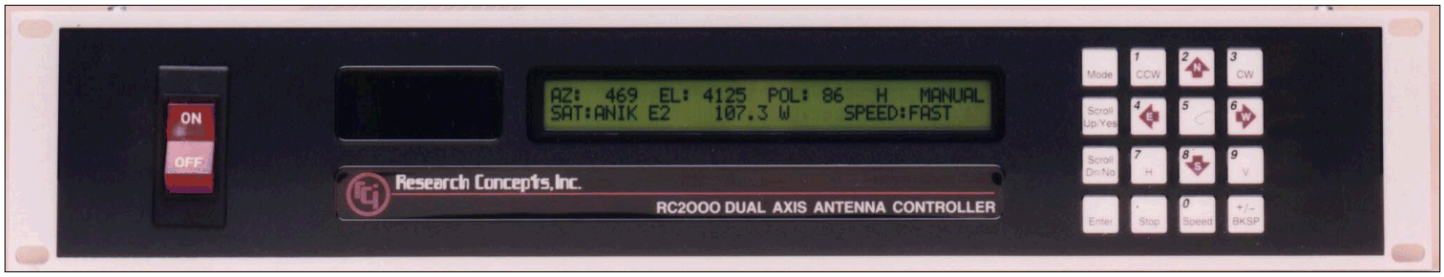
VIKING SATCOM

RC2000A



FEATURES

- **Automatic Positioning**
  precisely positions antenna with the press of a single key
- **Auto-Pol Input**
  polarity output tracks receiver transponder value
- **High Resolution Sensor Processing**
  insures accurate Ku-band positioning
- **Three-wire Polarotor™ Interface**
  allows automatic or manual polarizations control
- **Dual Speed**
  for fast slewing, fine positioning, user Programmable
- **Non-volatile Memory**
  stores up to 50 preset position and polarization combinations
- **Solid-State Drive Circuitry**
  provides reliable, quiet operation, rated at 10A
- **Built in Current Limiting**
  protects controller from excessive loads
- **Adapti-Drive™**
  maintains stable speed with varying load
- **Software Controlled Limits**
  provides backup to mechanical limits
- **RS-422 PC Control Interface**
  allows scheduling of movements and automated control

OPERATIONAL OVERVIEW

The RC2000A was designed to provide years of reliable operation through the use of a heavy duty solid-state drive network coupled with a novel microcontroller-based fault monitoring system. The 10 amp drive output capability is unparalleled in the market and the Adapti-Drive™ digital servo speed control optimizes antenna movement for today's demanding Ku-band applications. Additional features like an RS-422 communication port for PC control and a very user-friendly, menuing scheme make the RC2000A a unique and highly adaptable piece of equipment.

MODES

The RC2000A operates in a mode architecture whereby the controller's operational status is governed by the selected mode. An explanation of these modes are listed below.

MANUAL: Allows for manual jogging of the antenna azimuth, elevation and polarization axis. The fast/slow speed toggle is active in this mode.

AUTO: A satellite, previously saved in memory, can be recalled and the RC2000A will position the antenna on the selected satellite.

SETUP: This mode is invoked to store azimuth, elevation and polarization values memory for a selected satellite.

RESET: Used to reset the drive over-current protection circuits after the load error has been corrected.

DELETE: Allows the user to delete a satellite from the list of stored values.

FIX: Used to restore the proper position counters in the event of a memory error or sensor failure.

AZIM SLOW: This mode allows the user to select an appropriate drive slow speed value to optimize system performance.

ELEV SLOW: Same as for Azim Slow

CONFIG: Provides a concise point to enter any necessary system constants or enable options. Examples are Auto-Pol sense and status as well as simultaneous movement of axis during an Auto move.

LIMITS: Software limits are set for both axis in this mode. They provide backups for the mechanical limits and establish an estimate of the antenna range of operation.

SPECIFICATIONS

Power:	115/230 VAC, 48W
Size:	19.0″ W x 3.5″ H x 9.0″ D
Weight:	12.5 lbs.
Temperature:	0 – 50° C

Drive Output:	12 – 36 VDC, 10 Amps
Sensor Input:	Reed, Hall Effect, Optical
Polarization:	Standard Polarotor™ interface
PC Interface:	RS-422, 4 wire