

D-150A II

POWER AMPLIFIER

OWNER'S MANUAL



Applies only to 120 VAC
North American units.

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The information furnished in this manual does not include all of the details of design, production, or variations of the equipment. Nor does it cover every possible situation which may arise during installation, operation or maintenance. If your unit bears the name "Amcron," please substitute it for the name "Crown" in this manual. If you need special assistance beyond the scope of this manual, please contact our Technical Support Group.

Crown Audio Division Technical Support Group

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WARNING

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE!

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

TO PREVENT ELECTRIC SHOCK DO NOT OPEN. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

AVIS

**RISQUE DE CHOC ÉLECTRIQUE
N'OUVREZ PAS**

À PRÉVENIR LE CHOC ÉLECTRIQUE NE PAS OUVRIR. RIEN DES PARTIES UTILES À L'INTÉRIEUR.

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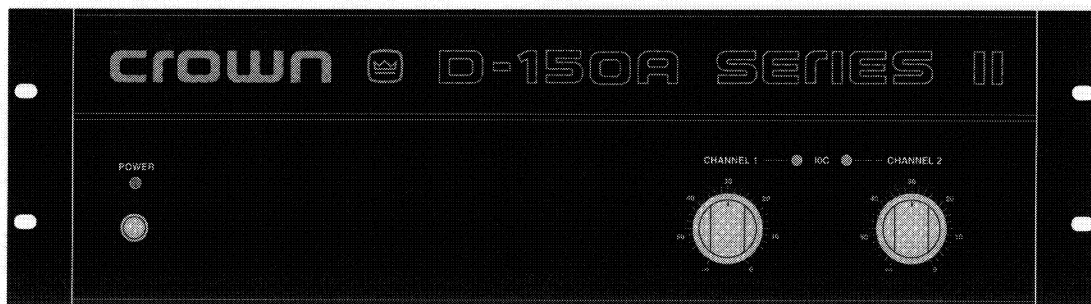
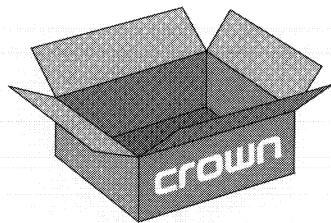


Fig. 1.1 D-150A II

1 Welcome

Thank you for purchasing the world-renowned D-150A II stereo power amplifier, a standard of audio excellence. Its high reliability, medium power output and cost efficiency make it an ideal amp for auditoriums, churches and traveling sound companies. Its ultra-low distortion and advanced AB+B circuitry qualify it for recording studios — wherever critical listening is required. The D-150A II is completely compatible with its predecessor, the D-150A, allowing it to integrate easily into existing sound systems. We construct each unit carefully from the finest materials and back each one with a full three-year warranty.

In order to enjoy your D-150A II to the fullest, we strongly recommend you read all the instructions, warnings and cautions contained in this manual. And for your protection, please send in your warranty registration card today and save your bill of sale as it is your official proof of purchase. Happy listening!



1.1 Unpacking

Please unpack and inspect your new D-150A II amplifier for any damage that may have occurred during transit. If any damage is found, notify the transportation company immediately. Only you, the consignee, may initiate a claim with the carrier for damage resulting during shipment. Crown will be happy to cooperate fully as needed. Save

the shipping carton as evidence of damage for the carrier's inspection.

Even if the unit arrived in perfect condition, as most do, save all packing materials so you will have them if you ever need to transport the unit. **NEVER SHIP THE UNIT WITHOUT THE FACTORY PACK.**

You should find the following items when you unpack:

- D-150A II amplifier
- 2 Dual Banana Plugs
- 4 Nylon Washers
- 4 10-32 Trusshead 1/2" Black Screws
- This Owner's Manual

1.2 Features

Here are some of the exciting features you will find in your new D-150A II power amplifier:

- Advanced AB+B class circuitry yielding maximum efficiency with minimum "crossover notch" distortion.
- Ultra-low harmonic and I.M. distortion resulting in best *dynamic transfer function* in industry.
- Very low noise level and wide dynamic range exceed digital audio standards.
- High damping factor giving greater motion control of loudspeakers.
- Patented IOC® (Input/Output Comparitor) circuitry immediately alerts of any distortion exceeding 0.05%, providing proof of performance.
- Outputs can be configured in "bridge-mono" mode for higher-power single-channel operation.
- Two regulated power supplies give complete isolation and stability.
- Passive cooling system uses integrated heatsink/chassis design for maintenance-free long-life operation.
- Rack mountable in a standard 19 inch equipment rack.

2 Facilities

A. Power

Depress this push button to turn on or off the D-150A II. Turn-on is instantaneous, with minimum thumps and no program delay. Because there is no delay, always turn on the D-150A II last so that turn-on transients from other components feeding the amplifier (like a mixer) will not be amplified.

B. Power Indicator

A LED that glows while the D-150A II is on.

C. Output Jacks

Banana jacks are provided at the output of each channel. Install banana plugs on the speaker cables for connection to the output jacks (bare wire or spade lugs may also be used). In MONO mode, only the two outside jacks (red) are used.

D. Input Jacks

An unbalanced 1/4 inch phone jack is provided for input to each channel. Do not use the Channel 2 input in MONO mode.

E. Stereo/Mono Switch

Facing the back of the amplifier, slide this switch to the left for STEREO mode and to the right for MONO mode. In MONO mode the input and level control for Channel 2 should not be used and only balanced (ungrounded) loads should be connected to the output jacks. (See wiring instructions in Section 3.3.)

F. Fuse

The AC line is safely fused. If the unit is configured for 100 or 120 VAC, an MDX-type 6.25 amp fuse is used. If the unit is set to use 200, 220 or 240 VAC, an MDA-type 3 amp fuse is used. Using of any other fuse size or type will invalidate the warranty.

G. Power Cord

A standard three-wire grounded AC cord and plug are provided.

H. Level

The volume of each channel is independently controlled by these level controls. The control for Channel 2 should be turned completely down and not used when operating in MONO mode.

I. IOC

An Input/Output Comparator LED is provided for each channel. The IOC indicators will flash or glow when distortion of any kind exceeds 0.05%. It is normal for them to glow for about a minute when the amplifier is turned off.

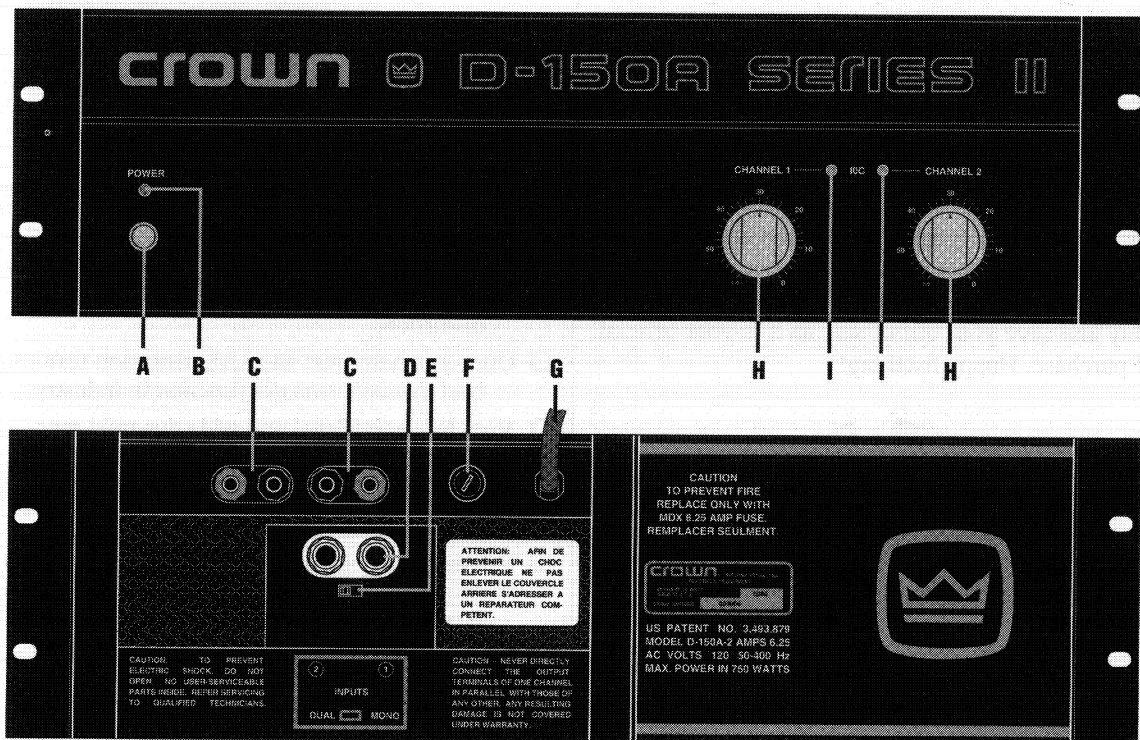


Fig. 2.1 Front and Rear Facilities

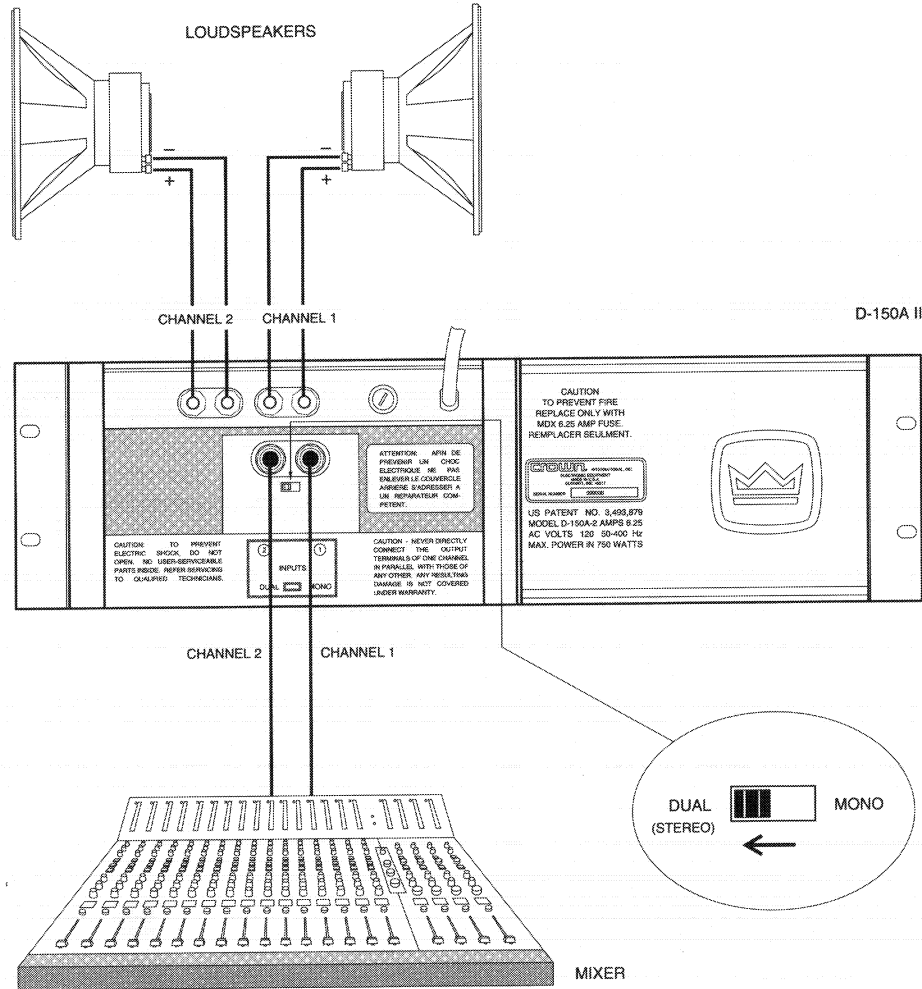


Fig. 3.1 Stereo System Connection

3 Installation

Before beginning the installation of your amplifier, please carefully note the following: *It is always wise to remove power from the unit and turn the input level controls off while making connections*—especially if the load is a loudspeaker system. This will eliminate any chance of loud blasts or damage to the loudspeakers.

3.1 Mounting

The D-150A II can be mounted into a standard 19 inch equipment rack or a custom cabinet of your own design. It occupies 5.25 inches of vertical rack space. The equipment rack or cabinet should have perforated panels in the top and bottom for ventilation. This is especially important if more than one amplifier will be mounted in the same cabinet. Please consider the cooling requirements.

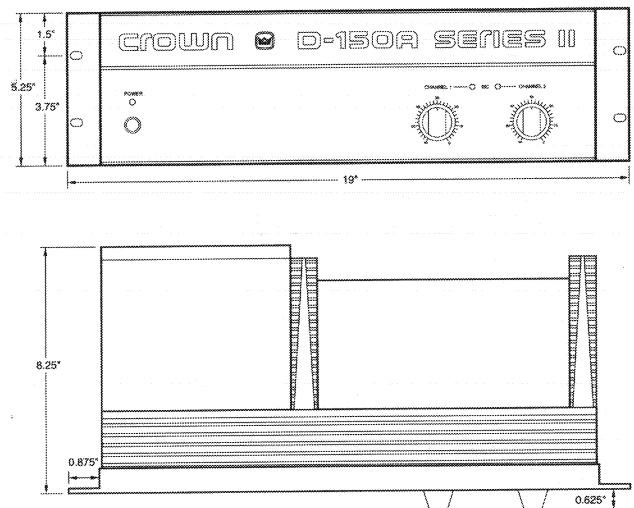


Fig. 3.2 Mounting Dimensions

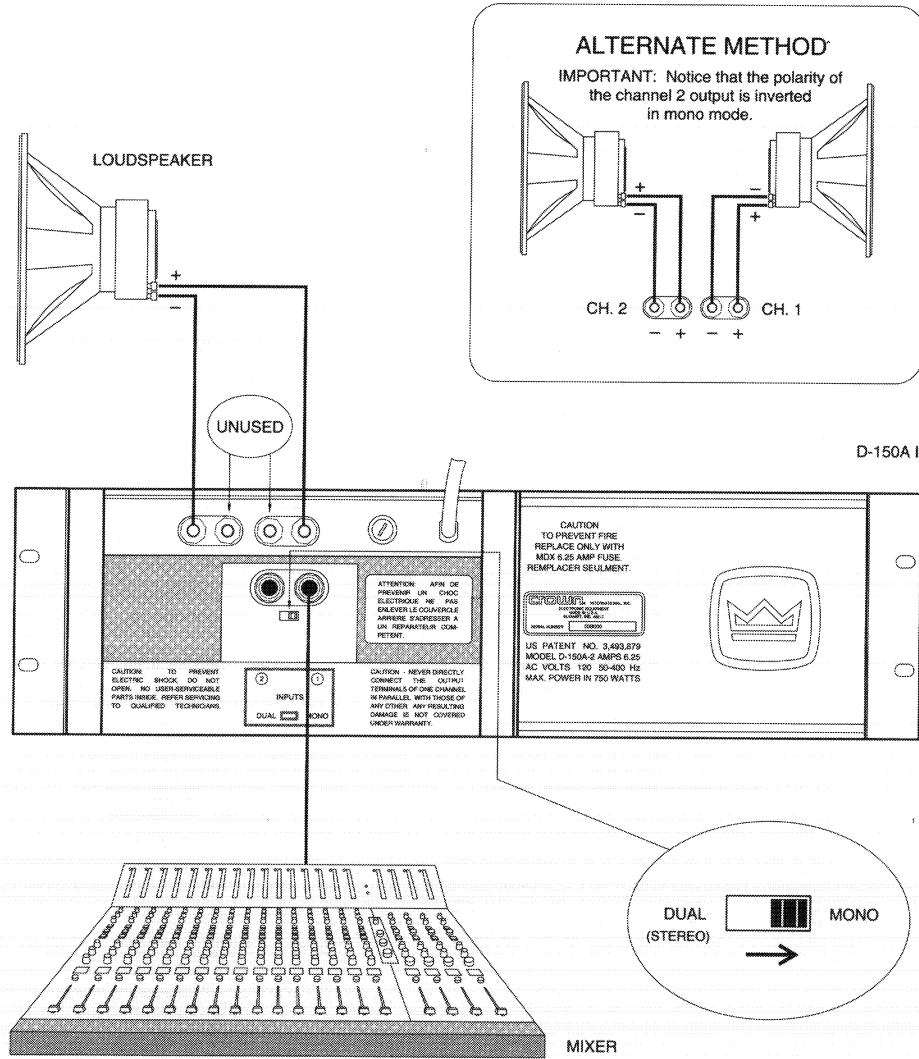


Fig. 3.3 Mono System Connection

3.2 Cooling

Sufficient ventilation must be provided in order to prevent overheating. Applications requiring long, sustained use at high power levels may require you to add a cooling fan. When rack mounting, we recommend that you allow a 1.75 inch space above and below the unit.

3.3 Wiring

Figures 3.1 and 3.3 depict the two most common ways to install a D-150A II in a sound system. All input and output jacks are located on the rear panel. Please use care in making connections, selecting signal sources and controlling the output level. The load you save may be your own! Crown is not liable for any damage done to loads due to careless amplifier usage and deliberate overpowering.

3.3.1 Mode of Operation

The D-150A II may be operated in either STEREO (Dual

or two-channel) or MONO mode by switching the Stereo/Mono switch on the rear panel of the amplifier. There are VERY IMPORTANT wiring differences between these two modes which are discussed next.

STEREO

The installation is very intuitive in STEREO mode. The input of Channel 1 feeds the output of the same channel as does the input of Channel 2. To put the amplifier in stereo mode, slide the Stereo/Mono switch at the back of the amplifier toward the left (as you face the rear of the amp). Be very careful not to short the two outputs together while in STEREO mode and observe correct loudspeaker polarity.

CAUTION: Never parallel the two outputs by directly tying them together or parallel them with the output of any other amplifier. Such connection does not result in increased power output and can cause excessive heating.