ATLONA
Connecting Technology

# IP to Relay Command Converter for Velocity Control System
AT-VCC-RELAY-KIT



The Atlona AT-VCC-RELAY-KIT is an accessory for the Atlona Velocity™ Control System that provides conversion between IP control commands and relay / sensor signals. This Velocity Control Converter is very compact and can be placed anywhere a device requires control and is not IP-capable. The VCC-RELAY-KIT is remotely powered through Power over Ethernet (PoE), or locally from a USB power source. The primary unit installs onto any surface via a convenient mounting dock. A simple "click" locks it into place for a secure, reliable installation. The control port module supports DIN rail installation, and features four relay outputs plus four sensor inputs. The inputs and outputs are both configurable for various operating modes.

## Package Contents

1 x AT-VCC
1 x AT-VCC-RELAY

## Operating Notes

- The Velocity Command Converter must be on the same network as the Velocity Gateway (AT-VGW-250) or it will be unable to sync for control.

- The AT-VCC-RELAY-KIT is PoE, to power the unit, simply plug it into a PoE compatible network switch. If the network switch is not PoE capable, a PoE injector (purchased separately) or USB can be used.

- All devices (AT-VCC, Velocity, AT-VTP, switchers, etc) should be set to static IPs or the DHCP IP address reserved for each individual device.

⚠ **IMPORTANT**: Velocity Gateway (AT-VGW-250) must be set up before the AT-VCC-RELAY-KIT is fully functional.

## Panel Description
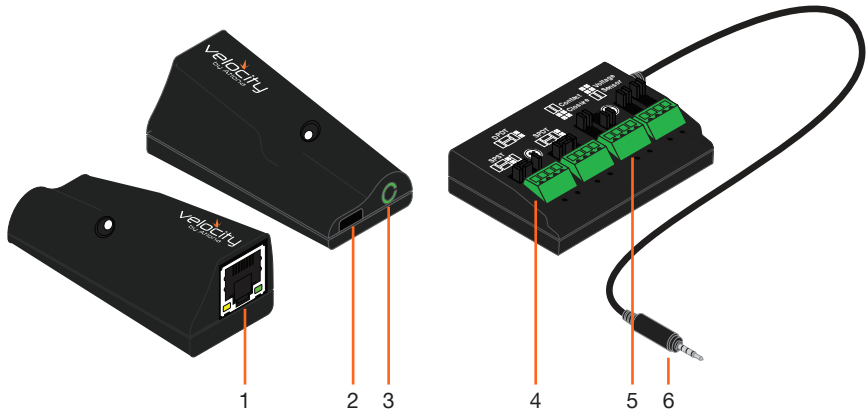


**1  Ethernet**
Connect an Ethernet cable from this port to the same network as the Velocity Gateway.

**2  USB**
Optional - Connect a mini USB to USB cable here for power.

**3  3.5mm Port**
Connect to a VCC relay connector.

**4  Relay**
Connect relay here, adjusting the jumpers to set the unit to the correct mode.

**5  Sensor**
Connect sensor here, adjusting the jumpers to the correct mode.

**6  3.5mm Connector**
Connect the 3.5mm connector to the 3.5mm port of the VCC.

## Relay

The relay has 4 terminals which vary in function depending on how the jumpers above the ports are set.

**NOTE:** Relays can only work up to a maximum of 24V and 500 mA current.
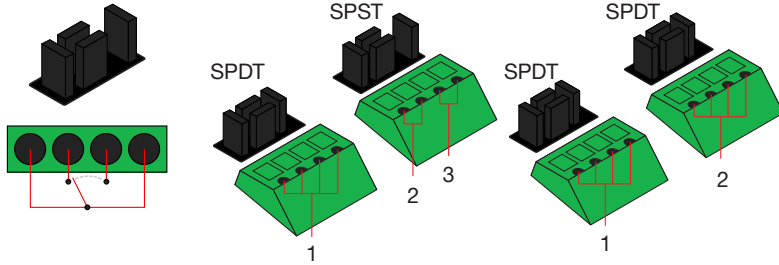
**Single Pole, Single-Throw (SPST)**

Place the jumpers as shown below, this can be done to a single connector or to both to create up to 4 independent relays.



SPST

SPST
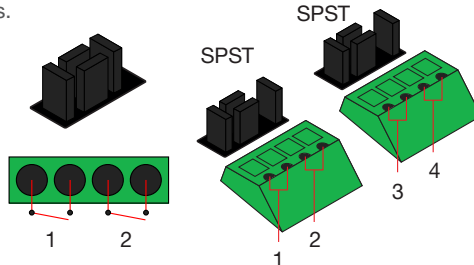
**Single Pole, Double-Throw (SPDT)**

Place the jumpers as shown below, this can be done to a single connector or to both to create up to 3 independent relays.

**Double Pole, Double-Throw (DPDT)**

When DPDT is selected within Velocity, it will create 2 relays that work simultaneously. If one port is opened, the other will open at the same time. The DPDT is a variant of the SPDT and the jumpers must be placed exactly as below to work.
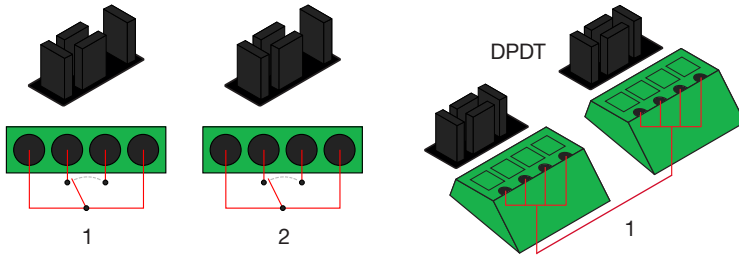
## Sensor

The ports can be set to sense either voltage or contact closure. Contact closure will react to the change in current, while voltage will react to voltage as low as +/- 3V or as high as +/- 24V.
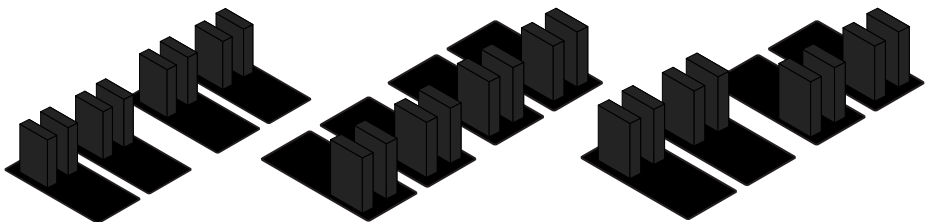
Both ports are set to Contact Closure

Both ports are set to Voltage Sensor

The ports are set to Contact Closure for the first two ports and Voltage Sensor for the last two.

## IP

The AT-VCC is set to DHCP by default. If the network does not support DHCP, it will automatically set the AT-VCC to the static IP of 192.168.1.70 after 30 seconds.

### VHelp and webGUI

Velocity will find the VCC when scan network is used, but if the VCC needs to be set up off site first, the software VHelp can be used.

1    Connect the AT-VCC to a network switch (PoE is best if a PoE switch is not available, a power injector or mini USB to USB cable may be used).

2    Download VHelp from the resource tab of http://atlona.com/AT-VCC-RELAY-KIT.

3    Unzip the file to the local PC

4    Double-click the VHelp executable to open the program. Vhelp will start discovery as soon as the program is opened.
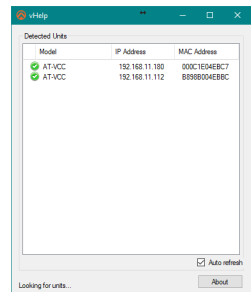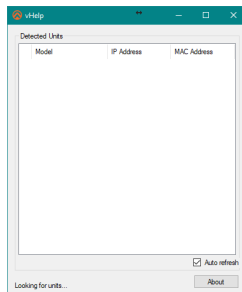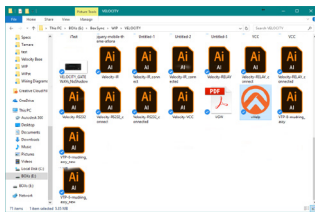


5    Double click on the VCC (to determine the correct one, look on the bottom of the VCC for the MAC address). The PC default browser will open to the AT-VCC webGUI.

**NOTE:** It is best to use the webGUI to set up the static IP only, as set up in Velocity will override any settings selected in the VCC page of the webGUI.
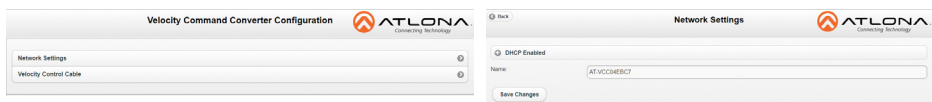


6    Select Network Settings to open the IP configuration page.

7    Select the DHCP Enabled header, this will disable DHCP and allows IP settings to be edited.
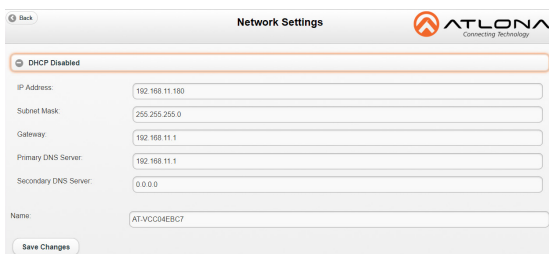


8    Type in the IP details to match the network details of the Gateway. e.g. If the Velocity gateway is located at the IP of 192.168.12.15, then the VCC should be set to an IP within the 192.168.12.XXX range that has not already been used.

## Installation and Set Up

> **NOTE:** Installation of the Velocity Command Converter can only be done after the VGW-250 has been set up. View the AT-VGW-250 Installation Guide and Velocity Manual for instructions.

1    Connect the Relay connector into the 3.5mm port on the unit.

2    Connect the Ethernet connector into the front port of the VCC.

    a    If the Ethernet cable is connected to a non PoE switch, use a PoE injector (purchased separately) or a mini USB to USB cable to a USB port on a wall port or device that supports USB power.

3    Open any browser on the network and type in the IP address of Velocity.

4    Select the **≡** button from the top left corner and select **Sites**.
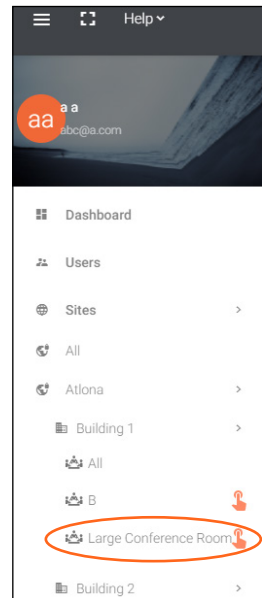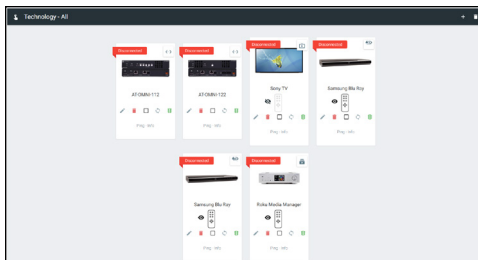


5    Select the building that corresponds with the room of the VCC.

6    Select the room the VCC is located in. A new screen will take over the window and display the technology in the room.

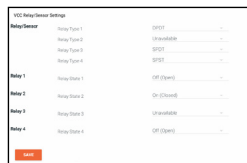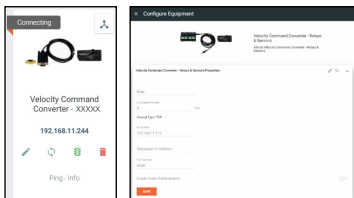7    Select the + button located at the top right corner of the room. A new menu will open.
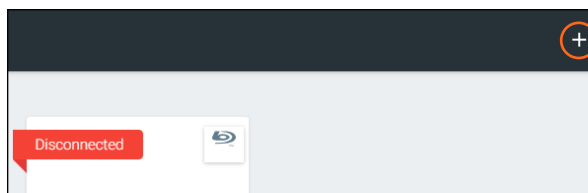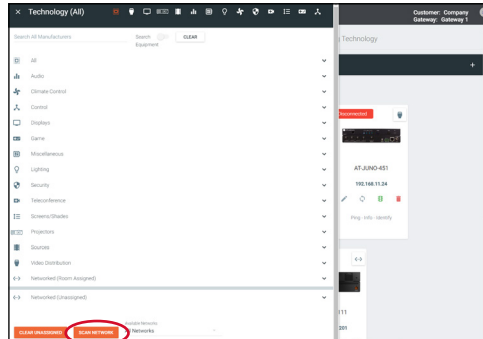
8    Press the scan network button. All Atlona devices found will appear in the unassigned list.

9    Select the Add button next to the VCC. A new pop up will appear.
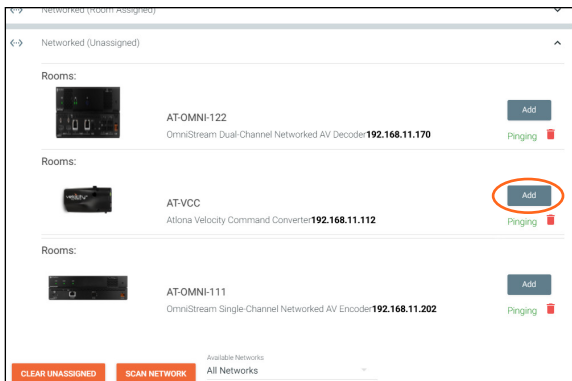


10    Select VCC Relay/Sensor. The AT-VCC will be added to the room.

11    Select edit on the VCC box. A new side menu will open.



12    Select the options that correspond with how the VCC will be used.

**NOTE:**  The sensor ports should automatically fill, but if there is no port information under Sensor Ports, fill in the following settings: Port 1 - 9156, Port 2 - 9157, Port 3 - 9158, Port 4 -9159.

13    Refer to the Macros, Event Macros, and Room Triggers section of the Velocity manual for setting up relay control.

## Connection Diagram

Version 1

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