



How to connect the EP500 Pro to the US utility power.

<https://bluettipower.com/technical-support/10220705>

Associated product(s): EP500 Pro

Entry type: FAQ, Entry ID: 10220703, Entry date: 07/30/2022

## Contents

<b>1. How to connect one EP500 Pro to the utility power for 120 Volt Circuits</b> .....	2
<b>2. How to connect two EP500 Pro to the utility power for 240 Volt Circuits</b> .....	4
<b>3. Accessories:</b> .....	14
3.1 Transfer switch .....	14
3.2 NEMA L14-30R inlet Box .....	15
3.3 NEMA L14 extension cord: .....	15
3.4 BLUETTI 30A-AC-charging-cable.....	16
3.5 BLUETTI FUSION BOX.....	16
3.6 NEMA L14-30R outlet .....	17
<b>4. More information:</b> .....	17

## 1. How to connect one EP500 Pro to the utility power for 120 Volt Circuits

“Single Phase” is set as the default machine type if you are operating a single EP500Pro. This is the only and correct setting if a single EP500Pro is being used.

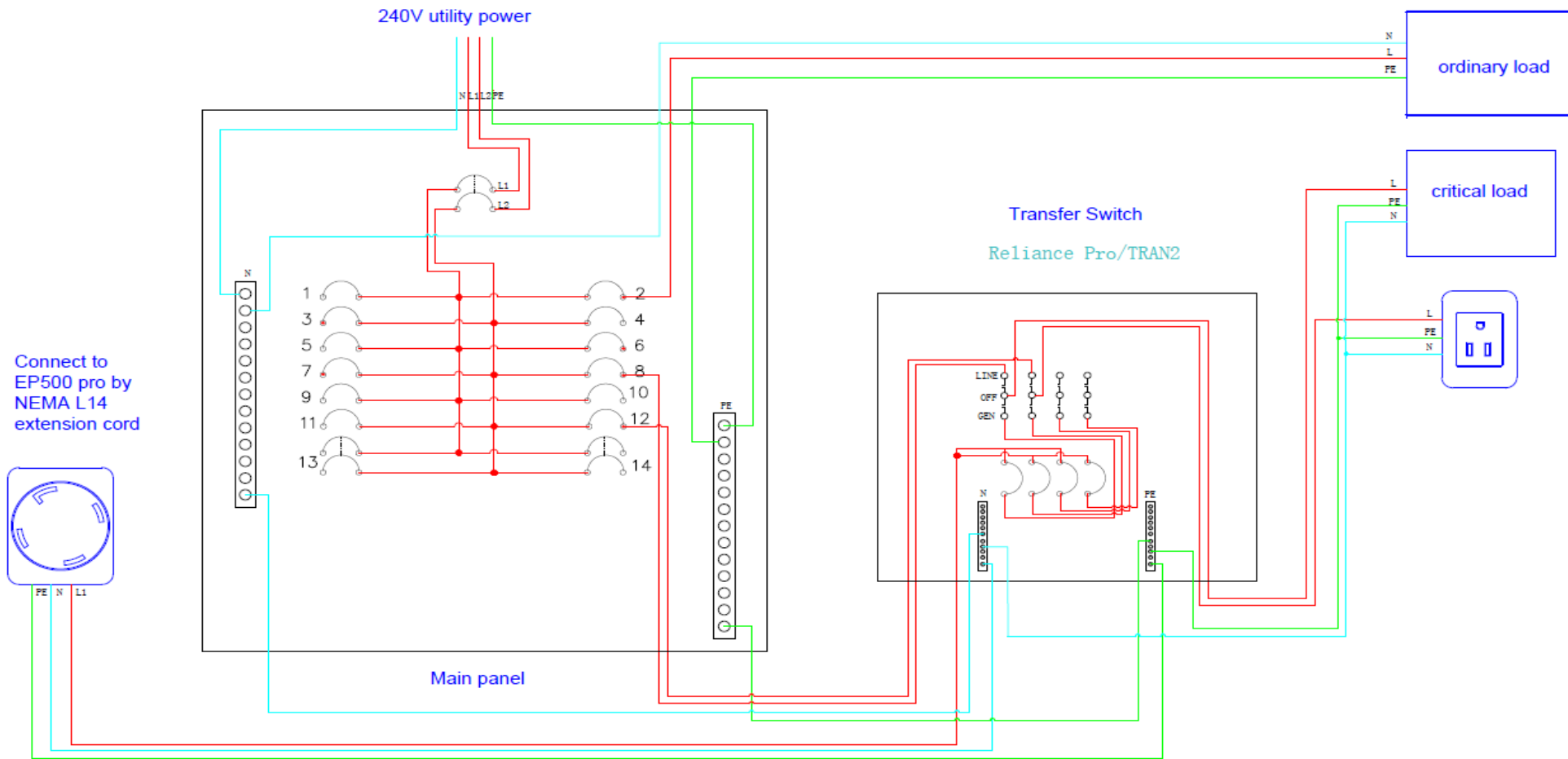
Firstly please purchase a manual transfer switch and the accessories as following:

NO.	Category	Quantity
1	Transfer switch : Reliance 306C Pro/Tran2	1
2	NEMA L14 extension cord	1
3	NEMA L14-30P inlet	1
4	NEMA L14-30R outlet	1

**NOTE: Please read the manuals before installing.**

How to connect the EP500 Pro to the US utility power

Then installed by the electrician refer to the example as below:



**NOTE:**

1. It must be installed by an electrician.
2. Take out the important load cables of the main panel and connect them to the common point of the transfer switch
3. Connect the important load cables from the air switch in the main panel to the point of LINE of the transfer switch
4. In single power mode (one EP500 pro), the 240V load (double hot line) cannot be connected to the transfer switch
5. In single power mode (one EP500 pro), L2 of L14-30 is suspended without wiring.

## 2. How to connect two EP500 Pro to the utility power for 240 Volt Circuits

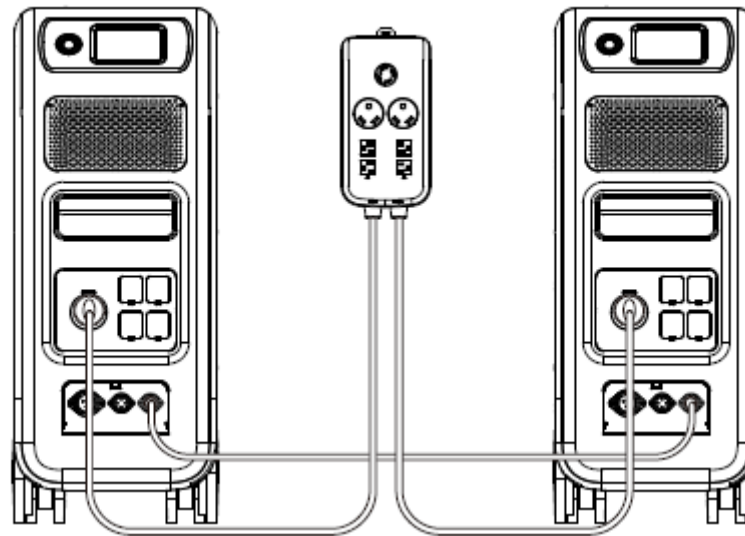
If you purchased two EP500 Pro to get the back-up power for household as 240 Volt Circuits.

Firstly, please purchase a manual transfer switch and the accessories as following:

NO.	Category	Quantity
1.	Transfer switch : Reliance 306CPro/Tran2(6 circuits )	1
2.	NEMA L14 extension cord	1
3.	BLUETTI 30A-AC-charging-cable	1
4.	NEMA L14-30P inlet	1
5.	BLUETTI FUSION BOX (optional)	1
6.	NEMA L14-30R outlet	1

Secondly, please read the manuals before installing.

### Split Phase Function



## How to connect the EP500 Pro to the US utility power

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### Note:

- (1) Please disconnect the AC charging cable for both EP500Pro units while binding into split phase box.
- (2) Certificated Technician is required to build the split phase system to power the Power Cabinet or Sub Panel.
- (3) The “Machine Type” setting on screen is used to enable or disable Split Phase output.

Split-Phase output is achieved by bonding two EP500Pro into one power system to double the available output power, voltage, and capacity.

- “Split Phase” is only used for connecting two EP500Pro together (only for the 100-120V version of the EP500Pro). A Fusion Box (P030A) is required (sold separately).
- Launch Split Phase Function:

(4) Only one touchscreen will be active when two EP500Pro units are connected.

(5) If one of the EP500Pro is out of power, the Split Phase Bonding function will deactivate automatically.

**Warning: If you insist to charge the EP500Pro which has been connected into split phase box already, please make sure the L1/L2/N wire is set at the right place or the EP500Pro will be damaged. L: Live wire N: Neutral wire**

### HOW TO CONFIGURE BOTH OF THE EP500 PRO:

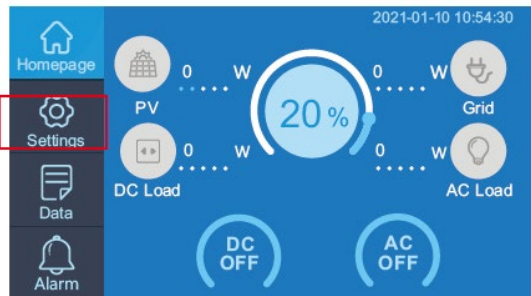
Step 1: Turn off both of **EP500 pro**.

Step 2: Plug in the plugs from the Split Fusion Box Pro to the two EP500Pro's outlets

Step 3: Plug in the communication cables to each of the two EP500Pro's.

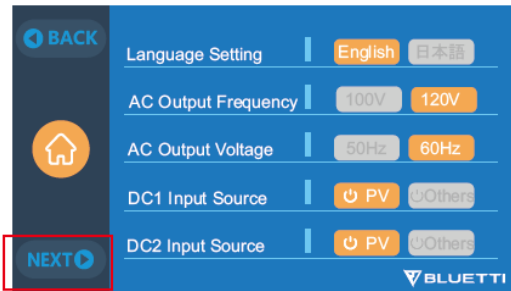
Step 4: Turn on one **EP500 pro**.

Step 5: Click the setting button on the LCD,



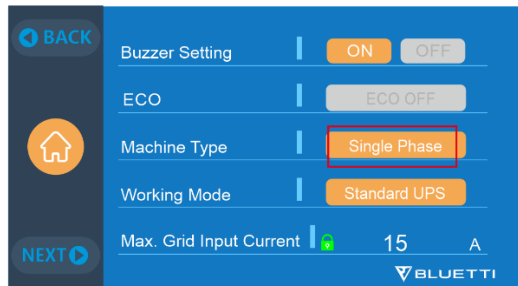
Step6: Click the NEXT,

## How to connect the EP500 Pro to the US utility power

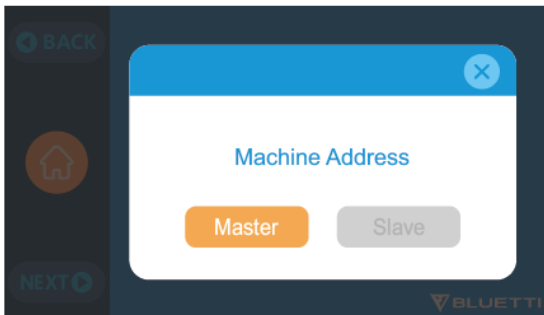


Step7: Click the "single phase" of the Machine Type setting, then click the "Split phase"

● Machine Type: Select Split Phase



Step8: Click the "Master"



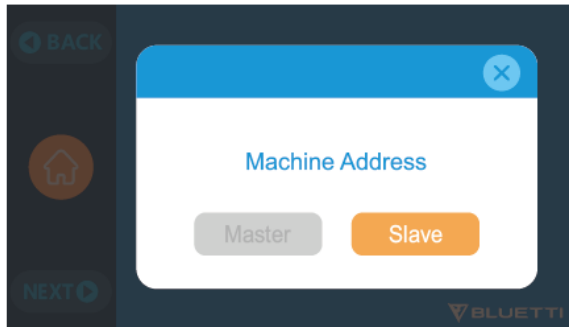
Step 9: Turn on another **EP500 pro**.

Step10: Click the setting button on the LCD.

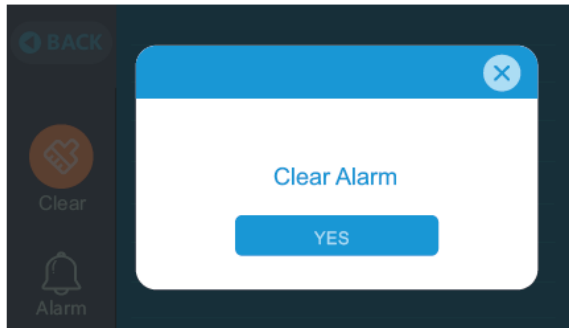
Step11: Following the Step 6- step 7: click the NEXT, then click the "single phase" and then click the "Split phase".

## How to connect the EP500 Pro to the US utility power

Step12: Click the "Slave"



Note: click clear the alarm history if the buzzer sounded



NOTE: Select "Master" will set the operating EP500Pro as the one to control both two EP500Pro. Select "Slave" will set the operating EP500Pro as the other EP500Pro as the "Master" one.

### CONNECTION:

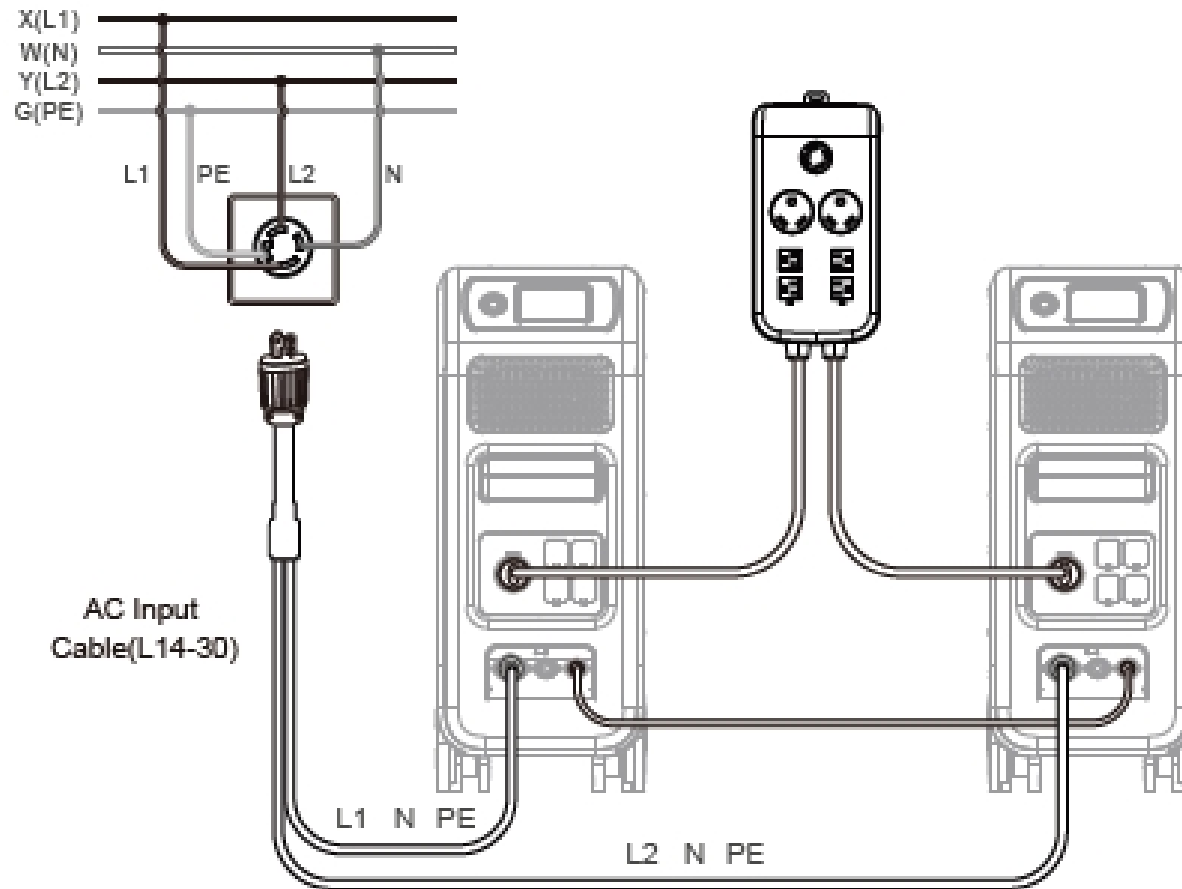
Machine type is just used to set for Split Phase, "Split Phase" is only used for connecting 2\* EP500Pro ( 100-120V Version) bonded 1 pairs of EP500Pro to one power system to double the output power, voltage, so as to capacity. Please refer to Split Phase setting for detailed information.

In Split Phase Power System, it is recommended that you choose our matching AC input cable. The AC input ports of the two machines are connected to L1, N, PE and L2, N, PE. Make sure that the phase of the two machines is correct.

This AC Input Cable (Optional Purchase) is designed to match Split Phase System. One end of the cable is connected to the NEMA L14-30 socket, and the other end is connected to the AC input interface of both two units through aviation plug. It must be ensured that the phase of the two machines is correct.

The current capacity of AC input plug shall be  $\geq 30A$ . We need purchase a BLUETTI 30A-AC-charging-cable and a NEMA L14-30R outlet to install the AC charge plug, the connect method as following:

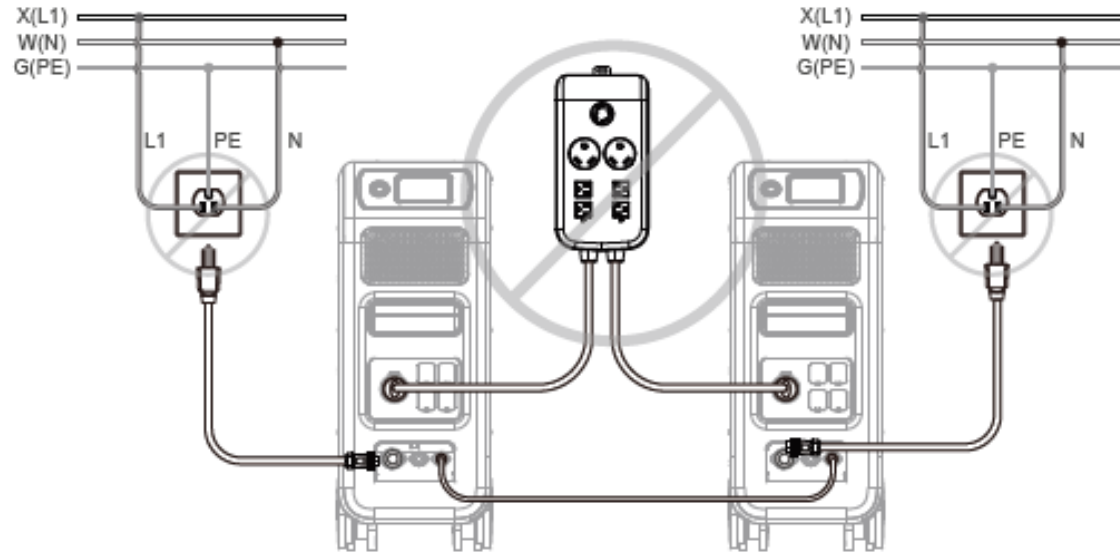
How to connect the EP500 Pro to the US utility power





**WRONG CONNECTION**

It's forbidden to connect EP500Pro into Split Phase System when AC charging is ON, please use AC Input Cable(Optional Purchase) to charge both of your power stations in Split Phase System. Wrong Connection will damage the battery inside the power station and your warranty will be invalid.



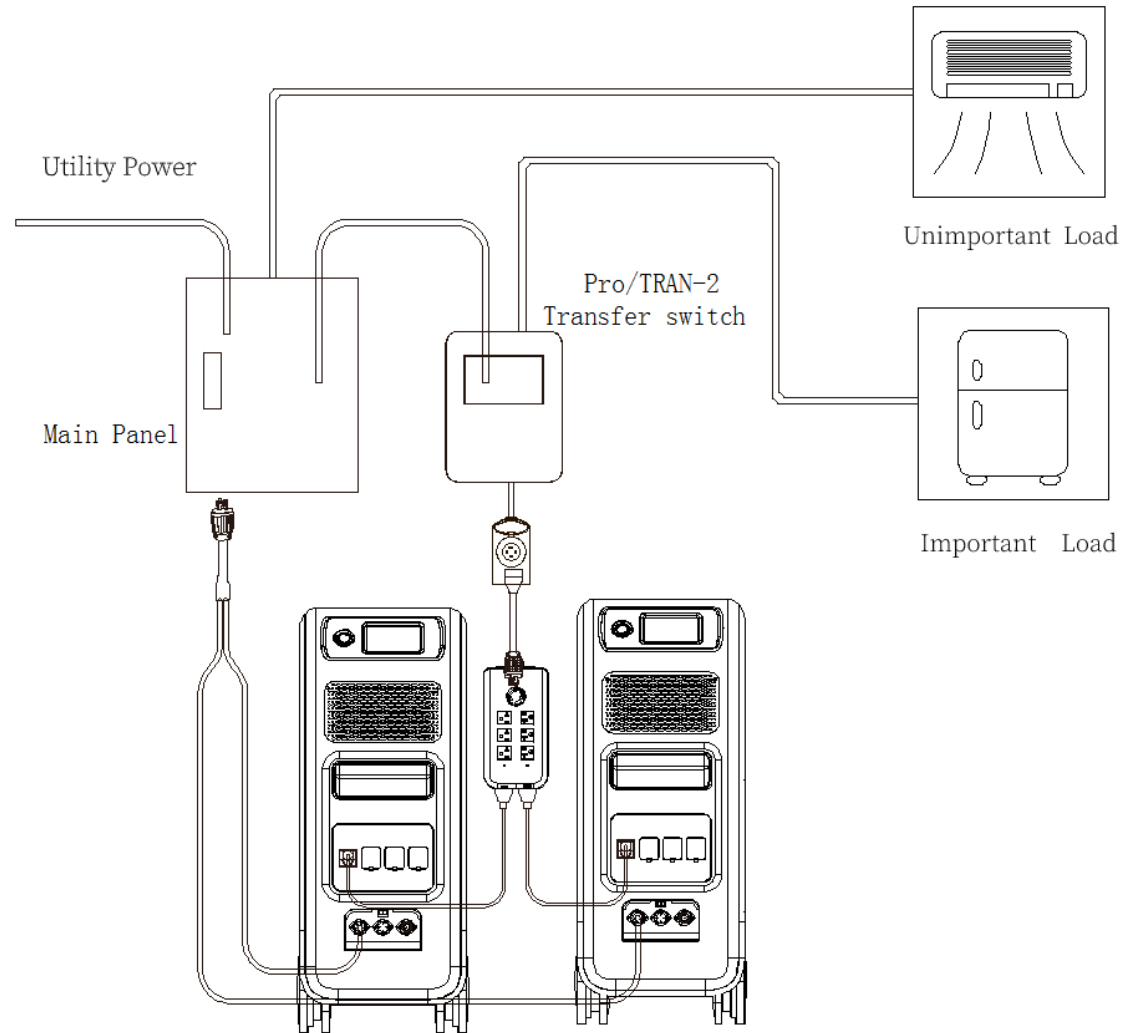
Thirdly, connect the EP500 Pro to the transfer switch

**NOTE:**

Before you begin installing your Reliance Controls transfer switch system, you need to create a plan for the appliances you choose to run during a power outage. In setting up a transfer switch to get the most power from your two power stations in split phase power system, it is desirable to "balance the load" between the two phases of your transfer switch. Devices which will consume the most of the two power stations' wattage should be divided between the two.

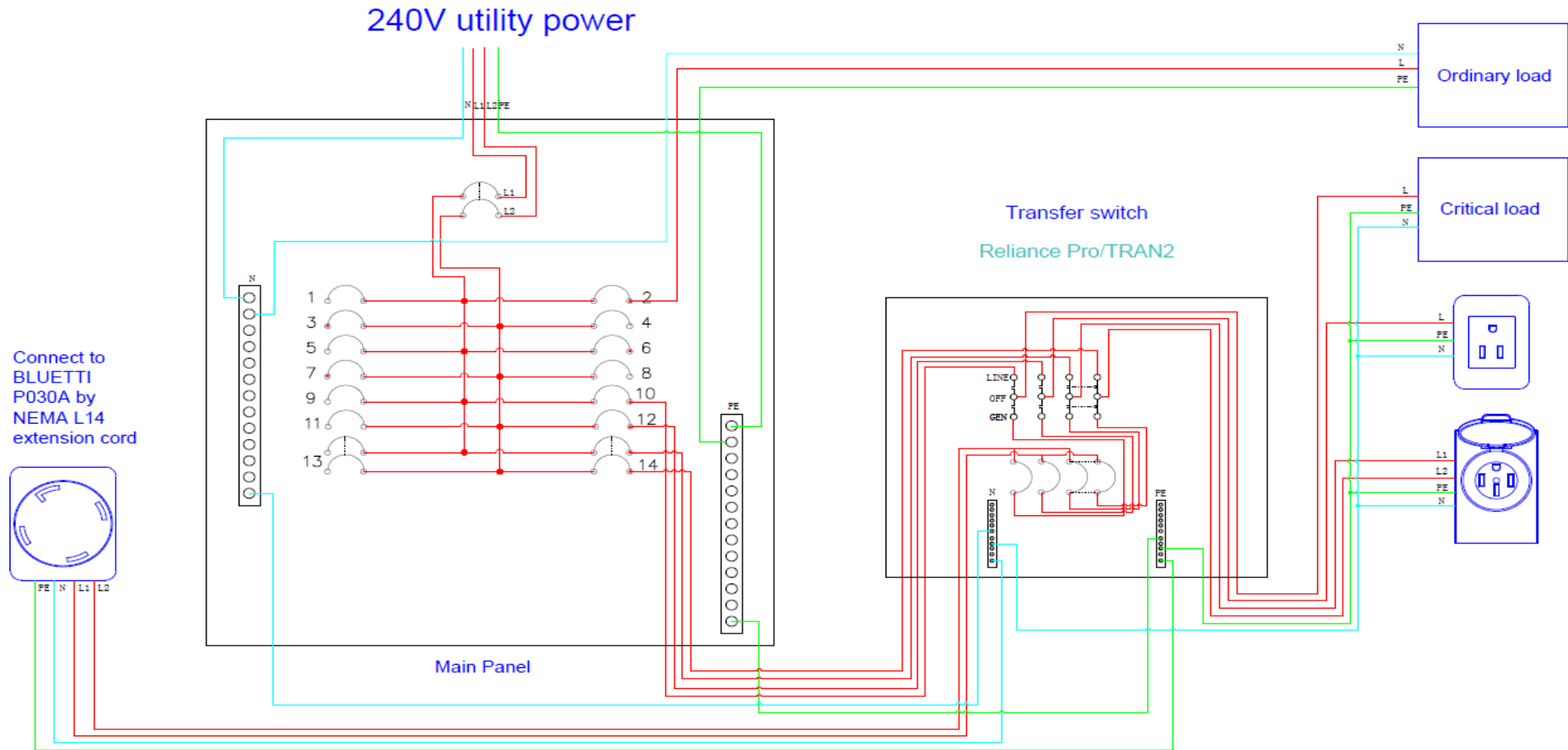
How to connect the EP500 Pro to the US utility power

**Please installed by the electrician refer to the example as below:**

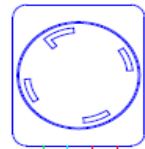


## How to connect the EP500 Pro to the US utility power

The circuit connection example as below:



Connect to  
BLUETTI  
P030A by  
NEMA L14  
extension cord

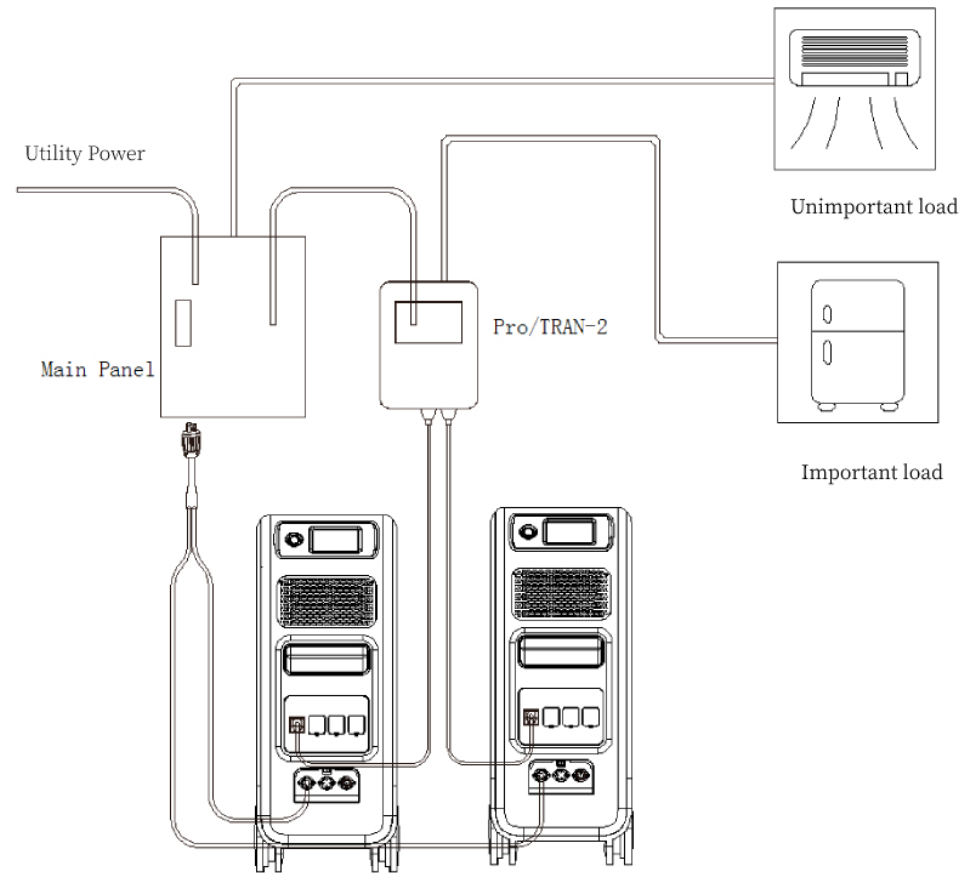


### NOTE:

1. Take out the important load cables of the main panel and connect them to the common point of the transfer switch
2. Connect the important load cables from the air switch in the main panel to the point of LINE of the transfer switch
3. It must be installed by an electrician.

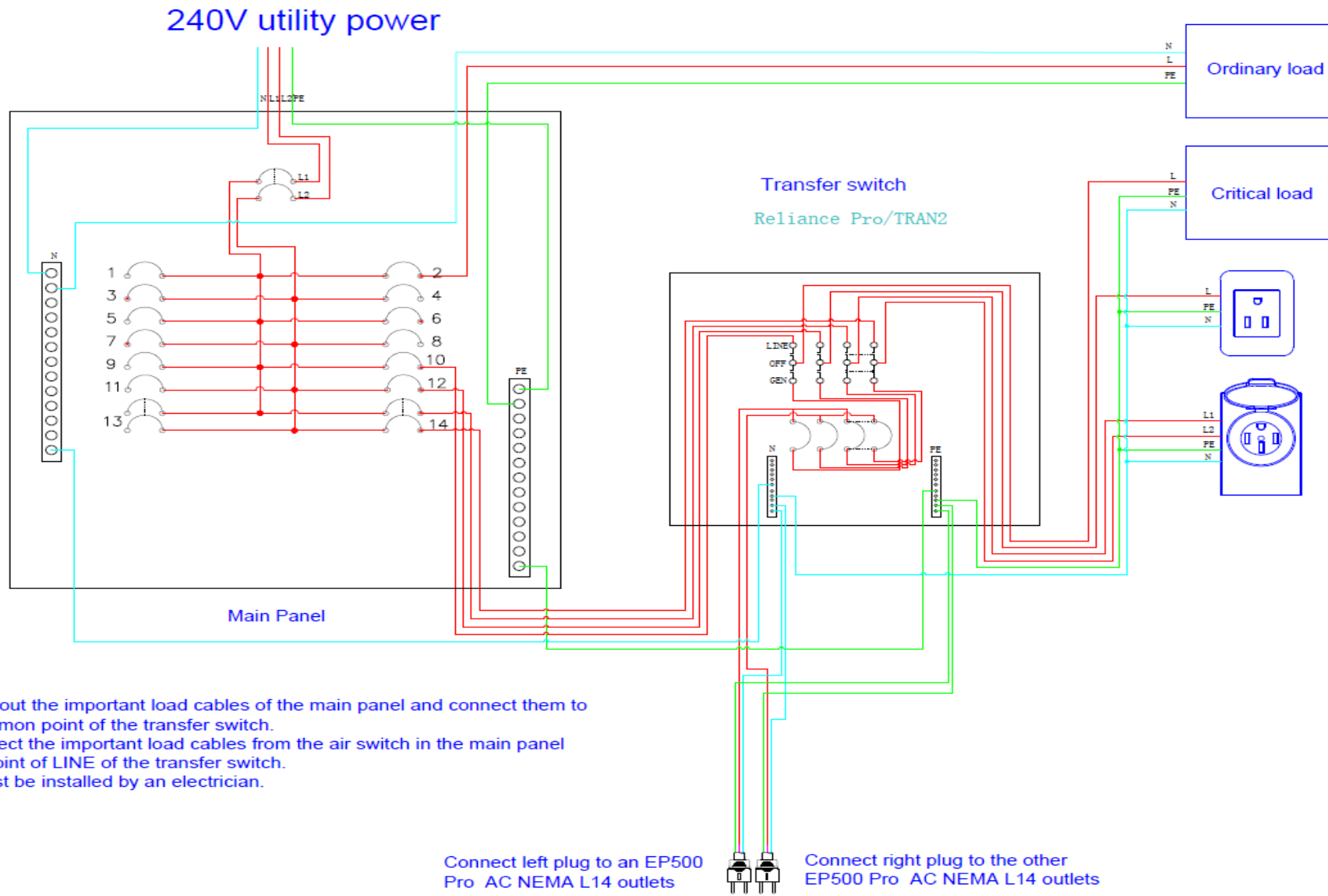
How to connect the EP500 Pro to the US utility power

**If you didn't purchase the FUSION BOX, Please installed by the electrician refer to the example as below:**



# How to connect the EP500 Pro to the US utility power

The circuit connection example as below:




### 3. Accessories:

#### 3.1 Transfer switch

a) If you want to get 6-circuit, please purchase a manual transfer switch as following:

[https://www.amazon.com/30-Amp-6-Circuit-Manual-Transfer-Switch/dp/B00X7VVVTS/ref=asc\\_df\\_B00X7VVVTS/?tag=hyprod-20&linkCode=df0&hvadid=309788238907&hvpos=&hvnetw=q&hvrand=14413753645099096762&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1013962&hvtargid=pla-570657575965&pssc=1](https://www.amazon.com/30-Amp-6-Circuit-Manual-Transfer-Switch/dp/B00X7VVVTS/ref=asc_df_B00X7VVVTS/?tag=hyprod-20&linkCode=df0&hvadid=309788238907&hvpos=&hvnetw=q&hvrand=14413753645099096762&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=1013962&hvtargid=pla-570657575965&pssc=1)



 **306C Pro/Tran 30-Amp 6-Circuit 2 Manual Transfer Switch**  
Visit the Reliance Controls Store  
★★★★☆ 33 ratings

**\$269<sup>00</sup>**

Pay \$22.42/month for 12 months, interest-free upon approval for the Amazon Rewards Visa Card

Operation Mode	Manual
Brand	Reliance Controls
Item Dimensions LxWxH	7.75 x 4.5 x 11.25 inches
Control Method	Remote
Unit Count	1 Count
Number of Items	1

**About this item**


- Includes full manufacturer warranty

[See more product details](#)

b) If you want to get 10-circuit, please purchase a manual transfer switch as following:

[https://www.amazon.com/30-Amp-10-Circuit-Manual-Transfer-Switch/dp/B00X7WJ5EA/ref=pssc\\_552808\\_t1\\_B00X7VVVTS](https://www.amazon.com/30-Amp-10-Circuit-Manual-Transfer-Switch/dp/B00X7WJ5EA/ref=pssc_552808_t1_B00X7VVVTS)



 **310C Pro/Tran2 30-Amp 10-Circuit 2 Manual Transfer Switch**  
Visit the Reliance Controls Store  
★★★★☆ 23 ratings

**\$399<sup>00</sup>**

Get \$50 off instantly: Pay \$349.00 upon approval for the Amazon Rewards Visa Card.

Operation Mode	Manual
Operating Voltage	240 Volts
Brand	Reliance Controls
Item Dimensions LxWxH	11.75 x 4.5 x 11 inches
Certification	UL
Unit Count	1 Count
Number of Items	1

**About this item**

- Includes full manufacturer warranty

[See more product details](#)

### 3.2 NEMA L14-30R inlet Box

NEMA L14-30 connect to the transfer switch, plug the L14-30R of the L14 extension cord.

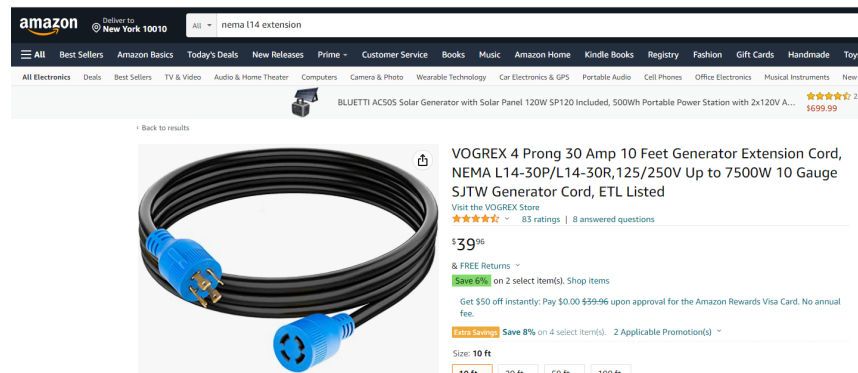
[https://www.amazon.com/Reliance-Controls-Corporation-PB30-Generators/dp/B000BQT47S/ref=pd\\_bxgy\\_img\\_sccl\\_1/142-1707139-6977663?pd\\_rd\\_w=8wVnX&content-id=amzn1.sym.7757a8b5-874e-4a67-9d85-54ed32f01737&pf\\_rd\\_p=7757a8b5-874e-4a67-9d85-54ed32f01737&pf\\_rd\\_r=FF4D3M7RGM6JJEM7AVJ2&pd\\_rd\\_wg=K9W0F&pd\\_rd\\_r=ef64e305-ec59-4a2c-baf7-5874507a8b5e&pd\\_rd\\_i=B000BQT47S&th=1](https://www.amazon.com/Reliance-Controls-Corporation-PB30-Generators/dp/B000BQT47S/ref=pd_bxgy_img_sccl_1/142-1707139-6977663?pd_rd_w=8wVnX&content-id=amzn1.sym.7757a8b5-874e-4a67-9d85-54ed32f01737&pf_rd_p=7757a8b5-874e-4a67-9d85-54ed32f01737&pf_rd_r=FF4D3M7RGM6JJEM7AVJ2&pd_rd_wg=K9W0F&pd_rd_r=ef64e305-ec59-4a2c-baf7-5874507a8b5e&pd_rd_i=B000BQT47S&th=1)



### 3.3 NEMA L14 extension cord:

If you want to get 10 FT NEMA L14 extension cord , the referenced purchase address as following


[https://www.amazon.com/VOGREX-Generator-Extension-L14-30P-L14-30R/dp/B099R9YWT8/ref=sr\\_1\\_2?crd=N3G3QLMF57TD&keywords=nema%2BI14%2Bextension&qid=1658719628&sprefix=name%2BI14%2Bextention%2Caps%2C249&sr=8-2&th=1](https://www.amazon.com/VOGREX-Generator-Extension-L14-30P-L14-30R/dp/B099R9YWT8/ref=sr_1_2?crd=N3G3QLMF57TD&keywords=nema%2BI14%2Bextension&qid=1658719628&sprefix=name%2BI14%2Bextention%2Caps%2C249&sr=8-2&th=1)



### 3.4 BLUETTI 30A-AC-charging-cable

If you purchase two EP500 Pro to get 240V, you need to purchase one 30A AC Charging Cable for split-phase function

Purchase address: <https://www.bluettipower.com/products/30a-ac-charging-cable-for-split-phase-function>



**30A AC Charging Cable For Split-Phase Function**  
★★★★★ Write a review | Ask a question  
US\$99.00

**Item:** 4 interest-free payments of \$24.75. [Learn more](#)

**Applicable Models:**  
AC500/EP500Pro/EP500


Quantity:

**Pay in 4 interest-free installments of \$24.75 with shop.** [Learn more](#)

### 3.5 BLUETTI FUSION BOX

The BLUETTI FUSION BOX as following, you could connect the FUSION BOX to the transfer switch by the L14 extension cord

[https://www.amazon.com/BLUETTI-Voltage-Capacity-Station-EP500Pro/dp/B0B2NQMJPH/ref=sr\\_1\\_1?crid=36JHS2J079AZ6&keywords=p030a+fusion+box&qid=1657539893&sprefix=p030a+%2Caps%2C256&sr=8-1](https://www.amazon.com/BLUETTI-Voltage-Capacity-Station-EP500Pro/dp/B0B2NQMJPH/ref=sr_1_1?crid=36JHS2J079AZ6&keywords=p030a+fusion+box&qid=1657539893&sprefix=p030a+%2Caps%2C256&sr=8-1)



**BLUETTI Split Phase Fusion Box P030A, Double the Output Power/Voltage/Capacity of BLUETTI Power Station EP500Pro**  
Visit the BLUETTI Store

**\$329<sup>00</sup>**

- [Function] - Bond 2 EP500Pro units into one larger power system to double the output power/voltage/capacity (limit for current is 6000W Max./230-240V/10200Wh)
- [What You Get] - 1 Split Phase Fusion Box P030A, 1 Communication Cable, User Manual, Certificate of QC Pass.

[See more product details](#)

**Custom Cable Connection 16 Gauge AWG 12.5 Braided 4 Conductor Shielded Plenum Speaker Wire Cable, 500 FT Fl...**  
**\$135<sup>00</sup>**

**Buy it with**



### 3.6 NEMA L14-30R outlet

The BLUETTI 30A-AC-charging-cable need plug into a L14-30R outlet for charging both EP500 pro. The referenced purchase address as following [https://www.amazon.com/Journeyman-Pro-Receptacle-Industrial-Grounding-Generator/dp/B07P8CGH52/ref=sr\\_1\\_7?crd=1WRMKA4V397S&keywords=l14-30r+receptacle&qid=1657944329&s=hi&sprefix=%2Ctools%2C405&sr=1-7](https://www.amazon.com/Journeyman-Pro-Receptacle-Industrial-Grounding-Generator/dp/B07P8CGH52/ref=sr_1_7?crd=1WRMKA4V397S&keywords=l14-30r+receptacle&qid=1657944329&s=hi&sprefix=%2Ctools%2C405&sr=1-7)



### 4. More information:

Website: [www.bluettipower.com](http://www.bluettipower.com)

Email: [service@bluettipower.com](mailto:service@bluettipower.com)