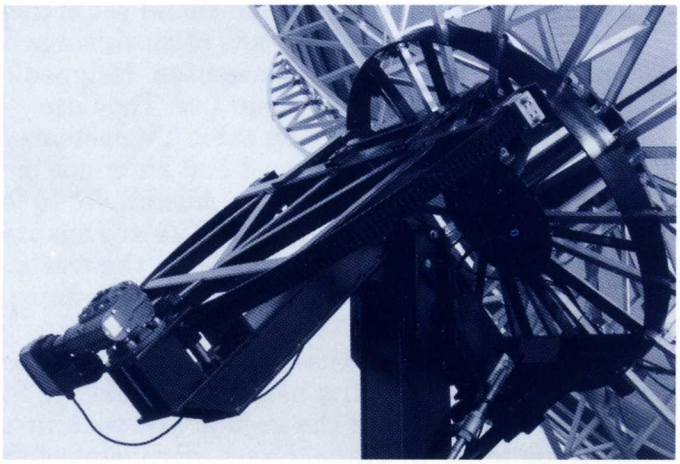
THE T20, T24, FEATURING...

ORBITRON Precision

Orbitron's concern with precision in every step of the design and production process has resulted in antennas that furnish superior reception and reliable performance. The features listed below demonstrate precise planning and execution in all their characteristics. These features are common to both the T20 and T24.

A sturdy steel tower consisting of a central 5⁹⁄₁₆″ O.D. pipe, four gusseted, steel tube legs and diagonal bracing is anchored in a concrete pad. This solidly supports the antenna.



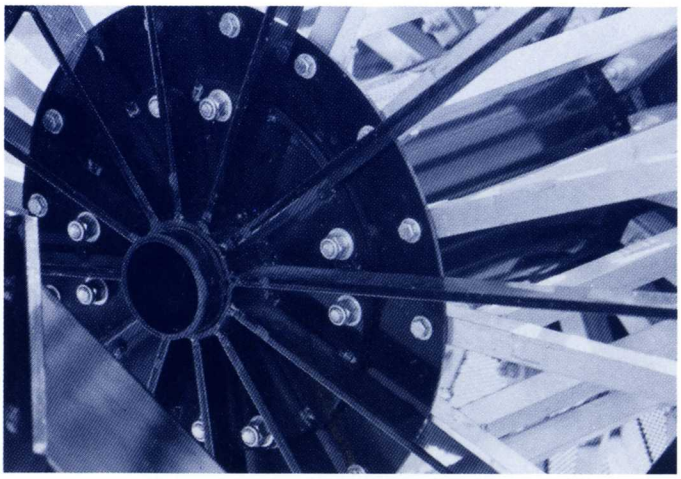
This view of the T24 mount shows the trusses, spool, hub ring, chain driven D ring, D ring drive motor and elevation beam.

A steel hub ring consisting of a heavy outer ring and twelve spokes is attached to the antenna's core or spool. The antenna pivots on this ring and it provides support for the trusses.

Horizon-to-horizon azimuth movement is provided by a double chain driven, steel D-ring. The chain is driven by a 36 volt D.C. motor.

Motorized declination movement allows easy declination adjustment. Motorized declination is superior to motorized elevation movement in that it keeps the antenna always perpendicular to the Clarke belt. This makes it easier to find and track satellites.

Dual axis tracking is a standard feature on these antennas. This feature allows tracking of unstable and inclined orbit satellites.



A close-up view of the spool with trusses in place.

A precision, machined spool functions as the core of the antenna. The trusses are attached to the spool in such a way as to allow the spool to turn on the mount during reflector assembly. This allows assembly of the reflector after the mount has been assembled on the tower. This can be done without the use of a crane, an extremely useful feature in remote areas.

Greasable, self aligning bearings are used for the azimuth pivot bearings. Declination bearings are oil impregnated bronze.

Sixteen welded aluminum trusses, made up of two matched parts, support the reflector.

Nine sets of aluminum mesh rings (seven on the T20), sixteen to a set, are bolted between adjacent trusses. The mesh panels are then attached to the rings with stainless steel hooks. These rings also help support the antenna and maintain parabolic accuracy.

Aluminum mesh panels capable of receiving either C or Ku signals are used.

Aluminum, pre-punched strips are screwed over the top of the mesh panels and into each truss. These strips and the aluminum mesh trim, which clamps around the antenna's perimeter, hold the mesh securely in place.

A quad feed support is used to precisely center the feed and add strength and stability to the antenna.

A black, powder coat finish is found on all steel parts of the antennas. The mesh panels are also powder coated. All other parts are mill finished aluminum.

A five-year limited warranty covers defects in materials and workmanship.

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