

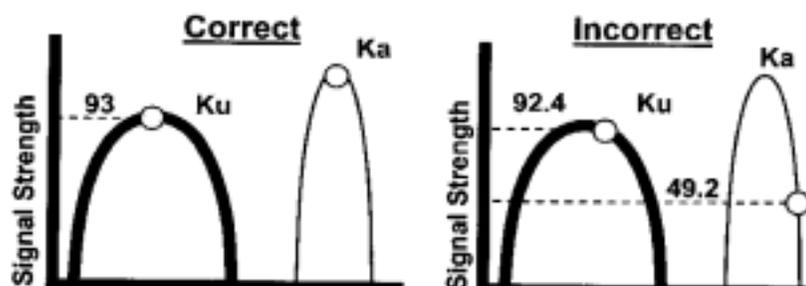
STEP 9 Aiming & Fine-tuning Antenna

SlimLine Ka/Ku Dish Antenna must be installed with greater precision and accuracy over previous Ku-only systems.

SlimLine Ka/Ku Dish Antenna is aligned to Ku satellites at 101° & 119°. Therefore a simple, external in-line Ku signal meter is all that is required. Use of a DIRECTV receiver as a signal meter for antenna alignment is not an acceptable method for peaking the antenna.

IMPORTANT NOTICE ON AZ/EL FINE-TUNING:

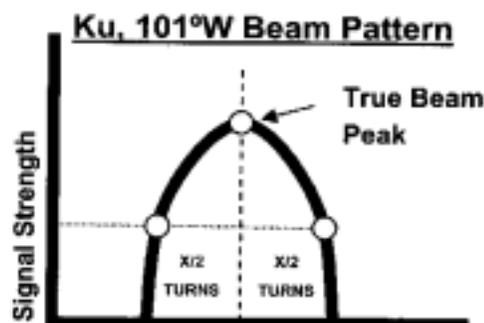
- Fine tuning involves finding the true beam peaks of the Ku and Ka signals.
- DIRECTV uses the Ku 101°/119° W beams for fine tuning, instead of a Ka signal, due to reasons of local Ka signal availability, Ka atmospheric noise, etc.
- Because the top of the Ku beam is relatively flat, missing the true beam peak at Ku by a small amount can cause a significant degradation at Ka.



FINDING TRUE BEAM PEAK USING THE DITHER APPROACH:

Dither is a method used to find the true beam peak. This applies to both styles of back assemblies:

- Find two equal signal points on the two slopes.
- If there are X number of fine-tuning turns between the two signal points, then the half-way point is the true beam peak.



Step 9A should be used for the CalAmp AZ/EL back assembly Model 151561.

Step 9B should be used for the WNC AZ/EL back assembly Model BAU.

STEP 9A Coarse align Azimuth and Elevation for CalAmp Model 151561

- Make sure the mast is perfectly plumbed, from Step 3.
- Set the in-line signal meter for 101° RHCP reception (13 volts with no 22 KHz tone). Alternate method is to select 101° satellite and an odd numbered transponder on the customer's receiver to power the LNB.
- Slowly rotate the antenna around the mast in the Azimuth direction until a peak is obtained, and then lock down the mast clamp bolts.
- Using a 1/2" Nut Driver, adjust the fine elevation screw for maximum signal level. If the fine elevation screw runs out of range or is not centered in its range of movement, loosen the elevation lock down screw and move the coarse elevation slightly to keep the bolt centered.

