

CP-720-208/240-MC4-MTC

STEP1: DC CONNECTION



IMPORTANT: ALWAYS CONNECT DC FIRST. DO NOT ENERGIZE AC BUS TO INVERTERS UNTIL ALL INVERTERS HAVE BEEN DC POWERED **WITH ENOUGH SUN LIGHT** (LED code continuously blinking).

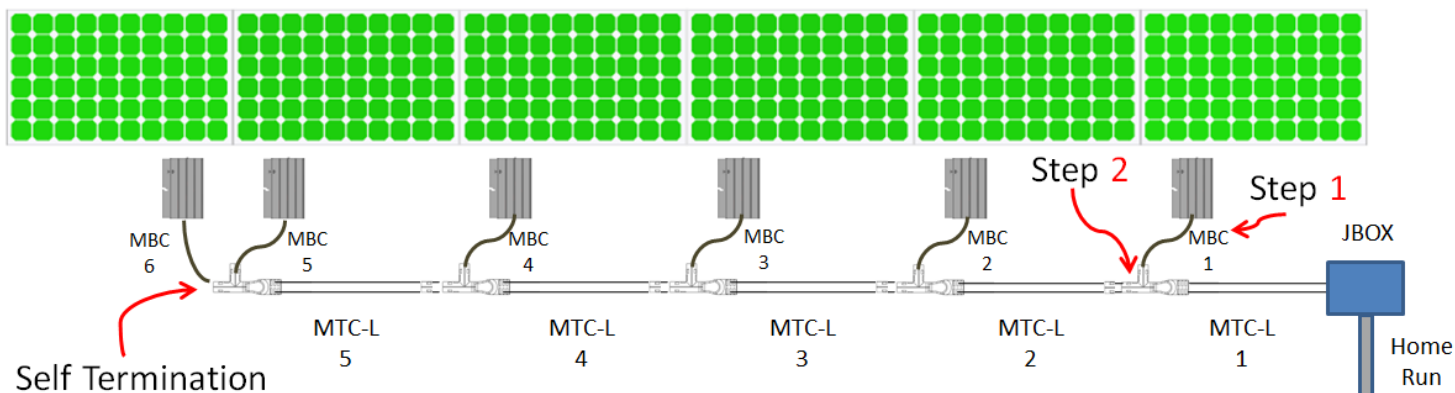
60/72 cell Modules: Make a SERIES connection between two 60 or 72 cell modules and plug the final resulting series string of two modules into the MC4 connectors of the CP720 (this can't be done incorrectly, the gender of the MC4 connectors ensures correct polarity on each connection).

96/128 cell modules: Make a PARALLEL connection between two 96 or 128 cell modules – DO NOT series combine 96 or 128 cell modules as this will exceed the voltage limit of the CP720 inverter possible resulting in damage. Parallel connection will require a 2 to 1 MC4 combining adaptor.

STEP2: AC CONNECTOR – INSTALLATION PROCEDURE

IMPORTANT: all MCB connections must be placed with care not to miss-align and push male pins backward into the inverter. The pin furthest away from ground (indicated with marking on plastic) is most vulnerable.

- 1) Place the modular branch connector (MBC) on the inverter FIRST. This will make it easier to align the small pins on the inverter with the connector. They self-align and are keyed.
- 2) Join the larger connector of the MBC to the T-Junction of the modular trunk cable (MTC).



LED CODES

AFTER DC is applied:

Blink Sequence	Meaning
Slow, 1 blink every 4 seconds	DC Connected, NOT Ready for AC to be applied
Continuous Blinking	DC Connected, Ready for AC to be applied (see step 1 warning)

AFTER AC is applied:

Blink Sequence	Meaning
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1 blink every 16 seconds	Normal operation, inverter bound to gateway
1 blink every 8 seconds	Normal operation, inverter not bound to gateway
2 blinks every 4 seconds	Inverter phase locked to Grid, no export, no errors
3 or 4 blinks every 4 seconds	Error: Grid Voltage out of range
5 blinks every 4 seconds	Error: PV module voltage out of range

WIRING FOR COMMUNICATION TO THE GATEWAY (240 V SPLIT-PHASE SYSTEMS)

Chilicon Power trunk cables have 4 color-coded conductors: **RED**, **BLACK**, **WHITE**, **GREEN**

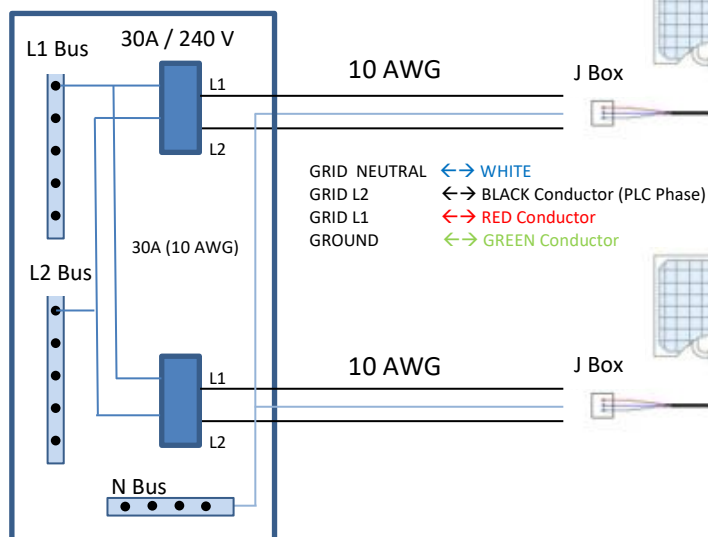
BLACK and **WHITE** conductors are for the PLC communication. The same grid line (**BLACK**) must be used to connect the inverter to the Gateway to ensure robust communication. Specifically, the Gateway inside the home (120 V) should be powered using **GRID HOT LINE B** (= **BLACK** trunk conductor) and **GRID NEUTRAL** (= **WHITE** trunk conductor).

NOTE: Communication with the Gateway is usually fine even if the Gateway is connected in the wall socket to the **RED** and **WHITE** trunk-equivalent wires. However, the signal will be weaker. The Gateway socket survey screen indicates the strength of the signal. In the worst case, you simply have to swap the **RED** and **BLACK** trunk wires on the breaker or at the AC disconnect.

NOTE: Miss-wiring AC grid lines to the inverter trunk (for instance swapping a GRID L1 for GRID NEUTRAL) will not damage the inverters. However, they will not export power in this configuration. If inverters are miss-wired, LED single blink export confirmation from the LED will never be established.

WARNING: NEVER CONNECT **GREEN** to a Live Wire

Solar AC Subpanel



Max 8 CP720 (10AWG) / String – 16 Modules

