

Bogart Engineering

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SC-2-Kit Instructions

Required:

Triplex phone adapter

J6 Jumper

2 Non-Crossed phone cables

Each SC-2030 can deliver up to 31 Amps to batteries. If charging exceeds 31 amps, this will not damage the SC-2030 but current will be limited to less than 31 A and the yellow light will flash.

How to use the TM-2030 to control two SC-2030 Solar chargers for up to 62 amps charging in a 12 or 24V battery system:

You can't just parallel the solar inputs of the SC-2030 and connect 60 amps from panels, because the current won't properly divide between the two. When using two SC-2030's, the solar panels should be separated into two roughly equal groups, with a separate pair of wires for each group going to the inputs of two separate SC-2030's. The outputs from each SC-2030 to the batteries can be paralleled in the obvious way: + to + and minus to minus. This is illustrated on the next page.

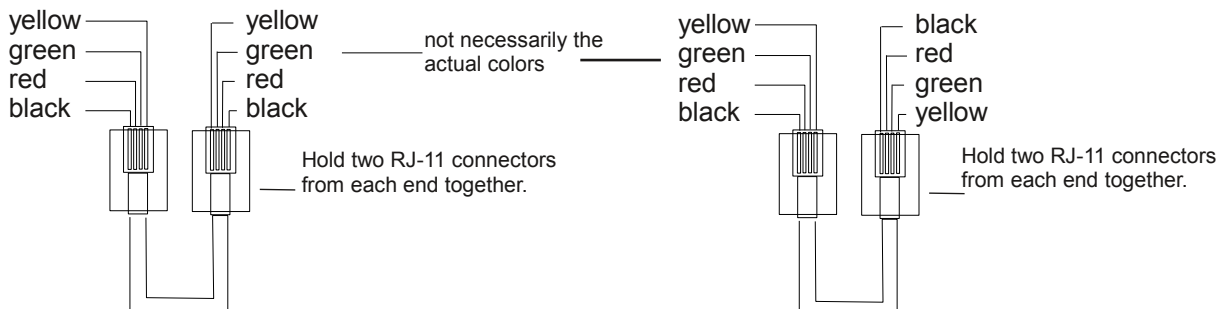
One SC-2030 will be identified as Unit 1, and the other Unit 2. Unit 2 has an identifying jumper that needs to be plugged into connector J6 on the rear of the unit. The temperature sensor should be connected to Unit 1, without the jumper. Temperature information from Unit 2 will be ignored.

As shown on wiring diagram, three communication cables from TM2030 to SC2030's are required. Two of the three cables need to be "non crossed" as described below, and are usually short. One is connected to each SC-2030, with the other end connected to the 3 way modular triplex adapter. The crossover cables connects to the back of the TM-2030.

Important! Maximum Voc from solar panels must not exceed 55V for each SC-2030

One (usually longer) **Crossed** phone cable from TM-2030 to 3 way phone adapter connector.

Two (shorter) **Non Crossed** phone cables.



These views show facing the sides of the connectors that do not have the plastic retainer clip. Commercially they used to usually be made "crossed", but recently there seems to be no consistency to the way they are made.

Wiring to connect two SC-2030 for 62 amp charging Controlled by one TM-2030

One unit must be distinguished by inserting the "unit 2" identifying jumper on connector J6 on back of SC-2030. Temperature sensor should be placed on unit 1.

