RF Test Solutions 1/2" Term Cap[™] Instructions

Suitable for Commscope LDF4, Eupen EC4, Trilogy AC012 & AT012

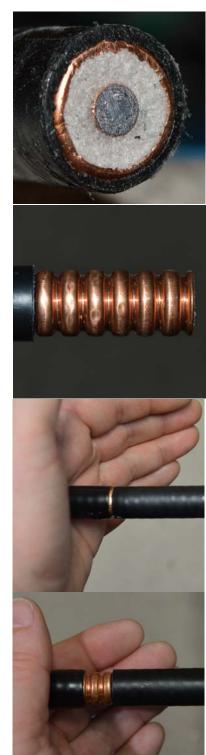
Tools Needed				
Hacksaw	Utility Knife	Course Sandpaper	File	

1. Cut the end of the feedline square and clean using the hacksaw. If needed clean the foam dielectric of debris. For aluminum conductors if it has been exposed to air for more than a couple of hours use a file or sandpaper to remove the oxide coating. Aluminum will oxidize when exposed to air and it is an electrical insulator.

2. Strip 1" of the outer jacket off. The Term Cap is installed over the outer conductor and not over the jacket.

3. Using the palm of your hand push the Term Cap straight on. Do not rotate the Term Cap as this can cause tearing of the flexible contacts. You must use enough force to fully seat the cap and to also compress the contacts completely against the feedline's conductors.

4. Next grip around the cap and forcefully stretch the cap all the way down the cable.



- 5. Continue all the way to the end of the cap stretching it. This will assist the cap to keep enough pressure on the termination to fully compress the flexible contacts ensuring the correct termination and Return Loss of the Term Cap.
- If desired the installed Term Cap can be taped in place. If the cable is going to be extensively handled during install or may have a lot of vibration during transport this will help the cap to keep the flexible contacts compressed.
- 7. There are many suitable tapes but the adhesive must be strong enough to bond to the "slippery" plastic of the outer jacket and to the cap's material. Duck Tape® for plastic sheeting is one example of a suitable tape.

A Term Cap is meant for a single use and to be left on the cable. This allows for easy testing anytime a cable is transported or suspected of having been damaged. The goal is to identify a feedline defect prior to installation or as soon as possible. This small effort can prevent unexpected larger costs or delays.

US Patents 9,673,604 and 9,954,324. Foreign patents pending.

To test a feedline with a Term Cap use Distance to Fault (DTF). Setup the instrument for a wide sweep span as you are testing a broadband component. For LMR a 100 to 1100 MHz span is recommended. For cellular testing keep a 1 GHz span from 1 to 2 GHz. The Term Cap DTF Return Loss will be 20 dB or better. This attenuates the far end reflection enough to see to the end of the cable and have good accuracy for evaluating any cable issues.

If the Term Cap return loss is poorer than 20 dB just reseat the Term Cap. Direct sunlight or elevated temperatures will soften the cap allowing the cap to relax a bit. Note that the Return Loss can vary a few dB within the first 15 minutes of installation. The cap will relax slightly over this time period causing slight changes. These can be ignored.

A useful accessory for feedline testing is a press-on test connector. With this and a Term Cap there is no need for specific feedline connectors or for cable preparation tools. Both Term Caps and Test Connectors are available from our distributor <u>Tested RF Cables</u>. You can ask your feedline manufacturer or distributor to install Term Caps for you.

