Sensibo Installation and Usage Guide

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Overview

Sensibo makes your existing air conditioner smart and connected! Sensibo is an external device that you pair your remote controlled air conditioner with. Sensibo will work with the majority of infra-red based HVAC systems whether it is a mini split, window AC, ductless, portable, heat pump and even central air conditioners.

The Chowmain driver for Sensibo communicates to Sensibo via the Sensibo Cloud API which enables full two way control and feedback over room temperature, humidity, setpoints, hvac mode, fan speeds and swing.

The Sensibo is Wifi based/USB powered you can easily retrofit them into existing jobs. Keep stock them in the back of your van and upsell them on customer visits. The product can be purchased off the shelf from retailers such as Harvey Norman, Good Guys, Bing Lee Electrics for $159 AUD or can be purchase online from Amazon or directly from the Sensibo website.

NOTE An active and stable internet connection is required for Sensibo to operate with RTI.

Features

- No static IP address required.
- Automatic configuration of available modes based on HVAC system capabilities.
- Control over
    - HVAC mode
    - Fan mode
    - Setpoint
    - Swing
- Feedback from
    - Room Temperature
      -Humidity

Installation

The zip file that included this documentation has the rtidriver file you will need to add. The first step is to download and extract the driver from the zip file. The default location is Documents\Integration Designer\Control Drivers

Set your project up by adding Rooms and controllers to suit your setup.

Add the driver

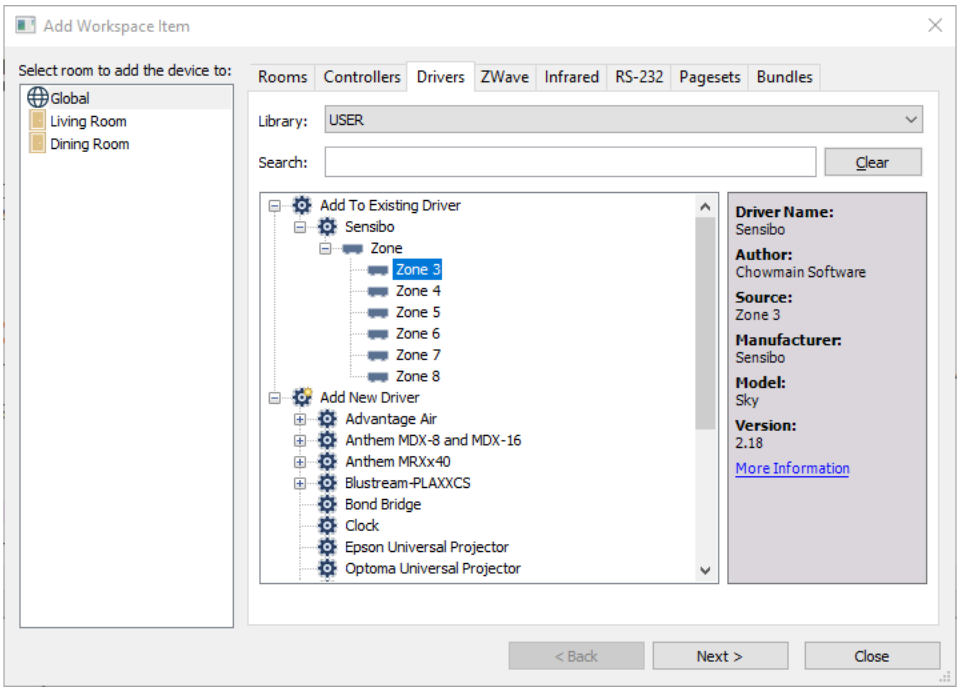
Please use the following steps to install the driver.

- Click on to the Drivers tab at the top of the Add Workspace Item window
- Select the USER library from the pull-down.
- The Sensibo driver supports multiple units (listed in the driver as zones) so select a room
- Find the Sensibo driver in the Add New Driver section and click Add Device.

If you have additional Sensibo units, they can be added to new rooms in the Add To Existing Driver section, making sure to select a zone from the Zone list.

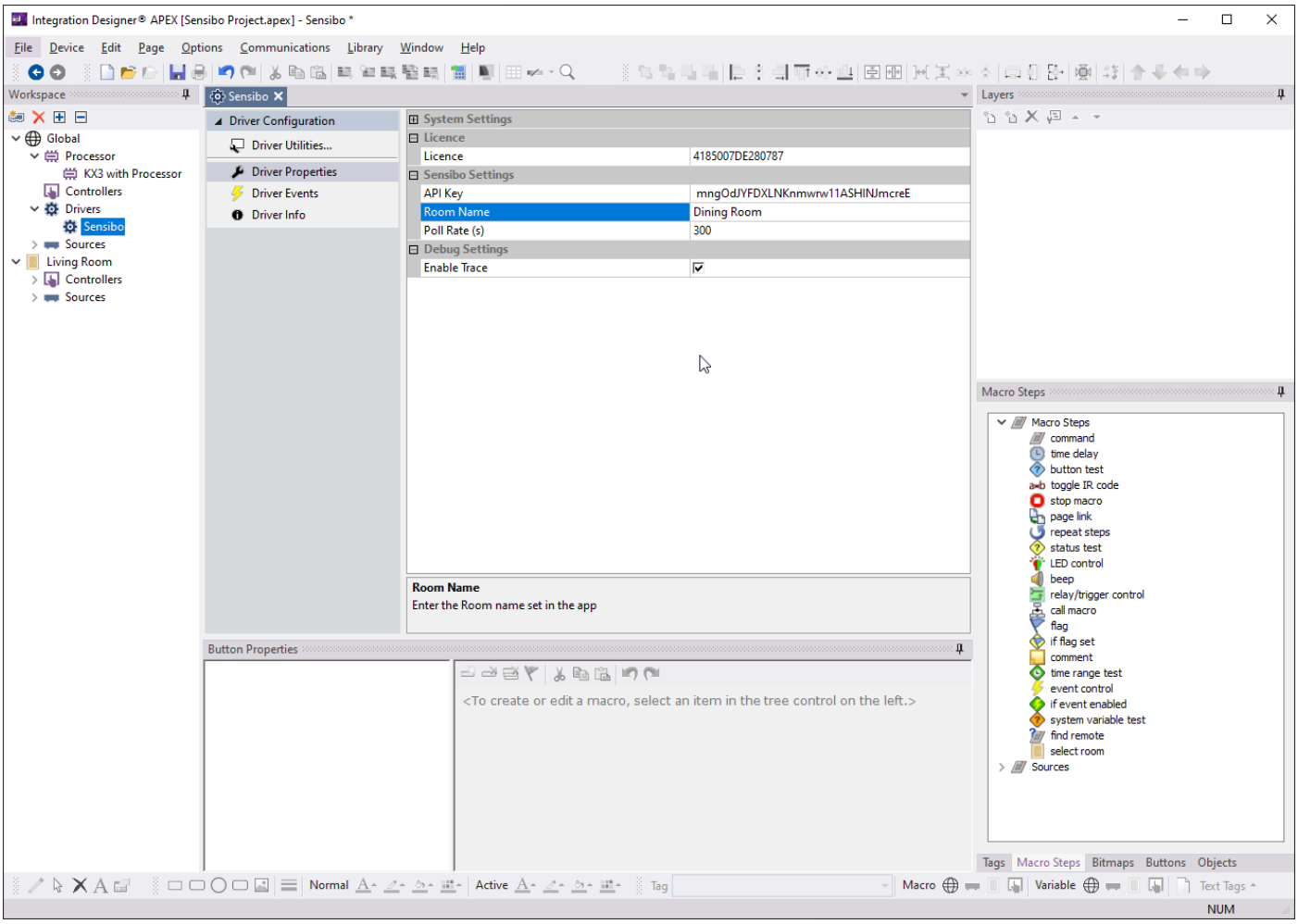
Once you all the Sensibo units have been added to your project click Next. If required change the driver name and when your done click Add Device.

The driver is now ready to configure or use.



Driver Configuration

The driver requires you to have your Sensibo setup and working. You will also require a licence. The following will take you through the steps to get all the required information you will need to configure the driver.

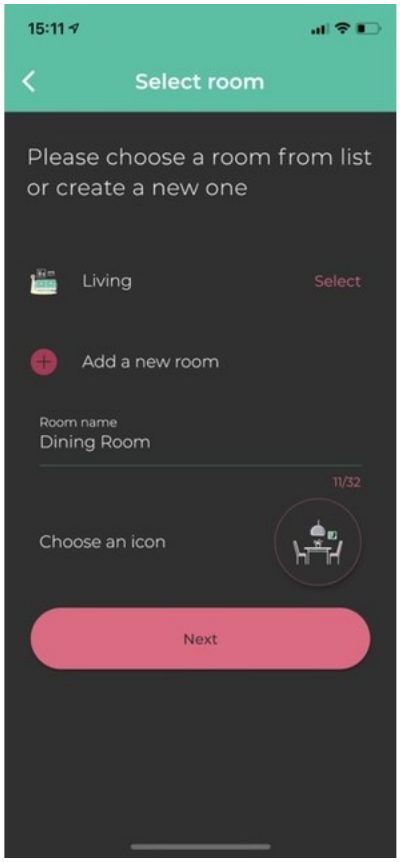


Sensibo API Key and Room Name

To communicate with the Sensibo cloud you need to have set up a room in the Sensibo app and you also need to obtain an API key.

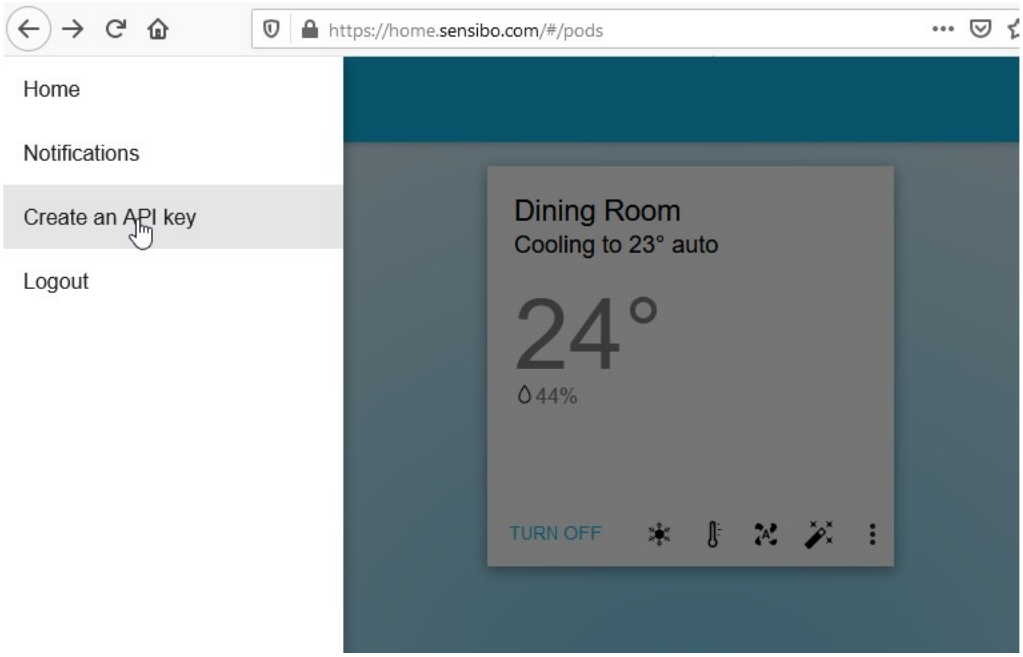
Set up a room

When you first configure the Sensibo you will be asked to add it to a room. The room name you use needs to be entered into the RTI drvier config exactly with the same case, spaces, etc.

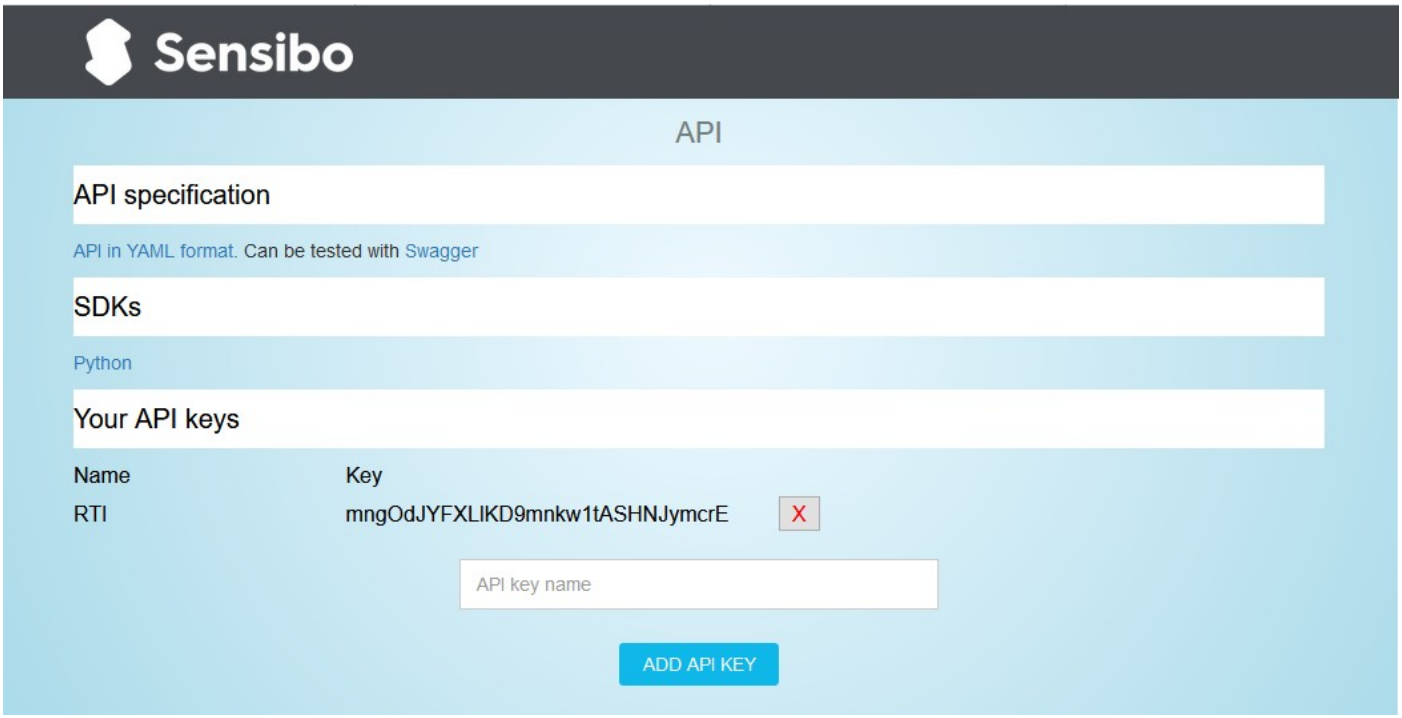


Get an API key

To get an API key you will need to log in to Sensibo at https://home.sensibo.com/login?next=/me/api with your Sensibo account details. Once you have logged in, click in the menu button in the top left corner (Hamburger Icon) then click Create an API key.



Enter a name for the API key (eg RTI) and click ADD API KEY. Note this key as you will need for the next step.



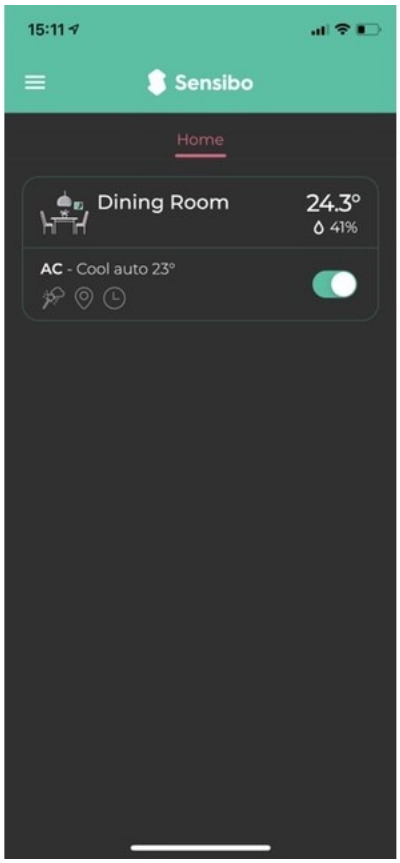
Configuring the Driver

To configure the driver you will need an API key, the room name that you have this Sensibo located in and, for continued operation past the trial period, a valid licence.

Sensibo Settings

There are three settings listed under the Sensibo Settings section of the driver config, API Key, Room Name and the Poll Rate.

The API key field needs to contain the API key you generated in the previous step.
The Room Name field needs to contain the room name for the Sensibo you want to control - you can have multiple Sensibo's on the same account. Enter the appropriate room name into this field exactly as it appears in the app (In the example below it is Dining Room).



Zone Setup

Each zone requires a name that must match the name used in the Sensibo app for the device you wish to control and the name must match exactly. The number of zones will be set by default to match the number of zones you added in the initial setup step.

Add licence to driver

The driver will work without a licence for its trail period (listed on our website), automatically entering the trial phase if you don't enter a licence key. To keep using the driver after the trial has expired you will need to purchase a licence key.

Driver Functions

The driver functions are listed below. They are zone specific, so the commands will be sent to the unit that has the name matching the one you have configured in the Driver Configuration.

Power Control

Power

The power function can be used to toggle the power to your A/C unit

Power On

The power function can be used to turn the power on to your A/C unit

Power Off

The power function can be used to turn the power off to your A/C unit

Temperature Control

Setpoint Up

The setpoint up command can be used to raise the current setpoint. The amount the temperature changes will vary depending on whether you have celcius or fahrenheit set as your temperature unit.

Setpoint Down

The setpoint down command can be used to raise the current setpoint. The amount the temperature changes will vary depending on whether you have celcius or fahrenheit set as your temperature unit.

Temperature

The Temperature command can be used to set a specific setpoint temperature. Please note the Sensibo only supports celcius so if you enter a value in fahrenheit it will be converted to the closest celcius value automatically which may not be the value you enter.

Mode

AC Mode

The AC Mode will let you set the mode of the A/C unit. The various modes are available in a drop down menu. NOTE: not all modes are available on all units so make sure to choose the modes that suit your unit.

Fan Control

Fan Speed Up

The fan speed up command can be used to raise the fan speed. The change of speed will vary depending on your A/C unit

Fan Speed Down

The fan speed down command can be used to lower the fan speed. The change of speed will vary depending on your A/C unit

Fan Speed Mode

The fan speed mode command can be used to directly set the fan speed. NOTE: not all modes are available on all units so make sure to choose the modes that suit your unit.

Swing Control

Swing Mode

The swing mode command can be used to directly set the vertical swing mode. NOTE: not all modes are available on all units so make sure to choose the modes that suit your unit.

Horizontal Swing Mode

The swing mode command can be used to directly set the horizontal swing mode. NOTE: not all modes are available on all units so make sure to choose the modes that suit your unit.

Driver Variables

The driver variables are listed below. They are zone specific, so the commands will be sent to the unit that has the name matching the one you have configured in the Driver Configuration.

Power On

The Power On variable will be true when the power is on and false when its off

Power Off

The Power Off variable will be true when the power is off and false when its on

Temperature

The Temperature variable contains the current temperature

Temperature Units

The Temperature Units variable contains the the setpoint temperature units for both the current temperature and the setpoint. It will either be C for celsius or F for fahrenheit

Setpoint

The Setpoint variable contains the current setpoint value.

Humidity

The Humidity variable contains the current humidity value, if your unit supports it

Mode

The Mode variable contains the currently set mode. Note the available modes will depend on the unit your have configured.

Fan Level

The Fan Level variable contains the name of the Fan level that is currently set. This uses the names built in to Sensibo. If you would prefer to use your own names then use the Fan Index instead.

Fan Index

The Fan Index variable contains the current index that represents the fan speed. It starts from 0 for off and will go up by 1 for each new level. Note that the number of levels is determined by the unit you have

selected so some experimentation may be required to get the correct values. This index value can be used to set your own string values for the fan modes.

Mode - Cool

The Mode - Cool variable will be true if the current mode is cool, and false otherwise.

Mode - Heat

The Mode - Heat variable will be true if the current mode is heat, and false otherwise.

Mode - Fan

The Mode - Fan variable will be true if the current mode is fan, and false otherwise.

Mode - Dry

The Mode - Dry variable will be true if the current mode is dry, and false otherwise.

Mode - Auto

The Mode - Auto variable will be true if the current mode is auto, and false otherwise.

Fan Speed - Quiet

The Fan Speed - Quiet variable will be true if the current fan speed is quiet, and false otherwise.

Fan Speed - Low

The Fan Speed - Low variable will be true if the current fan speed is low, and false otherwise.

Fan Speed - Medium Low

The Fan Speed - Medium Low variable will be true if the current fan speed is medium low, and false otherwise.

Fan Speed - Medium

The Fan Speed - Medium variable will be true if the current fan speed is medium, and false otherwise.

Fan Speed - Medium High

The Fan Speed - Medium High variable will be true if the current fan speed is medium high, and false otherwise.

Fan Speed - High

The Fan Speed - High variable will be true if the current fan speed is high, and false otherwise.

Fan Speed - Auto

The Fan Speed - Auto variable will be true if the current fan speed is auto, and false otherwise.

Fan Speed - Strong

The Fan Speed - Strong variable will be true if the current fan speed is strong, and false otherwise.

Swing Stopped

The Swing Stopped variable will be true if the current vertical swing setting is stopped, and false otherwise.

Swing Fixed Bottom

The Swing Fixed Bottom variable will be true if the current vertical swing setting is fixed bottom, and false otherwise.

Swing Fixed Middle

The Swing Fixed Middle variable will be true if the current vertical swing setting is fixed middle, and false otherwise.

Swing Fixed Top

The Swing Fixed Top variable will be true if the current vertical swing setting is fixed top, and false otherwise.

Swing Full

The Swing Full variable will be true if the current vertical swing setting is full (moving), and false otherwise.

Horizontal Swing Stopped

The Horizontal Swing Stopped variable will be true if the current horizontal swing setting is stopped, and false otherwise.

Horizontal Swing Range Center

The Horizontal Swing Range Center variable will be true if the current horizontal swing setting is range centre, and false otherwise.

Horizontal Swing Fixed Center

The Horizontal Swing Fixed Center variable will be true if the current horizontal swing setting is fixed centre, and false otherwise.

Horizontal Swing Fixed Left Right

The Horizontal Swing Fixed Left Right variable will be true if the current horizontal swing setting is fixed left/right, and false otherwise.

Horizontal Swing Fixed Left

The Horizontal Swing Fixed Left variable will be true if the current horizontal swing setting is fixed left, and false otherwise.

Horizontal Swing Fixed Right

The Horizontal Swing Fixed Right variable will be true if the current horizontal swing setting is fixed right, and false otherwise.

Horizontal Swing Full

The Horizontal Swing Full variable will be true if the current horizontal swing setting is full (moving), and false otherwise.

Setpoint Available

The Setpoint Available variable will be true if the setpoint is available for the selected unit and false otherwise

Heat Available

The Heat Available variable will be true if the heat mode is available for the selected unit and false otherwise

Cool Available

The Cool Available variable will be true if the cool mode is available for the selected unit and false otherwise

Fan Available

The Fan Available variable will be true if the fan mode is available for the selected unit and false otherwise

Dry Available

The Dry Available variable will be true if the dry mode is available for the selected unit and false otherwise

Auto Available

The Auto Available variable will be true if the auto mode is available for the selected unit and false otherwise

Low C

The Low C variable holds the value of the lowest setpoint temperature available for the selected unit in celsius

High C

The High C variable holds the value of the highest setpoint temperature available for the selected unit in celsius

Low F

The Low F variable holds the value of the lowest setpoint temperature available for the selected unit in fahrenheit

High F

The High F variable holds the value of the highest setpoint temperature available for the selected unit in fahrenheit

Fan Speed - Quiet

The Fan Speed - Quiet variable will be true if the current fan speed is quiet, and false otherwise.

Fan Speed - Low

The Fan Speed - Low variable will be true if the current fan speed is low, and false otherwise.

Fan Speed - Medium Low

The Fan Speed - Medium Low variable will be true if the current fan speed is medium low, and false otherwise.

Fan Speed - Medium

The Fan Speed - Medium variable will be true if the current fan speed is medium, and false otherwise.

Fan Speed - Medium High

The Fan Speed - Medium High variable will be true if the current fan speed is medium high, and false otherwise.

Fan Speed - High

The Fan Speed - High variable will be true if the current fan speed is high, and false otherwise.

Fan Speed - Auto

The Fan Speed - Auto variable will be true if the current fan speed is auto, and false otherwise.

Fan Speed - Strong

The Fan Speed - Strong variable will be true if the current fan speed is strong, and false otherwise.

Swing Stopped Available

The Swing Stopped Available variable will be true if the vertical swing mode stopped is available for the selected unit and false otherwise

Swing Fixed Bottom Available

The Swing Fixed Bottom Available variable will be true if the vertical swing mode bottom is available for the selected unit and false otherwise

Swing Fixed Middle Available

The Swing Fixed Middle Available variable will be true if the vertical swing mode fixed middle is available for the selected unit and false otherwise

Swing Fixed Top Available

The Swing Fixed Top Available variable will be true if the vertical swing mode fixed top is available for the selected unit and false otherwise

Swing Full Available

The Swing Full Available variable will be true if the vertical swing mode full (moving) is available for the selected unit and false otherwise

Horizontal Swing Range Center Available

The Horizontal Swing Range Center Available variable will be true if the horizontal swing mode range centre is available for the selected unit and false otherwise

Horizontal Swing Fixed Center Available

The Horizontal Swing Fixed Center Available variable will be true if the horizontal swing mode fixed centre is available for the selected unit and false otherwise

Horizontal Swing Fixed Left Right Available

The Horizontal Swing Fixed Left Right Available variable will be true if the horizontal swing mode fixed left/right is available for the selected unit and false otherwise

Horizontal Swing Fixed Left Available

The Horizontal Swing Fixed Left Available variable will be true if the horizontal swing mode fixed left is available for the selected unit and false otherwise

Horizontal Swing Fixed Right Available

The Horizontal Swing Fixed Right Available variable will be true if the horizontal swing mode fixed right is available for the selected unit and false otherwise

Horizontal Swing Full Available

The Horizontal Swing Full Available variable will be true if the horizontal swing mode full (moving) is available for the selected unit and false otherwise