

# Antenna Control Unit

Model No: JC-SC-ACU41



Land



Air



Marine

ACU is a state-of-the-art technology product designed with state of art motion control techniques to provide simultaneous control of the tracking antenna in Az & El axes. It is a Type-II control unit which takes both rate & position feedbacks for calculating the Servo loop compensation values by using customized algorithms. The unit is programmable for Manual, Slew, Auto, Slave, File & GPS track through a menu driven from the front panel. This advanced tracking controller is built-in with scan code generator, secant correction, encoder logic etc. This unit is developed for critical tracking applications.

## Applications

- High-performance Motion control
- Any type of motion control system

## Features

- Digital type II closed loop control system
- Graphical displays, Error cross-hair window, Signal level bar displays and Programmable parameter display
- Safety software position limits for avoiding damage to the antenna pedestal
- Reliability and maintainability in critical applications
- Bar graph display for tracking errors
  - Bar graph display of SNR
  - Built-in Diagnosis test
  - Keypad and mouse
  - Computer with GUI for configuration, monitoring and control
- Communication UDP interface with remote computer



## Technical Specifications

Functional	
Type	Digital type-II control system
Operating Modes	Standby, Slew, Manual, Point, Search, Slave, File/Auto track
Position Resolution	0.01°
Safety Limits	Configurable soft limits
Position Accuracy	0.01°
Limit inputs	0 or 24V DC
AZ & EL DC Error Output	±10V DC to drive
Display	TFT
Acquire/Loss Status	TTL
Encoder Interface	RS422
Communication Interface	RS232/USB/Ethernet
Scan Frequency	500 Hz/1 KHz (selectable)
Input AGC	0 to +10 Volts
Multiplication Factor	0 to 9.9 selectable
Error Outputs	0 to +10 Volts, AZ & EL
User Interface	Thumb wheels and Joy-stick for Az position and velocity commands respectively
Electrical	
Power	230V AC, 50 Hz, Single Phase
Mechanical	
Mounting	19-inch 6U Rack mountable
Size	485 L X 485 D X 264 H in mm
Weight	< 20 Kgs
Environmental	
Temperature - Operating	0° to +50°C
Temperature - Storage	-10° to +60°C
Humidity	90% RH Non-Condensing

