

**READ AND STUDY MANUAL BEFORE USE**



**Suntec Industries (H.K.) Ltd.**

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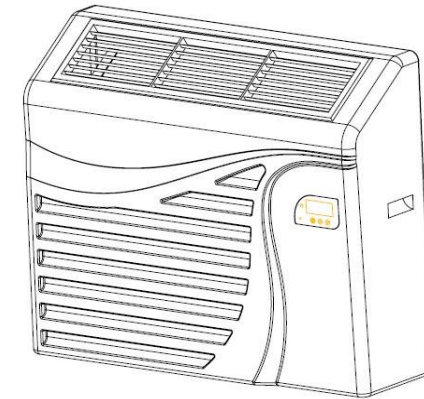
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URL: [www.suntecind.com](http://www.suntecind.com)

**Swimming Pools Dehumidifier**

**SP500C Pro / SP1000C Pro / SP1500C Pro**

**OPERATING MANUAL**



Suntec SP Series Swimming Pool Dehumidifiers are well used in swimming pools, sauna rooms, museums, art galleries, storage, archives, etc. They reduce the condensation on the windows, walls or other parts of the building in enclosed structural environments, which prevents mould, corrosion, rot of the building.

Suntec SP Series Swimming Pool Dehumidifiers work on the basis of the condensation principle with heat recycling, which means that the air from the room is dehumidified but all of the energy used remains in the room in the form of heat. The exchange principle guarantees the energy saving of up to 70%, which makes it especially favorable from an ecological point of view.

### **Safety Instructions**

- Do not allow children to play with or around the operating unit.
- Keep wiring and motor dry. Never operate the unit in standing water, rain and snow, as this may create a risk of injury from electric shock.
- Do not use the adaptor.
- Do not operate the unit with a damaged power cable.
- Always operate the unit with an earthed plug and with an earthed supply.
- Extension cables must be earthed and be able to deliver the appropriate voltage to the unit.
- Do not drop or throw the unit.
- Always operate the unit on a stable, level surface.
- Do not clog or block air intakes.
- Do not attempt to disassemble or repair the unit if you are not qualified to do so.

### **How to Use Dehumidifiers**

#### **Prior to installing your dehumidifier:**

All dehumidifiers are factory assembled and tested prior to delivery. Please unpack the carton and check whether there is any damage on the surface on the dehumidifier and whether the accessories are complete as stated on the following included accessories. If severe damage has occurred, please contact your supplier immediately and do not attempt to install dehumidifier unit.

### **We also provide other kinds of dehumidifiers:**

- **Swimming Pool Dehumidifier with Built in Wifi Technology**

Models: SP500C Pro, SP1000C Pro, SP1500C

- **Mobile Dehumidifiers with Timer Control**

Models: SD600, SD1000

Models: ST600, ST1000








- **Mobile Dehumidifiers with Humidistat, Timer Control & Built in Wifi Technology**

Models: ST601 Pro, ST1001 Pro

Please find out more from our website, [www.suntecind.com](http://www.suntecind.com)

DECLARATION OF CONFORMITY	CE
<p>We, declare under sole responsibility that our models (SP500C Pro, SP1000C Pro and SP1500C Pro) to which this declaration relates are in conformity with the following standards:</p> <p><b>EMC:</b>  <b>EN 55014 - 1:2006, EN 55014-2:1997+A1:2001</b>            Electromagnetic Compatibility: emission requirement</p> <p><b>EN 61000 - 3 - 2:2006, EN 61000-3-3:1995+A1:2001+A2:2005</b>            Electromagnetic Compatibility: emission requirement.</p> <p><b>LVD:</b>  <b>EN 60335 - 1: 2010+C1_2010+C2_2011+A1_2013+C1_2014+A2_2016</b>            Safety of household and similar electrical appliance            - General requirements.</p> <p><b>EN 60335 - 2-40: 2013+A1_2016</b>            Particular requirements for electric heat pumps,            air conditioners and dehumidifiers.</p>	
<p><b>Suntec Industries (H.K.) Ltd.</b></p> <p><b>Design and Development</b></p>	

### Included Accessories

Accessories	Accessory Name	Qty	Description
	Wall Mounted Brackets	2	Used for wall mount installation.
	Exploded Screws & Washes (fixing wall)	4	Used for wall mount installation.
	Screws & Washes (fixing Dehumidifier)	4	Used for wall mount installation.
	Floor Mounted Brackets	4	Used for floor mount installation.
	Universal Wheels	4	Used for mobile installation.
	Water Drain Hose (2 Meters)	1	Used for drain out water.
	Condensation Pipe Connector	1	Used for collect the condensation water.

## Installing your dehumidifier

### How to install the dehumidifier on the wheels?



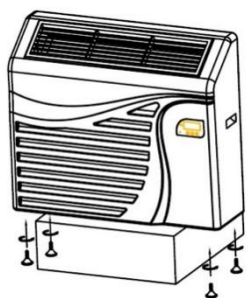
Step 1: Lift up the dehumidifier and let it sit on the wooden box as show on figure below.

Step 2: Take out the wheels from the accessory bag and screw those wheels into the screw thread on the base.

Step 3: Put the dehumidifier on the flat ground.

Step 4: Adjust the wheels height according to the ground condition.

### How to install the dehumidifier on the ground?



Step 1: Lift up the dehumidifier and let it sit on the wooden box as show on figure below.

Step 2: Take out the floor mounted brackets from the accessory bag and screw those brackets into the screw thread on the base.

Step 3: Put the dehumidifier on the flat ground.

Step 4: Adjust the brackets height according to the ground condition.

## Specifications

Model	SP500C Pro	SP1000C Pro	SP1500C Pro
<b>Water Removal (30°C/80%RH)</b>	50L per day	100L per day	150L per day
<b>Operating Temp. Range</b>	1° - 40° C	1° - 40° C	1° - 40° C
<b>Operating Humidity Range</b>	10% to 90% RH	10% to 90% RH	10% to 90% RH
<b>Compressor / Refrigerant</b>	Rotary / R410A	Rotary / R410A	Rotary / R410A
<b>Power Consumption</b>	720Watt	1500Watt	2050Watt
<b>Voltage / Cycle</b>	220~240V/50Hz	220~240V/50Hz	220~240V/50Hz
<b>Ampere</b>	3.1A	6.5 Amps	8.9 Amps
<b>Rated Air Flow</b>	500 m <sup>3</sup> /h	800 m <sup>3</sup> /h	900 m <sup>3</sup> /h
<b>Noise Level</b>	42dB(A)	48dB(A)	48dB(A)
<b>Installation/ mobility</b>	Mobile/ Floor Mount / Wall Mount	Mobile/ Floor Mount / Wall Mount	Mobile/ Floor Mount / Wall Mount
<b>Touch-pad control panel</b>	Yes	Yes	Yes
<b>Remote Control</b>	Yes	Yes	Yes
<b>Defrost Type</b>	Hot-gas bypass	Hot-gas bypass	Hot-gas bypass
<b>Air Filter</b>	Washable	Washable	Washable
<b>Housing</b>	Hard Plastic	Hard Plastic	Hard Plastic
<b>Drain Hose Length</b>	2m	2m	2m
<b>Cable Length</b>	3m	3m	3m
<b>W x D x H</b>	65 x 27 x 55cm	89 x 29 x 76cm	100 x 33 x 80cm
<b>Use Weight</b>	35kg	56kg	71kg

Specifications are subject to change without notice. Some values are approximate.

## Error Messages

Msg.	Description
ER01	Coil temperature sensor error
ER02	Ambient temperature sensor error
ER03	Humidity sensor error
ER04	Ambient temperature is over the operation range, which is 1 – 40°C.
ER05	High Pressure Switch off
ER06	Low Pressure Switch off
ER07	Communication error.

## Maintenance

### When it is not going to be used for a long time

- Set 80% RH as desired humidity for 3 or 4 hours to dry the inside of the dehumidifier.
- Turn off the dehumidifier and then disconnect the power plug.
- Remove battery from Remote Control.

### When the dehumidifier is going to be used again

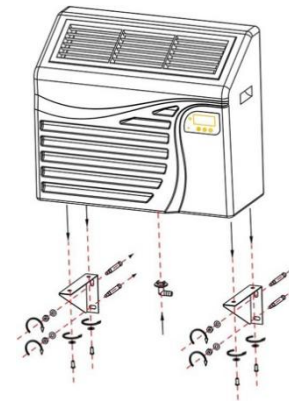
- Make sure the air inlet and air outlet does not be blocked.
- Check the ground wire is connected correctly.

**WARNING!** Always unplug any dehumidifier before performing maintenance procedures.

## Warranty

SunTec warrants to the original purchaser that if, within a period of 12 months from the date of purchase, this equipment is found to be defective either in original materials or workmanship (excluding normal usage wear and/or mishandling or abuse) the faulty part will be replaced free of charge upon presentation of the appropriate evidence, provided the unit is returned to the original supplier. Shipping expenses are not covered under the warranty.

## How to install the dehumidifier on the wall?



Step 1: Choose the right installation position for the wall support according to the size of installing holes and the wall bracket holes position. The installation position should guarantee the dehumidifier in horizontal position. The position of the exploded screw should be marked.

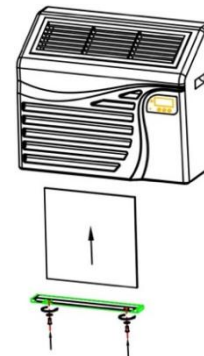
Step 2: Use the M8 percussive drilling machine to drill holes of 8mm  $\pm$ 0.5mm depth. Then take the nuts and gaskets off from the exploded screw and fix them into the holes with the hammer.

Step 3: Install the wall bracket with the exploded screw on the right position. Please take care to fix the bracket well with the nuts and gaskets. And don't forget to keep the bracket in the right direction during the installation.

Step4: Hang the dehumidifier on the wall bracket and aim dehumidifier base installing holes at the bracket holes. Fix the dehumidifier on the bracket with the fix screws and gaskets.

Step5: Plug in the Condensation Pipe Connector to the bottom central hole of the machine, then connect a suitable piping.

## How to change the filter on the dehumidifier?



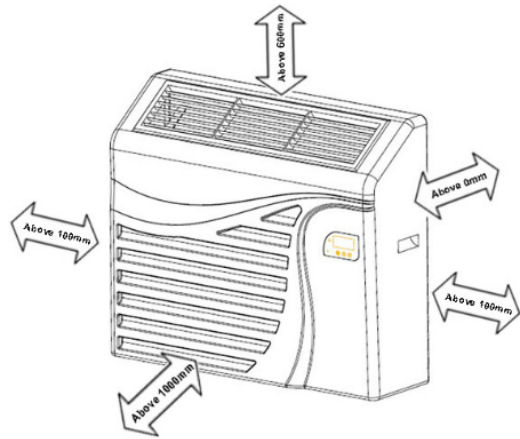
Step 1: Use screwdriver undo two screws at the bottom of the machine.

Step 2: Remove the metal cover filter plate and let the HAF filter drop off.

Step 3: Change a new filter.

## Position the dehumidifier

Before you turn on the machine, make sure there is enough space around the machine. Keep it away from anything that could prevent airflow into and out of the unit.



**CAUTION!** Never operate the Suntec SP dehumidifiers at temperature above 40°C. It could damage the machine.

## Operating Your Dehumidifier

### Place the dehumidifiers in upright position

If the dehumidifier has been in a horizontal position for any time over a few minutes, you must set it upright (vertical) for 45 minutes before starting.

### Connect drainage system

You can find the hose wrapped around in the accessories pack. Unwrap the entire hose, plug it into the water drain hose hole and run it into a drain, or bucket.

*Note: Please find a suitable piping to connect the Condensation Pipe Connector at the bottom of the machine if you find any condensation water leak out from there.*

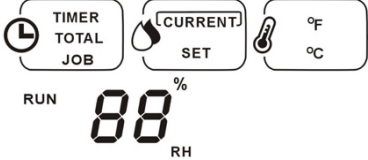
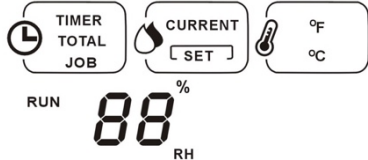
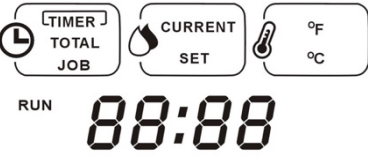
### Plug in the electrical cord

Locate the electrical cord. Plug it into a standard outlet with the correct voltage and amperage for the unit. If the unit experiences a loss of power, which can result from a power interruption and overheated.

## LCD Display – Cont.

	<p><b>“TOTAL” CLOCK.</b> While “TOTAL” CLOCK time is chosen, “TOTAL” wording in the square box will flash for 3 sec. The 4 digits show how many <i>DAYS</i> the machine has been used.</p>
	<p><b>“JOB” CLOCK.</b> While “JOB” CLOCK time is chosen, “JOB” wording in the square box will flash for 3 sec. The four digits display how many <i>HOURS and MINUTES</i> either the CURRENT JOB is running or the LAST JOB has been run.</p>
	<p><b>“°F” TEMPERATURE.</b> While “°F” TEMPERATURE function has been chosen, “°F” wording in the square box will flash for 3 sec and 3 digits figures display the current ambient “°F” temperature.</p>
	<p><b>“°C” TEMPERATURE.</b> While “°C” TEMPERATURE function has been chosen, “°C” wording in the square box will flash for 3 sec and 2 digits figures display the current ambient “°C” temperature.</p>

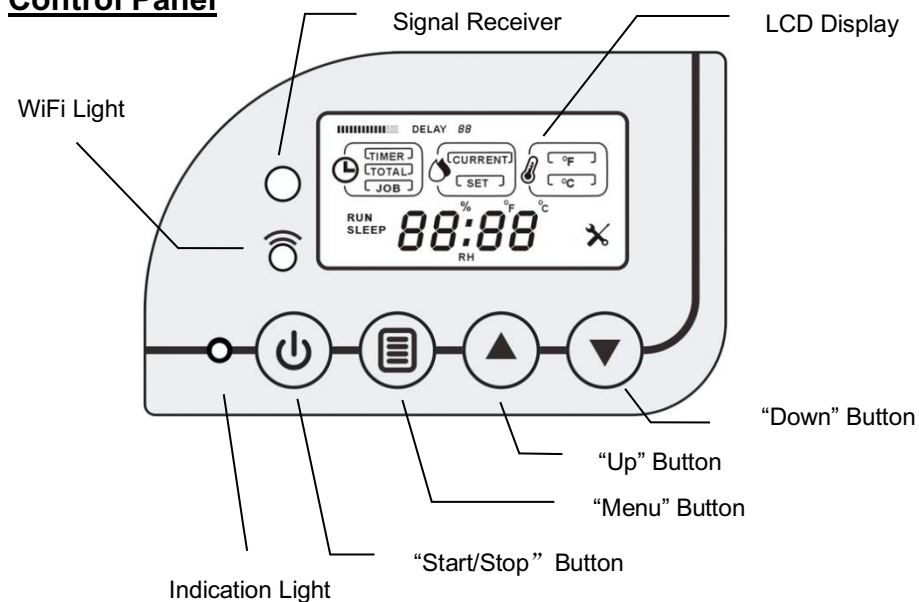
## LCD Display – Cont.

	<p><b>“CURRENT” HUMIDITY.</b> When the machine is turned on, the default display function goes to “CURRENT” HUMIDITY. “CURRENT” wording in the square box will flash for 3 sec and 2 digits Relative Humidity figures display the current ambient humidity.</p>
	<p><b>“SET” HUMIDITY.</b> While “SET” HUMIDITY function is chosen, “SET” wording in the square box will flash for 3 sec and the bottom 2 digits Relative Humidity figures also flash continuously until the user set the desired humidity which is from 25% to 80%. “- - %RH” is the value beyond this range, which read as nonstop dehumidification.</p>
	<p><b>“TIMER” CLOCK.</b> While “TIMER” CLOCK time is chosen, “TIMER” wording in the square box will flash for 3 sec. The bottom four digits show how many <i>HOURS and MINUTES</i> the “TIMER” is. In <i>STANDBY</i> mode, the four digits (- - : - -) flash continuously until user sets the <i>TIMER</i> from 00:10 to 23:50 hours. Once the “TIMER” is set and machine starts running, the four digits displays remain running time of the current <i>TIMER</i>., “- - : - -” is the value beyond this range, which read as nonstop dehumidification.</p>

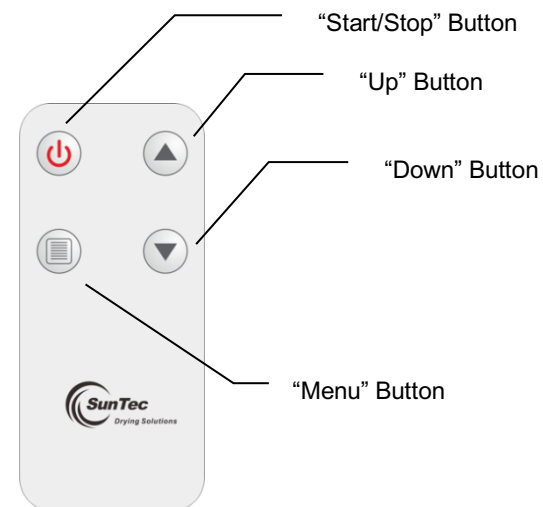
## How to Use the Control Panel & Remote Control

**Note:** Find “Dry Connect” Mobile App Quick Start Manual for WiFi connection.





### Control Panel



### Remote Control



## Touch Pad Keys:

	<p><b>On/Off.</b> Press the On/Off key to start or stop the dehumidification.</p> <ul style="list-style-type: none"> <li>After press the On/Off key, the machine starts and performs a compressor delay. The delay is up to a maximum of 180 seconds. (30 seconds delay for the first startup). The DELAY BAR flashes during this delay period.</li> <li>When dehumidification starts, the red indication light changes to green and LCD light up.</li> <li>When dehumidification starts, the LCD will display the current ambient humidity.</li> <li>Press the START/STOP key again to turn the machine off. The green indication light changes back to red and LCD light off.</li> </ul>
	<p><b>MENU.</b> Press the MENU key each time to choose the "CURRENT" HUMIDITY, "SET" HUMIDITY; "TIMER" CLOCK, "TOTAL" CLOCK, "JOB" CLOCK; "°F" TEMPERATURE, "°C" TEMPERATURE functions sequentially.</p> <ul style="list-style-type: none"> <li>In STANDBY MODE, the default function is "CURRENT" HUMIDITY, When error messages are on, "TIMER" CLOCK, "TOTAL" CLOCK, "JOB" CLOCK; "SET" HUMIDITY; "CURRENT" HUMIDITY, "°F" TEMPERATURE, "°C" TEMPERATURE icons &amp; wordings are disappear. Press MENU key again to get back those displays.</li> </ul>
	<p><b>"UP" KEY.</b> Press the "UP" key to go to the Humidity Setting Mode and start to set the desired air humidity,</p> <p>The desired air humidity will be increased by 5% for every press on the "UP" key. The default preset desired humidity is 60%RH. The adjustable range is from 25% RH to 80% RH. "- - %RH" is the value beyond this range, which read as nonstop dehumidification.</p>
	<p><b>"DOWN"KEY.</b> Press the "DOWN" key to go to the Humidity Setting Mode and start to set the desired air humidity,</p> <p>The desired air humidity will be decreased by 5% for every press on the "DOWN" key. The default preset desired humidity is 25%RH. The adjustable range is from 20% RH to 80% RH. "- - %RH" is the value beyond this range, which read as nonstop dehumidification.</p>



## On/Off Indication Light:

Color	Status	Description
N/A	Off	Machine has been turned off.
Red	On	Machine has been turned on.
Green	On	Machine start dehumidification.

## WiFi Indication Light:

Color	Status	Description
Red	Flash, 2 times per Sec.	EZ mode WiFi connection
Red	Flash, 1 time per Sec.	AP mode WiFi connection
Red	On	EZ/AP WiFi Connection Failure
Green	Flash, 1 time per Sec.	Connecting WiFi network.
Green	On	WiFi Connection successful.
Green	Flash, 2 times per Sec.	WiFi Connection Failure/ WiFi pcb is disconnected.

## LCD Display:

 DELAY	<b>DELAY BAR</b>
	<b>SERVICE.</b>
<b>RUN</b>	<b>RUN Mode. DEHUMIDIFICATION is ON.</b>
<b>SLEEP</b>	<b>SLEEP Mode.</b> DEHUMIDIFICATION is OFF. It automatically goes back to Running Mode again when the ambient humidity is higher than the preset humidity.