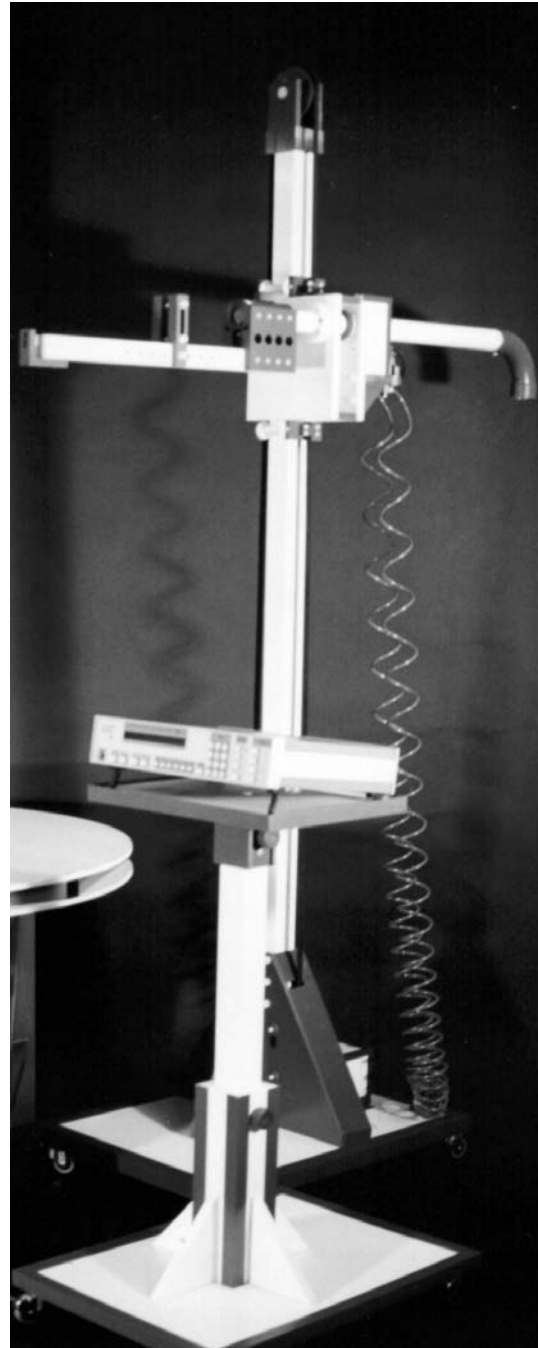


ARA TECH's antenna towers and masts provide antenna height adjustment and orientation for compliance testing. The **MA series** of efficient and accurate antenna towers are suitable for use in anechoic chambers or open area test sites (OATS).

These towers include a non-metallic mast and a horizontal antenna support arm that goes up and down the mast. The height of the support arm is adjusted either manually with a hand crank, or electrically with a remote controlled motor assembly. Guy wires and anchoring pins are available for antenna installation in open areas where wind conditions may warrant them.

All antenna towers are constructed using square fiberglass tubing for low maintenance, rigidity, and outdoor use. The square tubing design minimizes unwanted rotational and torsional twisting. Absolutely no conductive material is used above the motor assembly in our motorized antenna towers. The rigid and rugged construction of the foot design offers a convenient and low-stress tower lowering mechanism. The tower base has four casters; two casters are swivel mounted for steering. All towers can be easily disassembled for storage and transportation, and conveniently assembled for use at site. The single section cross arm is ideal for mounting small and large antennas. The support arm includes an antenna-mounting adapter for use with **ARA TECH** antennas. Adapters for mounting antennas from other manufacturers are also available on request.



The Electronic polarization control for 45° and 90° rotation is standard on Antenna Tower models **MA-240** and **MA-260**. Polarization rotation is accomplished entirely by non-metallic mechanical means. Polarization rotation is always around the antenna axis to avoid elevation errors, and it is controlled by a radio interference suppressed mechanism. **Compressed air is not used in this unique system.** Models **MA-240** and **MA-260** are ideal for automated testing.

Several models are available to choose from to meet specific test needs and test environment.

MAM series antenna towers are ideal for FCC Class A and B "Quick Scans" or "Pre Scans." Four and six-meter height models (**MAM-4/4** and **MAM-6**) may be easily assembled and disassembled into kit form for ease of transportation. The height adjustment is manual, using a hand crank in these towers. Manually controlled towers have the same high-quality construction and performance as our other products. The **MAM-4/4** is a portable mast available in two sections for easy assembly and disassembly. The **MAM-6** offers six-meter height adjustment.

Three different models of motorized masts (**MA-240**, **MA-260**, and **MA-240T**) are available for quick and automated testing. A motor assembly adjusts the height of an antenna and cross arm assembly by means of an innovative two-toothed belt system. Complete motor assembly resides in a shielded enclosure to minimize motor transient noise and interference with EMC testing. The **MA-240T** antenna mast may be tilted up to 20° toward the object to be tested. Mast tilt is required to meet the CISPR and VDE requirements for emission testing. The mast tilt directs the antenna to receive incident and reflected signals. It is also helpful to keep the main lobe of the antenna pattern on the device under test for accurate measurements as required by ANSI C63.4.

A specialized mast, (model **AS-220/T** on page 17) is available for use with our large antennas such as the **LPD-220** and **BCH-3010**.



MA-240T

SPECIFICATIONS

	MA-240	MA-260	MA-240T
MAX. ANTENNA HEIGHT(M)	4.05	6.05	4.05
TOTAL MAST HEIGHT	4.40	6.40	4.40
TILT ANGLE	N/A	N/A	Max 20°
MATERIAL	PVC+ fiberglass, weatherproof	PVC+ fiberglass, weatherproof	PVC+ fiberglass, weatherproof
MAST CROSS-SECTION	9.6cm x 9.6cm	9.6cm x 9.6cm	9.6cm x 9.6cm
BASE LXW	80cm x 80cm	100cm x 100cm	80cm x 80cm
ANTENNA WEIGHT	6kg	6kg	6kg
POSITIONING SPEED	min. 2cm/sec max. 12cm/sec	min. 2cm/sec max. 12cm/sec	Max 0.15m/sec
TILT SPEED	N/A	N/A	2°/sec
POSITIONING ACCURACY	± 1 cm	± 1 cm	± 1 cm
POLARIZATION	0°/90° (Vert./Hor.)	0°/90° (Vert./Hor.)	0°/90° (Vert./Hor.)
ANTENNA SUPPORT DRIVE	2 toothed belts	2 toothed belts	2 toothed belts
MOTOR, SHIELDED & RADIO INTERFERENCE SUPPRESSED	24 VDC/100 W	24 VDC/100 W	24 VDC/100 W
MOTOR FOR TILT FUNCTION	N/A	N/A	DC motor 24V/12W
CONTROL	Relays, octocoupler	Relays, octocoupler	Relays, octocoupler 5V
CONTROL CABLE	Cable or fiber optic(option)	Cable or fiber optic(option)	Cable or fiber optic(option)
CONTROLLER (RECOMMENDED)	HD202/HD2002	HD202/HD2002	HD202/HD2002
TEMPERATURE RANGE	15°C to 35°C	15°C to 35°C	15°C to 35°C