Alph-Spid Controller & HRD Satellite Operation Quick Guide

Before Using – please take the time to look at the satellite antennas from the 4th floor connector over the EECS atrium. From this vantage point, the satellite antennas are visible through the glass atrium ceiling. Make certain that the antennas are 1. pointed in the "parked" position (270 deg / west) and 2. the cables are not twisted tightly around the mast.

Useful Satellite Websites – to determine the satellite frequency, activity, operational status… either Google the satellite or N2YO.

1. Turn on power supply to ICOM 910 and then ICOM 910 Radio
2. Turn on computer
3. Open HRD, ignore "unspecified error".
4. Minimize "my logbook" screen (if the logbook interferes with the screen)
5. Select HRD Rotator  located on bottom of computer screen
   - Disconnect
   - Rotator = Alph-Spid
   - Protocol = Alpha Spid
   - Port = COM3
   - Refresh Rate = 1 sec
   - Stop Position = 360 deg
6. Select DDE Connect
7. Select DDE Track
8. Select "Connect". Display should show AZ/ EL
9. Select Satellite Tracking screen  (this opens up the world map)
   - Rotator = "enable"
10. Show "Tracks Selected" – OK
11. Select satellite to track from drop down list
    a. Select Freq – OK
    b. Select RX / TX
12. ICOM 910
    a. Top is always Satellite RX
    b. Bottom is always Satellite TX
    c. PWR < 50%
    d. ICOM 910 should be in SAT / REV mode
13. Rotator should read AZ 270 / EL 0 deg
14. If the above fails;

a. select “connect”
b. select DDE track
c. listen for Alpha-Spid to connect

15. Computer will announce Satellite when approximately 1 minute prior to reaching visible status Alpha-Spid controller will begin to track satellite. Always listen for the click of the Alpha-Spid controller. This will let you know that the antenna is moving. Verify with the controller module and the visual display on the HRD screen. If no “click” are-start the process….
16.
17. Listen / Adjust volume / Tune / Talk

1. Moving the Antenna’s to the “Parked” position when done
    a. “De-select” the frequency pairings
    b. Go to and “de-select” DDE Track
    c. Go to and from the Rotator drop down menu Select AZ 270 / EL 0. Antennas will then rotate to the parked position of 270 / 0 deg. (under “Locator” button)
    d. Power off ICOM 910 and computer.

    Always listen for the click of the Alpha-Spid controller. This will let you know that the antenna is moving. Verify with the controller module and the visual display on the HRD screen.