

# PIC Wire & Cable

A Division of the Angelus Corporation  
 Ph (262)-246-0500 Fax (262) 246-0450 www.picwire.com  
 PO Box 330 Sussex, WI 53089

## Termination Instructions

T-110939-QX

Approved: *MCT*

Date: 04/28/16

Rev. 0

Distribution: USER

Uncontrolled if Printed

### Termination Instructions for PIC P/N 110939, RJ45 Shielded Jack For Star Quad Cables (for E50424, E51424 and E51426 Star-Quad Cables)

**Required Tooling:** X-acto Knife, Sharp Razor, Wire Cutters, Heat Gun,  
 PIC P/N 110701 Soft Jaw Clamping Pliers (see pic to right).  
 Note: Similar pliers acceptable



Dimensions in Inches (NOT to Scale)

**Note:** Diameter of the cable determines the number of pieces of ATUM 8/2 x 1.0" shrink tube to use. Please see chart below for required qty needed.

Cable Type	Qty. Needed
E50424	1
E51424	1
E51426	2

- 1) Install labels (if applicable). Install ATUM 12/3 x 1.0" (larger dia.) shrink tube, then applicable qty per chart above of ATUM 8/2 x 1.0" (smaller dia.) shrink tube. Discard any unused pieces. Make Cut A @ 1.25" from cable end, through cable jacket (Fig. 1). Remove jacket/braid/foil. Make Cut B @ 2.0" from cable end, scoring the cable jacket (Fig. 1). Do Not nick or cut into wire braids. Remove jacket.
- 2) Shrink all pcs (as applicable) of ATUM 8/2 x 1.0" tube(s) onto cable, starting at the end of cable jacket (cut B). Fold braids back over ATUM / Jacket as applicable, (Fig. 2).
- 3) Trim braids to 0.50" length per fig. 2. Trim foil / teflon tape to 0.2" length from braid per fig. 2. Be very careful not to nick or cut into wire insulation. Inspect to verify insulation on wires after removing foil / teflon tape to verify insulation integrity on all wires.
- 4) Install ATUM 12/3 x 1.0" shrink tube over the braids, and shrink onto braids and cable using a heat gun, starting @ .350" from exposed foil/wire pairs (Fig 3), to secure all wire braid ends.
- 5) Form wires into the desired configuration, per assembly dwg, in preparation for insertion into the connector (reference Fig. 7 for typical wiring configuration). Cut any filler material (as applicable) as close to braid as possible.

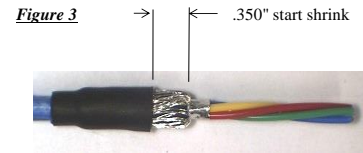
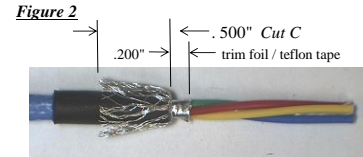
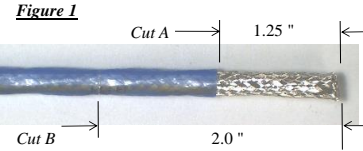
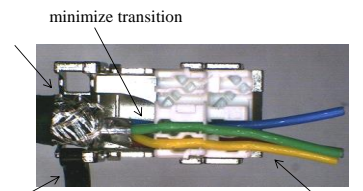


Figure 4a

**Notes:** Disregard color designation printed on wire carrier  
 Open strain relief clamp and install wires.  
 Install the wires in the bottom row first and pull wire ends.  
 Install the remaining wires into the top row of the wire carrier.  
 Wires in the top row must be pushed down into respective slots firmly (Fig. 4a).  
 Install the wires snug to minimize transition length between cable exit and wire carrier.

ATUM up to housing

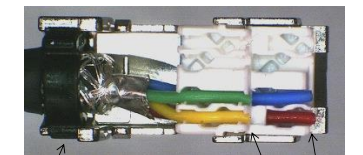


strain relief clamp, open position

pull wires snug

- 6) Before applying strain relief clamp, position the cable so that the ATUM shrink edge is up to the wire carrier housing (Fig. 4b). Close and crimp strain relief clamp using soft jaw clamping pliers until the clamp latches into place. Trim off each wire flush with the end of each assigned wire carrier cavity (Fig. 4b).
- 7) Align the panel jack body to fit onto the wire carrier & cable and push together. Adjust the soft jaw clamping pliers height to crimp squarely on the wire carriers and compress the body and wire carrier sections firmly together (Fig. 5), until latch on each side snaps into place.
- 8) Engage shield contact by pressing down on shield contact slide with a flat head screw driver (Fig. 6). Ensure shield contact is engaged by making sure shield contact is in contact with the cable.

Figure 4b



Strain relief clamp, close position

trim wires flush

Figure 5

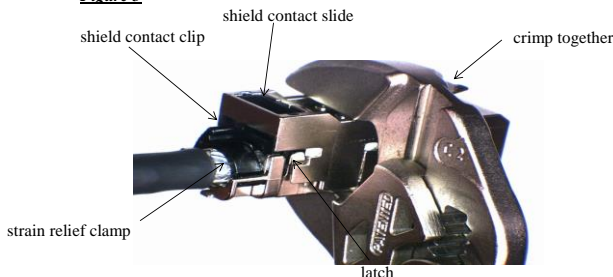


Figure 7 Wiring Configurations

Pin	ISDN	Pin	TTP Bus	Pin	568A
NA		1	Blue	1	Red
NA		NA		2	Blue
3	Yellow	3	Green	3	Yellow
4	Red	NA		NA	
5	Blue	NA		5	
6	Green	6	Yellow	6	Green
NA		NA		NA	
NA		8	Red	NA	

Figure 6



press down shield contact slide

Figure 8 Carrier pin out  
 (Disregard color designation)

