



How to connect the AC300+B300 to the US utility power.

<https://bluettipower.com/technicalsupport/10220706>

Associated product(s):AC300+B300

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1. How to connect one AC300+B300 to the utility power for 120 Volt Circuits

“Single Phase” is set as the default machine type if you are operating a single AC300+B300. This is the only and correct setting if a single AC300+B300 is being used.

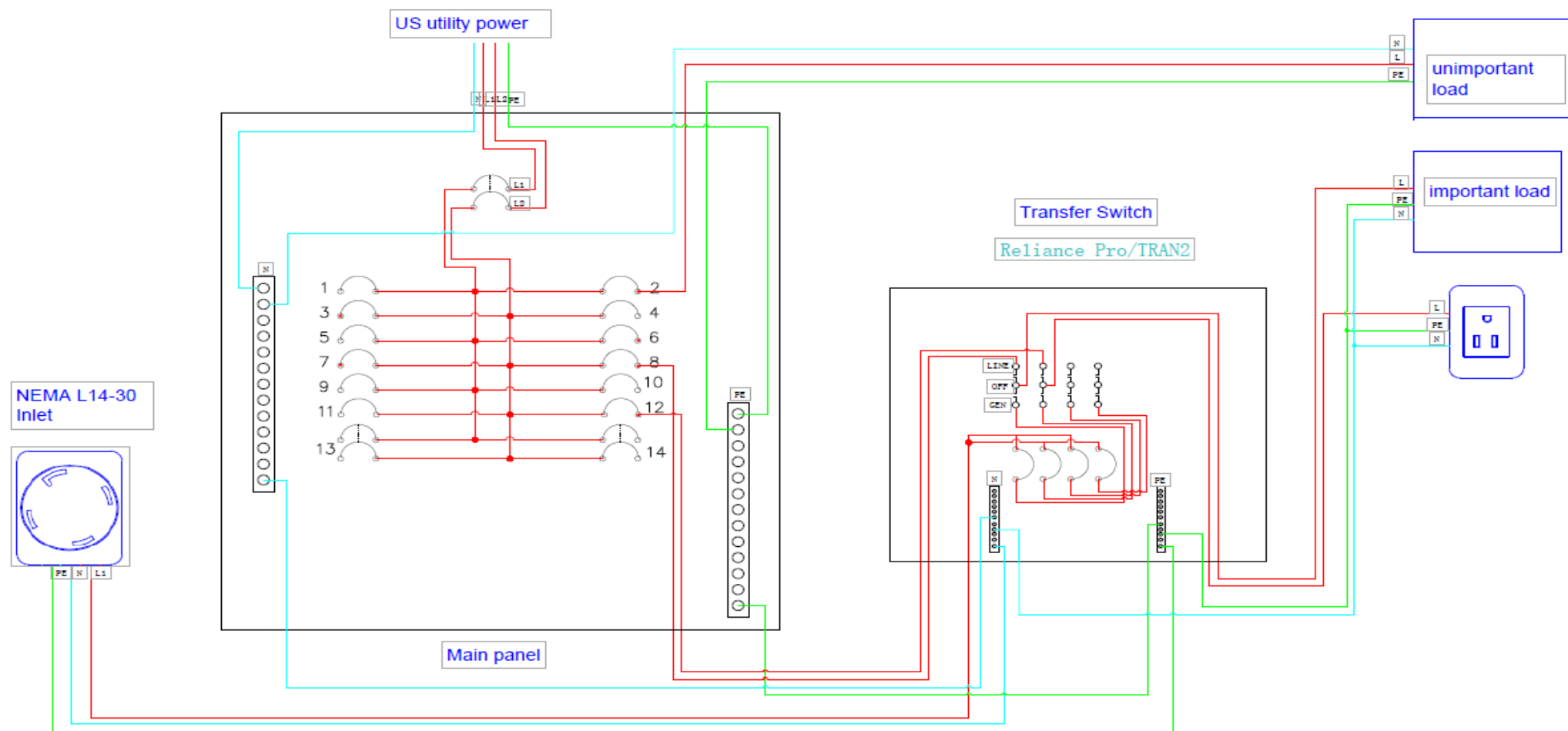
Firstly please purchase a manual transfer switch and the accessories as following:

NO.	Category	Quantity
1	Transfer switch : Reliance 306C Pro/Tran2	1
2	NEMA L14-30 inlet Box	1
3	NEMA L14 extension cord	1
4	Extension Cord Adapter NEMA TT30-P to L14-30R	1

NOTE: Please read the manuals before installing.

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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 AC300+B300, the 240V load (double hot line) cannot be connected to the transfer switch

2. How to connect two AC300+B300 to the utility power for 240 Volt Circuits

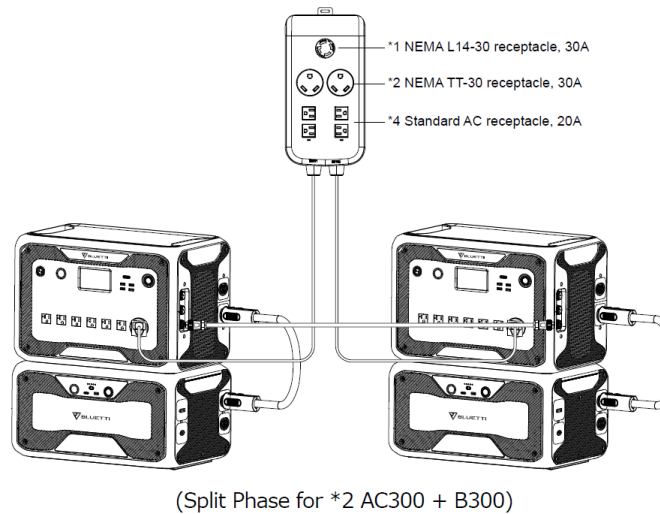
If you purchased two AC300+B300 to get the back-up power for household as 240 Volt Circuits.

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

NO.	Category	Quantity
1	Transfer switch : Reliance 306C Pro/Tran2(6 circuits) or Reliance 3010C Pro/Tran2 (10 circuits)	1
2	NEMA L14 extension cord	1
3.	BLUETTI 30A-AC-charging-cable	1
4.	BLUETTI FUSION BOX (optional)	1
5.	NEMA L14-30R outlet	1
6.	NEMA L14-30 inlet Box	1

Secondly, please read the manuals before installing.

Split Phase Function



How to connect the AC300+B300 to the US utility power

Note:

- (1) Please disconnect the AC charging cable for both AC300+B300 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 AC300+B300 into one power system to double the available output power, voltage, and capacity.

- “Split Phase” is only used for connecting two AC300+B300 together (only for the 100-120V version of the AC300+B300). A Fusion Box (P030A) is required (sold separately).
- Launch Split Phase Function:

- (4) Only one touchscreen will be active when two AC300+B300 units are connected.
- (5) If one of the AC300+B300 is out of power, the Split Phase Bonding function will deactivate automatically.

Warning: If you insist to charge the AC300+B300 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 AC300+B300 will be damaged. L: Live wire N: Neutral wire

HOW TO CONFIGURE BOTH OF THE AC300+B300:

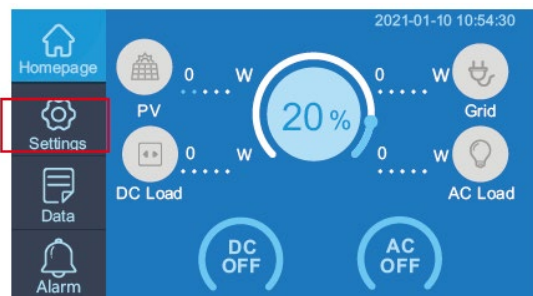
Step 1: Turn off both of **AC300+B300**.

Step 2: Plug the plugs from the Split Fusion Box Pro into AC300+B300 outlets

Step 3: Plug in the communication cables to each of the two AC300+B300's.

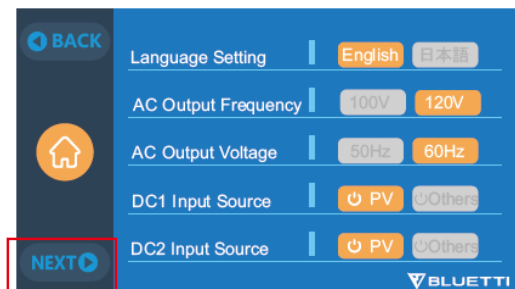
Step 4: Turn on one **AC300+B300**.

Step 5: Click the setting button on the LCD,



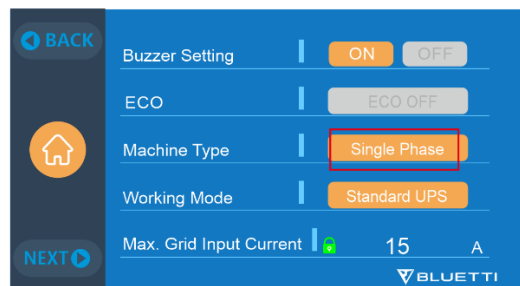
Step6: Click the NEXT,

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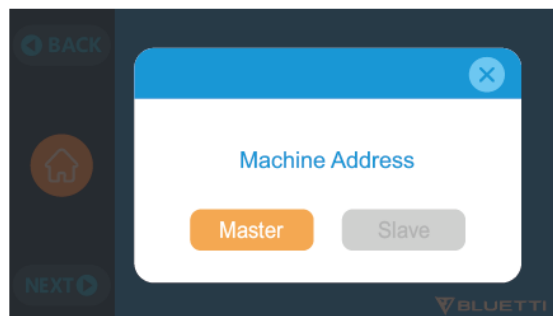


Step7: Click the “single phase” of the Machine Type setting, then click the “Split phase”

● Machine Type: Select Split Phase



Step8: Click the “Master”



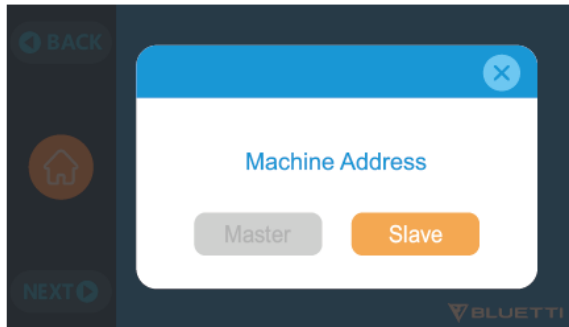
Step 9: Turn on another **AC300+B300**.

Step10: Click the setting button on the LCD.

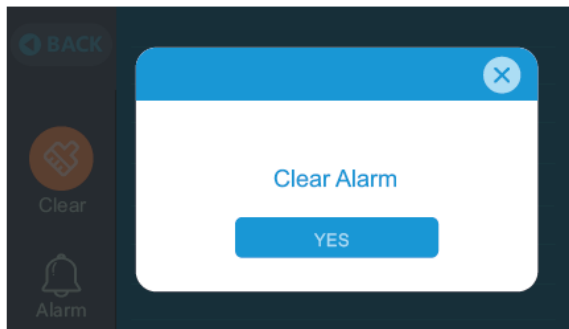
Step11: Following the Step 6- step 7: click the NEXT, then click the “single phase” and then click the “Split phase”.

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Step12: Click the "Slave"



Note: click clear the alarm history if the buzzer sounded



NOTE: Select "Master" will set the operating AC300+B300 as the one to control both two AC300+B300. Select "Slave" will set the operating AC300+B300 as the other AC300+B300 as the "Master" one.

CONNECTION:

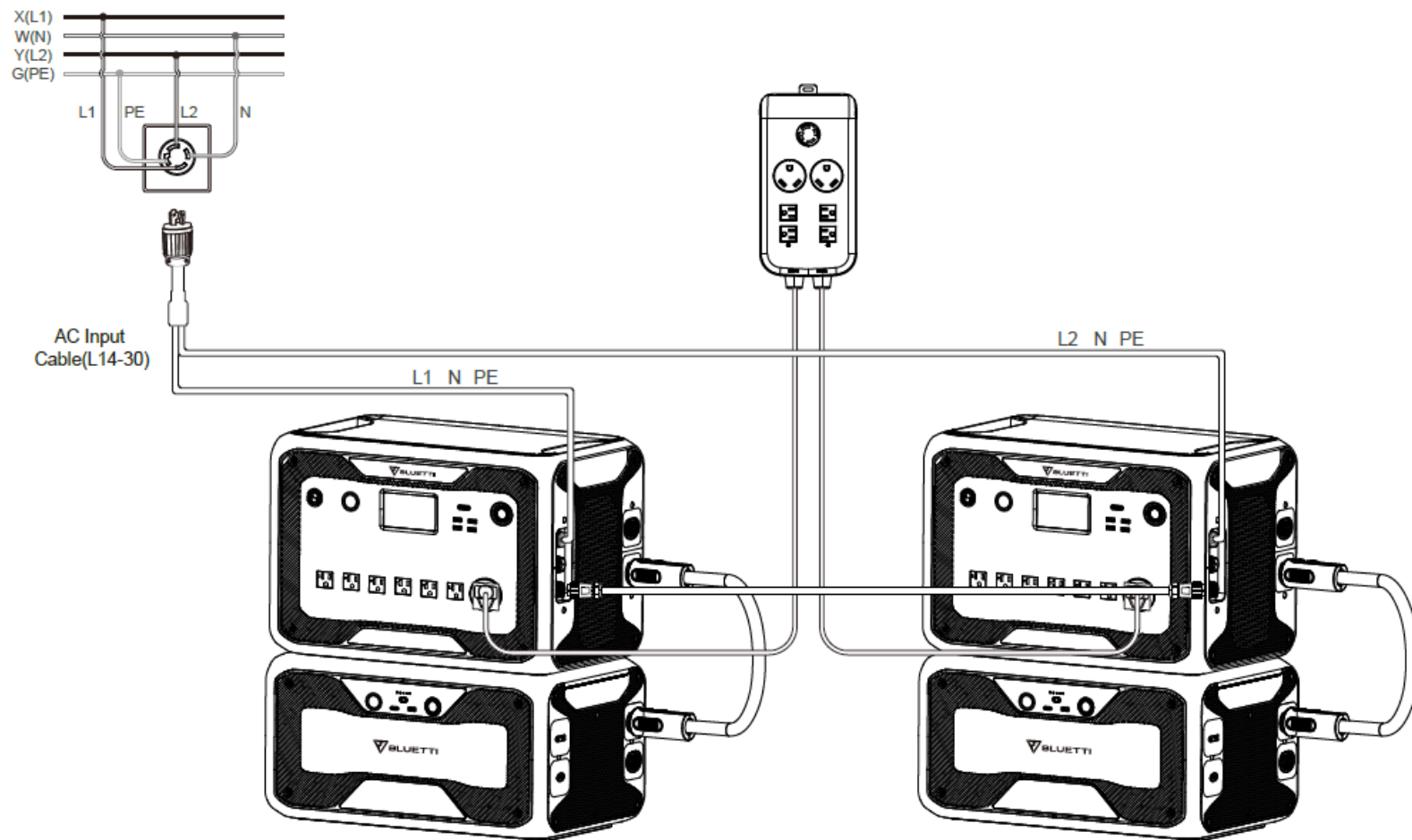
Machine type is just used to set for Split Phase, "Split Phase" is only used for connecting 2* AC300+B300 (100-120V Version) bonded 1 pairs of AC300+B300 to one power system to double the output power, voltage, so as to capacity. Please refer to Split Phase setting for detailed information.

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. The current capacity of AC input plug shall be $\geq 30A$.

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. We need purchase a BLUETTI 30A-AC-charging-cable and a

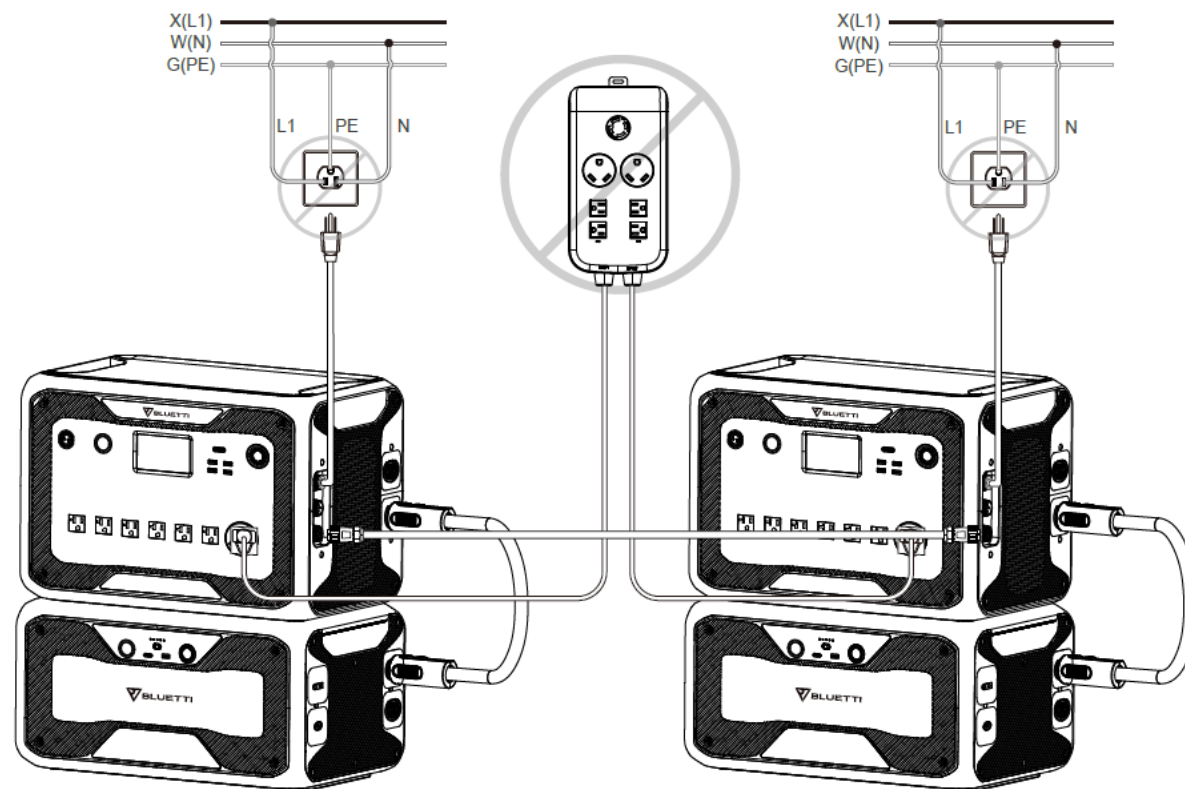
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NEMA L14-30R outlet to install the AC charge plug, the connect method as following:



WRONG CONNECTION

It's forbidden to connect AC300+B300 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.



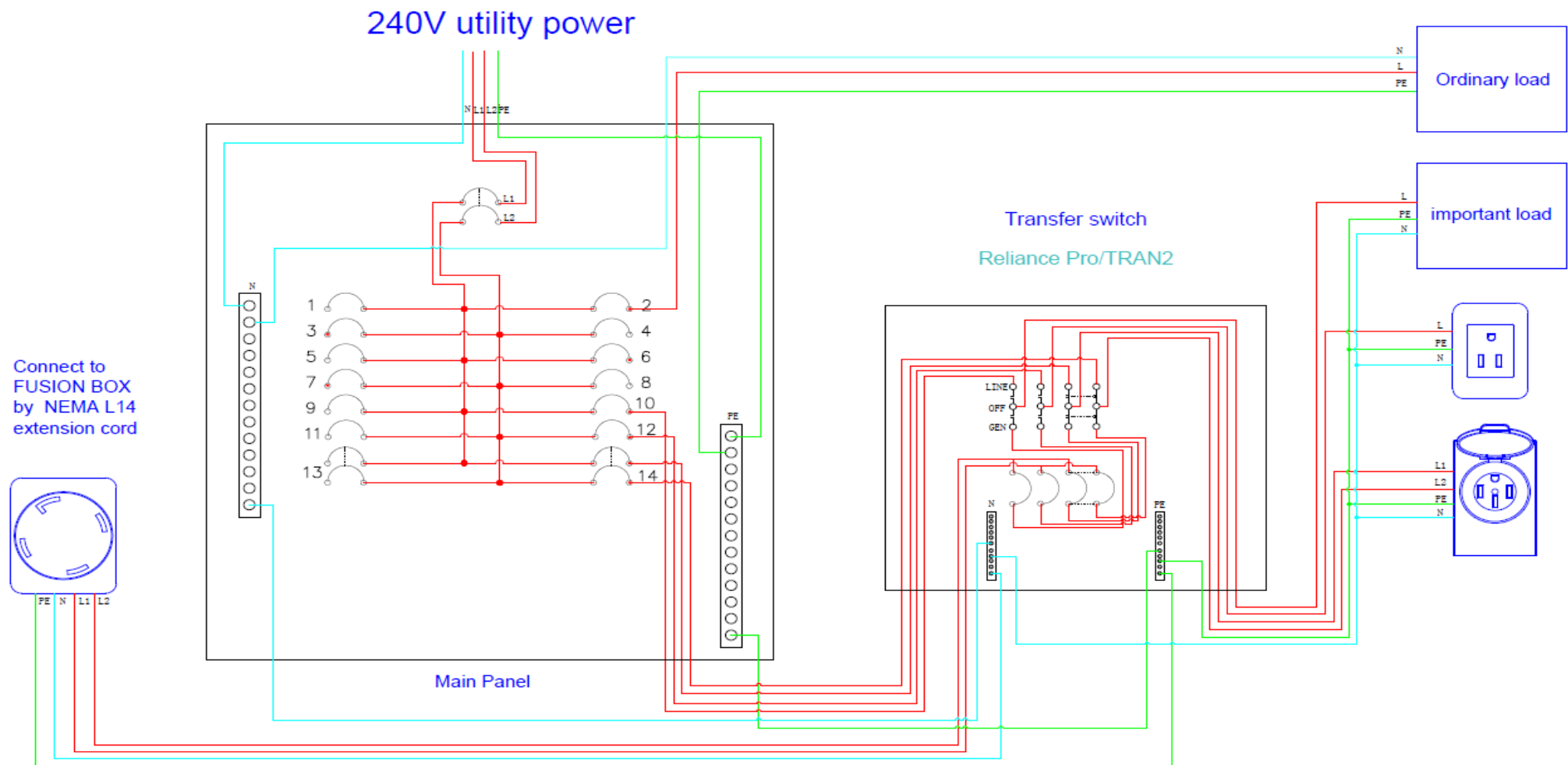
Thirdly, connect the AC300+B300 to the transfer switch

NOTE:

- 1) In split phase system, you may charge it via PV with the same method you charge one of them, id est charge through DC Input port on AC300. You may also dual charge it via PV and the BLUETTI 30A-AC-charging-cable simultaneously. (AC input only through the BLUETTI 30A-AC-charging-cable but not the original AC charging cable)
- 2) 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.

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



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.
4. Please check the voltage of outlets before plug in the household electrical equipment when transferred to the backup power

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=g&hvrnd=14413753645099096762&hvpone=&hvptwo=&hvgmt=&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

\$269⁰⁰

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=psdc_552808_t1_B00X7VVVTS



310C Pro/Tran2 30-Amp 10-Circuit 2 Manual Transfer Switch

Visit the Reliance Controls Store

★★★★★ 23 ratings

\$399⁰⁰

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

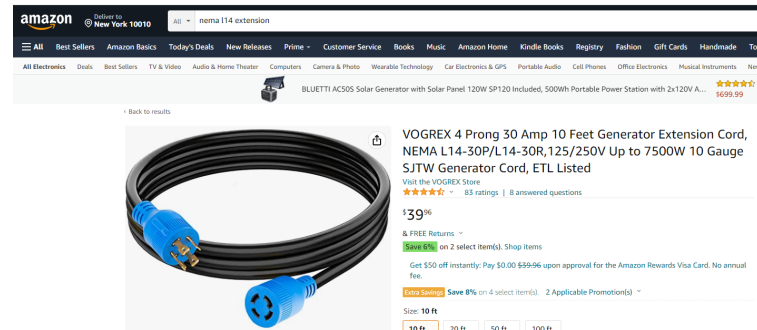
- Includes full manufacturer warranty

[See more product details](#)

3.2 NEMA L14 extension cord:

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

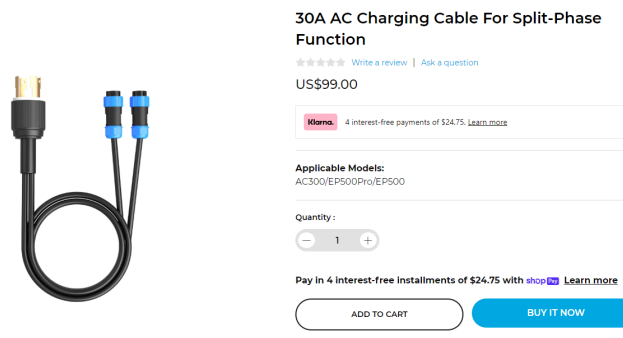
https://www.amazon.com/VOGREX-Generator-Extension-L14-30P-L14-30R/dp/B099R9YWT8/ref=sr_1_2?crid=N3G3QLMF57TD&keywords=nema%2Bl14%2Bextension&qid=1658719628&sprefix=name%2Bl14%2Bextention%2Caps%2C249&sr=8-2&th=1



3.3 BLUETTI 30A-AC-charging-cable

If you purchased two AC300+B300 to get 240V, you need to purchase one 30A AC Charging Cable for split-phase function

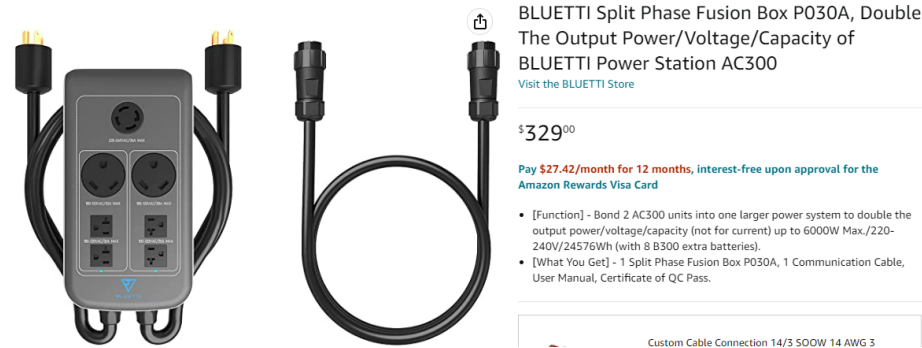
Purchase address: <https://www.bluettipower.com/products/30a-ac-charging-cable-for-split-phase-function>



3.4 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-Fusion-Voltage-Capacity-Station/dp/B0B2WG9B9Y/ref=sr_1_5?crid=1D8POL0HYBHZS&keywords=p030A&qid=1658881772&sprefix=p030a%2Caps%2C261&sr=8-5



3.5 NEMA L14-30 inlet Box

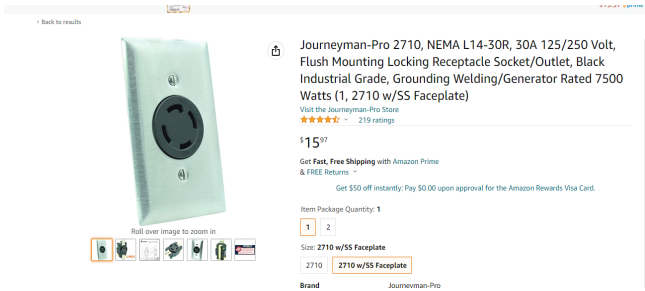
NEMA L14-30 inlet box connect to the transfer switch, plug the L14-30R of the L14 extension cord.

https://www.amazon.com/Reliance-Controls-Corporation-PB30-Generators/dp/B000BQT47S/ref=pd_bxgy_img_scc/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



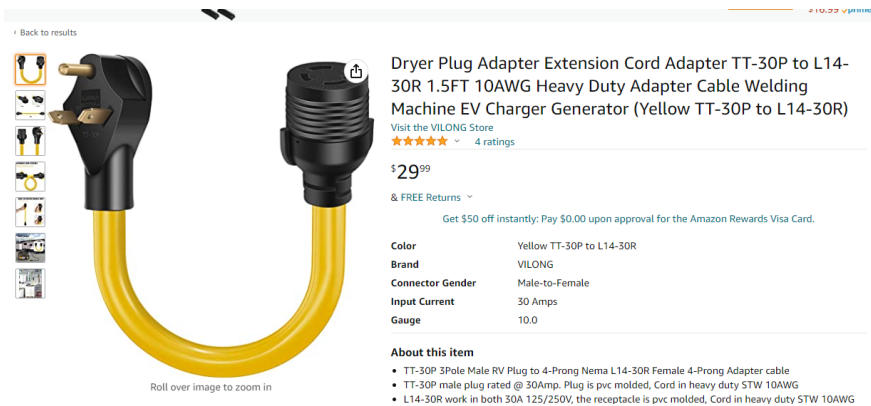
3.6 NEMA L14-30R outlet

The BLUETTI 30A-AC-charging-cable need plug into a L14-30R outlet for charging both EP500 pro. The 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



3.7 Extension Cord Adapter NEMA TT30-P to L14-30R

https://www.amazon.com/Adapter-Extension-L14-30R-Welding-Generator/dp/B094HSBVVV/ref=sr_1_10?crd=1CI1AA0X59T03&keywords=tt-30r&qid=1659943873&sprefix=tt-30r%2Caps%2C296&sr=8-10



4. More information:

Website: www.bluettipower.com **Email:** service@bluettipower.com