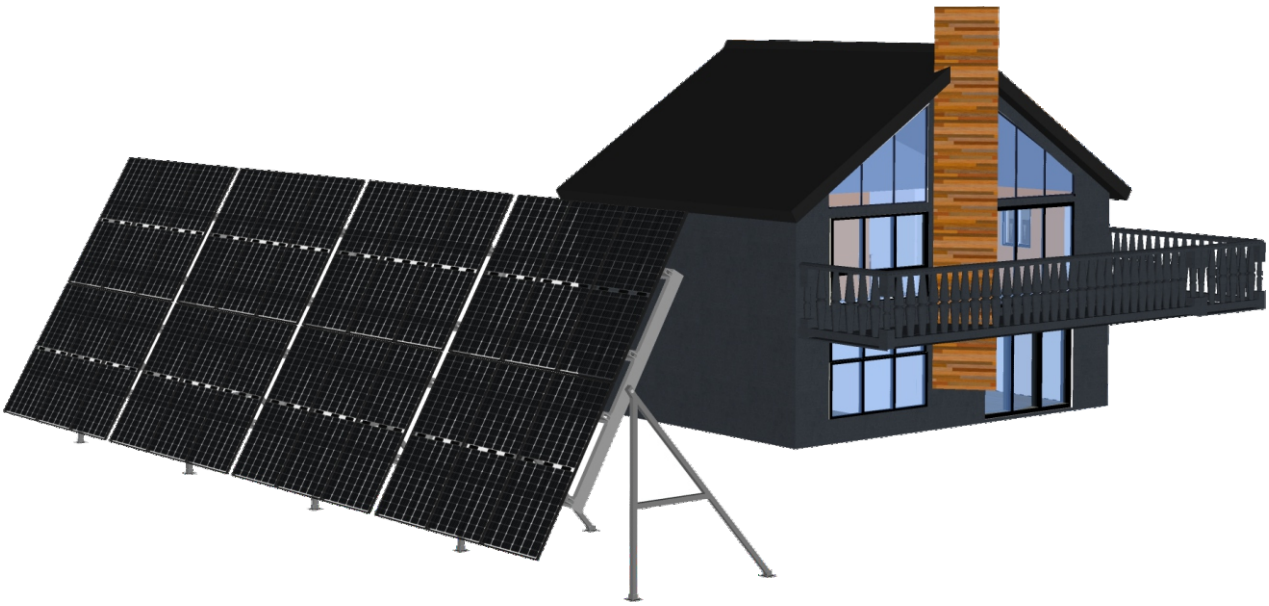


INSTALLATION MANUAL

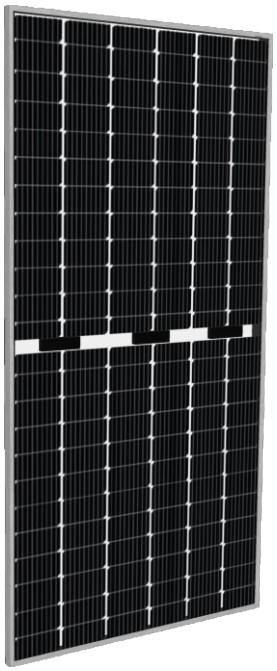
HYBRID INVERTER / OFF-GRID SETUP

SOLAR ONLINE

www.solaronline.ca

COMPONENTS & TOOLS

Main System Kit Components



MegaRevo Inverter

Carbon Batteries

Battery Disconnect

PV Fused Box

Fuse Holder & Fuses

PV Wire & MC4

Inverter & Battery Cables

Suggested Tools

INSTALLATION PROCEDURES

24 Panel Hybrid/Off-grid Kit

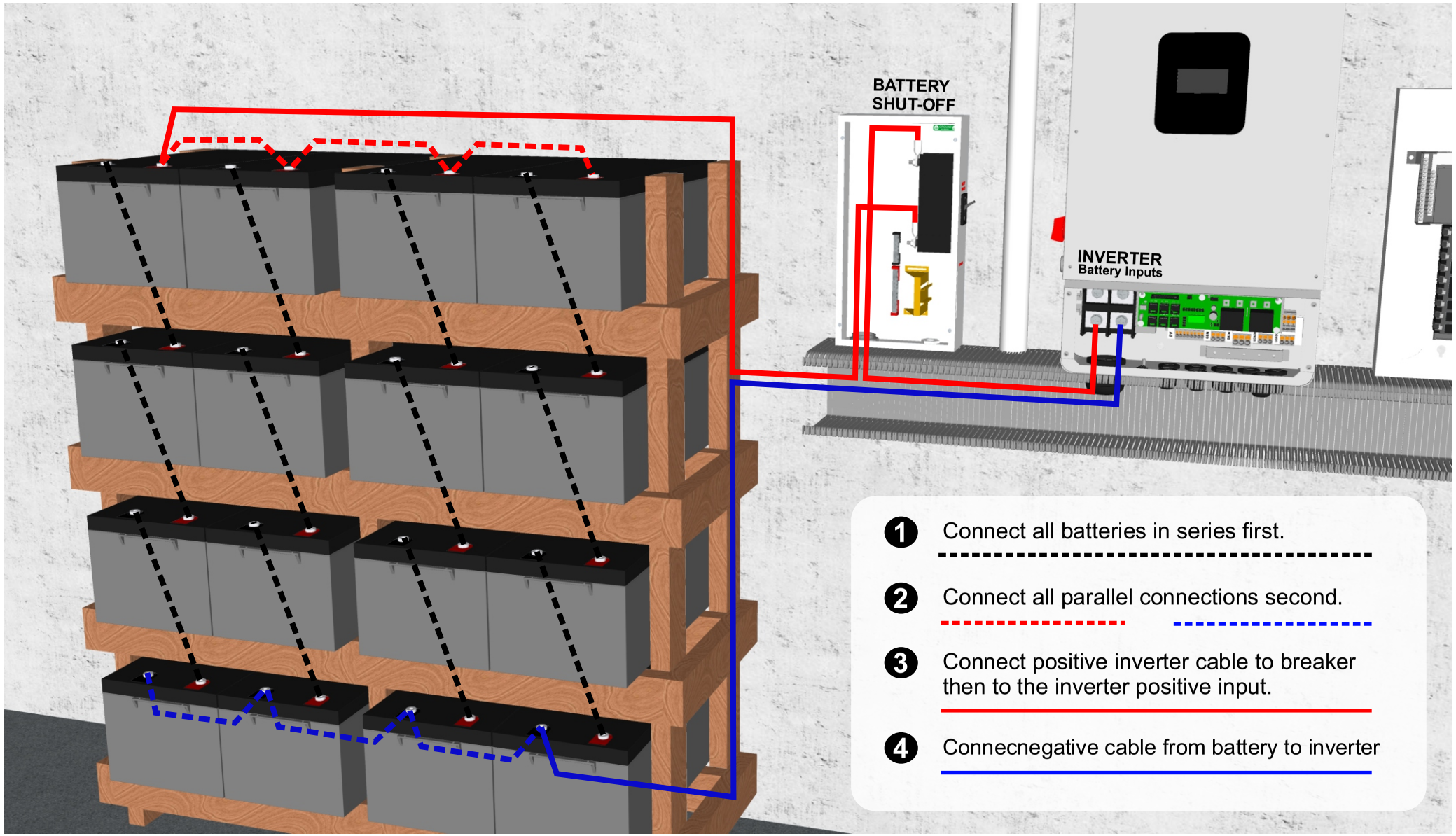
SOLAR ONLINE

www.solaronline.ca

BATTERY WIRE DIAGRAM OVERVIEW

Battery Wiring Connection Procedures

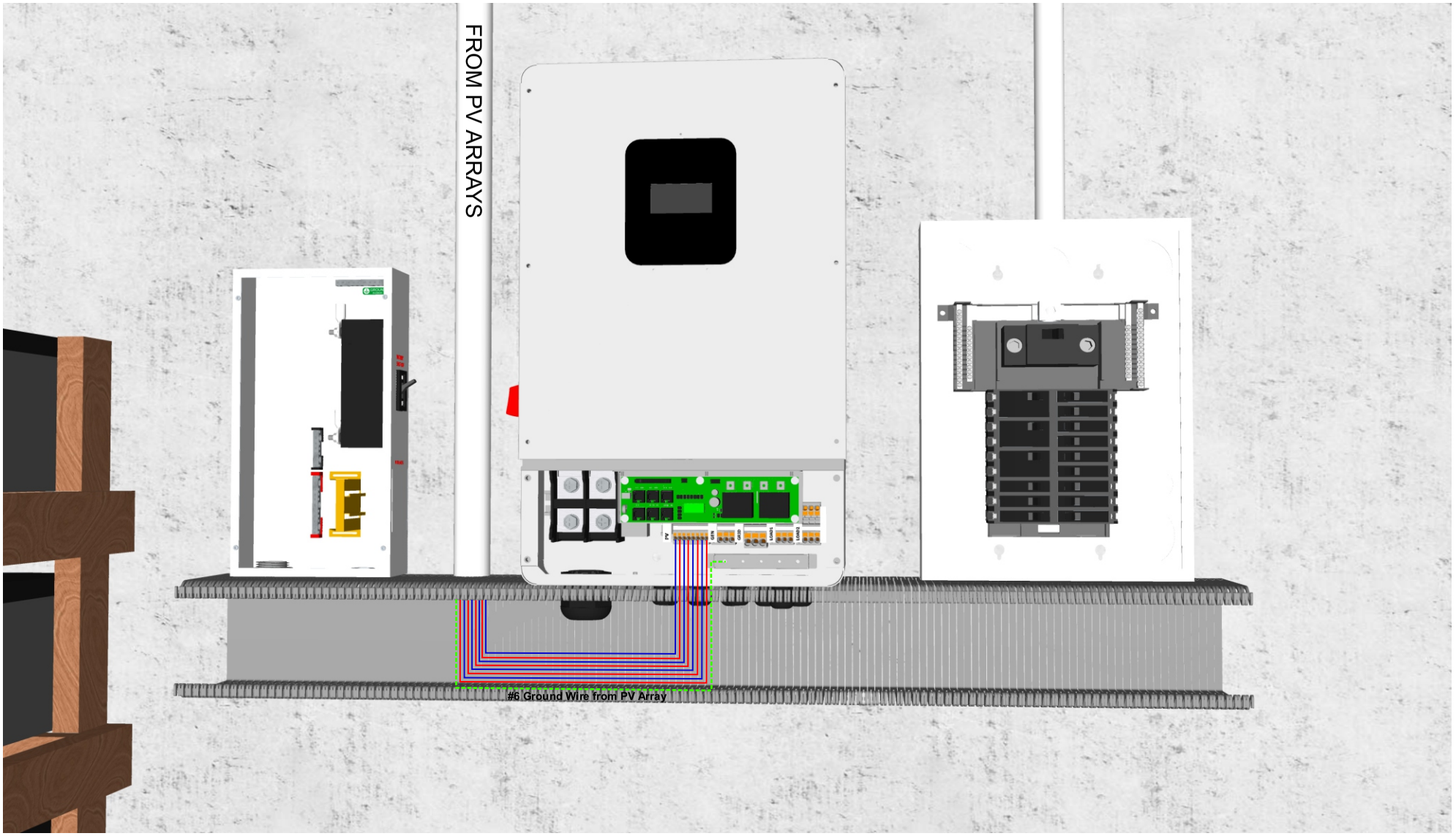
1. Wire up all your batteries in series and parallel first making it one single 48V battery bank. See below diagram.
2. Wire your inverter cable from positive battery post to the bottom of the 175A breaker in the battery shut-off box. You will then come out the top of the breaker and to the positive inverter input connection.
3. Making sure your breaker is in the off position. Lastly connect your inverter cable from negative battery post to inverters negative input connection.



PV WIRE DIAGRAM OVERVIEW

PV Wiring Connection Process

1. Run all four PV arrays in to the PV inputs of the inverter. (See below Diagram)
2. Each array has a positive and negative which stay paired together and are labelled as Pv1, Pv2, Pv3, Pv4.
3. Solar array grounding needs to run from the solar array to the main ground in the inverter or have a separate grounding rod beside the solar array.

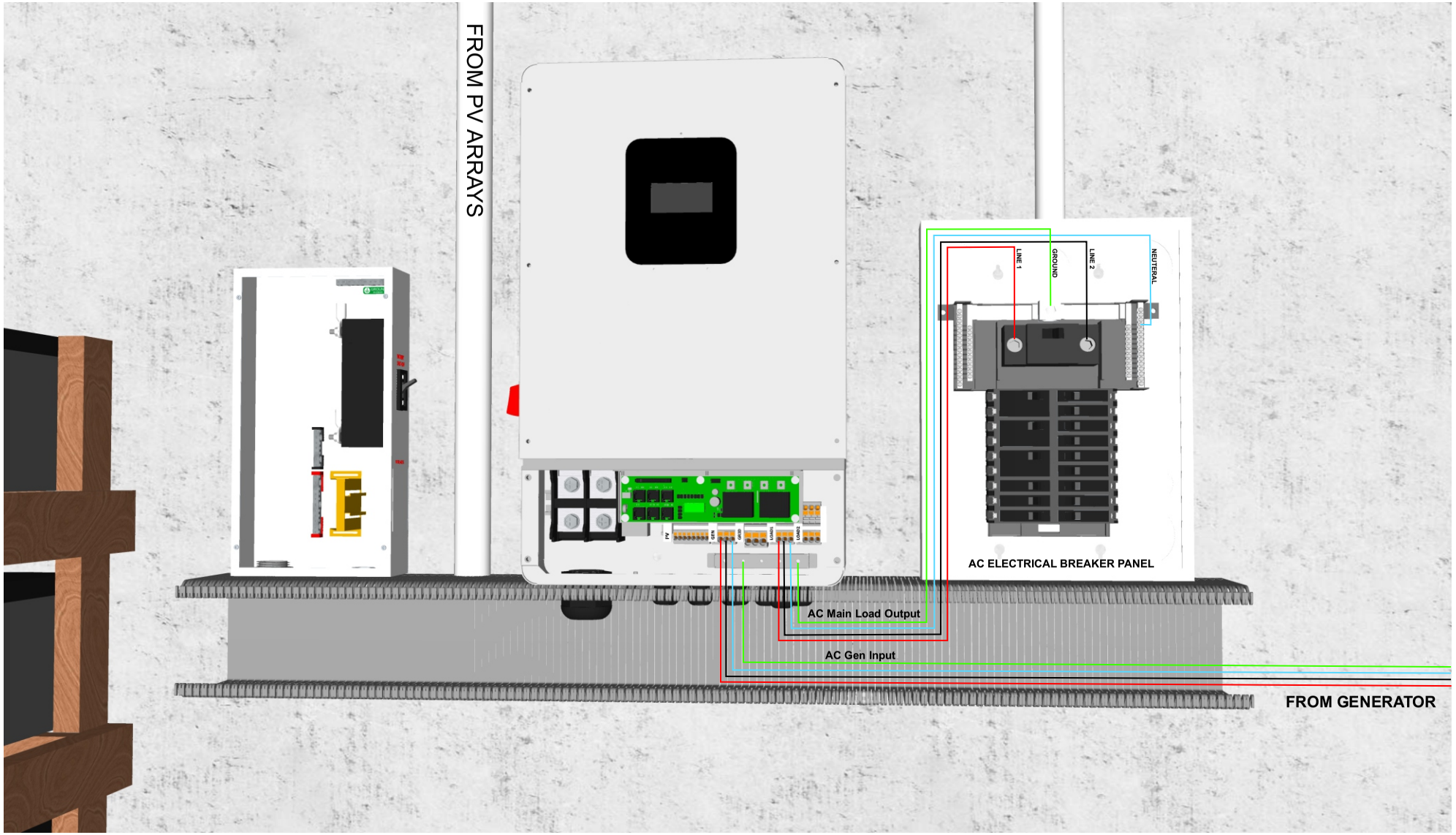


AC WIRE DIAGRAM OVERVIEW

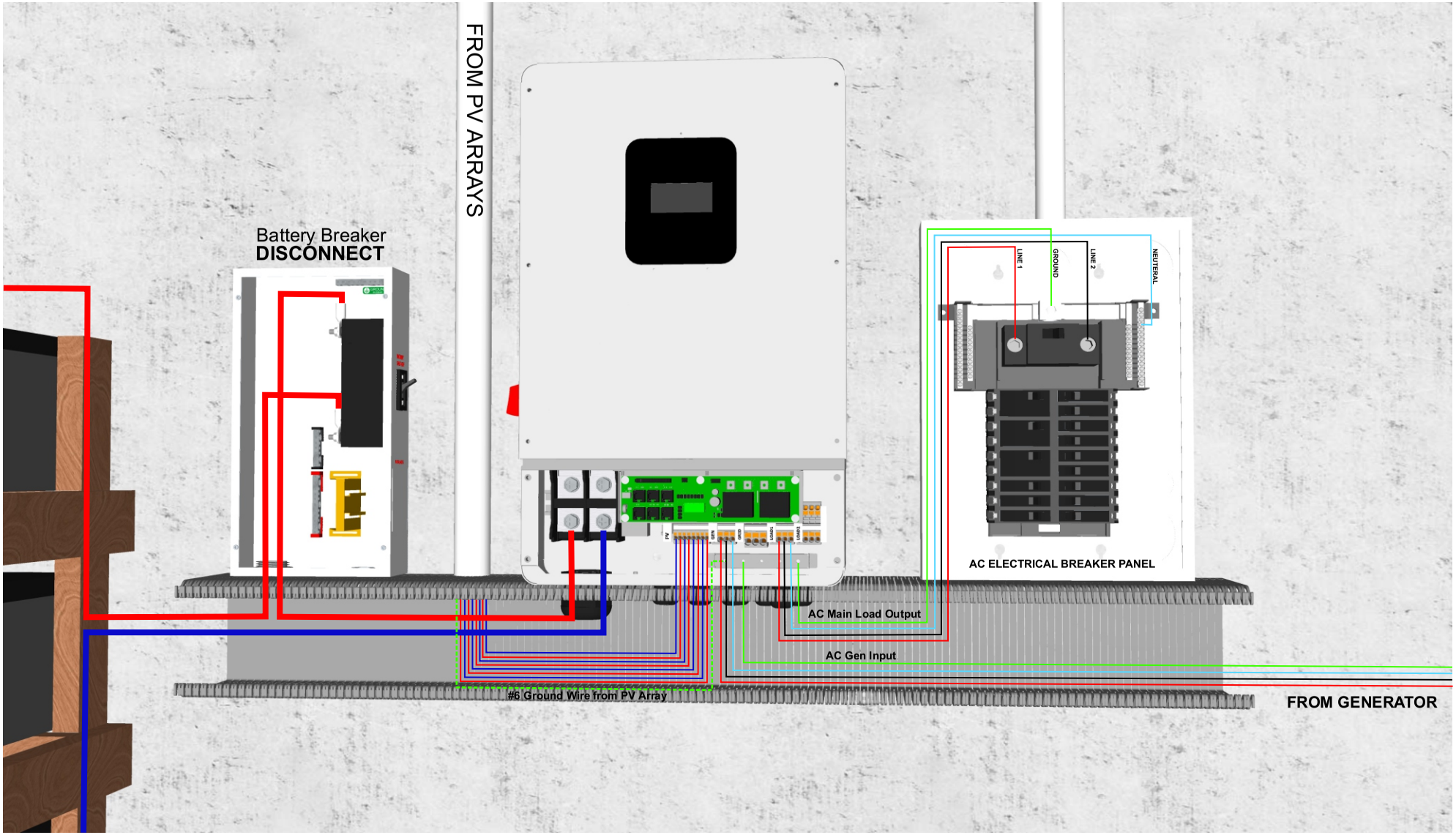
AC Wiring Connection Process For Load Out and for AC Generator Input

1. Load 1 is your main AC output and typically connects into the main feeds of a breaker box. (The AC Load Center needs to be rated for the inverter output)
   Example: If inverter has a 40A Max output the breaker needs to be a 40A minimum with the correct rated wire size.

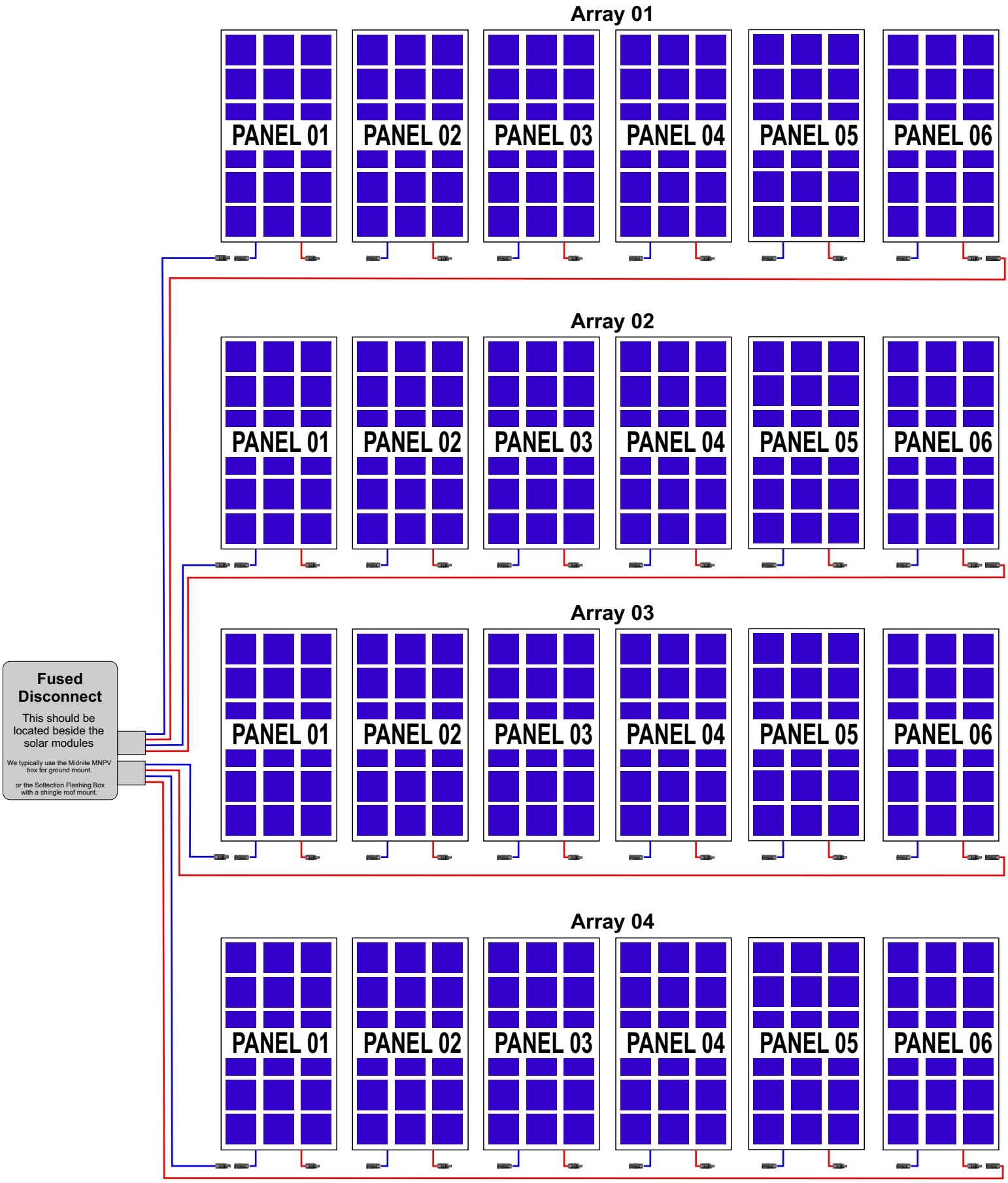
2. Connect your Generator AC output to the AC Input of the inverter (For use with Auto Gen Start please refer to inverter manual for installation procedures)



COMPLETED WIRE DIAGRAM



PV PANEL WIRE DIAGRAM



SINGLE LINE DRAWING

This is the single line drawing for this off-grid system

SYSTEM DETAILS

PV Module: JINKO - JKM460M-7RL3-TV

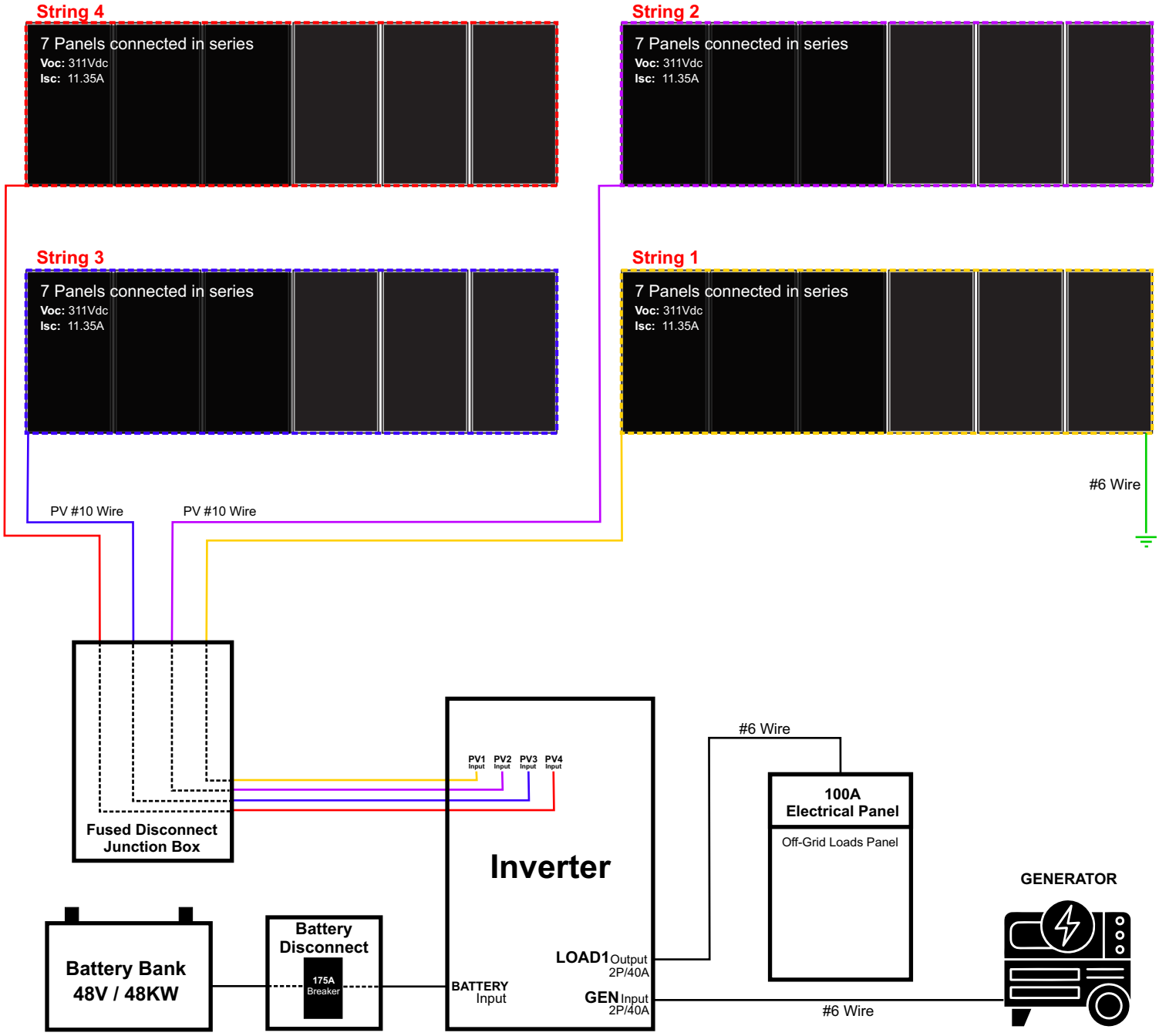
Collector Type:	Solar PV Module
Module Power:	460W
Number of Modules:	24
Total DC Power:	11.40KW

Module Electrical Properties (STC)

Vmp:	43.32V
Imp:	10.62A
Voc:	51.90V
Isc:	11.35A
Module Effciency:	20.21%

Inverter Type: MegaRevo R8KLNA

Brand:	MEGAREVO
Model:	R8KLNA
Number of Inverters:	1
Total AC Power Generation:	8 KVA
Max PV DC Voltage:	500V
Max PV Input Current:	12A x 4
Peak AC Power:	9,192W
Nominal AC Current:	38.3 @ 240V
CEC Effciency:	97.2%
NEMA Rating:	IP65/NEMA 3R
Safety:	UL1741SA all options, UL1699B, CSA 22.2



DISCLAIMERS

IMPORTANT: Please follow installation and wiring instructions exactly as outlined to ensure safety. We recommend installation by solar professionals & electricians to ensure adherence to relevant electrical codes. We have made every reasonable effort to ensure the accuracy of the instructions in this manual, but Solar Online Ltd does not guarantee that the information is error free, nor do we make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current.

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