TROUBLE SHOOTING

TROUBLE/INDICATION	POSSIBLE CAUSE	SUGGESTED REMEDY
No AC output-the Green LED light is not on	DC input below 10 Volts (12V model) DC input below 20 Volts (24V model)	•Recharge or replace battery
No AC output --inverter is cold	Poor connect with the battery.	• Disconnect load from inverter. Reconnect the unit to the battery terminals and tighten the connection.
Shut down after operating for a long time	•Over-temperature	•Disconnect the inverter and put aside for while to cool down the unit.

MAINTENANCE

Very little maintenance is required to keep the inverter operating properly.

DESCRIPTION

Peak power- Allow you to power appliances that require a large amount of initial power to work (such as many TVs and motor-power equipments).

Low Battery Alarm- the inverter sounds an audible alarm and turns itself off if the source battery becomes too low.

Auto shutdown/reset protection--- the inverter temporarily shuts itself down to protect itself from overheating.

Overload/Short Circuit Protection--- the inverter automatically turns itself off if the connected load is too high or if it shorts.

Fuse— the inverter comes with fuse/s already installed

HEAT DISPERSAL

The inverter generates heat while it is working. This is not a malfunction. However, if the inverter gets too hot while working, it will turn off by itself.

Position the inverter where air flows freely around it to allow the heat to disperse.

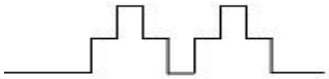
The inverter's thermal protection prevents it from operating when its temperature exceeds 140+/-9 °F (60+/-5 °C).

SPECIFICATION

Name	Description
Inverter Input	☐**12V(10-15V) DC** ☐**24V(20-30V)DC**
Inverter output	110-120VAC
Output frequency	60Hz
Output waveform	Modified Sine Wave
Continuous power	☐**800watts** ☐**1500watts**
Surge power	☐**1600watts** ☐**3000watts**
Inverter Best efficiency	Approx. 85%
Inverter no load current	<1A
Battery low alarm	☐**10.5+/-0.5V DC** ☐**22+/-0.5V DC**
Battery low shutdown	☐**10+/-0.5V DC** ☐**21+/-0.5V DC**
Thermal shutdown	140+/-9°F (60+/--5°C)
AC output socket	American socket*2
USB output	DC5V 2 Amp

INSTRUCTIONAL MANUAL

MODIFIED SINE WAVE



POWER INVERTER

☐DC12V-AC110V 800 WATT

☐DC24V-AC110V 800 WATT

☐DC12V-AC110V 1500 WATT

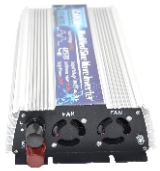
☐DC24V-AC110V 1500 WATT

ADVANCE SOFTSTART TECHNOLOGY

BACKMAN4410 or TRIPLETT 4200 must be used.

View of rear endplate:

12V 800W



1500W

View of front endplate:

RECOMMENDATION

- If the power inverter makes a beefing sound, turn OFF the power inverter and disconnect all appliances from inverter and disconnect the inverter from the power supply. The beefing sound may be the low battery warning, which indicates that the voltage of the battery power supply is getting low.
- When you are not using the inverter, turn the power switch to OFF and disconnect the inverter from the power supply.

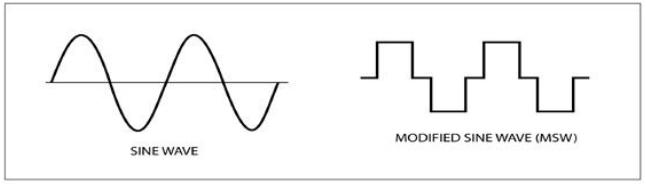
CAUTION:

THE FOLLOWINGS OPERATION WILL DAMAGE THE UNIT:

- REVERSE POLARITY BY CONNECTING THE WIRES TO THE INCORRECT TERMINALS.
- CONNECTING THE INVERTER TO POWER SOURCE GREATER THAN 15- VOLT DC (12V model) or 30V-VOLT DC (24V model).
- OPERATING THE INVERTER AND BATTERY IN OR AROUNT WATER.

MEASURING THE AC VOLTAGE

The output waveform of the AC output is a MODIFIED SINE WAVE. To measure the AC output voltage, you must have a TRUE RMS VOLTMETER.



SAFETY PRECAUTION

Do not open the case of the inverter. The high voltage inside the unit is the same type of power as our electrical outlets at home.

Do not let the cord of the inverter or any appliance's cord get wet.

Do not operate the inverter in or around water. The voltage of the unit makes electrical shock hazard if operated in wet conditions.

Keep it away from children, the inverter produces power just like your AC wall outlets at home and should be treated serious.

Allow at least 2 inch of clearance around the inverter for airflow.

If you operate the inverter in a moving vehicle, you need to secure the inverter to prevent it from shifting around while the vehicle is moving.

If there is anything wrong with the inverter, disconnect all of the power.

Your Fit4Less power inverter converts DC12-volt or DC24-volt battery power into 110 volts of AC power.

You can use the inverter to operate many types of appliances that use AC power such as TVs, VCRs, portable computers, power tools and lights for emergency use. This product is ideal for using in car, or home and office when the electricity is cut off often!

INSTALLATION

Where to install

The inverter should be installed in a location that meets the following requirements:

a. **Dry**- Do not allowing water to drop or splash onto the unit.
b. **Cool**- Ambient air temperature should be between 0 ℃ to 40℃, the cooler the better.
c. **Ventilation**- Allow at least 2 inches of clearance around the inverter for airflow. Ensure the ventilation openings on the rear and front of the unit are not obstructed.
d. **Safety**- Do not install the inverter in any compartment capable of storing flammable liquids such as gasoline.

CABLES

DC to AC inverter requires high amperage/low voltage DC power to low amperage/high voltage AC power. To operate properly connect inverter DC input terminals direct to batteries with heavier wires available. For different watts power inverter, we need different # as the connecting cables.

INVERTER QUICK HOOK UP AND TESTING

If you would like to quickly hook up the inverter and check its performance before going ahead with your installation, please follow these guidelines:

1. Unpack and inspect the unit, check to see that the power switch in the OFF position.
2. Connect the cable to the power input terminals on the rear panel of power inverter. The red terminal is positive (+) and black terminal is negative (-). Connect the cable into the terminals and tighten the wing nut to clamp the wires securely.
3. Connect the cable from the negative terminal of the inverter to negative terminal of the power source. Make a secure connection.

Caution

Loosely tightened connectors result in excessive voltage drop and many cause overheated wires and melted insulation.

4. Before proceeding further, carefully check that the cable you have just connected connects from the negative terminal of inverter to negative output terminal of power source.
5. When connecting the inverter directly to your battery terminals, it is important to connect with right polarity.

Warning:

A reverse polarity will burn the inside fuses and also some other components! Be careful for the input connection of RED cables to RED terminals and BLACK cables to BLACK terminals. You may observe a spark when you make this connection since current may flow to charge capacitors in the power inverter. Do not make this connection in the presence of flammable fumes, as explosion or fire may result.

6. Set the power inverter switch to ON position. Check the indicator in the front panel of the inverter. The Green indicator will light.
7. Set the power inverter switch to OFF position, the indicator lights may blink and the internal alarm may sound momentarily. This is normal. Plug the test load into the AC receptacle on the front panel of inverter. Leave the test load switch off.
8. Set power inverter switch to the ON position and turn the test load on, the inverter should supply power to the load. If you plan to measure the true output R.M.S. voltage of the inverter, a meter such as FLUKE 87A,