REVV

Generator 100R MK3
Owner's Manual

We are a small company out of Winnipeg, Canada. Years ago, I set out to make an amplifier that delivers the sound guitarists need that isn't in other amps, one that is extremely versatile in the tone and application. Luckily, when other musicians played my early prototypes, they agreed! The tone was fresh, unique and they all needed an amp for themselves! I quickly built a team of people as passionate about guitar as I am, and Revv was born. To be honest, it grew bigger and faster than I had ever hoped...

It has since been a long hard journey being a small business filled with long nights and people who didn't believe in us. After endless tweaking and customer feedback, I'm at a place where I know we are building the best-sounding, durable, and most versatile amps that we can. It's incredible hearing the kind words of amazing guitar players using Revv around the world, and we are just getting started.

Thank you for believing in us and making this possible. Nothing makes this journey more fulfilling than seeing musicians using what we've built to make music. That is what this is all about, making music. Because we are still a small business, every little bit helps, and we would appreciate you sharing pictures of your Revv gear on social media, using it to perform your music, or simply telling a friend about it. Thank you for your support and for making music.

Dan Trudeau
President & Designer

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WARRANTY

This Revv Amplification Inc. product is warranted against manufacturing defects in material and workmanship for a period of five (5) years from the date of purchase to the original owner. Tubes and fuses will be warranted for ninety (90) days from the date of purchase of the product to the original owner and all input jacks, connectors, and control switches will be warrantied for one (1) year. The warranty starts on the date of purchase by the original owner. This warranty is subject to the obligations and exclusions listed below.

OBLIGATIONS:

This warranty will be honored with original proof of purchase to the original owner only. Warranty work must be authorized by Revv Amplification Inc. in advance. All freight and duty (If applicable) are to be prepaid to and from Revv Amplification Inc. of all products that require and have been approved for warranty work. Revv Amplification Inc. is not liable for any freight and or duty (if applicable) charges.

EXCLUSIONS:

A product that has been altered or is missing serial numbers will not be covered. Items that were damaged while being shipped to or from Revv Amplification Inc. will not be covered by this warranty. This warranty shall not apply to repair or replacements necessitated by any cause beyond the control of Revv Amplification Inc. including, but not limited to, any malfunction, defects, or failure caused by or resulting from unauthorized service or parts, damaged or broken tubes, improper maintenance, incorrect line voltages, liquid damages, modification or repair by the user, misuse, abuse, accident, neglect, or fire. Revv Amplification Inc. does not authorize any party to assume for it any other obligation or liability. In no event shall Revv Amplification Inc. be liable for any damages arising from the use of this product, or for any delay in the performance of this warranty due to causes beyond our control.

SAFETY & WARNINGS

Please read, understand and follow all safety instructions in this manual, as well as those on the rear panel of the amplifier. These instructions and warnings must be followed for your safety, and also to ensure that the amplifier will serve you for many years. Please use common sense when operating, this is a professional instrument designed for electric guitar amplification, and should only be used with electric guitar signals.

- Do not operate or store this amplifier in a damp or wet environment.

- Do not keep items that contain liquid of any kind near or on the amplifier.

- Allow for 4-6 inches of space around the unit when operating. This unit produces heat and should be kept away from flammable items/objects.

- Never obstruct the top heat vent when the unit is powered on.

- Do not expose the amplifier to high temperature. Keep the amplifier away from radiators or any other items or equipment that supplies or produces heat.

- Be sure to connect to an AC power supply that meets the power supply specifications listed on the rear of the unit.

- Do not use an AC power cord that is damaged, has been pinched or is missing prongs.

- This amplifier must be properly grounded to local standards when being operated. Do not use 2 pole extension or power cords to supply power to this amplifier.

- Remove the AC power cord from the amplifier when changing tubes, fuses or when moving the amplifier. Always replace fuses with the correct type and rating. Always remove AC power cord when removing chassis.

- The AC power cord should be removed from the outlet when left unused for long periods or when there is risk of electrical storms.

- No user serviceable parts inside, all service should be done by qualified personnel only.

- Always make certain the proper load is connected to the amplifier before operating. Always make connections to the amplifier with the power off.

- Your amplifier is designed to produce high volume/sound pressure levels. Long term exposure to these levels can damage your hearing. Please use hearing protection when exposed to these levels for extended periods to prevent loss of hearing or hearing damage.

- Keep away from children.

SETUP & POWER UP

It is very important to place the amplifier in a dry location that provides 4-6" of space between the rear of the amplifier and anything in the area that has been designated for the amplifier. Tubes produce heat, and anything flammable should be kept away. Verify that the top heat vent is free from obstruction so that the heat produced by the tubes can escape from the interior of the amplifier. Now have a quick look at the tubes and make sure they are all seated in their sockets. Look good? We are ready to move on!

First, make sure that the power and standby switches are in the off (down) positions. Connect the amplifier to a speaker cabinet using a good quality speaker cable and set the impedance switch to the required impedance setting (See 3.5). Next, connect the AC power cord to the amplifier Mains connector on the rear of the amplifier and then to an AC outlet.

At this point, all other peripherals can be connected to the amplifier as well:

- FX Loop
- Guitar & Shielded Cable
- MIDI
- XLR
- USB
- Revv Cabinet Lighting
- Headphones
- Revv Foot Controller

Note: A good quality, shielded instrument cable is recommended for guitar input as well as FX loop connections to prevent unwanted noise. Cables can color the sound of a guitar's signal, and sometimes trying different cable lengths, can provide the desired sound.

Once all your connections are made, move the power switch to the On position and give the tubes at least one minute to warm up. Now is a great time to begin setting all controls while we wait. We recommend setting the master volume and gain controls to the lowest setting or zero (fully counterclockwise) and all treble, mid, and bass controls to the 12 o'clock positions to begin. Set the standby switch to the ON (up) position and you are ready to begin exploring!

Note: Upon power-up, you will have noticed that the buttons and clip LED all illuminate solid Red. This is the startup sequence of the amplifier. After a few seconds, the amplifier will complete the startup sequence and load up either Channel 1 (default) or your favorite saved amp setting.

FRONT PANEL

INPUT   1

¼" Instrument cable input.

CHANNEL ONE (CLEAN)   2

Selected by: **1.** pushing the designated front panel button, **2**. footswitch button #1 or a footswitch preset mode setting, **3.** MIDI & CC commands.

• Passive treble, middle, & bass controls with a wide range. Small turns equal large tonal change!

• Level control sets the FX loop signal intensity as well as overall volume for the channel.

Bright allows you to achieve a brighter or warmer clean tone without compromising the full range of your treble knob. This is also useful when using gain pedals that are picky about which amp they are boosting, so definitely experiment to taste. Channel 1 and Channel 2 share the bright switch between them.

The Wide function is activated by pressing the channel button. When the wide function is active the red LED will illuminate. In this mode, the sound the channel will produce will be bolder as all frequencies are boosted.

CHANNEL TWO (CRUNCH)   3

Selected by: **1.** pushing the designated front panel button, **2.** footswitch button #2 or a footswitch preset mode setting, **3.** MIDI & CC commands.

• Passive treble, middle, & bass controls with a wide range. Small turns equal large tonal change!

Bright allows you to tailor the sound to your preference by shifting the high end response of this channel. It makes quite a large difference, so don't be afraid to turn it on if you like a much more bitey tone! Pairing this on/off position with dialing of the treble knob can yield very powerful results. Channel 1 and Channel 2 share the bright switch between them.

Crunch Gain allows you to go from an almost totally clean tone to quite a bit of gain! And in conjunction with the drive mode setting, this channel can get quite spicy!

Crunch Drive mode is cycled by pressing the channel button. As you press the channel button you will see the drive LED change from OFF to Blue to Red. Each drive mode will alter the gain of the channel as well as increase or decrease the intensity of certain frequencies.

CHANNEL THREE (HIGH GAIN)   4

Selected by: **1.** pushing the designated front panel button, **2.** footswitch button #3 or a footswitch preset mode setting, **3.** MIDI & CC commands.

All else being equal, external of voicing switch positions, this Purple channel is drier, tighter, & clearer than Red Channel 4, with less gain on tap. As a result most people use the fatter & more saturated Red Channel 4 for lead & this Purple Channel 3 for rhythm but please experiment to your own taste, especially if you like a thick chunky rhythm distortion tone or a drier lead tone. This is a 4 channel amp with 2 high-gain channels so you can get the exact tones in your head without compromise, however, you choose to set it up.

- Gain, treble, mid, bass & level (volume) control knobs with a wide range of operation - small adjustment equal large tonal change!

Aggression has 3 levels : least saturation (green), tight saturation (blue), & highest/fattest saturation (red). These aggression levels are highly interactive with the gain knob & can result in everything from broken-up rock tones to metal rhythm tones & lead tones. These aggression levels can be cycled through both by repeatedly pressing the designated channel push button and by repeatedly pressing the Channel #3 footswitch.

Bright, Cut & Fat extend the highs, mids & lows respectively. These boosts can be powerful when looking for certain sounds as they interact so well with the channels EQ. The Fat control will allow you to either run a tight low end or dramatically loosen it up depending on what you need. Cut boosts mid frequencies and bright boosts treble to enhance your overall presence live or in the studio!

MASTER VOLUME CONTROLS   5

The Generator is equipped with 2 MIDI & foot-switchable/programmable master volume controls. These controls come right after the effects loop & also work as the FX loop return control. These controls can be toggled from one to the other for complete volume control & boosts.

The controls can be toggled via the footswitch button #4 (or programmed bank) or a MIDI device.

The master volume control can also be toggled by holding down the "Gate" button on the front of the amp for 2 seconds. This method of toggling the master volumes is primarily used when saving the setting to a bank on the foot controller in "preset mode".

DEPTH & PRESENCE   6

The Presence control has a great range of use! This control can be very powerful when brightening up the amp and adding amazing cut!

The Depth control is a bass control & will add some incredible low end to the output. Using the control sparingly is recommended to keep the bass response tight, as higher settings will give you a loose low end.

Note: *Lowering the bass control on the three channels & increasing the depth control is also another means of experimenting with the Generator's voicing!*

Note: *Both of these are controls of the power amp section of the amplifier & are global controls that affect all channels. Because they work well with the EQ of each channel, experimentation will provide a precise tone suited to your needs.*

REVERB SWITCH   7

The reverb on the amplifier is toggled on and off with the reverb switch. When the LED is illuminated, reverb is inserted into the guitar signal. The reverb level control on the rear of the amplifier is then set according to the amount of reverb desired.

Each channel on the amplifier can be set differently from each other to include reverb or not.

Note: *The reverb switch is also used to toggle the FX Loop in and out of the signal path when held down for 2 seconds. This method is used to save the FX Loop state to the "preset mode" of a bank on the foot controller, or quick toggle from the front of the amp front panel.*

GATE SWITCH 8

This amplifier is equipped with a high quality noise gate. The gate threshold control knob is located on the rear of the amplifier. When the gate button is pressed and the LED is illuminated, the noise gate is then activated on the current channel. The threshold level is then set to taste using the threshold control on the rear of the amp.

Each channel can be set differently from each other to have the noise gate active or not.

When the GATE LED is flashing, the gate is open and will allow the signal to pass through. You will find that when the threshold setting is set to your taste and you begin playing, the LED will flash. When the GATE LED is solid and not flashing, the gate is closed and will prevent unwanted noise.

If the threshold setting is turned fully down (completely counterclockwise) the gate LED will flash even when not playing. This is because the threshold is set to its lowest setting or OFF.

Note: *The noise gate switch is also used to toggle between master volume 1 and master volume 2 when held for 2 seconds. This function is used to save the desired master volume control to a bank on the foot controller when in "preset mode" or quickly toggle from the amp front panel.*

STORE SWITCH 9

The store switch on the amplifier is important and serves many purposes from MIDI settings to save channel settings. This is all covered in different parts of the manual depending on what you are looking to accomplish.

PRE-POST SWITCH 10

Because the Two Notes Technology inside can also provide digital power amp tone, you now have the ability to choose different tube types like EL34s or 6L6s as your "virtual" power amp sound. To take advantage of this ability, we added the Pre/Post switch. This momentary push button will give the Two Notes Technology inside either an input signal from the Pre-amp or the power amp. If the input signal comes from

the Pre-amp, then the real tube power amp won't color the sound and the digital tube types can be used from the Two Notes tech in all their tone glory. If the power amp (post) is used as the input signal to the Two Noted Technology,, then the real power amp will color the tone. So this gives you more options to find incredible tones from your amplifier!

When the switch is illuminated, the "pre" mode is engaged and the real power amp is taken out of the signal. The master volume controls on the amplifier will set the volume and signal intensity in this mode.

If the button is not illuminated, then the "post" mode is active and the real power amp is part of your sound. The master volume controls on the amplifier will set the volume and signal intensity in this mode.

Each channel can be set differently from the other and in conjunction with the saved digital cabs can provide incredible versatility in sounds.

Note: *When the "pre" mode is active, the volume level between pre and post will be different. In most cases, depending on master volume settings, the "post" mode will always be louder than the "pre" mode. This is by design as the Two Notes Technology inside has its volume control from the digital power amp. To set your level, turn on the digital power amp from your two notes remote control panel and adjust the volume to taste. We recommend you save the cab bank this way and have it recalled when in "pre" mode to match volume levels with the real power amp.*

HEADPHONE JACK 11

The headphone jack on the amplifier comes right from the Two Notes Technology output! This allows you to use the amplifier with any of the selected speaker cabinet I.R. settings through your headphones and enjoy an amazing stereo tone! By utilizing the built-in reactive load, you can play the amp with no speaker using only the headphone jack as the output for quiet playing while still getting great tone.

HEADPHONE/XLR LEVEL CONTROL 12

This control, located under the headphone jack, sets the output level of the headphone as well as the stereo XLR outputs located on the rear of the amp.

Note: *The power delivered by the headphones output is high enough to remain efficient even when using high-impedance headphones. Therefore, it is possible to get very high audio levels with that output. We strongly advise against the use of headphones with high audio levels. The improper use of headphones can lead to irreversible damage to your hearing.*

VIRTUAL CABINET SWITCH   13

This 6 position selector switch will switch through the first 6 presets of the Two Notes virtual cabinet library saved to your Amplifier. You can change the virtual cabinets and all their options saved to each position by using the Two notes Remote software.

BLUETOOTH WINDOW   14

Your amplifier utilizes Bluetooth technology to access the two notes technology for on the fly changes via the app.

STANDBY & POWER SWITCH   15

The power & standby switches give the amp power from the mains, as well as a high voltage through the circuit. First, turn on the power switch and wait a minute to allow the tubes to warm up. Turn on the standby switch to the ON position once you are ready to play.

BACK PANEL
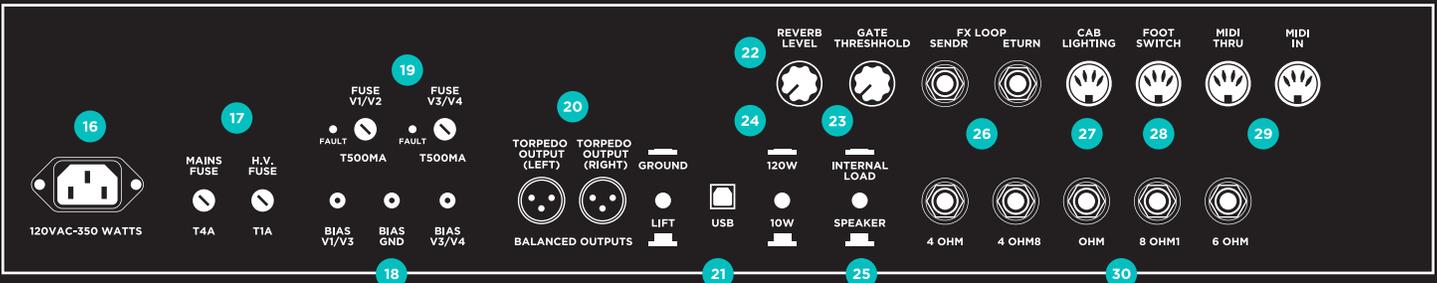
MAIN POWER CONNECTION · 16

When plugging the amplifier into the mains A/C wall receptacle, always make sure the amplifier power & standby switches are in the off position. The Required voltage & fuse ratings are marked on the amplifier, verify that they are correct before plugging in.

MAIN & HT FUSES · 17

The mains fuse & HT fuse are in place to protect you & your amplifier from overload conditions. It is vitally important that fuses with the same type and rating are used when replacing. Fuse requirements are marked on the rear panel of the amplifier. Always be sure to unplug the amplifier from the mains before replacing the fuses.

BIAS TEST POINTS · 18

This amplifier is designed to allow the user to set the bias of the power tubes without removing the chassis from the headshell. Each pair of power tubes needs to be set according to the tubes being used.

POWER TUBE FAULT FUSES · 19

The power tubes are fused in pairs. Should a power tube fail, the fuse will blow & take the pair of power tubes out of service. This has the benefit of protecting the amplifier, & also allows for continued playability, to allow the user to finish the gig on the remaining pair. The volume & tone will change but the show will go on.

Note: Should the amp be run with 2 power tubes removed from service (bad or blown fuse), in order to achieve a tone more consistent with normal 4 tube operation the amp should be run with an impedance setting of half the speaker cabinet rating. For example, if the speaker cabinet is 8 ohms, use a 4 ohm speaker jack on the amplifier, & if the speaker cabinet is 16 ohms, use an 8 ohm speaker jack.

XLR OUTPUT & GROUND LIFT · 20

The balanced output XLR jacks are a direct output from Two notes Torpedo Embedded. By connecting these outputs to front of house or an audio interface you can capture your amplifier's tone with no need for a cabinet or microphone!

The ground lift switch will defeat the ground on the amp should you encounter ground noise from other equipment you have connected.

XLR OUTPUT CONNECTORS 20.1

In the rear of the amplifier is a direct output from the embedded Two notes Torpedo and not direct from the tube amplifier output itself. The purpose of these outputs is to be used with audio interfaces to exclude the use of an actual speaker cabinet, using virtual cabinets instead.

Note: The reverb or other effects that the Two notes Torpedo provides will only be available through the output at the headphone or XLR jacks and not a real cabinet. The speaker output will always behave normally. As an added bonus, some users will find this useful for "wet/dry" setups in which they send a signal that utilizes reverb to FOH (front of house), while playing through a dry cabinet.

These two XLR connections will allow you the ability to run your output signal in mono or stereo! By utilizing the twin tracking option in the two notes remote software, you have the power to run stereo from these outputs to add some crazy versatility!

One side of your signal could be wet while the other dry to create a virtual guitar player right from your rig and add massive tone!

The Ground Lift switch should be set to ground (pushed in) for best results. However, if this produces a buzz or hum because of ground loops between the amplifier and the audio interface, press the ground lift switch to eliminate noise.

Note: The level control under the headphone jack controls your output level/volume to the XLR outputs. The clip LED will illuminate if the signal is set too high.

USB CONNECTOR 21

The USB connector will connect your computer to your amplifier with the provided USB data cable to use the Two notes Remote software. Use the USB connection to edit presets, create new presets, or load your third-party Impulse Responses! No audio signal is passed through the USB out.

REVERB LEVEL CONTROL 22

The reverb level control increases the intensity of the reverb effect in your sound when the reverb switch on the front panel is activated. Turn the knob clockwise to increase reverb and counterclockwise to decrease the effect.

GATE THRESHOLD CONTROL 23

The gate threshold control will set the guitar signal level required for the noise gate to open and close. As you turn the knob clockwise, you increase the amount of signal required to open the noise gate and allow the signal to pass.

WATTAGE SWITCH 24

This latching push switch sets the overall power output of the amplifier between 10 watts and 120 watts.

INTERNAL LOAD SWITCH 25

This latching push switch engages the internal load or allows a real speaker cab to be used when set accordingly. If there are no speaker cabs connected to the speaker jacks on the amplifier, the internal load will be engaged automatically.

FX LOOP SEND & RETURN JACKS 26

Your amplifier features a high-quality buffered FX loop, the send and return jacks connect to any pedals or effect units you may want to use with the amplifier.

Let's go through it step by step, just in case you have never used an effects loop and don't know how to hook it up.

The send jack will need to be connected to the input jack on your effects unit. The output jack on the effects unit (or last pedal in your chain, if you are connecting multiple effects in series in the loop) will then connect back to the return jack on the amp.

Your effect is now part of the signal chain, verify that your levels are set accordingly to the effect so you have a strong signal being sent to the amplifier, then adjust the volume control on the amplifier to your requirements.

Note: *The reverb switch is also used to toggle the FX Loop in and out of the signal path when held down for 2 seconds. This method is used to save the FX Loop state to the "preset mode" of a bank on the foot controller, or quick toggle from the front of the amp front panel.*

CABINET LIGHTING   27

The cabinet lighting jack on the rear of the amplifier is used to connect the amp to Revv speaker cabinets. Because the Revv badge on our cabinets lights up, you can illuminate the cab badge with this jack.

Simply use the 4 pin Din cable provided with all Revv cabinets and connect the amplifier to the cab lighting connector on the cabinet.

FOOT SWITCH CONNECTION   28

This connection both powers your footswitch & allows it to control your Revv. Should the provided footswitch cable fail, any 5 PIN DIN cable can be used.

Note: *This cable sends important data between the amplifier and the footswitch. If a lesser quality 5 PIN DIN cable is used, incorrect or erratic behavior could occur. A high quality cable is recommended, which can be provided by Revv should you need a replacement.*

MIDI CONNECTIONS   29

The MIDI IN connection is for external equipment connections when your rig necessitates control of your Revv with third-party gear.

The MIDI through jack allows for the connection of additional MIDI devices in your signal chain in addition to your Revv.

See MIDI Section of this manual for more details.

IMPEDANCE & SPEAKER JACKS   30

The amplifier must always be connected to a speaker cabinet or load when it is powered up and set to have the internal load disengaged. This amplifier can be used with cabinets that provide a load of 4, 8 & 16 ohms. Because the amplifier provides a number of speaker jacks with different impedance options, it

can also power 2 cabinets directly from the amplifier. The speaker jacks must be used correctly for the impedance to be matched between your amp and the cabinets being connected.

Most setups are simple, one cabinet plugged into the amp, select the impedance to that marked on the cabinet & you're ready to go! However, when it comes to adding more cabinets to the rig, more care must be taken to prevent damage. Most rigs will not utilize more than 2 cabinets so we won't go beyond 2 cabinets here.

Some examples:

• 2 - 8 ohm cabinets would be plugged into the the two 4 ohm speaker jacks (one per 8 ohm cab) located on the back of the amplifier.

• 2 - 16 ohm cabinets would be plugged into the the two 8 ohm speaker jacks (one per 16 ohm cab) located on the back of the amplifier.

• 2 - 4 ohm cabinets cannot be run in parallel with this amplifier. This will cause damage.

Note: *No damage will result when running the amplifier set at a lower impedance (Ex: 4 ohms) into a cabinet rated at a higher impedance (Ex: 8 Ohms). However the opposite will cause damage to the output transformer or other components & it is suggested that the amplifier never be run into a lower load.*

Note: *Depending on the power tubes used, this amplifier can supply 180 watts+ of power to the speakers at high volumes, so it is important to be sure your cabinet can handle that kind of power, especially when running KT88/6550 type tubes.*

TUBES & BIASING

POWER TUBES   31

Our high wattage amplifiers are designed around 6L6 tubes - but will accept the following tubes & gladly display their tonal characteristics for you in your Revv.

KT88

This tube is punchy with a strong low end and great clarity. The extra power out of this tube adds extra headroom & is very tight & focused. Overall can be described as "more" of the same sound, with a focused attack.

EL34

The EL34 tubes are more aggressive than the KT88, they add more harmonic content & have a bit more sizzle on the highs. Can impart a slightly "British" classic flavor.

6L6GC

Our standard, the 6L6GC tube is big, open & articulate.

Note: The tubes listed above are guaranteed to bias correctly & sound good in the amplifier, but if you are an experienced technician other tubes can be experimented with as well. 6550, KT77, KT66, 5881 can be equipped, with care.

POWER TUBE SOCKETS   32

This amp has been designed to allow mixing of power tubes as each pair has its own bias adjustment. Tube positions 1 & 3 are set up as one pair & are biased with the bias adjustment trimmer in between them. Tube 1 and 3 are the pair of power tubes closer to the middle of the amplifier. Tubes 2 & 4 are the second set that are biased with the adjustment trimmer in between them. This pair of power tubes are found closer to the rear

of the amplifier. This allows you to mix different power tubes in the amp if you wish to experiment with new sounds. i.e. a set of KT88 tubes can be used with a set of EL34 tubes.

Note: While we designed the amplifier to be easy to maintain, we advise that all tubes be set up by a qualified service technician to prevent damage to the amp from improper bias settings.

PREAMP TUBES   33

This amplifier uses 12AX7 (ECC83) preamp tubes in the preamp of your amplifier. Preamp tubes do not need to be biased & usually have a long life unlike power tubes, but a preamp tube can become faulty at any stage of its rated lifespan.

POWER TUBE BIAS   34

You will need a voltmeter or digital multimeter set to the lowest DC voltage range. (Make sure you refer to the meter's user manual).

Note: Use tubes that are matched! If 2 different tube types are being used, make sure they are matched. If all 4 are the same type, make sure they are matched pairs (don't mix them) although a matched quad is better.

To prepare:

1. Remove the rear baffle cover from the rear of the amplifier. If you are replacing tubes, do so now with the power off & the amplifier unplugged from the main power receptacle. Place the new tubes in the correct socket positions.
2. Turn the trimmers down by turning the trim pot with a small screwdriver in the counterclockwise direction. You can access the trim pots through the small holes in between the power tube pairs. If any fuses had blown, make sure to replace them as well.

3. Now plug the amplifier into the main power receptacle, unplug any guitar cables from the inputs & turn on the main power. Let the tubes warm up for one minute

4. Turn down the master volume controls to zero & turn on standby to the ON position.

5. Verify that none of the tube fault LEDs are on. If they are, power down the amplifier, remove the plug from the main power receptacle & replace the faulty fuse & return to step 3. If everything checks out, move on to the next steps of setting the bias. If it is still blowing fuses, a tube is at fault. Try a different pair.

SETTING THE BIAS   35

1. Place the black lead from your meter into the black bias test point on the amplifier & the red lead into the red bias test point (The red test point on the left is for V1 & V3 tubes, red test point on the right is for V2 & V4 tubes).

2. Refer to the chart below for bias set points for the tubes being used & slowly turn the trimmer in the clockwise direction until the value is reached.

3. Next, place the red lead into the other red bias test point & repeat step 2 for the other set of tubes. If 2 different pairs of tubes are being used, refer to the chart below & set the bias accordingly.

4. Re-check the settings of each bias test point & make any further adjustments as required.

5. Once the bias is set at the required settings, return the chassis into the headshell if removed and rear baffle panel to the rear of the amp & fasten it with the screws you removed. You are done!

(Measurements are for two tubes per bias point)

Note: *The range setting is for experimentation. Power tube bias settings change the sound of the amp & the range listed above is safe for experi-mentation. The largest setting is considered the maximum setting & should not be set above this setting. Running the tubes on the higher end of the range will shorten the tubes expected life.*

BIAS CHART   36

Type	Recommended set point	Safe Range
KT88	100mV	90mV to 110mV
EL34	70mV	60mV to 80mV
6L6GC	85mV	80mV to 95mV

MIDI

SETUP 37

Versatile & optional MIDI control helps Revv amps seamlessly integrate into any rig. The amplifier will store up to 128 programs for program change commands as well as accept Continuous Controller (CC) commands to control functions directly. The amplifier also features OMNI mode to allow control options on 16 channels, & phantom power to power control devices.

What does that mean?

1. You can set up "presets" of switch positions on the amp to recall quickly. (this could be used for clean, crunch, and high gain for example).
2. You can simply control anything's on/off state (FX loop for example).
3. You can do a combination of both of those things.
4. You can do this with a computer for automatic changes during songs, a MIDI floor control unit instead of our footswitch, a loop switcher with midi to control pedals as part of the "presets," a multi-effects unit with MIDI control, & more.
5. You can do this with just our footswitch, or not at all if you choose. External equipment just becomes more beneficial when integrating your Revv with additional pieces of a rig such as effects units.

OMNI MODE 38

OMNI mode off will allow the amplifier to be controlled via a designated channel (1-16), & OMNI mode on will allow the amplifier to respond to commands on any channel. If other equipment is being used in a MIDI system, it is desirable to set each piece of equipment to separate channels. However if the amplifier is the only piece of gear being controlled via MIDI, then setting it to a specific channel is not required and using the OMNI mode setting becomes preferable.

To toggle OMNI mode on or off:

1. Make sure the power switch is in the off position.
2. Press & hold "Reverb" push button.
3. With the "reverb" push button being held, turn on the power switch.
4. Release the reverb push button once the reverb LED begins to flash. Once the "reverb" LED has stopped flashing, it has accepted the command to adjust OMNI mode.

Note: The reverb LED will flash 3 times when it turns OMNI mode on, & 4 times when it turns OMNI mode off.

MIDI CHANNEL SETTING 39

This amplifier can either automatically or manually change the 16 MIDI channels you would like it to respond to. The channel change is stored in memory & only needs to be done when you need the amp to respond on a certain channel.

1. To set the MIDI channel: With the power off, press & hold the store button then turn on the power switch. The amp will power up & begin to flash all 3 channel LEDs as well as the Ch1/Ch2 Bright LED. Once this happens it is awaiting the channel data to be received from the external equipment (Automatic) or to be set manually.
2a. To set the channel automatically: (recommended) With your external equipment ready (pedals, computers, etc.) & set to the channel you want the amplifier to be controlled from via MIDI, send a command to the amplifier by pressing a program change button or CC command on your external equipment. Once the amplifier receives the data, it will verify the channel it received & save it to memory. Easy!
2b. To set the channel manually: Once step 1 has been completed above & the channel LEDs and CH1/CH2 Bright LED are flashing, press the CH1 CLEAN button. The CH1 LED will flash & the other Channel LEDs and Bright LED will turn off, this signifies that

MIDI channel 1 has been selected. Simply continue to press the CH 1 button to get to the channel you desire. As you press the button you will notice the other Channel LEDs and Bright LED turn on as you increase the MIDI channel number. Once you reach the channel you desire, press the STORE button to save it to memory.

Simply continue to press the CH 1 button to get to the channel you desire. As you press the button you will notice the other Channel LEDs turn on as you increase the MIDI channel number. Once you reach the channel you desire, press the STORE button to save it to memory.

Note: Only 4 LEDs are used, so the MIDI channel count will be done in values of 4. MIDI channel 1 will be signified by CH1 CLEAN LED flashing, & as you increase in number, MIDI channel 4 will be signified by all three channel LEDS and the bright LED flashing, but once MIDI channel 5 is selected, only the CH1 CLEAN LED will flash again. Every time you reach MIDI channel 5, 9, or 13, the LED cycle will once again start from the CH1 CLEAN LED. So keep count as you select the channel you desire. If you go past MIDI channel 16, the count will start at channel 1 again. Once saved to memory, the Channel LEDs and bright LED will flash very quickly several times to verify the change has been made & completed.

MIDI PROGRAM CHANGE   40

This amplifier can remember up to 128 program settings of the MIDI controllable functions. To set a program (i.e. amplifier configuration) to be controlled via MIDI:

1. Set the amplifier to the configuration you intend to save to a program number. (Ex: Ch: 3, Aggression level: 2, Fat: ON, Master Volume: 2, FX Loop: OFF, etc)
2. Once the amplifier is configured as you would like, press the store button. The Store LED will flash & the amplifier will wait now for a command through its MIDI IN jack.
3. Send a program change command from your MIDI Pedal or other equipment with the correct channel & program number you intend to have the amplifier. save the current configuration to.
4. Once the command is received, the amplifier will save the current amp configuration to that program

number. The Store LED will flash 3 times & turn off verifying that the command has been received & saved.

Now, anytime you send that program number to the amplifier from your MIDI pedal or other external equipment, the amplifier will switch to that saved configuration. This will allow for any configuration of your settings to be recalled with any MIDI device.

MIDI CONTROLLABLE FUNCTIONS   41

The amplifier functions that can be controlled via MIDI are as follows:

Channel Selection (1-3)
Wide Mode (Ch1
3 Drive Levels (Ch2)
3 Aggression Levels (Channel 3)
Bright function (All Channels)
Cut function (Channel 3)
Fat function (Channel 3)
FX Loop in/out
Master Volume 1 & 2
Reverb
Noise Gate
Pre-Post
Mute
Two Notes Embedded Functions

These functions can be set & controlled in a MIDI program change setting, where one program change command will call up a configuration of the above settings, or continuous controller commands, where a CC command will switch any one of the functions listed above, independent from any of the others. The CC command functions are great for things like instant access buttons on foot pedals etc.

CONTINUOUS CONTROLLER (CC)   42

To use CC commands, the amplifier Functions have all been given a designated number & on or off setting. When using & selecting a function the number associated with the function must be used & then the setting of the function (on or off) must also be sent. Most MIDI equipment (pedals etc) allows you to select

a CC number & then designate whether it be turned to on or off. (Consult the external equipment instruction manual).

The following commands & their CC numbers need only be sent an ON command (0-63) as they are used to switch between channels & aggression levels which cannot be turned off, only changed to a different channel or level, on & off commands sent will produce the same result.The following 2 commands will switch to the channel & then toggle through the aggression levels with each use of the command using the footswitch to switch to the channel & toggle through the aggression levels. This command will also respond to an on & off command with the same result:

Function	CC Number Hex value)
Ch. 1	13 - (0x0D)
Ch. 1 wide	14 - (0x0E)
Ch. 2 low Drive	15 - (0x0F)
Ch. 2 med Drive	16 - (0x10)
Ch. 2 high Drive	17 - (0x11)
Ch. 3 low aggression	18 - (0x12)
Ch. 3 med aggression	19 - (0x13)
Ch. 3 high aggression	20 - (0x14)

The following command will switch to the channel & then toggle through the aggression levels with each use of the command like using the footswitch to switch to the channel & toggle through the aggression levels. This command will also respond to an on & off command with the same result:

Ch. 3+ aggression toggle	24 – (0x18)

The following commands control functions that are turned on & off. These functions require an off (0-63) & on (64-127) command (byte) to be sent with the CC number to either turn them on or off.

If you are trying to use them & are not getting them to respond, chances are you are sending the wrong command byte (0-63 is OFF & 64-127 is ON).

(Consult the Peripheral's instruction manual)

Function	CC Number Hex value)
Noise Gate	26 – (0x1A)
Masters	27 – (0x1B)
Fat	28 – (0x1C)
Bright	29 – (0x1D)
Mute	30 – (0x1E)
Reverb	31 – (0x1F)
Pre-Post	33 – (0x21)
Cut	34 – (0x22)
FX Loop	35 – (0x23)
Two Notes Power Amp	36 – (0x24)
Two Notes Reverb	37 – (0x25)
Two Notes Noise Gate	38 – (0x26)
Two Notes Twin Tracker	39 – (0x27)
Two Notes EQ	40 – (0x28)
Two Notes EQ R	41 – (0x29)
Two Notes Mute	42 – (0x2A)

TORPEDO REMOTE & REACTIVE LOAD

The amplifier can be connected to Two notes Remote software to manipulate all available settings and change the presets found on the front knob of the amplifier.

This is via the USB port. You can find the Remote Software for the amplifier here: https://www.two-notes.com/downloads

Once you connect to the computer using the provided USB cable, your computer will start recognizing the amplifier. This may take a couple of minutes. Once this is complete, simply open the Remote Software and the amp will connect. Once connected, you can tweak all available Torpedo Embedded settings to your preferences!

Note: If you are new to studio practices such as mic placement, the difference in tonalities between different speakers and more Two notes has a wealth of resources available throughout their channels to get you started. Of course, the presets are the best start in this situation!

BLUETOOTH CONNECTION   43

You will connect to the Two Notes Torpedo inside your Revv Amplifier from your mobile device via Bluetooth. The connection has to be done in the following order:

1. Launch the Torpedo Wireless Remote app
2. Accept all the requested authorizations (they depend on your tablet or phone)
3. The connection window should show up and when it does, follow the on screen instructions.
4. Input the pin code to pair the Torpedo in your Revv amplifier and your mobile device. The pin code is found with your amplifier. Contact Revv should you misplace the Pin Code.

TROUBLESHOOTING   44

If after inputting the pin code the Torpedo does not show up in the "Devices" menu in Torpedo Wireless Remote, you will need to unpair the Torpedo in the list of devices that are paired in the Bluetooth menu of your phone. Once you have done this, please redo the procedure detailed above. You cannot pair the Torpedo from the phone or tablet OS, it has to be done by Torpedo Wireless Remote. Some phones need to have the location (GPS) activated to allow for Bluetooth pairing. Try activating the Location if you find yourself unable to pair with just the Bluetooth activated on your phone or tablet.

INTERNAL REACTIVE LOAD   45

Your amplifier comes with a built-in, fan-cooled, reactive load to allow you to play without the need for a speaker cabinet. On the rear of the amplifier, there is an internal load/speaker switch to switch between the speaker cabinet and the reactive load.

Depending on what you need, you can switch between the two on the fly. The speaker cabinet does not have to be unplugged when switching to the reactive load, the switch will bypass the speaker cab and only use the reactive load or vice versa! So you have full control by simply using the switch..

Note: If you forget to plug in a speaker cab and run the amplifier without a speaker cab fear not! The amplifier automatically uses the reactive load if there is no speaker plugged into the amplifier. But be aware, if there is a cable plugged into the speaker jack on the amplifier but no speaker cab plugged into the other end of the cable, this will cause damage unless the reactive load is engaged by using the internal load switch!

SETTINGS & SAVING CABINETS

The amplifier by default will power up with channel 1 loaded and all options turned off. But if you would prefer to save how the amplifier powers up and how each channel is set at power up you can!

Any combination of channels, drive, aggression settings and functions can be saved so that the amplifier will always power up in your favorite setting.

In order to perform this setting:

1. Select the channel you want to power up with and set it up to your preference.
2. Press the store button and quickly release.
3. The store led will now flash
4. Press the CH button of the channel you have active.

The amplifier will now store your setting and confirm it by flashing the store led quickly and turn off. That's it! Your favorite setting will now be loaded when the amplifier is powered up. This will remain until changed.

Note: Each channel can be set up this way, however, the last channel saved will be the first channel to become active when the power is turned on. So when setting your channels up the way you want them when power is applied, just remember that you want to save your power up channel last.

FRONT PANEL & CAB LIGHTING   46

While we know a lot of people like the color-changing Revv logo and cabinet lighting, some do not. The option to turn this feature on and off has been added to your amplifier!

To disable/enable the cab and logo lighting:
With the main power in the OFF position

1. Press and Hold the GATE button then power ON the amplifier.

2. When the GATE LED begins to flash release the button.
3. If the GATE LED flashes 4 times, the cab save option is disabled. If the GATE LED flashes 3 times, the cab save feature is enabled.

The logo leds will either now be on or off for complete amplifier customization!

SAVING GLOBAL/MASTERS   47

While the FX Loop and Master functions are considered global settings across all channels, some players might prefer that these functions are saved differently on each channel. In this case, the amplifier has been designed to offer either setting so that it is possible to have each channel call up a different setting for both the FX loop as well as the master volumes.

This can be a pretty powerful feature if your settings will always remain the same.

By default, these functions are set to global as most players will require the FX Loop and master to remain the same across all channels (global).

But to toggle the amp to store these settings differently among the channels, simply turn on the saved FX Loop/Masters setting.

With the main power in the OFF position:

1. Press and Hold the FAT button then power ON the amplifier.
2. When the FAT LED begins to flash, release the button.
3. If the FAT LED flashes 4 times, the setting is saved to store the FX loop/masters how you want them to all channels. If the FAT LED flashes 3 times, the setting is saved to global.

Now when you proceed to save your favorite settings on each channel (using the "saving channels and settings" method in this manual), you can also save the FX Loop and either of the master volume controls specifically.

Note: To toggle between the master controls and the FX Loop on or off, you can either use the foot controller or the GATE and REVERB buttons on the amp front panel. If using the GATE and REVERB buttons, pressing each button for 2 seconds will toggle these functions:

1. Reverb will toggle the FX loop on and off.
2. Gate will toggle between master 1 & 2

SAVING A DIGITAL CAB TO A BANK   48

When you want to save a cab to a bank along with your favorite channels and settings to be recalled when you press the bank button, the save must be performed in the following order:

1. Select the bank you plan to make the save to.
2. Select the channel as well as drive or aggression modes you plan to save to the bank.At this point the bank LED on the foot controller will begin to flash.
3. Next you will need to select the cab you want saved to the bank. If channel functions (Fat, Bright etc) are selected first, the cab will not be saved.
4. Once you have selected your cab, you may proceed to then select the functions you plan to save to the bank.
5. Once completed, press the bank button to store these settings, the bank LED will stop flashing confirming the save.

SAVING A DIGITAL CAB TO A CHANNEL   49

One cool feature of your amplifier is the ability to save digital cabs to each channel, drive and aggression settings! This will allow you to have many different sounds with every channel, drive or aggression setting change.

In order to save a cab to a channel, drive or aggression setting:

1. Select the channel, drive or aggression setting you want to save a digital speaker cab to.
2. Select the digital speaker cab bank you would like saved with the 6 position rotary switch or two notes remote software.
3. Press and hold the store button until the LED flashes.

Now everytime you switch to that channel, drive or aggression setting, the digital speaker cab you have saved will be loaded by the Two Notes technology inside!

DISABLE/ENABLE CAB SPEAKER   50

For those that have no desire to save digital speaker cabinets, this feature can be disabled so that only the same cab will be used no matter what channel or setting you change.

With the main power in the OFF position.

1. Press and Hold the PRE-POST button then power ON the amplifier.
2. When the Pre-Post LED begins to flash, release the button.
3. If the PRE-POST LED flashes 5 times, the cab save option is disabled. If the Pre-Post LED flashes 4 times, the cab save feature is enabled.

FACTORY RESET   51

If you would like to clear the amp's memory of all saved program patches & restore all of the amps settings to the factory default, which includes MIDI channel (restored to CH1), OMNI Mode, FX Loop (Restored to off at power-up) & a full memory clear, proceed with the procedure below:

With power OFF, press & hold CH3 button & the CH3 BRIGHT button together & turn the power switch to the ON position. The amplifier will flash the CH3 & CH3 BRIGHT LEDs to confirm that the factory defaults have been restored.

Note: When resorting to the factory reset, just remember that ALL settings in the amps memory will be erased.

FOOT CONTROLLER

The Revv footswitch can be configured to either operate as a normal footswitch (with some bonuses) or a tool to quickly recall presets on the amplifier.

Control Mode: Select between all three channels, drive, aggression modes, fx loop on/off, master volumes, and a master mute function.

Preset Mode: Select combinations of channel and functions + master volume select & FX Loop on/off that can be recalled with one button press.

Note: To switch between modes, press & hold the footswitch button 1 for 2 seconds. The LEDs will all illuminate then switch to the settings in the other mode. All settings will be retained when switching between modes.

HOOK UP   52

The footswitch is connected to the rear of the amplifier with a 5 PIN DIN Cable. The amplifier & footswitch will work with any 5 PIN DIN cable should you be in a pinch, but the Revv cable is always recommended for best performance.

It is recommended that the footswitch be connected to the amp with the power off, but should you plug it in during amplifier use, it will power up & automatically set itself to the amps current settings. Upon power-up, all LEDs will turn on for a couple of seconds as it initializes. Once complete, the foot pedal will set itself to the amplifier's current configuration.

CONTROL MODE   53

The foot pedal will always power up in control mode. This mode works similarly to most other foot pedals - it simply controls the functions of the amp. Here is how the buttons respond in control mode:

BUTTON 1

This button has 3 functions, it switches to channel one when the amp is not in channel one, switches between clean and clean wide & switches between foot pedal modes when held for 2 seconds (control & preset).

BUTTON 2

This button will switch to channel two when the amp is not in channel two. It will also toggle through Channel 2 drive modes when in the amp is in channel 2.

BUTTON 3

This button has two functions, it will switch to channel 3 when the amp is not in channel three, & cycle through aggression levels when in channel 3.

BUTTON 4

This button toggles between the two master volume controls.

BUTTON 5

This button toggles FX Loop In/Out.

BUTTON 6

This button turns mute on and off when pressed.

PRESET MODE   54

When the footswitch is in preset mode, each button can then be used to save amp settings, much like a MIDI program change command. For example, if you wanted to save an amp setting like ch3, aggression: high, bright: on, fat: on, FX loop: in, Master volume: 2, you could save this all to one button! Then every time you want to use this amp configuration, all you would have to do is press that one button & the amp would change to this setting. Each button on the foot controller can save settings. They can also save digital cabs utilizing the Two Notes Torpedo tech inside!

Note: When a preset is set on the footswitch, it will not be lost if power is removed from the amp. The Revv footswitch has memory & will retain the settings. Each button is identical in Preset mode & will be considered banks. Each bank can hold an amp preset.

Note: Buttons one & six, however, have 2 functions in preset mode. Button one will switch between the modes (Control & Preset), & button six will activate mute in the same way as in control mode. Holding either button for 2 seconds will activate these abilities.

TO SAVE A PRESET TO A BANK   55

1. Put the footswitch in preset mode & select the bank you want to save to (Buttons one through six).
2. Set the amplifier to your desired configuration from the front panel of the amp.
3. The bank LED on the footswitch you have selected will begin to blink stating a change has been made on the front panel of the amp.
4. Once you're finished configuring the amp, simply press the desired bank button on the footswitch to save the setting into that bank & you're done! The LED will stop flashing verifying that the change has been saved. Now every time you press that bank button, the amp will switch to the configuration you saved to it.

Note: Any change made on the front panel of the amp will result in a bank LED blinking which means that the current bank setting is different from that of the amps new configuration. To save the new setting press the bank button on the footswitch (blinking LED), or, to reset the configuration & not keep the change, simply press another bank button & the change will NOT be saved.

FOOT CONTROLLER RESET   56

The footswitch memory can be cleared when it is needed. Each of the 6 banks will be returned to factory defaults. To reset the memory & return the unit to factory defaults, begin with the amplifier's power off & the footswitch plugged into the footswitch jack on the amplifier

Next, press & hold buttons 1 & 2 down & turn the power switch to the ON position on the amplifier. As soon as the footswitch powers up it will return all memory locations to factory defaults as long as buttons one & two were held down properly at power-up.

Note: This will erase all your settings from the foot controllers memory!

FOOT CONTROLLER MUTE   57

The amp can be muted via the foot pedal by pressing & holding button six for 2 seconds in any mode. Once the amp is muted the LED will flash until the mute is turned off. Mute can be turned off by pressing button six again & quickly releasing it.