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308 Industrial Park Road Starkville, MS 39759 USA Ph: (662) 323-9538 FAX: (662) 323-6551 Center Insulator for **Doublet-type Antenna**

INSTRUCTION MANUAL

General Description

The "CI" is a weatherproof, lightweight, high strength center insulator. It is used for connecting coaxial feedline to a doublet-type antenna. The "CI" will accept RG-8/U type, RG-213/U, RG-11 /U, RG-58/U, and RG-59/U. The insulator can be hung from a supporting mast.

Coax Assembly Instructions

if you are using RG-8/U type, RG-213/U or RG-1 1 /U, strip the end of the coax as shown in Figure 1, Detail B. If you are using a smaller coax (RG-58/U or RG-59/U), insert the adaptor plug over the coax before stripping back as shown in Figure 1, Detail A.

Solder two $_{1/4^{\rm o}}$ solder lugs on the coax as shown in Figure 1



Attach the coax and dipole wires to the eyebolts exactly as shown in Figure 2. The dipole is put through the eyebolt twice and wrapped around itself at least five times. The free end is soldered to the solder lug for electrical connection.



shown. The other half is exactly the sar the sequence is reversed.

Item No.	Description	Item No.	Description
1	Sleeve Suspension, 5/16" x 5/8"	7	Lockwasher, internal, 1/4"
4	Bolt, round head, #6-32 x 1/8"	8	Flatwasher, 1/4"
5	Nut, hex. 1/4" - 20	9	Eyebolt, ¼ x 1 1/2" x 1/2"
6	Nut, hex, #6-32	10	Solder Lug, ¼" ring

Figure 3 Illustrated Parts Breakdown of Dipole and Coax Attachment Attach the pigtails of the coax to each eyebolt *as* shown in the exploded view, Figure 3.

Lay the coax connectors, eyebolts and the dipole wires in one half of the insulator exactly as shown in Figure 3.

Apply silicone grease, Vaseline or some similar substance to seal the coax and edges against weather.

Assemble one half of the insulator to the other half and secure using fourteen (14) #6 x ${}^{3}_{/B^{"}}$ bolts and nuts. The outer 1/4" nut on each eyebolt is then tightened to insure a good connection. *Do not twist the eye boll!* This will disturb the internal connections and damage the antenna.

Mounting Instructions

As with any dipole, it is important that this antenna be mounted in the clear. The higher the better, as general rule. In this respect, a little additional transmission line with accompanying transmission losses is preferred over the close proximity of surrounding objects.

The light weight of the Model "CI" center insulator allows it to be supported either by the antenna itself or suspended from a support. A hole is provided in the top of the insulator for suspension from the center. When supporting the antenna by the center insulator, do not let the insulator contact any of the



When supporting the antenna by the ends only, do not try to *take all sag* out of *the antenna*. *This* will cause tremendous stress to be built up and cause failure of the *antenna*. Several feet of sag in the center will do no

Figure 4 Completed

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PARTS LIST

m	Part No.	Description	Qty
2	465460	Insulator, Triangle, 1/8" x 4'"	2
9	540066	Eyebolt, $\frac{1}{4^{*}} \times 1 \frac{1}{2^{*}} \times \frac{1}{z}$	
	872078	Parts Pack 155S, Stainless S	
1	171586	Sleeve, Suspension, ⁵ /16" x	
3	465570	Insulator, Adaptor Plug	
4	501118	Bolt, round head, #6-32 x 3/8"	
5	554099	Nut, hex, ¹ /4" - 20	
6	555888	Nut, hex, #6-32	
7	562961	Lockwasher, internal, ¼"	
8	566344	Flatwasher, 1/4	
10	677555	Solder Lug, ¼" ring	4

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hy-gain. LIMITED WARRANTY

Hy-Gain Warrants to the original owner of this product, if manufactured by *Hy-Gain* and purchased from an authorized dealer or directly from *Hy-Gain* to be free from defects in material and workmanship for a period of 12 months for rotator products and 24 months for antenna products from date of purchase provided the following terms of this warranty are satisfied.

- 1. The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original or machine reproduction of such proof of-purchase to *Hy-Gain* at the time of warranty service. *Hy-Gain* shall have the discretion to deny warranty without dated proof-of-purchase. Any evidence of alteration, erasure, or forgery shall be cause to void any and all warranty terms immediately.
- 2. *Hy-Gain* agrees to repair or replace at *Hy-Gain's* option without charge to the original owner any defective product under warranty, provided the product is returned postage prepaid to *Hy-Gain* with a personal check, cashiers check, or money order for \$8.00 covering postage and handling.
 - 3. Under no circumstances is *Hy-Gain* liable for consequential damages to person or property by the use of any *Hy-Gain* products.
- 4. Out-of-warranty Service: *Hy-Gain* will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
- 5. This warranty is given in lieu of any other warranty expressed or implied.
 - 6. *Hy-Gain* reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.
- 7. All *Hy-Gain* products to be serviced in-warranty or out-of-warranty should be addressed to hy-gain, 308 Industrial Park Road, Mississippi 39759, USA and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-of-purchase.
- 8. This warranty gives you specific rights, and you may also have other rights which vary from state to state.