Technical Note
By Erik Bech – February 2008

Category 6A connecting hardware testing update

EC Cabling has updated its equipment for testing of connecting hardware to the new Category 6A requirements.

Development of the new test procedures has taken place in the standardisation committees of TIA/EIA and IEC. During this development a new test fixture was defined. The new fixture has smaller dimensions than the impedance controlled fixture for Cat. 6 measurements. Smaller dimensions are important when tests to higher frequencies are needed. The fixtures are specified in the newest drafts for Cat 6A requirements in the document, which will become TIA/EIA-568-B.2-10. EC Cabling is now getting experience with the new set-up and modifying the test procedure accordingly.

The test set-up consists of balun assemblies with four baluns in a block, adapter plates, calibration artefacts, and a direct probe.

The two figures below show typical measurement set-up’s using these fixtures.

Figure 1. Set-up for verification of a test plug. The plug is terminated with the new direct probe.
Figure 2. Set-up for test of transmission performance for a jack mated with a test plug.

With this update of our test facility, DELTA EC Cabling is now ready to perform certification of Category 6A connecting hardware in compliance with the newest draft standards.

For further information, please refer to our Technical Note of July 2007.