Overview

The EasyTouch II ScenePoint DR (dual relay) station is a single gang wall box configuration containing two relays. Station design includes the ability to learn travel time of shade motors through Design Center software, allowing the ability to place shades at any position from fully open to fully closed. Wired ScenePoints are powered via the local line feed, and communicate with the system through the 2-wire station bus. Before the station is programmed, the relays function in default mode as *independent* toggle relays or *interlocked* toggle relays. Once the station is programmed, buttons can perform any operation that a standard station supports. The station's loads may be controlled by any other keypad, IR input, RS 232, timed event, etc. EasyTouch II DR relay stations are available in two through five button configurations, single gang. Stations may be ganged together in any combination up to 4-gangs. Switch between interlock and non-interlock operation modes via a switch located on the back of the station (station is shipped in *interlocked* mode). The EasyTouch II Scene-Point DR relay station joins Vantage's premiere line of backlit stations. Each button is evenly backlit with a built in diffuser and three color LED providing an array of color choices*, lighting ***only the lettering*** on each button. The backlit lettering color also indicates the button's status. Programming provides the user with the option to personalize the color for ON and OFF status. Additional custom status colors may be programmed as desired. The EasyTouch II also features an ambient light sensor for automatic day/night backlight intensity control* and a built-in IR receiver. See Design Center software for EasyTouch II ScenePoint faceplate and button finishes.

*Notes to Installer

EasyTouch II LEDs

Current technology does not allow LED suppliers to guarantee color values. It is common to have a slight difference among LEDs, however, this is not too noticeable with backlit engraving. Historically, blue and red LEDs are more consistent than green LEDs. Because of this slight variation it is recommended that one or two stations be *pre-programmed* with the colors the client is requesting and shown to the client for their final approval before ordering and installing.

EasyTouch II Auto Backlight

Issue:

The Auto Backlight feature for EasyTouch II will not change all stations at the same time.

Description:

EasyTouch II incorporate a built-in light sensor. When enabled through Vantage software the sensor will change the brightness of the button LEDs. For example, in normal light the buttons would be bright. In extremely low light conditions, as at night time with all the lights off, the buttons would be dimmed to a very low level. Many conditions lend to the phenomenon of keypads not changing at the same time. The location of each keypad is primary. In multiple gang situations more light may be on one part of the multi-ganged station causing the auto backlight feature to operate differently in that section of the multi-gang. Many other lighting factors, even less noticeable to the human eye, can affect, auto backlight sensors, intended results.

Solution:

Because manufacture variations are inherent in light sensors and the conditions mentioned above are inevitable, it is not always practical to use the Auto Backlight feature. This feature may be turned off in Software. If the Auto Backlight feature is not working as the client and installer intends, Vantage Controls recommends using one of the following two suggestions to control the brightness of EasyTouch II buttons.

1. Edit the *LED* style for EasyTouch II buttons by creating two Modes*. Each mode can use the same ON/OFF colors at very different intensities. Create two Time Controls. One for Sunrise and one for Sunset. Program the time controls to assign the appropriate Mode.

-OR-

2. Create the two Mode LED style as described in step one. Install a Vantage light sensor and program the light sensor to change the modes of all the EasyTouch II stations at once in an area.

Specifications

Description	Specification
Station Dimensions	Height = 4.3" -or- 109mm Depth = 1.38" -or- 35mm Width = 2.5" -or- 64mm
Weight	4.9oz. -or- 139g
Voltage	120VAC ~ 60/50Hz
Max. Load Each Relay	5A (600W @ 120V) General Purpose 5A (600W @ 120V) Ballast 5A (600W @ 120V) Tungsten 5A (600W @ 120V) Drapery Motor 5A (600W @ 120V) Fluorescent
Minimum Load Required	0 Watts
Load Types	Incandescent, Cold Cathode, HID, Fluorescent, Constant-Speed Motors
Built-in Lightning / Surge Protection	MOV surge suppression High Voltage meets IEEE C62.41 (6000V & 3000A) Low Voltage meets ITU-T K.20
Cooling	None required
Backlit Buttons	3 color LEDs
Auto LED Intensity	Yes, Built-in/standard
IR Receiver	Yes, Built-in/standard
Status Indicator	Microprocessor Status LED
Station Bus Connections	24V / 36V Station Bus
Station Bus Wiring	2C, 16AWG / 1.31mm2, twisted, non-shielded, <30pF per foot. Separate a minimum of 12" / 30.5cm from other parallel communication and/or high voltage runs.
Station Equivalent	0.36W on IC-24 / 0.54W on IC-36
Station Wiring configuration	Daisy-chain/Star/Branch
Ambient Operating Temperature	32 - 77°F -or- 0 - 25°C
Ambient Operating Humidity	5 - 95% non-condensing
UL and CUL Listed	Yes

System Requirements

InFusion Design Center Software must be used to program the station.

Installation

Installation of Vantage products should be performed or supervised by a *Certified Vantage Installer. Turn the circuit breaker off and make sure no voltage is present where the relay station is to be mounted.* Damage caused by failure to disconnect power may void the warranty and is a risk to the installer. This station requires Neutral to operate. The Green ground lead must be connected to the structure's safety ground. A standard station pigtail will mate with the station bus connector on the relay station. The station's bus wire, Vantage's pigtail and Vantage's station bus are rated at 600Volts. A pigtail connects to the station bus using wire nuts, insulation displacement crimps or any other suitable wire fastener.

CAUTION: When used as a shade controller only connect one shade per station. Multiple shades connected to one station may not stay synchronized and other malfunctions may occur.

BLIND LIMIT SWITCHES MUST BE SET BEFORE INSTALLING!

Minimum Back Box Dimensions

Number of Gangs	Minimum Back Box Dimensions
1	2.80"h x 1.80"w x 2.5"d
2*	2.80"h x 3.60"w x 2.5"d
3*	2.80"h x 5.40"w x 2.5"d
4*	2.80"h x 7.20"w x 2.5"d

* ScenePoint dual-relay stations are available in one gang models only. 2, 3 and 4 gang *Back Box* dimensions are calculated by ganging stations together.

NOTE: UL requires one-half inch clearance between the back of the station to the back of the back box.

Most standard back boxes that have the receiving threads for the dimmer mounting screw inside the box will be adequate. Most back boxes where the receiving threads are outside the box will be too small.

Local codes may require that the low voltage wiring be connected outside of the electrical box. A groove is provided in the relay station to route the station bus outside of the electrical box. See detailed drawing at end of instructions.

Mud Rings
If mud rings are specified on a job it is important to test the mud rings for proper fit. Some mud rings run substantially smaller than back boxes and are not large enough for the station. The *only solution* is to test the fit first.

3-Way Switch Application
An EasyTouch II DR Station may be used in any 3-way application. When installing a ScenePoint DR station, as a 3-way switch, the Red and Red/White (Loads Out) wires are not connected and are properly capped-off.

Station Setup in Software
InFusion: In the *Project Explorer* click on *Style/Profile View*. Right click on *Keypad Styles* and select *Add Keypad Style*. In the *Object Editor* window fill in all the information for the keypad style including the EasyTouch II *Button Shape.* Select SoftLine or TrimLine plastic for ScenePoint stations. Remember to check or uncheck the Auto Backlight check box to enable or disable this built-in feature. Right click on button style and setup a button style with the button color wanted. While still in Style/Profile View, right click on LED Styles and fill in the appropriate information in the Object Editor for EasyTouch II LEDs – Red/Green/Blue with ON and OFF colors. Next select the room, then click on *Vantage Objects* in the *Object Explorer* and expand *Stations, WireLink*. From the list of stations double click on the *ScenePoint DR Station* to place it in the room. In the Object Editor, name the station and make sure it is on the correct WireLink bus.

Configuration
When the station is first connected to the Station Bus, the diagnostic LED will blink twice followed by a pause, meaning that the station is connected and powered correctly, but not configured. In Design Center, click on the Configure Stations button on the toolbar and highlight the ScenePoint DR station. The Status LED will blink 5 times followed by a pause and the button LEDs will blink rapidly between red and off indicating that the station is in configuration mode. To finish configuring press any button on the Station 3 times. The station may also be configured by typing the serial number in the project file. Please note, if the serial number contains an alpha character please ignore this when typing in the serial number. Once configured the Status LED will remain off and the buttons stop blinking.

Interlocked, Independent or Blinds Operation Modes
Interlocked Mode: – *SWITCH ON BACK IN LEFT POSITION:*
- This provides hardware interlock control between the two relay loads. Both relays are never allowed to be ON simultaneously. Interlock switch on the station must be set active/Interlocked

Independent Mode: – *SWITCH ON BACK IN RIGHT POSITION:*
- Each relay is controlled independent of the other. Both relays may be on at the same time. Interlock switch on the station must be set to inactive/non-Interlocked

Shade Mode: – *SWITCH ON BACK IN LEFT POSITION:*
- For shade mode the Interlock switch on the station must be set active/Interlocked. Limit switches must be properly setup on shade motors. Station must be programmed as a Shade Controller in Design Center

Changing Operation Mode of Station
If any station has been programmed as a Shade control or two independent relays and the mode or operation is changed, set the interlock switch and reset the station *before* re-programming in Design Center. Please see *Reset* below.

Shade Controller
In this mode the station has the ability to track and set blinds to specific positions. *Limit switches must already be set before doing the following.* Once programmed as a shade controller in Design Center the blind should be executed to fully OPEN and then fully CLOSED positions. This ***teaches*** the station the limits of the blind it is controlling. When the station has learned the full open and full closed positions it can then be moved to any position wanted. For example to move the blind to its middle position simply program a task in Design Center to set the blind at 50%. It is also possible to assign the blind to a slider on a TPT touchscreen. The blind may be set to any position by moving the slider.

Self-Calibration:
As stated above, when the shade is newly installed it must calibrate itself by having the shade go to a limit (set on the motor) and then go directly, without stopping, to the other limit. The station *measures the time* this travel takes and uses this time to determine settings between the limits. Every time the shade goes directly from one limit to the other limit it will *resave the travel time* preventing errors if the shade changes speed over time or new fabric is installed or if the station is moved to a different shade etc.

Shades will travel at slightly different speeds when opening vs. closing. This causes a normally small uncompensated error on the position of the shade. If precise positioning is required, such as to match positions of multiple adjacent shades, the ILT controller with ILT motors should be used instead of this shade controller.

Reverse Shade:
NOTE: If the shade is moving in the wrong direction due to the motor wires being reversed or the fabric is wound in the opposite direction as expected on the roller, the direction can be reversed by setting the Reverse Shade direction in Design Center preventing the need to rewind the fabric or rewire the station.

Default Mode
The EasyTouch II station has a default mode that operates without programming or being connected to the Vantage System. After a power outage the loads will be off even if they were on before power was lost. If the station has power but communication with the controller is lost the station will revert to default operation, (i.e., toggling the load directly connected to the station) however the interlock switch will still respond to its current position, active or inactive. At final assembly, switches 1 through 3 control relay 1 and switches 4 and 5 control relay 2 until programmed.

Default Button Control

Number of Buttons	Relay 1	Relay 2
2	Button 1	Button 2
3	Button 1	Buttons 2 & 3
4	Buttons 1 & 2	Buttons 3 & 4
5	Buttons 1, 2 & 3	Buttons 4 & 5

Default IR Mode
EasyTouch II ScenePoints have a built-in IR receiver. The default IR mode that is active before the station is programmed or if the station is offline is explained below. This is also dependent on the status of the Interlock switch on the back of the station. When Vantage IR Scene Code 230 is transmitted from the Vantage IR Remote Control. The local ScenePoint load one will toggle ON and OFF. When Vantage IR Scene Code 231 is transmitted from the Vantage IR Remote Control. The local ScenePoint load two will toggle ON and OFF. If the station is in Interlock mode then turning either load ON will turn the opposite load OFF if it is already ON.

Reset
The station stores the configuration data locally so that it will continue to operate correctly if communication with the system is lost. This information includes: LED properties and sounder properties. To reset this information to the factory default, press and hold switches 1, 2 and 3 while power is applied to the station. The status LED flashes briefly, indicating that the reset took place.

After a reset, the LED levels will be default and the loads will all be off and the LEDs will change to Blue for ON and White for OFF. If the station was used as a Shade Controller the *Full Open* and *Full Closed* positions must be re-learned by fully opening and then fully closing the blind without stopping.

Removing Metal Tabs
Removal of metal tabs allows ganging with other ScenePoint Stations or third party devices.

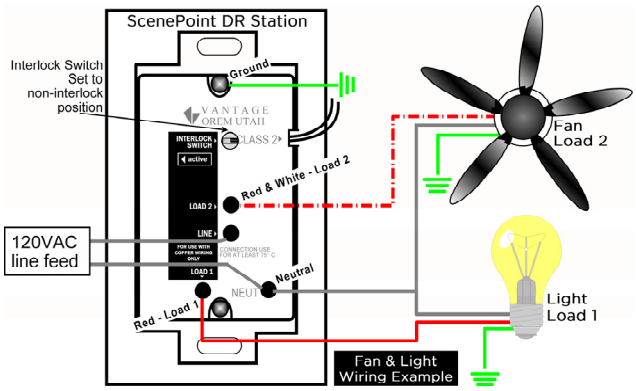
Diagnostic Information
The Status LED can be seen behind the sensor light bar. The light bar is just between the 3rd and 4th button diffusers. The Status LED is off or blinks 2, 3, 4 or 5 times followed by a pause to indicate status information.

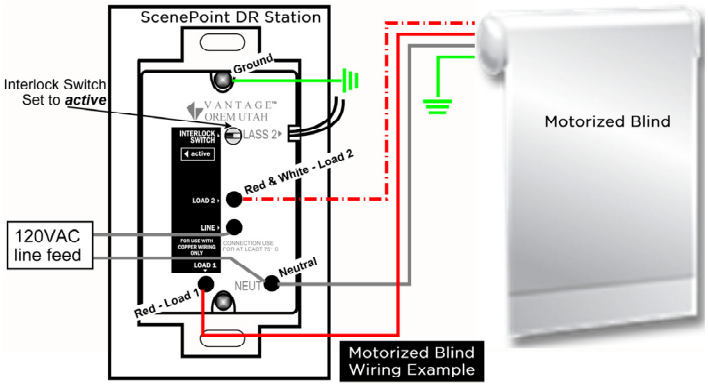
Off: The station is programmed and configured, or the station is not powered, a line voltage connection has not been made or the line feed breaker is off.
Two blinks: Station is operating correctly but is not configured.
Three blinks: Station is ***not*** communicating with the Main Controller. Verify that station bus wiring conforms to Vantage guidelines and is properly connected.
Four blinks: Relay station problem. Please contact the factory.
Five blinks: Configuration mode.

Cleaning Buttons and Faceplates

- Turn the breaker to the station OFF
- Dampen a soft cloth in water and wring-out to barely damp – almost dry
- Use a light buffing motion to wipe clean
- Do not take the station apart
- Never spray station with any cleaners

ScenePoint Wiring Examples





Fan and Light

Always disconnect power before wiring the station and station loads. In this application the Interlock Switch is set to inactive or the non-interlocked position. Connect relay load 1 to the light and relay load 2 to the fan, or vice-versa. Typically, neutrals are all tied together at the station box. Custom program desired operation in Design Center.
NOTE: The light may not be dimmed in this application.

Motorized Blind

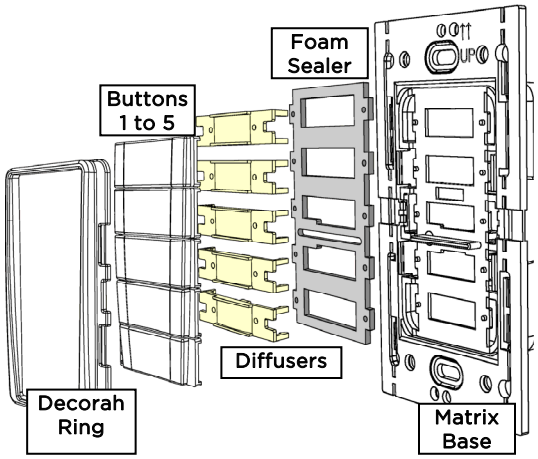
Always disconnect power before wiring the station and shade motor. In this application the Interlock Switch is set to ***active*** or Interlocked. Connect load 1 to the open relay of the blind motor and load 2 to the close relay, or vice-versa. Typically, neutrals are all tied together at the station box. Custom program desired operation in Design Center.

Changing the Number of Buttons

EasyTouch II dual-relay ScenePoints will support 2 to 5 buttons. The number of buttons may be changed on a keypad after it has been installed by following these instructions.

Turn the circuit breaker off and make sure no voltage is present at the ScenePoint station being modifying.

1. Change the software file to the new number of buttons with proper engraving.
2. Order the new buttons for proper engraving.
3. Disconnect power from the station
4. Replace the old button configuration with the new button configuration using the chart example below.
5. When finished replacing the buttons and the station is fully assembled, test the new buttons operation.



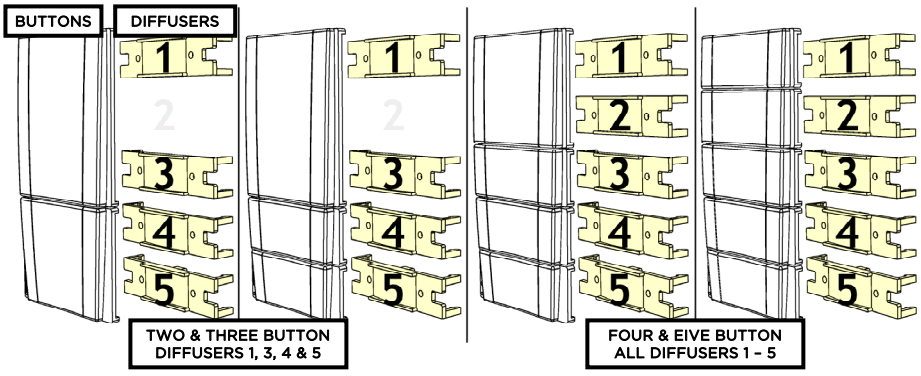
Proper Button Assembly of EasyTouch II Stations

Disassemble:

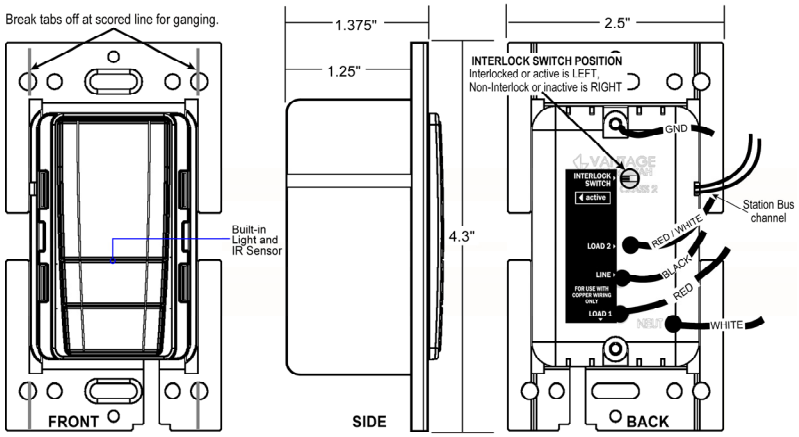
1. Faceplate: Remove faceplate.
2. Decorah Ring: Remove Decorah button ring.
3. EasyTouch II Buttons: Remove buttons that need replaced.
4. LED Button Diffuser: *Remove* or *add* diffusers for new button configuration, using the examples below.

Assemble:

1. LED Diffusers: Double check diffusers are in the correct position.
2. Buttons: Place buttons in proper positions for new configuration. Buttons must be in the correct position following tapered design from top to bottom. Buttons have a small number on the back border, 1 is top and 5 is bottom.
3. Decorah Button Ring: Replace, securely snaps in place.
4. Faceplate: Replace.



Line Drawing



NEC Code Wiring Information

Installing ScenePoints with Vantage parts, meet or exceed all NEC codes for connecting the Class 2 wiring ***inside*** or ***outside*** of the electrical box. See diagram (right) for Class 2 connections outside of the electrical box.

***National Electrical Code and NEC are registered trademarks of the National Fire Protection Association NFPA 70**

Vantage ScenePoint Stations satisfy National Electrical Code (NEC). Based on Article 725-136. Vantage station bus wiring and Vantage pigtails meet NEC's code. Vantage station bus wiring and Vantage pigtails are 600V rated. ScenePoints installed with Vantage parts meet all NEC codes for wiring inside the electrical box. However, Vantage has included a path to make Class 2 connections outside of the electrical box if desired. Follow these instructions to make connections to the Station Bus outside, of the electrical box. Please see "ScenePoint Class2 Wiring_technote.pdf" at http://dealer.vantagecontrols.com/ for more information.*

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Note: Please See item number **4a** for TrimLine II stations

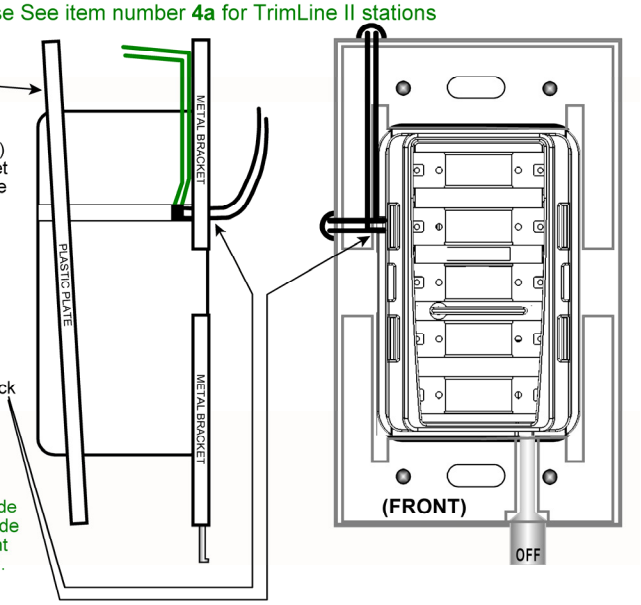
1.
Remove back (plastic) plate from metal brackets if there.

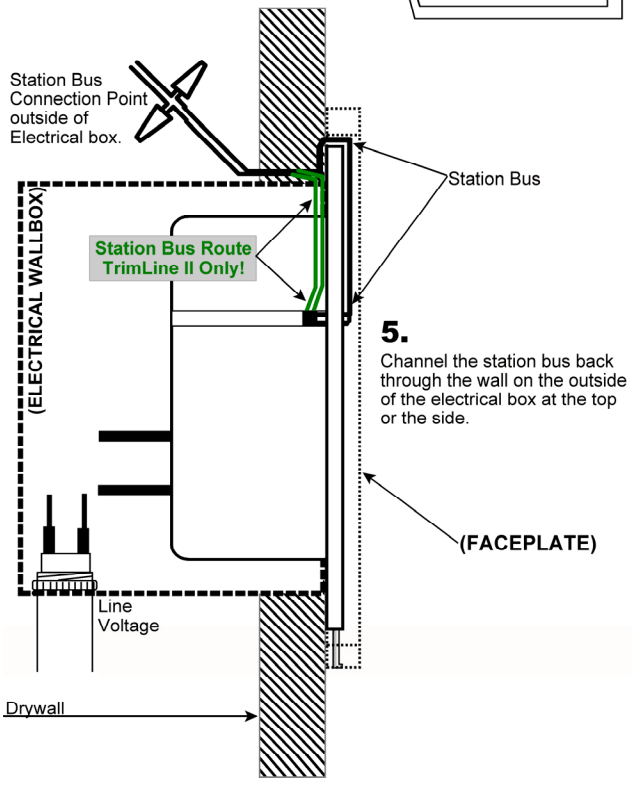
2.
Carefully slide station bus (Class 2 Wiring) connection wire between the metal bracket and the station's back box feeding the wire out the front of the station.

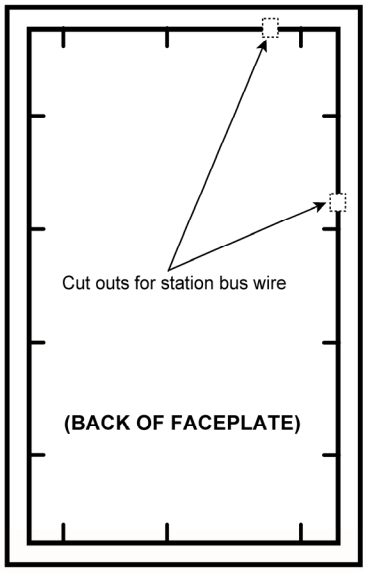
3.
Snap plastic back plate back onto metal brackets.

4.
The station bus wire may be pulled to the left or top side of the station as illustrated. The station bus will then be channeled back through the wall on the outside of the electrical box.

4a.
For TrimLine II stations only, station bus wire may be pulled straight up the back side of the metal bracket and then routed outside of the electrical box. The plate has a slight recess allowing the wire to not be pinched.





5.
Channel the station bus back through the wall on the outside of the electrical box at the top or the side.

(FACEPLATE)