

**MODENA**

# ***User Manual Book***

## ***Solar Water Heater***

Giorno Series  
SH 1513 CE

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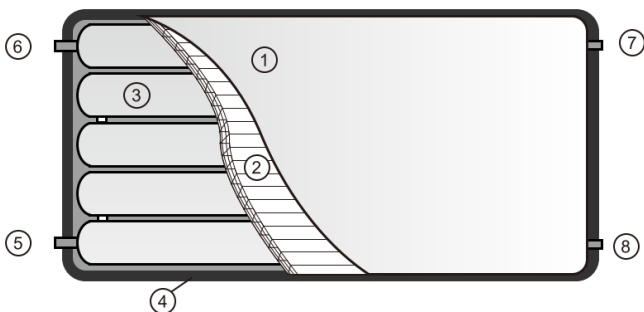
This manual book explains everything you need to know about your new product. Please contact our Customer Care should you need further assistance through [www.modena.com](http://www.modena.com).

## PART 1: IMPORTANT SAFETY INFORMATION

1. The installation may only be carried out by qualified professionals.
2. The pipes must be insulated with a suitable UV resistant material of the appropriate thickness in order to reduce heat loss and protect the pipes from freezing.
3. If you choose the model with with heating element and controller function, you must have reliable grounding. It is strictly forbidden to use this product without reliable grounding.
4. To avoid scalding, when the hot water temperature is higher than 50 °C, it must be mixed with cold water before use.
5. It should be installed in a sunny and open area to get optimum efficiency.
6. Unfiltered water can cause system corrosion, it is recommended to use soft water.
7. The system may only be installed on roof surface. The static load-bearing capacity of the roof must be checked in accordance with local and regional stipulations at the site prior to the installation of the panels, it is necessary by means of the commissioning of a structural engineer.

## PART 2: PRODUCT INTRODUCTION

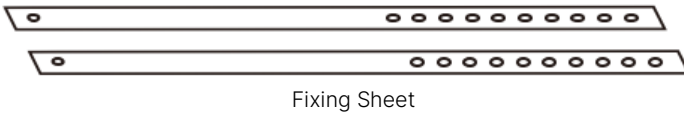
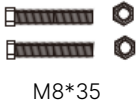
### Solar Water Heater Panel



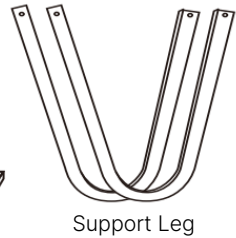
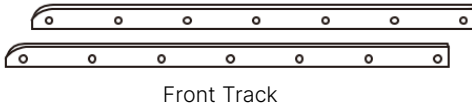
Remark:

- 1. Tempered Safety Solar Glass
- 2. Clear Heat Insulation
- 3. Storage Tank
- 4. Case
- 5. Drain Hole
- 6. Outlet Hole
- 7. Reserve Hole
- 8. Inlet Hole

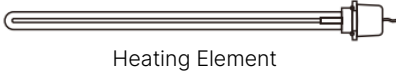
**Standard Accessories**



**Flat Roof Installation Accessories**



**Electric Back Up Accessories**



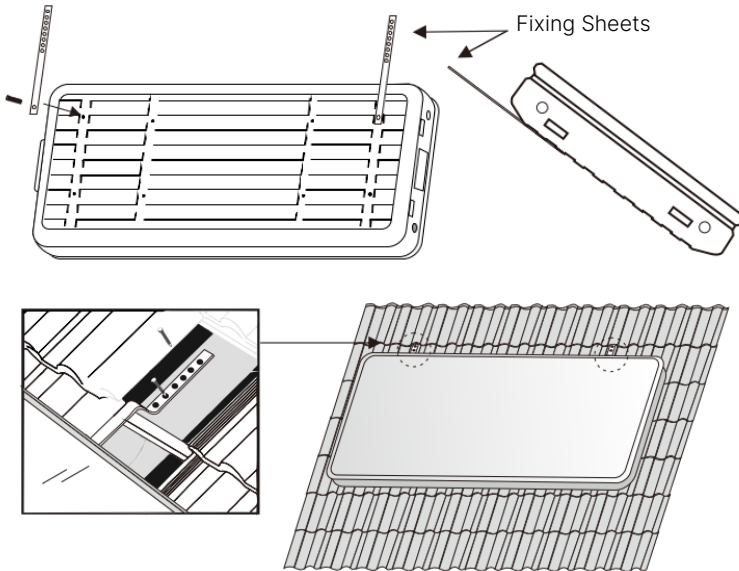
## PART 3: INSTALLATION

### Preparation

1. Check the outer shell whether it is well.
2. Check if the accessories are complete against the packing list.
3. Prepare the necessary tools before installation. Tie the safety rope and take other protective measures during the altitude operation.

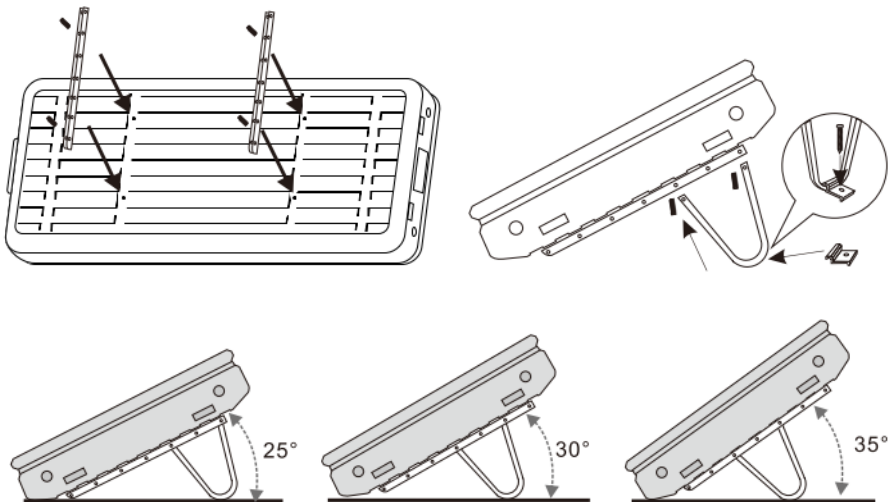
### On-Roof / Slope Installation

1. Fix the fixing sheets to the back of the solar water heater.
2. Turn it over and fix the fixing sheets on the beam of the roof.
3. Cover the tile back.



### Flat Roof Installation

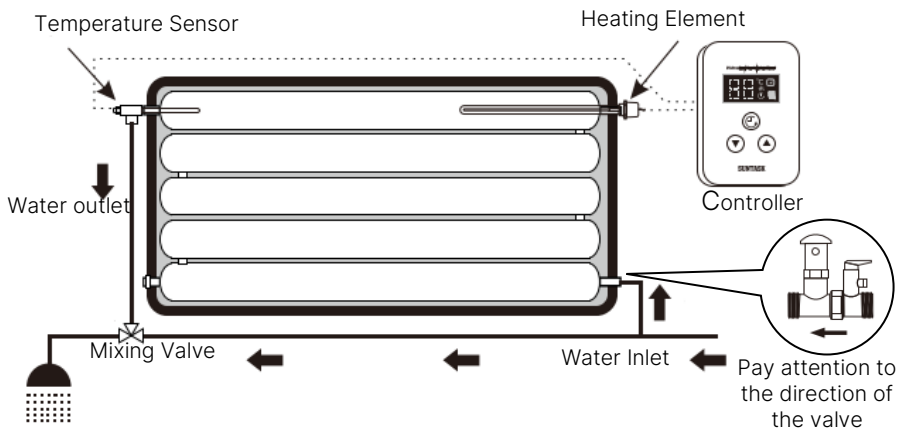
1. Fix the front tracks on the back of the solar water heater.
2. Turn it over and fix the support legs with the front tracks according to the suitable angle.
3. Using the fixing press pads, fit the support legs with the flat roof.



Choose suitable angle according to the local latitude

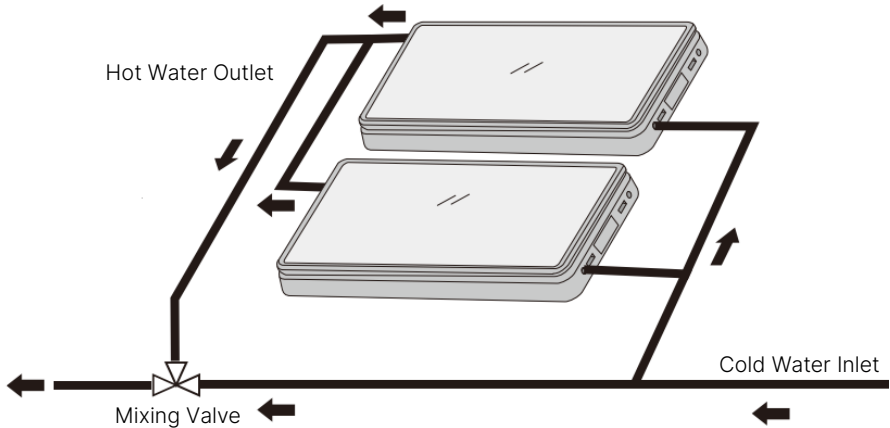
### Piping and Electrical Connection Method

Install the combined valve at the water inlet according to the image below. Pay attention to the direction of the valve.

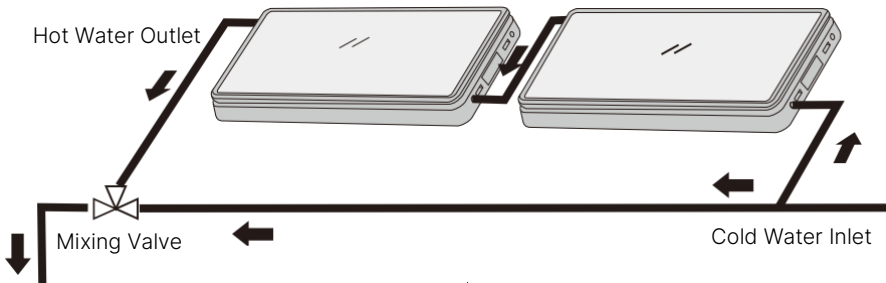


## Several Panels Combination

### 1. Parallel Installation



### 2. Series Installation



## PART 4: MAINTENANCE

If the solar water heater is installed at dusty area, it will reduce the absorption rate of the collector panel when the dust adheres to the collector surface. Therefore, the surface of the collector should be cleaned at least every half or one year according to the dirt condition.

**Note:** you must ask to the professional workers to help do it.

## PART 5: TROUBLESHOOTING

Problem	Possible Cause	Recommended Actions
Water is not hot in sunny day	The panel is covered by dust	Clean the dust periodically
	The panel is covered by high towers, trees, tall building, fences, other water heaters, etc	Remove the covering / barrier or move the solar water heater to the open place.
	Hot water valve got leakage or cannot close well.	Check or change the outlet valve
	Heat loss from the pipeline	Add proper insulation along the hot water pipeline.
No hot water come down	No water supply	Check the water supply pipe
	Inlet valve damaged	Check or change the inlet valve

## PART 6: SPECIFICATIONS

Model	SH 1513 CE
Product Type	Compact Solar Water Heater
Color	Black
Capacity	150 L
Maximum Temperature	70 °C
Maximum Pressure	5 bars
Insulation Material	ESPP
Backup Power	1500 W
Piping Connection	2x3/4" male thread
Weight	42 kg
Dimension	2184 x 814 x 212 mm
Collector Area	1.75 m <sup>2</sup>

Specifications of this appliance may change without notice to improve the quality of the product. Pictures in this manual are schematic and may not match your product exactly. Values stated on the machine labels or in the documentation accompanying it are obtained in laboratory in accordance with the relevant standards. Depending on operational and environmental conditions of the appliance, values may vary.



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