

# Installation Guide

## BELDEN GigaBIX Cross-Connect System

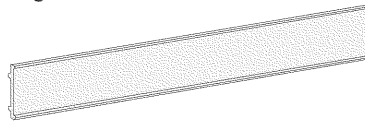
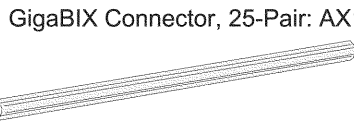
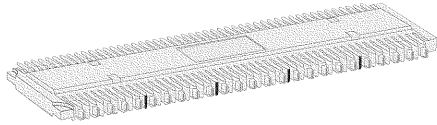
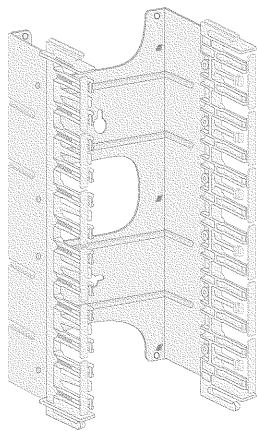
Doc # PX101821 Release 03



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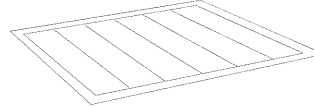
### GigaBIX Termination Kit, 300-Pair (Kit # AX101471)

#### Basic Components

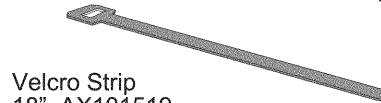


GigaBIX Mount: AX101472 GigaBIX design Strip: AX101483

#### Accessories



Label Sheets



Velcro Strip 18" AX101519



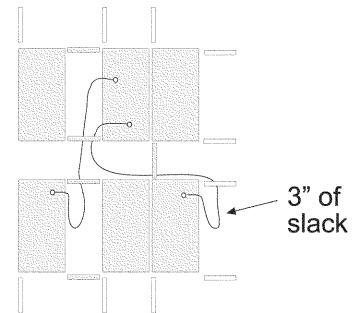
Wood Screws #8-3/4"

#### Standard Tools and Materials

- Marker
- Measuring tape
- Spirit Level
- Cutters
- BIX Connecting Tool

#### Cross-Connect Routing

1. Route jumper wires as shown.

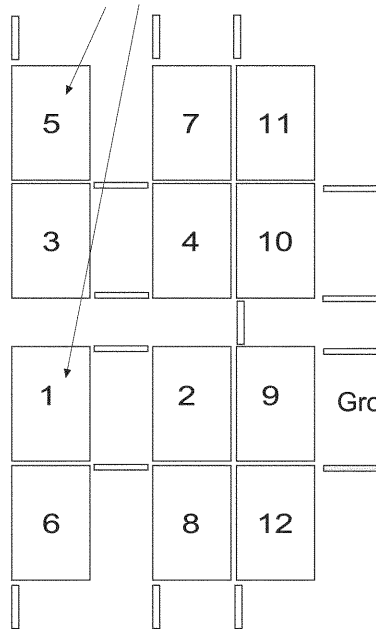


2. Using your hand, form a three inch portion of slack close to lower connection.

### GigaBIX Cross-Connect Layouts

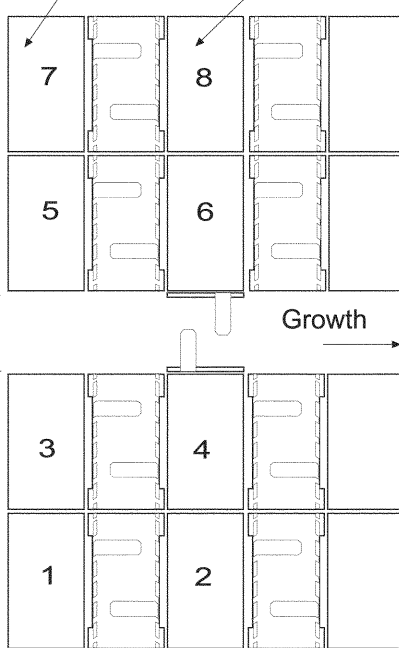
#### Cross-Connect Layout

Equipment or Distribution Fields



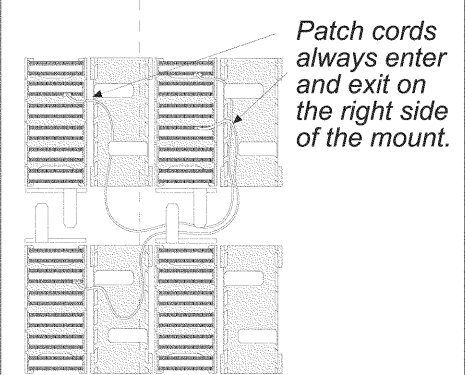
#### Patch Cord Layout

Distribution Field Equipment Field



Route patch cords from field to field.

Distribution Equipment



#### Important Note

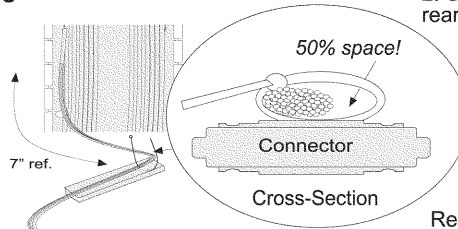
The procedure shown in this guide is recommended to provide for a quick and simple method for installing high performance data carrying cables.

Traditional BIX installation methods are also acceptable, however, the following important steps must be utilized!

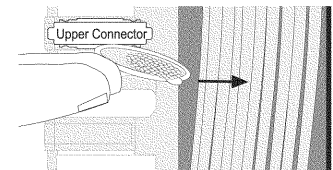
Refer to I.G. # NOT 0331 for complete instructions.

#### To avoid bowing the connector:

1. Position cable-tie through connector slots and fasten. Do not pull tight! Form an oval shape leaving approx. 50% space!



2. Using your fingers, dress wire bundle into rear area of mount!



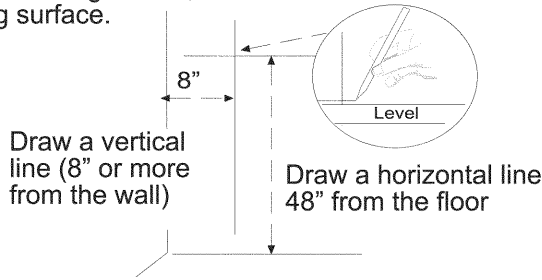
Repeat procedure with lower connector.

**Cross-Connect Wire Layout**

**Patch Cord Layout**

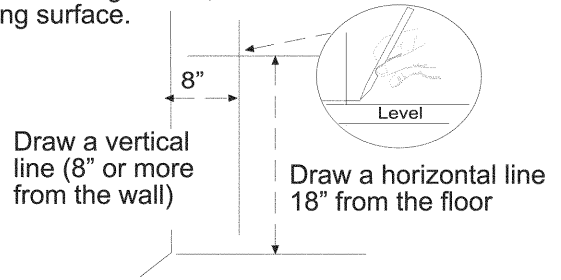
**1. Marking Wall/Mounting Surface**

Measure, and using a level, mark wall or mounting surface.



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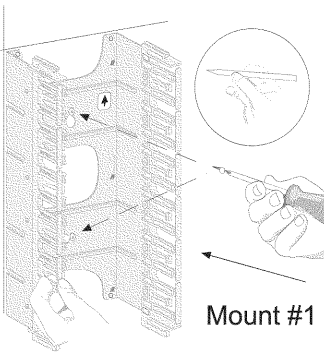


**2. Attaching the first GigaBIX Mount**

Orient mount to lines. Mark screw locations and using #8 x 3/4" wood screws, fasten to wall.

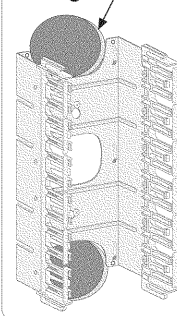
**Keep mount straight with line!**

Position mount with arrow facing up.



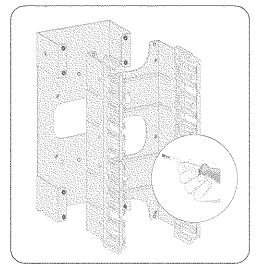
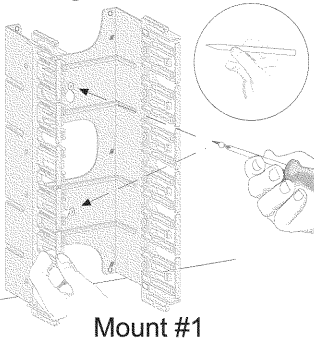
**False Wall**

Cut out hole for cables routing through wall



**2. Attaching the first GigaBIX Mount**

Orient mount to lines. Mark screw locations and using #8 x 3/4" wood screws, fasten to wall.



Refer to PX101798 for details on installing cable management modules

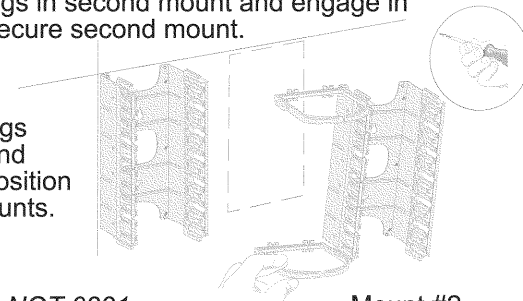
**3. Attaching additional GigaBIX Mounts**

Attach two rings in second mount and engage in first mount. Secure second mount.

**Note:** Use rings horizontally and vertically to position additional mounts.

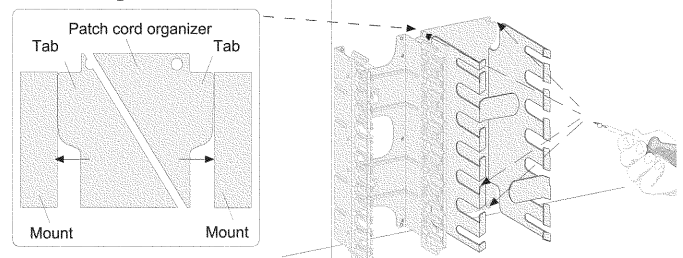
Refer to I.G.# NOT 0331 for full details on mounting hardware.

Mount #2 & Rings



**3. Attaching the first Patch Cord Bracket**

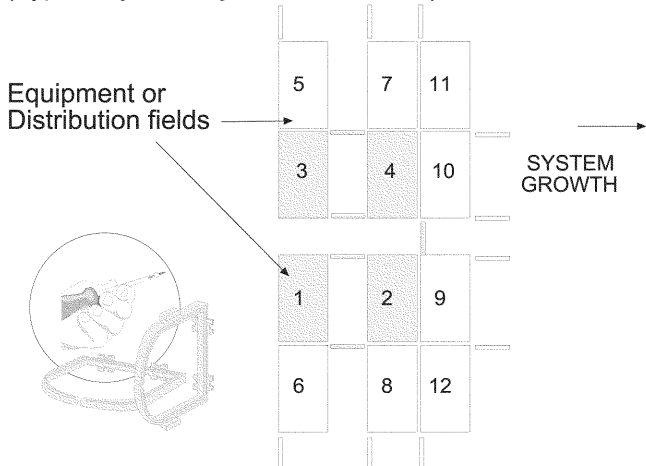
Orient patch cord bracket to line. Mark screw locations and using #8 x 3/4" wood screws, fasten to wall.



Butt tabs against mounts to produce the correct spacing.

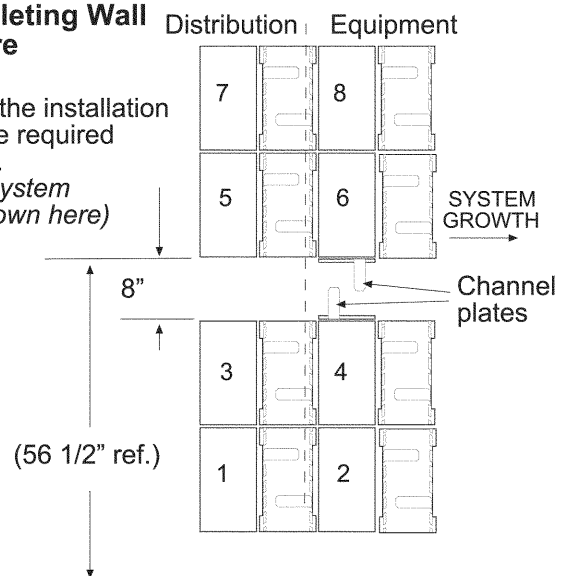
**4. Completing wall hardware**

Continue the installation adding the required mounts. Secure external rings in their positions as shown. (Typical system layout shown below)



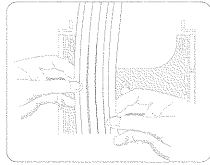
**4. Completing Wall Hardware**

Continue the installation adding the required hardware. (Typical system layout shown here)



**5. Routing Multi-Pair Cables**

Route cable bundles, and using Velco strips, fasten to upper mount. **(Note: Cables routing from the top down shown here)**



5A

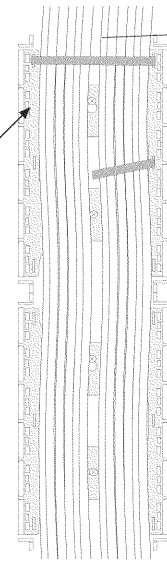


**5B. Route upper bundle into mount and fasten both bundles using top lances.**

Upper bundle

Mount entrance

5B

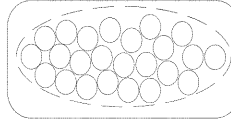


**NOTE: To minimize cable congestion when routing, work cables into a parallel oval form before bundling and securing to mount.**

**Press bundle into rear area of the mount!**

**5A. Fasten bundle for lower mount on the right side using the center lance.**

**To Maintain oval shape do not over tighten strips!**



Cross-section of bundle at the entrance of the mount

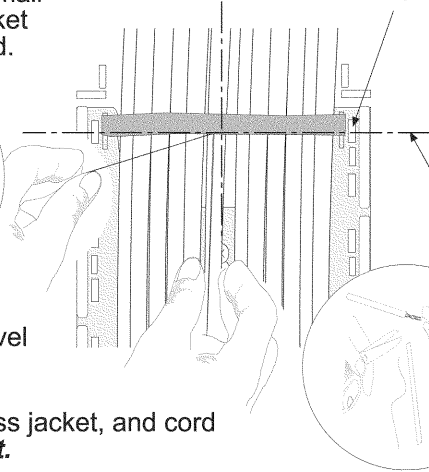
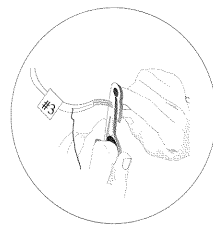
**6. Terminating Connectors**

Select the appropriate cable. Locate the cable in the center of the mount and remove the jacket level with the first position in the upper mount.

**6D. Snap a GigaBIX connector into the second position from the top in the upper mount. Use the color code and polarizing feature to correctly orient the connector.**

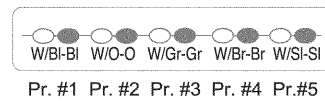
**6A. Remove a small portion of the jacket to expose rip cord.**

Center line of mount 1st. position



Center line of 1st. connector position

Color Code

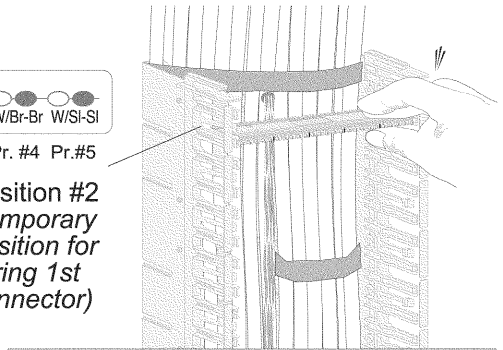
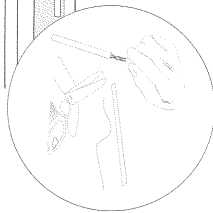


Pr. #1 Pr. #2 Pr. #3 Pr. #4 Pr. #5

Position #2 (temporary position for wiring 1st connector)

**6B. Slit jacket level with first position.**

**6C. Cut off excess jacket, and cord at the strip point.**



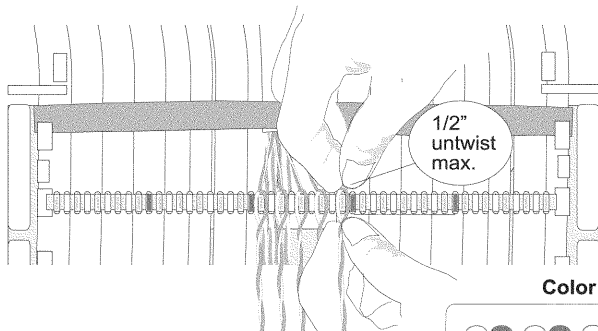
Polarizing feature

Pair #1

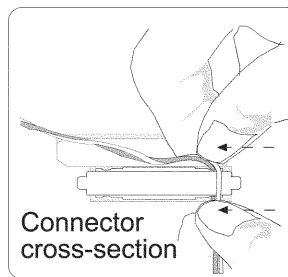
Color code

**6E. Following the color code (below), select and untwist pairs and position wires over the pair-splitter into the connector slots.**

**Installer's Tip: To improve ease of termination, leave 1/4" space between the connector and first twist.**

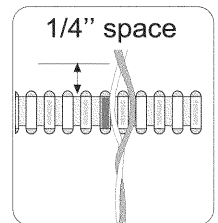


1/2" untwist max.



Connector cross-section

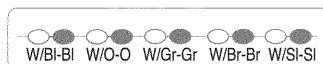
Using both hands, position conductors evenly in slots.



1/4" space

Hold wires taut from cable to connector position!

Color Code



Pr. #1 Pr. #2 Pr. #3 Pr. #4 Pr. #5

