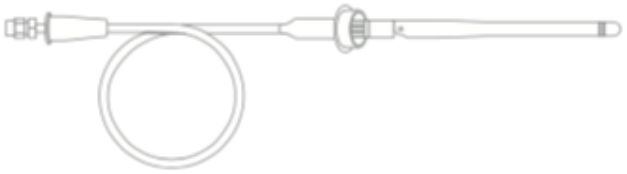
Getting Started with your Vue

Step 1. What's in the box

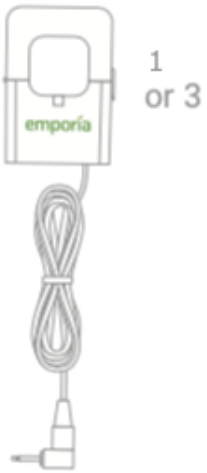
Your new Emporia Vue contains the following items.
If any of these items are missing or if you believe they've been damaged, call support immediately.

Energy monitor



WiFi antenna assembly

3.5mm plugs and 2.5mm plugs

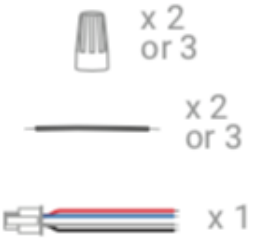


1
or 3

200A CTs

x 0, 8,
or 16

50A CTs

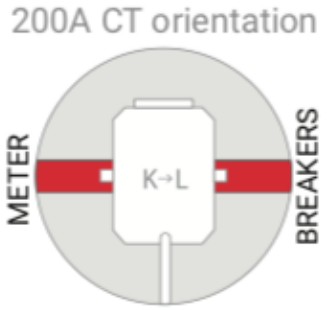


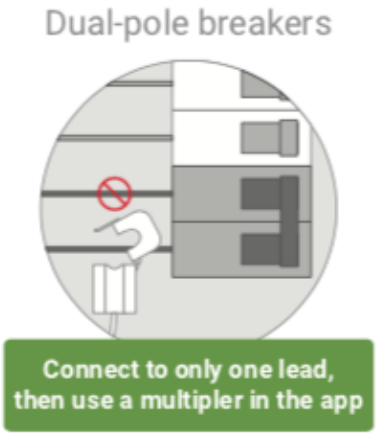
Wire nuts,
extra wires,
and wire harness

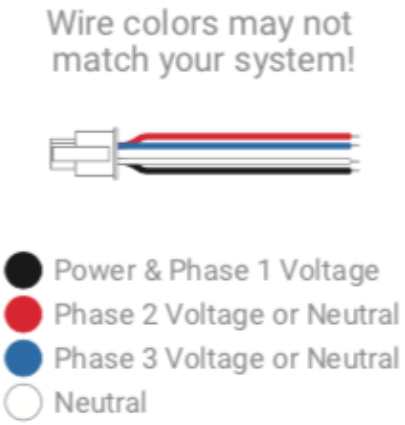
This Document is only for the purpose of Quick Understanding. Download & Print **Official Installation Guide** available on Emporia App before proceeding with installation

WARNING :Opening Power Distribution Box / Panel is Hazardous. Should only be done by a trained Electrician.

Common Questions







Step 2: Get the App

The easy-to-follow installation instructions are in the app! Download the **Emporia Energy app** onto your phone or tablet from the Apple App Store, from Google Play, or from emporiaenergy.com/app. **Create an account** and **begin the setup process**

Download on the App Store

GET IT ON Google Play

emporiaenergy.com/app

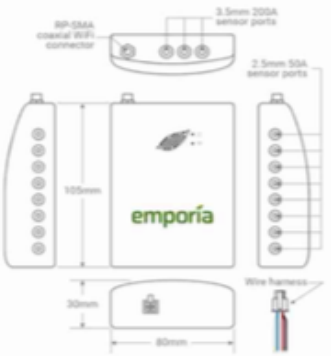
Printable pdf at emporiaenergy.com/installation-guides

Energy monitor connections

The energy monitor is the hub of the Emporia Vue. The 3.5mm A, B, and C audio jack ports on the top of the monitor are the inputs for the 200A main CTs (your bundle may only have included two). The coaxial connector for the WiFi cable is also on the top. The 2.5mm 1 through 16 audio jack ports on the sides of the monitor are the inputs for the 50A CTs (your bundle may have come with 16 or 8 CTs, or none). The port for the wiring harness is located on the bottom of the monitor. All of the ports are clearly labelled on the back of the energy monitor.

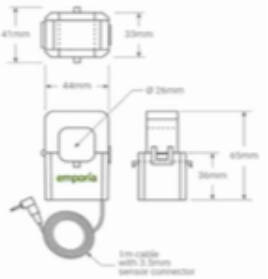
GEN 2 VUE ENERGY MONITOR

Supported Systems	1) Single-phase up to 240 VAC line-neutral; 2) single, split-phase 120/240VAC; and 3) three-phase up to 415Y/240VAC (no delta)
WiFi	2.4 GHz 802.11b/g/n
Input Power Rating	100-240VAC 50-60Hz
Power Consumption	< 3W
Certification	Energy Monitor: EMCTV2 (E506714) as per UL/IEC/EN 62368-1
FCC ID	2AS6P-EMPCTV2
Dimensions	4.1"x3.1"x1.1" (105mmx80mmx30mm)
Operating Conditions	-40˚-122˚F (-40˚-50˚C) 0-80% RH
200A sensor ports	3 @3.5mm two-pole audio connector
50A sensor ports	16 @2.5mm two-pole audio connector
WiFi antenna port	1 @ RP-SMA Coaxial connector
Wire harness (power) port	1 @ 4-pin Molex connector



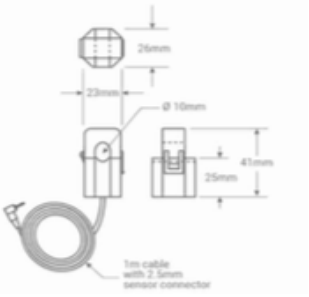
GEN 2 200A CURRENT SENSOR

Frequency	50-60Hz
Max Current	200A
Output	0.0 - 0.333V (Measuring 0-200A)
Accuracy	±2%
Dimensions	2.6"x1.7"x1.6" (65mmx44mmx41mm)
Window Diameter	1" (26mm)
Cable Length	39" (1m)
Connector	3.5mm right-angled two-pole audio connector



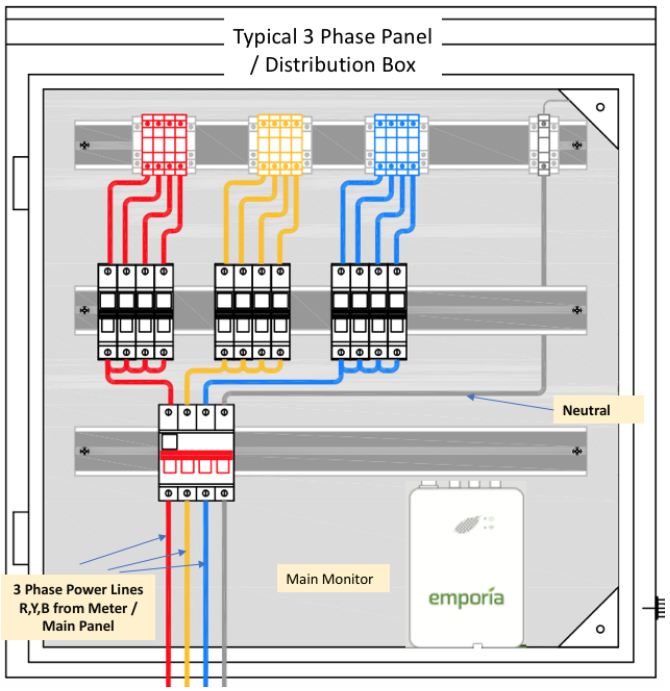
GEN 2 50A CURRENT SENSOR

Frequency	50-60Hz
Max Current	50A
Output	0.0 - 0.333V (Measuring 0-50A)
Accuracy	±2%
Dimensions	1.6"x0.9"x1" (65mmx44mmx41mm)
Window Diameter	0.39" (10mm)
Cable Length	39" (1m)
Connector	2.5mm right-angled two-pole audio connector



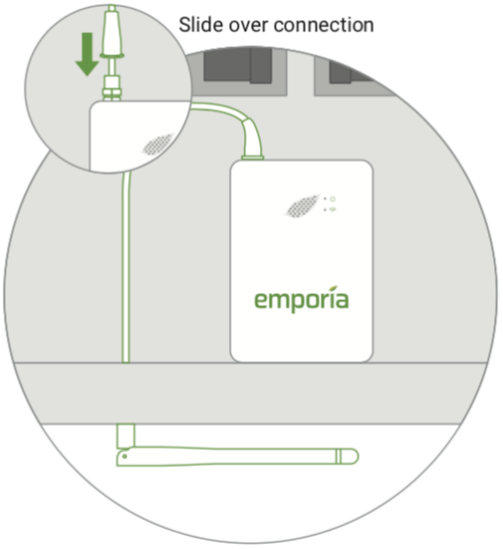
Step 3: Find a place for the monitor

Locate a place within your electrical panel for your Vue energy monitor. Your breaker box may be oriented differently, but the monitor is small and designed to fit easily in the box. Find a place that works for you.



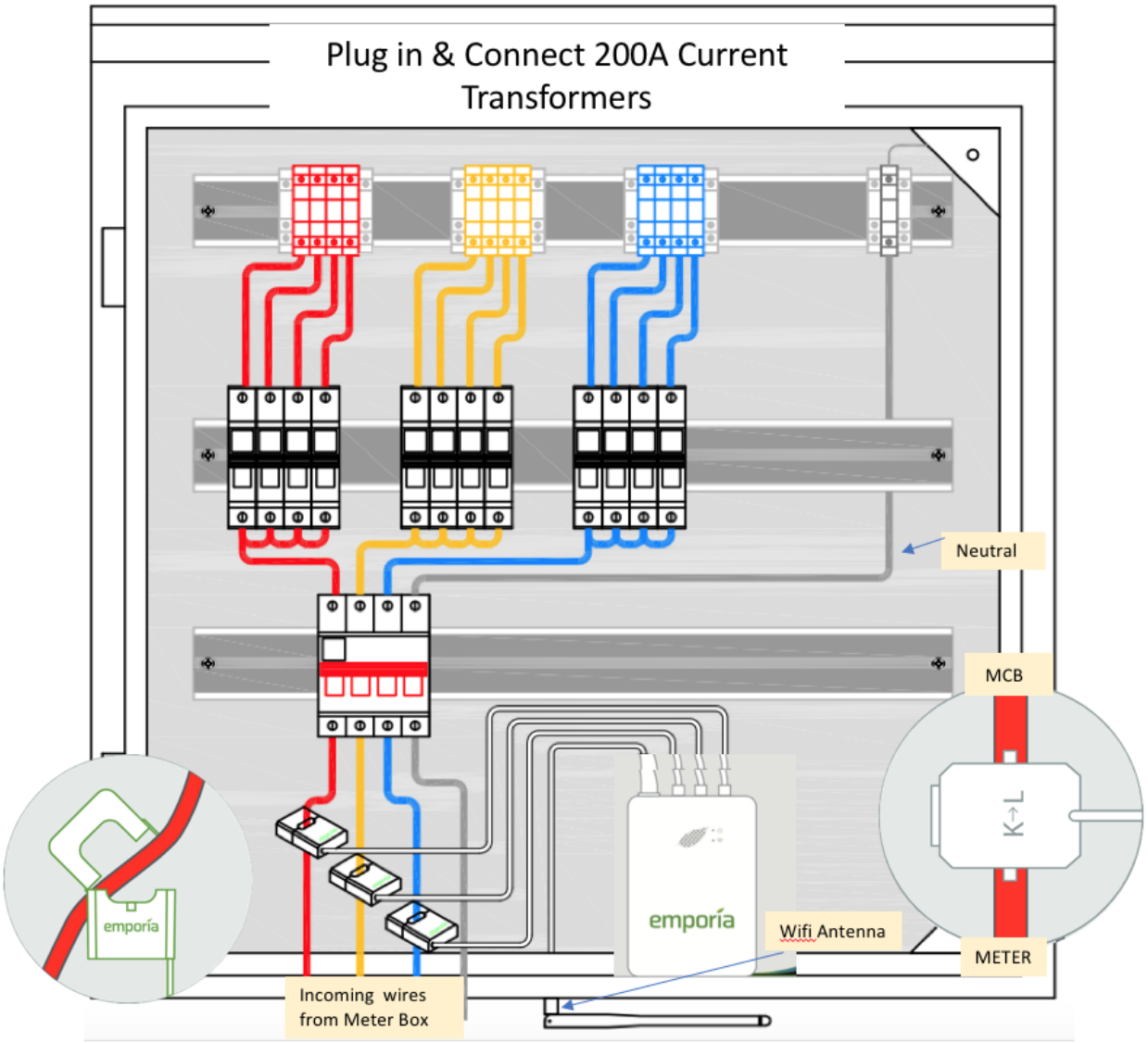
Step 4: Mount the antenna

Screw the antenna assembly cable to the top of the energy monitor in the jack marked . Then, slide the cable sleeve over the metal connection so that it is fully insulated. Next, use a screwdriver to remove a knockout from inside the electrical panel. Now, feed the antenna through the hole. Finally, plug the hole with the knockout plug. It's ok to install the antenna inside of a wall.



Step 5: Plug in and connect the 200A current transformers

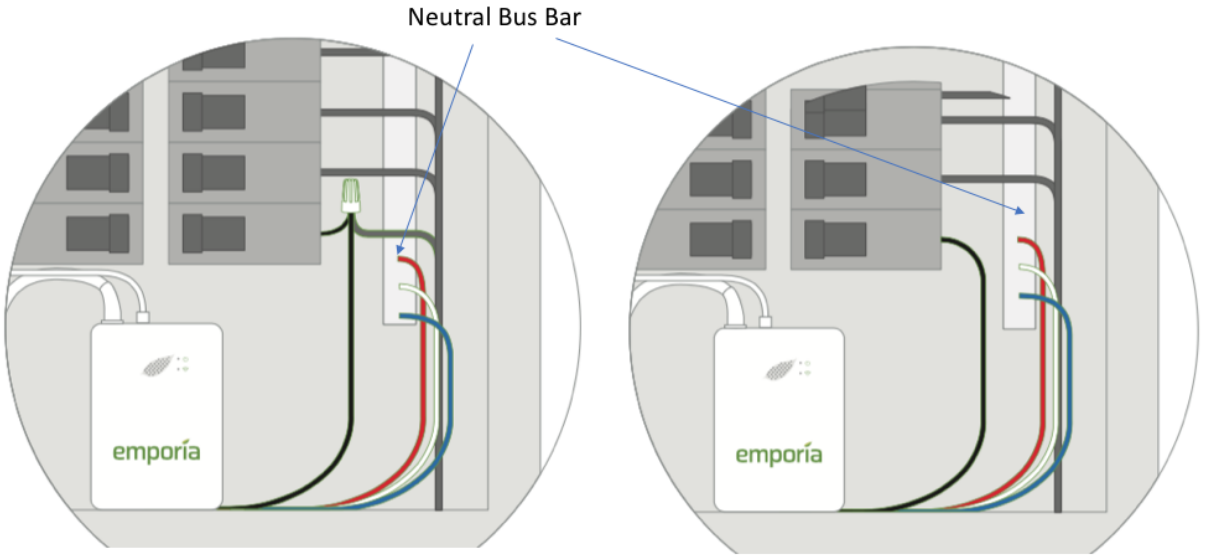
Your system will have 1 or 3 main service cables (a typical Three Phase system is shown below). Open the clasps on the CTs and place each clamp around one of the main service cables. Then, shut the clasps to secure the CTs. IMPORTANT! The K→L imprint on the bottom of the CTs should point toward the breakers. Finally, insert the 200A current transformer audio jacks into the audio jack ports on the top of the energy monitor.



Step 6 & 7: Plug in the wire harness

Insert the power supply wiring harness into the bottom of the energy monitor until it clicks into place securely. The wire harness allows for single-phase power and three-phase voltage sensing: White connects to Neutral, Black provides power and voltage sensing, and Blue and Red enable voltage sensing only.

Single Phase or No Phase



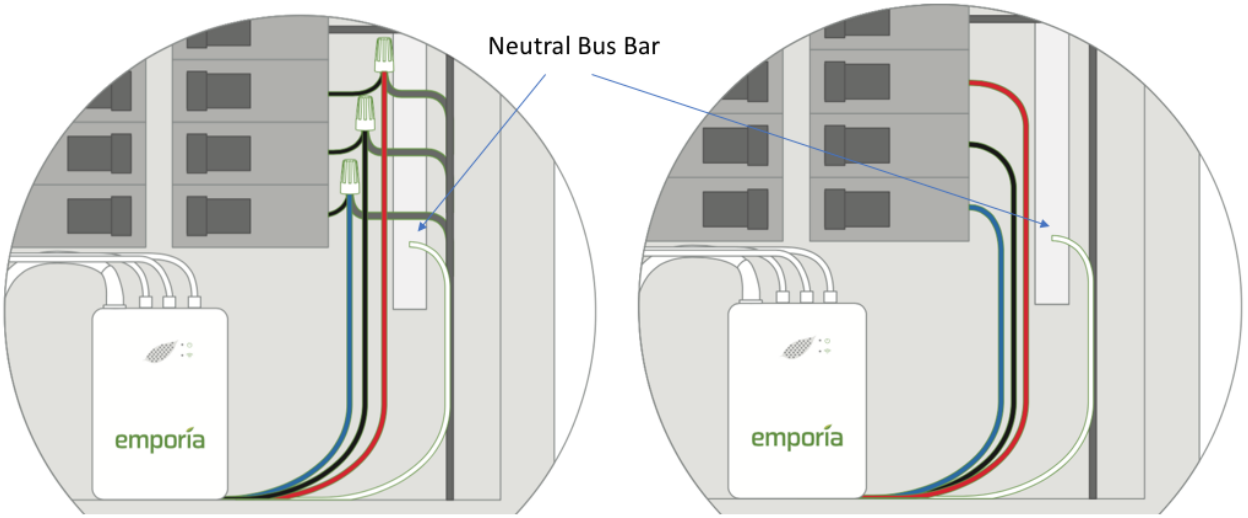
No Empty MCB/Breaker and One 200A CT

Secure the Red, White, and Blue wires from the wire harness to the neutral bus bar. Turn off a 15A breaker and disconnect its wire. Connect that wire to the Black wire from the harness and the piece of extra wire with the wire nut. Then secure the extra wire to the breaker.

One empty breaker and one 200A CT

Secure the Red, White, and Blue wires from the wiring harness to the neutral bus bar (you can use a wire nut and extra wire if needed). Turn off an empty 15A breaker and secure the Black wire from the harness to the hot lead from the breaker.

Three Phase



No empty breaker and three 200A CTs (3 Phase)

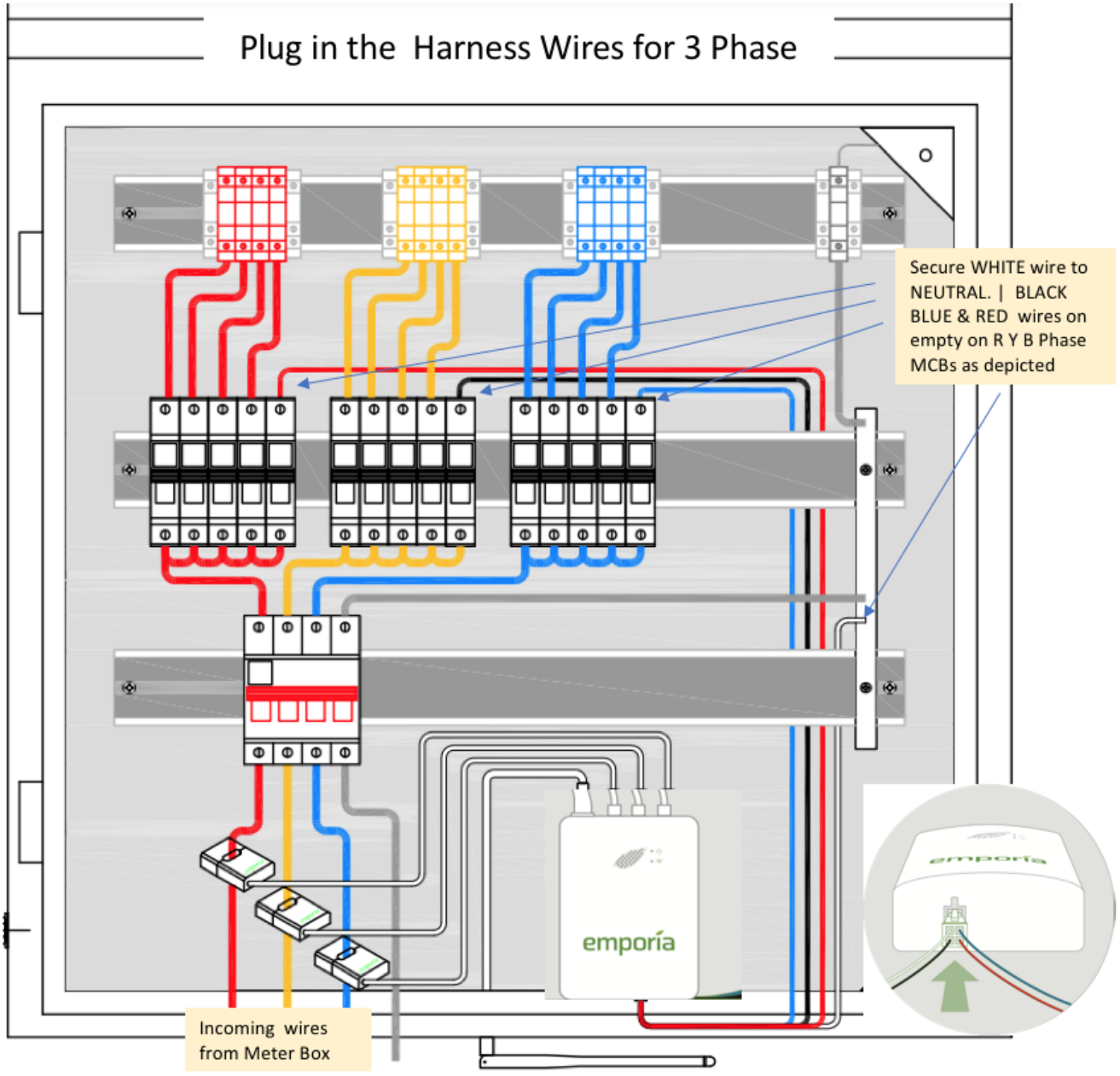
Secure the White wire from the wire harness to the neutral bus bar BLACK BLUE and RED WIRE ARE TO BE PUT on Different MCBs OF R Y & B Phase. IT should be on three different phases. (Ref Single Phase section for No Empty Breaker)

Three empty breakers and three 200A CTs

Secure the White wire from the wire harness to the neutral bus bar. BLACK BLUE and RED WIRE ARE TO BE PUT on Different MCBs OF R Y & B Phase. IT should be on three different phases.

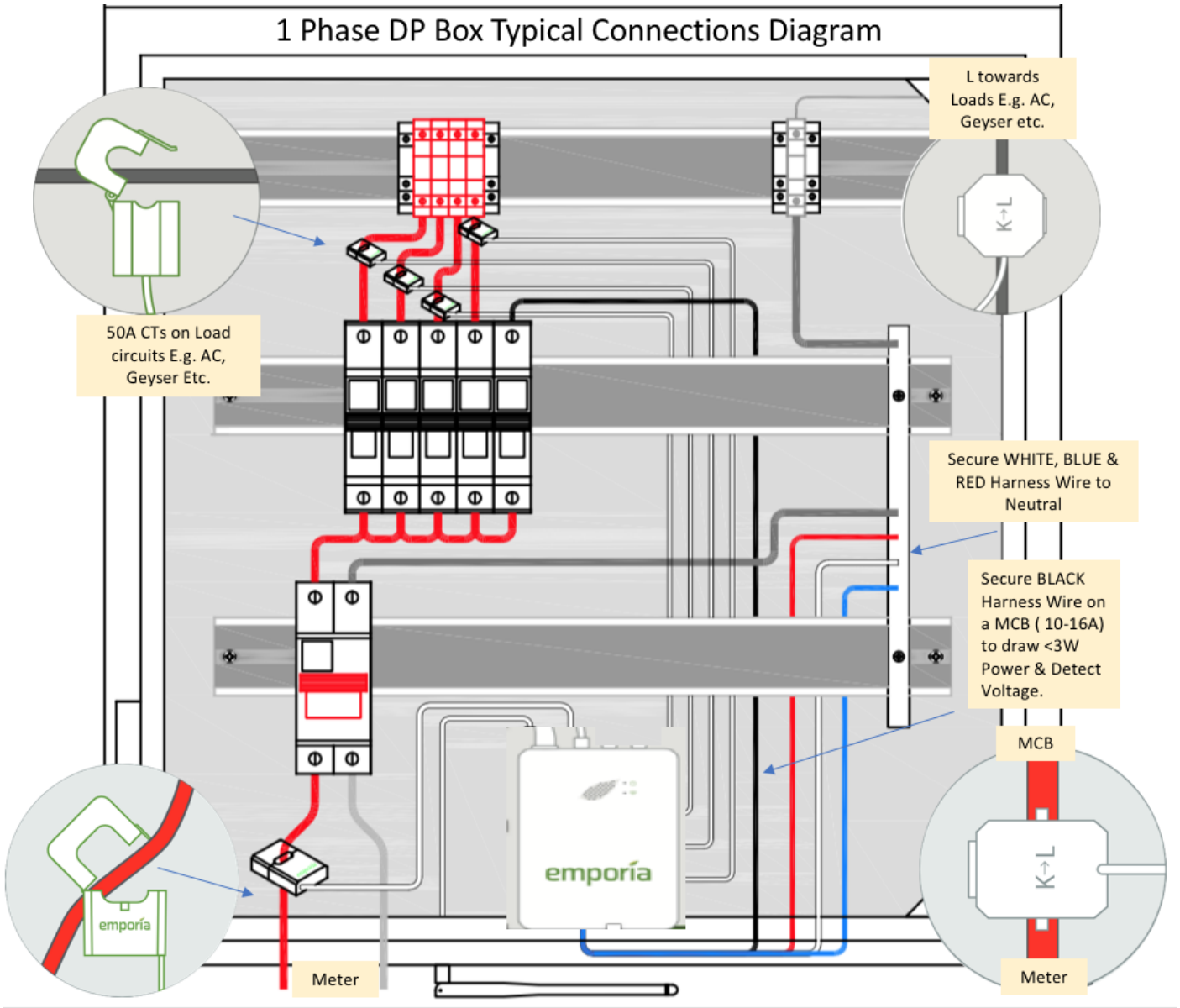
Step 6 & 7 Cont.

THREE PHASE HARNESS WIRE ILLUSTRATION



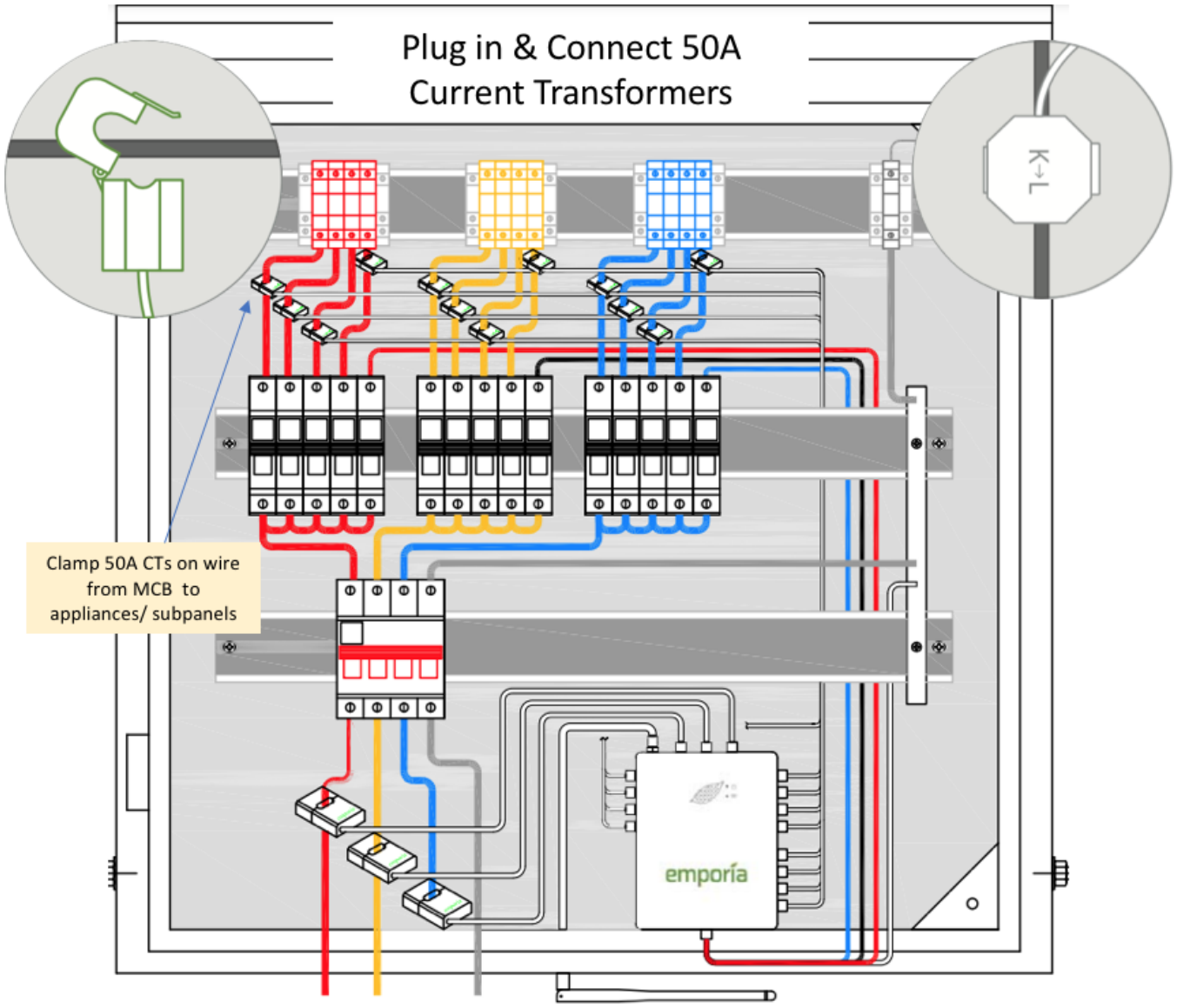
Step 6 & 7 Cont.

SINGLE PHASE HARNESS WIRE ILLUSTRATION ALONG WITH 200A CT and 50A CT CONNECTION



Step 8: Plug in and connect the 50A current transformers

If your Vue has 50A CTs, open the clasps on the 50A CTs and place each clamp around the hot leg from the breaker you wish to monitor. Then shut the clasps to secure the CTs. IMPORTANT! The K→L imprint on the bottom of the CTs should point away from the breakers. Then, insert the audio jacks attached to them into the 2.5mm audio jack ports on the sides of the energy monitor. Note the port numbers so you can name the circuits in the app.

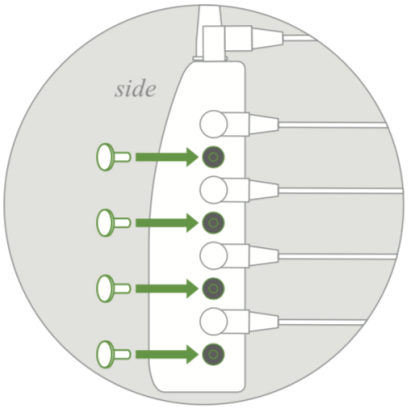


Step 8 (continued): A note about multi-pole (3 Phase) breakers

If you wish to monitor 3-pole breakers (3 Phase appliances Eg pump/ HVAC etc) , you can either use one CT on each pole, or you can use a single CT. To use a single CT, clasp the clamp around either one of the hot leads coming off the breaker (it doesn't matter which). You'll then be able to input a circuit multiplier in the app to double or triple the reading by entering a "2" or "3." We don't recommend multipliers for unbalanced loads, such as subpanels.

Step 9: Insulate empty 2.5mm 50A CT audio jack ports

Identify the empty 2.5mm 50A CT audio jack ports on the sides of your Vue. These will be labeled 1 through 16. Depending on your installation, you may have anywhere from 16 empty ports to none at all. If you don't have any empty ports, proceed to Step 11. If you do, securely insert the provided 2.5mm insulation plugs into all of the Vue's empty 2.5mm ports so they are completely insulated.



Step 12: Replace the cover and turn on all breakers

Secure the cover to the box with any screws you removed in Step 2. Next, flip any breakers that you turned off during installation to restore power to the circuits in your home. You should hear a power up tone from the Vue to confirm it has power. Then, close the panel. Once the panel cover is replaced, the antenna connector and audio jack ports on the Vue will not be accessible.

Step 13: Complete setup

Tap the button in the app to indicate that you've installed your Emporia Vue, heard its power up tone, and you're ready to proceed. Your phone will connect via Bluetooth to the system and then you'll connect to a nearby Wi-Fi router. Make sure you have your Wi-Fi name and password.

Troubleshooting Tips

The Emporia app is not finding my Vue after I've installed it.

Ensure the Vue has power: Check for a green power light.
Listen for a startup tone.
Check the wire harness is secure and wired properly.
Check that the main breaker is turned on. Check that the breaker powering the Vue is turned on.
Ensure your phone can connect to the Vue.
Check your phone's Bluetooth is on. If you're using an Android, turn on Location Services for your phone to properly scan for Bluetooth devices.
Ensure the Vue's Wi-Fi antenna has been installed properly.
Check the antenna is properly screwed into the energy monitor
Ensure the antenna is outside of the electric panel. It's ok if it is inside a wall, just ensure it's not inside the metal box.
Try power cycling the breaker to which the Vue is connected.
Try restarting the Emporia App.
Try rebooting your phone.

The Emporia Energy app isn't getting real-time data from the Emporia Vue

Ensure all current transformers are securely fastened around their respective cables in your electric panel.
Check the current transformers audio jacks are securely plugged into the audio jack ports of the energy monitor.

SOLAR SUPPLEMENT

Vue solar installation

The Emporia Vue is capable of monitoring your solar production. You will install your Vue differently depending on whether your solar is a **breaker-fed** or a **line-side tap** installation. These installations are covered in the subsequent pages. If you are interested in monitoring how much energy you are pulling and sending back to the grid, you'll need to utilise 50A CTs as described below.

Net metering

The 200A CTs that connect to your mains will provide net metering out of the box — displaying electricity used minus electricity produced. To ensure the Vue can correctly measure net metering, the 200A CTs must be correctly oriented and be placed between the meter and the incoming solar.

Energy in from and out to grid

For the Vue to be able to calculate how much energy your system is getting from and sending out to the grid, you'll need to employ two 50A CTs on the incoming leads from your inverter. Installation depends on where these leads enter your system, which is illustrated in detail on the next two pages.

Line-side tap solar installation (Grid Tied / Net Solar)

For line-side tap solar installs, the 200A CTs must be installed between the meter and incoming feeds from the inverter. To monitor how much energy is pulling from and sending back from the grid, install a 50A CT on each of the leads coming in from your inverter to the mains. Ensure the directionality of all CTs is correct.