56V FREQUENTLY ASKED QUESTIONS

1. What are the costs of purchasing and running battery products compared to gasoline products?

The upfront purchase price of battery product, including a battery and charger is often more than the cost of a comparable gasoline product. However, operating costs are lower since there is no fuel or oil required for operation. Battery equipment also requires less maintenance, which further offsets the initial higher investment costs of battery-powered equipment, products and services.

2. What is the difference between Lithium batteries and Lithium-Ion batteries?

A lithium-ion battery is designed to be recharged, whereas the lithium battery cannot be recharged.

3. What are the advantages of Lithium-Ion batteries?

Lithium-ion batteries have higher energy density, which provides more power with less weight.

4. Does a higher voltage rating mean more power? (e.g., 40V, 60V, 80V? Are more volts better?)

Power is defined as amount of work performed during a period of time. Battery voltage is only one part of the power equation. Volts do not equal power. Other parts of the power equation include motor type, motor efficiency, quality of motor components, magnet quality, magnet quantity, and also the programming parameters each manufacturer programs into their tools.

5. What does Ah mean? How does it affect power and/or run time?

Ah is an abbreviation for ampere-hour (often abbreviated to amp-hour). This is the total amount of charge a battery can deliver in one hour. A power tool that continuously draws 1.0A of current will completely drain a 1.0 Ah battery pack in one hour (under ideal conditions). Simply put, a pack
with a higher amp-hour rating contains more energy than a pack (of the same voltage) with a lower amp-hour rating. If you're considering a battery for a tool that requires a lot of power or torque to be effective, then a higher Ah battery would be a plus as you'll get more run time from the battery. If it's a light-duty tool, then a lower Ah battery will be just fine as it won't need to draw as many amps to work well, with the added plus of being less expensive and lighter in weight.

6. How is the power of a battery calculated?

The amount of energy stored in a battery is specified in Watt-hours (Wh). A Watt-hour is the voltage (V) that the battery provides multiplied by how much current (Amps) the battery can provide for some amount of time (generally in hours). Voltage * Amp hours = Wh.

Example:

60V x 5.0Ah = 300Wh

18V x 12.0Ah = 216Wh

Even though the above 18V battery example has a higher Ah rating, the voltage is lower, and the overall amount of energy stored in the battery is less.

7. How do I choose the right battery for the job?

When choosing which battery to use on your tool, there's really only one thing you need to consider: How much run time do you need? It is best to pick the battery size that provides the level of runtime needed for your task.

8. What is the average runtime for ECHO 56V BATTERY-POWERED BLOWER?

Blowers operate in very high load applications, and runtime can vary drastically based on how the user operates the unit. For example, the DPB-2500 with a 2.5Ah battery being operated on non- stop turbo mode will run for approximately 9 mins, 15 mins on high speed and up to 90 mins on low speed.

9. What is the average runtime for ECHO 56V BATTERY-POWERED HEDGE CLIPPER?

Hedge clippers operate in very light load applications, which can provide some of the longest runtimes out of any handheld battery-powered equipment. For example, the DHC-2300 can operate up to 90 mins with 2.5Ah battery and up to 180 mins with 5.0Ah battery. The lighter the application loads, the longer the runtime.

10. What is the expected run time for ECHO 56V BATTERY-POWERED LINE TRIMMER?

Trimmers can be used in a wide range of applications from trimming light grass where a lawnmower can't reach, such as around a downspout, decks, sheds, etc. to high load applications like heavy brush removal or ditch line clearing. Runtimes will vary drastically based on the amount of load that is applied to the tool. For example, the DSRM-2100 can operate up to 56 mins with 2.5Ah battery and 112 mins with 5.0Ah battery. The "up to" times are under light trimming conditions. As operating load increases, runtimes will decrease. The DSRM-2600 can operate up to 26 mins with 2.5Ah battery and 52 mins with 5.0 Ah battery, also under light trimming application.

11. What is the average number of cuts that you can make with ECHO 56V BATTERY-POWERED CHAINSAW?

The biggest influence on the number of cuts that can be completed with a battery-powered chainsaw, per battery charge is the chain sharpness. Always ensure your chain is properly sharpened. Dull chain requires the chainsaw to work harder, increasing the cutting load and drastically reducing the number of cuts you can get from a single charge. For example, with a sharp chain the DSC-5000, with 5.0Ah battery can make up to 200 cuts on a 6”x6” log, whereas the DCS-2500T can make up to 60 cuts on a 4”x4” log.

12. What is the expected run time for ECHO 56V BATTERY-POWERED LAWN MOWER?

Conditions that can affect runtimes for lawnmowers include height of grass, grass type, moisture level of the grass, and mowing style such as bagging, mulching or side-discharging. Also, terrain such as slopes can have an effect on run times when using a self-propelled feature. The DLM-2100SP will mow up to 70 mins or 1/3 acre on (1) 5.0Ah battery. Up to 140 mins or 2/3 acre with (2) 5.0 Ah batteries & up to 35 mins with (1) 2.5Ah battery or 1/6 acre. These runtimes are based on regular weekly lawn maintenance cutting applications.

13. HOW fast will the ECHO STANDARD CHARGER fully charge a battery?

Recharge time: 2.5Ah battery: 75 min.
5.0Ah battery: 150 min.

14. HOW fast will the ECHO RAPID CHARGER fully charge a battery?

Recharge time: 2.5Ah battery: 38 min.
5.0Ah battery: 75 min.

15. What is the proper way to store the ECHO 56V product and battery when not in use?

When storing the product for long periods of time, ensure that the following preparations for storage are carried out. Do not store your tool without performing protective storage maintenance which includes the following:

- Remove battery from tool.
- Cover battery compartment.
- Store tool in a dry, dust-free place, out of the reach of children.
- Store in temperatures between 32°F (0°C) and 113°F (45°C).
- If battery is stored for longer than six months, charge it to 100% capacity.

16. How do I transport ECHO LITHIUM-ION BATTERIES?

When battery is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, and jewelry like rings, & bracelets or any other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together will damage the battery.

17. How do I ship ECHO LITHIUM-ION BATTERY?

Check with your local carrier for shipping requirements.

18. How can I recycle ECHO LITHIUM-ION BATTERIES?

ECHO pre-pays into the battery recycling program offered by the Rechargeable Battery Recycling Corporation (RBRC). Each ECHO 56V battery carries the RBRC Recycle Logo and Phone number. You can call or locate a recycling drop off location by contacting RBRC at:

- www.call2recycle.org
- 1.877.2.RECYCLE

19. How can I tell the percentage of charge left in the battery by the LED lights?

- Four green lights = 80-100%
- Three green lights = 65-80%
- Two green lights = 45-65%
- One green light = 25-45%
- One blinking green light = 10-25%
- No lights = under 10% capacity, and battery should be charged as soon as possible

20. What temperature should I charge the battery in?

Ideal charging temperature: 40ºF (4°C) to 104ºF (40°C)

21. What temperature can my tool be operated in?

The range of ambient temperatures varies by tool, but for most tools the range is 14ºF (-10°C) to 113ºF (45°C). This may vary based on usage and condition of tool.

22. What do the different lights on the charger indicate?

With the battery installed, flashing green light battery is charging, solid green light battery is fully charged, flashing red light, defective battery or charger. Solid red light, battery is too hot or too cold to charge, adjust battery temperature as needed.

23. How long will my battery last, charges and discharges before I notice a degradation of the battery capacity?

It depends on type of tool, application and charger type being used. Batteries average 900+ charge cycles before reduced run time could be experienced.

24. What is MAXOUT™ technology?

MAXOUT™ technology is a software feature in the DCS-2500T, DSRM-2600, DSRM-2600U and DPAS-2600SB that enables the power output to stay consistent as the battery discharges, similar to a gas-powered tool where power is consistent until it runs out of gas.

25. Should I leave my battery on the charger when not in use?

No. Once charging is completed, ECHO recommends that the user remove the battery from charger and unplug the charger from the outlet.

26. What should I do if I have a defective tool and/or battery?

Bring your tool, battery, and charger to an authorized ECHO dealer for inspection.

27. What is the advantage of a brushless motor over motors with brushes?

Brushless motors are very durable, are quieter than brush motors, are more efficient and require less maintenance.

28. Can batteries stay in the tool for extended storage, is there any voltage draw?

ECHO recommends removing batteries and covering the battery compartment. While at rest Voltage Draw is minuscule, ECHO recommends storing the battery separate from the tools.

29. When is the best time to charge the battery?

ECHO recommends that the battery be charged after it is fully depleted and no longer powers the tool.

30. What is the best way to clean dirty tools/batteries?

Use compressed air or a soft bristle brush to remove debris from battery and battery compartment.

31. Is there any maintenance needed on tools and batteries?

Each tool requires different levels and intervals of maintenance. Example: chainsaws require maintenance for the bar and chain, while lawnmowers have a blade that requires sharpening, and some trimmers require gearcase and driveshaft maintenance. It is best to see your owner's manual for easy-to-follow steps on how to properly maintain each tool.

32. Can I operate battery-powered tools if I have a pacemaker?

The components of this machine generate an electromagnetic field during operation, which can interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemakers should consult with their physician and the pacemaker manufacturer before operating this machine. In the absence of such information, ECHO does not recommend the use of this machine by anyone who has a pacemaker.