

DBS / ATSC AMPLIFIERS

LA145A (5) INPUT AMPLIFIER

SITUATION

DBS Ka/Ku or ATSC off-air signals are required at multiple locations connected via coax cable.

SOLUTION

Model LA145a may be placed after a DBS dish or ATSC antenna to extend the signals the equivalent of 150 feet of RG-6 cable.

RELATED CONSIDERATIONS

Amplifiers may be coax line powered from either their RF input or RF output connectors. A dedicated power port is also provided. Model LA145A-T includes an external power supply for direct powering.

FEATURES

- *Wide bandwidth*..... 54 to 2150 MHz forward
..... 2 to 40 MHz return
- *High Input Ability*..... -20 dBm
- *DC & 22 kHz/DiSeQc passing*..... low insertion
- *Indoor / Outdoor case*..... die cast aluminum
- *Multiple power options*..... line or external DC

APPLICATION NOTES

Model LA145A amplifiers may be used as part of a DIRECTV® multi-floor apartment distribution system.

Model 5SATPL power supply and polarity locker provides strong DC and control signals to power the SL5 LNB and amplifier.

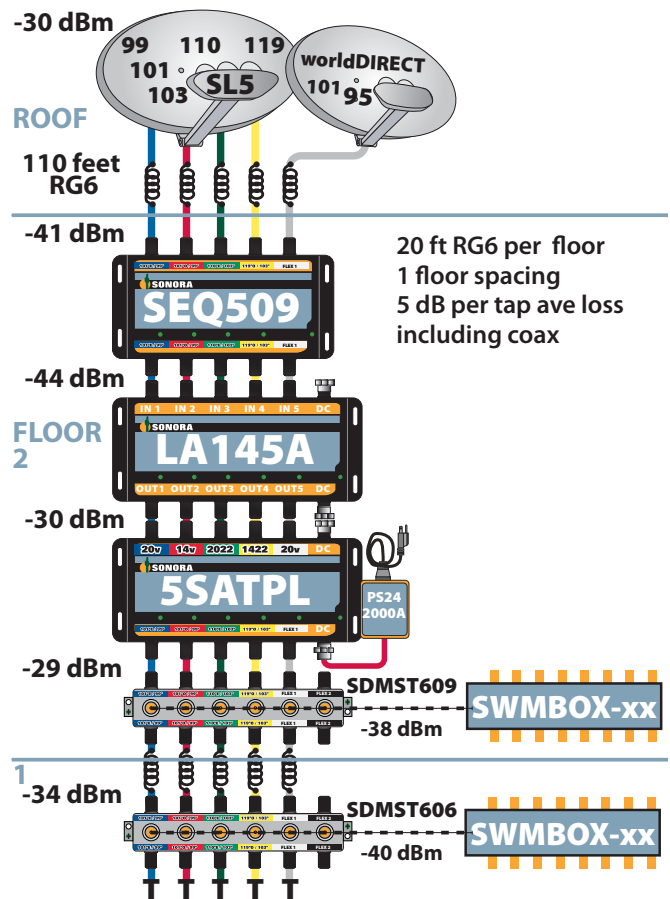
Model SEQ509 provides signal equalization for maximum signal amplification.

Model SWMBOX hubs at each IDF hold multiple SWM switches.



DESCRIPTION

Indoor / Outdoor 54 to 2150 MHz DBS / ATSC line powered amplifier with 14 dB forward gain and passive sub-band return.



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LA145A SWM Expansion

Model LA145A-T integrated with model HRvS8p splitters to create the model **S5x8AMP** SWM expansion hub. Model S5x8AMP hubs provide **DIRECTV®** signals to (8) SWM8 or SWM16 switches with zero loss.

Model SWM-RK8 holds up to (8) SWM8 or SWM16 switches. Model PS242000A power supplies are used to power the switches. Complete IDF solutions are available.



SPECIFICATIONS

Specifications..... TypicalQC Limit
Gain

2 to 40 MHz	-1 dB	-4 dB
54 MHz	9 dB	8 dB
250 MHz	10 dB	9 dB
950 MHz	13 dB	11 dB
2150 MHz	16 dB	14 dB

Maximum Output (32 equal transponders)-10 dBm

Maximum Output Power

IM2 with 2 tones @ 0 dBm	-36 dBc	-34 dBc min
IM3 with 2 Tones @ 0 dbm	-52 dBc	-50 dBc min

Pass band Flatness

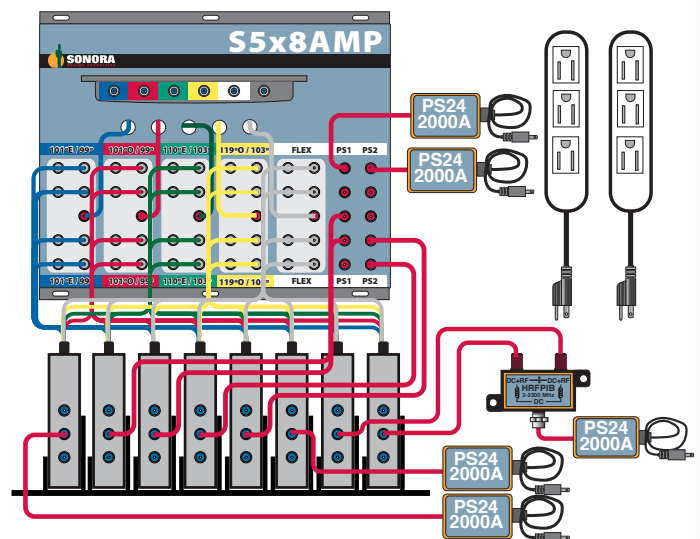
Any 24 MHz band	0.1 dB	0.2 dB
Input Return Loss	14 dB	11 dB
Output Return Loss	13 dB	11 dB
Noise Figure	6 dB	7 dB

Power Specifications

Voltage	12 to 20 VDC
Current	86 mA / channel

Mechanical Specifications

Dimensions	6" x 4.75" x 0.875"
Weight LA145A	1.5 lb (0.7 kg)
Weight LA145A-T	2 lb (0.9 kg)
Master Carton Weight	18 lb. (8.2 kg)
Master Carton LA145A-T (12 units)	11" x 9" x 9"
Master Carton Weight	26 lb. (11.8 kg)



Environmental Specifications

Operating Environment	Indoor/Outdoor
Ambient Temperature	-30° C to +60° C

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