

Normal Operation Indications

<table>
<thead>
<tr>
<th>LED</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power ON</td>
<td>OPC (Ongoing Power Concern)</td>
</tr>
<tr>
<td>Power OFF</td>
<td>OCE (Ongoing Concern End)</td>
</tr>
<tr>
<td>Fault</td>
<td>FAL (Fault)</td>
</tr>
<tr>
<td>Attention required</td>
<td>ATT (Attention Required)</td>
</tr>
<tr>
<td>Battery State</td>
<td>BATTERY STATE</td>
</tr>
</tbody>
</table>

Communications

Power Indications and Detail Pages

Installation

Limited Warranty
## Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Share Used By Freedom (SN &lt; 1000)</td>
<td>Yes</td>
</tr>
<tr>
<td>Freedom Model</td>
<td>Expert Model</td>
</tr>
</tbody>
</table>

### Power

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>On</td>
</tr>
<tr>
<td>Weight</td>
<td>3 oz</td>
</tr>
<tr>
<td>Frequency</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Output Power</td>
<td>20 W</td>
</tr>
<tr>
<td>Efficiency</td>
<td>90%</td>
</tr>
<tr>
<td>Compliance</td>
<td>FCC/CE</td>
</tr>
<tr>
<td>Interface</td>
<td>USB-C</td>
</tr>
<tr>
<td>Dimensions</td>
<td>4.5 In x 2.75 In x 0.75 In</td>
</tr>
<tr>
<td>Weight</td>
<td>0.5 lb</td>
</tr>
</tbody>
</table>

### Options

- [ ] Extra Battery
- [ ] Charger
- [ ] Setup Guide
- [ ] Warranty Card

### Status LED

- **Red**: Charge Is Not Successful
- **Green**: Charge Is Successful
- **Amber**: Charge Is Successful But Battery Is Not Fully Charged

### Operation

1. **On**
2. **Setup**
3. **Charge**
4. **Power**

### Troubleshooting

- Check that the Freedom Model is fully charged.
- Ensure the Freedom Model is connected to the correct power source.
- If the Freedom Model is not charging, check for any obstructions in the charging port.
- Contact support if the issue persists.
**LED Indication**  | **Fault LED** | **Error Detected** | **Possible Solution**
--- | --- | --- | ---
OVERTEMP | On | Off | Over-temperature shutdown. Increase air circulation and allow to cool.
BATTERY STATE Empty blinking | ON | Low Battery Shutdown (too low to continue inverting) | Charge batteries.
BATTERY STATE Empty On | ON | Battery Overload (excessive triple voltage during charge) | Select lowest Power Share setting. Turn off DC Loads. Restart Charger.
15.6 VDC blinking (31.0 VDC in 24 V system) | ON | High battery shutdown. | Check other charging sources connected to the battery.
AC IN blinking | ON | AC Backfeed (external AC power detected at inverter output) | Disconnect Incoming AC power and correct wiring.
INVERT blinking | ON | Inverter overload (too much AC load on inverter) | Reduce AC load on inverter. Reset by pressing INVERT Off and On.
CHARGE blinking | ON | Charger overload (Battery voltage too low to charge) | Check batteries. Turn Off all DC loads. Restart charger.

**NOTE:** For error conditions not shown above, disconnect Freedom Remote Control Panel for 30 seconds, verify that phone cable is plugged in at remote and inverter/charger and verify that batteries are above 10 VDC. If condition persists, disconnect incoming AC power from inverter/charger and remove positive battery lead for 30 seconds.

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**Setup Mode**

Enter the SETUP mode by pressing and holding the SET button for 3 seconds until the LED blinks. The Freedom Remote is connected to a 485 Series inverter or DCU. All LEDs are on. Activate the SET button.

**SET MENU**

- **ON/OFF**
- **SET/UP**
- **SET/AHR**
- **SET/HR**
- **SET/RC**
- **SET/BC**
- **SET/DT**
- **SET/FU**
- **SET/EP**
- **SET/SP**
- **SET/CL**
- **SET/BC**
- **SET/EP**

Default Freddom 4.5 watts, 48 Series 5 watts.

**SET AHR**

- **Application:** Battery Capacity (Amphours) and Power (Watts).
- **Default settings:**
  - 1000W: 200 amp hours
  - 2000W: 400 amp hours
- **Function:**
  - Displays the remaining battery amp hours.

**SET HR**

- **Application:** Battery Capacity (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 485 Series Only: 1000W, 200 amp hours
  - 2000W, 400 amp hours
- **Function:**
  - Displays the battery power capacity.

**SET RC**

- **Application:** Battery Charge (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 1000W, 200 amp hours
- **Function:**
  - Displays the battery charge rate.

**SET BC**

- **Application:** Battery Charge (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 1000W, 200 amp hours
- **Function:**
  - Displays the battery charge rate.

**SET DT**

- **Application:** Battery Discharge (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 1000W, 200 amp hours
- **Function:**
  - Displays the battery discharge rate.

**SET FU**

- **Application:** Battery Usage (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 1000W, 200 amp hours
- **Function:**
  - Displays the battery usage rate.

**SET EP**

- **Application:** Battery Efficiency (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 1000W, 200 amp hours
- **Function:**
  - Displays the battery efficiency.

**SET CL**

- **Application:** Battery Charge Level (Percent).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
  - 1000W, 200 amp hours
- **Function:**
  - Displays the battery charge level.

**SET BC**

- **Application:** Battery Capacity (Amphours) and Power (Watts).
- **Default settings:**
  - 485 Series Only: 2000-3000W, 400 amp hours
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- **Function:**
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ERROR Indications and Troubleshooting

In case of Malfunction, Start trying the troubleshooting steps below:

1. Check that batteries are properly installed.
2. Check the battery charger.
3. Check the connection to the charger.
4. Check the battery terminals.

If the problem persists, contact your dealer or a service center.

Low Power Mode

Setting the automatic turn-off time is important to avoid unnecessary battery drain.

To set the turn-off time, go to the menu and select SETUP. From there, select Auto OFF Time. Enter the desired turn-off time and save the settings.

Equalizing Procedure

Follow the manufacturer's instructions for equalizing the batteries.