



AMPLI  FIRE

POWERED BY



USER MANUAL

V1.0

AMPLI**FIRE**

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INTRODUCTION

Thank you for purchasing AmpliFire, a world-class amp tone and multi-effects pedal. A powerful and portable device, it is small enough to fit in the front pocket of a gig bag yet potent enough to please even the most discriminating tube amp and effects aficionados.

We designed Amplifire as an instrument that we, as guitar players, wanted for ourselves. This meant it had to sound/feel authentic and amazing while being easy to use, transport and be road rugged.

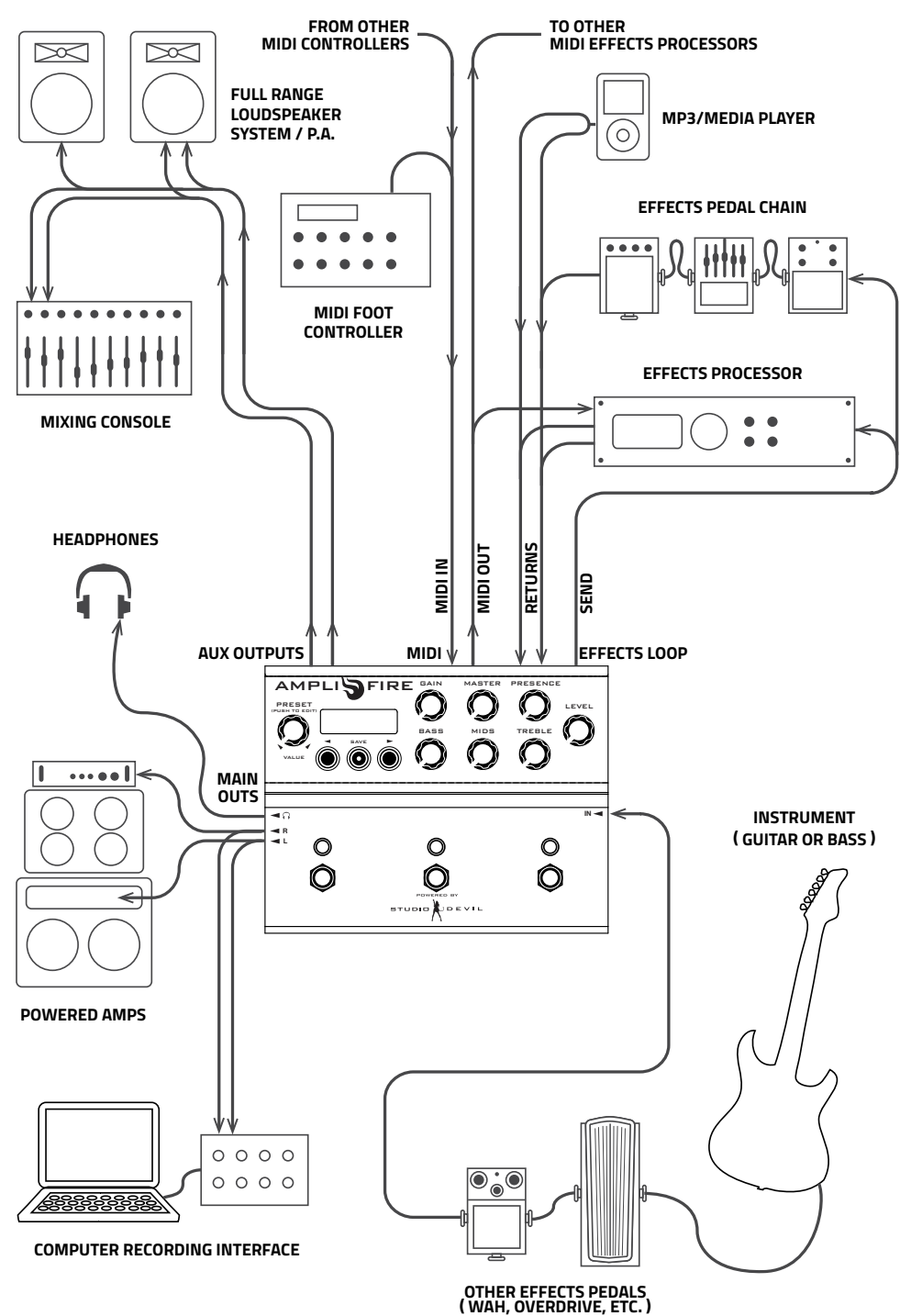
Amplifire is equally capable of being a complete rig replacement or part of a larger pedal board and/or outboard processing rig.

HERE ARE SOME HIGHLIGHTS:

- All new, state-of-the-art amp modeling based on Studio Devil's highly acclaimed and patented technology
- Blazing dual-DSP powered hardware allowing for complex and detailed algorithms
- Stereo 1024 point cabinet impulses with ability to upload 3rd party IRs
- Robust effects selection including drive, modulation, delay, reverb, compression, eq, gate, etc.
- Dedicated, physical amp control knobs for intuitive tone adjustments
- Pristine studio quality audio quality and ultra low noise floor
- Versatile i/o options including $\frac{1}{4}$ " Hi Z input with proprietary processing, separate stereo $\frac{1}{4}$ " and XLR outputs and user programmable effects loop
- 3 fully configurable and rugged foot switches
- Robust external control of presets parameters via midi and foot switch jacks
- Easy to use as a pedal or desktop device
- PC/Mac editor
- 128 programmable presets
- Field upgradeable firmware
- And much more!

Enjoy!

CONNECTION DIAGRAM

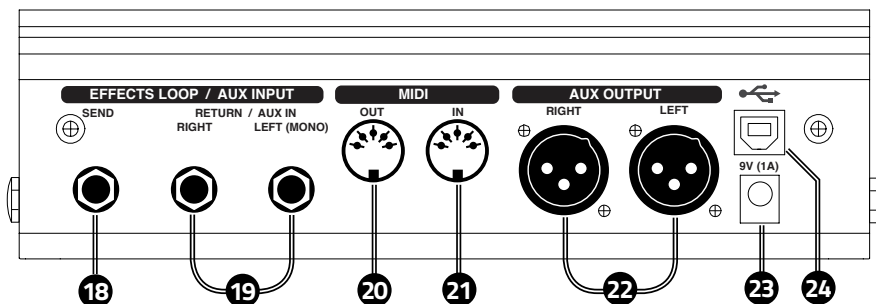
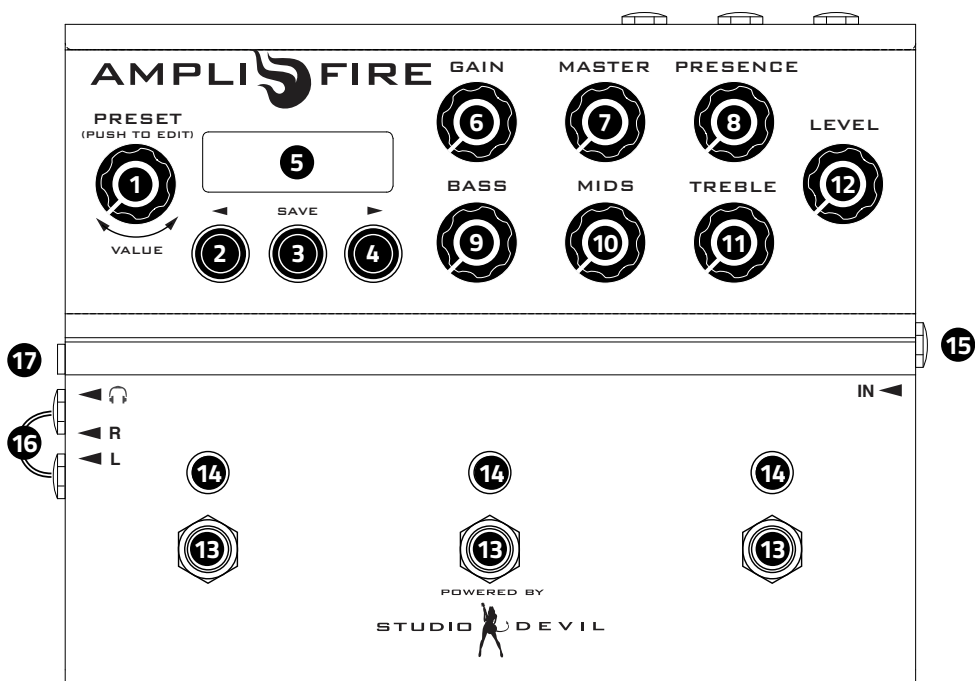


CONNECTORS

- 1 DATA ENTRY ENCODER** – used to select and edit user presets. Turn to select a preset or change a parameter value. Push (click) to select menus for editing presets.
- 2 BACK BUTTON** – used to decrease preset or to go to previous item in edit menus.
- 3 SAVE BUTTON WITH LED** – used to save presets. Press once to select destination and new preset name. Press again to commit the save. Press and HOLD for TUNER function. Built-in LED blinks when a preset has been edited but not saved as a warning to save your edits.
- 4 NEXT BUTTON** – used to increase preset or to go to next item in edit menus.
- 5 LCD SCREEN** – displays currently active preset or edited data name and value.
- 6 GAIN KNOB** – adjusts the gain control of the preamp of the virtual guitar amplifier model.
- 7 MASTER KNOB** – adjusts the master volume control of the virtual guitar amplifier model.
- 8 PRESENCE KNOB** – adjusts the presence control of the simulated power amp section of the virtual guitar amplifier model.
- 9 BASS KNOB** – adjusts the bass equalization control of the tone stack in the virtual guitar amplifier model.
- 10 MIDS KNOB** – adjusts the mids equalization control of the tone stack in the virtual guitar amplifier model.
- 11 TREBLE KNOB** – adjusts the treble equalization control of the tone stack in the virtual guitar amplifier model.
- 12 LEVEL KNOB** – sets the output level of all outputs simultaneously (MAIN outputs, AUX outputs, and HEADPHONES level). This is like an analog output level control.
- 13 FOOTSWITCH** – fully programmable footswitch for changing presets, enabling individual effects, or selecting tap tempo.
- 14 DUAL-COLOR LED** – indicates the state of the programmable footswitch. In preset mode, lights up in RED or AMBER to indicate preset A or preset B. In effect enable mode, lights up RED when effect is active. Blinks at repeat rate for TAP TEMPO function.
- 15 GUITAR INPUT** – Hi-Z input for connecting an electric guitar with a 1/4" phone jack.
- 16 MAIN OUTPUTS** – TRS balanced (or unbalanced) 1/4" output jacks for connecting to amplifiers, mixers, computer interfaces, or input channels of other audio devices.
- 17 HEADPHONE JACK** – 1/8" mini jack for connecting to headphones. **REMEMBER TO USE CAUTION WITH HEADPHONES. EXCESSIVE LOUDNESS IS HARMFUL TO YOUR HEARING AND HEALTH.**
- 18 FX LOOP SEND JACK** – 1/4" mono output jack for connecting to the input of an external effects unit.
- 19 FX LOOP RETURN / AUX IN JACKS** – stereo 1/4" jacks for connecting to either the outputs of an external effects unit or to an auxiliary music player. In FX LOOP mode, these act as a switchable external effect between the amp modeling and the stereo post effects section. In AUX IN mode, these act as an auxiliary audio input which can be mixed with your processed guitar output (for playing along with backing tracks, etc.).
- 20 MIDI OUT JACK** – 5-pin DIN connector for connecting to the MIDI input of an external effects processor. Allows synchronizing program changes to an external processor which may be used in the effects loop. Also performs an optional MIDI THRU function to merge incoming MIDI data from the MIDI IN jack.
- 21 MIDI IN JACK** – 5-pin DIN connector for connecting to the MIDI output of a MIDI controller or MIDI footswitch. Allows for changing presets via program changes and enabling individual effects via continuous controllers.

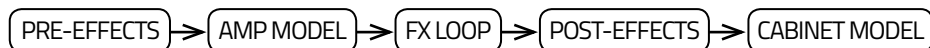
CONNECTORS CONTINUED...

- 22 AUX OUTPUT XLR JACKS** – Balanced XLR output jacks for connecting to external mixer or professional direct recording equipment.
- 23 DC POWER JACK** – for connecting to a 9 or 12 volt power supply (DC or AC, either polarity), 1A minimum. Accepts a standard 2.1mm coaxial plug (either polarity).
- 24 USB CONNECTOR** – for connecting to a host PC. Allows easier editing of presets and uploading custom user cabinet impulse data and firmware via host editing software.



EFFECTS AND SIGNAL CHAIN

Amplifire consists of a world-class amp modeling engine and studio quality effects developed by Studio Devil. They are arranged into the following signal chain groups:



Amplifire is capable of running all of these effects:

NOISE GATE

COMPRESSOR

PRE-FILTER

WAH

VOLUME

DISTORTION / OVERDRIVE/ FUZZ

PARAMETRIC EQ / PROGRAMMABLE FILTER

GRAPHIC EQ

TREMOLO / PANNER

CHORUS

FLANGER

PHASER

ECHO MODELER / PINGPONG DELAY

REVERB

You can choose to place most of these effects into either the PRE-EFFECTS SECTION, or the POST-EFFECTS section, to allow versatility in pre or post processing of your amplifier tone.

Think of the PRE-EFFECTS section like the pedals that run into your amp, and the POST-EFFECTS section as any stereo studio effects you would place onto your amp after it is mic'd up (either on a live mixing board, or in a recording studio).

All signals before the FX LOOP are mono, and all signals after the FX LOOP are stereo. So, any stereo effects assigned to the PRE-EFFECTS section will operate in MONO mode.

PRE-EFFECTS

The PRE-EFFECTS section allows you to apply any standard MONO effects processing that would occur BEFORE the guitar amp, such as pedals or other effects that would be inserted before going into the input of your amp.

The PRE-EFFECTS include:



- **The GATE effect** provides a programmable NOISE GATE. The NOISE GATE has global parameter settings, so that you don't need to change all your presets if you change your guitar. NOISE GATE enable is programmed per preset, so that you can shut it off for particular presets, and leave it on for others. These options can be set in the GATE effect menu.
- **The VOLUME effect** models a VOLUME pedal control. The VOLUME options can be set in the VOLUME effect menu. It can be repositioned to three locations: the PRE-EFFECTS section (as shown), just after the AMP modeling section (just before the LOOP SEND), or POST-EFFECTS section for maximum flexibility.
- **The WAH effect** models a WAH-WAH effects pedal. The WAH-WAH is fully customizable and the options are set in the WAH-WAH effect menu.
- **The COMP effect** models a compressor module for controlling the dynamics of your guitar input. The COMPRESSOR options can be set in the COMPRESSOR effect menu.
- **The BOOST effect** models classic stomp box distortion effects and can be repositioned to different locations in the PRE-EFFECTS chain. It is typically placed before the MODULATION and EQ, but it can be repositioned between MODULATION AND EQ or after MODULATION and EQ. These options can be set in the BOOST effect menu.
- **The EQ block** is made up of the GRAPHIC EQ and three (3) PARAMETRIC EQ effect modules, each of which can be set to the PRE-EFFECTS section or POST-EFFECTS section. These options can be set in the GRAPHICEQ, PARAMETRIC 1, PARAMETRIC 2, and PARAMETRIC 3 effect menus.
- **The EFFECT block** can be assigned to either the PRE-EFFECTS section or POST-EFFECTS section. You can choose from world-class classic CHORUS, FLANGER, PHASER, or TREMOLO effects. These options can be set in the EFFECT menu.
- **The ECHO effect** can be assigned to either the PRE-EFFECTS section or POST-EFFECTS section to get the different effects of feeding an echo into an amp or processing echoes after the amp tone. These options can be set in the ECHO effect menu.

AMPS

At the heart of AmpliFire is Studio Devil's patented, world-class amp modeling. It convincingly captures the sound, feel and nuances of the great guitar amps of all-time.

From the start, AmpliFire provides you with 10 amps that cover nearly all the sonic territory from Jazz to Djent. They are:

US Clean: Based on the 2 speaker combo that set the standard for clean, loud, guitar amps spanning a wide variety of styles.

D Luxe: Based on a medium powered, American, single 12" workhorse classic known for its snappy and crystalline tones and coveted by country, blues and rock players.

'59 B Man: Based on the amp that inspired many of the amps that would follow it, this legend started as a bass amp and is known for its diverse tones and touch sensitive dynamics.

Top Boost: Based on a British classic, this "Class A" 2x12 is known best for its chime, jangle and it's beautiful, unique voicing whether played clean, dirty or in between.

Plexi: Based on the British amp with a reputation for being the definitive Rock tone machine, this amp can be sweet, crunchy or mean with its mid focused punchy sound.

Brit 800: Based on the early 80s British 100w head that helped define the Heavy Metal sound, this beast can blow the roof off but cleans up surprisingly well. Put an overdrive pedal in front of it and you've got "the sound".

Hot Brit: An AmpliFire original model, this amp is inspired by the great British rock amps but has a tighter low end and more gain on tap so a drive pedal in front as necessary (unless you want over the top).

Recto: Based on the amp that defined much of the 90s' heavy sounds, this amp has tons of gain and compression on tap, sounds great with scooped mids and has a powerful bottom end.

5051: Based on the original signature amp of one of the most influential guitarists of all time, this amp is a gain machine that has become a Metal standard with its focused bottom end and touch sensitive response.

Kornfield: Based on a very popular boutique model, this amp puts its own aggressive but responsive and nuanced spin on the Brit sound.

This, however, is not where it ends. AmpliFire is a user upgradable platform and we'll be issuing free firmware upgrades to add new amps. We're looking forward to hearing what our customers would like to see come next. Check back often as there's a good chance that this list is already no longer up-to-date.

EFFECTS LOOP (FX-LOOP)

The EFFECTS LOOP allows you to place an external effect or processor or pedal into the Amplifire signal routing chain.

The EFFECTS LOOP is positioned between the AMP MODEL and the POST-EFFECTS section. The EFFECTS LOOP has a MONO SEND and a STEREO RETURN. All processing before the EFFECTS LOOP is MONO. All processing after the EFFECTS LOOP is STEREO.

Connect the MONO SEND to your external effect processor input, and connect the outputs of your external effect processor to the Amplifire STEREO RETURN jacks. If your external effect processor has a MONO output only, you may connect it to either of the STEREO RETURN jacks. **(When only one return jack is connected, Amplifire will automatically split the return signal into dual-MONO mode from either return jack.)**

The EFFECTS LOOP is switchable so you can switch the inserted effect on or off. You can do this by assigning the EFFECTS LOOP control to a FOOTSWITCH (see FOOTSWITCH section below). You can also program each preset to have the EFFECTS LOOP on or off, so that some presets could use the loop effect while others don't.

If you connect nothing to the EFFECTS LOOP STEREO RETURN jacks, the EFFECTS LOOP is always off. In this configuration, you may use the SEND jack as an alternate amp modeling direct MONO output.

The EFFECTS LOOP can be configured as MUTE SEND or MUTE RETURN (spillover). In MUTE SEND mode, turning off the effects loop only mutes the loop send, allowing any remaining delay or reverb tails in the loop to properly decay (spillover). In MUTE RETURN mode, the effects loop acts like a traditional loop, immediately muting the returns and cutting off the loop right away.

The EFFECTS LOOP can be configured as an AUX INPUT mode (see GLOBAL SETTINGS sections below). This mode allows you to connect a music player or backing tracks which are mixed (unaffected) with your main outputs.

If you have the AUX INPUT mode selected, then Amplifire will disable the EFFECTS LOOP, routing the output of the AMP MODEL effects block directly to the POST-EFFECTS section. Amplifire will also mix the RETURN JACKS with the MAIN and AUX outputs, to allow full-range blending of the aux input with your playing.

The EFFECTS LOOP can also be configured as EXPRESSION PEDAL mode, allowing you to use expression pedals (with a special adapter cable, available separately) to control effect parameters in real-time. (See EXPRESSION PEDALS section.)

POST-EFFECTS

The POST-EFFECTS section allows you to apply any standard STEREO effects processing that would occur AFTER the guitar amp, such as studio processing or other effects that would be applied after your amp.

The POST-EFFECTS include:



- **The EQ section** is made up of the GRAPHIC EQ and three (3) PARAMETRIC EQ effect modules, each of which can be set to the PRE-EFFECTS section or POST-EFFECTS section. In the POST-EFFECTS section, these effects operate in stereo. These options can be set in the GRAPHICEQ, PARAMETRIC 1, PARAMETRIC 2, and PARAMETRIC 3 effect menus.
- **The EFFECT block** can be assigned to either the PRE-EFFECTS section or POST-EFFECTS section. You can choose from world-class classic CHORUS, FLANGER, PHASER, or TREMOLO effects. In the POST-EFFECTS section, these effects operate in stereo. These options can be set in the EFFECT menu.
- **The ECHO effect** can be assigned to either the PRE-EFFECTS section or POST-EFFECTS section to get the different effects of feeding an echo into an amp or processing echoes after the amp tone. In the POST-EFFECTS section, this effect operates in stereo. These options can be set in the ECHO effect menu.
- **The REVERB effect** is the last effect in the POST-EFFECTS section to apply simulated room acoustics and reverberation to the final tone. This effect is stereo. These options can be set in the REVERB effect menu.
- **The VOLUME effect** models a VOLUME pedal control. The VOLUME options can be set in the VOLUME effect menu. It can be repositioned to three locations: the PRE-EFFECTS section, just after the AMP modeling section (just before the LOOP SEND), or POST-EFFECTS section (as shown) for maximum flexibility.

CABINET MODELING

The CABINET section is where Amplifire applies Impulse Response (IR) modeling technology and filtering to simulate the sound of microphones and guitar loudspeaker cabinets. Each of the amp models in Amplifire contain a built-in IR cabinet. Amplifire also supports user customizable IR cabinets which you can upload to Amplifire via USB.

- The CABINET modeler can be configured to use any cabinet from the list of amp models, or any one of the user-defined cabinets.
- The CABINET modeler lets you tweak the cab models with filters specially designed for adjusting microphone and loudspeaker cabinet tones.
- The CABINET modeler can be enabled or disabled on either set of outputs independently (MAIN / AUX), allowing you to use full range systems AND other real guitar cabinets simultaneously.
- The CABINET modeler is always enabled on the headphones output (although you can choose to disable the cabinet modeling on all outputs for three separate full range outputs).

CABINET MODELING CONTINUED...

MATCHED CABINETS

Each amp model in Amplifire has its own built in cabinet IR model. These cabinets are “matched” to the amp model, meaning that they model the type of cabinet that is typically used with that particular type of amp model. Without any programming or cabinet selection, you get the “right” sound by default by leaving the MATCHED cabinet option set. This way, when you change an AMP MODEL, you automatically get the typical cabinet for that amp.

Amplifire allows you customize your tone and swap out these “matched” cabinet models for those that are from the other amp models. To hear what an amplifier sounds like with another amp’s cabinet, just select another cabinet from the list in the CABINET menu.

SELECTING A CABINET

To EDIT THE CABINET OPTIONS from the preset display, click the ENCODER twice: the first time takes you to the AMP MODEL menu, the second time takes you to the CABINET menu. Then, turn the encoder to select a new CABINET model or mode. Press the NEXT and BACK buttons to cycle through some of the other CABINET modeling options, including filter tweaks.

USER CUSTOM CABINET IRS

Amplifire also supports custom USER CABINETS that you can upload to Amplifire via USB. To use one of these custom cabinets, just select one of the user cabinet slots from the end of the list in the CABINET menu. For more information, see the USB section below.

SELECTING PRESETS

Amplifire stores 128 user programs called presets. You can select the active preset from this set with the ENCODER knob or the NEXT and BACK buttons. To advance to the next preset, press NEXT. To backtrack to the previous preset, press BACK. Press and hold NEXT or BACK to advance quickly through the presets. You can also turn the ENCODER knob clockwise to go forward or counter-clockwise to go backward. Amplifire automatically loads the preset as soon as you select it.

QUICK EDIT - TWEAK KNOBS

Amplifire includes six (6) quick tweak knobs to make adjustments just like on a real amplifier without having to enter edit menus or programming. These six knobs allow you to adjust GAIN (tube preamp gain), MASTER (tube power amp master volume), PRESENCE (tube power amp presence control), BASS, MIDS, and TREBLE (tube preamp tone stack controls).

Just grab and turn one of the knobs to instantly adjust the tone. The display will show the value while you’re turning the knob to let you know where it is. It also shows you how it compares to the original preset value using left and right arrows in the display. The arrows show you which direction to turn to match the knob with the original preset value. When both arrows are displayed, the knob matches the original preset value.

Once you edit the preset, the SAVE LED starts blinking, warning you to remember to save your changes if you want to (see SAVING PRESETS below).

DEEP EDIT – PRESET PARAMETERS

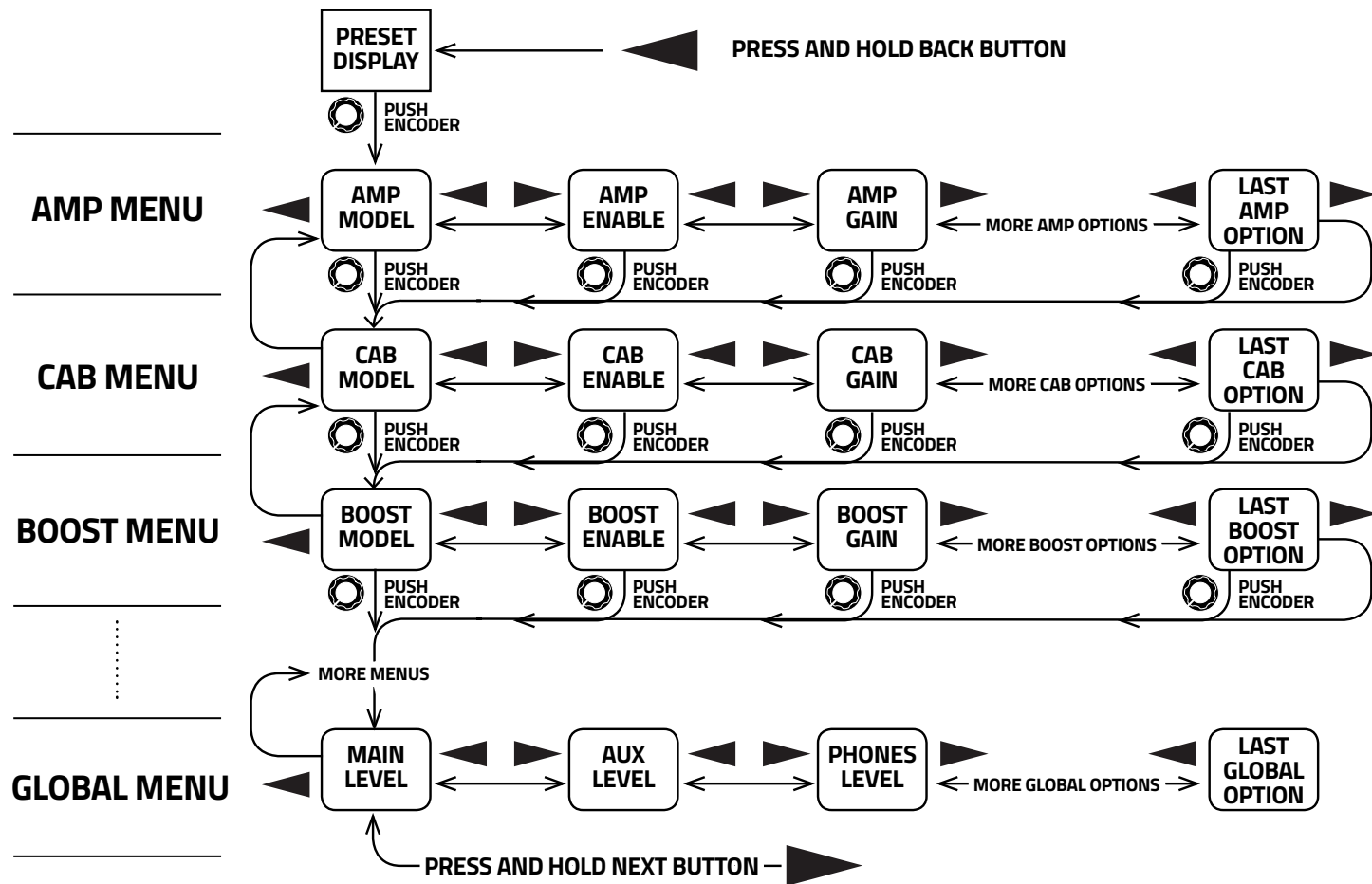
Amplifire has many effects modules, and each effects module has several parameters. Deep editing allows you to customize each of these parameters to create your own tone and effects setup. Here's how it works:

- **To ENTER EDIT MODE**, push down on the ENCODER knob. This takes you to the first effect menu, AMP MODEL.
- **To CHANGE THE PARAMETER VALUE**, turn the ENCODER knob right or left to increase or decrease your selection.
- **To ADVANCE TO THE NEXT PARAMETER** within an effect menu, press the NEXT button. This takes you to the next parameter within that same effect.
- **To BACK UP TO THE PREVIOUS EFFECT PARAMETER**, press the BACK button. This takes you to the previous parameter within that same effect.
- **To ADVANCE TO THE NEXT EFFECT MENU**, press down on the ENCODER knob again. This takes you to the next effect menu.
- **To EXIT EDIT MODE**, press and hold down either the ENCODER knob or the BACK button for one second. This will return to the preset display.

The effects MENUS are organized as depicted in the diagram below. Press the ENCODER knob to go down to the next effect menu, and press the NEXT and BACK buttons to move right or left across each effect menu's parameters. At any location, turn the ENCODER to change the value.

Some tricks about the EDIT MODE:

- **WRAP-AROUND:** If you are currently at the last parameter item in the same effect, pressing NEXT will wrap-around and take you to the first item of the next effect menu.
- **FAST BACK:** If you are currently at the first parameter of an effect, pressing BACK will take you back to the first parameter of the previous effect menu! This is to provide a FAST BACK option for when you want to quickly advance from a menu far down the list to one closer to the top.
- **FAST OPTIONS MENU:** The last menu is the OPTIONS menu, which sets some global parameters. To get there quickly, press and hold the NEXT button for one second. This takes you to the last menu immediately without having to press the ENCODER knob several times.



SAVING PRESETS

Saving a preset requires pressing the SAVE button TWICE.

The first press lets you choose the destination preset and edit the preset name. The second press commits your changes to preset memory.

After you press the SAVE button the first time, the destination preset, the preset name, and a cursor appear in the display window. The NEXT and BACK buttons move the cursor in the display to allow you to select either the destination preset or individual characters in the preset name. Turning the ENCODER knob then allows you to change the value of the element at the cursor position.

Once you have selected the destination preset and name, press the SAVE button again to save your changes.

- **To SAVE YOUR CHANGES TO THE SAME PRESET**, without making any changes to the name, simply press the SAVE button twice, and wait for Amplifire to finish saving your preset.
- **To SAVE YOUR CHANGES TO A DIFFERENT PRESET LOCATION** with the same name, press the SAVE button once, then turn the ENCODER knob to select the destination preset, and then press the SAVE button a second time to commit the save. Amplifire will overwrite your changes to the selected destination preset.
- **To COPY A PRESET TO A DIFFERENT LOCATION**, press the SAVE button once, then turn the ENCODER knob to select the destination preset, and then press the SAVE button again to commit the save. Amplifire will copy the active preset to the selected destination preset.
- **To CHANGE A PRESET NAME**, first press the SAVE button once. Then, using the NEXT and BACK buttons, move the cursor across the preset name to the location of the character you wish to change. While over this character, turn the ENCODER knob to scroll through the available characters. When you have selected the appropriate character, continue to use the NEXT and BACK buttons to move to the next character, and so on, until you have completed editing the name. Finally, press the SAVE button again to commit the changes. Amplifire will overwrite your changes to the selected destination preset with the new name.
- **To CANCEL SAVE**, simply press either the BACK or ENCODER knob. This returns you to the preset display.

DEFAULT PRESET ON POWER-UP

You can choose the preset which Amplifire will load when it first powers up. Initially, this is set to preset 0, but it can be programmed to be any of the 128 presets in Amplifire:

- **To SET THE DEFAULT POWER UP PRESET**, simply select the preset you want by turning the ENCODER knob (or by pressing the NEXT and BACK buttons). Once you have selected the desired preset, press the SAVE button TWICE to save the UNCHANGED PRESET into the SAME PRESET LOCATION. This redundant SAVE operation instructs Amplifire to make it the default preset on power up. The next time you turn on Amplifire, it will load your selected preset.

DISCARD EDIT? CONFIRM

If you try to change presets with the ENCODER or NEXT / BACK buttons while the preset has been changed (edited), Amplifire will warn you and ask you to confirm your decision.

The display window will show a message asking if you want to DISCARD EDIT? Press the NEXT button to confirm and discard all of your changes. Press the BACK button to CANCEL return to the edited preset for either more editing or to save.

WARNING: Amplifire will not warn you if you try to make a program change via a footswitch or MIDI program change. If you are in a performance, and use either a footswitch or external MIDI device to instruct Amplifire to change presets, it will discard any edits and immediately switch to the selected preset. This is to make sure that accidental edits caused by turning the KNOB accidentally don't interfere with live performance switching. If you make intentional edits, make sure to SAVE before hitting any footswitches or external MIDI program changes!

PARAMETER SETTINGS

AMP

MODEL: Selects the amplifier model from the list of available amp models. Choose NONE to bypass the amp model.

ENABLE: enables or disables the amp modeling effect. Choose ACTIVE to enable the amp modeling or BYPASSED to disable the amp modeling.

GAIN: sets the gain control knob of the amplifier from 0.0 (minimum) to 10.0 (maximum).

BASS: sets the bass control knob of the amplifier tone stack from 0.0 (minimum) to 10.0 (maximum).

MIDS: sets the mids control knob of the amplifier tone stack from 0.0 (minimum) to 10.0 (maximum).

TREBLE: sets the treble control knob of the amplifier tone stack from 0.0 (minimum) to 10.0 (maximum).

PRESENCE: sets the presence control knob of the power amplifier from 0.0 (minimum) to 10.0 (maximum).

MASTER: sets the master volume control knob of the power amplifier from 0.0 (minimum) to 10.0 (maximum).

LEVEL: adjusts the final output level of the amp model in dB. This control helps to match the level of your preset with other presets.

DAMPING: adjusts the damping factor of the power amp model from 0% to 100%. Set at 100% for normal power amp operation or adjust down less damping, more bass resonance, and more presence.

SAG: adjusts the power supply sag effect from 0% to 100%. Set to 0% to disable the effect, or gradually add sag to add more effect.

POWERAMP ENABLE: separately enable the power amp section of the amp model. This is a GLOBAL parameter. When using your pedal with a real tube power amp, you can optionally turn off the simulated tube power amp by selecting DISABLED here. Most times you will just want to leave this parameter ENABLED.

PARAMETER SETTINGS CONTINUED...

CABINET

MODEL: Selects the cabinet model and/or cabinet emulation mode. Select NONE to disable everything: no cabinet model, no ROLLOFF, PEAK Q, BOTTOM, and AIR adjustment filters (for use with real guitar cabinets). Select FILTER ONLY to disable the cabinet model only and run the cabinet ROLLOFF, PEAK Q, BOTTOM, and AIR adjustment filters ONLY. Select MATCHED to automatically select the built-in cabinet model for each amp model (and filters). Select an amp model name to choose a specific matched cabinet from the list of available amp models (mix and match cabs for other amps). Or, select one of the USER CABS slots to select one of the user custom impulse response models. In all modes except NONE, the ROLLOFF, PEAK Q, BOTTOM, and AIR adjustment filters are active.

ENABLE: Choose the outputs to have cabinet modeling.
This is a GLOBAL parameter. Choose:

NONE: no cabinet modeling (using guitar cabs on either sets of outputs).

MAINS ONLY: cabinet modeling on the main $\frac{1}{4}$ " outputs only (no cabinet modeling on the aux XLR outputs)

AUX ONLY: cabinet modeling on the aux XLR outputs only (no cabinet modeling on the main $\frac{1}{4}$ " outputs)

BOTH OUTPUTS: all outputs have cabinet modeling.

ROLLOFF: Adjusts a high frequency rolloff filter corner frequency to help tame cabinet impulses that have too much high end. Value is in Hertz (Hz). Adjust down to cut off more highs or adjust up for less rolloff.

PEAK Q: Adjust the peaking of the rolloff filter. The peak is a bump in the frequency response just before rolloff. A lower value of PEAK Q means less peak. Smooth (no peak) values are between 0.5 and 1.0. High peaking values are between 1.0 and 5.0.

BOTTOM: Adjust the bottom end shelf of the cabinet model. Value is in dB. Use this to reduce cabinet models with too much low end woof or increase to warm up cabinets that sound too thin.

AIR: Adjust the upper top end frequencies of the cabinet model. Value is in dB. Use to add more sparkle and brilliance to cabinet models that sound too dull or dark.

LEVEL: Adjust the output level of the cabinet model in dB. Some impulses have a different perceived loudness than others. Use this parameter to help balance the level of a cabinet model with you amp model.

PARAMETER SETTINGS CONTINUED...

BOOST

ENABLE: Turns the BOOST effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

MODE: Select from the following BOOST modes:

OVERDRIVE: models a classic overdrive pedal similar to the Boss SD-1

DISTORTION: models a typical distortion pedal similar to a Boss DS-1

FUZZ: models a fuzz-type distortion pedal similar to a Fuzz-Face

INSERT: Select from the following INSERT positions in the signal chain:

BOOST>FX>EQ: places the BOOST pedal before the modulation effect and pre-eq effects in the PRE EFFECTS section.

FX>BOOST>EQ: places the BOOST pedal between the modulation effect and pre-eq effects in the PRE EFFECTS section.

FX>EQ>BOOST: places the BOOST pedal after the modulation effect and pre-eq effects in the PRE EFFECTS section.

DRIVE: Adjusts the drive of the boost effect from 0% to 100%.

tone: Adjusts the variable tone of the boost effect from 0% to 100%.

LEVEL: Adjusts the output level of the boost effect in dB to match the bypassed level or to just provide additional boost or cut.

EFFECT

ENABLE: Turns the modulation EFFECT effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

MODE: Choose from one of the following modulation EFFECT modes:

NONE: no modulation effect will be used.

TREMOLO: a tremolo effect (varies the amplitude of your signal with a sweeping LFO).

CHORUS: a chorus effect (varies the pitch of your signal with a sweeping LFO).

FLANGER: a flanger effect (varies a comb filter type effect with a sweeping LFO).

PHASER: a phaser effect (varies a series of notch filters with a sweeping LFO).

INSERT: positions the modulation effect. Choose PRE to position the effect in the PRE-EFFECTS section (mono, before the amp model). Choose POST to position the effect in the POST-EFFECTS section (stereo, after the amp model).

SPEED: Adjusts the speed of the LFO sweep in Hertz (Hz). Increase for a faster sweep or reduce for a slower sweep.

PARAMETER SETTINGS - EFFECT CONTINUED...

SWEEP: Adjusts the amount of the effect sweep from 0% to 100%.

TWEAK "A": Adjusts a special parameter which depends on the selected effect:

TREMOLO: controls the WIDTH parameter of the tremolo from 0% (no panning) to 100% (full panning). Only has an effect in POST (stereo) mode. In PRE (mono) mode, it has no effect.

CHORUS: controls a HIGHPASS / LOW-CUT FILTER feeding the CHORUS effect. Adjusts the rolloff frequency from 0% (~30Hz) to 100% (~3kHz).

FLANGER: controls the REGENERATION of the FLANGER effect from 0% to 100%. Increasing this control produces a more intense flanger effect.

PHASER: controls the REGENERATION of the PHASER effect from 0% to 100%. Increasing this control produces a more intense phaser effect.

TWEAK "B": Adjusts a special parameter which depends on the selected effect:

TREMOLO: controls the WAVE SHAPE of the LFO of the tremolo effect. Selection starts at 0% for sine wave, blends into a triangle wave at 50%, and blends into a square wave at 100%.

CHORUS: controls the DELAY TIME feeding the CHORUS effect from 0% (~0.5ms) to 100% (~5ms).

FLANGER: controls the fixed MANUAL delay time for the FLANGER effect from 0% (~0.2ms) to 100% (~5ms).

PHASER: controls the notch filters BASE FREQUENCY from 0% (~150Hz) to 100% (~600Hz).

LEVEL: Adjusts the output level of the modulation EFFECT in dB to match the bypassed level or to just provide additional boost or cut.

WET MIX: Controls the balance of dry signal blended with wet (effected) signal. For most applications you should leave this at 50% (a 50-50 mix of dry and effected signal). For more dry mix, reduce towards 0%. For more effect signal in the mix, increase towards 100%.

ECHO

ENABLE: Turns the ECHO effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

MODE: Select from the following ECHO modes / styles:

NONE: selects no ECHO model effect. Forces the ECHO effect off even if the ENABLE is ACTIVE.

DIGITAL: models a digital delay pedal with a full range echo repeat.

ANALOG: models an analog-delay type pedal with a very warm echo repeat.

TAPE ECHO: models a delay pedal based on audio tape, having echo repeats with a mid-range peak.

PARAMETER SETTINGS - ECHO CONTINUED...

DARK TAPE: models a delay pedal similar to the TAPE ECHO mode but with a darker rolloff on the echo repeats.

SOFT DIGITAL: models a delay pedal similar to the DIGITAL mode but with a gentle rolloff of the highs on the echo repeats.

INSERT: positions the ECHO effect. Choose PRE to position the effect in the PRE-EFFECTS section (mono, before the amp model). Choose POST to position the effect in the POST-EFFECTS section (stereo, after the amp model).

LEVEL: Controls the level in dB of the ECHO effect only. Adjust to blend the right amount of reverb with your dry (unaffected) signal.

TIME: Sets the time interval between echo repeats (in milliseconds).

REPEATS: Sets the amount of feedback which controls the duration of the repeats from 0% (single repeat / slap back) to 100% (almost infinite repeats).

PING PONG: activates PING-PONG mode. Choose ENABLED to turn on the ping-pong delay mode which makes the repeats alternately bounce between left and right channels. Choose DISABLED for a standard echo effect without ping-pong echoes. This option only works in the POST (stereo) position. In the PRE (mono) position, the PING PONG effect is not noticeable.

TAILS: activates TAILS (repeat tails). Choose ENABLED to have your echo repeats continue to ring out and delay even after the ECHO effect is turned off. This allows you to hear a smooth transition from ACTIVE to BYPASSED. Choose DISABLED to force the echo effect and its repeat echoes to both mute immediately after turning the ECHO effect to BYPASSED.

SPILLOVER: Controls if the echo effect continues to decay after changing presets (spilling over into the next preset). This parameter is per preset and controls if the delay spills over when ENTERING (switching to) that preset. Setting this parameter to ENABLED means that any remaining echo from the previous preset will continue to spillover when you switch to THIS preset. Setting this parameter to DISABLED means that when entering THIS preset, any remaining echoes will be reset. If the ECHO effect is set differently in the switched preset from the previous preset, the echoes will change to the sound indicated by the new preset. If you want the echo speed and character to sound identical between two (or more) presets, make sure to set the ECHO parameters the same in all of them.

WIDTH: Controls the stereo width of the delay. Works in conjunction with the PING-PONG mode and only used when the ECHO effect is set in the POST (stereo) position. Adjust from 0% (full summed to mono) to 100% (true stereo).

FLUTTER: Controls the variation in delay time (FLUTTER) to simulate subtle changes in speed control in old analog tape echo effects, creating a natural CHORUS-like effect. Adjust from 0% (no flutter) to 100% (maximum speed variation and flutter).

FLUTTER SPEED: Control the FLUTTER variation speed in Hertz (Hz). Adjusts the frequency of the flutter speed variation, which has an effect similar to a CHORUS LFO speed. Only noticeable when FLUTTER control is set above 0%

PARAMETER SETTINGS CONTINUED...

GRIT: Controls the amount of distortion in the echo repeats. Some old echo effects can be overdriven into distortion, only noticeable on the repeats. This adjusts the amount of distortion from 0% (no distortion) to 100% (lots of distortion).

DRY LEVEL: Allows you to change the dry (unaffected) signal level when the ECHO effect is enabled. Usually, the dry signal is mixed equally (0dB) with the ECHO effect. In cases where you want the dry signal much lower than the ECHO effect (to accentuate the echoes), or want to increase the output level, you can adjust it here.

DUCKING: Controls the DUCKING effect of the ECHO modeler. The DUCKING effect lowers the volume of the ECHO effect when it detects that you are playing, and will swell it back up to normal volume when you stop playing. This allows you to hear a nice echo effect at the tail end of your phrasing without it cluttering up the notes as you play them. Set the amount of DUCKING ATTENUATION (in dB) here. This effect is also controlled by the THRESHOLD and RELEASE parameters (see below).

THRESHOLD: Controls the THRESHOLD of the DUCKING effect. Sets the level which the input to the ECHO needs to reach in order to activate the DUCKING ATTENUATION. As soon as your input reaches this threshold, the echoes will be reduced in volume by the amount of dB specified in the DUCKING parameter.

RELEASE: Controls the amount of time that the DUCKING effect will restore the echo levels to normal (0dB of attenuation) after the input to the ECHO falls below the THRESHOLD. Once your playing stops (or falls below the THRESHOLD parameter), the DUCKING effect begins to increase the volume of the ECHO effect. The RELEASE time controls how fast (or slow) this release occurs.

REVERB

ENABLE: Turns the REVERB effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

TYPE: Select from the following REVERB modes / styles:

SMALL: simulates the reverb of a small room.

MEDIUM: simulates the reverb of a medium-sized club or small hall.

LARGE: simulates the reverb of a large sized venue or large concert hall.

SPRING: simulates the reverb of a spring reverb tank.

LEVEL: Controls the level in dB of the reverb effect only. Adjust to blend the right amount of reverb with your dry (unaffected) signal.

DECAY: Controls the decay time (size) of the reverb from 0% (minimum size) to 100% (maximum size).

LOW-FREQUENCY DAMPING: Controls the amount of dampening of low-frequency (bass) in the simulated room acoustics from 0% (most amount of bass) to 100% (least amount of bass).

HIGH-FREQUENCY DAMPING: Controls the amount of dampening of high-frequency (treble) in the simulated room acoustics from 0% (least amount of treble) to 100% (full amount of treble).

PARAMETER SETTINGS - REVERB CONTINUED...

DIFFUSION: Controls the amount of stereo diffusion of the reverb from 0% to 100%.

WIDTH: Controls the amount of stereo separation of the reverb from 0% (fully summed to mono) to 100% (full stereo panning).

PREDELAY: Controls the amount of PREDELAY feeding into the reverb unit. Used to simulate very large spaces where the first echo splash from the reverb occurs only after a predelay time. Adjust from 0 to 100 milliseconds.

GATE

ENABLE: Turns the noise GATE effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

THRESHOLD: Adjusts the threshold (in dB) of the noise GATE, which is the minimum level of the input signal that will open the GATE.

ATTACK: Adjusts the attack time (in milliseconds) of the noise GATE. This controls how much time it takes for the GATE to open once the input signal has risen above the THRESHOLD.

RELEASE: Adjusts the release time (in milliseconds) of the noise GATE. This controls how much time it takes for the GATE to close after the input signal has fallen below the THRESHOLD.

SLOPE: Controls the smoothness of the GATE as it opens or closes. Adjust from 0% (smoothest) to 100% (quickest) slope.

SPILLOVER: Controls if the reverb effect continues to decay after changing presets (spilling over into the next preset). This parameter is per preset and controls if the reverb tail spills over when ENTERING (switching to) that preset. Setting this parameter to ENABLED means that any remaining reverb from the previous preset will continue to spillover when you switch to THIS preset. Setting this parameter to DISABLED means that when entering THIS preset, any remaining reverb will be reset. If the REVERB effect is set differently in the switched preset from the previous preset, the reverb will change to the sound indicated by the new preset. If you want the reverb character to sound identical between two (or more) presets, make sure to set the REVERB parameters the same in all of them.

DRY LEVEL: Allows you to change the dry (unaffected) signal level when the REVERB effect is enabled. Usually, the dry signal is mixed equally (0dB) with the REVERB effect. In cases where you want the dry signal much lower than the REVERB effect (to accentuate the reverb), or want to increase the output level, you can adjust it here.

DUCKING: Controls the DUCKING effect of the REVERB modeler. The DUCKING effect lowers the volume of the REVERB effect when it detects that you are playing, and will swell it back up to normal volume when you stop playing. This allows you to hear a nice reverb at the tail end of your phrasing without it cluttering up the notes as you play them. Set the amount of DUCKING ATTENUATION (in dB) here. This effect is also controlled by the THRESHOLD and RELEASE parameters (see below).

THRESHOLD: Controls the THRESHOLD of the DUCKING effect. Sets the level which the input to the REVERB needs to reach in order to activate the DUCKING ATTENUATION. As soon as your input reaches this threshold, the reverb will be reduced in volume by the amount of dB specified in the DUCKING parameter.

PARAMETER SETTINGS - GATE CONTINUED...

RELEASE: Controls the amount of time that the DUCKING effect will restore the reverb levels to normal (0dB of attenuation) after the input to the REVERB falls below the THRESHOLD. Once your playing stops (or falls below the THRESHOLD parameter), the DUCKING effect begins to increase the volume of the REVERB effect. The RELEASE time controls how fast (or slow) this release occurs.

COMPRESSOR

ENABLE: Turns the COMPRESSOR effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

DRIVE: Controls the amount of drive into the compressor pedal effect. Adjust from 0% (minimum compression) to 100% (maximum compression).

ATTACK: Adjusts the attack time (in milliseconds) of the COMPRESSOR. This controls the time for the COMPRESSOR to increase compression as the input signal rises.

RELEASE: Adjusts the release time (in milliseconds) of the COMPRESSOR. This controls the time for the COMPRESSOR to decrease compression as the input signal decays.

LEVEL: Adjusts the output level of the COMPRESSOR effect in dB to match the bypassed level or to just provide additional boost or cut.

LOOP

ENABLE: Turns the external effects LOOP on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off. In AUX INPUT mode, the loop ENABLE serves no function. (see loop MODES below)

MODE: Choose from the following modes:

MUTE SEND: In MUTE SEND mode, the LOOP bypass/active state controls the mute on the send jack only and the return jacks are always active. This allows any effect tails (like in delays and reverbs) to continue to ring out and decay even after the loop is BYPASSED.

MUTE RETURN: In MUTE RETURN mode, the LOOP bypass/active state controls the mute on both the send and the return. This immediately mutes any external effects connected to the LOOP once it is BYPASSED.

AUX INPUT: In AUX INPUT mode, the LOOP acts like an auxiliary input for connection with external music players. The input will mix with the guitar processed input without any POST effects. In this mode, the send jack remains active and can be used as an additional guitar send.

EXPRESSION: in EXPRESSION mode, the effects loop is disabled and may be used with a special adapter cable (available through Atomic Amps) to accommodate two standard expression pedals (for controlling effect parameters with pedals in real-time). For expression pedals to work, the LOOP must be put into EXPRESSION mode.

See the EXPRESSION PEDALS section for more detail on how to use EXPRESSION PEDALS with AmpliFire.

PARAMETER SETTINGS - LOOP CONTINUED...

SEND LEVEL: Adjusts the relative output of the SEND jack in dB to help match with external effects processor inputs.

RETURN LEVEL: Adjusts the relative input gain of the RETURN jacks to help match with external effects processor output levels.

PEDAL A: Displays the position of expression pedal “A” in percent (%). The full heel position (minimum position) should display as near 0%. The full toe position (maximum position) should display as near 100%. If you do not get a good range with your pedal, you may calibrate it by pressing SAVE while on the PEDAL A display. This starts the PEDAL A calibration function. (See the EXPRESSION PEDALS section for more details).

PEDAL B: Displays the position of expression pedal “B” in percent (%). The full heel position (minimum position) should display as near 0%. The full toe position (maximum position) should display as near 100%. If you do not get a good range with your pedal, you may calibrate it by pressing SAVE while on the PEDAL B display. This starts the PEDAL B calibration function. (See the EXPRESSION PEDALS section for more details).

PARAM A: Selects the parameter for expression pedal “A” to control. You may choose from any non-global, non-menu type parameters (normal continuous parameters) within your preset.

MIN A: Sets the minimum value of the selected PARAM A. This represents the value of the parameter when EXPRESSION PEDAL A is in the heel (minimum) position.

MAX A: Sets the maximum value of the selected PARAM A. This represents the value of the parameter when EXPRESSION PEDAL A is in the toe (maximum) position.

PARAM B: Selects the parameter for expression pedal “B” to control. You may choose from any non-global, non-menu type parameters (normal continuous parameters) within your preset.

MIN B: Sets the minimum value of the selected PARAM B. This represents the value of the parameter when EXPRESSION PEDAL B is in the heel (minimum) position.

MAX B: Sets the maximum value of the selected PARAM B. This represents the value of the parameter when EXPRESSION PEDAL B is in the toe (maximum) position.

PARAMETER SETTINGS CONTINUED...

WAH WAH

ENABLE: Turns the WAH-WAH effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

PEDAL: Sets the position of the WAH-WAH pedal from 0% (down or heel position) to 100% (up or toe position). This can be set to a fixed position for a “cocked-WAH” sound, or assigned to an EXPRESSION PEDAL or MIDI for continuous control (see EXPRESSION PEDAL and MIDI sections).

FREQUENCY MIN: Sets the minimum frequency of the WAH-WAH filter effect sweep. This is the resonant frequency of the filter when the PEDAL parameter is in the minimum 0% (heel) position.

FREQUENCY MAX: Sets the maximum frequency of the WAH-WAH filter effect sweep. This is the resonant frequency of the filter when the PEDAL parameter is in the maximum 100% (toe) position.

TYPE: Choose the type of filter for the WAH effect. Some WAH-WAHs use a BANDPASS type, but some use a high-peaking LOWPASS type. Each has its own character:

LOWPASS: selects a variable low-pass filter. The WAH pedal controls the rolloff frequency. This mode preserves the low end of your guitar even when the pedal is put into the higher positions.

BANDPASS: selects a variable band-pass filter. The WAH pedal controls the center frequency. This mode is more nasal and characteristic of WAH-WAHs. It reduces the low end of your guitar when the pedal is put into the higher positions.

Q: Adjusts the “Q” or peaking of the filter. Increase this value for a thinner, more nasal, and crisper WAH sound. Lower this value for a more subtle and rounder WAH sound.

LEVEL: Sets the output LEVEL of the WAH when the effect is enabled. This allows you to automatically add clean boost to your WAH when it is enabled! Adjust the amount of boost in dB.

PARAMETER SETTINGS-WAH WAH CONTINUED...

AUTO-OFF: Enables the AUTO-OFF feature of the WAH effect. Most real WAHs have an on/off switch. Most expression pedals don't. To solve this issue, we created an AUTO-OFF feature which can bypass your WAH effect automatically when the pedal is parked or inactive for a period of time. NOTE: the AUTO-OFF feature only functions if the WAH is ENABLED. When the WAH is BYPASSED, the AUTO-OFF feature has no effect (the WAH remains bypassed).

DISABLED: turns off the AUTO-OFF feature, and your WAH is only controlled by the ENABLE parameter.

INACTIVITY: selects INACTIVITY AUTO-OFF mode. In this mode, the WAH will automatically turn off when the WAH PEDAL parameter is not changed more than the THRESHOLD amount during an interval of time specified by the TIMER parameter. (see THRESHOLD and TIMER parameters below).

PARKED: selects PARKED AUTO-OFF mode. In this mode, the WAH will automatically turn off when the WAH PEDAL parameter is kept below the THRESHOLD amount during an interval of time specified by the TIMER parameter. (see THRESHOLD and TIMER parameters below).

TIMER: Sets the AUTO-OFF timeout time (in seconds). When the AUTO-OFF feature is enabled, this parameter sets the amount of time for the WAH to automatically shut off when the PEDAL is either inactive or parked.

THRESHOLD: Sets the AUTO-OFF threshold for inactivity or parked position. If the PEDAL changes less than this amount then it is INACTIVE. If the PEDAL remains below this amount then it is PARKED.

VOLUME

ENABLE: Turns the VOLUME effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

INSERT: Positions the VOLUME effect into one of three positions, each with a subtly different control of your sound:

PRE: In the PRE position, the VOLUME effect is placed in the beginning of your PRE-EFFECTS section (at the input, just after the GATE). This allows you to mimic the effect of rolling off your guitar volume knob with you foot. It is the same as if you had a volume pedal as your first pedal in your effects chain.

AMP: In the AMP position, the VOLUME effect is placed right after your AMP model, just before the effects LOOP SEND. This allows you to control the volume of your tone as it is sent to your FX LOOP and POST EFFECTS, allowing tails in your POST EFFECTS (and FX LOOP effects) to ring out even after turning your VOLUME effect down.

POST: In the POST position, the VOLUME effect is placed at the end of your POST-EFFECTS section. This allows you to control the volume of everything, like a master volume control similar to the output LEVEL knob.

PEDAL: Sets the position of the VOLUME pedal from 0% (down or heel position) to 100% (up or toe position). This can be set to a fixed position for a set VOLUME, or assigned to an EXPRESSION PEDAL or MIDI for continuous control (see EXPRESSION PEDAL and MIDI sections).

PARAMETER SETTINGS CONTINUED...

GRAPHIC EQ

ENABLE: Turns the GRAPHIC EQ effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

INSERT: positions the GRAPHIC EQ effect. Choose PRE to position the effect in the PRE-EFFECTS section (mono, before the amp model). Choose POST to position the effect in the POST-EFFECTS section (stereo, after the amp model).

LEVEL: Adjusts the output level of the GRAPHIC EQ effect in dB to match the bypassed level or to just provide additional overall boost or cut to the effect.

80, 160, 320, 640, 1.2K, 2.6K, 5.1K, LEVEL: Adjusts the amount of boost or cut for each of the equalizer bands of the GRAPHIC EQ effect in dB.

PRE EQ

ENABLE: Turns the PRE EQ filter effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

TYPE: Selects the type of filter. Choose from the following:

NONE: Disables the filter even when it is ACTIVE.

GAIN ONLY: Applies only gain (across all frequencies). In this mode, only the LEVEL parameter has effect.

LOWPASS 1: Applies a first-order low pass filter which passes bass (lows) and rolls off treble (highs). This filter begins to roll off (cut) high frequencies above the value set in the FREQUENCY parameter. It passes all low frequencies below the FREQUENCY parameter at the level set with the LEVEL parameter. This filter is not affected by the Q control.

HIGHPASS 1: Applies a first-order high pass filter which passes treble (highs) and rolls off bass (lows). This filter begins to roll off (cut) low frequencies below the value set in the FREQUENCY parameter. It passes all high frequencies above the FREQUENCY parameter at the level set with the LEVEL parameter. This filter is not affected by the Q control.

LOW SHELF 1: Applies a first-order low shelf filter which changes the level of the bass (lows) and leaves treble (highs) unaffected. This filter boosts (or cuts) low frequencies below the value set in the FREQUENCY parameter by the amount set with the LEVEL parameter. It leaves high frequencies above the FREQUENCY parameter unaffected. This filter is not affected by the Q control.

HIGH SHELF 1: Applies a first-order high shelf filter which changes the level of the treble (highs) and leaves bass (lows) unaffected. This filter boosts (or cuts) high frequencies above the value set in the FREQUENCY parameter by the amount set with the LEVEL parameter. It leaves low frequencies below the FREQUENCY parameter unaffected. This filter is not affected by the Q control..

PARAMETER SETTINGS - PRE EQ - TYPE CONTINUED...

LOWPASS 2: Applies a second-order low pass filter which passes bass (lows) and rolls off treble (highs). This filter begins to roll off (cut) high frequencies above the value set in the FREQUENCY parameter. It passes all low frequencies below the FREQUENCY parameter at the level set with the LEVEL parameter. This mode is similar to LOWPASS 1, but has a faster roll off and it is affected by the Q control.

The Q control affects peaking before rolloff. Increase the Q to increase the peak that occurs just before rolloff. Reduce the Q to flatten the peak for a smoother rolloff.

HIGHPASS 2: Applies a second-order high pass filter which passes treble (highs) and rolls off bass (lows). This filter begins to roll off (cut) low frequencies below the value set in the FREQUENCY parameter. It passes all high frequencies above the FREQUENCY parameter at the level set with the LEVEL parameter. This mode is similar to HIGHPASS 1, but has a faster roll off and it is affected by the Q control. The Q control affects peaking before rolloff. Increase the Q to increase the peak that occurs just before rolloff. Reduce the Q to flatten the peak for a smoother rolloff.

LOW SHELF 2: Applies a second-order low shelf filter which changes the level of the bass (lows) and leaves treble (highs) unaffected. This filter boosts (or cuts) low frequencies below the value set in the FREQUENCY parameter by the amount set with the LEVEL parameter. It leaves high frequencies above the FREQUENCY parameter unaffected. This mode is similar to LOW SHELF 1, but has a sharper transition from lows to highs and it is affected by the Q control. The Q control affects peaking just around the transition between lows and highs. Increase the Q to increase the peak that occurs at the transition. Reduce the Q to flatten the peaks for a smoother transition.

HIGH SHELF 2: Applies a second-order high shelf filter which changes the level of the treble (highs) and leaves bass (lows) unaffected. This filter boosts (or cuts) high frequencies above the value set in the FREQUENCY parameter by the amount set with the LEVEL parameter. It leaves low frequencies below the FREQUENCY parameter unaffected. This mode is similar to HIGH SHELF 1, but has a sharper transition from highs to lows and it is affected by the Q control. The Q control affects peaking just around the transition between highs and lows. Increase the Q to increase the peak that occurs at the transition. Reduce the Q to flatten the peaks for a smoother transition.

BANDPASS: Applies a bandpass filter which allows only frequencies in a narrow band to pass and cuts all other frequencies outside this band. The center frequency of the band is determined by the FREQUENCY parameter and its level is controlled by the LEVEL parameter. The width of the band (amount of frequencies near the center frequency) is determined by the Q control. Increase the Q control for a NARROWER band, decrease the Q control for a WIDER band.

NOTCH: Applies a notch filter which cuts frequencies within a narrow band and lets all other frequencies outside this band pass at the level set by the LEVEL parameter. The center frequency of the band is determined by the FREQUENCY. The width of the band (amount of frequencies near the center frequency) is determined by the Q control. Increase the Q control for a NARROWER band, decrease the Q control for a WIDER band.

PARAMETER SETTINGS - PRE EQ - TYPE CONTINUED...

PEAKING: Applies a peaking filter which boosts or cuts the level of frequencies within a narrow band and leaves all other frequencies outside this band unaffected. The level of the peak is set by the LEVEL parameter. The center frequency of the peak is determined by the FREQUENCY parameter. The width of the peak (amount of frequencies near the center frequency) is determined by the Q control. Increase the Q control for a NARROWER peak, decrease the Q control for a WIDER peak.

LEVEL: Adjusts the output LEVEL (in dB) of the filter, typically the level of the pass band of frequencies for the filter (see filter types above for more detail).

FREQUENCY: Adjusts the corner frequency of the filter. This can be either the cutoff, transition, or center frequency depending on the type of filter (see filter types above for more detail).

Q: Adjusts the Q of the filter which controls the amount of peaking. This parameter has no effect on GAIN ONLY and first order filters (which do not have a Q control). Increase the Q for sharper peaks / narrower bands. Decrease the Q for smoother transitions / wider bands.

LOW-CUT: Adjusts the roll off frequency of a special low-cut filter, designed to allow customizing your tone by feeding less lows into the front end input of the guitar amp model. This parameter can be used to “mod” the amp models for a tighter and punchier tone.

PARAMETRIC 1, 2, AND 3

ENABLE: Turns the PARAMETRIC (1, 2, or 3) filter effect on or off. Select ACTIVE to turn it on. Select BYPASSED to turn it off.

TYPE: Selects the type of filter. Choose from GAIN ONLY, LOWPASS 1, HIGHPASS 1, LOW SHELF 1, HIGH SHELF 1, LOWPASS 2, HIGHPASS 2, LOW SHELF 2, HIGH SHELF 2, BANDPASS, NOTCH, or PEAKING. (see the PRE EQ section above for a detailed description of these filter modes).

INSERT: positions the PARAMETRIC (1, 2, or 3) effect. Choose PRE to position the effect in the PRE-EFFECTS section (mono, before the amp model). Choose POST to position the effect in the POST-EFFECTS section (stereo, after the amp model).

LEVEL: Adjusts the output LEVEL (in dB) of the filter, typically the level of the pass band of frequencies for the filter (see filter types above for more detail).

FREQUENCY: Adjusts the corner frequency of the filter. This can be either the cutoff, transition, or center frequency depending on the type of filter (see filter types above for more detail).

Q: Adjusts the Q of the filter which controls the amount of peaking. This parameter has no effect on GAIN ONLY and first order filters (which do not have a Q control). Increase the Q for sharper peaks / narrower bands. Decrease the Q for smoother transitions / wider bands.

FOOTSWITCH 1, 2, AND 3

MODE: Select the mode of operation for the footswitch. Choose from the following options:

A<->B: toggles between two presets, preset "A" and preset "B". Press once for preset "A". Press again for preset "B". Press again returns to preset "A", and so on. Press and hold for two seconds to BYPASS the unit. Each footswitch has two presets, "A" and "B" which can be assigned to any of the 128 presets (see PRESET "A" and PRESET "B" sections below).

A/B<->BYPASS: toggles between a preset and BYPASS. Press once for preset "A". Press again for bypass. Press again returns to preset "A", and so on. Press and hold for two seconds to toggle between preset "A" and preset "B". Each footswitch has two presets, "A" and "B" which can be assigned to any of the 128 presets (see PRESET "A" and PRESET "B" sections below).

LOOP CONTROL: toggles the external effects loop on and off.

ALL BYPASS: toggles the unit from ACTIVE to BYPASS, bypassing all effects and amp modeling.

EFFECT: toggles the modulation EFFECT between ACTIVE and BYPASSED.

ECHO: toggles the ECHO effect between ACTIVE and BYPASSED.

REVERB: toggles the REVERB effect between ACTIVE and BYPASSED.

NOISE GATE: toggles the NOISE GATE effect between ACTIVE and BYPASSED.

WAH: toggles the WAH-WAH effect between ACTIVE and BYPASSED.

VOLUME: toggles the VOLUME effect between ACTIVE and BYPASSED.

GRAPHIC EQ: toggles the GRAPHIC EQ effect between ACTIVE and BYPASSED.

PRE FILTER: toggles the PRE FILTER effect between ACTIVE and BYPASSED.

PARAMETRIC (1, 2, AND 3): toggles the PARAMETRIC (1, 2, AND 3) effect between ACTIVE and BYPASSED..

AMP BYPASS: toggles the amp modeling on and off.

COMPRESSOR: toggles the COMPRESSOR effect between ACTIVE and BYPASSED.

TAP TEMPO: allows you to set the ECHO delay time by tapping the tempo with your foot.

PRESET "A": Select one of the 128 presets for use as preset "A" in A<->B or A/B<->BYPASS modes (allows you to toggle between two presets).

PRESET "B": Select one of the 128 presets for use as preset "B" in A<->B or A/B<->BYPASS modes (allows you to toggle between two presets).

GLOBAL SETTINGS

Some of Amplifire's parameters are GLOBAL, meaning that they have only one value and do not change with each preset. These GLOBAL parameters are either system options or effect parameters that are best set once from one location and that apply to all presets universally.

When you change a GLOBAL SETTING, the SAVE LED will NOT blink, since it does not require you to save the preset. All GLOBAL SETTINGS are saved automatically when you return to the preset display.

Some global settings are scattered among the effects menus (if they apply to a specific effect), but most are located in the last menu (the OPTIONS menu).

The table below lists the GLOBAL SETTINGS and their functions:

CABINET ENABLE: Chooses which set of outputs have cabinet modeling. In some cases you may want to send a signal without cabinet modeling to a real guitar cabinet (such as a stage amp), and another signal with cabinet modeling to a full range system (such as a PA system). This option lets you choose cabinet modeling on BOTH MAIN and AUX outputs, MAIN outputs only, AUX outputs only, or NONE (no cabinet modeling on either set of outputs). NOTE: Cabinet modeling is ALWAYS present on the HEADPHONES output.

NOISE GATE THRESHOLD: Adjusts the threshold of the noise gate, which is the input signal that will open the gate. Any signals below this level will allow the gate to close.

NOISE GATE ATTACK: Sets the attack time of the noise gate to control the speed of the opening of the gate.

NOISE GATE RELEASE: Sets the release time of the noise gate to control the speed of the closing of the gate.

NOISE GATE SLOPE: Sets the slope of the noise gate release curves, which controls how smoothly or abruptly the noise gate closes and opens.

LOOP MODE: Selects the mode of the EFFECTS LOOP. Choices are MUTE SEND, MUTE RETURN, and AUX INPUT.

In MUTE SEND mode, switching the effects loop on and off only mutes the send, allowing the return to continue to spill over into the post processing effects chain. This is useful for allowing external delays and reverbs to continue to spillover into Amplifire's return jacks.

In MUTE RETURN mode, switching the effects loop on and off will immediately mute the return jacks and any sound coming back from them. This is a typical effects loop operation.

In AUX INPUT mode, the return jacks are rerouted to the end of Amplifire's processing chain, and mixed with the output. The aux input bypasses the cabinet modeling for full range blending of the return jack inputs with the outputs. This allows mixing external music players with the amp modeling output for playing over backing tracks, computer, and other music sources.

In EXPRESSION mode, the effects loop is configured as EXPRESSION PEDAL mode, allowing you to use expression pedals (with a special adapter cable, available separately) to control effect parameters in real-time. (See EXPRESSION PEDALS section.)

GLOBAL SETTINGS CONTINUED...

SEND LEVEL Sets the output level of the SEND jack. This is a relative level in dB for a full scale digital output.

RETURN LEVEL: Sets the input level of the RETURN jacks. This is a relative level in dB for a full scale digital input.

MAIN LEVEL: Sets the output level of the MAIN output jacks. This is a relative level in dB for a full scale digital output.

AUX LEVEL: Sets the output level of the AUX output jacks. This is a relative level in dB for a full scale digital output.

HEADPHONES LEVEL: Sets the output level of the HEADPHONES jack. This is a relative level in dB for a full scale digital output.

FOOTSWITCH 1 MODE: Sets the mode of Footswitch #1 (left footswitch). This option can assign one of the following modes to the footswitch:

FOOTSWITCH 1 PRESET A: Each footswitch can be put into a preset select mode to choose one of two presets, preset A (red) or preset B (amber). This setting selects the number of the preset that is loaded when preset A (red) is switched in by the footswitch.

FOOTSWITCH 1 PRESET B: Each footswitch can be put into a preset select mode to choose one of two presets, preset A (red) or preset B (amber). This setting selects the number of the preset that is loaded when preset B (amber) is switched in by the footswitch.

FOOTSWITCH 2 MODE: Sets the mode of Footswitch #2 (center footswitch). See the description for FOOTSWITCH 1 MODE above for details.

FOOTSWITCH 2 PRESET A: Sets the preset number for preset A of footswitch #2. See the description for FOOTSWITCH 1 PRESET A above for details.

FOOTSWITCH 2 PRESET B: Sets the preset number for preset B of footswitch #2. See the description for FOOTSWITCH 1 PRESET B above for details.

FOOTSWITCH 3 MODE: Sets the mode of Footswitch #3 (right footswitch). See the description for FOOTSWITCH 1 MODE above for details.

FOOTSWITCH 3 PRESET A: Sets the preset number for preset A of footswitch #3. See the description for FOOTSWITCH 1 PRESET A above for details.

FOOTSWITCH 3 PRESET B: Sets the preset number for preset B of footswitch #3. See the description for FOOTSWITCH 1 PRESET B above for details.

MIDI IN CHANNEL: Sets the input MIDI channel from 1 through 16, OMNI, or NONE. (see MIDI section below for a complete description)

MIDI OUT CHANNEL: Sets the output MIDI channel from 1 through 16, OMNI, or NONE. (see MIDI section below for a complete description)

MIDI THRU: Sets the MIDI through function on or off.

GLOBAL SETTINGS CONTINUED...

CONTRAST: Adjusts the LCD display window contrast to help optimize visibility of the display. Values are from 1 to 10.

MAIN OUTPUT MODE: Sets the MONO/STEREO operation of the MAIN outputs. Choices are:

STEREO MODE: left and right outputs are a true stereo signal pair.

DUAL MONO LEFT: this is a dual mono mode, where the left stereo output is copied to both the left and right outputs.

DUAL MONO RIGHT: this is a dual mono mode, where the right stereo output is copied to both the left and right outputs.

DUAL SUMMED: this is a dual mono mode, where the sum of the right and left stereo outputs is copied to both the left and right outputs.

AUX OUTPUT MODE: Sets the MONO/STEREO operation of the AUX outputs. See the MAIN OUTPUT MODE global setting above for a complete description.

POWER AMP ENABLE: Globally enables or disables the power amplifier section of the amp modeling effect. This is useful when you are running AmpliFire into a real tube power amp, and you want to avoid having the power amp modeling on top of the effects of a real tube power amp.

TAP TEMPO MODE: Selects the tap tempo period. Normally, the ECHO repeat rate will be set to the period between taps of the tap tempo switch. Alternatively, you may choose one of the following modes:

NORMAL: the repeat rate equals the interval between taps on the footswitch

EIGHTHS: the repeat rate is twice as fast as the interval between taps on the footswitch (as if quarter notes are tapped into the footswitch, and eighth notes are produced in the repeat rate).

TRIPLETS: the repeat rate is three times as fast as the interval between taps on the footswitch (as if quarter notes are tapped into the footswitch, and triplet notes are produced in the repeat rate).

16THS: the repeat rate is four times as fast as the interval between taps on the footswitch (as if quarter notes are tapped into the footswitch, and sixteenth notes are produced in the repeat rate).

DOTTED 8THS: the repeat rate is one and a half times as fast as the interval between taps on the footswitch (as if quarter notes are tapped into the footswitch, and dotted eighth notes are produced in the repeat rate).

TUNER SILENT: Enables or disabled silent tuning. When enabled, the guitar input is silenced (muted) whenever AmpliFire is in TUNER mode. When disabled, tuner operation does not affect the signal path.

GLOBAL SETTINGS CONTINUED...

PRESET INDEXING: Selects the numbering of the presets:

0-127: Presets are numbered starting from 0 and running up to 127.

1-128: Same presets are numbered starting from 1 and running up to 128.

WAH AUTO-OFF MODE: Sets the auto-off feature of the WAH-WAH effect. See the WAH effect parameters for a complete description.

WAH AUTO-OFF TIMER: Sets the auto-off timer of the WAH-WAH effect. See the WAH effect parameters for a complete description.

WAH AUTO-OFF THRESHOLD: Sets the auto-off threshold of the WAH-WAH effect. See the WAH effect parameters for a complete description.

FOOTSWITCHES

Amplifire features three (3) fully programmable footswitches. Each footswitch can be independently programmed to allow one of the following functions:

- Provide instant access to presets
- Control an individual effect enable/bypass
- Tap tempo function.

When programmed to allow instant access to presets, the footswitch toggles between two programmable presets, preset A and preset B. Each footswitch has its own pair of preset A and preset B, so you can assign up to six (6) different presets to the three (3) footswitches.

When programmed to control an individual effect enable/bypass, the footswitch toggles the effect on and off, just like if it were a real effect pedal.

When programmed for tap tempo, the footswitch allows you to tap in the ECHO modeler delay time with your foot.

FOOTSWITCH MODES

The following are the FOOTSWITCH modes that Amplifire supports:

A/B OR BYPASS: Toggles between two different presets, preset A and preset B. The LED toggles between two colors, red and amber, to indicate which of the two presets is currently loaded. In this mode, you can press and hold the footswitch to switch the unit into bypass.

A OR B / BYPASS: Toggles between active and bypass. When active, the LED is lit and is red if preset A is loaded or amber if preset B is loaded. In this mode, you can press and hold the footswitch to toggle the active state between preset A and preset B.

LOOP CONTROL: Toggles the state of the effects loop, either on or off.

FOOTSWITCH MODES CONTINUED...

BYPASS: Acts like a master bypass, toggling all effects processing on and off.

BOOST: Switches the BOOST modeler effect. Acts like an overdrive pedal on/off switch.

EFFECT: Switches the MODULATION effect. Acts like an effect pedal on/off switch.

ECHO: Switches the ECHO/DELAY MODELER effect.
Acts like an effect pedal on/off switch.

REVERB: Switches the REVERB effect. Acts like an effect pedal on/off switch.

GATE: Switches the NOISE GATE effect. Acts like an effect pedal on/off switch.

WAH: Switches the WAH-WAH effect. Acts like an effect pedal on/off.

VOLUME: Switches the VOLUME effect. Acts like an effect pedal on/off.

GRAPHIC EQ: Switches the GRAPHIC EQ effect.
Acts like an effect pedal on/off switch.

PARAMETRIC 1: Switches the PARAMETRIC 1 effect.
Acts like an effect pedal on/off switch.

PARAMETRIC 2: Switches the PARAMETRIC 2 effect.
Acts like an effect pedal on/off switch.

PARAMETRIC 3: Switches the PARAMETRIC 3 effect.
Acts like an effect pedal on/off switch.

AMP: Switches the AMP modeling effects. Acts like an effect pedal on/off switch.

COMPRESSOR: Switches the COMPRESSOR effect.
Acts like an effect pedal on/off switch.

TAP TEMPO: Allows the footswitch to act as a tap tempo function, which sets the delay time of the ECHO effect to the period between taps of the footswitch. In this mode, the footswitch LED blinks red at a rate that represents the delay time of the ECHO effect.

PROGRAMMING FOOTSWITCHES

Footswitch modes are selected on the FOOTSWITCH menu. The FOOTSWITCH menu appears second to last in the menu list, just before the GLOBAL settings page. To CHANGE THE FOOTSWITCH MODES, press the ENCODER knob to enter edit mode. Then, tap the ENCODER knob several times to drill down the effect menus until the FOOTSWITCH 1 mode selection appears in the LCD display window. You are now in the FOOTSWITCH menu. Press the NEXT and BACK buttons to cycles through the options for the footswitches, and turn the ENCODER knob to change the values.

PROGRAMMING FOOTSWITCHES CONTINUED...

The FOOTSWITCH menu options are as follows:

| | | |
|------------------------|------------------------|------------------------|
| FOOTSWITCH #1 MODE | FOOTSWITCH #2 MODE | FOOTSWITCH #3 MODE |
| FOOTSWITCH #1 PRESET A | FOOTSWITCH #2 PRESET A | FOOTSWITCH #3 PRESET A |
| FOOTSWITCH #1 PRESET B | FOOTSWITCH #2 PRESET B | FOOTSWITCH #3 PRESET B |

These settings are global, so they will automatically get saved once you return to the preset display.

TUNER

Amplifire features a built-in tuner to assist in tuning up your guitar.

- To **ACTIVATE THE TUNER**, press and hold the SAVE button for one second.
- To **EXIT TUNER MODE**, press any button.

While in TUNER MODE, play your guitar into it and Amplifire will display the closest note and arrows indicating your tuning in the LCD display window. Adjust the tuning of your guitar until both arrows point to the center note, and your guitar string is in tune.

CLIP WARNING

Amplifire features a digital clip warning system to alert you whenever your output signal is driven above the maximum digital levels.

If your signal clips one of the three (3) sets of outputs (MAIN, AUX, or HEADPHONES), Amplifire will display a CLIP WARNING in the display windows for 2 seconds. The CLIP WARNING will also indicate which output pairs clipped. For example, if you see Main+Aux+HP in the CLIP WARNING message, then you are experiencing digital clips on all three sets of outputs.

The CLIP WARNING will remain displayed for as long as digital clips continue to occur. The CLIP WARNING will automatically disappear after two seconds of no digital clipping.

To help control digital clips, you can do one of the following:

- Reduce the LEVEL knob to lower levels.
- Reduce an effect LEVEL within your preset which may be causing excessive output.
- Adjust the EQ settings of your preset to lower excessive bass or treble frequencies.
- Set the individual MAIN OUTPUT, AUX OUTPUT, or HEADPHONE OUTPUT global settings to help reduce the output level of each set of outputs.

EXPRESSION PEDALS

SPECIAL CABLING

AmpliFire supports up to two standard expression pedals to allow real-time control of parameters using foot pedals. To enable this feature, you will need a special adapter cable to connect your expression pedals to AmpliFire.

This adapter is available through Atomic Amps, or you can build your own with standard $\frac{1}{4}$ " adapters. Alternatively, you might want to assemble your own.

The connections you need are:

- Connect the SEND JACK (TIP) to both RINGS of the EXPRESSION PEDALS. (If using only one expression pedal, then connect the SEND JACK (TIP) to the RING of the single EXPRESSION PEDAL only).
- Connect the TIP of EXPRESSION PEDAL "A" to the RIGHT RETURN JACK (TIP).
- Connect the TIP of EXPRESSION PEDAL "B" to the LEFT RETURN JACK (TIP). (only if using a second expression pedal)
- ALL SLEEVES CONNECTED TO EACH OTHER (for shielding).

With these connections, you can adapt expression pedals for use with AmpliFire's FX LOOP.

ENABLING EXPRESSION PEDAL MODE

Once your expression pedals are connected to AmpliFire with the special cabling, you must set the EFFECTS LOOP to EXPRESSION mode.

Go to the EFFECTS LOOP menu and choose EXPRESSION mode from the choices.

TESTING AND CALIBRATING EXPRESSION PEDALS

Once your expression pedals are connected and EXPRESSION mode is enabled, you can test and calibrate your expression pedals.

To TEST your expression pedals:

Go to the PEDAL A (or PEDAL B) parameter items of the EFFECT LOOP menu. These parameters display the current position of the expression pedal. The reading should change smoothly from 0% to 100% as you move the corresponding expression pedal from the minimum (heel) position to the maximum (toe) position.

If you do not get good results (or no changes at all), you may need to check your cabling adapter, make sure you are in EXPRESSION mode, or CALIBRATE your pedals.

EXPRESSION PEDALS CONTINUED...

To CALIBRATE your expression pedals:

1. Press the SAVE button while AmpliFire is displaying the PEDAL A (or PEDAL B) parameter. Pressing SAVE while TESTING your expression pedal will start the CALIBRATE process.
2. AmpliFire will ask for the “Heel Position”. Move your expression pedal to the minimum position (fully down / heel position). Leave it there for a few seconds and then press the SAVE button again.
3. AmpliFire will then ask for the “Toe Position”. Move your expression pedal to the maximum position (fully up / toe position). Leave it there for a few seconds and then press the SAVE button to complete the CALIBRATE process.

Optionally, you can repeat the process starting on the PEDAL B test parameter menu to CALIBRATE the second expression pedal.

If at any point in the CALIBRATE process you wish to ABORT the calibration operation, press the ENCODER or BACK or NEXT buttons. This will abandon the calibration, restore the calibration setting to the previous state, and return to the PEDAL A (or PEDAL B) TEST display.

ASSIGNING EXPRESSION PEDALS

Once the expression pedals are connected, calibrated, and working smoothly, you can assign them to parameters for continuous control.

When an expression pedal is assigned to a parameter, it does not corrupt the value of the parameter in the preset (this is to preserve your settings when you choose to use your presets without expression pedals in the future). The expression pedal simply overrides the preset value with the value generated by the expression control.

To ASSIGN A PARAMETER to an expression pedal control, go to the LOOP PARAM A (or LOOP PARAM B) parameter item in the LOOP menu and select one of the numerous parameters available for continuous control. To start, you may want to assign PARAM A to WAH PEDAL and PARAM B to VOLUME PEDAL. These are the most common parameters used with expression pedals.

After assigning a parameter to an expression pedal, you may want to adjust the minimum and maximum values of that parameter that the expression pedal will sweep between.

ADJUSTING THE EXPRESSION PEDAL SWEEP

Once an expression pedal is assigned to a parameter, you may want to control the extremes of values between which the expression pedal will sweep. This is done by adjusting the LOOP MIN A and LOOP MAX A (or LOOP MIN B and LOOP MAX B) parameters in the LOOP menu.

To adjust the value of the parameter that represents the minimum position of the expression pedal, adjust the LOOP MIN A (or LOOP MIN B for expression "B") to the desired minimum parameter value.

To adjust the value of the parameter that represents the maximum position of the expression pedal, adjust the LOOP MAX A (or LOOP MAX B for expression "B") to the desired maximum parameter value.

With the MIN and MAX values set, the assigned parameter will sweep between the MIN value and the MAX value as the expression pedal is moved between its minimum (heel) position and its maximum (toe) position.

MIDI

Amplifire responds to and transmits MIDI messages to support program changes and MIDI continuous control changes.

MIDI communicates messages over one of sixteen (16) channels. Amplifire can be programmed to send or receive these messages on any one, all, or none of these channels. These are selected by the MIDI options in the GLOBAL SETTINGS menu.

The **MIDI IN CHANNEL** global setting selects which MIDI channel Amplifire will react to.

- Set the MIDI IN CHANNEL to the desired MIDI channel and Amplifire will react to program changes or control changes it receives on the MIDI IN jack on that channel ONLY.
- Set the MIDI IN CHANNEL to OMNI, and Amplifire will react to any program changes or control changes it receives on the MIDI IN jack.
- Set the MIDI IN CHANNEL to NONE, and Amplifire will ignore all program changes and control changes it receives on the MIDI IN jack.

The **MIDI OUT CHANNEL** global setting selects which MIDI channel Amplifire will transmit program changes on.

- Set the MIDI OUT CHANNEL to the desired MIDI channel and Amplifire will send program changes to the MIDI OUT jack on that channel ONLY.
- Set the MIDI OUT CHANNEL to OMNI, and Amplifire will send program changes on the MIDI OUT jack on all channels.
- Set the MIDI OUT CHANNEL to NONE, and Amplifire will not send any MIDI program changes to the MIDI OUT jack.

The **MIDI THRU** global setting allows Amplifire to relay MIDI messages it receives on the MIDI IN jack to the MIDI OUT jack. This is useful for MIDI setups where Amplifire is part of a chain of MIDI equipment in which only some of the messages are intended for Amplifire, and others are intended for other equipment on the same chain.

- Turn the MIDI THRU global setting to ON to let Amplifire merge incoming messages on the MIDI IN jack with outgoing messages to the MIDI OUT jack.
- Turn the MIDI THRU global setting to OFF and Amplifire will only send its own program changes to the MIDI OUT jack.

MIDI PROGRAM CHANGES are mapped one-to-one, meaning that Amplifire will switch to the same preset as the incoming MIDI program change message. Likewise, if you change presets in Amplifire using the ENCODER or FOOTSWITCH, Amplifire will transmit the same preset number in the outgoing MIDI program change.

MIDI CONTROL CHANGES are MIDI messages that contain a control number (CC#) and a data value. Several MIDI CC Control Number is assigned to particular parameter controls in Amplifire to allow external control of effects and functions.

DATA VALUES between 0 and 63 are interpreted as OFF, and DATA VALUES between 64 and 127 are interpreted as ON.

The MIDI CC# control numbers supported by Amplifire are listed below:

| MIDI CC# | FUNCTION |
|----------|----------------------|
| 80 | BYPASS Amplifire |
| 81 | EFFECT LOOP enable |
| 82 | BOOST enable |
| 83 | EFFECT enable |
| 84 | ECHO enable |
| 85 | REVERB enable |
| 86 | NOISE GATE enable |
| 87 | GRAPHIC EQ enable |
| 88 | PARAMETRIC #1 enable |
| 89 | PARAMETRIC #2 enable |
| 90 | PARAMETRIC #3 enable |
| 12 | PREFILTER enable |
| 13 | FOOTSWITCH #1 press |
| 14 | FOOTSWITCH #2 press |
| 15 | FOOTSWITCH #3 press |
| 16 | AMP MODEL enable |
| 17 | COMPRESSOR enable |
| 18 | TAPTEMPO press |
| 19 | WAH enable |
| 20 | VOLUME enable |
| 21 | WAH PEDAL |
| 22 | VOLUME PEDAL |

For TAP TEMPO and FOOTSWITCH continuous controls, the DATA VALUE is ignored and any message is interpreted as a “press” of that function.

