

J-SERIES MATV ANTENNA (VHF AND FM)

Description

The J-series Yagi antennas are heavy duty 75-ohm or 50-ohm antennas, for MATV and CATV applications.

Assembly and Mounting

1. Consult Figure 1 or 2 and Table 1 or 2, then assemble the elements onto the crossarm in their proper positions as denoted by their length. Note that the back of the crossarm is the end with the orange plastic plug. DO NOT overtighten the hex-bolts securing the elements.

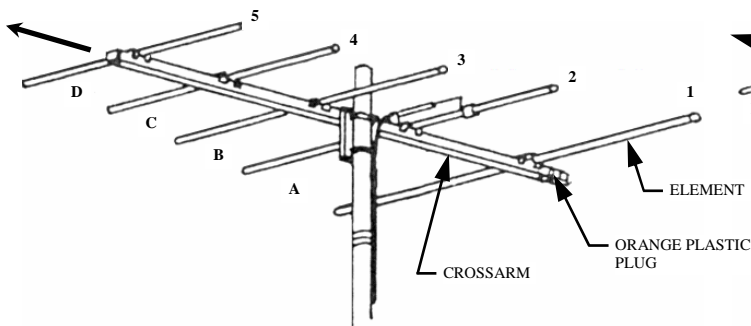


FIGURE 1 TYPICAL MOUNTING OF MODEL J55-*-WC

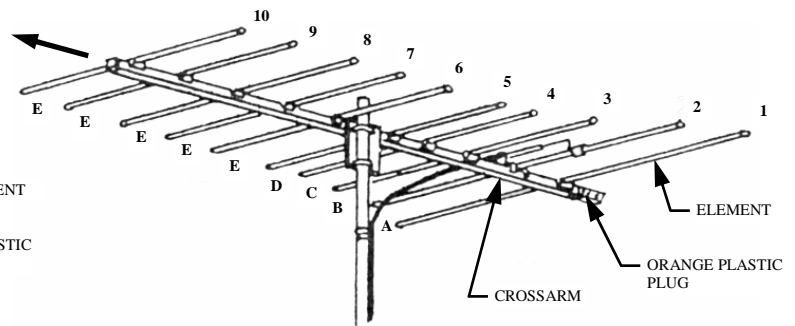


FIGURE 2 TYPICAL MOUNTING OF MODEL J105-*-WC

NOTE: THESE ANTENNAS CAN BE CONVERTED TO A CANTILEVER MOUNT BY APPLYING A "WC" CANTILEVER MOUNTING KIT

TABLE 1	ANTENNA ELEMENT LENGTH (in inches)					
ELEMENT	J55-2	J55-3	J55-4	J55-5	J55-6	J55-FM
1	110	100.5	89	77	70	65
2	100.5	91	81.5	70.5	65.5	58.5
3	92	85	76.5	66.5	62	50
4 & 5	85	81	73	63	60	48.5
SPACE	ANTENNA ELEMENT SPACING (in inches)					
A	25.5	24.5	28	24	21.25	21.5
B	15.75	15.25	16	12	12	6.75
C	11.5	9	8.5	8	7	12.25
D	39.5	30	25.5	26	20.75	28.5

TABLE 2	ANTENNA ELEMENT LENGTH (in inches)						
ELEMENT	J105-7	J105-8	J105-9	J105-10	J105-11	J105-12	J105-13
1	33.5	32.5	31.25	30.5	30	28.5	27
2	30.5	29.5	29.5	28	27.25	26.375	25.375
3	27.625	27	26	25.5	25.375	23.25	23
4 - 10	26	24.5	24.25	23.875	22.75	22.25	21.5
SPACE	ANTENNA ELEMENT SPACING (in inches)						
A	8.75	11	11	9.25	8.875	9.5	11
B	10.5	9.25	9.25	6.875	9.75	9.75	9.375
C	7.5	7	7	7.5	7.125	5.625	6.5
D	8.5	10.5	10.5	10	9.625	9.75	8
E	11	10.5	10.5	10	9.625	8.5	8

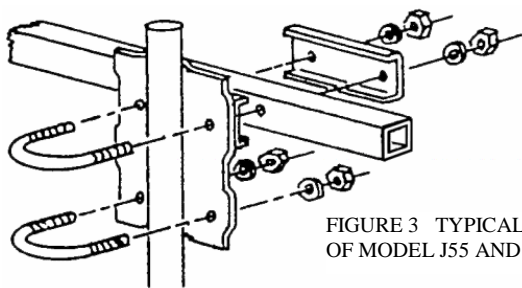


FIGURE 3 TYPICAL MOUNTING OF MODEL J55 AND J105

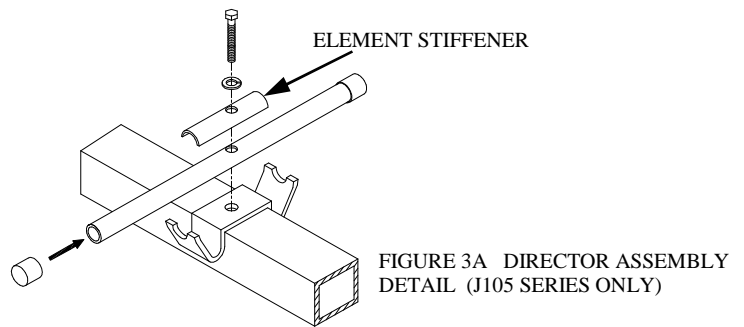
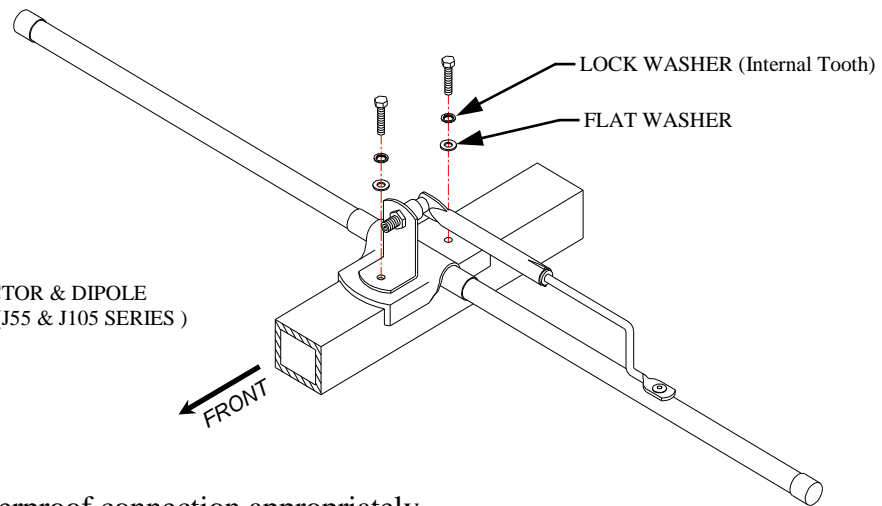


FIGURE 3A DIRECTOR ASSEMBLY DETAIL (J105 SERIES ONLY)

2. Loosely assemble the dual "U" bolt mounting bracket onto the crossarm as shown in Figure 3.
3. Lift the antenna into position, hold it upright and slide its "U" bolt assembly onto the mast.
4. Orient the antenna in the desired direction, then tighten the hex nuts on the "U" bolts sufficiently for supporting the antenna.

FIGURE 4 DIRECTOR & DIPOLE ASSEMBLY DETAIL (J55 & J105 SERIES)



Down Lead Connection

Attach down lead and weatherproof connection appropriately.

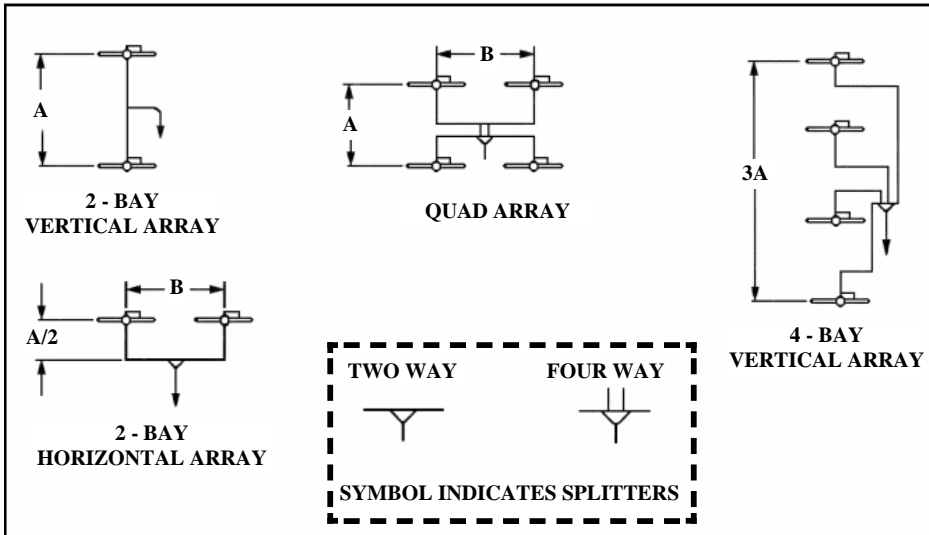
Final Orientation

Rotate the antenna until maximum signal strength is received, then fully tighten the hex nuts on the "U" bolt assembly.

Arrays

J-Series 75-ohm antennas may be attached both vertically and horizontally for greater gain and directivity. It is essential that the spacings given below in Figure 4 and Table 3 be strictly adhered to for best possible results.

The gamma feeds of all antennas within the array must face in the same direction for proper polarity. Note that the feeds shown in Figure 4 all face right as viewed from the front of the antenna.



MODEL	DIMENSION A (in inches)	DIMENSION B (in inches)
J55-2	140	208
J55-3	127	188
J55-4	116	172
J55-5	102	150
J55-6	94	140
J55-FM	80	120
J105-7	54	74
J105-8	52	72
J105-9	50	70
J105-10	48	67
J105-11	46	65
J105-12	45	63
J105-13	44	61

Splitting harnesses may be made from any good quality 75-ohm coaxial cable such as RG-6/U and Jerrold Model F-659 (pat.pend.) adjustable coaxial connectors, Jerrold Model 1596A two-way or Model 1597 four-way splitters are recommended. These should be used with Model HB-1 outdoor housings for weather protection. Instructions for use are supplied with each splitter. Consult your Jerrold dealer. Each leg of the harness should be as short as and directly routed as practical with no sharp bends, length is not critical. However, the pairs of input cables for each 1596A splitter or pair of splitters must be of equal length; the four input cables for Model 1597 splitters must also be of equal length.