Coaxial Cable Feedline Choke Kit - 50 Ω

COM-CFC-50K
COM-CFC-50K-INS-Revision 2b
Thank You for purchasing the Comtek Systems Coaxial Feedline Choke Kit. The Coaxial Feedline Coaxial Cable is an RF choke used with a vertical antenna system to help prevent antenna radiated stray RF from flowing on the feedline phasing lines back to the radio room.

Parts Included:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
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<tbody>
<tr>
<td>100 ea.</td>
<td>Ferrite beads</td>
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<tr>
<td>1 ea.</td>
<td>RG-400U, shielded, coaxial cable, 4.5 feet</td>
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<tr>
<td>2 ea.</td>
<td>PL-259 UHF Connectors</td>
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<td>2 ea.</td>
<td>UG-176 Reducers</td>
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<tr>
<td>1 ea.</td>
<td>Shrink Tube, 3/4” dia., 43” long</td>
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<tr>
<td>2 ea.</td>
<td>Shrink Tube with internal adhesive, 3/8” dia., 1” long</td>
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Tools Required:

- Soldering Iron & Solder
- Knife or RG-400U coaxial cable stripping tool
- Scissors
- Small Wire Brush
- Electrical Tape
- Heat Shrink Gun or other heat source to evenly shrink the heat shrink tubing
- Ohm Meter
Assembly:

1. Carefully place the 100 beads on the RG-400U cable.

2. Holding the ends of the RG400U, center the beads so there is an equal amount of RG-400U on each end.

3. Cut a piece of electrical tape lengthwise into two pieces. This tape will be used to hold the beads in position on the RG-400U cable while completing the assembly.
4. Wrap one piece of the cut tape around the coaxial cable next to the first bead keeping it close to the end of the beads.

5. Install the large 43" long heat shrink over the beads. Center it so equal amounts of Heat Shrink are on either side of the beads. Use a heat shrink gun or other heat source to shrink the tubing evenly and completely for the entire length.

6. Place the small 1" long Heat Shrink tubes with adhesive over the ends of the long heat shrink, overlapping the 43" heat shrink about 1/2". Use a heat shrink gun or other heat source to shrink the tubing evenly and completely for the entire length. You may notice some of the adhesive squeeze out when shrinking the tubing. This is normal and this adhesive is what provides the weather sealing effect.
7. Prepare the RG-400U coaxial cable ends for the PL-259 connectors. Place the UG-176 adapters and the PL-259 shells over the coaxial cable.

8. Using a knife, make the first cut on the coaxial cable to carefully remove the outer jacket about 3/4" long.

9. Trim the braid back about 1/2".

- 5 -
10. Using a wire brush, comb the braid evenly outward.

12. Push the UG-176 reducer even with the bottom of the braid and fold the braid over the UG-176 reducer. Trim the braid away from the threaded portion of the UG-176 reducer.

11. Carefully make the second cut on the RG-400U and remove the insulation from the center conductor approximately 1/2".
13. Install the PL-259 body over the coaxial cable and thread the reducer completely in the body.

14. Visually inspect the connector assembly. There should be braid visible through the solder holes in the side of the PL-259. There should also be center conductor wire visible in the end of the PL-259 center pin. Use an ohm meter to verify there are no stray pieces of braid shorting out the center to the shield.

15. Solder the PL-259 side holes and center pin. Repeat applicable steps for other end of coaxial cable assembly. Use an ohm meter to verify proper continuity from center pin to center pin, shield to shield, and no shorts between center pin and shield.

When installed on your vertical antenna, use **TES-2155** - 3M Temflex™ 2155 Rubber Splicing Tape and overwrap with **TES-06132** - Scotch Super 33+ Vinyl Electrical Tape to weatherproof the connections available from DX Engineering at: www.dxengineering.com
Technical Support

If you have questions about this product, or if you experience difficulties during the installation, contact Comtek Systems at (330) 572-3200. You can also e-mail us at:

Info@comteksystems.com

For best service, please take a few minutes to review this manual before you call.

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