APPLIED INSTRUMENTS

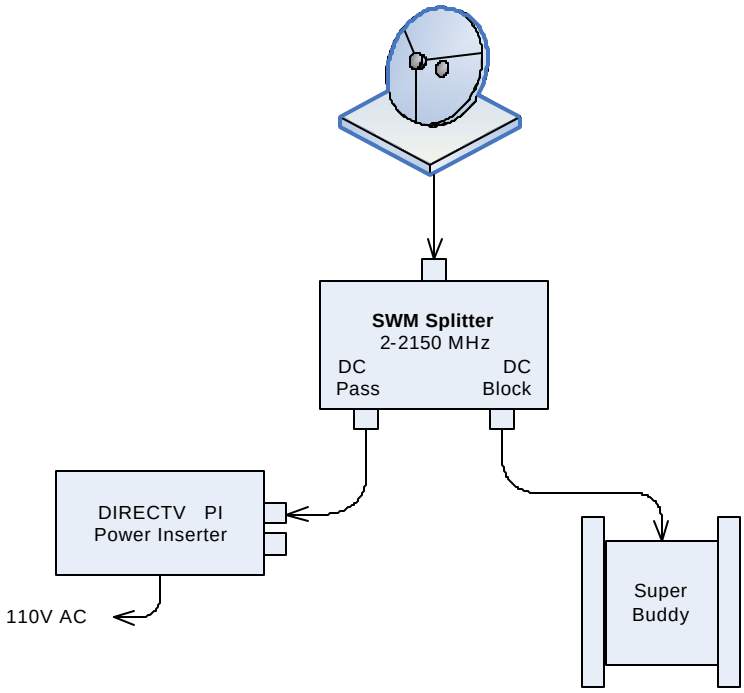
Application Note

04/02/2008

Installing a **DIRECTV SWM-ODU** with the Super Buddy™ meter.

Connections:

A power inserter is required to supply the SWM-ODU with the 21 to 29 volts it requires. Use a power passing/blocking splitter approved for SWM use to connect the Super Buddy according to the following diagram. The Super Buddy should be on the DC power blocking side of the splitter and the Power inserter on the power passing side.



Take care when making these connections: there is a chance that an accidental application of up to 30 VDC to the Super Buddy may damage the meter.

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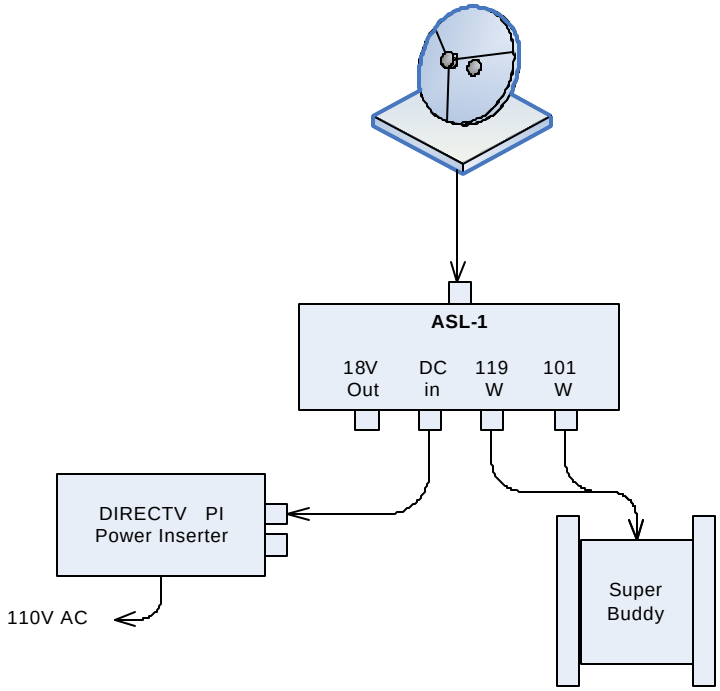
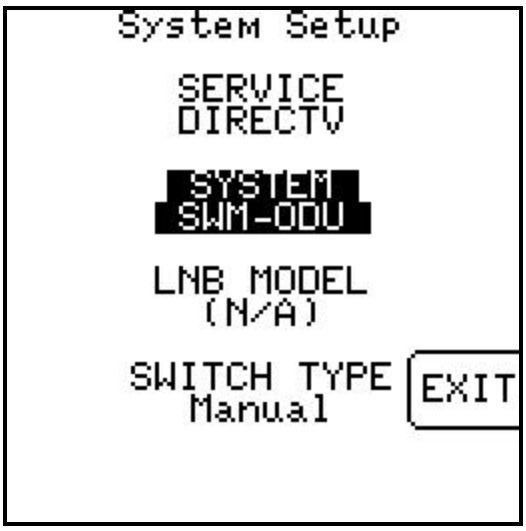
Optional Connections:
Alternately, the DIRECTV ASL-1 SWM ODU Alignment Signal Locator may be used instead of the splitter. The ASL-1 is not required with the Super Buddy but may be used as shown below. In this case you will have to manually move the cable from the 101 connector on the ASL-1 to the 119 connector to switch satellites in addition to changing the selection on the meter from LNB 1(SWM 101) to LNB 2 (SWM 119).



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

- REGION your geographic region
- SERVICE **DIRECTV**
- SYSTEM **SWM-ODU**
- LNB MODEL N/A
- SWITCH TYPE Manual (the default for the SWM-ODU)

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**.



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Press **EXIT** or **DONE** to return to Run Mode

Antenna Pointing:

1) Be sure the mast is plumb and secure per the directions of DIRECTV.
2) Obtain the azimuth, elevation and tilt settings from the DIRECTV receiver or the Super Buddy zip code screen.
3) Preset the antenna tilt and elevation to the settings obtained.
4) Apply power to system using the power inserter as diagrammed above. When power is applied, and before any receivers are connected, the SWM-ODU will enter a diagnostic mode that is required for the alignment procedure.
5) Press the LNB button once to select LNB1 and the 101 West satellite. The Super Buddy will tune to a SWM-ODU channel which comes from the 101 West LNB.
6) Adjust the antenna's azimuth to obtain a signal lock and peak the signal level on your left bar graph. If you cannot obtain a lock, just peak the signal level and try to obtain the lock in the next step.
7) Now adjust the elevation to obtain the peak signal level and a signal lock.
8) At this point, you should be ROUGHLY aligned to 101 West. The SWM-ODU is not compatible with the Super Buddy's satellite ID feature, but the signal lock status indicates that you are pointed either at 101 or at 119 West.
9) Press the LNB button again to select LNB2 and the 119 West satellite. The Super Buddy will tune to a SWM-ODU channel which comes from 119 West.
10) Adjust the TILT (or dish rotation) to peak the signal for 119 West. Do NOT change the azimuth or elevation in this step, just the tilt. Very little adjustment should be needed since the preset settings should be very close. If you do not obtain a signal lock on this step, it is possible that in step 6 you pointed the dish at 119 instead of 101. To correct this, change the elevation, move the dish to the east and return to step 6.

At this point you should have signal locks on both 101 West and 119 West, and the signals should be roughly peaked. Now you need to perform the dithering process, per DIRECTV instructions, while 101 West (LNB1) is selected.

The dithering is essential for proper alignment of the Ka band portion of this antenna.

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