



# *Setting Up My Antennas*

## DX-CC & Doublet



Ken, N1RGK



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# *What are we going to cover in this presentation?*

Two Individual Wire Antennas using different feed line technology

- Coax
- 600 $\Omega$  ladder line

The operating bands of each antenna

The method and hardware used to install each antenna

Environmental results experienced so far with high winds, snow

# *The DX-CC Tri-Band Wire Antenna Coax Feed Line*

## **Alpha Delta Parallel Dipole Antenna DX-CC**

Parallel Dipole Antenna  
Multi-Band 1,000 W  
80, 40, 20, 15, 10 meters  
82 ft., in Length

\$179.99 - 



# W7FG True Ladder Line Single Open Wire Fed Dipole



Coverage: 80, 40, 20, 15, 10 Meters  
125' Dipole with 100' 600Ω Open Wire Ladder Line  
No Splices, Solder or Crimping to Fail. No Screws  
Extremely Lightweight & Low Wind Loading  
100% Copper, 16 Gauge, 26 Strand Wire  
20+ Years of Proven Reliability – Designed in VT  
98% Nominal Velocity Factor  
Nearly Unaffected by Rain, Unlike 450Ω or 300Ω Twin lead  
100% USA Made!  
*The antennas and ladder line are made by individuals with disabilities through a program in Oklahoma.*

\$115.00







## Mastrant Antenna Support and Guy Line Ropes – MP05100

Rope, Antenna Guy, Mastrant-P,  
Break Strength 1,102 lbs., 5 mm/0.197 in.  
Diameter, 100 m / 330 ft. Roll

\$55.99 / Roll



**R&L Electronics**

Text Questions to  
513-868-6399

**800-221-7735**

### ADC-05 MASTRANT

DUPLEX WIRE ROPE CLIP 5mm (M5)



**\$3.04**



ASC05

**MASTRANT ASC05**  
BULL-DOG GRIP 5mm (M5)

**\$2.14**

**BUY**

In Stock



ATH05

**MASTRANT ATH05**  
5mm THIMBLE

**\$0.57**

**BUY**

In Stock





**HARKEN**  
**22mm Single Micro Block, Shackle**

\$15.99

 **West Marine**

- Extremely lightweight, free-running blocks
- Blocks are compact and Low-friction
- Polished 316 stainless steel
- Delrin® ball bearings
- Sheave Diameter: 7/8" (22 mm)
- Max. Line Diameter: 1/4" (6 mm)
- Max. Working Load (MWL): 200 lb. (91 kg)
- Breaking Load: 1200 lb. (544 kg)
- Weight: .75 oz (21 g)
- Length: 2 1/4" (57 mm)









# 11-1/2 in. x 8 in. x 11-1/2 in. Concrete Block

★★★★★ (38) ✓

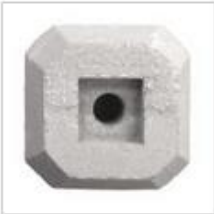
[Write a Review](#)

[Questions & Answers \(73\)](#)

- Designed for installing and anchoring posts
- Simple and easy installation
- No holes to dig or concrete to pour



**\$5**<sup>10</sup>















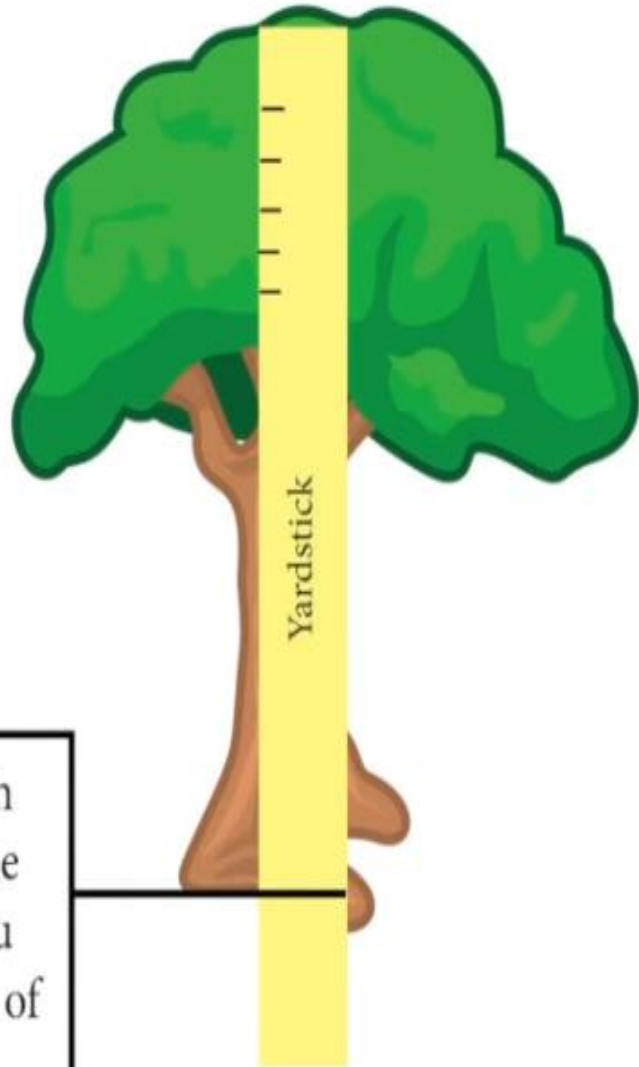








# How High Is My Antenna?



The point at which you are holding the yardstick once you measure the length of your arm.

What you will need to measure the height of an antenna...

1. A 3' Yard Stick
2. A 100' Measuring Tape

What you will need to do...

1. Hold yard stick from your eye to the end of your arm and note how many inches it is. Remember this number.
2. Hold the yardstick at the number found in step #1.
3. Hold the yardstick vertically in front of you so that the base of the tree is at the bottom of the yardstick where you are holding and the top of the antenna is at the top end of the yardstick, or at zero. You will have to move closer or further away to achieve this.
4. Take the Measuring Tape and measure the distance from where you stand to the base of the tree.
5. The distance you measure will be the height of the antenna.



# Termination of Coax and Ladder Line

Use of PVC Box and Slim Duck



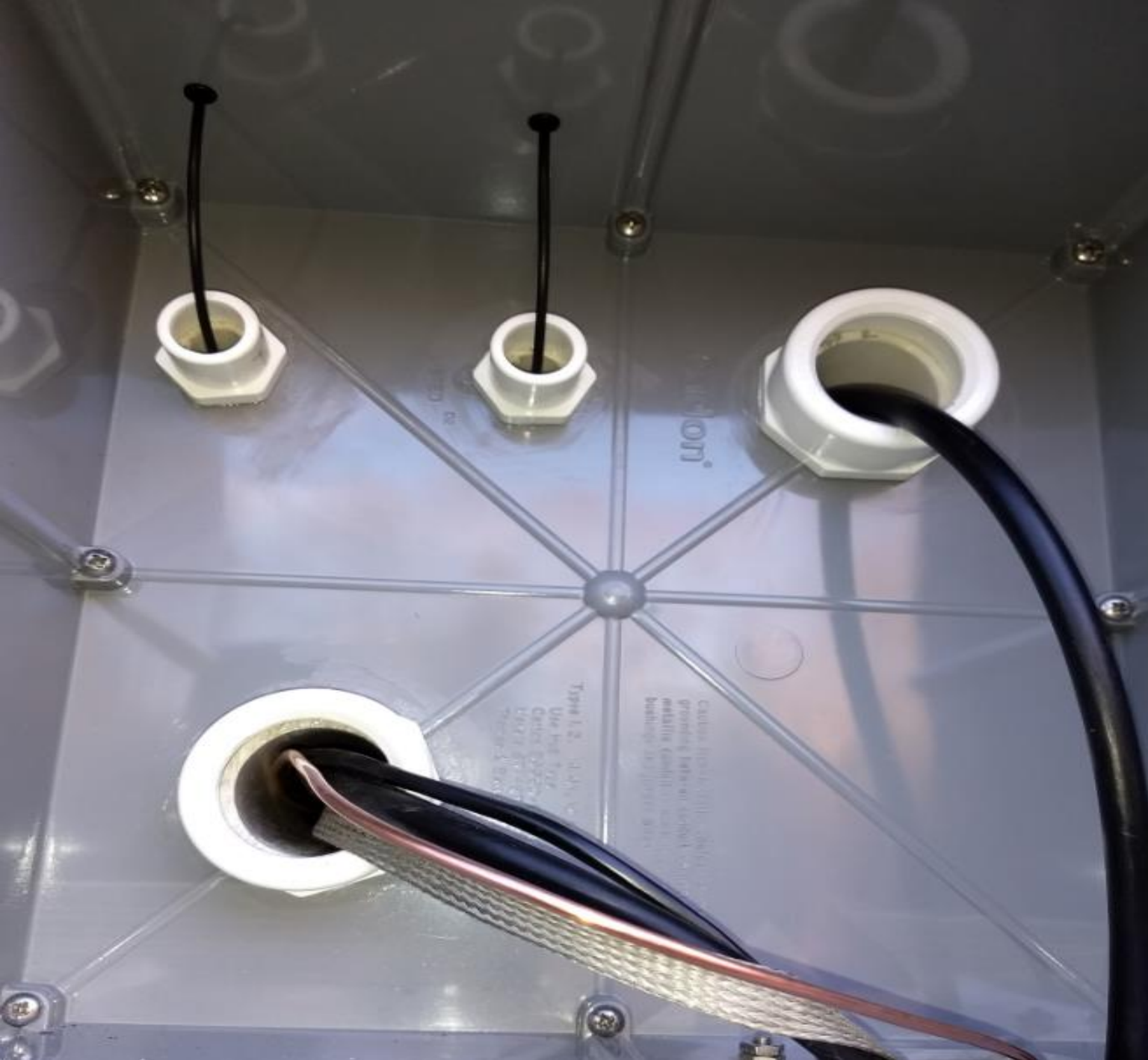














# Ham Shack – Antenna Entry Point

Inlet Point for HF & VHF Coax



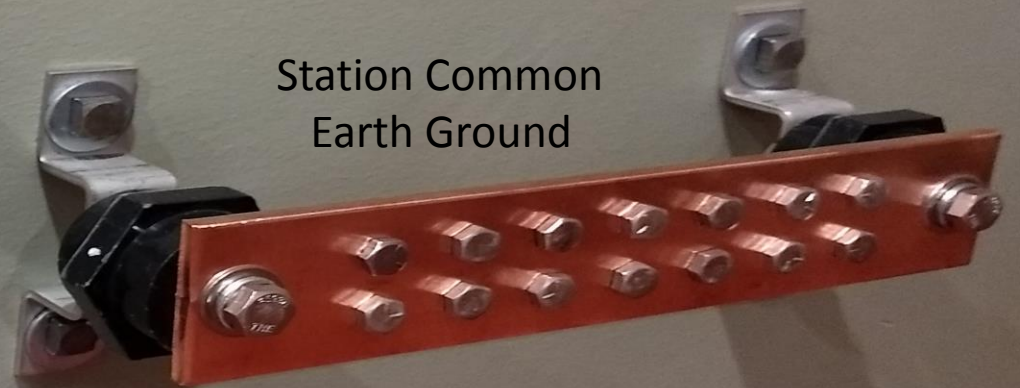
2 ½" Separation for  
600Ω Ladder Line



Inlet Point for Antenna Switch  
Control Wiring, Common Coax  
and Earth Ground



Station Common  
Earth Ground





## Ameritron RCS-10 Remote Coax Switch

**Brand:** Ameritron

**Manufacturer's Part Number:** *RCS-10*

**Part Type:** Antenna Switches, Remote

**Product Line:** Ameritron RCS-10 Remote Coax Switches

**DXE Part Number:** AME-RCS-10

**Remote Antenna Switch Ports:** Eight, SO-239

**Remote Antenna Switch RF Input:** Single, SO-239

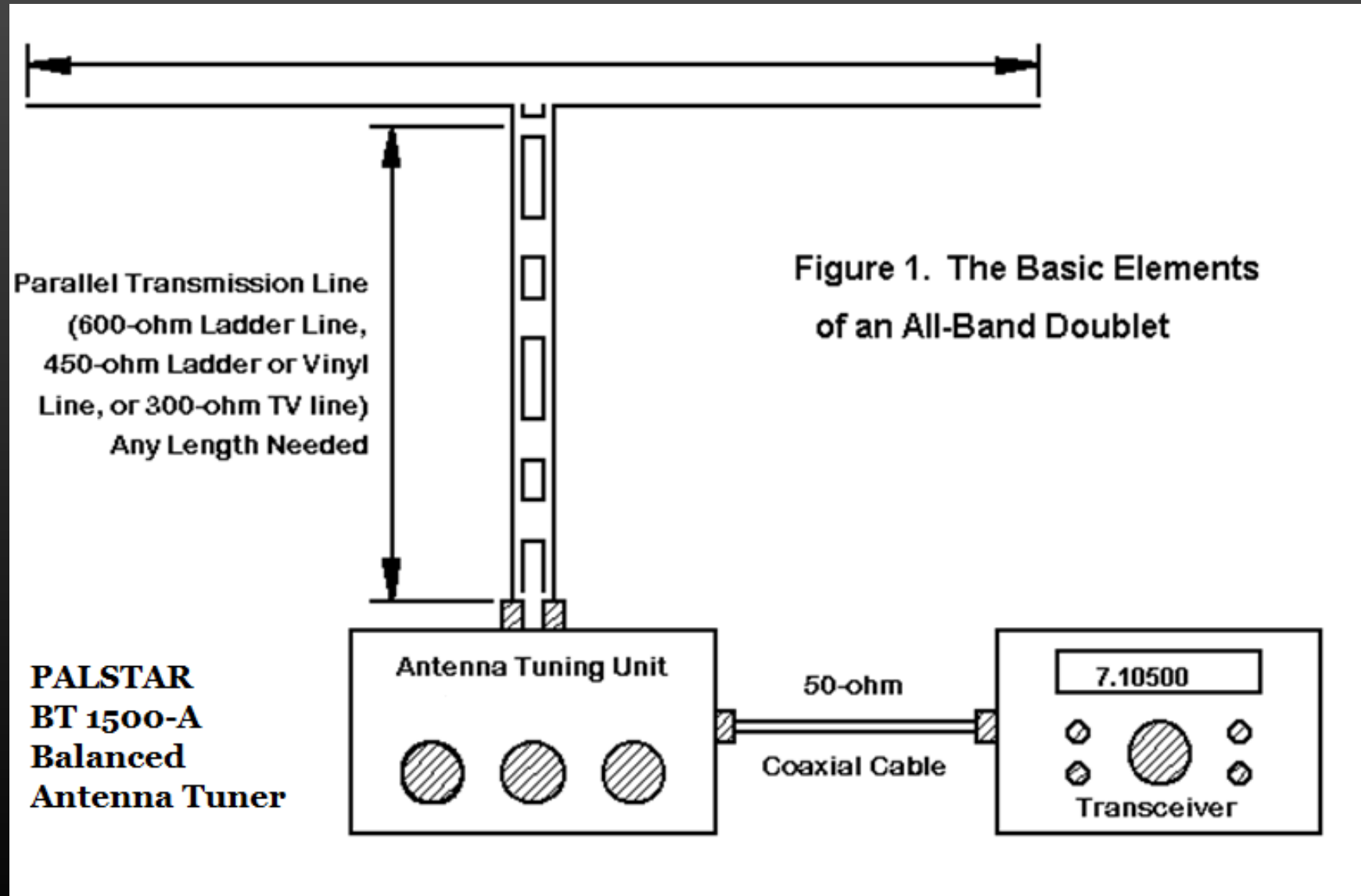
**Remote Antenna Switch Power Handling:** 5 kW key-down

\$189.95





# 600 Ohm Ladder Line, 125' #16AWG Stranded Copper Wire



# PALSTAR, INC MODEL BT1500A

## Double L Balanced Tuner

### For Use With Ladder Line



# Which COAX Do I Use

**DX Engineering DXE-400 MAX Coax**  
**Low-Loss 50Ω**  
**Bulk Coaxial Cable**  
**500 Foot Reel** **\$399.99**



Coaxial Cable Type: 400MAX  
Coaxial Cable Jacket Outside Diameter: 0.405 in.  
Coaxial Cable Jacket Material: PE, Type III  
Center Conductor Gauge: 10 AWG Stranded  
Center Conductor Material: Bare copper  
Center Conductor Construction: 19 strand - 0.0210 in.  
Dielectric Material: Gas injected foam polyethylene  
Dielectric Outside Diameter: 0.285 in.  
Shield 1 Construction: Bonded polyester tape  
Shield 1 Material: Aluminum  
Shield 1 Percent Coverage: 100  
Shield 2 Construction: Braided  
Shield 2 Material: Aluminum Tinned copper  
Shield 2 Percent Coverage: 95-96  
Low-Loss Gas Foam  
Loss Per 100 ft. at 30 MHz: 0.8 dB  
Velocity Factor Percentage: 84  
Coaxial Cable Length: 500 ft.  
UV-Resistant: Yes  
Direct Bury: Yes

**Times Microwave LMR400**  
**\$1.00/foot**  
**What does LRM Stand For?**  
**According to TMS...**



TMS makes the highest quality coaxial cable for communications services including Amateur Radio. The LMR series is a 50 ohm coax designed to replace lower quality coax cables. There are rumors of what LMR stands for. One site says it is from the old days at TMS when they contracted to Lockheed Martin to make coax for military radar and radio equipment, LMR meaning **L**ockheed **M**artin **R**adar coax. Another site says it just means **L**and and **M**obile **R**adio coax. But for all we know, it could be the initials of the first guy in the warehouse to keep inventory of the stuff. Or it may mean absolutely nothing.





## Which PL259 Coaxial Connector Do I Use?

Coaxial Connector, PL259  
for RG-8U/DXE-400 type Cable,  
12 per Package

\$43.99 or \$3.67 each





**PL259 Assembly**

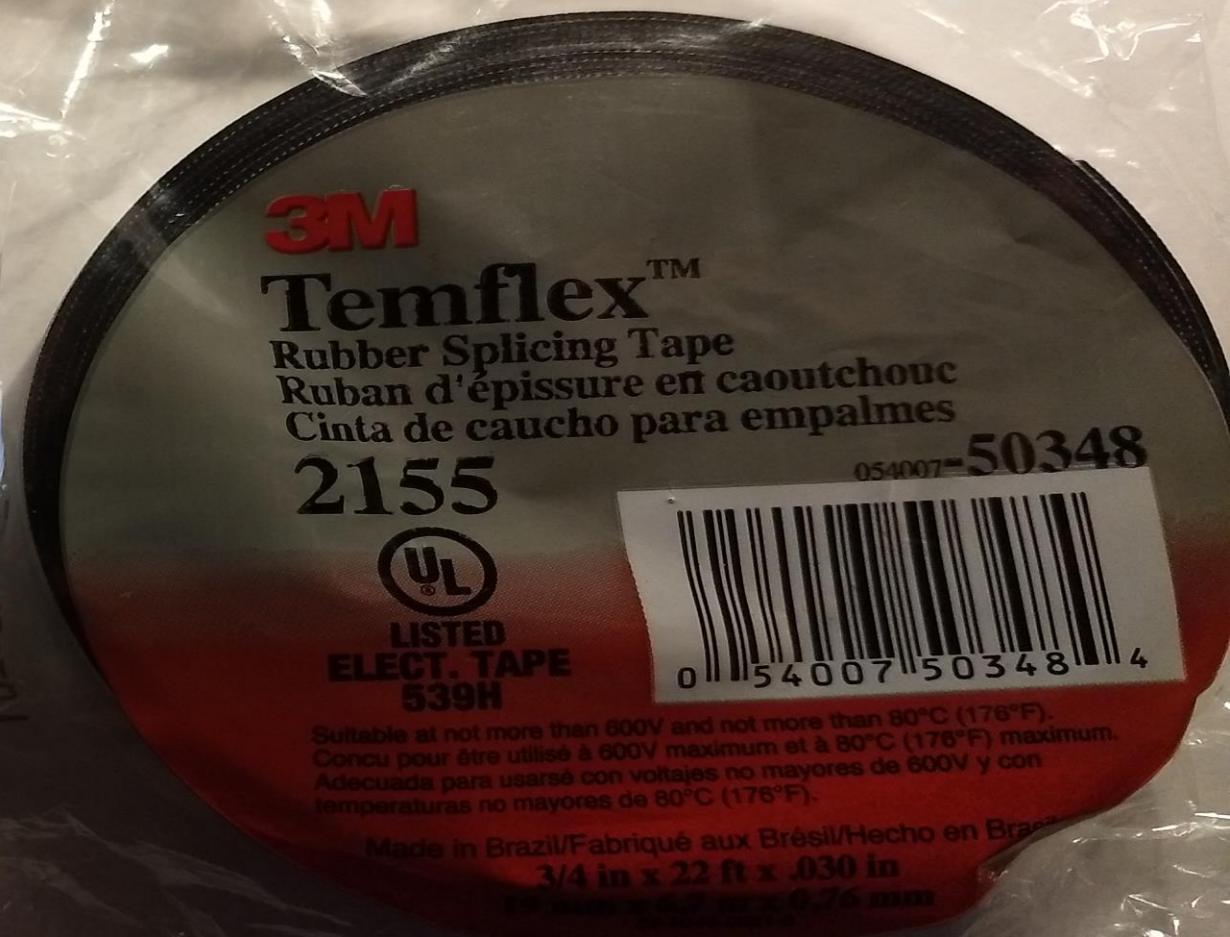
**DX Engineering Ultra-Grip 2 Crimp  
Connector Hand Tool & Die Set  
DXE-UT-CRMP2**

**\$55.98**





# The Simple 1, 2, 3 To Keep Water & Ice Out of Your Coax and PL259 Connectors



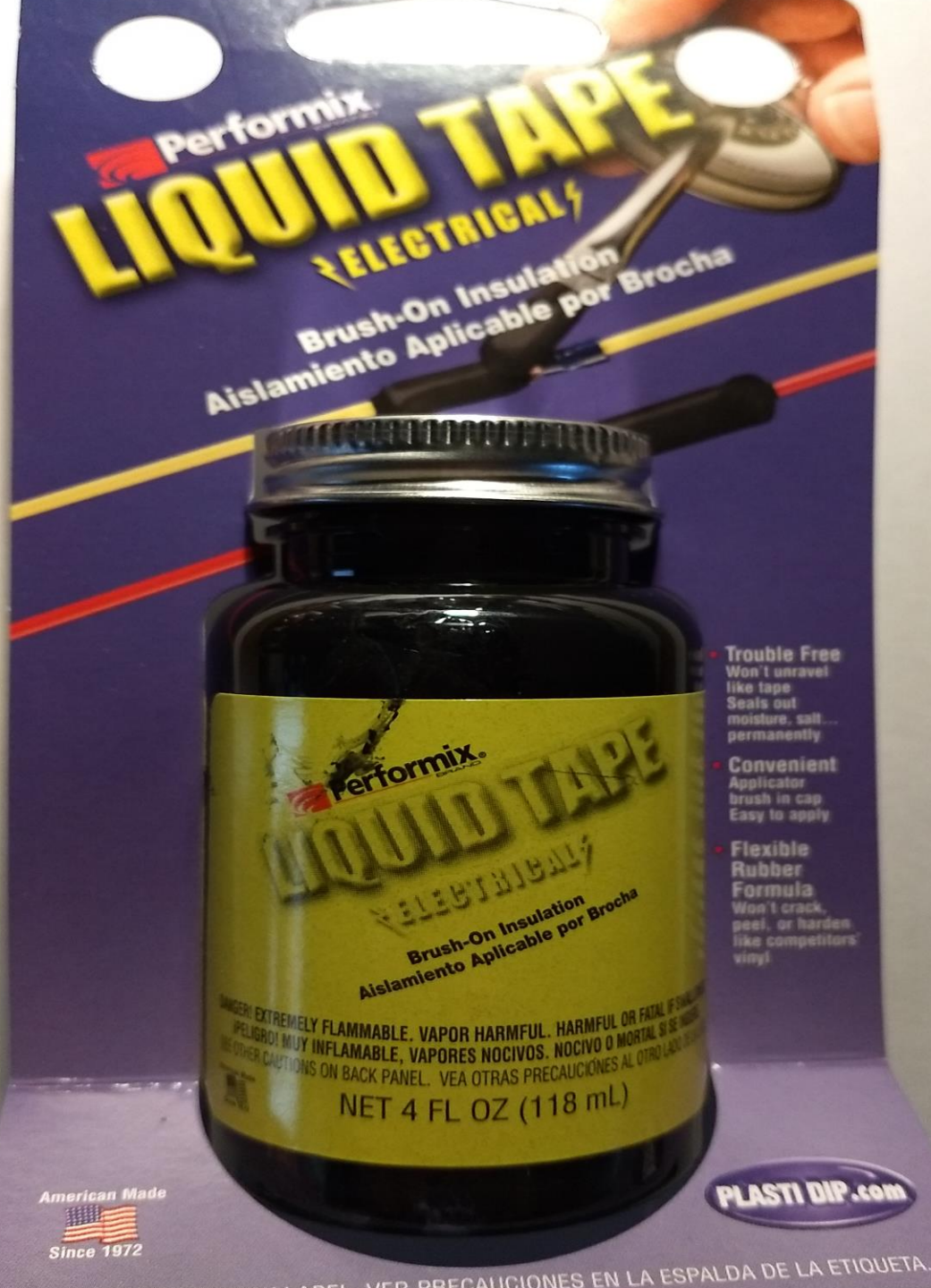


Step # 3

## Liquid Tape

Performix Plasti Dip Liquid  
Electrical Tape Coatings  
LET14Z03

\$7.99



73, N1RGK