

# Litheli

2.4A / 2.4A DUAL PORT

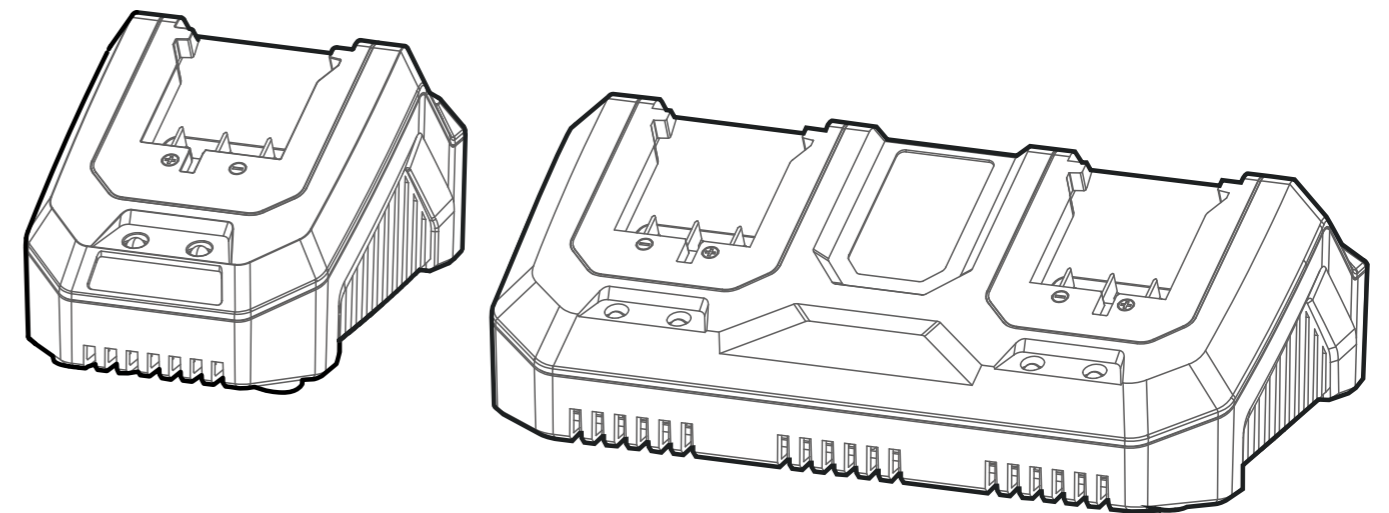
# CHARGER

E1-24CR E1-24CR2



[www.Litheli.com](http://www.Litheli.com)

WELCOME TO A BATTERY POWERED LIFE



VISIT OUR WEBSITE @ [www.Litheli.com](http://www.Litheli.com)

**⚠ WARNING:** To reduce the risk of injury, the user must read and understand the operator's manual before using this product. Save this manual for future reference.




# TABLE OF CONTENTS

**SAFETY SYMBOLS**-----02  
**IMPORTANT SAFETY INSTRUCTIONS**-----03  
**KNOW YOUR TOOL**-----05  
**OPERATION**-----06  
**MAINTENANCE**-----07  
**TROUBLESHOOTING**-----07  
**WARRANTY**-----08





# SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	<b>DANGER</b>	Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.
	<b>WARNING</b>	Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b>	Indicates a hazardous situation, which, if not avoided, may result in minor or moderate injury.
	<b>NOTICE</b>	(Without Safety Alert Symbol) Indicates information considered important, but not related to a potential injury (e.g. messages relating to property damage).

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

	<b>Read Operator's Manual</b>	To reduce the risk of injury, user must read and understand the operator's manual before using this product.
	<b>Wear Eye Protection</b>	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	<b>Wet Conditions Alert</b>	<b>WARNING!</b> Do not expose the unit to rain or wet conditions.
	<b>Class II Construction</b>	Double-insulated construction.

## READ ALL INSTRUCTIONS!

### **READ AND UNDERSTAND THE OPERATOR'S MANUAL**

**⚠ WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

# IMPORTANT SAFETY INSTRUCTIONS

**⚠WARNING!** Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury. The term “power tool” in all of warnings listed below refers to corded power tools or battery operated (cordless) power tools.

**⚠WARNING!** To ensure safety and reliability, all repairs should be performed by a qualified service technician.

## WORK AREA SAFETY

1. Keep the work area clean and well lit. Cluttered or dark areas invite accidents.
2. Do not operate power tools in explosive environments, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks, which may ignite the dust or fumes.

## ELECTRICAL SAFETY

1. Avoid body contact with grounded surfaces, such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded.
2. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
4. Do not abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep the cord away from heat, oil, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.
5. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. Use charge the Litheli lithium-ion battery packs list below:

Charger	Battery Packs
D02203000(E1-24CR) D02203100(E1-24CR2)	D01102700(E1-20BYSJ) D01202900(E1-20BY2SJ)

## SAFETY INSTRUCTIONS FOR CHARGER

**⚠CAUTION:** To reduce the risk of electric shock or damage to the charger and battery, charge only those lithium-ion rechargeable batteries specifically designated on your charger’s label. Other types of batteries may burst, causing personal injury or damage.

1. Before using the battery charger, read all instructions and cautionary markings in this manual and on the battery charger, the battery and the product using the battery to prevent misuse of the products and possible injury or damage.
2. Do not use the charger outdoors or expose it to wet or damp conditions. Water entering the charger will increase the risk of electric shock.
3. Do not handle charger, including the charger plug and charger terminals with wet hands.
4. 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.
5. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
6. Do not abuse the cord or charger. Never use the cord to carry the charger. Do not pull the charger cord to disconnect the plug from a receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.
7. Make sure that the cord is located so that it will not be stepped on, tripped over, come in contact with sharp edges or moving parts, or otherwise be subjected to damage or stress. This will reduce the risk of accidental falls, which could cause injury and damage to the cord, which could then result in electric shock.
8. Keep the cord and charger from heat to prevent damage to housing or internal parts.
9. Do not allow gasoline, oils, petroleum-based products, etc. to come in contact with plastic parts. These materials contain chemicals that can damage, weaken, or destroy plastic.
10. Do not operate the charger with a damaged cord or plug, which could cause shorting and .

electric shock. If damaged, have the charger repaired or replaced by contacting Litheli Customer Service.

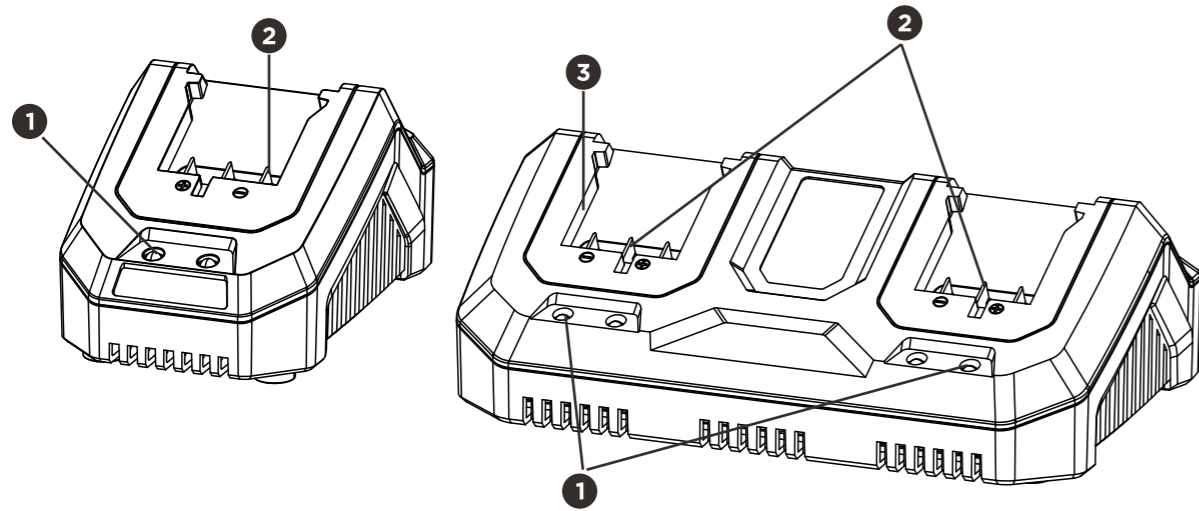
11. Do not operate the charger if it has received a sharp blow, been dropped, or has otherwise been damaged in any way. Take it to an authorized service technician for an electrical check to determine if the charger is in good working order.
12. Do not disassemble the charger. Take it to an authorized service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
13. Unplug the charger from the electrical outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.
14. Disconnect charger from the power supply when not in use. This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It will also help prevent damage to the charger during a power surge.
16. Risk of electric shock. Do not touch the uninsulated portion of output connector or uninsulated battery terminal.
17. This manual contains important safety and operating instructions for 20V Charger.
18. To reduce the risk of injury, close supervision is necessary when an appliance is used near children.
19. For a portable appliance - To reduce the risk of electrical shock, do not put charger in water or other liquid. Do not place or store appliance where or can fall or be pulled into a tub or sink.

## SERVICE

1. Have your charger serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the charger is maintained.
2. When servicing a charger, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

**Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.**

# KNOW YOUR TOOL



E1-24CR

E1-24CR2

1. Charger LED Indicators

2. Electrical Contacts

3. Mounting Slot

## TECHNICAL DATA

SKU No.	E1-24CR	E1-24CR2
Item No.	D02203000	D02203100
Input	120V-60Hz, 70W	120V-60Hz, 2*70W
Output	Max. 21.2V 2.4A	Max. 21.2V 2.4A/Per Port
Weight	0.71lbs (0.22KG)	1.33lbs (0.60KG)
Recommended Ambient Temperature for Charging	41°F-104°F(5°C-40°C)	
Charging Time (Approx.)	E1-20BYSJ (2Ah): 60mins E1-20BY2SJ (4Ah): 120mins	E1-20BYSJ (2Ah): 60mins 2*E1-20BYSJ (2Ah): 60mins E1-20BY2SJ (4Ah): 120mins 2*E1-20BY2SJ (4Ah): 120mins

## PACKING LIST

SKU No.	PART NAME	QUANTITY
E1-24CR	2.4Ah Charger	1
	Operator's Manual	1
E1-24CR2	2.4A Dual Port Charger	1
	Operator's Manual	1

# OPERATION

## HOW TO CHARGE THE BATTERY PACK

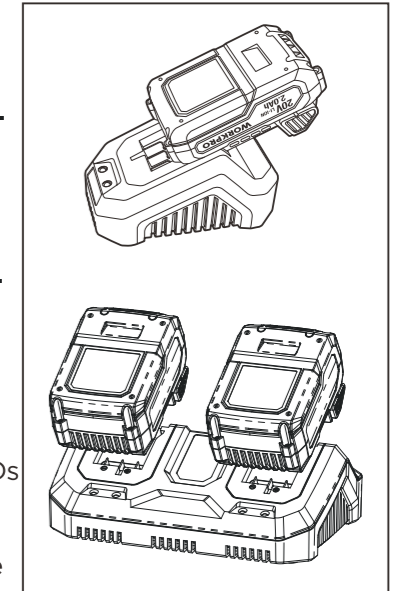
**⚠WARNING!** Do not use the charger outdoors or expose it to wet or damp conditions. Water entering the charger will increase the risk of electric shock.

**NOTICE:** Lithium-Ion battery packs are shipped partially charged. Before using it the first time, fully charge the battery pack.

- Connect the charger to the power supply (120V~, 60Hz).
- Align the raised ribs of the battery pack with the battery-mounting slots in the charger; slide the battery pack down onto the charger.

**NOTICE:** You can charge two batteries at the same time on E1-24CR2.

- The charger will communicate with the battery pack to evaluate the condition of the battery pack.
- When the battery pack is charging, the green LED indicator on the charger will flash, 4 LED indicators on the battery pack will flash green in sequence.
- When the battery pack is fully charged, the charging indication LEDs on the charger will stop flashing and will shine green continuously. The power indicator on the battery pack will turn off. Remove the battery pack from the charger and disconnect the charger from the power supply.
- The battery pack will fully charge if left on the charger, but it will not overcharge. If the battery pack remains on the charger for one month or more, it will drop to lower charge capacity. If this occurs, reinstall the battery pack on the charger to recharge it fully.



**NOTICE:**

- A significantly reduced run time after fully charging the battery pack indicates that the batteries are near the end of their usable life and must be replaced.
- The charger may warm during charging. This is part of the normal operation of the charger. Charge in a well-ventilated area.

## CHARGER LED INDICATOR TABLE

Use the table below to determine charger light patterns and possible causes. For all other issues, contact Litheli Customer Service.

Indication	Possible Reason
Red Light - On Green Light - Off	No load -There's no battery inserted in the charger.
Red Light - Off Green Light - Rapidly flashes	Low voltage charging - The battery is heavily discharged. It may take some time to recover to normal charging.
Red Light - Off Green Light - Slowly flashes	Normal charging - The battery is being charged.
Red Light - Off Green Light - On	Fully charged - The battery is fully charged and the charging process is finished.
Red Light - Slowly flashes Green Light - Off	Temperature abnormal - Charging process stopped and will restart when battery returns to normal temperature.
Red Light - Rapidly flashes Green Light - Off	Over current charging -The current coming through the charger is greater than what the charger can support. Stop charging as soon as possible. Abnormal performance - Something is wrong with the battery or the charger. Contact Litheli Customer Service.

## CHARGING A HOT OR COLD BATTERY PACK

If the battery pack is out of the normal temperature range, the red LED will shine and the green LED will go off. When the battery pack cools down to approximately 135°F (57°C) or warms to more than 37°F (3°C), the charger will automatically begin charging.

## DEFECTIVE BATTERY PACK OR CHARGER

If the charger detects a problem, the red LED will begin flashing and the green LED will go off.

- If registering as defective, remove and reinsert the battery pack in the charger. If the LEDs still read “defective” a second time, try charging a different battery pack.
- If a different battery pack charges normally, dispose of the defective battery pack (refer to the instructions in the battery pack manual).
- If a different battery pack also indicates “defective”, unplug the charger and wait until the red LED goes out, then reconnect the plug to the power supply. If the red LED on charger still displays defective, the charge may be defective.

## MAINTENANCE

**⚠WARNING:** To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.

**⚠WARNING:** When servicing, use only identical Litheli replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician.

**⚠WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. to come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Charger doesn't work. LED flashes red or all the LEDs turn off.	Battery pack or charger is defective or bad connection between the battery pack and charger.	Try to remove and reinsert the battery pack in the charger.
		Try charging a different battery pack.
		Unplug the charger and wait until the red LED goes out, then reconnect the plug to the power supply.
Charger doesn't work and LED shines red.	Battery pack is too hot or too cold.	Allow the battery pack to reach normal temperature. Charging will begin when battery pack returns to 37°F(3°C)-135°F(57°C).

## WARRANTY

### Litheli WARRANTY POLICY

- 3-year limited warranty on Litheli outdoor power equipment and power tools for personal, household use.
- 1-year limited warranty on Litheli battery packs and chargers for personal, household use.

Please contact Litheli customer service at [service@litheli.com](mailto:service@litheli.com) any time you have questions or warranty claims.

### LIMITED WARRANTY SERVICE

FOR THREE YEARS from the date of original retail purchase, this Litheli outdoor power equipment and power tools are warranted against defects in material or workmanship. Defective product will receive free repair or will be exchanged.

FOR ONE YEAR from the date of original retail purchase, the Litheli battery pack and charger are warranted against defects in material or workmanship.

Defective product will receive free repair or exchanged.

1. This warranty applies only to the original purchaser from an authorized Litheli shop and may not be transferred.
2. The warranty period for any Litheli product, battery pack and charger used for residential only.
3. The warranty period for routine maintenance parts, such as, but not limited to, blades, trimmer heads, chain bars, saw chains, belts, scraper bars, blower nozzles, and all other Litheli accessories is 90 days for residential purpose.
4. This warranty does not cover the damage resulting from modification, alteration or unauthorized repair.
5. This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse (including overloading of the product beyond capacity and immersion in water or other liquid), accidents, neglect or lack of proper installation, and improper maintenance or storage.
6. This warranty does not cover normal deterioration of the exterior finish including but not limited to scratches, dents, paint chips, or to any corrosion or discoloring by heat, abrasive and chemical cleaners.

### PRODUCT REGISTRATION

Please register your Litheli product at <https://www.litheli.com/pages/register-sn>.

For better warranty services, we recommend that you register the product within 30 days from the date of the original retail purchase.

### WARRANTY CLAIM

For warranty claims, please contact Litheli customer service. You will need to submit a registration document or proof of purchase in the form of a valid receipt that displays date and place of purchase. Replacement tools do not come with a new warranty. The original tool's warranty will continue from the original date of purchase.