

MICROWAVE CABLE ASSEMBLY CARE & HANDLING

Storm microwave coaxial cable assemblies will last longer and provide better performance when properly used and cared for. It is important to routinely clean the connectors and inspect the assembly for damage.

CABLE ASSEMBLY ROUTING & HANDLING

Care should be taken to avoid bending the assemblies beyond the minimum bend radius guidelines. Failure to do so will destroy the cable.

Twisting the cable should be avoided. Excessive twist can damage the cable assembly at the cable/connector interface. Even low-force torsion can affect electrical performance and cause connections to loosen.

Cable assemblies should be stored in a large coiled configuration (1–2 feet in diameter). When you need to use the cable, simply unroll it.

Avoid pinching or crushing the cable assembly. Never pull equipment around by the cable, and never expect the cable to support equipment or devices.

CABLE ASSEMBLY MATING & DE-MATING

Contact pins and dielectrics can be damaged if the connectors are misaligned during the mating process. Make sure that the mating interfaces are parallel and aligned while mating the connectors.

You can usually feel if the pins are aligned or not. When you sense that they are aligned, gently turn the coupling nut until mating is complete.

Insufficient coupling torque can produce inaccurate results, and over-torque coupling can damage the cable assembly and connecting equipment. When mating the connector, firmly hold the body of the connector to keep it from rotating. If the connector bodies are allowed to rotate during mating & de-mating, the plating and surface finish of the outer and inner contacts can be damaged. Also, rotation of the connector body transfers unwanted torque to the cable assembly.

Torque wrenches, set to the correct torque, should be used to mate a connector with wrench flats. To mate connectors with knurled nuts, use your fingers. **Never use pliers to tighten any connector.** Listed below are recommended coupling torque values for popular connectors.

CONNECTOR	COUPLING TORQUE
7 mm, N, Precision N, TNC	12 to 15 in-lbs
2.4 mm, 2.9 mm, 3.5 mm, SMA	8 to 10 in-lbs
SMA, TNC	5 in-lbs

CONNECTOR INTERFACE CLEANING

Clean interfaces extend connector life and provide more accurate, repeatable measurements. Moisten a clean, lint-free swab using isopropyl alcohol, remove any excess alcohol, wipe the interface components as required to eliminate debris, then blow-dry the interface with filtered compressed air or nitrogen. Re-inspect the connector to verify that the interface is clean and ready for use. Remember to clean the mating connectors, as they may be the source of debris.

The use of connector end caps is recommended when cables are not in use.