

PWGW DIN V Vignette Architectural Gateway

Installation Guide

OVERVIEW

Vignette is an architectural DMX Snapshot Record and Recall system consisting of wall stations and gateways.

Vignette's Architectural Gateways provide connectivity for the Vignette wall stations, DMX In used to capture scenes from a programming console and DMX Out/Thu to your lighting rig.

CONNECTIONS

The gateway features terminal blocks that can be removed from the module to facilitate wiring. Both compression screw and IDC terminal blocks are supplied. Use IDC connectors with solid core cable and compression screw with stranded copper wire.

POWER

The gateway must be supplied 24 VDC. If your system uses the full 64 insert capacity, you must supply 72 Watts. **DO NOT** use the IDC connectors on the main power connector.

DMX

Connect the control source you want to snapshot to Port B. Observe the same polarity convention throughout the system. Connect the lighting system (LEDs, Dimmers, Interfaces etc.) to Port A.

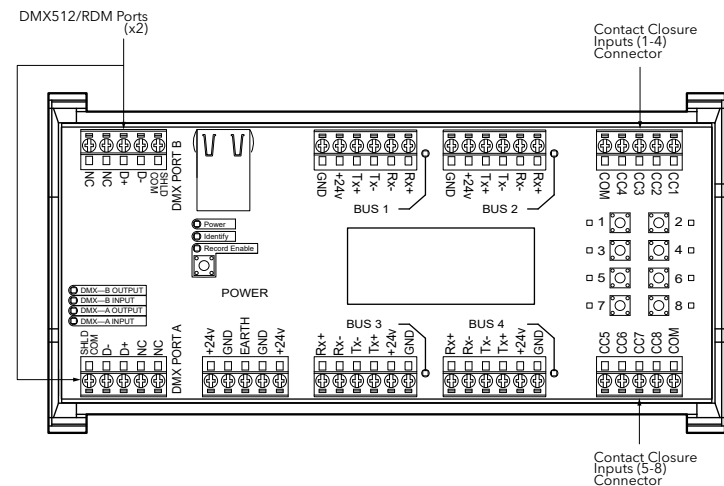
STATION BUSES

All station bus wiring must be in a continuous run and daisy-chained. No "tees" are permitted. Maximum cable length for category 5 wiring is 500 feet (152 meters). Maximum cable length for Belden 9773 wiring is 1000 feet (305 meters). The last station on the line must be terminated with two resistors with a value of 100 to 120 ohms, between pins 1 & 2 and between pins 3 & 4. Architectural Gateways ship with four pre-terminated IDC connectors.

Each bus can power up to 16 inserts. For example, a wall station comprising of one 4-button master and a dual slider slave counts as 2 inserts. The gateway can power a total of 64 inserts across the four buses. There is no addressing logic per bus; by default, button 1 on all stations is snapshot #1, etc. Advanced wall station configuration must be done over an Ethernet network link with Pathscape running on a PC.

CONTACT CLOSURES

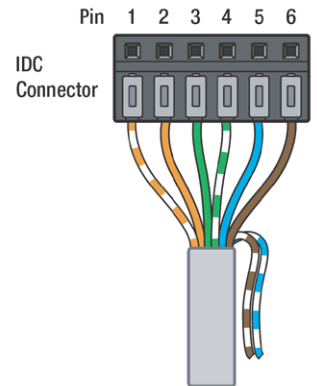
Dry contact closure terminals are provided on gateway model PWGW DIN VD2C8, VE2C8 and VC16 (8, 8, and 16, respectively) for triggering memories with external momentary contacts. Buttons with LED indicators are included on the gateway itself for local control or testing purposes.



STATION BUS WIRING

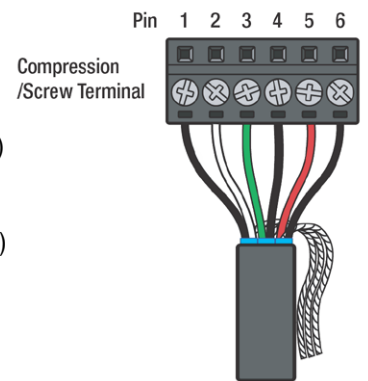
Category 5 Wiring (using IDC connector)

Pin 1: Rx+	White/Orange
Pin 2: Rx-	Orange
Pin 3: Tx-	Green
Pin 4: Tx+	White/Green
Pin 5: +24V	Blue
Pin 6: GND	Brown
NC:	White/Blue
NC:	White/Brown



Belden 9773 Wiring (using compression screw)

Pin 1: Rx+	Black (White pair)
Pin 2: Rx-	White
Pin 3: Tx-	Green
Pin 4: Tx+	Black (Green pair)
Pin 5: +24V	Red
Pin 6: GND	Black (Red pair)
NC:	Shield foil
NC:	Drain wire



NOTE: Terminate both ends of the wire identically, as per above (wall station and gateway)

STATUS INDICATORS

POWER

Glowing steadily red indicates power supply is OK; off indicates no power.

IDENTIFY

Will flash blue when Pathscape software is identifying the gateway. Without Pathscape connected, you will not see this indicator light on.

RECORD ENABLE

When this function is activated by the button, the LED will glow red. If you press and hold a button for 5s on a wallstation you will snapshot the incoming DMX512 for recall from that button.

BUS

Bus lights will flash red when the gateway receives data from the inserts on the bus. Likewise, the Link LED on the back of the master inserts will blink when they receive data from the gateway.

DMX INPUT/ OUTPUT (A/B)

DMX A and B each have an amber LED when the port is configured as an input. If no DMX is present, the amber LED will flash. DMX Output LEDs are solid green when active. The LED will flash if no eDMX is present and the port is inactive.

RJ45 LEDs

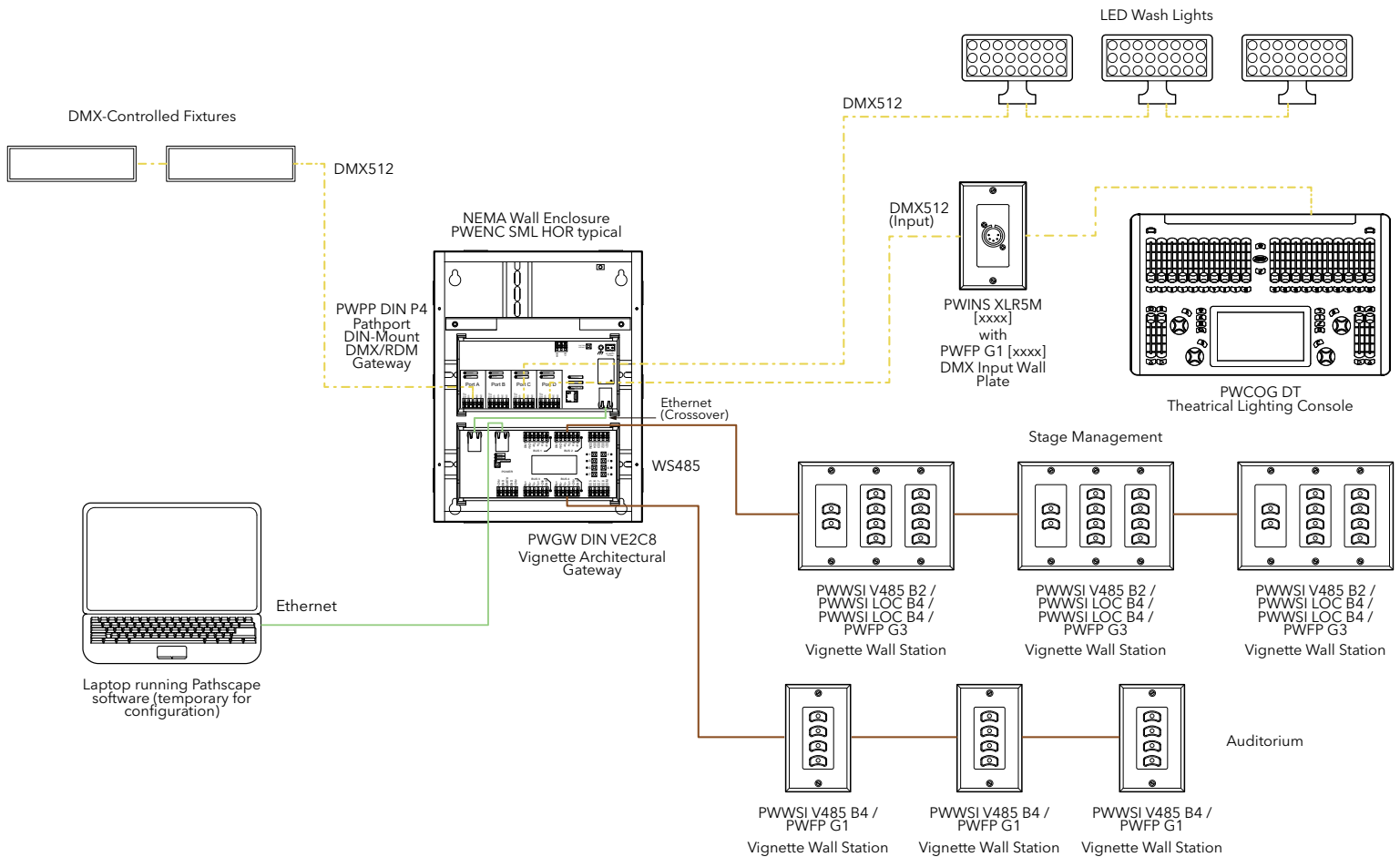
The RJ45 Ethernet jack has two green LEDs. One will glow steady when the link is up and the other will flash with activity.

CONTACT CLOSURE LEDs

These will mirror existing button/slider configurations. These LEDs will also flash when Pathscape is identifying the gateway.

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OUT OF BOX OPERATION - PWGW DIN VD2 & PWGW DIN VD2C8

Step 1

Ensure all your wall stations are wired per the guide on the reverse of this page and the last station in the bus is terminated. When the gateway is powered, you should see BUS activity on the wired bus terminal at the gateway and on rear of each station.

Step 2

Open Pathscope on a PC on the same network. **YOU MUST USE** Pathscope software to add the device to a **Security Domain** and enable **Unsecured Protocols** if needed (see Pathscope manual for details on **Security**, and **Vignette Properties > Network DMX Receive Protocols**).

Step 3

Connect your DMX512 source (console) to Port B and set up a look that you want to snapshot. The amber Port B Input light should be solid. If it is flashing, you do not have an active input.

NOTE: For models that do not include DMX ports, connect your source to the same lighting network as the Vignette system. Use Pathscope to specify the Universe that should be captured by the snapshot. See Pathscope manual for additional details.

Step 4

Press the **Record Enable** button on the gateway to illuminate the red Record Enable LED.

Step 5

Press and hold the first button on any wall station for 5 seconds. It will glow green when it has recorded the snapshot.

Step 6

Repeat Step 2, setting up the next look to record from your DMX source.

Step 7

Repeat Step 5, pressing and holding subsequent buttons.

Step 8

Remove your source's DMX line from Port B. After 10 seconds your lights will fade to black.

Step 9

Touch each of the recorded buttons. Upon pressing the buttons the snapshots will crossfade from one to the other in 5 seconds. Start at Step 2 if you need to record other snapshots.

Step 10

Touch the **Record Enable** button on the gateway to disable recording.

ADVANCED CONFIGURATION

Additional configuration of Vignette gateways and wall stations must be performed using Pathscope.

For Gateway model PWGW DIN VD2C8 and VE2C8, contact closures/buttons are configured as snapshots 1-8 (1-16 for model PWGW DIN VC16) by default. They behave as momentary switches (toggle on/off); this is appropriate for use of third party push buttons. For use with external switches, configure the appropriate contact closures/buttons' Button Type as "maintained" in Pathscope.

When a contact closure/button is configured as "momentary" (the default, toggle on/off Button Type), it is also possible to use the on-board buttons to record memories. Set up a look, press the Record Enable button, and press and hold a button, just like on a wall station.

Using Pathscope, you may also configure the following:

- Zones: Programmed directly in Pathscope; does not require a DMX source. Can be used on sliders (dimnable) or buttons (non-dim, on/off).
- Allow Record: Set any button as the "Record Enable" button. Useful for turning on/off Record Enable from a wall station.
- Grandmaster: Set a button or slider to be Grandmaster for all Zone and Snapshot control.
- Exclusive Lock: Lock out all buttons and sliders on a playback, except for those on the station where the Exclusive Lock button was pressed.
- Blackout Zones: Set a button to deactivate all Zone playbacks, regardless of slider position. Useful for situations where a Zone has a minimum level above zero; but you still need to be able to turn it off.

For detailed instructions on the advanced capabilities of Vignette and how to configure them, see the "Vignette" section of the Pathscope manual.

ADDITIONAL NOTES

Before recording any snapshots, make sure that no snapshots are playing back. All buttons should be the same color of white when no snapshots are playing back.

When you activate a snapshot, the button will glow dim blue for 5 seconds as the snapshot fades in. It will glow a brighter blue when the snapshot is active. When you press an active button, it will glow lavender for 5 seconds while the gateway fades to black.

One second after it fades to black, the DMX A port will shut off and its amber DMX IN LED will flash indicating that the port is disabled. (Gateway models PWGW DIN VD2 and PWGW DIN VD2C8)

When you connect an active source to DMX Port B, the lights will take 5 seconds to fade from the active snapshot to the console's look. (Gateway models PWGW DIN VD2 and PWGW DIN VD2C8)

When you unplug the console, the console's look will hold for 1 second, then start to fade to the active snapshot over 5 seconds. The 1 second hold will reduce flicker if you have faulty cabling.

Every aspect of the Vignette system may be configured with Pathscope, available free for download from Pathway Connectivity's website. This includes the ability to prioritize or merge snapshots with the console, snapshot and recalling four universes of E1.31 sACN, changing crossfade times, partitioning between four rooms, defining custom zones for use on buttons or faders, setting up a grand master fader and much more. The output port(s) on the gateway (PWGW DIN VD2 and VD2C8) can also act as RDM controllers when used with Pathscope.

Pathscope allows you to name your stations, buttons, sliders, and identify individual stations to ease the setup process.

When using Pathscope, the Vignette Gateway has the ability to playback snapshots and zones in four independent areas. You may also mix Vignette PoE stations on the same network. Each PoE Master station you add gives you another network-wide playback group which any button or slider may use.

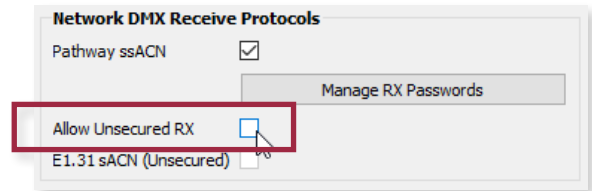
IMPORTANT - UNSCURED NETWORK PROTOCOLS

Due to new cybersecurity laws, all Vignette devices shipped after January 1, 2020 have security properties enabled. This means that by default, the device is not set up to receive unsecured network protocols such as E1.31 sACN.

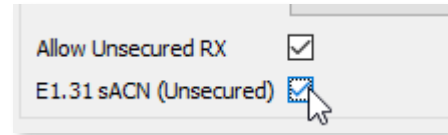
You must add the Pathport to a Security Domain using Pathscope before configuration and use.

Pathway ssACN (Secure sACN) is enabled by default.

To use the above unsecured protocols, open Pathscope. In the Pathport base device properties, under the **Network DMX Receive Protocols** section, click the **Allow Unsecured RX** checkbox.



Once checked, you may select the network protocol(s) to receive.



For further information, please see the following sections in the Pathscope manual: **Security, Vignette Properties > Network DMX Receive Protocols.**

ELECTRICAL INFORMATION

- 24VDC Power input
- 72W maximum power consumption (8W per gateway plus 1W per insert, to a maximum of 64 inserts on the 4-bus station network)
- Bus power: 24V DC over Cat5 or three-pair cable (Belden 9773 or equivalent)
- Bus wiring:
 - Standard Cat5/5e/6 Cable: 492 ft (150m) maximum
 - Retrofit onto existing 3-pair Belden 9773 or equivalent: 984 ft (300m) maximum
 - Using IDC Connectors: Cat5 or solid wire, 22-24 AWG
 - Using Compression screw connectors: three-pair stranded (Belden 9773 or equiv), 14-30 AWG
- Class 2 Device

COMPLIANCE

- ANSI E1.11 DMX512-A R2013
- ANSI E1.20 RDM - Remote Device Management
- ANSI E1.31 sACN - Streaming ACN
- ANSI E1.33 RDMnet - RDM over IP
- IEEE 802.3 Ethernet
- RoHS 2011/65/EU + A1 2015/863
- CE
- California Title 1.81.26, Security of Connected Devices

PHYSICAL

- 1.0 lbs (0.45 kg)
- Dimensions:
 - PWGW DIN V: 4.5"W x 4" H x 1.9" D (113mm x 103mm x 48mm)
 - PWGW DIN VD2: 6.25" W x 4" H x 1.9" D (159mm x 103mm x 48mm)
 - PWGW DIN VD2C8: 8" W x 4" H x 1.9" D (203mm x 103mm x 48mm)
 - PWGW DIN VC16: 8" W x 4" H x 1.9" D (203mm x 103mm x 48mm)
 - PWGW DIN VE: 6.25" W x 4" H x 1.9" D (159mm x 103mm x 48mm)
 - PWGW DIN VE2C8: 8" W x 4" H x 1.9" D (203mm x 103mm x 48mm)
- Operating Conditions: 14°F-113°F (-10°C to 45°C); 5-95% relative humidity, non-condensing