

Bad Cat

Cub Owner's Manual

Bad Cat Amps
Costa Mesa, California

For the latest information go to: 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 Cub was among the original Bad Cat designs - boutique and highly desired, it has been used on countless stages and recording sessions. Its original circuitry was simple and yet extremely versatile, offering punch and chime. It gained up smoothly and set the standard for touch responsiveness, establishing itself as a classic. Over the years, this amp's design has been refined and improved. Every iteration brings something new to the table and our newest Cub is no exception.

A single channel amplifier now with two gain modes, the original Cub circuitry is accessed in the clean mode on this amplifier. In this mode, the Cub is capable of bright chiming, classic clean tones to smooth, touch responsive edge of breakup. Switch the front panel toggle to overdrive mode to engage an additional tube gain stage for more harmonic content and complexity not found on prior Cub models. The new Cub also offers two switchable independent master volume controls that can be preset for lead and rhythm volumes. The Cub has been further expanded by adding a powerful midrange control, studio quality reverb, and a fully buffered effects loop.

You can understand why we are so excited to introduce the new Cub and how hard it was to stop playing it long enough to write this.

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

This controls the overall gain (input volume) of the amplifier's preamp in both the Clean and Overdrive mode. Turning the control clockwise increases the gain and harmonics.

Clean/Overdrive Toggle Switch

This control allows you to run in the Clean mode or engage another tube gain stage to get higher gain tones. Notice that there isn't a large jump in perceived volume as you engage the extra gain stage. This is intentional.

Bass

Controls the amount of low frequency in the preamp. Counterclockwise decreases the amount of low frequency and turning the control clockwise will increase the low frequencies.

Mid

This control is very important in the shaping of the overall amplifier tone. Full counter-clockwise will scoop out the midrange frequencies emphasizing the bass and treble frequencies. Pushing this control clockwise will increase the amount of midrange in the amplifier. It is normal that this control seems to increase the overall volume level of the amplifier when in the more extreme (past noon) settings.

Treble

This control manages the treble frequencies. Turning to the right, past noon will brighten the signal adding more high frequencies and attack. This control is designed so that generally keeping it at the noon position is a good starting point. Turning this control counter-clockwise can also allow in more midrange frequencies.

Presence

The Presence knob is a global control of the higher mid and treble frequencies after the Return stage of your amplifier. Use it to set the overall brightness of your amplifier.

Master 1

The Cub amplifier has two independent master volume controls. These control the overall amplitude and volume of the amplifier. Use the Gain control to regulate the amount of overdrive and control the output level / amplitude with the Master. You can set one Master for rhythm volume and the other for lead solo volumes. This is a footswitchable function.

Master 1 and Master Toggle Switch

You can toggle and activate either of the two Master volume controls using this toggle switch. (This is bypassed when the footswitch is engaged)

Master 2

The Cub amplifier has two independent master volume controls. Like Master 1, this controls the overall amplitude and volume of the amplifier. Use the Volume control to regulate the amount of gain or distortion and control the amplitude with the Master. You can set one Master for rhythm volume and the other for lead solo volumes. This is a footswitchable function.

Reverb

Controls the wet/dry ratio between the unaffected dry signal and the wet, effected reverb signal. Turning this control to full 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 LO or HI mode.

FX Loop Send

This jack sends a -10dB low impedance signal to your effects devices, regardless if it is pedals or rack units. Use a shielded instrument cable.

NOTE: The internal Noise Gate is processing the signal right before the SEND output, so that the trail of time based effects like delay or reverb decay naturally and are unaffected.

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.

NOTE: Signals applied will not be processed by the internal Noise Gate

Speaker Outputs

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

- Designed and Built in Southern California
- Custom Hand-wound Bad Cat Transformers
- 30 Watts
- 2 - EL34 Power Tubes
- 3 - 12AX7 Tubes
- Single Channel
- Clean / Overdrive Mode
- 2 Switchable Master Volumes
- Studio Quality Reverb
- Buffered FX Loop
- Custom UK 12" Celestion speaker
- Two Button Footswitch: Clean / OD and Master One / Two
- Individual Speaker Outputs (16, 2x4, 2x8 ohms)
- Line Out
- 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 and fill out the registration form.

Cub Tube Chart

