Technical Note TN25: Changes to the termination method of Excel screened jacks



Author: lan Mckiernan **Date:** March 2018

This technical note details enhancements to the termination procedure for screened Category 6_A keystone jacks as network applications diversify and the demand for additional screening requirements grow.

What this means

The key feature of the Screen Test used is the measurement of the impedance of the screen. It is therefore essential that the drain wire or braid of any screened cable makes effective contact with the body of the screened jack. The introduction of the foil increases the contact area with the jack body and improves impedance.

Amendments to Excel Installation Guidelines

Excel Networking has revisited the termination techniques used on all Category 6_A keystone jacks with Category 6_A and 7_A screened cables.

To improve the connection between the drain wire/braid/foil of the screened cable and the body of the keystone jack, this document is intended to summarise the techniques used when terminating Excel Screened Category 6_A Keystone Jacks.

The termination instructions included within the keystone jack packaging reflect these enhancements.

- When using Category 6_A U/FTP or F/FTP cable with keystone jacks 100-180 & 100-185, ensure that one of the pair of foils is folded (conductive side out) and wrapped around the sheath 360° The drain wire is then wrapped around the foil.
- When terminating the 100-181 low profile keystone jack, ensure that one of the pair of foils is folded (conductive side out) and wrapped around the sheath 360°. The drain wire is wrapped around the foil at 360° before being wrapped around the collar of the wire-guide another 360°. Stripping length is increased to 70mm.
- When using the Category 7_A S/FTP cable with keystone jacks 100-180 & 100-185, it is important to push the braid back over the jacket using a twisting motion.
- When terminating Category 7_A cable onto the 100-181 low profile keystone jack, separate the braid and twist it into a single element and then wrap it around the collar of the wire-guide at least 360°.

This Technical Note has been produced by Ian Mckiernan, Pre-Sales Technical Manager, on behalf of Excel

excel without compromise.