

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

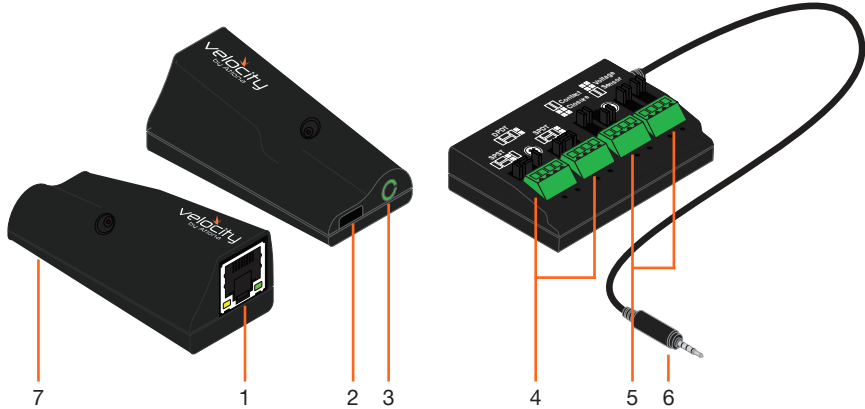
Operating Notes

- The 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-HW) 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.

7 Factory Reset Button

Press and hold this button to reset all settings to the factory default.

Relay

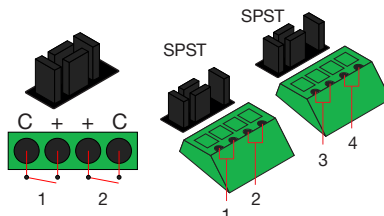
The relay has 4 terminals which vary in function depending on how the jumpers above the ports are set.



NOTE: Relays can only work up to a maximum of 24V and 500 mA current.

Single Pole, Single-Throw (SPST)

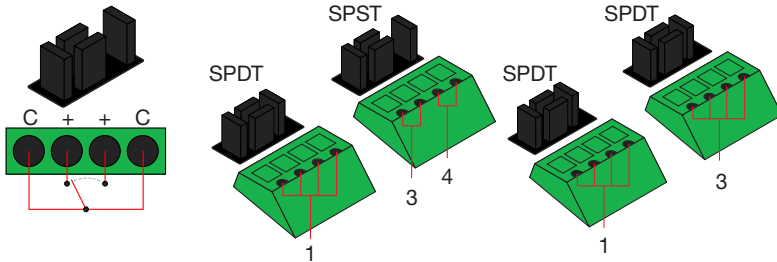
Place the jumpers as shown below, this can be done to a single connector or to both to create up to 4 independent relays.



Single Pole, Single-Throw is best used when using a device with a simple open/close (on/off) circuit is being used.

Single Pole, Double-Throw (SPDT)

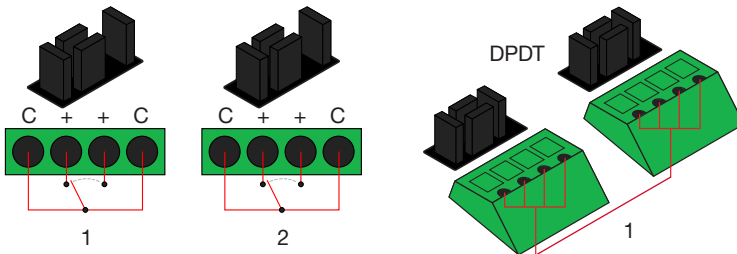
Place the jumpers as shown below, this can be done to a single connector or to both to create up to 3 independent relays.



Single Pole, Double-Throw is best used when two circuits are going to one common, such as: switching between two input circuits or selecting two power sources.

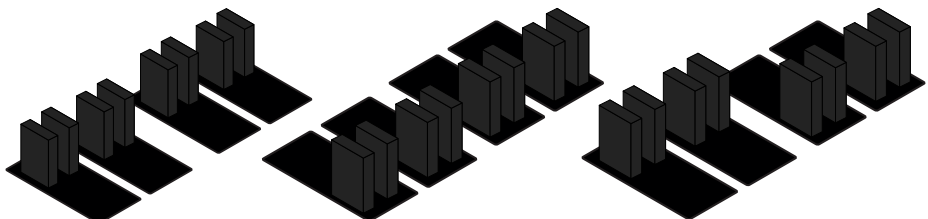
Double Pole, Double-Throw (DPDT)

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.

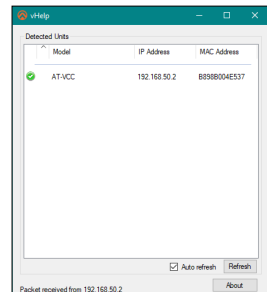
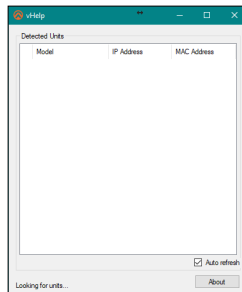
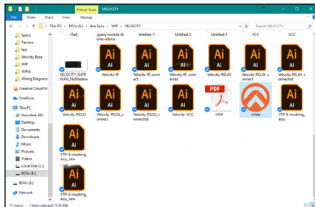
IP

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.

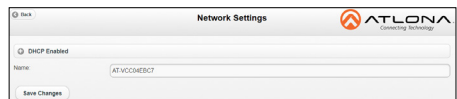
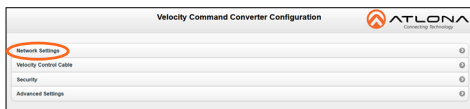
VHelp and webGUI

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.

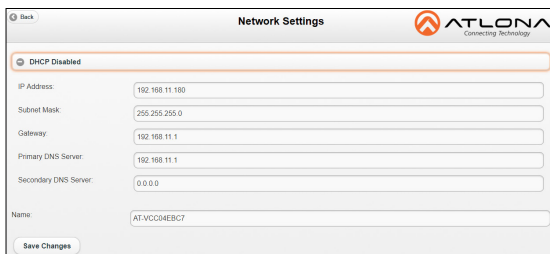
- 1 Connect the Relay connector into the 3.5mm port on the unit.
- 2 Connect the AT-VCC to a network switch (PoE is best if a PoE switch is not available, a power injector or mini USB to USB cable may be used).
- 3 Download VHelp from the resource tab of <https://atlonac.com/product/at-vcc-relay-kit/>.
- 4 Unzip the file to the local PC
- 5 Double-click the VHelp executable to open the program. Vhelp will start discovery as soon as the program is opened.



- 6 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.



- 7 Select Network Settings to open the IP configuration page.
- 8 Select the DHCP Enabled header, this will disable DHCP and allows IP settings to be edited.



- 9 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.

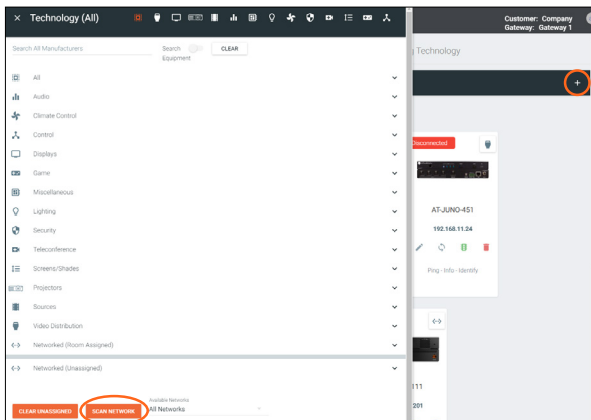
- 10 Press the Save Changes button.

NOTE: Connecting the VCC to Velocity can only be done once Velocity has been set up. View the Velocity Manual for instructions.

- 11 Open any browser on the network and type in the IP address of Velocity.
- 12 Log in and select the ≡ button from the top left corner and select **Control**.
- 13 More options will appear. Select **All Rooms**. A new screen will open.
- 14 Select the Edit Room Technology button on the room tile. The Modify Technology screen will open.



- 15 Select the building that corresponds with the room of the VCC.
- 16 Select the room the VCC is located in. A new screen will take over the window and display the technology in the room.
- 17 Select the + button located at the top right corner of the room. A new menu will open.



- 18 Press the scan network button. All Atlona devices found will appear in the unassigned list.



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



20 Select the **VCC Relay/Sensor** from the drop down menu.

21 Press the **ADD VCC TO ROOM** button. A VCC tile will appear in the room.

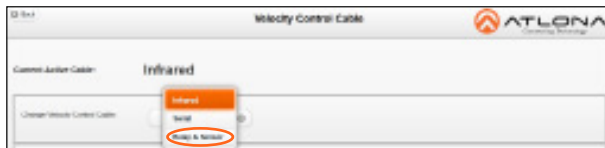
The VCC is now ready to use. Refer to the Macros, Event Macros, and Room Triggers section of the Velocity manual for setting up relay control.

i NOTE: If for some reason the unit isn't syncing or the settings aren't being set, they can be set up manually through the VCC webGUI.

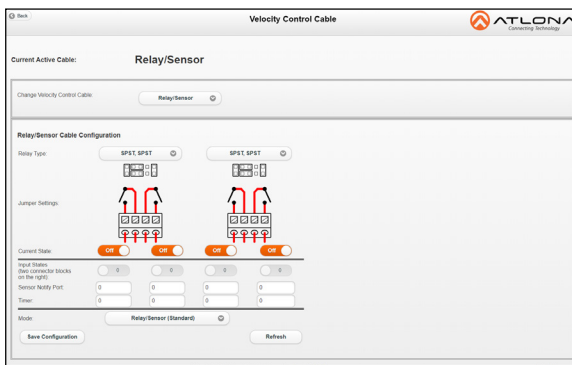
- Type the VCC's IP into a web browser to open the Velocity Command Converter Configuration.
- Select **Velocity Control Cable** from the two options.



- Select **Relay/Sensor** from the drop down menu.



- Select the Relay/Sensor configurations.



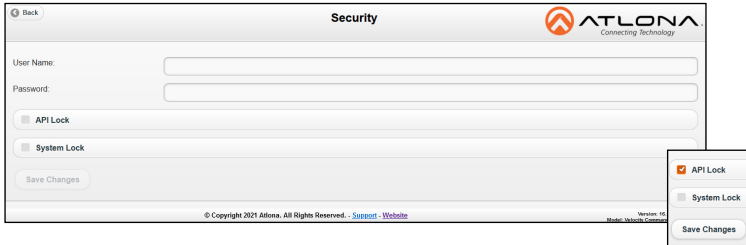
i NOTE: Ensure to select the Relay type that matches how the connector was pinned. Refer to **Relay** and **Sensor** sections if unsure how to set up the connector.

Security

Security options have been provided with the VCCs, to set between web UI, API, and system lock.



- Select **Security** from web UI menu. A new page will open.



- To protect the web UI from being altered, a username and password can be set, once a username and password has been set, select the **Save Changes** button to enable login.
- To lock the configuration of the VCC, select **API lock** (after setting a username and password) and press the **Save Changes** button. With the API lock set, no configuration changes can be made through TCP commands and must be changed through the web UI.
- System Lock should not be used unless all configuration and routing has been set and will not need to be changed. Once **System Lock** has been selected and the **Save Changes** button pressed, no device changes can be made unless the unit is factory reset through the button on the side of the VCC.

Advanced Settings

If needed, the system can be rebooted or reset from the Advanced Settings page. Select it from the home page menu.



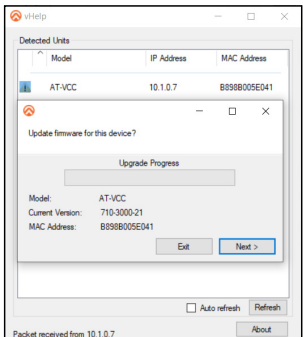
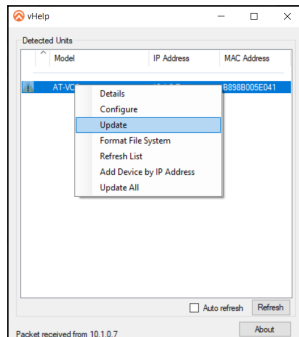
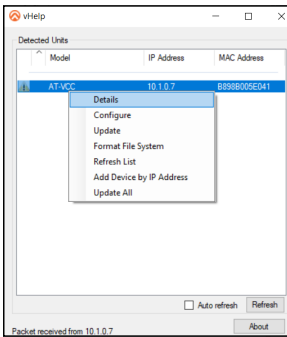
- **Reboot** - Use this button to restart the unit.
- **Factory Reset** - Use this to set everything back to default settings. This will reset the unit to DHCP, which may cause the IP to change and the unit to need to be rediscovered.



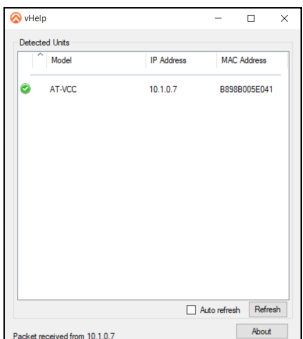
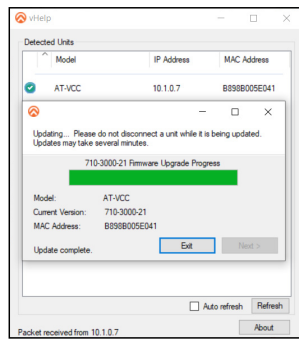
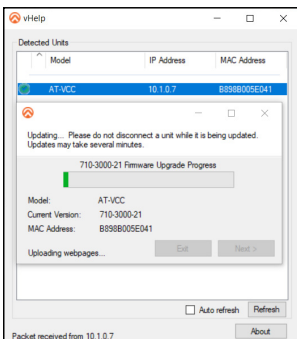
Firmware Update

To update the VCC the most recent vHelp software will be needed. The vHelp has the firmware built into the software and will automatically detect if the VCC is on the most recent firmware.

- 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 <https://atlon.com/product/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 Once the unit is found, if it is out of date an exclamation mark will display next to it. Right click to open the drop down menu.
- 6 Select Update from the drop down list. A new pop up will appear.



- 7 Press the Next button to start the update. The progress bar will cycle through green. This process can take up to 2 minutes.
- 8 Once the update is complete, press Exit. The unit will now show a green check mark next to it to show the unit is up to date.



Notes



Notes

Warranty

To view the product warranty, use the following link or QR code:

<https://atlona.com/warranty/>.



English Declaration of Conformity

The English version can be found under the resources tab at:

<https://atlona.com/product/at-vcc-relay-kit/>.



Chinese Declaration of Conformity 中国RoHS合格声明

由SKU列出於:

<https://atlona.com/about-us/china-rohs/>.

