

ControlEdge Remote Termination Panel (RTP) 900RTS-0001:

- ✓ Universal Input/Output,
- ✓ Digital Inputs, Digital Outputs, Analog Outputs,
- ✓ High Density Analog Inputs, High Density Analog Outputs,
- ✓ High Density Digital Inputs, High Density Digital Outputs

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Summary

Remote Termination Panels (RTP) provide an easy way to connect I/O modules to field wiring. RTPs integrate typical externally connected components, reducing wiring and setup time.

It also minimizes the need for multiple wires under a single screw connection by expanding the shared terminals of the I/O module. RTPs comply with the RoHS 2 directive and have conformal coating to sustain in G3 environments..

A single DI/DO/AO-RTP and cable is used with the following modules:	See page
4 Point Analog Output	3
16 Point Contact Digital Input	4
16 Point DC Digital Input	6
16 Point AC Digital Input	8
16 Point DC Digital Output	10
8 Point AC Digital Output	11
16-channel Universal Input / Output	13
8 Point Analog Output	16

Dual DI/DO/AO-RTPs and cables are used with the following modules:	See page
16 Point Analog Output	19
16 Point Analog Input	21
32 Point DC Digital Output	23
32 Point DC Digital Input	25
Latch / Unlatch RTP to Rail	29

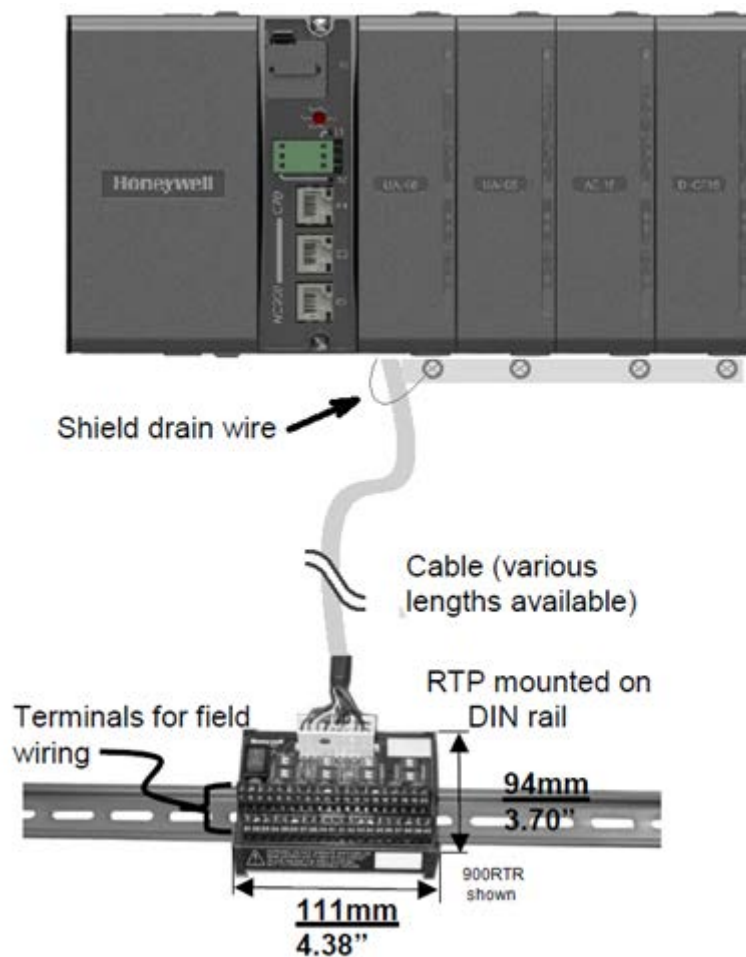
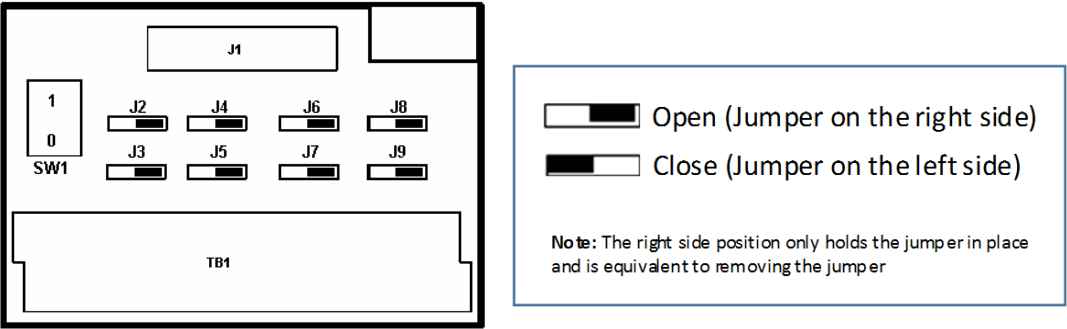
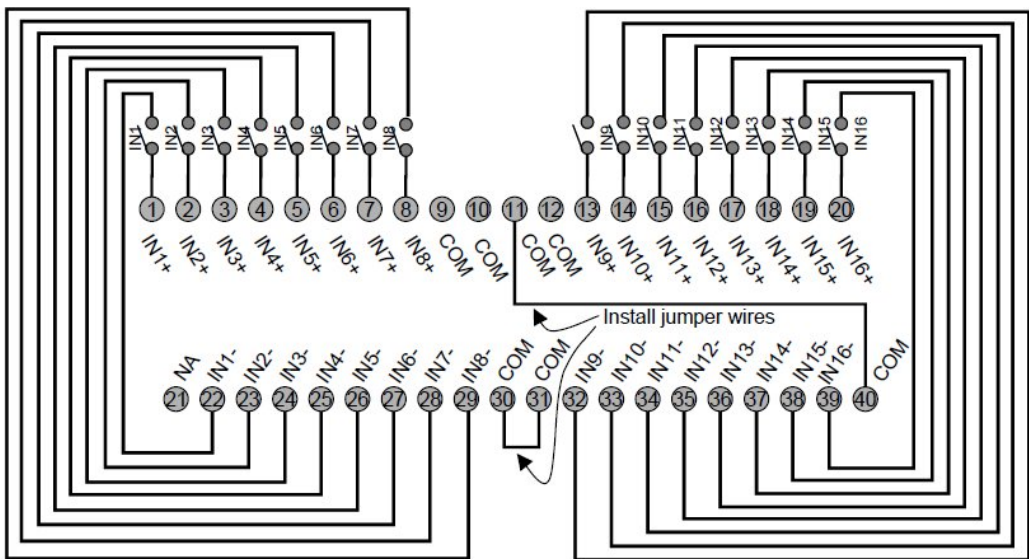


Figure 1: Example installation (high capacity AI/AO/DI/DO use a second RTP and cable, not shown)

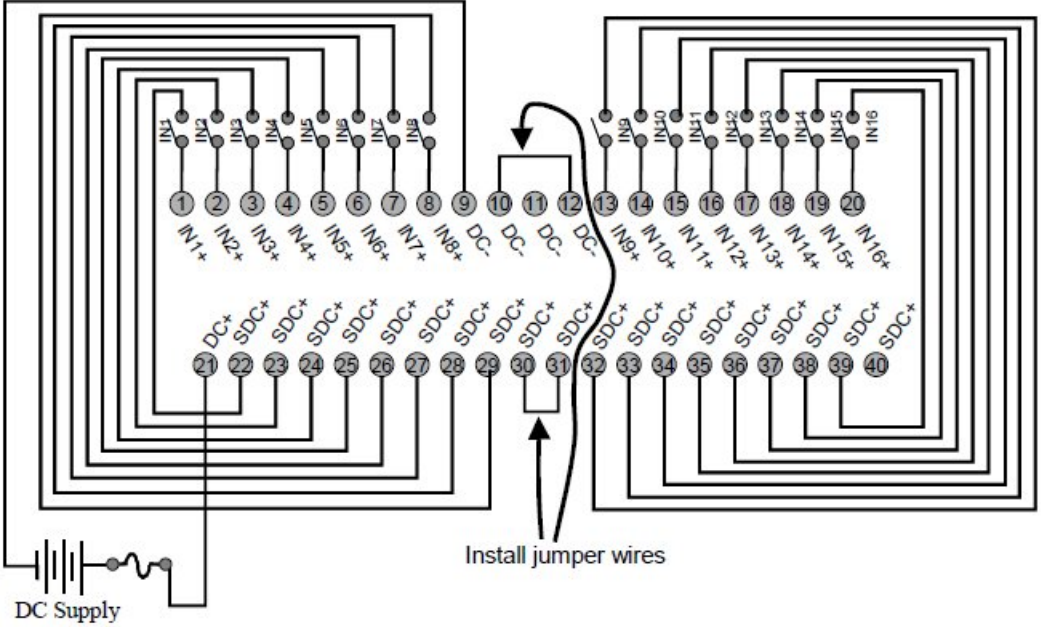
4 Point Analog Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure. Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to AO module at IO rack. Choose from: <ul style="list-style-type: none"> 900RTC-L210 Remote Terminal Low Voltage Cable Assembly, 1.0 meters long 900RTC-L225 Remote Terminal Low Voltage Cable Assembly, 2.5 meters long 900RTC-L250 Remote Terminal Low Voltage Cable Assembly, 5.0 meters long Install AO module label onto the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29 Connect cable to RTP
3	<p>Set/verify jumper positions as shown for use with an analog output module.</p> <div data-bbox="328 848 1391 1171"> <p>SW1 is not used. I/O Module RIUP (Removal and Insertion Under Power) functionality is not affected by using the RTP.</p> <p>See page 15 for RTP internal schematic.</p> </div>
4	<p>Connect field wiring</p> <p>LOADS ARE 0 to 750 ohm</p>

16 Point Contact Digital Input	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point Contact DI module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-L210 Remote Terminal Low Voltage Cable Assembly, 1.0 meters long 900RTC-L225 Remote Terminal Low Voltage Cable Assembly, 2.5 meters long 900RTC-L250 Remote Terminal Low Voltage Cable Assembly, 5.0 meters long Install 16 point contact DI module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded as described in the shield grounding section of Installation and User guide of the controller being used.
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29 Connect cable to RTP
3	<p>Set jumper positions as shown for the 16 point contact digital input module.</p> <div data-bbox="289 852 1349 1178">  <p>Diagram showing the 16 point contact digital input module with jumper positions J1 through J9 and SW1. The module is shown with a DIN rail and a terminal block TB1. The jumper positions are indicated by black bars (Close) and white bars (Open). The legend shows: Open (Jumper on the right side) and Close (Jumper on the left side). Note: The right side position only holds the jumper in place and is equivalent to removing the jumper.</p> </div> <p>Attention: SW1 is not used. Module RIUP is not affected by using the RTP. See page 15 for RTP internal schematic.</p>

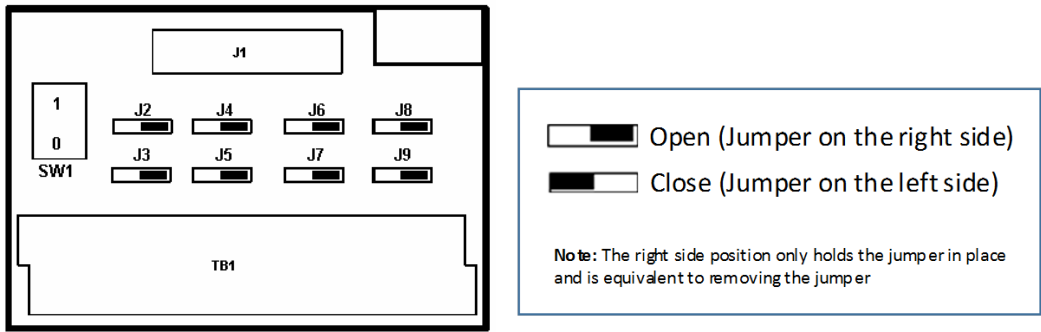
16 Point Contact Digital Input

Step	Action
4	<p>Connect Field wiring</p>  <p>The diagram illustrates the wiring for 16 point contact digital inputs. It shows two main sections of terminals, each with 16 inputs (IN1 to IN16) and common (COM) terminals. The left section has terminals 1 through 20, and the right section has terminals 21 through 40. The wiring shows connections for IN1+ through IN16+ and IN1- through IN16-. A note 'Install jumper wires' points to the COM terminals, indicating that jumpers should be installed between the COM terminals of the two sections.</p>

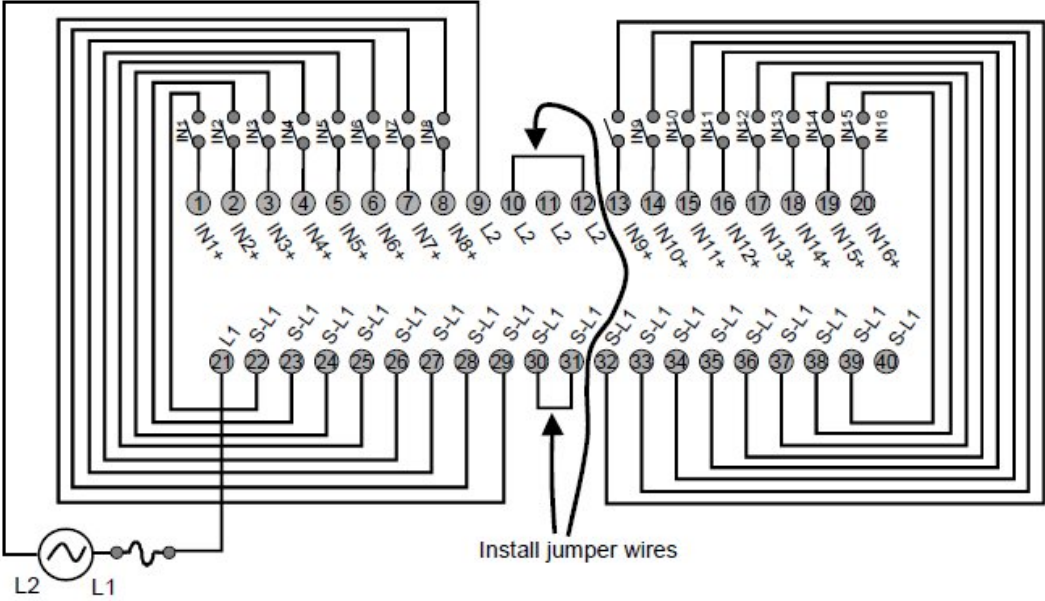
16 Point DC Digital Input	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure. ATTENTION: The RTP combines the two groups of 8 inputs into one group of 16.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point DC DI module at The IO Rack. Choose from: 900RTC-L210 Remote Terminal Low Voltage Cable Assembly, 1.0 meters long 900RTC-L225 Remote Terminal Low Voltage Cable Assembly, 2.5 meters long 900RTC-L250 Remote Terminal Low Voltage Cable Assembly, 5.0 meters long Install 16 point DC Digital Input module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29 Connect cable to RTP
3	<p>Set/verify jumper positions as shown for the 16 point digital input module.</p> <div data-bbox="298 976 1367 1299" data-label="Diagram"> <p>Diagram showing the 16 point digital input module with jumpers J1 through J9 and terminal block TB1. A switch SW1 is shown on the left. A legend indicates: Open (Jumper on the right side) and Close (Jumper on the left side). A note states: Note: The right side position only holds the jumper in place and is equivalent to removing the jumper.</p> </div> <p>Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. Please reference ControlEdge PLC/UOC or ControlEdge HC900 Hybrid Controller Installation and User guides.</p> <p>Attention: SW1 is not used. Module RIUP is not affected by using the RTP.</p> <p>See page 15 for RTP internal schematic.</p>

16 Point DC Digital Input	
Step	Action
4	<p>Connect field wiring.</p> <p>Note: SDC+ in the wiring figure below refers to power that is disconnected from these screw terminals when switch SW1 is open (0).</p>  <p>DC Supply</p> <p>Install jumper wires</p>

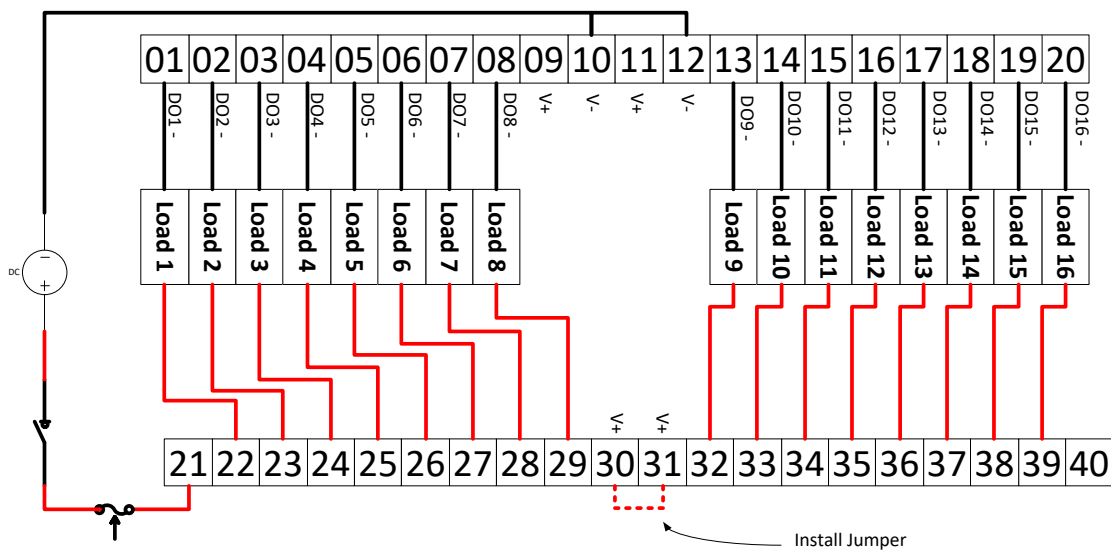
16 Point AC Digital Input

Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>ATTENTION: The RTP combines the two groups of 8 inputs into one group of 16.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point AC DI module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-H210 Remote Terminal High Voltage Cable Assembly, 1.0 meters long 900RTC-H225 Remote Terminal High Voltage Cable Assembly, 2.5 meters long 900RTC-H250 Remote Terminal High Voltage Cable Assembly, 5.0 meters long Install 16 point AC Digital Input module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29 Connect cable to RTP
3	<p>Set/verify jumper positions as shown.</p> <div data-bbox="289 1010 1323 1339">  <p>Diagram showing the 16 Point AC Digital Input module with jumper positions J1 through J9 and TB1. The module includes a switch SW1 and a terminal block TB1. The jumper positions are indicated by black bars (Close) and white bars (Open). The legend shows: Open (Jumper on the right side) and Close (Jumper on the left side). Note: The right side position only holds the jumper in place and is equivalent to removing the jumper.</p> </div> <p>Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. Please reference ControlEdge PLC/UOC or ControlEdge HC900 Hybrid Controller Installation and User guides.</p> <p>ATTENTION: SW1 only disconnects L1, not both sides of the AC powerline. See page 15 for RTP internal schematic.</p>

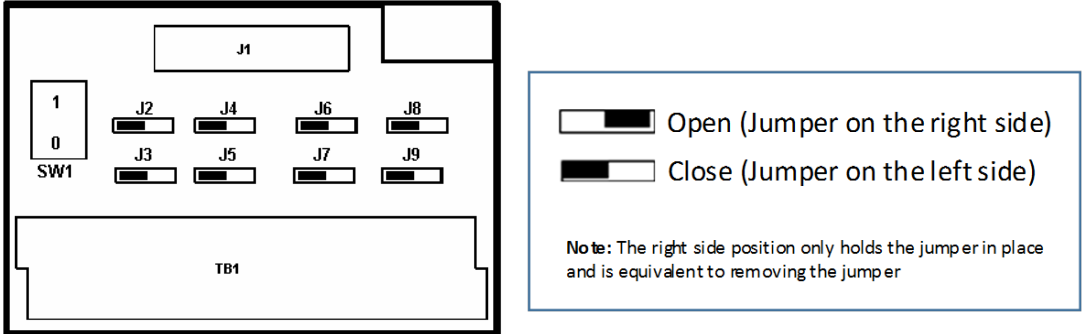


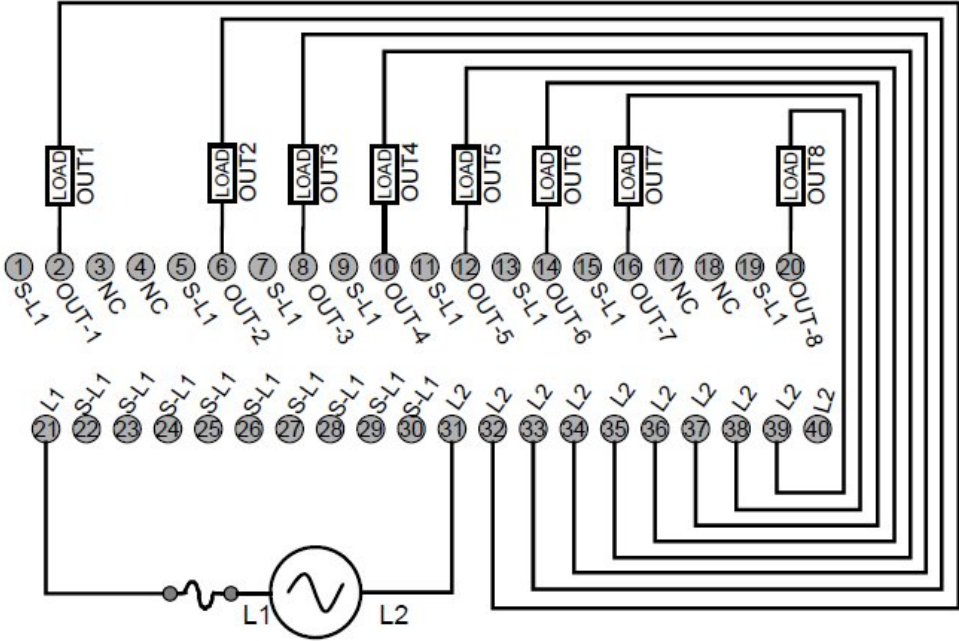
16 Point AC Digital Input

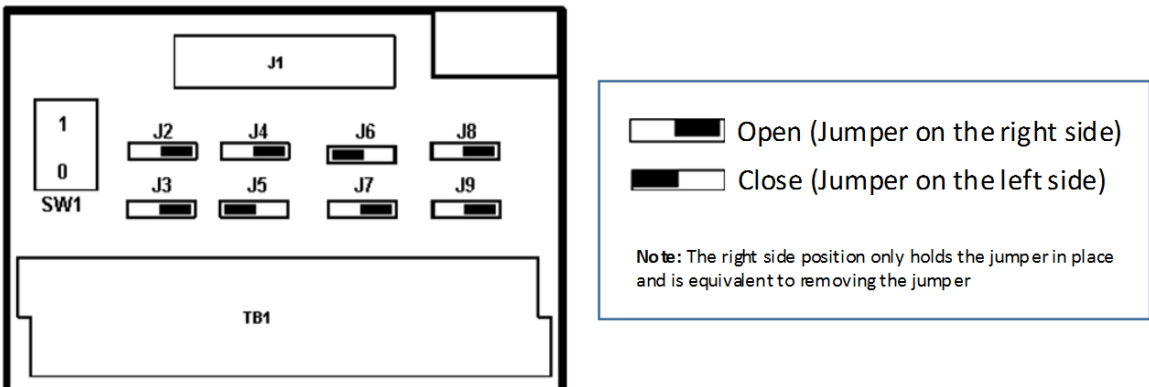
Step	Action
4	<p>Connect field wiring.</p> <p>Note: S-L1 in the wiring figure below refers to power that is disconnected from these screw terminals when switch SW1 is open (0),</p> 

16 Point DC Digital Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>ATTENTION: 16 point DC Digital Output is rated at 8A per module and 1A per output. Limited to 4A per group of 8.</p> <p>ATTENTION: The RTP combines the two groups of 8 outputs into one group of 16.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point DC DO module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-L210 Remote Terminal Low Voltage Cable Assembly, 1.0 meters long 900RTC-L225 Remote Terminal Low Voltage Cable Assembly, 2.5 meters long 900RTC-L250 Remote Terminal Low Voltage Cable Assembly, 5.0 meters long Install 16 point DC Digital Output module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29 Connect cable to RTP
3	<p>Set/verify jumper positions as shown.</p> <div data-bbox="240 978 1325 1312" data-label="Diagram"> </div> <p>Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. Please reference ControlEdge PLC/UOC or ControlEdge HC900 Hybrid Controller Installation and User guides.</p> <p>ATTENTION: SW1 only disconnects the positive terminal, not both sides of the DC power. See page 15 for RTP internal schematic.</p>

16 Point DC Digital Output	
Step	Action
4	<p>Connect Field Wiring</p> <p>Note: SDC+ in the wiring figure below refers to power that is disconnected from these screw terminals when switch SW1 is open (0).</p>  <p>Note: DC Outputs provide electronic overload protection in the module, but adding a fuse (see picture) protects the wiring.</p>

8 Point AC Digital Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>ATTENTION: 8 point AC Output is limited to maximum of 2A per output for any VAC, 6A per RTP for 240VAC, 8A per RTP for 120VAC.</p> <p>ATTENTION: The RTP combines the 8 isolated outputs into one group of 8.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> • Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). • Connect desired cable to 8 point AC DO module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-H210 Remote Terminal High Voltage Cable Assembly, 1.0 meters long 900RTC-H225 Remote Terminal High Voltage Cable Assembly, 2.5 meters long 900RTC-H250 Remote Terminal High Voltage Cable Assembly, 5.0 meters long • Install 8 point AC Digital Output module label into the module connector cover. • Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).

8 Point AC Digital Output	
Step	Action
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cable to RTP.
3	<p>Set/verify jumper positions as shown.</p> <div data-bbox="261 464 1338 795">  <p>  Open (Jumper on the right side)  Close (Jumper on the left side) </p> <p>Note: The right side position only holds the jumper in place and is equivalent to removing the jumper</p> </div> <ul style="list-style-type: none"> Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. For more details refer to the Installation and User manual (51-52-25-154). <p>ATTENTION: SW1 only disconnects L1, not both sides of the AC power line. See page 15 for RTP internal schematic.</p>
4	<p>Connect field wiring.</p> <p>CAUTION: S-L1 terminals in the wiring figure below are live when switch SW1 is on (1).</p> <p>Note: AC Outputs are individually fused in the module, but adding a fuse here protects the wiring.</p> 

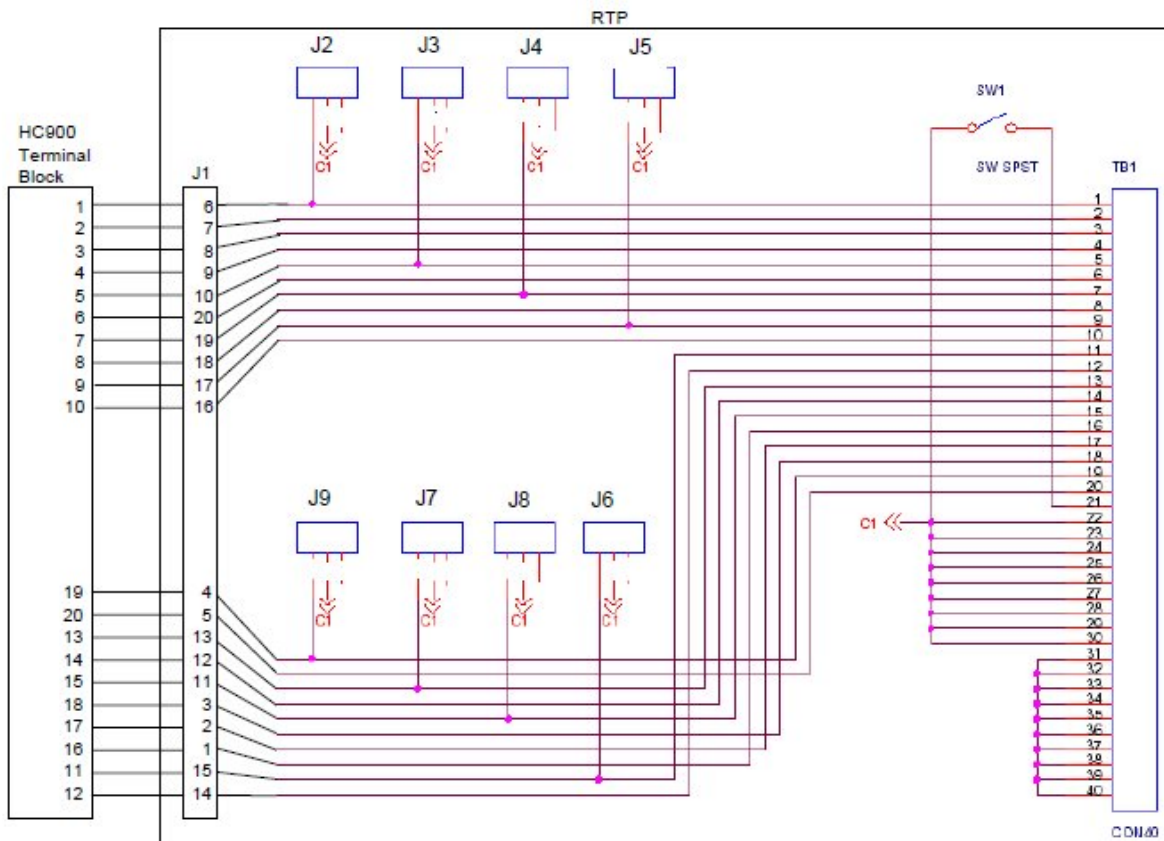
16-channel Universal Input / Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>ATTENTION: Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point UIO module at the IO Rack. Choose from: for modules with less than 2 Amps total 900RTC-L210 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-L225 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-L250 Remote Terminal Cable Assembly, 5.0 meters long for modules with more than 2 Amps total 900RTC-H210 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-H225 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-H250 Remote Terminal Cable Assembly, 5.0 meters long Install 16 point Universal Input/ Output module insert into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section “Shield Grounding” in the Installation and User manual (51-52-25-154).
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cable to RTP.
3	<p>Set/verify jumper positions as shown.</p>  <p>Module Removal / Insertion Under Power (RIUP) is not supported by Switch SW1 and must be provided externally to allow removal of the module from the rack without causing an arc. Please reference ControlEdge PLC/UOC or ControlEdge HC900 Hybrid Controller Installation and User guides.</p> <p>ATTENTION: SW1 is not used for this module type.</p> <p>See page 15 for RTP internal schematic</p>



16-channel Universal Input / Output	
Step	Action
4	<p>Connect field wiring as shown.</p> <p>Refer to the Installation and User manual (51-52-25-154).</p>

RTP Cable wire positions and colors (Applies to 4 AO, 1, 16 UIO) 6 DI, 16 DO, 8 DO

Twisted Pair Number	900 Platform Module TB	RTP J1 Plug Connector	Color
1	1	6	Black
	2	7	Red
2	4	9	Black
	5	10	White
3	6	20	Black
	7	19	Green
4	9	17	Black
	10	16	Blue
5	11	15	Black
	12	14	Yellow
6	14	12	Black
	15	11	Brown
7	16	1	Black
	17	2	Orange
8	19	4	Red
	20	5	White
9	3	8	Red
	8	18	Green
10	13	13	Red
	18	3	Blue

RTP Internal schematic (Applies to 4 AO, 16 DI, 16 DO, 8 DO, 16 UIO)

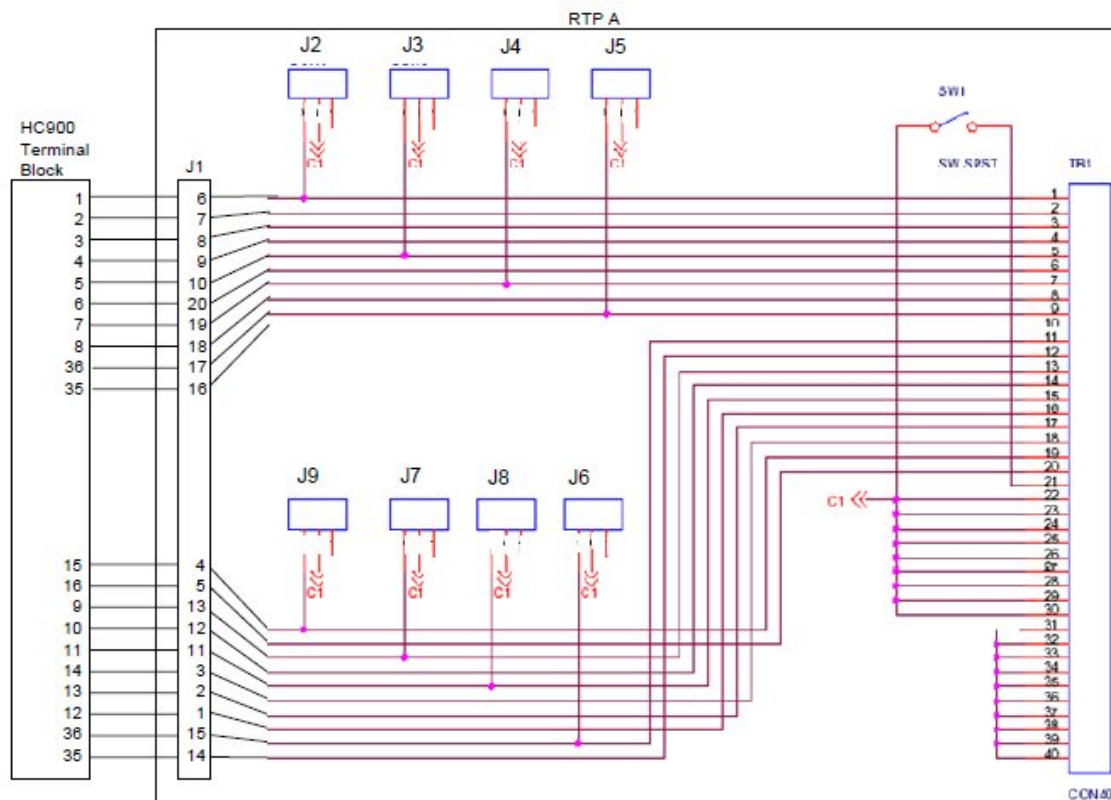




8 Point Analog Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 8 point Analog Output module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-BA10 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-BA25 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-BA50 Remote Terminal Cable Assembly, 5.0 meters long Install 8 point Analog Output module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTP to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cable to RTP.
3	<p>Set/verify jumper positions on each RTP as shown.</p> <div data-bbox="235 900 716 1226" data-label="Diagram"> </div> <div data-bbox="776 1020 1271 1102" data-label="Text"> <p>  Open (Jumper on the right side)  Close (Jumper on the left side) </p> </div> <div data-bbox="776 1150 1261 1199" data-label="Text"> <p>Note: The right side position only holds the jumper in place and is equivalent to removing the jumper</p> </div> <ul style="list-style-type: none"> Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. For more details refer to the Installation and User manual (51-52-25-154). <p>ATTENTION: SW1 opens the + side of the External 24V Power so that RIUP of module is possible. See page 18 for RTP internal schematic.</p>

8 Point Analog Output	
Step	Action
4	<p>Connect field wiring.</p> <p>LOADS ARE 0 to 750 ohm</p> <p>LOAD AO-2</p> <p>LOAD AO-1</p> <p>ETC.</p> <p>RTP A for Inputs 1 to 8</p> <p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>AO1+ AO2+ AO1- AO2+ AO3+ AO4+ AO5+ AO6+ AO7+ AO8+</p> <p>21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40</p> <p>DC+ SDC+ EXT +24V EXT 24V RTN</p> <p>External 24VDC supply</p> <p>Install 24V wires as shown: 22 to 10 22 to 12 24VRTN to 9 24VRTN to 11</p>

RTP A Cable wire positions and colors (for cable assembly drawing, applies to 8 AO and 16 AO)

Twisted Pair Number of Cable A	900 Platform Module TB Position	RTP A J1 Plug Connector	Color
1	1	6	Black
	2	7	Red
2	4	9	Black
	5	10	White
3	6	20	Black
	7	19	Green
4	36	17	Black
	35	16	Blue
5	36	15	Black
	35	14	Yellow
6	10	12	Black
	11	11	Brown
7	12	1	Black
	13	2	Orange
8	15	4	Red
	16	5	White
9	3	8	Red
	8	18	Green
10	9	13	Red
	14	3	Blue



16 Point Analog Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point Analog Output module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-3410 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-3425 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-3450 Remote Terminal Cable Assembly, 5.0 meters long Install 16 point Analog Output module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTPs to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cables to RTPs. Cables are marked "RTP A" and "RTP B." In step 4, RTP A will be wired to Inputs 1-10, RTP B to Inputs 9-16. You can write on the RTPs' labels to distinguish them. <p>Note: Inputs 9 and 10 are wired between both RTPs.</p>
3	<p>Set/verify jumper positions on each RTP as shown.</p> <div data-bbox="345 1037 824 1358" data-label="Diagram"> </div> <div data-bbox="857 1100 1409 1339" data-label="Complex-Block"> <div>  Open (Jumper on the right side) </div> <div>  Close (Jumper on the left side) </div> <p>Note: The right side position only holds the jumper in place and is equivalent to removing the jumper</p> </div> <ul style="list-style-type: none"> Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. For more details refer to the Installation and User manual (51-52-25-154). <p>ATTENTION: SW1 opens the + side of the External 24V Power so that RIUP of module is possible.</p> <p>See page 18 for RTP internal schematic.</p>

16 Point Analog Output	
Step	Action
4	<div data-bbox="284 273 1404 1102"> <p>LOADS ARE 0 to 750 ohm</p> <p>ETC.</p> <p>RTP A for Outputs 1 to 8, 9+ and 10+</p> <p>RTP B for Outputs 11 to 16, 9- and 10-</p> <p>EXT +24V</p> <p>EXT 24V RTN</p> <p>External 24VDC supply</p> <p>Install 24V wires as shown: 22 to 10 22 to 12 24VRTN to 9 24VRTN to 11</p> </div>

16 Point Analog Input	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>ATTENTION: The RTP labeled “DI, DO, AO RTP ASSY” with jumpers J2-J9 is the correct one for 16 point AI.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 16 point Analog Output module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-3410 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-3425 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-3450 Remote Terminal Cable Assembly, 5.0 meters long Install 16 point Analog Input module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section “Shield Grounding” in the Installation and User manual (51-52-25-154).
2	<p>Mount RTPs to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cables to RTPs. Cables are marked “RTP A” and “RTP B.” In step 4, RTP A will be wired to Inputs 1-10, RTP B to Inputs 9-16. You can write on the RTPs’ labels to distinguish them. Note: Inputs 9 and 10 are wired between both RTPs.
3	<p>Connect field wiring</p> <p>Set/verify jumper positions on each RTP as shown.</p> <div data-bbox="328 1180 1398 1503" data-label="Diagram"> <p>The diagram shows the internal components of the RTP module. At the top is a large terminal block labeled J1. Below it are nine smaller jumpers labeled J2 through J9, arranged in two rows. To the left of these jumpers is a switch labeled SW1 with positions 1 and 0. Below the jumpers is a terminal block labeled TB1. To the right of the jumpers is a legend box with two entries: 'Open (Jumper on the right side)' with a white bar icon, and 'Close (Jumper on the left side)' with a black bar icon. Below the legend box is a note: 'Note: The right side position only holds the jumper in place and is equivalent to removing the jumper'.</p> </div> <p>Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. For more details refer to the Installation and User manual (51-52-25-154).</p> <p>ATTENTION: SW1 opens current loop on the ground side so that RIUP of module is possible, but voltage is still present on the positive side at RTP and module terminals. See page 27 / 28 for RTP internal schematic.</p>

16 Point Analog Input

Step

Action

4

Connect field wiring.

Refer to the appropriate figure for your type of analog input.

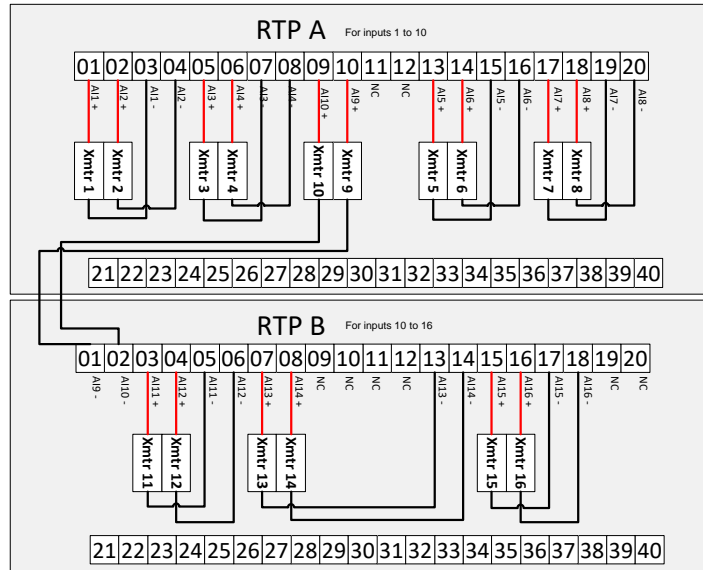


Figure 2: Voltage Input Connections

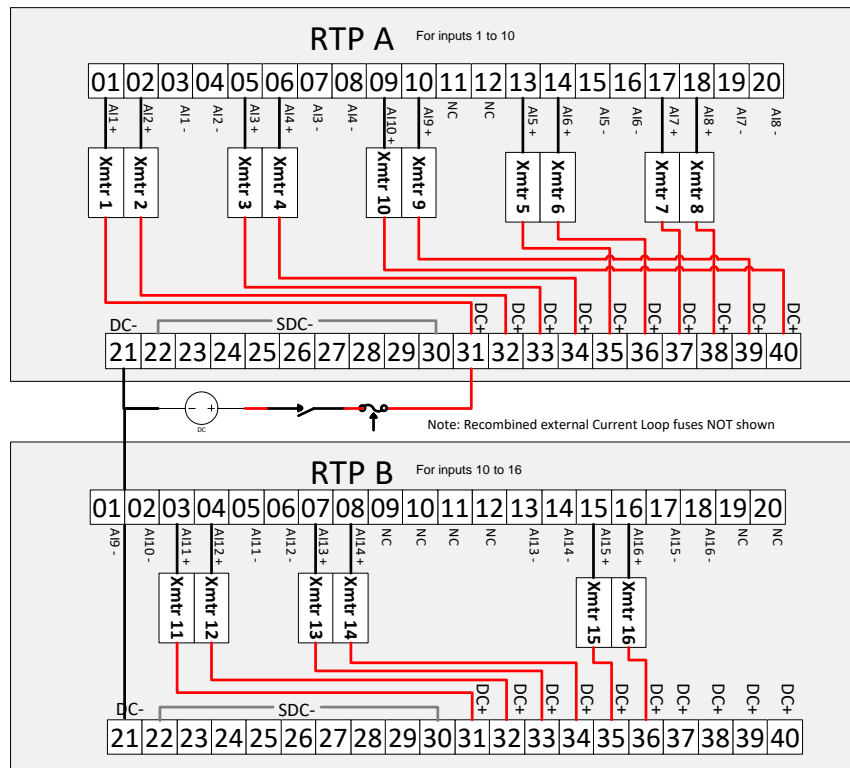
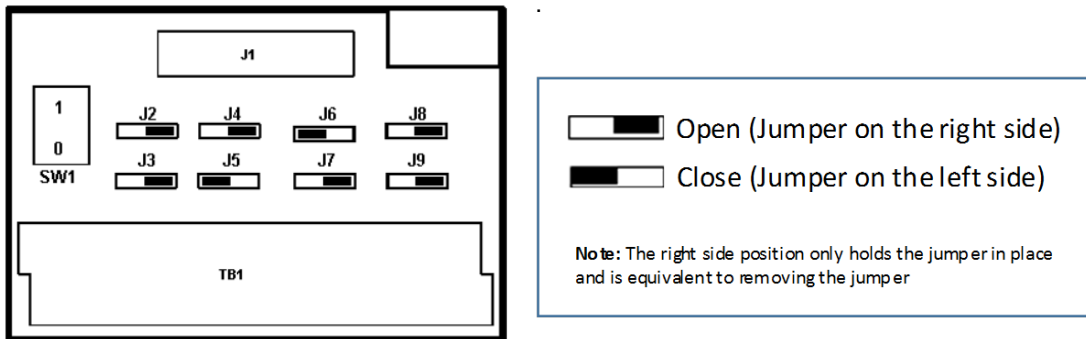


Figure 3: Current (ma) Input Connections with 2 wire transmitters

32 Point DC Digital Output	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>ATTENTION: 32 point DC Digital Output is limited to 6A per RTP and 0.5A per output.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 32 point DC Digital Output module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-3410 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-3425 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-3450 Remote Terminal Cable Assembly, 5.0 meters long Install 32 point DC Digital Output module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTPs to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cables to RTPs. Cables are marked "RTP A" and "RTP B." In step 4, RTP A will be wired to outputs 1-16, RTP B to outputs 17-32. You can write on the RTPs' labels to distinguish them.
3	<p>Set/verify jumper positions on each RTP as shown</p> <div data-bbox="341 987 1421 1323">  </div> <ul style="list-style-type: none"> Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. For more details refer to the Installation and User manual (51-52-25-154). <p>ATTENTION: SW1 opens current loop on the ground side so that RIUP of module is possible, but voltage is still present on the positive side at RTP and module terminals.</p> <p>See page 27 / 28 for RTP internal schematic.</p>

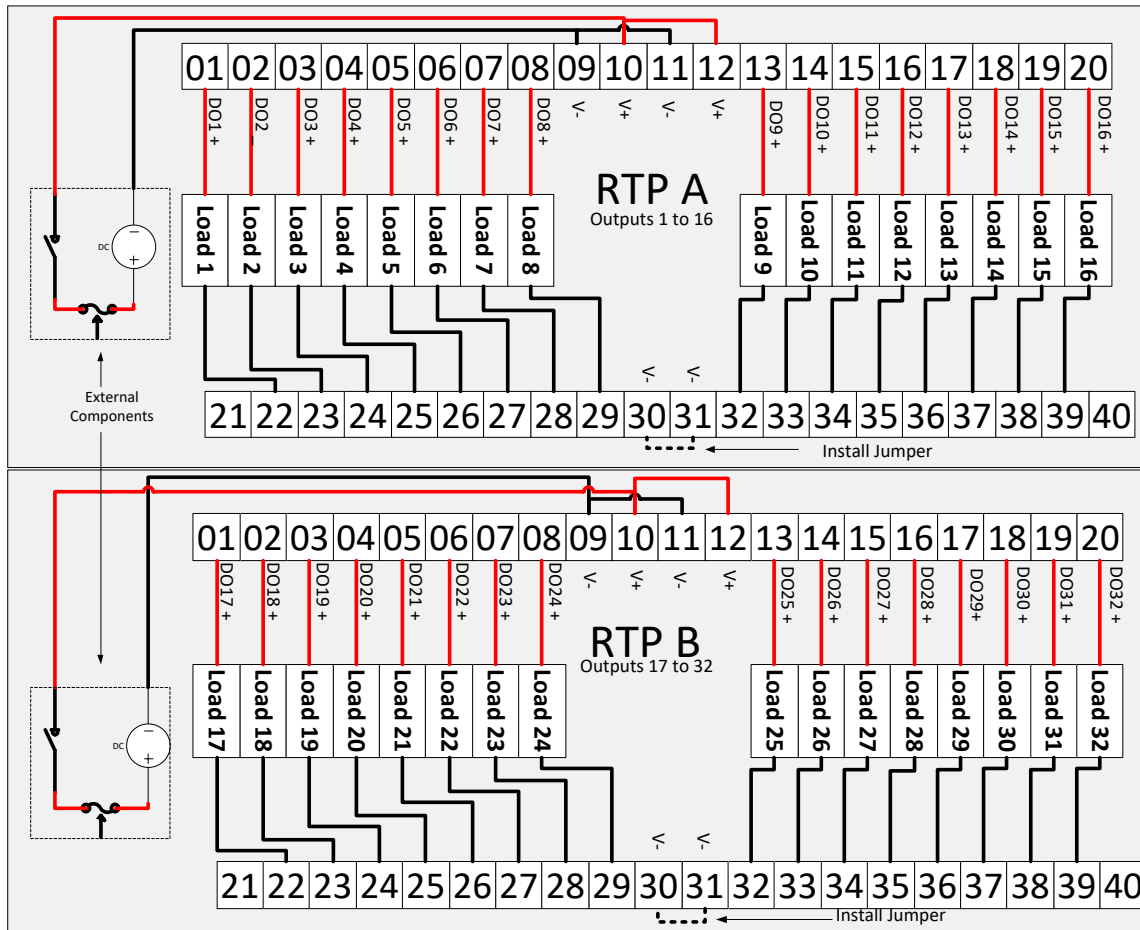
32 Point DC Digital Output

Step

Action

4

Connect field wiring.



32 Point DC Digital Input	
Step	Action
1	<p>ATTENTION: RTP and cables are intended for permanent installation within their own enclosure.</p> <p>Mount RTP cable assembly to 900 Platform (Figure 1).</p> <ul style="list-style-type: none"> Remove appropriate key tabs from terminal block to allow mating with the module. For more details refer to the Installation and User manual (51-52-25-154). Connect desired cable to 32 point DC Digital Input module at the IO Rack. Choose from: <ul style="list-style-type: none"> 900RTC-3410 Remote Terminal Cable Assembly, 1.0 meters long 900RTC-3425 Remote Terminal Cable Assembly, 2.5 meters long 900RTC-3450 Remote Terminal Cable Assembly, 5.0 meters long Install 32 point DC Digital Input module label into the module connector cover. Connect shield drain wire to the grounding bars at the base of the IO rack. All field-wiring shields must be grounded. For more details on shields grounding, refer to the section "Shield Grounding" in the Installation and User manual (51-52-25-154).
2	<p>Mount RTPs to DIN rail.</p> <ul style="list-style-type: none"> Latch to rail. See page 29. Connect cables to RTPs. Cables are marked "RTP A" and "RTP B." In step 4, RTP A will be wired to Inputs 1-16, RTP B to Inputs 17-32. You can write on the RTPs' labels to distinguish them.
3	<p>Set/verify jumper positions on each RTP as shown.</p> <div data-bbox="344 968 1404 1289" data-label="Diagram"> <p>Diagram showing the 32 Point DC Digital Input module with jumper positions J1 through J9. The module includes a switch SW1 and a terminal block TB1. The jumper positions are arranged in a 2x4 grid. A legend indicates that an open jumper (white bar) means the jumper is on the right side, and a closed jumper (black bar) means the jumper is on the left side. A note states that the right side position only holds the jumper in place and is equivalent to removing the jumper.</p> </div> <p>Module Removal / Insertion Under Power (RIUP) is supported by turning off Switch SW1 to allow removal of the module from the rack without causing an arc. Refer the Installation and User guide of the controller being used.</p> <p>See page 27 / 28 for RTP internal schematic.</p>

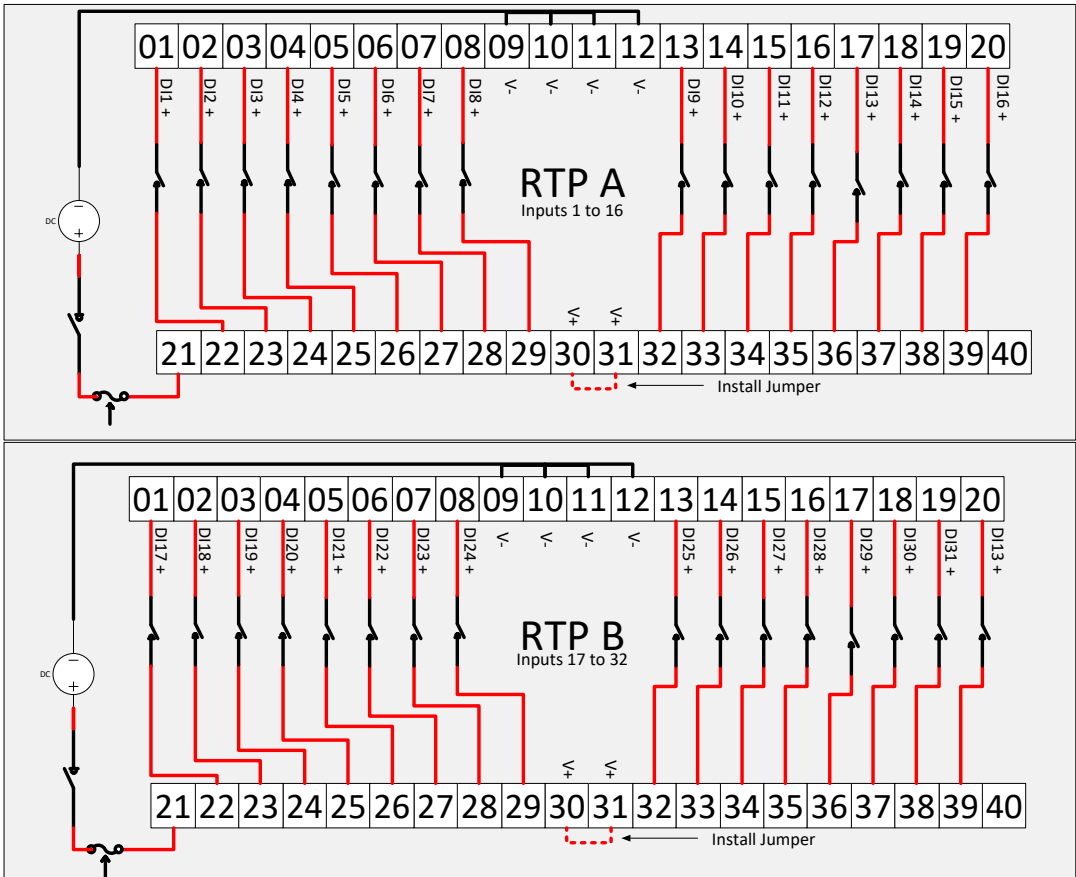
32 Point DC Digital Input

Step

Action

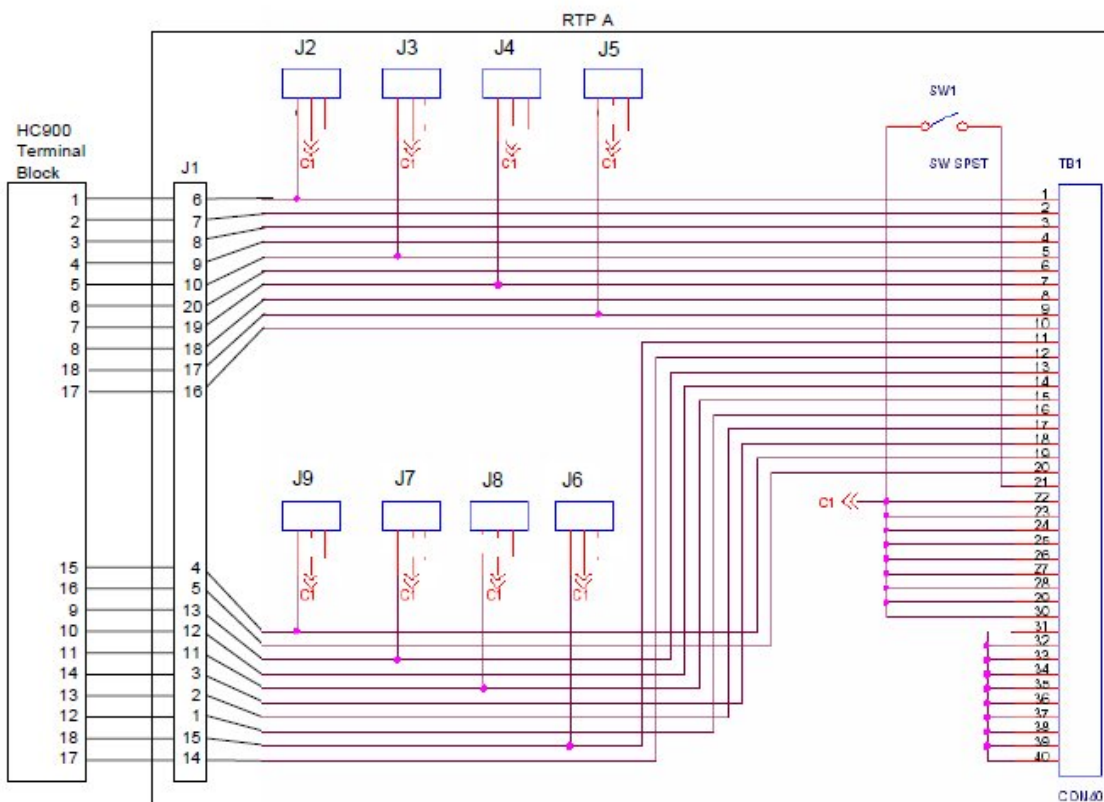
4

Connection field wiring.



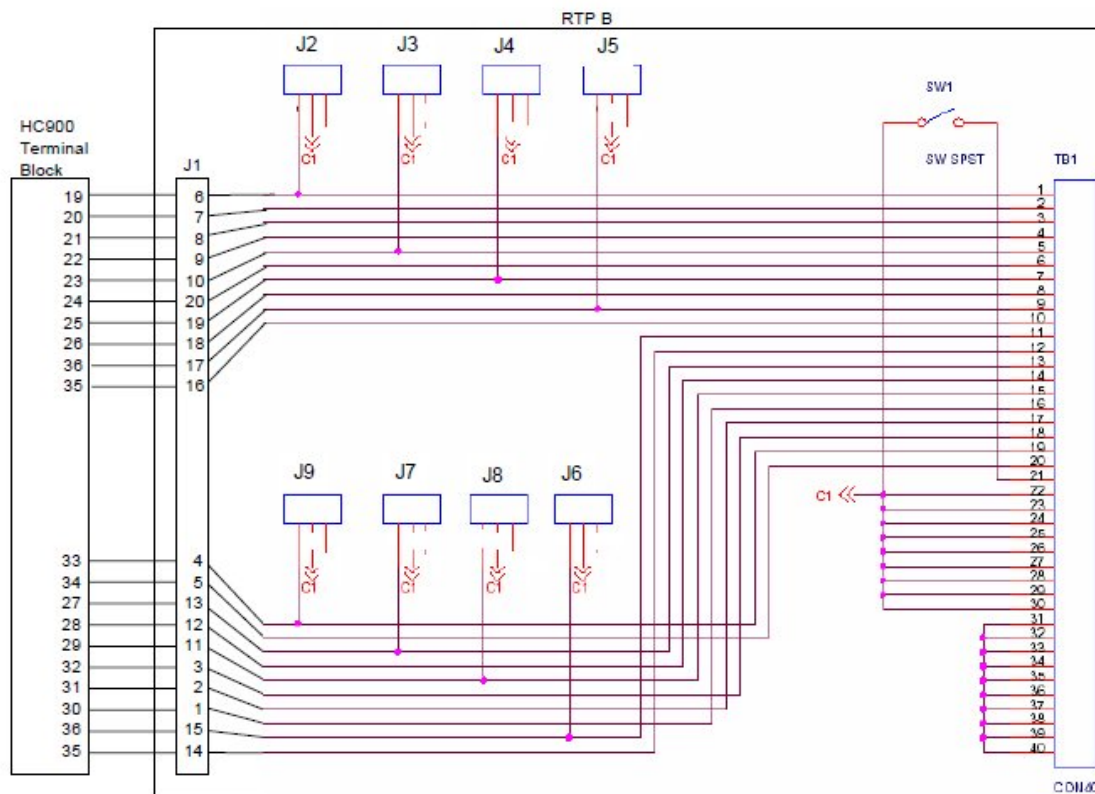
RTP A Cable wire positions and colors (for cable assembly drawing, applies to 16 AI, 32 DI, 32 DO)

Twisted Pair Number of Cable A	900 Platform Module TB Position	RTP A J1 Plug Connector	Color
1	1	6	Black
	2	7	Red
2	4	9	Black
	5	10	White
3	6	20	Black
	7	19	Green
4	18	17	Black
	17	16	Blue
5	18	15	Black
	17	14	Yellow
6	10	12	Black
	11	11	Brown
7	12	1	Black
	13	2	Orange
8	15	4	Red
	16	5	White
9	3	8	Red
	8	18	Green
10	9	13	Red
	14	3	Blue

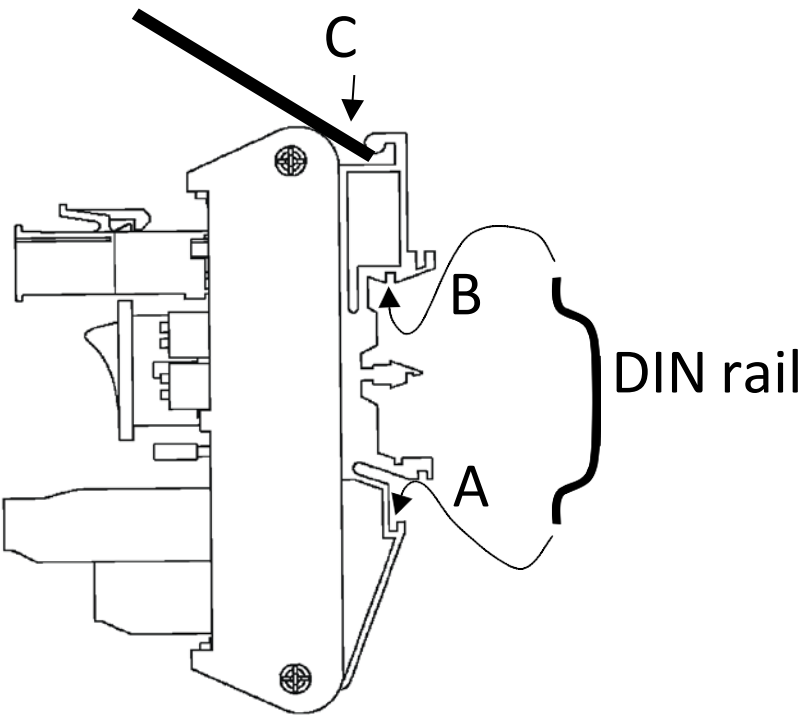


RTP B Cable wire positions and colors (for cable assembly drawing, applies to 16 AI, 32 DI, 32 DO)

Twisted Pair Number of Cable B	900 Platform Module TB Position	RTP B J1 Plug Connector	Color
1	19	6	Black
	20	7	Red
2	22	9	Black
	23	10	White
3	24	20	Black
	25	19	Green
4	36	17	Black
	35	16	Blue
5	36	15	Black
	35	14	Yellow
6	28	12	Black
	29	11	Brown
7	30	1	Black
	31	2	Orange
8	33	4	Red
	34	5	White
9	21	8	Red
	26	18	Green
10	27	13	Red
	32	3	Blue



Latch/Unlatch RTP to rail

Step	Action
1	Mounting screws must be installed at each end of the mounting rail, with additional screws approx. every 8"(203mm) to prevent twisting of the rail.
2	Insert one side of DIN rail at A. 
3	Insert other side of DIN rail at B, and push B over the rail to snap into place.
4	To remove, using slot screwdriver to lift C up gently (plastic is fragile) to disengage at B. Lift up and over rail, then disengage at A.

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