

Cat5e Module Installation Procedure

FOR USE WITH PHOENIX CONTACT MODULE

The Cat5e module permits the connection of Ethernet signals of up to 1000BASE-TX (1000 Mb/s) over elevator traveling cables manufactured with Cat5e-compatible wiring.

The importance of maintaining the twist of the pairs

When stripping and connecting the wires, do not let the conductor strands unravel and spread apart. If the wires are loose, insertion of the wire into a connector block becomes more difficult.

The paired wires are twisted to reduce cross-talk between them. The plugs and connectors are the most likely reason for performance degradation because that is where most of the untwists take place. It is therefore essential to maintain the twist of each pair all the way to the connector module. Failure to do so could result in performance degradation. Nicking or cutting the wire insulation may also cause signal loss.

Required tools/materials

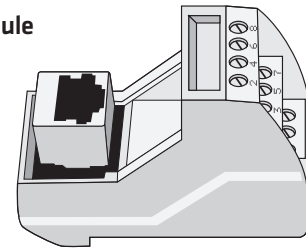
- Phoenix Cat5e module #2900701
- Ruler/tape measure
- Draka jacket strippers #36-146/36-147 Super-Peeler® or #36-060 Flexi-Peeler®
- Sock Slicer #36-177
- Cable stripper
- QuickStrip wire strippers #017-05-0001 or similar
- Wire cutters
- 1/8 in • 2.5mm flat-head screwdriver
- Cable Ties

Instructions

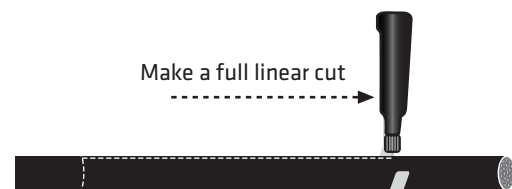
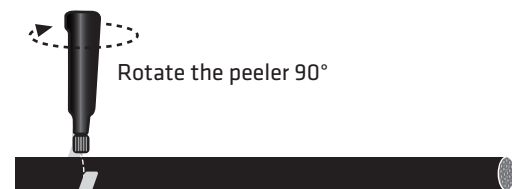
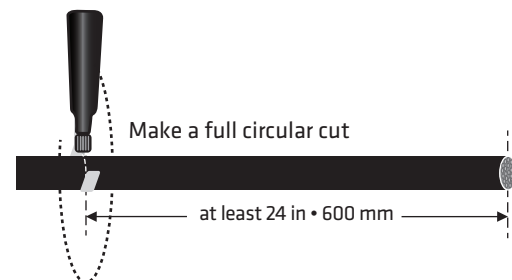
Step 1: Use a Flexi-Peeler (shown) or Super-Peeler to remove at least 24 in • 600 mm of jacket from the traveling cable. Remove the braid 'sock' with a Sock Slicer™ or utility knife, taking care not to nick the conductor insulation.

Separate the four grey shielded pair cables from the core. Use a utility knife to cut away any excess jute filler.

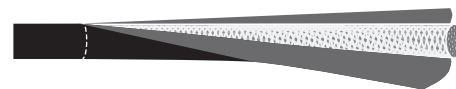
Phoenix Cat5e module



Step 1



Peel back the jacket and remove the sock...



...and separate the four grey Cat5e cables

Step 2: Using the cable stripper, remove 1 in • 25 mm of jacket. Take care not to nick or cut the conductor insulation.

Step 3: Peel away the shield and discard. This will reveal the white wire, the colored (orange, blue, green or brown) wire, the bare drain wire and the cable filler. Cut away and discard the cable filler.

Step 4: Trim and strip the wires in the four cables to the correct lengths. Make the white wire 1/2 in • 13 mm long with 1/4 in • 6 mm of exposed conductor. Make the colored wire 1 in • 25 mm long with 1/4 in • 6 mm of exposed conductor. The drain wire will be 1 in • 25 mm long.

Step 5: The module has three rows of connections: the bottom row is for drain wires, the middle row is for white wires and the top row is for colored wires. From left to right, the installation sequence is cable 2 (orange), cable 3 (green), cable 1 (blue) and cable 4 (brown).

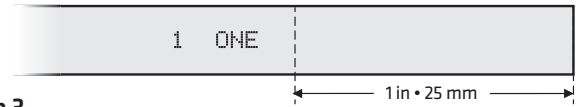
Step 6: Connect the drain wires first, using the screwdriver to tighten the connection, installing cables 2, 3, 1 and 4 left to right.

Step 7: Repeat that sequence with the white wires in the middle row, with cable 2 going in hole 1, cable 3 going in hole 3, cable 1 going in hole 5 and cable 4 going in hole 7.

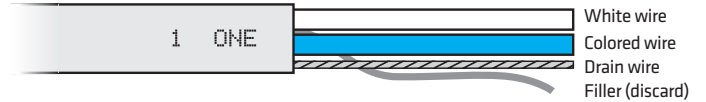
Step 8: For the top row, note the different installation order: cable 2 (orange) goes in hole 2, cable 1 (blue) goes in hole 4, cable 3 (green) goes in hole 6 (the blue and green wires will cross), and cable 4 goes in hole 8 (other wires in the illustration have been removed for clarity).

Step 9: Attach the module to a Top Hat DIN rail in a location clear from obstruction. When space does not allow for a DIN rail mounting (such as behind the Car Operating Panel [COP]), use the double-sided tape to affix the module to a clean, dry surface. Use cable ties (not included) to bind the four pairs together every 6 to 8 in • 150 to 200 mm along the length of the exposed cable. Repeat the process to connect a module to the other end of the cable if applicable.

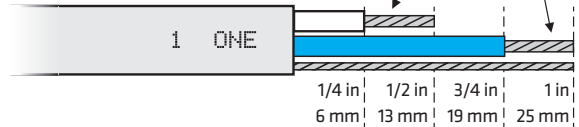
Step 2



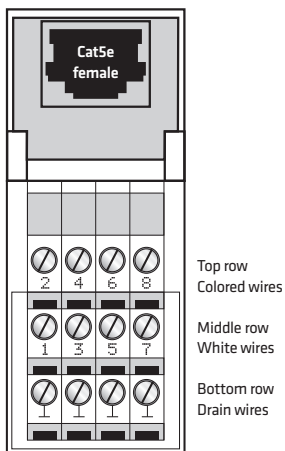
Step 3



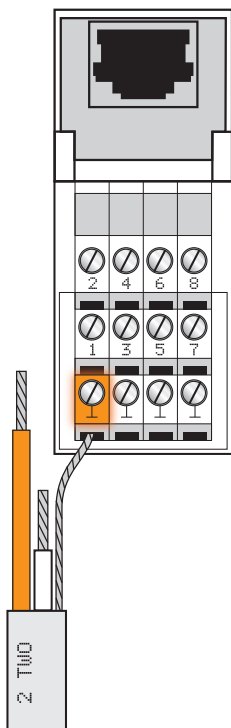
Step 4



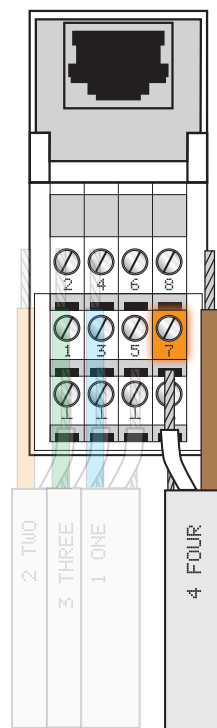
Step 5



Step 6



Step 7



Step 8

