



30.5 Broadcast AKG/8

KIT VERSION

Circular Polarization FM Antenna **User Manual**



This manual provides important guidelines for installing. Review this information carefully for proper installation. Both unit specifications and manual contents are subject to change without notice.

INDICATIONS

Antenna can be supplied already calibrated on a specific frequency or with a Kit of Metal accessories that allow calibration on the entire FM band.

You must have a Network Analyzer for calibration. Spectrum analyzer with Tracking Generator + Directional Coupler. Without these tools it is difficult to make a correct calibration.

To calibrate the antenna, place the 2 sliding extensions and the stainless steel strap so as to get the antenna resonance on the desired frequency.

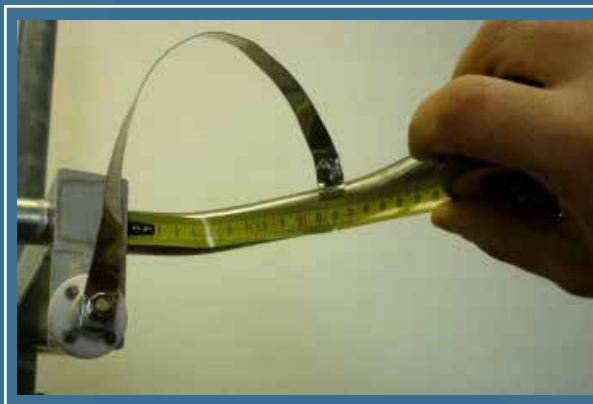
However, the calibration must take place with the antenna mounted on a pole of Diameter between 40-90mm, which must protrude beyond the bracket by at least 1mt, the antenna must be at least 3mt from the ground and positioned far from obstacles.

During the calibration phase, care should be taken not to interfere with the measurements Approaching metallic objects to the antenna.



Measure "A"

Antenna extensions must Be locked symmetrically, So they must protrude in the same way Measure above and below.



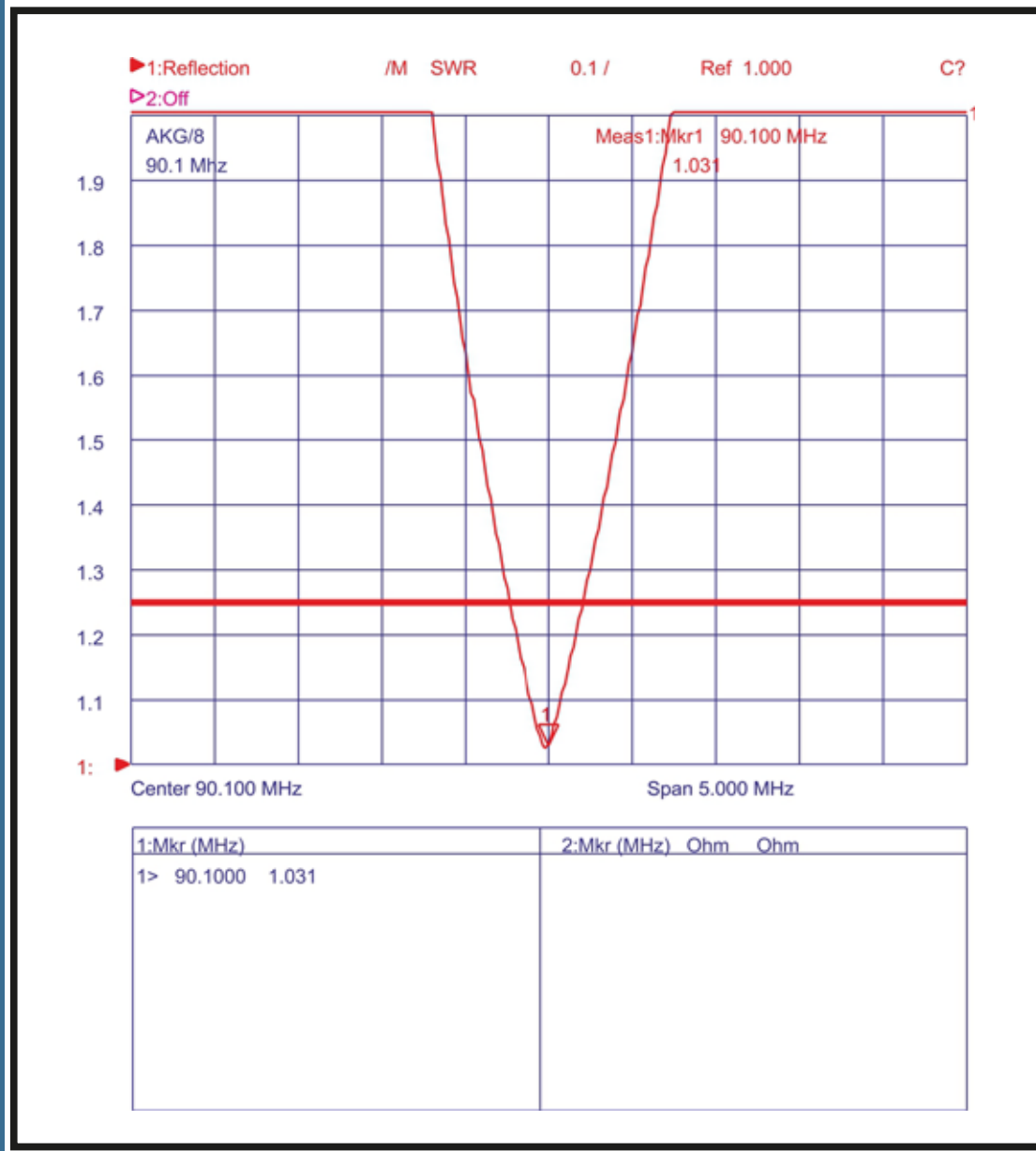
Measure "B"

The stainless steel band connecting The antenna input connector must Be moved along the element for Get the minimum return loss.

(Fastens POSSIBLE POSITION)

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Adjust the position of the stainless steel strap to get the best value of RETURN LOSS (no less than -20db) on the desired frequency. Once the point has been identified you will need to tighten all the screws firmly.



DURING THE ACTIVITIES OF AKG / 8, RECOGNIZE THAT:
The VSWR value of the AKG / 8 antenna is affected by the pole size on which it is installed. If you find a high value of VSWR on the test frequency, it probably means that The media on which it is installed is too large.

By moving slightly up and down the transmitter frequency that powers the AKG/8 antenna, you can locate the frequency at which they work, that is the frequency at such as the value of VSWR decreases (about 1% of return power).

Once you have identified the frequency on which the antenna works, reset the frequency Of the transmitter to the required one. (The deviation should not exceed 3-400 Khz).

Then adjust symmetrically, half a centimeter at a time, the extensions present above and below the antenna, to decrease the value of VSWR according to the following

Instructions:

Increasing the projection of the extensions the working frequency decreases, by consequently, decreasing the projection of the extensions the working frequency increases.

AKG/8 MEASUREMENT TABLE WITH REFERENCE TO WORK FREQUENCY

AKG/8	LUNGHEZZA PROLUNGHE	BLOCCO PROLUNGHE MISURE "A"	DISTANZA FASCETA MISURE "B"
88 Mhz	240mm	190mm	205mm
90 Mhz	240mm	180mm	195mm
92 Mhz	240mm	150mm	187mm
94 Mhz	240mm	130mm	197mm
96 Mhz	240mm	110mm	186mm
98 Mhz	120mm	87mm	161mm
100 Mhz	120mm	65mm	161mm
102 Mhz	120mm	48mm	158mm
104 Mhz	120mm	29mm	151mm
106 Mhz	120mm	12mm	151mm
108 Mhz	/	/	111mm

