



# SIMX FAN7194 Heat Transfer Touch Screen Controller Installation Guide

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## SIMX FAN7194 Heat Transfer Touch Screen Controller



### Product Information

The Heat Transfer Touch Screen Controller is a device used to control and monitor heat transfer systems. It features a touchscreen interface and is equipped with Firmware Version 3.4. The controller is designed to accurately sense air temperature in the heat source room and facilitate the efficient transfer of heat to other rooms.

### Definitions/Warning/Caution

Before using the product, it is important to understand the following definitions:

- **WARNING:** Refers to conditions where there is a possibility of injury or death if the procedure is not followed.
- **CAUTION:** Indicates the possibility of damage to the equipment, installation, or premises if a procedure is not followed.
- **NOTE:** Provides additional information intended to clarify points, procedures, or instructions.

### Warnings:

- Please read all instructions carefully before commencing installation.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities.
- If intending to install an air transfer system in a room where gas appliances are used for the heat source, consult the gas fire installation company and refer to Section G4/2.2 (Mechanical Ventilation) of the NZ Building Code for safety criteria.
- The system is not designed for use with heat pumps.
- Negative pressure from certain models of solid fuel fires can cause smoke from the fireplace to enter the room. Ensure proper ventilation and make-up air supply if using a fireplace that relies on room air for combustion.
- Consider using a door vent to circulate air throughout the room.

## Caution:

- All wiring must comply with national wiring rules.
- Any changes or modifications made to the product without prior written approval from the manufacturer will void the warranties.
- Take appropriate safety measures when cutting hazardous building materials.

## Installation Instructions

To install the Heat Transfer Touch Screen Controller, follow these steps:

1. Choose an inside wall at eye level in the heat source room, preferably opposite the heat source. Ensure that the air temperature can be accurately sensed and is not affected by direct sunlight or convection currents.
2. Do not install the controller in wet/damp areas (e.g., laundry or bathrooms), on hot surfaces, in convection currents, or in locations unaffected by changes in room temperature.
3. Avoid installing the controller near any localised heat source.
4. Cut an opening in the wall for the flush box and mount it securely.
5. Run the electrical cable from the roof cavity down to the flush box.
6. Wire the cable to the power module of the touch screen controller located on the back.
7. To separate the front screen of the touch screen controller from the back module, carefully insert a flat head screwdriver into the slot and gently lever the screwdriver handle upwards.
8. Mount the power module to the flush box using the provided screws.

Following these instructions will ensure proper installation and functionality of the Heat Transfer Touch Screen Controller.

## Definitions

Before use please read and understand these definitions.

**WARNING** and/or the use of the symbol refers to conditions where the possibility of injury, or death, exists if the procedure is not followed.

## CAUTION

**CAUTION** indicates the possibility of damage to the equipment, installation or premises if a procedure is not followed.

## NOTE

**NOTE** provides additional information intended to clarify points, procedures or instructions

## Warning

- Please read all instructions carefully before commencing installation.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or

mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

- Children should be supervised to ensure that they do not play with the appliance.
- Precautions must be taken to avoid the backflow of gases into the room from the open flue of gas or other open-fire appliances when mounted in outside walls or soffits.
- Isolate the mains supply before making any electrical connections. This system should be installed by a registered electrician.
- A means of mains power isolation must be installed in the circuit for the purpose of safe access for any internal cleaning, recalibration or maintenance.
- All electrical, electronic and mechanical parts must be installed, and all ducting secured, before applying mains power.
- There are no isolated (safety extra low voltage) terminals incorporated. Please treat all terminals as being mains live.

## **Important**

- If it is intended to install an air transfer system such as HeatTrans into a room where gas appliances are used for the heat source, the gas fire installation company must be consulted before undertaking installation. Section G4/ 2.2 (Mechanical Ventilation) of the NZ Building Code refers to certain safety criteria which should be considered when installing mechanical ventilation in a room where gas appliances are used. The gas heating installation company can advise on these aspects.
- The system is not designed for use with heat pumps.
- With certain models of solid fuel fires, negative pressure can cause smoke from the fire place to enter the room where the fireplace is operating.
- If you have a fireplace that uses air from the room for combustion, please ensure that make-up air is available to replace the air that is exhausted by the HeatTrans system.
- The use of a door vent can assist in circulating the air throughout the room.

## **Caution**

- All wiring must comply with national wiring rules.
- Any changes or modifications made or attempted to this product, without the prior written approval of the manufacturer, will void any and all stated warranties.
- Take appropriate safety measures when cutting hazardous building materials

## **Installation**

### **Heat Transfer Touch Screen Controller**

- Install on an inside wall at eye level in the heat source room, preferably opposite the heat source, where the air temperature can be sensed as accurately as possible and not be adversely affected by direct solar radiation or convection currents.
- DO NOT install in wet/damp areas (ie. laundry or bathrooms), on hot surfaces, in convection currents, or exposed to direct sunlight or in locations that are not generally affected by changes in the room temperature.

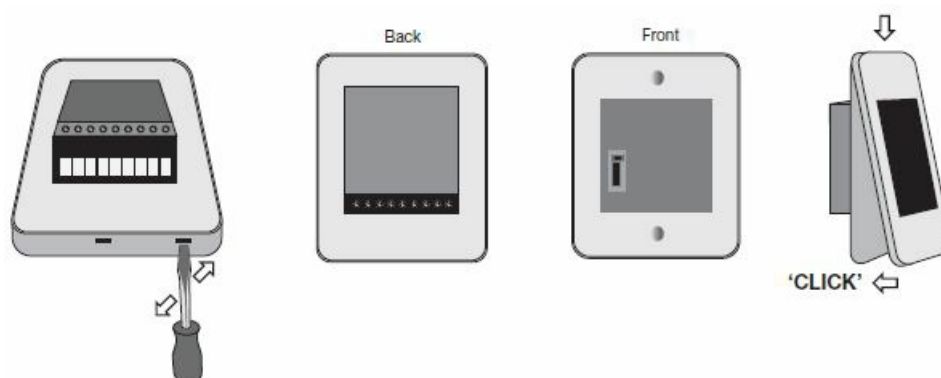
- DO NOT install near any localized heat source.
- Cut an opening in the wall for flush box and mount it.
- Run the electrical cable from the roof cavity down to the flush box.
- Wire the cable to the power module of the touchscreen controller, located on the back.
- Separate the front screen of the touchscreen controller from the back module. Carefully insert a flathead screwdriver into the slot and gently lever the screwdriver handle upwards.
- Mount the power module to the flush box using screws provided.

**CAUTION:** Using incorrect screws or not tightening screws sufficiently may cause damage to the product when re-assembling.

- Ensure the circuit board on the back module is centered so the connectors to the front screen can line up.

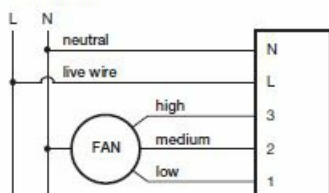
**CAUTION:** Forcing the controller back together without aligning the connectors properly may cause damage.

- Carefully attach the front screen to the back power module. Align the top edge, rock in, and listen for a click.

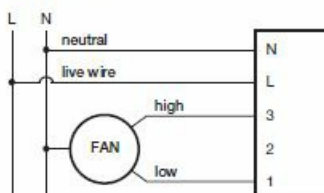


## Wiring Diagrams

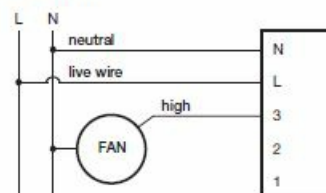
### 3 Speed



### 2 Speed



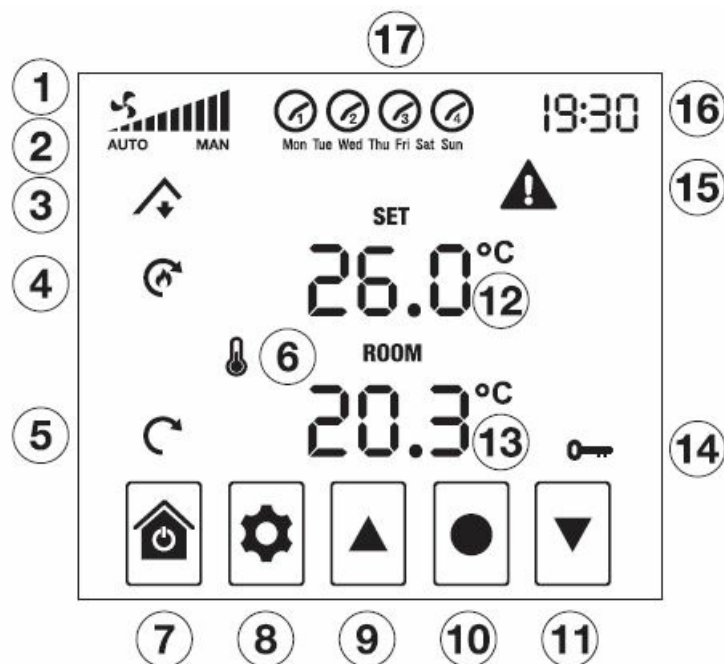
### 1 Speed



## Home Screen Icons

1. System Fan Speed
2. Heat Transfer Mode 1)
3. Summer Vent ON
4. Heat Transfer ON
5. Recycle ON
6. Temperature Sensing ON
7. Home and Power
8. Settings
9. Up
10. Select
11. Down
12. Set Temperature
13. Current Room Temperature

14. Key Lock ON
15. Alert 2)
16. Time 3)
17. Scheduler Period and Day

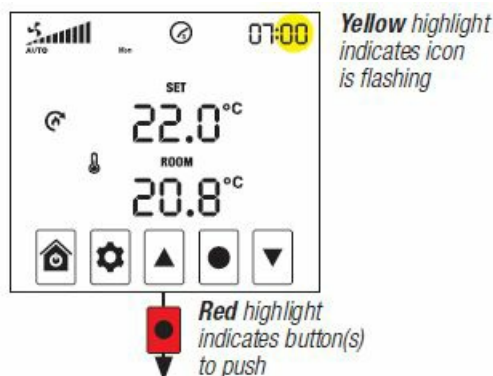


- Heat Transfer mode selections are AUTO or MAN (manual)
- When an electronic fault in the system occurs, the alert icon will appear and the applicable error code(s) will be displayed instead of the time
- Time is displayed in a 24-hour clock format

## Button Functions

- Power OFF/ON or discard selections and return to the Home Screen
- From the Home Screen enter the setting screen or return to the previous setting option
- Scroll through setting options and change setting values
- Save the setting selection and go to the next setting option

## Screen Highlights



## Fan and Fan Speed Setting





All HeatTrans touchscreen controllers are set to the three fan speed options 003 by default and the three fan speeds available – HIGH, MEDIUM, and LOW. If your fan does not have three speeds, you can follow the guide below to alter the fan speed to fan speed option 002 or fan speed option 001 as required.





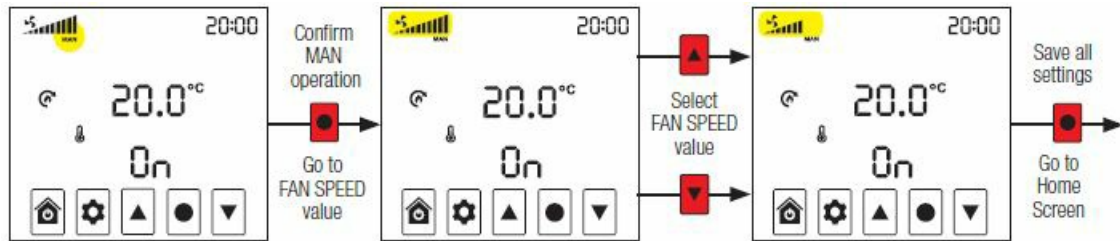
## Auto Operation and Temperature (TEMP) Setting

- Fan speed will adjust automatically based on the indoor air temperature. If system is in BOOST mode, the fan will operate at the speed set for that mode.







- On the Home Screen, press **SETTINGS**  and then **UP** , or **DOWN** , to toggle to ON
- Press **SELECT**  to enter VENTILATION mode

- Press UP , or DOWN , to toggle to MAN operation and follow the guide below to change the system fan speed.









- Fan speed will remain constant at the speed set. If system is in BOOST mode, the fan will operate at the speed set for that mode.

### Fan OFF Setting

- On the Home Screen, press SETTINGS  and then UP , or DOWN , to toggle to OFF
- Press SELECT  to save the fan OFF setting.

### Key Lock Setting

When Key Lock is ON, system settings cannot be changed



- Press UP  and DOWN  together for 3 seconds, until the KEY LOCK  icon is displayed, to confirm that the system is locked.
- Press UP  and DOWN  together for 3 seconds, until the KEY LOCK  icon is not displayed, to confirm that the system is unlocked

### System Time-Date Settings

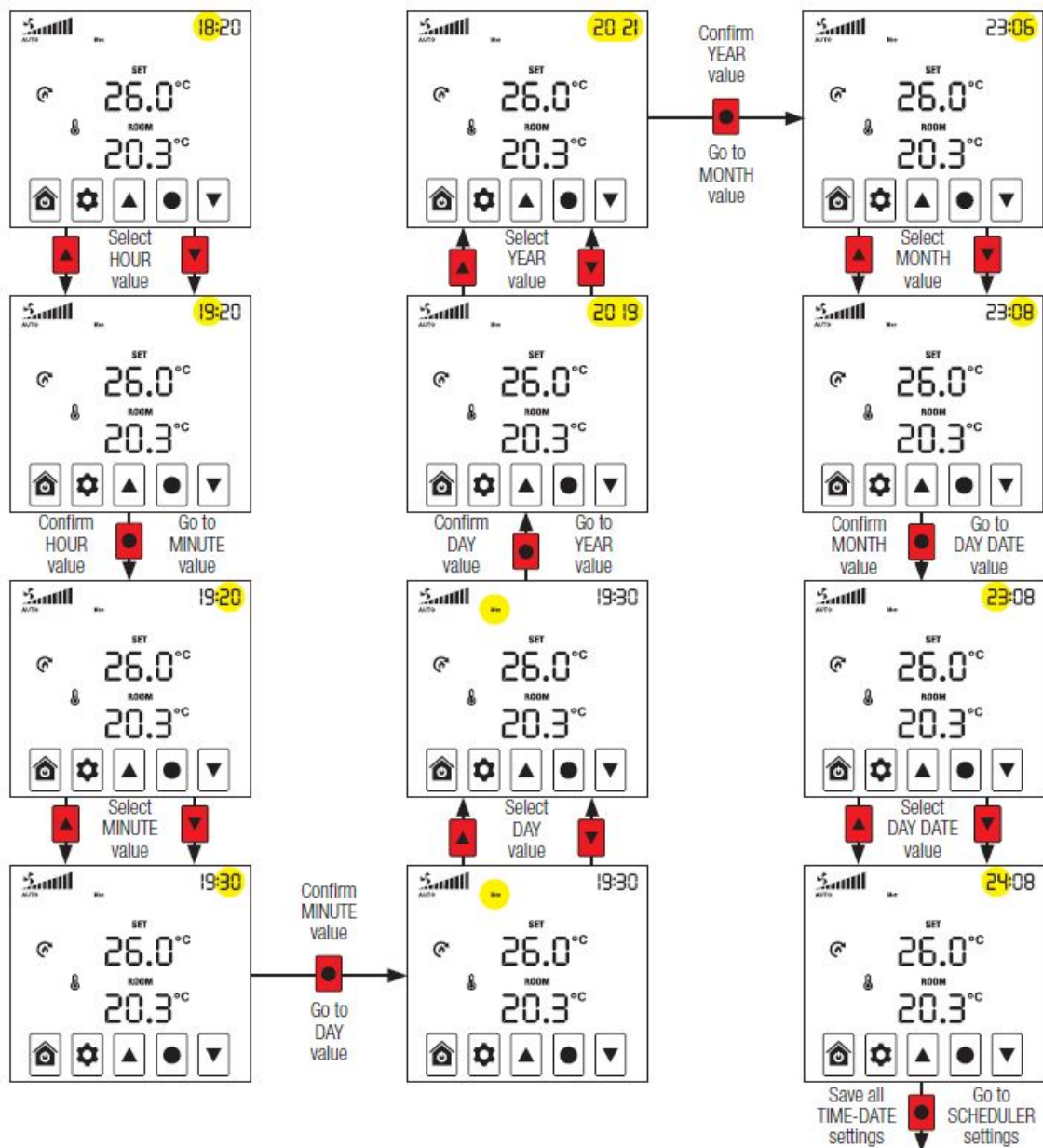
System Time-Date Settings must be entered before Scheduler start times for HEAT TRANSFER can be set.

- On the Home Screen, press SETTINGS for 3 seconds to enter Time-Date Settings and follow the guide below to complete

**NOTE:** Settings shown are examples only





- Press HOME  at any stage to exit and enter Scheduler Settings
- Press SETTINGS  at any stage to return to the previous screen

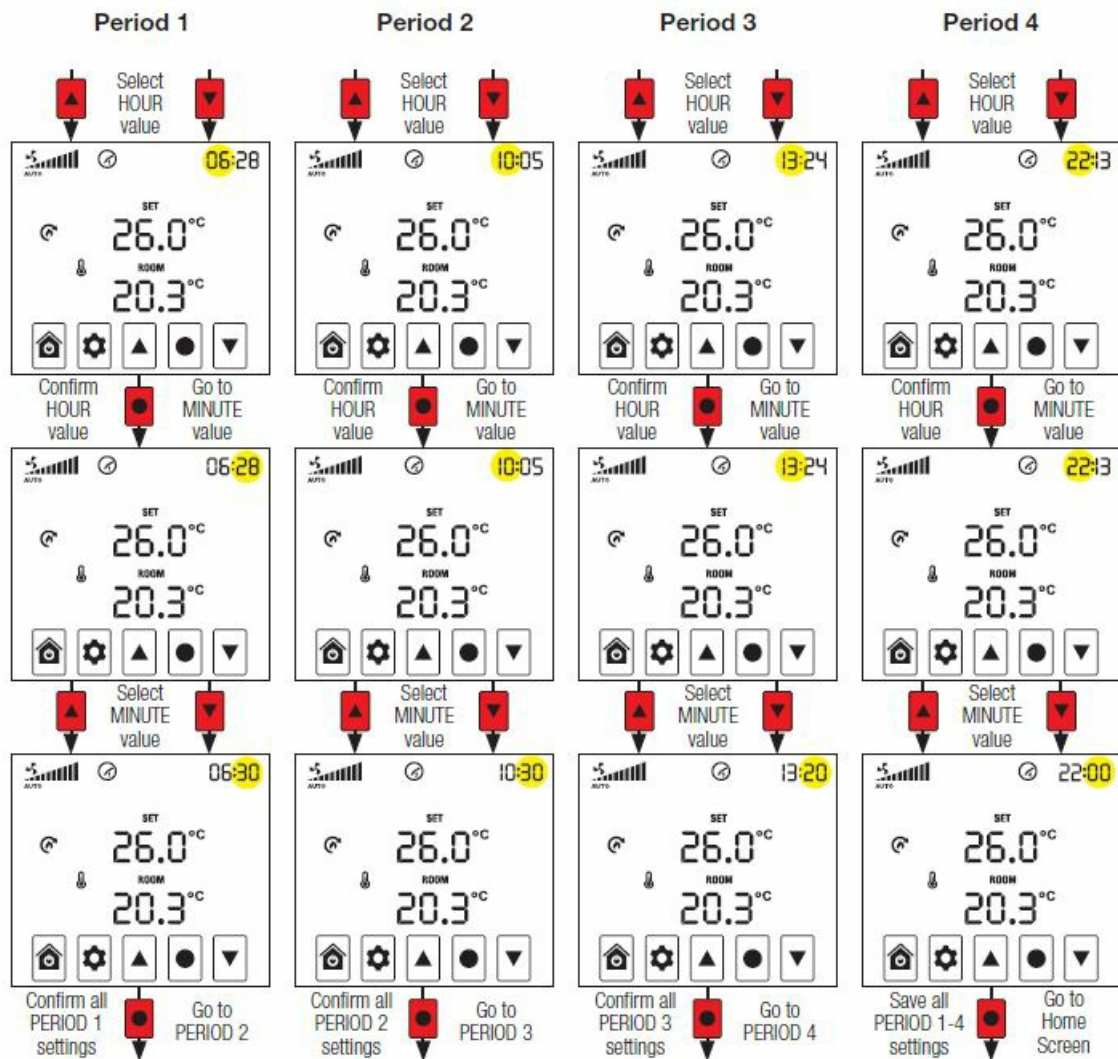




## • System Operating Settings

### Scheduler Settings

- Setting the Scheduler is only necessary if you want HEAT TRANSFER to operate for predetermined times during each of the four periods available every 24 hours. Each period of time starts with the scheduled start time for that period and ends at the start time for the next scheduled period.
- On the Home Screen, press **SETTINGS**  for 3 seconds then press **HOME**  to enter Scheduler Settings and Follow the guide below to complete  
**NOTE:** Settings shown are examples only
- Press **HOME**  at any stage to exit Scheduler Settings and return to the Home Screen
- Press **SETTINGS**  at any stage to return to the previous screen






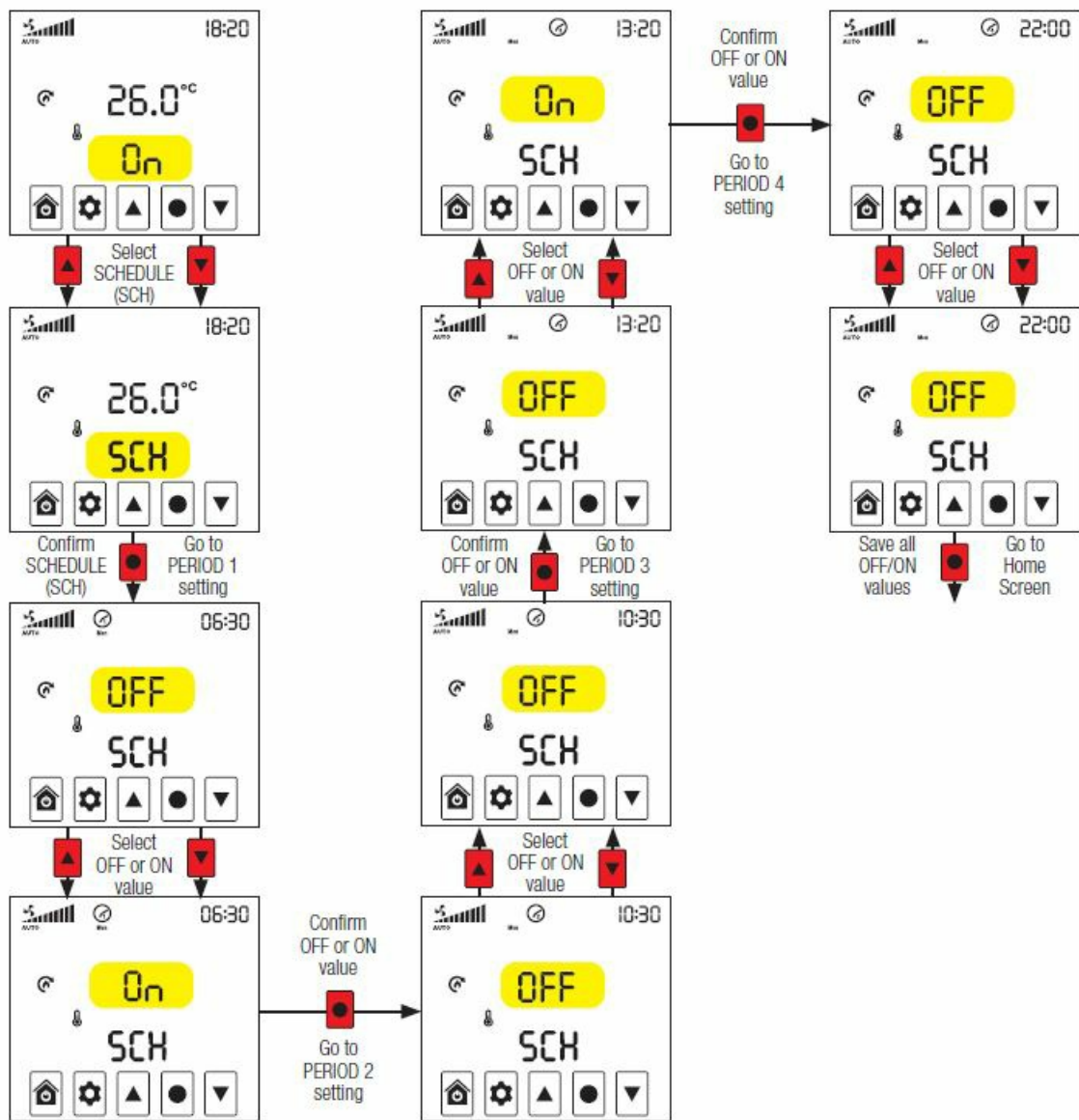
## System Operating Settings

### Period OFF/ON Schedule

Set HEAT TRANSFER mode to AUTO operation (see page 8).

Fan speed will adjust automatically based on the indoor air temperature.

- On the Home Screen, press SETTINGS  to enter Period OFF/ON Schedule and follow the guide below to complete the fan OFF/ON settings for each of the four periods available in a 24-hour period.  
**NOTE:** Settings shown are examples only.
- Press HOME  at any stage to exit Period OFF/ON Schedule and return to the Home Screen
- Press SETTINGS  at any stage to return to the previous screen



## System Operating Settings

### Period Schedule Log



Record your scheduled start times and OFF/ON status in the Period Schedule Log below

Date	Period 1			Period 2			Period 3			Period 4		
	Start	OF F	ON	Start	OF F	ON	Start	OF F	ON	Start	OF F	ON

## Modes

## Boost

BOOST enables you to immediately override fan speed settings and boost fan speed to maximum.

- On the Home Screen, press SELECT  for 3 seconds and the system's fan will boost to maximum speed.
- In BOOST mode, the time segments will become a count down to the end of the BOOST mode.
- A quick tap of SELECT  on the Home Screen will exit BOOST mode.



## Commissioning and Testing

### Inspection Checklist






- The controller is displaying temperatures correctly.
- The controller is configured to match the number of speeds the fan motor has.
- Fan operates on all speeds. Put fan onto high speed to continue the inspection.
- There are no leaks in the ducting.
- Diffusers are open and not whistling.
- The system is set to AUTO operation

## Advanced Settings

### Advanced Setting Selection

Advanced Settings can be changed at any time using the guide below. This guide must also be used to enter the password at setting 020 before settings 021 and above can be changed.



014	Reserved	N/A	N/A	
015	Reserved	N/A	N/A	
016	Reserved	N/A	N/A	
017	Reserved	N/A	N/A	
018	Reserved	N/A	N/A	
019	Restore 000 – 018 Default Settings	0 – 1	0	1 = restore
020	Enter Installer Password:	0 – 100	0	2
021	Summer Vent Kit Mode	0 – 1	0	1 = enabled
022	Reserved	N/A	1	Do not change
023	Reserved	N/A	N/A	
024	Reserved	N/A	N/A	
025	Fan Type	0 – 1	0	
026	Number of Fan Speeds	1 – 3	3	
027	Reserved	N/A	1	Do not change
028	Touch Activation Setting –  Home/Power	15 – 125	55	3
029	Touch Activation Setting –  Settings	15 – 125	55	3
030	Touch Activation Setting –  Up	15 – 125	60	3
031	Touch Activation Setting –  Select	15 – 125	60	3
032	Touch Activation Setting –  Down	15 – 125	60	3
033	EC Fan Speed – Low	0 – Medium	30%	
034	EC Fan Speed – Medium	Low – High	50%	
035	EC Fan Speed – High	Medium – Boost	70%	
036	EC Fan Speed – Boost	Boost – 100	100%	

1. If your room temperature reading is inaccurate, use this setting to calibrate.
2. Settings 021 and above are installer-only settings and are only accessible after the installer password (setting 020 = ) has been entered and set.
3. **CAUTION:** It is possible to render buttons inoperable and irrecoverable by adjusting the touch activation settings. Adjust at your own risk. The lower the value the more sensitive the button, the higher the value the less sensitive the button.

## Troubleshooting



An ALERT icon and error code will appear on the Home Screen when there is an electronic fault in the system. Contact Simx, 09 259 1662, for assistance.

## Technical Specifications


TOUCH SCREEN CONTROLLER V3.4	
Temperature Range	5-35°C adjustable
Display Resolution	0.1°C
Operating Voltage/Frequency	220-240V AC, 50Hz
Switching Voltage	240V AC Max
Switching Current	3A max resistive load
Operating Temperature	0 to 40°C
Operating Humidity	5-90% non condensing
Live Output Isolation	Relay
Output Control	Relay / 0-10V DC
Display	3.5" digital LCD touch screen
Approval	All relevant AS/NZS standards
EMC Approval	All relevant AS/NZS standards

Specifications are subject to change without notice

## Distributed by Simx Limited

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## Documents / Resources

	<p><a href="#">SIMX FAN7194 Heat Transfer Touch Screen Controller</a> [pdf] Installation Guide</p> <p>FAN7194 Heat Transfer Touch Screen Controller, Heat Transfer Touch Screen Controller, Transfer Touch Screen Controller, Touch Screen Controller</p>
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## References

- [Simx - Home Ventilation, Lighting, Commercial Ventilation Distributors | Simx New Zealand](#)

