SONICTONE AMPLIFICATION®

Royal Crown

RC15 | RC30

Classic Series

Cathode-Biased Tube Amplifier

15-Watt Head / 1x12 Combo

- or -

30-Watt Head / 2x12 Combo

Owner's Manual

www.sonictoneamps.com
Made in the USA

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SONICTONE AMPLIFICATION®

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Introduction

I'd like to personally thank you for purchasing the SonicTone Royal Crown tube amplifier. I know how important every player's tone is to them and that consideration goes into every amp. Carefully designed and hand-built here in the U.S., the Royal Crown is an influential circuit that has been used to power classic rock for decades. From a chimey clean channel to a tight harmonic overdrive, this amp will deliver some fantastic tones for you to use when playing live or in the studio. Good luck and enjoy the amp!

Sincerely,

Nick Sagona

Safety Instructions

1. Always use the correct types of tubes for this amplifier.
2. Always match the impedance to correct value of the speaker load.
3. Do not attempt to bypass the fuses or use different fuse values.
4. Please only use the provided SonicTone footswitch, which is compatible with this amplifier.
5. Please only use the correct cable to connect the footswitch to the amplifier.
6. Please operate the amplifier in dry and safe conditions.
7. Please store the amplifier in a reasonable, climate-controlled environment.
8. Prolonged exposure to high sound levels may cause permanent hearing loss. Please take the necessary precautions. See page 7 for more information.
9. If you are experiencing issues with the amplifier, please have it worked on by a qualified service technician only. Do not attempt to open the amp and work on it yourself.

WARNING!

Dangerous and potentially lethal voltages may be present in the amplifier even after it has been turned off and unplugged. Do not open the amp yourself or touch the inside of it. Only have a qualified service technician open up and work on the amplifier.

Features

The Royal Crown is a cathode-biased tube amplifier. The 15-watt model uses three (3) 12AX7 preamp tubes, two (2) EL84 power tubes and one (1) EZ81 rectifier tube. The 30-watt model uses four (4) 12AX7 preamp tubes, four (4) EL84 power tubes and one (1) GZ34 rectifier tube. The features include:

- 2 independent channels with separate EQs
- Bright switch on channel 1
- Hot/cool switch on channel 2
- Tone cut control
- No negative feedback
- Master volume
- Tube/solid-state rectifier switch
- 3-way output impedance switch (16, 8 or 4 ohm)
- 12" Celestion speaker(s) *(combo versions only)*
- Birch plywood cabinet with finger-jointed construction

RC15

- Bypassable FX loop
- 1-button footswitch

RC30

- Bypassable and footswitchable tube-driven FX loop
- FX loop series/parallel switch with send and return controls
- Mono preamp out & mono power amp in jacks
- 2-button footswitch

Tube/Solid-State Rectifier Switch:

The tube/solid-state rectifier switch is another interesting feature that can give you a subtle tonal option. When set to the tube rectifier, the amp will produce a slightly more vintage sound, where there is a little more compression and sag with the sound. Some players prefer this, saying that it gives the amp a more vocal and spongy sound and that the notes have a nice "touch" or "bloom" to them. However, if that's not your preference, switching to the solid-state rectifier will give the amp a slightly more aggressive sound with a more firm and immediate response.

Footswitch Operation

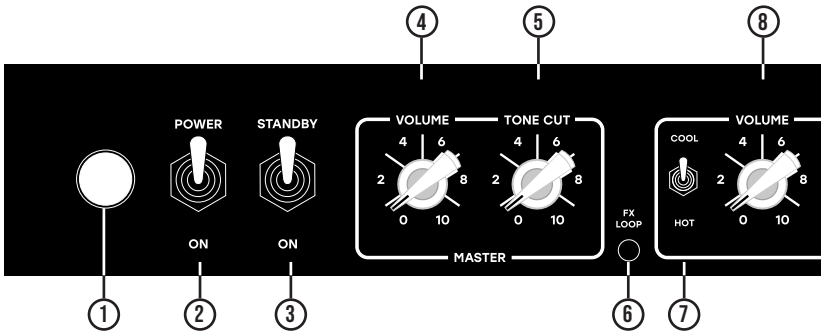
RC15:

The 1-button footswitch requires a 1/4" TRS cable to be inserted into the footswitch jack on the rear panel as well as the jack on the footswitch. The "CH 1 / CH 2" switch on the front panel is automatically defeated if the footswitch cable is plugged into the footswitch jack on the rear panel.

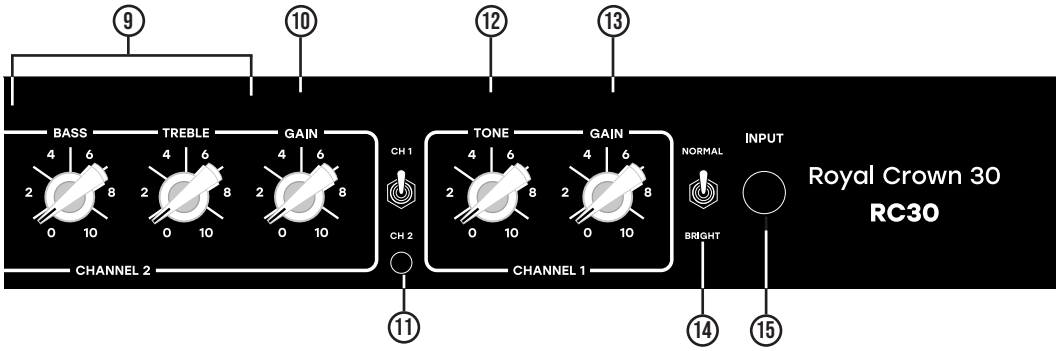
RC30:

The 2-button footswitch requires the active 5-pin DIN cable to be inserted into the footswitch jack on the rear panel as well as the jack on the footswitch. In order for the footswitch to operate correctly, the corresponding switches on the amp must be set to the OFF position. The left button (orange LED) engages channel 2. The right button (green LED) engages the FX loop.

Front Panel



1. **Pilot Light** – illuminates when the amp is turned on.
2. **Power Switch** – turns the amp on.
3. **Standby Switch** – allows the amp to be played. When the standby is off, the tubes are kept warm, but the amp will not make any sound.
4. **Master Volume** – adjust the overall master volume of the amp.
5. **Tone Cut** – a tonal control to adjust the overall brightness of the amp. Increasing this control darkens the tone.
6. **FX Loop LED** – illuminates when the FX loop is engaged (RC30 model only.)
7. **Hot/Cool Switch** – switch to engage more gain and a more aggressive tone for channel 2. When set to "hot", the channel 2 EQ has a reduced and different effect on the tone.
8. **Volume** – adjust the overall volume of channel 2.

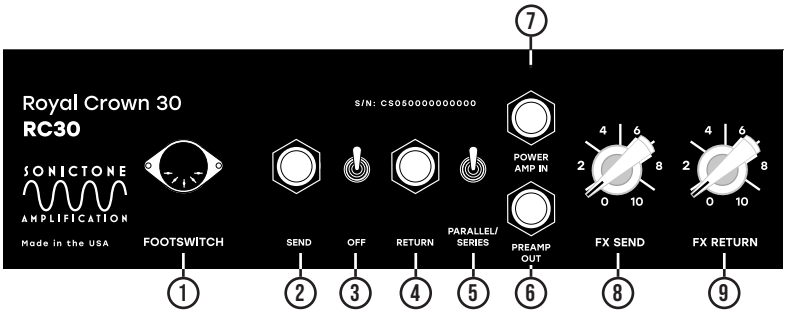


9. **Bass and Treble** – passive equalization controls to adjust the tone of channel 2. They have the widest effect and operate normally when on the "cool" setting of the "hot/cool" switch (7).
10. **Gain** – adjust the overall gain of channel 2.
11. **CH 1 / CH 2 Switch & LED** – switch to change between channels 1 and 2 when not using the footswitch. The LED illuminates when channel 2 is engaged.
12. **Tone** – adjust the tone of channel 1.
13. **Gain** – adjust the overall gain of channel 1.
14. **Bright Switch** – switch to engage a brighter tone for channel 1.
15. **Input Jack** – mono input jack to plug your guitar into.

! NOTICE !

Tube amplifiers are voltage-sensitive devices that require a certain amount of AC input voltage (VAC.) If the provided input voltage is too low, the amplifier may not function properly. If the provided input voltage too high, it may damage the amplifier. Please take care to ensure that the correct AC input voltage is provided to the amplifier. See the **specifications** section of this manual for more info.

Rear Panel



1. **Footswitch Jack** – jack to plug the provided footswitch cable into (5-PIN DIN or 1/4" TRS on the RC15)

2. **FX Loop Send Jack** – mono input jack for the FX loop instrument level send signal.

3. **FX Loop Bypass Switch** – switch to fully bypass the FX loop circuit.

4. **FX Loop Return Jack** – mono input jack for the FX loop instrument level return signal.

5. **FX Series/Parallel Switch (RC30 Model Only)** – switch to operate the FX loop in either series or parallel mode. In parallel mode, the original signal is allowed to pass through unaffected and the send control acts as a "wet/dry blend" to mix the level of affected signal into the mix with the unaffected signal. In parallel, depending on the amount of "wet" signal set by the send control, the overall signal may be louder due to the dry and wet signals being mixed together. In this scenario, it is recommended to use the return control to balance out the overall volume.

6. **Preamp Out (RC30 Model Only)** – mono unbalanced output jack to send the post-FX loop line level signal to another external unit or power amp.

7. **Power Amp In (RC30 Model Only)** – mono unbalanced input jack to send a line level preamp signal from another amp into the power amp of this amp. Once a line is plugged into this jack, the internal preamp is disconnected and the power amp will only amplify the incoming external preamp signal.

8. **FX Loop Send Level (RC30 Model Only)** – control to adjust the level of the send signal to the FX chain.

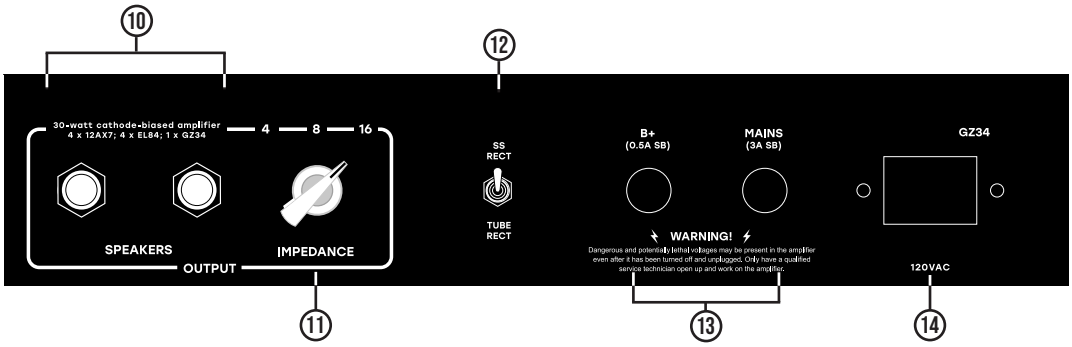
9. **FX Loop Return Level (RC30 Model Only)** – control to adjust the level of the return signal to the amp.

A note about the FX Loop – When the FX loop is off (bypassed), the entire signal will bypass the FX loop circuit altogether. However, the send and return jacks are switched jacks that are connected together internally when nothing is plugged into them. Therefore, when the FX loop is on, signal will be allowed to pass through the FX loop even if nothing is plugged into it. If the FX loop is on but not being used, the return control on the **RC30 Model** can be used as an additional volume control to reduce the volume when the FX loop is on, and then boost the volume when the FX loop is switched off using the footswitch. This will effectively provide a volume "boost" option.

A note about the insert points (RC30 Model) – It is important to make a distinction between the FX loop and the "preamp out/power amp in" jacks. The FX loop is a lower instrument level signal designed for FX units and requires the "make-up" gain of the return stage. The "preamp out/power amp in" insert point is post-FX loop and is a higher line level signal that needs no recovery stage. The two insert points have different purposes and behave differently because of this.

In summary, the FX loop is designed to feed external FX units via the send jack and receive the processed instrument level signal to the return jack. The "preamp out/power amp in" insert point is designed to feed other power amps, or receive a line level signal from another preamp.

Rear Panel (continued)



10. **Parallel Speaker Jacks** – mono input jacks to plug the speaker(s) into. PLEASE NOTE: The jacks are in parallel, so if you plug two equal impedance speaker loads into them, you must set the impedance switch to half their impedance. For example, with two 16 ohm speaker loads plugged in, the impedance switch should be set to 8 ohms.

11. **Impedance Selector Switch** – switch to select the correct impedance of the speaker load hooked up to the amp.

12. **Solid State/Tube Rectifier Switch** – switch to change between using the tube rectifier or the solid state rectifier.

13. **Fuse Holders** – receptacles for the amp's fuses. (On the RC15 model, the the high voltage fuse is located inside the amp.)

14. **AC Jack** – jack to plug the provided AC cord into.

2-Year Limited Warranty

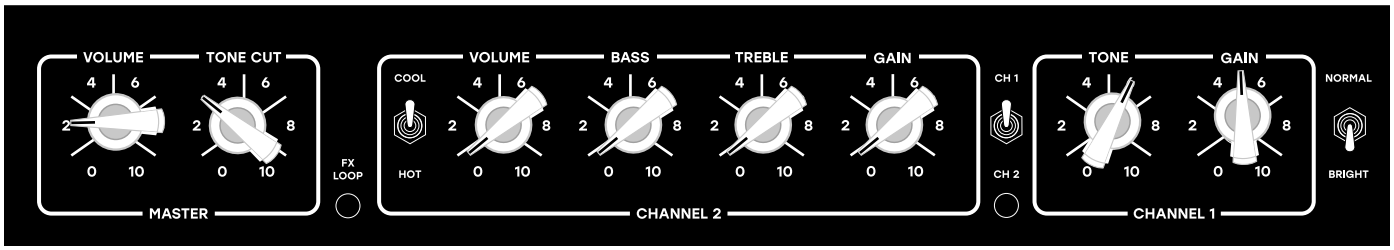
This amplifier is protected with a limited, 2-year warranty for any and all defective issues with the build workmanship and parts, excluding tubes, transformers and speakers. The warranty does not cover general wear and tear, neglect, misuse or abuse, damage from liquids (water, alcohol, etc.), disasters, acts of God or unauthorized modifications. Any modifications made to the amp by the owner or a technician will void the warranty. The owner is responsible for all warranty shipping costs. Once the warranty work is completed, the customer will be notified and sent a final shipping invoice. The owner then is required to pay the shipping invoice to have the repaired amp shipped back to them. Returned warranty shipping will be insured and will require a signature.

! HIGH SOUND LEVEL WARNING !

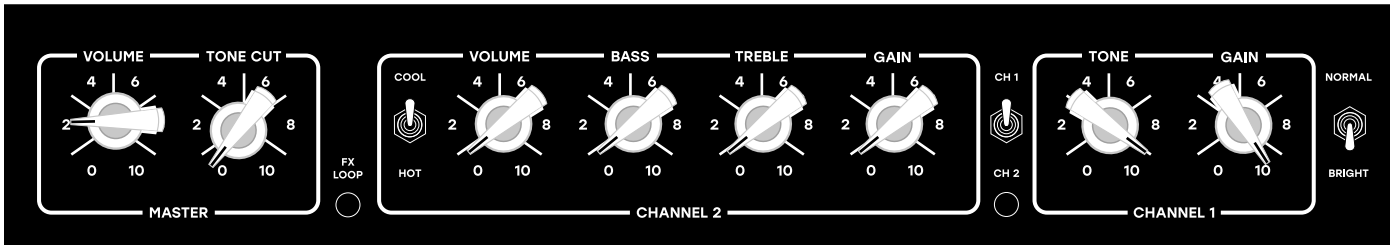
Guitar amplifiers produce extremely high sound levels. Any prolonged exposure to high sound levels may cause permanent hearing loss. Please take care to use proper hearing protection when operating and playing through a SonicTone amplifier. For more information on exposure to extreme sound levels and its effects, please visit the **OSHA website here**.

Sample Settings

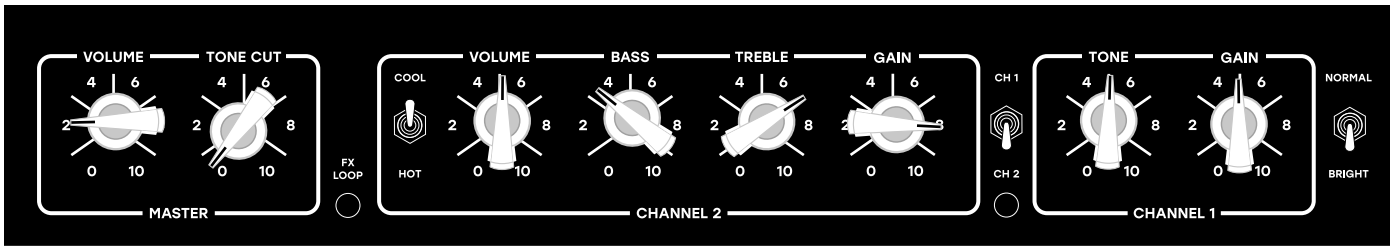
Channel 1 - Chimey Clean:



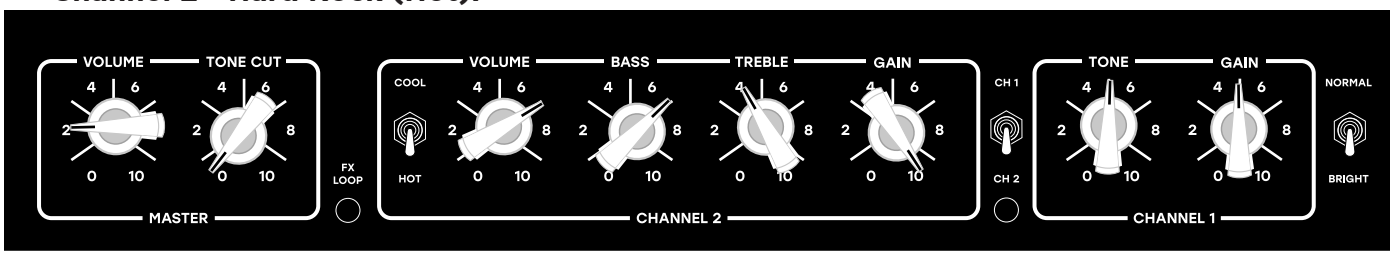
Channel 1 - Light Blues Crunch:



Channel 2 - Classic Rock (Cool):



Channel 2 - Hard Rock (Hot):



Specifications

Product Series: Classic Series

Product Model: Royal Crown Head, 1x12 Combo or 2x12 Combo

AC Input & Fuses:

- Standard IEC jack for U.S. 120VAC
- Slo-blo mains fuse: US 120VAC **15W** - 2A; **30W** - 3A
- 0.5A slo-blo high voltage (B+) fuse

Tubes & Power Output:

RC15 Model

- Three (3) 12AX7 preamp tubes
- Two (2) EL84 power tubes
- One (1) EZ81 rectifier tube
- 15W @ 16, 8 or 4 ohms

RC30 Model

- Four (4) 12AX7 preamp tubes
- Two (2) EL84 power tubes
- One (1) GZ34 rectifier tube
- 30W @ 16, 8 or 4 ohms

Speakers:

- 12-inch Celestion speaker(s), wired for 16 ohm or 8 ohm *(combo versions only)*

Footswitch:

RC15 Model

- 1-button SonicTone footswitch
- 1/4” TRS cable

RC30 Model

- 2-button SonicTone footswitch
- 5-pin active DIN cable

Dimensions:

RC15 Head

- Width: 24 in
- Height: 10.75 in
- Depth: 9 in
- Weight: 28.0 lbs

RC15 1x12 Combo

- Width: 24 in
- Height: 20.75 in
- Depth: 10 in
- Weight: 39.0 lbs

RC30 Head

- Width: 30 in
- Height: 10.75 in
- Depth: 9 in
- Weight: 32.0 lbs

RC30 2x12 Combo

- Width: 30 in
- Height: 20.75 in
- Depth: 10 in
- Weight: 55.0 lbs

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