

Litheli

OPERATOR'S
MANUAL

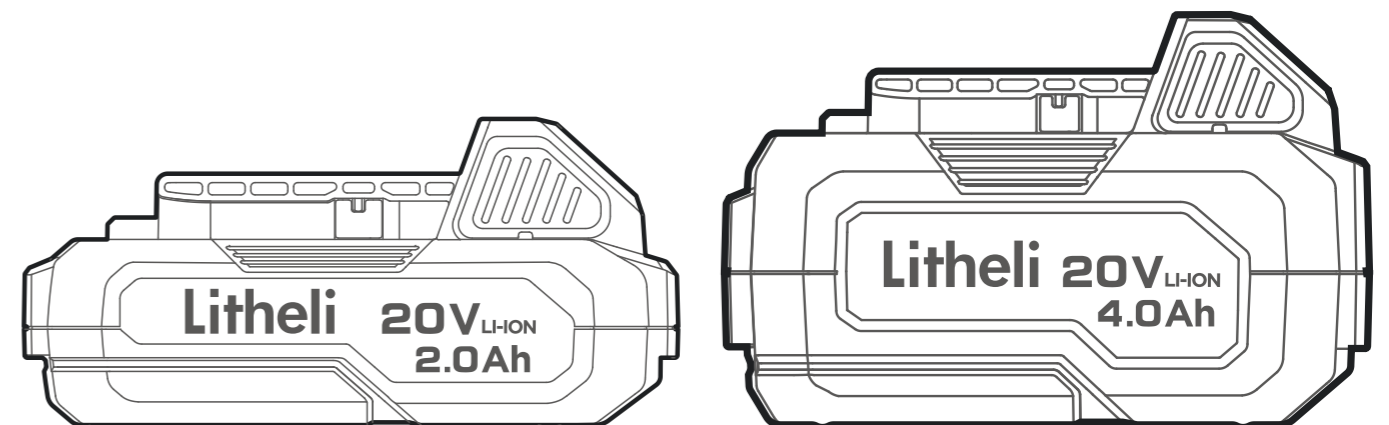
2.0Ah / 4.0Ah BATTERY PACK

E1-20BYSJ E1-20BY2SJ



www.Litheli.com

WELCOME TO A BATTERY POWERED LIFE



VISIT OUR WEBSITE @ 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.




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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
	DANGER	Indicates a hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION	Indicates a hazardous situation, which, if not avoided, may result in minor or moderate injury.
	NOTICE	(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.

	Read Operator's Manual	To reduce the risk of injury, user must read and understand the operator's manual before using this product.
	Wear Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Wet Conditions Alert	WARNING! Do not expose the unit to rain or wet conditions.
	Recycle Symbol	This product uses lithium-ion (Li-ion) batteries. Local, state, or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

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.

⚠WARNING! Risk of fire and burns. Do not recharge, disassemble, heat above 212 °F (100 °C), or incinerate. Keep battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly according to local recycling or waste regulations.

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. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
2. Use only with chargers listed below:

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

BATTERY TOOL USE AND CARE

1. Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance. Such preventive safety measures reduce the

- Such preventive safety measures reduce the risk of starting the appliance accidentally.
2. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire explosion or risk of injury.
 3. Recharge only with the chargers specified by the manufacturer. A charger that is suitable for one type of battery pack may create a rise of fire when used with another battery pack.
 4. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
 5. 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.
 6. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

SPECIFIC SAFETY RULES

1. Know your power tool. Read the operator’s manual carefully. Learn the applications and limitations, as well as the specific potential hazards related to the tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.
2. Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards when not using your battery tool or when changing accessories. Following this rule will reduce the risk of electric shock, fire or serious personal injury.
3. Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 212 °F (100°C) may cause explosion.
4. Do not dispose of the batteries in a fire. The cells may explode. Check with local codes for possible special disposal instructions.
5. Do not open or mutilate the battery. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
6. Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has been dropped or received a sharp

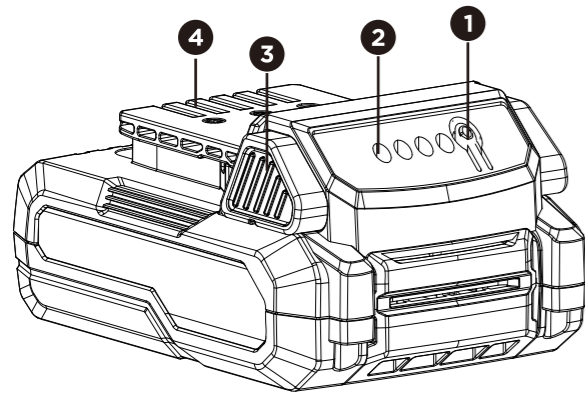
- blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
7. Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
 8. Do not charge the battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
 9. Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire. The specified temperature is greater than 41°F (5° C) and less than 104°F (40° C).
 10. Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets in your eyes, flush them with clean water for at least 10 minutes, and then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.
 11. Do not let gasoline, oils, petroleum-based products, etc. come in contact with plastic parts. These substances contain chemicals that can damage, weaken or destroy plastic.
 12. Have your battery pack serviced by a qualified repairperson using only identical replacement parts. This will ensure that the safety of the battery pack is maintained.

SERVICE

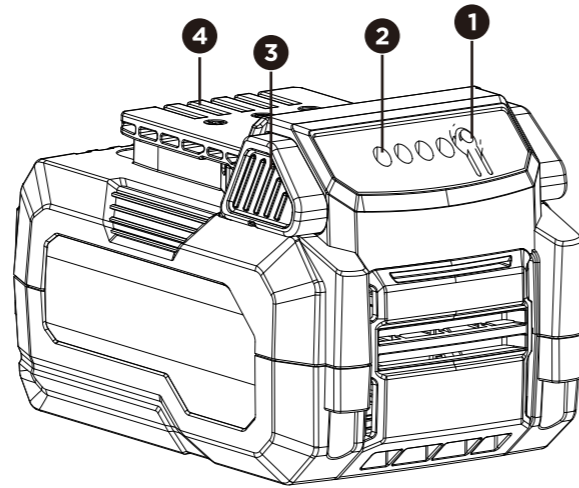
Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

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



E1-20BYSJ



E1-20BY2SJ

1. Power Button 2. Battery LED Indicators 3. Battery Pack Release Button 4. Battery Contacts

TECHNICAL DATA

SKU No.	E1-20BYSJ	E1-20BY2SJ
Item No.	D01102700	D01202900
Capacity	20V 2Ah(40Wh)	20V 4Ah(80Wh)
Weight	0.91lbs (0.42KG)	1.57lbs (0.71KG)
Recommended Ambient Temperature for Charging	41°F-104°F(5°C-40°C)	
Optimum Storage Temperature in Use	50°F-80°F(10°C-26°C)	

PACKING LIST

SKU No.	PART NAME	QUANTITY
E1-20BYSJ	2Ah Battery	1
	Operator's Manual	1
E1-20BY2SJ	4Ah Battery	1
	Operator's Manual	1

OPERATION

BATTERY INDICATOR

The battery pack is equipped with a push button for checking the charge level. Simply press the push button to read off the battery charge level from the LEDs of the battery indicator:

LED Indicator	Battery Charge Level/Working Conditions
4 lights on	75%<Charge Level≤100%
3 lights on	50%<Charge Level≤75%
2 lights on	25%<Charge Level≤50%
1 light on	10%<Charge Level≤25%
1 light flashes	Charge Level≤10%

BATTERY PROTECTION

The battery circuitry protects the battery pack from extreme temperature, overdischarge, and overcharge. To protect the battery from damage and prolong its life, the battery pack circuitry will turn off the battery pack if it becomes overloaded or if the temperature becomes too high during use. This may happen in extremely high torque, binding, and stalling situations. The battery pack will shut down with 4 LED indicators shining green together for 5s when its operating temperature exceeds 158°F (70°C), and will begin normal operation when it returns to 152°F (67°C).

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.

COLD WEATHER OPERATION

This Lithium-Ion battery pack will provide optimal performance in temperatures between 50°F(10°C) and 80°F(26°C). When the battery pack is very cold, it may “pulse” for the first minute of use to warm itself. Put the battery pack on a tool and use the tool in a light application. After about a minute, the battery pack will have warmed itself and will operate normally.

WHEN TO CHARGE THE BATTERY PACK

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

It is not necessary to run down the battery pack charge before recharging. The Lithium-Ion battery can be charged at any time and will not develop a “memory” when charged after only a partial discharge. Use the 4-LED indicator to determine when the battery pack needs to be recharged.

HOW TO CHARGE THE BATTERY PACK

Follow the instructions in the Operator's Manual for the Litheli Charger.

TO ATTACH AND DETACH THE BATTERY PACK

Follow the instructions in the Operator's Manual for the individual Litheli product.

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.

⚠WARNING: It is not recommended to use compressed dry air as a cleaning method for the battery pack. If cleaning with compressed air is the only method to apply, always wear safety goggles or safety glasses with side shields when using compressed air to clean the tool. If the operation is dusty, also wear a dust mask.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean clothes to remove dirt, dust, oil, grease, etc.

⚠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.

⚠WARNING: To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., can cause a short circuit.

BATTERIES

The battery pack is equipped with Lithium-Ion rechargeable batteries. The duration of use from each charge will depend on the type of work performed.

The batteries in this tool have been designed to provide maximum trouble-free life. Like all batteries, they will eventually wear out.

Do not disassemble the battery pack or attempt to replace the batteries. Handling of the batteries, especially when wearing rings and jewelry could result in a serious burn.

To obtain the longest possible battery life, read and understand the operator's manual.

- It is good practice to unplug the charger and remove the Lithium-Ion battery pack when not in use.

For Lithium-Ion battery pack storage longer than 30 days:
Store the Lithium-Ion battery pack where the temperature is below 80°F (26°C) and free of moisture.

- Store Lithium-Ion battery packs in a 30%-50% charged condition.
- Every six-month of storage, fully charge the Lithium-Ion battery pack.
- Exterior may be cleaned with a cloth or soft non-metallic brush.

BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING



To preserve natural resources, please recycle or dispose of batteries properly. This product contains lithium-ion batteries. Local, state, or federal laws may prohibit disposal of lithium-ion batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

⚠WARNING: Upon removal of the battery pack for disposal or recycling, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble the battery pack or remove any of its components. Lithium-Ion batteries must be recycled or disposed of properly. Also, never touch the terminals with metal objects and/or body parts as a short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

TROUBLESHOOTING

Problem	Possible Cause	Solution
The battery pack charge is reduced after more than one month of non-use.	The battery pack has automatically performed self-maintenance to extend its life.	Fully recharge the battery pack before use.
The 4-LED indicators shine green together when the battery pack is working.	The battery is too hot.	Cool the battery pack until its temperature drops below 152°F (67°C).
The battery cannot be correctly charged on the charger.	The battery pack is too hot or too cold.	Allow the battery pack to reach normal temperature. Charging will begin when battery pack itself returns to 37°F(3°C)-135°F(57°C).
	Other reasons.	Contact Litheli Customer Service.

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 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.