

# EDISON POWER TOOL BATTERY INVERTER USER MANUAL

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Thank you for purchasing a MillerTech product from LDSreliance! You have made an investment in a unique inverter that will give you the flexibility, portability, and power to run AC devices anywhere you need to go. While the operation of this device is straightforward, we have compiled this manual to address some common questions and concerns that may come up as you begin to use your inverter. If you have any questions or issues that are not addressed herein, please contact LDSreliance at 405-824-3570 or MillerTech at 855-MAX-LITH.

# **Table of Contents**

Unboxing & Inspection	
Compatibility of Batteries	3
Milwaukee	3
DeWalt	3
Makita	3
Operation	4
Battery Installation	4
Turning On The Inverter	4
Battery Hot Swapping	4
Troubleshooting	5
Basic Troubleshooting	5
Checking Or Replacing Fuses	5
More Information	6
Devices To Avoid	6
Best Practices	6
FAQ	7
Specifications	8
Warranty & Support	9
Reference Materials & Undated Manuals	10

# **Unboxing & Inspection**

Please inspect the box for shipping damage before using your inverter. If the packaging is damaged, look for any signs of physical damage to the inverter such as a dented case, broken battery socket(s), or cracked LED screen.

Inside the box should be the inverter itself and a plastic bag with some spare fuses.

# **Compatibility Of Batteries**

#### Milwaukee & DeWalt

For the Milwaukee and DeWalt version of the inverter, the battery socket(s) on top of the inverter will work with any M18 18V Milwaukee power tool battery or any 20V DeWalt power tool battery. In addition, the FlexVolt series of DeWalt batteries will also work.



#### Makita

For the Makita version of the inverter, the battery socket(s) will work with any 18V LXT power tool battery.



## **Operation**

#### **Battery Installation**

Your power tool batteries will slide into the socket(s) on top of the inverter just like they do into your power tools. The battery should click and lock in place when installed correctly.

To remove the battery, simply push the release button on the battery and slide the battery out of the socket.

### **Turning On The Inverter**

With a battery or batteries installed, simply push the power switch on the front of the inverter to allow power to flow from the battery(s) to the inverter. The inverter should make a chirping sound when it first turns on. The LED screen will then turn on and begin to cycle between two different displays. The first display is for voltage and will be in the format of b20.0 or something similar. The second display is for the frequency of the AC output and will be in the format of F117 or something similar. At this point the AC outlet and USB port will be live and ready to deliver power.

### **Battery Hot Swapping**

For dual socket models, it is possible to hot swap a single battery while another is still installed. In other words, with two batteries installed on the inverter, you can remove one of them without interrupting power to the inverter. The exception to that would be if the inverter is providing close to its power limit through the AC outlets, which is 600W, then a single battery may not be able to continue to provide that much power. But for all but max power applications, you should be able to pull a drained battery out and replace it with a fresh battery if you need to do so.

## **Troubleshooting**

#### **Basic Troubleshooting**

If the inverter will not provide power at all but the LED display is lit up and cycling through the two displays, make note of the two displays. The voltage, or number that starts with a b, should be at least 17.0. If not, please recharge your battery(s).

If the voltage is within spec, turn off the inverter and disconnect the battery(s). Then reinstall the battery(s) and turn on the inverter. If the problem continues, contact support.

If, at any point, the LED display shows an unusual number or series of numbers, such as f3.00, please do not use the inverter and contact support. Write down the numbers that flash on the LED screen and give them to support.

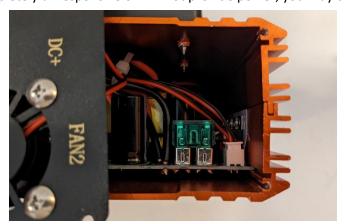
If the ALM red light is on that indicates the voltage is very low. The red light turns on at 15V and the audible alarm will sound. That will continue until the voltage drops to 14.5V, at which point the inverter will shut off. If the inverter is providing a very small amount of power to a device then it may take quite a while for the voltage to drop to the cut off point. There is nothing wrong with the inverter during this period between 15V and 14.5V, it is just indicating that it will be shutting off soon.

If the audible alarm is continually making noise or beeping even with a fully charged battery, stop using the inverter and contact support.

Please note that the fan(s) do not always operate during use. There is no cause for concern unless the case gets too hot to touch.

#### **Checking Or Replacing Fuses**

If the inverter is completely unresponsive or will not provide power, you may choose to check the



fuse(s). You may also be directed to do so by tech support. Simply remove the black cover on the back side of the inverter with the fans and the fuse(s) will be visible on the circuit board on the right side.

### **More Information**

Every manufacturer rates their products in different ways. And there may be more to the rating than the average consumer is aware of. Because of this, it is not enough to simply match the power rating of your inverter with the power rating of any AC device. Some devices may draw much more than their power rating for a brief period, called a surge. The purpose of this manual is not to outline every scenario where a product may not work with your inverter. But we have attempted to outline some common uses which are problematic or scenarios to avoid to ensure that you get the most out of your investment.

#### **Devices To Avoid**

- Heat Guns (300W and 600W models only) avoid any heat guns, regardless of power rating
- Air Conditioners, Refrigerators & Compressors (300W and 600W models only) avoid devices
  with inductive compressor motors that require very high surge current to start. Some small
  dorm fridges or travel fridges may work just fine with the 600W inverter model but full-size
  units should be avoided.

#### **Best Practices**

The following are general suggestions to get the best battery life, inverter performance, and/or trouble-free operation:

- Multiple batteries are better than one if you have the dual or triple socket model, using multiple batteries will not only give you longer run time but will also discharge each battery with an equal load. This drains the batteries more slowly and less deeply, which can increase battery performance and longevity. It also allows hot swapping, should that become necessary to keep a load running continuously for long periods of time, such as a CPAP machine.
- Avoid dust and water your inverter is not designed to be operated in dusty, wet, or marine environments. Avoid using it in woodworking shops, out on a boat in the open sea, or on a rainy camping trip where the inside components of the inverter could be corroded, short-circuited, or clogged.
- Make sure any adapters can support max current While not officially supported, customers have reported success using adapters to successfully use Ryobi, Ridgid, or other brand batteries with MillerTech EDISON inverters. If you are going to do so, make sure the adapter is built to handle 30A for the 600W model or 15A for the 300W model.

#### **Frequently Asked Questions**

Q: Will there be a Ryobi, Hart, Ridgid, Craftsman, Black & Decker or any other model?

A: It has been discussed as a possibility but there are no plans in the works.

Q: Are the fans loud and/or do they run continuously?

A: The fans are triggered by heat and do not run all the time. When they do run they are not very loud.

Q: Will my DeWalt version work with the FlexVolt series of batteries?

A: Yes.

Q: My inverter looks hand made or has cosmetic defects. What gives?

A: Final assembly of each inverter is done by MillerTech in Ohio. The battery sockets are installed by hand, with a technician soldering the wires to each socket. The connections are protected by tape for extra protection against short circuits or other problems. There may be minor cosmetic artifacts or imperfections but every effort is made to give you the best quality product possible for the low price that you paid.

Q: What protections does the inverter have?

A: The inverter can protect itself against low voltage, short circuit, overload, and overcurrent.

# **Specifications**

### 1000W Models

**Battery Voltage: 16-21V** 

AC Voltage & Frequency: 120V @ 60Hz

Sine Wave: Pure Sine Wave

DC Output: None

**AC Continuous Output: 1000W** 

AC Surge Output: Not rated by manufacturer – limited by batteries and not the inverter

### 600W Models

**Battery Voltage: 15-21V** 

AC Voltage & Frequency: 120V @ 60Hz

Sine Wave: Pure Sine Wave

DC Output: 5V USB A

**AC Continuous Output: 600W** 

AC Surge Output: Not rated by manufacturer – limited by batteries and not the inverter

### 300W Models

**Battery Voltage: 15-21V** 

AC Voltage & Frequency: 120V @ 60Hz

Sine Wave: Pure Sine Wave

**DC Output:** 5V USB A

**AC Continuous Output: 300W** 

AC Surge Output: Not rated by manufacturer – limited by batteries and not the inverter

# **Warranty & Support**

Your inverter comes with a full, one year warranty. MillerTech will replace any inverter that support has determined to be defective as long as the product was purchased from an authorized reseller.

If you believe that you have a warranty issue or need support, you can contact LDSreliance at 405-824-3570 or MillerTech at 855-MAX-LITH. You may be required to perform troubleshooting steps, take pictures or video of the inverter's behavior, or replace the fuses. If support determines that your inverter needs to be replaced, you will be asked to mail the inverter back to MillerTech. Once MillerTech receives the defective unit a replacement will be shipped to you. The replacement unit may be brand new or refurbished at MillerTech's discretion and will carry the remainder of the original product warranty.

### **LDSreliance (Official MillerTech Reseller)**

Idsreliance@gmail.com

405-824-3570

### **MillerTech Energy Solutions**

855-MAX-LITH

# **Reference Materials & Updated Manuals**

Additional materials, such as video how-to's, test data, advanced instructions, and revised or updated product manuals will be made available on the web at **store.ldsreliance.com** or on the LDSreliance Youtube channel at **youtube.com/ldsreliance**.