

# Do-It-Yourself Garage

## Marine Solar Panel Installation - Jeff Cote



Pacific  Yacht Systems  
marine electronics & electrical

design • installation • service • support

# Safety

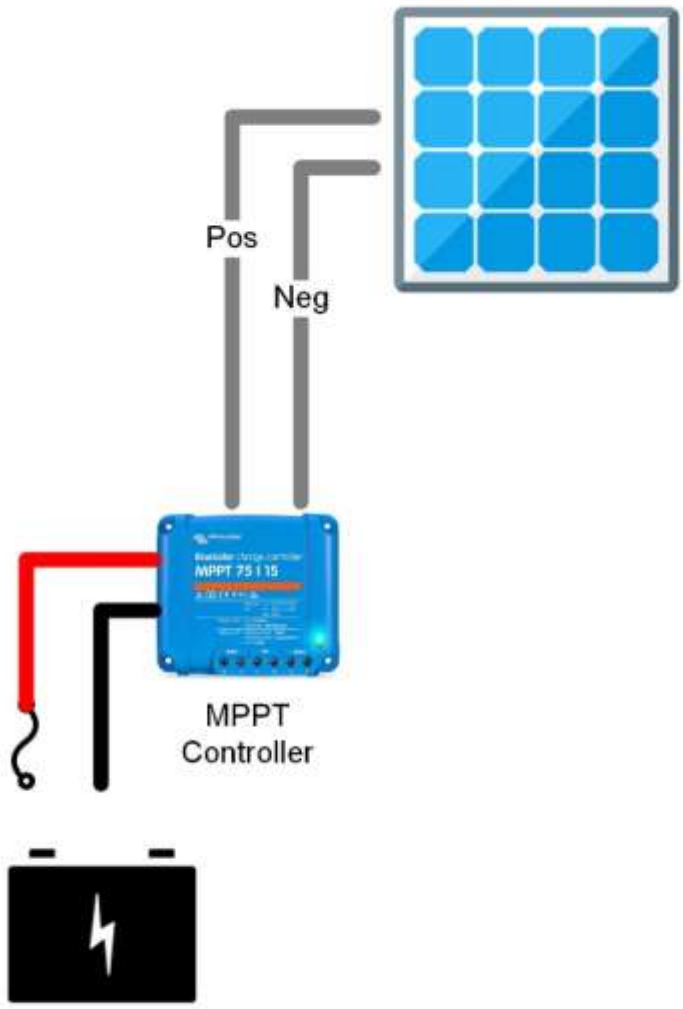


- Safety is paramount
- Land vs marine electrical code
- Trouble/fire on land vs at sea

# Wide Selection of Panel Size



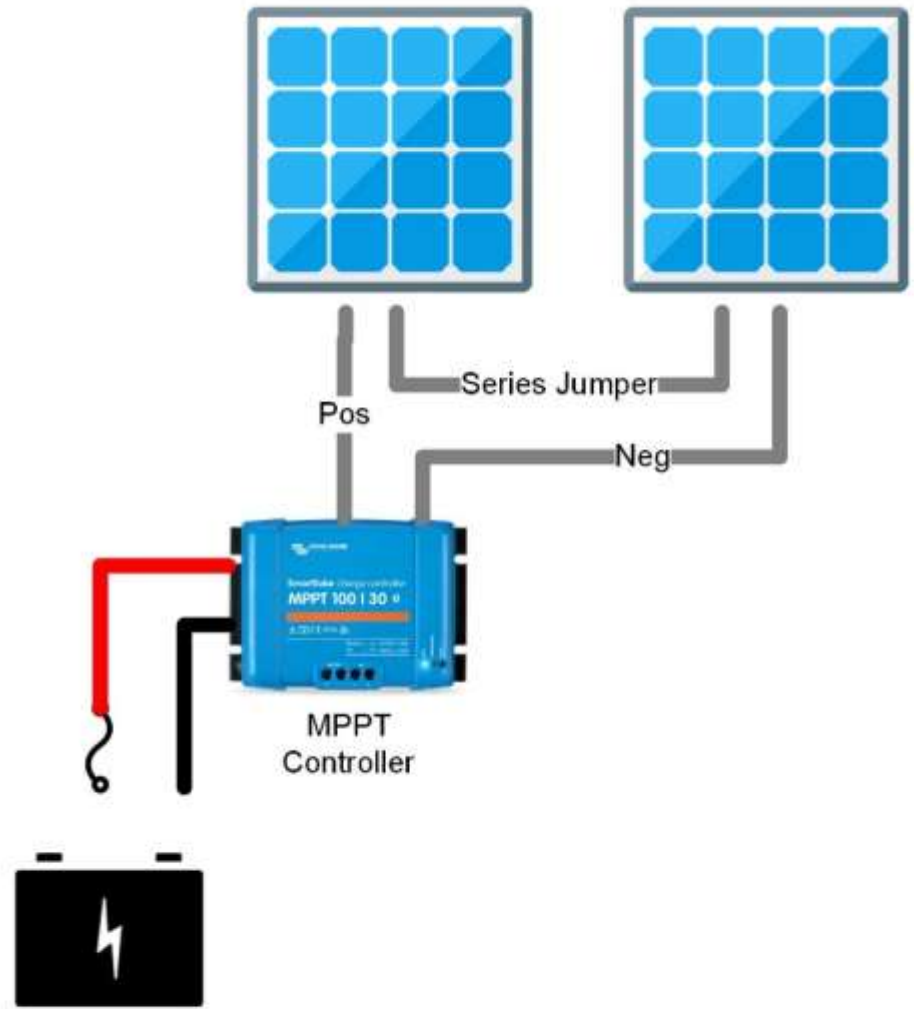
### Single Solar Panel



MPPT Controller

Battery

### Solar Panels in Series



MPPT Controller

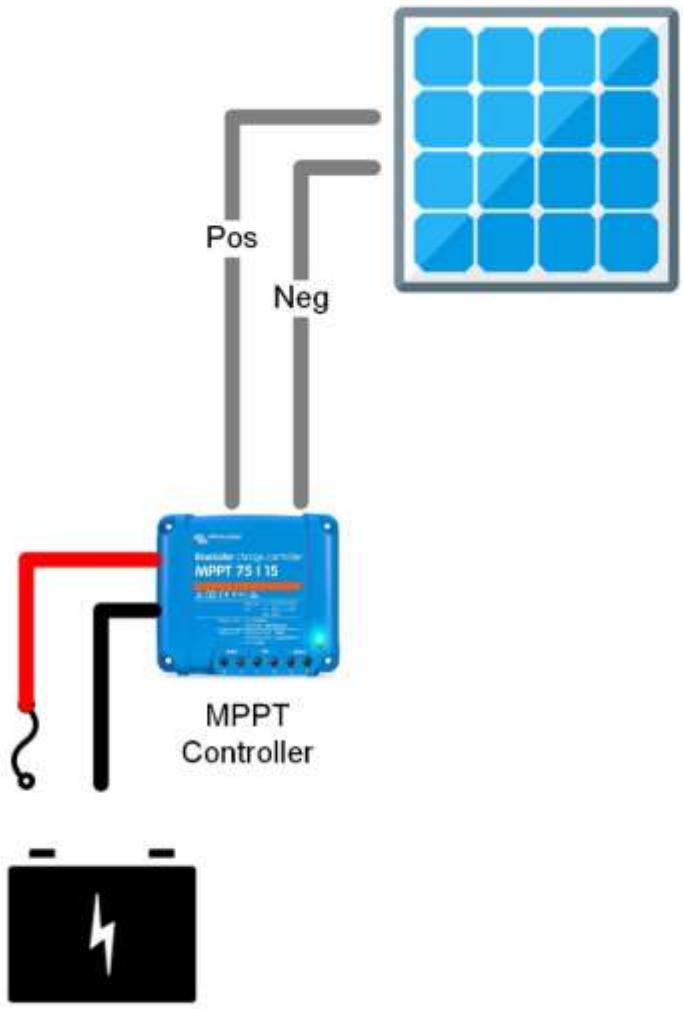
Battery

# Solar Installation Components



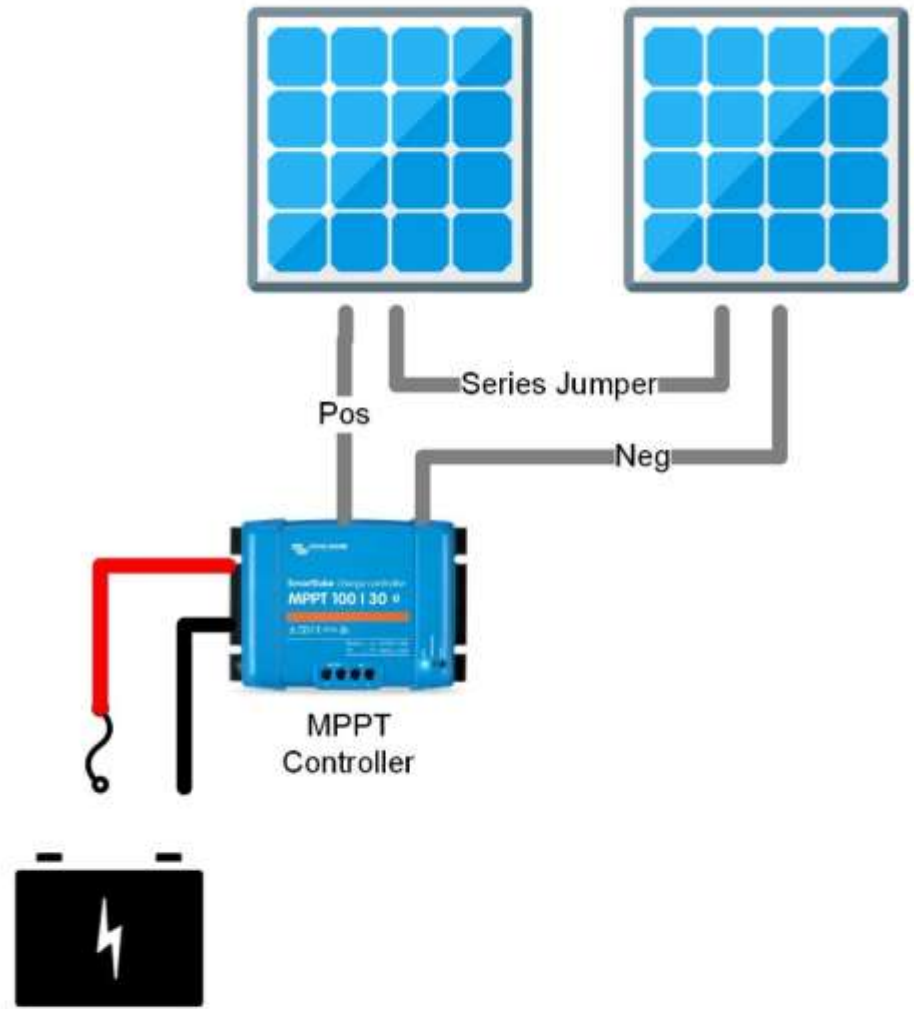
- Solar Panels
- MC4 Terminals
- Outdoor rated cable
- Cable clam or Clam Shell
- Marine wire for inside
- MPPT controller
- Fuse holder and fuse at batteries

### Single Solar Panel



Battery

### Solar Panels in Series



Battery

# Prepping for Dodger Install



# Hardtop Installation





# Solar Wiring



# Solar MC4 Connectors Disassembled



# Solar MC4 Connectors



# Controller Selections



- PWM vs MPPT
- Make selection based on
  - Battery Voltage
  - Maximum amperage
  - Maximum voltage
  - Battery chemistry: Flooded, AGM, Gel, Custom

# MPPT – 75/15



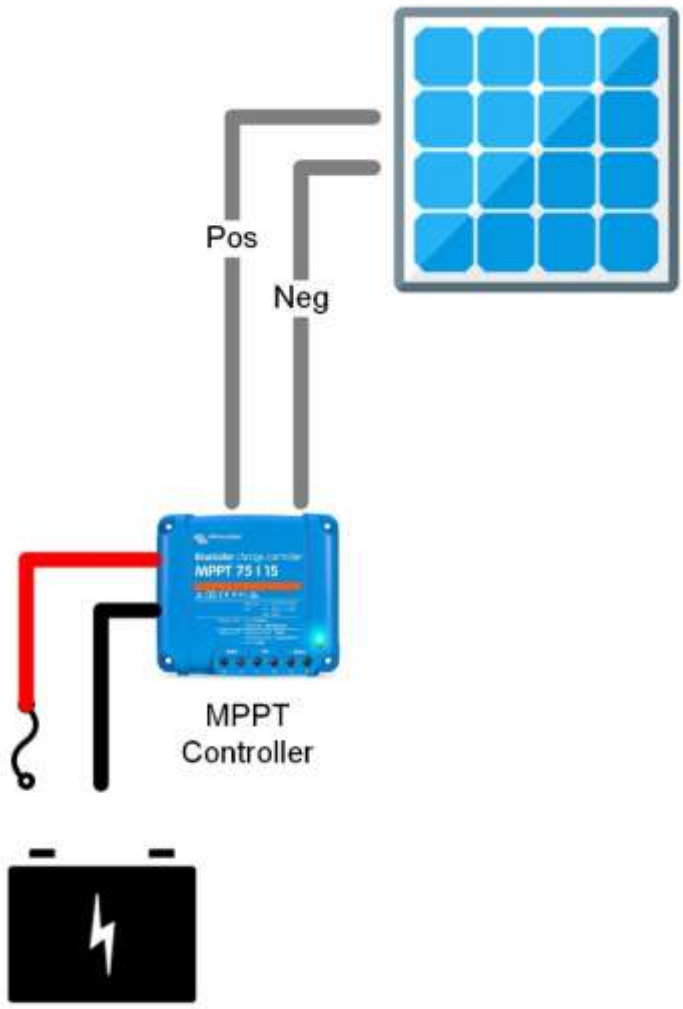
# Genasun – GV-10 LA



# MPPT Wiring

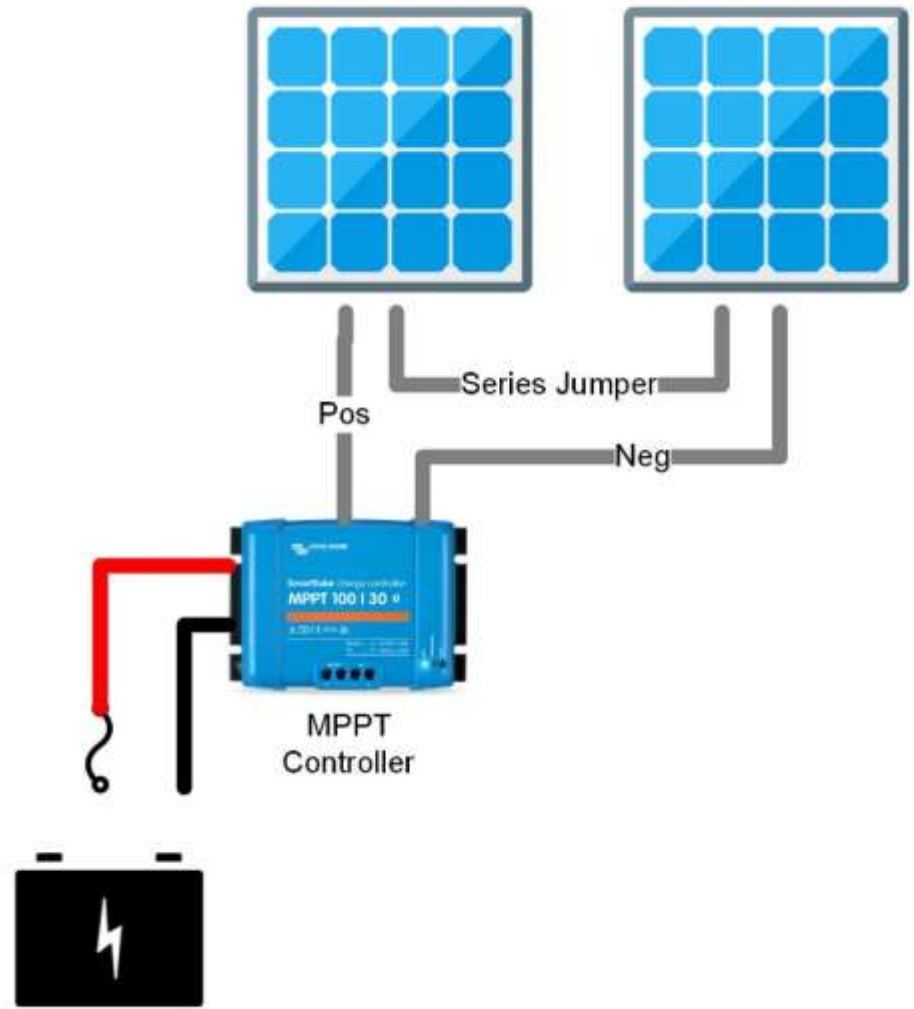


### Single Solar Panel



Battery

### Solar Panels in Series



Battery



# Marine Electrical Connections

Full service shop delivering  
marine electrical and navigation  
solutions tailored to your vessel  
and boating needs

Pacific  Yacht Systems  
marine electronics & electrical

design • installation • service • support