



Warning: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICE-ABLE PARTS INSIDE. REFER SERVIC-ING TO QUALIFIED PERSONNEL. This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.



This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.





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The RadioShack 10 dB Coaxial In-Line Amplifier brings to your home video system the same technology that is used in commercial cable systems: a single, standard coaxial cable carries both the TV/radio signal and the power necessary for the in-line amplifier.

The In-Line Amplifier reduces or eliminates the signal losses caused by signal transformers, signal splitters, other in-line devices or extremely long cable runs between the antenna and receiver system. And, the In-Line Amplifier will amplify virtually any TV/radio signal, from 5 MHz to 1 GHz (1000 MHz).

The compact, in-line design of the amplifier simplifies installation at the "head end" of an antenna system (the end nearest the antenna, where amplification will do the most good).

The In-Line Amplifier can be used with antenna systems for:

- Standard VHF/UHF/Cable TV
- Amateur TV Systems
- Scanners
- FM Stereo Radio



Caution: Because the In-Line Amplifier uses the coaxial cable to carry the TV/radio signal from the DC power supply, proper connections are crucial. Failure to exactly follow the connection instructions in this manual can result in damage to your amplifier or your TV/radio receiver.

ILLUSTRATION

Note: The amplifier and DC block are sealed together by a plastic tube. In most installations, they must remain together. Read all connection instructions carefully.



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ONE ANTENNA/ONE RECEIVER SYSTEMS

If you are using a single antenna with a single TV/radio receiver, "Installation A" shows the proper connections. To avoid damage to your TV/radio receiver and/or the amplifier power injector, carefully check all the points listed below.

- Do not separate the amplifier from the DC block. The DC block must be between the amplifier and the 300-to-75 ohm transformer (Cat. No. 15-1140) at the antenna.
- Follow the connection labeling on the amplifier/DC block unit: **TO ANT**enna, **TO POWER** INJECTOR. The amplifier will not receive power if they are reversed.
- Follow the connection labeling on the power injector: **TO TV**, **TO AMPLIFIER**. Your TV/radio receiver will be damaged if they are reversed.
- If a VHF/UHF splitter is used for a TV, it must be connected between the TV and the power injector.

The In-Line Amplifier is designed for use with F-type connectors. For some antenna systems (for scanners, for example), you will have to use connection adapters or make a special cable.

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ONE ANTENNA/TWO RECEIVER SYSTEMS

If you are using a single antenna with two TV/radio receivers, "Installation B" shows the proper connections. To avoid damage to your TV/radio receivers and/or the amplifier power injector, carefully check all the points listed below.

- For the first antenna and TV/radio receiver (#1), follow all instructions on Page 5 for "One Antenna/One Receiver Systems."
- Make sure the power injector is between the amplifier and the splitter (before the signal is split).









Additional Amplification

If additional amplification is needed, you can connect another amplifier in line with the first amplifier. Remove the DC block from the optional second amplifier. One power injector will supply enough power for both amplifiers.

Note: The In-Line Coaxial Amplifier can only be purchased as a kit, with the Power Injector and DC Block. If you want to use a second amplifier in your system, retain the extra parts for future additions to your system or as replacements if other parts are damaged or lost.



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AMATEUR TV SYSTEMS

You can use the In-Line Amplifier with 2.4 GHz, amateur TV (ATV) systems, as shown in "In-stallation C."

If the power supply provided with your ATV antenna provides a center-positive power supply, it can be used to power the In-Line Amplifier as well; you do not need the amplifier's power injector.

Caution: The In-Line Amplifier cannot be used if the ATV power supply is center negative.

In this case only, you should remove the DC block from the amplifier and connect the amplifier directly to the F-type connector on the ATV antenna down converter. Remove the plastic tube that holds the amplifier and DC block together and unscrew the two pieces.

If the ATV antenna is used with more than one TV receiver, you must follow all connection procedures for "One Antenna/Two Receiver Systems" (Page 7–9), except that the DC block between the antenna and the amplifier will be removed, as described above.







PROBLEM SOLVING

If the TV/radio receiver does not operate correctly after installation of the In-Line Amplifier:

- Immediately unplug the power injector.
- Check all connections and compare them with the appropriate installation drawing(s) in this manual.

If no problems are found in the connections: Plug in the power injector and try the TV/radio receiver again. If possible, try a different TV/radio receiver with the system or try the TV/radio receiver with a different antenna system.

If the above procedures do not resolve the problem: Take the unit to your local RadioShack store for assistance.



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SPECIFICATIONS

Amplifier:

Frequency:	5–900 MHz		
Gain:	5–50 MHz 50–300 MHz 300–900 MHz	8 dB MIN 10 dB MIN 9 dB MIN	
Input Capability		83dB µV MIN (7 CHANNEL INPUTS)	
Max Input for –60dB Third Order Distortion		90dΒ μV MIN (Teste	d AT CH.3)
Noise Figure:	5–400 MHz 400–900 MHz	6 dB MAX 6.5 dB MAX	

Power Injector:

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Input	120V AC 60Hz
Output Voltage	DC 9±1 V
Max Output	100 mA
Insertion Loss	









