





## S + C Bands 3.1 m ANTENNA & ANTENNA CONTROL UNIT



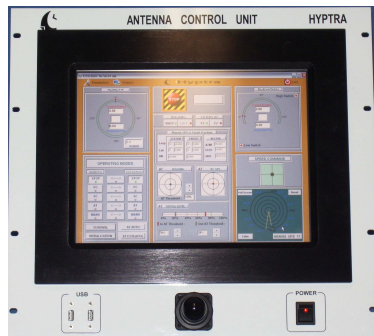
### ANTENNA CONTROL UNIT (ACU)

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.



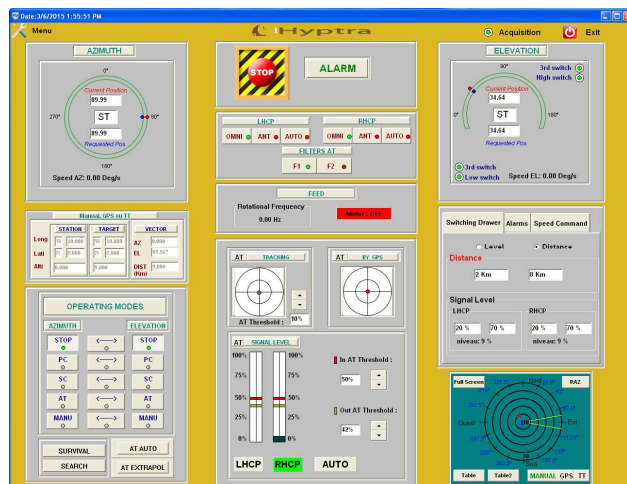
### OPERATING MODES available through the PC Man- Machine Interface

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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