APPLIED INSTRUMENTS, INC.

RF TEST AND MEASUREMENT

Application Note

03/27/2012

Installing Ku Band 10.75 GHz LO LNBF satellite system with AI Turbo S2 satellite meter

Connections: LNBF output port connected to ODU / LNB port of AI Turbo S2 meter with coax cable

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   **Generic Ku Band**
- SYSTEM   **H/V Dual Pol LNBF**
- LNB MODEL   **Std N. Am Ku 10.75**
- SWITCH TYPE   defaults to **none**

*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*

Antenna Pointing

Install the mast plumb, preset the antenna vertical angle, mount to mast and grossly align azimuth. You may want to use the AZ/EL lat/long or postal code look-up feature to obtain rough antenna settings.

- Use left / right arrow keys to select the desired satellite (orbital position displayed in upper left corner of LCD screen). Refer to your service paperwork to know which satellite to aim dish at.
- Press the **AZ/EL** soft-key, type in the local postal code or latitude and longitude, and press **ENTER**. Approximate antenna settings will be displayed. Press **EXIT** soft-key to return to the main Run screen.

Run Mode

- Press **LNB** soft-key (located on middle right side of LCD screen) to power the LNB.

After selecting the desired satellite and pressing the **LNB** soft-key to power the LNB:

- Adjust antenna azimuth and elevation to obtain maximum signal level (left bar graph), signal quality (right bar graph), and LOCK status.
- Physically rotate the LNB and feed horn assembly/LNBF (adjusting the polarization offset) either clockwise or counter-clockwise to maximize signal level and quality.
- Press the **ID** soft-key to verify the satellite. "ID VERIFIED" means you are pointed correctly.
- If "ID FAILED" is displayed, press **SCAN** soft-key and 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.

Other Notes:
-It is NOT recommended to keep AI Turbo S2 meter in line while checking IRD/receiver/modem status due to attenuation from the meter's circuitry.

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