

REV V

Owner's Manual the Generator 100(P)



INTRO

Congratulations and welcome to the Revv family! Thank you for trusting Revv Amplification with such an important part of your musical endeavors. Enjoy tone, durability, and ease of use designed to inspire.

Please note that this manual applies to both our Generator 100 & Generator 100P amplifiers. This is because the control layout & instructions are identical. The gain channel & LED on the 100 is red (all else being equal - thicker & more saturated) whereas the gain channel & LED on the 100P is purple (all else being equal - tighter with more note separation). They are however both versatile & clear tight gain channels that can be dialed to your own tastes with the voice switches & aggression levels.



table of contents

		intro	—	2
1.0	—	safety instructions & warnings	—	4
1.1	—	set up & power up	—	5
2.0	—	front panel layout	—	6
2.1	—	input	—	6
2.2	—	channel one (clean)	—	7
2.3	—	channel one (crunch)	—	8
2.4	—	channel two	—	9-10
2.5	—	master volume controls	—	11
2.6	—	presence & depth	—	12
2.7	—	function controls	—	13-15
2.8	—	standby & power switch	—	15
3.0	—	rear panel layout	—	16
3.1	—	main power connection	—	16
3.2	—	bias test points	—	17
3.3	—	impedance & speaker jacks	—	18-19
3.4	—	FX loop connections	—	20-21
4.0	—	serial effects loop	—	22
4.1	—	FX loop on/off	—	22
4.2	—	SEND level control	—	23
4.3	—	FX loop in/out	—	23-24
4.4	—	FX loop hookup	—	24
5.0	—	tubes & bias	—	25
5.1	—	power tubes	—	25
5.2	—	power tube sockets & tube type	—	26
5.3	—	preamp tubes	—	26
5.4	—	power tube bias	—	26-27
5.5	—	set the bias	—	28
5.6	—	bias chart	—	28
6.0	—	MIDI	—	29-30
6.1	—	OMNI mode	—	30
6.2	—	MIDI channel setting	—	31-32
6.3	—	MIDI program change	—	32-33
6.4	—	MIDI controllable functions	—	33
6.5	—	Revv Generator 100w continuous controller commands (CC)	—	34-35
7.0	—	foot switch	—	36
7.1	—	hook up	—	36
7.2	—	control mode	—	37
7.3	—	preset mode	—	38-39
7.4	—	memory reset	—	39
7.5	—	mute & the footswitch	—	39
8.0	—	amp memory reset (factory default)	—	40
9.0	—	specifications	—	40
		warranty	—	41

safety instructions & 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 instrument is designed for electric guitar amplification, and should only be used with electric guitar signals.

- Do not store or operate the amplifier in damp/wet areas.
- Do not keep items that contain liquid on or near 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.
- Do not expose the amplifier to high temperature, keep away from radiators or heat producing/supplying items.
- 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.

set up & power up

Only keep your Revv in a dry place that keeps 6" of space between the rear and any other objects. Tubes produce heat, and anything flammable should be kept away.

First, make sure that the power and standby switches are in the off (down) positions. Next, connect the AC power cord to the amplifier Mains connector on the rear of the amplifier - then to an AC outlet. At this point, all other peripherals can be connected to the amplifier as well: Foot Switch, FX Loop, Guitar, and cable

Note: A high quality, shielded instrument cable is recommended for guitar input as well as FX loop connections to prevent unwanted noise.

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, channel level, 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. Now set the standby switch to the Revv (up) position and you are ready start!

Note: Upon power up, you will notice that all LED's light up for a couple seconds and then only the Channel 1 LED remains lit. This is normal as the amp does a start up sequence at power up, then arms channel one to begin.

Front Panel Layout



Input

1/4" Instrument cable input.

Active Input

The active input jack is to be used with guitars that have **active pickups** & work better with lower impedance than a guitar with passive pickups. Because active pickups don't require high impedance & usually provide a stronger signal out, this jack provides the proper circuit in order to keep the tone of the amp articulate & preventing unwanted compression & noise. If you are finding the tone weak to your personal tastes - **do not hesitate to plug an active pickup-equipped guitar into the passive input to experiment with new sounds.** This operation is safe - & will just hit the front end of the amp harder if you are going for that sound.

Passive Input

The passive input jack is to be used with guitars that have **passive pickups** & require high impedance for proper signal transfer. This jack is designed to get the strongest signal from a passive pickup to the first tube stage.



2.2

Channel One (Clean)

Selected by: **1)** pushing the designated front panel momentary toggle switch up, **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 = large tonal change!

Level (volume) controls both Clean & Crunch volume for well-balanced operation.

Very clean (high headroom) & punchy. Takes pedals very well - or decrease power to 10 watts for a more broken up sound with the **Output Power Switch**. Channel output power is independent so you can use this to control both tone & volume separately from the gain channel.

Channel One (Crunch)

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

Crunch shares its EQ with Clean, & includes a **Crunch Bright** switch to both tailor the sound to your preferences & operate well with settings you have already dialed in for clean. However, many guitarists find this to be their favorite Channel One mode so feel free to dial it in with crunch engaged as a primary setting & go from there.

Crunch Gain is an independent knob used only for this mode & will go from “just barely more than clean” to quite a bit of distortion.





2.4

Channel Two

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

Gain, treble, mid, bass & level (volume) control knobs with a wide range of operation - small adjustment = 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 momentary toggle switch & by repeatedly pressing the Channel #2 footswitch.

The amplifier has a midrange focus & to modify this you can either slightly dial back the mid control or switch between the two Contour options for a bright upper-mid focused sound (on) or a thick lower-mid focused sound (off).

Bright & Fat extend the highs & lows respectively. I find it is best to engage these if you prefer the overall tone either or both provide & then set the treble & bass knobs to taste, accounting for the voicing switch positions. Fat is also a useful tool when switching to a single-coil equipped guitar.

As with Channel One, Channel Two has an independent 100 watt / 10 watt Output Power Switch. 10w mode will help achieve satisfying sounds at lower volume and/or give you the option of a tone featuring more power amp saturation. All else being equal this will result in a more broken up oldschool sound, compared against letting the preamp take care of much of the gain in the higher headroom 100w mode.





2.5

Master Volume Controls

The Generator is equipped with 2 MIDI programmable & foot switchable 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.

Master volume #1 control is in use when the red “masters” LED is off.
Master volume #2 control is in use when the red “masters” LED is on.

The controls can be toggled via the front panel “masters” toggle switch, the footswitch button #4 (or programmed bank) or a MIDI device.



2.6

Presence & Depth

The Presence control from the off position to the 2 o'clock position will give you a subtle increase in treble, & everything past that point will then provide a greater increase for a sharper cut.

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

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 looser 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.



2.7

Function Controls

The accessory functions are activated by the momentary toggle switches. These switches are assigned 2 functions each & control the functions when the switch is pushed in the direction of the function's label. The LED associated with each function will then reflect the state of the function.

A - Masters Switch

The master volume toggle switch is a momentary switch that needs to be pushed up in order to toggle between the 2 master volume controls. The Red LED is illuminated when master #2 is in use & not illuminated when master #1 is in use.

B - Mute Switch

Mute totally silences the amp & is useful in many situations as an alternative to the standby switch.

This can be controlled by pushing down on the labeled front panel momentary switch. The Red LED will flash when the amplifier is in mute. Manual Mute can also be turned on by holding down button #4 on the footswitch for 2 seconds, as well as with MIDI control.

Note: It is not possible to program mute into a footswitch preset bank. Button #4 on the footswitch will control mute in any footswitch mode.

C - Serial FX Loop Switch

The FX Loop toggle switch turns the serial FX loop on & off, as well as in & out of the signal path. On & off is selected by pushing the toggle switch up & releasing it quickly, in & out is selected by pushing the toggle switch up & holding it until the LED flashes. The on & off selection will set the amp to use the FX loop & activate the FX loop footswitch button #3 for use. When the FX loop is not being used it can be turned off & the footswitch will react to this condition by flashing the LED when stepped on.

The in & out control of the FX loop simply does what the footswitch would do when stepped on, it takes effects in & out of the signal path. This feature was added to be able to set the in or out condition of the FX loop to a preset bank on the footswitch when the footswitch is in preset mode, or to control the in or out function when the footswitch is not plugged in to the amp.

Note: This amplifier is set by default to startup with the FX Loop turned off. If you want to bypass the feature & want the FX loop to turn on automatically at startup, simply power off the amplifier, press the FX Loop toggle switch up & hold it, then turn the main power switch to the on position. The FX Loop LED will flash & immediately turn the loop on. Now whenever you turn the amplifier on, the FX loop will also be on & ready to be put in & out of the signal path as you wish.

D - Store Switch

The store switch is used to program MIDI as well as set the MIDI channel. When the amplifier is powered up, by pressing the store toggle switch down, the store LED will begin to flash. At this point, the amplifier is waiting for a MIDI program command to be received. Once received, the current amplifier configuration will then be saved to memory so that anytime the program command is received via MIDI; the amp will switch itself to the saved configuration.

Note: When in store mode, once a MIDI program command is received, the LED will flash quickly then turn off - signaling the user that a program command has been received & the amp's configuration has been stored to memory.



Standby & Power Switch

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

Note: NEVER power up the amplifier without the proper speaker load connected!

Rear Panel Layout



Main Power Connection

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

The mains fuse & HT fuse are in place to protect you & your amplifier from overload conditions. Always replace them with the same type & rating only! Always unplug the amplifier from the mains before replacing the fuses. Fuse requirements are marked on the rear panel of the amplifier.



Bias Test Points

This amplifier is designed to allow the user to set the bias of the power tubes without removing the chassis from the head shell.

Each pair of power tubes needs to be set according to the tubes being used.

Power Tube Fault Fuses

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, so as 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, set the amplifier to 4 ohms, & if the speaker cabinet is 16 ohms, set the amplifier to 8 ohms.



3.3 Impedance & Speaker Jacks

The amplifier must always be connected to a speaker cabinet or load when it is powered up. This amplifier can be used with cabinets that provide a load of 4, 8 & 16 ohms.

Because the amplifier provides 2 speaker jacks, it can also power 2 cabinets directly from the amplifier, but the impedance will need to be set correctly.

Most setups are simple, one cabinet plugged into the amp, set 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 run to the amplifier (one per speaker jack), the correct impedance switch setting would be 4 ohms as they are being run in parallel.

2 - 16 ohm cabinets would be run to the amplifier (one per speaker jack), the correct impedance switch setting would be 8 ohms as they are being run in parallel.

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 possibly cause damage to the output transformer or other components & it is suggested that the amplifier never be run into a lower load than what the amplifier is set to when hooking up speakers in different configurations.

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.



3.4 FX Loop Connections

The FX loop connections are to be hooked up to external pedals or effects units. The Send level will supply the signal required & needs to be set accordingly with the send level control.

MIDI Connections

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 connection of additional MIDI devices in your signal chain in addition to your Revv.

Foot Switch Connection

This connection both powers your footswitch & allows it to control your Revv.

Should the provided footswitch cable fail, any Ethernet cable can be used. However, this cable sends data between the amplifier & footswitch & if a lower quality cable is used incorrect switching or erratic behavior may occur. A high quality cable is recommended, which can be provided by Revv should you need a replacement.

Speaker Cab Lighting

Revv speaker cabinets each have an illuminated up logo which is powered from the cab lighting jack on Revv amplifiers. This is a 4 pin DIN jack that should be connected to the 4 pin DIN jack of a Revv speaker cabinet only. The logo will change colors in conjunction with the channel switching of your head.

Note: This jack can only be used with Revv speaker cabinets.

Serial Effects Loop

This effects loop is foot switchable, preset recallable, & MIDI + CC controllable. It has also been given an On & Off control ability to have the send level control & FX Loop jacks removed from the signal path entirely - even though it was designed from the start to be as transparent as possible. Tube driven with the send output buffered at 900 ohms.

Note: This amplifier is set by default to startup with the FX Loop turned off. If you want the FX loop to turn on automatically at startup, simply press the FX Loop toggle switch up & hold it (while amp is powered off), then turn the main power switch to the on position. The FX Loop LED will flash & immediately turn the loop on. Now whenever you turn the amplifier on, the FX loop will also be on.

Note: The effects loop will need to be turned on in order to be controlled via MIDI Program patches as well, unless it is set to turn on automatically at power up.

FX Loop On/Off

The amplifier's footswitch (button #3 in control mode) is used to switch the effects loop in & out of the signal path to make it easier to apply & remove effects to the guitar signal on the fly.

If you did not turn on the effects loop when starting up the amplifier - no footswitch or MIDI changes will be able to turn it on. This is to prevent accidental activation if you do not intend on using it. This means you can either turn it on using the front control, or set the amplifier to always turn on the effect loop at startup, as above.



4.2 *SEND Level Control*

This effects loop has a Send Level control to make sure your effects volume is optimal. Always make sure to check this knob if you are experiencing any overly loud, or quiet effects - or level issues of any kind.

If your effects start clipping - you are driving the loop too hard with this control.

The master volume controls on the amp also work as return signal controls, so they will need to be adjusted once your send level is set up in order to drive the power amp to your desired volume.

Note: The level controls on each channel will also affect the send level being sent from the effects loop - when one is set higher than the rest you will find your signal changes when using that channel. Be sure to test each channel & the send level coming from the effects loop. For this reason it is normally preferable to set the level of your channels first then adjust your effects loop send level.

4.3 *FX Loop In/Out*

In order to put the effects loop into the signal path, it needs to be turned on first (See 4.1). The effects loop, once turned on, can be put in & taken out of the guitar signal path in a few ways:

1) The front panel toggle switch, when held for 2 seconds will toggle the loop in & out. This method of toggling the loop is designed for footswitch preset setting (See 7.1) but can be used for FX Loop in/out toggling as the user requires from the front panel of the amplifier when the footswitch is not plugged in. Note: When the FX Loop in/out is toggled from the front panel by holding the switch, the LED will flash 4 times when it is in, & 3 times when it is out of the signal path.

2) The foot switch, when not in preset mode, toggles the effects loop in & out of the signal path when the FX Loop is turned on & button #3 of the footswitch is pressed. The footswitch LED #3 will illuminate when it is in, & turn off when it is out of your signal path.

3) The FX Loop can also be controlled via MIDI & CC commands from external equipment. Simply program the amp for MIDI programs or use CC commands to do so. (See Section 6)

FX Loop Hook up

First, you need to hook up your effects units to the amplifier. The send jack will need to be connected to the input of the first (or only) effects unit in your chain. The out jack on the effects unit (or last pedal in your chain) will then connect back to the return jack on the amp.

Next, turn on the amp & turn the effects loop on by pressing the FX Loop toggle switch up on the front panel. You should see the red LED light up to indicate that the effects loop is now on & in the guitar signal path. Adjust each channel's level control to your liking & set your send level control & master volume as above.

Note: If you hear no sound - your effects loop level control knob is probably set at zero!

Tubes & Bias

Power Tubes

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 & a 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 & Tube Type

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 next to tube 1. Tubes 2 & 4 are the second set that are biased with the adjustment trimmer next to tube 2.

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

This amplifier uses 12AX7 preamp tubes in tube positions V1 V2 V3 V4 & V6. A 12AT7 preamp tube is used in the V5 position for the FX Loop & only a 12AT7 tube should be used in this socket.

Preamp tubes do not need to be biased & usually have a long life unlike power tubes, but it is possible for a preamp tube to become faulty at any stage of its rated lifespan.

Power Tube Bias

The power tubes can be biased without taking the chassis out of the wood head shell. 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 pairs. If all 4 are the same type, make sure they are matched pairs at the very least (and don't mix them up), 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)** Next unlock the bias trimmers by turning the nut counter clockwise & then turn the trimmers down by turning the trimmer shaft with a small screwdriver in the counterclockwise direction. If any fuses had blown, make sure to replace them as well.
- 3)** Now plug the amplifier into the main power receptacle, make sure the amplifier is plugged into a load or speaker cabinet, 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 Revv 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.

Set the bias:

- 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, lock down the trimmer lock nuts by turning the nuts clockwise while holding the trimmer shaft with a screwdriver so as not to lose the setting. Do not over tighten the nuts, just snug them. Once complete, return the rear baffle panel to the rear of the amp & fasten it with the screws you removed. You are done!

BIAS CHART (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 experimentation. 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.

Type	KT88	EL34	6L6GC
Safe Range	90mV - 115mV	60mV - 85mV	80mV - 100mV
Recommended set point	105mV	75mV	90mV

MIDI



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 controlling 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, rhythm, & lead, 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.

6.1

OMNI Mode

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 when the amplifier is the only piece of gear being controlled via MIDI, then setting it to a specific channel is not really required & setting the OMNI mode on becomes preferable.

In order to toggle OMNI mode on or off:

- 1) Make sure the power switch is in the off position.
- 2) Press & hold “masters” toggle switch.
- 3) With the “masters” toggle switch being held, turn on the power switch.
- 4) Release the masters toggle switch once the masters LED begins to flash. Once the “masters” LED has stopped flashing, it has accepted the command to adjust OMNI mode. The amplifier will adjust OMNI mode & then reset itself by completing its startup sequence. Once the start-up sequence is done (2 seconds) & the CH1 CLEAN LED is illuminated, you are ready to go.

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

MIDI Channel Setting

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) In order to set the MIDI channel:

With the power off, press & hold the store switch then turn on the power switch. The amp will power up & begin to flash all 3 channel LEDs. 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 are flashing, press the CH1 CLEAN toggle switch (up). The CH1 LED will flash & the other Channel LEDs will turn off, this signifies that MIDI channel 1 has been selected. Simply continue to press the CH 1 toggle switch (up) to get to the channel you desire. As you press the switch 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 switch to save it to memory.

Note: There are only 3 channel LEDS & one aggression LED, 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 & the aggression 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 will flash very quickly a number of times to verify the change has been made & completed. The amp will then restart, completing the MIDI channel change procedure.

6.3

MIDI Program Change

This amplifier can remember up to 128 program settings of the MIDI controllable functions. In order 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: 2, 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 switch. 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!

6.4

MIDI Controllable Functions

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

Channel Selection

3 Aggression Levels (Channel 2)

Bright function (Channel 2)

Fat function (Channel 2)

FX Loop in/out

Master Volume 1 & 2

Mute

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.

Revv Generator 100w Continuous Controller Commands (CC)

In order to use CC commands, the Generator 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 equipments' 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.

Function + CC Number (Hex Value)

Channel 1 Clean - 16 - (0x10)

Channel 1 Crunch - 17 - (0x11)

Channel 2 low aggression - 18 - (0x12)

Channel 2 medium aggression - 19 - (0x13)

Channel 2 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:

Channel two plus aggression toggle: 24 – (0x18)

The following commands control functions that are turned on & off. These functions require an on (0-63) & off (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)

Effects Loop: 26 – (0x1A)

Masters: 27 – (0x1B)

Fat: 28 – (0x1C)

Bright: 29 – (0x1D)

Mute: 30 – (0x1E)



Foot Switch

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 clean, crunch, & gain channels, gain aggression modes, fx loop on/off, master volumes, & a master mute function

Preset Mode - select combinations of channel & switch positions + master volume select & FX Loop on/off that can be recalled with one button press.

Note: The footswitch will always be updated should a change be made on the amplifier front panel. Panel controls override the footswitch.

Note: To switch between modes, press & hold 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

The footswitch is connected to the rear of the amplifier with a shielded Ethernet cable & very rigid connectors. The amplifier & footswitch will work with any Ethernet 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

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 One – This button has 3 functions, it switches to channel one when the amp is not in channel one, changes channel one to either the clean amp mode or crunch amp mode when the amp is already in channel one, & switches between foot pedal modes when held for 2 seconds (control & preset).

Button Two – This button has 2 functions in control mode, it will switch to channel two when the amp is not in channel two, & it will change the aggression level but only when the amp is already in channel two. The LED for channel two will change according to aggression level.

Button Three – This button toggles the FX loop In/Out. If the FX Loop is not turned on however, the FX Loop will not be changed, the LED will flash a few times to signal this.

Button Four – This button has two functions in control mode. It is used to switch between the 2 master volume controls as well as turn mute on & off. When the button is pressed & released, it will change the master volume controls. When it is held for 2 seconds it will mute the amplifier & the LED will flash.

Note: Bright & Fat functions cannot be changed via the footswitch as they are considered to be an extension of the EQ. They can be saved to a bank when in Preset mode however.

Preset Mode

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: ch2, 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.

Note: When a preset is set on the foot switch, 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 & four however, have 2 functions in preset mode. Button one will switch between the modes (Control & Preset), & button four 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:

- 1)** Put the footswitch in preset mode & select the bank you want to save to (Buttons one through four).
- 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.

7.4

Memory Reset

The footswitch memory can be cleared when it is needed. Each of the 4 banks will be returned to factory defaults. In order to reset the memory & return the unit to factory defaults, begin with the amplifiers 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.

7.5

Mute & the footswitch

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 mute is turned off. Mute can be turned off by pressing button four again & quickly releasing it.

Amp Memory Reset (Factory Default)

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 CH2 toggle switch (up) & the CH2 fat switch (down) together & turn the power switch to the ON position. The amplifier will flash the CH2 & Red Aggression LEDs to confirm that the factory defaults have been restored.

Specifications

- 2 Channels: Clean + Crunch, & Gain
 - Independent output power control on each channel
 - Intelligent foot control capabilities
 - MIDI capabilities
 - CC control of all functions
 - OMNI functionality
 - 3 band EQ per channel + voicing switches
 - REVV tube arrangement: 5 - 12AX7, 1 - 12AT7, 4 - 6L6GC
 - Presence & depth control
 - Two master volume controls
 - 4, 8, 16 ohm output impedance speaker jacks
 - Baltic birch head shell
 - Dimensions: 26.5" × 10" × 10.5"
 - Weight: 45 lbs
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WARRANTY

This Revv Amplification Inc. product is warrantied 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 however will be warranted for ninety (90) days from date of purchase of the product to the original owner and speakers will be warranted for one [1] year. The warranty starts on the date of receipt by the original owner. This warranty is subject to the exclusions and obligations listed below.

Exclusions

Product that has been altered or are 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.

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) is to be pre paid 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.

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