

RBC-30 Battery Charger

RBC-30 Charger and RB-1825/RB-1850 Batteries







⚠ WARNING!

















Read this Operator's Manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.

RIDGID[®]

Safety Symbols

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.

-  **DANGER** DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.
-  **WARNING** WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
-  **CAUTION** CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
-  **NOTICE** NOTICE indicates information that relates to the protection of property.

-   These symbols mean read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.
-  This symbol means always wear safety glasses with side shields or goggles while using this equipment to reduce the risk of injury.
-  This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
-  This symbol indicates the risk of electrical shock.
-  This symbol means do not expose the charger to water or rain to reduce the risk of electrical shock.
-  This symbol means do not expose the battery to water or rain to reduce the risk of electrical shock.
-  This is the China RoHS symbol.
-  This symbol means do not burn the battery or expose to high temperatures to reduce the risk of fire or explosion.
-  This symbol means the battery storage temperature should not exceed 60° C (140° F) to reduce the risk of fire or explosion.
-  This symbol indicates that RIDGID RBC-XX series battery chargers (such as the RIDGID RBC-30 or RBC-20) should be used to charge this battery.
-  This symbol indicates that RIDGID RB-18XX series batteries (such as the RIDGID RB-1825 and RB-1850) can be charged with this battery charger.
-  This symbol indicates that the product is For Indoor Use Only.
-  This symbol indicates that the product is Class II equipment.
-  This symbol indicates this is electrical equipment that should not be disposed of with household waste. See "Disposal" section.
-  This is the symbol for a fuse.

Important Safety Instructions

WARNING

This section contains important safety information that is specific to the RIDGID® RBC-30 Battery Charger and RB-18XX Series batteries.

Read all instructions, markings and warnings for the battery charger, batteries and any other equipment being used before use to reduce the risk of electrical shock, fire, explosion or serious personal injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE!

Battery Charger Safety

- To reduce risk of injury, charge only RIDGID RB-18XX series rechargeable batteries or batteries indicated in specifications. Other types of batteries, including non-rechargeable batteries, may burst causing injury to persons and damage.
- Charger is for indoor use only.
- Charge Li-Ion batteries at ambient temperatures specified in the instructions. Charging at low or high ambient temperatures (i.e. below 32°F (0°C) or above (113°F (45°C))) increases the risk of battery leakage, electrical shock or fire.
- Properly insert battery into charger. Battery polarity must match charger output polarity to reduce risk.

- **Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.**
 - **To reduce risk of damage to 12V power port connector and cord, pull by 12V power port connector rather than cord when disconnecting charger.**
 - **To reduce risk of shock, do not attempt to use both a.c. (mains) and d.c. (power port) input at the same time.**
 - **Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.**
 - **Do not operate charger with damaged cord or 12V power port connector – replace it immediately.**
 - **To reduce risk of electric shock, unplug charger before attempting any maintenance or cleaning.**
 - **Use an appropriate power source.** An improper power source may cause damage to charger resulting in electrical shock, fire or burns.
 - **Do not allow anything to cover the charger while in use.** Proper ventilation is required for correct operation of charger. Covering vents may result in fire. Allow a minimum of 3" (76 mm) of clearance around the charger for proper ventilation.
 - **Unplug the charger when not in use.** Reduces risk of injury to children and untrained persons.
 - **Do not carry charger by power cord.** Do not pull cord to unplug. Reduces risk of electrical shock.
- nals with conductive objects.** Shorting of terminals may cause sparks, burns or electrical shock.
- **Do not expose charger or battery to damp or wet conditions, such as rain. Make sure hands are dry when handling.** Moisture increases the risk of electrical shock.
 - **Follow all charging instructions and do not charge or store the battery pack outside the temperature range specified in the instructions.** Charging or storing improperly or at temperatures outside the specified range may damage the battery and increase the risk of battery leakage, electrical shock or fire.
 - **This appliance can be used by children 8 years and above and persons with reduced physical, sensory or metal capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.**
 - **Children should be supervised to ensure that they do not play with the appliance.** Cleaning and maintenance shall not be done by children without supervision.

Battery Safety

Charger and Battery Safety

- **Use appropriate Charger and Battery combinations.** See *Specifications*. Using chargers and batteries that are not rated for use together can cause the battery to burst, fire or other personal injury.
- **Do not use charger or battery if either has been dropped, modified or damaged in any way.** Modified or damaged charger or battery increases the risk of electrical shock.
- **Do not open or disassemble the charger or battery.** There are no user serviceable parts. Have repairs performed only at authorized locations. Opening or disassembling the charger or batteries may cause electrical shock or personal injury.
- **Do not probe charger or battery terminals with conductive objects.** Shorting of terminals may cause sparks, burns or electrical shock.
- **Avoid contact with battery fluids.** Fluids may cause burns or skin irritation. For skin contact, wash with soap and water. For eye contact, immediately flush eyes thoroughly with water and continue flushing for at least 15 minutes without rubbing. Seek medical attention. See *battery SDS* for additional information.
- **Use batteries only with equipment specifically designating their use.** Using Equipment and batteries that are not rated for use together can cause fire or other personal injury.
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Do not burn battery or expose to high temperatures.** High temperatures can cause the battery to explode.
- **Properly dispose of batteries.** When disposing, place tape over battery terminals to prevent shorting. Batteries are Li-Ion and

should be recycled. Follow all applicable local regulations for disposal of batteries. Refer to *Disposal* section.

Description

The RIDGID® RBC-30 18V Lithium-Ion Battery Charger is designed to charge 18V Lithium-Ion Batteries (as listed in the *Specifications* section). The charger can operate on AC power from a wall outlet (mains) or 12V DC from a vehicle electrical system (power port). This charger requires no adjustments. The charger includes lights to indicate battery charge state and charger condition.



Figure 1 – RIDGID® RBC-30 18V Lithium-Ion Battery Charger



Figure 2 – RIDGID® RB-18XX Series Lithium-Ion Batteries



Figure 3 – RB-18XX Series Battery Charge Indicator

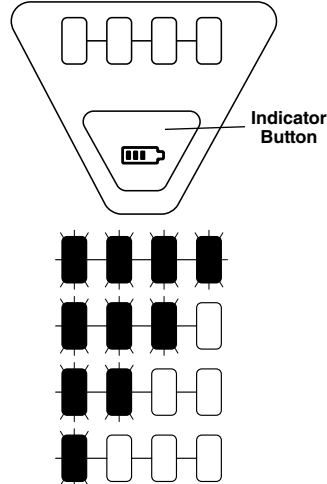


Figure 4 – RB-18XX Series Battery Charger Indicator lights

The batteries are equipped with charge indicator lights. Press the indicator button to display lights.

The charger indicator lights give an approximation of the battery charge state (more lights = more charge). A variety of factors (including battery temperature, discharge rate, age, etc.) can affect this. Batteries may show more charge after resting for a few minutes than right after use.

Specifications

Batteries

Type.....	Lithium-Ion (Li-Ion)	
Model	RB-1825	RB-1850
Cell Information	51NR	51NR
	19/65	19/65-2
Nominal Voltage	18.0 V	18.0 V
Amp hour	2.5 Ah	5.0 Ah
Watt-Hour	45 Wh	90 Wh
Battery Weight	1.09 lbs.	1.59 lbs.
	(0.49 kg)	(0.72 kg)

Maximum Battery Temperature

.....140° F (60° C)

Compatibility

RB-18XX series batteries (such as the RB-1825 and RB-1850) can be charged in any RIDGID RBC-XX series charger (RBC-30, RBC-20, RBC-10).

Light Diagnostic Chart








Charger Icon	Solid Light 	Blinking Light 	Meaning
	—	Yellow	Charger is plugged in with no battery installed - ready to charge.
	—	Green	Battery is being charged. Charge level <85%.
	Green	—	Battery charge level >85%, ready for use. Battery continues to charge. Once battery is fully charged, the charger switches to retention charging.
	—	Red	Battery is misaligned in charger. Remove battery and reinsert onto charger.
			Battery is damaged. See <i>Optional Equipment Section</i> to select an appropriate replacement battery. See <i>Disposal Section</i> for recycling information.
			Charger is damaged. See <i>Service and Repair</i> section.
	Red	—	Battery or charger outside of charging temperature range. Allow battery and charger to reach temperature range by sitting in a conditioned environment.
NO Lights ON			Charger does not have power. Ensure that charger is properly connected to electrical outlet. ----- Charger is not working properly. See <i>Service and Repair Section</i> .



Figure 5 – Light Diagnostic Chart

RBC-30 Charger

TypeLi-Ion
 Input.....120V a.c., 60Hz (U.S. & Canada)
 100V-240V a.c., 50-60Hz (all others),
 2A Max. (Mains)
 11.8 - 15.8V d.c., 12.5A Max. (Power Port)
 Output18Vd.c, 4.0A (a.c. input)
 18Vd.c., 2.0A (d.c. input)
 Approximate Charge Time*2.5 Ah (on a.c) 39 min (on d.c) 74 min
 5.0 Ah (on a.c) 82 min (on d.c) 148 min

Cooling.....Passive convection cooling (no fan)
 Charging Temperature Range32° F (0° C) - 113° F (45° C)
 Charger Dimension...5.7" x 5.3" x 3.5" (145 x 134 x 89 mm)
 Charger Weight1.55 lbs. (0.70 kg)
 CompatibilityIn addition to RIDGID RB-18XX series batteries (such as the RB-1825 & RB-1850), the following RIDGID 18V batteries can be charged with the RBC-30 battery charger: Catalog numbers 44693, 44698, 43323, 43328, 31013, 32743, 31018, 32473, 28218 and 28448.

* Charge time from battery charge indicator lights all OFF to 4 lights ON (approx. 85% charge).

Inspection and Assembly

⚠ WARNING



Daily before use, inspect the charger and batteries and correct any problems. Assemble charger according to these procedures to reduce the risk of injury from electric shock, fire and other causes, and to prevent tool and system damage.

1. Make sure the charger is unplugged. Inspect the power cord, charger and batteries for damage or modifications, broken, worn, missing, misaligned or binding parts. If any problems are found, do not use charger or batteries until the parts have been properly repaired or replaced.
2. Clean the equipment. This helps to prevent the equipment from slipping from your grip, allows proper ventilation as well as allowing any damage to be seen.
3. Check to see that all warning labels and decals on the charger and batteries are intact and readable. See Figure 6 & 7.



Figure 6 – Charger Warning Label



Figure 7 – Battery Warning Label

4. Select an appropriate location for the charger before use. Check work area for:
 - Flammable liquids, vapors or dust that may ignite. If present, do not work in area until sources have been identified

and corrected. Battery charger is not explosion proof and can cause sparks.

- Clear, level, stable and dry location for charger. Do not use in wet or damp areas. For use in a vehicle, the charger should not move when the vehicle is in use, and should not obstruct or interfere with the vehicle operation.
- Proper charging temperature range.
- Appropriate power source. Confirm that outlet matches the charger plug and is not damaged. Use of extension cords is not recommended. For use in a vehicle, a 12V d.c. power port is required. Vehicle must be negative grounded – do not use with positive ground systems.

⚠ CAUTION This charger is rated to draw up to 12.5A from a vehicle 12V d.c power port. Confirm that vehicle power port fuse is rated for 12.5A or higher to prevent the fuse from opening. Vehicle fuse ratings are typically found in the vehicle operator's manual. Do not replace the vehicle power port fuse with fuses rated higher than directed by the vehicle manufacturer.

The 12V d.c. power cord is equipped with a 12.5A, 250V 3AG size fast-acting 1/4" (6.3 mm) diameter x 1 1/4" (31.8 mm) long fuse (See Figure 8).

If a fuse repeatedly opens, do not continue to replace it. The cause of the fuse overload must be determined and fixed. Do not bypass fuses or replace fuses with wire or foil. This can cause fire or serious damage elsewhere in the electrical circuit. Only replace fuses with identical fuses.

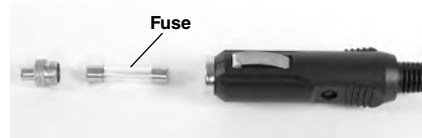


Figure 8 – 12V DC Power Port Connector

- Sufficient ventilation area. The charger needs a clearance of at least 3" (76 cm) on all sides to maintain the proper operating temperature.
5. If needed, securely install power cord into charger (Figure 9). Only one cord (a.c. or 12V d.c) should be installed at a time. See *Optional Equipment* section for proper cords for use with the RBC-30 Battery Charger.



Figure 9 – Charger Cord Connections

- This charger is provided with a keyhole hanging feature if wall mounting is desired. Screws should be installed at a center distance of 3" (76mm) – See Figure 6.

Operating Instructions

⚠ WARNING



Follow operating instructions to reduce the risk of injury from electrical shock.

Charging Procedure

New batteries reach their full capacity after approximately five charging and discharging cycles. It is not necessary to completely discharge a battery pack before recharging.

- Set up charger according to Inspection and Assembly section.
- With dry hands, insert plug into appropriate power source. See Figures 1 & 8 for 12V d.c. power port connector. Use with vehicle power ports. Route cords to prevent tripping or cord damage.
- When charger is in "ready to charge" mode, the yellow LED light will blink continuously.
- With dry hands, fully insert the battery pack onto the charger (see Figure 10). Do not force the battery into the charger. The battery pack will begin charging automatically. The battery pack will become slightly warm to the touch during charging. This is normal and does not indicate a problem. The LED light on the battery charger will indicate charging condition (Figure 5).

Once the battery is charged, it may remain on the charger until use. There is no risk of overcharging the battery. When used with 12V power from a vehicle, if the vehicle is not run for a long time or multiple batteries are charged without running the vehicle, the vehicle battery may be discharged.



Figure 10 – Inserting Battery In Charger

- When charging is complete, with dry hands, remove the battery from the charger and unplug the charger from outlet.

Inserting/Removing Battery In Tool

- With dry hands, insert battery into receptacle. Battery only fits into receptacle one way. If the battery will not fully seat into the receptacle, do not force. As the battery is inserted into tool, the spring loaded tabs will engage the tool to retain the battery in place.



Figure 11 – Installing/Removing Battery In Tool

- To remove battery, depress release buttons and pull straight out (Figure 11). Always remove the battery from the tool when making adjustments, changing attachments or storing.

Storage

⚠ **WARNING** Store the charger and batteries in a dry, secured, locked area that is out of

reach of children and people unfamiliar with proper charger operation.

Remove batteries from tool or charger before storage. The battery packs and charger should be protected against hard impacts, moisture and humidity, dust and dirt, extreme high and low temperatures, and chemical solutions and vapors.

NOTICE Long term storage in the fully charged state, the fully discharged state or in temperatures above 140°F (60°C) can permanently reduce the capacity of a battery pack.

Cleaning

⚠ WARNING

Unplug charger and remove battery before cleaning. Do not use any water or chemicals to clean charger or batteries to reduce the risk of electrical shock.

Remove any dirt or grease from the exterior of the charger and battery pack with a cloth or soft, non-metallic brush.

Service and Repair

⚠ WARNING

Improper service or repair can make the machine unsafe to operate.

There are no user-serviceable parts for this charger or battery packs. Do not attempt to open charger or battery cases, charge individual battery cells, or clean internal components.

For information on your nearest RIDGID Independent Service Center or any service or repair questions see *Contact Information* section in this manual.

Optional Equipment

⚠ WARNING

To reduce the risk of injury, only use Optional Equipment specifically designed and recommended for use with the RIDGID RBC-30 Battery Charger, such as listed.

Chargers and Cords

Catalog No.	Model RBC-30	Region	Plug Type
64383	Charger	USA, Canada and Mexico	A
56523	Charger	Europe	C
64388	Charger	China	A
64393	Charger	Australia	I
64378	Charger	Japan	A
64398	Charger	United Kingdom	G
64173	Charger Cord	North America	A
64183	Charger Cord	Europe	C
64178	Charger Cord	China	A
64188	Charger Cord	Australia & LA	I
64193	Charger Cord	Japan	A
64198	Charger Cord	United Kingdom	G
64203	Charger Cord	12V DC	—

All chargers come with 12V DC charger cord.

Batteries

Catalog No.	Model	Capacity
56513	RB-1825	18V 2.5Ah
56518	RB-1850	18V 5.0 Ah

All batteries can be charged with any catalog number RBC-30 Battery Charger.

Disposal



The batteries are Li-ion type and should be recycled.

Li-Ion

Parts of the unit contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally. Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.



For EC Countries: Do not dispose of electrical equipment with household waste!

According to the European Guideline 2012/19/ EU for Waste Electrical and Electronic Equipment and its implementation into national legislation, this marking indicates that this battery charger and battery pack should not be disposed of with other household wastes throughout the EU. To prevent possible harm to the environment or human health from improper waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To recycle

your used device, please use existing collection systems or contact the retailer from whom the product was purchased. They can take this product for environmentally safe recycling.

Battery Disposal



For USA and Canada: The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the battery packs means that RIDGID has already paid the cost of recycling the lithium-ion battery packs once they have reached the end of their useful life.

RBRC™, RIDGID®, and other battery suppliers have developed programs in the USA and Canada to collect and recycle rechargeable batteries. Normal and rechargeable batteries contain materials that should not be directly disposed of in nature, and contain valuable materials that can be recycled. Help to protect the environment and conserve natural resources by returning your used batteries to your local retailer or an authorized RIDGID service center for recycling. Your local recycling center can also provide you with additional drop off locations.

RBRC™ is a registered trademark of the Rechargeable Battery Recycling Corporation.

For EC countries: Defective or used battery packs/batteries must be recycled according to the guideline 2012/19/EU.

Battery Transport

The battery is tested according to UN Document ST/SG/AC.10/11/Rev/6 Part III, subsection 38.3. It has effective protection against internal overpressure and short-circuiting as well as devices for the prevention of violent rupture and dangerous reverse current flow.

The lithium-equivalent content in the battery is below applicable limit values. Therefore, the battery is not subject to national or international regulations pertaining to dangerous mediums, neither as an individual component nor when inserted into a machine. However, the regulations governing dangerous goods may be relevant when transporting several batteries. In this case, it may be necessary to comply with special conditions (e.g., concerning the packaging).