



CommScope's HeliAx® Tool and Connector Matrix

A lot has changed since I entered the world of wireless back at the turn of this century. When I came into this industry, there were roughly eight 50-ohm corrugated cable manufacturers vying for business and a footing in the American marketplace. Of the eight, there were two dominant figures and there was everyone else.

Back in June of 2007, a major announcement spelled out the acquisition of Andrew Corporation by CommScope. That move combined two companies with a global reach, together, and immediately created a scenario where the blended company now offered two 50-ohm cable lines in parallel – each with their own connectors, prep tools, ground kits, hangers, and other ancillary support items.

Moving forward from 2008 to the present, there have been several changes and developments in the now unified CommScope cable line, branded under the trade name of HELIAX®. Over the years, we have seen the 7/8" cable product move from LDF5-50A to an off-shoot product offering greater flexibility in VXL5-50, then there were AVA5-50, AVA5-50FX, and back to AVA5-50. There were also significant changes for 1-1/4", and 1-5/8" cables, the creation of LDF4.5-50, a 5/8" cable to address microwave applications, and the removal of 2-1/4" cable entirely from the product line up, due in part to falling demand and ever-increasing technology changes in foam dielectric materials.

There have been multiple changes and advancements in connector technology for HELIAX® cable products, moving from solder-on center-pin connectors, ring flare to positive stop. With each subtle change in cables, it is typically associated with a change in the associated connector as well. The resultant new connector offerings added ease of installation as well as increased performance.

Given the advancement in cable products, it has also given us newer, vastly improved tools for the cable preparation process in fitting connectors and ground kits. In a relatively short span of time, there have been many significant changes which enhance performance, and the tools have brought about more precision, greater ease of use, and result in better performance of a final, assembled product. I still remember cutting 1-5/8" cable with a fine-toothed hacksaw, "eye-balling" to make sure I stayed at the apex of the corrugation!

Make sure your field personnel are equipped with the right tools for the job. There is the old saying of "Measure twice, cut once" and it does apply here. Verify the products used for the application and make sure you have the proper tools. When it comes to wireless work you may find yourself dealing with 7/8" cable one day, 6" superflex the next, and maybe 5/8" cable the job after that. Or depending on the job at hand, a variety of cable sizes over the course of one day. Keeping things straight and "current" with today's products can become a challenge.

PRIMUS

CommScope offers a great reference document called the HELIAX® Tool and Connector Matrix that spells out the current up-to-date cable product line up. This includes all the right connectors, hand prep tools, drill prep tools, grounding kit prep tools and installation wrenches that would be used to make installation day go smoothly, and help provide for a completed antenna line or jumper that will perform well in return loss testing and meet PIM performance specifications.

Scan the QR code, and save the document to your phone for quick reference in the field, or store on your computer desktop in the office. Measure twice... cut once!

- Rob Menees

