature.


The battery will never be charged if the battery is damaged. In that case the charger's indication LED light shines consistently green.

– The four LEDs on the battery pack indicate the current charged power level. Press the battery's electric energy button to check the power level of the battery.
– When the battery is full charged, the battery charger will stop charging (switch to stand by).
– It is recommended to remove the battery from the battery charger when the battery is fully charged, or the charger is disconnected from the power supply.
– Pull out the plug. Never use the power supply cable to disconnect the charger from the wall socket.

● Maintenance

– Make sure the battery and battery charger are clean and that the terminals on the battery and the battery charger are always clean and dry before the battery is placed in the battery charger.
– Keep the battery guide tracks clean. Clean plastic parts with a clean and dry cloth.

● Transport and storage

– Store the equipment in a lockable area so that it is out of reach of children and unauthorized persons.
– Store the battery and the battery charger in a dry, moisture-free and frost-free space.
– Store the battery where the temperature is between 14 °F (-10 °C) and 113 °F (45 °C) and never in direct sunlight.
– Store the battery charger only in an enclosed and dry space.
– Be sure to store the battery separate from the battery charger.

● Fault codes

Troubleshooting the battery and the battery charger during charging.

LED display	Possible faults	Possible action
Charger LED shines consistently green but battery electric energy LED light indicates no increase in charge.	The battery is ok, but temperature deviation.	Charge the battery in surroundings where temperatures are between 32°F (0 °C) and 104°F (40 °C). Wait for the battery cool down.
Charger LED shines consistently green but battery electric energy LED light indicates no increase in charge.	Battery is damaged. Charger is damaged.	Contact PRORUN Customer Service.

● Disposal of the battery, battery charger and machine.

– Symbols on the product or its packaging indicate that this product can not be handled as domestic waste. It must instead be submitted to an appropriate recycling station for the recovery of electrical and electronic equipment.

– By ensuring that this product is taken care of correctly, you can help to counteract the potential negative impact on the environment and people that can otherwise result through the incorrect waste management of this product. For more detailed information about recycling this product, contact your municipality, your domestic waste service or the shop from where you purchased the product.

4.TECHNICAL DATA

Battery charger		Rechargeable Li-ion Battery			
Model	PC120	Model		PB12020	PB12040
Input Voltage, V	AC100-240	Cells (pcs)		5	10
Frequency, Hz	50-60	Rated capacity		2.0 Ah	4.0 Ah
Output Voltage, V	21	Voltage	Nominal	18 VDC	
Output current, A	2.0		Max.	21 VDC	
Power, W	50	Electric energy		36 Wh	72 Wh

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