

Smart choice for power™

xantrex[™]
A MISSION CRITICAL ELECTRONICS BRAND



Owner's Guide

Xantrex Gateway

Xantrex Gateway
808-1888

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Product Name and Part Number

Xantrex Gateway (808-1888)

Contact Information

Telephone: +1-800-670-0707 (Toll Free USA/Canada) / +1-408-987-6030 (Outside USA/Canada)

Email: customerservice@xantrex.com

Web: <https://xantrex.com/support/get-customer-support/>

Information About Your System

As soon as you open your product, record the following information and be sure to keep your proof of purchase.

Serial Number _____

Product Number _____

Purchased From _____

Purchase Date _____

Abbreviations and Acronyms

AC [~]	Alternating Current, Mains
CAN	Controller Area Network bus protocol
DC [---]	Direct Current
EMC	Electromagnetic Compatibility (emissions and immunity)
EMI	Electromagnetic Interference source (emissions only)
IP	Ingress protection rating (example: IP20 is for Indoor Use only)
kW	Kilowatts (1000 watts)
LED	Light Emitting Diode
PN	Product Number
RV-C	Recreational Vehicle (Caravan) CAN Bus Communications protocol
SD	Secure Digital
SSID	Service Set Identifier
V, VAC, VDC	Voltage, Volts AC, Volts DC
V, V~, V---	

Product Safety Information

NOTICE

RISK OF ELECTRIC SHOCK AND EQUIPMENT DAMAGE

- Connect communication circuits only to Safety Power Source Class 1 (PS1) circuits. This device connects to a 9-58V--- battery source through the two-pin battery terminal (see *Connection Terminals on page 8*).
- Do not expose the Xantrex Gateway to rain, snow, spray, or bilge water. For indoor use only.
- Do not disassemble. No user serviceable parts inside.
- Do not install and/or operate in compartments containing flammable materials or in locations that require ignition-protected equipment.

Failure to follow these instructions may result in injury or equipment damage.

EMI / EMC Information

This device complies with part 15 of the FCC Rules and contains a licence-exempt transceiver that complies with ISED Canada's licence-exempt RSS Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Contains:

FCC ID: 2ABCB-RP14B

IC: 20953-RP14B

⚠ CAUTION

Unauthorized changes or modifications to the equipment could void the user's authority to operate the equipment.

End of Life Disposal

The Xantrex Gateway is designed with environmental awareness and sustainability in mind. At the end of its useful life, the Xantrex Gateway can be decommissioned and disassembled. Components which can be recycled must be recycled and those that cannot be recycled must be disposed of according to local, regional, or national environmental regulations including the WEEE Directive.

Many of the electrical components used in the Xantrex Gateway are made of recyclable material like steel, copper, aluminum, and other alloys. These materials can be auctioned off to traditional scrap metal recycling companies who resell reusable scraps.

Electronic equipment such as the circuit boards, connectors, and fuses can be broken down and recycled by specialized recycling companies whose goal is to avoid having these components end up in the landfill.

For more information on disposal, contact Xantrex.

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1 INTRODUCTION

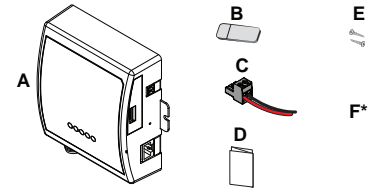
The Xantrex Gateway is a single-box communications hub from Xantrex that is capable of interfacing with a number of Xantrex inverters, chargers, inverter/chargers, lithium-ion battery BMS, and solar charge controllers. You can connect your smart phone or tablet to the Xantrex Gateway in two ways; (1) using Bluetooth and the Xantrex App or (2) via its Wi-Fi access point and access its embedded Web Application called **xantrexapp.com**, to monitor, control and change settings on any of the connected devices.

This chapter includes the following topics:

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Connection Terminals	8
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Materials List

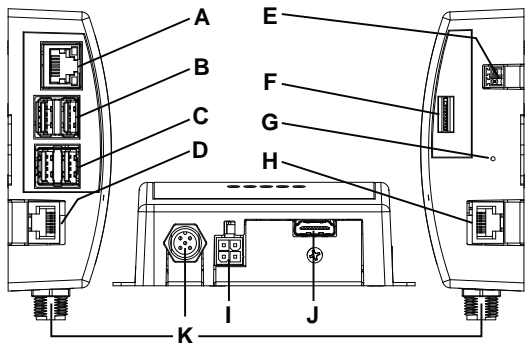
The Xantrex Gateway package includes the following items:



A	Xantrex Gateway	
B	microSD card reader	
C	power supply 2-pin connector with pigtail, 14–28 AWG (0.2–1.5 mm ²)	
D	Quickstart guide	
E	2x mounting screws 6-20 ¹ / ₂ " (or equivalent)	
F*	PN: 808-1889	Harness RV-C CAN 4-pin to RJ45 XGW (RV-C)
	PN: 808-1890	Harness RJ45 to MPPT XGW (Modbus)
	PN: 808-1891	Harness Micro-C to RJ45 XGW (NMEA2000)
	PN: 808-1892	Harness 20-pin to RJ45 XGW (RV-C)

NOTE: If any of the items are missing, contact Xantrex or any authorized Xantrex dealer for replacement. See *Contact Information on page 2.*

Connection Terminals

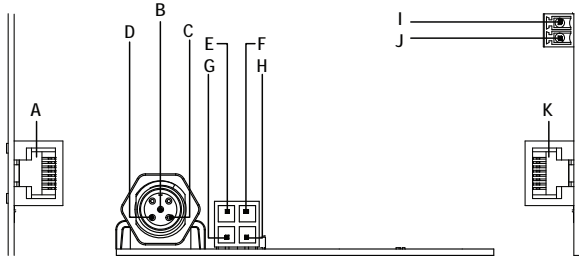


I	RV-C (CAN) bus port - connect to an auxiliary device such as a compatible RV controller, a Xantrex Freedom EX unit, a Xantrex Freedom XC PRO unit, or a Xantrex Battery (PN: 884-XXXX-XX only).
J	HDMI port ⚠ Use to connect to the Gateway Touchscreen or another HDMI monitor.
K	NMEA 2000 [Micro-C (CAN)] port - connect to an auxiliary NMEA 2000 compatible device such as a vessel monitoring system (VMS) or Freedom XC PRO Marine. ⚠ RESERVED FOR FUTURE USE.

A	Ethernet port for wired internet connection.
B	5V 0.5A USB host ports
C	⚠ Use to connect to the Gateway Touchscreen device. May also be used to connect a mouse and keyboard.
D	RJ-45 RV-C (CAN) port - connect to a compatible RV-C (CAN) device such as a compatible Xantrex Freedom EX unit, Xantrex Freedom XC PRO unit, or a Xantrex Battery (PN: 884-XXXX-XX only). ⚠ If the Xantrex Gateway device is the end device of an RV-C (CAN) network, then you must turn on the CAN terminator switch. Refer to <i>Activate RV-C Internal Terminator</i> .
E	Battery input power supply terminal (connect using the supplied 2-pin connector power cable to a 9-58V $\overline{---}$ power source only).
F	micro-SD card slot for the supplied micro-SD card ⚠ Do not remove the micro-SD card.
G	Reset button - press to restore the Wi-Fi SSID and password to factory settings.
H	RJ-45 RS-485 Modbus port - connect to an RS-485 Modbus device such as a Xantrex MPPT Solar Charge Controller (SCC)

Port Pin Assignments

NOTE: Match port pin assignments to connector pins carefully.



A	Pin 1: +12_CAN Pin 2: NC Pin 3: GND Pin 4: CAN1_RV-C_L	Pin 5: CAN1_RV-C_H Pin 6: GND Pin 7: +12_CAN Pin 8: GND	RJ-45 port [RV-C (CAN)]
B	CAN_L		NMEA 2000 [Micro-C (CAN)] port
C	COM		
D	CAN_H		
E	CAN_Shield		RV-C (CAN) port
F	COM		
G	CAN_L		
H	CAN_H		
I	Battery neg(-), GND		Battery terminals for power
J	Battery pos(+)		
K	Pin 1: NC Pin 2: NC Pin 3: RS485-B Pin 4: RS485-B	Pin 5: RS485-A Pin 6: RS485-A Pin 7: NGnd Pin 8: NGnd	RJ-45 port [RS-485 (Modbus)]

LED Status Indicators

- Power
- ● Status
- Wi-Fi
- CAN
- Modbus

Power	Green	The Xantrex Gateway is connected to a 9-58V= battery as its main power source.
	Off	The Xantrex Gateway is disconnected from its main power source.
Status	Off	⚠ Reserved for future use.
	Green	The Xantrex Gateway is connected to the Wi-Fi network.
Wi-Fi	Off	No Wi-Fi connection is detected
	Green	CAN device is detected.
CAN	Off	No CAN device is detected.
	Green	Modbus device is detected.
Modbus	Off	No Modbus device is detected

2 INSTALLATION

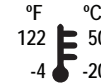
Before beginning your installation, read this entire chapter, assemble all the tools and materials you require, and be aware of all safety and electrical codes which must be met when installing as part of a power system.

This chapter includes the following topics:

Mounting	11
System Installation Diagram	13
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Freedom XC PRO Inverter/Charger Wiring	15
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Mounting

①

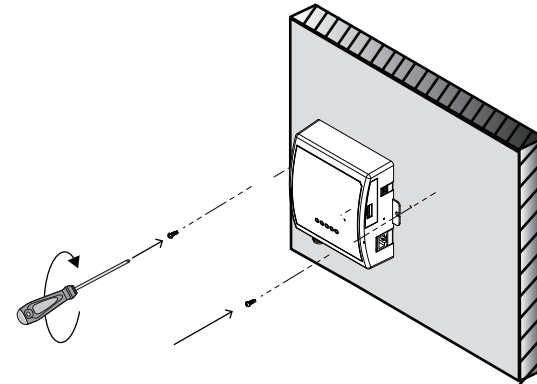


IP20

PS1



②



Consider the following suggestions for mounting.

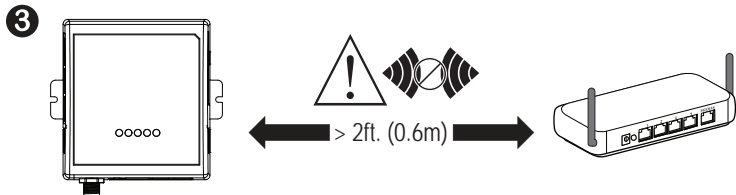
- Locate the Xantrex Gateway as close as possible to its power supply.
- Thick walls, metallic objects, and other communication devices may interfere with the signal and affect signal strength. See Notice below.
- Avoid exposure to direct sunlight.
- Be at least within 20 feet (6 m) to obtain the best possible Wi-Fi signal from the Xantrex Gateway.

NOTICE

WI-FI INTERFERENCE

Place the Xantrex Gateway away from other Wi-Fi devices such as a wireless modem (if present) at least 2 feet (0.6 meter) from each other.

Failure to follow these instructions can produce interference in communications.

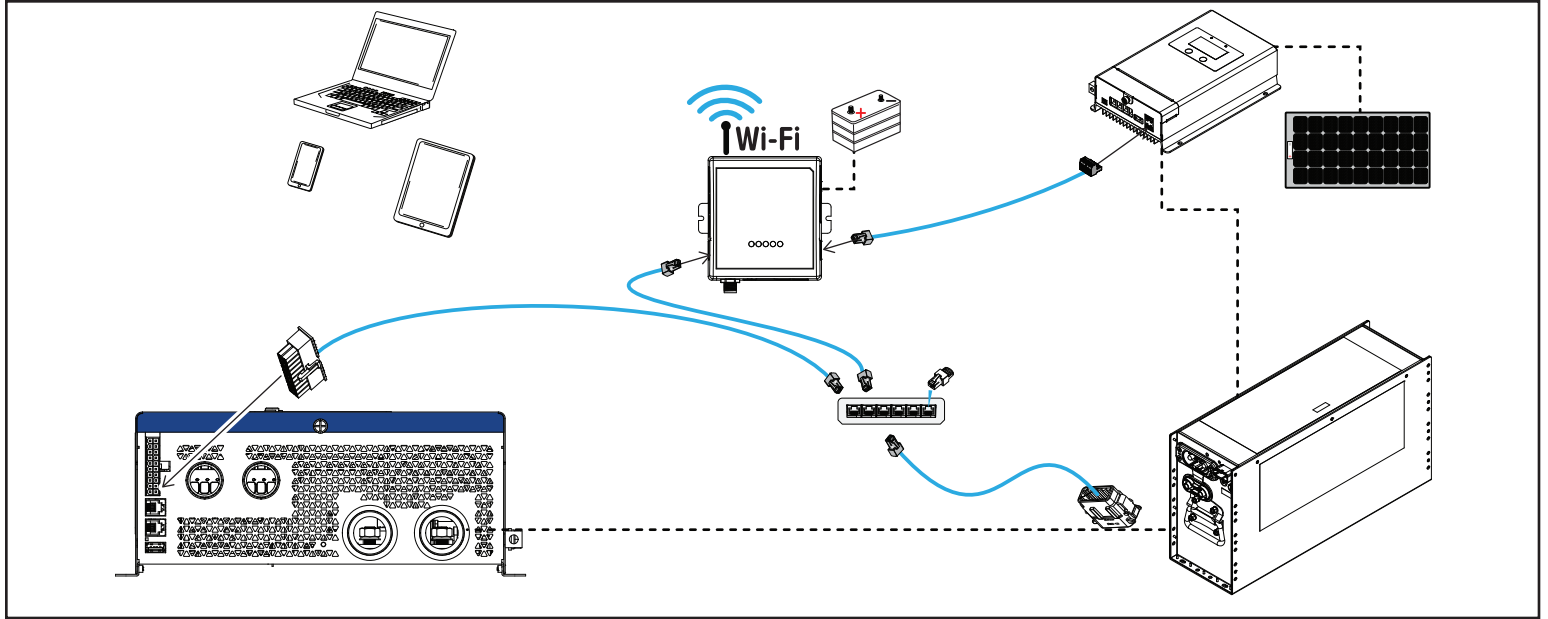


System Installation Diagram

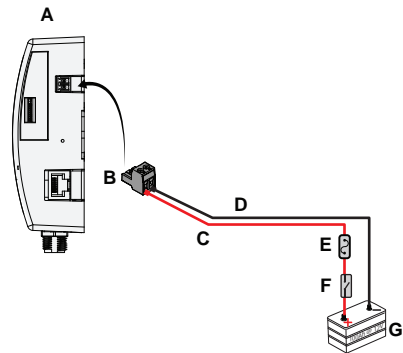
This diagram illustrates a system installation that represents a complete and well-integrated Gateway network for your vehicle or vessel.

Figure 1 Typical Vehicle Communication Network

⚠ The solid lines are the communication cables. The dotted lines are electrical power connections. Use the installation guide for each power system device.



Power Source Wiring



⚠ Attach battery cables to the 2-pin connector before plugging the connector to the Xantrex Gateway.

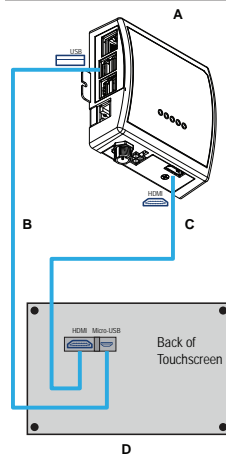
⚠ The Xantrex Gateway has no power switch.

⚠ You can connect only one power source. The Xantrex Gateway has no power switch. As long as the Xantrex Gateway and the Freedom X | XC | XC PRO | EX unit are connected and the Freedom X | XC | XC PRO | EX is connected to a battery, the Xantrex Gateway will receive power.

A	Xantrex Gateway	E	10A fuse/fuseholder
B	Power port 2-pin connector (supplied)	F	Battery disconnect device ⚠⚠⚠ Keep the disconnect device open to prevent energizing the Xantrex Gateway.
C	Battery pos(+) cable	G	Battery
D	Battery neg(-) cable		

Gateway Touchscreen Wiring

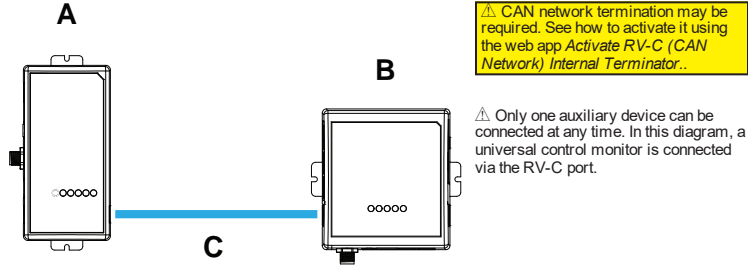
NOTE: Consult the Gateway Touchscreen installation guide for more information.



A	Xantrex Gateway	C	HDMI cable (supplied with the Touchscreen)
B	USB-A to Micro-USB cable (supplied with the Touchscreen).	D	Gateway Touchscreen device

Freedom Combox Wiring

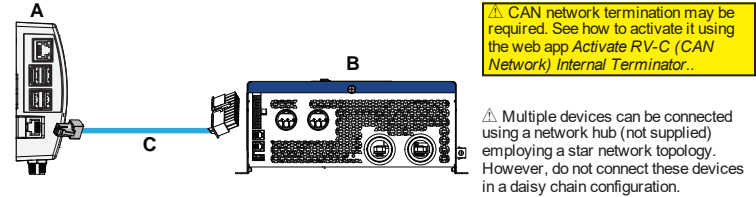
NOTE: Consult the Freedom Combox Owner's Guide for more information.



A	Freedom ComBox	C	Network cable (supplied) - 4-pin to RJ45 connectors
B	Xantrex Gateway		

Freedom XC PRO Inverter/Charger Wiring

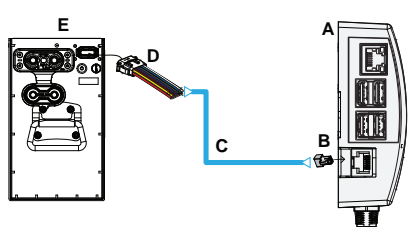
NOTE: Consult the Freedom XC PRO inverter/charger Owner's Guide for electrical connections to batteries, AC source, and loads.



A	Xantrex Gateway	C	Harness 20-Pin to RJ45 XGW (RV-C) (PN: 808-1892)
B	Optional Freedom XC PRO inverter/charger		

Xantrex Battery Wiring

NOTE: Consult the Xantrex Battery Owner's Guide for electrical connections.



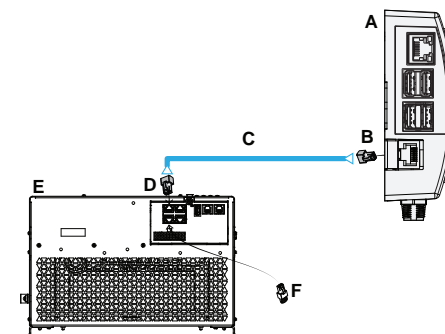
⚠ CAN network termination may be required. See how to activate it using the web app *Activate RV-C (CAN Network) Internal Terminator*..

⚠ Multiple devices can be connected using a network hub (not supplied) employing a star network topology. However, do not connect these devices in a daisy chain configuration.

A	Xantrex Gateway	D	DEUTSCH 12-pin harness (not supplied). Splice the connector to one end of the patch cable.
B	RV-C port RJ-45 connector (not supplied).	E	Xantrex Battery (PN: 884-XXXX-XX series only)
C	Patch cable with RJ-45 connector on one end (not supplied). Terminate the other end of patch cable with the appropriate connector.		

Freedom EX Inverter/Charger Wiring

NOTE: Consult the Freedom EX inverter Owner's Guide for electrical connections to batteries, AC source, and loads.



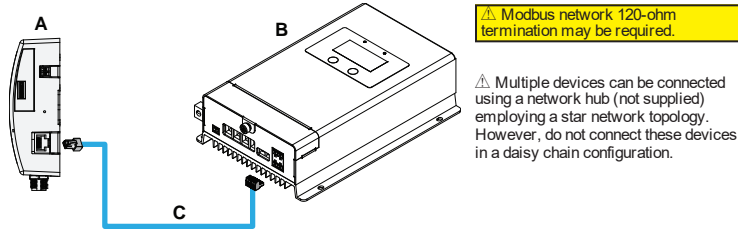
⚠ CAN network termination may be required. See how to activate it using the web app *Activate RV-C (CAN Network) Internal Terminator*..

⚠ Multiple devices can be connected using a network hub (not supplied) employing a star network topology. However, do not connect these devices in a daisy chain configuration.

A	Xantrex Gateway	D	RJ-45 connector (not supplied).
B	CAN port RJ-45 connector (not supplied).	E	Optional Freedom EX inverter/charger
C	Patch cable (not supplied)	F	Network terminator (not supplied)

MPPT Solar Charge Controller Wiring

NOTE: Consult the Xantrex MPPT Solar Charge Controller Owner's Guide for electrical connections to batteries, solar panel, and loads.



⚠ Modbus network 120-ohm termination may be required.

⚠ Multiple devices can be connected using a network hub (not supplied) employing a star network topology. However, do not connect these devices in a daisy chain configuration.

A	Xantrex Gateway	C	Harness RJ45 to MPPT XGW (Modbus) (PN: 808-1890)
B	Optional Xantrex MPPT Solar Charge Controller		






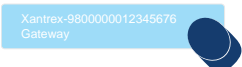
3 CONFIGURATION


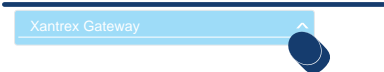

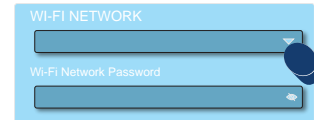
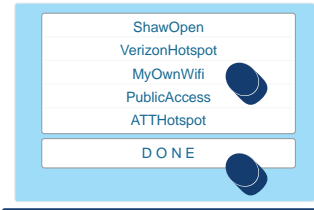
This chapter explains how to operate the Xantrex Gateway and configure devices using its web application interface. This chapter includes the following topics:




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Wi-Fi Connection	23
Web Application	24
Home Screen (System View)	28
Settings	28
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Xantrex Gateway Software	31

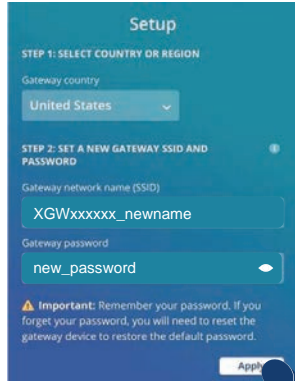
Xantrex App Connection


Requirements: iPhone/iPad (iOS version 11 or newer), Android phone/tablet (Android version 7.0 or newer)

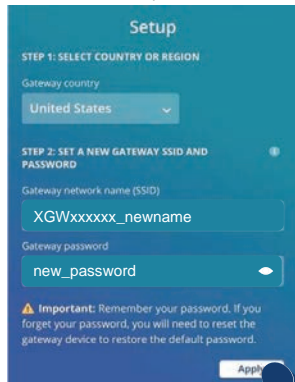
How to...	Steps
<p>Connect to the Xantrex Gateway using the Xantrex App through an existing Wi-Fi network.</p>	<ol style="list-style-type: none"> 1. Make sure that the Xantrex Gateway is powered. Observe the Power LED and be sure it is on. 2. Download the Xantrex App and install it on your smart phone. <div data-bbox="402 189 526 312" style="text-align: center;">  </div> <div data-bbox="302 327 453 373" style="text-align: center;">  </div> <div data-bbox="483 327 634 373" style="text-align: center;">  </div> 3. Tap the Xantrex App, tap Device, then tap the Gateway device. <div data-bbox="302 416 402 493" style="text-align: center;">  </div> <div data-bbox="302 511 685 572" style="text-align: center;">  </div> <div data-bbox="302 625 542 692" style="text-align: center;">  </div> <p>If a pairing code is requested, enter the last six digits of the serial number found on the unit.</p> <div data-bbox="302 742 769 817" style="text-align: center;"> <p>SN: XGW123456</p> </div> <div data-bbox="488 841 753 887" style="text-align: center;"> <p>↓ six-digit pairing code</p> </div>

How to...	Steps
	<ol style="list-style-type: none"> 4. Tap Settings, then Xantrex Gateway, then Wi-Fi Network, then select MyOwnWifi and tap DONE, where "MyOwnWifi" is the SSID of your own Wi-Fi network. <div data-bbox="1081 178 1393 239" style="text-align: center;">  </div> <div data-bbox="1081 245 1463 317" style="text-align: center;">  </div> <div data-bbox="1081 323 1463 394" style="text-align: center;">  </div> <div data-bbox="1081 434 1393 554" style="text-align: center;">  </div> <div data-bbox="1081 578 1393 788" style="text-align: center;">  </div>

How to...	Steps
	<p data-bbox="284 125 776 160">5. Enter the Wi-Fi password and tap Apply. Tap Status and tap Connect to wlan0 IP Address.</p>  <hr/>  <hr/> 



How to...	Steps
	<p data-bbox="1058 125 1557 160">6. It is recommended to change the Country (if applicable), and the default SSID and password. Tap Save.</p> 

How to...	Steps
<p>Connect to the Xantrex Gateway via a Xantrex Gateway hotspot</p>	<ol style="list-style-type: none"> 1. Go to your smart phone's Wi-Fi settings, look for the XGW123456 SSID (where "XGW123456" is the SSID of the Xantrex Gateway) and connect to it. 2. Tap the Xantrex App, tap Status, and tap Connect to aplan0 IP Address. 

How to...	Steps
	<ol style="list-style-type: none"> 3. Change the default SSID and password, if desired then Tap Save. 
	<ol style="list-style-type: none"> 4. Reconnect to the new SSID from your smart phone's Wi-Fi setting. 5. Repeat steps 1 and 2. 6. If you do not have Wi-Fi, skip the succeeding step and go to <i>Wi-Fi Connection on page 23</i>.



Wi-Fi Connection



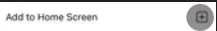

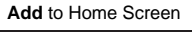

Requirements: iPhone/iPad (iOS version 11 or newer), Android phone/tablet (Android version 7.0 or newer), modern laptop with Wi-Fi and browser.

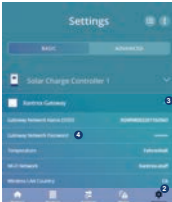
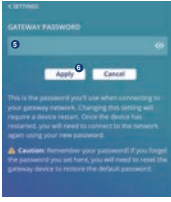
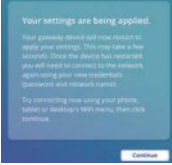


How to...	Steps
<p>Connect to the Xantrex Gateway Wi-Fi.</p>	<ol style="list-style-type: none"> 1. Make sure that the Xantrex Gateway is powered. Observe the Power LED and be sure it is on. 2. Open your smart phone, tablet, or laptop and navigate to its Wi-Fi settings. <div style="display: flex; justify-content: space-around; align-items: center; margin: 10px 0;"> <div style="text-align: center;">  <p>iOS</p> </div> <div style="text-align: center;">  <p>Android</p> </div> </div> 3. Search for the Xantrex Gateway SSID in the list of Wi-Fi networks. SSID: "XGW 123456", where 123456 is the serial number of your device. 4. Enter the factory default password and tap Join or Connect. Password: "12345678". 5. Once joined or connected to the Xantrex Gateway, proceed to <i>Web Application on page 24</i>. <p>⚠ Do not connect to guest Wi-Fi networks.</p>

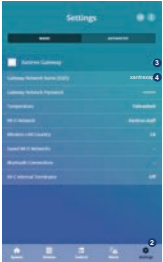

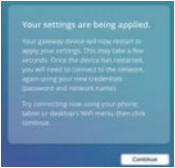

Web Application

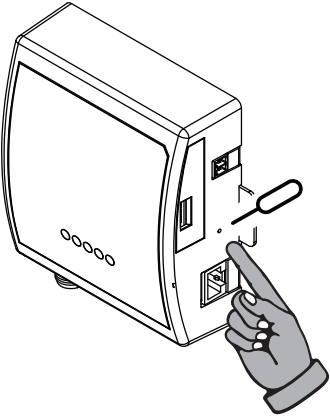
Requirements: Wi-Fi connection for all smart devices.
 Compatible operating systems such as iPhone/iPad (iOS version 11 or newer) and Android phone/tablet (Android version 7.0 or newer).

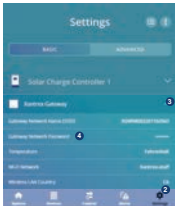

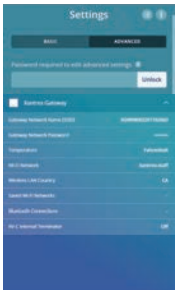
How to...	Steps
<p>Open the XantrexApp web application [xantrexapp.com].</p>	<ol style="list-style-type: none"> 1. Setup and connect to the Xantrex Gateway Wi-Fi hotspot. See <i>Wi-Fi Connection on page 23</i>. 2. Open the XantrexApp web application from your smart phone, tablet, or laptop by using a web browser to go to xantrexapp.com or by aiming the mobile device camera to the QR code above and tapping the link. <div data-bbox="1068 240 1305 277" style="border: 1px solid black; padding: 2px; margin: 10px 0;"> xantrexapp.com </div> <div data-bbox="1062 288 1182 408" style="text-align: center;">  </div> <ol style="list-style-type: none"> 3. Upon initial set up, you will be prompted to change the password and give you a choice to bridge a Wi-Fi network with internet access. Bridging a Wi-Fi network with internet connection allows your smart device continuous access to the internet without losing the Wi-Fi connection to Xantrex Gateway.
	<div data-bbox="1068 522 1243 820" style="border: 1px solid black; padding: 5px; margin-bottom: 10px;">  </div> <p>The Devices Home screen appears.</p> <p>NOTE: This Home screen appears with the Xantrex Gateway as well as other devices that are connected through RV-C or a Modbus network.</p>

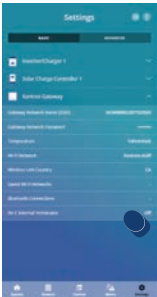
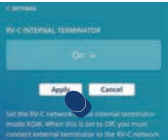
How to...	Steps
<p>Create and add the xantrexapp.com Web app icon on an iOS mobile device.</p> 	<ol style="list-style-type: none"> 1. From your iOS mobile device, open Safari and go to xantrexapp.com or aim the mobile device camera to the QR code on the left and tap the link. 2. Tap  from the bottom of the screen. 3. Tap .
<p>Create and add the xantrexapp.com Web app icon on an Android mobile device.</p>	<ol style="list-style-type: none"> 1. From your Android mobile device, open a web browser and go to xantrexapp.com or aim the mobile device camera to the same QR code on the left and tap the link. 2. Tap  from the upper right hand corner of the screen. 3. Tap .
<p>Access from a laptop.</p>	<ol style="list-style-type: none"> 1. From your laptop's web browser, go to xantrexapp.com. 2. Press .

How to...	Steps
<p>Change the Xantrex Gateway Wi-Fi password.</p>	<ol style="list-style-type: none"> 1. Open the XantrexApp web application from your smart phone, tablet, or laptop. <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> 2. Tap Settings. 3. Tap Xantrex Gateway. 4. Tap Gateway Password. 5. Enter the new Gateway Password. 6. Tap Apply to save the new password. The succeeding dialog screen appears. <div style="text-align: center;">  </div> 7. Return to the Wi-Fi settings of your smart phone, tablet, or laptop. <div style="display: flex; justify-content: center; align-items: center; gap: 10px;">   </div> <p style="text-align: center;">iOS Android</p> 8. Re-connect with the Xantrex Gateway SSID and enter the new password. 9. Return to the XantrexApp web application. 10. The dialog screen in step 6 will have disappeared. If not, tap Continue. 11. Write down the new Password in the space provided in the back page.

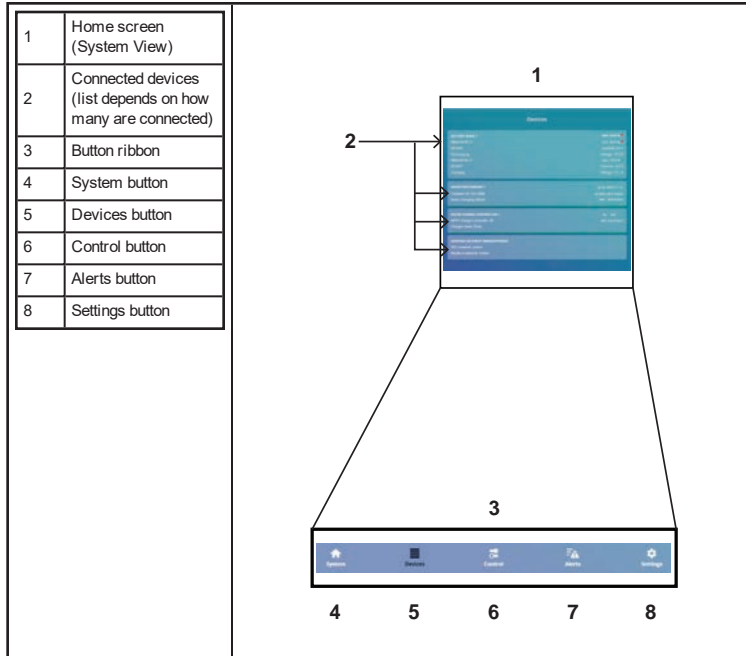
How to...	Steps
<p>Change the Xantrex Gateway SSID.</p>	<ol style="list-style-type: none"> 1. Open the Xantrex App web application from your smart phone, tablet, or laptop.   <ol style="list-style-type: none"> 2. Tap Settings. 3. Tap Xantrex Gateway. 4. Tap Gateway Network Name (SSID). <ol style="list-style-type: none"> 5. Enter the new Gateway Network Name (SSID). 6. Tap Apply to save the new SSID. The succeeding dialog screen appears. 
 <p>iOS Android</p> <ol style="list-style-type: none"> 7. Return to the Wi-Fi settings of your smart phone, tablet, or laptop. 8. Re-connect with the new Xantrex Gateway SSID and enter the password. 	<ol style="list-style-type: none"> 9. Return to the XantrexApp web application. 10. The dialog screen in step 6 will have disappeared. If not, tap Continue. 11. Write down the new SSID in the space provided in the back page.

How to...	Steps
<p>Reset the Xantrex Gateway SSID and password including all customized settings to factory values.</p> <p>⚠ ALL SETTINGS WILL BE RESTORED TO FACTORY VALUES. PROCEED WITH CAUTION.</p>	<p>Press and hold for more than five (5) seconds the reset button on the Xantrex Gateway as shown below to restore the SSID and password to its factory values of SSID=XGW123456, where 123456 is the serial number of your device and Password=12345678.</p> 

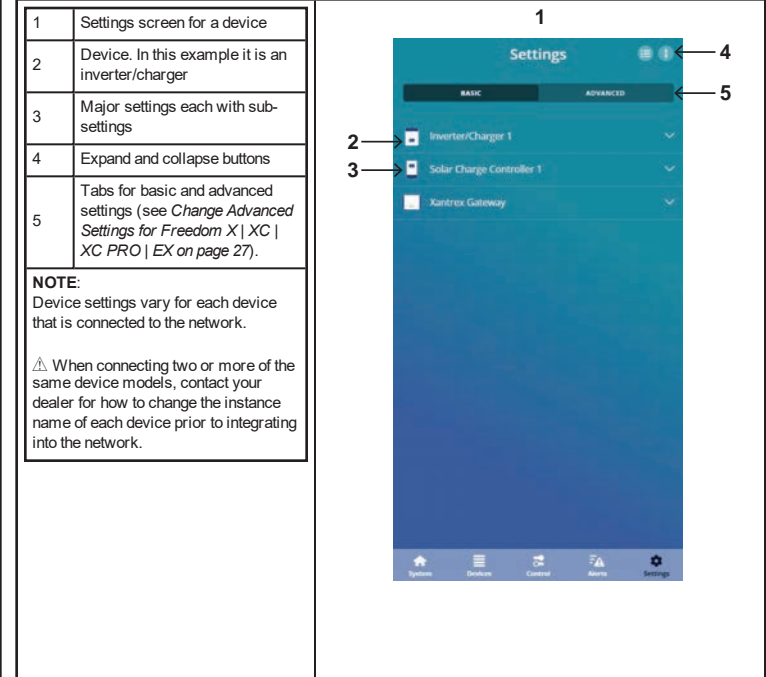
How to...	Steps
<p>Change Advanced Settings for Freedom X XC XC PRO EX</p>	  <ol style="list-style-type: none"> 1. Tap the Advanced tab. 2. Enter the password becareful at the top of the screen. 3. Tap Unlock to gain access to Advanced settings. 4. Modify the setting/s you want to change.
	 <p>NOTE: Leaving the Advanced screen and then coming back to it later on requires you to do step 2 again.</p>

How to...	Steps
<p>Activate RV-C (CAN Network) Internal Terminator</p>	  <ol style="list-style-type: none"> 1. Select the Xantrex Gateway device from the Device list. 2. Tap RV-C Internal Terminator. 3. Select On. 4. Tap Apply.

Home Screen (System View)



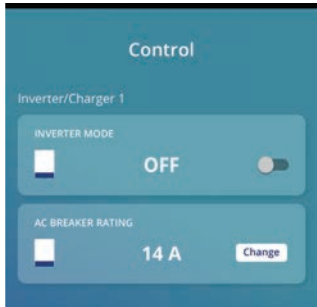
Settings



Control

1	Control screen for a device
2	Inverter mode control. In this example it is an inverter/charger with a binary switch On or Off.
3	AC Breaker control. In this example it is for an inverter/charger with a Change option allowing the user to change the setting within a range of values. See the device's Owner's Guide for information.

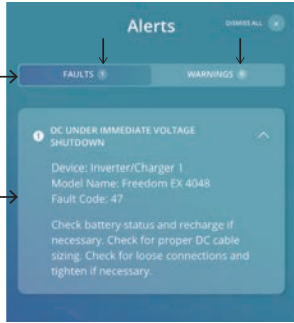
NOTE:
Controls vary for each device that is connected to the network.



Alerts

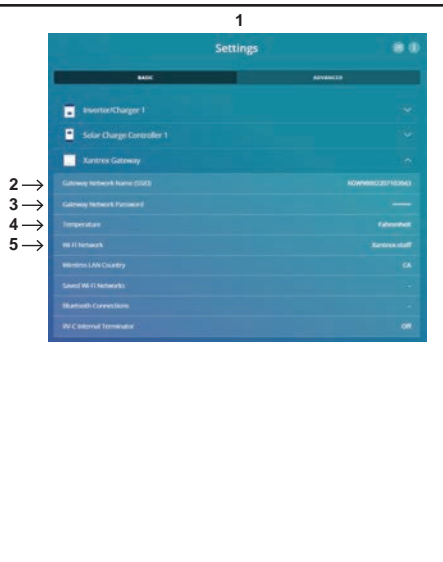
1	Alerts screen
2	Two types of alerts. In this example, the Xantrex Gateway has detected one fault and no warnings as shown by their badge icons.
3	Alert information. Alert messages show what device is affected, its model, an error code, and instructions. See the device's Owner's Guide for information on error codes.

NOTE:
Only connected devices to the Xantrex Gateway network will have their alerts aggregated in the Xantrex App [xantrexapp.com].

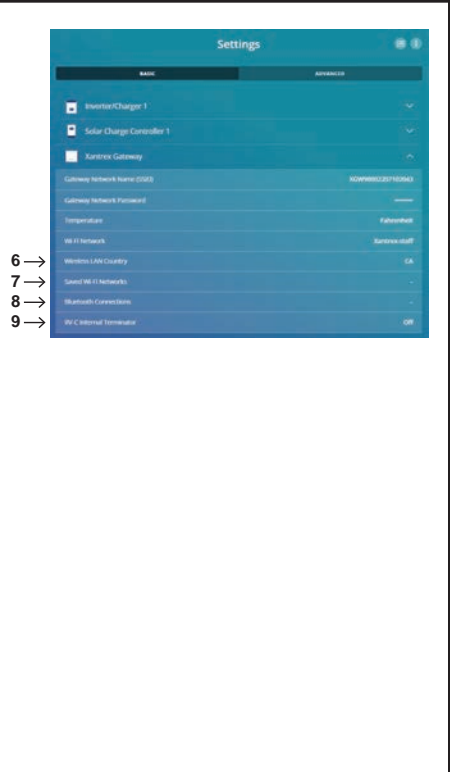


Xantrex Gateway Settings

1	Settings screen for the Xantrex Gateway
2	Xantrex Gateway Network Name (SSID). See <i>Web Application on page 24</i> for information on how to change the SSID.
3	Xantrex Gateway Password. See <i>Web Application on page 24</i> for information on how to change the password.
4	Temperature - Choose between Celsius or Fahrenheit.
5	Wi-Fi Network - If you want to be able to access the internet on a separate Wi-Fi network with your smart device without losing the capability to monitor and control your Xantrex devices via the Xantrex Gateway, select a Wi-Fi network that has an internet connection from the list and enter its SSID and password.



6	Wireless LAN Country - Set to the appropriate country where the Wi-Fi network is available.
7	Saved Wi-Fi Networks - Lists all available networks that have been previously saved. Choose manually to connect.
8	Bluetooth Connections- Choose a smart device to unpair from Xantrex Gateway, if you wish to reset the Bluetooth pairing between the two devices. Your smart device will disappear from the list if it has been unpaired. Repeat the same steps if your smart device persists on the list. Multiple reattempts might be required. ⚠ Please exit Xantrex App and unpair Xantrex Gateway from your smart device first in order to reset its Bluetooth pairing properly with Xantrex Gateway.
9	RV-C Internal Terminator - Set to On to use the internal terminator inside Xantrex Gateway for the RV-C network. When this is set to Off, you must connect an external terminator to the RV-C network.
<p>NOTE: You may retain the factory set SSID The only functional reason to change it is if you have multiple Xantrex Gateway networks nearby.</p>	



Xantrex Gateway Software

How to...	Steps
<p>Upgrade the Xantrex Gateway software.</p> <p>⚠ Also, make sure to install on the computer the Raspberry Pi Imager software available at: https://www.raspberrypi.com/software/</p>	<ol style="list-style-type: none">1. Go to https://xantrex.com/library/firmwares/ and look for available software.2. Remove the microSD card from the Xantrex Gateway and insert it into the microSD card reader (included in the Xantrex Gateway box).3. Insert the microSD card reader into your computer.4. On your computer, open the Raspberry Pi Imager and click Operating System.5. Scroll down and click Erase option.6. Click Storage and select the SD card from the list.7. Click Write and wait for the formatting to finish.8. Click on Operating System again and select Use custom.9. Select the new software file provided by Xantrex.10. Make sure the SD card is selected in Storage and click Write.11. When the Write command completes, remove the microSD card reader from the computer and then the microSD card from the reader.12. Insert the microSD card into the Xantrex Gateway.

4 TROUBLESHOOTING

This section will help you narrow down the source of any problem you encounter. This chapter includes the following topics:

Common Issues	34
Maintenance	36

Common Issues

Problem	Cause	Solution
The Xantrex Gateway's Power LED indicator is not lit up.	The Xantrex Gateway is not receiving power.	Check that the Xantrex Gateway is connected to a Xantrex Battery (9-58V $\overline{---}$) which is its main power source. Re-check the Power LED indicator after connecting with the battery.
The Xantrex Gateway's Wi-Fi SSID is not showing up in the network list of the smart phone or tablet.	The Xantrex Gateway is not receiving power.	Check that the Xantrex Gateway is connected to a Xantrex Battery (9-58V $\overline{---}$) which is its main power source.
	The smart phone/tablet or laptop is too far from the Xantrex Gateway.	Stay within the standard Wi-Fi range of 75 ft (~25m).
The web app [xantrexapp.com] is displaying a " <i>This site cannot be reached.</i> " message.	The smart phone/tablet or laptop was disconnected from the Xantrex Gateway's Wi-Fi network.	Reconnect to the Xantrex Gateway's Wi-Fi network. Stay within the standard Wi-Fi range of 75 ft (~25m).
The auxiliary RV-C device is not showing on the device list of the web app.	Harness RV-C CAN 4-Pin to RJ45 XGW (RV-C), Harness RJ45 to MPPT XGW (Modbus), Harness 20-Pin to RJ45 XGW (RV-C) is wired incorrectly.	Check that CAN wires are terminated properly and correspond to the PORT (pin) assignments.

Problem	Cause	Solution
Xantrex Gateway has power but connected devices are not showing on the device list of the web app.	The connected devices may not be turned on or receiving their own power.	Make sure the connected devices are powered and their cable connections to Xantrex Gateway are secure.
The Xantrex App cannot pair with Xantrex Gateway.	The Bluetooth server is not synchronized with the smart phone/tablet.	Unpair the Xantrex App from the smart phone/tablet. Close all open apps on the smart phone/tablet. Redo the pairing process. See <i>Xantrex Gateway Settings on page 30</i> for information.
Connected devices are showing with <code>node_xxx</code> in their device names.	Device instances are duplicated in multiple units.	Configure each connected device by renaming each one to a unique device name.

Maintenance

WARNING

ELECTRICAL SHOCK HAZARD

Do not disassemble the Xantrex Gateway. It does not contain any user-serviceable parts. Attempting to service the unit yourself could result in an electrical shock or burn.

Failure to follow these instructions can result in death, serious injury, or equipment damage.

- Make sure the Xantrex Gateway remains in a dry environment.
- Clean up any accumulated dust or dirt on the unit.
- Check all the wires and cables for insulation damaged. Repair or replace, if necessary.
- Tighten all terminal connections. Inspect for loose or broken wire connections.
- Confirm that all terminals are free from corrosion

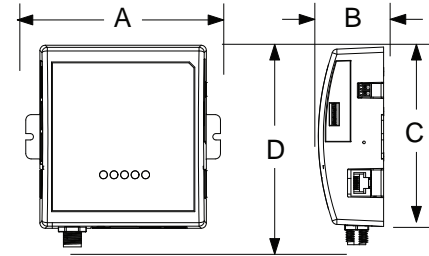
5 SPECIFICATIONS

NOTE: Specifications are subject to change without prior notice. This chapter includes the following topics:

Physical Specifications	37
Electrical Specifications	38
Compatible Devices	38
Regulatory	39

Physical Specifications

A - 4.2 in. (107mm) with flanges
 B - 1.4 in. (37mm)
 C - 3.7 in. (95mm)
 D - 4.1 in. (105mm) including port








Weight	0.5 lb (227 g)
Housing / Mounting System	ABS Plastic, Wall-mount: 4-screw
IP rating / Mounting Location	IP 20, NEMA Type 1, Indoor only
Status Display	5 x LEDS
Temperature	Operating: -4 to 122°F (-20 to 50°C) Storage: -40 to 185°F (-40 to 85°C)
Humidity	Operating: < 95%, non-condensing Storage: < 95%, non-condensing

Electrical Specifications

Communication interfaces	
RJ-45 port (same side as the battery terminal)	RS-485 Modbus
RJ-45 port (left hand panel)	RV-C CANbus terminal requires one Harness RV-C CAN 4-Pin to RJ45 XGW (RV-C), Harness RJ45 to MPPT XGW (Modbus), Harness 20-Pin to RJ45 XGW (RV-C) or equivalent: 4-terminals, 16-24AWG, pin assignments to match port assignments.
Battery terminal	2 pins, 16-24 AWG
NMEA 2000	NMEA 2000 (Micro-C) terminal requires matching male connector ⚠ Reserved for future use.
Data Interface Micro SDHC/XC	Micro SDHC/XC 2GB-2TB, FAT32/exFAT. Data storage only.
Power supply via Battery terminal	Power input voltage range: 9–58V _{DC} Power input current: 3.5A at 12V _{DC}

Compatible Devices

	Optional	Freedom EX inverter/charger/converter Compatible PN: 820-4080-41
	Optional	Xantrex Battery Compatible PNs: 884-0310-12/01, 884-0410-12/01, 884-0205-24/01, 884-0100-51
	Optional	Freedom X inverter with a ComBox Compatible PNs: 817-1000, 817-2000, 817-3000, 817-2000-21, 817-2000-12
	Optional	Freedom XC PRO inverter/charger Compatible PNs: 818-2010, 818-3010
	Optional	Xantrex MPPT Solar Charge Controller Compatible PN: 710-3024-01 (shown), 709-3024-01

To order Xantrex products, contact an authorized Xantrex dealer. The Xantrex Gateway requires one power source.

Regulatory

North America (US, CA)	EMI	CFR 47 (FCC) Part 15B, Class B			
		ISED Canada ICES-003, Class B			
	RF	CFR 47 (FCC) Part 15C, FCC ID: 2ABCB-PR14B			
		ISED Canada RF, IC: 20953-RP14B			
European Union (EU)	Type	Regulations	Test Standard	Description	
	E-mark	UN/EU Regulation	ECE R10.06	Automotive EMC – Regulation 10 - EMC emissions & transients	
		Automotive EMC Standard	EN 50498	Automotive Electromagnetic Compatibility (EMC) – Emissions and immunity	
European Union (EU)	CE Marking	Radio Equipment Directive 2014 / 53 / EU	EMC Directive 2014 / 30 / EU	EN 55032, Class B	Electromagnetic Emission
				EN 55035	Electromagnetic Immunity
		Low Voltage Directive 2014 / 35 / EU	EN/IEC 62368-1	Communication technology equipment Safety	
		Radio Frequency Spectrum	EN 300328	Data transmission	
			EN 62311	Human exposure	
		RoHS"3" Directive 2011 / 65 / EU and 2015 / 863 / EU	EN 63000	Environmental	

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<https://xantrex.com/support/get-customer-support/>

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+1-408-987-6030 (Outside USA/Canada)

xantrexapp.com



Scan with your
smart phone or
tablet or enter
xantrexapp.com
on your web
browser.

new SSID: _____

new Password: _____

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