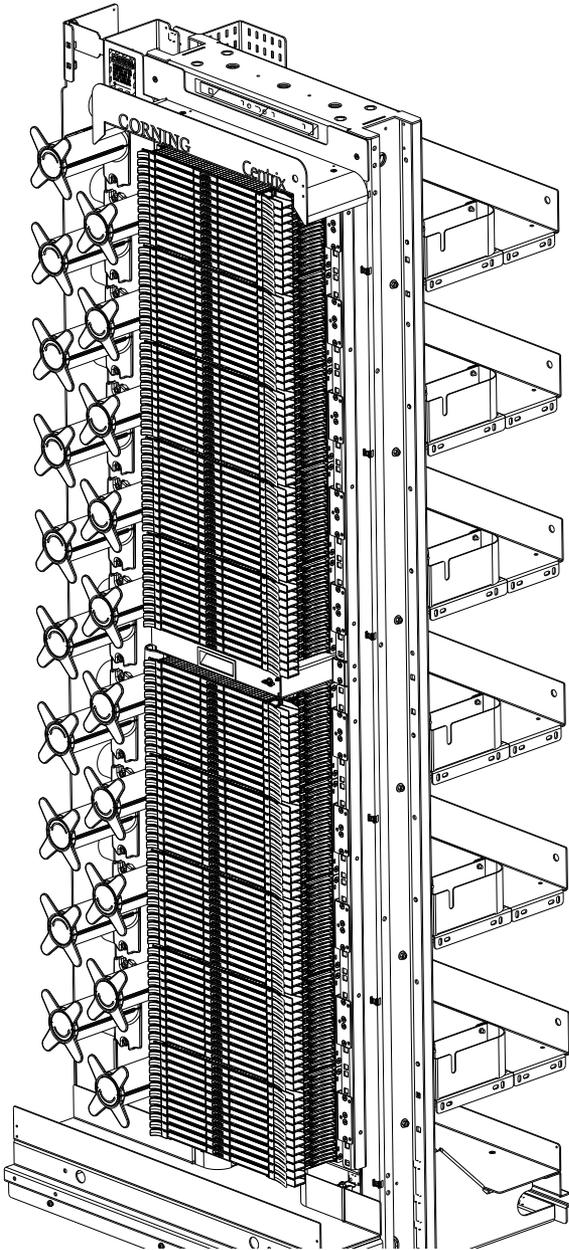


CORNING

Jumper Routing in Centrix™ System Frame

p/n 003-960, Issue 4



related literature |

003-948	Centrix System Housing Installation
003-949	Centrix System Pigtailed Housing with Pigtailed Cassette Installation
003-950	Centrix System Frame Installation
003-951	Centrix System Stubbed Housing Installation
003-959	Centrix System Splitter/CWDM Cassette Installation
003-961	Centrix System Accessories Installation

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1. Connect Jumpers



WARNING: Never look directly into the end of a fiber that may be carrying laser light. Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

- Make the connections in the first cassette as described in this section.
- Then route the jumpers as described in [Section 2](#) or [5](#) for your application.
- Lastly, make the connections in the second cassette following the instructions in this section.

Step 1: If routing jumpers to an adjacent frame, start with the most densely loaded frame (source frame). Pull module out to detent position ([Figure 1](#)).

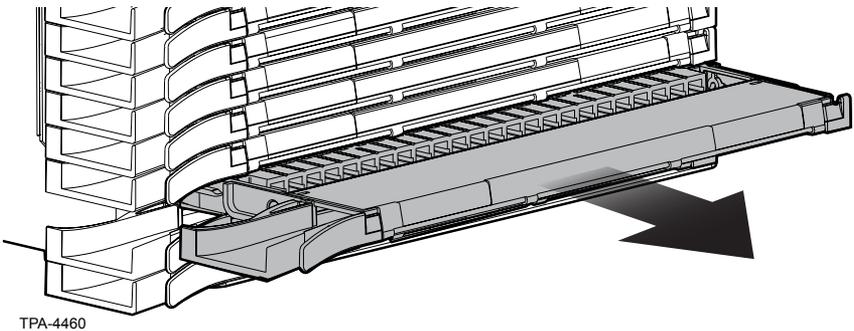


Figure 1

Step 2: Press buttons on each side of the cassette ([Figure 2](#)) and lower the handle.

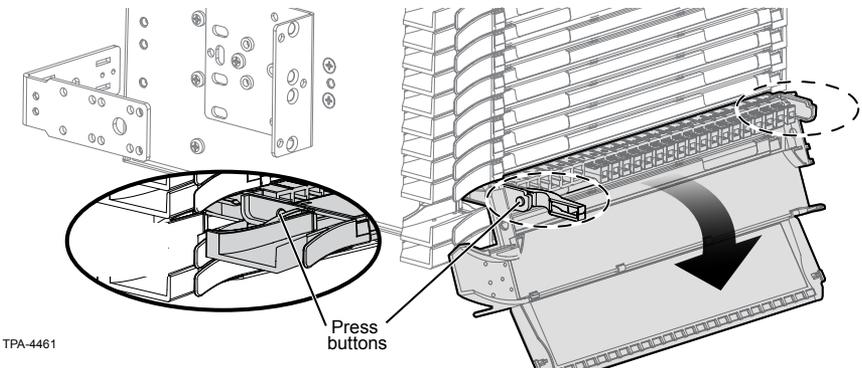


Figure 2

Step 3: Remove dust caps and clean adapters and connectors per standard company practices or as described in [Section 6](#). Connect jumpers as required ([Figure 3](#)).

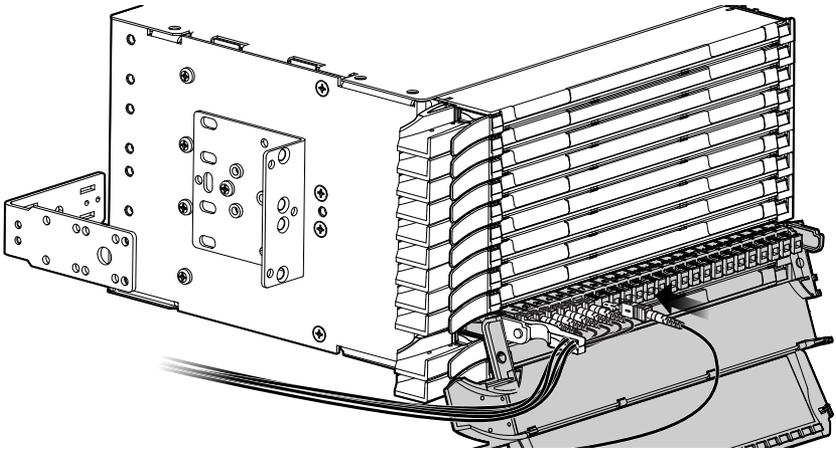
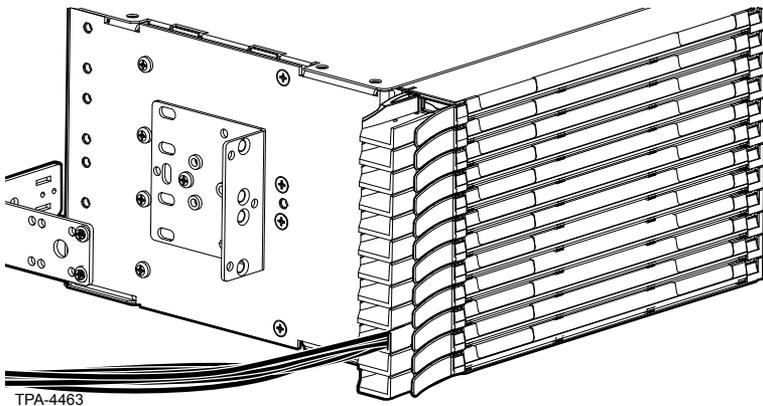


Figure 3

Step 4: Dress jumpers under the flaps on the handle and out the left side of the cassette ([Figure 3](#)).

Step 5: Then raise the handle until the buttons on each side engage to hold the handle up ([Figure 4](#)).

Step 6: Lastly, close the cover over the jumper cables.



TPA-4463

Figure 4

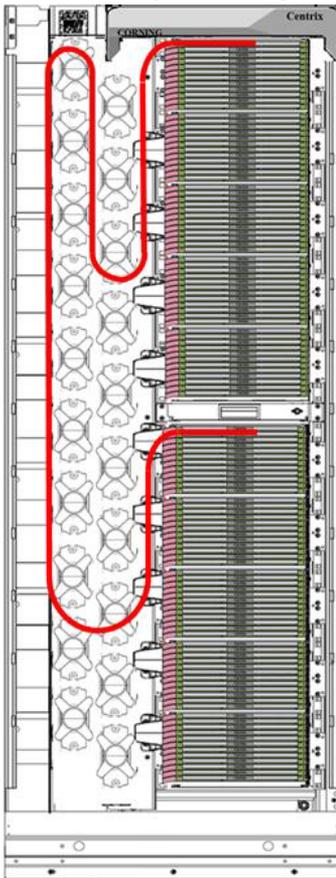
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2. Jumper Routing and Slack Storage when Cross-connecting in the Same Frame

When cross-connecting jumpers within one frame, use a single-fiber jumper length of 4 m (13 ft) to eliminate the need to cut jumpers to a specific length.

- Determine location of jumper termination.
- Connect both ends of the jumpers to the selected adapters, then route slack under both transition spools and over the highest hub that can be reached without pulling on the jumper.
- If the termination is within the same frame, refer to [Figure 5](#). If the jumper termination is within another frame, skip to [Section 5](#).

2.1. Connecting Housing 1 to Housing 6



Cross-connecting in the same frame

Connecting housing 1 to housing 6

Top five housings assigned to active equipment (EQ)

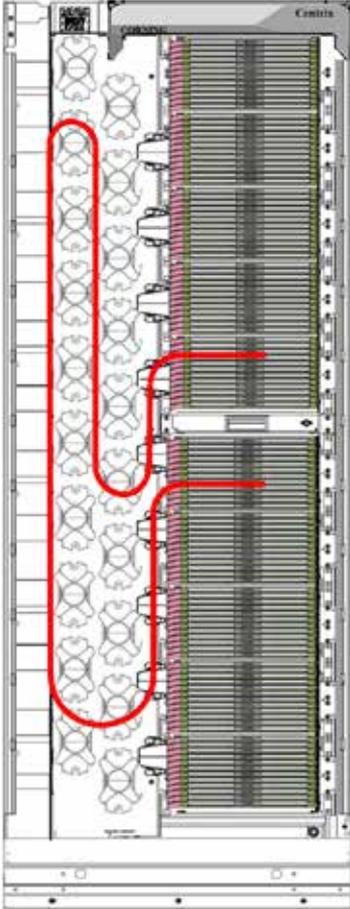
Bottom five housings assigned to outside plant (OSP)

Unless noted otherwise, jumper routing configurations are the same for front and rear cable access frames.

TPA-4450

Figure 5

2.2. Connecting Housing 5 to Housing 6



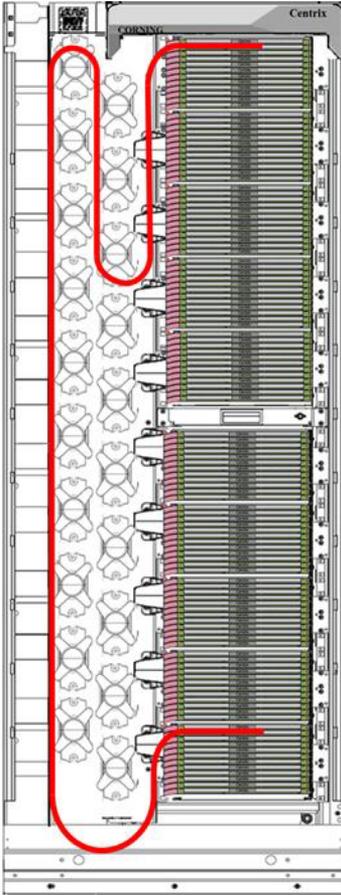
Cross-connecting
in the same frame

Connecting housing 5 to housing 6

TPA-4453

Figure 6

2.3. Connecting Housing 1 to Housing 10



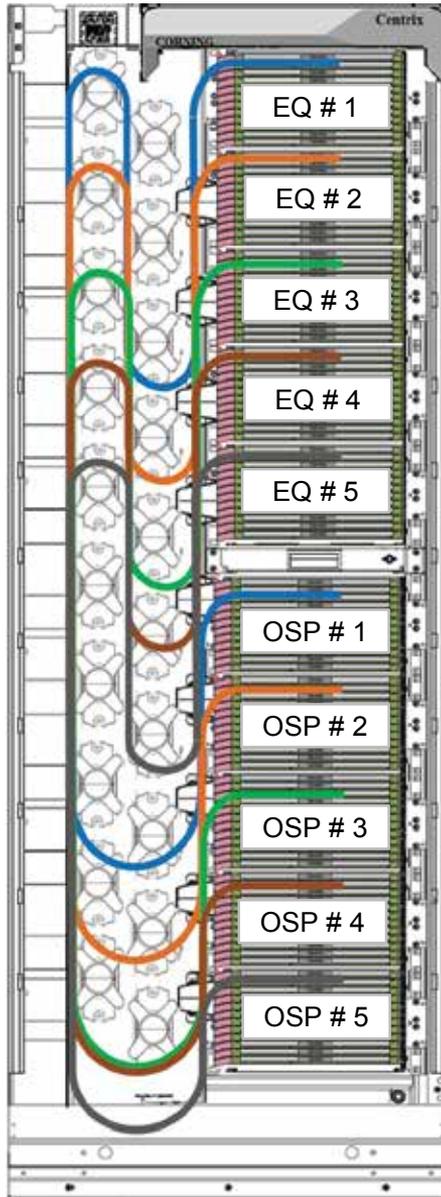
Cross-connecting
in the same frame

Connecting housing 1 to housing 10

TPA-4452

Figure 7

2.4. Full Frame Composite Cross-connect Routing



TPA-4568

Figure 8

3. Cross-connecting Jumpers in Adjacent Frames

3.1. Cross-connecting Jumpers in Adjacent Rear Cable Access Frames

When cross-connecting jumpers to adjacent rear cable access frames, use a length of 6 m (16.25 ft), plus 1.0 m (3.3 ft) for every additional frame passed.

- Always use rear troughs to transition between frames.
- Distribute fiber between different troughs and hubs in the interbay unit (IBU) to minimize fiber loading.

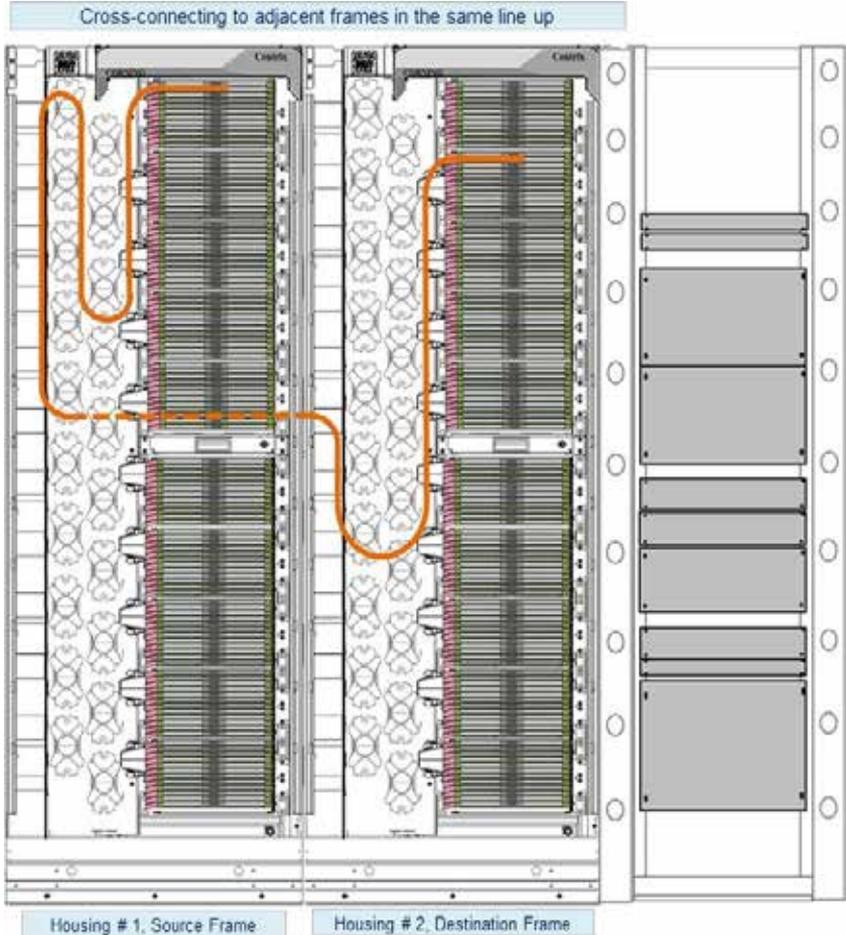
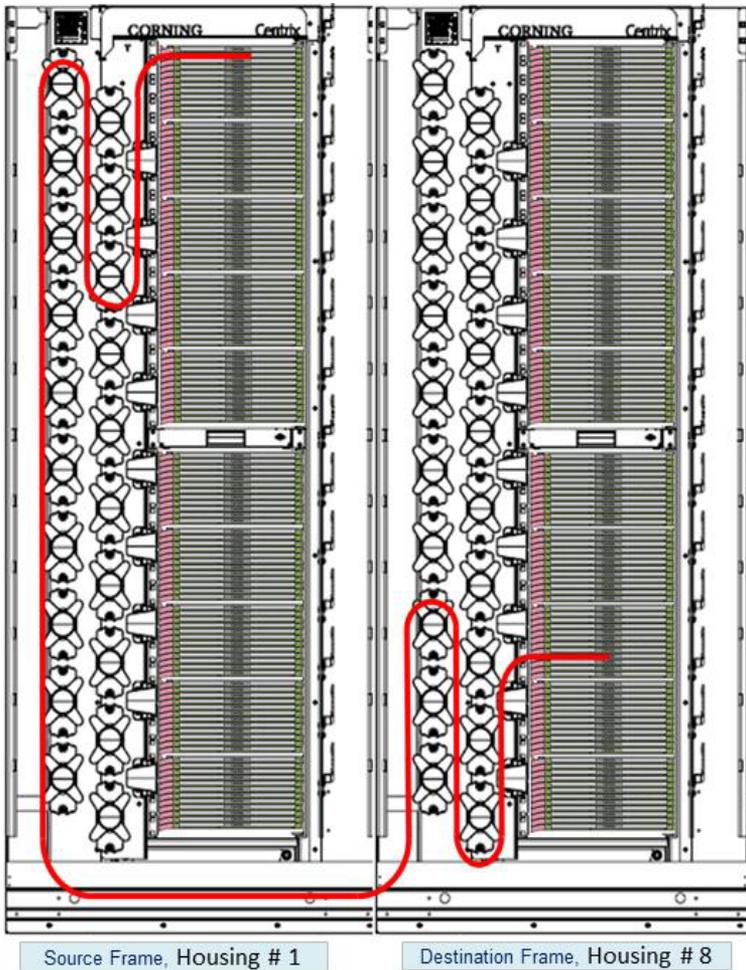


Figure 9

3.2. Cross-connecting Jumpers in Adjacent Front Cable Access Frames

When cross-connecting jumpers to adjacent front cable access frames, use a length of 6 m (16.25 ft), plus 1.0 m (3.3 ft) for every additional frame passed.

- Always use lower troughs to transition between frames.
- Distribute fiber between different hubs in the inter-bay unit (IBU) to minimize fiber loading.



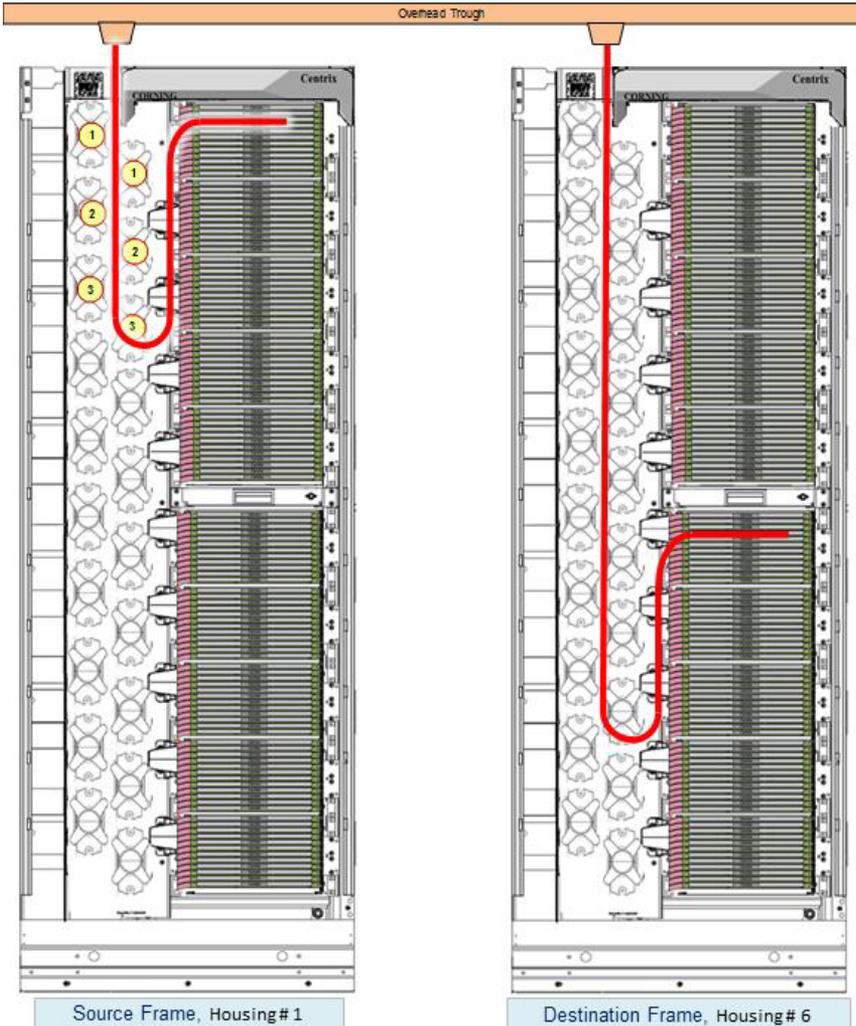
TPA-4451-EMEA

Figure 10

4. Cross-connecting Jumpers Using Overhead Trough System

Use overhead trough systems to route jumpers as shown in Figure 11 when:

- frames are not adjacent to each other in the same frame lineup or
- frames are not in the same frame lineup.



TPA-4455

Figure 11

5. Jumper Routing and Slack Storage when Interconnecting between Frames

- Rear cable access frame: Always use rear troughs to transition between frames.
- Front cable access frame: Always use bottom troughs or overhead trough system to transition between frames.
- Distribute fiber between different troughs and hubs in the IBU to minimize fiber loading.

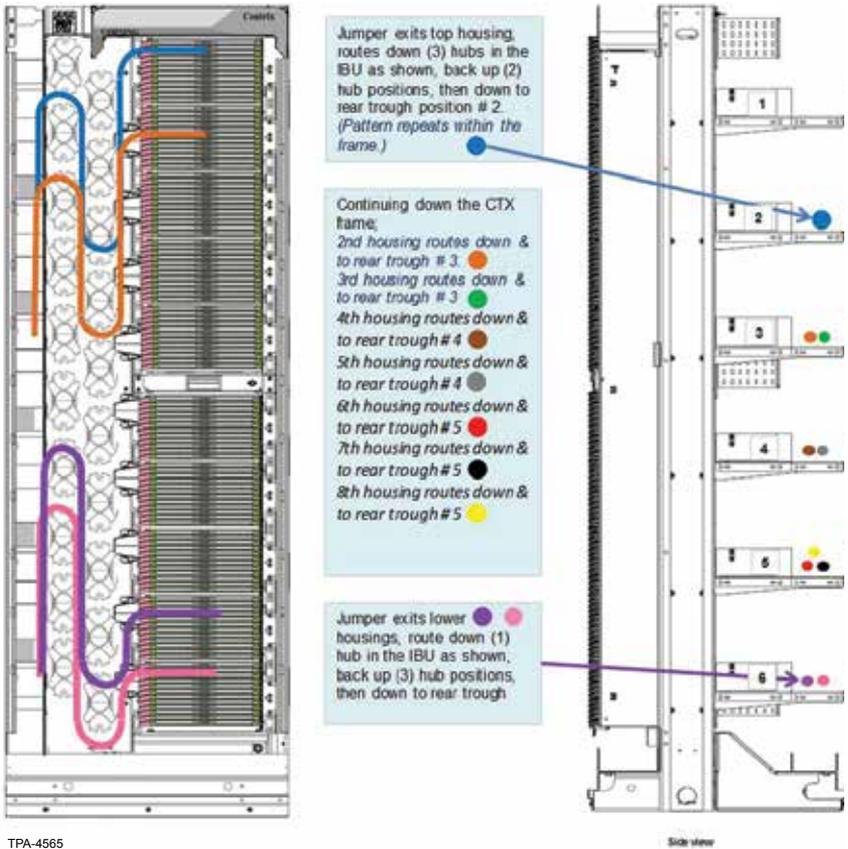
5.1. Initial Jumper Routing from Source Frame



TPA-4458

Figure 12

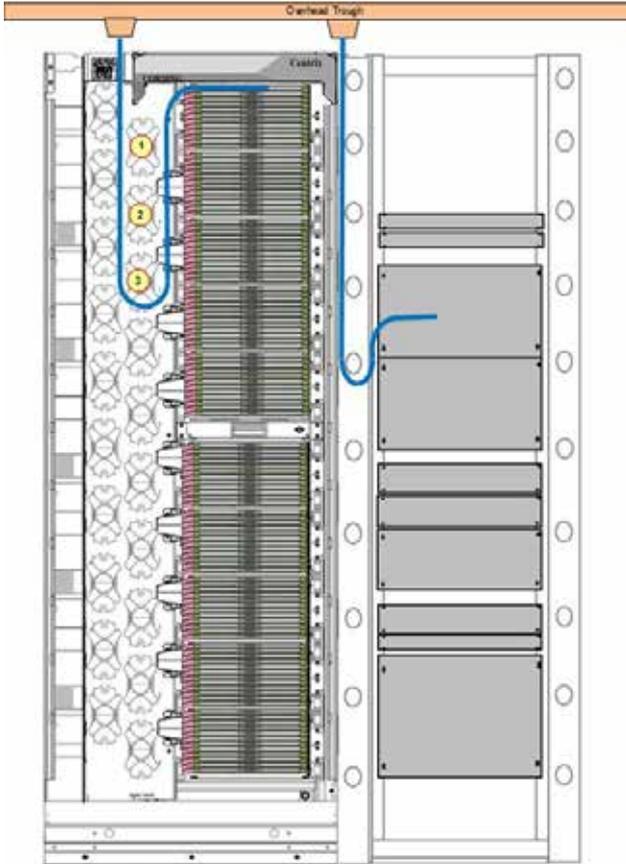
5.2. Subsequent Jumper Routing from Source Frame



TPA-4565

Figure 13

5.3. Interconnecting to Active Equipment



Interconnect Routing between Centrix Frame and Actives Network Frame

NOTE: Can be used with either front-facing single-fiber connected jumpers or front-facing 12-fiber MTP connectors

TPA-4457

Figure 14



Rear View

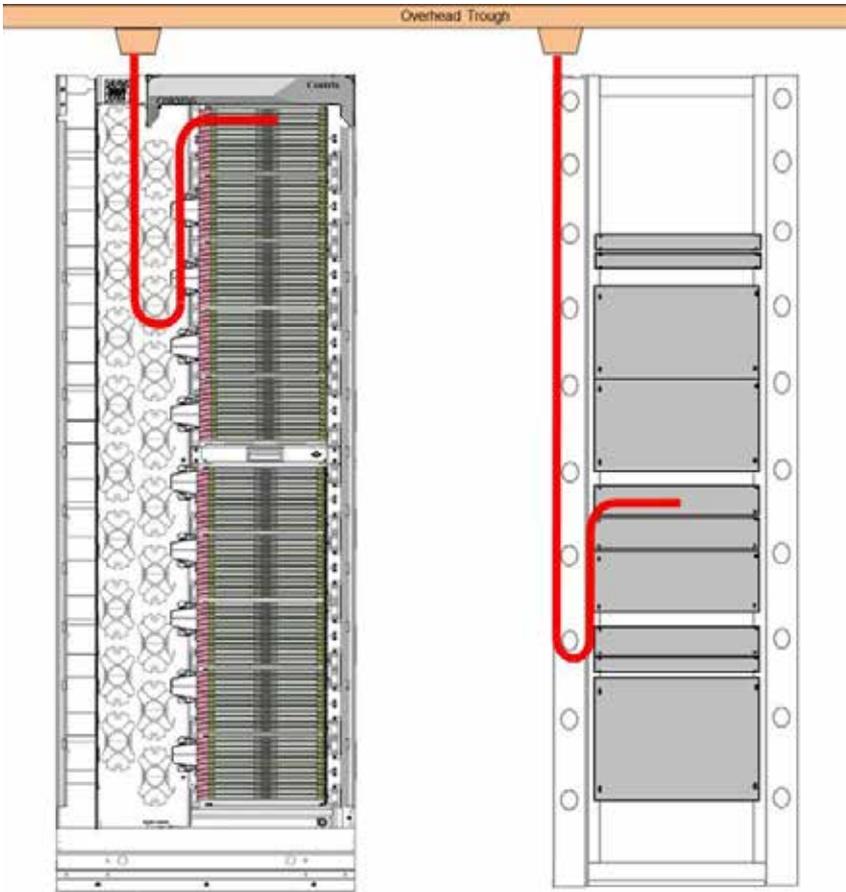
Interconnect Routing between Centrix Frame and Actives Network Frame

NOTE: Can be used with rear-facing 12-fiber MTP connectors
(Refer to SRP 003-1006 or 003-1011 for detailed instructions)

TPA-4457b

Figure 15

5.4. Interconnecting Jumper Routing to Active Shelves in a Different Frame Lineup Using Overhead Trough System

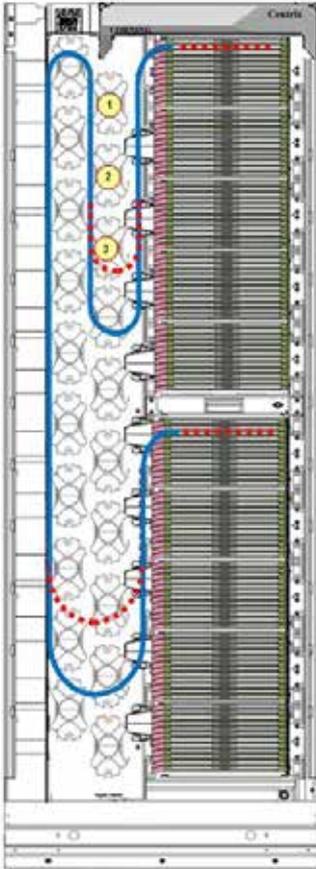


TPA-4459

Figure 16

5.5. Interconnecting Jumpers between Distantly Spaced Ports

- When connecting ports 1 through 12 of a 24-port cassette or ports 1 through 18 of a 36-port cassette to another cassette's ports 1 through 12 or 1 through 18, it is recommended to add one additional inner hub to the routing path.
- It is recommended to use the same routing scheme when connecting housing 5's ports to housings 6 through 10 using the inner hubs to address the dimensional differences.



TPA-4567

- **When connecting ports 1 through 12 of a 24-port cassette or ports 1 through 18 of a 36-port cassette to another cassette's ports 1 through 12 or 1 through 18, it is recommended to add one additional inner hub to the routing path.**
- **It is recommended to use the same routing scheme when connecting housing 5's ports to housings 6 through 10 using the inner hubs to address the dimensional differences.**

Figure 17

6. Connector Care and Cleaning



WARNING: Isopropyl alcohol is flammable with a flashpoint at 54°F. It can cause irritation to eyes on contact. In case of contact, flush eyes with water for at least 15 minutes. Inhalation of vapors irritates the respiratory tract. Exposure to high concentrations has a narcotic effect, producing symptoms of dizziness, drowsiness, headache, staggering, unconsciousness and possibly death.

- Always keep dust caps on connectors and adapters when not in use.
- Ensure dust caps are clean before reuse.
- Use optical cleaning materials as standardized by your company.
- Clean the connector before every mating, especially for test equipment patch cords (jumpers.)
- A minimum level of cleaning is listed below. Local procedures may require more rigorous cleaning methods.

Step 1: Remove plugs from the connector adapter.

Step 2: Wipe the connector ferrule twice with a lint-free wiping material moistened with isopropyl alcohol. Then wipe across the end of the ferrule.

Step 3: Repeat previous step with a dry wipe.

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