



Blue Link 480

Solar Power Generator



Shipment Acceptance and
Installation Guide.

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This symbol designates using extra caution or two people required to performing a step.



Blue Link Solar Network LLC encourages recycling of all shipping materials. Please do your part to help the environment and dispose of all packaging materials properly.

Section I. Before Accepting Shipment

Prior to signing the shipping paperwork for your BlueLink 480, please inspect and note any damage.

If the package contains a “Shockwatch” Label, indicate the condition noted on the label.

Note any damage or other abnormalities to the corrugated cover or pallet.

If anything abnormal is found, note it on the shipping paperwork before accepting your BlueLink 480.

Request the delivery man to place your BlueLink 480 as close as possible to the permanent installation site.

Section II. Before You Begin



Please read this installation guide completely prior to starting. It is divided into (3) basic steps: Section III - Installation, Section IV - Operation, and Section V - Registration.

To complete section III you will need the tools listed in Table 1, the hardware from the **Accessory Package** - Table 2, and the **Angle Braces**. The **Accessory Package** and the 4 **Angle Braces** are located on the pallet (Figure 1)

Table 1. Tool List:

- 1) Flat bladed (standard) screwdriver for staple removal - un packing.
- 2) 7/16” wrench for loosening shipping support nuts.
- 3) 1/2” wrench for tightening angle brace bolts.

Table 2. Accessory Package Contents:









	Blue Link Commission Data Card	x1
	Inverter Registration Card	x1
	PV Module Documentation	x3
	Warranty Card	x1
	5/16 x 3” Bolt	x4
	5/16 x 3/4” Bolt	x4
	5/16” Flat Washer	x8
	Test Cord	x1

Figure 1 shows your Blue Link still on the wooden pallet with the side PV modules deployed. Figure 2 gives the basic dimensions of your deployed Blue Link 480.

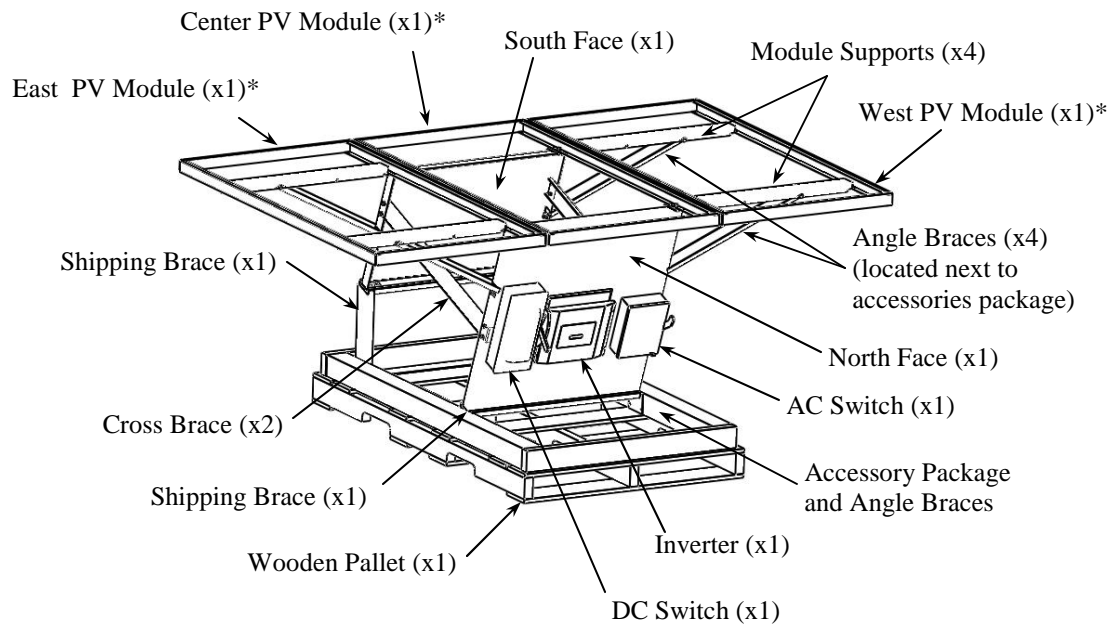


Figure 1

* The PV Module glass is transparent

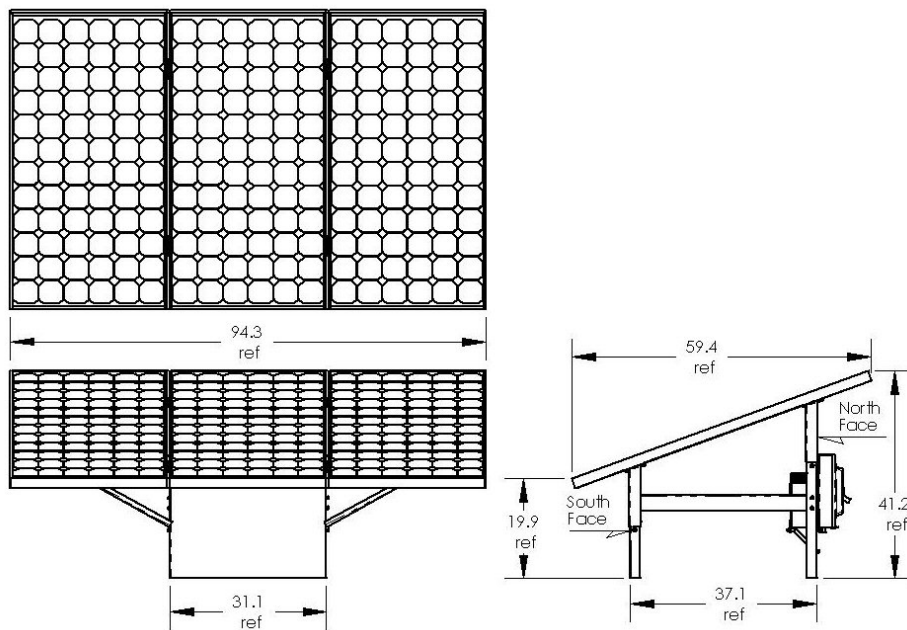


Figure 2

Section III. Installation

Move BlueLink 480 in the carton to a position close to the intended permanent location.



DO NOT DROP YOUR BLUELINK 480!

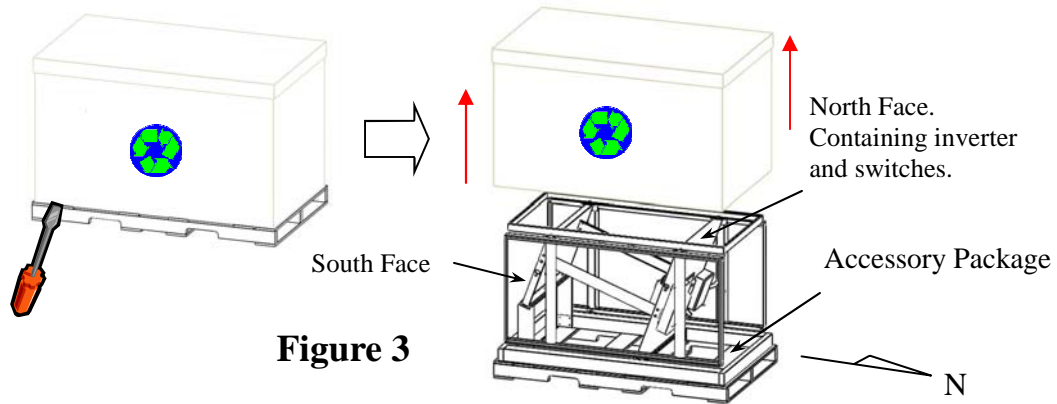


Figure 3

1. Remove staples with staple remover or flat head screwdriver.
2. Lift cardboard cover from unit and set aside.
3. Remove **Angle Braces** and **Accessory Package**, identify components and hardware, set aside.



TWO PEOPLE ARE RECOMMENDED FOR THE FOLLOWING STEPS.

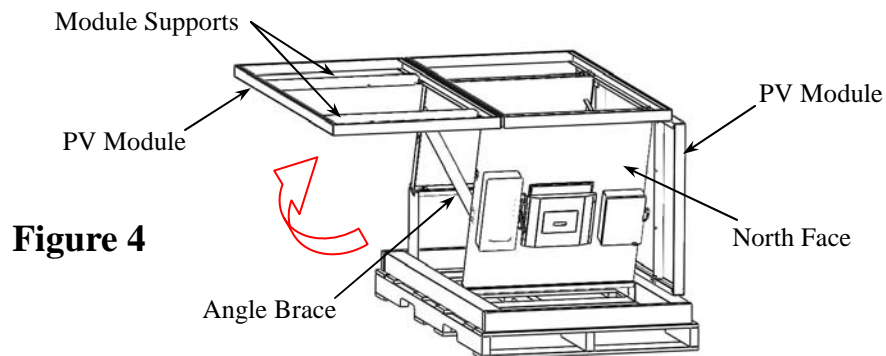


Figure 4

Place 2 **Angle Braces** & 2 each **5/16 x 3 bolts** & **5/16 x 3/4 bolts** along with washers close at hand before deploying modules.

4. With the unit still bolted to the pallet, lift one PV Module by the bottom edge from the vertical position to the horizontal or “deployed” position.

Note: The 2 **Module Supports** (mounted under the PV Modules) each have 2 sets of screw holes. The side of the **North** and **South faces** each have a square hole and a screw hole.



Both **Angle Braces** must be bolted in place before the person holding the PV Module can release it. The PV Modules are glass and may crack if twisted.

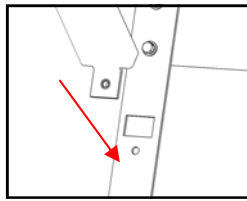


Figure 5

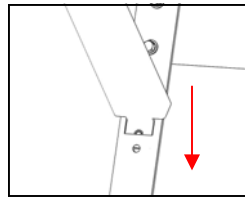


Figure 6

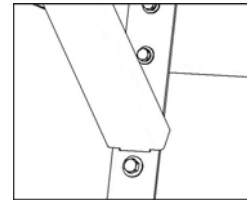


Figure 7

5. While one person holds the PV module in place, another person must insert the tab on the **Angle Brace** into the square hole on the side of the **North** and **South** faces (Figure 5)

6. Once the **Angle Brace Tab** is through the square hole, slide it down so the screw hole lines up with the screw hole in the side of the face (Figure 6)

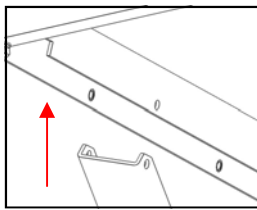


Figure 8

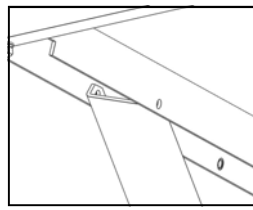


Figure 9

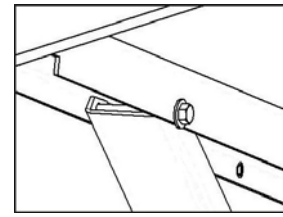


Figure 10

7. Align the **Angle Brace** to the **Module Support** under the PV Module so the **Angle Brace** fits inside the **Module Support**.

Note: PV Panels will be located as shown in (Figure 2)

8. Line up the outer most holes in the **Module Support** with the holes in the **Angle Brace** (Figure 9) Use the 5/16 x 3.0" bolts with washers under the bolt head to attach the **Angle Brace** and the **Module Support** together (Figure 10)

9. Use the 5/16 x 3/4" bolts with washers to fasten the **Angle Brace** to the side of the face (Figure 7)

10. Repeat steps 4 through 9 for the remaining 3 **Angle Braces** (Figure 2)

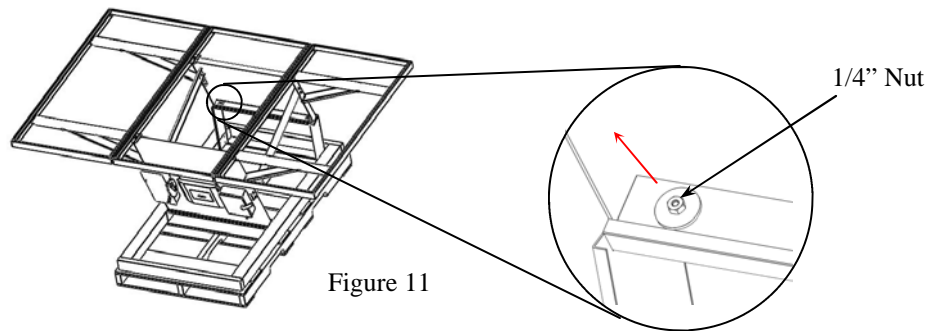



Figure 11

11. Remove the 2 nuts and washers that fasten each face to the shipping braces.

 After the 4 nuts are removed, do not move or jar your BlueLink 480.

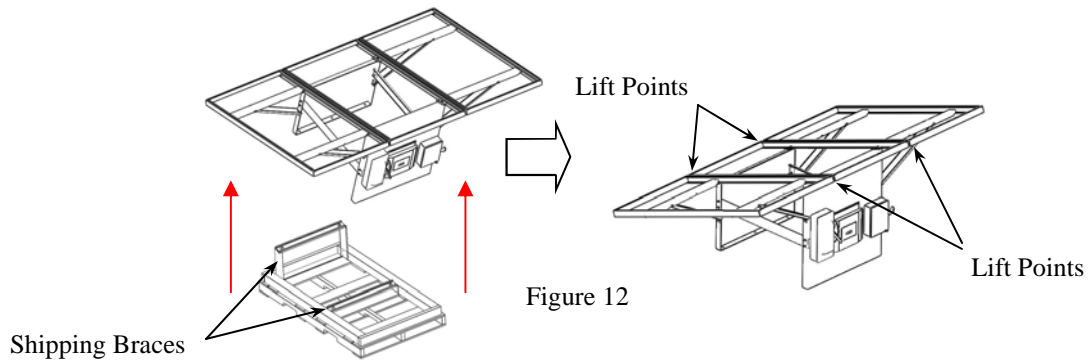



Figure 12

 Unit weighs approximately 200 lbs. Make certain that there is an appropriate number of people to help lift the unit from the pallet to the ground, the face with the inverter and switches is twice as heavy as the opposing face.

12. With one person at each face, lift the unit by the Center PV Module frame at the lift points indicated (figure 12)

13. Carefully move the unit to permanent location. Secure to foundation with face containing inverter and switches facing North.

Section IV. Operation Wiring your BlueLink 480 to the grid.

Note: Your BlueLink 480 has been pre-tested and operated prior to shipment, see the commission data card in the **Accessory Package**.

B. Permanent Installation

- 1) Contact your local regulatory agency (s) to determine applicable regulations for permanently mounting and wiring your Blue Link 480.
- 2) Select location for your Blue Link 480 with maximum exposure to sunlight.
- 3) The Blue Link 480 is designed to fasten to a concrete footing (s) for permanent installation. Construct foundation according to local codes. The foundation dimensions provided (Figure 15) are calculated to withstand 150 mph winds, the maximum encountered in the United States. The 1/2" anchor bolts shown must align with the holes in the North and South faces of your Blue Link 480. The Blue Link 480 is wider and longer than the recommended foundation size, so be sure to allow ample clearance beyond the edges on all sides.
- 4) After time for curing of concrete foundation, set your BlueLink 480 carefully over the anchor bolts, tighten nut with flat washer to firmly secure your Blue Link 480 to the foundation. The North face of your Blue Link 480 contains the inverter switches.
- 5) The National Electrical Code (NEC #690.64.B1) recommends a dedicated circuit for your Blue Link 480 Solar Generator. The international building code (IBC 2003) provides foundation requirements. States and cities that provide rebates for solar powered installations may require a building permit to qualify.

B. Testing your BlueLink 480.

Figure 13



Note: Make sure both AC & DC breaker switches are in the off position.

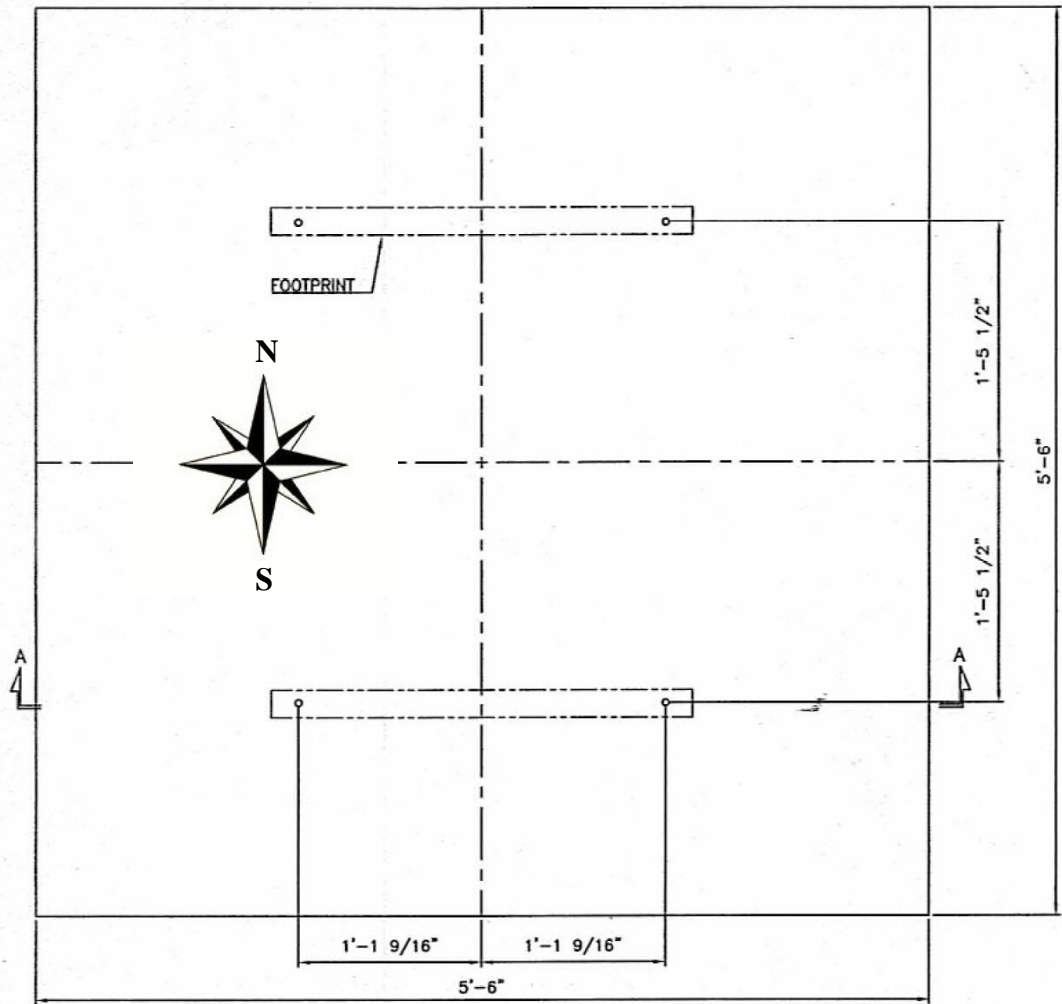
- 1) Open the AC Switch Box cover and feed the **Test Cord** (from the **Accessory Package**) through a knockout hole in the side or bottom of the box.
- 2) Connect the 3 identified wires (L,N&G) to the 3 identified terminals. L to L, N to N and G to G. and close box.
- 3) Plug the cord into any line 120 volt outlet.
- 4) Switch the DC then the AC switch to the “ON” position. Observe the LCD readout on the face of the Inverter. After about 5 minutes, your BlueLink 480 will begin generating power, which will be indicated by a continuous display on the LCD readout showing output values.



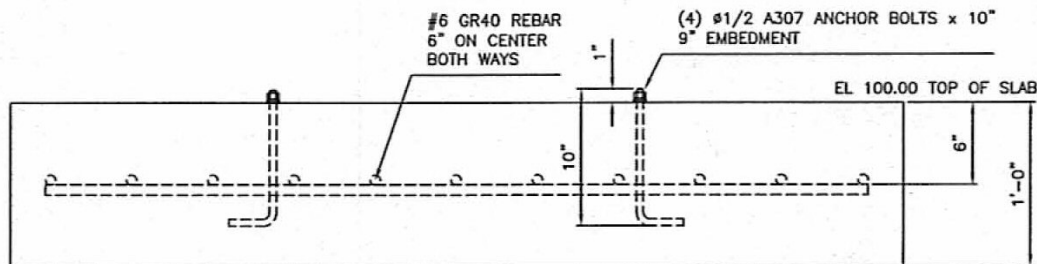
Figure 14

Section V. Registration

Read the Inverter and PV module information in the accessory package, then mail in the Inverter Registration Information and the BlueLink 480 Registration Card found in the accessory package.



PLAN VIEW



SECT A-A

WIND DESIGN CRITERIA
IBC 2003

NOTES:

1. FOUNDATION EXCAVATIONS SHALL BE MADE NEAT TO THE DIMENSIONS INDICATED IN THE DRAWINGS. BEFORE PLACING CONCRETE, FOOTING, TRENCHES SHALL BE CLEARED OF STANDING WATER AND LOOSE SOIL.
2. CONCRETE STRENGTH AT 28 DAYS SHALL BE 3000 PSL. READY MIXED CONCRETE SHALL CONFORM TO ASTM C94. IN ADDITION, MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.50 BY WEIGHT AND SLUMP SHALL BE 3 TO 4 INCHES. MAXIMUM AGGREGATE FOR ALL CONCRETE SHALL BE 3/4"
3. CONCRETE INGREDIENTS SHALL CONFORM TO THE FOLLOWING: A) PORTLAND CEMENT: PER ASTM C 150 TYPE 1 OR 2. B) AGGREGATES: FINE AND CORSE - CONFORM TO ASTM C 33. C) WATER: CLEAN AND FREE OF DETRIMENTAL IMPURITIES.
4. CONCRETE PLACEMENT SHALL CONFORM WITH PROVISIONS OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND SECTIONS 1905 AND 1906 OF THE 1998 CALIFORNIA BUILDING CODE.
5. THOROUGHLY VIBRATE CONCRETE TO ENSURE CONSOLIDATION AROUND REINFORCING, INSERTS AND ANCHOR BOLTS.
6. INSTALL REINFORCING STEEL IN CONFORMANCE WITH CONCRETE REINFORCING STEEL INSTITUTE'S "MANUAL OF STANDARD PRACTICE". SECURELY SUPPORT AND ANCHOR ALL REINFORCING STEEL TO AVOID DISPLACEMENT.
7. REINFORCING STEEL SHALL HAVE A MINIMUM CONCRETE COVER OF 3".
8. WASHERS SHALL BE PROVIDED BENEATH ALL NUTS AND HEAD OF ALL BOLTS.



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Figure 15



7-21-05

Bluelink Model BL480 Limited Warranty

What this limited warranty covers:

This limited warranty covers the aluminum mounting components and the assembly of all the components, and warrants the materials and workmanship to be free from defects that will impede the design criteria for a period of five years from the date of first purchase by the original purchaser, when installed per manufacturer's instructions.

This limited warranty covers only the cost of parts and or the labor required to restore or replace covered items to proper condition at the sole discretion of Bluelink Solar Network LLC.

After obtaining a "return authorization number" send the faulty item(s) to the factory, freight prepaid with a copy of the original invoice for either repair or replacement.

What this limited warranty does not cover:

Defects resulting from misuse, abuse, negligence, accidents, normal wear, alteration, modification or repair without direct consultation with the manufacturer or it's authorized representative, or use in a manner other than that specified by the manufacturer.

The inverter and solar panels are covered under the manufacturer's warranty specific to those components. Documentation is provided in the BlueLink 480 accessory package.

Bluelink Solar Network LLC, Inc assumes no responsibility for indirect, incidental or consequential damages.

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