## 10 Meter Vertical Ground Plane Antenna

## **OBJECTIVE:**

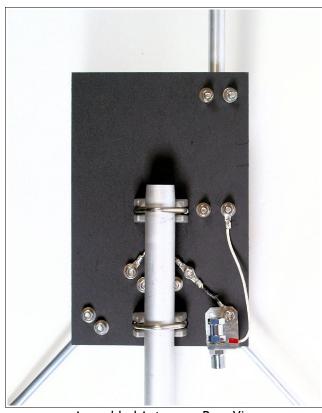
Construct a vertical ground plane with one vertical element, and two radial elements, from readily available parts.

1	EX-Engineering DXE-MMP-P2 polymer plastic 25 in. x 7.5 in. x 11.5 in. element to boom plate	
2	DX-Engineering DXE-SAD-075A 3/4 inch saddle clamps	
4	DX-Engineering DXE-CAVS-2P 1.5 inch saddle clamps	
2	DX-Engineering DXE-CAVS-2P 1.5 inch saddle clamps	
2	DX-Engineering DXE-AT1494 Aluminum Tubing 3' x 0.500" x 0.058" wall, 6063-T832 drawn, no slits	
2	DX-Engineering DXE-AT1189 Aluminum Tubing 6' x 0.375" x 0.058" wall, 6063-T832 drawn, no slits	
1	EX-Engineering DXE-AT1496 Aluminum Tubing 3' x 0.750" x 0.058" wall, 6063-T832 drawn, no slits -	
1	DX-Engineering DXE-AT1481 Aluminum Tubing 6' x 0.625" x 0.058" wall, 6063-T832 drawn, no slits	
2	EX-Engineering DXE-ECL-020 Element Clamp for 1/2 in. and smaller tube	
1	Combination coax cable and whip antenna antenna mount Optional coax connection	
1	EX-Engineering DXE-8X19-RT 19" Pigtail from elements to PL-259 Optional coax connection.	
1	Sundry parts - wire, terminal lugs	

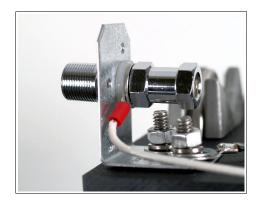
## Finished / Assembled Antenna:



Assembled Antenna - Front View



Assembled Antenna - Rear View



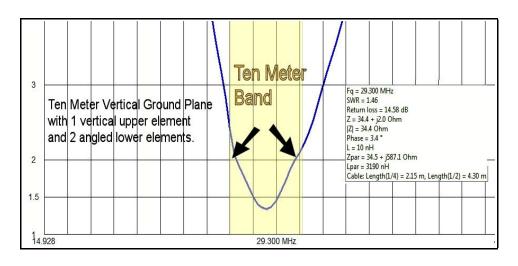
Coax Connector sud and plate assembly.



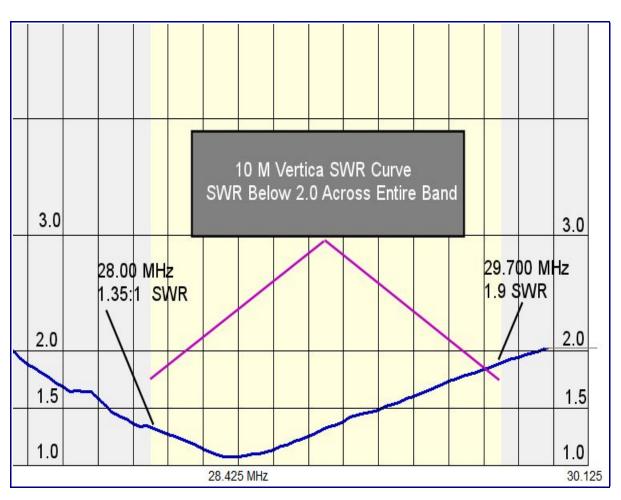
Alternative coax connection scheme.



**DX-Engineering Clamps** 

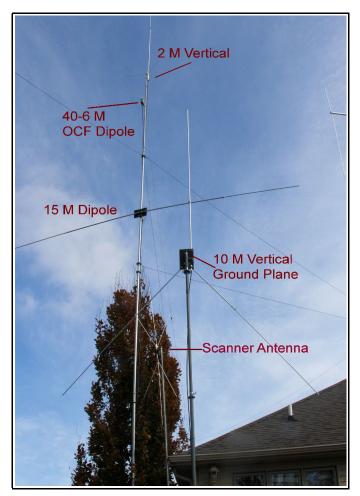


SWR measured with a Rig-Expert AA-230 Antenna Analyzer 2:1 or lower SWR across the entire 10 meter band.









Design and construction by James Richards - K8JHR