

Application Note

10/29/2015



Installing a DIRECTV Phase III System with the XR-3 Satellite Meter



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

Meter set-up

Press the **SYST** System soft-key (located near top left corner of LCD screen) to enter the System Setup menu. Then select the following:

- REGION your geographic region
- SERVICE **DIRECTV**
- SYSTEM **Phase III / Sat-C**
- LNB MODEL **(N/A)**
- SWITCH TYPE defaults to **22 kHz**

*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 zip code or latitude and longitude.

Run Mode

- Connect a coax jumper cable from the ODU/LNB port of your XR-3 meter to one of the LNBF output ports.
- Press the LNB soft-key (located near middle right side of LCD screen) once to power LNB1 (101°). The satellite orbital position will be displayed 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 101°W satellite. "ID VERIFIED" means you are pointed correctly.
- If "ID FAILED" is displayed, press **SCAN** soft-key and XR-3 will find which satellite you are aimed at.

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- 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 (combo 110°W and 119°W). Fine tune azimuth, elevation and skew of dish to maximize signal level and signal quality, and achieve LOCK.
- Press ID soft-key to verify ID of 110°W and 119°W satellite.
- If "ID FAILED" is displayed, press **SCAN** soft-key and XR-3 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. Transponders 8, 10, and 12 come from the 110°W satellite and transponders 22 through 32 come from the 119°W satellite.

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, 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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