

Cameron

A M P L I F I C A T I O N

Cameron CCV-100

Owner's Manual

Version 1.1

CONGRATULATIONS! You've just become the proud owner of one of the world's finest guitar amplifiers. This amplifier has been designed, refined and constructed to deliver maximum musical performance of any style, in any situation. And in order to live up to that tall promise, the controls must be very powerful and sophisticated. But don't fear! Just by following our sample settings, you'll be getting great sounds immediately. And as you gain more familiarity with the CCV's controls, it will provide you with much greater depth and more lasting satisfaction from your music.



REAR PANEL

Power Switch: Turns the amplifier on and off. *Caution: Ensure that the Standby Switch on the front panel is in Standby position prior to powering the amplifier on.*

High/Low: Flip the switch either down (low power) or up (high power). Low power applies approximately 425-450 volts to the power tubes. This makes the amp have a little bit of sag and more pronounced bottom end. High power applies approximately 525-550 volts and will make the amp feel tighter with less give. It is normal for the amp to appear to be louder in low power since the bottom end is more pronounced.

Effects Loop: The CCV comes equipped with a high quality, transparent solid state effects loop. The effects loop is also equipped with an adjustable send level knob. This knob adjusts the send level to help compensate for decreased/increased signals. The loop is located after the preamp and before the power amp. An effects loop is a must if you plan on using “time based effects” like chorus or delay. Use send going to the effects unit, and return from the effects unit.

Midi: The CCV is equipped with midi switching capabilities. The midi switching controls channel switching and the boost. The CCV has an 8 pin midi input.

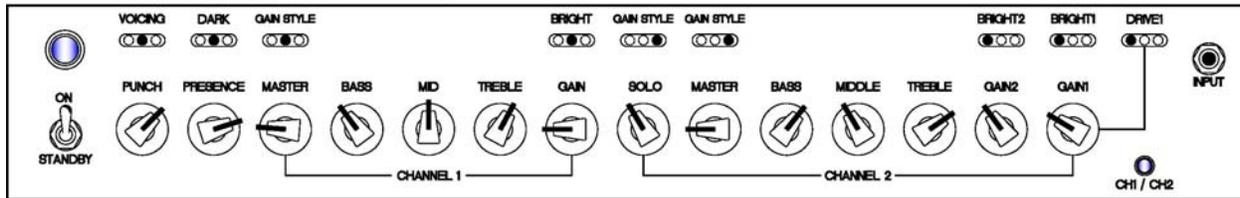
Outputs: The CCV has 3 sets of outputs, one 16 ohm, two 8 ohms and two 4 ohms. Be sure to match the speaker cabinet rating to the appropriate output. You must **ALWAYS** have a cabinet connected before turning on the amplifier.

Line Out: This is a simple feature that offers an adjustable-level signal for driving external slave power amplifiers. Here the signal is derived from the speaker terminal, so a speaker (or load resistor) **MUST** be connected at all times!

A.C Receptacle: The CCV uses a removable IEC type power cord to supply the A.C. power. In The USA, the proper voltage is 117 volts A.C (110-120). Always be sure to connect the CCV to its rated voltage to avoid damaging internal circuitry. Located inside the receptacle is a 4 amp Slo-Blo fuse. Should the fuse blow, replace it with a similar type and rating.

Fuse: The FUSE should be a 2 amp Slo-Blo for use with 100 or 117 volts A.C. Mains. Should the fuse blow, replace it with a similar type and rating.

FRONT PANEL: CCV-100



FRONT PANEL

Punch: The punch is basically a resonance knob. A resonance knob controls the amount of bottom end the amp produces. In simple terms, the resonance works like a low end EQ to offset low end frequency dropout. The 3 position switch located above it changes the tone of the amp resonance. Center is normal/off, the left is slightly darker, but adds a tiny bit of gain and feel. The right is darker yet and really smooth.

Presence: This knob sets up the basic brightness of the overall tone. But unlike a tone control, the Presence acts on the output, not the preamp. The 3 position switch located above it changes the brightness of the amp as well. Center is normal/off, left is slightly dark and right is very dark. If you are looking for a slightly smoother sound, adjust the switch to the left. This setting gets rid of a little bit of the high end, but still cuts. Use the presence and punch 3 position switches together for a really cool tonal variety.

Channel One Controls

Master Volume: This adjusts the overall volume on channel one only. Above the master volume is a 3 position switch which adjusts gain/clipping. The clipping switch adds gain/clipping ala “Jose Master”. The center is low gain /no clipping and the amp will be loud and clean. To the left is mid gain/clipping. To the right is max gain/clipping. Keep in mind that as you add gain/clipping you are clipping the entire signal, so the volume will drop (this is normal). Just adjust the volume up or down to compensate for any changes.

Bass: This knob controls the lower frequencies. Turn it down to lower the bass; turn it up to increase the bass.

Middle: This knob controls the mid-range frequencies. Turn it down to lower the mids; turn it up to increase the mids. The CCV naturally has a lot of mids, so don’t be afraid to set the knob below half way.

Treble: This knob controls the high-end frequencies. Turn it down to lower the treble; turn it up to increase the treble.

Gain: This knob controls the amount of gain on channel one. Turn it down to have low gain, turn it up for more gain. The gain pot has a 3 position switch above it. This switch adds in a treble which adds gain. Center is off, left is the brightest (most gain) and right is less bright (mid gain). Remember that the higher the knob is turned up, the less noticeable the switches become. Keep this in mind when you set the amp for the maximum gain. Since this will allow you to turn back the gain pots to get a more noticeable effect from the switches (for better cut and more articulation). You can roll it back to noon and the amp will still have a lot of gain. Experiment!!

Channel Two Controls

Solo Master: This is simply another master volume on channel two that is switchable. Use it for an increase in volume from the regular master. The solo master also has a gain/clipping switch. Like all of the master volumes on the CCV, the gain/clipping switches that add gain ala “Jose Master”. The center is no clipping and the amp will be loud and clean. To the left is mid gain/clipping. To the right is max gain/clipping. Keep in mind that as you add gain/clipping you are also clipping the signal, so the volume will drop (this is normal). A cool simple trick to do is set the master on mid (left) gain/clipping and the solo master on (right) max gain/clipping and use a foot switch to toggle between them. This way the amp becomes basically 3 channels.

Note: One of THE biggest advantages of having the clipping type gain is the ability to roll back on the guitars volume. Rolling back lowers the input signal and thus cuts the gain and saturation of the amp. The amp will sound very clear and clean. Experiment and watch your friends faces as you go from clean to mean with the turn of the volume knob.

Master Volume: This adjusts the overall volume on channel two only. Above the master volume, as mentioned previously, is a 3 position switch which adjusts gain/clipping. This switch adds gain ala “Jose Master”. The center is low gain/no clipping and the amp will be loud and clean. To the left is mid gain/clipping. To the right is max gain/clipping. Keep in mind that as you add gain/clipping you are also clipping the signal, so the volume will drop (this is normal). Just adjust the volume up or down to compensate for any changes.

Bass: This knob controls the lower frequencies. Turn it down to lower the bass; turn it up to increase the bass.

Middle: This knob controls the mid-range frequencies. Turn it down to lower the mids; turn it up to increase the mids. The CCV naturally has a lot of mids, so don’t be afraid to set the knob below half way.

Treble: This knob controls the high-end frequencies. Turn it down to lower the treble; turn it up to increase the treble.

Gain 2: This knob controls the amount of gain on channel two and works in conjunction with Gain 1. Turn it down to have low gain, turn it up for more gain. The gain pot has a 3 position switch above it. This switch adds in treble which adds gain. Center is off, left is the brightest (most gain) and right is less bright (mid gain). Remember that the higher the knob is turned up, the less noticeable the switches become.

Gain 1: This knob controls the amount of gain on channel two and works in conjunction with Gain 2. Turn it down to have low gain, turn it up for more gain. The gain pot has a 3 position switch above it. This switch adds in treble which adds gain. Center is off, left is the brightest (most gain) and right is less bright (mid gain). Remember that the higher the knob is turned up, the less noticeable the switches become. Note: Use Gain 1 and Gain 2 together to get a myriad of gain options. Set one high, one low, set one switch to the left, one to the right, both on, both off, etc. Remember that the higher the knob is turned up, the less noticeable the switches become. Keep this in mind when you set the amp for the most gain. When adding gain (via the gain/clipping switches above the masters), turn back the gain pots to get a more noticeable effect from the gain switches (for better cut and more articulation). You can roll them back to noon and the amp will still have a lot of gain. There is no right or wrong way to set these knobs or switches. If it sounds good, it is good. Have fun and experiment!!

Channel 1 / Channel 2 toggle switch: This 2 position switch allows you to toggle between the two channels without the need of a foot switch. Note that this switch is bypassed when a foot switch is connected in the back of the amp.

Gain Voicing: This is the 3 position switch located under the channel toggle switch. This switch changes the voicing on channel 2 only. Center is the least amount of gain. To the right, the sound is mid gain, but the bottom end gets really big. To the left is max gain. Remember that using max gain, the amp will be slightly dark and have a big bottom end. Don't be afraid to tinker with the switch. A really cool thing to do is set the switch for mid or low gain and use a pedal. It seems to change the entire amp into something different. On low gain settings you will notice that the switch seems to add a little mid-range.

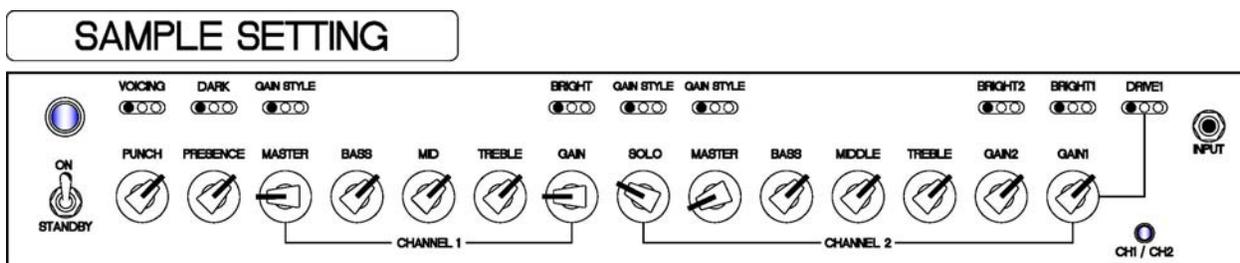
Input Jack: This is the location for the input of the guitar jack.

Tubes: The CCV is a tube amp and requires the use of both preamp and power tubes. Over time, tubes will wear out and will need to be changed. The preamp and power tubes can be changed any time you notice the amps tone starting to degrade (depending on how often it is used), the power tubes will need to be properly biased in order to function correctly. IF you are not sure how to bias an amp, take it to a tech.

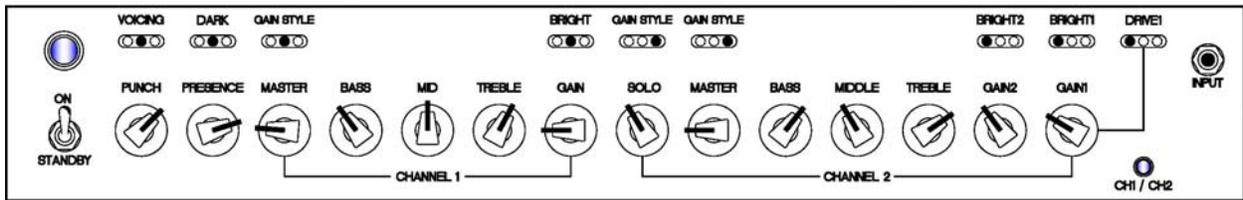
WARNING: Amplifiers contain lethal voltages and care should be used when changing the power tubes. All of the preamp tubes are 12AX7 / ECC83 types. All of the power tubes are EL34 / 6CA7 / KT77 types.

Sample Settings

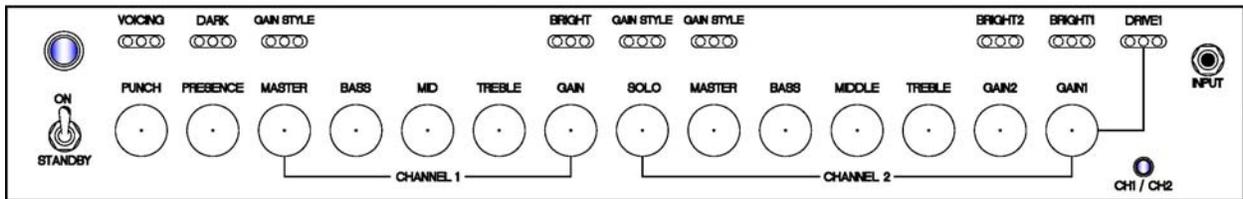
On the entire amplifier, set all of the knobs to approximately 2 o'clock, master volumes low and **all** switches to the left. Start with channel two and adjust the volume while playing to get something you like. At this point adjust the bass, mids and treble knobs to your liking. Next adjust the punch and presence to your liking. Try adjusting the 3 position switches back and forth to get familiar on how they interact with the amps tone. Now adjust the 3 position switch over the master volumes to the right. You should notice an increase in gain and a decrease in volume. This decrease in volume is normal and you will need to turn up the amp to compensate. Repeat the same procedures with channel one. After playing and adjusting the knobs and switches above the knobs, try adjusting the 3 position voicing switch near the input of the amplifier. Take your time to get a full understanding how the switch changes the voice of channel 2.



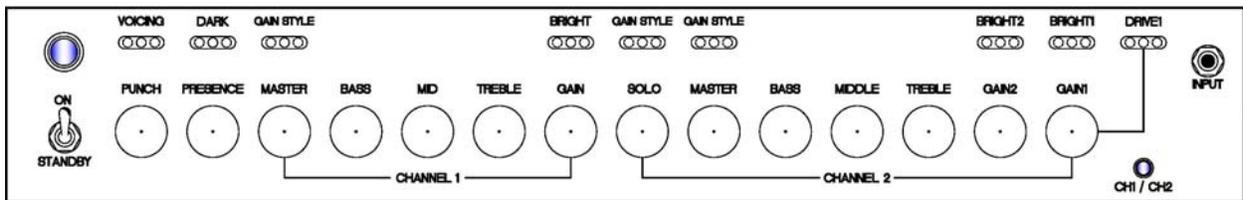
DESCRIPTION: CH2 - HEAVY CRUNCH FOR BRIGHT GUITARS/SPEAKERS



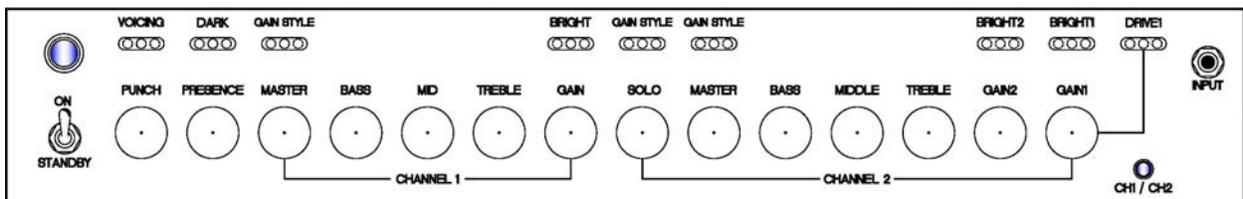
DESCRIPTION: _____



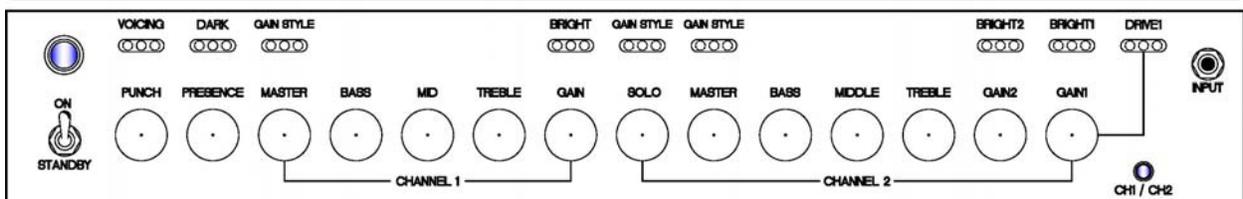
DESCRIPTION: _____



DESCRIPTION: _____



DESCRIPTION: _____



IMPORTANT SAFETY INSTRUCTIONS

- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings.
- 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 is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 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.
- To ensure proper ventilation always make sure there is at minimum four inches (101.6mm) of space behind the rear of the apparatus. The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- Do not impede ventilation by placing objects on top of the apparatus which extend past the rear edge of its cabinet. No open flame sources, such as lighted candles, should be placed on the apparatus.
- The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The AC plug is the mains disconnect. The plug should remain accessible after installation.

WARNING: Always make sure proper load is connected before operating the amplifier. Failure to do so could pose a shock hazard and may result in damage to the amplifier.

WARNING (EU): Permission from the Supply Authority is needed before connection. Do not expose amplifier to direct sunlight or extremely high temperatures. Always insure the amplifier is properly grounded. Always unplug AC power cord before changing fuse, tubes or removing chassis. Use only same type and rating when replacing fuse. Avoid direct contact with heated tubes. Keep amplifier away from children. To avoid damaging your speakers and other playback equipment, turn off the power of all related equipment before making the connections. Do not use excessive force when handling buttons, switches and controls. Do not use solvents such as benzene or paint thinner to clean the unit. Always connect to an AC power supply that meets the power supply specifications listed on the rear of the unit. Make certain grounding conforms to local standards.

YOUR AMPLIFIER IS LOUD! EXPOSURE TO HIGH SOUND VOLUMES MAY CAUSE PERMANENT HEARING DAMAGE!

Your Cameron Amplifier is a professional instrument. Please treat it with respect and operate it properly.

Contact: Brad King
Email: Brad@CameronAmplifiers.com
Direct: 401-932-5464

Cameron Amplification
5419 Cleon Ave.
North Hollywood, CA 91601