

# Pre-RMA testing Power Inverters



## 2. Pre-RMA test form - Inverter

### 1. General

Product, system and fault information	
Date	
Model	
Serial Number	
Date of installation (if known)	
Date of failure (if known)	
Battery type, brand name and overall capacity (if known)	

### 2. Initial check

Initial check	
Does the unit have internal water damage or corrosion?	<input type="checkbox"/> Yes, no warranty. <input type="checkbox"/> No.
Are the internals of the unit very dirty, or is there soot, dust or oil present inside the unit?	<input type="checkbox"/> Yes, no warranty. <input type="checkbox"/> No.
Are there foreign objects inside the unit: like screws, animals or insects?	<input type="checkbox"/> Yes, no warranty. <input type="checkbox"/> No.
Does the unit have burn marks on its internal parts, or does it smell burned?	<input type="checkbox"/> Yes. <input type="checkbox"/> No.
Does the unit have mechanical damage to any of its internal parts?	<input type="checkbox"/> Yes, no warranty. <input type="checkbox"/> No.
Does the unit have external mechanical, water or corrosion damage?	<input type="checkbox"/> Yes, no warranty. <input type="checkbox"/> No.
Does the unit have burn marks or melting marks on its housing, or does it smell burned?	<input type="checkbox"/> Yes. <input type="checkbox"/> No.
Does the unit have mechanical or burn damage to its electrical connectors?	<input type="checkbox"/> Yes, no warranty. <input type="checkbox"/> No.

### 3. First power up

Power the unit up and check	
Remove all wires and cables from the unit. Connect the unit to a DC power supply or battery bank. Turn the DC supply on and turn the unit on via its main switch. Is there a DC short-circuit?	<input type="checkbox"/> Yes, lodge a warranty claim. <input type="checkbox"/> No.
Are there any LED(s) on or blinking?	<input type="checkbox"/> Yes, go to 4. <input type="checkbox"/> No.

Power the unit up and check	
<p>For Phoenix Inverter VE.Direct and Phoenix Inverter Compact only:</p> <p>Check the internal fuse and replace the fuse if it is broken. What is the outcome?</p>	<input type="checkbox"/> The fuse is not broken. <input type="checkbox"/> The replacement fuse blew, lodge a warranty claim. <input type="checkbox"/> Fuse replaced, there are no LEDs on or blinking. <input type="checkbox"/> Fuse replaced and LED(s) are on or blinking, go to 4.
<p>Check if the remote link is in place; if not, place the link. Are any LED(s) on or blinking now?</p> <p><u>Note:</u> To find the location of the remote link, refer to the product manual.</p>	<input type="checkbox"/> Yes, go to 4. <input type="checkbox"/> No.

## 4. Bluetooth

Bluetooth check	
Is the product a "Smart" product, i.e., does it have built-in Bluetooth?	<input type="checkbox"/> Yes. <input type="checkbox"/> No, go to step 5.
Is Bluetooth active, i.e., do you see the unit listed in the device list of the VictronConnect app?	<input type="checkbox"/> Yes, go to step 5. <input type="checkbox"/> No.
<p>If Bluetooth is not active, it is unlikely to be a faulty Bluetooth module. More likely, Bluetooth has been turned off in the VictronConnect settings. To re-activate Bluetooth, consult the product manual.</p> <p>Is Bluetooth active now?</p>	<input type="checkbox"/> Yes, go to step 5. <input type="checkbox"/> No.
<p>If Bluetooth is still not active, rule out the following:</p> <ul style="list-style-type: none"> <li>• Are there problems with your phone or tablet?</li> <li>• Are you within Bluetooth range?</li> <li>• Only one phone or tablet can connect via Bluetooth at a time; is perhaps another phone or tablet already connected?</li> <li>• Consult the product manual and the <a href="#">VictronConnect manual</a> to try to resolve the Bluetooth issue.</li> </ul> <p>Is Bluetooth active now?</p>	<input type="checkbox"/> Yes. <input type="checkbox"/> No, lodge a warranty claim.

## 5. Firmware and settings

Update the firmware and reset the settings to default	
Connect via an interface (or Bluetooth) to the VictronConnect app and navigate to the unit. Is this possible?	<input type="checkbox"/> Yes. <input type="checkbox"/> No, not possible; lodge a warranty claim.
<p>Check if the firmware is up to date. If the firmware is not up to date, update the firmware to the most recent version using the VictronConnect app:</p> <ul style="list-style-type: none"> <li>• Go to the VictronConnect settings page.</li> <li>• On the settings page, click on the "3 dots" symbol in the top right-hand corner.</li> <li>• Select "Product info".</li> <li>• On the product info page, check and/or update the firmware.</li> </ul>	<input type="checkbox"/> Yes, the firmware has been updated. <input type="checkbox"/> Yes, the firmware was already up to date. <input type="checkbox"/> No, not possible to update the firmware.

Update the firmware and reset the settings to default	
<p>Save the unit's settings. File the settings under its serial number and keep the file on record for future reference. To save the settings:</p> <ul style="list-style-type: none"> <li>• Go to the VictronConnect settings page.</li> <li>• On the settings page, click on the "disk" symbol at the top.</li> </ul>	<input type="checkbox"/> Yes, the settings file has been saved. <input type="checkbox"/> No, not possible to save the settings.
<p>Reset all settings to default:</p> <ul style="list-style-type: none"> <li>• Go to the VictronConnect settings page.</li> <li>• On the settings page, click on the "3 dots" symbol in the top right-hand corner of the page and select "Reset to defaults".</li> </ul>	<input type="checkbox"/> Yes, the settings are set to default. <input type="checkbox"/> No, not possible to set the settings to default.
<p>Does the VictronConnect app display any error codes? If so, try to resolve the errors by consulting the product manual. Did it get resolved?</p>	<input type="checkbox"/> No errors, go to 6. <input type="checkbox"/> There were errors, but they were resolved. <input type="checkbox"/> There were errors, but they were not resolved.
<p>Write down the error number and name.</p>	<p>Error number: Error name:</p>

## 6. Functionality

Inverter functionality check	
<p>Measure the DC voltage at the DC connection terminals inside the unit. Is this voltage the same as the battery voltage reading in the VictronConnect app?</p>	<input type="checkbox"/> Yes. <input type="checkbox"/> No, lodge warranty claim.
<p>Measure the AC output using a True RMS multimeter. Are you measuring exactly 230Vac or 120Vac depending on the unit's AC voltage rating?</p>	<input type="checkbox"/> Yes. <input type="checkbox"/> No, lodge warranty claim.
<p>Does the measured AC voltage correspond with the AC voltage reading in the VictronConnect app?</p>	<input type="checkbox"/> Yes. <input type="checkbox"/> No, lodge warranty claim.
<p>Load the unit using incandescent light globes, electric heaters or any other type of resistive AC load. Can the unit power a load as high as its power rating without overload or temperature alarm?</p>	<input type="checkbox"/> Yes. <input type="checkbox"/> No, lodge warranty claim.
<p>Is the unit making an unusual noise?</p>	<input type="checkbox"/> Yes, lodge a warranty claim. <input type="checkbox"/> No.

## 7. Remarks

Provide additional fault information or add issues not already covered in earlier questions

## 8. RMA lodgement

For your information purposes, provide details after lodging the RMA	
<p>RMA type:</p>	<input type="checkbox"/> Warranty claim. <input type="checkbox"/> Non-warranty repair or replacement request.
<p>RMA lodgement date</p>	

For your information purposes, provide details after lodging the RMA

Victron Energy RMA number

Your reference number