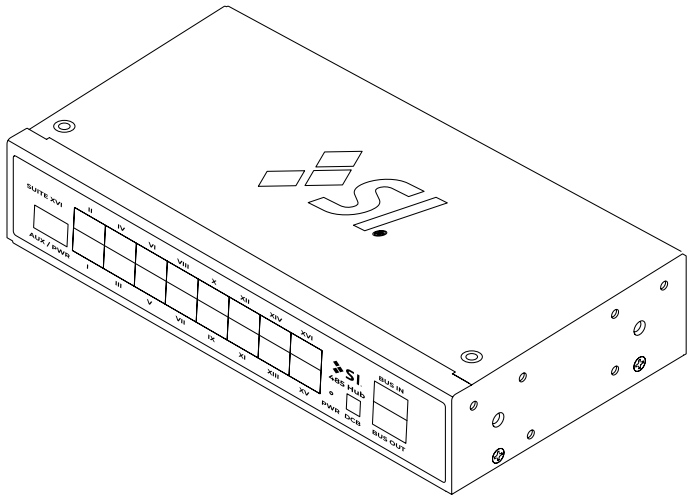

SUITE XVI

Installation Instructions

DOC.#400166 | v.1.2 | 25 May 2022

Once the install is complete, go to https://support.screeninnovations.com/accessories/suitexvi/, or scan the QR code for the programming manual or other resources.

Thank you for purchasing an SI product. If you have any questions or need any assistance with your Suite XVI, we would love to help you.

Technical Support: 512.832.6939
Hours of Support: 7:30am – 5pm CST

screeninnovations.com
screensupport@screeninnovations.com or shadesupport@screeninnovations.com

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INTRODUCTION - Suite XVI

SUITE XVI is a 485 Data Hub that can support up to sixteen 485 devices such as 485 keypads, 485 Wireless controllers, 485 GPIO interfaces, and 485 AC power motors. This product can work directly with JANUS, TRO.Y, and other 485 devices and may be powered by the 485 BUS input or an optional external bus power supply.

Features

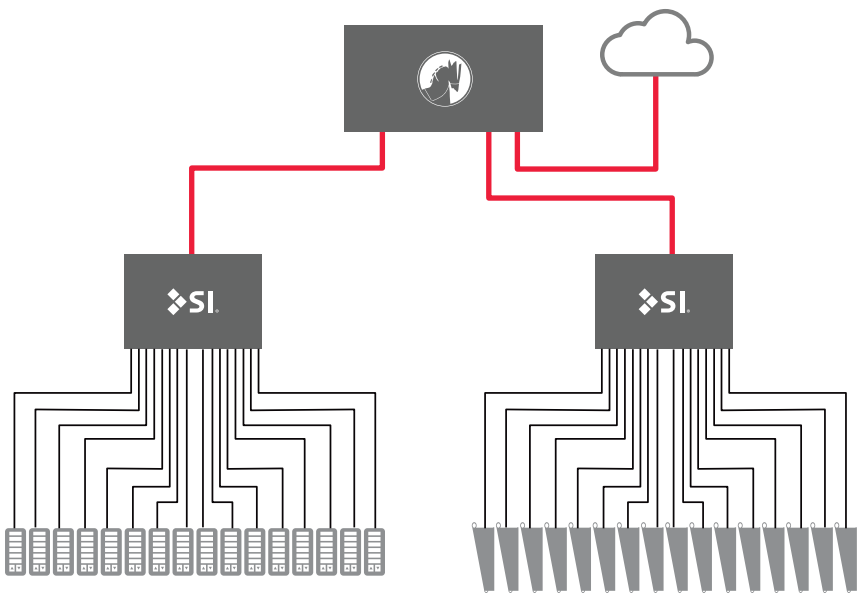
- (16) 485 device ports
- (1) 485 Bus In port
- (1) 485 Bus Out port
- (1) 485 Auxillary/Power input port
- Versatile mounting options
- Completely solid state, no moving parts
- Unit remains at room temperature (does not emit heat)
- Selectable 485 DC BIAS
- Includes bus segment status LEDs for:
  - Power
  - Communication
  - End of line notification

INITIAL CONSIDERATIONS

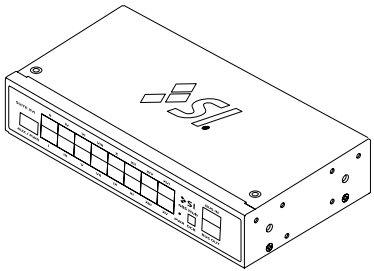
Thank you for your purchase of Suite XVI.

This is designed to be installed indoors, Rack or Din mounted.
Suite XVI has sixteen (16) 485 ports. The two main applications include 485 devices such as keypads and 485 AC power motors.

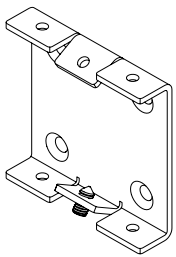
See the figure showing TRO.Y connected to two Suite XVI data hubs, connected to 16 keypads and 16 AC powered shades.



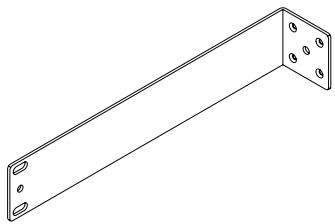
PARTS IN THE BOX



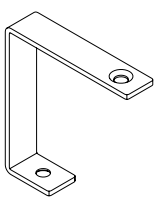
Suite XVI



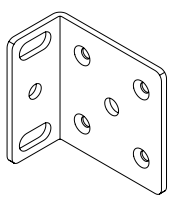
Universal DIN Rail Bracket (2)



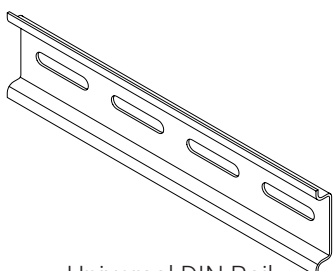
Long Rack Ear



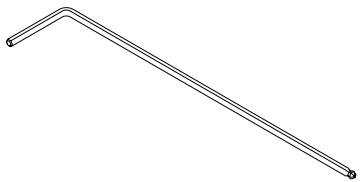
Rack Mount Fascia



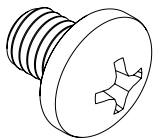
Universal Rack Ears (2)



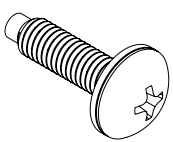
Universal DIN Rail



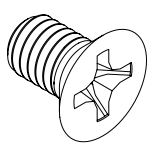
1.5 mm Hex Tool



DIN Rail Screws (2)



Rack Mount Screws (4)

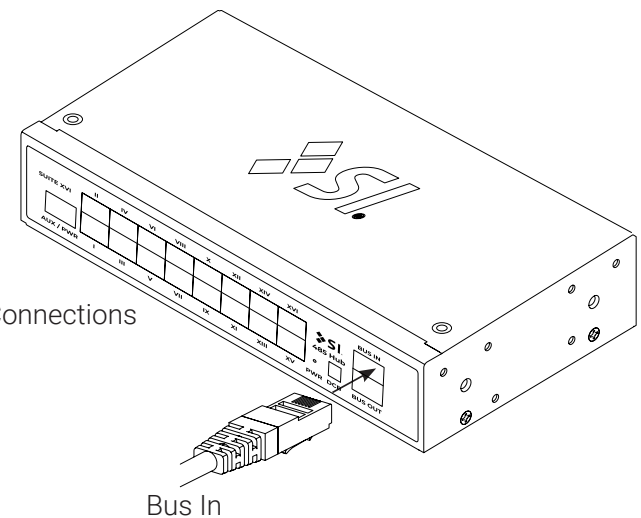


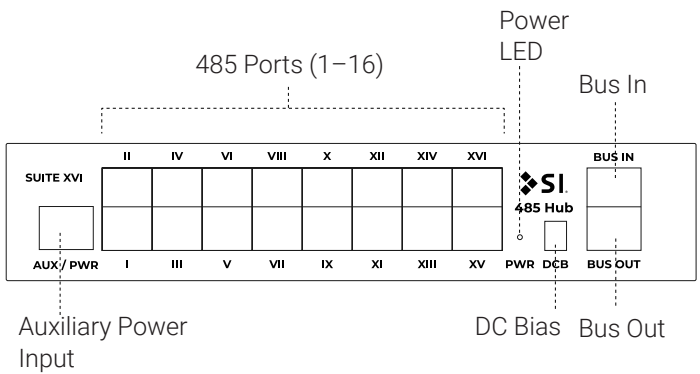
Universal Mounting Screws (10)

INSTALLATION - CONNECTIONS

Connecting Power

SUITE XVI is powered using the power available on the 485 bus IN connection. When using this data hub with other devices, check the spec sheet for the device to determine how many power units the device can power. If the device does not have suitable power for all devices connected to the hub, then you can add a 485 bus power supply to the AUX power input





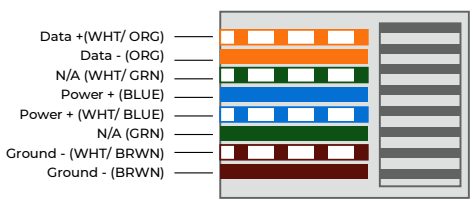
Note: Line Bus protection from powered devices connected to device ports

INSTALLATION - CONNECTIONS

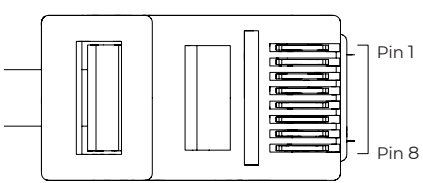
Connecting Suite XVI

Suite XVI offers the ability to connect up to sixteen (16) 485 devices or AC motors, using CAT5e/6 cable.
If connecting more than sixteen devices, add additional Suite XVI via the Bus Out and Bus In. Attention must be paid when adding additional Suite XVI hubs as additional auxillary Bus power may need to be applied.

All 485 ports SDN (485) connection



Upto 200' max. CAT 5e or better



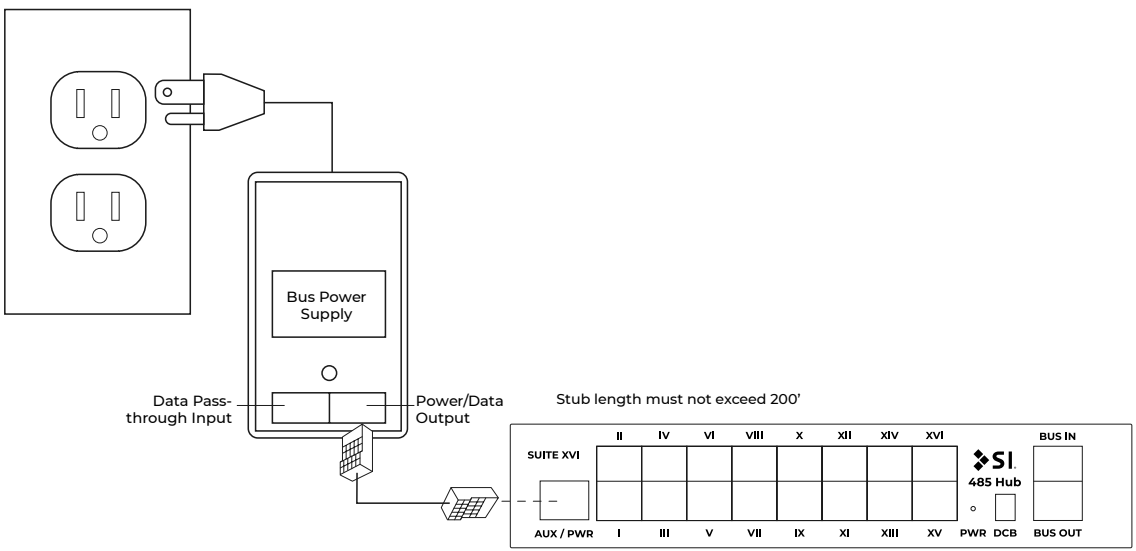
Common 485 Bus Power units

485 Bus Device	Bus Power Units (BPU) provided	Bus Power Units (BPU) consumes
Janus (BPU provided only on ports 1–8)	100	0
TRO.Y (per port)	16	0
UAI+/SI.FI	0/40	1/0
Bus Power Supply - #18224400	80	0
Suite XVI	N/A	1
Suite XVI (DCB enabled)	N/A	1.5
Keypad/Decoset	N/A	1
RTS Receiver	N/A	1
Fontus	N/A	1
AC Motors	4	0
MOAB	N/A	2
CAT 5 (per 100 feet)	N/A	0.25

INSTALLATION - CONNECTIONS

Utilizing Auxiliary Power Input

When an Auxiliary Bus Power is connected, it takes prescedent over any power on the Bus In.

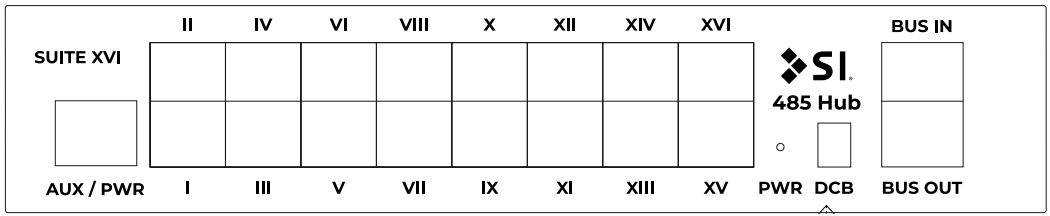


INSTALLATION - LED OPERATION

LED information table

Port	Left LED OFF (Yellow)	Left LED ON (Yellow)	Left LED blinking	Right LED OFF (Green)	Right LED ON (Green)	Right LED Flashing (Green)
Bus In	N/A	N/A	N/A	N/A	Bus Idle (bus connected)	With Bus data activity
Bus Out	Bus Idle (bus connected)	End of Bus Line (not connected)	N/A	Bus Idle (bus connected)	N/A	With Bus data activity
Aux. Power	N/A	Aux. Power connected (GREEN)	N/A	N/A	N/A	With Bus data activity
Main Power	No power on Bus (RED)	Power on Bus (RED)	N/A	N/A	N/A	N/A

INSTALLATION - DC BIAS OPERATION



DCBias FUNCTIONALITY:

Note: Use a thin tool such as a paper clip.

Switch 1 - Enables DCBias for 485 - A

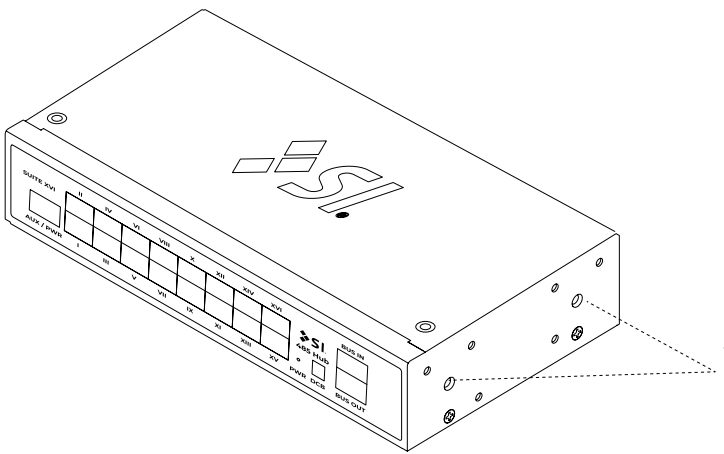
Switch 2 - Enables DCBias for 485 - B

Note: DCBias should only be used for extremely long or very noisy Bus lines.

RACK MOUNTING

Screw Hole Locations

Suite XVI can be mounted in various ways using the ten (10) screw hole locations shown below.

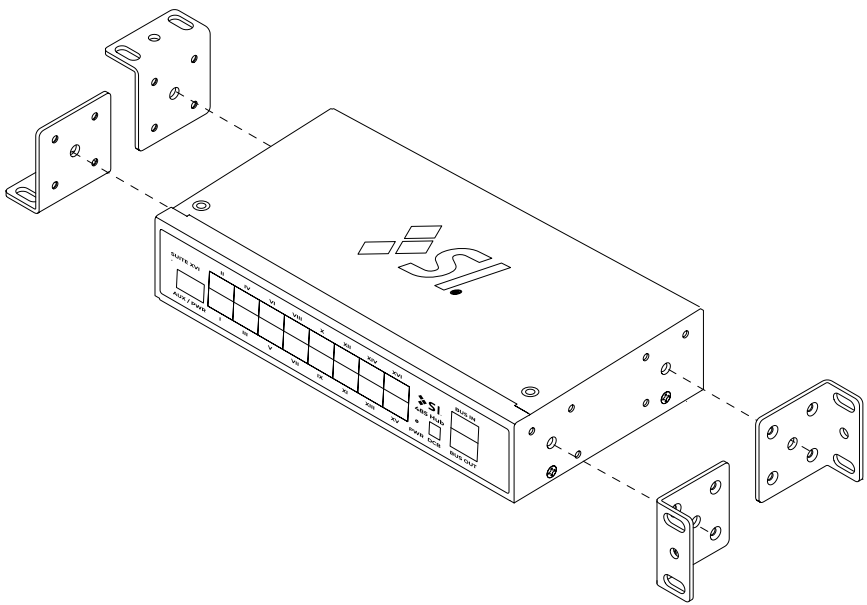


> Janus and Suite XVI share the same mounting features and accessories; there are infinite ways to install them together or seperately.

RACK MOUNTING

Using Universal Rack Ear

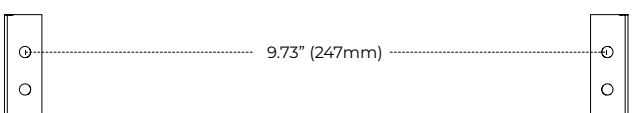
The symmetrical hole pattern of the Suite XVI Universal Rack Ear allows these multi-functional brackets to be mounted on either side of Suite XVI in any orientation. This makes it possible to mount Suite XVI to virtually any surface, in multiple positions.



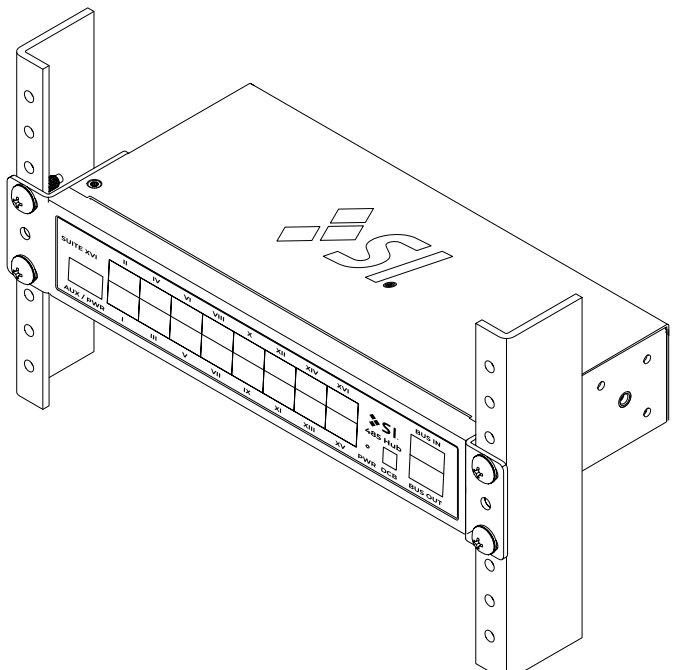
RACK MOUNTING

1. Half Rack

Suite XVI can be mounted in a standard half rack using two Universal Rack Ears.

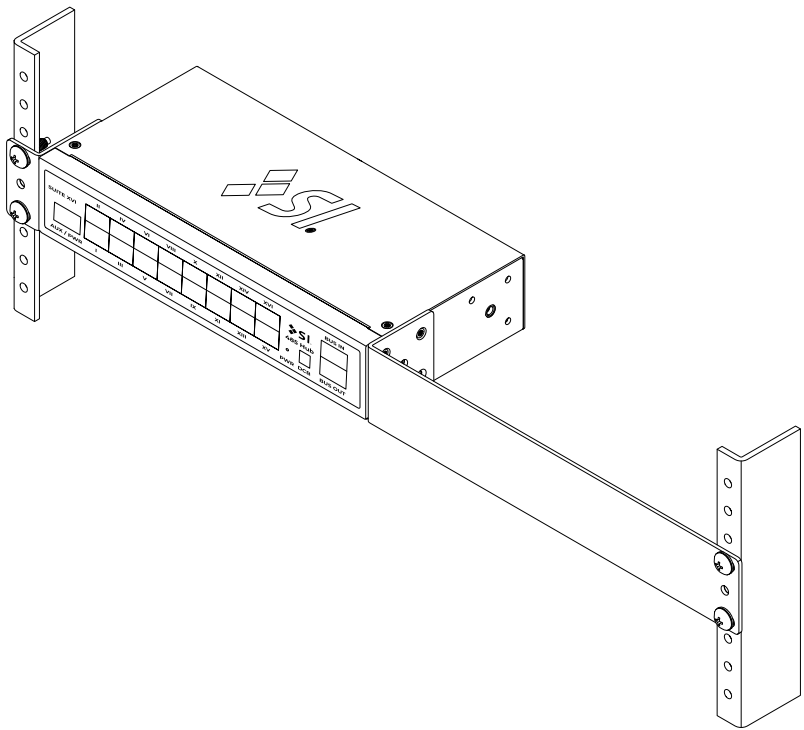


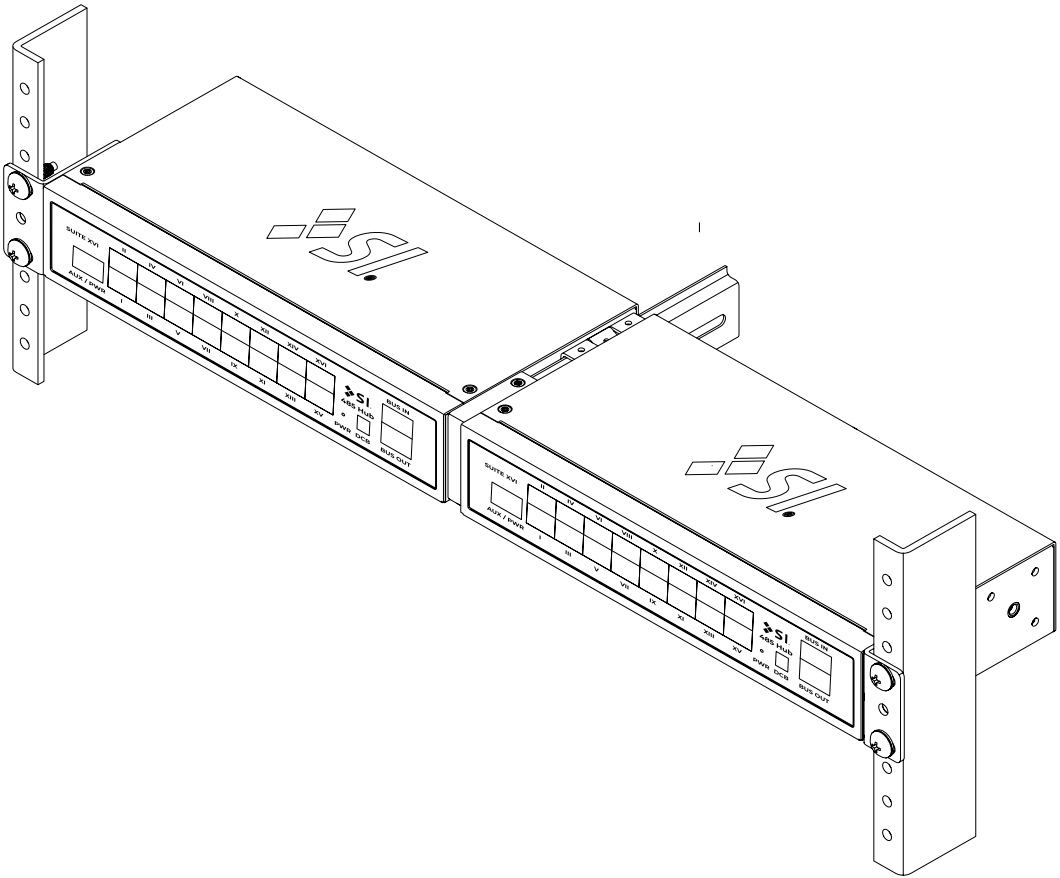
Note: Half Rack hole spacing must be 9.73"(247mm).



2a. Full Rack (Single Suite XVI Unit)

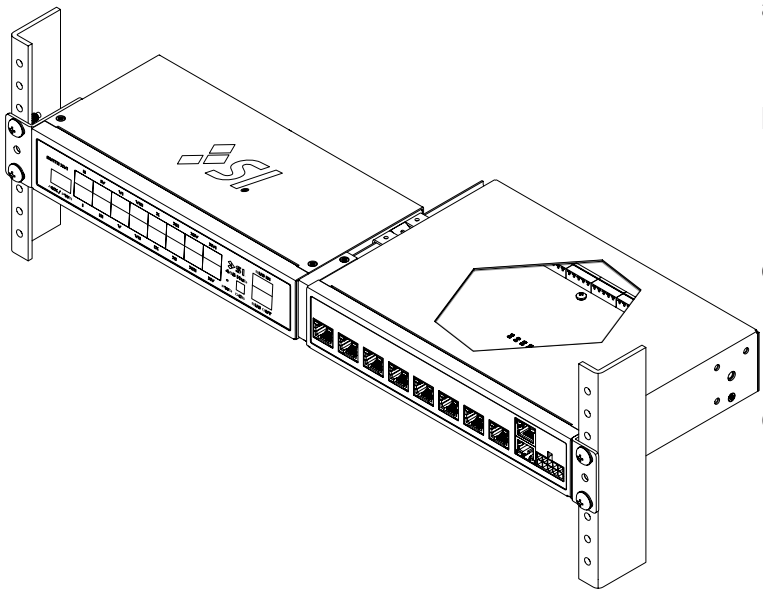
A single Suite XVI unit can be mounted in a standard 19” rack using one Universal Rack Ear and one Long Rack Ear.




SUITE XVI
AUX / PWR
I
II
III
IV
V
VI
VII
VIII
IX
X
XI
XII
XIII
XIV
XV
XVI
SI
Cat5 Hub
PWR
DCS
BUS IN
BUS OUT

2b. Mounting with Suite XVI Full Rack

Two Suite XVI/Janus units can be coupled together and mounted in a standard 19” rack. Follow the steps on the following spread for installation:



Note: When combining a Suite XVI and Janus, use the DIN rail included with Janus.

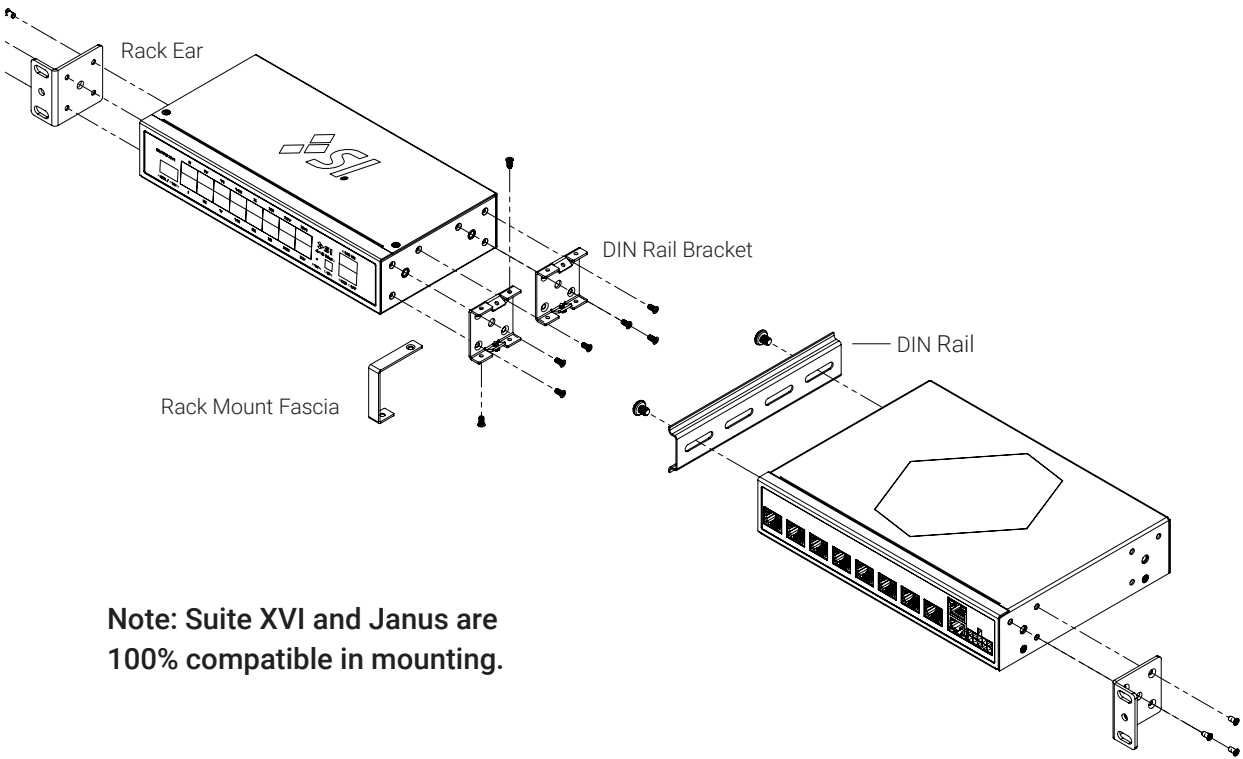
a. Using two (2) of the included DIN Rail Screws, install the DIN Rail onto the first TRO.Y unit.

b. Using three (3) Rack Ear screws each (included), install the two DIN Rail Brackets on the opposite side of the second TRO.Y unit.

c. While holding both TRO.Y units, slide the DIN Rail through both DIN Rail brackets. Then, tighten both set screws using the provided 1.5mm hex tool.

d. Slide the Rack Mount Fascia over the exposed DIN Rail bracket on the desired front face of the combined unit. Fasten the fascia down with two (2) Rack Ear Screws on the top and bottom.

e. Finally, fasten one Rack Ear to each TRO.Y unit using three (3) Rack Ear screws each.



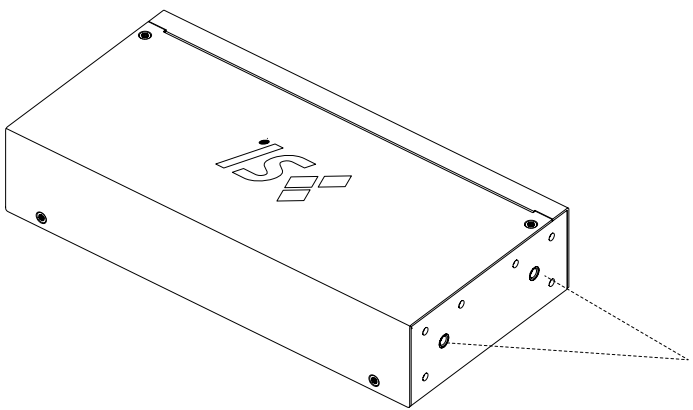
Note: Suite XVI and Janus are 100% compatible in mounting.

DIN RAIL MOUNTING

Screw Hole Locations

Suite XVI is available in both plenum and non-plenum options. If mounting in a plenum air space, ensure you have purchased a plenum-rated Suite XVI kit.

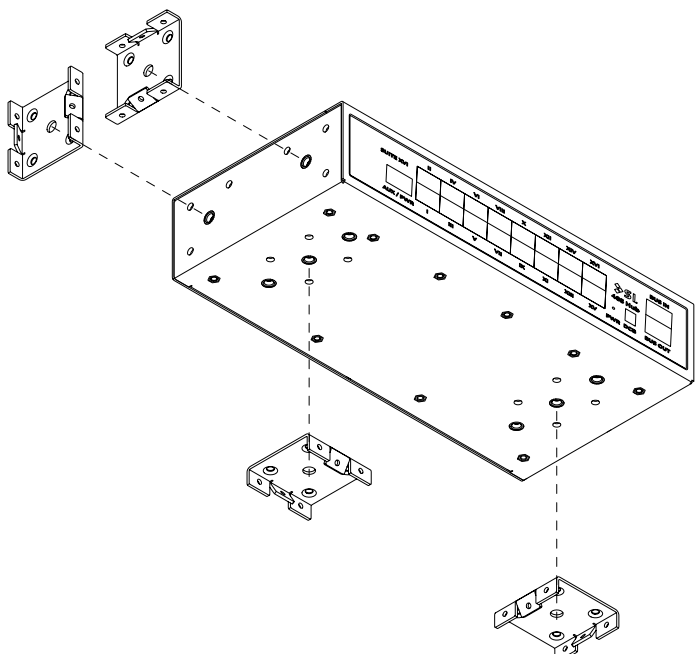
Suite XVI can be mounted in various ways using ten (10) screw hole locations.



DIN RAIL MOUNTING

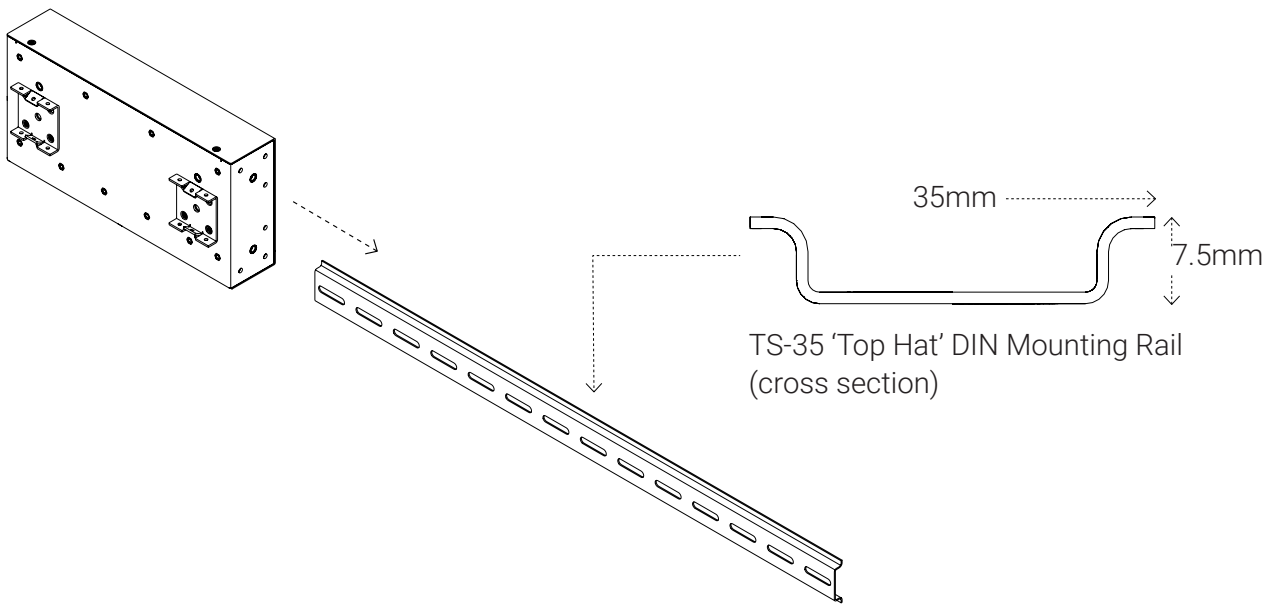
Using Universal DIN Rail Bracket

Similar to the Universal Rack Ear, the Suite XVI Universal DIN Rail Bracket features a symmetrical hole pattern which provides ten (10) total mounting locations on Suite XVI. Each Universal DIN Rail Bracket has multiple threaded holes which accommodate set screws to lock the Brackets in place along the DIN Rail.



DIN RAIL MOUNTING

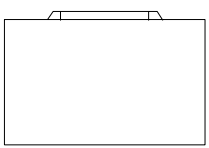
Using the Universal DIN Rail brackets, Suite XVI can be mounted in a variety of orientations and locations. The Universal DIN Rail Brackets are designed for TS-35 'Top Hat' DIN Mounting Rail and can be mounted on the bottom or either side of Suite XVI.



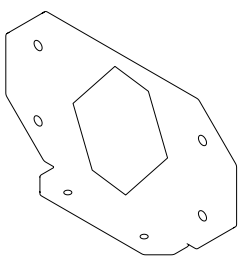
STRUCTURED WIRING BOX MOUNTING

Suite XVI can be installed into nearly any structured wiring enclosure using either the Universal Rack Ears or Universal DIN Rail Brackets. Structured wiring enclosures are a convenient and professional way to manage wiring and mount supporting devices such as power supplies. By using one of the Jopplin Kits, you can achieve a complete mounting solution for the enclosure.

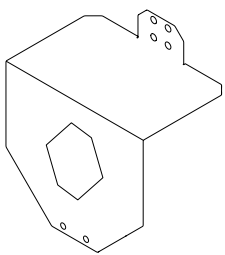
Parts in the Jopplin XVI Bracket Kit



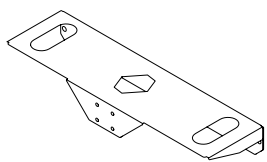
90 Degree Power Connectors (2)



Suite XVI Stack Mount brackets and shovels(2)



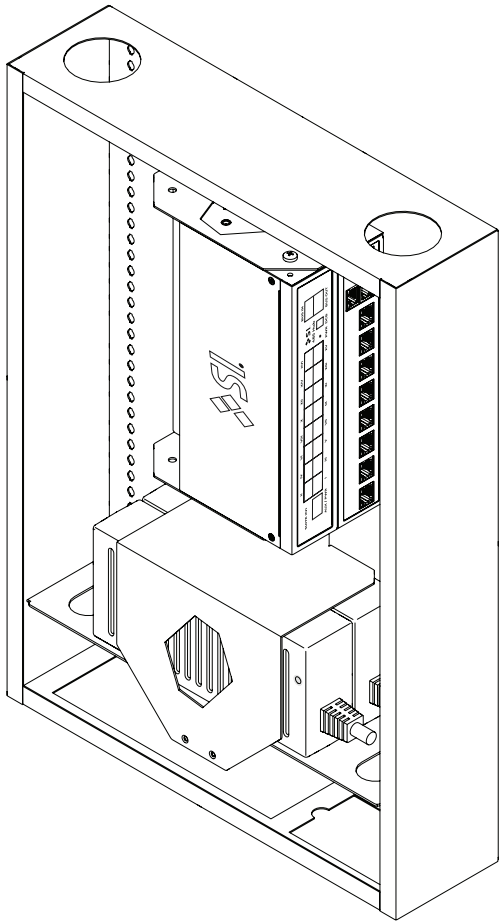
Power Supply Upper bracket



Power Supply Lower Bracket

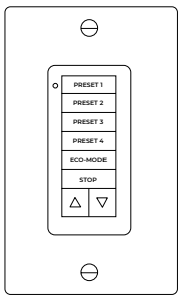
Depending on which Jopplin Kit is selected:

1. Connect up to 2/4 Suite XVI units or a combination of Janus and a Suite XVI unit into the Stack Mount brackets and shovels.
2. Assemble top and bottom Power Supply brackets and insert up to 2/4 Janus Power Supplies.
3. Route Power Supply cables from 2/4 Power Supplies up to the 2/4 Janus units installed into the Stack Mount.

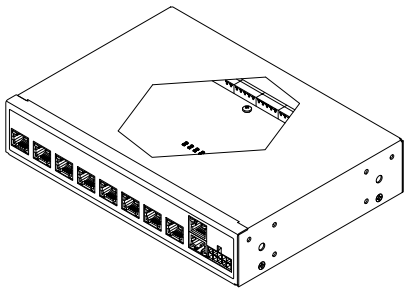


ADDITIONAL ACCESSORIES

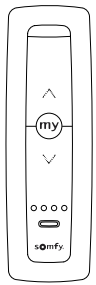
Sold Seperately



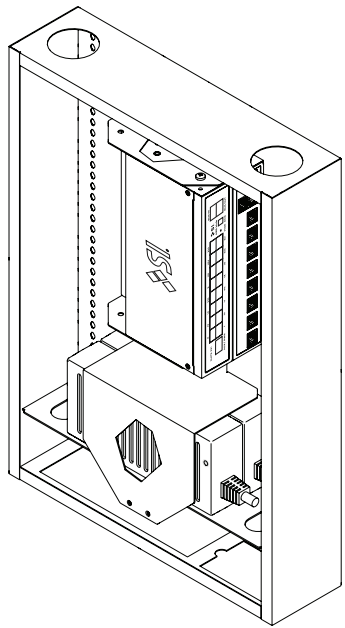
Decoflex Keypad
• 485 direct
• RTS via RTS 485 Reciever

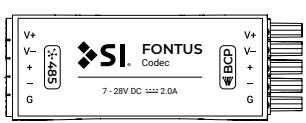


Janus

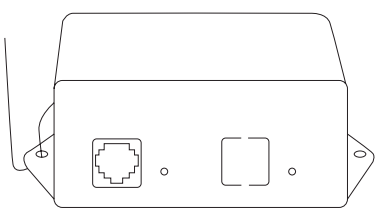


Situo remotes
• Via wireless controller

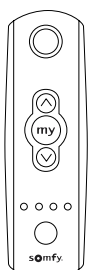




Fontus



RTS - 485 Receiver



Telis remotes
• Via wireless controller

Jopplin XVI Bracket kit
(see page 23–24)

TROUBLESHOOTING - ETHERNET

Tech Support: 512.832.6939

Problem	Possible Cause	Action to Take
Suite XVI will not operate.	Suite XVI is not powered.	1. Check Bus In connection on the hub. Make sure the Bus device upstream has enough power for Suite XVI. 2. If not using Bus device, check Auxiliary power input (make sure the Aux. power unit is powered).
Suite XVI cannot discover any 485 motors.	Improper bus connection(s) between Suite XVI/Janus/485 shades.	1. Verify that at least one Suite XVI bus out is connected to a bus in on a Janus. 2. Verify that at least one 485 shade is connected to a shade port on a Janus.
My 485 device does not seem to operate	Not enough power on the bus line.	1. Connect optional auxillary in line Bus power supply. OR 2. Connect Bus out from a Janus

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