

15A/25A backpack battery

E60BP15/E60BP25

ANOVA

Instructions and user manual



ANOVA[®] e⁺

EN

Milesur SLU
Rúa Eduardo Pondal, nº 23 - Pol. Ind. Sigüeiro
15688 - Oroso - A Coruña - 981 696 465 - www.millasur.com





Anova would like to congratulate you for choosing one of our products and guarantee you the assistance and cooperation that has always distinguished our brand over time.

This machine is designed to last for many years and to be of great use if used in accordance with the instructions contained in the user manual. We therefore recommend that you read this instruction manual carefully and follow all our recommendations.

For more information or questions you can contact us through our web supports such as www.anova.es

INFORMATION ABOUT THIS MANUAL

Please pay attention to the information provided in this manual and on the appliance for your safety and the safety of others.

- This manual contains instructions for use and maintenance.
- Take this manual with you when working with the machine.
- Contents correct at time of printing.
- We reserve the right to make changes at any time without affecting our legal responsibilities.
- This manual is considered an integral part of the product and must remain with it in case of loan or resale.
- Ask your dealer for a new manual if it is lost or damaged.

READ THIS MANUAL CAREFULLY BEFORE USING THE MACHINE



To ensure your machine provides the best results, please read the usage and safety instructions carefully before using it.

OTHER WARNINGS:

Incorrect use may cause damage to the machine or other objects.

Adaptation of the machine to new technical requirements may cause differences between the content of this manual and the purchased product.

Read and follow all instructions in this manual. Failure to follow these instructions could result in serious personal injury.

INDEX

1. SAFETY INSTRUCTIONS
2. PRODUCT DESCRIPTION
3. TECHNICAL SPECIFICATIONS
4. INSTALLATION AND OPERATION
5. MAINTENANCE
6. TROUBLESHOOTING
7. WARRANTY
8. ENVIRONMENT
9. CE CERTIFICATE

1. SAFETY INSTRUCTIONS

1.1. General safety instructions

Important



Be sure to read and understand all safety instructions in this instruction manual, including all warning symbols before using this product. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

This battery pack has many features to make its use more efficient and convenient. Safety, performance and reliability have been given top priority in the design of this product, making it easy to maintain and operate.

Warning

Operating any power tool can cause foreign objects to enter your eyes, which may result in serious eye damage. Always wear safety glasses with side shields and a full-face shield when required before starting to use the power tool. We recommend a wide vision safety mask to be worn over standard safety glasses with side shields.

Danger

Risk of fire and burns. Do not recharge, disassemble, heat above 212°F (100°C) or burn. Keep the battery out of reach of children and in its original packaging until ready for use. Dispose of used batteries as soon as possible according to local recycling or waste regulations.

1.2. Safety symbols

This section shows and describes the safety symbols that may appear on this product. Read, understand, and follow all instructions before attempting to use this product.

The purpose of safety symbols is to draw your attention to potential hazards. Safety symbols and the explanations they contain deserve your careful attention and understanding. Warning symbols do not, by themselves, eliminate any hazard. The instructions and warnings they provide are not a substitute for proper accident prevention measures.



CE marking



Indicates a potential risk of personal injury.



To reduce the risk of injury, the user must read and understand the operator's manual before using this product. Failure to do so may result in serious injury to the operator and/or bystanders.



Always wear safety glasses or safety glasses with side shields when using this product that meet the applicable standard.



Any damaged or discarded electrical or electronic equipment must be delivered to the appropriate collection centres.
Do not dispose of power tools, rechargeable batteries/rechargeable batteries with household waste. Power tools and batteries that have reached the end of their useful life should be collected separately and returned to an environmentally friendly recycling facility. Check with your local authority for recycling advice and collection points.



Do not put or dispose of the battery in water.



Protect the battery from temperatures above 45°C.



Protect the battery from heat and fire.

1.3. General safety instructions

The term "power tool" in all warnings listed below refers to corded power tools or battery-operated (cordless) power tools.

To ensure safety and reliability, all repairs must be performed by an official dealer.

1.3.1. Safety in the work area

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

1.4. Safety in the use and care of battery-powered tools

- Prevent unintentional starting. Make sure the switch is in the off position before connecting to the battery pack, picking up or carrying the power tool. Carrying the power tool with your finger on the switch or turning the power tool on with the switch on invites accidents.
- Disconnect the battery from the power tool before making any adjustments, changing accessories, or storing power tools. These preventive safety measures reduce the risk of accidentally starting the power tool.
- Do not modify or attempt to repair the power tool or battery pack except as indicated in the use and care instructions.
- Do not use a battery or power tool that is damaged or modified.
- Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- Recharge only with chargers specified by the manufacturer. A charger that is suitable for one type of battery may cause a fire when used with another type of battery.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

- These batteries are specifically designed for use with 60V power tools. Using the batteries on any other tool can not only damage the batteries and the tool, but also create a risk of injury and fire.
- When the battery is not in use, keep it away from other metal objects such as paper clips, coins, keys, nails, screws or other small metal objects that may establish a connection from one terminal to another. A short circuit between battery terminals may cause burns or a fire.
- Under abusive conditions, battery fluid may escape; avoid contact. If accidental contact occurs, rinse with water. If fluid comes into contact with eyes, additionally seek medical attention. Battery fluid may cause irritation or burns.

1.5. Service and maintenance

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

1.6. Specific safety instructions

- Know your power tools and battery. Read the operator's manual carefully. Know the applications and limitations, as well as the specific potential hazards associated with the tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.
- Battery-powered tools do not have to be connected to an electrical outlet, so they are always in working order. Be aware of potential hazards when not using your battery-powered tool or changing accessories. Following this rule will reduce the risk of electric shock, fire, or serious personal injury.
- Do not expose a battery or power tool to fire or excessive temperatures. Exposure to fire or temperatures above 212°F (100°C) may cause an explosion.
- Do not dispose of batteries in fire. Cells may explode. Check local codes for possible special disposal instructions.
- Do not open or break the battery. Released electrolyte is corrosive and may cause damage to eyes or skin. May be toxic if swallowed.
- Do not crush, drop or damage the battery. Do not use a battery or charger that has been dropped or received a strong blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- Batteries give off toxic gases and may explode in the presence of an ignition source. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flames. An exploding battery may propel debris and chemicals. If exposed, rinse with water immediately.
- Do not charge the battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
- Follow all charging instructions and do not charge the battery or power tool outside the temperature range specified in the instructions. Charging incorrectly or at temperatures outside the specified range may damage the battery and increase the risk of fire. The specified temperature is above 41°F (5°C) and below 104°F (40°C).
- Under extreme conditions of use or temperature, battery leakage may occur. If liquid comes into contact with your skin, wash immediately with soap and water and then seek medical attention. Following this rule will reduce the risk of serious personal injury.
- Do not allow gasoline, oils, petroleum products, etc. to come into contact with plastic parts. These substances contain chemicals that can damage, weaken or destroy plastic.

- Have your battery checked by a qualified technician using only manufacturer-approved replacement parts. This will ensure that the safety of the battery pack is maintained.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you loan this tool to someone, loan these instructions to prevent misuse and possible injury.

1.7. Residual risks

▲ Important

Even if the equipment complies with the relevant product safety regulations, there may be residual risks given the characteristics of the equipment and the work for which it has been designed.

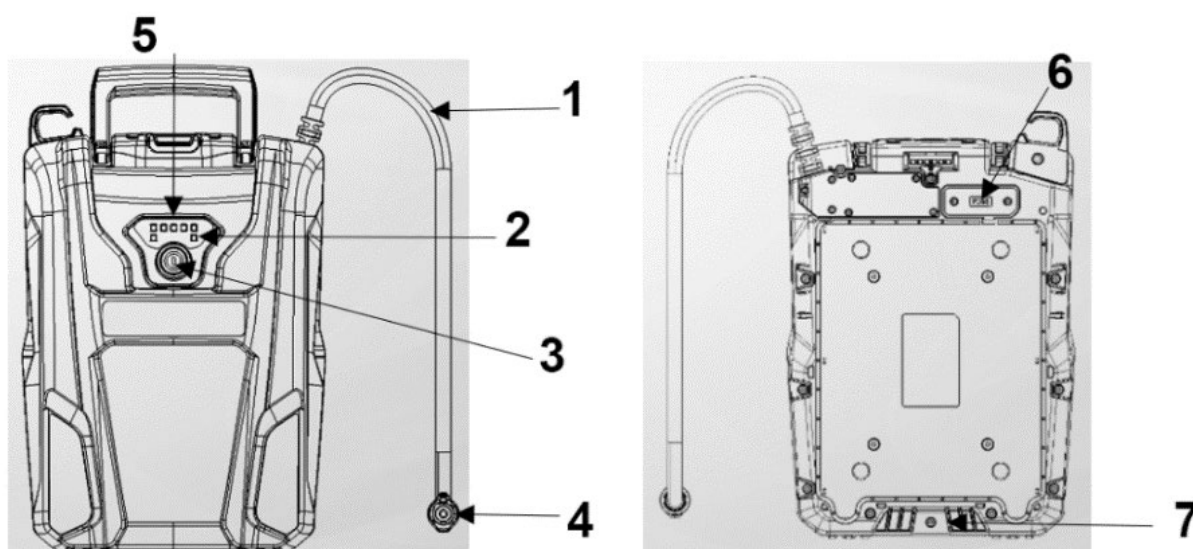
Failure to follow the instructions contained in the instruction manual may result in other residual risks due to improper use.

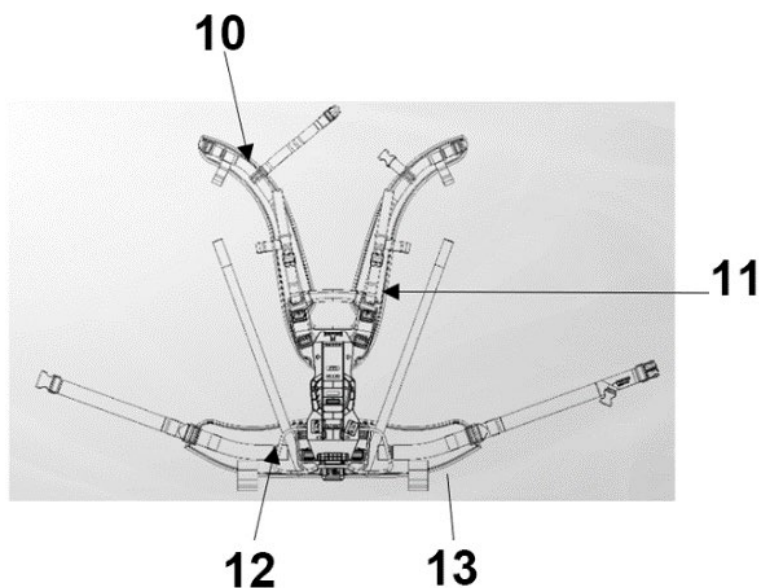
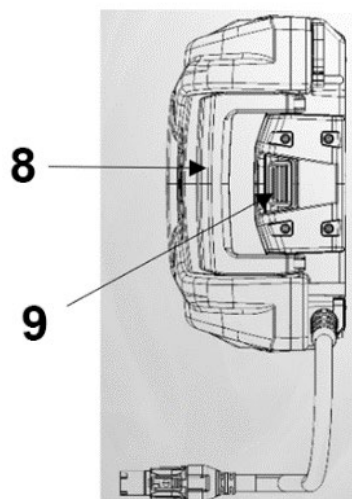
Residual risks can be minimized by following the safety instructions.

- Following these instructions and being careful will reduce the risk of personal injury and equipment damage.
- Failure to follow these safety instructions may result in injury to the operator or property damage.
- Lack of care, incorrect use or failure to follow safety rules can result in injury to hands and fingers when the wedge is in motion.
- There is a risk of electrocution if you use non-approved electrical connections.
- There is a risk of hearing loss when working with the machine without protection for long periods.

Note: Even if you take preventive measures, there may be residual risks that are not obvious.

2. PRODUCT DESCRIPTION





1. Battery cable
2. Abnormal LED indicator
3. Power indicator button
4. Battery plug
5. LED battery power level indicator
6. Fuse
7. Harness location support

8. Carrying handle
9. Harness release button
10. Shoulder strap
11. Harness frame
12. Harness support
13. Belt strap

3. TECHNICAL SPECIFICATIONS

Technical specifications	E60BP15	E60BP25
Voltage	60V	60V
Maximum capacity	900Wh	1500Wh
Charging current	Fast charge: 8A	Fast charge: 8A
	Normal load: 4A	Normal load: 4A
Loading time	Fast charge: 1.8h (approx.)	Fast charge: 3h (approx.)
	Standard charge: 3.9h (approx.)	Standard charge: 6.5h (approx.)
Operating temperature	-20°C ~ +45°C	-20°C ~ +45°C
Net weight (without cable)	6.4kg	8.1kg

Note: Due to technical product updates, this document is subject to change without notice.

4. INSTALLATION AND OPERATION

4.1. Unpacking

⚠ Attention

Make sure that you have all the materials listed. Check that the tool has not been damaged in transit. Do not discard the packing material until you have carefully inspected and used the tool satisfactorily.

Please inform the dealer or supplier immediately of any damage or missing parts, as claims submitted after this date will not be recognised.

4.2. Mounting and dismounting the backpack harness

**Optional*

To assemble (Fig. 2)

- Place the battery pack into the harness holder
- Align the harness release button with the harness mounting piece and slide it until a clear click is heard. The battery is now mounted in place.

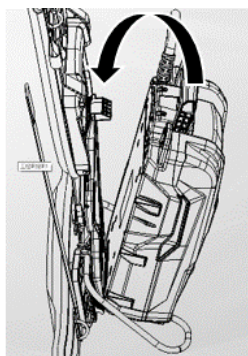


Fig.2

To disconnect (Fig. 3 and 4)

- Press the harness release button on the top of the battery until you hear a clear "click" sound, the battery will be disconnected from the harness.

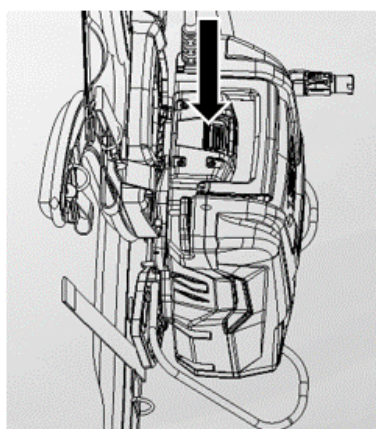


Fig.3

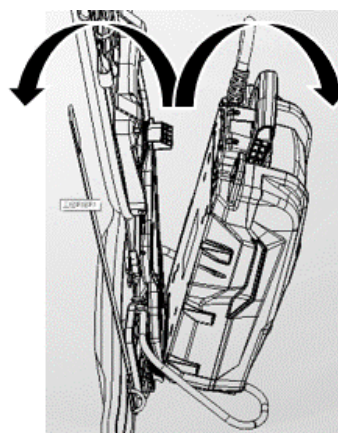
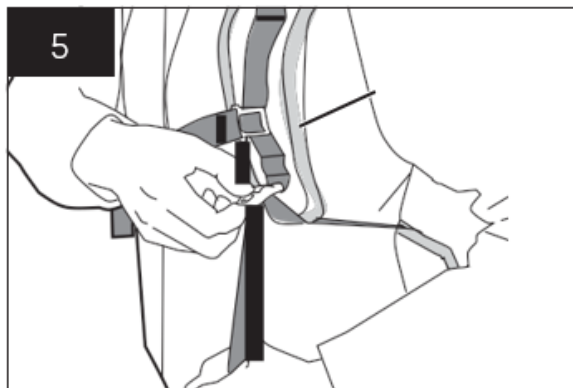


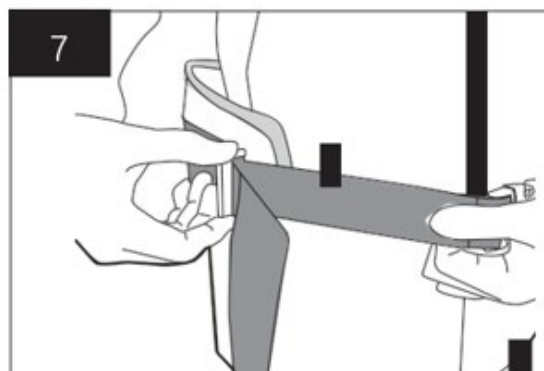
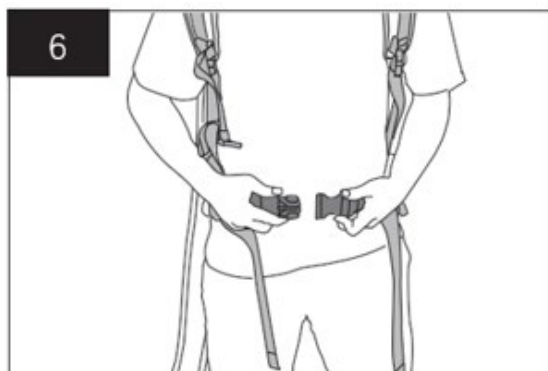
Fig4

4.3. Adjust battery harness

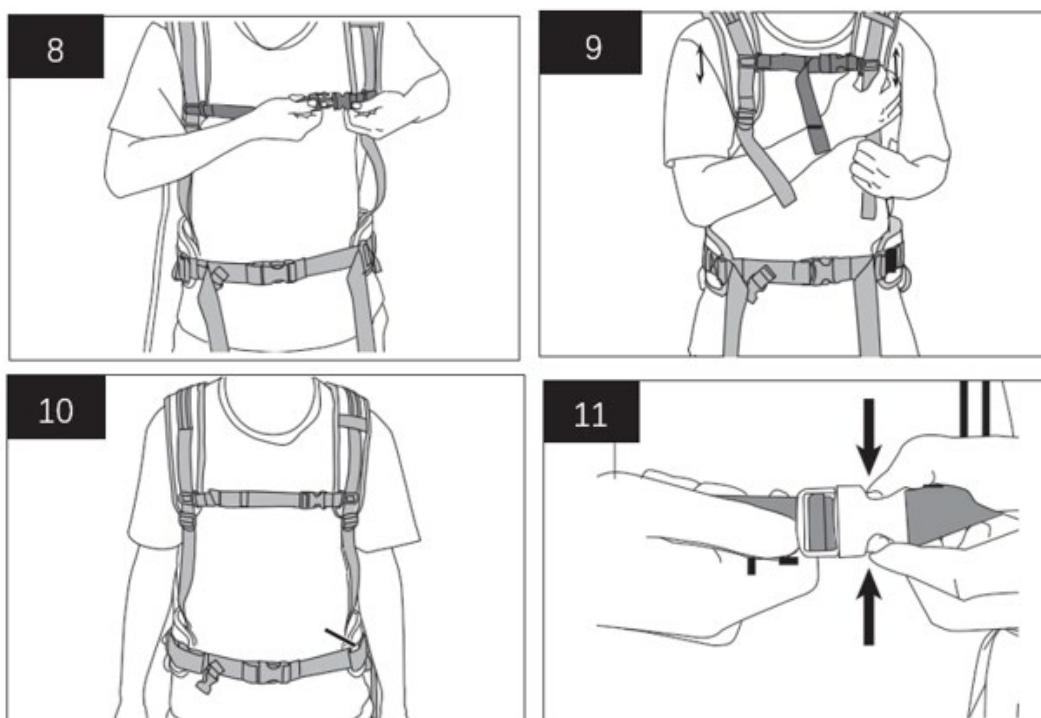
1. Put your arms through the harness shoulder straps to hold the backpack battery on your back and temporarily adjust both shoulder straps to comfortable positions, making sure your shoulders are comfortable (Fig. 5).



2. Fasten the waist buckle onto the belt strap and adjust its length so that the backpack battery is held securely on your hips (Fig. 6 and 7).
Note: The backpack battery should not be too high on your back; it should be positioned closer to your hips than your shoulders.



3. Adjust the chest buckle and adjust its length if necessary (Fig. 8).
4. Readjust the shoulder straps for added security and comfort, making sure the backpack battery sits securely on your back with the weight supported by the waist strap and without excess movement when you move (Fig. 9).
5. Insert any excess length of belt strap into the elastic on both sides (Fig. 10).
6. To disconnect the battery from your back, simply press the waist and chest buckles to release them and lower the battery from the pack (Fig. 11).



⚠ Warning

When an emergency occurs, release the chest and waist buckles immediately to remove the backpack strap on each side, which is a quick release method.

4.4. Connecting and disconnecting the battery from the tool

Follow the instructions in the operator's manual for each corresponding product.

⚠ Attention

To avoid serious personal injury, always disconnect the battery pack from the tool when cleaning or performing any maintenance. Use only manufacturer-approved replacement parts. Use of any other parts may create a hazard or cause damage to the product. To ensure safety and reliability, all repairs should be performed by an authorized dealer.

4.5. Backpack battery LED indicator

This lithium-ion backpack battery is equipped with a 5-LED battery power level indicator and an abnormal LED indicator to display the battery power level and error.

When in use:

- Press the power indicator button on the battery to display the battery power level or battery status.
- The 5 LED indicator will light up one by one from right to left, after all LED indicators are solid green, then the LED indicator will light up as below and turn off after 10 seconds. A dead battery causes no LED to light up.
- The display can also be used during battery discharge. Short press the power indicator button to display the LED indicators.

Charging/battery status	5 LED indicator					Illustration
	LED#5	LED#4	LED#3	LED#2	LED#1	
0%-5%						Continuous green
5%-15%						Continuous green
15%-35%						Continuous green
35%-70%						Continuous green
70%-100%						Continuous green
<5%						Flashing green
Abnormal temperature error						Flashing green

Note: For abnormal LED indicator, please refer to troubleshooting.

4.6. Battery protection

The battery circuit protects the battery from extreme temperatures, overcharging, and discharging. To protect the battery from damage and prolong its life, the battery circuit will shut down the battery if it becomes overcharged or if the temperature becomes too high during use. This can occur in situations of extremely high torque, stalling, or similar.

When charging, the battery will automatically shut off and all segments of the 5 LED battery level indicator will turn off when the temperature is higher than 60°C or lower than 10°C. Allow the battery to reach normal temperature. Charging will start when the battery returns to normal.

When discharged, the battery will automatically shut off when the temperature is higher than 60°C or lower than 10°C. All 5 LEDs will glow green for 10 seconds when the power level indicator button is pressed. The battery will start to operate normally under both conditions when the temperature returns to normal and the power tool is restarted.

No battery heating activity is permitted under any circumstances.

5. MAINTENANCE

Warning

When performing maintenance, use only manufacturer-approved replacement parts. Use of any other parts may create a hazard or cause damage to the product.

All maintenance, except for the items listed in these maintenance instructions, must be performed by your authorized dealer. If in doubt, do not perform any maintenance without first consulting your dealer.

To reduce the risk of fire, personal injury, and product damage due to short circuit, never immerse your tool, battery pack, or charger in liquid or allow liquid to flow into them. Corrosive or conductive fluids such as sea water, certain industrial chemicals, and bleaches or products containing bleach, etc., may cause a short circuit.

⚠ Danger

Insufficient maintenance and care can lead to accidents and unforeseen injuries. Repairs and work required for the correct use of the machine must be carried out by qualified and authorised personnel. For more extensive maintenance or repairs, hand the machine over to your authorised dealer. Repairs to power tools must be carried out by a specialist service.

Note: If you have any questions or problems persist, please contact your dealer or service center.

5.1. Batteries

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

The batteries in this manual have been designed to provide maximum trouble-free battery life. Like all batteries, they will eventually wear out. To get the longest possible battery life, please read and understand the manual carefully.

⚠ Attention

Do not disassemble the battery pack or attempt to replace battery cells. Handling batteries, especially when wearing rings and jewellery, could result in serious burns.

It is good practice to unplug the charger and remove the backpack battery from the charger when not in use.

For long-term storage of the lithium-ion battery: Store the battery in a place where the temperature is below 26°C and free from moisture.

- Store lithium-ion battery packs with a charge of 30% to 50%.
- The exterior can be cleaned with a cloth or a soft non-metallic brush.

5.2. Cleaning

- Disconnect the battery cable from the tool and turn off the battery.
- 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 a clean cloth to remove dirt, dust, oil, grease, etc.
- Never allow brake fluids, gasoline, petroleum-based products, penetrating oils, etc., to come into contact with plastic parts. Chemicals can damage, weaken, or destroy plastic, which may result in serious personal injury.

5.3. Transport and storage

- Packaging protects the machine from damage during transport.
- To transport the backpack battery, wrap the product in its packaging for added protection.

- Do not carry the battery connected to the tool to avoid accidental starting.
- For storage, keep the battery away from toxic and harmful gases and materials to avoid personal injury.
- Store the battery in places away from children, unqualified persons and in spaces free from moisture and rain.
- Keep parts of the packaging out of reach of children and dispose of them properly.

5.4. Correct disposal of the battery pack

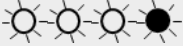
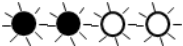
Regarding battery pack removal and preparation for proper recycling:

- If your device is no longer useful or needed in the future, do not dispose of it with household waste, but rather in an environmentally friendly manner.
- Dispose of the device at an appropriate collection/recycling point. This allows plastic and metal parts to be separated and recycled. Information on the disposal of materials and devices is available from your local authority.
- Batteries should not be thrown into household waste. As a consumer, you must dispose of obsolete batteries correctly. Batteries should be removed and disposed of properly at the end of the life of your device.
- Electrical appliances cannot be thrown into household waste.
- Any damaged or discarded electrical or electronic devices must be delivered to the appropriate collection centers.

Warning

When removing the battery pack for disposal or recycling, cover the battery pack terminals with strong adhesive tape. Do not attempt to destroy or disassemble the battery 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 occur. Keep away from children. Failure to follow these warnings could result in fire and/or serious injury.

6. TROUBLESHOOTING

Abnormal LED indicator (Red color only)		Cause	Solution
	3 long flashes + 1 short flash	Front sampling error	Check open circuit Replace U3
	3 short flashes + 1 long flash	NTC disconnection	1. Check if the temperature line contact is poor. 2. Check whether the ground voltage of the 4 middle test points NTC0/NTC1/NTC2/NTC3 is within the range (normal range: 0°C-60°C/voltage is: 0.8V-2.3V)
	1 long flash + 1 short flash	Low voltage	Ensure timely charging in case of normal low voltage discharge
	1 long flash + 3 short flashes	Short circuit protection	There is a short circuit on the power side, it is necessary to exclude the short circuit problem.
	1 long flash + 4 short flashes	Over current discharge	There is a discharge overcurrent phenomenon on the power supply side, which reduces the load power and requires re-plugging.
	2 long flashes + 1 short flash	COM Error	1. Check that the COM line has no bad contact 2. Replace the power supply device or charger that has been the problem and then replace the battery to protect the motherboard.
	2 short flashes + 1 long flash	High temperature discharge	Let the battery cool down until it is below 60°C, restart
	2 short flashes + 2 long flashes	Low temperature discharge	Let the battery warm up to above -10°C, restart
	1 long flash + 2 short flashes	Cell error	1. Make sure each battery cell is connected correctly 2. Make sure the voltage difference between each battery cell is within 1V 3. Make sure the voltage of the lowest section of the battery cell increases during 10 minutes of charging. 4. Replace the motherboard 5. Replace the battery cell

Note:

 → Long flash, lasting 1 second.

 → Short flash, lasting 0.2 s.

Abnormal indicator repetition period: about 1.6s

Problem / symptom	Possible cause	Possible solution
Power tools do not work	- There is no electrical contact between the power tool and the battery. - The battery is dead. - The battery or power tool is too hot. - The battery cable or plug is not working. - The voltage of a battery cell is below the lowest protection voltage.	- Reconnect the battery to the power tool. - Charge the battery. - Cool the battery pack or power tool until the temperature drops below 60°C and restart the power tool. - Contact an authorized dealer for repair. - Charge the battery immediately.
The battery cannot be charged	- The battery temperature exceeds or drops below the specified charging temperature range. - There is no electrical contact between the battery and the charger. - The connection between the charger and the power supply fails.	- Allow the battery to reach normal temperature and charging will begin again. - Place the battery back into the charger. - Reinsert the charger plug into the power supply.
5 LED indicators turn off during charging	- The battery is too hot. - The battery may be defective.	- Allow the battery to reach normal temperature and charging will begin when the battery returns to 3°C - 57°C. - Observe the LED indicator on the charger. If the RED LED is flashing or off, the battery is defective.

7. WARRANTY

If your product suffers from a manufacturing defect during the established warranty period, please contact or go to your point of sale directly with the necessary documentation.

Your purchase invoice should be retained as proof of the date of purchase. Your tool must be returned to your dealer in an acceptable, clean condition, in its original molded case, if applicable to the unit, accompanied by your appropriate proof of purchase.

7.1. Warranty period

The legal warranty period for the product begins on the original date of purchase by the first initial buyer and its duration will be that established by the Royal Decree-Law on the protection of consumers and users against situations of social and economic vulnerability of the year corresponding to the time of acquisition of the product.

Some countries do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of consequential or incidental damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country.

7.2. Exclusions

This warranty does not cover product damage or performance problems caused by:

- Natural wear and tear.
- Misuse, neglect, careless operation or lack of maintenance.
- Defects caused by incorrect use, damage caused by manipulations carried out by personnel not authorized by Anova or use of non-original spare parts.
- Defects in normal wear parts such as bearings, brushes, cables, plugs or accessories such as drills, bits, saw blades, etc.
- Damage or defects resulting from abuse, accidents or alterations.
- Incorrect use and storage (explicit reference that the rules described in the operating instructions have not been complied with).
- Customer-caused wear (e.g. broken saw blades, worn carbon brushes, etc.).
- Wear and secondary damage due to lack of maintenance, repair, lubricants (e.g. overheating damage due to blocked cooling slots, bearing damage as a result of dirt, frost damage, etc.)
- Damage as an obvious result of overuse/overloading.
- Damage caused by inappropriate supplies (e.g. incorrect fuel)
- Load-induced breakage of housing components or accessories due to abnormal stress
- Load-induced deformation of housing components or accessories due to abnormal stress.
- Damage resulting from the operation of supplies that are overfilled or leak due to improper storage, inappropriate cleaning agents, or other damaging chemical components.
- Damage due to improper exposure to extreme temperatures (e.g. freeze fractures, thermal deformation of components, etc.)
- Damage from permanent exposure to ultraviolet radiation.
- Damage caused by inadequate maintenance.
- Any damage caused by failure to comply with the instruction manual
- Any product that has been attempted to be repaired by an unqualified professional.
- Any product connected to an inadequate power source (amps, voltage, frequency).
- Any damage caused by external influences (water, chemicals, physical, shocks) or foreign substances.
- Use of unsuitable accessories or parts.
- It does not include defects in normal wear parts, nor does it cover damage or defects resulting from abuse, accidents or alterations, nor transportation costs.

The warranty is also void if the product has been altered or modified, or if the trademark/serial number on the machine has been defaced or removed.

Routine maintenance, tune-ups, adjustments or normal wear and tear are not covered under this warranty.

This manual does not cover all possible situations regarding warranty exclusions, for more information please contact your nearest Anova dealer.

7.3. In case of incident

The warranty must be correctly completed with all the requested information and accompanied by the purchase invoice.

Anova reserves the right to reject any claim where the purchase cannot be verified or where it is clear that the product was not properly maintained (maintenance, ventilation slots cleaned, lubrication, carbon brushes regularly maintained, cleaning, storage, etc.).

Private use means personal household use by an end consumer. Commercial use means all other uses, including uses for business, income-generating or rental purposes. Once the product has been used for commercial use, it will henceforth be considered a commercial product for the purposes of this warranty.

These are our standard warranty terms, but occasionally there may be additional warranty coverage not determined at the time of publication. For more information, please contact your nearest official Anova dealer or visit www.millasur.com.

Warranty service is only available through official Anova dealers. You can locate your nearest dealer on our dealer map at www.anova.es.

8. ENVIRONMENT



Protect the environment. Recycle the oil used by this machine by taking it to a recycling center. Do not pour used oil into drains, soil, rivers, lakes or oceans.



Dispose of your machine in an environmentally friendly manner. Machines should not be disposed of with household waste. Their plastic and metal components can be sorted according to their nature and recycled.

The materials used to package this machine are recyclable. Please do not throw the packaging into your household waste. Dispose of this packaging at an official waste collection point.

Batteries should not be thrown into the trash. At the end of your machine's lifespan, batteries or chargers should be removed from the equipment and disposed of separately.