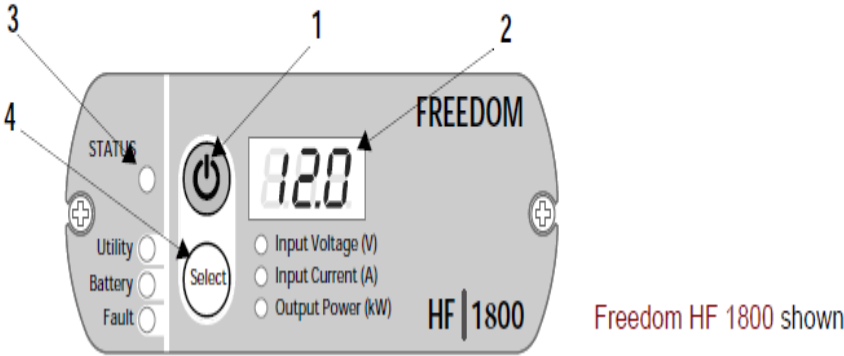




Xantrex Freedom HF 1800 Inverter/Charger - Fault Code And Troubleshooting Information



Display Panel



Feature	Description
1	Inverter button is the main unit switch that turns the Freedom HF’s inverter function ON or OFF.
2	Three- digit LED display scree shows status information and fault codes
3	Status LED indicates the modes of operation with the three color LED
4	Select button changes status information display on the display screen

Red is a fault condition. What is the fault code?

Error Code	Condition	Action
E01	Low battery voltage shutdown is imminent depending on the setting	<ul style="list-style-type: none">• Check battery status and recharge if necessary.• Check for proper DC cable sizing.• Check for loose connections and tighten if necessary.
E02	High battery voltage	



	shutdown > 15.5 volts DC	<ul style="list-style-type: none"> Check for external charging sources, such as an over voltage alternator, and disconnect if necessary.
E03	AC output overload shutdown	<ul style="list-style-type: none"> Reduce the loads connected to the AC outlet of the unit. Check appliances that have high-surge ratings and disconnect if necessary. <p>NOTE: This could be a logical fault, hard reset and reassess the error condition.</p>
E04	Over-temperature shutdown	<ul style="list-style-type: none"> Reduce the loads connected to the AC outlet of the unit. Check that the ventilation grille is not blocked. Check for ambient temperature and move the unit to a cooler location whenever possible.
E05	Low battery voltage detected depending on setting	<ul style="list-style-type: none"> Check battery status and recharge if necessary. Check for proper DC cable sizing. Check for loose connections and tighten if necessary.
E06	AC output overload warning	<ul style="list-style-type: none"> Reduce the loads connected to the AC outlet of the unit.
E07	Over-temperature warning	<ul style="list-style-type: none"> Reduce the loads connected to the AC outlet of the unit. Check that the ventilation grille is not blocked. Check for ambient temperature and move the unit to a cooler location whenever possible.
E08	not used	
E09	not used	
E10	High battery voltage (> 15.5 V)	<ul style="list-style-type: none"> Check for external charging sources, such as an over voltage alternator, and disconnect if necessary. Confirm that the external charging source is not the cause. The error may be caused by the internal battery charger system. Call Xantrex for

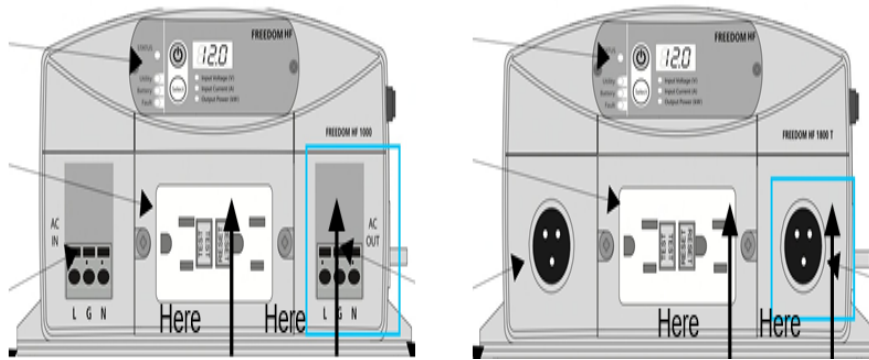
		charger system. Call Xantrex for support.
E11	Over-temperature detected on the AC transfer relay	<ul style="list-style-type: none"> • Reduce the loads connected to the AC outlet of the unit. • Check that the ventilation grille is not blocked. • Check for ambient temperature and move the unit to a cooler location whenever possible.
E12	Battery is bad or external DC load is connected to the battery.	<ul style="list-style-type: none"> • Check the battery bank. • NOTE: The battery voltage did not rise above 5 volts DC after 1 minute or 10 volts DC after 15 minutes. • Check that the external DC load current consumption is below the charging current setting. • Disconnect the DC load or increase the charger current setting.

Most codes describe external problems that will cause the FreedomHF to be unable to operate. Each will require troubleshooting to figure out the cause.

- The exception is E03, as this the “default” error code that will come up if the unit faults but it cannot classify it as one of the other errors. This could be a logical fault. Hard reset the unit and reassess the error condition.

Amber is the invert condition. The Freedom HF is reporting that it is inverting without a fault condition.

Check the AC voltage on the output contacts of the Freedom HF, both on the GFCI outlet and the hardwire contact points:



If there is voltage on the hardwire contacts but none on the GFCI: The problem is a tripped GFCI, faulty GFCI, or wiring problem to the GFCI.

If there is no voltage on the hardwire contacts: The inverter is suffering a logic failure or freeze up. Hard reset the unit for a couple of hours. If a hard reset does not resolve the issue, the unit is likely faulty.

If there is voltage on both the hardwire contacts and the GFCI: The problem is not the inverter. The issue is elsewhere and downstream from the inverter.

Green is a shore power condition. This should only be seen when the vehicle is plugged into shore power.

If the status light is off:

- Does the light turn on when the green power button is pressed?
 - If so and the problem of power to the load is still occurring, begin the troubleshooting process with the new status light.
 - If the status light does not turn on, then check to see if the battery voltage is arriving at the DC terminals of the Freedom.
 - The problem could be damaged DC cabling or a burned out fuse.

If further assistance is needed, call Xantrex Technical Support at 1 (800) 670-0707.



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