

Application Note

4/28/2014



Installing Dish 500 Legacy System with the AI Turbo S2 Satellite Meter



Connections: Output port of LNB connected to ODU / LNB port of AI Turbo S2 with coax cable

Meter Setup:

Push the **SYST** System soft-key to select the following:

- REGION your geographic region
- SERVICE **Dish Network**
- SYSTEM **Dish 500 Legacy**
- LNB MODEL **Twin Legacy** or other as applicable if using a wing dish or switch
- SWITCH TYPE defaults to **Twin** (assuming you'll be connected directly to the LNB)

*To make selections, arrow up or down to the item to change and press **Enter**, then arrow up or down to the desired option and press **Enter**. Press **EXIT** or **DONE** to return to Run Mode*

Azimuth/Elevation Lookup:

Push the **AZ/EL** soft key (lower left corner of main run screen), use the numeric keypad to enter the Postal Code for your current location, and press the **ENTER** key. Press **EXIT** to return to Run Mode.

Antenna Pointing

Install the mast (pole) plumb, preset the antenna reflector's vertical angle (elevation setting) and Skew setting, mount antenna reflector to mast, and grossly align azimuth (using magnetic compass according to 'Magnetic' coordinates shown in AZ/EL screen on meter). You may want to use the AZ/EL look-up feature to obtain rough antenna reflector settings based on your zip code or latitude and longitude.

Run Mode:

- Press **LNB** soft-key (located on middle right side of LCD screen) once to power the LNB and for LNB1 (119°W). The satellite orbital position will be shown in upper left corner of LCD screen.
- Adjust antenna reflector azimuth (left or right) and elevation (up or down) to obtain maximum signal level (left bar graph), signal quality (right bar graph), and LOCK status.
- Press the **ID** soft-key (located on middle left side of LCD screen) to verify that you're aligned to the 119°W satellite. "ID VERIFIED" means you are pointed correctly.
- If "ID FAILED" is displayed, press **SCAN** soft-key and the AI Turbo S2 will find which satellite you are aimed at.
- If desired, you may also use Up/Down arrow keys to scroll through other transponders to check for proper level and quality.



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- Press **LNB** power soft-key again to toggle to LNB2 (110°W). Fine tune azimuth, elevation and skew of dish to maximize signal level (left bar graph) and signal quality (right bar graph), and achieve LOCK.
- Press **ID** soft-key to verify ID of 110°W satellite.
- If desired, you may also use Up/Down arrow keys to scroll through other transponders to check for proper level and quality.

Limit Scan:

This step may be done for each satellite.

- Press the **MENU** soft key.
- Press the **LIM SCAN** soft-key or scroll and highlight **Limit Scan** and press **Enter**.
- Press the **EDIT** soft key then press the **USE ZIP** soft key.
- Press **DONE** to perform limit scan.
- Review results or save them in meter for future use.

You may also choose to use the PoP Scan function of the meter to record the measurements. Please refer to the operations manual for more information and instructions related to the Proof of Performance scan feature.

Notes:

- It is NOT recommended to keep the AI Turbo S2 meter in line while checking receiver status due to attenuation from our circuitry.
- Please ensure that you have the latest versions of North American Field Guide, Software, Dish Limit values, and Postal Codes loaded into your meter. If your meter has older versions loaded, please use the FlashUpdate program to update your meter, as described in the Operations Manual.



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