

APPLICATION

SITUATION

The **DIRECTV**® (4) polarity AU9S dish signals traveling through extended lengths of coax cable have higher loss at high frequencies.

SOLUTION

Model **SEQ409** attenuates the lower frequency signals the equivalent of 150 feet of RG-6 coax cable recreating a flat frequency spectrum.

RELATED CONSIDERATIONS

Signals originating from different satellites have power level differences. Model **SEQ409** may be used to attenuate the lower Ka band of the **DIRECTV**® spectrum.

FEATURES

- *DBS Compatibility* 5 LNB **DIRECTV**®
- *22 kHz & DC passive* use with line amplifiers
- *Coax Cable Compensation* 150 feet RG-6
- *Indoor / Outdoor case* Die cast Aluminum

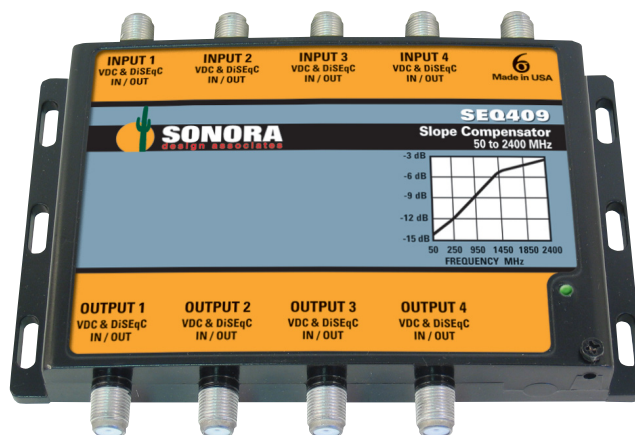
APPLICATION NOTES

Model **SEQ409** provides 12 dB of attenuation at 250 MHz and 3 dB of attenuation at 1850 MHz to equalize coax cable loss.

Model **SEQ409** equalizes the lower Ka / Ku frequency bands for maximum output from amplifiers. The lower Ka band is reduced 7 dB from 250 MHz to 1450 MHz.

Amplifiers produce a higher output with less distortion when presented an equalized input.

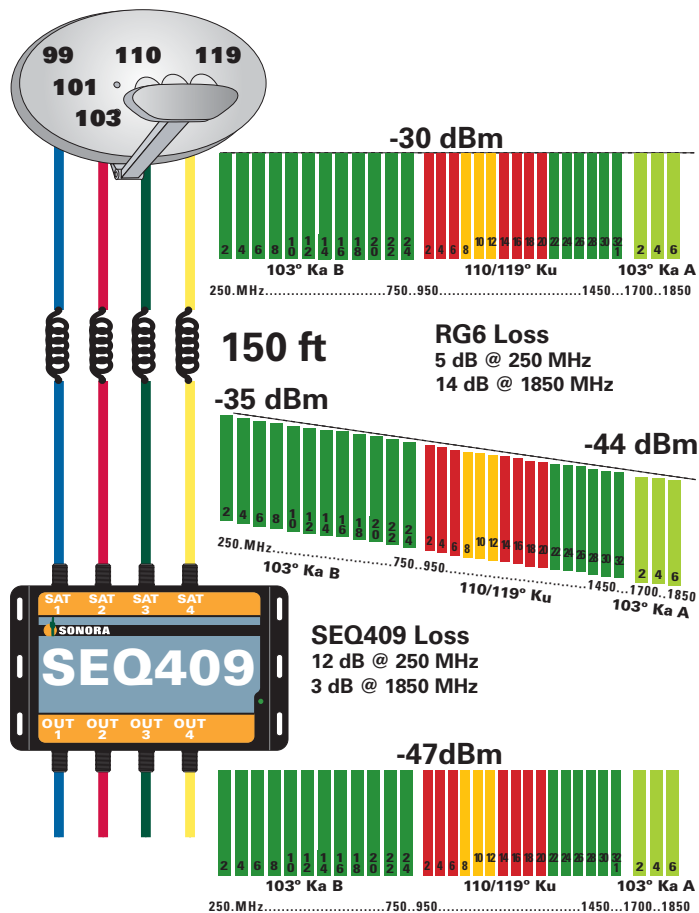
Amplifiers



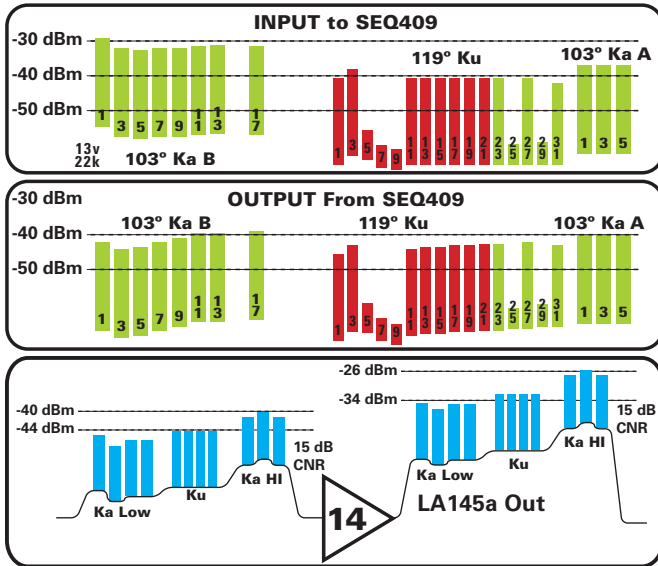
SEQ409 Slope Equalizer

DESCRIPTION

DIRECTV® (5) LNB, AU9S slope compensator.



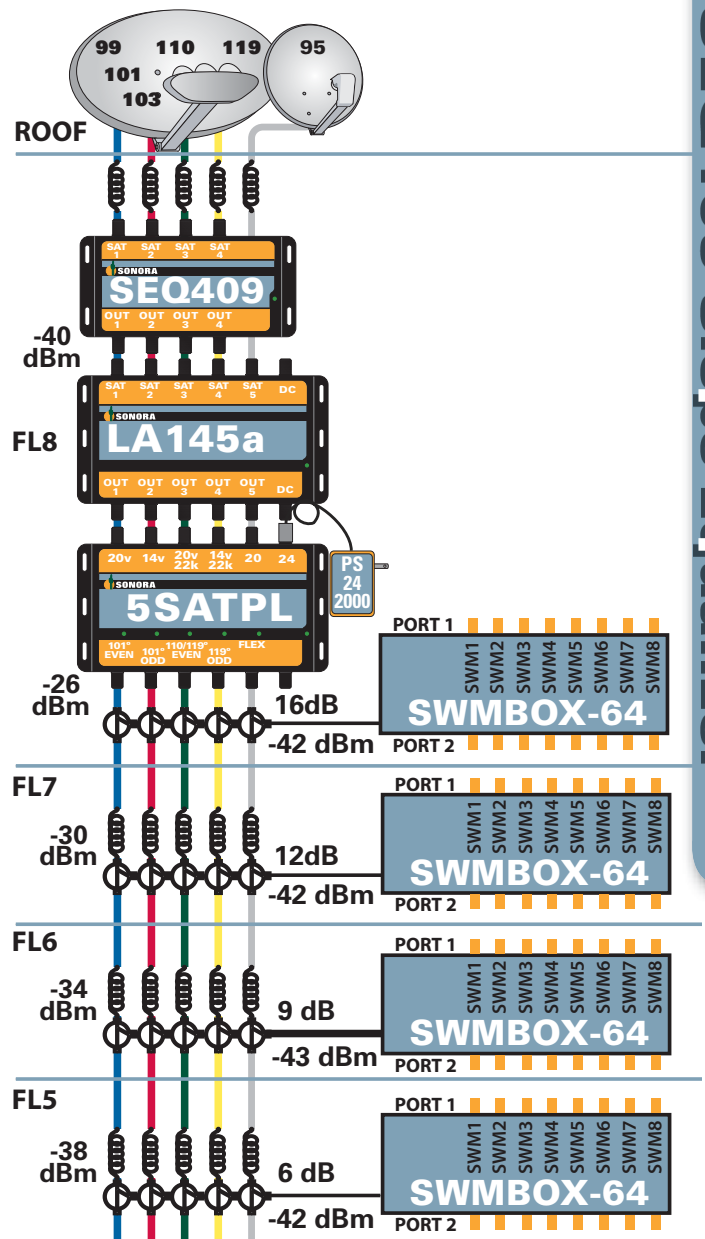
Amplifiers



Model **SEQ409** is used to reduce the lower Ka signal levels to obtain the maximum un-distorted output from model **LA145a** amplifier.

The lower Ka signals originate from the AU9S a full 10 dB higher than the Ku signal at 1450 MHz.

Slope compensation in the **SEQ409** and **LA145a** create a positively slope signal for distribution.



DIRECTV® 5 Satellite Ka / Ku Switch Plan

99° Ka B	RHCP 13V	101° Ku	99° Ka A
1 3 5 7 9 1 1 1 1 1 2 2 1 3 5 7 9 1 1 1 1 2 2 2 2 3			1 3 5
99° Ka B	LHCP 18V	101° Ku	99° Ka A
2 4 6 8 0 1 1 1 1 2 2 2 2 4 6 8 0 1 1 1 1 2 2 2 2 3			2 4 6
103° Ka B	RHCP 13V & 22kHz	119° Ku	103° Ka A
1 3 5 7 9 1 1 1 1 1 2 2 2 1 3 5 7 9 1 1 1 1 2 2 2 2 3			1 3 5
103° Ka B	LHCP 18V & 22kHz	110/119° Ku	103° Ka A
2 4 6 8 0 1 1 1 1 2 2 2 2 4 6 8 0 1 1 1 1 2 2 2 2 3			2 4 6

250. MHz.....750.950.....1450...1700...1850

99/101 Odd 99/101 Even 103/119 Odd 103/119 Even 110 Even DISH

SPECIFICATIONS

Specifications Typical QC Limit

Inputs / Outputs (4) @ 5 to 2400 MHz

Return Loss 54-2400 MHz..... 15 dB 12 dB

Power Specifications

DC Passive All ports, 2 Amp

Insertion Loss

50 MHz.....	13 dB.....	14 dB
250 MHz.....	12 dB.....	13 dB
950 MHz.....	8 dB.....	9 dB
1450 MHz.....	5 dB.....	6 dB
1850 MHz.....	3 dB.....	4 dB
2150 MHz.....	3 dB.....	4 dB
2400 MHz.....	3 dB.....	4 dB

Mechanical Specifications

Dimensions..... 9.5"L x 5.5"W x 7/8"H

Weight 1.5 lb (0.7 kg)

Master Carton (45 units) 19" x 15" x 6"

Master Carton Weight 46 lb. (21 kg)

Environmental Specifications

Operating Environment:..... Indoor/Outdoor

Ambient Temperature -30° C to +70° C