

DBS AMPLIFIERS

LA141, LA142, LA143

APPLICATION

SITUATION

The cable distance from the dish to the switch to the receiver exceeds 200 feet and the receiver signal strength is low.

SOLUTION

Model LA141, LA142 or LA143 inserted between the receiver and the dish boost the DBS signal level the equivalent of 150 feet of RG-6 cable.

RELATED CONSIDERATIONS

Signal strength is related to both amplitude and signal quality. Amplifiers cannot correct for dish misalignment or damaged cable or connectors. Test receiver strength near the dish to verify that cable loss is the problem.



DESCRIPTION

Indoor / Outdoor 950 to 2400 MHz DBS line powered amplifiers have 14 dB gain. Available in single, dual and triple configurations.

Sonora DBS line amplifiers provide superior frequency response as illustrated in the gain and return loss plots below. Markers 1,2,3,4 placed at 950 MHz, 1450 MHz, 2150 MHz and 2400 MHz illustrate the smooth sloped response needed for reliable amplification.

FEATURES

- Receiver Compatibility : DirecTV, DISH
- High Input Level: -28 dBm
- DC & 22 kHz/DiSeQc passing: low insertion loss
..... high impedance to ground
- Line Amplification: 14 dB (150 ft RG-6)
- Cable Slope Pre-Emphasis 150 feet RG-6

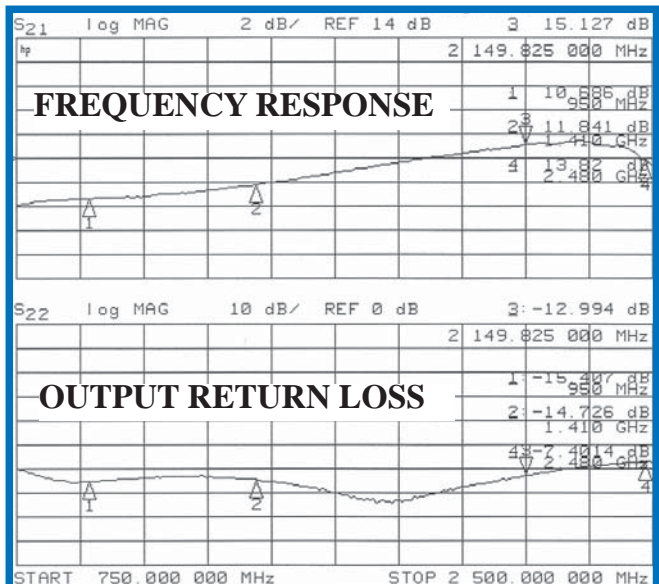
COLOR CODE

- | | | | |
|--|------------|--|-----------|
| | Sat A Even | | Sat C |
| | Sat A Odd | | Cable TV |
| | Sat B Even | | A Stacked |
| | Sat B Odd | | B Stacked |

SPECIFICATIONS

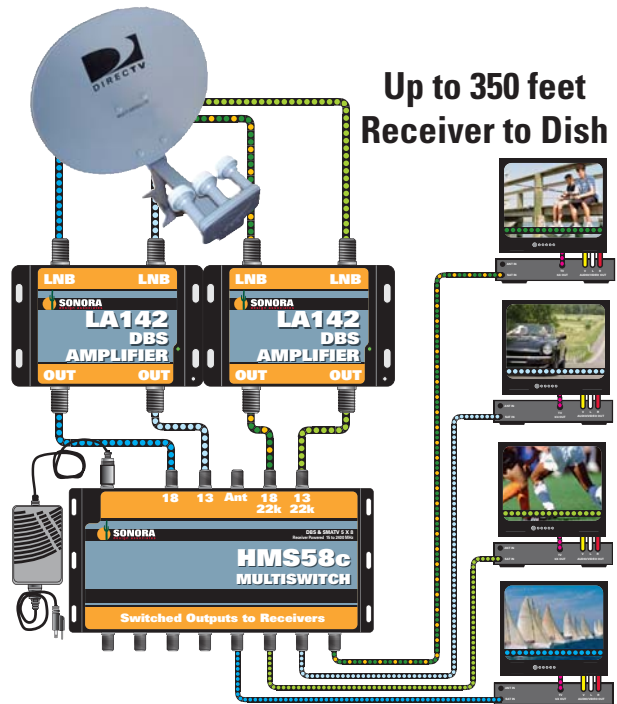
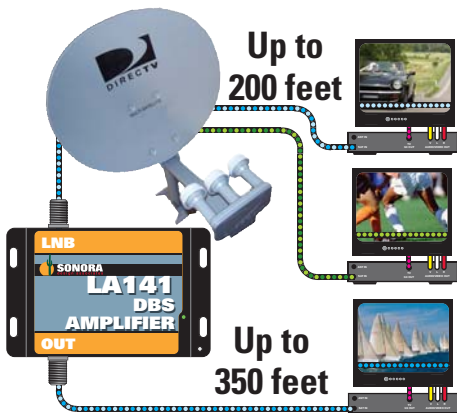
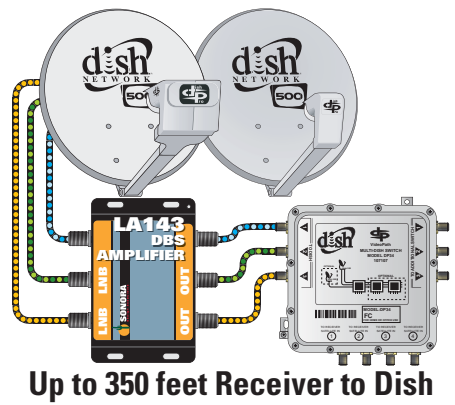
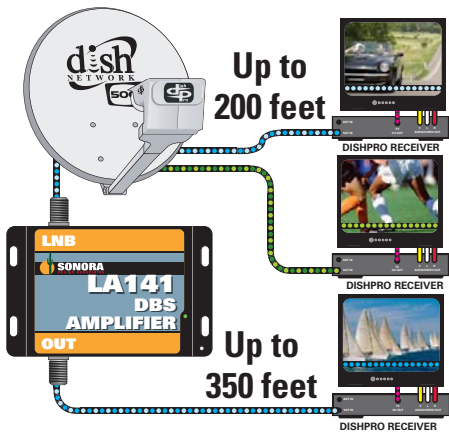
Mechanical Specifications

- Dimensions..... 4.0" x 3.0" x 0.75"
 Weight 0.5 lbs, (0.2 kg)
 Master Carton (72 units)..... 12.5" x 12.5" x 9.5"
 Carton Weight 17 lbs, (8.0 kg)



DBS AMPLIFIERS

DBS Line Powered



SPECIFICATIONS

Specifications Typical QC Limit

Gain			
950 MHz	10 dB		9 dB
1450 MHz	11 dB		10 dB
2150 MHz	14 dB		13 dB
2400 MHz	13 dB		11 dB
Maximum Input (32 transponders)			-28 dBm
IM2 with 2 tones @ -30 dBm	-40 dBc		-35 dBc min
IM3 with 2 Tones @ -23 dbm	-45 dBc		-40 dBc min
1 dB Compression, 1 Tone	-6 dBm		-8 dBm
Passband Flatness			
Any 24 MHz band	0.1 dB		0.2 dB

Specifications Typical QC Limit

Input Return Loss 950-2150 MHz	17 dB		15 dB
Output Return Loss 950-2150 MHz	15 dB		13 dB
Noise Figure	6 dB		7 dB
Power Specifications			
Voltage			12 to 22 VDC
Current			45 mA / channel
Environmental Specifications			
Operating Environment			Indoor/Outdoor
Ambient Temperature			-30° C to +70° C