All About Effects
"A Beginner's Guide To Awesome Guitar Tone Enhancement"

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I've been putting this guide together for those of you who would like to use effects to enhance your sound but have little idea of how to do it.

Maybe you have a little knowledge of effects. For example, you may know distortion or echo when you hear it and realize that that is the effect you need to generally have your guitar sound a certain way. However, when you turn on your distortion pedal it doesn't sound quite like the recording. Maybe the little dials on the distortion pedal may as well not be there because you have no idea what they do!

This is probably because you have the basic concept of what distortion sounds like but lack the exacting knowledge you need to create the subtleties that could make it sound more similar to the sound you are trying to emulate. The goal of this guide is to help you recognize these subtleties and then choose and use the equipment you will need to create them.

Emulating the sound of your favorite guitar player can be tricky. There are exacting elements to it, a science of choosing the right gear and the art of using your ears and sometimes intuition to find use it. The more you learn to balance these two elements, the easier it will be to create the sounds you want.

Part 1: Explanation of effect categories and subcategories:

Lets look at the sounds you wish you were creating as variations on what I like to describe as the "broad" categories of effects that you are probably already aware of, or already creating. For example you may be seeking a Black Sabbath distortion sound but every time you kick on that distortion pedal it sounds like Metallica. Perhaps you want to sound like Tom Petty but every time you kick it on it sounds like Stevie Ray Vaughn.

In this example or broad effect category would be "distortion". We'll consider the different variations of "distortion" as subcategories (those being Black Sabbath, Metallica, Stevie Ray Vaughn and Nickelback sounds.)

Since each sound is unique we'll give its distortion type its own name:

Black Sabbath – Overdrive
Metallica – Metal Distortion
Nickelback- Traditional Distortion
Stevie Ray Vaughn – Blues Tube Distortion

This brings to attention the fact that there are many variations on the distortion pedal, sometimes a dozen from the same company. Lets take Boss pedals as an example. We can choose from: *Combo Drive, Blues Driver, Dyna Drive, Distortion, Turbo Distortion, Deluxe Reverb Amp, Bassman Amp, Fuzz, Mega Distortion, Metal Core, Metal Zone, Overdrive, Overdrive/Distortion, and Power Stack.*

Each of these is manufactured to create a unique sound.

So logic tells us that if we want a specific sound we need to choose a specific pedal. This is the first step. If I were to choose pedals from Boss for each of our specific sounds here they would be:

Black Sabbath – Power Stack
Metallica – Metal Zone
Nickelback- Distortion
Stevie Ray Vaughn – Blues Driver

The next step would be learning how to use the pedal to fine-tune it to the sound you seek. These would be the subtleties I spoke of earlier. This is the part where you start turning the little knobs. I'll get into the details of how to do that a little bit later.

First though lets explore each category of effects and how they sound.

Part 2) Identifying effects:

It's easy to identify some effects like echo and distortion. But others are a bit trickier. Here's an example of some.

Take Chorus, Tremelo, Phase, and Flange. These all have a similar overall concept because they belong to what is known as the "Modulation" category. In a sense each of these could be considered a variation on "Modulation". Here are some characteristics and comparisons you can use to help recognize/identify these effects in the Modulation category.

Chorus: An effect used to artificially create the sound of a several instruments playing the same thing at the same time. It can be described as a "swelling" effect. It can be used on either acoustic or electric. Examples: "Fly By Night" by Rush, "Come As You Are" By Nirvana, and "Every Rose Has Its Thorn" by Poison.

Phase: Called Phase because the sound it creates is from putting a signal out of phase with itself (the technical part of this I will explain later). I describe it as a "swirling" sound. Examples: " Lightning Crashes" by Live for rhythm, anything from Van Halen I for lead and "Breath" by Pink Floyd.

Tremelo: Creates a "fluttering" sound. Basically it swells the volume of the signal (a note or chord) it a specific rate so it sounds like someone is turning a volume knob back and forth rapidly. Examples: "Boulevard of Broken Dreams" intro by Green Day and "Midnight Special" intro by CCR.

Flange: Often described as an "airplane" or "spaceship" effect. It sounds a bit like the sound is being slowed and then sped up again, which is where it finds its roots. (Technical stuff I'll explain later.) Examples: "Barracuda" by Heart, "Atomic Punk" and "Unchained" Intros by Van Halen and " Spirit of the Radio" by Rush.

Here's where it gets fun. Often a variation on an effect category will have variations of its own, a kind of variation on a variation. I don't know what to call it really so lets just call it a sub-variation.

An example of this can be found in the Behringer company's line: Chorus Orchestra, Chorus Space Analog 3d pedal, Chorus Space Digital 3D pedal, Chorus Space, and Ultra Chorus are all available. That's five sub-variations of Chorus!

Part 3: Identifying more effects from various pedal types.

Now that we've used modulation as an example of identifying effects we'll explore some more categories. Keep in mind there are literally dozens of pedals being manufactured under all sorts of different names. The most important or broad members of the category are explored here.

Distortion

Distortion: I refer to this as the "classic" distortion sound. Examples: "Iron Man" By Black Sabbath and "Aqualung" by Jethro Tull.

Overdrive: A slightly distorted sound, kind of "dirty". Examples: "Roadhouse Blues" by The Doors and "Mary Jane's Last Dance" by Tom Petty.

Fuzz: This is almost a sound like static coming from a TV when there's no channel there. Examples: The solo in "Paranoid" by Black Sabbath and "Purple Haze" by Jimmy Hendrix.

Grunge: A sound typical of Seattle's grunge bands from the 90's. Heavily distorted to the point that it starts to lack clarity in tone. Examples: "Smalls Like Teen Spirit" by Nirvana and "Plush" by Stone Temple Pilots.

Metal: This is characterized by high-gain yet crisp distortion. Best descried as "crunchy" Examples: Anything by Metallica or Megadeth.

Reverb, Echo and Delay

Reverb: Reverb adds ambiance to a sound. It can vary from the quick sound you would hear coming back at you if you were singing in a shower (known as "slapback") to that which you would hear in a large room (known as "room"). Examples: Jim Morrison's (The Doors singer) ambient vocals and surf guitar sound.

Echo: Echo is just as its name describes. It is an echo, or reproduction of a sound at the same volume just heard later than the original sound. Example: Ozzy's opening vocals in "Crazy Train" and "Us And Them" by Pink Floyd.

Delay: Delay is similar to echo in that the sound is heard later than the original however the sound that you hear is less in amplitude, or softer. Almost always it will "decay", or be a bit softer with each repetition. Example: "Welcome To The Jungle" intro by Guns 'N Roses and "Where The Streets Have No Name" by U2.

EQ (Equalization): This isn't so much an effect as it is a way to "shape" sound. The tone knobs on an amp are actually EQ controls. An EQ pedal allows you to make frequencies you choose louder or softer in order to shape the sound. For example there is a contrast between the twangy sound of a surf guitar and the smooth sound of a jazz guitar. Both are "clean" signals, but EQ'ed differently.

Compression: A compressor takes a sound and "compresses" it by a given ratio, the most common being 3:1. It makes the sound more "punchy". The thick kick drum sounds and gunshot like snare you

hear in most rock are because of some type of compression. Examples: The funky guitar in Michael Jackson's "Thriller", the drum and guitar break in Metallica's "One" and the snappy snare sound in the intro to "Ants Marching" by Dave Matthews.

Gating: Usually used along with compression, gating only allows a signal to pass through it the "gate" when it is above a certain level (volume). This is handy when you want a vocal signal to be processed. The volume of the vocals can be allowed to pass through the gate but not the lower volume of breaths between the vocals, so the breaths are not heard. It's also good for making a snare sound "snappier" because the tones before and after the strike of the snare can be eliminated.

Boost: Boost is an increase in level, or volume. When you hear an instrument get loud suddenly in a recording that's boost. Usually this happens when the solo comes. A simple boost pedal will increase the volume a certain amount when you turn it on, usually a few decibels. This is what the boost pedal on amp does. More complex boost pedals allow you pick how much you want it boosted when they are on or even the frequencies (EQ) you want to be boosted.

Wah: A Wah pedal is actually a big *bandpass filter*. This means that it boosts the frequency (treble or bass) of a signal according to how the player controls or fluctuates it. This control of fluctuating frequencies creates the Wah effect. Examples: "Voodoo Chile" by Jimmy Hendrix and "Stir It Up" by Bob Marley. Also Kirk Hammet's (Metallica) solo in "Enter Sandman" a good example of Wah used in a metal context.

Noise Reduction: A noise reduction pedal works pretty much the same way as a gate does, only letting signals above a certain level pass. This eliminates hum from other effects or electrical noise.
Harmony, Modulation and Whammy: Harmony pedals create a note that is either above or below the note being played at a specified interval and play it in unison with the original note. Simply put, it generates a harmony. A harmony pedal creates something like the harmonized guitar in "More Than A Feeling" by Boston.

Modulation pedals will play the note but not in unison. A whammy pedal is the best example of a modulation pedal. The modulation is controlled by the foot pedal and there is no unison note. A good example of a whammy pedal is "Bulls On Parade" solo by Rage Against The Machine.

Preamp: A preamp amplifies, or boosts, a signal before it is passed into the amp, thus "pre-amp". This is most useful for signals that are weak such as signals from mics for recording or guitars going directly into a soundboard. A lot of acoustic-electric guitars have built in preamps for that reason. Most multi-effects units have built in preamps as well. A preamp can also be used to "shape" the sound to some degree by the circuitry or tubes used to boost the signal.

Part 4: Understanding signal flow and how to adjust those little knobs on the pedal.

To understand how to adjust your effects effectively first you must understand *signal flow* and how a signal becomes *processed* to end up having a unique sound characteristic.

To make this more easily understood I'm going to use an analogy for this part of the guide. For this part consider the signal being water and the signal flow being moving water. The way we can interrupt,

modify or control the flow of water is processing. Next is list of terms that you will find on the knobs of your pedals and how they relate to signal flow.

Level (Volume): Imagine water flowing through a faucet. When you turn the knob more water flows. This is volume. The more volume you have, the louder the sound gets. Thus more level = louder sound.

Tone (EQ): Most pedals have only one tone knob. EQ pedals or amps will have more than one. Lets cover the one knob option first. Here think about a faucet that has one of those levers that goes left for hot, right for cold. Lets say right is bass (low tones) and left is treble (high tones). Anywhere between the extremes is a mix of hot and cold, for example warm, a bit warm, or a bit cold. When you are turning the tone knob you are modifying the signal flow to become warmer (more treble) or colder (more bass). The result you get is a modified sound has a mix of high and low tones that you want to hear.

If you have more than one tone knob, for example on an amp you may have two or three think of it as a sink that has both a warm and cold knobs with the mix of water flowing out of the same faucet. I have one of those in my bathroom. You can mix the treble and bass using separate knobs to come up with your desired combination.

Gain: This is similar to level but the goal with gain is usually to drive the signal to the point where it distorts. Think about water flowing through a drainage ditch. As long as the ditch isn't full the water flows freely, maintaining its form. This is *clean* signal flow. Next consider that there is a hard rain and more water than the ditch can handle flows into it, causing it to overflow and water spills all over the ground above it. This extra water is *distortion*. Now consider point at which the water has overflowed the point of *clipping*. The more water that needs to be pushed past the clipping point, the more distortion you get.

So the gain controls the amount of water you want to push through the ditch. More gain pushes volume to a clipping point, any volume beyond which creates distortion. The more volume beyond the clipping point, the greater the distortion.

I like to separate degrees of distortion into 3 groups. Distortion that is mild isn't far beyond the clipping point. We call that "Overdrive". Distortion that is moderately above the clipping point is simply "Distortion". Distortion that is far beyond the clipping point I call "Metal".

Chorus: Wikipedia did a good job with this one: Chorus pedals get their name because they are meant to mimic the effect choirs and string orchestras produce naturally by mixing sounds with slight differences in timbre and pitch. A chorus effect splits the instrument-to-amplifier audio signal, adding a slight delay and frequency variations or "vibrato" to part of the signal while leaving the rest unaltered.

Imagine this: You hear the sound of a river, a gushing, babbling sound. Now lets say the river splits into two smaller creeks of *somewhat* equal size (slight variations in tibre and pitch) and you stand between them hearing one in each ear. If you stand at different points between them the overall sound will be different. The gushing and babbling you hear from the original river are present in both smaller creeks *however* the they are not in sync with one another (slight delay and frequency variations) so you are hearing two unique sounds at the same time. This is chorus.

Therefore think of the knobs on the chorus pedal as ways to manipulate the sound you hear, as ways to control the flow of water in at the split in the river. Delay corresponds to where you would be standing to hear different sounds. Rate (timbre) would be contingent on the speed of water flow. Depth is how smooth the overall sound is. Level is the overall volume.

Flange: Like Chorus pedals, Flangers add a variably delayed version of the audio signal to the original or signal. The difference with the Flanger is the delayed version is uniform. This creates a “sweeping” effect when both signals are heard at the same time.

Using the water analogy this would demonstrate a river split equally in two, but one half of it flows faster than the other, imagine one wave from the faster one preceding the slower. As each wave passes, you here it sweep by a slower one. When listened to together a sweeping effect could be heard because waves from a faster creek will repeatedly pass slower ones in the other creek.

The knobs on the Flanger are used as follows: The “delay” knob controls the amount of delay added to the signal, or the difference between the waves passing one another. The "depth" control although on some pedals it will read "mix." is how much the signals are blended. Regen is how much feedback ,in this case how loudly you hear the sound of one wave passing another This is to control how noticeable the pitch modulation in your flanger effect will be. “Speed” determines the rate of the flange sweep, or how fast the water would be flowing overall.

Tremelo: Imagine some water flowing from a faucet and turn the dial so that water flows in different levels repeatedly and rhythmically. For example you could alterneate having it on full fully open and then medium, and you do it in consistent intervals of time. This is tremelo. The overall sound if this would be rhythmic bursts.

In this case your control knobs Wave, Depth and Rate would function like this: Wave would be the overall intensity of the signal flow. Depth is the difference of the signal flow between one intensity and the other, For example there would be greater depth if you alternated between fully open and 25% open than you would between fully open and 50% open. Rate is how quickly you turn the knob. So you would have a more broken flow at a higher rate.

Phase: Consider phase to be like two faucets, maybe a hot and cold flowing simutaneously at the same rate into a sink. Catch is one was turned on before the other one so its flow got a head start, so it sets the pace for how fast everything goes down the drain.

The result is that when they get to the sink the water splashes into the sink and ripples form before it goes down the water that goes down the drain ends up being warm as a reslut of the mix. The ripples are the swooshing effect you hear when you experience phase. The warmth is the blend of the frequencies that happen by one signal being out of phase with another.

As for the controls, the speed (or rate on some pedals) is how fast the swooshing, or ripples, will be. Resonance is the intensity, or loudness of the swooshing sound. Depth is how deep, or pronounced the ripples would be.

Filters: (ie Wah, Talkbox): Think about a filter as one of those shower heads that will shoot the water out in different patterns. In essence, the water, or signal is being filtered into any given arrangement. Filters do exactly this to a signal. For example, in the case of a wah you have a bandpass filter that changes the arrangement of frequencies emphasized as you pump the pedal. An EQ is a filter that can boost some frequencys while cutting others, thus this could be analagous to filtering the water into some arragement with a shower head.

Delay, Echo and Reverb: These three effects are similar in nature in that each reproduces a signal in some magnitude and it is repeated after the original signal is produced.

Reverb is the most subtle of the three, sometimes so much so that it can be hard to discern in a mix of instruments. With reverb an abience is added by having the original signal reproduced in a lesser volume at a very short interval of time after the original signal. The signal also tapers off in volume as it is reproduced, thus it sounds like it dies out quickly when compared to echo or delay. Reverb controls vary greatly among manufacturer but usually contain a time setting, tone and perhaps presets for different types of reverb such as “plate”, “room” or “hall”. Think of reverb as a short splash after a pebble is thrown in a pond.

Delay is less subtle than reverb and is easily heard. The time settings for delay are generally a lot longer than reverb, producing a slight echo effect because the reproductions of the signal are farther apart from one another in time. Other settings usually include feedback and level. Feedback is how loudly each repetition is played back. Here the repetitions are played back in a decreasing volume with each so that the sound everntually has a fading away effect. Delay is like a series of gentle waves rolling onto the beach, each one losing intensity as it grows closer to land.

Echo is just as its name implies. It is an echo, or exact reproduction of the original signal. In this case you have control over the interval of time after the original signal is played until you here the echo. You also have control over how loud the echo is. Other controls that might be included are mix, level, or tempo, depending on the manufacturer. Echo is like the tide before a storm, with large waves hitting on to the beach, each one similar in size and loudness of sound of crashing to the last.

Part 5: The physics of sound:

There are many good websites out there that explain the details of the physics of sound. Instead of me just summarizing the information, it will be of more benefit to you if you have it in a comprehensive format. Here are some links to some of the best sites I have found that explain the physics of sound and how it relates to effects.

The Physics Of Sound Waves:
http://www.physicsclassroom.com/Class/sound/
http://method-behind-the-music.com/mechanics/physics

Distortion / Gain:
http://gizmodo.com/5826651/what-is-distortion

Delay, Echo, Reverb:
http://www.cartage.org.lb/en/themes/Sciences/Physics/Acoustics/SoundWaves/Behavior/ReflectionRefraction/ReflectionRefraction.htm

Modulation (Flange, Phase, Chorus, Tremelo):
http://en.wikipedia.org/wiki/Modulation

EQ, Filter:
http://en.wikipedia.org/wiki/Linear_filter

Part 6: Effects Pedals Available:

There are tons of effects pedals available. So many that I think it isn't humanly possible to test even some of them to make buyer recommendations like I did with the *Buyer's Guide To Budget Guitars.* (If you haven't read it you will benefit by doing so because it will help you pick an instrument that can help you achieve the sounds you seek along with your effects.)

Instead I've compiled a comprehensive list of all of the pedals made by manufacturers making more than ten pedals. This should save you some time in searching for information yourself to look through everything that is out there.

Behringer:

Distortion: Tube Overdrive, Distortion Modeler, Vintage Distrotion, Ultra Distortion, Vintage Tube Overdrive, Heavy Metal, Ultra Feedback/distortion, Heavy Distortion, Super Fuzz, Ultra Fuzz, Overdrive, Power Overdrive, Warp Distortion, Super Metal, Distortion, Ultra Metal, Ultra Distortion (2mode), Overdrive/Distortion (2 mode), Blues Overdrive,Vintage Tube Overdrive,

Modulation: Ultra Tremelo UT100, Ultra Tremelo/Pan, Vintage Phaser, Ultra Phase Shifter,Ultra Vibrato, Chorus Orchestra, Hi Band Flanger, Chorus Space Analog 3d pedal, Chorus Space Digital 3D pedal, Vintage Tube Monster, Phaser PH9, Rotary Machine, Super Phase Shifter, Super Flanger, Digital Reverb, Digital Delay (Digital Stereo), Ultra Phase Shifter(2 mode), Ultra Flanger (2 mode), Ultra Chorus,Ultra Tremelo UT300,

Reverb/Delay:Vintage Delay, Vintage Time Machine, Digital Delay, Digital Reverb/Delay,

Compression: Slow Motion, Dynamics Compressor, Compressor/Limiter, Compressor/Sustainer,

Noise Reduction: Noise Reducer

EQ& Acoustic Simulator: Graphic EQ 7 Band, Acoustic Modeler

Wah :Hellbabe Wah (wah pedal), Ultra Wah (Auto wah), Dynamic Wah

Preamp, Modeler & DI Box: Acoustic Driver, Guitar Driver, Preamp/Booster, Tube Amp Modeler, Filter Machine, Echo Machine, Reverb Machine, Flanger Machine, Acoustic Modeler, Ultra Acoustic Modeler

Harmony: Ultra Pitch Shifter/Harmonist

Boss:

Distortion: Combo Drive, Blues Driver, Dyna Drive, Distortion, Turbo Distortion, Deluxe Reverb Amp, Bassman Amp, Fuzz, Mega Distortion, Metal Core, Metal Zone, Overdrive, Overdrive/Distortion, Power
Stack

Reverb and Delay: Digital Delay DD-3, Digital Delay DD7, Digital reverb, Fender Reverb

Modulation: Flanger, Chorus Ensemble, Super Chorus, Phase Shifter, Tremelo

Wah; Dynamic Wah, V-Wah

Simulators: Acoustic Simulator

EQ: Equalizer,

Pitch Shift: Super Octave, Harmonist

Noise Reduction: Noise Suppressor

Carl Martin:

Pro Series---->

Distortion: Hot Drive 'n Boost, Hot Drive MK II, Hot Drive MK 3, The Fuzz, Plexitone, Ac Tone, Crunch Drive, Rock Drive, Heavy Drive,

EQ& Preamp Combo: Parametric Preamp

Compression: Compressor

Modulation: Chorus XII, Tremovibe, Two Faze

Contour: Contour 'n Boost

Delay/Reverb: Delayla, Delayla XL, Echotone

Boost: Boost Kick, Hydra Boost

Noise Suppression: Noise Eliminator

Vintage Series---->

Distortion: DC Drive, Crush Zone, And Blue Ranger

Modulation: Surf Trem,Classic Flange, Classic Chorus

Wah: 2 Wah, Classic Optical Envelope (auto-wah)

Compression: Classic Opto Comp

Delay/Reverb: Red Repeat, Headroom

Danelectro:

Distortion: Pastrami Overdrive, Cheese Distortion, French Toast Ocatave/Distotion, Black Coffee Metal Distortion, Black Licorice Metal, T-Bone Distortion

Harmony: Chili Dog Octave,

EQ: Fish and Chips 7 Band EQ

Modulation: Chicken Salad Vibrato, Rocky Road Spinning Speaker, Pepperoni Phaser, Milkshake Chorus, Hash Browns Flanger

Delay and Reverb: PB&J Delay, Slap Echo,

Wah: French Fries Auto-Wah

Compression: Surf & Turf Compressor

DigiTech:

Distortion: Lyra, Death Metal, Bad Monkey, Grunge, Tone Driver, Hot Rod, Metal Master, Screamin Blues, Distortion Factory, Bass Driver

Loopers: JamMan Delay, JamMan Stereo, JamMan Solo,

Delay/ Reverb: Time Bender, ,Digidelay, Digireverb

Modulation: Turbo Flanger, Synth Wah, Hyper Phase, Multi-Chorus, Chorus Factory, Expression Factory, Main Squeeze, Digiverb

Whammy: Whammy DT, Whammy, Harmony Man

Dunlop:

Tons of Wahs: Cry Baby Wahs, Multi-Wah, Cry Baby, Cry Baby Classic, Jerry Cantrell, Joe Bonamassa

Electro Harmonix:

Distortion: Graphic Fuzz, Bug Muff Pi,Big Muff With Tone Wicker, Double Muff, English Muff'n, Enigma, Geranium 4 Big Muff Pi, Geranium OD, Holy Stain, Little Big Muff Pie, LPB-1, LPB-2ube, Metal Muff, Micro Metal Muff, Muff Overdrive, Pocket Metal Muff, Riddle, Tube Zipper

Modulation: Deluxe Classic Mistress, Memory Man, Flanger Hoax, Nano LCone, Neo Clone, Neo Mistress, Small Clone, Small Stone, Stereo Clone Theory, Stereo electric Mistress, Stereo Polychorus, Stereo Polyphase, Worm

Compression: Black Finger, Freeze, NY-2A, Soul Preacher, White Finger

Envelope Filters: Bi-Filter, Doctor Q, Enigma, Micro Q-Tron, Q-Tron, Q-Tron Plus, Riddle, Stereo Talking Machine, Tube Zipper, Worm

Delay/Reverb: #1 Echo, Deluxe Memory Boy, Deluxe Memory Man w/ Tap Tempo, Freeze (see also compression), Memory Boy, Stereo Memory Man With Harzari,
Memory Toy

Noise Suppression: Hum Debugger

Harmony: Octave Multiplexer, Ravish, Ring Thing, POG2

Preamps: / EQ / Tone Shaping: Analogizer, Knockout, Screaming Bird, Tube EQ

Fulltone:

Distortion: Plimsoul, 69 MKII, 70-BC Fuzz, Catalyst, Octafuzz, Soul Bender, Robin Trower Overdrive,Fulldrive2 Mosfet, GT500, Ultimate Octave

Boost: Far-Boost FB-3

Modulation: Mini DejaVibe, DevaVibe, Supa-Trem

Delay/Reverb: Tube Tape Echo

Wah: Clyde Deluxe Wah, Clyde Standard Wah

Keeley:

Compression: Keeley Compressor, 4 Knob Compressor

Overdrive: Luna Overdrive, Fuzz Head

Boost: Java Boost, Katana Boost, Time Machine Boost

Modulation: 6 Stage Phaser

Wah: Wah

Talk Box: Talk Box

Bypass / Amp Switcher: True Bypass, 3-Banger, A/B Amp Switcher

Also: Various Boss and Ibanez Pedal Modifications.

Ibanez:

Distortion: TS9DX Tube Screamer, TS9B Tube Screamer, TS9 Tube Screamer, TS808 Hand Wired Tube screamer, TS 808 Tube Screamer Overdrive Pro, JD9 Jet Driver, Tube King Distortion, Tube King Overdrive, Steve Vai Jemini Distortion

Modulation: Flanger, Stereo Chorus, Paul Gilbert Airplane Flanger

Reverb/Delay: Analog Delay

Boost: Big Bottom Boost

Morley:

A ton of different Wah Pedals, way too many to mention here.

MXR:

Distortion: '78 Badass Distortion, Distortion, Doubleshot Distortion,Overdrive, Fullbore Metal, Zakk Wylde Overdrive, Dime Distortion

Modulation: Phase 90, EVH-117 Van Halen Flanger, EVH-90 Van Halen Phase, Stereo Chorus, Script Phase 90, Stereo Tremelo,

Delay: Carbon Copy

EQ: 10 Band EQ, 6 Band EQ

Compression &Gating: Dyna Comp, Smart Gate, '78 Vintage Dyna Comp

Boost: Boost Line Driver, Boost Overdrive

Line 6:

Stompbox Modelers:

(multi-effects): M13, M9, M5

Specialty modelers: JM4 Looper, DL4 Delay, Dm4 Distortion,MM4 Modulation, FM4 Filter

ToneCore Pedals:

Distortion: Uber Metal

Modulation: Space Chorus

Reverb/Delay: Verbzilla,Echo PArk Del

EQ: Otto Filter (Auto Wah)

Compression: Constrictor

Pigtronix:

Distortion: Philosopher's Tone (Compressor/Sustainer/Distortion), Aria Diode Clipping Overdrive, Polysaturator Distortion, Distortion Fuzz,Fat Drive

Envelope Generator Sustainer: Philosopher King

Analog Guitar Synth: Mothership

Modulation: Tremvelope, Envelope Phaser

Delay/Reverb: Echolution

Effects Mixer: Keymaster

Boost: J-FET preamp

Other: Dual Expression Pedal

Rocktron (Has 4 Series):

Reaction Series----->

Distortion: Distortion 1, Distortion 2, Super Charger Overdrive

Modulation: Chorus, Phaser, Tremelo,

Filter: Dynamic Filter

Boost: Super Booster,

Noise Reduction: Hush

Reverb / Delay: Digital Delay,

Compression: Compressor

Harmony: Octaver

Tuner: Tuner

Botique Series------>

Single Tone Shifter for pickups: Recoiler

Wah: Sweet spot wah, Deadly Sins Wah

Distortion: Cottonmouth Fuzz, Metal Embrace, O.D.B. Overdrive, Third Angel Distortion, Valve Charger

Boost: Megabooster

Noise Elimination: Guitar Silencer

Modulation: Dream Star Chorus, Celestial Delay

Compression: sacred fire Compressor

Harmony: Black Rose Octaver

Tuner: Utility Tuner

Classic Series------->

Distortion: Austin Gold Overdrive, Metal Planet Distortion, Rampage Distortion, Silver Dragon Distortion, Sonic Glory Overdrive, Zombie Distortion

Filter: Heart Attack Dynamic Filter

Compression: Big Crush

Modulation: Deep Blue Chorus, Hypnotic Flange,

Noise Reduction; Hush

Reverb/Delay: Short Timer Delay

Tuner: XTuner Pedal

Boost: Nitro Tonal Booster

T-Rex Engineering:

Wah: Gull Wah, Tonebug Sensewah

Reverb / Delay: Reptile, Reptile2, Tap Tone, Tonebug Reverb

Boost: Tonebug Booster, Twin Boost

Switch: Polyswitch A/B

Modulation: Room-Mate, Sweeper, Tonebug Chorus/Flanger,Tonebug Phaser, Tremonti Phaser, Tremster, Twister 2, Whirly Verb

Compression: Comp-Nova,Squeezer, Tonebug Sustainer

Distortion: Alberta, Bass Juice, Bloody Mary, Crunchy Frog, Dr. Swamp, Hobo Drive, MAB Overdrive, Moller, Mudhoney, Mudhoney II, Tonebug Distortion, Tonebug Fuzz, Tonebug Overdrive, Tonebug Totenschlager, Yellow Drive

Harmony: Octavius