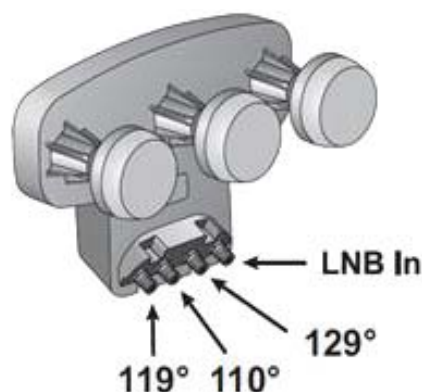


## Application Note

4/28/2014



# Installing a Dish Network Dish 1000.4 West System (Western Arc) with the AI Turbo S2 Satellite Meter



**Connections:** Connect a coax cable from an LNBF output port to the ODU / LNB port of the AI Turbo S2 satellite meter

### Meter Setup:

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

- REGION                      your geographic region
- SERVICE                     **Dish Network**
- SYSTEM                     **Dish 1000.4 West**
- LNB MODEL                **Dish 1000.4 West** or other as applicable if using a wing dish
- SWITCH TYPE             defaults to **DpPlus**

*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 Zip 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 postal code or latitude and longitude.

### Run Mode:

- Connect a coax jumper cable from the ODU/LNB port of your AI Turbo S2 meter to one of the LNBF output ports.
- Press **LNB** soft-key (located on middle right side of LCD screen) once to power the LNB and go to 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.



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- 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.
- Press **LNB** power soft-key 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.
- Press **LNB** power soft-key to toggle to LNB3 (129°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 129°W satellite.
- If desired, you may also use Up/Down arrow keys to scroll through other transponders to check for proper level and quality
- If you have a wing dish (connected to the LNB) aimed at 61.5°W, 72.7°W, 77°W, 118.7°W, or 121°W, then Press **LNB** power soft-key to toggle to LNB4. 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 correct 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.

### 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.

