



S + C Bands 2.4 m ANTENNA & ANTENNA CONTROL UNIT



ANTENNA CONTROL UNIT (ACU)

The dedicated software, through the color display, provides a user friendly interface (see below non contractual example of ACU screen).

The software can easily be customized for user's needs.
Touch screen with integrated PC in option

MONITORING INFORMATION available through the PC Man-Machine Interface

- Elevation and Azimuth pedestal angles
- Selected operating mode
- Tracking signal level (when Auto-tracking mode is active)
- Tracking errors
- Tracking polarization in operation
- Main antenna / Acquisition-Aid antenna status
- Alarms
- Logbook : events (El, Az, Time, antenna speed, received signal level, tracking errors, operating modes...) are recorded with 50ms step.



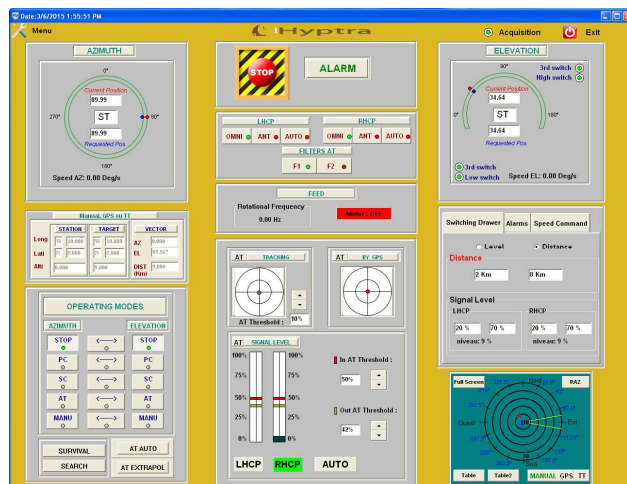
OPERATING MODES available through the PC Man- Machine Interface

Elevation and Azimuth axes are independent :

- **STOP** : Stop on El. and Az. ; brakes are switched on
- **MANUAL** : El. and Az. axes reach the angular positions received through the PC
- **SLEW** : El. and Az. axes speed adjustment(-25 to +25%/s with 8 bits ; step = 0.16%/s)
- **AUTO-TRACKING**: manual or automatic (with tracking error angle criteria or HF signal level criteria)
- **GPS** : The ACU elaborates El. and/or Az. angles through the target GPS information received by RS232 or TCP/IP link under **NMEA 0183 standard**. The target range is calculated by the ACU and displayed on the screen.
- **SLAVE (option)**: The ACU elaborates El. and/or Az. angles through the SLAVE information received by TCP/IP link.
- **MEMORY TRACK (with AT mode)**: as back up mode in case of auto-tracking lost. When auto-tracking is lost, the antenna continues traveling of Az and El with extrapolated speed.
- **SEARCH (option)**: searching around current antenna location (spiral scan)
- **PROGRAM TRACK (option)**: Tracking following a predicted trajectory download from computer.
- **Acquisition-Aid Antenna (option)**: manual or automatic selection between the main antenna and the Acquisition-Aid Antenna.
- **PRESET** : Up to 100 El. and Az. angles can be stored
- **SURVIVAL (STOW)**: El. 90°, brakes applied on El. and Az.
- **INITIALIZATION** : The ACU calculates the correction to be applied according to the electronic spirit level and compass information.
- **AUTOTRACKING SUPPORTED BY GPS (with AT mode)**: When GPS data from aircraft are available, the operator through the Man Machine Interface, can follow the aircraft and locates the aircraft into the 5 dB antenna pattern.

Starting in AutoTracking mode, if for any reason, the aircraft reaches this " 5 dB circle" then the antenna will automatically switch to GPS tracking mode.

Then when antenna will cross the 2 dB circle on its way back, the antenna will switch automatically in Auto-Tracking mode.



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