

Return Serial Number Sheet to NeoVolta Inc.

Installer (Company): _____

Installed Component	Serial Number
NV14 (left side by disconnect)	
Inverter (left side by green push button)	
WiFi logger (on logger and box)	
Battery 1 (upper left) NV14	
Battery 2 (lower left) NV14	
Battery 3 (lower right) NV14	
NV24 (left side of cabinet)	
NV24 Battery 4 (bottom shelf)	
NV24 Battery 5 (top shelf)	

Homeowner Information:

Name (First and Last): _____

Phone Number: _____

Email: _____

Street Address: _____

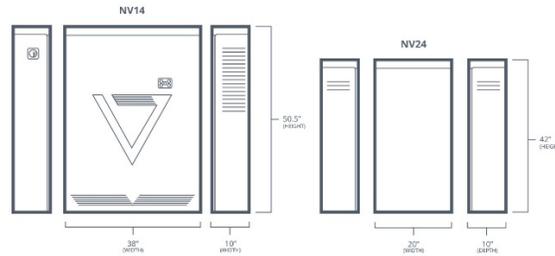
City, State, and Zip Code: _____

Date Installed: _____

Installed Inside or Outside? _____

NeoVolta NV14 and NV24 Quick Install Instructions

If difficulty, refer to full installation manual or call **NeoVolta at (858) 226-4936 Mon-Fri, 8am-5pm PST.**



PHYSICAL INSTALL OF NV14 and/or NV24

- Determine location of NV14 and/or NV24 unit and Critical Load Subpanel.
 - The NV14 needs **4 inches** of clearance on the left side (Disconnect assess) and **4 inches** of clearance of the right side for heat exhaust.
 - If installing NV24, it needs to be within **TWO feet of the NV14** (left, right, or opposite side of wall).
- NV14 and/or NV24 must be mounted on solid foundation (concrete, pavers, etc.)
- Measure the height of the NV14 and/or NV24 from legs to mounting bracket on the back panel.
- Use included mounting brackets, find studs, and mount the mounting brackets on the house.
- Lift the NV14 and/or NV24 onto the mounting brackets.
- Adjust legs to level the NV14 and/or NV24 to level.
- Add 40 Amp breaker to the main service panel and connect to the NV14 Utility Grid Input Breaker using conduit/wire.
- Connect solar to the NV14 PV AC breakers (if solar input is AC) or to the PV1 / PV2 DC input (if solar is DC).
 - **Up to 9,600 W AC PV, 8,448 W DC PV, and/or up to 10,000 W combined AC and DC PV.**

DO NOT PULL CRITICAL LOAD WIRES IF SOLAR IS NOT INSTALLED AND FUNCTIONING

- Install provided Eaton sub panel and provided 40 Amp input breaker.
- Once solar is installed, **pull up to SIXTEEN 15 and/or 20 Amp breakers** from the main service panel to the new Eaton Subpanel utilizing no more than 32 Amps. Installers can pull more circuits IF they conduct an Amp study. These circuits will be powered via the NV14, grid on or off. Matching Neutral wires must be located and moved to the Subpanel or a ground loop will occur.
- Once Critical Load breakers are pulled, connect the NV14 AC Load Output breaker to the critical load subpanel input breaker using appropriate conduit.

CONNECT SOLAR TO NV14 (AC, DC and/or both AC/DC)

- The NV14 can accept 9,600 watts of Solar AC power (string or micro-inverter). We can accept 8,448 Watts of DC solar (two MPPS with 5000 W, 500 V and 18 Amps max each). Or we can accept a combination of AC and DC solar, but this is limited to 10,000 Watts combined.

INSTALLING BATTERIES

- Take batteries out of their boxes. **WRITE down all battery serial numbers on component sheet:**
- Change the white toggle pin settings as follows:
 - **Battery One** Must be set with the **pin one up**, the rest down.
 - **Battery Two** Must be set with **pin two up**, the rest down.
 - **Battery Three** Must be set with **pin three up**, the rest down.
 - NV24 **Battery Four** Must be set with the **pins one and two are up**, the rest down.
 - NV24 **Battery Five** Must be set with **pins one and three are up**, the rest down.
- Remove the upper bracket for upper battery.

- For NV24 installation, connect the positive and negative battery connections into the NV14 prior to installing the NV14 batteries. The positive and negative terminals land on the positive/negative terminals under the inverter inside the NV14. The ground lands on the ground bar at the top on the NV14. The NV24 communications connection lands on the upper left battery inside the NV14.



- Place all three NV14 batteries into the cabinet.
 - For the NV14, the three batteries (with specific pins) can go into any position.
 - For the NV24, the two batteries (with specific pins) can go into any position.
- Connect all NEGATIVE battery connections, then connect all POSITIVE battery connections.
- Connect all RS485 communications cables.
 - NV24 upper battery connects to the lower battery. The lower battery connects to the upper NV14 battery.
 - NV14 upper left battery connects to the lower left battery.
 - NV14 lower left battery connects to the lower right battery, which connects to the inverter.
- The batteries are in SLEEP Mode. To wake them up, use provided paperclip, and push reset hole for two seconds. All batteries will automatically light up and wake up if connected properly.
- Replace upper and lower battery retaining brackets for the NV14. For the NV24, there are upper/lower recessed tabs that should be pulled out to secure the upper/lower batteries.

COMMISSIONING THE SYSTEM

- Turn NV14 40 Amp Main Service Panel breakers on.
- Turn on NV14 AC/DC disconnect switch on upper left outside of the unit.
- Flip Utility Grid Input Breaker up/on.
- Turn on NV14 inside inverter disconnect switch and press ON the green inverter button.
- The system takes 1-2 minutes to wake up. You should see green AC and Normal lights above LCD screen.
- Flip the Critical Load Output Breaker up/on. Turn on critical load sub panel breakers on one at a time.
- Flip the AC Solar and/or DC input breakers / fuse blocks up/on.
- Meter all inputs and output for 240 V.
- Press The Battery icon on the main LCD screen.

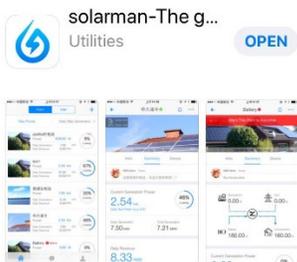


You should see three lines of info for the NV14 and five lines of info for the NV24. This assures that the batteries are communicating. If this information is not correct, then try resetting the communications cables into the batteries.

	Volt	Curr	Temp	SOC	Energy	Charge Volt	Charge Curr	Fault
1	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
2	47.98 V	2.80 A	0.0 C	30.2%	30.2Ah	54.0V	110.0A	0.00
3	47.97 V	2.40 A	7.2 C	37.5%	40.8Ah	54.0V	110.0A	0.00
4	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
5	47.97 V	3.00 A	18.0 C	35.4%	37.9Ah	54.0V	110.0A	0.00
6	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
7	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
8	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
9	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
10	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
11	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
12	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
13	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
14	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00
15	0.00 V	0.00 A	0.0 C	0.0%	0.0Ah	0.0V	0.0A	0.00

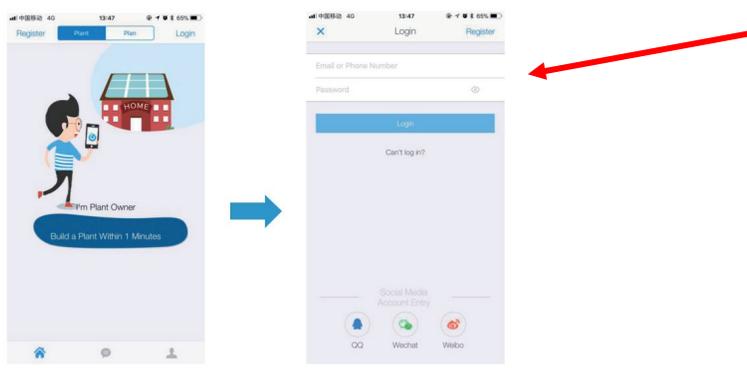
Solarman Connection for iPhones and Android Phones

- Connect the WiFi extension cable to the WiFi mount on the upper left side of the NV14. Ensure that lights come on.
- Customer connect **their Smart Phone** to their WiFi router (must use customer SMART Device). **Installer can do all of this on their smart phone so long as you use the **Customer App**, starting from being logged out, and then make a new "Register" entry. Once complete, give the email and password info to the customer and make sure that they load the App and that they can see the working information.
- Customer open **App Store** OR **Google Play** and download **Solarman 2.0** or **Solarman Utilities App**.



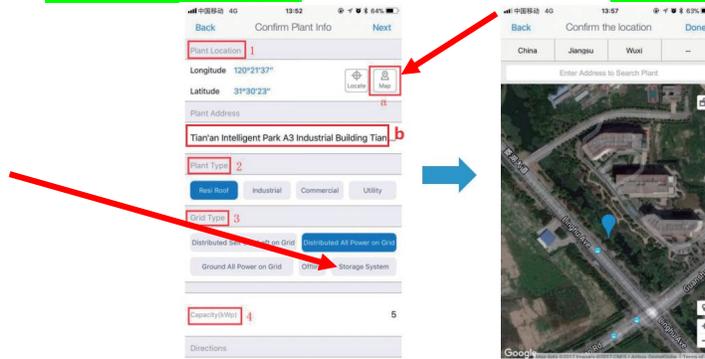
STEP 1: - Customer open the App and click "Register." Enter First and Last name, email, etc...Then, click "Build Plant Within 1 Minutes."

Customer email and a password for NV14 login. Password to be simple 6-8 letters and numbers. NO Special Characters.



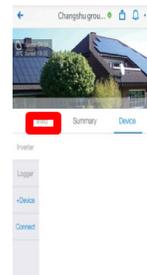
- Automatically goes to "pop ups." Allow access to camera. DO NOT allow send notifications.
- Once camera open, allow camera to scan the LOGGER QR code on the WiFi stick logger. Also, when prompted, select "Do Not Have An Installer." It's easier this way.

STEP 2: - The app will ask to confirm plant information. Use map function to locate property address. You can also manually enter the address (but map is easier). Enter residential **roof solar**, enter **storage system**, enter approx. **size of solar system** “capacity” in kWh, and **for currency select USD**.



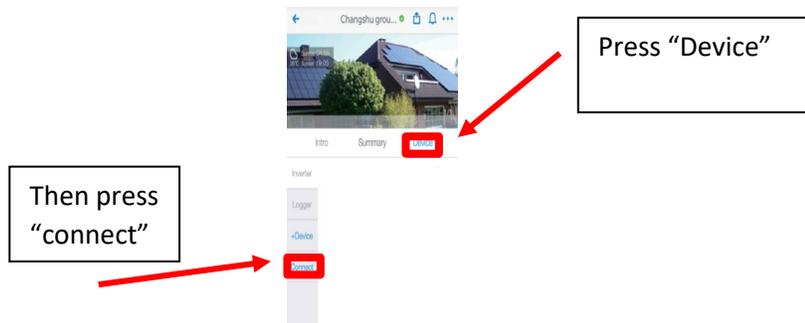
- Select “Next.” - Enter Plant name (**first and last name of customer**) and contact phone number.

STEP 3: - Select the “Intro” Tab.

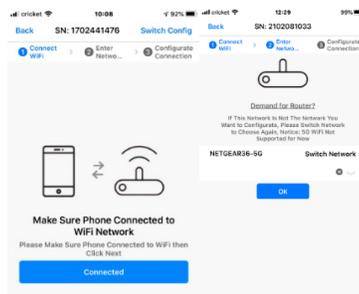


- Scroll down to “**Installer**.” Select Installer, enter **NAME OF YOUR COMPANY** (as registered), hit enter.
- Select the listed “NAME OF YOUR COMPANY.” Hit Enter.
- Select “**Bind**.” Once Bound, click back, cancel, then back.
- Select “**Distributor**.” Enter NeoVolta. Select **NeoVoltaInc**. Hit Bind. Once bound, click back, cancel, back, then back.

STEP 4: - Now select “Device” and then select “Connect.”



- The page automatically appears.



Enter Customer WiFi password and hit enter.
* For Ethernet Logger, just enter the Wifi password then wait for plant to build (20 minutes).



Write down AP hot spot number.
Write down the Password.
Password is the same as on the antenna/logger.

RETURN TO PHONE SETTINGS PAGE

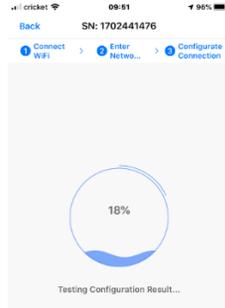
- Select WiFi in settings. Find the new Hot Spot AP number. Select it and enter the Password.



In this example, find AP_1702441478 and enter password 813d804b

Return to the Solarman App

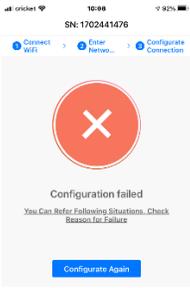
- Once you return to the Solarman App, it will automatically go to the build page:



IF SUCCESSFUL after a few minutes:

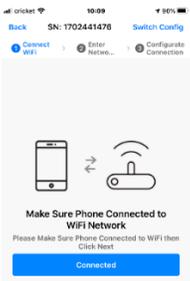


IF FAILURE:



Be patient and try again

If this method does not work or if a password does not appear, then go back to device tab, go to connect, and then switch configuration mode at the top left:



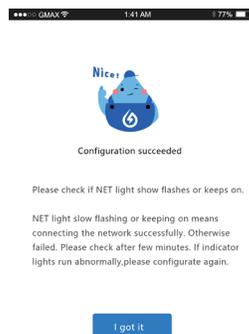
- Select Connect, enter Customer WiFi password and hit enter.
- App will access camera: Allow camera to take a picture of the Logger QR code:



- App will ask that you press the sticker logger reset button for 1 second. Press button:



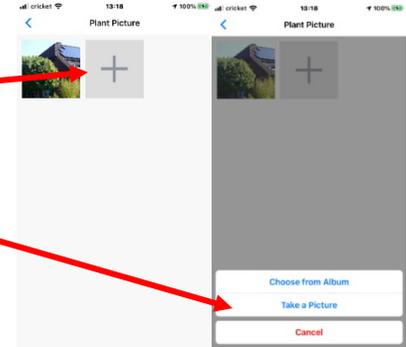
- Enter customer **WiFi password** one more time.



- **You can add a picture of the home**. Tap on the picture of the home at the top. Tap the + symbol. Take a picture. You can drag default picture to the bottom of screen to delete. Then, the actual home will be on the App.



Press on the Generic house Picture
 Select the + symbol
 Take a picture of the Home



Once new picture loads, press on old picture and drag to bottom of page to delete it.

- You should see three lights on the WiFi stick logger.

- COM light should be steady green (good communications with NV14).
- NET light should be steady green (good communications with WiFi router in home (if not steady, then use lanyard to move WiFi stick logger to location with better signal (higher up).
- Ready light should be flashing green (meaning that system is connected and communicating).

Once WiFi is connected

YOU ARE DONE!!! Takes 20 Minutes to fully build App Data the first time.

(The App builds the battery info first, then Home info, then Grid info, and PV info last)



You want this screen to be present when you install the cover. Press the ESC button to get to main page.

Put the cover on with included bolts. Remember to tighten the opposite corners first, then the remaining opposite corners, then the middle bolts. Make sure that the White bolt cover caps are accessible as the Installer rep will place White caps into the access holes once City/County Inspection has passed.