AIRTOPIA

ENHANCED CLIMATE CONTROL

Control4 driver

Installation and Usage Guide

Revision: 1.3
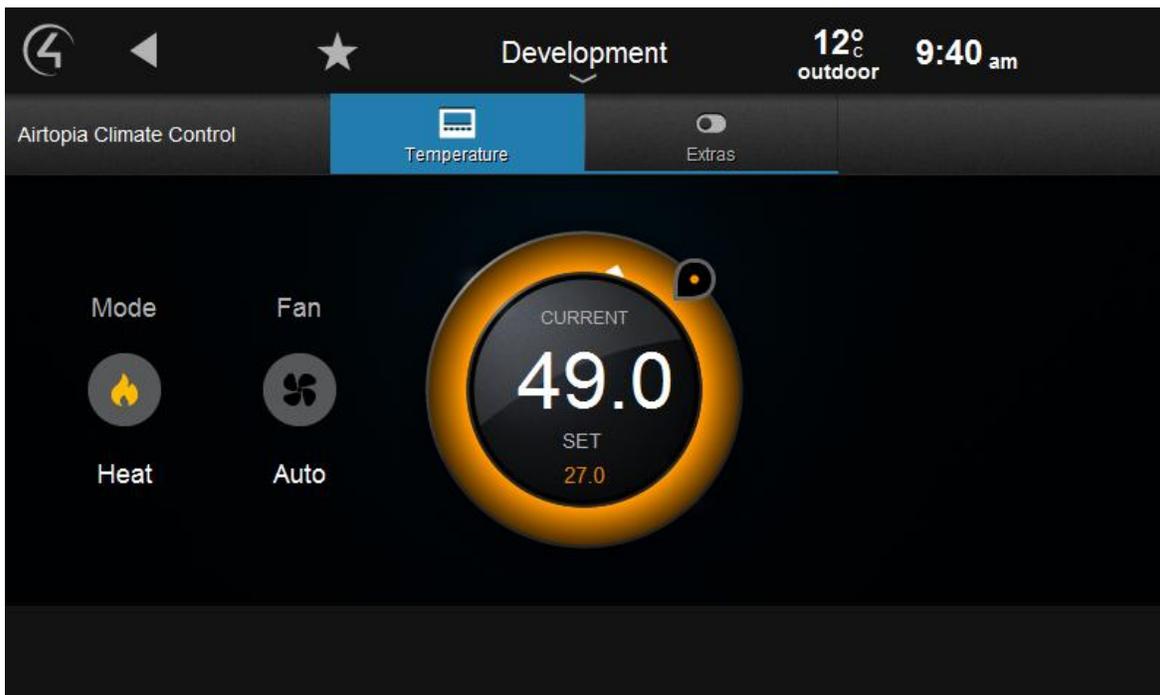**Date:** Wednesday, March 30, 2016

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Figure 1 - Example user interface

Overview

The Airtopia is a device that allows you to take control over leading split system HVAC units using infra red control with feedback from a temperature sensor and CT energy clamp. The Airtopia device will utilise its online cloud database to find the correct code set for your HVAC split system and as such eliminate the time consuming and tedious task of learning IR codes. For more information about the Airtopia device please visit their website (http://www.airtopia.global/).

Our driver enables us to integrate infrared controlled HVAC systems using the Airtopia hardware into the Control4 system with feedback. This provides a total solution for what would be a one way system.

Features

- Heat, Cool & Auto HVAC modes supported.
- Auto, Low, Medium, High & On Fan modes supported.
- 14 – 34 degrees of Set Point supported.
- Temperature feedback onto navigator screens.
- Power Usage Feedback into a variable for use in programming or other drivers.
- Contact Closure Feedback (used for power status or other)
- Default values to be sent for non Control4 compliant functions
    - Horizontal Swing Mode
    - Vertical Swing Mode
    - Quiet Mode
    - Powerful Mode
    - Long Mode
- Other functions accessible via the Control4 programming tab.
    - Horizontal Swing Mode
    - Vertical Swing Mode
    - Quiet Mode
    - Powerful Mode
    - Long Mode
- Use the original HVAC remote and it will feed back through the Airtopia to Control4 with the new status of the system.

Change Log

Version #20160330 - 30-MAR-2016
- Added contact closure settings. You can now set it up so that if the contact closure if closed then assume the device is off or if it is open then assume the device is at its previous hvac mode. You can also bind other devices and program off of it however note that since this is a polled function feedback is not instantaneous (may take upto 10 seconds for feedback to come in).
- Improved polling by 300%. This is due to API changes which makes it easier to get data without flooding the network with commands.
- Added code to check if the value is already set. If it is it will not set that value. This will make the system a bit more efficient.

Version #20151023 - 23-OCT-2015
- Removed Chowmain Licencing and branding. This driver now belongs to iConnectBMS Pty Ltd. All sales and support enquiries should be forwarded to www.airtopia.global

Version #2015105 - 05-OCT-2015
- Fixed issue where driver reverts to Celcius on director reboot.

Version #20150909 - 09-SEP-2015
- Updated to support Fahrenheit conversion

Version #20150505 - 05-MAY-2015
- inIRt has been rebranded to Airtopia. Driver has been rebranded to suit.

Version #20150407 - 07-APR-2015
- Resolved issue where logs on 2.6 systems would fill out controller storage causing system stability issues. This only effects systems where people have set the debug logs to 'print and log' or 'log' and have forgotten about it over longer periods of time.

Version #20150217- 17-FEB-2015
- Resolved issue where proxy would turn off then on again

Version #20141119- 19-NOV-2014
- Converted from C4I to C4Z filetype

Version #20140722 - 22-JUL-2014
- Initial Release

Driver Installation

1. The driver you have downloaded will be in a zip file. Double click on this file to open it in your preferred zip program (WinZip, WinRar, etc.).

2. Extract the c4i file to the My Documents\Control4\Drivers directory. If you are using Windows 7 or 8 this will be extracted to the Libraries\Documents\Control4\Drivers directory.
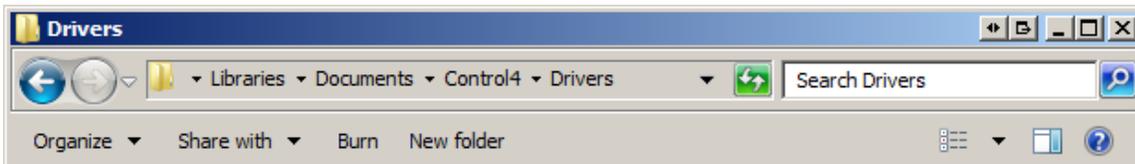
3. You are now ready to add and configure the driver via the Composer Pro software.

Adding the driver to your project

Note: Prior to starting this section please first set up the Airtopia device by following the installation manual included with the product. In order to maintain reliable communications you will need to set the device up as a static IP address or have a DHCP reservation for the device.

1. Launch the Composer Pro application and connect to your project

2. In the '**System Design**' page select the '**Search**' tab on the right hand side.

3. Type in '**airtopia**' in the search field and hit the enter button

4. Double click on the '**Airtopia Climate Control**' driver to add it to your project

5. Highlight the '**Airtopia Climate Control**' driver on the left hand side of the System Design page.

6. Select '**True**' in the dropdown box for the '**Show Driver Config**' property.

Show Driver Config	True ▼

7. Set up the IP Address for the unit. The port should be left as default unless the manufacturer changes the port number in future.

IP Address	192.168.1.124
Port	30000

8. Due to limitations in Control4 no additional controls can be added to Control4's user interfaces apart from Mode and Fan Speed. As such properties have been given to provide a means to always set up the defaults for when you turn on the system for the following.

Horizontal Swing Default	do not send ▼
Vertical Swing Default	do not send ▼
Quiet Default	do not send ▼
Powerful Default	do not send ▼
Long Default	do not send ▼

Note: If the Default is set to '**do not send**' then it will not send a command for that particular function.

9. If you wish to utilise the Contact Closure in the device then please specify how you want to use it here.
    a. If you want to use it to tell the driver that the HVAC unit has been turned on or off manually (eg the user uses the original IR remote to turn off the HVAC unit) then use **HVAC on off status**.
    b. If you want to connect it upto another device to use in general Control4 programming then set it to **Other** and bind a sensor based device to the Airtopia driver connections under the Connections tab in Composer.

Note: As the Airtopia device requires polling for feedback contact closure status will take upto 10 seconds to feed back into Control4. Please do not use this for time critical applications.

Contact Closure Mode	HVAC on off status ▼
	HVAC on off status
Show Device Status	Other

10. You should now be able to view the Device Status by changing selecting '**True**' in the dropdown box for the '**Show Device State**' property.

Show Device Status	True ▼

11. You will notice that the Connection Status is set to ONLINE. If it is OFFLINE then you will need to make sure that the unit is on the correct IP address.

Connection Status	ONLINE

Programming other commands

Due to limitations in Control4 no additional controls can be added to Control4's user interfaces apart from Mode and Fan Speed. As such commands can be programmed to fire using the Control4 programming tab. This can be assigned to Custom Button press events or assigned to zigbee keypads on the wall for example. Note that not all mode changes are available and are determined by the unit you are using.

- Horizontal Swing

Set Horizontal Swing Mode ▼

mode	auto ▼
	auto
	left
	mid_left
	mid
	mid_right
	right
	outward
	inward
	off
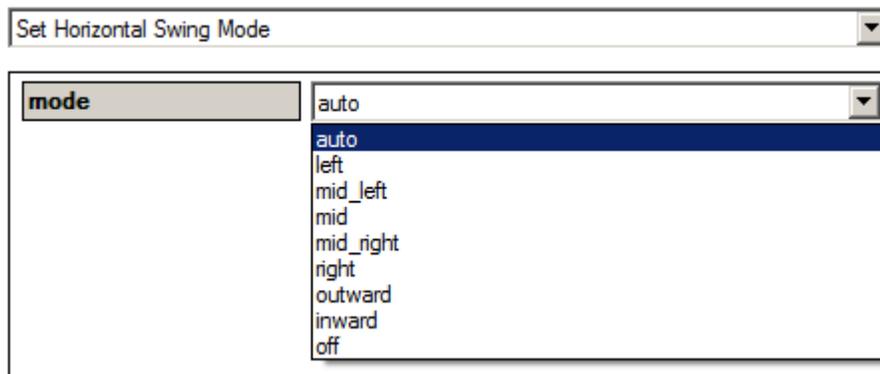
- Vertical Swing (0 = 0°, 1 = 22.5°, 2 = 45°, 3 = 67.5°, 4=90°, off = default rest position)

Set Vertical Swing Mode

mode	off
	0
	1
	2
	3
	4
	off

- Quiet Mode

Set Quiet Mode

mode	on
	on
	off

- Powerful Mode

Set Powerful Mode

mode	on
	on
	off

- Long Mode

Set Long Mode

mode	on
	on
	off