### Hi-Z Antennas<sup>™</sup> Models AL-18, AL-24 V2.0 Base Insulator UPGRADE Manual – pg 1/6



#2 from R –AL-18 Right Most – AL-24





L to R: .875, .750, .625 & .500 (AL-24 ONLY)





This latest re-design of the AL series base insulator totally liberates the Full performance of these verticals. They yield a very low base capacitance (pF). WARNING: Avoid HAZARDOUS LOCATIONS. Stay Clear of Power Lines And or any overhead obstructions.

# HIGH PERFORMANCE HF RECEIVING SYSTEMS & COMPONENTS

### Hi-Z Antennas<sup>™</sup> Models AL-18, AL-24 V2.0 Vertical Assembly Instructions – pg 2/6



### **CHOOSING A LOCATION FOR THE ANTENNA**

For best performance, mount the antenna in a clear location away from buildings, towers, feedlines, utility wires, and other antennas. Never mount this antenna in a location that will permit unsuspecting people to come in contact with any part of the antenna. Never mount this antenna where a mechanical failure might allow the antenna to contact power lines or other utility wires. Always ground the feedline to a good earth ground at the point where It enters a building for lightning protection.







HIGH PERFORMANCE **HF RECEIVING SYSTEMS & COMPONENTS** 

# **BOM / Element**

1ea .875" X 12" aluminum tube 1ea .750" dia FiberGlas rod 2ea 6X32X 1.5" SS PH Screws 3ea 6X32 SS K-lock nuts 1ea PVC shim 2ea #20 SS Clamps 1ea 13 inch wire with terminals 1ea 5 inch wire with terminals

NOTE:

First, check the parts you received. The BOM to the left is the quantity per element upgrade.

Please take the time to read and understand the Assembly procedures to ensure a great installation. Any questions just email us at contact@hizantennas.com Or call us at 541.543.9921.



# Element UPGRADE Assembly Instructions

- 1. Please review the last page. These are the mounting dimensions when attaching the vertical and insulator to the mount. REFERENCE ONLY--
- 2. Lower all verticals. Remove the existing base insulator as it will be retired.
- 3. Insert the base .875" X 12" tube over the base of the Fiberglas insulator until the holes line up. Insert 6X32X1.5" SS PH screw and attach with 6X32 SS K-lock nut and tighten.
- 4. Take the large element base end (.875" x 72") and insert it over the insulator as mentioned in step 3 until it is 1" way from the .875" X 12" tube. Drill a number 6 clearance hole through the .875" x 72" element base tube and insulator so the hole is about ½" on the base element tube. Inserted a 6x32x1.5"SS PH screw through the drilled hole and attach with 6x32 SS K-lock not and tighten. Add one more K-Lock on this screw and leave finger tight for now. THIS WILL BE THE ELEMENT CONNECTION TERMINAL. See pg 5 and 6.
- 5. Repeat steps 3 and 4 to complete the upgrade for ALL elements.
- 6. Note image on last page for re-mounting the vertical to your mounts. We want the 12"x.875" tube to attach to the mount so the upper edge is flush with the top of the angle mount. Use the new#20 SS clamps. Use the PVC as shown to contain the .875" X 12" as shown in the image. Tighten the 12" tube with PVC shim with the SS clamps. You do not have to crush it, just tight.
- 7. Reconnect the Hi-Z Amp. Use the 5 inch wire to connect to ground terminal on mount. Use the 13" wire to connect the Element / Antenna terminal from the Hi-Z Amp to the element terminal as discussed in step 4 above.
- 8. Re-attach the Hi-Z Amps as shown in the image. Note the pg 4. Drill two holes as shown in the existing 4 inch tubing and push a cable ties through and pull it together, does not have to be tight as it is ONLY holding the hi-Z Amp inside the tube.



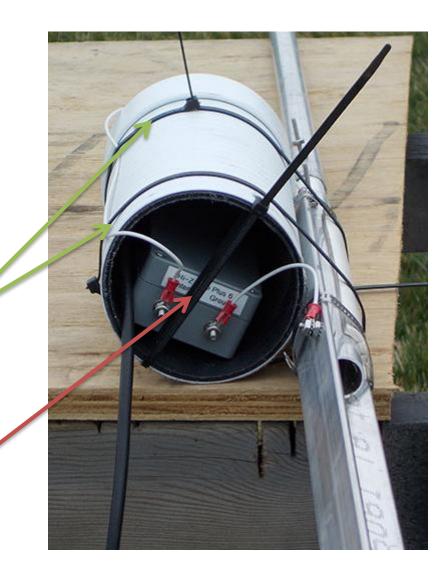
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# HIGH PERFORMANCE HF RECEIVING SYSTEMS & COMPONENTS

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Cable ties to WX-Proofing Pipe to the mount - takes 2 cable ties per holding joint

Holding cable tie-Holds amp inside pipe



HIGH PERFORMANCE HF RECEIVING SYSTEMS & COMPONENTS Hi-Z Antennas<sup>™</sup> Models AL-18, AL-24 V2.0 Vertical Assembly Instructions – pg 5/6

# AL-24 Vertical Base Mounting Dimensions



.875" X 6ft element base tube – Customers existing base element tube



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