



REP Design LLC

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INSTALLATION INSTRUCTIONS:

CNCT-PL259 WXQD[®] Weather Resistant Coax Cable Quick Disconnect with SO239 Connectors

Thank you for your purchase! We appreciate your business and would like to hear from you about your installation – comments, suggestions and photos! Also let us know if you have ideas for new products!

These instructions describe how to install the CNCT-PL259[®] (“CNCT”) coax quick disconnect to your antenna, mounted on a vehicle or stationary setup. The CNCT comes fully assembled but can be disassembled if needed, to replace any of the internal parts or to adjust the spacing for the PL259 “slide in” connector. Refer to the **Figures** at the end of these instructions for installation and connection ideas.

The most current version of these instructions is on our web site “Downloads” page, and may be more recent than hard copy instructions provided with our products. The instruction version date is on the footer of each page of our instructions.

Be sure that you consider the safety and ground clearance if mounted on a vehicle, and lightening especially if used with a stationary antenna. SAFETY FIRST!

Description of the CNCT:

The purpose of the CNCT is to provide a weather resistant quick disconnect, when you need to periodically, quickly, disconnect your coax or remove your antenna. The CNCT is made to be mounted outside. It has two SO-239 connectors: the “mounted” end (with stainless steel bolt) is connected to your radio coax and the other is connected to your antenna coax.

It has been tested at 100 watts and has low loss (1%) across HF and 6 meter frequencies. It has not been tested (yet) at higher power or higher frequencies, but should work fine at frequencies and power levels that are appropriate for PL-259 connectors. Our test results are on our web site: <http://www.repdesign.us/Test%20Results.html>

A “weather cap” is provided for when your antenna is removed, to keep the internal parts from getting wet.

The CNCT is weather resistant, as the “spin off” outer ring housing seats against a rubber o-ring (**Figure 2**). Teflon tape is used on the end plugs that are drilled to mount the two SO-239 connectors. The CNCT is made from Schedule 80 PVC.

What you need to install the CNCT:

No special tools are required. You will need to apply weather proofing on both SO239 connectors and your coax plugs to ensure that water can not enter your coax or the CNCT housing. The provided 1/4x20 stainless steel bolt is mounted to your installation, to any metal or non metal surface. This does NOT have to be grounded as it is not connected to the coax connectors inside the CNCT. A nut and washers are included – you just need to provide a bracket with a 1/4 inch hole.

How to use the CNCT:

(1) Mount the CNCT to any metal or none metal bracket, on your vehicle or stationary antenna location.



The provided 1/4x20 bolt mounts to a ¼ inch hole, which does not have to be grounded as it is not connected to the connectors inside the CNCT. THINK about where you are mounting the CNCT: on a vehicle locate it so it is not likely to impact the road, curb or vehicle next to you; on a stationary antenna be sure your antenna is grounded BETWEEN the CNCT and your antenna.

The CNCT does NOT provide any lightning protection! Grounding the CNCT mounting bolts serves NO PURPOSE as the bolt is not connected to the connectors. THINK SAFETY FIRST!

(2) **Connect your coax to the CNCT.**

Plug the coax from your radio into the “mounted” end of the CNCT (end with the bolt). Connect the coax from your antenna to the other end. Weather proof the coax and around the SO-239 connectors on the CNCT. Use “Coax-Seal” or other material around the SO-239 connectors. You can weather proof your coax plugs using the same material or electrical tape or self fusing tape. However, you MUST weather proof around the SO-239’s as they are not sealed inside the housing.

(3) **Use of the quick disconnect feature.**

To disconnect the antenna side of the CNCT, turn the “spin off” (**Figure 2**) counter clock-wise. The slide-in coax connector in the center of the CNCT allows you to simple pull the antenna side of the CNCT straight out WITHOUT TWISTING, once the spin off is unscrewed.

When the antenna side is removed, install the “weather cap” in the same manner that you install the antenna side of the CNCT. The weather cap keeps weather out of the CNCT when your antenna coax is disconnected.

To re-connect the antenna side, simply slide the coax connector straight in WITHOUT TWISTING, and turn the spin-off firmly HAND TIGHT.

Before removing the antenna side spin-off, wipe access water from around the outside of the spin off to help keep water from entering the spin off WHEN YOU ARE DISCONNECTING your antenna-side coax. Some water will collect under the spin off ring but an o-ring keeps water from entering the housing when closed – just use care when removing the spin-off. If some water drops enter the housing simply wipe it dry before installing the antenna side or weather cap.

(4) **Adjustment of the internal “slide-on” coax connector.**

The slide-in coax connector in the center of the CNCT (**Figure 2**) allows you to simple pull the antenna side of the CNCT STRAIGHT OUT, WITHOUT TWISTING, once the “spin off” (**Figure 2**) is unscrewed. You can adjust how far the two connectors slide together, by unscrewing the outer SO-239 nuts and adjusting how far both SO-239’s stick out of the CNCT. This also affects how easy the connectors slide together.

You adjust the spacing by unscrewing the external SO-239 nuts and removing the connectors. Adjust the internal nuts on both SO-239’s to move the connectors closer together or farther apart. Once the spacing is set, tighten the outer SO-239 nuts. Be sure to weather proof the SO-239s as described above.

(5) **Maintenance.**

The CNCT requires little maintenance as it is made from Schedule 80 PVC. The SO239 connectors must be weather proofed on the outside of the CNCT housing. Wash off dirt and de-icing salt periodically. If the spin off is hard to rotate you can wipe WD-40 on the threads. You can use a little petroleum jelly (“Vaseline”) on the rubber o-ring to keep it soft.

Spare parts, accessories, downloads and related products.



Let us know if you need spare parts or are interested in our other products. For a current description of our products, photos, videos and prices please visit our web site: www.repDesign.us/. If you don't see something you're looking for, related to mobile or portable radio operation, please let us know – your idea could become a new product! As a specialty company, we are looking for unique ideas to serve the amateur radio community.

For a listing of our current products, with links to detailed information and to order, go to our "Products" web page: <http://www.repdesign.us/Products%20%26%20Ordering.html>

You can find the current versions of product instruction manuals on our "Downloads" page: <http://www.repdesign.us/Download.html>

Warranty Summary:

All products include a **two (2) week "return for any reason"** and **six (6) month manufacturing defects limited warranty**. If you should need to return your product please contact us **IN ADVANCE** to obtain a return authorization number. **Please refer to the complete warranty** terms that are enclosed with your order; this is also included on our web site.

CNCT Illustrations :

Figure 1: What is provided: CNCT housing with mounting bolt. Weather cap to screw on if the antenna side coax is disconnected.



Figure 2: Illustration of the CNCT features.

