

# PIC Wire & Cable

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## Termination Instructions

T-190015

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### Termination Instructions for PIC RJ45 Ethernet Connector P/N 190015

(for PIC Ethernet Cable P/N's E10424, E12424, E13424, E40424, & E61424)

Recommended Hand Tools :	X-acto Knife, Sharp Razor, Magnifier (for RJ45 inspection)
Required Tooling	PIC 110340 RJ45 Crimp Tool (110274, Alternate) , Wire Cutters

- 1) Install rubber strain relief sleeve onto the cable. Install metal rear shield, with the wider end towards the cable end (Fig. 1).
- 2) Make Cut A @ .600" from cable end, through the cable jacket (Fig. 1). Do Not nick or cut into wire insulation. Remove jacket, braids, and foil (Fig. 1). Inspect wire insulation to verify integrity.
- 3) Make Cut B @ .375" from Cut A, through the jacket (Fig. 2). Do Not cut into or nick wire braids. Remove jacket, and moderately flare the ends of the braids, to allow for installation of the inner ferrule (Fig. 3). Leave the foil intact.
- 4) Install the inner ferrule, over the wires, over the foil, under the wire braids. Seat firmly down to Cut B, under the braids (Fig. 4).
- 5) Form wires into the desired configuration (ex. Fig. 5), per assembly dwg, in preparation for insertion into the connector (reference Fig. 10 for typical wiring configuration). Trim off the ends of the wires square and even using sharp wire cutters (to avoid flattening foam FEP insulation). Trim off .050" Max (Fig. 5).
- 6) Prior to installation of the connector body, form wires 4 & 6 upwards, offset from wires 3 and 5 (Fig. 6a). This will conform with the cavity pattern inside the RJ45 (Fig. 6b) which will aid in wire insertion. Install connector body onto wires until all wires are fully seated (Fig. 7a). To complete full insertion, push while gripping braids over the ferrule. Confirm wires are fully seated by viewing stranded wire conductors through the front end of the connector body (Fig. 7b). The inner ferrule may contact the connector body when wires are fully inserted.
- 7) Slide the rear shield into place over the braids/ferrule and onto the back of the RJ45 until the shield is fully seated (Fig 8a). The end of the jacket should be visible outside the rear of the shield (Fig. 8a).
- 8) Confirm all wires are fully seated. Crimp the connector using 110340 RJ45 Crimp Tool (Fig. 8b) or 110274 Tool (alternate).
- 9) Slide Strain Relief up over hex crimp section of the Rear Shield (Fig. 9).

All Dimensions in Inches - Not to Scale

Figure 1 Cut A → .600" ←

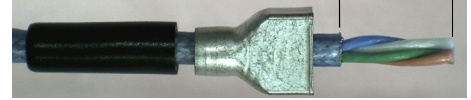


Figure 2 → .375" ← Cut B

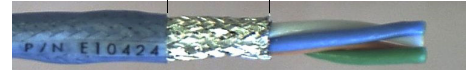


Figure 3 (flare braids)

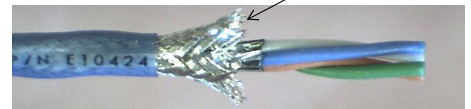


Figure 4 (seat ferrule under braids, over foil)

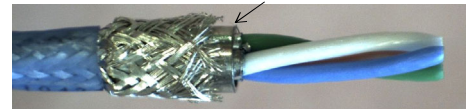


Figure 5 (configure wires, )  
(trim ends even (.050" Max))

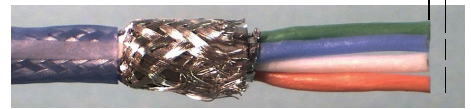
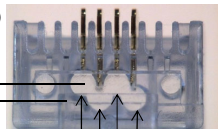


Figure 6a

Figure 6b

(offset wires 4 & 6 )  
side view

(front view)



cavities: 6 5 4 3

Figure 7a

Figure 7b

(install connector body)

(wires fully seated)

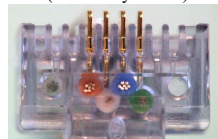
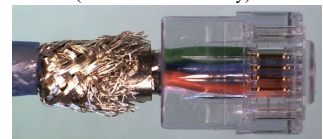


Figure 8a

Figure 8b

(fully seat the rear shield)

(crimp)

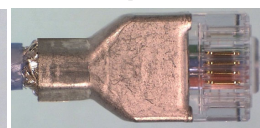
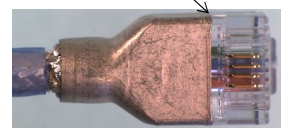


Figure 9

(locate strain relief sleeve)

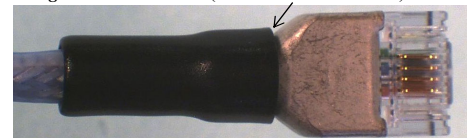


Figure 10

Typical ISDN Wiring Configuration

