



Cut this circle for the front of Mount

3 7/8 inches = 9.8 cm

Template for the mount holding the cone horn. Any horn taller than 18-inches will fit.

The front and rear of the mount are 8x10-inch rectangles. The wood is 3/4 inch thick. The front has a large semi-circle cut. The rear has a 1/2-inch hole drilled.

The elevation mount 15.5 inches long, including the thickness of the front and back pieces and the balusters. . The balusters are 14 inches long.

Align with the middle top of the front and rear parts of the elevation mount.

Drill 1/2 inch wide hole for rear of Mount

1/2 inch

For each circle R inches from the point, the cone radius is $r = R/4$. Since the mount length is 15.5 inches, the radius, r, of the front semi-circle is $15.5/4 = 3\ 7/8 = 3.875$ inches.

At the rear of the mount, the cone length is .75 inches so $r = (3/4)/4 = 3/16$ -inches. The hole diameter is $6/16$ -inches. Round up to 1/2-inch width.

The circles are offset from the edge by 1/2-inch. The rear hole will be just inside the top edge.

The feed probe is inserted at optimum location, where the circumference of the cone is 2 lambda. As a formula:

$$C = 2 \pi r = 2 \text{ lambda}$$

$$\pi r = \text{lambda} \text{ or } r = \text{lambda} / \pi$$

$$\text{Now } r = R/4$$

$$\begin{aligned} R &= 4 * \text{lambda} / \pi \\ &= 4 * 21.12\text{-cm} / 3.1415 \\ &= 26.9\text{-cm} \\ &= 10.6\text{-inches.} \end{aligned}$$