

Crestron **SRD-AMP-1**
High-Gain Line Amplifier

Installation Guide



This document was prepared and written by the Technical Documentation department at:



Crestron Electronics, Inc.
15 Volvo Drive
Rockleigh, NJ 07647
1-888-CRESTRON

Contents

High Gain Line Amplifier: SRD-AMP-1 **1**

- Introduction..... 1
 - Block Diagrams 2
 - Specifications..... 3
 - Included Items 3
 - Industry Compliance..... 4
 - Installation 4
- Problem Solving..... 5
 - Troubleshooting 5
 - Further Inquiries 6
 - Future Updates..... 6
- Return and Warranty Policies 7
 - Merchandise Returns / Repair Service..... 7
 - CRESTRON Limited Warranty..... 7

High Gain Line Amplifier: **SRD-AMP-1**

Introduction

The SRD-AMP-1 is an inline amplifier intended for use in overcoming cable and splitter losses in a Crestron[®] XM or SIRIUS[®] satellite radio distribution network. It is rated to provide 16 dB (typical) of gain in the satellite radio band (2320-2345 MHz), and is powered from the DC bias voltage (4.5 VDC to 6.5 VDC nominal) provided by the antenna connection on the satellite radio tuner downstream. It is also designed to pass DC voltage to provide power to the antenna and other line amplifiers installed upstream.

Placed at the beginning of a cable run, a single SRD-AMP-1 line amplifier will overcome the loss of approximately 150 feet of standard RG-6 cable. Up to two amplifiers may be cascaded at one spot for a total of 32 dB of gain to overcome the loss of 300 feet of cable. Cable runs in excess of 350 feet are possible using quad shielded RG-6, with additional SRD-AMP-1 line amplifiers installed inline as necessary, spaced equally along the cable run to prevent overload and distribute the gain properly.

An F-male coupler is included for use in connecting two line amplifiers in cascade.

The amplifier will pass DC power in both directions, but must be installed so the output (marked with an arrow labeled **RADIO**) is always oriented in the direction of the radio.

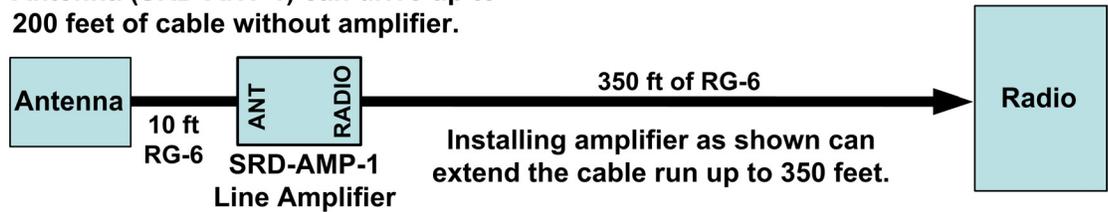
NOTE: The SRD-AMP-1 is designed for indoor or outdoor mounting.

Block Diagrams

The following diagrams illustrate three typical installation configurations using the SRD-AMP-1 line amplifier.

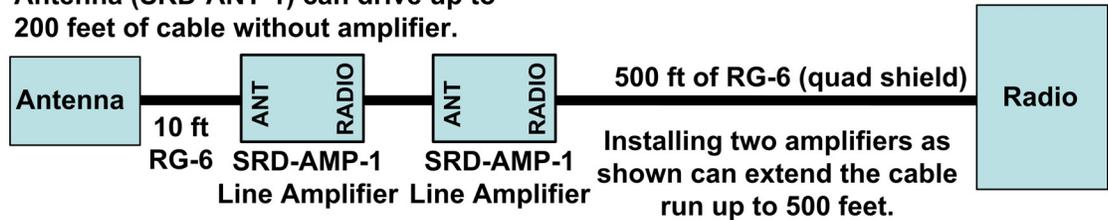
Single SRD-AMP-1 Installation

Antenna (SRD-ANT-1) can drive up to 200 feet of cable without amplifier.



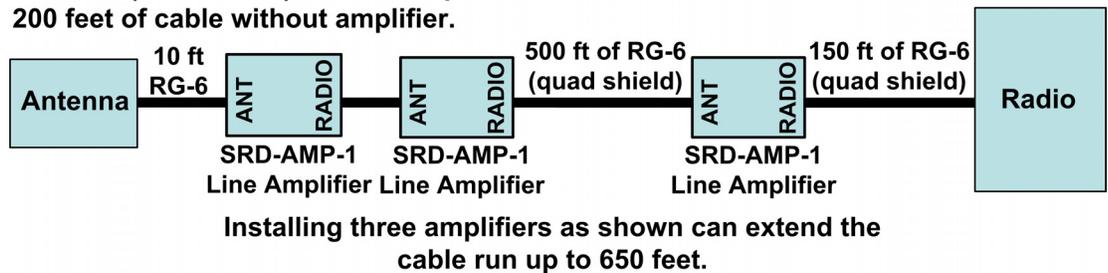
Double SRD-AMP-1 Installation

Antenna (SRD-ANT-1) can drive up to 200 feet of cable without amplifier.



Triple SRD-AMP-1 Installation

Antenna (SRD-ANT-1) can drive up to 200 feet of cable without amplifier.



Specifications

Following are specifications for the SRD-AMP-1.

SRD-AMP-1 Specifications

SPECIFICATION	DETAILS
Gain	16 dB (Typical @ 4.5 VDC)
Current consumption	10 milliamps @ 4.5 VDC
Power passing	Both directions
Environmental temperature	-40° to 150°F (-40° to 66°C)
Humidity	0% to 98% RH (non-condensing)
Overall dimensions:	
Height	0.64 in (1.63 cm)
Width	3.25 in (8.26 cm)
Depth	1.07 in (2.72 cm)

Included Items

The items included in the SRD-AMP-1 are listed and shown below.

SRD-AMP-1 Included Items

DESCRIPTION	PART NUMBER	QTY
Amplifier with Mounting Screws	2021525	1
F-male to F-male Coupler	2021526	1



High Gain Line Amplifier



F-Male to F-Male Coupler



Mounting Screws (4)

Industry Compliance

As of the date of manufacture, the SRD-AMP-1 has been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.



Installation

Refer to the illustrations on page 2, and, using the screws provided, orient and mount the amplifier(s) appropriately according to the distance between the antenna and the radio. Prepare and connect appropriate RG-6 and/or RG-6 (quad shield) cables to the amplifier(s).

NOTE: For best results in all configurations, use quad-shielded RG-6 cable whenever possible.

Problem Solving

Troubleshooting

The table after this paragraph provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

SRD-AMP-1 Installation Troubleshooting

TROUBLE	POSSIBLE CAUSES	CORRECTIVE ACTION
No signal reception. Radio display shows: “Antenna Disconnected”, or “Acquiring Signal”	Short circuits or discontinuities	With radio on and all antenna cables connected at the radio, check for 4 - 7 VDC at antenna end of cable.
		With radio on and all antenna cables connected at the radio, check for AC voltage at antenna end of cable; should be < 1 VAC. If AC voltage is found, check for ground loops.
“Check Antenna” or “No Signal”	Antenna is connected properly but signal is too weak for reception.	Ensure proper cable type and length(s) per the illustrations on page 2.
		Ensure amplifiers are oriented properly with the output (marked with an arrow labeled Radio) oriented towards the radio.
		Refer to the instructions supplied with the antenna to ensure the antenna is pointed accurately.

(Continued on following page)

SRD-AMP-1 Installation Troubleshooting (Continued)

TROUBLE	POSSIBLE CAUSES	CORRECTIVE ACTION
Limited reception or channels available for XM and/or SIRIUS tuners.	Problem with tuner card.	Ensure that the tuner card is registered/activated.

Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling Crestron at 1-888-CRESTRON [1-888-273-7876].

You can also log onto the online help section of the Crestron website (www.crestron.com/onlinehelp) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the SRD-AMP-1, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website periodically for manual update availability and its relevance. Updates are identified as an “Addendum” in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact an authorized CRESTRON dealer. Only authorized CRESTRON dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

Trademark Information

All brand names, product names and trademarks are the sole property of their respective owners. Windows is a registered trademark of Microsoft Corporation. Windows95/98/Me/XP/Vista and WindowsNT/2000 are trademarks of Microsoft Corporation.



Crestron Electronics, Inc.
15 Volvo Drive Rockleigh, NJ 07647
Tel: 888.CRESTRON
Fax: 201.767.7576
www.crestron.com

Installation Guide – DOC. 6720A
(2021527)

08.08

Specifications subject to
change without notice.