

Materials Needed

- Wire Cutters
- Cable
- Connector Spec Sheet
- Strip Tool
- Connector
- Solder
- Soldering Iron
- Crimp Tool
- Heat Gun
- Wire Brush (optional)





Crimp Tool and Strip Tool for TWS-400 Cable Displayed



Prepare the Cable

1. Cut the rough length of cable you need. It is important to use high quality cutters.

TIP! The cable cut must be clean and the cable must not be crushed or "out of shape" in any way.

Stripping the Cable

TIP! TerraWave indicates the recommended stripping lengths for each connector on the spec sheet. Please consult the spec sheet for specific stripping dimensions.

- 1. Adjust the wire stripping tool so the first cut is down to the center copper wire. The second cut should just cut through the jacket, exposing the braid just below the jacket. A properly aligned tool will not cut through any of the wire braiding. Multiple adjustments may be needed to precisely align your tool for the proper depths.
- 2. When the stripping tool is properly adjusted, insert the cable into the stripper so that the cable is flush with the end of the tool.
- 3. Spin the stripping tool around the cable until the tool spins freely around the cable.
- 4. Pull the stripper away from the cable while lightly squeezing the jaws of the stripper onto the cable.
- 5. Insert the other end of the wire stripper onto the cable and spin gently. This cut will remove the outer jacket and expose the braided cable shield.

Installing the Connector

Using Crimp Connectors

- 1. Slide the provided heat shrink over the cable jacket.
- 2. Slide the ferrule over the cable jacket.
- 3. Fold the braiding back over the jacket of the cable. This can be done manually or with a wire brush.
- **TIP!** Pushing the braiding back is an important step for three reasons:
- The braid should not touch the center conductor at all
- Pushing the connector onto the cable with the braiding still covering the insulator is much harder
- The braiding must make contact with the body of the connector and pulling back the braiding ensures a better and tighter crimp

For detailed product information and to purchase product, please contact a TerraWave Regional Sales Engineer at 210-375-8482, 800-851-4965, sales@terra-wave.com or visit <u>www.terra-wave.com</u>.



How to Install a TerraWave Coaxial Connector onto TerraWave Coaxial Cable

4. Solder the center pin of the connector to the center conductor of the cable. The solder must be hot enough to run into the holes on the center pin, melting the pin to the copper conductor. Let cool. The connection should be solid and lump free.

TIP! TerraWave recommends soldering all center pins to ensure a solid connection to conductor. We do not recommend crimping the center pins.

- 5. Slide the connector over the cable jacket, assuring the center pin fits properly through the center of the body of the connector.
- 6. The white insulation of the connector should be flush with the inside of the connector.
- 7. Pull the ferrule to the body of the connector. It should fit snug with the connector body so the braid may need to be pulled forward a bit by the ferrule.
- 8. Crimp the ferrule of the connector onto the cable with moderate pressure.

TIP! TerraWave provides the recommended crimp die size for each connector on the spec sheet. If you do not have the recommend crimp diameter, a smaller die may work. Do not use a larger die than is recommended because the ferrule will not crimp onto the cable properly.

- 9. Do a "pull test" to ensure the connector is snug on the cable. If the connector body pulls out, the ferrule was not tight enough and you may need to apply more pressure when crimping.
- 10. Pull the heat shrink over the ferrule.
- 11. Using the heat gun, lightly wave the gun over the heat shrink until it has shrunk to a tight fit around the ferrule and the cable. Apply even heat over the entire surface of the heat shrink.

TIP! Do not over-heat the heat shrink. This may cause an increase in normal attenuation rates.

Properly terminating coaxial cable will take some practice and patience. TESSCO offers pre-terminated cable assemblies using TerraWave cable and connectors in a variety of lengths, cable types and connector combinations. For more information or to order product, please contact a TerraWave Regional Sales Executive at 210-375-8482, 800-851-4965 or sales@terra-wave.com.



Captivated Center Pin (CCP) Connectors

TerraWave's Captivated Center Pin Connectors were designed to be easily installed in the field. The center pins are already set in the connector so no soldering is required.

- 1. Slide the provided heat shrink over the cable jacket
- 2. Slide the ferrule over the cable jacket
- 3. Fold the braiding back over the jacket of the cable

