

## Airtopia C-Bus HVAC Application Note

This application note is provided as a guide to configuring the C-Bus HVAC to operate with the Airtopia controller. Please regularly check the Airtopia web site for updates to this App note (by version number) as new features are regularly added to the Airtopia controller and there may also be changes made to the C-Bus product. Templates are available from our website support page.

### Introduction

The Airtopia controller is capable of integrating with the C-Bus HVAC application layer and once programmed, the application can

- View and change the power (on/off) state
- View and change the mode (cool, heat, dry etc)
- View and change the fan speed
- View and change the set point (target temperature)
- View and change the swing control
- View the room temperature (optional)
- View the air conditioners power consumption (optional)

This application note describes how to easily configure the C-Bus HVAC application so it can operate natively with the default values that exist in the Airtopia controller.

Use Toolkit to set the Airtopia Unit Address.

This will be the device ID address for the measurement channel and also for the HVAC and Trigger Group.

Use **HVAC** application protocol and the **Trigger Control** application to transmit your required Air Comfort Controls.

### Templates for HVAC application are available

#### HVAC - 'Set Zone Mode'.

Set the **Zone Group** to the Device Address and **Zone list** to unswitched.

Use the **Temperature** for desired 'Set Point'

Use **Mode** for switching device OFF or ON with Heat, Cool, Heat/Cool (auto), Fan Only.

*Note: For mode Dry see Dehumid application*

Set **Plant type** to 'reverse cycle'

#### HVAC – 'Humidity'

For Mode Dry, set to 'dehumidify'

## Fan

Auto and fixed fan speeds

- Fan Speed Auto - select 'fan automatic'
- Fan Speeds (fixed) - select 'fan continuous' and choose a fan speed.

The Airtopia control will automatically equally scale the available fixed air conditioner fan speeds against the continuous 0 – 63 selection, Example if an air condition has 3 fixed speeds available,

- Low (1) is set by fan speeds between 0 – 21
- Med (2) is set by fan speeds between 22 - 42
- High (3) is set by fan speeds between 43 – 63

## Swing (optional)

**HVAC - 'Trigger Control'**

For swing control, use the 'Trigger Control' Application

Trigger Group	Action Selector (level)	Function
01	00	Swing Off
01	01	Swing On Vertical
01	02	Swing On Horizontal
01	03	Swing On Vertical + Horizontal

## Measurement Application

Use the measurement application to view temperature and power

### Temperature (optional)

The temperature (DTS) is an optional display that will show the reading from the temperature sensor if one is connected to the Airtopia controller.

Airtopia Group Address Channel 0

*Note: only use an Airtopia supplied Digital Temperature sensor.*

### Power (optional)

The power is an optional display that will show the reading from the current sensor (CT) if one is connected to the Airtopia controller.

Airtopia Group Address Channel 1

*Note: only use an Airtopia supplied Current sensor.*