Features

The Antenna Control Unit bearing model number: LSACS-ES33AER is designed to position an antenna to the desired satellite of interest or place antenna to the required look-up angles. This system is designed for Earth Station Antenna which uses AC motors for antenna AZ, EL and FEED rotations. Incremental Encoder is used to provide the AZ, EL and FEED angle readings.

Features of the Antenna Control System

The Antenna Control Unit performs numerous functions and following list describes the functionalities provided by the Antenna Control Unit.

- Display of AZ, EL, FEED and SS readings
- Display of ACU status
- Display of GPS LAT, LONG, DATE AND UTC Time (Optional - If GPS needed)
- Display AZ, EL, FEED Encoder reverse and No Reading messages
- Display of Software and Hardware Interlock messages
- Choose Themes
- Option to set AZ, EL, FEED Encoder Present Angles
- Option to enable or disable AZ, EL and FEED Encoder inverse
- Option to set AZ, EL, FEED encoder gear ratios
- Option to change Settings Password
- Option to enter 100+ Satellites including Satellite name, Orbital Position
- Option to perform step track as and when user required.
- Option to set time interval to perform step track.
- Option to set min. AGC level
- Option to enable/disable time interval.
- Option to enter AZ, EL scan degrees.
- Option to set software limits
- Option to enable/disable software limits
- Option to enable/disable Hardware limits
- Option to Inverse Hardware limits
- Option to Inverse AZ, EL, FEED Motors
- Option to set motor speeds of AZ and EL
- Option to set ACU in simultaneously 2-axis or 3-axis mode
- Option to set GPS Latitude and Longitude. This is used in case of no GPS device installed
- Tracking (Auto, Manual, Step, Position, Memory)
- Remote Interface RS232
- Software to operate ACU from PC
- ACU Tracking 0-10 VDC analog input
- One-Button to select reqired Satellite

ANTENNA CONTROL UNIT (Indoor Unit) SPECIFICATIONS

Displays	AZ position angle 000.00 to 359.99
	EL position angle 000.00 to 89.99
	Feed position 000.0 TO 179.99 Deg
Encoder	18 bit absolute encoder with 0.001 Deg resolution
	1 for Azimuth and 1 for Elevation
	1 for Feed (13 bit absolute encoder)
Controls	Mode selection, front panel keys
Modes of Operations	a) Manual mode:-Slew mode (continues movement),
	Step mode (step wise movement but not continuous)
	b) Program track mode: - Auto and Manual Track (Position Designation track)
	c) Step Track Mode
Satellites Storage	100 Satellites including Saellite name, Orbital Postion
Step Track Time Interval	1, 5, 15, 30, 60 & 90 minutes
Step Track step size (AZ/EL)	0.02, 0.04, 0.06, 0.08 & 0.10 Deg Selectable
Step Track Resolution	0.08 dB over 20dB range
Step Track accuracy	0.10 dB over 20dB range
Alarm Indications	Software and Mechanical (hardware) Limits CW, CCW, UP, DN, FCW, FCCW, LIN, and CIR
GPS and Electronic Compass	Optional
Host Computer interface	RS 232, D type connector Interface for Remote monitoring and control operations by host PC
Input Power	230 V AC, 50Hz/30VA, 1 Ø
Size	2U (19”W x3.5” H x12”D)
Weight	4 kg
Operating Temperature	0 to +5 0° C