SDT series

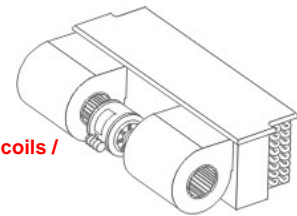## 3 / 3x / 3-ir / 3x-ir

To be used with:
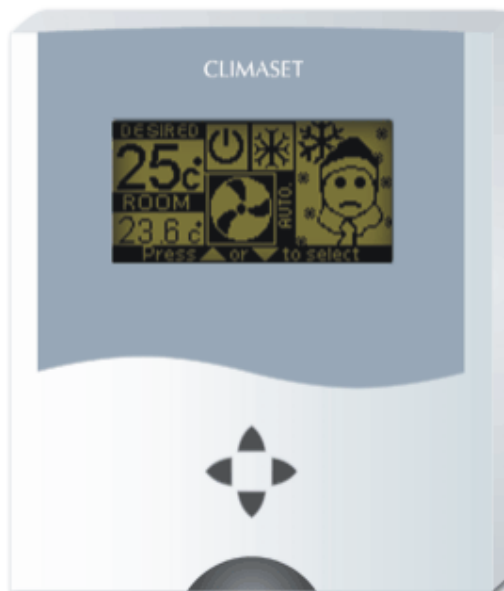**Horizontal room fan coils /
Ducted fan coils**

- 3-speed fan control
- Simultaneous indication of
  room & desired temperature
- Animated screen
- Bilingual

CLIMASET®
Interactive Controllers

User's Guide

Contents

CLIMASET

1. Your Climaset

Climaset SDT 3/3-ir/3x/3x-ir are designed to work in conjunction with ceiling type horizontal room fan coils/ducted fan coils to maintain the room/building air condition at the comfort level. Each of the mentioned models consists of the following units:

❶ Wall mounted unit
❷ Remote controller (Optional, SDT 3-ir/SDT3x-ir)
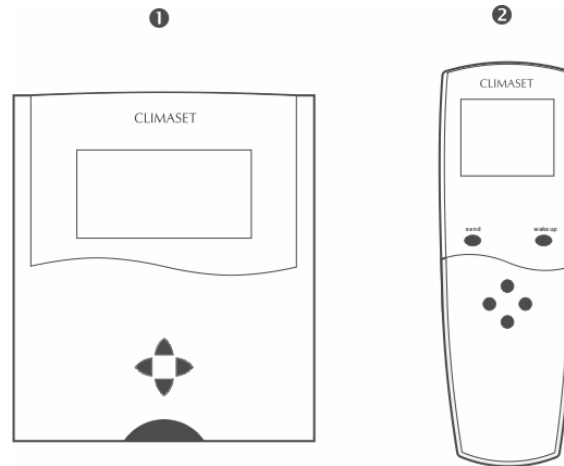
2. Wall mounted unit

The wall mounted unit has the following functions:

1. Measurement of room temperature.
2. Interaction with user to adjust the set points.
3. Interaction with the remote controller (SDT 3-ir / 3x-ir only).
4. Interaction with fan coil to adjust the desirable fan speed.

2.1. Keys and infrared sensor
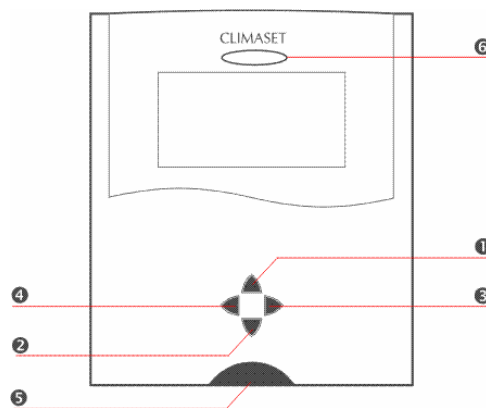
❶"Up" and ❷"Down"
   Use these keys to scroll the menus.
❸"Right" and ❽"Left"
   Use these keys to adjust the values in each menu item.
❼"Power"
   On/Off switch.
❵"Infrared sensor" (SDT 3-ir / 3x-ir only)

2.2. Screen elements
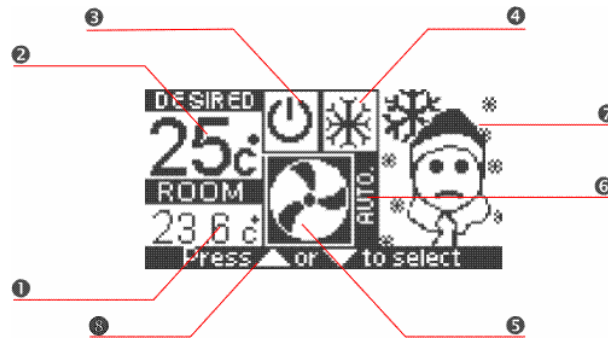
❶Room temperature: Indicates the current room temperature.

❷Desired temperature: Your desired room temperature.

❸Power status:

Air conditioner apparatus is on.
Air conditioner apparatus is off.

❹Season setting:

The device is adjusted to work in summer.
The device is adjusted to work in winter.

❺Fan status: Indicates a schematic of the selected fan speed. The number of the blades is proportional to the selected fan speed.

Note: The icon just represents the selected fan speed. The device may be on or off due to difference between room and desired temperature or power status setting of the wall mounted unit.

❻Auto: This icon appears if the "Auto" mode is selected. It means the device automatically selects the appropriate fan speed which is proportional to the temperature difference between the room and desired. So by approaching to the desired temperature the fan speed reduces. The feature is called "smooth approach" and is only available in SDT 3x/3x-ir.

❼Animated icon: It reacts based on temperature difference between the "Desired" and the "Room".

The left icon appears when the room temperature is above the comfort range. Comfort range is up to 1˚c above the "Desired" in summer or up to 1˚c below the "Desired" in winter.
The middle icon indicates that the room temperature is in the comfort range.
The right icon shows the room temperature is below the comfort.

❽Status bar: Indicates the "Menu item" you wish to adjust. Use "Up" or "Down" keys to surf through these menus (Refer to section 2.1 for "Up" and "Down" keys)

2.3. Using the menu

2.3.1. Accessing a menu function

Scroll with the "Up" or "Down" keys to access the desired menu function. Use "Right" or "Left" keys to adjust the set points (Refer to section 2.1 for "Up", "Down", "Right" and "Left" keys)(Refer to section 2.4 on adjusting set points and their functions).

2.3.2. List of menu functions

1. Fan speed
2. Desired temperature
3. Season settings
4. English / Local

2.4. Menu functions

2.4.1. Fan speed (Menu item 1)

it represents the adjusted fan speed. Use "Left" key to decrease the fan speed or "Right" key to increase it

Note: If the fan speed is set to its minimum value and "Left" key is pressed the power status will be switched off. It switches on again by pressing the "Right" key.

Notice: Pressing the "Right" key while the maximum fan speed is selected enables the"Auto" mode (SDT 3x/3x-ir only)(Please refer to section 2.2 for more description on "Auto" mode). You may exit the "Auto" mode by pressing the "Left" key in "Fan speed" menu, which cause the device to return to the maximum fan speed again.

2.4.2. Desired temperature (Menu item 2)

It is the temperature which you like to maintain your room. The standard set point for comfort condition in the residential zones is 24°c, but you can set a higher or lower temperature if you wish.

The minimum allowable temperature is 16°c and the maximum is 31°c. You can use "Right" key to increase the value or "Left" key to decrease it (Refer to section 2.1 for "Right" and "Left" keys). As you change the value the result appears on the desired temperature section of the screen (Refer to section 2.2 to find the "Desired temperature" on the screen).

Note: If you set a value much lower than 24°c in summer or much higher in winter, it may cause your air conditioning device to work continuously. The set point which causes the device to work continuously depends on outside temperature, air conditioning device heating and cooling capacity, and some other factors related to your building.

Note: If you set a value much higher than 24°c in summer or much lower in winter, it may cause your air conditioning device not to start working. For a brief on the conditions which cause such a behavior refer to the previous note.

2.4.3. Season settings (Menu item 3)

Set the current season for the controller to work properly.
Setting the "summer" in this field causes the controller to switch the air conditioner on if the room temperature is higher than desired.
In "winter" mode, the air conditioner switches on if the room temperature is lower than desired.
Use "Right" or "Left" key to adjust the current season. The result appears at "Season setting" section of the screen (Refer to section 2.2 to find "Season setting" section of the screen and section 2.1 for "Right" and "Left" keys).
Notice: Not setting this field correctly may cause your air conditioner not to start working.

2.4.4. English / Local (Menu item 4)

It indicates language of the items of the status bar. If "English" is selected, all menu functions will appear in English. If local is selected, all menu functions of the status bar will appear in your local language.

2.5. Back light

Pressing any keys on the wall mounted unit turns on the back light for several seconds. It enhances reading during the night.

3. Remote controller unit (SDT 3-ir / 3x-ir only)

The remote controller utilizes infrared light waves to send the commands to the wall mounted unit. The light waves are effective at the maximum distance of 16 meters. The viewing angle for the remote controller is 30 degree. It means the wall mounted unit can still sense the commands even if remote controller deflects up to 30 degree from the wall mounted unit infrared sensor.

Note: All remote controllers use the same code, so you may use a single remote control with several wall mounted units.

Notice: Blocking the infrared lamp on the top of remote controller significantly reduces the range.

3.1. Installing batteries for remote controller

Locate the small latch on the battery compartment cover and push gently the latch in the direction of the arrow as illustrated below.
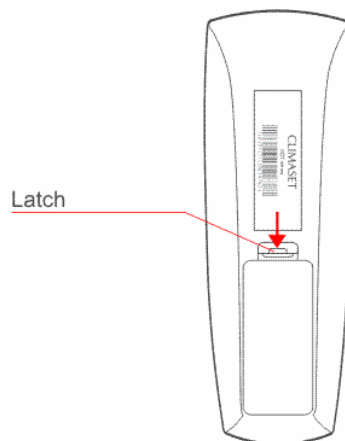
The cover releases. Lift off the cover to reveal the inner battery compartment.
Install two new AAA-size 1.5-volt alkaline, lithium or NiCad batteries with correct polarity following the illustration inside the battery compartment.
Warning: Mixing different battery types may cause explosion. Install same battery types each time you change them.
Replace the battery cover by inserting the prong into the slot at the bottom of the battery compartment and then pushing the cover until the latch snaps closed.
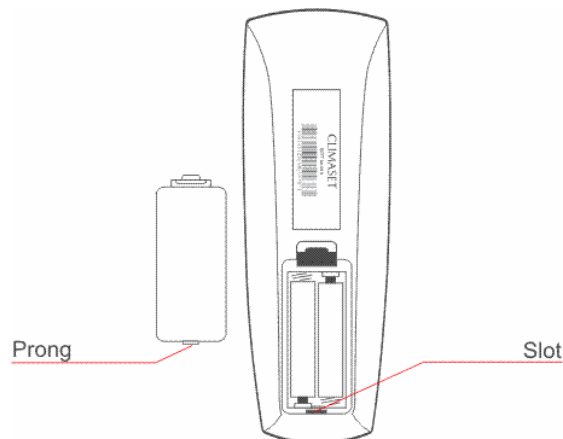
Press the "Wake up" key (Refer to section 3.2 for the "Wake up" key). The "Stand by" screen appears and the remote controller is functional (Refer to section 3.3.1 for "Stand by" screen).

Notice: Do not place objects on top of the remote control after installation of the batteries. Pressing the keys for an extended period of time reduces the battery life.

3.2. Keys

❶"Up":
Use this key to increase the desired temperature.
❷"Down":
Use this key to decrease the desired temperature.
❸"Right":
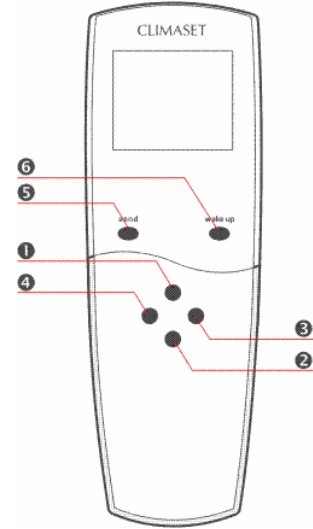Use this key to switch on the "power status" setting.
❹"left":
Use this key to switch off the "power status" setting.
❺"Send":
Use this key to transmit settings to the "Wall mounted" unit. After it recognizes the commands, it responses by a beep sound. If the beep sound is not heard, you should repeat the transmission by pressing the "Send" key again.

Notice: If the beep sound is not heard after several attempts, it may be one of the following cases:

- You may too much far from the "Wall mounted" unit. Step toward the "Wall mounted" unit and try again.
- The deflection between remote controller and the "Wall mounted" unit is above the maximum allowable. Point the remote controller toward the "Wall mounted" unit.
- Batteries should be replaced with new ones.
- If none of the above is the case, please contact your dealer for customer service.

❻"Wake up": Activates the remote controller. The remote controller is equipped with auto power off feature in order to minimize power consumption. If you do not push any key for 3 minutes, it goes to "Sleep" mode.

3.3. Screen elements

3.3.1. Stand by screen
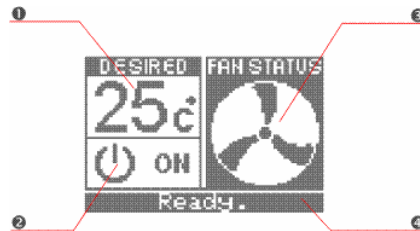
❶ Desired temperature: Your desired room temperature.

❷ Power status:

- Air conditioner apparatus is on.
- Air conditioner apparatus is off.

❸Fan speed: It represents the adjusted fan speed. Use "Left" key to decrease the fan speed or "Right" key to increase it.
Note: If the fan speed is set to its minimum value and "Left" key is pressed the power status will be switched off. It switches on again by pressing the "Right" key.
Notice: Pressing the "Right" key while the maximum fan speed is selected enables the "Auto" mode (SDT 3x/3x-ir only)(Please refer to section 2.2 for more description on "Auto" mode). You may exit the "Auto" mode by pressing the "Left" key in "Fan speed" menu, which cause the device to return to the maximum fan speed again.

❹ Status bar: It indicates messages about the last key you have just pressed for several seconds.

3.3.2. Good bye screen

If the remote controller is not used for about 3 minutes, it goes to the "sleep mode". Before it sleeps, "Good bye screen" will appear for some seconds.


3.4. List of status bar messages

❶"Ready": Remote controller is ready for adjustments.

❷"Temp. raised": By pressing "Up" key you have increased the "Desired" temperature.

❸"Temp. dropped": By pressing "Down" key you have decreased the "Desired" temperature.

❹"Fan spd. raised": By pressing the "Right" key you have increased the fan speed.

❺"Fan spd. dropped": By pressing the "Left" key you have decreased the fan speed.

❻"Power turned on": By pressing the "Right" key when the power status was off, you have switched on the power status.

❼"Power turned off": By pressing the "Left" key when the minimum fan speed is selected, you have switched off the power status.

❽"Auto selected" (SDT 3x/3x-ir only): You have entered the automatic (Smooth approach) mode by pressing the "Right" key when the device was at maximum fan speed.

❾"Auto cleared" (SDT 3x/3x-ir only): Automatic (Smooth approach) mode has been cleared after pressing the "Left" key when the device was in automatic mode.

❿"Not allowed": The message appears if you try to set the desired temperature above 31°c or below 16°c or by pressing "Right" key when the power status is on or "Left" key when the power status is off.

4. Installation guide

4.1. Mounting the wall mounted unit

Position the mounting plate on the wall. Level the mounting plate. Use a pencil to mark the mounting holes. Remove the plate from the wall and drill 3/16" holes in wall. Tap anchors into drilled holes. Reposition the plate and loosely insert two mounting screws into the holes. Level the plate for appearance. Tighten mounting screws.
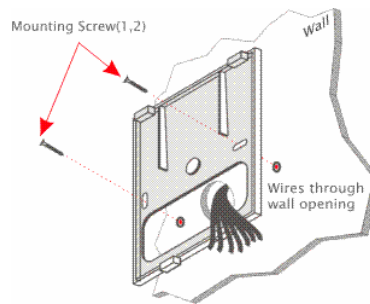
### 4.2. Proper wiring technique for the wall mounted unit

Please refer to the sketch below for the proper wiring technique. Also refer to section 4.5 for arrangement of the wires.
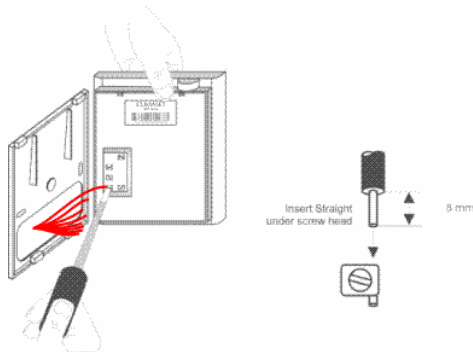
4.3. Engaging the wall mounted unit

Engage tabs at the top of the units and the wall plate. Gently press lower edge of the case to latch. To remove the "Wall mounted unit" from the wall, the top should be pulled out first.
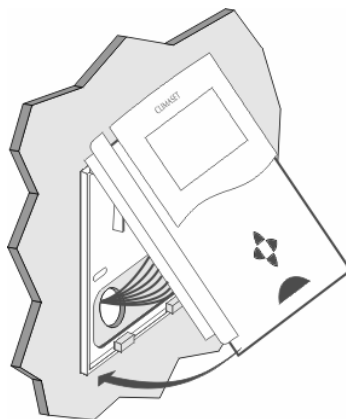
4.4. Wall mounted unit connectors

Connector Unit	Description	Input / Output	Electrical Characteristics
1	Phase	Input	AC220V/50Hz
2	Null	Input	Null
3	Fan high speed terminal	Output	AC220V/50Hz
4	Fan medium speed terminal	Output	AC220V/50Hz
5	Fan low speed terminal	Output	AC220V/50Hz

4.5. Wiring diagram

Please refer to sketch below for the wirings.

A. Wiring diagram for horizontal room fan coils

B. Wiring diagram for ducted fan coils
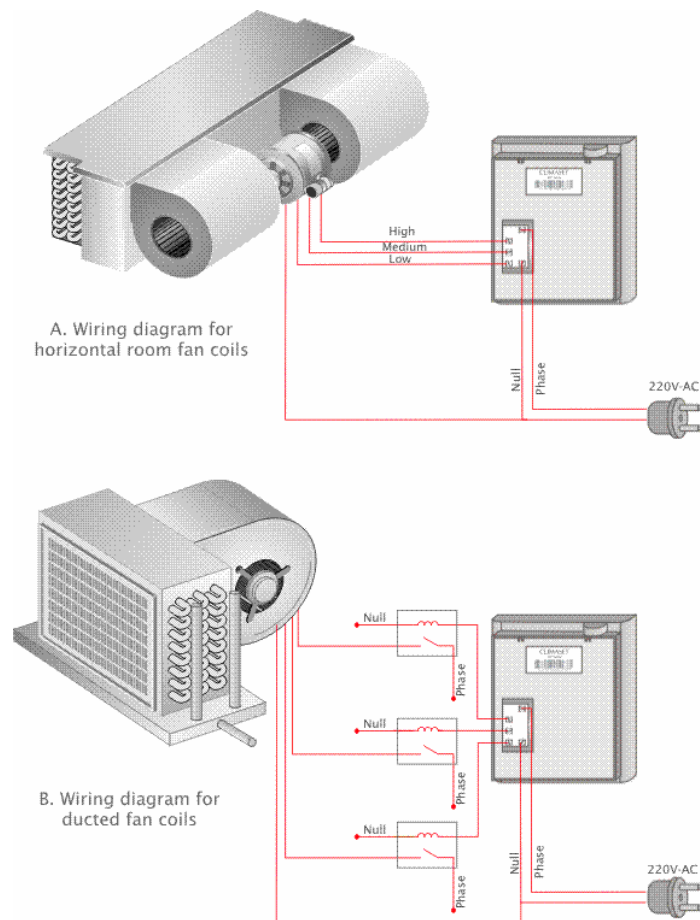
5. Care and maintenance

Care should be taken about the following items which may cause warranty obligation.

1. Keep the remote controller unit out of reach of children.

2. Do not use detergents   or   any chemicals to clean the Climaset. It may cause damages to electronic parts inside.

3. Climaset is designed to be used for residential comfort. Do not store it in hot or cold areas. Also it should not be stored in dirty or dusty environment.

4. Do not attempt to open any part of the Climaset. There is no part inside which you can service it. Ask your local dealer for services, if necessary.

5. Do not drop the remote controller. Take care in handling remote controller.

6. Keep the Climaset dry. Moisture can cause irreparable damages on electronic parts.

6. Specifications

Wall mounted unit	Temperature Sensitivity	0.1 ˚C
	Display Resolution	128×64
	Backlight	Enabled
	Display Width	66 mm / 2.6 inches
	Display Length	32.7 mm / 1.3 inches
	Width	130 mm / 5.1 inches
	Length	110 mm / 4.3 inches
	Height	42 mm / 1.6 inches
Remote controller	Max. Effective Distance	16 m
	Max. Viewing Angle	30˚
	Display Resolution	98×64
	Display Width	31.6 mm / 1.2 inches
	Display Length	25.3 mm / 1 inches
	Width	47 mm / 1.8 inches
	Length	150 mm / 5.9 inches
	Height	23 mm / 0.9 inches
	Battery Type	AAA Alkaline/NiCad
Operating condition	Temperature	0 ˚C to 70 ˚C
	Humidity	5% to 90% non-Condensing