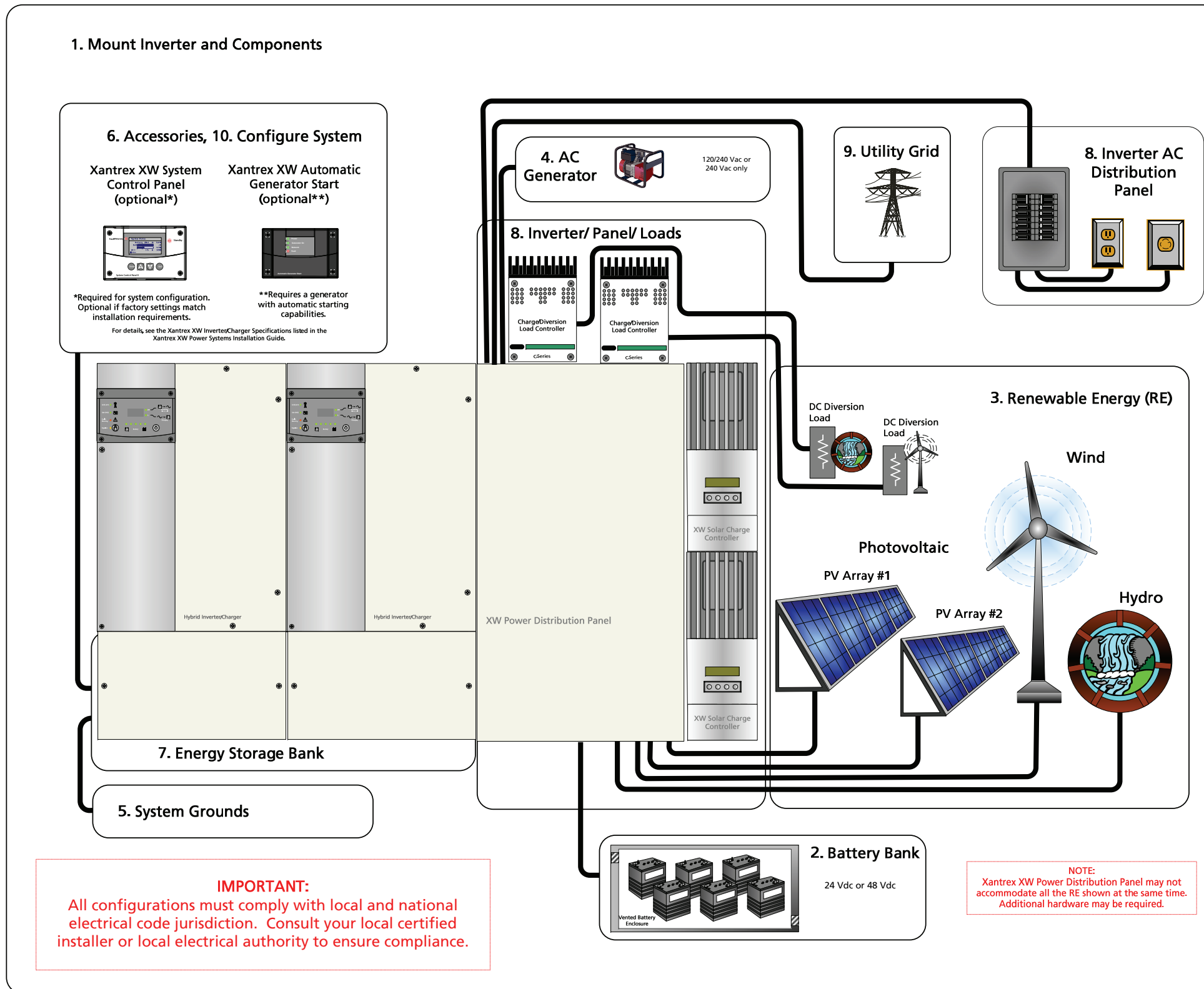


Xantrex XW Power System - Installation Overview



IMPORTANT:
All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance.

Installation Overview:

The following information is a list of basic steps required to install a Xantrex XW Inverter/Charger. Actual installation procedures will vary depending upon the configuration of the intended system. *This Overview is provided for information only. Consult the Xantrex XW Power System Installation Guide for specific installation instructions.*

- 1. Mount the inverter/charger and supporting components.**
 - ▶ Plan the safe location and wiring routes for all components involved.
 - ▶ Be sure the mounting surface is strong enough to support the weight of all the equipment.
 - ▶ Be sure all wiring will safely handle the desired loads/current.
 - ▶ Install the Xantrex XW Conduit Box and Xantrex XW Power Distribution Panel (if required).
- 2. Prepare the Energy Storage (Battery) Bank.**
 - ▶ Select battery type, size, and battery bank configuration (Series, Parallel or Series-Parallel).
 - ▶ Connect appropriate cabling, DC disconnects, and over-current protection.

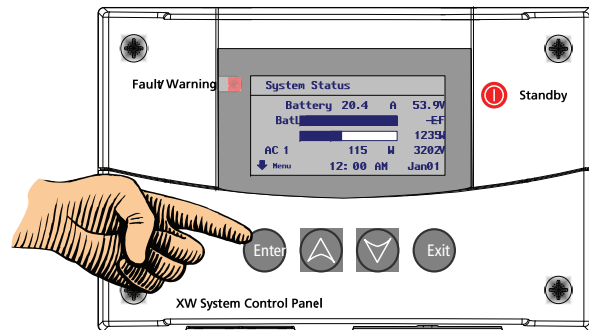
See the Application Note *Battery Banks for Inverter Systems* on the Schneider Electric website (www.schneider-electric.com).
- 3. Install the renewable energy sources (if used).**
 - ▶ Photovoltaic sources (Solar) - Includes the PV panels, combiner boxes (if used), DC Disconnects with ground fault protection (PVGFP) if needed and DC Controller.
 - ▶ Wind/hydro sources - Includes the hydro/wind generator, DC Disconnects, Load Controller, and Diversion Load.
- 4. Install the AC or DC generator (if used).**
 - ▶ Install an AC generator for AC load backup or battery charging.
 - ▶ Install a DC generator for DC loads or battery charging.
- 5. Prepare the system grounds.**
 - ▶ Ensure there is only one (1) neutral-to-ground bond.
 - ▶ Ensure the system is properly grounded and has all appropriate system protection.
 - ▶ Ensure multiple ground rods (if used) are bonded together.
- 6. Install any accessories needed.**
 - ▶ Xantrex XW System Control Panel
 - ▶ Xantrex XW Solar Charge Controller
 - ▶ Xantrex XW Automatic Generator Start
 - ▶ Category 5 Network Cables
 - ▶ Auxiliary Load and/or RPO Switch
 - ▶ AC Sync Cables
- 7. Connect the Energy Storage bank to the inverter/charger.**
 - ▶ Connect the Negative Cable from the DC Disconnect to the DC Negative (-) terminal on the Inverter.
 - ▶ Connect the Positive Cable from the DC Disconnect to the DC Positive (+) terminal on the inverter.
- 8. Connect the inverter/charger to the Inverter AC Distribution Panel and house loads.**
 - ▶ Connect the AC OUT of the inverter/charger to the Inverter AC Distribution Panel supporting the house loads.
- 9. If power is available from a local utility grid:**
 - ▶ Connect the input from the local utility grid.
- 10. Configure specific system parameters.**
 - ▶ Use the Xantrex XW System Control Panel or the computer-based Xantrex XW Configuration Tool.
 - ▶ See the Xantrex XW Operation Guide for detailed instructions on configuring system parameters.

Xantrex XW Inverter/Charger – Basic Menu Map



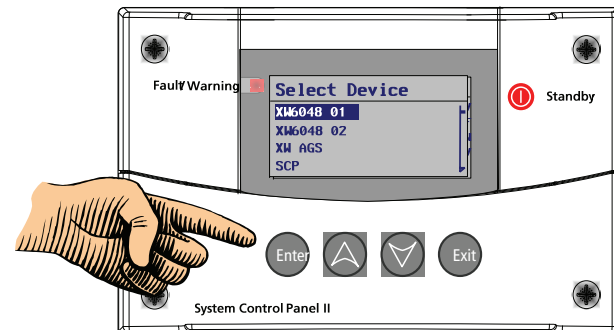
Use the Xantrex XW System Control Panel to select basic features and functions.

1 System Home Screen



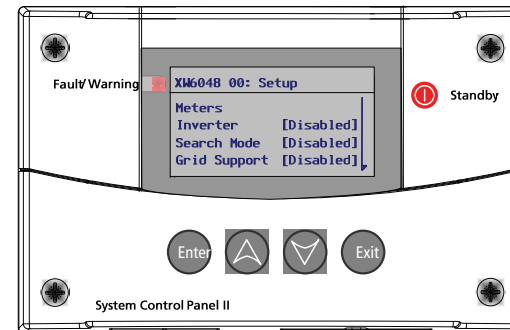
From the System Home Screen, press ENTER to access the Device List.

2 Select Device Screen

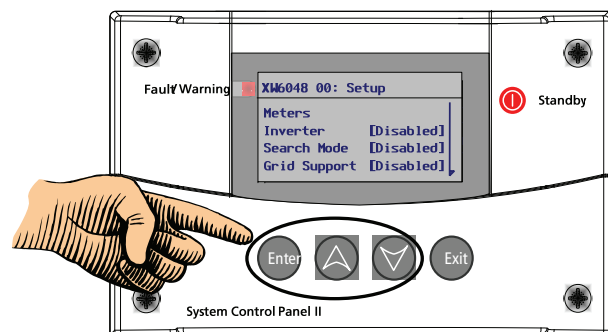


From the Device List, press ENTER to select the device.

3 Basic Setup Menu

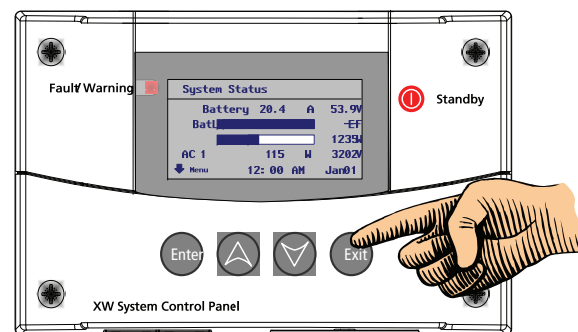


4 To Switch between Basic and Advanced* Setup Menus



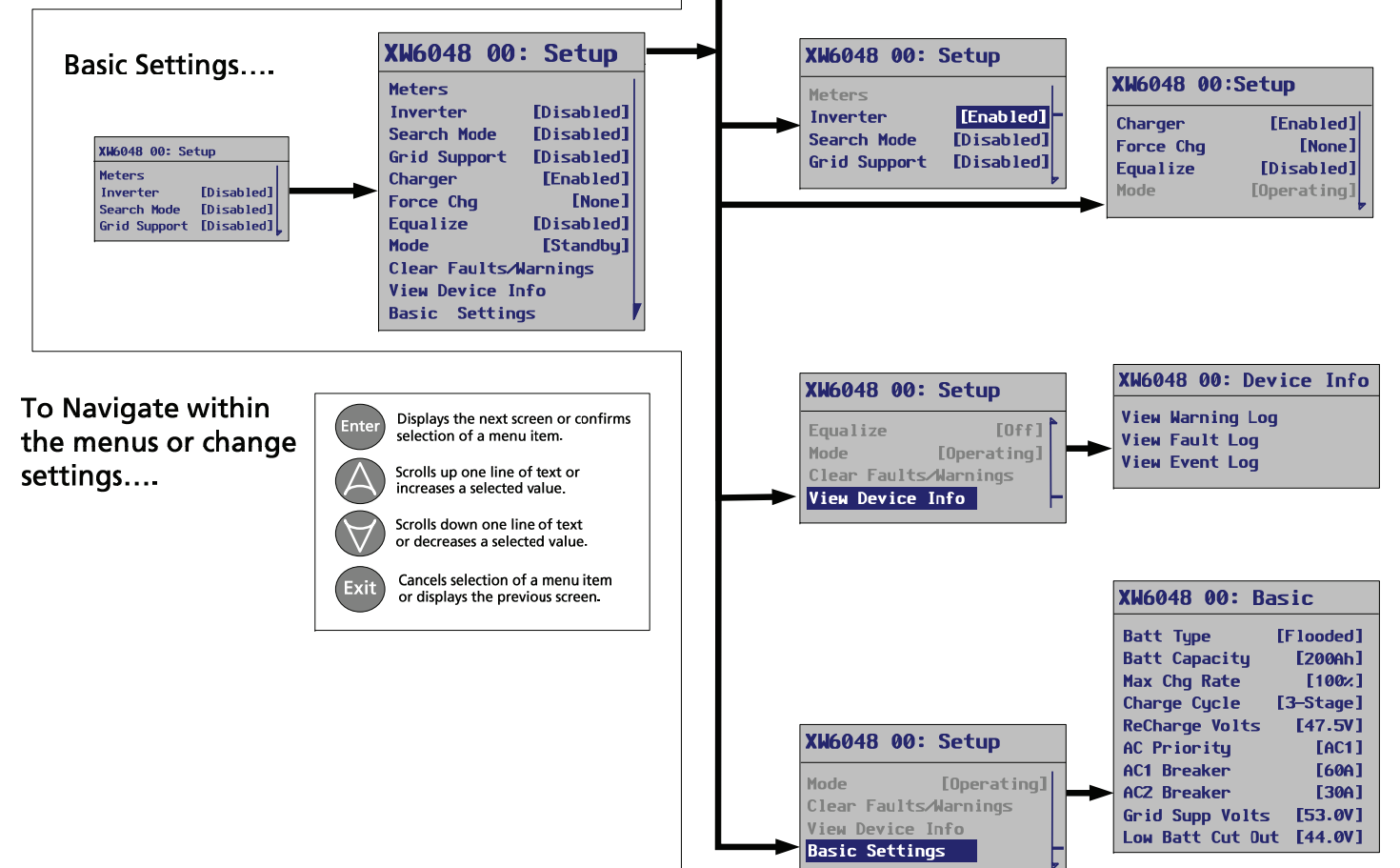
Press all 3 buttons at the same time.

5 Return to the System Home Screen



Press EXIT twice (2x) to return to System Home Screen.

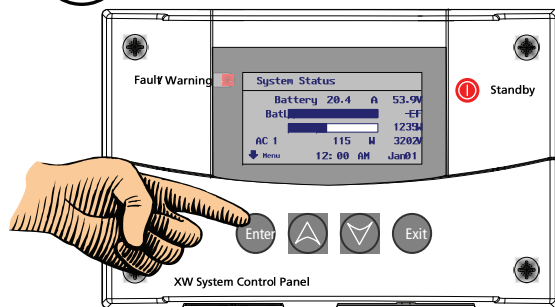
*Advanced Settings are shown on the Advanced Menu Map. Details for using the Basic and Advanced Settings are available in the XW Operation Guide.



Menu Map for Xantrex XW Automatic Generator Start

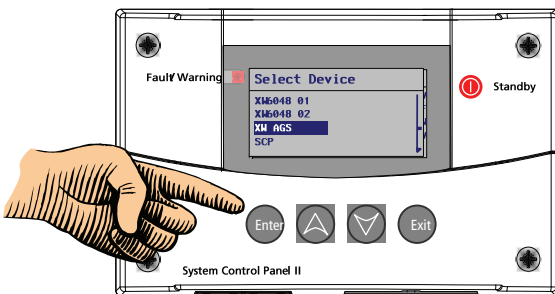
Use the Xantrex XW System Control Panel to configure generator functions and options.

1 System Home Screen



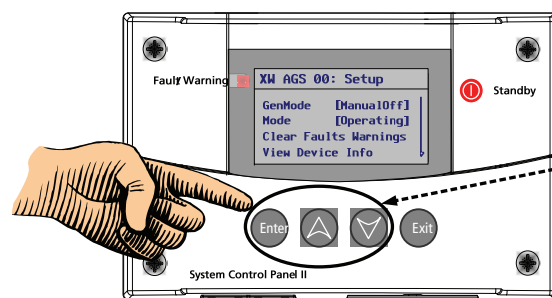
From the System Home Screen, press ENTER to access the Device List.

2 Select Device Screen



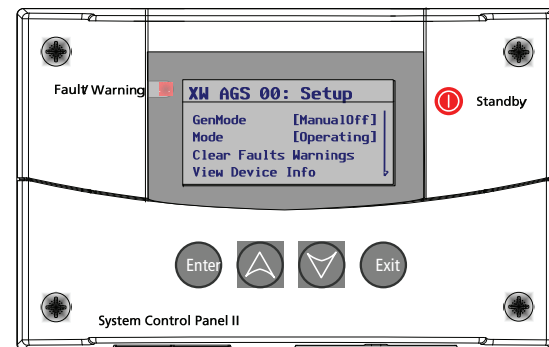
From the Device List, press ENTER to select the device.

3 To switch between Basic and Advanced Setup Menus

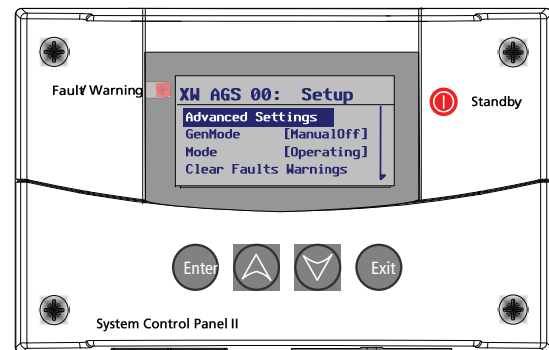


Press all 3 buttons at the same time.

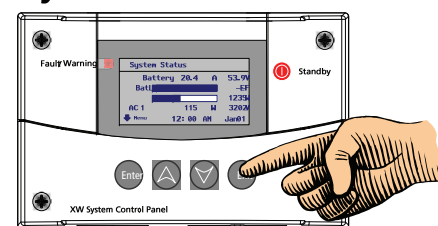
4a Basic Setup Menu



4b Advanced Setup Menu



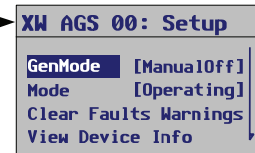
5 Return to the System Home Screen



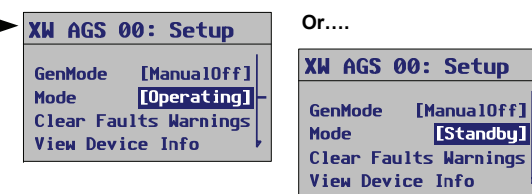
Press EXIT twice (2x) to return to System Home Screen.

Basic Settings...

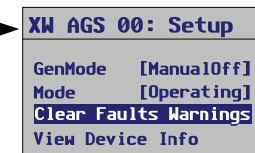
To Select the Generator Mode...



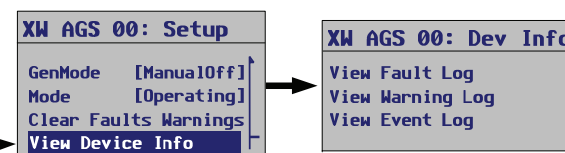
To Change the System Mode... Or...



To Clear Faults Warnings...

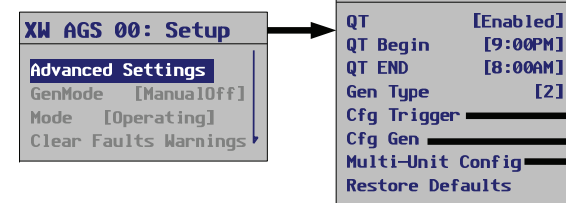


To View Device Information...



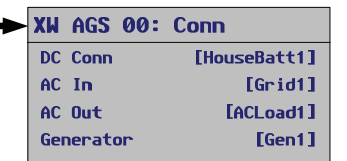
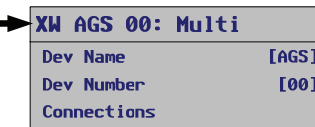
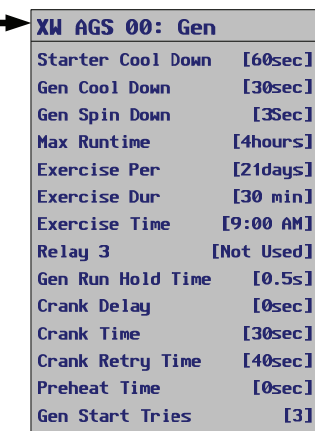
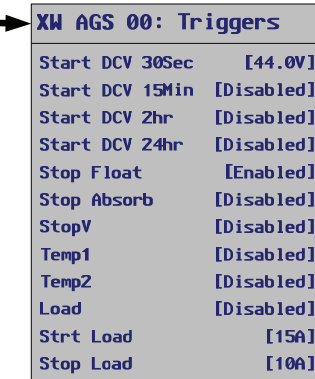
Advanced Settings...

To Configure...



To Navigate within the menus or change settings....

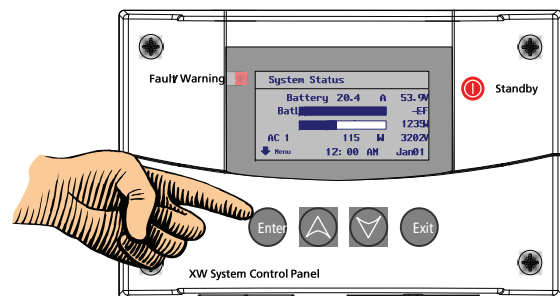
- Enter Displays the next screen or confirms selection of a menu item.
- Scrolls up one line of text or increases a selected value.
- Scrolls down one line of text or decreases a selected value.
- Exit Cancels selection of a menu item or displays the previous screen.



Menu Map for Xantrex XW Solar Charge Controller

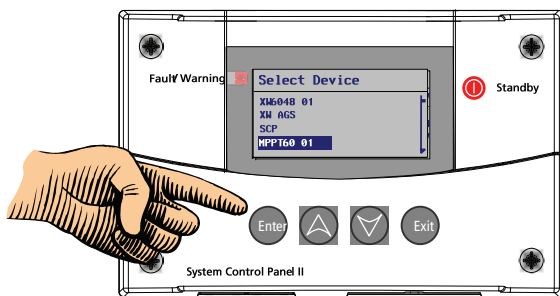
Use the Xantrex XW System Control Panel to configure Charge Controller functions and options.

1 System Home Screen



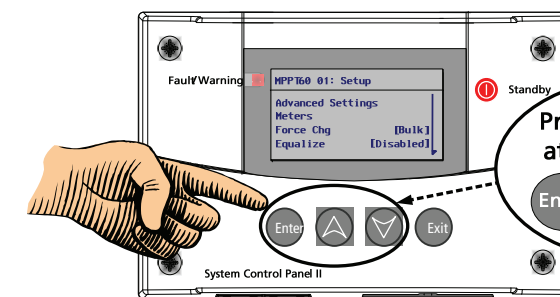
From the System Home Screen, press ENTER to access the Device List.

2 Select Device Screen



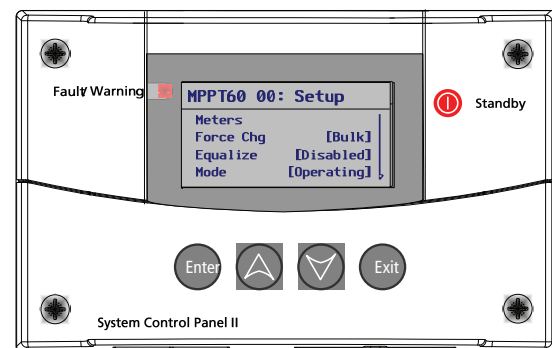
From the Device List, press ENTER to select the device.

3 To switch between Basic and Advanced Setup Menus

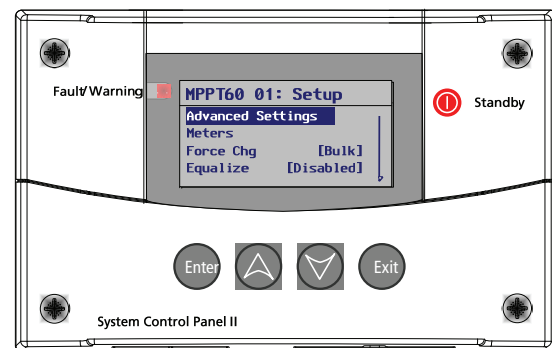


Press all 3 buttons at the same time.

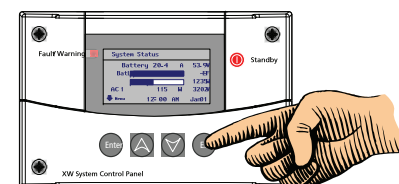
4a Basic Setup Menu



4b Advanced Setup Menu



5 Return to the System Home Screen



Press EXIT twice (2x) to return to System Home Screen.

Basic Settings...

To Monitor...

MPPT60 00: Setup

Advanced Settings
Meters
Force Chg [Bulk]
Equalize [Enabled]

MPPT60 00: Meters
PV In Power 215W
PV In 2.1A 100.5V
DC Out Power 210W
DC Out 3.7A 57.4V
Today 3.5Ah 0.20kWh
Life 0.1K1h 5kWh
Batt Temp 20C
Charging Absorb
Aux Off

To Enable/Disable Features...

MPPT60 00: Setup

Advanced Settings
Meters
Force Chg [Bulk]
Equalize [Enabled]

MPPT60 00: Setup
Advanced Settings
Meters
Force Chg [Bulk]
Equalize [Enabled]

To Select Operating Mode...

MPPT60 00: Setup

Equalize [Enabled]
Mode [Operating]
Clear Faults Warnings
View Device Info

MPPT60 00: Setup
Equalize [Enabled]
Mode [Standby]
Clear Faults Warnings
View Device Info

To Clear Faults Warnings...

MPPT60 00: Setup

Equalize [Enabled]
Mode [Operating]
Clear Faults Warnings
View Device Info

To View Device Information...

MPPT60 00: Setup

Equalize [Enabled]
Mode [Operating]
Clear Faults Warnings
View Device Info

MPPT60 00: Dev Info
View Warning Log
View Fault Log

Advanced Settings...

To Configure...

MPPT60 00: Setup
Advanced Settings
Meters
Force Chg [Bulk]
Equalize [Enabled]

MPPT60 00: Adv
Charger Settings
Input Settings
Aux Settings
Copy from [MPPT 02]
Multi Unit Config
Restore Defaults

MPPT60 00: Chr
Batt Type [Flooded]
Custom Settings
Batt Capacity [200Ah]
Max Chg Rate [100%]
Charge Cycle [3-Stage]
ReCharge Volts [50V]
Absorb Time [120min]
Default Batt Temp [Warm]
Batt Voltage [48.0V]

MPPT60 00: Cust
EqLz Support [Enabled]
EqLz Voltage [64.0V]
Bulk Voltage [57.6V]
Absorb Voltage [57.5V]
Float Voltage [54.0V]
Batt Temp Comp [108mV/K]

MPPT60 00: Input
MPPT AutoTrack [Disabled]
MPPT Ref Volts [100.00V]

MPPT60 00: Aux
Manual Aux [ManualOff]
Active Lvl [Active High]
Output Level [12V]
Trig Src [LowBattV]
Trigger Level [42.0V]
Trigger Delay [1 Sec]
Clear Level [48.0V]
Clear Delay [1 Sec]

MPPT60 00: Aux
Manual Aux [ManualOn]
Active Lvl [Active High]
Output Level [12V]
Trig Src [LowBattV]
Trigger Level [42.0V]
Trigger Delay [1 Sec]
Clear Level [48.0V]
Clear Delay [1 Sec]

MPPT60 00: Multi
Dev Name [MPPT]
Dev Number [01]
Connections

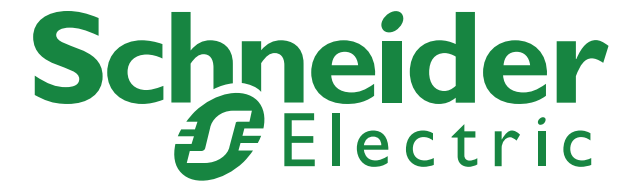
MPPT60 00: Aux
Manual Aux [Automatic]
Active Lvl [Active High]
Output Level [12V]
Trig Src [LowBattV]
Trigger Level [42.0V]
Trigger Delay [1 Sec]
Clear Level [48.0V]
Clear Delay [1 Sec]

To Navigate within the menus or change settings....

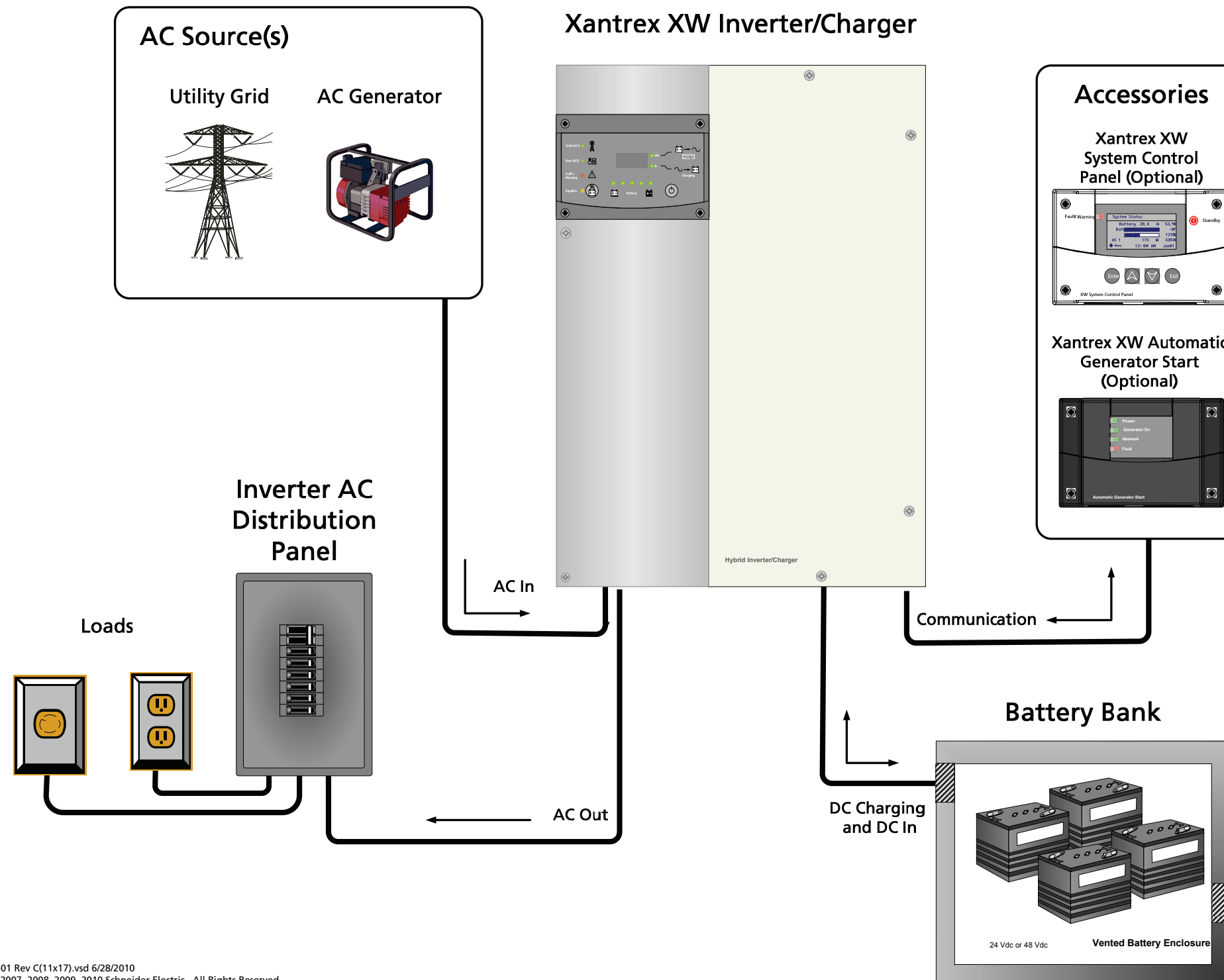
- Displays the next screen or confirms selection of a menu item.
- Scrolls up one line of text or increases a selected value.
- Scrolls down one line of text or decreases a selected value.
- Cancels selection of a menu item or displays the previous screen.

MPPT60 00: Conn
PV In [SolarArray1]
AC Out [HouseBatt1]

Xantrex XW Series Power System



Single-Inverter System (Stand-alone)



Schneider Electric Supplied Components:

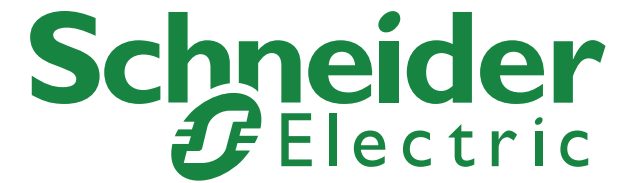
- Xantrex XW Inverter/Charger includes
 - Mounting Plate
 - Battery Temperature Sensor
 - Xantrex Xanbus™ Network Terminator
- Xantrex XW System Control Panel (optional)
 - Communication Cable (Category 5) (7ft) (2.1m)
- Xantrex XW Conduit Box (optional) (not shown)
- Xantrex XW Automatic Generator Start (optional)

Customer Supplied Components:

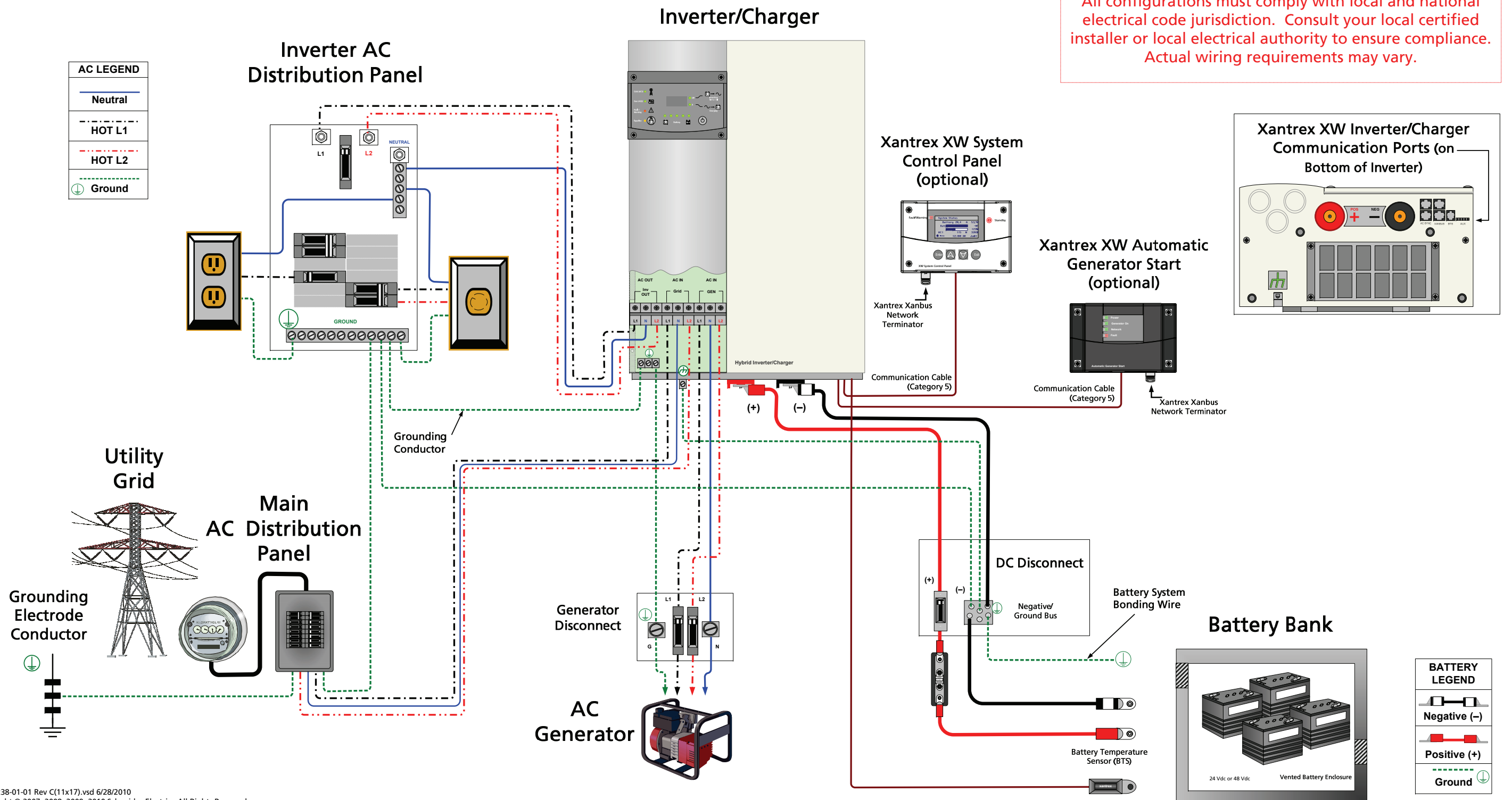
- Battery Bank (24 Vdc or 48 Vdc)
- Generator and/or Grid Connection
- Inverter AC Distribution Panel to Loads
- All wiring and cabling
- Communication Cable (Category 5) for Xantrex XW System Control Panel and/or Xantrex XW Automatic Generator Start (If used)
- All breakers for loads and peripheral disconnects (e.g., generator disconnect)

IMPORTANT:
All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance.

Xantrex XW Series Power System

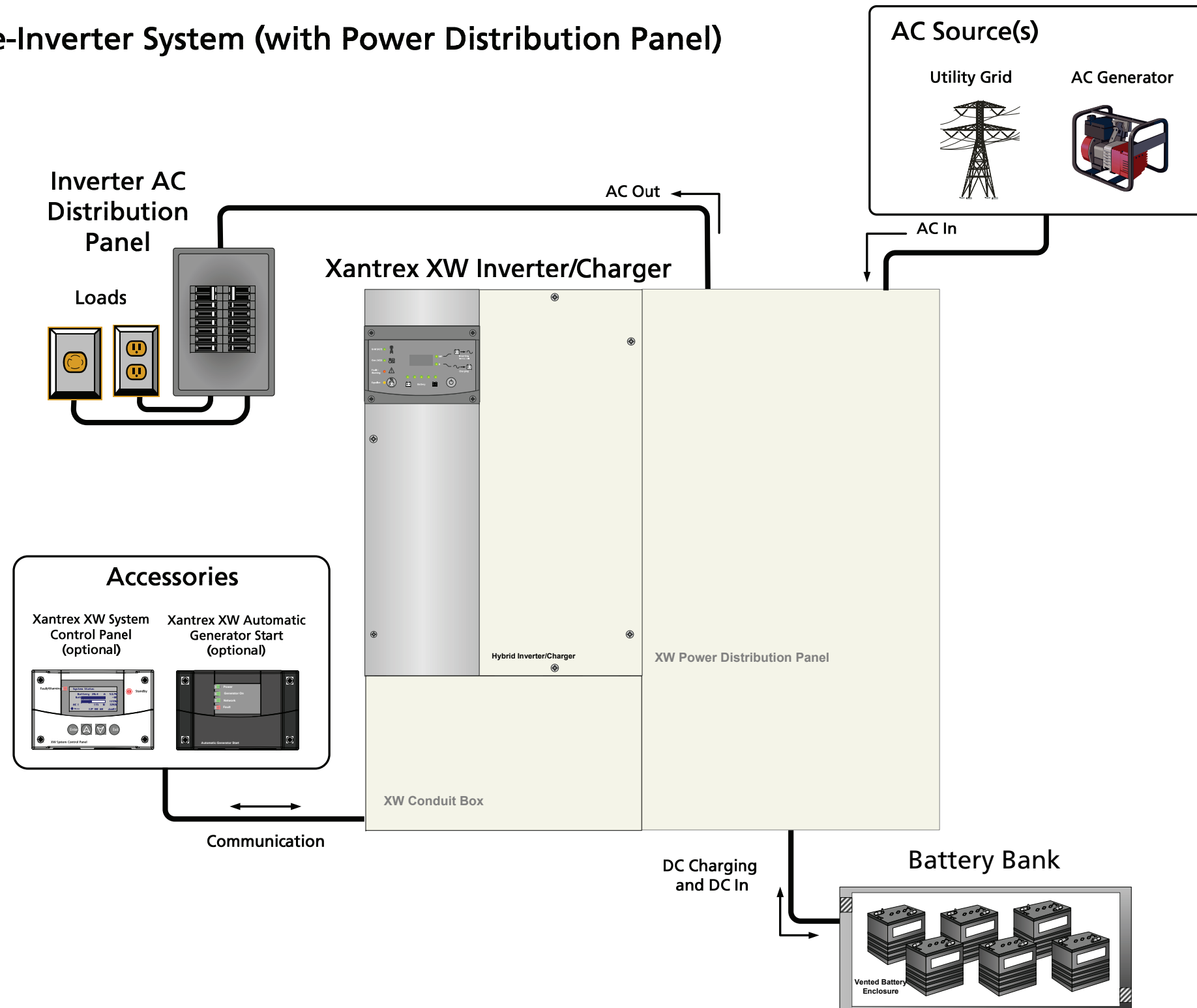


Single-Inverter System Wiring (Stand-alone)



Xantrex XW Series Power System

Single-Inverter System (with Power Distribution Panel)



Schneider Electric Supplied Components:

- Xantrex XW Inverter/Charger includes
 - Mounting Plate
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Power Distribution Panel includes
 - Mounting Plate
 - Xantrex XW Conduit Box
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock
 - two Ground Terminal Bus Bars
 - one AC Neutral Bus Bar
 - #6 AWG AC wiring for inverter connection to breakers
 - DC Negative bus bar
 - GJ250A DC Breaker with copper bus bar
 - one pair #4/0 AWG Battery Cables
- Xantrex XW System Control Panel (optional) includes
 - Mounting Plate
 - Communication Cable (Category 5) (7ft) (2.1m)
 - Xantrex Xanbus Network Terminator
- Xantrex XW Automatic Gen Start (optional) includes
 - Wiring Harness
 - Xantrex Xanbus Network Terminator

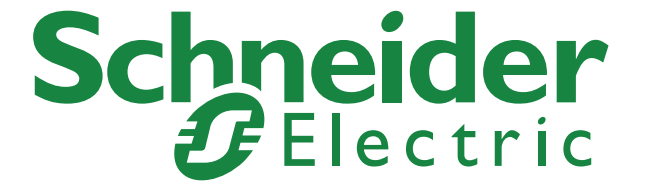
Customer Supplied Components:

- Battery Bank (24 Vdc or 48 Vdc)
- Generator and/or Grid Connection
- Inverter AC Distribution Panel to Loads
- Wiring and cabling to and from the system
- Communication Cable (Category 5) for Xantrex XW System Control Panel and/or Xantrex XW Automatic Generator Start (if used)
- All breakers for loads and peripheral disconnects (e.g., generator disconnect)

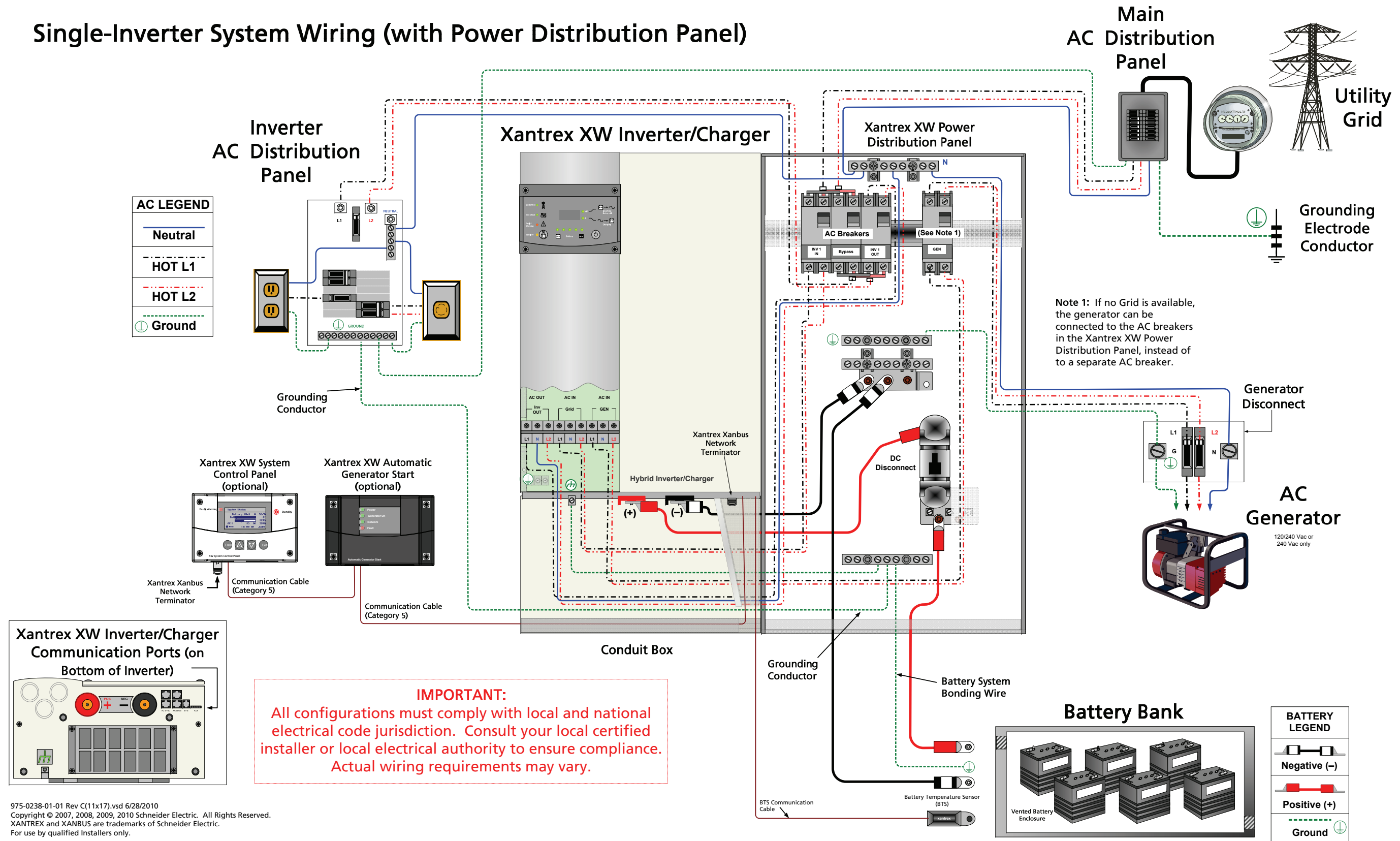
IMPORTANT:

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Xantrex XW Series Power System

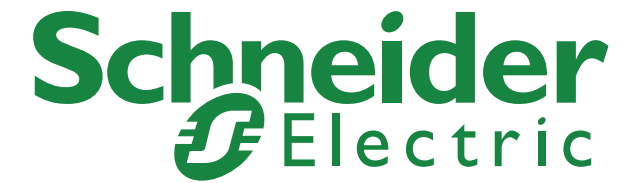


Single-Inverter System Wiring (with Power Distribution Panel)

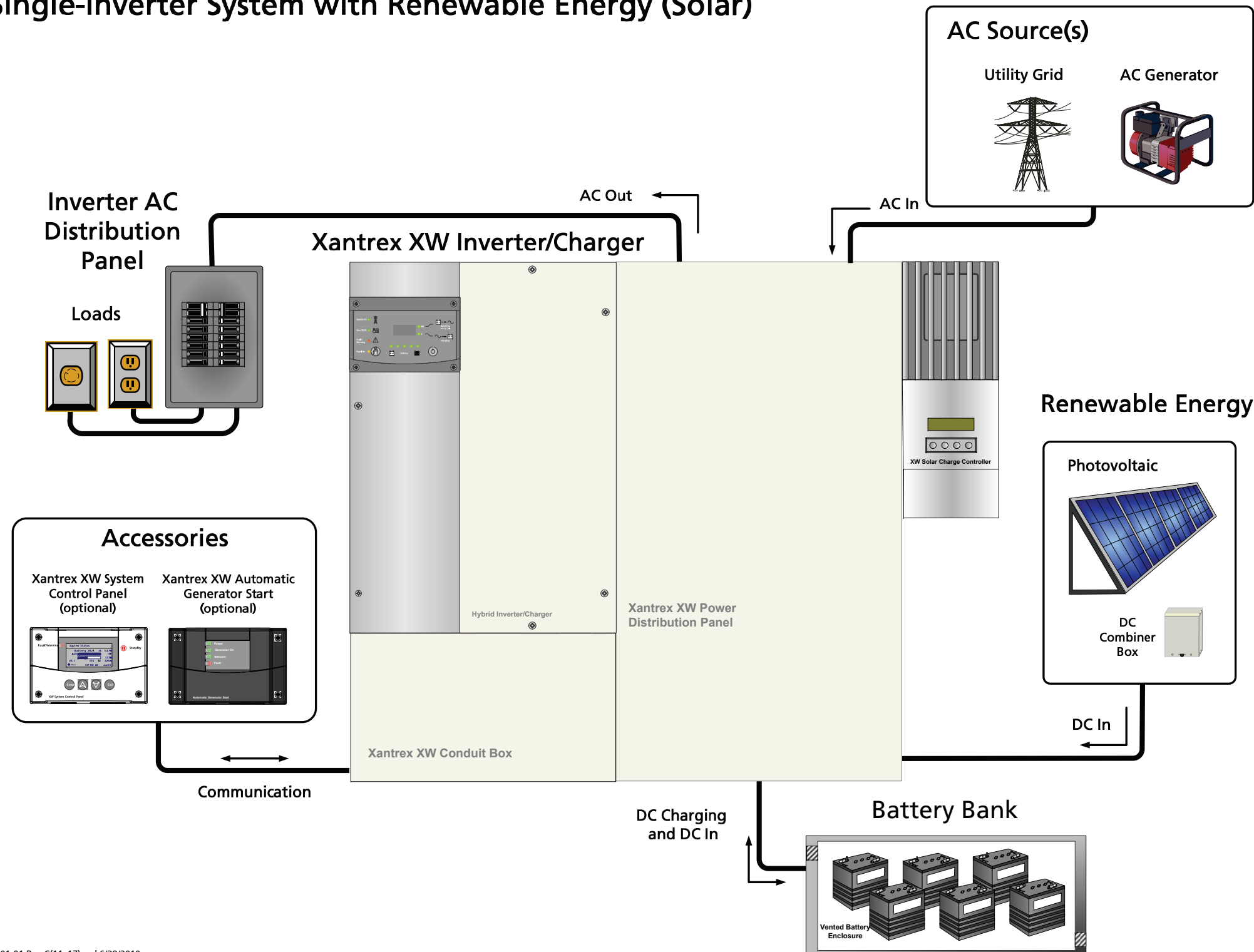


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Xantrex XW Series Power System



Single-Inverter System with Renewable Energy (Solar)



Xantrex Supplied Components:

- Xantrex XW Inverter/Charger includes
 - Mounting Plate
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Power Distribution Panel includes
 - Mounting Plate
 - Xantrex XW Conduit Box
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock
 - two Ground Terminal Bus Bars
 - one AC Neutral Bus Bar
 - #6 AWG AC wiring for inverter connection to breakers
 - DC Negative bus bar
 - GJ250A DC Breaker with copper bus bar
 - one pair #4/0 AWG Battery Cables
- Xantrex XW System Control Panel (optional) includes
 - Mounting Plate
 - Communication Cable (Category 5) (7ft) (2.1m)
 - Xantrex Xanbus Network Terminator
- Xantrex XW Solar Charge Controller includes
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Automatic Gen Start (optional) includes
 - Wiring Harness
 - Xantrex Xanbus Network Terminator

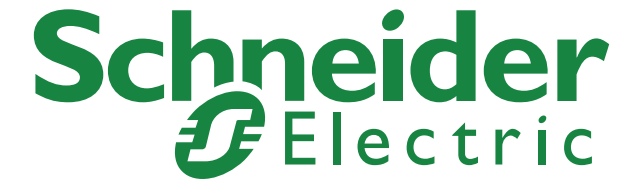
Customer Supplied Components:

- Battery Bank (24 Vdc or 48 Vdc)
- Generator and/or Grid Connection
- Solar Panels and associated cabling
- DC Combiner Boxes (may or may not be required)
- Inverter AC Distribution Panel to Loads
- Wiring and cabling to and from the system
- Communication Cable (Category 5) for Xantrex XW System Control Panel and/or Xantrex XW Automatic Generator Start (If used)
- All breakers for loads and peripheral disconnects (e.g., generator disconnect)

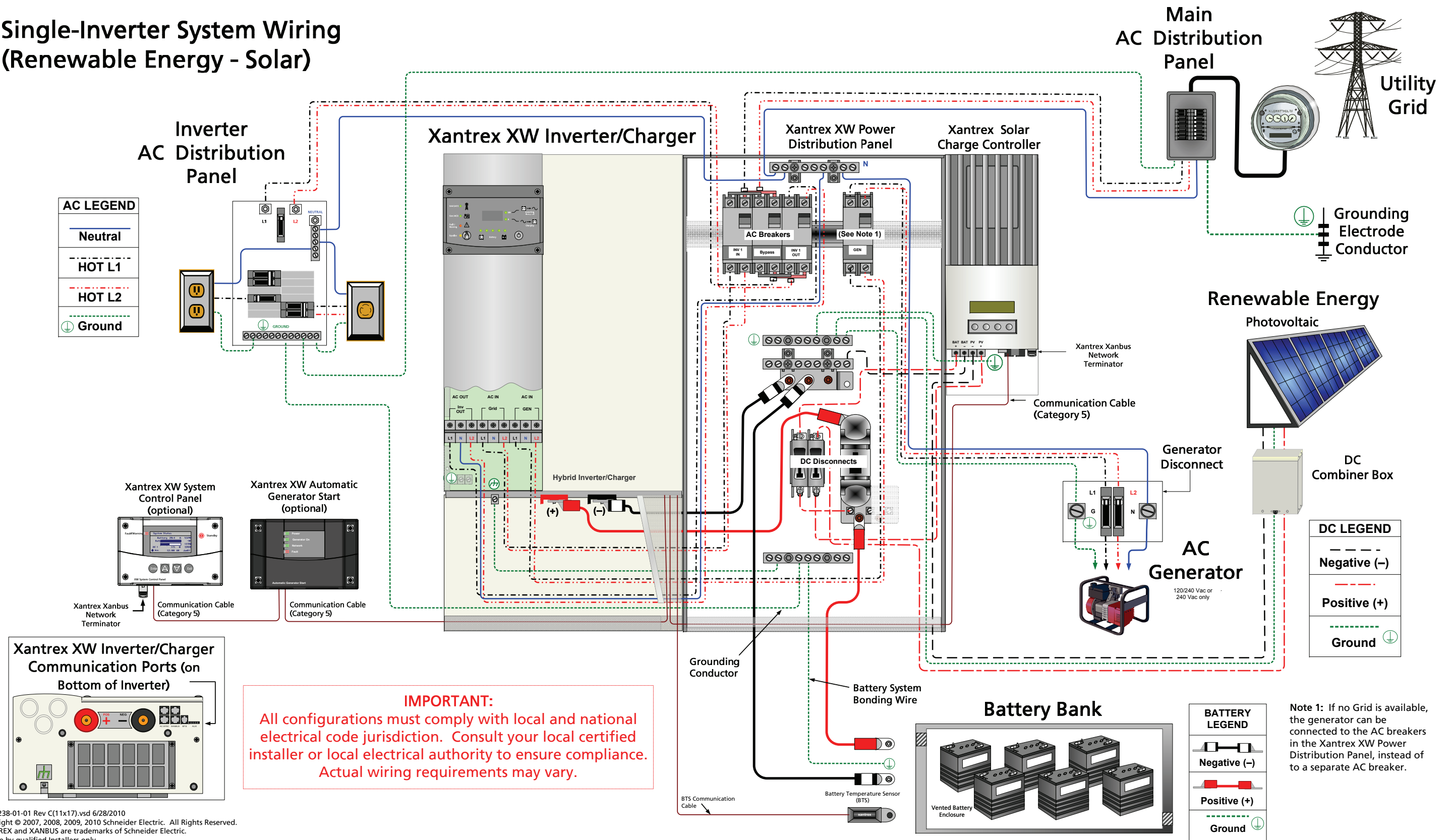
IMPORTANT:

All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance.

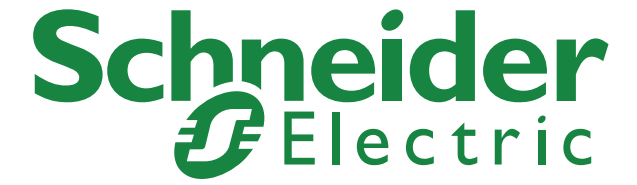
Xantrex XW Series Power System



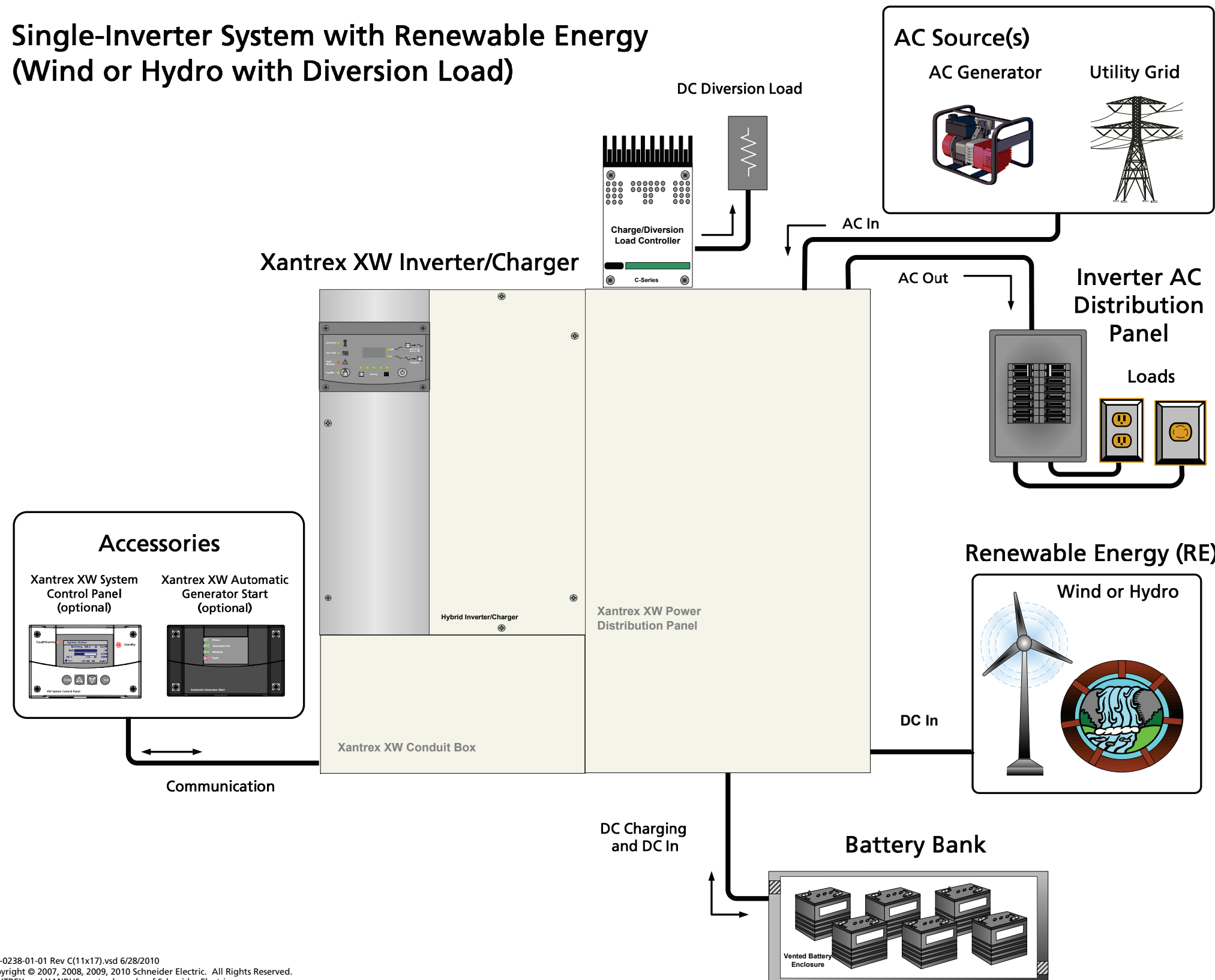
Single-Inverter System Wiring (Renewable Energy - Solar)



Xantrex XW Series Power System



Single-Inverter System with Renewable Energy (Wind or Hydro with Diversion Load)



Schneider Electric Supplied Components:

- Xantrex XW Inverter/Charger includes
 - Mounting Plate
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Power Distribution Panel includes
 - Mounting Plate
 - Xantrex XW Conduit Box
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock
 - two Ground Terminal Bus Bars
 - one AC Neutral Bus Bar
 - #6 AWG AC wiring for inverter connection to breakers
 - DC Negative bus bar
 - GJ250A DC Breaker with copper bus bar
 - one pair #4/0 AWG Battery Cables
- C Series Charge Controller for Diversion Load Control
- Xantrex XW System Control Panel (optional) includes
 - Mounting Bracket
 - Communication Cable (Category 5) (7ft) (2.1m)
 - Xantrex Xanbus Network Terminator
- Xantrex XW Automatic Generator Start (optional) includes
 - Wiring Harness
 - Xantrex Xanbus Network Terminator

Customer Supplied Components:

- Battery Bank (24 Vdc or 48 Vdc)
- Generator and/or Grid Connection
- Wind or Hydro Turbines and associated cabling
- Diversion Load and associated wiring
- Inverter AC Distribution Panel to Loads
- Wiring and cabling to and from the system
- Communication Cable (Category 5) for Xantrex XW System Control Panel and/or Xantrex XW Automatic Generator Start (If used)
- All breakers for loads and peripheral disconnects (e.g., generator disconnect)

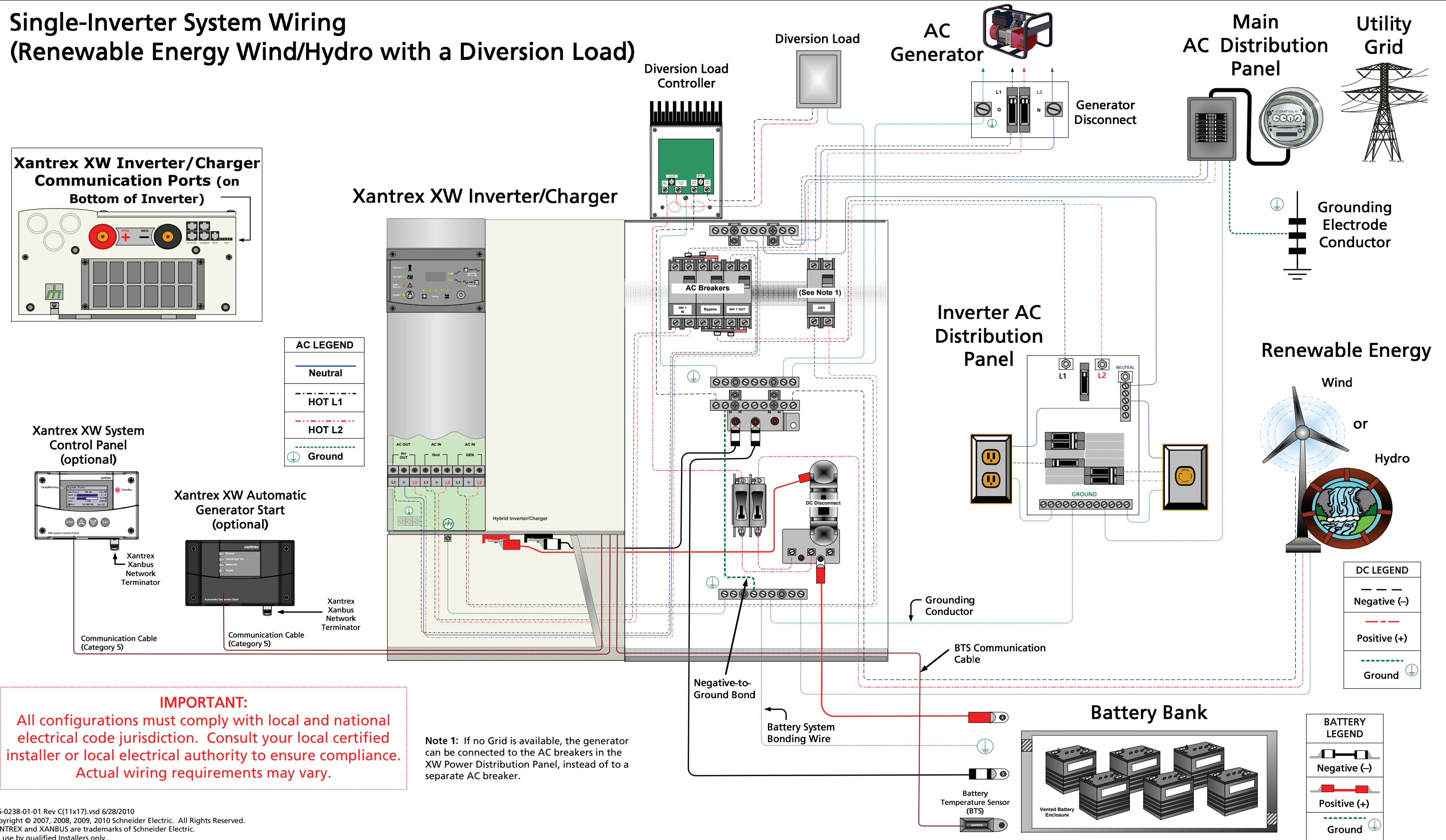
IMPORTANT:

All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance.

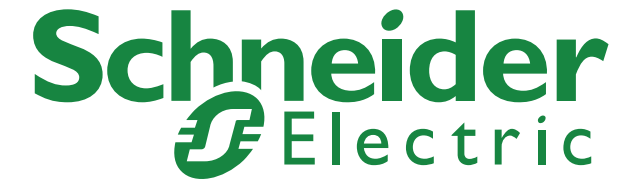
Xantrex XW Series Power System



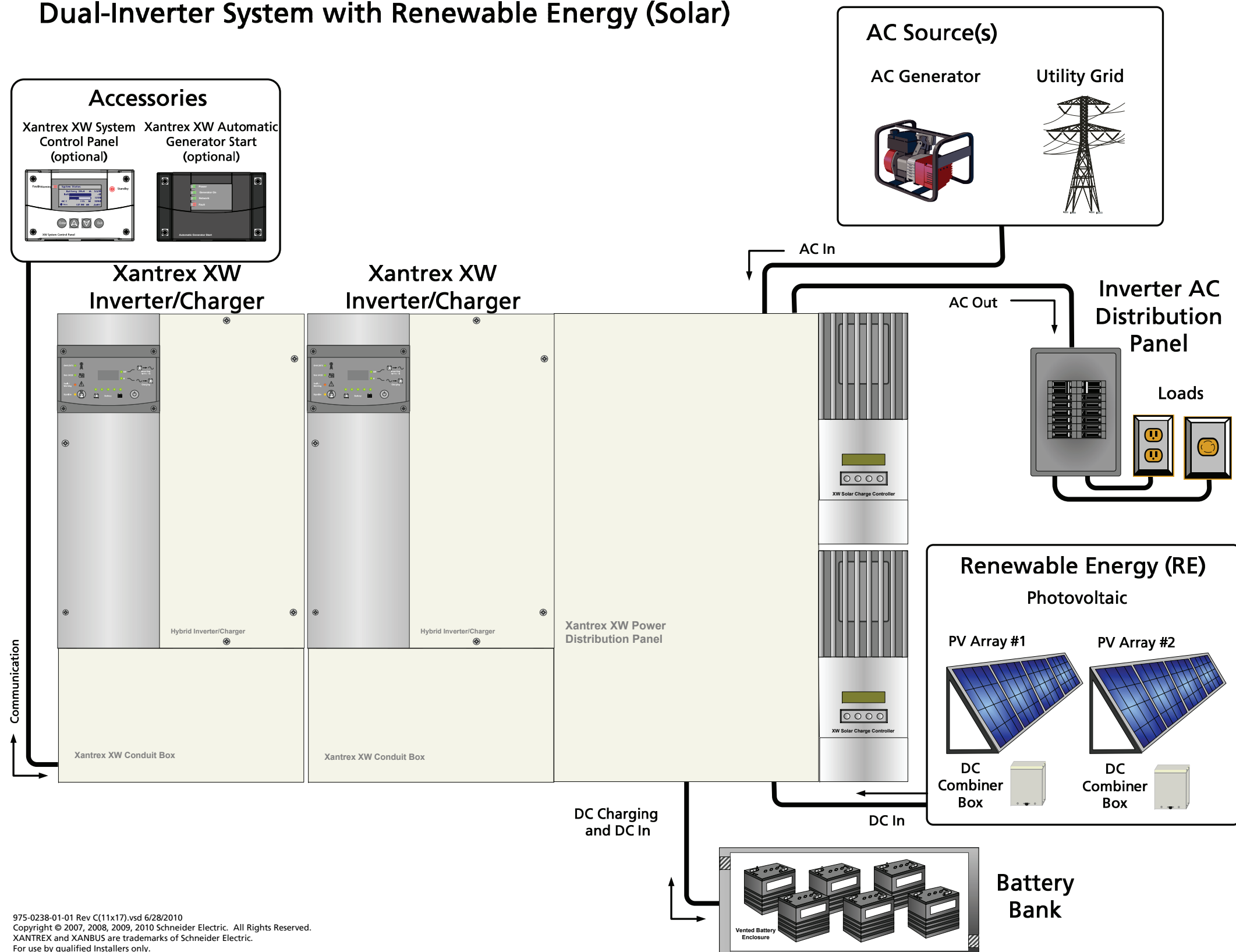
Single-Inverter System Wiring (Renewable Energy Wind/Hydro with a Diversion Load)



Xantrex XW Series Power System



Dual-Inverter System with Renewable Energy (Solar)



Xantrex Supplied Components:

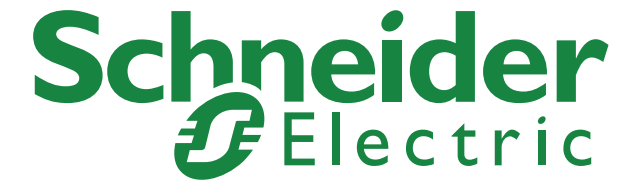
- Xantrex XW Inverter/Charger includes
 - Mounting Plate
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Power Distribution Panel includes
 - Mounting Plate
 - Xantrex XW Conduit Box
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock
 - one Ground Terminal Bus Bar
 - one AC Neutral Bus Bar
 - #6 AWG AC wiring for inverter connection to breakers
 - DC Negative bus bar
 - GJ250A DC Breaker with copper bus bar
 - one pair #4/0 AWG Battery Cables
- Xantrex XW Connection Kit for Inv2 includes
 - Xantrex XW Conduit Box for second XW Inverter
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC Breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock for dual inverterchargers
 - #6 AWG AC wiring for inverter connection to breakers
 - one GJ250A DC Breaker with copper bus bar
 - two Communication Cables (for Xanbus networking and AC Sync)
 - one pair #4/0 AWG Battery Cables for second inverter
- Xantrex XW Solar Charge Controller includes
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW System Control Panel includes
 - Mounting Bracket
 - Communication Cable (Category 5) (7ft) (2.1m)
 - Xantrex Xanbus Network Terminator
- Xantrex XW Automatic Generator Start (optional) includes
 - Wiring harness
 - Xantrex Xanbus Network Terminator

Customer Supplied Components:

- Battery Bank (24 Vdc or 48 Vdc)
- Generator and/or Grid Connection
- Solar Panels and associated cabling
- DC Combiner Boxes (may or may not be required)
- Inverter AC Distribution Panel to Loads
- Wiring and cabling to and from the system
- Communication Cable (Category 5) for Inverter Stacking
- Communication Cable (Category 5) for Xantrex XW System Control Panel and/or Xantrex XW Automatic Generator Start (if used)
- All breakers for loads and peripheral disconnects (e.g., generator disconnect)

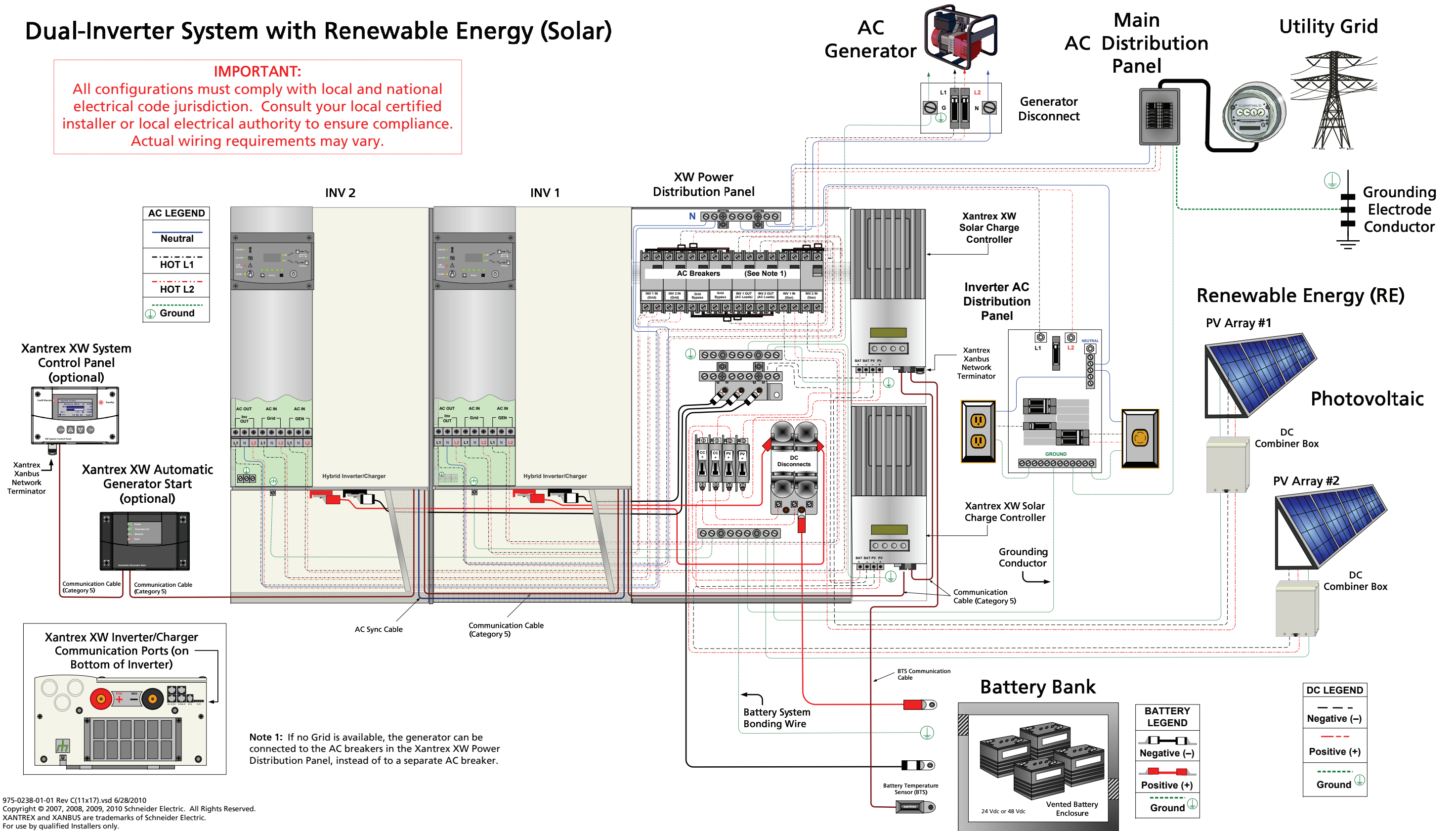
IMPORTANT:
All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance.

Xantrex XW Series Power System

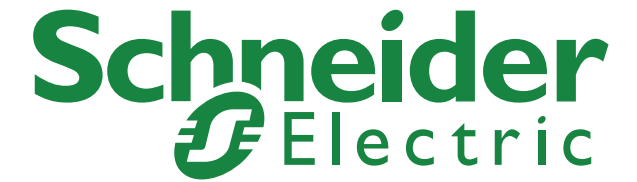


Dual-Inverter System with Renewable Energy (Solar)

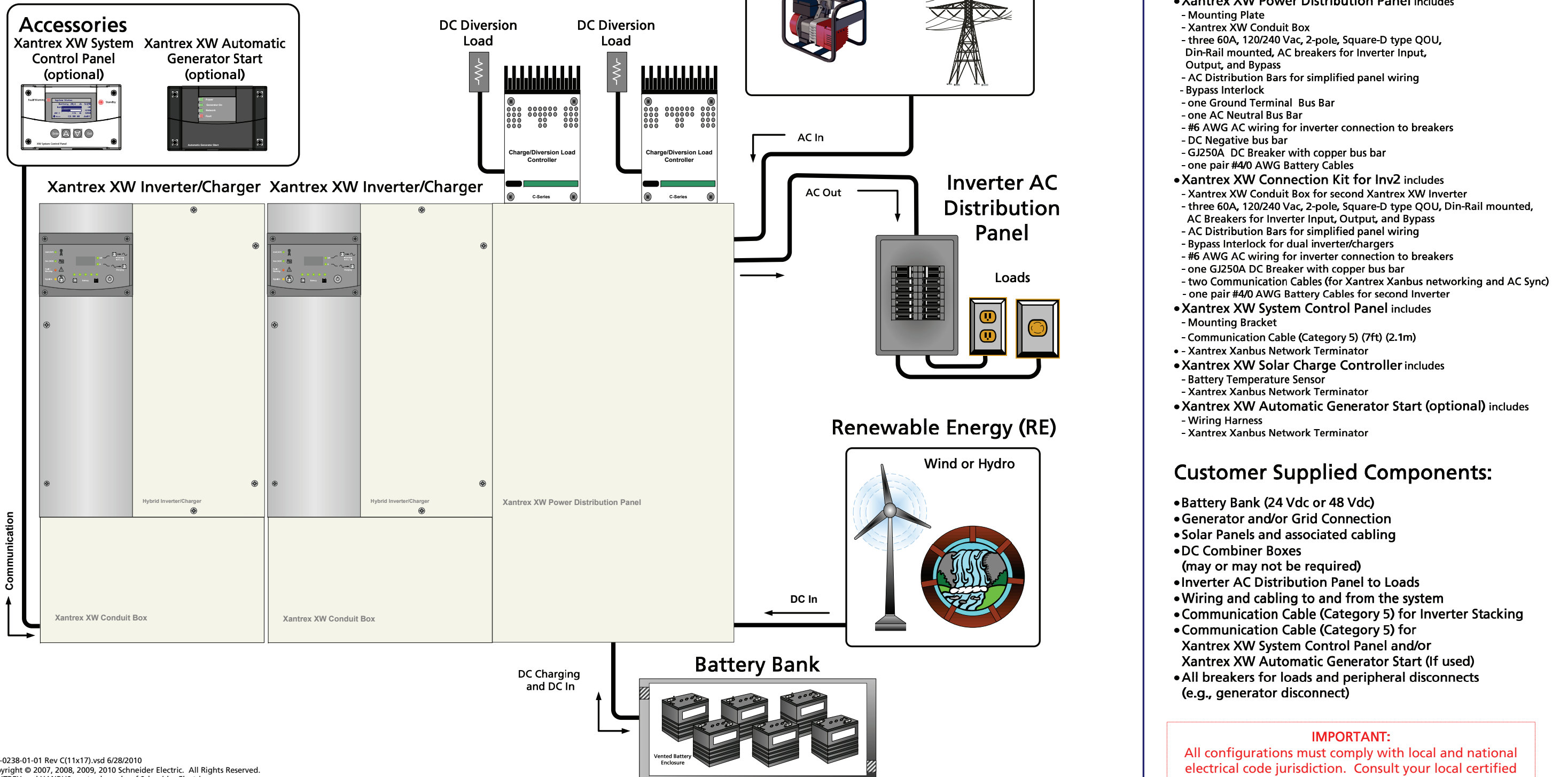
IMPORTANT:
All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance. Actual wiring requirements may vary.



Xantrex XW Series Power System



Dual-Inverter System (Renewable Energy with Diversion Loads)



Xantrex Supplied Components:

- Xantrex XW Inverter/Charger includes
 - Mounting Plate
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Power Distribution Panel includes
 - Mounting Plate
 - Xantrex XW Conduit Box
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock
 - one Ground Terminal Bus Bar
 - one AC Neutral Bus Bar
 - #6 AWG AC wiring for inverter connection to breakers
 - DC Negative bus bar
 - GJ250A DC Breaker with copper bus bar
 - one pair #4/0 AWG Battery Cables
- Xantrex XW Connection Kit for Inv2 includes
 - Xantrex XW Conduit Box for second Xantrex XW Inverter
 - three 60A, 120/240 Vac, 2-pole, Square-D type QOU, Din-Rail mounted, AC Breakers for Inverter Input, Output, and Bypass
 - AC Distribution Bars for simplified panel wiring
 - Bypass Interlock for dual inverter/chargers
 - #6 AWG AC wiring for inverter connection to breakers
 - one GJ250A DC Breaker with copper bus bar
 - two Communication Cables (for Xantrex Xanbus networking and AC Sync)
 - one pair #4/0 AWG Battery Cables for second Inverter
- Xantrex XW System Control Panel includes
 - Mounting Bracket
 - Communication Cable (Category 5) (7ft) (2.1m)
- Xantrex Xanbus Network Terminator
- Xantrex XW Solar Charge Controller includes
 - Battery Temperature Sensor
 - Xantrex Xanbus Network Terminator
- Xantrex XW Automatic Generator Start (optional) includes
 - Wiring Harness
 - Xantrex Xanbus Network Terminator

Customer Supplied Components:

- Battery Bank (24 Vdc or 48 Vdc)
- Generator and/or Grid Connection
- Solar Panels and associated cabling
- DC Combiner Boxes (may or may not be required)
- Inverter AC Distribution Panel to Loads
- Wiring and cabling to and from the system
- Communication Cable (Category 5) for Inverter Stacking
- Communication Cable (Category 5) for Xantrex XW System Control Panel and/or Xantrex XW Automatic Generator Start (If used)
- All breakers for loads and peripheral disconnects (e.g., generator disconnect)

IMPORTANT:
All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance.

Xantrex XW Series Power System



Dual-Inverter System (Renewable Energy with Diversion Loads)

IMPORTANT:
All configurations must comply with local and national electrical code jurisdiction. Consult your local certified installer or local electrical authority to ensure compliance. Actual wiring requirements may vary.

