



Powers 240V appliances from a 12V automotive battery/240V AC power source

With removable colour LCD Bluetooth screen

#### Features:

- Heavy duty aluminium housing
- Removable 2.4 inch Bluetooth colour LCD display with touch screen functionality for switching main unit on/off and displays inverter input voltage, amperage, output AC wattage and also low voltage warning
- Dual 240VAC outlet
- RCD switch for short circuit protection, instantaneous output cut-off for power leakage protection and to turn 240VAC output on or off
- Automatic AC transfer switch when it have 240VAC input detected
- Highly efficient power processing with 90% efficiency
- Permanent mounting points
- Low voltage warning at 11.5V with flashing voltage reading on the voltage gauge
- Shuts down output at 11V along with visible warning on LCD screen
- Over/under voltage, output short circuit, over temperature protection
- Automatic temperature reduction with rear cooling fan
- 1 year warranty

#### Operation:

Once the inverter has been correctly installed, appliances can be plugged into the AC outlets and operated.

- Check if 240V appliance is suitable sized for inverter capacity and plug into 240V AC outlet.
- To turn on 240V AC power, switch on the RCD switch so that there is 240V AC output, and also ensure that the ON/OFF switch on LCD screen is switched to on (Blue colour).

- Whilst the inverter is in operation, you can keep the LCD screen plugged in and installed on the inverter unit or by utilising the Bluetooth connection, the display screen can be installed up to 10M away from the inverter body (display screen requires a constant 12V source of power to operate).
- when input battery voltage drops to 11V, the icon on the bottom left corner on the screen will show up on the LCD screen and the output power will shut down in order to prevent further power draw from the battery. To start inverter operation after this happens, please turn off unit then turn unit back on.
- Cooling fans will automatically come on or off as required by the internal microprocessor control system.

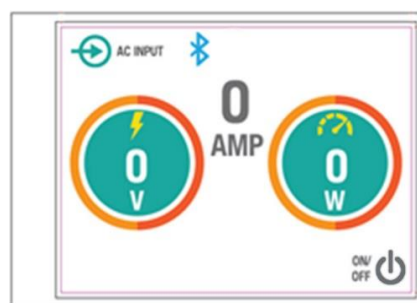
### LCD screen operation:

The LCD screen is wirelessly paired with the inverter using Bluetooth technology and the inverter main unit can be switched on/off using the touch screen button on the LCD screen. When the inverter is not in use, please switch off the main unit by touching the ON/OFF switch ( To grey colour) on the LCD screen in order to prevent current draw from the connected battery. The RCD switch only switches off AC output power and will not switch off operation of the main unit, therefore if the RCD switch is off but the main switch on the LCD screen is on, the inverter will still have residual current draw from the connected battery.

The LCD screen can be installed either directly on the inverter body or in a suitable location up to 10M from the Inverter installation location; however it requires a separate 12V DC power source to operate. Supplied with the unit are 2 types of power lead for the LCD display:

- 1 x 0.3M direct connection cable – a 0.3M cable can be pulled out from the LCD screen which can be directly connected to the inverter main unit and moved 0.3m from the main unit without requiring any 12V power, used in applications that do not have a separate power source convenient to power the LCD.
- 1 x 1.7m power cord – used to install the LCD screen at a remote location next to a 12V power source or for hardwiring the unit to ignition power.

**When the AC transfer switches from DC input to external 240VAC input, the LCD screen will not display any input voltage/ampereage/wattage, and will only display the AC input icon on the top left of the screen because the LCD screen only shows DC input information. Please see LCD screen below:**



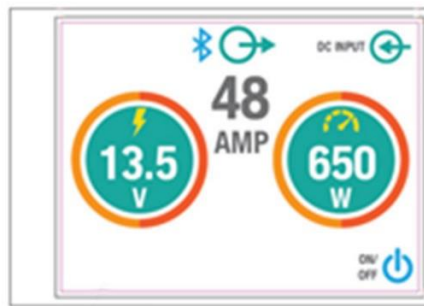
When AC input

The wireless LCD screen displays various information: output power, input voltage, input current and also has an on/off button for switching the main unit on or off. The Bluetooth icon on the top part of the screen will show up if there is signal received from the main unit, if there is no signal, the Bluetooth icon will disappear. Please see below:



When bluetooth signal off

DC input will appear on top right side of the screen if there is a battery connected to the input of the inverter. See below:



When DC input

Low Voltage Warning: Only when input battery voltage drops to 11.5V, the voltage reading will start to flash.

Low Voltage Cut-off: Only when input battery voltage drops to 11V, the icon on the bottom left corner on the screen will show up on the screen, and the output power will shut down in order to prevent further power draw from the battery.

When the ON/OFF button on the bottom right corner of the screen is pressed, the main unit will shut off (to grey colour), and the LCD screen will indicate that there is no input and output. See below:



When switch off main unit



### 2000W Inverter LCD display screen:

1. 240VAC external power input (only displayed when external 240VAC power is connected).
2. Bluetooth active icon (only displayed when the Bluetooth signal is connected).
3. Output active icon (When inverter has 240VAC load connected).
4. DC input active icon (When DC input terminal has 12V connected).
5. Input battery DC voltage reading (When battery voltage drops to 11.5V, the number will flash).
6. Output power reading.
7. Low voltage cut-off indicator (only displays when battery voltage drops to 11V).
8. Input DC current reading.
9. Touch control On/Off switch of the inverter output (Blue is on, Grey is off).
10. Manual switch to turn screen on/off.

### Replacement LCD screen unit:

If the LCD monitor is damaged or faulty, you can ask the supplier to offer new LCD monitors. After connecting power to the new monitor, please try to place the monitor as close to the main unit as possible so that the host can be paired with the monitor within a short amount of time, as soon as the the Bluetooth signal is displayed on the screen, the matching is successful. The main unit can only pair with one monitor.

### AC Transfer Switch:

When there is AC power going into the back of the unit's input AC terminals (shown below), the DC input will be bypassed and cut off within 1 second so that there will be no current draw from the DC battery, and then the 240VAC outlets at the front and the 3 output AC terminals at the back will become operational and output power. The LCD screen will display AC input mode on the top left corner and an input of 0V, 0A and 0W.



### Inbuilt Safety Protection Systems:

- **Overload Protection:** This occurs when an appliance draws capacity greater than the inverter can provide. Output AC power will be stopped. This protection state will need to be manually reset by removing the load, turning off the switch and then turning on the unit to be used again.
- **Over Temperature Protection:** If the internal inverter temperature goes above 60°C, the output will be stopped and will need to be manually reset. If this occurs remove the load, power down the device and inverter and leave the unit to cool down. Check the operation of the cooling fans and whether they are blocked or not by -dust or debris. Then turn the switch back on to begin using the inverter again.
- **Low voltage protection:** If the source battery level falls below 11.5V, the unit will emit low voltage warnings. If the source battery voltage falls below 11V, output will be stopped and the unit will need to be manually reset by removing the load, turning off the switch and then turning on the switch again. Continued operation of the inverter will only occur if the source battery voltage rises above 11.5V.

### Specifications

Specifications	HIP2000WL
Continuous Output Power	2000W
Minimum Input Voltage	11V
Output Voltage	240VAC
Output Frequency	50Hz
Output Waveform	Pure Sine Wave
AC Transfer Switch	Yes
Efficiency (Full Load)	90%
RCD Switch protection	Yes, 10A240VAC, t <sub>≤</sub> 0.1s
Input voltage range	11V-15V
Input Low Voltage Warning	11.5V
Input Low Voltage Cut-off (requires manual reset)	11V
Input over-voltage cut-off (automatically resets)	15.5V
Standby current (When main switch is off)	11mA
No Load working current (when main switch is off)	0.5A-0.6A
Output Overload protection( Manual restart)	2100W
Protection systems (Output)	Over/under-voltage protection, Overheating protection, Overload protection, Short circuit protection
LCD display functions	Displays output power, input voltage, input current and also has an on/off

	button for switching unit on/off
LCD screen extra cable length	1.7m extension cable for LCD display unit 12V power supply
Wiring kit	Yes
Input cable type	70cm AWG3 (25mm <sup>2</sup> ) 100% copper fully insulated
Internal operating temperature range	-10°C - 50°C
Internal over-temperature protection (requires manual reset)	60°C-65°C
External fuse specification	150A
Input Reverse Polarity Protection	No
Cooling Fan	Single Brushless Fan (Automatic operation)
Fan control method	Temperature maintained at 40°C±10°C

 **WARNING**

**SHOCK OR FIRE HAZARD**

Make sure to keep all inverter leads away from sharp edges and hot surfaces. eg: engine compartment or vehicle exhaust system.

This inverter generates the same potentially lethal AC power as a household wall outlet. Do not insert foreign objects in the inverter's AC outlet or any other openings in the inverter. Please do not open the inverter. Have a qualified individual to complete any service work. Make sure never to expose the inverter to rain, water, snow, or spray.

Please do not cover or block the ventilation vent of the inverter or install in a tight place.

The wires in most 12 volt sockets or power outlets are not designed for devices more than 150 watts, please connect 300 and 600 inverter directly to the battery with appropriately sized leads.

**RISK OF FIRE OR EXPLOSION**

The inverter contains components that may produce sparks. To prevent fire or explosion, do not install the inverter in compartments containing batteries or flammable materials or in locations that require ignition protected equipment.

**RISK OF DAMAGE TO THE EQUIPMENT**

Inverter should be directly connected to standard electrical and electronic equipment to household or RV AC distribution wiring.

Do not connect it to any AC load circuit in which the neutral conductor is connected to ground (earth) or to the negative of the DC (battery) source.

 **CAUTION**

This inverter must only be operated with 12 volt DC battery. The inverter will not operate with 24 volt battery.

**CORROSIVE MATERIALS HAZARD**

Batteries contain electrolyte, which is harmful to humans, please wear protective cloth and eyewear when working around batteries, also make sure that metal tools will not short the battery.