



DA-7X2 Satellite Prediction

Load current orbital data, establish a location, and review an upcoming pass

What this feature lets you do: Use Satellite Prediction to see when a supported satellite should rise above your location and where to look or listen during the pass. It does not authorize a frequency or automatically compensate for Doppler shift.

Receive first: Begin by receiving and learning the pass display. Transmit only when your license, the satellite's published operating mode, the band plan, and the pass conditions permit it. Avoid interfering with an ongoing contact.

1. Load current satellite data

1. Read the DA-7X2 with the matching BTECH CPS and save a backup.
2. Connect the radio, select its COM port, and choose Tool > GPS Satellite Data Update.
3. Select HTTP Download and wait for CPS to retrieve the current orbital data.
4. Review the downloaded list, then select Write Data and wait until the radio write completes.
5. Close the update window, disconnect safely, and power-cycle the radio.

Refresh before planning: Orbital elements age. Download current data again when predictions no longer match observed passes or before relying on the radio for a new operating session.

2. Establish the radio's location

1. Turn GPS on and move to a location with a clear view of the sky.
2. Wait for the GPS icon to show a valid position before opening Satellite Prediction.
3. If GPS cannot be used, configure one verified fixed location in the CPS APRS Fix1-Fix8 area, then select that location for satellite prediction.

3. Review a pass

1. Open Menu > Satellite > Satellite.
2. Select a satellite and review the predicted pass time and direction.
3. Use the up/down controls to review the detail screens, including the listed receive and transmit frequencies where provided.
4. Program a receive channel or tune VFO for the downlink. For any authorized transmit test, verify the current satellite frequency plan independently and account for Doppler shift.
5. Keep contacts short and listen between transmissions; passes and shared satellite access are limited.

If the list is empty or inaccurate: Confirm Tool > Options exposes the GPS/satellite feature and that the data write completed. Verify a GPS lock or the selected fixed location, including latitude, longitude, and hemisphere. Then download current orbital data, power-cycle the radio, and confirm the radio's time zone, date, and time.