

*Owner's Guide*

*for the*

**CRATE MX120R**

*Guitar Amplifier*




# MX120R Guitar Amplifier

## Congratulations!

You are now the proud owner of the Crate MX120R amplifier. This rugged amplifier delivers serious clean and distorted sounds through its premium 12" Crate Custom speakers. Channel selection, Crate's exclusive Shape circuit, and reverb on/off are controllable by using the supplied footswitch. An insert jack allows virtually noise-free connection of your favorite effects.









Like all Crate products, your MX120R is designed by musicians, and built using only the best components. Extensive testing confirms that this amplifier is the absolute best it can be.

In order to get the most out of your new amplifier, we strongly urge you to read the information contained in this manual before you begin playing.

And **thank you** for choosing 

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 <b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN  <p>WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	 <b>PRECAUCION</b> RIESGO DE CORRIENTAZO NO ABRA  <p>PRECAUCION: PARA REDUCIR EL RIESGO DE INCENDIOS O DESCARGAS ELECTRICAS, NO PERMITA QUE ESTE APARATO QUEDE EXPUESTO A LA LLUVIA O LA HUMEDAD. PARA DISMINUIR EL RIESGO DE CORRIENTAZO, NO ABRA LA CUBIERTA. NO HAY PIEZAS ADENTRO QUE EL USUARIO PUEDE REPARAR. DEJE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.</p>	 <b>ATTENTION</b> RISQUE D'ELECTROCUTION NE PAS OUVRIR  <p>ATTENTION: PROTEGEZ CET APPAREIL DE LA PLUIE ET DE L'HUMIDITE AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION. POUR REDUIRE D'ELECTROCUTION NE PAS ENLEVER LE COUVERCLE. AUCUNE PIECE INTERNE N'EST REPARABLE PAR L'UTILISATEUR. POUR TOUTE REPARATION, S'ADRESSEZ A UN TECHNICIEN QUALIFIE.</p>
<b>IMPORTANT SAFETY INSTRUCTIONS</b>		
<ul style="list-style-type: none"> <li>• READ, FOLLOW, HEED, AND KEEP ALL INSTRUCTIONS AND WARNINGS.</li> <li>• DO NOT OPERATE NEAR ANY HEAT SOURCE AND DO NOT BLOCK ANY VENTILATION OPENINGS ON THIS APPARATUS.</li> <li>• DO NOT USE THIS APPARATUS NEAR SPLASHING, FALLING, SPRAYING, OR STANDING LIQUIDS.</li> <li>• CLEAN ONLY WITH LINT-FREE DAMP CLOTH AND DO NOT USE CLEANING AGENTS.</li> <li>• ONLY CONNECT POWER CORD TO A POLARIZED, SAFETY GROUNDED OUTLET WIRED TO CURRENT ELECTRICAL CODES AND COMPATIBLE WITH VOLTAGE, POWER, AND FREQUENCY REQUIREMENTS STATED ON THE REAR PANEL OF THE APPARATUS.</li> <li>• PROTECT THE POWER CORD FROM DAMAGE DUE TO BEING WALKED ON, PINCHED, OR STRAINED.</li> <li>• UNPLUG THE APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.</li> <li>• ONLY USE ATTACHMENTS, ACCESSORIES, STANDS, OR BRACKETS SPECIFIED BY THE MANUFACTURER FOR SAFE OPERATION AND TO AVOID INJURY.</li> <li>• THIS APPARATUS DOES NOT OPERATE NORMALLY AND REQUIRES SERVICE WITH ANY PHYSICAL DAMAGE FROM IMPACT OR ANY EXPOSURE TO MOISTURE.</li> <li>• SERVICE MUST BE PERFORMED BY QUALIFIED PERSONNEL.</li> <li>• OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.</li> </ul>		
EXPLANATION OF GRAPHICAL SYMBOLS: EXPLICACION DE SIMBOLOS GRAFICOS: EXPLICATION DES SYMBOLES GRAPHIQUES:	 = "DANGEROUS VOLTAGE" "VOLTAJE PELIGROSO" "DANGER HAUTE TENSION"	 = "IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL" "ES NECESARIO QUE EL USUARIO SE REFIERA AL MANUAL DE INSTRUCCIONES." "REFERREZ-VOUS AU MANUAL D'UTILISATION"

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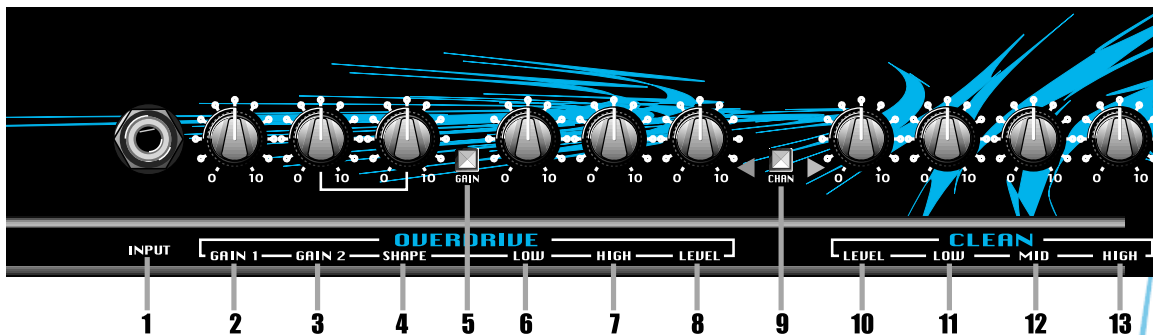
## **Important Safeguards and Precautions:**

All Crate products are designed for continuous safe operation. Abiding by the following rules can help prevent damage to your amplifier, yourself and others.

- The amplifier is equipped with a three-pronged AC power cord. To reduce the risk of electrical shock, **NEVER** remove or otherwise attempt to defeat the ground pin of the power cord.
- Connect the amplifier **ONLY** to a properly grounded AC outlet of the proper voltage for your amp.
- Avoid sudden temperature extremes, rain and moisture. Also, avoid sudden and intense impact. (If the unit has been subjected to any of the preceding abuses, have it looked at by an authorized service center.)
- Do not expose the unit to splashing or dripping liquid. Do not place liquid filled objects on the unit.
- **NEVER** set the amplifier on a support that will not bear its weight.
- Always keep the total speaker impedance at or above the rated load.
- Unplug the amplifier before cleaning it. **NEVER** spray liquid cleaners onto the amplifier. Wipe it with a slightly dampened, lint-free cloth to remove dirt and film.
- **DO NOT** use the amplifier if it has sustained damage to the chassis, controls, or power cord. Refer the unit to an authorized service center for inspection.
- Prolonged exposure to high volume levels may cause permanent hearing loss or damage. Such damage is progressive and irreversible!

# MX120R Guitar Amplifier

## The Front Panel:



**1: INPUT:** Use this 1/4" jack to connect your guitar to the amplifier by means of a shielded instrument cable.

**OVERDRIVE CHANNEL:** A high gain channel giving you sounds from a slight edge to serious overdrive.

**2: GAIN 1:** Use this control to adjust the amount of light distortion for the Overdrive channel. Gain 1 produces less intense distortion than Gain 2 (#3) and is active when the Gain switch (#5) is in the out position.

**3: GAIN 2:** Use this control to adjust the amount of heavy distortion for the Overdrive channel. Gain 2 produces more intense distortion than Gain 1 (#2) and is active when the Gain switch (#5) is depressed.

**4: SHAPE:** Use this control to "dial in" the tone for the Overdrive channel when Gain 2 is selected. Rotating the control counterclockwise enhances the mid frequencies, while rotating the control clockwise enhances the low and high frequencies. This control is active only when Gain 2 is selected.

**5: GAIN:** Use this switch to select which gain control is active for the Overdrive channel. With the switch in the out position, Gain 1 is selected. When the switch is depressed, Gain 2 is selected.

**6: LOW:** Use this control to adjust the low frequency level of the Overdrive channel.

**7: HIGH:** Use this control to adjust the high frequency level of the Overdrive channel.

**8: LEVEL:** Use this control to adjust the output level of the Overdrive channel.

**9: CHANNEL SWITCH:** Use this switch to select either channel. With the switch in the out position, the Clean channel is selected. When the switch is depressed, the Overdrive channel is selected.

**CLEAN CHANNEL:** A normal gain channel designed to give you crystal clear sounds to medium distortion.

**10: LEVEL:** Use this control to adjust the output level of the Clean channel.

**11: LOW:** Use this control to adjust the low frequency level of the Clean channel.

**12: MID:** Use this control to adjust the midrange frequency level of the Clean channel.

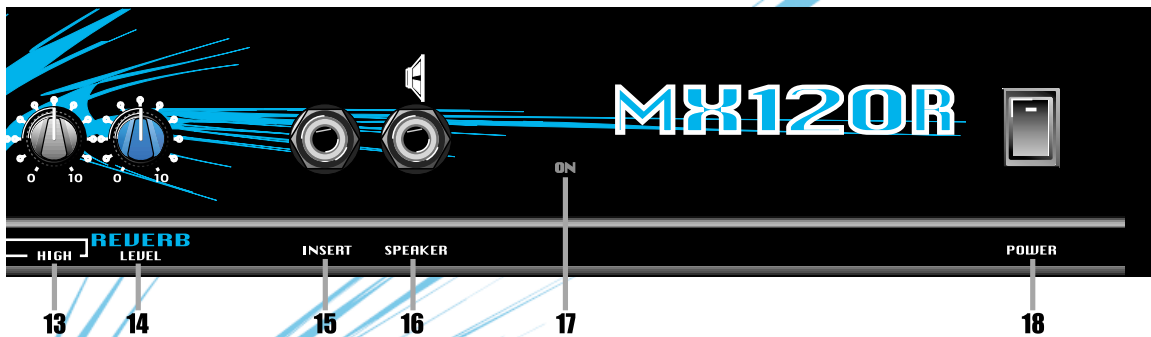
**13: HIGH:** Use this control to adjust the high frequency level of the Clean channel.

**14: REVERB LEVEL:** Use this control to adjust the amount of reverberation: in its full counter clockwise position the signal will be "dry" (without any reverb). As you rotate the control clockwise the amount of reverberation increases.

**15: INSERT:** Use this jack to connect an external effects device to the amplifier. Use a stereo 1/4" male Y connector: ring = send, tip = return, sleeve = ground. (Refer to the illustration to the right.)

**16: EXTERNAL SPEAKER:** Use this jack to connect the amplifier to an external speaker. The internal speaker is disconnected when this jack is used. The minimum impedance for the external speaker is 4 ohms.

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**17: ON LED:** This LED will illuminate when power is applied to the amplifier.

**18: POWER:** Use this switch to turn the amplifier on and off.

**19: AC LINE CORD:** (Rear panel, not shown:) This grounded power cord is to be plugged into a grounded power outlet, wired to current electric codes and compatible with voltage, power, and frequency requirements stated on the rear panel. **Do not attempt to defeat the safety ground connection.**

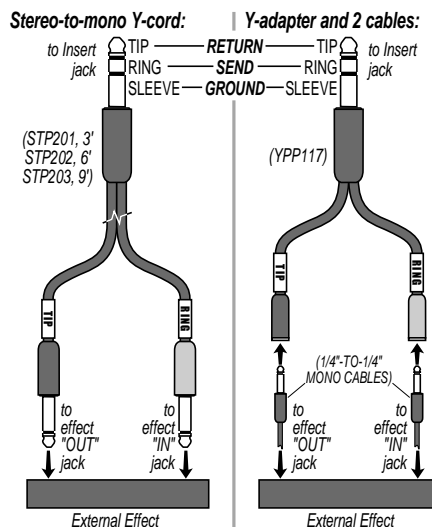
**20: FUSE:** (Rear panel, not shown:) The fuse protects the amplifier from damages caused by a faulty AC power source and/or other problems. If the fuse opens, replace it ONLY with the same size and type. If fuses continue to fail, check the AC source – if the source is okay, contact your Crate dealer for service information.

**21: CHANNEL SELECT / GAIN FOOTSWITCH JACK:** (Rear panel, not shown:) Use this jack to connect the stereo 1/4" plug of the supplied three-button footswitch for remote control of channel selection and gain selection.

**22: REVERB FOOTSWITCH JACK:** (Rear panel, not shown:) Use this jack to connect the mono 1/4" plug of the supplied three-button footswitch for remote control of reverb on and off.

## CONNECTING TO THE INSERT JACK:

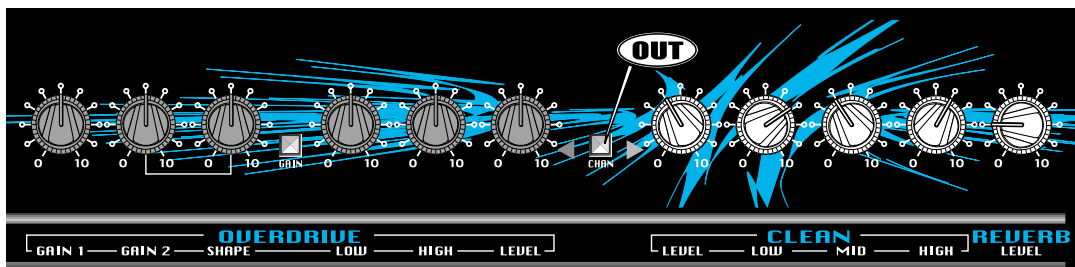
The Insert jack (#15) allows you to patch external effects into the amplifier just prior to its power amp stage. Use Crate's STP201, STP202 or SP203 stereo-to-mono Y cord or an adapter such as Crate's YPP117 and two 1/4" mono signal cables to connect the effect as shown to the immediate right.



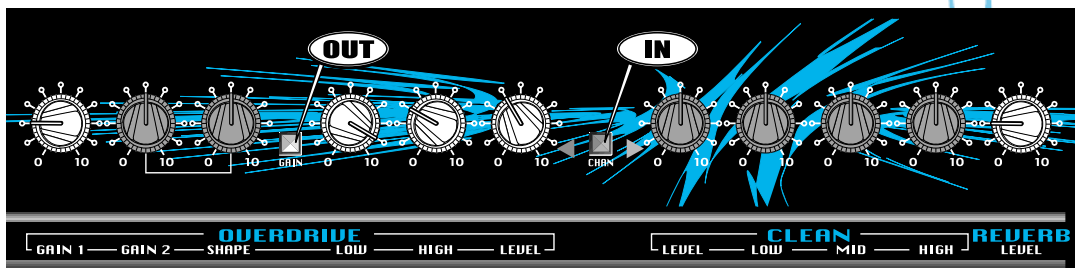
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## Suggested Settings:

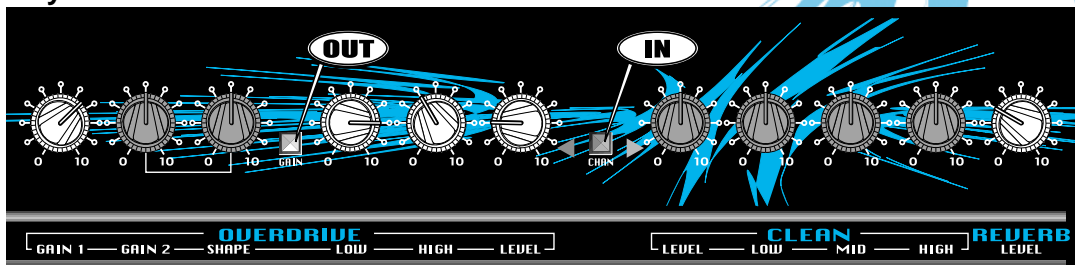
### Clean:



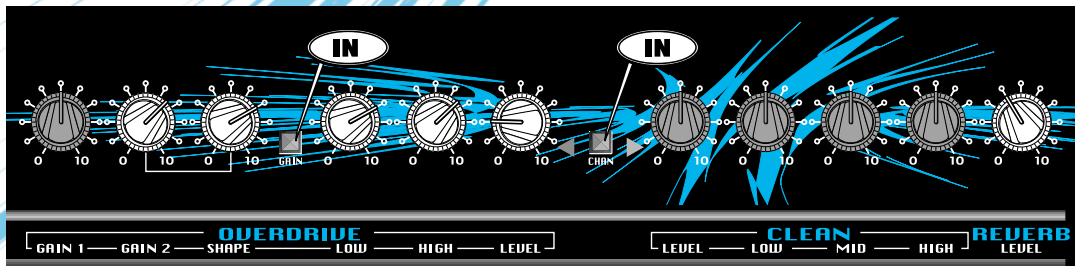
### Blues:



### Rhythm:

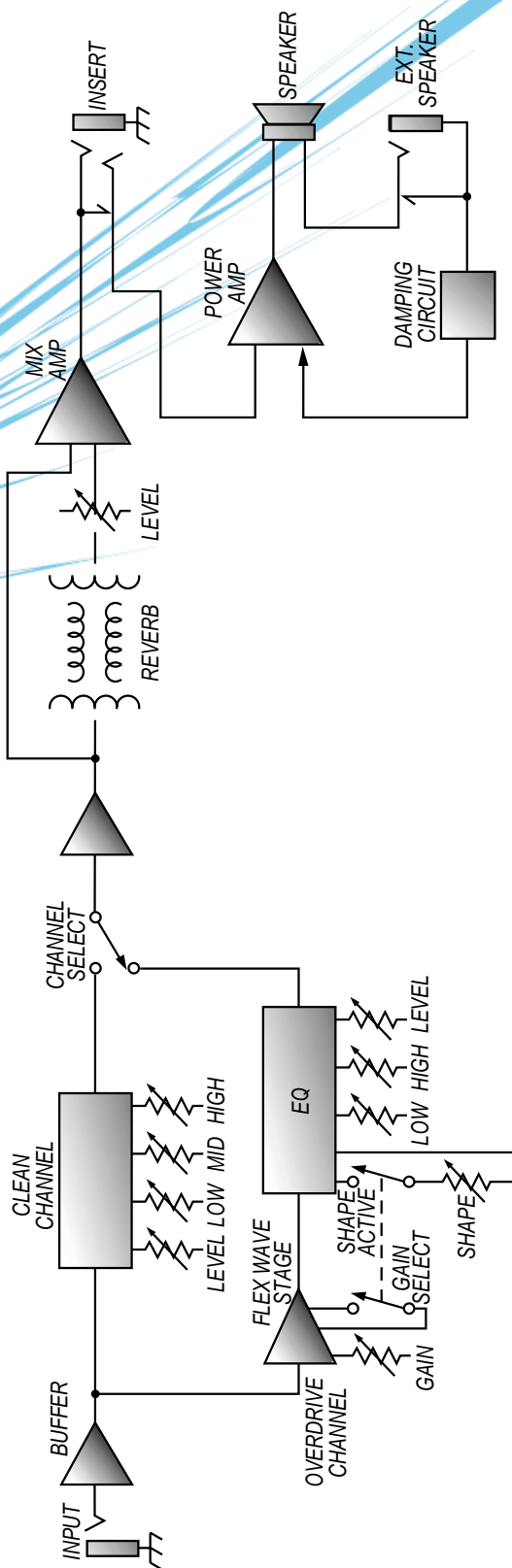


### Lead:



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## System Block Diagram:



# MX120R Guitar Amplifier

## MX120R TECHNICAL SPECIFICATIONS:

Output Power Rating	115 watts RMS @ 5% THD 4 ohms, 120 VAC
Gain, Overdrive Channel	Gain 1 = 88dB, Gain 2 = 110dB
Gain, Clean Channel	58dB
Tone Control Range, Low	Overdrive = 11dB @ 80Hz, Clean = 22dB @ 80Hz
Tone Control Range, Mid	Overdrive = Shape Control, Clean = 14dB @ 600Hz
Tone Control Range, High	Overdrive = 10dB @ 10kHz, Clean = 28dB @ 10kHz
Maximum Input Signal Accepted	7 volts peak-to-peak
Internal Speaker	(2) 12" Crate Custom Design, 8 ohm
Power Requirements	120 VAC, 60Hz, 95VA 100/115VAC, 50/60Hz, 95VA 100/115VAC, 50/60Hz, 95VA
Size and Weight	21" H x 26.5" W x 11" D, 50 lbs.

**The MX120R is covered with a durable black Tolex material: wipe it clean with a lint-free cloth. Never spray cleaning agents onto the cabinet. Avoid abrasive cleansers which would damage the finish.**

*Crate continually develops new products, as well as improves existing ones. For this reason, the specifications and information in this manual are subject to change without notice.*

The logo for the brand 'CRATE' is displayed in a bold, stylized, metallic font. The letters are white with a blue and silver gradient and a 3D effect. The background of the entire page features a dynamic, abstract design of blue and white streaks that create a sense of motion and energy, resembling a guitar pick or a signal waveform.

[www.crateamps.com](http://www.crateamps.com)



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