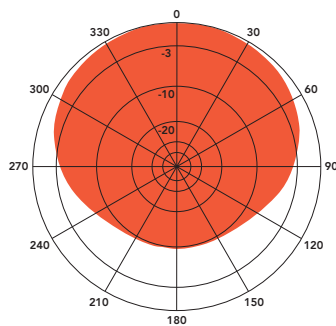


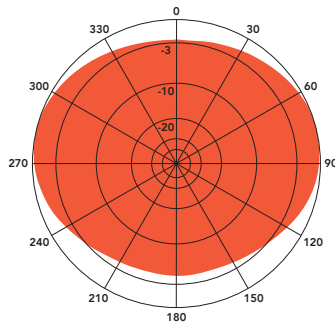
DIPOLE PATTERN ADJUSTMENT

Telewave folded dipoles are field adjustable to provide different horizontal patterns and gain values. The horizontal spacing from tower between the dipole and the support mast or tower leg controls this adjustment. Review the patterns below to determine which is best suited to your range area requirements. Use the chart on the next page to find the appropriate dimension for antenna to mast spacing. The drawing at the bottom shows how this measurement is made and the vertical spacing to be used for multi-element arrays.

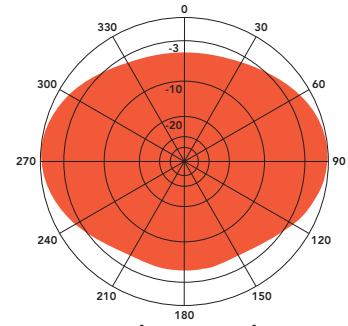
Horizontal radiation patterns



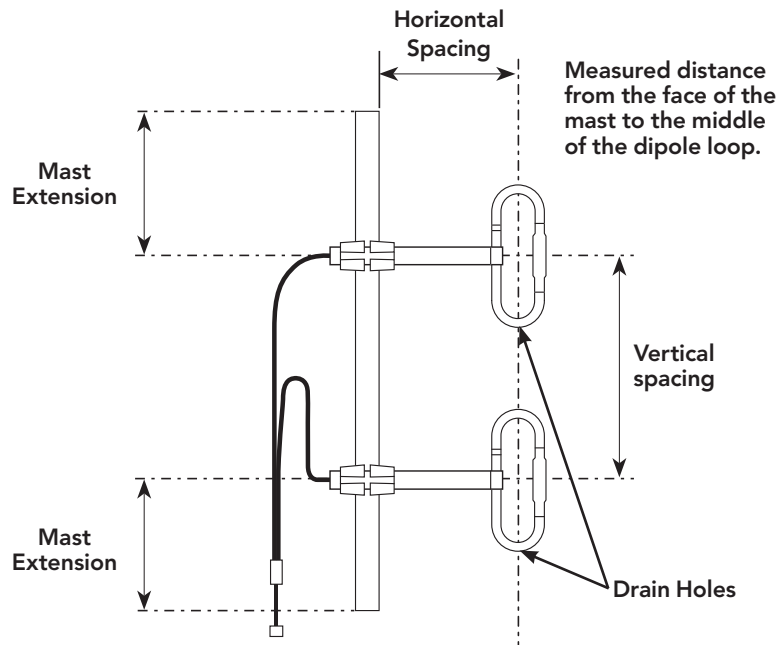
Offset Circular
1/4 wavelength spacing



Cardioid
3/8 wavelength spacing



Bi-directional
1/2 wavelength spacing



IMPORTANT: Be sure that the drain holes are on the bottom when the elements are installed.

DIPOLE PATTERN ADJUSTMENT

DIPOLE MOUNTING AND MAST SPECIFICATIONS

Mast lengths shown are minimum acceptable lengths to insure proper pattern control. Mast extension is applied at top and bottom of array. Longer masts are acceptable, but the dipole or array must be centered on the support to prevent beam tilt. The clamps provided with the dipoles will work properly to attach the dipole boom to a mast that is between 1.5 to 2.5 inches in diameter. To attach to smaller supports (1-1.5" diameter), use ANTS420 shims. This allows direct mounting to small towers such as the Rohn 25 and 45.

MAST MINIMUM LENGTH AND ELEMENT VERTICAL SPACING (at midband)

ANTENNA	MAST LENGTH	MAST EXTENSION	VERTICAL SPACING	MINIMUM MAST TYPE
ANT350D	20"	10"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT350D3	3'-7"	10"	23"	1.5" Schedule 40 Galvanized Pipe
ANT350D6-9	7'-5"	10"	23"	1.5" Schedule 40 Galvanized Pipe
ANT375D	16"	8"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT375D3	3'-3"	8"	24"	1.5" Schedule 40 Galvanized Pipe
ANT375D6-9	7'-3"	8"	24"	1.5" Schedule 40 Galvanized Pipe
ANT400D	15"	7.5"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT400D3	3'	7.5"	22"	1.5" Schedule 40 Galvanized Pipe
ANT400D6-9	6'-2"	7.5"	22"	1.5" Schedule 40 Galvanized Pipe
ANT425D	14"	7"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT425D3	2'-11"	7"	21"	1.5" Schedule 40 Galvanized Pipe
ANT425D6-9	6'-5"	7"	21"	1.5" Schedule 40 Galvanized Pipe
ANT450D	13"	6.5"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT450D3	2'-7"	6.5"	19.375"	1.5" Schedule 40 Galvanized Pipe
ANT450D6-9	5'-11"	6.5"	19.375"	1.5" Schedule 40 Galvanized Pipe
ANT450D7-12	12'-4"	6.5"	19.375"	1.5" Schedule 40 Galvanized Pipe
ANT500D	13"	6.5"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT500D3	2'-7"	6.5"	17.5"	1.5" Schedule 40 Galvanized Pipe
ANT500D6-9	5'-5"	6.5"	17.5"	1.5" Schedule 40 Galvanized Pipe
ANT550D	12"	6"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT550D3	1'-10"	5.5"	16"	1.5" Schedule 40 Galvanized Pipe
ANT550D6-9	4'-6"	5.5"	16"	1.5" Schedule 40 Galvanized Pipe
ANT750D	8"	4"	N/A	1.5" Schedule 40 Galvanized Pipe
ANT750D3	19"	4"	11.625"	1.5" Schedule 40 Galvanized Pipe
ANT750D6-9	3'-6"	4"	11.625"	1.5" Schedule 40 Galvanized Pipe
ANT900D	6.5"	3.25"	N/A	0.5" Schedule 40 Galvanized Pipe
ANT900D3	22"	4"	14"	0.5" Schedule 40 Galvanized Pipe
ANT900D6-9	4'-2"	4"	14"	0.75" Schedule 40 Galvanized Pipe

ELEMENT HORIZONTAL SPACING FROM TOWER (at midband)

MODEL NUMBER	1/4 wl. OFFSET CIRCULAR	3/8 wl. CARDIOID	1/2 wl. BI-DIRECTIONAL
ANT350D, D3, D6-9	8.4"	12.6"	16.8"
ANT375D, D3, D6-9	7.4"	11.1"	14.8"
ANT400D, D3, D6-9	6.9"	10.3"	13.7"
ANT425D, D3, D6-9	7"	10.5"	14"
ANT450D, D3, D6-9, D7-12	6"	9"	12.1"
ANT500D, D3, D6-9	5.4"	8.1"	10.9"
ANT550D, D3, D6-9	5"	7.5"	10"
ANT750D, D3, D6-9	3.7"	5.5"	7.3"
ANT900D, D3, D6-9	3.1"	4.6"	6.2"