The SWM LNB requires additional steps to be performed during the peaking process.

An ASL (Alignment Signal Locator) is required to be used during the peaking process to ensure that the 101° and 119° satellites are located and peaked for maximum signal strength.

The SWM integrated LNB is connected to the ASL (SWM IN port). This connection then allows the 101° and 119° satellite locations to be split into separate unique signals as seen below.

The BirDog, Supper Buddy, Acutrac Pro 22 and Acutrac III meter have been tested and verified to work with the ASL.

If an ASL is not available then a single port power passing two way splitter (rated @ 2MHz - 2150MHz) can ONLY be used with the BirDog and Super Buddy meters.

Note: The SWM Integrated LNB output port must be connected to the input port of the Splitter

The following pages describe the proper peaking procedures using both methods. These procedures do not exclude or eliminate the need to dither the KaKu dish.

Peaking must be performed using the SWM LNB
Super Buddy Meter

**ASL Peaking**

**SWM Integrated LNB Peaking:**

Note: Use instructions in the Meter Setup section for peaking of the SWM-ODU

DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.

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 the SWM LNB using the power inserter as the diagram outlines. *(When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.)*

5) Connect the Super Buddy to the 101 port of the ASL unit. Press the LNB button once to select LNB1 and the 101 West satellite. The Super Buddy will tune to a SWM Integrated LNB 101 west channel.

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 Integrated LNB is not compatible with the Super Buddy’s satellite ID feature, but the signal lock status indicates that you are pointed at 101.

**Note:** Use the LNB button on the main screen to turn on LNB 1 (101° west) or LNB 2 (119° west) during the peaking process.

You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures

**Note:** You will have to disconnect the cable from the 101° port on the ASL and connect to the 119° port on the ASL during the tilt adjustment step of the dithering process

Software updates can be found at the following link:
http://www.appliedin.com/sbdownmen

Use the Flash Update Program from Applied Instruments to obtain the proper software

**System Setup**

- SERVICE DIRECTV
- System SWM-ODU
- LNB MODEL (N/A)
- SWITCH TYPE Manual

**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)
Super Buddy Meter
Splitter Peaking

SWM Integrated LNB Peaking:
Note: Use instructions in the Meter Setup section for peaking of the SWM-ODU

DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.

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 the SWM Integrated LNB using the power inserter as the diagram outlines. (When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.)

5) Connect the Super Buddy to the 2nd port of the splitter. Press the LNB button once to select LNB1 and the 101 West satellite. The Super Buddy will tune to a SWM Integrated LNB 101 west channel.

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 Integrated LNB is not compatible with the Super Buddy’s satellite ID feature, but the signal lock status indicates that you are pointed either at 101.

Note: Use the LNB button on the main screen to turn on LNB 1 (101° west) or LNB 2 (119° west) during the peaking process.

You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures.
**BirDog Meter**  
**ASL Peaking**

**SWM Integrated LNB Peaking:**

**DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS**

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.

2) Obtain the azimuth, elevation and tilt settings from the DIRECTV receiver.

3) Preset the antenna tilt and elevation to the settings obtained.

4) Apply power to the SWM Integrated LNB using the power inserter as the diagram outlines. (*When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.*)

5) Connect the Birdog meter to the 101 port of the ASL unit. Press the arrow button to select **DIRECTV SWM 101**

6) Adjust the antenna's azimuth to obtain a signal lock and peak the signal level on your 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.

**You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures**

Note: You will have to disconnect the cable from the 101° port on the ASL and connect to the 119° port on the ASL during the tilt adjustment step of the dithering process.

Software updates can be found at the following link  
[http://www.birdog.tv/](http://www.birdog.tv/)

Download the following files  
DIRECTV SWM 101  
DIRECTV SWM 119  
DTV KaKu 3g 119 west  
DTV KaKu 3g 101 west

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BirDog Meter
Splitter Peaking

SWM Integrated LNB Peaking:

**DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS**

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.

2) Obtain the azimuth, elevation and tilt settings from the DIRECTV receiver.

3) Preset the antenna tilt and elevation to the settings obtained.

4) Apply power to the SWM Integrated LNB using the power inserter as the diagram outlines. *(When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.)*

5) Connect the Birdog meter to the 2nd port of the splitter. Press the arrow button to select **DIRECTV SWM 101**

6) Adjust the antenna's azimuth to obtain a signal lock and peak the signal level on your 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.

*You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures*

Software updates can be found at the following link
**http://www.birdog.tv/**

Download the following files
- DIRECTV SWM 101
- DIRECTV SWM 119
- DTV Ka/Ku 3g 119 west
- DTV Ka/Ku 3g 101 west

**DIRECTV SWM 101**
S ................................................................. 211
Q ................................................................. %. 95%
Found

**DIRECTV SWM 119**
S ................................................................. 191
Q ................................................................. %. 98%
Found
Accutrac Pro Meter
ASL Peaking

SWM Integrated LNB Peaking:

DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.

2) Obtain the azimuth, elevation and tilt settings from the DIRECTV receiver.

3) Preset the antenna tilt and elevation to the settings obtained.

4) Apply power to the SWM Integrated LNB using the power inserter as the diagram outlines. **(When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.)**

5) Connect the Accutrac Pro meter LNB 1 to the 101 port of the ASL unit. Press the on /menu button.

6) Adjust the antenna’s azimuth to obtain a signal lock and peak the signal level on your 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.

You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures

Note: You will have to disconnect the cable from the 101° port on the ASL and connect to the 119° port on the ASL during the tilt adjustment step of the dithering process
Digisat III Meter
ASL Peaking

SWM Integrated LNB Peaking:

**DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS**

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.

2) Obtain the azimuth, elevation and tilt settings from the DIRECTV receiver.

3) Preset the antenna tilt and elevation to the settings obtained.

4) Apply power to the SWM Integrated LNB using the power inserter as the diagram outlines. (*When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.*)

5) Connect the Digisat meter LNB port to the 101 port of the ASL unit. Press the on /menu button.

6) Adjust the antenna's azimuth to obtain a signal lock and peak the signal level on your 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. You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures

Note: You will have to disconnect the cable from the 101° port on the ASL and connect to the 119° port on the ASL during the tilt adjustment step of the dithering process.
Accutrac III Meter
ASL Peaking

SWM Integrated LNB Peaking:
DO NOT CONNECT ANY IRD to the SWM Integrated LNB BEFORE OR DURING THE PEAKING PROCESS

1) Be sure the mast is plumb and the foot plate is secure to an approved mounting surface.
2) Obtain the azimuth, elevation and tilt settings from the DIRECTV receiver.
3) Preset the antenna tilt and elevation to the settings obtained.
4) Apply power to the SWM LNB using the power inserter as the diagram outlines. **(When power is applied, and before any receivers are connected, the SWM Integrated LNB will enter a diagnostic mode that is required for the alignment procedure.)**
5) Connect the Accutrac III meter LNB port to the 101 port of the ASL unit. Press the power on/off button. Then select the 101 location by using the satellite select button. You will be viewing the KU bar for signal strength.
6) Adjust the antenna’s azimuth to obtain a signal lock and peak the signal level on your bar graph.
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.

You can now follow the KaKu dithering process as outlined in the KaKu Dithering procedures

Note: You will have to disconnect the cable from the 101° port on the ASL and connect to the 119° port on the ASL during the tilt adjustment step of the dithering process.
Part 1: Course Elevation Adjustment/Fine Tune Tilt

(1) With Azimuth, elevation and tilt roughly set according to the customers specific zip code and signal on your signal meter for the 101° west location proceed to step 2.

(2) Ensure that the following bolts are loose.
- Leave Azimuth bolts loose
- Leave these Elevation bolts loose

(3) Align and peak the 101 satellite to the highest signal level possible.

(4) Tighten the mast collar bolts. Then using the Azimuth screw turn clockwise and then counter clockwise until the maximum signal is obtained from the 101° location.

(5) Using a ½” nut driver, coarse align the elevation by turning the elevation screw clockwise and then counter clockwise until the maximum signal is obtained from the 101° location.

(6) To fine tune the tilt,
- if connected to an ASL – connect the 119 port cable to the meter then continue on with the instructions.
- if connected to a SWM splitter continue on with the instructions.
  - set the meter to 119 degrees by selecting,
    - **Super Buddy** = LNB 2
    - **Birdog** = DIRECTV SWM 119
    - **Accutrac Pro** Specific Setting (LNB 1, 13v w/o 22KHz ).
    - **Accutrac III** – Satellite Select
      - Ka @103, Ku @ 119
    - **Digisat III** Specific Setting
      - ( 13v w/o 22KHz )

(7) Slowly rotate the dish (left/right) around the tilt axis to peak the signal to 119°.

(8) Tighten the Tilt Lock Nuts.

Go to Part 2: Fine Tune Elevation

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(1) If ASL is used, reconnect the 101 port cable back to the meter. Set Meter back to 101° –
- Super Buddy LNB 1
- BirDog DIRECTV SWM 101
- Accutrac Pro Specific
(LNB 1, 13v w/o 22KHz).
- Accutrac III – Satellite Select
  Ka @99, Ku @ 101
- Digisat III
  (13v w/o 22KHz)

(2) Write down the signal level number.

(3) Set the plastic dial to zero (0) by hand.

(4) Using the nut driver, rotate the fine tune adjustment bolt two (2) full turns “counter clockwise.”

(5) Record the signal level.

(6) Rotate the bolt “clockwise” counting turns as well as the fractions until the same signal level is achieved.
Note: This may require 5 to 7 turns.

(7) Divide the number by two (2). Note: You can use the division chart below.

(8) Turn the dial, not the screw back to zero.

(9) Rotate the screw “counter clockwise” by the divided amount of turns.

(10) Tighten the Elevation bolts

Go to Part 3: Fine Tune Azimuth

Complete Part 1 before Fine Tuning Elevation
Part 3: Fine Tune Azimuth

1. Set Meter to 101° - Super Buddy LNB 1, BirDog DIRECTV SWM 101
   Accutrac Specific (LNB 1, 13v w/o 22KHz)
   Accutrac III – Satellite Select
   Ka @99, Ku @ 101
   Digisat III Specific
   (13v w/o 22KHz)

2. Record the signal level

3. Set the plastic dial to zero (0) by hand.

4. Using a ½ inch nut driver, rotate the fine tune adjustment bolt 2 full turns “counter clockwise.”

5. Record the signal level

6. Rotate the bolt “clockwise” counting turns as well as the fractions until the same signal level is achieved.
   Note: This may require 5 to 7 turns.

7. Divide the number by two (2). Note: You can use the division chart below.

8. Turn the dial, not the screw back to zero.

9. Rotate the screw “counter clockwise” by the divided amount of turns.

10. Tighten down the Azimuth bolts and verify signal via the IRD
    (Make sure that the the SWM Integrated LNB screws are installed)

If good signal from the IRD, the Peaking Process is complete