

Replacement of High Power DC Panel in Three Phase Inverters with Synergy Technology

This guide explains how to replace the High Power DC Panel in the Three Phase Inverter with Synergy Technology.

Revision History

Version 1.0 (October, 2021)

Kit Contents

- Replacement DC Panel

Required Tools

- 4 mm Allen torque wrench
- Torque Phillips screwdriver
- 3 mm flat head screwdriver

Removing the Synergy Manager Cover

→ To remove the Synergy Manager cover

1. Switch the ON/OFF/P switch of the Synergy Manager to OFF and wait 5 minutes for the internal capacitors to discharge.

WARNING!



The Synergy Manager cover should be opened only after switching the inverter ON/OFF/P switch located at the bottom of the Synergy Manager to OFF. This disables the DC Voltage inside the inverter. Wait five minutes before opening the cover. Otherwise, there is a risk of electric shock from energy stored in the capacitors.

AVERTISSEMENT!

Ne pas ouvrir le couvercle de l'onduleur avant d'avoir coupé l'interrupteur situé en dessous de l'onduleur. Cela supprime les tensions CC et CA de l'onduleur. Attendre cinq minutes avant d'ouvrir le couvercle. Sinon, il y a un risque de choc électrique provenant de l'énergie stockée dans le condensateur

2. Turn-off the DC Disconnect Switch on the front cover of the Synergy Manager (only applicable for models with DC Disconnect Switch).
3. Disconnect AC to the inverter by turning-off the inverter circuit breakers on the distribution panel.
4. Remove the six Allen screws on the front cover of the Synergy Manager and remove the cover.

CAUTION!



When removing the front cover, make sure not to damage the internal components. SolarEdge will not be held responsible for any components damaged as a result of incautious cover removal.

Removing the High Power DC Panel

→ To remove the high power DC panel:

1. Disconnect all DC wires from DC+ and DC- terminals (see Figure 1).

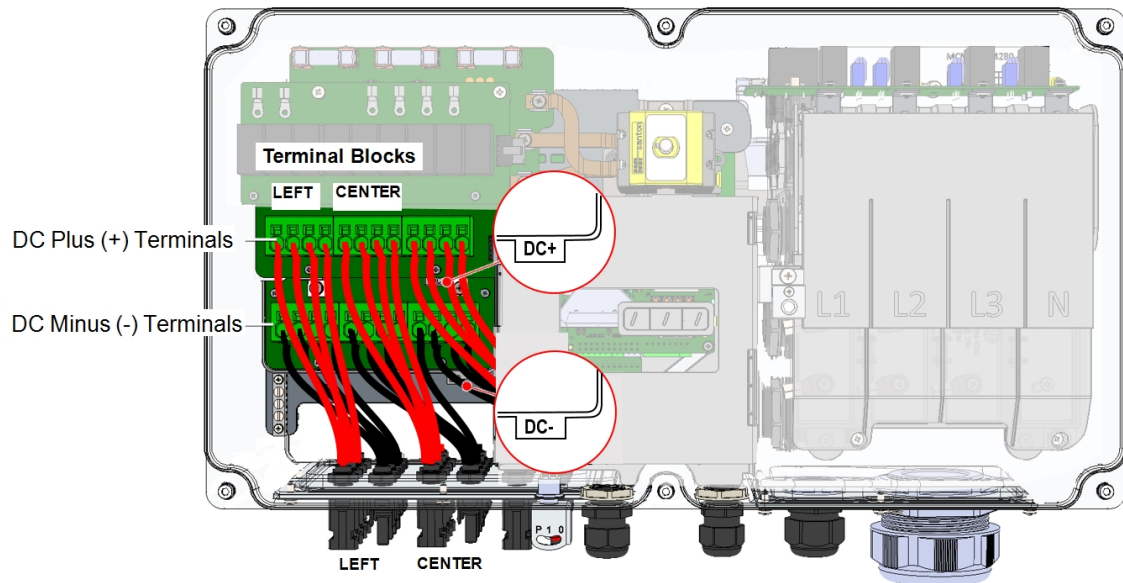


Figure 1: Disconnecting wires from DC+ and DC- terminals inside the Manager Unit

2. Release the eight screws connecting the DC panel and remove the panel. Verify that the O-ring sits properly in the groove of the Manager Unit housing.

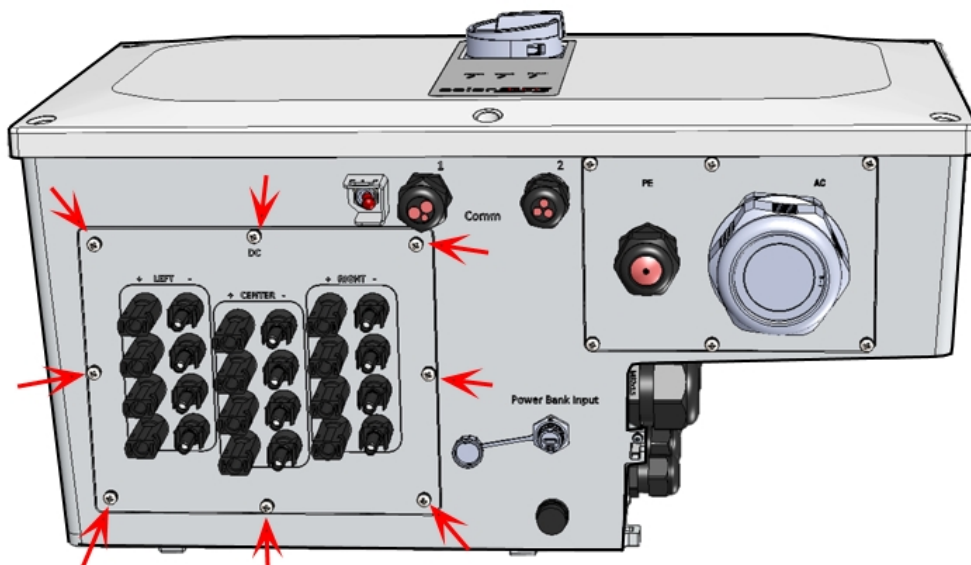


Figure 2: Removing the DC panel at the bottom of the Manager Unit

Installing the Replacement the High Power DC Panel

→ To install the high power DC panel:

1. Position the DC panel and tighten the eight screws connecting the panel to the Manager Unit with a torque of 1.9 N*m (1.4 lb*ft).

2. Connect all DC wires to the DC+ and DC- terminals.

CAUTION!



Ensure that the wires coming from the DC panel are connected to the corresponding **Left** or **Center** terminal blocks (See example in *Figure 3*).

Ensure that **Plus (+)** and **Minus (-)** wires coming from the DC panel are connected to the corresponding Plus (+) and Minus (-) of the terminal blocks (See example in *Figure 3*).

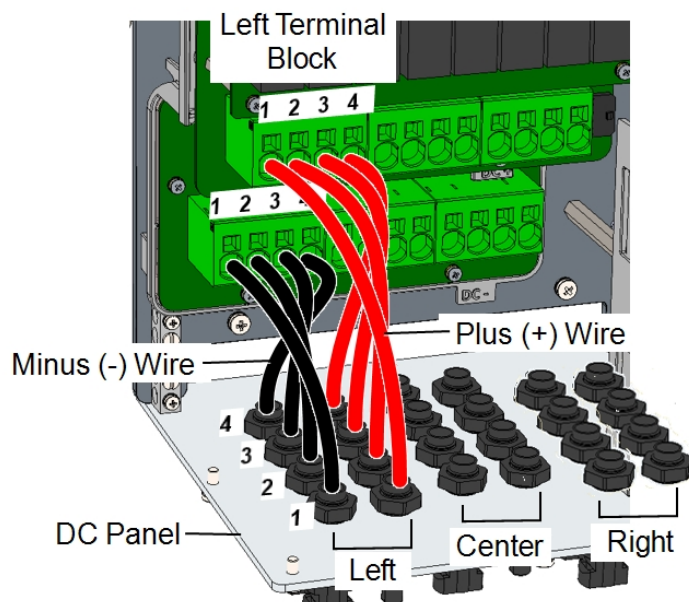


Figure 3: Example of DC wires connection

3. Close the Synergy Manager cover and fasten the six Allen screws with a torque of 3.5 N*m (2.6 lb*ft).

Support Contact Information

If you have technical problem concerning SolarEdge product, please contact us at:

<https://www.solaredge.com/service/support>

<https://www.solaredge.com/us/service/support>

Before contacting, make sure to have the following information at hand:

- Model and serial number of the product in question.
- The error indicated on the product SetApp mobile application, LCD screen, indication LEDs or in the monitoring platform (if available).
- System configuration information, including the type and number of modules connected and the number and length of strings.
- The communication method to the SolarEdge server (if available).
- The product's software version as it appears in the ID status screen of the LCD or SetApp mobile application.