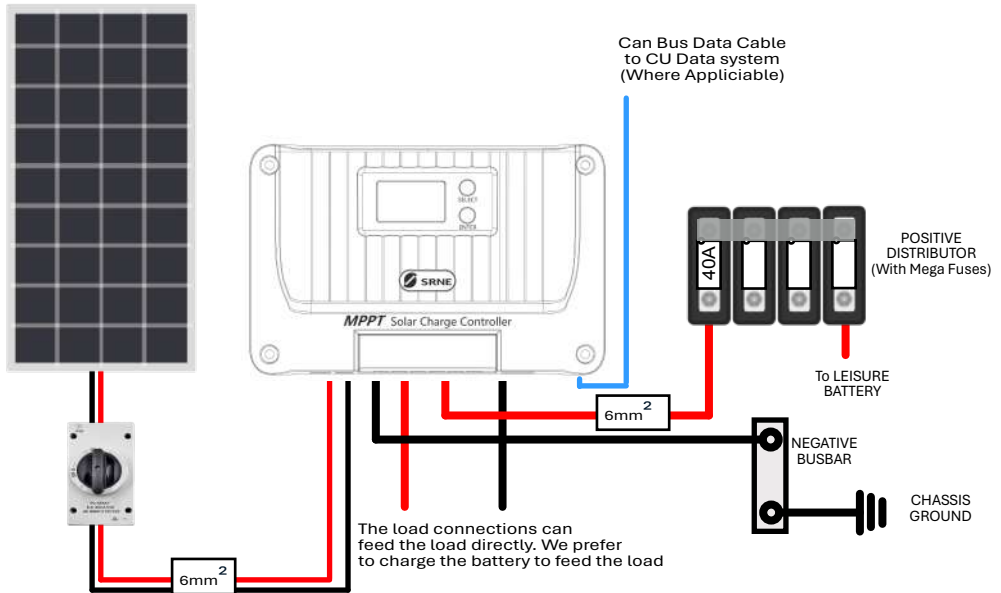


SRNE SHINER 2430 MPPT



INSTALLATION

1: Install the SRNE SHINER 2430 MPPT in a ventilated space

2: When installing the solar panels use 6mm solar cable and ensure you install an isolator switch so that the solar energy can be isolated from the system for maintenance work. Make sure to connect the solar panels into the circuit once you have fitted the isolator.

3: Ensure the isolator switch is OFF and connect the 6mm cable into the Shiner 2430 using battery connectors supplied

4: Run 6mm cables (positive) either to a Positive Distribution block or direct to the Leisure battery. Ensure this is fused with 40A Mega or Midi fuse

5: Run 6mm cables (negative) either to a battery negative, ground or negative busbar.

It is recommended to follow the diagram above to future proof your system.

Please also reference manufacturers manual.

Adding and configuring device

1: Load the SRNE app

2: Adding device - Select [+] and select the device from the list of devices.

3: Add device and follow and password notifications. The default password is 123456.

4: Once the device is added, select the device and press the setup cog ⚙ in the top right corner.

5: Complete the configuration. Items marked with * need your input. Please note some fields are fixed based on battery chemistry type. If you need to enter specific settings then change to custom options

Battery Settings	Value
System Voltage	Automatic, 12V or 24v
House Battery Type*	Select the correct battery chemistry
Charger Settings	Value
Max Charge Voltage	Max Charge Voltage is the highest battery voltage the charger is allowed to reach while charging. Leave as default unless you need to reduce charge level
Charge / Discharge	Turn charge and discharge function On/Off
Charging Upper Limit Temp	Charging Upper Limit Temperature is the maximum battery temperature at which charging is allowed. Leave as default. Once this temperature is reached turn off charging
Charging Lower Limit Temp	Charging Lower Limit Temperature is the minimum battery temperature at which charging is allowed.
Overvoltage	Over Voltage is a protection setting that triggers when the battery voltage rises above a safe limit. Fixed setting unless you select Custom Options
Charge Limit Voltage	Charge Limit Voltage is the maximum battery voltage the charger is allowed to reach during charging. Fixed setting unless you select Custom Options
Absorption Voltage	Absorption Voltage is the charging voltage the battery is held at during the absorption stage of charging. Check battery manufacturer recommendation, default is normally okay
Float Charge	Float Charge Voltage is the lower maintenance voltage applied to a battery after it has been fully charged. Fixed setting unless you select Custom Options (Check battery manufacturer recommendation)
Recharge Voltage	Also know as Re bulk. It is designed to ensure that if a significant load is applied after the battery is fully charged (and has entered float mode), the charger switches back to maximum power (bulk) to replenish the power consumed. Fixed setting unless you select Custom Options
Max Absorption Time	Absorption Voltage is the charging voltage the battery is held at during the absorption stage of charging. Check battery manufacturer recommendation, default is normally okay
Temperature Compensation Coefficient	Temperature compensation in MPPT controllers automatically adjusts the battery charging voltage based on the battery temperature. This is important because battery chemistry behaves differently at varying temperatures. Most controllers use a compensation factor of approximately -4 mV per cell per °C. For a typical 12 V lead-acid battery (6 cells) this equates to around -24 mV per °C. The standard reference temperature used for battery charging is 25 °C. When the battery temperature deviates from this point, the controller adjusts the charging voltage accordingly: Below 25 °C (colder conditions): Charging voltage is increased to ensure the battery reaches full charge. Above 25 °C (hot conditions): Charging voltage is reduced to prevent overcharging and excessive gassing. Temperature compensation becomes particularly important when battery temperatures fall below 10 °C or rise above 30 °C, where the impact on charging behaviour becomes more significant. Many modern MPPT controllers achieve this automatically through an external temperature sensor or a built-in temperature probe, ensuring optimal charging performance and extending battery lifespan. Leave as default
Equalisation Charge Interval	Equalization Charge is a special charging stage where the charger raises the battery voltage above normal charging levels to balance the battery cells. Fixed setting unless you select Custom Options (Check battery manufacturer recommendation) Used for Lead Acid Batteries
Manual Balancing	Force Equalisation charge of Lead Acid battery.
Overcharge Return Voltage	Recharge voltage is the battery voltage level at which a charger or controller (MPPT, inverter/charger, or DC-DC charger) will restart charging after the battery has previously been full or the charging cycle has ended.
Under Voltage Warning	Under Voltage Warning is the battery voltage level where the system warns that the battery is getting low, but it does not shut anything down yet.
Over Discharge Voltage	Over Discharge Voltage is the battery voltage level at which the system disconnects loads to prevent the battery from being drained too far.
Discharge Cut-Off Voltage	Discharge Cut-Off Voltage is the battery voltage level where the system completely stops discharging the battery to prevent damage. Lead Acid feature
Delay time for Over Discharge	Delay Time for Over Discharge is the amount of time the controller waits before disconnecting the load after the battery voltage drops below the Over Discharge Voltage.
Discharge Upper Limit Temp	Discharge Upper Limit Temperature is the maximum battery temperature at which the battery is allowed to supply power (discharge).
Discharge Lower Limit Temp	Discharge Lower Limit Temperature is the lowest battery temperature at which the battery is allowed to supply power (discharge).
Load Settings	Value
Load Working Mode	
Light Controlled Delay Time	
Light Controlled Voltage	