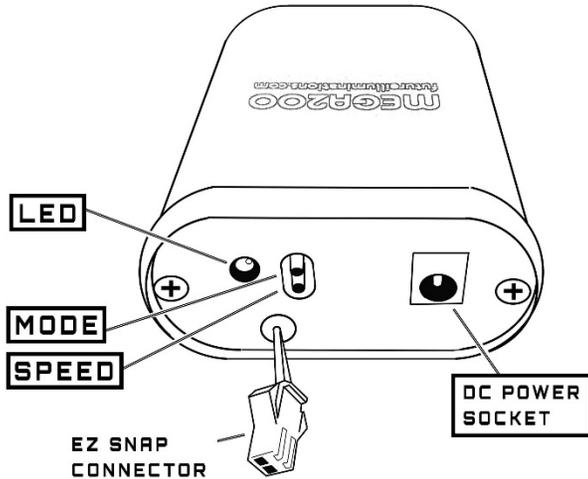


Congratulations on your purchase of a Mega EL Inverter, the only EL Inverter on the market today designed and built in the USA. Let's get started!

Front Panel



- Power Socket** - Receptacle for 12V DC in via standard 5.5mm barrel plug.
- Mode Button** - Cycles through modes
- Speed button** - Adjusts speed of Blink Mode and Fade Mode
- LED** - Flashes green, red or amber to indicate status
- EZ Snap Connector** - High Voltage AC out to electroluminescent element.

Power Supply
Always connect a load to the EZ-connector before you connect the power.
 The Mega inverter has a socket which accepts the standard 12V 5.5mm barrel plug. Do not

force the use of a connector that does not fit, it could damage the inverter.

The Mega inverter requires a robust power supply in order to operate properly. For AC wall adaptors we recommend a minimum rating of 12V 1 Amp to drive the Mega 100+, and a minimum rating of 12V 2 Amp for the Mega 200.

For battery powered operation make sure your battery can provide the current draw referenced above. Batteries can fluctuate in voltage as they go from fully charged to depleted; Do not operate your Mega inverter at greater than 15 volts, or less than 10.5 volts.

Operating modes

Always connect a load to the EZ-connector before you connect the power.

When you connect a Mega inverter to a power supply the inverter will go through a boot-up sequence, the LED will flash green 4 times. After booting up the inverter will send full power to the connected electroluminescent element.

Recommended minimum load:

Inverter	Minimum EL Wire	Minimum EL Panel
Mega 100+	20 feet	60 sq in
Mega 200	45 feet	135 sq in

The Inverter will start in Constant On Mode. The other modes are Blink Mode and Fade Mode. The mode button cycles through the modes. The speed button can be used to change the speed in Blink Mode and Fade Mode, there are 20 different speeds to choose from. Once you have reached the fastest speed, pressing the speed button will cycle back down through the speeds. A red LED flash with each button press lets you know you are descending through the available speeds.

Diagnostic mode will run if you hold down both buttons while turning on the power. A series of blinks will read out the software version number. You may be asked to use this mode by tech support.

Recommendations for Safe Operation

- Always connect the EL Panel/EL Wire load to the inverter before you connect the power.
- Never operate the inverter without any load connected, or a load below the minimum recommended above.

- Do not get the Mega Inverter wet, even if it is off.

The Mega inverter relies on passive convection cooling, the entire black case acts as a heat sink. Air needs to be able to flow freely past the case, do not operate in a sealed container or mount the inverter behind a panel.

Caution: The case will be hot after extended use, up to 160°F (70°C). It would be easy to burn yourself on the metal case at this temperature. Handle with care!

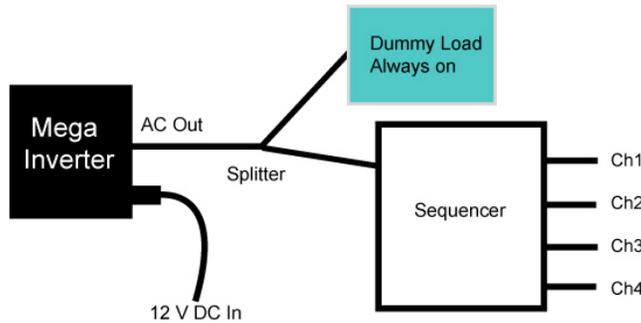
Do not operate the unit without the case intact, it will not cool properly, you could damage the inverter or shock yourself, and void your warranty.

The Mega inverter is resilient and can handle temporary overloads. For quiet operation and adequate cooling do not try to drive more than the maximum load in Constant On mode.

Inverter	Maximum EL Wire	Maximum EL Panel*
100+	100 feet	350 sq in
200	200 feet	725 sq in

* Not all EL Panels are the same, you may find that some panels will overload the inverter with less area.

If you are using a sequencer on the output of the inverter, design your system to have a dummy load at least equal to the recommended minimums so that if the sequencer shuts off all channels the inverter will still have a minimum load and will not be damaged.



Troubleshooting

The Mega inverter has a fuse to prevent excessive current draw. If the fuse blows the Mega inverter will stop working. The fuse will reset itself after cooling down. Check that your power supply is adequate.

The Mega inverter has overheat protection, it will shut itself off and blink the LED red when the internal temperature reaches 170°F (85°C). Allow the

inverter to cool down before touching it or resetting it. To reset the inverter disconnect and reconnect the power. Check that the inverter is getting adequate airflow. Check that the load is not more than the inverter can drive, you may have to remove electroluminescent elements from your array.

The Mega Inverter has reverse voltage protection. The Barrel plug should provide + to the center and -/ground to the outside wall of the plug. If the inverter will not boot up check the wiring to your 12V source.

Technical Support is available from Ellumiglow in person, on the phone or over email.

Support: 877-615-6556 | support@ellumiglow.com | 222 SE Alder St. Suite 1 | Portland, OR 97214

Product Manual: Mega 100+/200 Inverter

Version 0.4