

# *Bad Cat*

## Black Cat Owner's Manual

Bad Cat Amps  
Costa Mesa, California

For the latest information go to: [www.badcatamps.com](http://www.badcatamps.com). Whilst the information contained herein is correct at the time of publication, due to our policy of constant improvement and development, Bad Cat Amps reserves the right to alter specifications without prior notice.

## IMPORTANT SAFETY INSTRUCTIONS

READ THE FOLLOWING INFORMATION CAREFULLY. SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE! NO USER SERVICEABLE PARTS INSIDE. DO NOT ATTEMPT TO GAIN ACCESS TO THE INTERIOR OF THE PRODUCT. REFER ALL SERVICING TO AUTHORIZED BAD CAT SERVICE CENTERS.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings.
8. Install in accordance with the manufacturer's instructions.
9. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
10. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
11. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Turning off the power switch does not completely isolate this product from the power line so remove the plug from the socket if not using it for extended periods of time.
14. Install this product near the wall socket and keep the power plug easily accessible.
15. WARNING—This apparatus shall be connected to a mains socket outlet with a protective earthing connection.
16. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
17. Do not install this equipment on the far position from wall outlet and/or convenience receptacle.
18. Do not install this equipment in a confined space such as a box for the conveyance or similar unit.
19. Excessive sound pressure from earphones and headphones can cause hearing loss.
20. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
21. This apparatus is for moderate climates areas use, not suitable for use in tropical climates countries.
22. The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
23. No naked flame sources, such as lighted candles, should be placed on the apparatus.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities

## **Introduction**

Congratulations and thank you for purchasing a tube amplifier from Bad Cat. As with all Bad Cat products, your amplifier is designed from the ground up to provide the very best tones possible in a rugged, reliable package. Each one of our models is constructed with Bad Cat's commitment to making the highest quality amps, designed and built in Costa Mesa, California. Our users benefit from our passion every time they plug in and crank up their favorite Bad Cat amp. Since we also play what we build, it is truly gratifying for the Bad Cat Team to be a part of bringing each amp to life and welcome you to the Bad Cat den.

## **Features**

The lineage of the Black Cat goes all the way back to the original boutique guitar amplifier designed and built in Southern California. It was overbuilt and overspec'd and made to be the sonic successor to one of the most legendary and coveted amps from the early 1960s. Now Bad Cat has gone back to the drawing board. The inspiration for the new Black Cat was to deliver on the original promise. We set out to capture all that is magical about the original designs, all while utilizing modern engineering and manufacturing advances to fit the needs of the modern player.

The new Black Cat features two unique channels with bias-modulated tremolo and studio quality reverb. Channel 1, a more traditional Black Cat sound, is bright and clear without being harsh. It is very responsive, complex in midrange character and delivers the sound you know and expect from this amplifier design. Channel 2 has all of the complexity and chime of channel one but with more gain on tap, while preserving our signature string-to-string note definition.

The new Black Cat is subtle and beautiful. It is an achievement in timeless tone.

Thank you,

The Bad Cat Team

## Front Panel (from left to right)

### Input

Plug your guitar in here. Always use a good quality screened guitar lead.

### Volume 1

Use this to control the amount of Volume/Gain in Channel 1. You can run this control at a lower setting to achieve cleaner sounds or turn it clockwise to get more gain and harmonics. Use this in conjunction with the Master 1 to get the tone you are looking for with the amplitude you need.

### Master 1

Master 1 controls the output level and volume of the amplifier in Channel 1. Use the Volume control to regulate the amount of gain in Channel 1 and control the amplitude with the Master.

### Channel 1 and Channel 2 Toggle Switch

Use this switch to toggle between Channel 1 and Channel 2. This is a footswitchable function. (Note: the footswitch will override this function)

### Volume 2

Channel 2 has considerably more gain on tap than Channel 1. Use this to control the amount of gain or overdrive in your tone. You can run this control at a lower setting to achieve cleaner, less overdriven sounds or turn it clockwise to get more gain and harmonics. Use this in conjunction with the Master 2 to get the tone you are looking for with the amplitude you need.

### Master 2

Master 2 controls the output level and volume of the amplifier in Channel 2. Use the Volume control to regulate the amount of overdrive in Channel 2 and control the amplitude with the Master 2.

### Treble

The Treble control is designed to give you a wide array of tonal options that go beyond a typical guitar tone stack. It is the key element of the tone stack/EQ and in conjunction with the Cut control it determines the overall frequency response of the amplifier. Starting in the noon position gives you a more 'neutral' character. Turning to the right (or clockwise) will scoop out the mids and emphasize the lower and higher frequencies whereas turning it to the left (or counterclockwise) brings punchy mid frequencies forward and decreases higher and lower frequencies.. all that in a well-balanced sonic performance.

### Bass

The Bass knob controls the amount of low frequency in the preamp. In the Black Cat it acts like a post or Mastering-EQ, it doesn't change the character of your tone and regardless of the setting the amp will not get muddy. Counterclockwise decreases the amount of low frequencies and turning the control clockwise will increase the low frequencies.

### Cut

The Cut controls the amount of high frequency roll-off before the power section. Turn the knob clockwise and the high frequency in your tone will soften. Turning the control counterclockwise will allow more high frequencies to pass.

### Intensity (Tremelo)

This controls the amount of intensity of the Tremolo effect. Turning the knob clockwise will increase the amount and relative effect of the Tremolo circuit. Likewise, turning it counterclockwise will decrease the effect.

### Speed (Tremelo)

This controls the speed of the tremolo effect. Turning the knob clockwise will increase the speed of the Tremolo circuit. Likewise, turning it counterclockwise will decrease the speed of the effect.

### Tremolo ON/OFF Toggle Switch

This switch allows you to turn off the Tremolo circuit. (Note: The foot switch will override this function).

## Front Panel (continued)

### Reverb

Controls the wet/dry ratio between the unaffected dry signal and the wet, affected Reverb signal. The Black Cat comes with a huge Reverb trail which works particularly well in conjunction with the Bias Tremolo. Here the Reverb is mixed in parallel to your signal and the FX loop, which allows for some incredible sounds with a simple delay. Turning this control fully counterclockwise will remove the Reverb from the circuit. Turning the control clockwise will gradually increase the amount of Reverb in the circuit. Set it where you feel it suits your playing style and circumstances best.

## Rear Panel (from left to right)

### Power Input

This is where you connect your power cable. Use IEC power cable only. The cable should only be connected to a power outlet that is compatible with the voltage, power and frequency requirements stated on the rear panel.

### Power Switch

When engaged voltage is applied to all internal circuits except for the high voltage for all signal amplifying audio stages.

### Standby Switch

Applies the high voltage to all signal amplifying audio stages.

### HT Fuse

The value of the HT Fuse is specified on the rear panel. Never use a fuse of the incorrect value or attempt to bypass it.

### Footswitch

The supplied 2-button footswitch is connected here. The footswitch enables you to switch between Channel 1 or Channel 2 and Tremolo On/Off.

### FX Loop Send

This output jack sends a -10dB low impedance signal to your effects devices, regardless if it is a pedal, a rack unit or an entire chain of effects. Use a shielded instrument cable.

### FX Loop Return

High Impedance input to the recovery stage of the FX Loop and a direct input to the power amp. This jack disconnects the preamp signal from the power amp when used in case you want to utilize the power amp only. Plug a shielded instrument cable into this jack and connect to the effects.

### Speaker Outputs

There are overall 5 speaker outputs, 1x 16 $\Omega$ , 2x 4 $\Omega$  and 2x 8 $\Omega$ . Both 4 $\Omega$  as well as both 8 $\Omega$  are wired in parallel. In case you want to use two cabinets at the same time, 2x 16 $\Omega$  cabinets should be connected to the two 8 $\Omega$  jacks, 2x 8 $\Omega$  cabinets should be connected to the two 4 $\Omega$  jacks.

NOTE: Always be sure that your amplifier is connected to a proper load or a speaker cabinet before the amplifier is switched on.

### Line Out

Non frequency compensated output with a tenth of the output level to drive post effects or external power amps when running a wet/dry system or a speaker simulation device such as IR loaders.

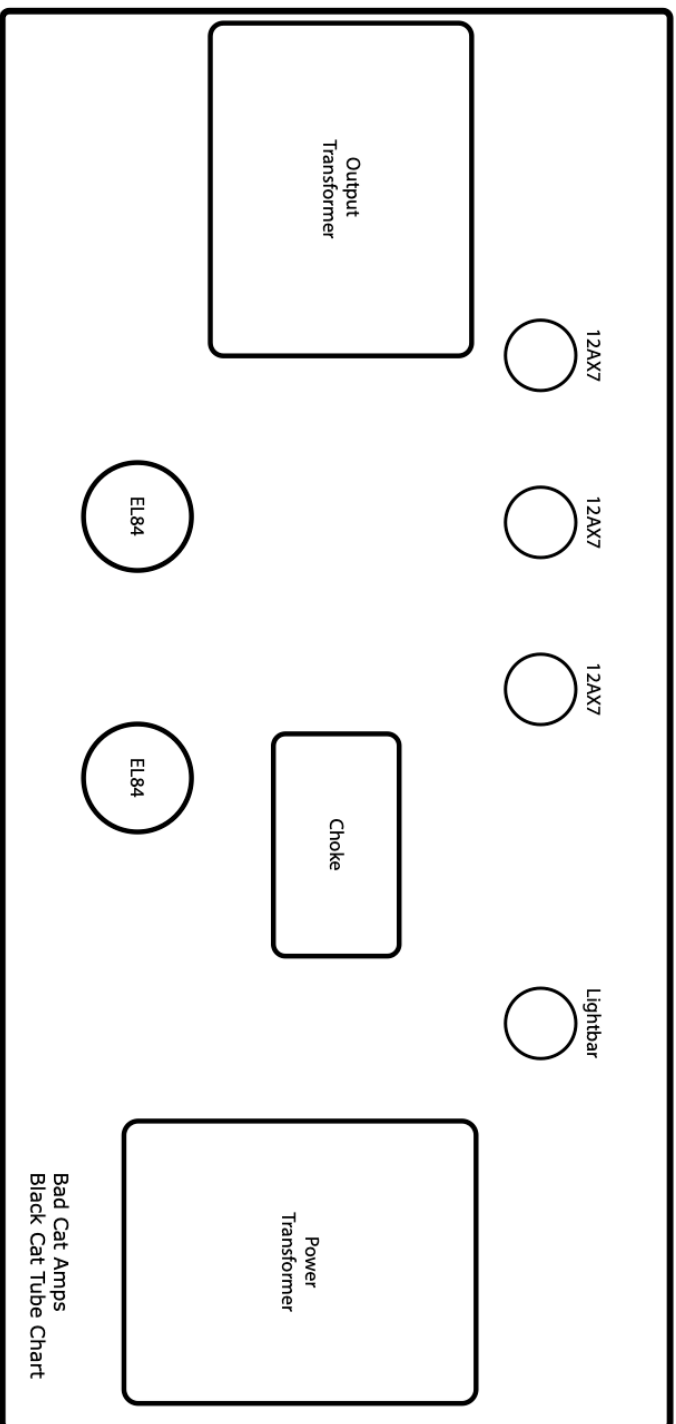
## Bad Cat Black Cat Technical Specifications

- Designed and Built in Southern California
- Custom Hand-wound Bad Cat Transformers
- 20 Watts
- 2 - EL84 Power Tubes
- 3 - 12AX7 Tubes
- 2 Channels
- Independent VOLUME and MASTER per Channel
- Bass, Treble, Cut
- Studio Quality Reverb
- Bias-Modulated Tremolo
- Buffered FX Loop
- Individual Speaker Outputs (16, 2x4, 2x8 ohms)
- Line Out
- Two Button Footswitch: Channel Select and Tremolo
- Baltic Birch Cabinet
- 5-year Limited Warranty
- 20.75" Width x 10.375" Depth x 10" Height (Head Dimensions)
- 31 lbs Head Weight
- 23.75" Width x 10.375" Depth x 19" Height (Combo Dimensions)
- 48 lbs Combo Weight
- Custom UK 12" Celestion speaker (Combo)
- Two Button Footswitch Included

### Bad Cat Manufacturer Warranty

Every Bad Cat amp is backed by a 5 year non-transferable warranty. Registration and proof of purchase is required for Manufacturer's Warranty coverage. To learn about the warranty and to register your amp, please visit [www.badcatamps.com/support](http://www.badcatamps.com/support) and fill out the registration form.

# Black Cat Tube Chart



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