

ROCKMAN

DISTORTION GENERATOR

OPERATING MANUAL





TABLE OF CONTENTS

	Page
Front Panel Overview	2
General Operating Instructions	3
In/Out Connections	4-5
Signal Path Diagram	6-7
Detailed Function Descriptions	8-11
Distortion/Filters	8
Output	9
Footswitching	10
"Y" Cord and A/B Switching	11
Specifications	12



Front Panel Overview

Guitar Input: (Rear Panel) accepts signals from all passive and active guitars as well as electric keyboards.

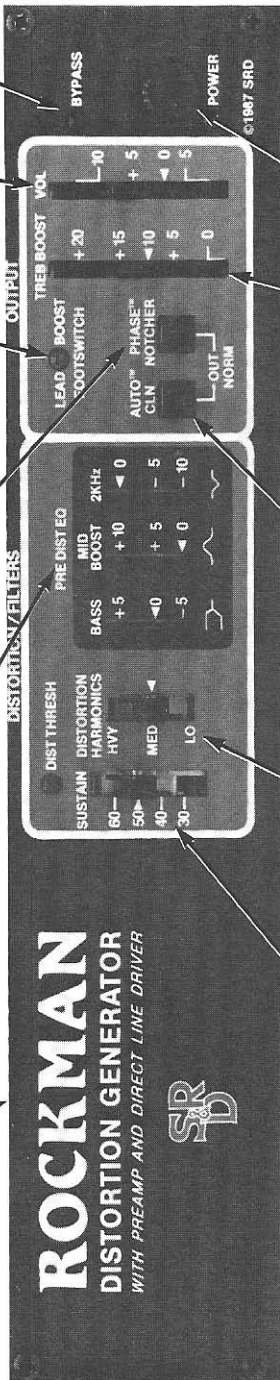
PRE-DISTORTION EQ: provides bass cut and boost, mid range boost, and 2kHz notching before distortion.

PHASE NOTCHER™: electronically reproduces phase notch characteristics of miked 4 × 12 speaker cabinets.

LEAD BOOST: footswitch activated circuit provides additional volume boost and enhanced harmonic content for high gain solo parts.

VOLUME: adjusts master output level.

BYPASS LED: indicates BYPASS mode, footswitch activated.



SUSTAIN: controls compressor sustain and stage feedback. NOTE: reduce setting to prevent feedback at loud stage volumes.

DISTORTION HARMONICS: controls amount of pre-distortion gain as well as the way in which the distortion is generated, thereby varying harmonic content of distorted signal.

AUTO™ CLEAN: automatically restores lost treble response and volume when you turn down the guitar volume pot to play clean. Push button IN to activate.

POWER CAUTION: Turn ON DISTORTION GENERATOR power before the power amp. If no LED's are lit, unit is OFF.

TREBLE BOOST: provides overall control for treble. Intended as a coarse adjustment to compensate for amp or sound system response.

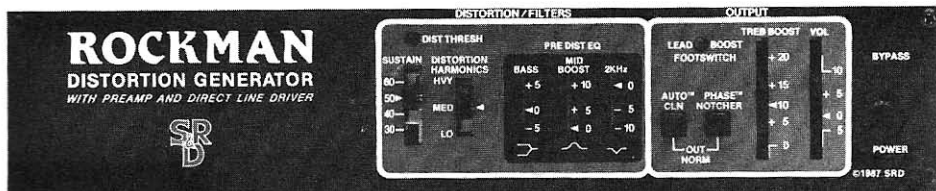
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General Operating Instructions

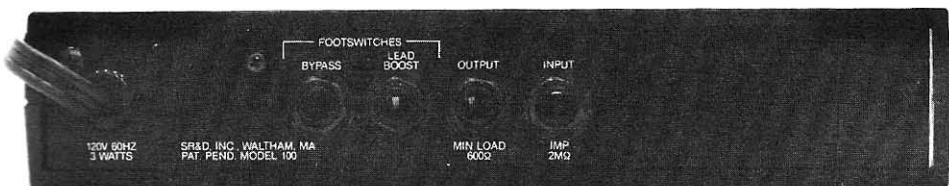
These General Operating Instructions will get you started using your ROCKMAN™ DISTORTION GENERATOR right away. We urge you to read the rest of this manual soon, so you will fully understand and be able to better enjoy all the capabilities of this sophisticated signal processor.

1. Check that the DISTORTION GENERATOR power switch is OFF (out), then connect the power cord to an AC outlet. CAUTION: line voltage must match the voltage requirement printed on rear panel of the unit.
2. Connect output jack on rear panel to a power amp, mixing board (line input), or guitar amplifier. When using a guitar amp; A) use its low gain input, B) set its master volume to 10, C) set its volume knob at a low setting, D) set the tone controls to a halfway or neutral setting and E) on the DISTORTION GENERATOR, set the TREBLE BOOST slider to approximately 10dB.
3. Move all sliders and switches to the normal positions, as marked by the small triangles (▶) and place all pushbuttons in the OFF (out) position.
4. Push the DISTORTION GENERATOR power button ON.
5. Turn the power amp ON. Plug your instrument into the input jack located on the rear panel. Turn up instrument volume to 10 and play.

To activate footswitchable features, use the ROCKMAN FOOTSWITCH or any standard push on/push off footswitch.



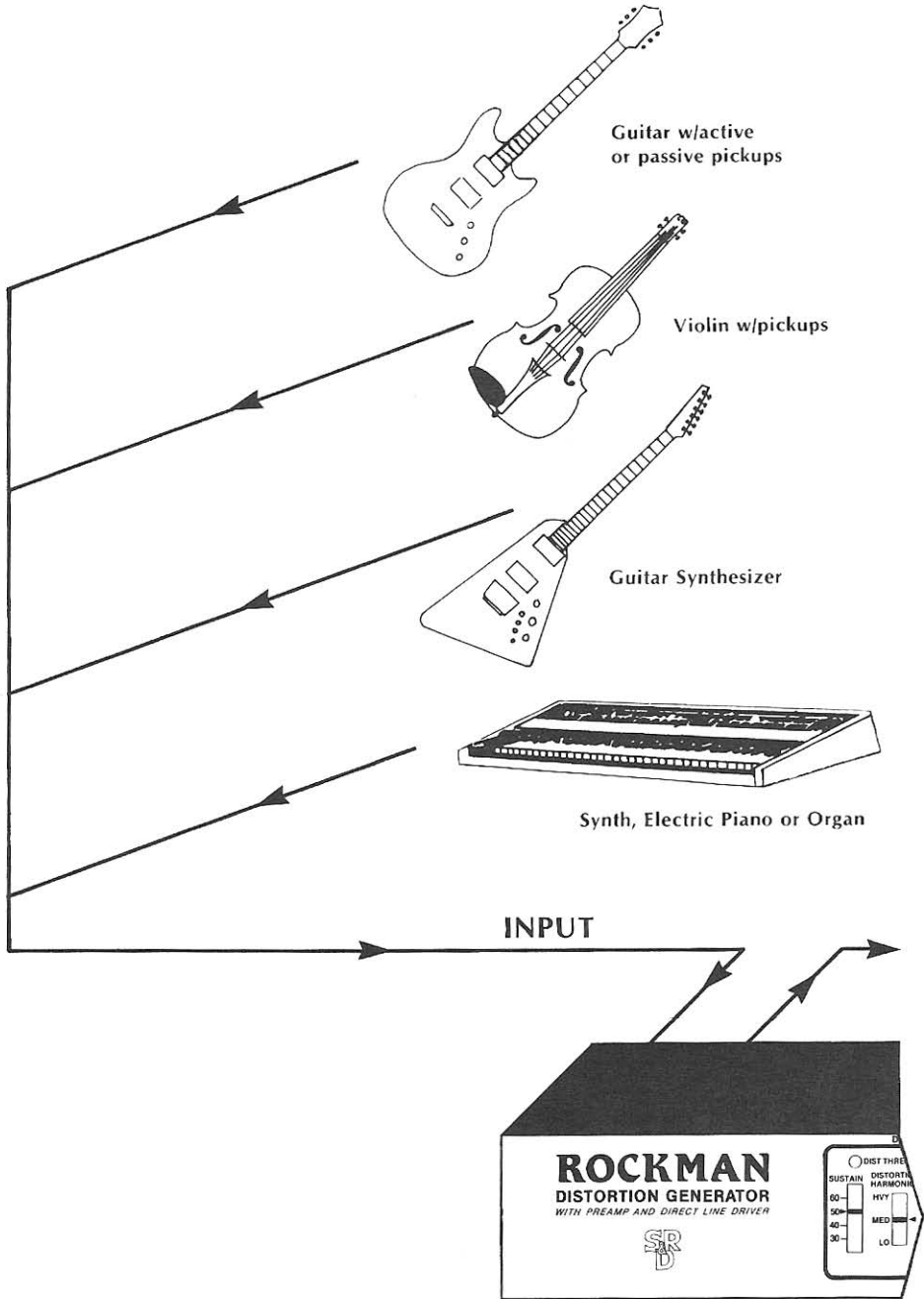
FRONT PANEL



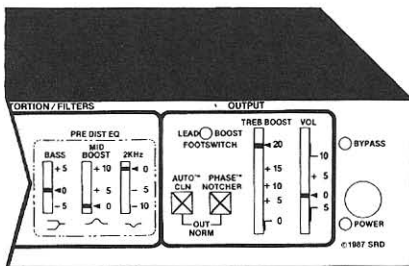
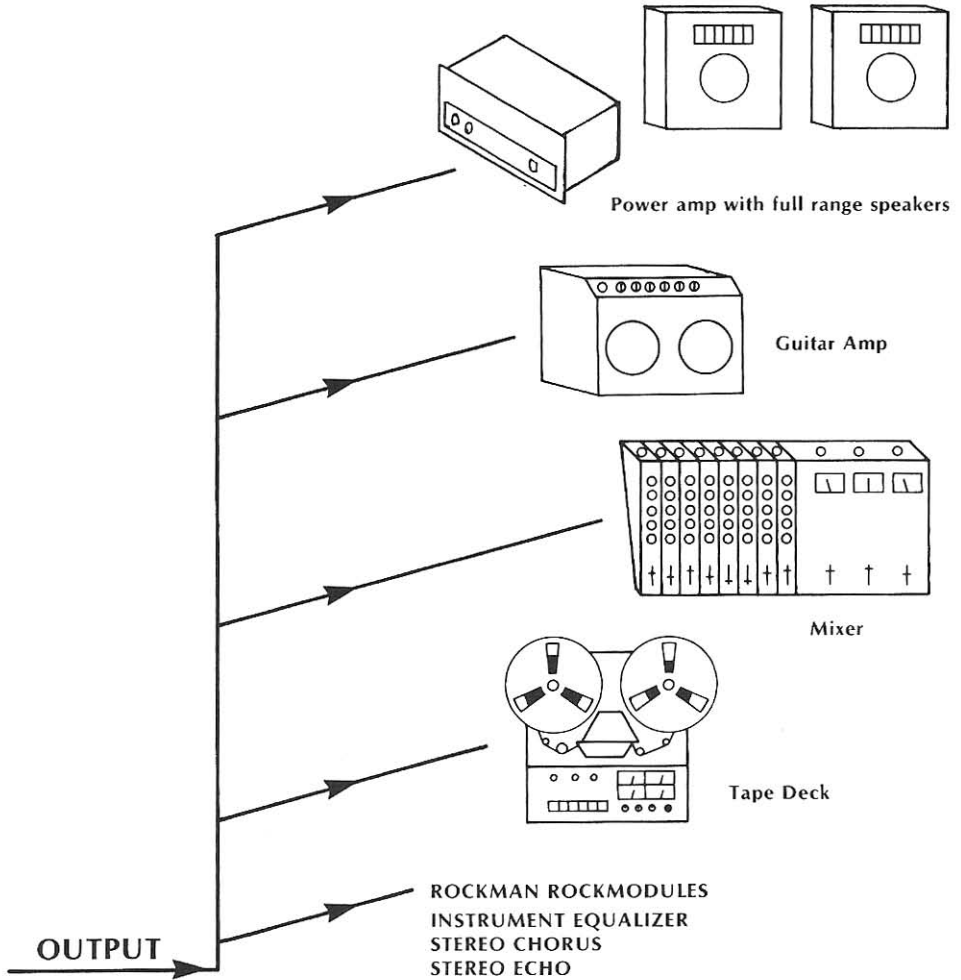
REAR PANEL



In/Out



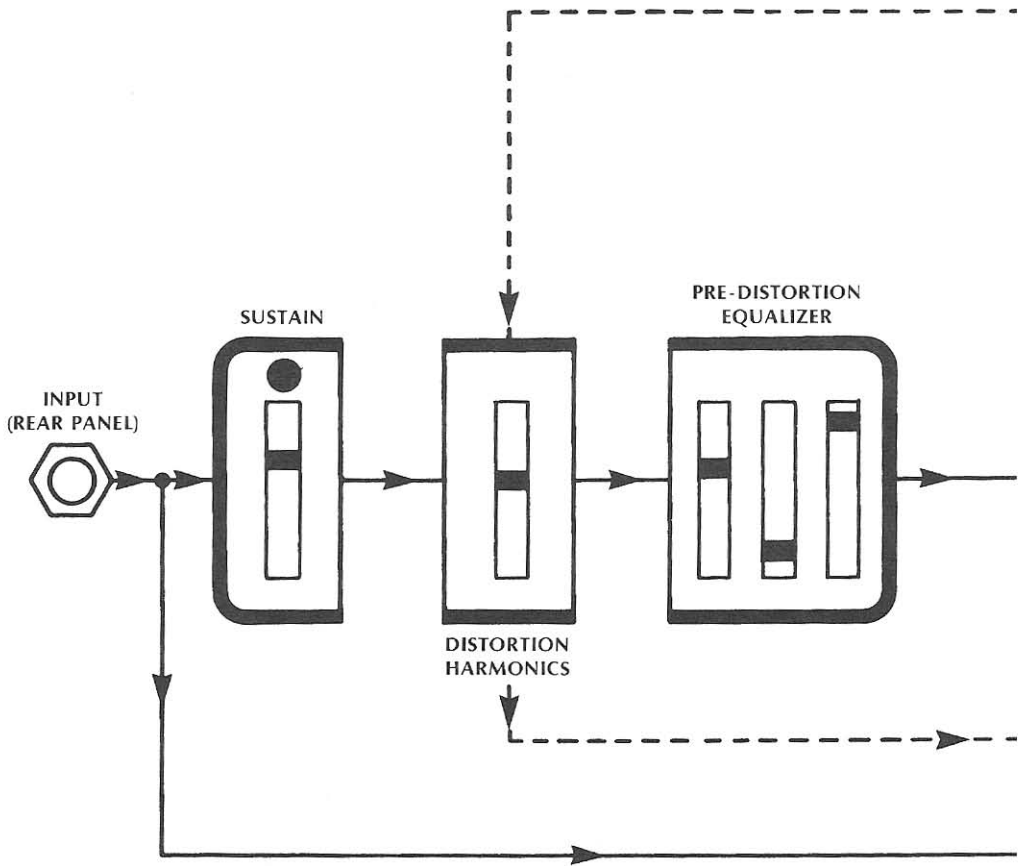
Connections

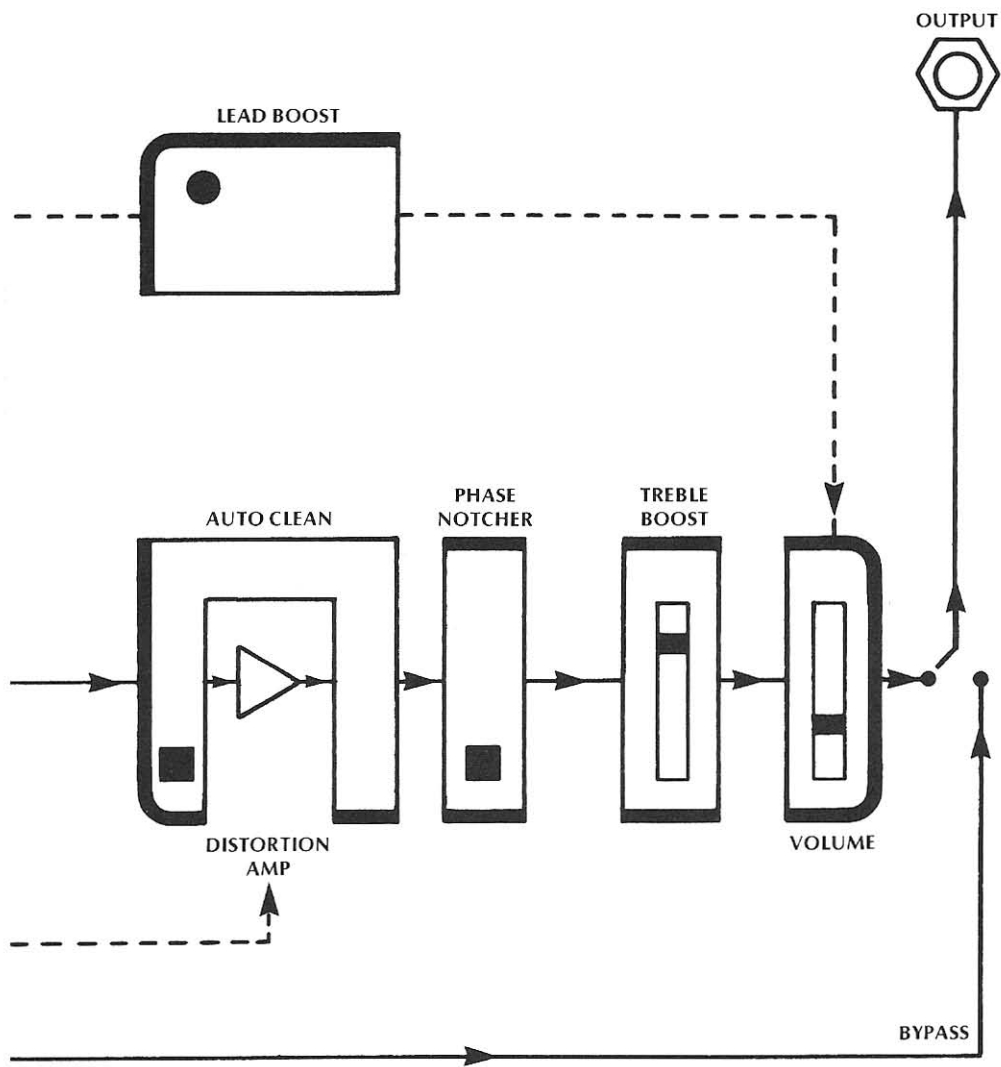


DISTORTION GENERATOR



Signal Path







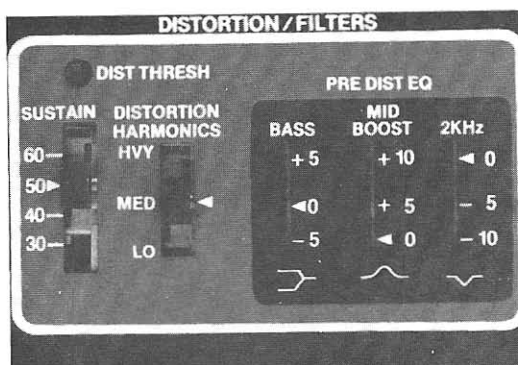
Detailed Function Descriptions

Distortion/Filters

The SUSTAIN switch is the primary compressor control, and is used to adjust sustain time and control acoustic feedback at high stage volumes. This switch also increases or decreases distortion harmonics. If unwanted acoustical feedback occurs at loud stage levels, reduce sustain control setting, not OUTPUT VOLUME.

The DISTORTION THRESHOLD LED lights when the instrument signal is high enough to produce distortion.

The DISTORTION HARMONICS switch provides 3 stages of pre-distortion gain boost, enhancing the harmonic content of the signal.



PRE DIST EQ adds bass and mid-range control before the distortion preamp circuits.

The BASS control allows cut and boost of 5dB.

The MID-RANGE BOOST slider increases the midrange at 600Hz by up to 10dB.

The 2kHz notch slider, when activated, improves clarity in distorted rhythm parts. This effect is subtle, and is most useful when using a pickup with accentuated upper midrange content. With a more balanced pickup you may not require this feature to achieve a smooth rhythm sound.

NOTE: Post-distortion EQ may be added **after** the DISTORTION GENERATOR output.

Output

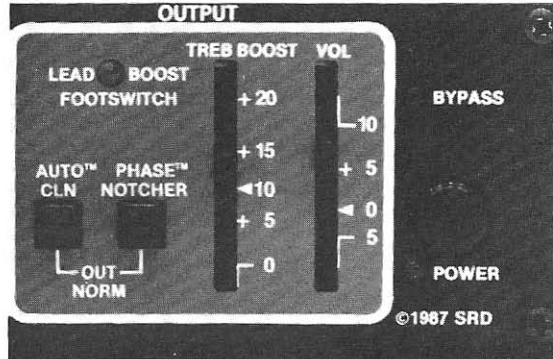
AUTO CLEAN allows you to change from a distorted sound to a cleaner sound simply by backing off on your instrument volume knob. Unlike typical guitar/amp response, volume and treble will not disappear as you turn down your instrument level.

PHASE NOTCHER mimics the desirable phase cancellation patterns of miked multi-speaker cabinets without actually needing the extra equipment (especially useful when going direct to a mixing board).

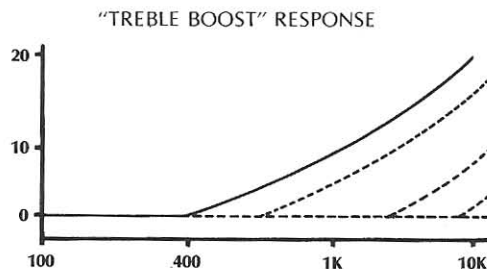
LEAD BOOST circuit provides additional volume and distortion harmonics. LED indicates operation of LEAD BOOST circuit.

NOTE: A step-on/step-off-type footswitch must be inserted in the rear panel footswitch jack in order to activate this circuit.

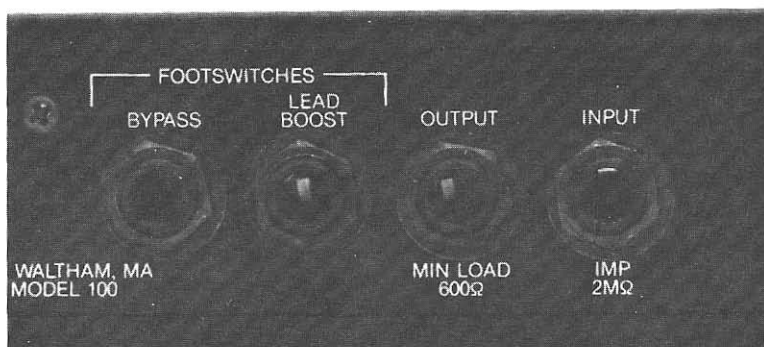
TREBLE BOOST provides a coarse overall adjustment of frequency response. While it is not intended as tone control, its purpose is to roughly match the DISTORTION GENERATOR's treble response to any type of amplification device, from sophisticated sound systems to standard guitar amps. The normal setting is +10, which provides the proper response for guitar amps or speakers with built-in treble emphasis. The +20 setting will give the proper response for a flat sound system.



OUTPUT VOLUME is the final volume control on the DISTORTION GENERATOR. It can be thought of as a master volume control because it adjusts output level after all distortion and compression stages. The total adjustment range is 15dB. At the "0" position, output level is approximately .3Vrms, and is a good all-around setting for driving most effects and power amps.



Footswitching



BYPASS FOOTSWITCH allows cancelling of all **DISTORTION GENERATOR** processing. In **BYPASS** mode, the audio signal still passes through a low noise buffer circuit so power to the **DISTORTION GENERATOR** must be "ON" for the signal to flow. With no footswitch connected, the unit is always active. A **RED LED** shows bypass is active.

NOTE: If you are not using your **DISTORTION GENERATOR** as your primary preamplifier, but wish to occasionally switch it into your system, best results will be obtained with the **TREB BOOST** slider at a lower than +10 setting.

LEAD BOOST FOOTSWITCH activates an increase in volume and adds more harmonic content and treble emphasis to the signal. A **YELLOW LED** indicates circuit is active. If no footswitch is connected, circuit operates normally.

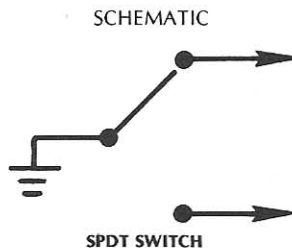
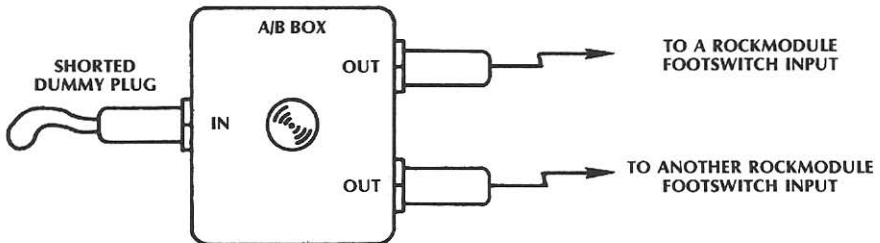
"Y" Cord and A/B Switching

The use of "Y" cords and A/B switching circuits can greatly simplify the use of ROCKMODULES™ in live performance situations. The type of "Y" cord needed is a single female mono jack splitting off to two ¼" male mono plugs. The kind of cable used is not critical as there is no audio signal passing through this circuit.

The theory at work here is that one footswitch can perform more than one on-off function by splitting it up with a Y cord. Deciding what you want to turn ON and OFF together is crucial. Any configuration of the ROCKMODULE footswitch functions will work in this way.

A/B boxes are simple footswitches that can bypass one module while activating another and vice versa.

A/B BOX FOOTSWITCHING



A/B boxes are readily available or can easily be built. Their most obvious use would be when using two SUSTAINORS™, or a SUSTAINOR and a DISTORTION GENERATOR in series. A combination of Y cords and A/B boxes could control many modules with a few footswitches and allow for a truly customized modular set-up.



Specifications

INPUT	Impedance.	Over 2M Ω
	Maximum Level.	4Vrms (+12dBv)
COMPRESSOR	Adjustment Range.	30dB (30, 40, 50, 60)
PRE-DISTORTION EQ	BASS.	-5dB to +5dB
	MID BOOST.	0dB to +10dB
	2kHz Notch.	-10dB to 0dB
PHASE NOTCHER	Low Notch.	250Hz
	High Notch.	2.5kHz
OUTPUT	Impedance.	470 Ω
	Maximum Level.	4.5Vrms (+13dBv)
	Treble Boost Range.	20dB continuous
DIMENSIONS	8½"W, 5½"D, 1¾"H.	(Standard half-rack width)
POWER REQUIREMENT	3-watts, line voltage, see rear panel	
ACCESSORIES	19" ROCKMODULE RACKMOUNT (holds two units)	
Purchased Separately	ROCKMAN FOOTSWITCH	

Specifications subject to change without prior notification.