

# BASE STATION

## HS-FOX727

DUAL BAND YAGI ANTENNA

### \*\*\*\*\* INSTRUCTION MANUAL \*\*\*\*\*

**NOTE** PLEASE READ ALL INSTRUCTIONS BEFORE ASSEMBLY

#### FEATURE

- (1) Dual band for 2m/70cm.
- (2) Independent element type ensures a nice gain and performance in comparison with Mono band.
- (3) Light weight, compact and easy to install and re-assemble.

#### SPECIFICATIONS

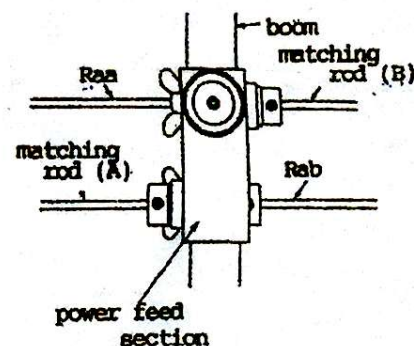
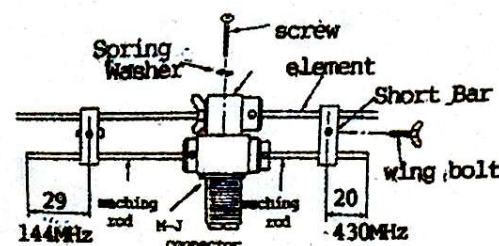
|               |                          |
|---------------|--------------------------|
| Type          | 3-Elements YAGI (144MHz) |
|               | 5-Elements YAGI (435MHz) |
| Frequency     | 144-146 / 430-440MHz     |
| Gain          | 9.5dBi / 11.15dBi        |
| Power input   | 50 watts (FM) max.       |
| Impedance     | 50 $\Omega$              |
| FB ratio      | more than 12dB           |
| Boom length   | 1,130 mm                 |
| Connector     | M - J                    |
| Suitable Mast | 25 - 43 mm diameter      |
| Weight        | 850 g                    |

#### ASSEMBLY

- (1) Identify and arrange the 8-elements and the power feed unit of antenna see color chart.
- (2) Using flat washer and wing nut join each element and the power feed unit (with Raa and Rab) according to color code to boom.
- (3) Insert matching rod A & B into power feed unit.  
A (longer bar) should be in the hole farthest from the SO-239 connector. B (shorter bar) should be in the hole closest to SO-239 connector. Using hex. wrench provided, tighten match rods in power feed unit with set screws. Attach shorting bars per diagram.
- (4) Refer to drawing and attach cable clamp on boom forward from location of U-bolt bracket and on the same side as the power feed unit.
- (5) Mount antenna on mast in either horizontal or vertically (offset if necessary when using a metal mast - see diagram)
- (6) Attach coax with PL-259 connector to power feed unit and insert coax into clamp. Use electrical tape or wire ties to secure coax along boom.

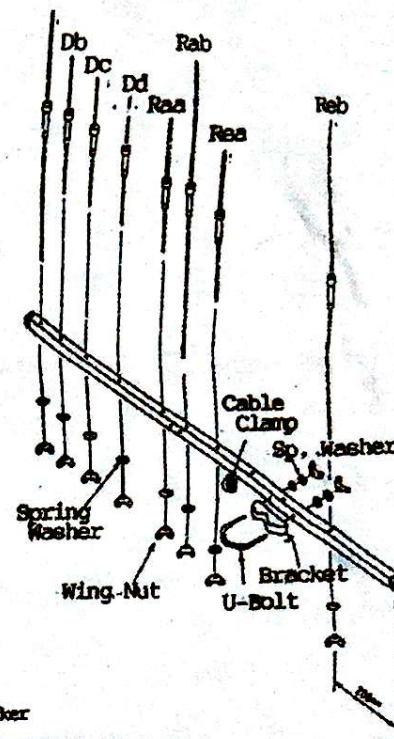
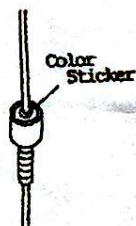
#### VSWR ADJUSTMENT

- (1) Adjust VSWR at center frequency of each band. Move shorting bar further from connector to raise center frequency where VSWR is optimum.
- (2) Be sure wing nut assembly is tightened on the shorting bar.

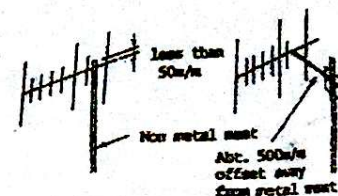
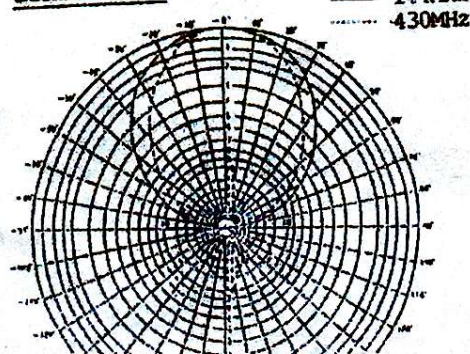


#### ELEMENTS COLOR CHART

|               |       |          |
|---------------|-------|----------|
| Element (Da)  | 932mm | - RED    |
| Element (Db)  | 310   | - BLUE   |
| Element (Dc)  | 312   | - YELLOW |
| Element (Dd)  | 316   | - WHITE  |
| Element (Raa) | 330   | - BLACK  |
| Element (Rab) | 952   | - GREEN  |
| Element (Raa) | 380   | - ORANGE |
| Element (Reb) | 1,044 | - BROWN  |



#### Beam Pattern



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