

# Technical Note

## Changes to the termination method of Excel jacks for testing the Screen when using the Fluke DSX 5000



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This technical note covers the anomaly some installers are experiencing when testing a screened Category 6<sub>A</sub> solution when using the Fluke DSX 5000.

### Changes in Screen Testing employed by the DSX 5000

The DSX CableAnalyzer is the first field tester to report distance to shield integrity issues using a patented A.C. measurement technique. This is especially important in data centres. Other testers use the more traditional DC measurement which can cause them to be fooled, due to the racks in a data centre using a common ground.

However this sensitivity can lead to difficulties when testing a traditional screened horizontal cabling installation.

Note: This anomaly is not experienced with Fluke DTX1800, LantekII, Psiber WireExpert or the JDSU 40G Certifier.

### What this means.

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

### Amendments to Excel Installation Guidelines

Excel Networking has revisited all the termination techniques used on all of the Category 6<sub>A</sub> jacks along with using the Category 6<sub>A</sub> and 7<sub>A</sub> cables.

To remove any possibility of poor connection between the drain wire and the body of the keystone jack this technical note is intended to amend and reiterate the techniques required for all the Excel Screened Category 6<sub>A</sub> Keystone Jacks.

- When using the Category 6<sub>A</sub> U/FTP or F/FTP cable (100-191 & 100-196) ensure the drain wire is wrapped around the foil/sheath at least 2-3 times when terminating the keystone jacks (100-180 and 100-185).
- When terminating the 100-181 low profile keystone jack the drain wire must be wrapped around the collar of the wire-guide at least 360 degrees
- When using the Category 7<sub>A</sub> S/FTP cable, it is important to push the braid back using a twisting motion when terminating the keystone jacks (100-180 and 100-185).
- When terminating Category 7<sub>A</sub> 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 at least 360 degrees.

Following these guidelines will ensure that any faults reported will be real issues that need to be rectified rather than 'phantom' reports.

*This Technical Note has been produced by Paul Cave, Technical Manager – Infrastructure, on behalf of Excel*

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