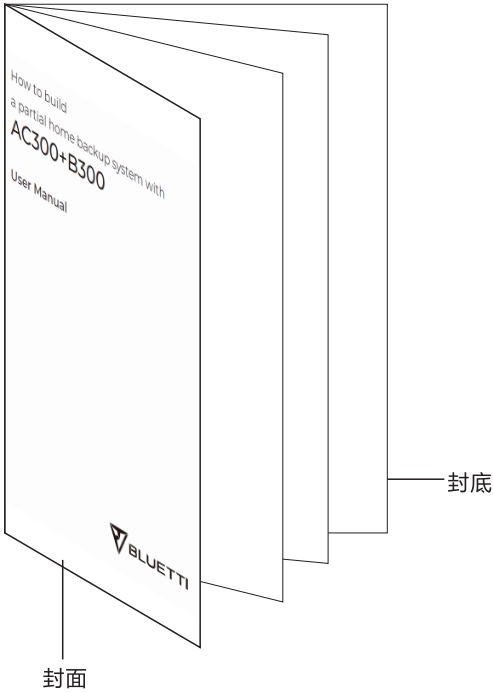


版本	更改	审核	日期
A0	首版发布	徐瑕曼	2023.01.12
A1			
A2			
A3			



说明书示意图（共20P）

- 样品承认书要求：
- 01、封面（供应商&我司承认会签）
 - 02、图纸/规格
 - 03、尺寸报告
 - 04、包装说明
 - 05、试验报告（如纸张，胶水，装订环保证明等）
 - 06、材质分解表（如纸张纸的克重品牌，材质克重和胶水品牌型号等）
 - 07、材质证明、MSDS（如有第三方正式机构的证明也附上）
 - 08、IQC检验报告

技术要求：

成品尺寸：A5(142*210mm)，公差+1/-1mm；

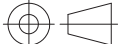
材质：128g双铜版纸封面封底，80g双铜板纸内页，双面印刷，订装；

颜色：单黑印刷；

所用材质需符合RoHS；

注：印刷需清晰，表面洁净，无凹凸痕迹，折边整齐；

不能有模糊，脏污，脱墨，花点，重影，印歪，纸张不平整等不良。

深圳市德兰明海科技有限公司 Shenzhen PowerOak Newener Co., ltd				
材 料			表面处理	无特殊说明，长度单位：mm 未标注尺寸公差按： x. （没有小数位）±0.2 x. x （一位小数位）±0.1 x. xx（两位小数位）±0.05 x° （角度） ±0.5° * 一重要尺寸 0--参照尺寸
型 号	AC300	比例： 1: 1 /A4	图纸编号/版本 OPS039-6D08A0	
名 称	家庭电网接线说明书 BLUETTI			
设 计	审 核	批 准	物 料 编 号	
徐瑕曼 2023.01.12			17.0303.0556-00	
			共 张/ 第 张	

How to build
a partial home backup system with
AC300+B300

User Manual



How to build a partial home backup system With
AC300+B300



Thank You!

Thank you for making BLUETTI a part of your family.

From the very beginning, BLUETTI has tried to stay true to a sustainable future through green energy storage solutions for both indoor and outdoor use while delivering an exceptional eco-friendly experience for our homes and our world.

That's why BLUETTI makes its presence in 70+ countries and is trusted by millions of customers across the globe.



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Declaration

- The installation should be performed by a licensed electrician. Improper installation may result in death or serious injury and property damage.
 - This document is provided for reference purpose ONLY and does not constitute legal advice. Please consult the local licensed electrician for details.
- BLUETTI shall not be liable for any damage or injury caused by improper installation of the backup system.**

1. 120 Volts AC300+B300 Backup System

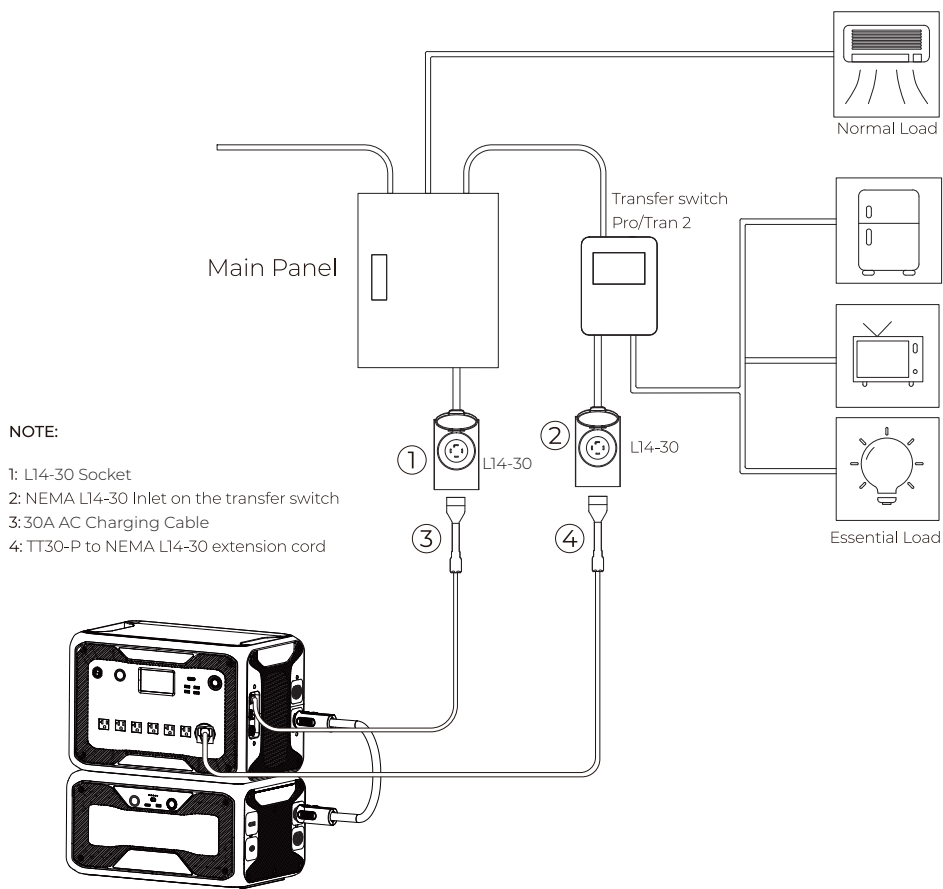
AC300+B300's Machine Type is set to "Single Phase" by default. DO NOT change this setting if you are operating a single AC300+B300 set.

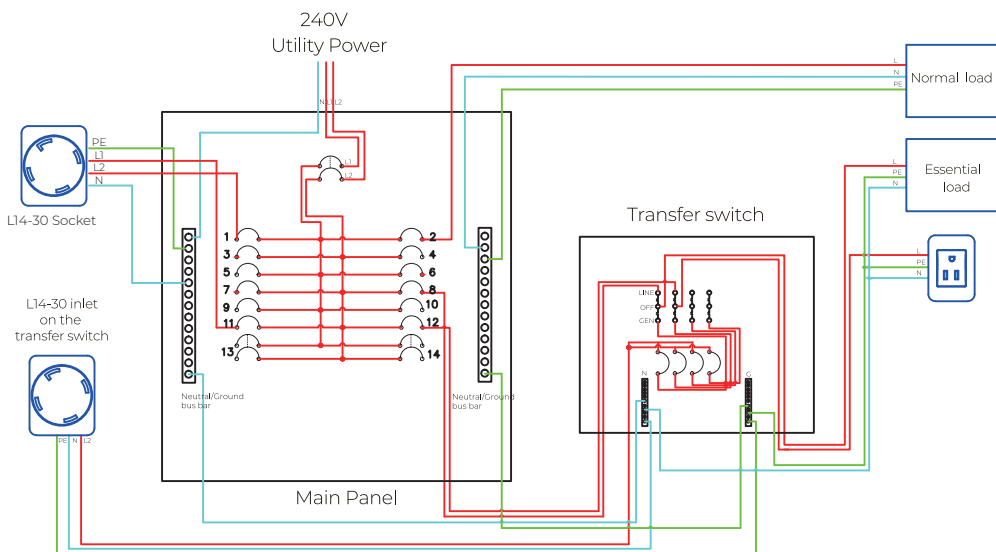
To build the backup system, you need the following:

Accessories	Qty.
Transfer switch: Reliance 310A Pro/Tran 2	1
NEMA TT30-P to L14-30R extension cord	1
30A AC charging cable	1

NOTE: Please read the Reliance 310A Pro/Tran2 manual before installation.
<http://www.reliancecontrols.com/Documents/PT2%20Loadside%20Installation%20and%20Operating%20Instructions.pdf>

Refer to the diagram below for proper installation of AC300+B300 backup system.





NOTE:

- The backup system must be properly installed by a licensed electrician.
- Please check the voltage at outlets before plugging in your household appliances.
- It is a electrical schematic. For the actual wiring diagram, please refer to Reliance PRO/TRAN2 installation instructions.

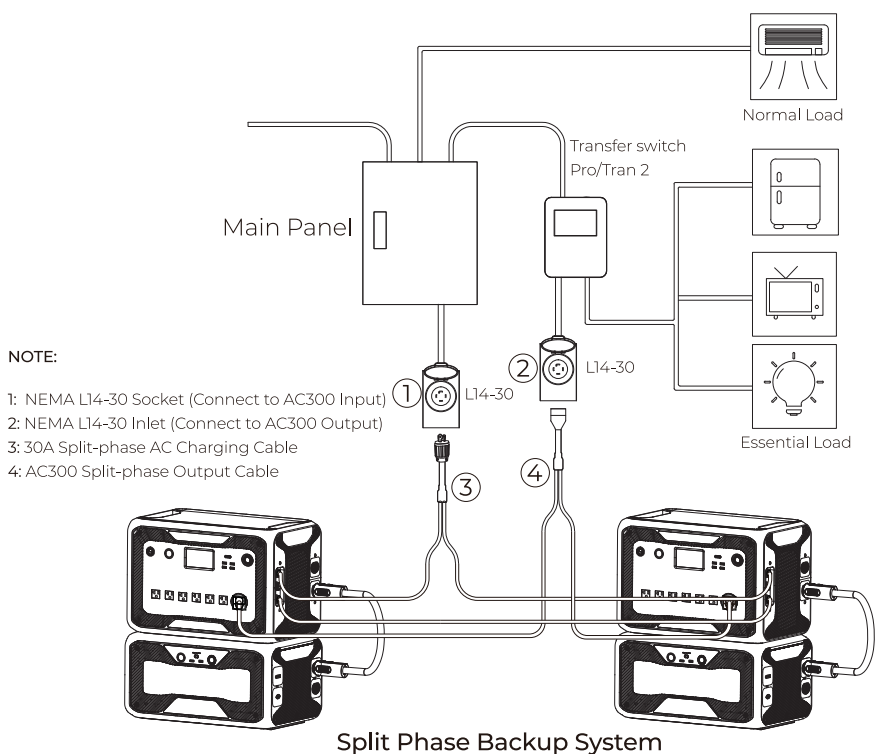
2. 240 Volts AC300+B300 Backup System

You can build the 240V Split Phase System by pairing two sets of AC300+B300 together. The system also has double the available output power and capacity. Besides TWO sets of AC300+B300, you also need the following:

Accessories	Qty.
Transfer switch: Reliance 310A Pro/Tran 2	1
AC300 split-phase output cable	1
NEMA L14-30R socket	1
AC300 30A split phase AC charging cable	1
Communication cable for split-phase function	1

Please read the Reliance 310A Pro/Tran 2 manual before installation.
<http://www.reliancecontrols.com/Documents/PT2%20Loadside%20Installation%20and%20Operating%20Instructions.pdf>

Before installing the Reliance Controls transfer switch system, please make a emergency energy plan that includes which appliances you need during a power outage. It is highly recommended to “balance the load” between the two phases of transfer switch, that’s to say, do not connect high-wattage appliances centrally to a single AC300+B300 set.



! Caution! The backup split phase system must be properly installed by a licensed electrician.

How to configure the AC300+B300 sets:

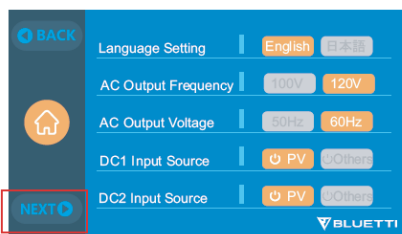
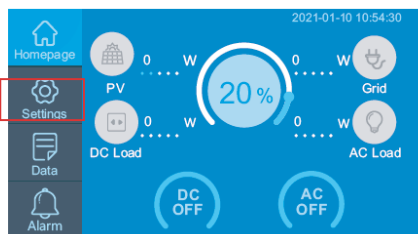
Step 1: Turn off both AC300+B300 sets.

Step 2: Connect AC300+B300 sets to transfer switch via the AC300 split-phase output cable. One TT-30 plug goes to a set.

Step 3: Connect two AC300 units via the communication cable.

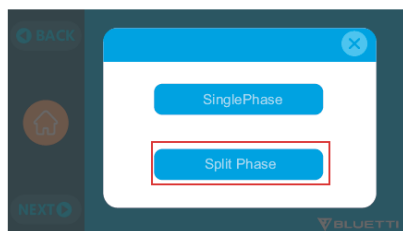
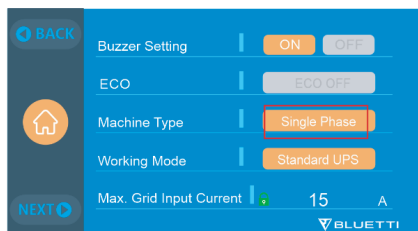
Step 4: Turn on either AC300+B300 set.

Step 5: Go to “Settings” and tap “Next”.

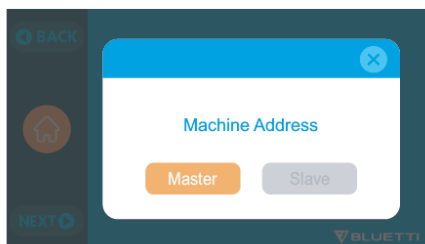


Step 6: Tap “Single Phase”, the machine type option pops up and select “Split phase”.

- Machine Type: Select Split Phase

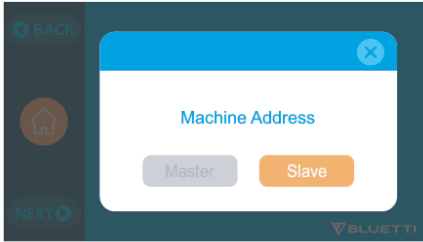


Step 7: Select the “Master” in the Machine Address pop up.

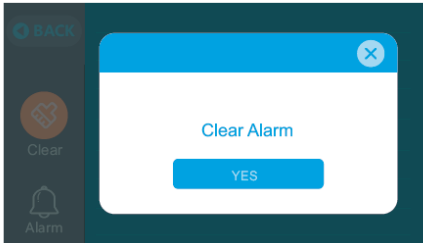


Step 8: Turn on the other AC300+B300 set. Repeat step 5 and 6 to set its machine type to “Split phase”.

Step 9: Select the “Slave” in the Machine Address pop up.



If the connection fails, clear the alarm history and reconnect.



NOTE:

- Disconnect the AC charging cables from AC300+B300 sets before connecting to the transfer switch.
- The split phase system can be controlled ONLY on the “Master” set.
- If one of the AC300+B300 sets is out of power, the split phase system fails automatically.

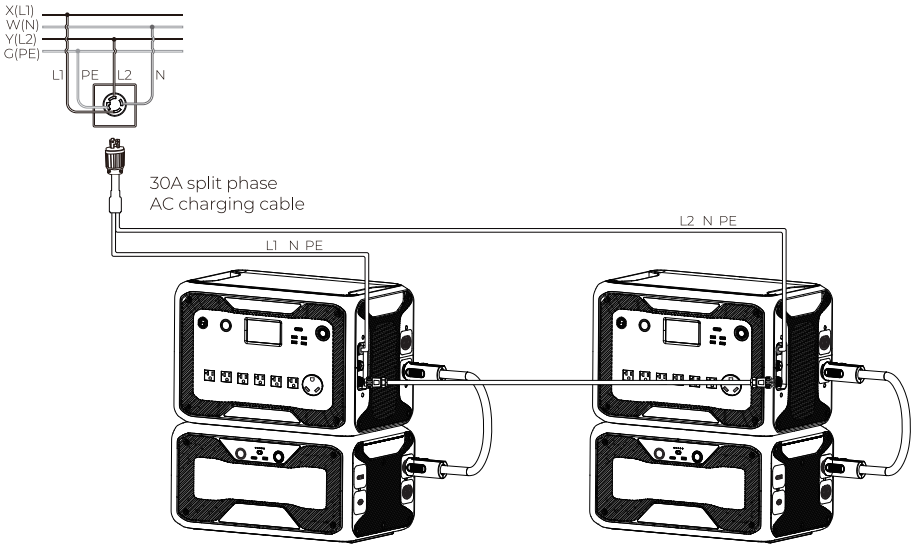
NOTE:

- The backup system must be properly installed by a licensed electrician.
- Please check the voltage at outlets before plugging in your household appliances.
- It is a electrical schematic. For the actual wiring diagram, please refer to Reliance PRO/TRAN2 installation instructions.
- In the main panel, two Neutral/Ground bus bars have been connected together with copper strips.

Connect the AC300+B300 sets to the main panel

Charge the 240V split phase system with AC300 30A split phase AC charging cable. Plug the cable to a NEMA L14-30 socket (240V)and the other two connectors into AC300s' AC input ports.

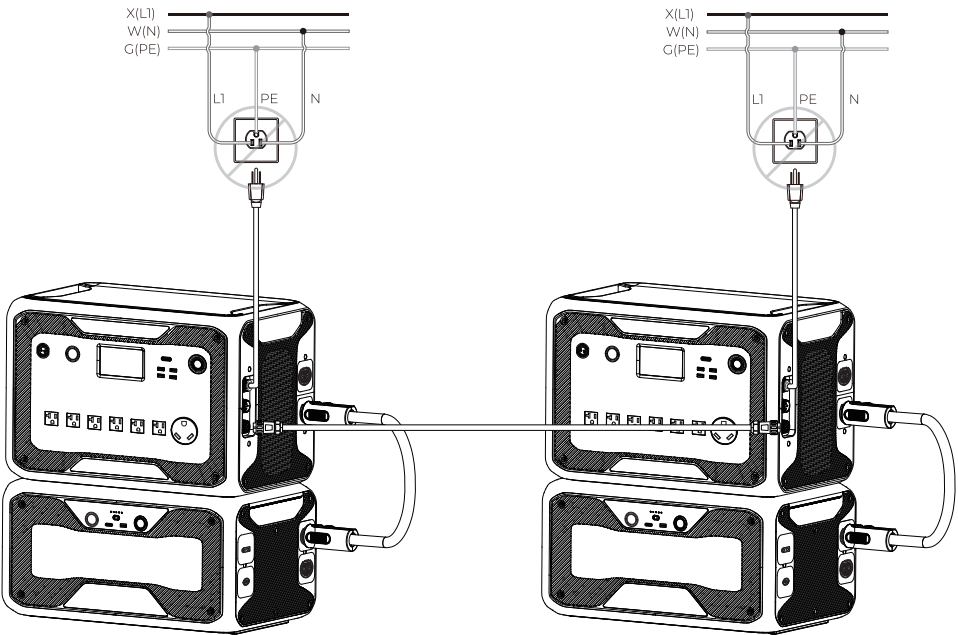
The AC input ports should be connected to L1/N/PE and L2/N/PE, respectively. The current capacity of AC input plug shall be $\geq 30\text{A}$.



WRONG CONNECTION

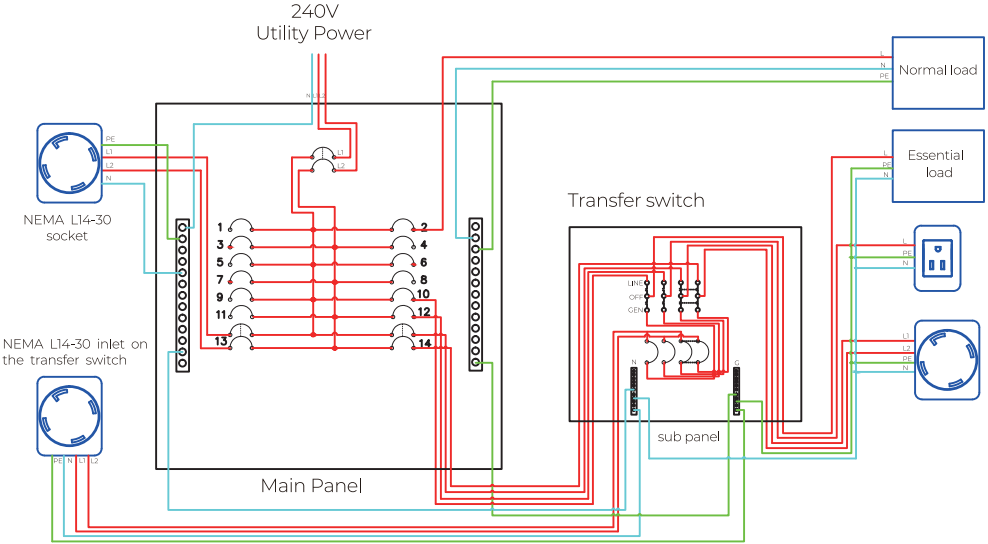
Warning! DO NOT charge AC300+B300 with standard AC charging cable in the split phase system, as this may cause damage to the batteries inside B300s and invalidate your warranty.

L: Live wire N: Neutral wire



NOTE:

The split phase system supports charging via solar panels. You can charge it by PV and the AC300 30A split-phase AC charging cable simultaneously. (AC input only through the AC300 30A split-phase AC charging cable but not the standard AC charging cable)



3. Accessories

3.1 Transfer switch

Recommendation: Reliance Controls 310A PRO/TRAN 2 transfer switch.



3.2 BLUETTI 30A AC charging cable

Please buy it from BLUETTI official store.

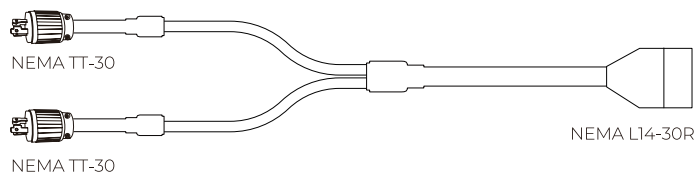
AC300 30A AC Charging Cable



3.3 BLUETTI AC300 split-phase output cable

Please buy it from BLUETTI official store.

<https://www.bluettipower.com>



3.4 BLUETTI AC300 30A split-phase AC charging cable

Please buy it from BLUETTI official store.

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



3.5 Communication cable for split-phase function

Please buy it from BLUETTI official store.

<https://www.bluettipower.com/products/communication-cable-for-split-phase-function>



3.6 NEMA L14-30R socket

For charging the 240V AC300+B300 split phase system.

Recommendation: Journeyman-Pro HJP 2710 NEMA L14-30R socket.

3.7 NEMA TT30-P to L14-30R extension cord

For connecting AC300+B300 to the sub panel.

Recommendation: Parkworld NEMA TT30-P to L14-30R extension Cord.

3.8 Circuit breaker & protection box

If you have a residential solar array with a voltage of 12V-150V, you're strongly recommended to use a DC circuit breaker panel to enable or disable solar charging.

NOTE : If there are two solar panel arrays with a total open circuit voltage of 12-150V, you also need two 2P 16A DC circuit breakers.

4. How to install Reliance Controls

Please refer to Reliance Controls website: www.reliancecontrols.com

4.1 How to install Reliance Controls ProTran2 - Part1, Tools and Planning

<https://www.youtube.com/watch?v=xTqjw6WJ7o&list=PLpYCE0n7d22iDNwpVnOF9HULSUYYBBRY86>

4.2 How to install Reliance Controls ProTran2 - Part2, Mounting

<https://www.youtube.com/watch?v=wNbBHVHgwOY&list=PLpYCE0n7d22iDNwpVnOF9HULSUYYBBRY86&index=2>

4.3 How to install Reliance Controls ProTran2 - Part3, Wiring

<https://www.youtube.com/watch?v=TKruj9BpZM8&list=PLpYCE0n7d22iDNwpVnOF9HULSUYYBBRY86&index=3>

4.4 How to install Reliance Controls ProTran2 - Part4, Replacing Circuit Breakers

<https://www.youtube.com/watch?v=IkOuauT-YP8&list=PLpYCE0n7d22iDNwpVnOF9HULSUYYBBRY86&index=4>

4.5 How to install Reliance Controls ProTran2 - Part5, Installing The Power Inlet Box

<https://www.youtube.com/watch?v=OM8sYRhEVPY&list=PLpYCE0n7d22iDNwpVnOF9HULSUYYBBRY86&index=5>

4.6 How to install dd Controls ProTran2 - Part6, How To Operate

<https://www.youtube.com/watch?v=O4GA9AK8Tmo&list=PLpYCE0n7d22iDNwpVnOF9HULSUYYBBRY86&index=6>

5. More information:

Website: www.bluettipower.com

Email: service@bluettipower.com

