SOGTICPS

SY-SLCD cvcLCD Solar Controller

SOGTICPS SY-SLCD cvcLCD Solar Controller Instructions

Contents

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SOGTICPS SY-SLCD cvcLCD Solar Controller

Please check out whether or not the product model is the same as the one on the packaging when open the pack.

Containing:

- A set of the host machine
- A copy of the manual
- A pack of desiccant

Specification

- **Model:** SY-SLCD
- **Input voltage:** DC12V/24V, DC36V, DC48V,DC96V
- **Output voltage:** DC12V/24V, DC36V, DC48V, DC5V/1.5AX2USB
- **Operating temperature:** -25°C –55 °C

Description of product function

- The product is a multi-functional LCD solar controller with a clock display and seven operating modes that are charging mode, light control mode, light and time delay control mode, universal control mode, manual control mode, timing control mode, and testing mode. Among them, the test mode is only applicable to the factory test.
- Charging control applies to any mode, as long as the charging condition is reached, it can charge immediately.

Discharge control varies as different control modes change, under the trouble-free condition, specific instructions are as follows:

1. Charging mode: in any case, never discharge.
2. Light control mode: when the controller detects night, it will delay ten minutes and then start to discharge; when

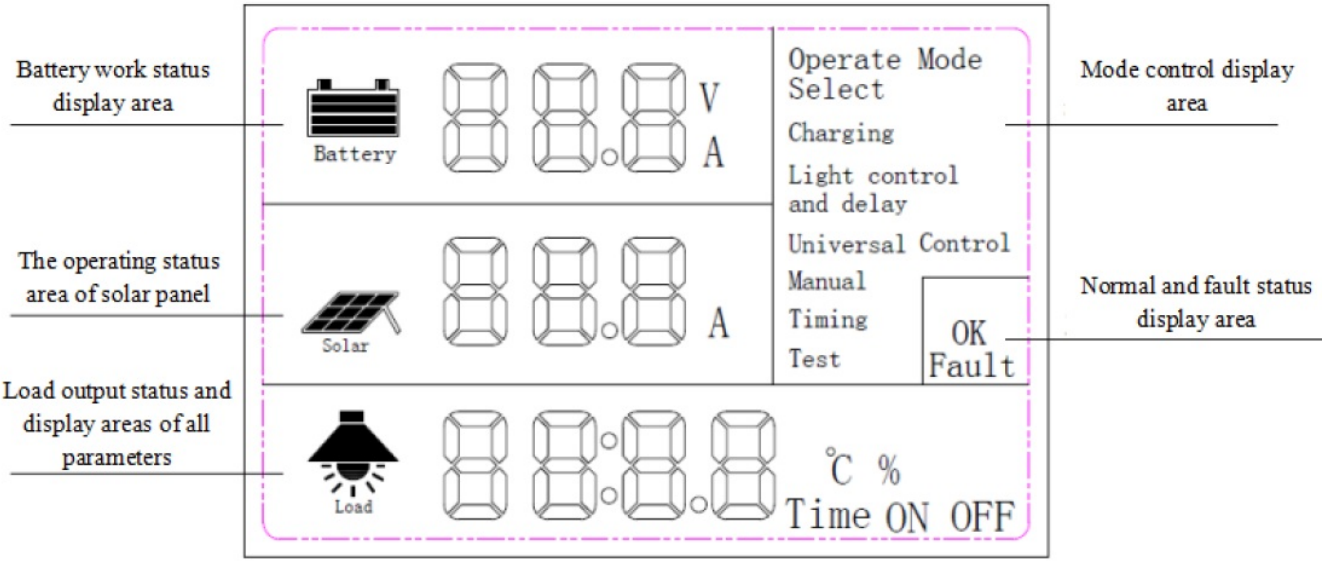
it detects daytime, it will delay ten minutes and then stop discharging.

3. Light and time delay control mode: when the controller detects nights, it will delay ten minutes then start to discharge and count down, if the timer stops by zero, discharge will stop. The longest duration of delay is 23:59.
4. Universal control mode: under the trouble-free condition, it always keeps discharging.
5. Manual control mode: it uses “ ▼ ” for discharging or not.
6. Timing control mode: it opens or closes the discharge regularly.
7. Test mode: it is the same as light and time delay control mode but only loses ten minutes of time delay.
8. The controller still discharges under low-voltage protection. Touch-holding “ ▼ ” for 5 seconds, discharge continues to output. But discharge is only stopped by hand. Notice that this performance may damage the battery, be careful with it!

Display and operation instructions

Display screen

1. Fullscreen



2. **Battery work status display area instructions**
   - 

Battery charging state and voltage indication. When the battery is charging, four rails will display dynamically if the four rails are in a static state it shows the current battery level
   - 

The display of battery voltage and discharge current toggles at intervals of 5 seconds.
3. **The operating status area of solar panel**
   - 

When the solar panel displays, it means charging status, when it doesn’t display, it means stopping charging.
   - 

It displays the charge current.
4. **Load output status and the parameters displaying area**
   - 

When the battery discharges, the load icon light is on; when not discharged, the light is off.

- 

When “°C” is displayed, four numerical values display is controller’s temperature; when “%” is displayed, four numerical values display is electric quantity of the battery; when “Time” is displayed, four numerical values display is 24-hour time. when “Time ON” is displayed, four numerical values displayed are the timing start time of the timing control mode; when “Time OFF” is displayed, four numerical values is the timing stop time of the timing control mode or light and time delay control mode.

5. **Mode controlling display area**
    - “Operate Mode Select’ keeps on; it means that the area is the alternative area of controlling mode.
    - “Charging” keeps on, which means that the controller is in charging mode.
    - “Light Control” keeps on, which means that the controller is in light control mode.
    - “Light Control and delay” keeps on, which means that the controller is in light start and time delay stop control mode.
    - “Universal Control” keeps on, which means that the controller is in universal control mode.
    - “Manual” keeps on, which means that the controller is in manual control mode.
    - “Timing” keeps on, which means that the controller is in timing control mode.
    - “Test” keeps on, which means that the controller is in test mode.
6. **Normal and fault display area**
    - “OK” keeps on, it means that the controller is in a normal state.
    - “Fault” flickers, which means that the controller detects the abnormalities of the battery’s voltage, discharge current, or controller’s temperature. When the battery’s voltage is abnormal, “Fault” flickers, in the meantime, the value of voltage also flickers. When the discharge current is too large, “Fault” flickers, meanwhile, the abnormal current value also flickers. When the controller’s temperature exceeds 75°C, “Fault” flickers, and the value of temperature also flickers.

Operating instructions

1. “▲” Numerical values and mode adjustment.
   “■” Setting/confirmation
   “▼” Displacement and impulse start/stop
2. **Time setting**
   When charged, it immediately enters the time setting state, load output, and the first one(the first one to the left) of the four values in the parameters display area flicker, it means that this place is changeable, press “▲” to adjust, press “▼” for displacement adjustment. If time needs adjusting again, then long press “■” for 5 seconds to enter the time setting state.
3. **Mode adjustment**
   Press “■”, the current control mode can flicker, then press “▲” to get the needed control mode, then press “■” again to confirm.
4. **Delay stop time adjustment of light control + delay stop control mode.**
   When “Light Control and delay” is chosen and confirmed, it will automatically make the delay stop time parameters, the operational approach is the same as time setting operation, load output, and the display area of all parameters will show “Time OFF”, after adjusting, then press “■” to get back to the display mode. If delay stop time parameters need modifying again, directly press two times of “■” to enter delay stop time

parameters adjustment.

5. **The adjustment of the start time and stop time of the timing control mode**
   When the “Timing” control mode is chosen and confirmed, it will automatically pop up the time parameters start, the operational approach and time setting are the same, load output and the display area of all parameters will show “Time ON”. After adjusting the start time and pressing “ ■ “, it will automatically enter the stop time parameters adjustment and load output, and the display area of all parameters will show “Time OFF”, after finishing the adjustment, press “ ■ ” to get back to the display mode.

Protection parameters

1. **Voltage protection instructions**
   - When using a 12V battery, if the battery’s voltage is below 10.5V, it will delay 6 seconds under low voltage protection, the value of voltage flickers, “Fault” flickers, and discharge stops. When the voltage gets back to 11.5V, it gets back to normal. When the voltage is over 16.0V, the value of voltage flickers, “Fault” flickers, and discharge stops. When the voltage recovers back to 15.0V, it returns to normal.
   - When using a 24V battery, if the battery’s voltage is below 210V, it will delay 6 seconds under low voltage protection, the value of voltage flickers, ‘Fault” flickers, and discharge stops. When the voltage gets back to 11.5V, it gets back to normal. When the voltage is over 16.0V, the value of voltage flickers, “Fault” flickers, and discharge stops. When the voltage recovers back to 15.0V, it returns to normal.
   - When using a 36V battery, if the battery’s voltage is below 31.5V, it will delay 6 seconds under low voltage protection, the value of voltage flickers, “Fault” flickers, and discharge stops. When the voltage gets back to 34.5V, it gets back to normal. When the voltage is over 48.0V, the value of voltage flickers, ‘Fault” flickers, and discharge stops. When the voltage recovers back to 45.0V, it returns to normal.
   - When using a 48V battery, if the battery’s voltage is below 42.0V, it will delay 6 seconds under low voltage protection, the value of voltage flickers, “Fault” flickers, and discharge stops. When the voltage gets back to 46.0V, it gets back to normal. When the voltage is over 64.0V, the value of voltage flickers, “Fault” flickers, and discharge stops. When the voltage recovers back to 60.0V, it returns to normal.
2. **Discharge current protection instructions**
   - When the discharge current is above 150% of the rated current, it starts protection immediately, the value of the protection current flickers, “Fault” flickers, and the discharge stops.
   - Discharge current is around 110%~150% of rated current, it will delay ten seconds for protection, the value of protection current flickers, “Fault” flickers, and discharge stops.
   - Discharge current is around 100%~ 110% of rated current, it will delay ten seconds for protection, the value of protection current flickers, ‘Fault’ flickers, and discharge stops.
3. **Charging protection instructions**
   - When using a 12V battery, if the battery’s voltage is below 13.0V, it will start to charge, if the voltage is above 14.8V, it will stop charging.
   - When using a 24V battery, if the battery’s voltage is below 26.0V, it will start to charge, if the voltage is above 29.6V, it will stop charging.
   - When using a 36V battery, if the battery’s voltage is below 39.0V, it will start to charge, if the voltage is above 44.8V, it will stop charging.
   - When using a 48 V battery, if the battery’s voltage is below 52.0V, it will start to charge, if the voltage is above 59.2V, it will stop charging.

Attention

1. Do not set the product on fire in case of permanent damage to the product
2. Do not set the product on fire in case of permanent damage to the product
3. Do not use this product in high temperatures and wet environments
4. Do not dismantle this product in case of damage
5. Do not make the output a short circuit in case of danger.

Documents / Resources

	SOGTICPS SY-SLCD cvcLCD Solar Controller [pdf] Instructions 80A, SY-SLCD cvcLCD Solar Controller, SY-SLCD, cvcLCD Solar Controller, Solar Controller, Controller

References

- User Manual