

## RA30DSP

ACOUSTIC GUITAR AMPLIFIER

### Instruction Manual

#### Features

- o 30 Watts
- o 1x8" Custom Coaxial Speaker
- o 256 Digital Effect Presets Built In
- o Acoustic Guitar and Mic Input
- o Multiple EQ Voicings
- o Guitar Modeling Features
- o Wedge Shaped

*May be covered by one or more of the following: U.S. Patents #4538297, 4647876, 4696044, 4745309, 4881047, 4893099, 5124657, 5263091, 5268527, 5319713, 5333201, 5402498 and 5493617.*

*Other patents pending. Foreign patents pending.*



Your Rocktron RA30DSP Acoustic Amplifier has been tested and complies with the following Standards and Directives as set forth by the European Union:

**Standard(s):** IEC60065 Professional Audio/Video or Similar Equipment, EN55013:1997, EN61000-3-2 (1995) EN61000-3-3(1995), EN55020:1995, CSA E65-94

This means that this product has been designed to meet stringent guidelines on how much RF energy it can emit, and that it should be immune from other sources of interference when properly used. Improper use of this equipment could result in increased RF emissions, which may or may not interfere with other electronic products.

To insure against this possibility, always use good shielded cables for all audio input connections. This will help insure compliance with the Directive(s).

## Specifications

OUTPUT	30 Watts
SPEAKER	Custom 8" Coaxial (8 Ohms)
WEIGHT	11Kgs
DIMENSIONS	390x320x435 (mm)
POWER CONSUMPTION	70W
INPUT IMPEDANCE	1M ohm
HEADPHONE IMPEDANCE	100 Ohms or greater
EXTENSION SPEAKER OUTPUT JACK	1/4" Output Jack
EQ	3-band

# Precautions

**NOTE:** IT IS VERY IMPORTANT THAT YOU READ THIS SECTION TO PROVIDE YEARS OF TROUBLE FREE USE. THIS UNIT REQUIRES CAREFUL HANDLING.

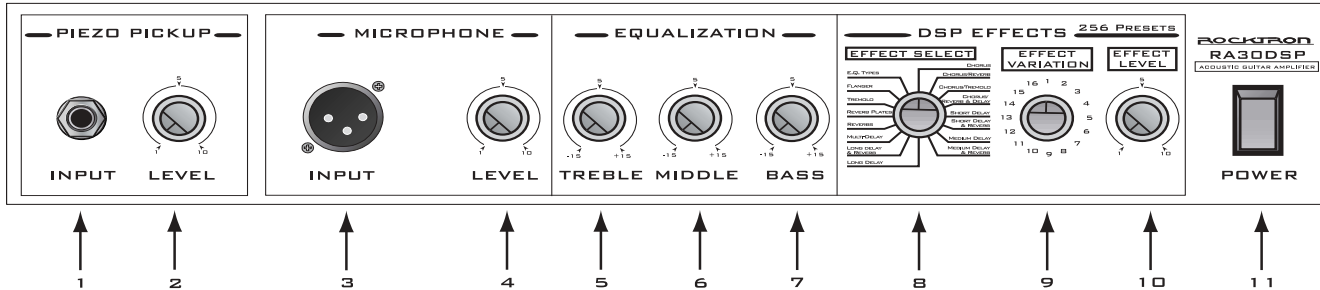
- All warnings on this equipment and in the operating instructions should be adhered to and all operating instructions should be followed.
- Do not use this equipment near water. Care should be taken so that objects do not fall and liquids are not spilled into the unit through any openings.
- The power cord should be unplugged from the outlet when left unused for a long period of time.

DO NOT ATTEMPT TO SERVICE THIS EQUIPMENT. THIS EQUIPMENT SHOULD BE SERVICED BY QUALIFIED PERSONNEL ONLY. DO NOT MAKE ANY INTERNAL ADJUSTMENTS OR ADDITIONS TO THIS EQUIPMENT AT ANY TIME. DO NOT TAMPER WITH INTERNAL ELECTRONIC COMPONENTS AT ANY TIME. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID THE WARRANTY OF THIS EQUIPMENT, AS WELL AS CAUSING SHOCK HAZARD.

## OPERATING TEMPERATURE

Do not expose this unit to excessive heat. This unit is designed to operate between 32° F and 104° F (0° C and 40° C). This unit may not function properly under extreme temperatures.

# Front Panel



## Piezo Pickup Section

- 1 **INPUT Jack**  
Using a standard guitar cable with a 1/4" jack - plug your guitar into this jack
- 2 **LEVEL Control**  
Adjusts the overall "LEVEL" or output of the guitar signal

## Microphone Input Section

- 3 **XLR Input Jack**  
Using a standard microphone cable with XLR jacks, plug a microphone into this jack.
- 4 **LEVEL Control**  
Adjusts the overall "LEVEL" or output of the microphone signal.

## Equalization Section

- 5 **TREBLE Control**  
Adjusts the high frequencies of the signal
- 6 **MIDDLE Control**  
Adjusts the midrange frequencies of the signal
- 7 **BASS Control**  
Adjusts the low-end frequencies of the signal

## DSP Effects Section (Explained in detail on following pages)

- 8 **EFFECTS SELECT Knob**  
This 16 position knob allows you to select one of 16 different preset effects "blocks". Each effect block (or each position) contains 16 different preset effect "settings" which are selected via the EFFECTS VARIATION Control (see point 9).

- 9      **EFFECTS VARIATION Knob**  
This 16 position knob allows you to select one of 16 different presets in each effect “block”. Each position is a variation of the effect(s) in the block selected with the “EFFECTS SELECT knob” from point 8.
- 10     **EFFECTS LEVEL Control**  
This control adjusts the overall “Level” or volume of the effect.
- 11     **POWER Switch**  
This switch turns the amplifier on or off. When the switch is “lit” - the amplifier is “ON”.

## Back Panel

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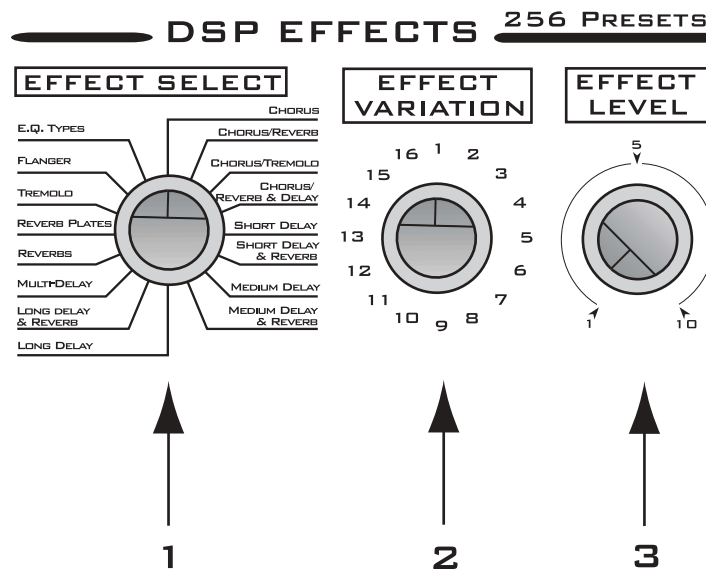
- 1      **EFFECTS BYPASS Jack**  
Connect the optional Rocktron RFS1 Footswitch (not included) to this jack. This will allow you to turn the built-in effects “On” or “Off”. This is ideal in live performance situations where you may want to turn the effects off for rhythm playing and on for solos (or vice-versa). See the Rocktron website for more information regarding the RFS1 - [www.rocktron.com](http://www.rocktron.com)
- 2      **EXTENSION SPEAKER Jack**  
This 1/4” jack allows you to connect the amplifier to an extension speaker cabinet.
- 3      **HEADPHONE Jack**  
This 1/4” jack is used to connect to headphones. Plugging into this automatically mutes the speaker.
- 4      **POWER CABLE Connection**  
Using the included power cable connect the amplifier to a standard wall outlet. See “Fuse Replacement” section for details on how to replace the fuse

# DSP Effects Section

The RA30DSP is equipped with 256 different digital effects presets. Here is a list of the effects available:

Delay  
Chorus  
Reverb  
Tremolo  
Flanger  
EQ Types  
and combinations of the above

The DSP Effect section is fairly simple to operate. Please see the diagram below and follow the instructions:



- 1 **EFFECTS SELECT Control** - This control knob is a 16 position selector that allows you to select the desired effects as shown on the front panel of the amplifier. Each of the 16 positions contains 16 different effect variations of selected effect(s). To select the variation please see point 2.
- 2 **EFFECT VARIATION Control** - This control knob is a 16 position selector that allows you to select a variation of the effect that you have chosen in the EFFECTS SELECT section (see point 1). There is a total of 16 different variations of each effect. Thus, in total there are 256 different preset effects to choose from.
- 3 **EFFECTS LEVEL Control** - This control knob adjusts the overall volume level of the effect. This control does NOT control the overall output of the amplifier - only the output of the effect. All presets were written with the EFFECTS LEVEL Control set at the midway point or LEVEL 5.

Here is a list of each effect and each variation (Clockwise)

## Chorus

Effect Variation	Chorus	
	Rate	Depth
1	Slow	Soft
2	Slow	Light
3	Slow	Medium
4	Slow	Heavy
5	Slow	Saturated
6	Slow	Wobble
7	Medium	Soft
8	Medium	Light
9	Medium	Medium
10	Medium	Heavy
11	Medium	Saturated
12	Medium	Wobble
13	Fast	Soft
14	Fast	Light
15	Fast	Medium
16	Fast	Heavy

## Chorus with Reverb

Effect Variation	Chorus		Reverb Room
	Rate	Depth	
1	Slow	Light	Small
2	Slow	Light	Medium
3	Slow	Light	Large
4	Slow	Light	Hall
5	Slow	Light	Arena
6	Slow	Medium	Medium
7	Slow	Medium	Hall
8	Slow	Medium	Arena
9	Slow	Heavy	Hall
10	Medium	Light	Medium
11	Medium	Light	Hall
12	Medium	Light	Arena
13	Medium	Medium	Medium
14	Medium	Medium	Hall
15	Medium	Medium	Arena
16	Fast	Medium	Large

## Chorus Tremolo

Effect Variation	Tremolo		Chorus	
	Rate	Depth	Rate	Depth
1	Slow	Medium	Slow	Light
2	↓	Medium	Slow	Medium
3		Medium	Slow	Heavy
4		Medium	Slow	Light
5		Medium	Slow	Medium
6		Medium	Slow	Heavy
7	Faster	Medium	Slow	Light
8	↓	Medium	Slow	Medium
9		Medium	Slow	Heavy
10		Deep	Medium	Light
11		Deep	Medium	Medium
12		Deep	Medium	Heavy
13		Deep	Medium	Light
14	↓	Deep	Medium	Medium
15		Deep	Medium	Heavy
16		Deep	Medium	Light

## Chorus with Reverb and Delay

Effect Variation	Chorus		Reverb Size	Delay Time
	Rate	Depth		
1	Slow	Light	Small	Short
2	Slow	Light	Medium	Medium
3	Slow	Light	Large	Long
4	Slow	Light	Hall	Long
5	Slow	Light	Arena	Short
6	Slow	Medium	Medium	Medium
7	Slow	Medium	Hall	Long
8	Slow	Medium	Arena	Long
9	Slow	Heavy	Hall	Medium
10	Medium	Light	Medium	Short
11	Medium	Light	Hall	Medium
12	Medium	Light	Arena	Long
13	Medium	Medium	Medium	Medium
14	Medium	Medium	Hall	Short
15	Medium	Medium	Arena	Long
16	Fast	Medium	Large	Medium



# Short Delay

Effect Variation	Short Delay	
	Milliseconds	Regenerations
1	120	1
2	150	1
3	180	1
4	200	1
5	220	1
6	250	1
7	280	1
8	300	1
9	120	Multiple
10	150	Multiple
11	180	Multiple
12	200	Multiple
13	220	Multiple
14	250	Multiple
15	280	Multiple
16	300	Multiple

# Short Delay with Reverb

Effect Variation	Short Delay with Reverb		
	Milliseconds	Regenerations	Reverb Size
1	120	1	Reflection
2	150	1	Small Room
3	180	1	Medium Room
4	200	1	Large Room
5	220	1	Small Hall
6	250	1	Medium Hall
7	280	1	Large Hall
8	300	1	Arena
9	120	Multiple	Reflection
10	150	Multiple	Small Room
11	180	Multiple	Medium Room
12	200	Multiple	Large Room
13	220	Multiple	Small Hall
14	250	Multiple	Medium Hall
15	280	Multiple	Large Hall
16	300	Multiple	Arena

## Medium Delay

Effect Variation	Medium Delay	
	Milliseconds	Regenerations
1	320	1
2	350	1
3	380	1
4	400	1
5	420	1
6	450	1
7	480	1
8	500	1
9	320	Multiple
10	350	Multiple
11	380	Multiple
12	400	Multiple
13	420	Multiple
14	450	Multiple
15	480	Multiple
16	500	Multiple

## Medium Delay with Reverb

Effect Variation	Medium Delay with Reverb		
	Milliseconds	Regenerations	Size
1	320	1	Reflection
2	350	1	Small Room
3	380	1	Medium Room
4	400	1	Large Room
5	420	1	Small Hall
6	450	1	Medium Hall
7	480	1	Large Hall
8	500	1	Arena
9	320	Multiple	Reflection
10	350	Multiple	Small Room
11	380	Multiple	Medium Room
12	400	Multiple	Large Room
13	420	Multiple	Small Hall
14	450	Multiple	Medium Hall
15	480	Multiple	Large Hall
16	500	Multiple	Arena

## Long Delay

Effect Variation	Medium Delay	
	Milliseconds	Regenerations
1	520	1
2	550	1
3	580	1
4	600	1
5	620	1
6	650	1
7	680	1
8	720	1
9	520	Multiple
10	550	Multiple
11	580	Multiple
12	600	Multiple
13	620	Multiple
14	650	Multiple
15	680	Multiple
16	720	Multiple

## Long Delay with Reverb

Effect Variation	Long Delay with Reverb		
	Milliseconds	Regenerations	Reverb Size
1	520	1	Reflection
2	550	1	Small Room
3	580	1	Medium Room
4	600	1	Large Room
5	620	1	Small Hall
6	650	1	Medium Hall
7	680	1	Large Hall
8	720	1	Arena
9	520	Multiple	Reflection
10	550	Multiple	Small Room
11	580	Multiple	Medium Room
12	600	Multiple	Large Room
13	620	Multiple	Small Hall
14	650	Multiple	Medium Hall
15	680	Multiple	Large Hall
16	720	Multiple	Arena

# Multi-Delay

Effect Variation	Delay		
	Delay 1 ms	Delay 2 ms	Regenerations
1	100	200	1
2	150	300	1
3	200	400	1
4	250	500	1
5	300	600	1
6	350	700	1
7	400	800	1
8	450	900	1
9	500	1000	1
10	200	400	Multiple
11	250	500	Multiple
12	300	600	Multiple
13	350	700	Multiple
14	400	800	Multiple
15	450	900	Multiple
16	500	1000	Multiple




# Reverbs

Effect Variation	Reverb Size
1	Reflection
2	Small Room
3	Small Room
4	Medium Room
5	Medium Room
6	Large Room
7	Large Room
8	Club
9	Club
10	Cathedral
11	Cathedral
12	Hall
13	Hall
14	Arena
15	Stadium
16	Chasm

# Reverb Plates

Effect Variation	Reverb Size
1	Reflection
2	Small Room
3	Medium Room
4	Large Room
5	Small Hall
6	Medium Hall
7	Large Hall
8	Arena
9	Reflection
10	Small Room
11	Medium Room
12	Large Room
13	Small Hall
14	Medium Hall
15	Large Hall
16	Arena

# Tremolo

Effect Variation	Tremolo	
	Rate	Depth
1	Slow	Medium
2		Medium
3		Medium
4		Medium
5		Medium
6		Medium
7	Faster	Medium
8		Medium
9		Medium
10		Deep
11		Deep
12		Deep
13	↓	Deep
14		Deep
15		Deep
16		Fastest Deep

# Flanger

Effect Variation	Flanger		
	Rate	Depth	Decay
1	Slow	Light	Light
2	Slow	Light	Medium
3	Slow	Light	Heavy
4	Slow	Medium	Light
5	Slow	Medium	Medium
6	Slow	Medium	Heavy
7	Slow	Heavy	Light
8	Slow	Heavy	Medium
9	Slow	Heavy	Heavy
10	Medium	Light	Light
11	Medium	Light	Medium
12	Medium	Light	Heavy
13	Medium	Medium	Light
14	Medium	Medium	Medium
15	Medium	Medium	Heavy
16	Fast	Medium	Medium

# EQ

## Effect Variation 1

### Traditional Acoustic Flat

Low	Low-Mid	Mid	Mid-Hi	Hi

## Effect Variation 2

### Traditional Acoustic - Rock

Low	Low-Mid	Mid	Mid-Hi	Hi

## Effect Variation 3

### Traditional Acoustic - Country

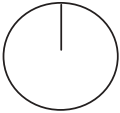
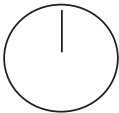
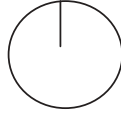
Low	Low-Mid	Mid	Mid-Hi	Hi

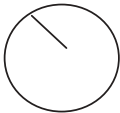
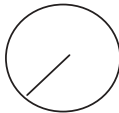
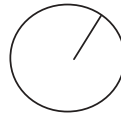
## Effect Variation 4

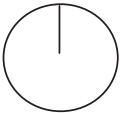
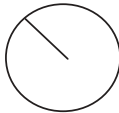
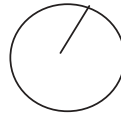
### Traditional Acoustic - Blues

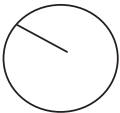
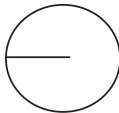
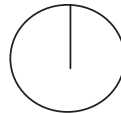
Low	Low-Mid	Mid	Mid-Hi	Hi

Set your Equalization controls as shown below for each variation

Treble Knob	Mid Knob	Bass Knob
		

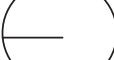


Treble Knob	Mid Knob	Bass Knob
		

Treble Knob	Mid Knob	Bass Knob
		

Treble Knob	Mid Knob	Bass Knob
		




### Traditional Acoustic - Jazz

[illegible]

Treble Knob	Mid Knob	Bass Knob
		




## Archtop Acoustic

[illegible]

Treble Knob	Mid Knob	Bass Knob
		




## New Age

[illegible]

Treble Knob	Mid Knob	Bass Knob
		




## Modern Rock

[illegible]

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 9 Jumbo Body Style




[illegible]

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 10

#### New Yorker Body Style

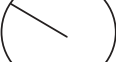


Low	Low-Mid	Mid	Mid-Hi	Hi

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 11

#### Dobro Guitar




[illegible]

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 12

#### Lead Acoustic

[illegible]




Treble Knob	Mid Knob	Bass Knob
		



### Effect Variation 13

## Acoustic Bass




[illegible]

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 14

## Solid Body Acoustic




[illegible]

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 15

## Acoustic Electric Piezo




[illegible]

Treble Knob	Mid Knob	Bass Knob
		

### Effect Variation 16

## Mic'd Acoustic - Room

[illegible]

Treble Knob	Mid Knob	Bass Knob
		

# Fuse Replacement

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We recommend that you use an authorized repair person to change the fuse in this unit.

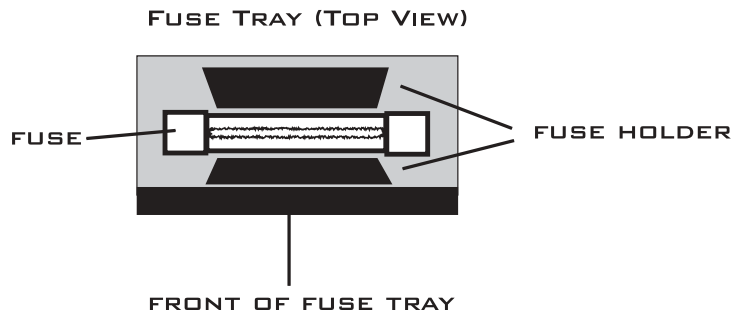
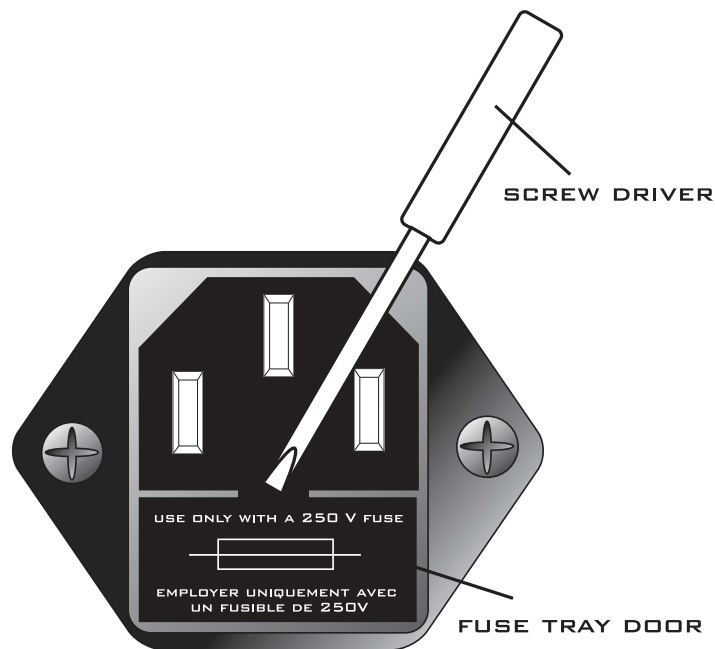
To access the fuse, first power down the unit and unplug the cable from the wall outlet and the amplifier. Using a small screw driver, open the fuse tray by prying open the small tab as shown in the drawing above.

Please note that the tray will not come all of the way out.

Remove the old fuse and replace with a comparable new fuse and close the tray being sure that the tray snaps into position

AC 117V 50/60 HZ  
Fuse T1A 250V

AC 230V 50/60 HZ  
Fuse T500mA 250V



# *Check out some of our other products:*

## **Rack Gear:**

**Gainiac** (*preamp w/12ax7 tube*)      **Chameleon 2000** (*preamp w/multi-effects*)

**Voodoo Valve** (*preamp w/12ax7 tube and multi-effects*)

**Prophesy** (*our top of the line preamp with multi-effects*)

**Xpression** (*Digital Multi-Effects Processor for Guitar and Bass*)

**Blue Thunder** (*Digital Bass Preamp with Effects*)    **HUSH Super C** (*guitar noise silencing system*)

**Vendetta VP4 Preamp** (*All Tube 4-Channel Guitar preamp - 2 Rack Space*)

## **Stomp Boxes:**

**Rampage Distortion, Tsunami Chorus, Austin Gold Overdrive, HUSH The Pedal, Banshee Talkbox,**

**Vertigo Vibe, Metal Planet Distortion, Deep Blue Chorus, Short Timer Digital Delay,**

**Sonic Glory Overdrive, Big Crush Compressor, Black Cat Moan Wah Wah**

## **Electric Guitar - Acoustic Guitar and Bass Amplifiers:**

**Vendetta Head**(*100 W Head 4-Channels All Tube - MIDI Switchable*)

**Vendetta Combo** (*100W 2x12" Combo - Celestion 90's all Tube -4-Channel - MIDI Switchable*)

**R80DSP** (*80W 1x12" Amp w/Digital Effects*)    **RT80** (*80W 1x12" Amp w/Reverb & Built-in Tuner*)

**R120DSP** (*120W 2x10" Amp w/Digital Effects*)

**RT122C** (*120W 2x12" Amp w/Stereo Chorus, Reverb & Chromatic Tuner*)

**R50DSP** (*50 Watt 2x8"Guitar Amp w/Digital Effects*)

**R50C** (*50 Watt 2x8"Guitar Amp w/Reverb & Chorus*)

**S112** (*1x12" Speaker Cabinet*)

**R20** (*20 Watt 1x8"Amp w/Reverb*)      **R10** (*10 Watt 1x6.5"*)

**RA50DSP** (*50W Acoustic Amp w/Digital Effects - Wedge Shape*)

**RB20** (*Bass Amp 20W with 8" Speaker*)    **RB30** (*Bass Amp 30W with 10" Speaker*)

**RB60** (*Bass Amp 60W with 12" Speaker*)

**RB100** (*Bass Amp 100W with 15" Speaker*)

## **Foot Controllers:**

**MIDI Mate** (*Midi Foot Controller*)    **MIDI XChange** (*MIDI Footcontroller*)

**All Access** (*Midi Foot Controller*), **HEX** (*Expression Pedal*), **RMM900** (*7-pin Din MIDI Cable*)

**RFS1 and RFS2** (*Single and Double Latching Footswitchs for Rampage Amps*)

**ROCKTRON**  
TECHNOLOGY FOR GUITARISTS

**RA30DSP**

**ACOUSTIC GUITAR AMPLIFIER**

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