

aura-t™

aura-t™ SMART

aura-t™ SMART (AR m³/h) for HRV3QAR

auraSMART® app

**HRV** controllers

**Product Manual** 





TP736/EU

TP737/EU





# Warnings, Safety information and Guidance

## **Important Information**

#### Read instructions fully before the installing this appliance.

- 1. This manual covers the operation of the HRV control system only, it must therefore be read in conjunction with the relevant heat recovery unit Product Manual.
- 2. Installation of the appliance and accessories must be carried out by a qualified and suitable competent person and be carried out in clean, dry conditions where dust and humidity are at minimal levels.
- 3. All wiring must conform to current I.E.E. Wiring Regulations and all applicable standards and Building Regulations
- aura-t<sup>™</sup> must be connected using the communication cable provided, this can be extended up to 30m. Control & Communication cable - Unshielded 4 Core 18-24AWG Stranded, Tinned Copper.
- 5. Control & communication cables should not be placed within 50mm or on the same metal cable tray as any 230V lighting or power cables.
- 6. Ensure all cable glands are fully tightened.



#### Important environmental information about this product.

This symbol on this unit or the package, indicates that disposal of this unit after its life cycle could harm the environment. Do not dispose the unit as unsorted municipal waste; it should be disposed by a specialized company for recycling. This unit should be returned to your distributor or

to a local recycling service. Respect the local environmental rules. If any doubt contact your local authorities about waste disposal rules.





- 7. The unit must be stored in a clean and dry environment. Do not install the appliance in areas where the following may be present or occur;
- Excessive oil or a grease laden atmosphere,
- Corrosive or flammable gases, liquids or vapours,
- Ambient temperatures above 40°C or below -5°C,
- Humidity levels above 90% or is a wet environment.
- 8. The appliance is not suitable for installation to the exterior of the dwelling.
- 9. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- 10. Children should be supervised to ensure that they do not play with the appliance.
- 11. To avoid damaging the touch screen, do not operate it with sharp or hard objects; do not apply excessive fingertip pressure.
- 12.Do not use abrasive cleaners, waxes, solvents or alcohol based cleaning products; do not use paper towels for cleaning the aura-t™.



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# Product Overview

## Description

The aura- $t^{\text{TM}}$  is a programmable touch screen controller which monitors and displays the status of a Titon ECOaura HRV unit. It allows the unit to be commissioned, and gives the user both manual and timed control of fan speeds. The aura- $t^{\text{TM}}$  is connected to the HRV via a low voltage connection and can be sited remotely from the unit.

The aura-t™ SMART units can also connect and to the Titon auraSMART® app using WiFi either directly or using a WiFi network and can be used to commission and control the HRV.

#### **Packaging Contents**

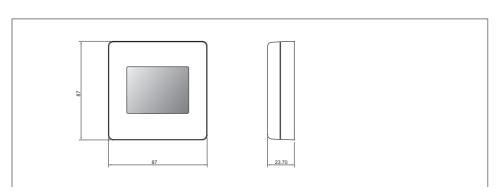
Inspect the unit when taking delivery. Check the unit for damage and that all accessories have been supplied.

#### Package supplied with:-

- 1 x aura-t<sup>™</sup> controller.
- 1 x ~3m aura-t<sup>™</sup> communication cable.
- 1 x Product Manual

Any shortages or damage must be immediately reported to the supplier.

#### **Dimensions**



aura-t<sup>™</sup> and aura-t<sup>™</sup> SMART



#### **Features**

The following gives an outline description for each of the product features. The aura-t™ SMART controller expands on these features, adding WiFi control and commissioning via the Titon auraSMART® app. Available from the Play Store or the

#### App Store

### **Speed Selection & Display**

The unit speed can be manually selected via the on screen 1, 2, 3 & 4 buttons/ icons which are also used to display any automatically selected speed.

#### 24 Hour Clock

The aura-t™ has a twenty four hour clock with a battery backup.

#### Day of Week Display

The aura-t<sup>™</sup> displays the days of the week ■ as numbers.

#### **Boost Overrun Timers**

A programmable timer that controls the time the HRV remains at Boost Speed after that can be used to switch the HRV to all boost switches have been released.

### **Internal Humidity Sensor**

The HRV has a relative humidity (RH) sensor. The RH sensor can be programmed to switch the HRV into Boost Inhibit is used to prevent the HRV's Speed.

#### Filter Change Alert

The aura-t™ will display an alert after a specified time when the HRV filters require changing.

### **Programmable Speeds**

The unit has 4 programmable speed settings, all speeds are variable between 14-100% and allow independent speed setting of both supply and extract ventilation rates

- Speed 1. Setback. Reduced ventilation.
- Speed 2, Continuous. Normal ventilation.
- Speed 3, Boost. Increased ventilation
- Speed 4, SUMMERboost®. Very high ventilation.

#### Timer

The aura-t<sup>™</sup> has a programmable timer Speed 1 at specified times. Using the auraSMART® app all speeds can be controlled

#### **Boost Inhibit**

speed increasing. Boost Inhibit is used in conjunction with a Timer event.

#### Status Icons

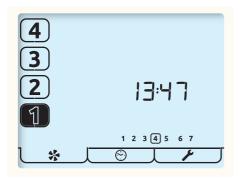
The aura-t™ displays icons to indicates modes of operation in Real-time.

## **User Interface**

The aura- $t^m$  is operated via a LCD touchscreen. The screen is backlit, the backlight operates when the screen is touched.

### Menu Tabs

The aura-t™ screen has three interactive menu screens which are selected via tabs at the bottom of the touchscreen.





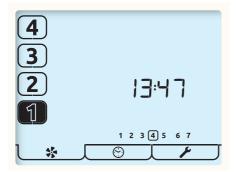
Passcode Screen

Tab	7.*	J © J	J
Function	Monitor & Control Fan Commission	Timer	Setup
Name	Run Mode	Timer Mode	Setup Mode
Description	Displays Fan Speed, Time, Day and Status. Gives access to Fan Speed Setup	Gives access to Timer Run/Pause and Timer Setup	Gives access to Time, Day, RH threshold, Overrun Timers, Summer Bypass, Passcode settings & Filter Reset. Switch Setup in a Sub-Menu.
	If passcode is er	nabled enter 3333 to act	ivate the above menus.



## Run Mode

The aura-t™ controls the HRV unit's 4 programmable speed settings.



This is the Run Mode screen; use the number buttons to select the required fan speed.



Press and Hold the [1] button to turn the unit off, just the [1] icon will be displayed; Tap the button to turn the unit back on.

The current running speed will be indicated by the corresponding number button being highlighted.

The time of day is also shown on this screen in 24 hour format along with the days of the week; the current day is ringed.

#### Status Icons

If the fan speed is being controlled by an external switch, a sensor or the timer this is indicated by an icon beneath the speed selection buttons being visible.

The icons are as follows:



An external switch is active and is controlling a function of the unit.



The timer is active and is keeping the HRV at Speed 1. Using the auraSMART° app all speeds can be controlled.



The speed the HRV is running at is being controlled by the internal humidity sensor or an external Proportional Input sensor







## Other Icons

Other status icon that may be visible on the screen are listed below:



Filters require replacement. Refer to the Controller Setup for details of how to reset.



Frost Protection, if this icon is constantly lit the temperature outside is low and the speed of the HRV Supply Fan has been reduced to prevent damage to the Heat Cell. If the Frost icon and backlight are flashing the indoor temperature is low and both fans will have stopped. Tap any of the fan speed number buttons to restart the fans. If the temperature is still too cold, Frost Protection will be activated.



Summer Bypass is in operation, air from outside is being supplied directly to the property without recovering heat from the Heat Cell.



This is often accompanied by SUMMERboost\*, both fans switch to Speed 4 to increase the rate fresh air is supplied to the property and stale hot air is extracted.

Press & Hold the [4] button to cancel SUMMERboost®.



The Boost Overrun timer is active and is holding the HRV at Speed 3; this follows an external Boost switch being deactivated or if the internal Humidity sensor has put the unit into Boost and the Humidity has reduced below the set-point.



The padlock icon adjacent to the Speed 3 button and accompanying the timer icon indicates Boost Inhibit is active. The HRV is being held at Speed 1 by the timer and will not respond to external Boost switches or the internal Humidity sensor; it is also not possible to manually increase the speed the HRV's running speed. Proportional Input sensors are not affected.



The warning icon flashing at the bottom of the screen adjacent to the Fan icon indicates a fan failure has been detected; contact the installer. If very high temperatures are detected inside the HRV, fan failure mode will be enabled to protect the HRV from damage.



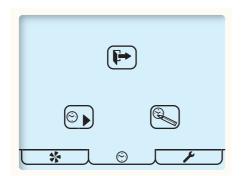
aura-t™ with auraSMART® WiFi Full Connection see page 21 for further details.



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#### Timer Mode

The controller has a seven day, four events per day timer. The timer is used to automatically change the HRV speed to Setback, Speed 1 at programmed times. An additional function of the timer is that when it activates Setback there is an option to engage Boost Inhibit.



This is the Timer Mode screen; the buttons displayed on screen have the following functions:



Tap the Play / Pause button to toggle between play and pause.



Press and Hold to pause timers indefinitely.



The Run arrow indicates the timer is currently active and will be used to switch the HRV in and out of Speed 1



The Pause and Hour Glass symbols indicate the Timer is temporarily paused; Timer will restart 8 hours after being invoked.



The Pause symbol indicates the timer is currently inactive and will have no effect on fan speeds; this pause is indefinite.









Timer Setup, Tap this button to adjust the Timer, see Timer Setup section.

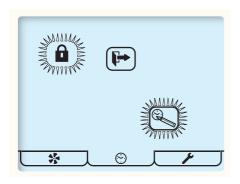


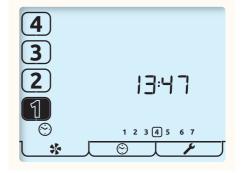
Tap this to Exit and return to Run Mode.

- When the timer has automatically switched the HRV to Speed 1 this can be manually overridden by tapping [2-4] keys. Tap the Speed 1 key to return to timer control.
- When the next timed event occurs the unit will revert to timer control.
- Manual override is not possible if Boost Inhibit is in operation.

#### auraSMART® WiFi Timers

- 1. The auraSMART® App has a seven day, eight events per day timer. The timer is used to automatically change the HRV speed to any of the speeds at programmed times.
- 2. An additional function of the timer is that when it activates Speeds 1 or 2 there is an option to engage Boost Inhibit.
- 3. If the timer is being controlled by the app the timer screen below will be shown.
- 4. To return to the aura-t™ SMART controller's timers press and hold the Timer Setup button; the controller's timer has reduced functionality and can only set speed 1.





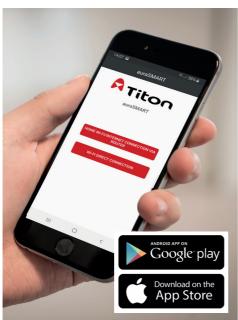




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## auraSMART® User Guide

## Home WiFi/Internet connection - Option 1



- Download the Titon auraSMART® app from either Google Play or the App Store.
- Open the app, select "HOME WiFi/ INTERNET CONNECTION VIA ROUTER"
- Click Register to create a new user account (if you have not set one up before)



4. Create your chosen account details in the screen below, and accept the app terms and conditions. You will receive an e-mail with a link to activate your account, you will not be able to access account facilities until completing the activation process.



Log in to your new account using the account name and password that you just created.

- 5. In your phone WiFi settings, ensure your phone is connected to the same WiFi router as the aura-t™ will be connected (not a 3G/4G mobile connection).
- 6. In Device List click ADD, then scan the QR code on the aura-t™ WiFi module, or manually input the ID and Code



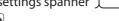
Device ID XX-XX-XX-XX-XX Verification Code XXXXXXXX



- **(**
- 7. The module will show on the app screen as "Status:offline", click the module details in the app, and confirm you want to connect to the internet OK
- 8. Input your WiFi router password.
- 9. A short video is displayed in the app showing the aura-t™ settings



a. Click the settings spanner 🛴 🗡



- b. Use the arrow buttons to scroll to the WiFi connection screen shown left (for info the icon functions are given below)
  - i. Cicon is to search for a WiFi/ internet router network connection ii. Cicon is to search for a WiFi Direct connection (see section 2)
  - iii. icon resets the aura-t™ WiFi module passcode to default (displayed on the label in the WiFi module)
- c. Press then using the arrow
  buttons select to make a WiFi/
  internet connection, pressing to select.
- d. Tap to return to Run screen.
- e. The WiFi symbol 🛜 will flash to confirm the aura-t™ is searching for a

- connection.
- f. In the app check the "Device is ready for internet connection" and click NEXT
- g. In the app, click OK as shown:



Once paired the aura-t™ will display the full WiFi symbol (not flashing), The status of the module in the app will show as "Online". WiFi functions of the app are now available via the internet and 3G/4G connections.

ii. Picon is to search for a WiFi Direct

connection (see section 2)

fails to connect ensure that the network is

set to 2.4GHz rather than 5GHz.

The app may display incorrectly on a minority of devices due to font size and text scaling settings.





The unit can also be connected via WiFi direct where there is no router network or internet connection. In WiFi direct mode only a local connection is possible with a single phone to  $aura-t^{m}$ .

- Download the Titon auraSMART® app from either Google Play or the App Store.
- Open the app, select "WiFi DIRECT CONNECTION"
- On the aura-t<sup>™</sup>, follow the steps below to create a WiFi hotspot



a. Click the settings spanner  $\downarrow$ 



- i. Cicon is to search for a WiFi/internet router network connection
- ii. O icon is to search for a WiFi Direct connection (see section 2)
- iii. icon resets the aura-t™
  WiFi module passcode to default
  (displayed on the label in the WiFi
  module)

- b. Press then using the arrow
  buttons select to create a
  WiFi direct hotspot, pressing to
- c. The display screen will show:



select.

 Connect your phone to the aura-t™ SMART WiFi direct hotspot, it will be named as the Device ID. The default passcode is 12345678.



Device ID XX-XX-XX-XX-XX Verification Code XXXXXXXX

- In app, Device List click ADD, then scan the QR code on the aura-t™ WiFi module.
- 6. In the app, click OK as shown:



 The module will show on the app screen as "Status:online", click the module details in the app to connect.



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## auraSMART® example app screens

#### Run Mode



Within this section the user can control the speed of the HRV Unit. The current status of the HRV and any warnings or alerts are also shown on this screen.

#### **Boost Overrun**

A programmable timer that controls



the length of time the HRV remains at Boost Speed after all boost switches have been released. Separate times can be configured for both Kitchen and Wetroom Boost switches. Adjustable between

0 and 60 minutes.

#### **Humidity Threshold Control**

Units are fitted with an Integrated



Humidity Control. This continuously monitors the relative humidity (RH) of the extracted air and triggers Boost Speed when the relative humidity rises over the set threshold. The

Humidity Sensor's trigger point is variable from 30% RH to 100%RH

#### Fan Commissioning

When installing any HRV unit, it's



important to get the air flow correct as per design specifications. The Fan Commissioning section allows installers to adjust the air flow accordingly. Ideal for maintenance and quick and

easy commissioning. Passcode 3333.

#### **Summer Bypass**

During summer months, it's important



to put your HRV unit into Summer Bypass to restrict the amount of hot air returning into a dwelling. With the Summer Bypass Control, it allows the user to be able to check the temperatures and

disable Summer Boost if necessary.

### Control/Switch settings

Control/Switch settings allows the user



to set the function of 5 (3 volt free and 2 Live switch) physical switch inputs on the controller. These can be set to a Kitchen Boost, Wet Room Boost (providing a different run on time), setback,

summer boost disable, or fan speed 4.





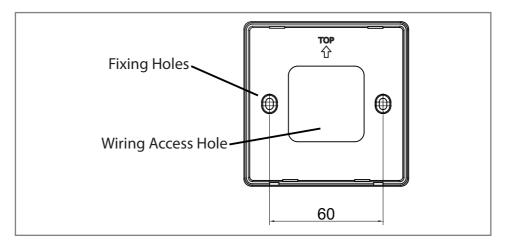
## Installation

### Location

The aura-t™ should be mounted in position convenient for the householder and where the supplied control cable will reach.

#### **Fixing**

- 1. Un-clip the front of the aura-t™ case from the Back Plate.
- 2. Thread the control cable through the hole in the Back Plate.
- 3. Fix Back Plate.
- 4. Connect the communication cable, see Wiring section.
- 5. Clip the front of aura-t<sup>™</sup> to the Back Plate.



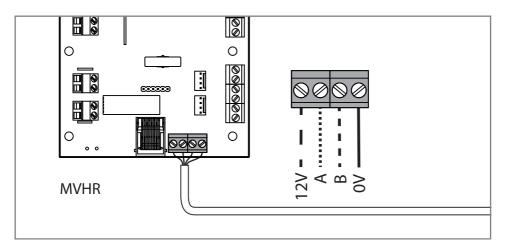
Connection to HRV



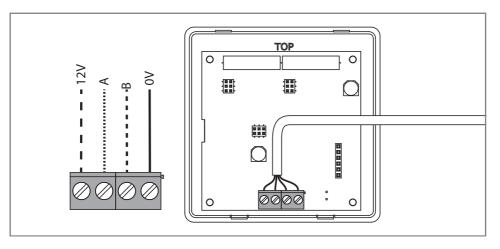


## Wiring

The aura-t™ control cable may be supplied fitted with a plug in connector for connection to the HRV, if the HRV does not have a socket remove the plug and use the wiring diagrams below.



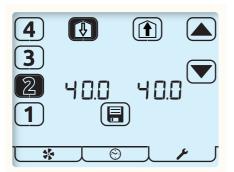
Connection to HRV



Connection to aura-t™



# Fan Commission



TP737 is for use exclusively with the HRV3 Q AR Plus Eco (TP412BAR) and displays the fan speeds as m³/hr. All other controllers display fan speed as a percentage.



Fan Commission Mode is entered by pressing the Fan Button for 5 seconds whilst in Run Mode.

A flashing item on the screen indicates it is being edited.

- Select the required fan speed using the number buttons at the left of the screen. The current fan speeds is highlighted, the HRV will run at the selected speed.
- Supply
- 2. Use the Supply to dwelling or Extract from dwelling buttons at the top of the screen to select which fan is to be adjusted.



3. Use the arrow keys to adjust the fan speed. The fan will respond in real-time to the adjustment being made.



4. Repeat the above for all fan speeds requiring adjustment.

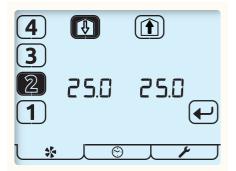


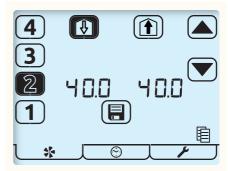
When all of the fan speeds are correct tap the Save button to store all the fan speed settings to memory and exit back to Run Mode.

Additionally Speed 1 can be set to Zero/Off. This is achieved by setting Speed 1 to 14.0 (72 m³/hr with TP737) & then pressing and holding button 1 until the value changes to 0. The Zero/Off speed can be applied to both extract and supply fans

(lacktriangle)

## Cloning







Enter Fan Commission Mode by pressing the Fan button for 5 seconds whilst in Run Mode. The HRV's fan speeds will be displayed. Tap the Fan button to display the fan speeds stored on the aura- $t^{\text{TM}}$ . The stored speeds can be viewed using the number buttons, the HRV will run at the selected speed.



To copy the stored speeds to the HRV tap the Enter button, the arrow buttons will be illuminated and the speeds could be adjusted as detailed in **Commissioning** or simply written to the HRV by tapping the Save button

#### Saving Fan Speeds to the aura-t™





To save the current fan speed to the aura-t<sup>™</sup> press and hold the Supply or Extract buttons. The copy icon will be illuminated and when save is tapped the fan speeds will be saved to the aura-t<sup>™</sup> and written to the HRV.



The aura-t™ could then be connected to another HRV and the stored speeds written or **Cloned** to it as detailed above.

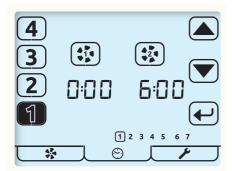


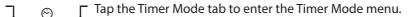


## **Timer Setup**

Timer setup is achieved in three steps

#### 1 Day Selection







1. Tap the Timer Setup Key to commence setup.



2. A ring around the day selected will blink. Change the day that the timers are to be edited by using the Arrow Keys. .



3. Tap the Enter Key to start editing timers for that day.







#### 2 Select Event & Edit Timers



In this example; tapping the Save key will save the settings; these will set the unit to run at Speed 1 between 08:00 & 12:00

1. Tap the event number to be edited [1-4] from on left hand side of the screen. The selected event will highlight.



2. Use the fan keys to select either the time the HRV will switch into Speed 1 or Speed 2.





- 3. Speed 1 key toggles between selecting Speed 1 and selecting Speed 1 with Boost Inhibit indicated by Padlock Icon.
- 4. The selected time will flash, use the arrow keys to adjust in 5 minute increments.



5. Select the other events [1-4] to edit/check their times and function as required.

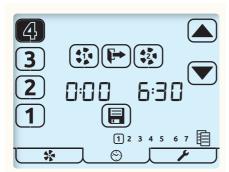


6. When all events for the current day Tap to save.



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#### **3** Copy Timers or Exit Timer Setup







2. Tap the Enter Key to commence copy procedure.



3. Tap the Exit key to start editing another day's times or press a second time to exit to Run Mode.



4. When copying; the just edited day is ringed and the following day has a flashing ring. Tap the Enter key to select this day, solid ring indicates selection or use the arrow keys to choose days and the Enter key to select/deselect.



5. When all required day(s) have been selected tap the Save key to complete the copy and return to step 1 Day Selection Screen.



6. Repeat day, event and timer setup or tap the Exit key to return to Run Mode.







#### Event timings:

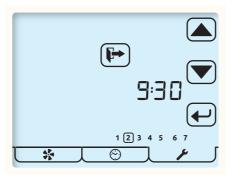
- The Speed 2 cannot be set earlier than Speed 1.
- Events where Speed 1 and Speed 2 are identical are ignored by the timer.

1) 2 3 4 5 6 7 Days	Event	Speed 1	Speed 2			
	1	00:00	06:30			
1 2 3 4 5	2	08:30	12:00			
1 2 3 4 3	3	13:30	18:00			
	4	22:30	00:00			
	1	00:00	07:30			
6 7	2	09:30	12:00			
0 7	3	14:00	18:00			
	4	22:30	00:00			
J_©[	Press & Hold the Timer Tab to load/reload the above default setting for the timer; this action also opens Timer Setup.					



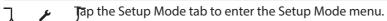


## Controller Setup









All the editable settings in the Controller Setup menu are accessed in the same way. Menu navigation is achieved by first Setting Selection and then Editing.

#### **Setting Selection**



- Arrow keys are used to select a setting, the setting will flash.
- Tapping the Enter key will allow the setting to edited.



Tap the Exit button to return to Run Mode.



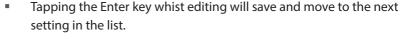


#### **Setting Editing**



Arrow keys are used to change setting value.







The order in which editable settings are displayed is as follows.



1. Time (24 hour clock)

1 2 3 4 5 6 72. Day of week.



3. Humidity threshold











4. Kitchen Overrun timer.

5. Wet room Overrun timer.



7. Passcode Disable / Fnable.

8. aura-t<sup>™</sup> with auraSMART® WiFi only



WiFi Network Connection

Reset WiFi passcode to factory default & reset connection to WiFi Direct

9. Filter Reset

If a filter change is required the reset ring will be flashing. Tap 1 the Enter key to reset or the Exit key.

If a filter change is not due but the filter timer requires resetting press the Enter key twice.

Tap Exit key to return to Run Mode.

aura-t™ with auraSMART® WiFi icon definitions

Full Connection

Connected to Local network. Internet or Server unavailable

Local network, searching for connection.



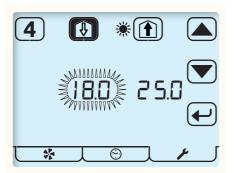






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#### Summer Bypass Setup





Use to adjust value up or



down.



Enter key.



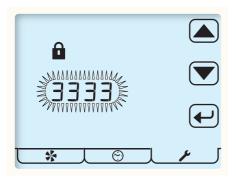


Use the Supply and Extract buttons to select which threshold is to be adjusted. Supply represents from atmosphere air temperature; Extract represents from dwelling air temperature.



Tap button[4] to enable / disable SUMMERboost. Unfilled icon (shown) represents disabled.

#### Passcode Enable / Disable





Tap Enter key to edit state.



Use to enable / disable



Passcode.

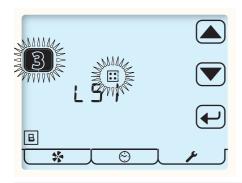
- ---- indicates Passcode is disabled.
- 3 3 3 3 indicates Passcode is enabled.





#### Switch Setup Menu

In this Sub-Menu of the Setup Menu the installer can configure the function of the HRV unit's switch inputs S1, S2, S3, LS1 & LS2 (see HRV Product Manual for details)







Exit Key.





Switch Setup menu active.

All switch inputs to the HRV unit; S1, S2, S3, LS1 & LS2 can be assigned any of the following functions.



Kitchen Boost, Speed 3.



Wet Room, Boost, Speed 3.



Speed 1, Setback



SUMMERboost disable.



Speed 4

OFF no

Off Normally Open

OFF nc

Off Normally Closed



Manual Summer Bypass



<sup>\*</sup> If Passcode is enabled, access to the Switch Setup Menu is only available from the Time setup menu.

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## Maintenance

The aura-t™ is maintenance free but will indicate when your heat recovery unit requires maintenance. Please refer to for your heat recovery unit manual for instructions.

#### **Cleaning Exterior**

For best results use a clean damp micro fibre cloth. Do not use abrasive cleaners, waxes, solvents or alcohol based cleaning products; do not use paper towels.

## **Appendix**

## aura-t™ Configurable Defaults

The table below details the default values and the range of available settings, plus any additional information about those settings the aura- $t^{\text{TM}}$  can configure. The installer should record all configuration settings in the space available.

Configurable Item	Configurable Item			Default	Configured	Additional information
		Min	Max			imormation
Time		Any Time		00:00		24 hour clock.
Day of Week		1	7	1		Two groups, five week days & two weekend days.
Boost Overrun	Kitchen	0 mins	60 mins	15 mins		
	Wet Room	0 mins	60 mins	15 mins		

Boost Overrun timers are set independently for Kitchen and Wet Room inputs.

Boost Overrun timers must be set greater than zero for any momentary switch to trigger boost. When using latching switches to initiate Speed 3, Boost, the Overrun timer will start when the latching switch is disengaged.

Internal Humidity Boost (Set point)		30%	89%	70%	
Speed 1, Setback.	Supply	14% (72)	100% (392)	18% (88)	Can be set to
	Extract	14% (72)	100% (392)	18% (78)	Zero/Off
Speed 2,	Supply	14% (72)	100% (392)	40% (179)	
Continuous.	Extract	14% (72)	100% (392)	40% (166)	
Speed 3, Boost.	Supply	14% (72)	100% (392)	70% (311)	
	Extract	14% (72)	100% (392)	70% (295)	









Configurable Item		Range		Default	Configured	Additional
		Min	Max			information
Speed 4,	Supply	14% (72)	100% (392)	100% (392)		
SUMMERboost®	Extract	14% (72)	100% (392)	100% (392)		
Summer Bypass	Extract	17°C	35°C	25°C		
	Supply	10°C	20°C	18°C		

In order for the Summer Bypass to operate the temperatures of both the air being extracted from the property and supplied from outside must be above their individual thresholds. If the temperature of the Supply air is less than 1°C cooler than the Extracted air the Summer Bypass does not operate to prevent the warmer air being supplied directly to the property.

SUMMERboost®		Enabled	Disabled	Enabled		
SUMMERboost® ope	rates in cor	niunction wi	th Summer By	pass and switche	s the fans to Sr	peed 4. It can

SUMMERboost® operates in conjunction with Summer Bypass and switches the fans to Speed 4. It can also be disabled by a latching switch if fitted.

Switch Inputs	SW1		Kitchen Boost	
	SW2		Wet Room Boost	
	SW3		SUMMERboost® Disable	

Switch options are: Kitchen Boost, Wet Room Boost, Speed 1, Speed 4, SUMMERboost disable, OFF normally open,OFF normally closed, Manual Summer Bypass. When configured as Kitchen or Wet room Boost, the switch will use the associated Boost overrun and delay times for that room.

Live Switch Inputs	LS1		Kitchen Boost	
	LS2		Wet Room	
			Boost	

Live Switch options are: Kitchen Boost, Wet Room Boost, Speed 1, Speed 4, SUMMERboost disable, OFF normally open,OFF normally closed, Manual Summer Bypass. Live Switches also use the Boost overrun and delay times for the rooms they have been configured to.

#### auraSMART° WiFi

Connection Type		WiFi Direct	
, ,			

Bracketed values refer only to the values displayed by the TP 737 (m<sup>3</sup>/hr) controller.

## Compatibility

The aura-t™ SMART (WiFi) controller is compatible with HRV units software version FW0027-0206 onwards circa June 2016.





#### **HRV ECOaura Defaults**

The table below details HRV settings and defaults, which that the aura- $t^{\text{TM}}$  CANNOT configure. During installation and commissioning they may be changed from the default values by an alternate Titon controller. There is space available in the table where the installer should record configuration settings.

Configurable Item		Range		Default	Configured
		Min	Max		
Do ant Dolou Timon	Kitchen	0 mins	60 mins	0 mins	
Boost Delay Timer	Wet Room	0 mins	60 mins	0 mins	

If the Boost Delay Timer is set greater than zero momentary switches will not switch the HRV into Speed 3 Boost. When using latching switches the HRV will not Boost until the Delay time has elapsed.

Filter Change Interval	3 Months	24 Months	12 Months	
Summer Bypass Enable/Disable	Enabled	Disabled	Enabled	
Frost Protection Mode	Off	Reduce	Off	
Frost Protection Threshold	-2°C	11.5℃	2°C	

When Frost Protection is operating in Off Mode the Supply fan is switched off when the temperature measured by the sensor on the to atmosphere side of the heat cell drops below the Frost Protection Threshold. When operating in Reduce Mode the speed of the Supply Fan is gradually reduced when the temperature drops below the threshold. At 4°C below the threshold it is stopped.

Duct Heater Enable/Disable	Enabled	Disabled	Disabled	
Duct Heater Mode	Frost	User	Frost	
Duct Heater Threshold	-4°C	16°C	4°C	
Duct Heater Hysteresis	1℃	10℃	1℃	

When operating in Frost Mode the Duct Heater uses the sensor on the to atmosphere side of the Heat Cell and switches on 2°C above the Frost Protection threshold. When operating in User Mode it uses the sensor on the from atmosphere side of the heat cell and the threshold and hysteresis detailed above. In both modes the Duct Heater will be switched off if the Supply fan speed drops below 22.5% PWM.

	Internal Humidity Boost				On	
	RH Boost Overrun		1 min	60 mins	15 mins	
ſ	RH Boost Hysteresis		1%	10%	1%	

When the Humidity of the air being extracted from the property reaches the threshold configured by the aura-t<sup>m</sup> the fans switch to Speed 3 Boost. They remain at Speed 3 until the Humidity has dropped below the threshold minus the hysteresis and the RH Boost Overrun time has elapsed.







Configurable Item		Range		Default	Configured
		Min	Max		
Room Sensor 1 Enable/Disable		Enabled	Disabled	Disabled	
Sensor Type				%RH	
Lower threshold				60%	
Upper threshold				70%	
Room Sensor 2 Enable/Disable		Enabled	Disabled	Disabled	
Sensor Type				CO <sub>2</sub>	
Lower threshold				800PPM	
Upper threshold				1400PPM	

If fitted, Room Sensors are used to provide Demand Control Ventilation based on the environmental parameter they are measuring.

Below their lower threshold they have no effect on the ventilation rate; once the lower threshold is exceeded the fan speeds proportionally increase from Speed 2, Continuous until the upper threshold is reached when the fans will be running at Speed 3, Boost. In addition to the %RH and CO<sub>2</sub> sensor detailed above Air Quality and Temperature Room Sensors may be fitted. With any Room Sensor the range of Demand Control Ventilation will be dependant on the individual sensor's characteristics and the thresholds configured by the installer.







In the event of any queries please contact the system installer. Ensure this booklet is passed to the householder once installation & commissioning of the ventilation system is complete. This Product Manual must be kept in the Home Information Pack.

Installed by:		



#### MARKETING DIVISION

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