

System Controller for Solar Heating Model SRK868V6



Solar Controller Kit



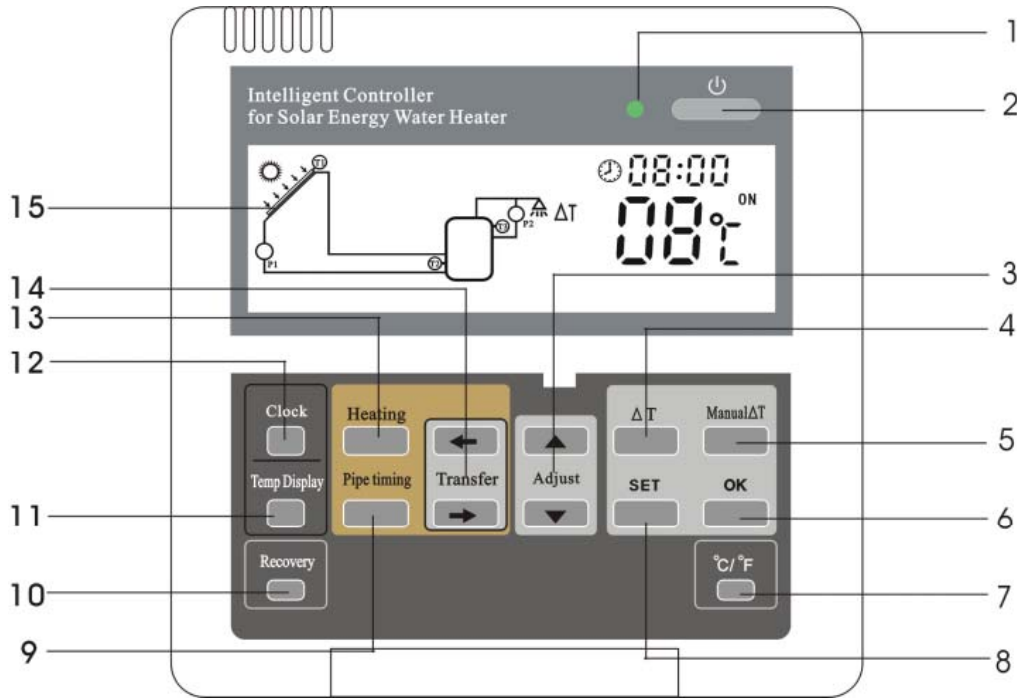
Kit Contents:

Item	PCS	Description
1	1	Control Panel with LCD display and Control Key Pad
2	1	Power Module with Wiring Terminal strip
3	2	NTC Temp. Probes for Water Tank (upper and lower)
4	1	NTC Temp. Probe for Water Pipe (Optional)
5	1	PT100 Temp. Probe for Solar Panel
6	1	Mounting and wiring hardware
7	1	Installation and Operation Instructions manual

Features:

- Suitable for most types of Solar Heating systems
- LCD display with backlight
- Internal real time Clock with backup
- 3 temperature sensor probes + 1 optional
- 1 Output for Solar circulating pump
- 1 Output for User Hot Water circulating pump
- 1 High Power Output for water tank Booster Heating
- 1 Output for optional valve for overheat cooling
- Programmable Temperature Differential on Solar Collector side
- Selectable Celsius or Fahrenheit
- Programmable Water Tank Temperature and Time for Booster heating
- Programmable Time (of day) and Temp. for User Hot Water circulation
- Programmable Tank overheat protection
- Programmable Solar Collector freeze protection with reheating
- Monitoring and display off all temperature sensors

Control Panel



Item		Description
1	Green lamp	Supply Power ON indicator
2	ON/OFF pushbutton	Controller ON/OFF switch (and special functions)
3	“▲” “▼” Adjust	Adjustment UP, DOWN buttons
4	▲T	Solar Temperature Difference preset mode
5	Manual ▲T	Manual ON/OFF switch for Solar circulating pump (P1)
6	OK	Activate/Deactivate selected function
7	°C / F	Celsius / Fahrenheit selection
8	SET	Start some preset modes or activation of some special functions
9	Pipe timing	Timer Programming mode for Hot Water circulating pump (P2)
10	Recovery	Reset to factory default settings
11	Temp. Display	Display the temperature readings
12	Clock	Set the Clock
13	Heating	Auto Time/Temperature Program and Manual control of Booster Heat
14	“◀” “▶”	Cursor control during preset
15	Display screen	LCD display with LED backlight

Specifications

- Supply: Models for 120Vac or 208-240Vac $\pm 10\%$, 50/60Hz
- Power consumption: < 4VA
- Temperature test units: Celsius or Fahrenheit (selectable)
- Temperature test accuracy: $\pm 1^{\circ}\text{C}$ ($\pm 2\text{F}$)
- Temperature test range: $0 \sim 121^{\circ}\text{C}$ ($32 \sim 250\text{F}$)
- Internal Real Time Clock: Yes
- Clock backup: Internal lithium battery (or self-recharging backup)
- Program Memory: Internal, non-volatile

- 4 test Inputs: 4 wired temperature sensor probes,
 - ✓ 1 Pt1000 sensor ($\leq 500^{\circ}\text{C}$) for solar collector (silicon cable $\leq 280^{\circ}\text{C}$, 535F),
 - ✓ 1 or 2 NTC10K, B3950 sensors ($\leq 135^{\circ}\text{C}$, 275F) for tank, (PVC cable $\leq 105^{\circ}\text{C}$, 220F),
 - ✓ (optional) 1 NTC 10K, B3950 sensor ($\leq 135^{\circ}\text{C}$, 275F) for hot water circuit pump. (PVC cable $\leq 105^{\circ}\text{C}$, 200F),

- Inputs wiring connection: Screw terminal

- 4 Outputs (SPST, N.O. relays):
 - ✓ 1 for Heating booster, 16Amp, 240Vac max. (max. 2000W resistive load)
 - ✓ 1 for Solar circulating pump, 5Amp, 240Vac max. (max. 600W load)
 - ✓ 1 for Hot Water circulating pump, 5Amp, 240Vac max. (max. 600W load)
 - ✓ 1 for electromagnetic valve, 5Amp, 240Vac max. (max. 600W load)

- Outputs wiring connection: Screw terminal

- Control Panel display: LCD with LED backlight
- Control Panel dimensions: 120mm x120mm x18mm (4.72" x 4.72" x 0.7")
- Power Module dimensions: 200mm x140mm x 45mm (7.87" x 5.51" x 1.77")

- Operating ambient temperature : $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$ (14 F \sim 122 F)
- Enclosure rating: Water proof grade IP40.