Congratulations on your purchase of the V3 all tube amplifier. Carvin has been building tube guitar amplifiers since 1949. They have been used by top professionals like Frank Zappa, Steve Vai, Craig Chaquico, Allan Holdsworth, and other great musicians. You will discover that these amplifiers represent a significant sound improvement over conventional amplifiers. Spend time with your new V3 and get to know its many sounds.

TECHNICAL DESIGN OF THE V3

The V3 design criteria was to build a high performance 3-channel guitar amplifier with an all-tube signal path. The V3 has the ability to produce ultra-high gain and bass heavy sounds with the flexibility to cover all playing styles. The V3 utilizes new ideas built upon proven tube amplifier technology with an extensive set of features.

FLEXIBLE GAIN STRUCTURES

Each channel of the V3 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 V3 allows you to set-up both overdrive channels alike, then change settings to achieve mild or drastic differences between the two channels.

MASTER EQUALIZATION

The V3 incorporates three master equalization controls: DEEP, MID CUT, and BRIGHT. These controls affect the power amp output and allow you to finalize your sound in a way not available on most amps.

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 1meg sealed controls (many guitar amps use only 250k 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.

TWO “SMART” EFFECT LOOPS + “SMART” REVERB

The V3 features two switching effect loops, one series and one parallel. We called them “Smart” loops because they recall their settings when you switch between channels 1-3. For example, you can set both loops ON for channel 1, just Loop 2 for Channel 2, and Loop 1 for channel 3, or any combination. The TAIL switch activates the long tailed loop feature, switching off only the “send” and leaving reverbs and delays to decay naturally the way it’s done in the recording studio. The built-in Reverb will also switch for each channel in the same way.

GIVE YOURSELF A BOOST!

A switchable volume boost is available by footswitch or MIDI. Set the amount of boost with the BOOST control. When turned on, it will boost your amp’s output by up to 9dB for solos or any time you need to stand out in the mix.

MIDI MEMORY and CC Control

Set the Channel (1-3), Loops 1&2 (on/off), Reverb (on/off) and Boost (on/off) number you choose from your controller. The V3 also responds to CC.

EL34 POWER TUBES

Your amp is equipped with EL34 power tubes because of their powerful output 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 V3 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 control oscillations through careful component layout and lead placement allowing its shimmering highs to be reproduced.
V3 FRONT & REAR PANEL CONTROLS

GETTING STARTED QUICKLY
If you are like most players, you probably want to plug in and get started playing right away. 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 V3 amp, a 120 or 230 AC grounded power outlet, your instrument, a standard guitar cord, a speaker cord and speaker cabinet.

First, make sure the rear panel 120VAC/240VAC switch is set for the voltage in your area. Plug in your speaker and set the “SPEAKER OHMS” switch to match your speaker. If you have the FS44M footswitch, plug it into the rear 5-pin “FS44M” footswitch jack. Turn all volume controls off. With the amp turned off, and the 120/240 switch set correctly, plug into AC voltage.

Now, plug in your guitar and turn the POWER switch ON. Wait 60 seconds or more for the tubes to warm up, then turn on the STANDBY switch. The amp will be ready to play in a few seconds. Gradually raise the Volume and Master controls and re-adjust the tone controls to your liking. If you feel your amp is malfunctioning, first check all settings and connections. However, sometimes tubes are damaged in shipping. In this case, contact Carvin.

FRONT PANEL

1. POWER SWITCH
The POWER switch is to be utilized as the master ON/OFF switch. As the amp is turned on, the large BLUE jewel lamp LED near the input jack will illuminate as your ON indicator.

2. STANDBY SWITCH
After turning the POWER switch ON, wait 60 seconds or more for the tubes to warm up - then turn on the STANDBY switch. When turning the amp OFF, shut off the STANDBY switch 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 tube filaments on and warmed up for immediate use.

MASTER SECTION
These controls affect all output from the amp.

3. MASTER VOLUME
Controls output of all 3 channels and effects. Once your channel levels are set up and balanced to each other you may not want to change them. Use the MASTER to change your overall volume level for the amp.

4. BOOST CONTROL AND LED
Add up to 9 dB of volume boost via the FS44M footswitch MIDS preset, or CC control. The front panel GREEN LED will light when the BOOST function is ON, (to switch the BOOST without a footswitch, see MIDI PROGRAMMING)

5. BRIGHT
Boosts high frequencies starting at 5kHz for added clarity. Adjust for different rooms, or simulate closed or open back cabinets.

MID CUT
The MID CUT removes midsrange frequencies sometimes referred to as “muddy”. The MID CUT is a progressive control that varies both the level and frequency of the cut. At low settings, the MID CUT starts mildly cutting frequencies in the 900khz range. At Maximum setting “10” a deep cut is produced with the frequency centered around 450Hz.

7. DEEP
Turning up the DEEP control adds low frequencies at the sub-harmonic range. If your speakers sound unfocused or muddy, try reducing the DEEP control in small steps. This can tighten up your sound and give your amp a more solid feel. You may want to reset the MASTER volume after adjusting the DEEP control.

8. REVERB, “SMART” SWITCH AND LED
The REVERB control sets the level of Reverb for the amp. The switch allows you to set the Reverb ON or OFF for each channel 1-3. As you switch through the channels, the LED will indicate the REVERB is ON for the channel you are using.

CHANNEL SELECTION, LOOPS AND INPUT

9. CHANNEL SELECT SWITCHES
Press and release switch 1, 2 or 3 to select the channel to be used. The LEDs next to the channel’s volume control indicate which channel is functioning. The FS44M footswitch or MIDI also be used to select the channel. These switches are also used to set up MIDI presets (see MIDI IN/TRU).

10. SMART LOOPS AND LED
The V3 remembers your effects loop settings for each channel. Just assign the loop(s) to the current channel, Smart Loop™ permanently saves it until you change it. LOOP 1 is a series loop, and LOOP 2 is a parallel loop. The LEDs will also light during MIDI programming.

11. 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. Before you connect your guitar, be sure the “SPEAKER OHMS” switch is set for your speaker.

12. BLUE JEWEL LIGHT
Indicates the POWER is ON.

CHANNELS 1 & 2 OVERDRIVE
The V3 features extensive tone and drive shaping for each channel. Unlike most 3-channel amplifiers, the V3 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.

13. 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.

14. TREBLE, MID, BASS CONTROLS
To start off, 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 while adjusting the treble.

15. EQX
Toggle between standard EQ and Expanded EQ. This switch opens a wider frequency range for the TREBLE and BASS, providing a second set of frequencies to work with.

16. DRIVE MODE 3-POSITION SWITCH
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”(up)- 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”(down)- 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.

17. 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 V3 has been “Hot Rodded” with very high gain available from 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).

18. LED CHANNEL INDICATORS
The blue LED will illuminate when channel 1 is selected. The red LED will illuminate when channel 2 is selected.

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

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

21. LED CHANNEL 3 INDICATOR
The Yellow LED will illuminate when CHANNEL 3 is selected.

22. CLEAN DRIVE
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. Try different sounds by setting the DRIVE MODE switch.

23. DRIVE MODE 3-POSITION SWITCH
The switch labeled BRIGHT/SOAK is a 3-position switch that changes the gain structure of the channel. This provides three choices of drive styles:

-“BRIGHT” - adds high end to the preamp, inviting high frequencies to chime and sustain as the DRIVE is turned up.
-“CENTER”- A classic, open clean sound with lots of headroom. Turning up the DRIVE adds harmonics and mild compression.
-“SOAK”- boosts all preamp frequencies. As the DRIVE is turned up, a vintage snarl is available when played hard. 
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.

### 31. LINE OUT / LEVEL / CABINET VOICING
The LINE OUT 1/4" jack is for connecting to power amps or mixers. The LEVEL control adjusts the output to prevent overloading the amplifier's input. The CABINET VOICING switch will simulate the frequency response of a guitar cabinet, and prevent excessive bass or treble going to your mixer. This gives you more control of your sound quality because you do not have to make extreme adjustments to your mixer's EQ. The output level is more than adequate to drive any professional mixer or power amp.

### 32. EFFECT LOOP2 PARALLEL - SEND/RETURN/TAIL
Effects LOOP2 is configured in parallel. This means that the original signal is left alone and effects from your processor will be added into it. This provides the lowest possible noise from an effects processor without degrading your tone. To use the EFFECTS LOOP2, 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. Set your processor so that no direct signal is heard at the output (MIX=100%). Adjust the effect level from your processor. If the processor has no adjustment, or is noisy, adjust the effect level with the LOOP2 RETURN knob. If your processor has a "Direct signal ON/OFF" setting, it is usually better to turn it OFF, so you can set the processor's mix or effect level internally by preset. The TAIL switch keeps the RETURN active after the loop is turned off, allowing reverbs and delays to decay naturally, instead of being utterly cut off.

### 33. MIDI PROGRAMMING FEATURES:
#### a.) The channel selection 1, 2, or 3.
#### b.) The LOOP1 and LOOP2 on/off settings.
#### c.) The REVERB on/off setting.
#### d.) The BOOST on/off setting.
#### e.) The LED backlight color setting
#### f.) The Amp channel 1 (any change on CC#81)
#### g.) The Amp channel 2 (any change on CC#82)
#### h.) The Amp channel 3 (any change on CC#83)
#### i.) The Reverb (OFF=0-63 / ON=64-127)
#### j.) The Loop2 (OFF=0-63 / ON=64-127)
#### k.) The Loop1 (OFF=0-63 / ON=64-127)
#### l.) The effect level (1 thru 100):
#### M.) The Amp channel 3 (any change on CC#81)
#### n.) The Amp channel 1 (any change on CC#82)
#### o.) The Amp channel 2 (any change on CC#83)
#### p.) The Reverb (OFF=0-63 / ON=64-127)
#### q.) The Loop2 (OFF=0-63 / ON=64-127)
#### r.) The Loop1 (OFF=0-63 / ON=64-127)
#### s.) The effect level (1 thru 100):
#### t.) The Amp channel 1 (any change on CC#81)
#### u.) The Amp channel 2 (any change on CC#82)
#### v.) The Amp channel 3 (any change on CC#83)
#### w.) The Reverb (OFF=0-63 / ON=64-127)
#### x.) The Loop2 (OFF=0-63 / ON=64-127)
#### y.) The Loop1 (OFF=0-63 / ON=64-127)
#### z.) The effect level (1 thru 100):
TUBE REPLACEMENT GUIDE

It is not uncommon for tubes to malfunction during shipping. If your amp is not working properly, first check all connections and settings. If you are still having problems, refer to the following tube replacement guide.

1) The 12AX7A preamp tubes are the smaller of the two kinds of tubes, and are located in the following order on your chassis: V1, V2, V3, V4, V5. To start with, V1 is located closest to the guitar input. Replace the tubes if your amp does not work or sounds muddy or dull. V1 is the input tube and affects all channels. V2 is the main drive tube for channels 1 & 2. Replacing V3 will correct problems with channel 3 and the effect sends. Replace V4 or V5 if no output is heard when putting a signal through (activated) effect returns.

2) If there is no output after replacing the preamp tubes, try replacing the EL34 output tubes. The amp should be rebaised after replacing the output tubes.

3) If the AC FUSE should blow and turn the amp off, replace the power tubes and replace the fuse with same type. Most likely one of these tubes might have a short.

NOTE: The V3 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, 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.

IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: Appliance 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 and liquids are not spilled into the enclosure through openings.

POWER SOURCES: The appliance 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 an appliance 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 appliance.

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

SAFETY INSTRUCTIONS (EUROPEAN)

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

GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live

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

Your Carvin product is guaranteed against failure for ONE YEAR unless otherwise stated. Vacuum tubes are guaranteed for 90 days. Carvin will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. CARVIN DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. Carvin assumes no responsibility for speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. 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 or servicing of Carvin products. CARVIN SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

HELP SECTION

1) AMP WILL NOT TURN ON
   Check the power to the amp. Check for tripped circuit breakers, unplugged extension cords or power-strip switches that may be turned off. Check the fuse. If a dark brownish color or no wire can be seen within the glass tube, then replace. The amp may be perfectly fine but occasionally a fuse may blow because of high AC voltage surges. After the fuse has been replaced with the proper Slow Blow value and if the fuse fails again, the amp will require servicing.

2) NO OUTPUT with POWER light ON
   Tubes damaged in shipping will be the primary reason for your amp to not function properly. Please give us a call to help guide you through this simple repair.

3) KEEP YOUR AMP LOOKING NEW
   Use a cloth to wipe the controls on the front & rear chassis panels. Wipe the black vinyl covering with a damp cloth.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!

THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!