Wiring and Installation Guide

AV-CP6 Series Control Panel Instructions

CONTROL PANEL

POWER/RESET

OPEN

STOP

CLOSE
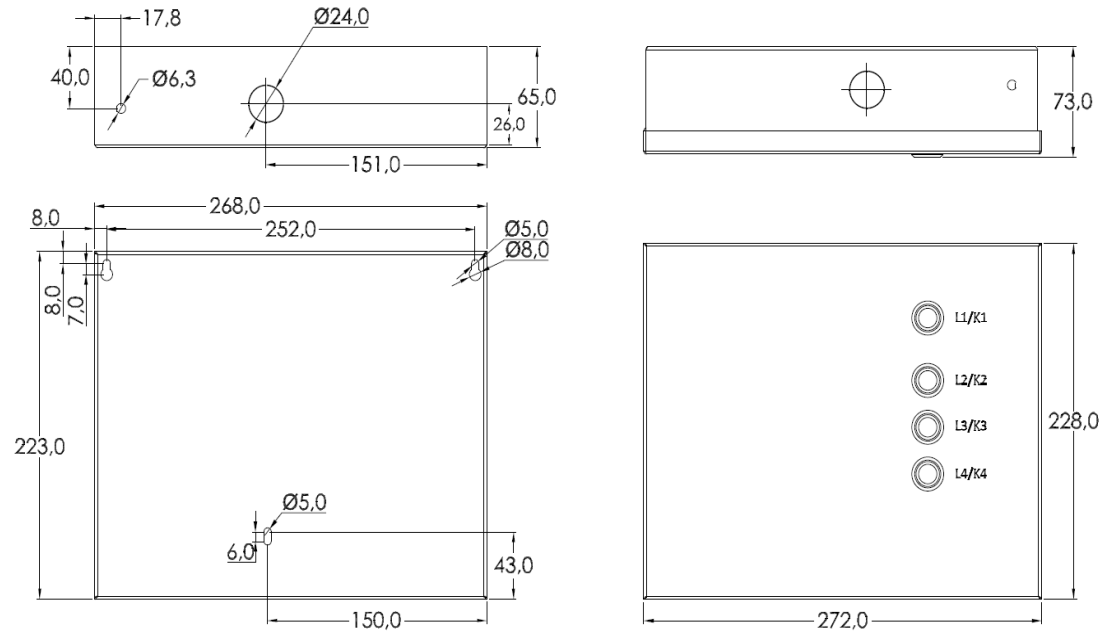
Dimensions above are for the AV-CP611 series controllers only.

L1/K1

L2/K2

L3/K3

L4/K4

Model	Power(W)	Channel	Vin(VAC)	Vout(VDC)	Frequency	Size(mm)
AV-CP611-10A	240	1	110/230	24	433.92MHz	272*228*73mm
AV-CP611-20A	480	1	110/230	24	433.92MHz	272*228*73mm
AV-CP621-40A	960	1	110/230	24	433.92MHz	292*258*87mm

LED/KEY	Color	Status	Function
L1 / K1	Blue	On/Off	AC power, Reset
L2 / K2	Green	On/Off/Flash	Open
L3 / K3	Red	On/Off	Stop
L4 / K4	Yellow	On/Off	Close

AV-CP6 Series Control Panel Wiring
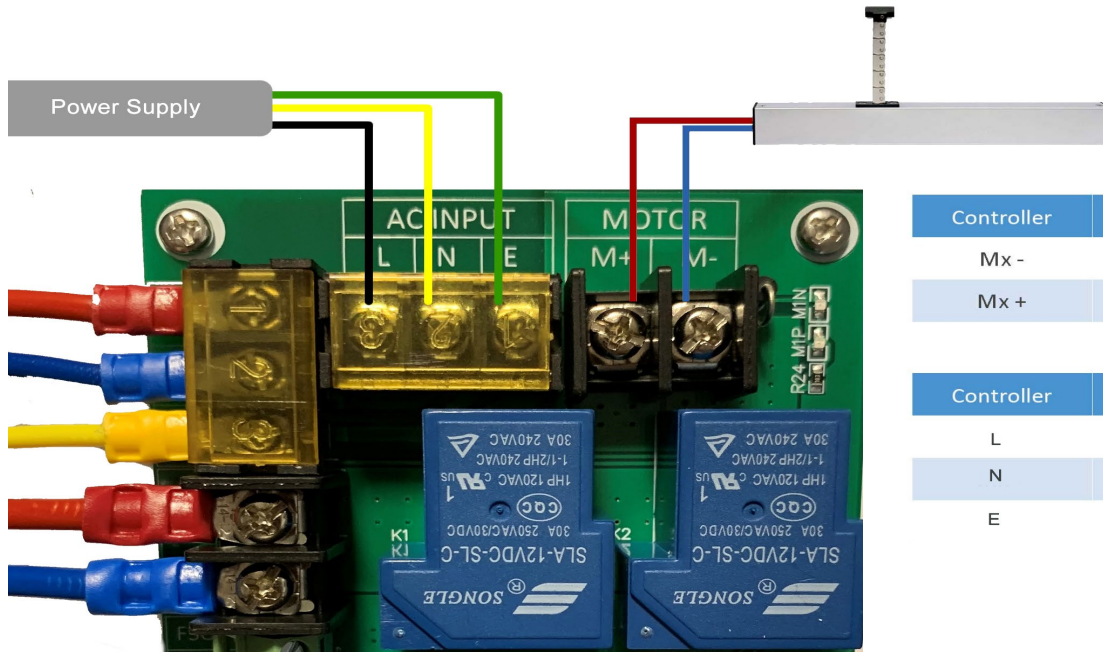
Controller	Vent Opener
Mx -	Blue
Mx +	Brown

Controller	Power Supply
L	Line - Black
N	Common - White
E	Ground - Green

Set DIP switch to ON when no controller is used

Power Control Relay Wiring
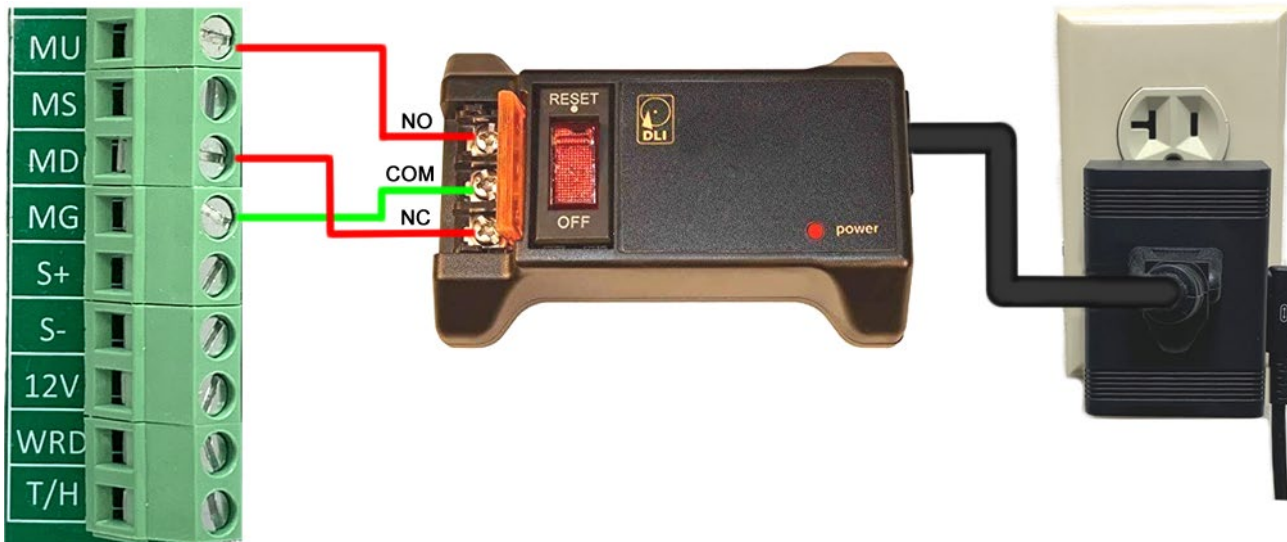
Set DIP switch to 1 if using the AV-TH001 controller

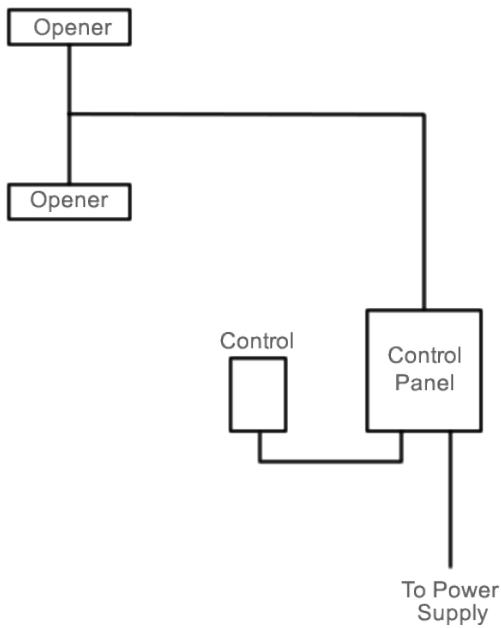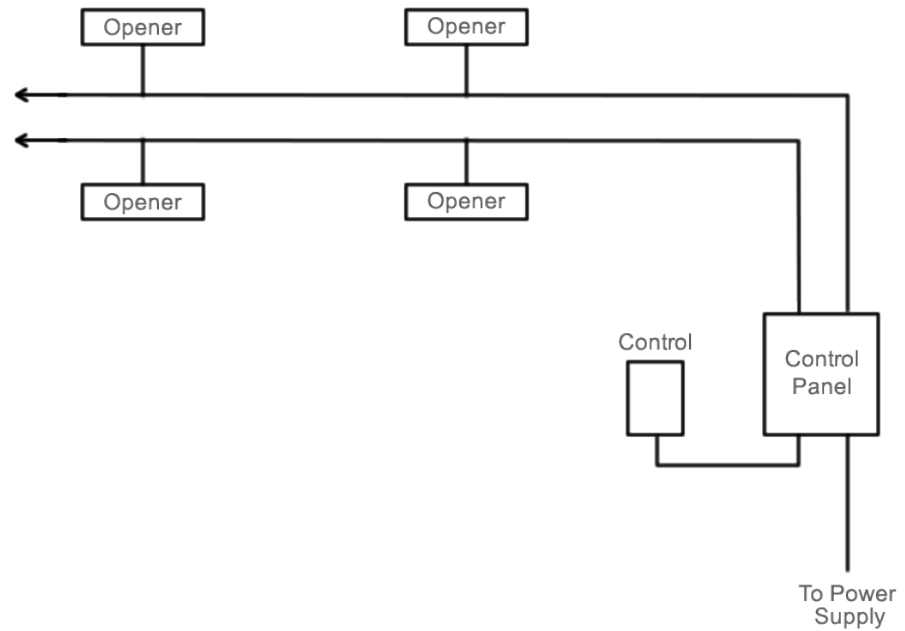*DIP switch is located in lower right corner of the control panel circuit board.

FIGURE 3

FIGURE 4

The wiring method in Figure 3 is commonly used in applications where 4 or less openers will be installed with less than 40' of total wiring run. 14 gauge wire can be used in this scenario. Figure 4 divides the power to the openers into multiple lines. It is recommended for applications of 4 or more openers and/or wiring runs over 40'. 14 gauge wire can still be used with this method for up to 8 openers with a wiring run of 40' or less (per line). 12 gauge wire should be used for longer runs.

AV-SCE Vent Opener Instructions
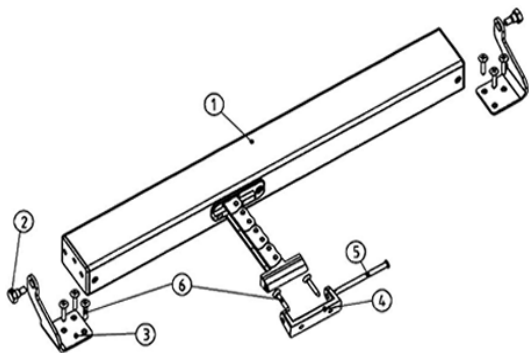
1. Actuator
2. Hexagonal head screw
3. Fixed Bracket
4. Fixed Holder
5. Pin
6. M5 self tapping screw

Unit : mm
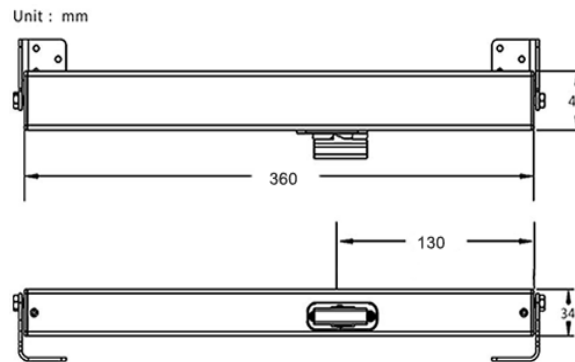
Opener Specifications

Voltage: 24V DC

Max Current: 1 amp

Max Lifting Weight: 55 lbs.

Arm Travel Distance: 12"

Time to Open / Close: ~ 35 seconds

Operating Temp Range: -4F to 149F

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1. Attach the fixed brackets to the actuator. Place the opener on the frame where the arm will attach as close the center of the vent as possible, and mark the location of both brackets.

2. Unscrew the fixed brackets, and place them where marked on the frame (mounting position shown is for Cross Country greenhouses and optimal position may vary for other brands).

3. Use the provided Hex head screws starting with the center hole. They are self-tapping so no pre-drilling is needed. For Cross Country greenhouses the top hole is not used because the screw will damage the covering / glazing on most models.

4. Mount the actuator to the fixed brackets, and place the fixed arm holder on the vent where the arm will make contact when extended. Use the Phillips head screws to attach the fixed arm holder to the vent frame. Press open on the control panel or remote to move the head of the arm in position to secure it to the holder with the attached bolt.

5. Fully open and close the vent to make sure it operates smoothly. Repeat this process for the rest of the openers.
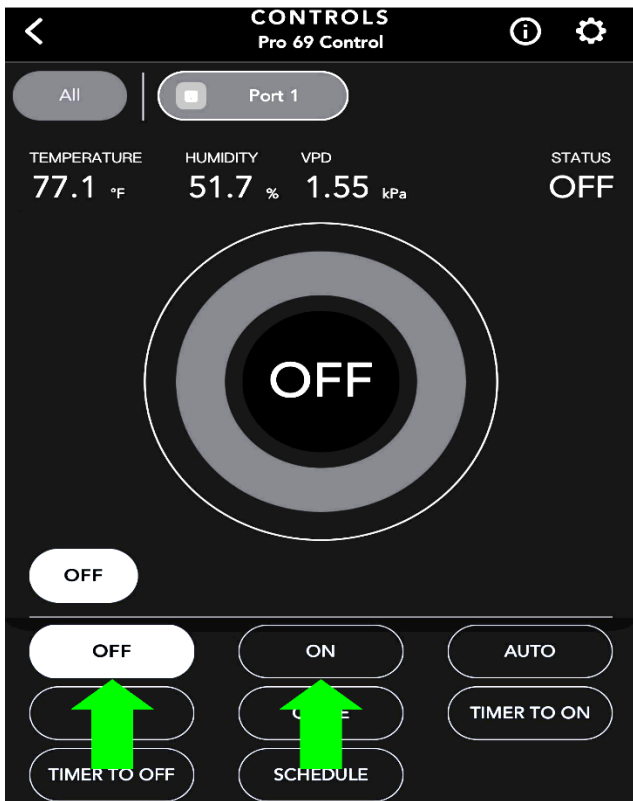
AC Infinity Control and Relay Operation

When using a 3rd party controller, it takes the place of the manual OPEN, STOP, CLOSE buttons on the front of the control panel and the remote control. It is not recommended using them when the relay is on (switched to RESET) because this can cause the openers to not function correctly. If you want to manually control the openers, it is recommended you use the manual ON/OFF function on the AC Infinity controller or its phone app instead.

The picture to the left shows what the screen looks like on the phone app. You can use it to access the controller by WIFI or Bluetooth if WIFI is not available. If you want to control the vent openers with the buttons on the control panel or remote control, you will need to switch the power control relay to the OFF position. Doing so will disable the AC Infinity controller.

AV-RT111 Remote Control Instructions

Pairing Remote with Control Panel

1. Power the control panel on or press reset if already on. Press and hold the STOP button for 5 seconds.
2. Press UP on the remote for 15 seconds. The LED on the remote should flash 3 times and turn off during this process.

Remove Pairing with Control Panel

1. Power the control panel on or press reset if already on. Press and hold the STOP button for 5 seconds.
2. Press DOWN on the remote for 15 seconds. The LED on the remote should flash 3 times and turn off during this process.
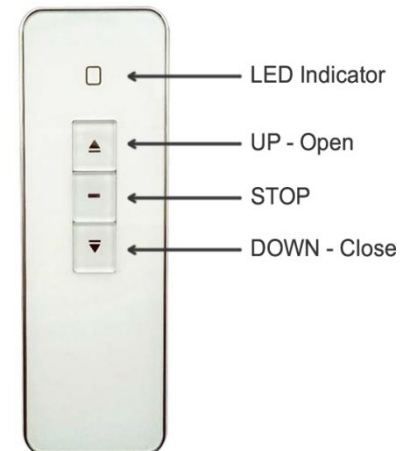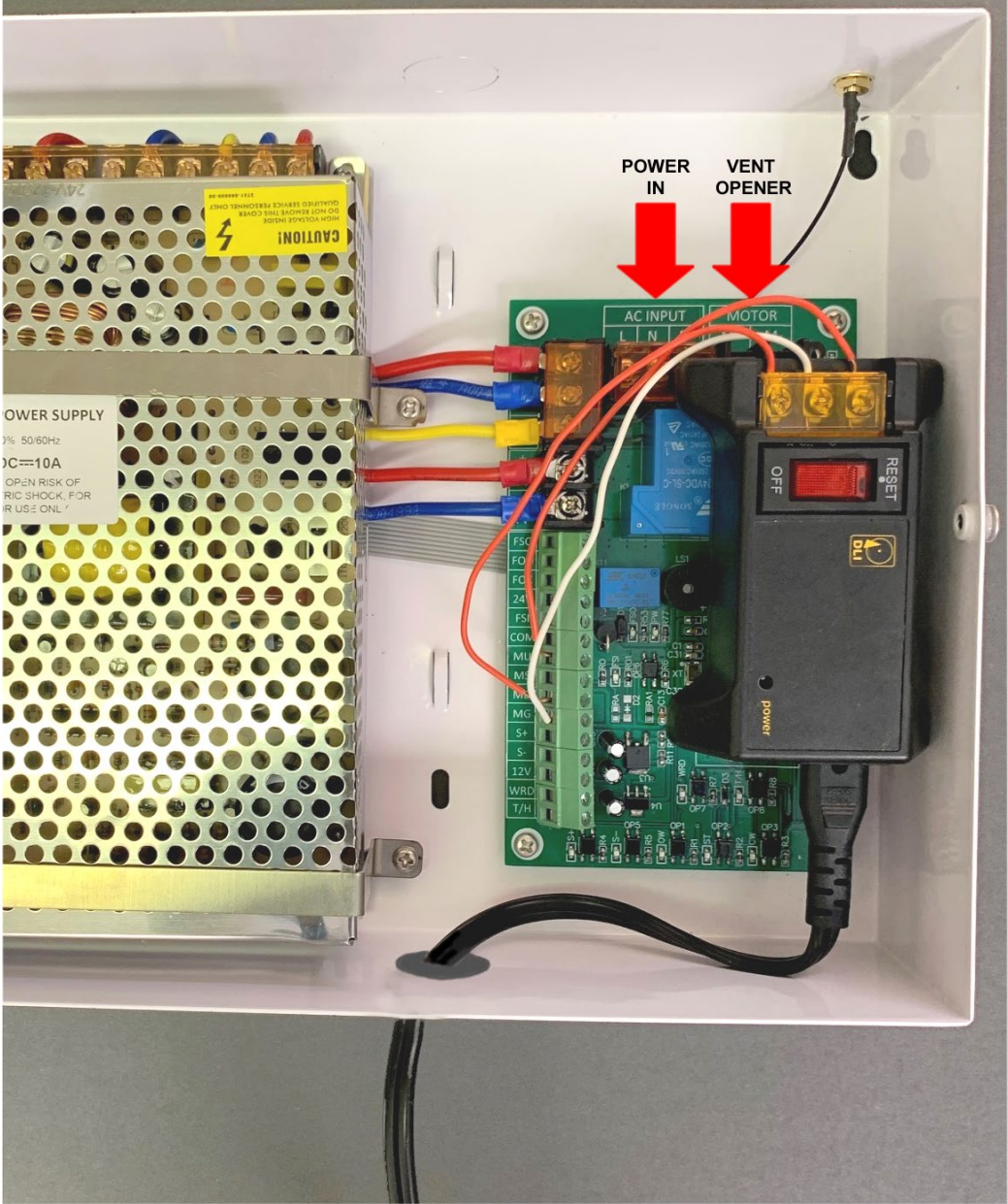
Typical Control Panel Installation

Typical control panel setup

Power control relay can be stored inside the control panel