TESCOM

Application Note

31 May 2023

Installing **Dish Western Arc DPH 1000.2** System with the XR-3 Satellite Meter

Requirements: XR-3(W) base unit with the Turbo S2 Module

Connections: Coax cable connected from an LNBF output port to the XR-3(W) satellite meter module's ODU / LNB port

Meter Setup:
Push the **SYST** System soft key to select the following:
- REGION   your geographic region
- SERVICE   **Dish Network**
- SYSTEM   **WA DPH 1000.2**
- LNB MODEL   **WA DPH 1000.2** or other as applicable if using a wing dish
- SWITCH TYPE   defaults to **Hybrid**

*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*
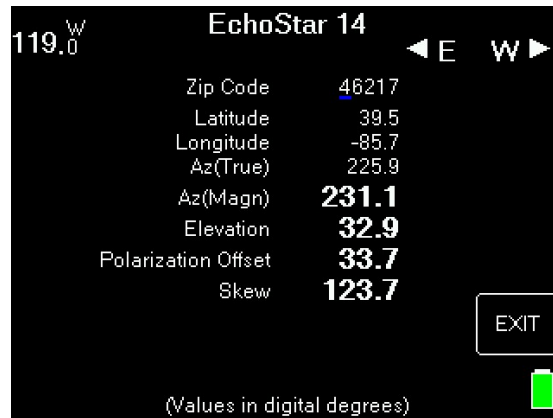
Application Note

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 you Postal 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 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.
- Press the **ID** soft key (located on middle left side of LCD screen) to verify that you are aligned to the 119°W satellite. "ID VERIFIED" means you are pointed correctly.
- If "ID FAILED" is displayed, press **SCAN** soft key and the XR-3(W) 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 are aligned to the correct satellite. "ID VERIFIED" means you are pointed correctly.
- If "ID FAILED" is displayed, press **SCAN** soft key and the XR-3(W) 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
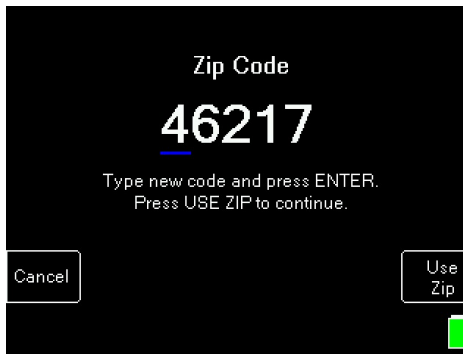
Limit Scan:
This step may be done for each satellite.
- Press the **MENU** soft key.
- Press the **LIM SCAN** soft key or scroll and highlight **Limit Scan** and press **Enter**.
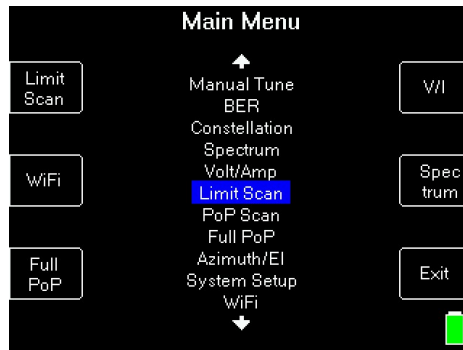
- Press the **USE Zip** soft key if correct or type a new code, press enter, then **USE Zip** soft key.

- Review results or save them in meter for future use.
- Detailed instructions for the Limit Scan feature are online at: https://tescomusa.com/pages/resources

LDDF Inc., dba TesCom • 1315 Sunday Dr. • Indianapolis, IN USA 46217 • Tel (512) 244-6689 • www.tescomusa.com

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 XR-3 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.