

V3M

V3M ★ V3MC



3 Channel ★ 50w ★ All-Tube ★ Reverb ★ Micro Amp



BEST GEAR GURUZ
of **NAMM**
2011
Best Overall Product

MADE IN
USA

CARVIN



KEY FEATURES AT A GLANCE

3 channels
All-tube - 12AX7 & EL84
Master Volume - Variable Boost

Reverb - Effects Loop
50w, 22w, 7w - switchable
19lb, 15" W x 8.5" D x 7" H

TECHNICAL DESIGN OF THE V3M

The **V3M** design criteria was to build a high performance 3-channel tube guitar amplifier in a compact, yet powerful package. The **V3M** has the ability to produce ultra-high gain and bass heavy sounds with the flexibility to cover all playing styles. The **V3M** utilizes new ideas built upon proven tube amplifier technology with an extensive set of features.

FLEXIBLE GAIN STRUCTURES

Each channel of the **V3M** offers three different gain modes that change the way the amp reacts to your playing. Different preamp frequencies are enhanced, giving each setting a different character. Unlike other 3-channel amps, the **V3M** allows you to set-up both overdrive channels alike, then change settings to achieve mild or drastic differences between the two channels.

tone controls and EQX

The passive BASS, MID, TREBLE tone controls offer a wide range of tone settings. The greater range of these controls comes from the use of high impedance 1 meg sealed controls. The EQX switch on each channel takes it one step further, offering a second range of tones to control by shifting the frequencies affected by the tone controls. The PRESENCE control is designed to adjust the "edge" on your sound. It's range allows for super-smooth warm sounds at lower settings or turn it up to cut through.

BUILT IN REVERB

The **V3M** reverb is custom designed for a lush, natural sound. The "long tail" switching system turns off only the send to let the reverb to decay without being cut off.

GIVE YOURSELF A BOOST!

A switchable volume boost is available by footswitch. Set the amount of boost with the BOOST LEVEL control. When turned on, it will boost your amp's output up to 6dB for solos or any time you need to stand out in the mix.

EL84 POWER TUBES

Your amp is equipped with EL84 power tubes because of their unique and responsive tone. The characteristics of these power tubes respond to the wide dynamic range of guitar playing. These tubes react to the touch. If you play soft the tubes remain clean and if you increase your attack they respond accordingly.

HIGH IMPEDANCE GUITAR INPUT

Carvin has long known about the effects of mis-loading a guitar pickup, which can cause high frequency loss. The **V3M** guards against this loss with its ultra high input impedance. We also considered the capacitance of the average shielded guitar cable which can reduce the high frequency response of your guitar pickups. Unlike other amplifiers, we purposely avoided adding capacitance in the preamp to control high frequency oscillations. Instead, we controlled oscillations through careful component layout and lead placement allowing its shimmering highs to be reproduced.



The **V3M** was awarded Gear Guru's Best of NAMM 2011 "Best Overall Product" because of its 19Lb compact size, features and it nails "Country", "Blues", "Jazz" and "Metal" tones. Its powerful 50 watts easily drives a 4-12 half stack while its 7 and 22 watt setting delivers sweet saturation at lower levels.

Each channel incorporates its own character drive switches "Bright to Soak" on the clean channel and "Thick" to "Intense" on the dual distortion channels. Lush Reverb, Effects Loop and Variable Boost are features not found in other micro amps. Never before has there been so much tone and power from a micro amp.

RECEIVING INSPECTION—read before getting started

INSPECT YOUR AMP FOR DAMAGE which may have occurred during shipping. If damage is found, please notify the shipping company and CARVIN immediately.

SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. CARVIN and the shipping company are not liable for any damage caused by improper packing.

SAVE YOUR INVOICE. It will be required for warranty service if needed in the future.

SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring.

RECORD THE SERIAL NUMBER on the enclosed warranty card or below on this manual for your records. Keep your portion of the card and return the portion with your name and comments to us.

V3M HEAD & V3MC COMBO SPECIFICATIONS:

RMS Power:	50, 22 or 7 watt "plate voltage" switch
Output Impedance:	4, 8 or 16ohm switch
Input Impedance:	220,000 ohms
Channel Tone Controls:	BASS, MID, TREBLE, PRESENCE, EQX
Ch 1 Sensitivity:	1mV for clipping
Ch 2 Sensitivity:	1mV for clipping
Ch 3 Sensitivity:	16mV for full output
FS44L-V3M Footswitch:	CH3, CH1/2, Reverb and Boost
Voiced Line Out:	-25dB from speaker output
Preamp Tubes:	4 - 12AX7's (dual stage)
Power Amp Tubes:	4 - EL84 (power pentode)
AC Power:	120 or 240 VAC, 50/60Hz, 150VA, 3A fuse
Size:	inches (mm) WxHxD/ Net Weight

V3MC Combo:	7-ply hard wood enclosure
V3MC Speaker:	12" Carvin GT12 or optional Celestion™ Vintage 30, 8 ohm
Warranty:	One Year
Country of Mfg:	Made in USA
Options see facing page:	- CBV3M (padded carry bag for V3M head)

	- CV3M3 (vinyl cover for V3MC combo)
	- FS44L-V3M LED footswitch - CH3, CH1/2, Reverb and Boost
	- 112V (matching 1x12 convertible speaker cabinet)
	- 212V (matching 2x12 convertible speaker cabinet)
	- 412VT or 412VB (matching 4x12 speaker cabinets)
	- V3MRP (rackmount brackets for V3M head - 4U)



INTERNAL LED LIGHTS - BLUE OR RED



12AX7 PREAMP TUBES
EL84 POWER TUBES



FS44L-V3M FOOTSWITCH



CBV3M GIG BAG



212V SPEAKER CABINET
OPEN OR CLOSED BACK



112V SPEAKER CABINET
OPEN OR CLOSED BACK



OPTIONAL SPEAKER:
CELESTION VINTAGE 30



V3MC
STANDARD BLACK

V3MC
PYTHON SNAKESKIN



CABINET COLORS

For your records, you may wish to record the following information.

Serial No. Invoice Date

V3M/V3MC FRONT & REAR PANEL CONTROLS

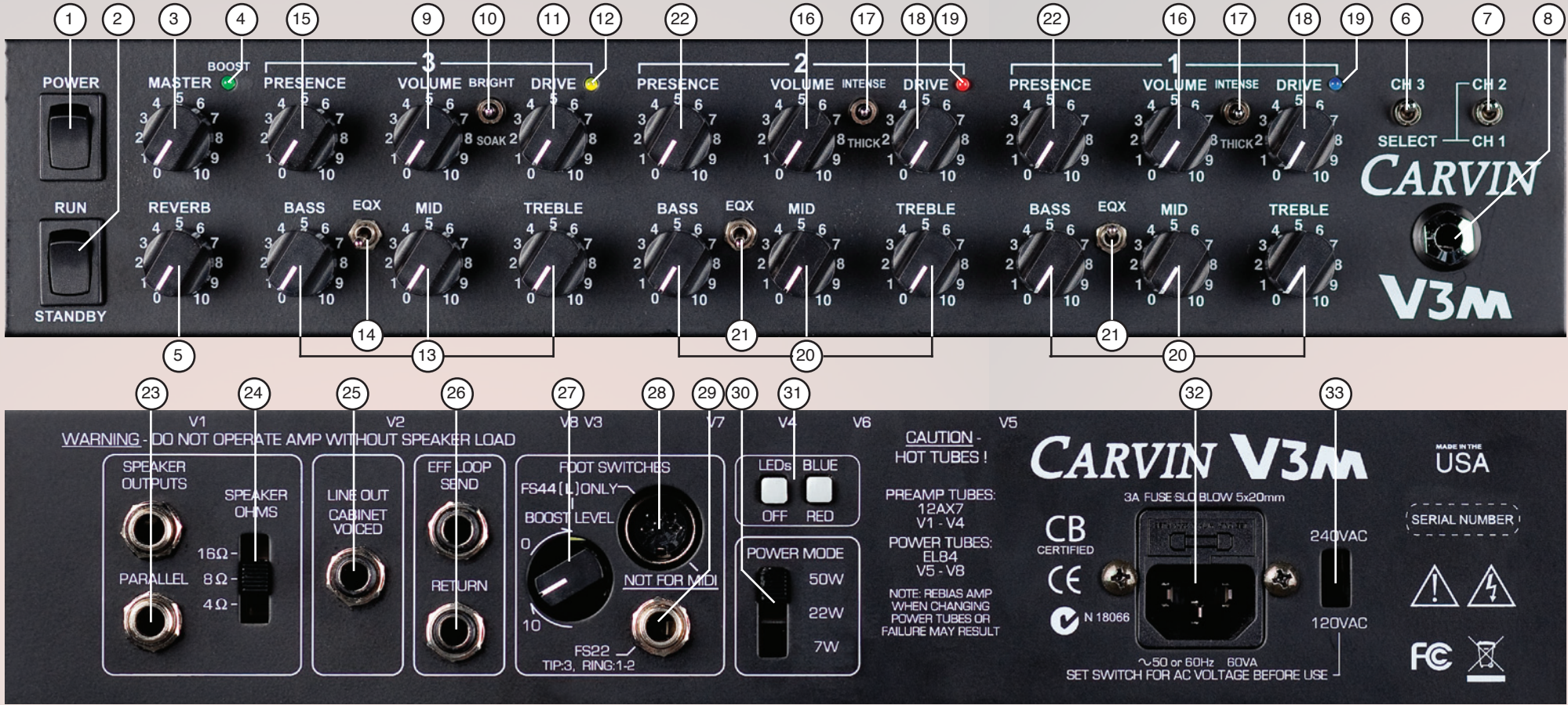
GETTING STARTED QUICKLY

FIRST, set the 120v/240v AC SWITCH for the proper AC voltage.

If you are like most players, you probably want to plug in your new amp and get started. You can read the rest of the manual later to learn the finer points of operating your amp. In order to get started, you will need your V3M amp, a 120V or 240V AC grounded power outlet, your instrument, a standard guitar cable, a speaker cable and speaker cabinet.

Plug in your speaker and set the “SPEAKER OHMS” switch to match your speaker. If you have the FS44L-V3M footswitch, plug it into the rear 5-pin footswitch jack. Turn all volume controls OFF.

Now, plug in your guitar and turn the POWER switch ON. Wait 60 seconds for the tubes to warm up, then set the STANDBY switch to RUN. The amp will be ready to play. Gradually raise the channel volume and master volume control and re-adjust the tone controls to your liking.



V3M on 112V 8 Ohm cabinet
(convertible for open/closed back)
Set V3M Speaker Ohms switch to 8 Ohms



V3M on 212V 8 Ohm cabinet
(convertible for open/closed back)
Set V3M Speaker Ohms switch to 8 Ohms

FRONT PANEL

1. POWER SWITCH

The POWER switch is to be utilized as the master ON/OFF switch. As the amp is turned ON, one of the 3 channel LEDs will illuminate as your ON indicator. The Boost LED or the V3M internal cage LEDs may also light.

2. STANDBY/RUN SWITCH

After turning the POWER switch ON, wait 60 seconds or more for the tubes to warm up - then set the STANDBY switch to RUN.

When turning the amp OFF, set the switch to STANDBY first, then shut off the POWER switch. Use the STANDBY switch if you are taking a break. This turns the high voltage off, increasing the life of your power tubes while keeping the power and preamp tube filaments ON for immediate use.

MASTER SECTION

3. MASTER VOLUME

The MASTER controls the output of all 3 channels and effects. Once your individual channel levels are set up and balanced, use the MASTER to change your overall volume.

4. BOOST LED

The GREEN LED will light when the BOOST function is ON. Without the FS44L-V3M footswitch the BOOST is left ON, acting as an effect loop return level. This function can only be turned off/on through the FS44L-V3M footswitch (see 27 & 28). Use the rear panel BOOST LEVEL to add up to 6 dB of volume boost

5. REVERB LEVEL

The REVERB control affects the amount of reverb for all channels. The reverb may be remotely turned off from the FS44L-V3M footswitch.

CHANNEL SELECTION

The LEDs next to each channel's DRIVE control indicate which channel is functioning. To use a footswitch, set both Channel Select Switches to the UP position.

6. CHANNEL 3 SELECT SWITCH

The CH3/SELECT switch engages/disengages Channel 3. Switch to up position (CH3) to play CH3, set to down (SELECT) to disengage CH3 and to use CH1/CH2. Switch to the up position when using a footswitch.

7. CHANNEL 1/2 SWITCH

The CH1/CH2 sets which channel will be active when CH3 is set to SELECT. Leave in the up position when connecting a footswitch.

8. GUITAR INPUT

A standard 1/4" input jack feeds all channels through the SELECT switches. Use a professional quality guitar cord no longer than 25 feet. Typical cable capacitance should be under 50pf—the longer the cord, the greater the capacitance (you can measure this with a capacitance meter). A long cable with high capacitance will reduce the overall treble response from your pickups.

CHANNEL 3 (CLEAN)

9. VOLUME

Switch to Channel 3 for “clean” playing. Adjust the DRIVE and VOLUME controls together to set the level for this channel.

10. DRIVE MODE 3-POSITION SWITCH (CH3)

The switch labeled BRIGHT/SOAK is a 3-position switch that changes the gain structure of the channel. There are three choices of drive styles:

- “BRIGHT” - adds a high end snap to the preamp, this is ideal for funk, country or blues.

- “CLASSIC” - (center) A classic, open clean sound with lots of headroom. Turning up the DRIVE adds harmonics and mild compression. This is ideal for clean jazz, blues and general rhythm.

- “SOAK” - boosts all preamp frequencies. As the DRIVE is turned up, a vintage crunch is available when played hard. This is ideal for aggressive blues and rock rhythm.

11. DRIVE CONTROL

For the cleanest sounds with the most headroom, set the DRIVE control below “5”. As the DRIVE is turned up, tube dynamics and harmonics are introduced to your sound. Different sounds can be achieved by setting the DRIVE MODE (Intense/Thick) switch.

12. LED CHANNEL 3 INDICATOR

The Yellow LED will illuminate when CHANNEL 3 is selected.

13. BASS, MID, TREBLE

You can start at 5 on the dial for each of the tone controls. However, these settings do not represent a normalized (flat) sound. You need to set them where they sound best. If your sound is too bright, you may want to reduce the PRESENCE control.

14. EQX SWITCH

Toggle between standard EQ and Expanded EQ. This switch opens a wider frequency range for the TREBLE, MID and BASS. This provides an expanded EQ range.

15. PRESENCE

For added clarity, the CH 3 PRESENCE controls only the highest guitar harmonics in the 5-10k Hz range. Careful adjustment with the TREBLE control makes this feature even more useful.

CHANNELS 1 & 2 (OVERDRIVE)

The V3M features extensive tone and drive shaping for each channel. Unlike most 3-channel amplifiers, the V3M allows you to set both overdrive channels to start with the same sound, then change the controls to get mild or drastic differences between the two channels.

16. VOLUME

Set the volume of the channel to be used. The level of signal coming out of the EFFECT SEND will also change. To change the volume of all channels without upsetting the balance between the 3 channels, use the MASTER volume control.

17. DRIVE MODE 3-POSITION SWITCH (CH1&2)

The switch labeled INTENSE/THICK is a 3-position switch that changes the gain structure of the channel. This provides three choices of distortion styles:

- “INTENSE”- the most gain and sustain with excellent picking articulation. The low-end is deep and percussive. Mids and highs smoothly blend and still cut through. Turning up the DRIVE adds more sustain and saturation.

- “CLASSIC”(center)- rich overdrive with a dynamic response. Turning up the DRIVE knob adds sustain and harmonics.

- “THICK”- designed with a massive low-end, textured mids and blistering highs. Turning up the DRIVE knob adds sustain to the highs and fuller low-end harmonics.

18. DRIVE CONTROL

For mild tube saturation, set the DRIVE control below “4”. For more harmonics and dynamic playing, set the control between 4 & 6. For full blown overdrive, set the control between 6 and 10 (your guitar volume should be turned all the way up).

Because the V3M has been “Hot Rodded” with so much gain in the DRIVE control, you may encounter feedback. If feedback is a problem, reduce the DRIVE or move the guitar to the side or away from the speaker(s).

19. LED CHANNEL INDICATORS

The blue LED will illuminate when channel 1 is selected.

The red LED will illuminate when channel 2 is selected.

20. TREBLE, MID, BASS CONTROLS

To start off with, set the BASS, MID & TREBLE controls at their center (5) position. These controls are to be set according to the type of sound you want. Try adjusting the PRESENCE control also when adjusting the treble.

21. EQX

Toggle between standard EQ and Expanded EQ. This switch opens a wider frequency range for the TREBLE and BASS providing an expanded EQ range to work with.

22. PRESENCE

Each channel features a PRESENCE control for added clarity. It's frequency range is from the mid to high range of the tonal spectrum. Careful adjustment with the TREBLE control will make this feature very useful.

REAR PANEL

23. SPEAKER OUTPUT JACKS

Two 1/4" SPEAKER JACKS are featured to allow use of several speaker systems at the same time. Calculate the total speaker impedance based on parallel wiring as the speaker jacks are wired in parallel.

24. SPEAKER IMPEDANCE SWITCH

The IMPEDANCE SWITCH offers the selection of 4 ohm, 8 ohm or 16 ohm to match your speaker system. The correct setting for two 16 ohm speakers or cabinets would be 8 ohms. The correct setting for two 8 ohm speakers or cabinets would be 4 ohms. Select the proper impedance. Download Carvin's Free Impedance Calculator App for iPhone available in the Apple App Store.

25. LINE OUT

The LINE OUT 1/4" jack is for connecting to power amps or mixers. This output is “Cabinet Voiced” to prevent excessive bass or treble going to your mixer. This greatly aids in sound quality because you do not have to make extreme adjustments to your mixer EQ. The output level is -25dB less than the speaker output and designed to drive any professional mixer or power amp.

26. EFFECT LOOP

Effect Loop is a series loop. This means it sends all signals through your processor. To use the Effect Loop, plug the INPUT of your effects into the SEND jack and the OUTPUT of your effects into the RETURN jack. Use shielded cables, not speaker cables. Make sure to adjust your processor levels so that it's input is not being overdriven. Adjust the processor MIX setting to your liking. If your processor has a “Direct signal ON/OFF” setting, it is usually better to turn it ON.

27. BOOST LEVEL CONTROL

Use the rear panel BOOST LEVEL to add up to 6 dB of volume boost for solos. This function can be only turned off/on with the FS44L-V3M footswitch. Without the FS44L-V3M footswitch, the BOOST is left ON. In this case, the BOOST LEVEL affects the volume of the amp acting as an effect loop return level. The front panel GREEN LED will light when the BOOST function is ON.

28. FS44L-V3M FOOTSWITCH JACK

To use this footswitch, set the front panel Channel Select switches to the UP position (see #6&7).

- The CH3 footswitch LED will show CH3 is ON and CH1&2 are off.
- The CH1-2 footswitch LED ON will show CH2 active when CH3 is turned off.
- The CH1-2 footswitch LED OFF will show CH1 active when CH3 is turned off.

DO NOT use MIDI devices in this jack. Other footswitches will not work.

29. FS22 FOOTSWITCH JACK

To use this footswitch, set the front panel Channel Select switches to the UP position (see #6&7). The switches on the FS22 footswitch will control the CH3 and CH1-2 switching. Most foot pedals with 2 switches and a stereo plug will work.

30. POWER MODE SWITCH (OUTPUT)

For maximum output power and dynamics, set the power selector switch is set to 50W. For early tube saturation at lower level playing, move this switch to the 22W or 7W settings. The volume reductions will be 3dB and 6dB.

31. LED LIGHTING

These switches control the LED accent lighting inside the V3M/V3MC. The LEDs can be set to RED, BLUE or OFF.

32. V3M/V3MC CHASSIS

As with any power tubes in an all-steel chassis, the chassis will become hot. This will cool down when the amp is placed on STANDBY when not used.

32. AC POWER & FUSE

Make sure the cord is securely inserted into the back of the unit. Plug the cord into a grounded “3” prong” power source. No attempt should ever be made to defeat or use the amp without the ground connected. The fuse is located inside the AC power cord receptacle. If the fuse blows, unplug the amp and check the AC power connection, your speaker connection and all tubes. Replace the fuse with the same type. If replacing the fuse does not restore the amp to working order, check the power tubes. See Help Section below. If no problem is found and the fuse blows again, your amp may need service.

33. AC VOLTAGE SWITCH (120V/240V)

It is very important to verify the proper setting before plugging the amp in. This switch sets the amp to use either 120VAC or 240VAC ranges from the wall socket. An improper setting may cause a blown fuse or other damage. The V3M will not require re-biasing if used at 50 or 60Hz, or if the AC voltage switch is changed for travelling to different areas of the world.

HELP SECTION

A) FEEDBACK FROM THE LEAD CHANNEL

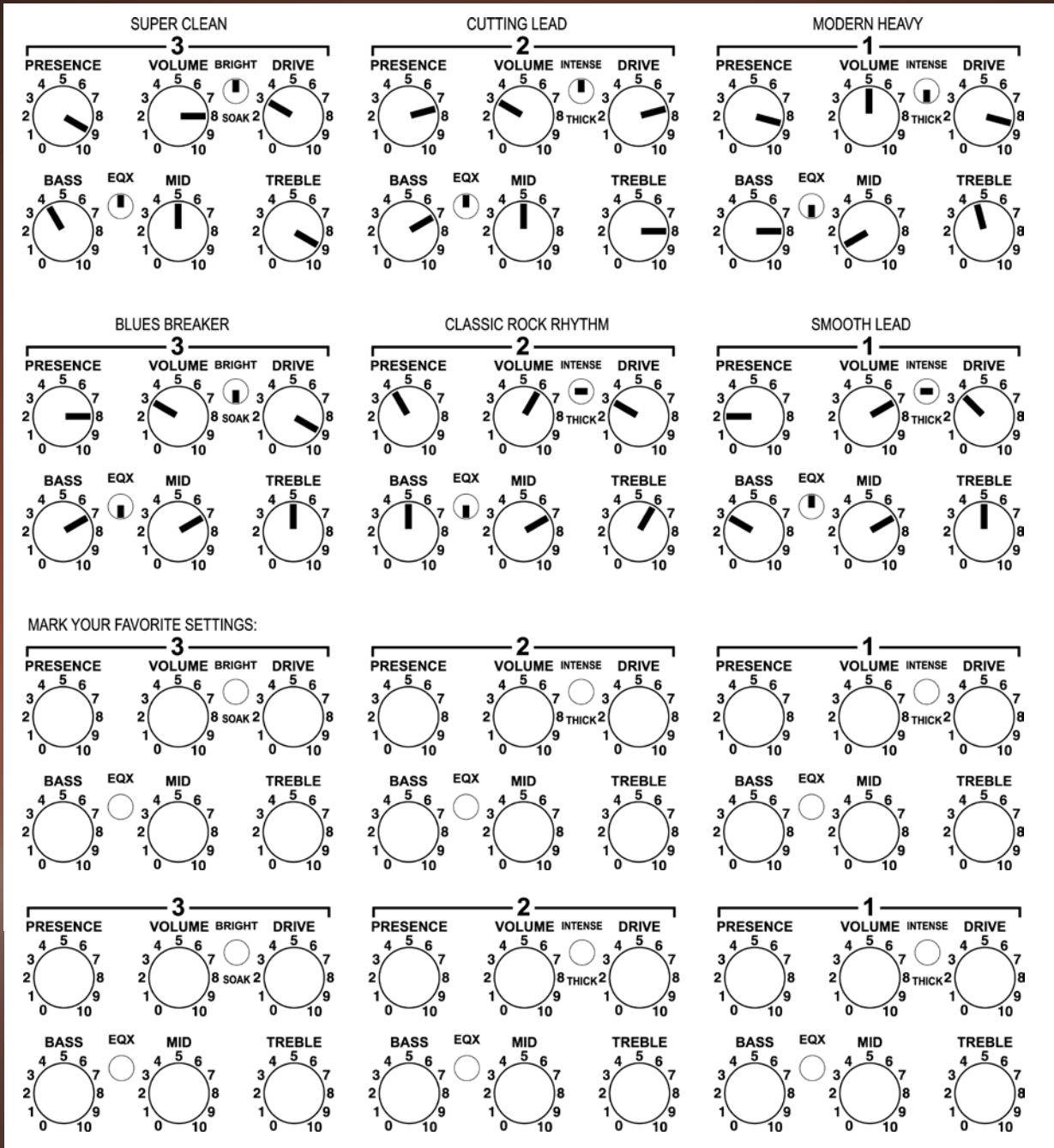
The V3M may feedback when the VOLUME, DRIVE, TREBLE and PRESENCE are turned all the way up. Like other high-gain tube amps, this is normal. To help control feedback and noise, reduce the DRIVE control or move the guitar to the side or away from the speakers. Sometimes replacing V1 or V2 (12AX7A) can help reduce feedback.

B) TUBE REPLACEMENT GUIDE

It is not uncommon for tubes to malfunction during shipping or after a long period of time. If your amp is not working properly, please refer to the following replacement guide.

- 1) The 12AX7A preamp tubes are the shorter tubes and are located in the following order on your chassis:
V1, V2, V3, V4. Replace the tubes if your amp does not work or sounds muddy or dull. V1 is located closest to the guitar input and is the input tube affecting all channels. V2 is the main drive tube for channels 1&2. Replacing V3 will correct problems with channel 3 and the effect return. Replace V4 if no output is heard when putting a signal through the effect return.
- 2) If there is no output after replacing the preamp tubes, or if the fuse blows, try replacing the EL84 output tubes. The amp should be rebased by a qualified technician after replacing the output tubes. Set to **80mA** across the standby switch (with switch off).
- 3) If the AC fuse should blow and turn the amp off, try replacing the power tubes. One of these tubes might be faulty.

QUICK REFERENCE SETTINGS



For more reference settings, watch the V3M videos



Videos with Steve Fister
CARVIN
CHANNEL
carvinchannel.com

Scan this with your mobile
device using a QR code app to
view all V3M videos



FAQ

Q: Where can I hear or see a demo of the V3M/V3MC?

A: Carvin has 3 videos and 1 audio clip available.

3min video is a quick overview with short sound samples in 50w mode.

8min video covers the V3M head in 50w mode and has an example of each channel.

15min video covers the entire amp in 50w and 7w mode plus also covers the 112V cab and V3MC combo as well as footswitch functions.

Audio clip used 22w mode and is ONLY available at Carvin Channel.com
Videos are available at CarvinChannel.com and Youtube.com.

Q: Can I rackmount the amp and what size rack will I need?

A: Yes with Carvin's V3MRP and will require a 4U rack case.

Q: Can I use the V3M without a footswitch?

A: Yes, you can manually switch channels on the front panel. To switch Reverb and Boost the FS44L-V3M footswitch is required. Without the footswitch connected, Boost and Reverb remain on. Use the Reverb and Boost level control to turn off.

Q: Can I use a different Carvin Footswitch?

A: The FS44L will work but is not labeled to match the V3M functions.

The FS44 will work but does not have LED indicators on the pedal, and is not labeled to match the V3M functions.

The FS22 will work but will only switch channels, switching between CH1/2, and CH3 on/off.

Q: Can I install different model tubes such as 6L6/5881?

A: The V3M is only designed for EL84 power tubes. Replace preamp tubes with 12AX7.



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.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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



IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: The product should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

POWER SOURCES: The product should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.

GROUNDING OR POLARIZATION: Precautions should be taken so that the grounding or polarization means of the product is not defeated.

POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

SERVICING: The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

SAFETY INSTRUCTIONS (EUROPEAN)

The conductors in the AC power cord are colored in accordance with the following code.

GREEN (YELLOW)—Earth WHITE (BLUE)—Neutral BLACK (BROWN)—Hot
U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

LIMITED WARRANTY - International Customers

CARVIN products are warranted against defective materials and workmanship for ONE(1) YEAR. DCM & HD Series power amps, active and passive LOUDSPEAKERS are warranted for THREE (3) YEARS. GUITARS, BASSES and COBALT SERIES have a FIVE(5) year warranty. TUBES shipped with amps, WIRELESS SYSTEMS & SPEAKER COMPONENTS (purchased as individual parts) are warranted for 90 DAYS.

The Limited Warranty will be void (does not cover) under the following conditions: a) any modified product, b) speakers with burnt, damaged or open voice coils, c) moisture, d) salt/smoke/contaminants, e) natural disasters, f) accidents, g) abuse, h) lack of reasonable care, or i) damaged caused to speakers or horn drivers caused by this unit. This warranty is in lieu of all other warranties expressed or implied. No representative or person is authorized to represent or assume for CARVIN any liability in connection with the sale of servicing of CARVIN products. CARVIN shall not be liable for incidental or consequential damages.

CARVIN will provide service and parts through the CARVIN DISTRIBUTOR or AUTHORIZED REPAIR CENTER IN YOUR COUNTRY at no charge providing the CUSTOMER includes "proof of purchase" (receipt or invoice) and the unit is shipped in original carton to the CARVIN DISTRIBUTOR or AUTHORIZED REPAIR CENTER IN YOUR COUNTRY.

For service, visit www.carvinworldservice.com and complete the "RMA Repair Form".

HELP/ MAINTENANCE

1) PRODUCT WILL NOT TURN ON - Check the power to the product (circuit breakers, ext. cords, etc.). Check the product's fuse. The product may be OK but occasionally a fuse may blow because of high AC voltage surges. If the proper fuse fails continuously, the product may require servicing.

2) KEEP YOUR PRODUCT LOOKING NEW - Use a damp cloth to wipe the controls on the front & rear chassis panels. Wipe vinyl coverings with a damp cloth.



CAUTION
RISK OF ELECTRIC SHOCK

REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL! THIS UNIT CONTAINS HIGH
VOLTAGE INSIDE!



CARVIN

Where made in the USA matters



12340 World Trade Drive, San Diego, CA 92128
carvinworld.com