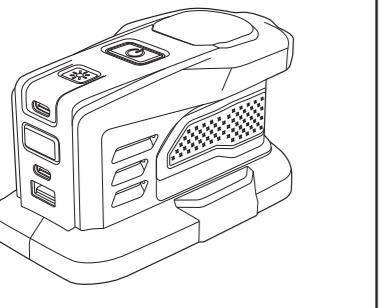


## Intelligent Power Source and Charger

for 18V Batteries [Instructions](#)  
The "PSC Pro" & "PSC Pro Max"



**SYMIK**

### Introduction

The SYMIK Power Source Charger Pro (PSC Pro) is an intelligent bi-directional 100W charger and 145W power source designed for Ryobi 18V batteries. It is able to charge 18V batteries @ charging power up to 100W (when used together with a 100W PD 3.0 Power Adapter and a Type C cable with internal E-marker chip). It can also convert your 18V battery into a power bank/source by discharging the battery. The discharge power is up to 145W PD (USB-C1 100W and USB-C2 45W combined). It is designed for both beginners and Pros. It is plug-and-play for beginners with all settings set to factory recommended values. For pros, they can adjust charge power, screen off time, power off current and more for a more customized use experience.

The PSC Pro Max is capable of 140W charging and 225W power output. The USB-C1 is equipped with a state of the art PD 3.1 circuit which can process 140W input and output power. With the power enhancement, the Pro Max is ideal for large and newer 8Ah and 12Ah batteries. Ideally, the Pro Max can fully charge an 8Ah battery in 1 hour and 10 minutes. The USB-C2 and USB-A of the Pro Max have independent circuits which will not cause power reduction when both used at the same time. The USB-C2 is 45W and USB-A is 40W.

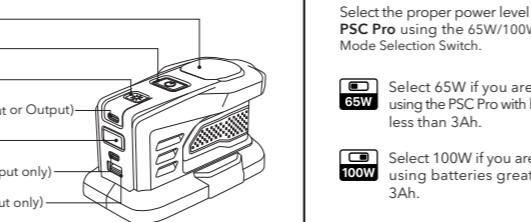
The most unique and innovative feature of the PSC is that the USB-C1's role/direction can be adjusted by the user. The user can set the role/direction of USB-C1 to "Input Only" or "Output

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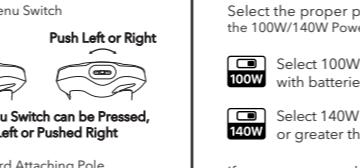
Only" or "Auto". This feature makes the PSC the Master of all power banks: It can sink/suck energy from other power banks or source/inject energy into other power banks which is not controllable when using 2 conventional power banks without the role selection feature.

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### Charger Diagram



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### Determine the Power Mode

#### Power Mode Selection Switch

Select the proper power level for your PSC Pro using the 65W/100W Power Mode Selection Switch.

Step 1: Fully Insert a battery until you hear the double clicks.

Step 2: Press and release the Power Button to power on the PSC.

Step 3: Connect devices to the USB ports.

Step 4: Press and hold the Power Button for over 2 seconds to power off the PSC.

Step 5: When the PSC is powered on, press and release the LED light button to turn on/off of the LED light. When the LED button is pressed, the OLED screen will switch to the USB-A/LED display mode.

Step 6: When the PSC is powered on, press and release the power button to switch between USB-C1/C2 and USB-A/LED display mode.

Step 7: When the OLED is in USB-A/LED display mode, push the menu switch to the left/right to decrease/increase the LED brightness.

Step 8: Select 100W if you are mostly using the PSC Pro Max with batteries between 3Ah and 6Ah.

Step 9: Select 140W if you are mostly using batteries equal to or greater than 6Ah.

Step 10: If you want to use the Pro Max to charge batteries less than 3Ah, you should limit the charge current to be less than 4Amps or Limit the USB-C1 Power to be 65W or less in the setting menu. Or just use with a 65W or smaller power adapter to charge small batteries.

### Using as a Power Source

#### Power Mode Selection Switch

Select the proper power level for your PSC Pro Max using the 100W/140W Power Mode Selection Switch.

Step 1: Select 100W if you are mostly using the PSC Pro Max with batteries between 3Ah and 6Ah.

Step 2: Select 140W if you are mostly using batteries equal to or greater than 6Ah.

Step 3: Connect devices to the USB ports.

Step 4: Press and hold the Power Button for over 2 seconds to power off the PSC.

Step 5: When the PSC is powered on, press and release the LED light button to turn on/off of the LED light. When the LED button is pressed, the OLED screen will switch to the USB-A/LED display mode.

Step 6: When the PSC is powered on, press and release the power button to switch between USB-C1/C2 and USB-A/LED display mode.

Step 7: When the OLED is in USB-A/LED display mode, push the menu switch to the left/right to decrease/increase the LED brightness.

Step 8: Select 100W if you are mostly using the PSC Pro Max with batteries between 3Ah and 6Ah.

Step 9: Select 140W if you are mostly using batteries equal to or greater than 6Ah.

Step 10: If you want to use the Pro Max to charge batteries less than 3Ah, you should limit the charge current to be less than 4Amps or Limit the USB-C1 Power to be 65W or less in the setting menu. Or just use with a 65W or smaller power adapter to charge small batteries.

### Charging A Battery

#### Power Mode Selection Switch

Select the proper power level for your PSC Pro Max using the 100W/140W Power Mode Selection Switch.

Step 1: Insert a battery.

Step 2: Connect the USB-C1 port to a power adapter with a USB-C cable.

Step 3: Charging with a USB-C cable (Not included) and Power Adapter (Not included).

Step 4: It is recommended to always have a battery inserted before attaching the USB-C1 to a power adapter.

### OLED Screen View Introduction

USB-C1/C2 DISPLAY MODE

Battery Level 19.8V

USB-C1 Direction Mode (Input Only/Auto/Output Only)

100W USB-C1 Input / Output Power Limit

PB Power Bank Mode

ER Charge Error

Temp Delay

NB No Battery

FC Full Charge

USB-C1 Voltage, Current, and Power

USB-C2 Voltage, Current, and Power

USB-A Voltage, Current, and Power

LED Mode and Brightness

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### Advanced Operations -- USB-C1 Role Change



When power on, the default role of USB-C1 is "Auto". The user can change the role/direction of USB-C1 to "Input Only" or "Output Only".

Before performing the role change, make sure there are no cables connected to any of the USB ports. When the OLED is in USB-C1/C2 display mode, push the Menu Switch to left or right for over 2 seconds to change the role.

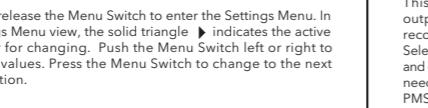
In "Input Only" Mode, USB-C1 will only sink energy from USB-C1 port into the 18V battery. User can use this feature to suck energy from other power banks or laptops (If the laptop supports output) even if the other party's USB-C port is in "Auto" mode.

In "Output Only" Mode, USB-C1 will work like a USB-C port on a power adapter which will only source energy. User can use this feature to make sure the PSC will charge other power banks.

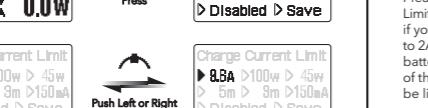
If the PSC is not performing as expected per the role, it can be because some protection features (such as under voltage lockout) of the power chip is engaged before the role change is performed. Power off the PSC, wait for 5 seconds, power on and try the role change again. Or try a battery with different charge level.

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### Advanced Operations -- Settings Menu



Press and release the Menu Switch to enter the Settings Menu. In the Settings Menu view, the solid triangle indicates the active parameter for changing. Push the Menu Switch left or right to adjust the values. Press the Menu Switch to change to the next setting option.



Please note, the charging power is restricted by C1 Input Power Limit or Charge Current Limit whichever is reached first. For example, if you set the C1 Power Limit to 65W and the Charge Current Limit to 20A, you will be charging the battery at about 36W (36 Watts) if the battery voltage is 18V. The charge power will vary with the change of the battery voltage. In the above example, the charge power will be limited to about 40W if the battery voltage increases to 20V.

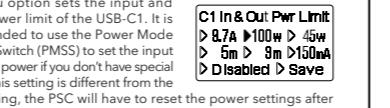
Please also note, the C1 Input and Output Power Limit is only a limit. For example, if you are using a 30W power adapter with the PSC, your max possible power will be limited to 30W by your power adapter. In order to perform charging over 65W, you will need a 100W Type C PD 3.0 Power adapter and a USB-C cable which supports 100W charging (with internal E-marker chip). For the Pro Max, you will need a 140W Type C PD 3.1 Power adapter and a 140W+USB-C cable in order to perform 140W charging.

C2 Output Power Limit

The available power options for USB-C2 are 30W, 45W, 65W and 100W. However, USB-C2 is based on a Buck Converter which steps

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### C1 Input and Output Power Limit



Power Off Current

Screen Off After

Strobe Modes Control

Save And Exit

Charge Current Limit

Power Off After

Screen Off After

Strobe Modes Control

Save And Exit

Charge Current Limit

Power Off After

Screen Off After

Strobe Modes Control

Save And Exit

Charge Current Limit

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Save And Exit