

Eventide DSP4000 Ultra-Harmonizer ®

Factory Programs

0 Utilities

This Bank contains a number of simple but useful programs.

1 Empty Program {L}

If you want to patch a program from the ground up, you can start with an empty program (like this). Nothing in, nothing out.

2 Mute {L}

Loading this program will simply turn off the output. Useful in performance if your kill mode is set to one of the bypass options. Nothing in, nothing out.

3 Oscillator-440 {L}

A general-purpose oscillator. On loading, it is set to a 440 Hz sine wave for tuning. Allows addition of an offset and modulation. Note that the output will clip above +12dB, and aliasing will be audible on triangular and square waves at higher frequencies. The oscillator level defaults at -20 dB upon loading. Nothing in, dual mono out.

4 Thru (In = Out) {L}

Simply passes the inputs to the outputs, just like DSP bypass. This, however, will route a digital input to an analog output (or vice-versa), which the bypass switch will not do. Stereo in, stereo out.

5 Universal Matrix {L}

M/S (mid/side) recording lets you air stereo events with complete mono compatibility. This setting decodes M/S recordings and controls their stereo width. It also lets you fix mono and stereo routing. Stereo in, stereo out.

6 White Noise {L}

A single noise source is output on both channels. Nothing in, dual mono out.

1 Pitch Shifters

This Bank offers a large array of general-purpose pitch shifting presets. From simple mono shifting to more complex eight-voice presets which show off the 4000's multi-voice capabilities.

Historical note: Eventide introduced digital pitch shifting to a waiting world with the H910 Harmonizer® in 1975. Since then, the power of these instruments has grown significantly, as you can see.

1 Mono Shift {L}

A single, mono pitch shifter - the simplest version of its type. Only the basic controls (shift and delay) are available on its menu. Useful and utilitarian. Mono in, mono out.

2 Dual Shift {L}

Two independent pitch shifters. One for each channel, with common LFO. This patch builds upon Mono Shift, not only with its two-channel operation, but with the addition of feedback and shift amount modulation. Stereo in, stereo out.

3 Dual External Shift {L}

Two independent pitch shifts that are controlled externally, with adjustable endpoints. This preset is for external control of two shifters for automation, wammy etc. Dual mono in, dual mono out.

4 Stereo Shift {L}

A simple, stereo pitch shifter. This is a stereo version of "Mono Shift," with simple structure and parameters, for true stereo operation. Stereo in, stereo out.

5 StereoExternalShift {L}

Stereo pitch shift that may be controlled externally, with adjustable endpoints. This is a version of "Stereo Shift," with added external control. Stereo in, stereo out.

6 Dual H910s {L}

Two of our classic H910 pitch shifters, one for each channel. What needs to be said about this vintage device ? Here it has been emulated, with all the familiar quiriness. Great for thickening any source (sauce). Dual mono in, dual mono out.

7 Diatonic Shifter {L}

A single, diatonic shifter - our simplest diatonic shifter. This preset is good if you desire one voice of shifting, or as an easy patch to experiment with if diatonic shifting is a new arena for you. Mono in, mono out.

A diatonic shifter is one that keeps its shifted output in key, rather than just shifting a fixed number of cents (or octaves). For example, with a conventional shifter, when you shift by a Major Third while playing in the key of C, if you play C, F or G, the result will be in key. Conversely, if you play D, E, A or B, the shifted output will be the wrong note, because these notes require a Minor Third shift. With the Diatonic Shifter, you define the harmonies and the final key you want, and the algorithm does the rest.

8 2-Voice *Diatonic* {L}

One diatonic shift per channel. This preset is essentially a two-channel version of "Diatonic Shifter." The logical next step. Dual mono in, dual mono out.

9 3/4 DelayDiaShift {L}

Two diatonic echoes - a fourth and an octave. This is the same structure as "2-Voice Diatonic," with the intervals and delay times set up differently. Stereo in, stereo out.

10 Multiple Diatonic {L}

Four diatonic shifts from one source. Here's where the fun starts. Four voices of Eventide! Mono in, stereo out.

11 8-voice Diatonic {L}

Eight diatonic pitch shifts. Four on the left, four on the right. Dual channel version of Multiple Diatonic. Even more fun! Dual mono in, dual mono out.

12 User defined scale {L}

Two diatonic shifters with user defined scales into reverb and chorus. This is where the 4000 series begins to show its colors, with multi-effects and complex processing. User defined scales let you play in unusual or non-western scales, while reverb and chorus add depth. Mono in, stereo out.

13 Multi-Shift {L}

Four pitch shifters into a stereo mixer. Four voices of pitch shifting. A good place to experiment with voicings. MIDI has been preset for major global control. Great for stage or studio. Mono in, stereo out.

14 8-Pitch Shifts {L}

From the mono input you get eight shifted and delayed signals that are combined with a stereo mixer. This is an eight-voice version of "Multi-Shift." This preset shows off the musicality of detuning intervals via multiple shifters, thickening not only the source but also the new voices. Mono in, stereo out.

15 Power Trip {L}

Eight pitch shifts set to give you a \POWER\ sound. Another version of "8-Pitch Shifts." Very full and wide. Mono in, stereo out.

16 Quad Detuners {L}

Makes music sound way out of tune. Channels 1 and 3 are from the left, and channels 2 and 4 are from the right. Well, there are times when being Out is In, right? Stereo in, mono out.

17 5th Place {L}

The perfect fifth effect in stereo with color. Stereo shifter with EQ into lush verb. With both shifting and reverb this preset shows one of many variations with 'complete' processing. This one with global MIDI control preset. Stereo in, stereo out.

18 Dubbler {L}

Doubles up your signal with four micro pitch shifts. With four detuned shifters slightly delayed and panned in stereo, this preset is full and smooth, with a mild natural chorus through natural signal beating instead of swept modulations. Mono in, stereo out.

19 Warm Shift {L}

One pitch shifter per channel. Each has a gentle lowpass in the feedback loop. Dual mono shifter, with all the controls to tweak your sound. With hicut filters in the feedback path, this preset lets you always keep it warm and smooth. Global MIDI included. Dual mono in, dual mono out.

20 5ths&Oct Multiply {L}

Fifth and octave pitch shifts. Another tweak of "Dubbler," this one uses larger intervals and modulation of the pitches for added richness. Mono in, stereo out.

21 120BPM ShifterDelay {L}

Play a note, get a riff. The output of each shifted voice is delayed 125ms from the previous voice, giving a rhythmic effect with multiple shifts and longer delay times. This shows one of the many possibilities inherent in our *multishift* module. Mono in, stereo out.

22 Big Heartbeat {L}

Two pitch shifters intertwined, with just a little feedback. By having the detuned shift feed back to an intertwined feedback path, this preset creates a very full effect with a small number of modules. Stereo in, stereo out.

23 Chim-Chiminee {L}

Nice, arpeggiated shifts with octaves and fifths. Covering several octaves, judicious use of detuning and related delay times, this preset is great for rhythmic playing, as well as volume swells. Mono in, stereo out.

24 Crystal Pad 2 {L}

Shimmering, squeaky fields. Reversible shifters and filters in our *plex* module give new meaning to the idea of reverb effects. This is a shimmering example of what has been termed a 'crystal' effect. Mono in, stereo out.

25 Dual Reverse Shift {L}

Two separate reverse pitch shifters. Dual channel reverse shifting with controls at the ready. A great place to start experimenting with reverse effects. Global MIDI control included. Dual mono in, dual mono out.

26 Fake Pitch Shift {L}

Modulated up/down third pitch shift with reverb. Adjust fdbk/decay for echo effect. Modulated delays in a *plex* module create a reverb and 'fake shift.' Interesting detuned texture. Mono in, stereo out.

27 Freq Shifter {L}

One frequency shifter per channel. This has a high amount of frequency shift that yields a ring modulation effect. A simple, dual channel frequency shifter with independent controls. A good place to experiment with this module. Not as harsh as ring modulation, this sits well with the original signal. Dual mono in, dual mono out.

28 Freqshift Chorus {L}

One frequency shifter per channel. With a frequency shifter, the lower frequencies are effectively pitch shifted more than the higher frequencies. Another tweak of "Freq Shifter." This one, being only slightly detuned, gives a nice, natural beating chorus. Dual mono in, dual mono out.

29 Freqshift Vibrato {L}

Nice chorus/vibrato created by four frequency shifters. Experiment with shifts and delays for more interesting effects. With four frequency shifters and delays, this is the logical next stage of development. Again a good preset for experimentation. Global MIDI control. Stereo in, stereo out.

30 Gil's Pitch&Reverb {L}

A very clean pitch shift, with a smidgen of reverb to make it smooth. Great for vocals. Smooth pitch and reverb. Simple and effective. Global MIDI control. Mono in, stereo out.

31 Jimmy's Bottom {L}

Gives a great bottom to any solo instrument. There's an octave shift down, compression, EQ, and chorus. The low end is smooth, giving a very warm and full sound, with just a touch of chorus. Mono in, stereo out.

32 Large Poly Shift {L}

A kind of pitch shifter you use with chords. Like "Poly Shift," but now you can shift up and down by octaves. Even with five shifting paths, this preset is simple to use and, as the man says, great for chords. Mono in, mono out.

33 Organizer {L}

Turns any line into an organ solo. Pure tones gets you a Hammond, complex tones get you a pipe. Well, it does exactly what it says. Mono in, stereo out.

34 Pitch sequencer {L}

Continuously plays a scale by shifting your signal. Try changing the sequence. This is an interesting algorithm that shows just one of the things your imagination can create with our open user platform, resulting in instant arpeggiation through sequencing a shifter's interval value. Mono in, mono out.

35 Poly Shift {L}

Breaks signal into comb bands and shifts each. Gives an interesting detune chorus. Be careful with small shift amounts and large feedback. Like "Large Poly Shift," this one is for smaller shift amounts, giving a real nice chorus effect. Mono in, mono out.

36 Ring Modulator {L}

The classic ring modulator effect, now in stereo. However much the left channel is frequency shifted up, the right is shifted down. Built in mixing allows control over image. Stereo in, stereo out.

37 Stereo Backwards {L}

Breaks input into little pieces and plays them backwards. Adjust optional pitch shift in 'Expert' menu. Uses M/S processing to maintain stereo image. With use of mid/side band processing, this reverse shifter is compatible with diverse formats. It is also simple to use, and a good one for experimenting with reverse effects. Stereo in, stereo out.

2 Delay Effects

This Bank is full of many useful delay based presets. Whether used for imaging effects, doubling or long delay and poly-rhythms, there is something here for all applications.

Historical note: the first Eventide Digital Delay Line (DDL), the 1745, appeared in 1971, offering a staggering 200 mS of delay time in its expanded version, using a total of 980 shift register chips to achieve this. A DSP4000 with sampler, in contrast, offers almost 200 seconds of storage, a thousandfold increase.

1 Mono Delay {L}

Mono delay with *feedback*. A single *delay* module with feedback. This is great for early steps in patch editing. Mono in, mono out.

2 Stereo Delay {L}

Two delays with common controls. This preset is a stereo version of "Mono Delay." Stereo in, stereo out.

3 Dual BPM Delays {L}

Allows you to adjust a delay in beats per minute. An input parameter will connect the right delays to the right tone controls giving you dual mono. A jump to something more complex. This program offers dual BPM style delays with tone control. Perfect for basic delays, when you know the tempo. Mono in, stereo out.

4 Dual Long Delay {L}

Two long delays, each 2.5 seconds. Dual mono delays created by stringing *delay* modules together. Dual mono in, dual mono out.

For Patch creation, note the *C_MULTIPLY* after the 'Delay' amount *KNOB*. Each delay module receives a delay value proportional to the number of delays in the line - in this case, a quarter of the time shown at the delay amount knob. This is because each delay has a *maxdelay* time of 660 ms each, so if you did not multiply the delay parameter by a quarter when the knob reached 660, you would have 2640 ms of delay, which might be useful, but not what you asked for.

5 Ext Control Delay {L}

Externally controlled delay. MOD-1 controls the length of the delay line. A simple, single *delay* module tied to an external control. As in most external controllers you need to redirect MOD-1 as your controller of choice under the 'mod con' menu under the SETUP function key. Stereo in, stereo out.

6 Fripper-tronics {L}

The modern alternative to two Revox's and a reel of tape. Five-second repeats, adjustable high cut and feedback. Simplified modern emulation of this classic process. High cut filters in the feedback paths simulate tape rolloff. Mono in, mono out.

7 Long Mono Delay {L}

Simple, 10-second delay. Mono version of "Dual Long Delays." The same clue to stringing delays together applies. This time, multiplying delay *knob* value by one-eighth prior to connection to the *delay* module's control input. Mono in, mono out.

8 Long Stereo Delay {L}

A stereo five-second delay Stereo version of "Dual Long Delays," achieved by the use of ganged parameters. Stereo in, stereo out.

9 Mono Delay BPM {L}

A simple delay where you set the delay time in beats per minute. The note value of this delay line is a single quarter note delay chosen by BPM instead of by milli-seconds. Mono in, mono out.

10 Precision Delay

Allows you to adjust delay in microsecond increments. One delay per channel. With a default of one millisecond, this utility delay is our most precise, giving control of the delays in increments of a fraction of an audio sample. How do they do it ? Dual mono in, dual mono out.

11 Clearmntn Claps

A *multitap*, specifically adjusted for claps. Just like the title implies. Bob tweaked this to liven up claps. Gives space without getting in the way. Stereo in, stereo out.

12 Envelope Taps {L}

The tap envelope is formed from an attack *multitap* and a decay *multitap*. Two *multitap* modules used for attack and decay characteristics. A great place to experiment with *EASYTAPS* modules. Mono in, stereo out.

13 Ext NumberofEchoes {L}

A "Number of Echos" tweak, with external control of number of echoes, delay between echoes and glide rate. Mono in, stereo out.

14 Multitap Delay {L}

A single delay line with many taps. You have individual control over each tap. An excellent place to experiment with the *MULTITAP* module. A single module lets you take advantage of each individual tap. Mono in, stereo out.

15 Number of Echos {L}

You control the number of repeats with one knob. This allows subsequent repeats to be louder than previous delays, as well as allowing you to set the exact number of delays. Note that each delay has a scaler to choose a percentage value of the main menu's delay time. Mono in, stereo out.

16 Quad Flange Echoes {L}

Each of four echoes are flanged and panned. Four modulating delay lines, two per side, are also panned independently to stereo, giving a very full and animated effect. Stereo in, stereo out.

17 BB Delayz {L}

Very fast and close feedback delays in the center of the stereo field, with long echo repeating/panning delays on the outside of the stereo field. Interesting on percussives, as well as tuned instruments. A good example of a *plexverb* program, this user created reverberant structure gives a very complex stereo field unobtainable with conventional units. Mono in, stereo out.

18 Centering Echoes {L}

Multitap echoes that start at edges of the stereo field and move progressively closer to center as they decay. An *easytap* module with pre and post diffusors and EQ control. Again, a good example of the type of complex fields

achievable with a small number of primary effects modules. This, too, is unobtainable with conventional signal processors. Mono in, stereo out.

19 Clearmntn Delays

More than your usual echoes. Has subtle filtering and shifting going on, combined with extremely smooth and warm detuned delays. Summed in, stereo out.

20 Dual Ducked Delay {L}

Two delays (one for each channel) that will duck out of the way when you play a lead and come back up when you're done. 'Ratio' adjusts how much to duck. A *ducker* is the same module that is used in a different form to create a compressor. In this case, it is used to lower or 'duck' the volume of the delay's feedback level, so that input signal level effects the number of repeats in an active (or interactive) manner. Dual mono in, dual mono out.

21 Dual Flanged delays {L}

Two delays where the echoes are flanged. Two delays into two *microdelays* used to flange the delays. The use of *microdelay* modules for the flangers gives very precise modulation times. Dual mono in, dual mono out.

22 Echospace Of God {L}

Massively verbed echoes that give you that \awe\ sound. Another *plexverb* program, this one is more verb-ish than echo-ish. Mono in, stereo out.

23 Ext Morphic Echos {L}

This is a five-tap multitap delay that you change between settings externally. Delay 1 is also fed back to the input. External control of parameters allows for some very unusual sounds, especially during the morph. Mono in, stereo out.

24 Man's Pan & Delay3

This program will delay and pan a mono signal with an LFO. At 60 percent depth, full pan will occur. Above 60, and you will engage 3-D effect. Summed in, stereo out.

25 Panning Delays {L}

Four delay lines, each panned by its own LFO. Also, each has another LFO modulating its delay. The result of this is four modulating delay lines, two per side, panned independently to stereo. The effect is very full and animated. Stereo in, stereo out.

26 Phase Delay {L}

A variable amount of 'phase shift.' This is real phase shift in degrees and it applies to each frequency. You also have precision delay and feedback. This patch defaults to zero parameter values, and is designed for precise control of phase angle and delay times. Dual mono in, dual mono out.

27 Resonechos {L}

Echoes that blur into a verb. This *plexverb* is tweaked with a bit more verve. The accent here is on delays, and delay build up and decay. Mono in, stereo out.

28 Slap Nonlinear {L}

A slapback where the echo is really a clump of diffused echoes with EQ. Another version of "Centering Echos," this one provides a very diffuse slap. Mono in, stereo out.

29 Super Ducked Delays {L}

Dual ducked delays with plenty of control and visual feedback. This preset supplies a complex example of ducking delays with EQ, precise control and neat meters. Dual mono in, dual mono out.

30 Patch Instruct {L}

This program is specifically here as a tutorial for the patch editor, found in the User Manual. Dual mono in, dual mono out.

3 Chorus/Flangers

This Bank contains a wide variety of modulated delays and phasers. Not only emulations of old favorites, but sophisticated stereo manipulations are also included.

For those unclear of the difference between *chorus* and *flanger*, both are essentially *delays* whose length can be modulated to sweep the effect, but a *flanger* has feedback around the *delay*, whereas a chorus does not.

A *phaser*, on the other hand, has no implicit delay, but uses a *filter*, whose phase shift can be modulated.

1 Auto Tape Flanger {L}

A stereo tape flanger where one delay is swept by another. The sweeping is controlled by an LFO. Although designed for tape flange simulation, this preset is a very smooth and sweet flange. When 100 percent wet, its sound is similar to phasing. Stereo in, stereo out.

2 Chorused Cabinet {L}

The sound of a miked speaker cabinet with a touch of modulating chorus. Another *plexverb* preset. This one simulates a miked speaker EQ curve and adds depth with modulation of the delays. A very smooth enhancement program. Mono in, stereo out.

3 Detune Chorus {L}

Similar to "Real Chorus," with lots of detuned echoes. With ten detuned pitches, this program has lots of beating, as well as sweep modulation. Mono in, stereo out.

4 Digest Inn {L}

Slimy, resonant, peaky flange, and short, repeating delay echo. Sounds like you are inside someone's stomach. Yuck! This *plexverb* has much shorter delay times, and a very resonant flange-type modulation. It shows, when compared to its siblings, the variations possible with a *plex* module used with delays. Mono in, stereo out.

5 Drew's Throatflange {L}

Deep, negative, resonant flange that adds a throaty quality to sounds. Sounds cool on drums, as well. This *plex* program used with moddelays adds resonant flanges that are still kept in their place. Similar to eight parallel delay lines, with some global parameters. Mono in, stereo out.

6 External Detune {L}

Externally controlled 'real' chorus. The amount of detune is tied to MOD-1, the tightness is tied to MOD-2. Control tightness and detuning via external control. This preset offers a lot of very smooth and controlled textures. Summed in, stereo out.

7 Ext Control Flange {L}

Allows you to switch control of the flanger from LFO to external (MOD-1). Simple pedal (or other external controller) controlled flanger. Stereo in, stereo out.

8 Ext Control Leslie {L}

Rotating speaker effect where the speed of rotation can be externally controlled. MOD-1 controls the speed. Ext controlled Leslie simulation with reverb. If you are a Leslie fan, give it a listen. Summed in, stereo out.

9 Ext Phase Flange {L}

A different kind of flanger, where the group phase changes instead of the group delay. MOD-1 controls the group phase. Adjust 'delay mod' to also change the group delay. Ext control of the phase angle gives an almost EQ quality to this effect. Subtle and different. Summed in, mono out.

10 Ext Tape Flanger {L}

Externally controlled tape flanger. MOD-1 controls the tape sync. MOD-2 controls the depth of the effect. Like "Auto Tape Flanger," this one has external control of sweep and depth. Stereo in, stereo out.

11 Ext Wave Guide {L}

Experimental filter where you determine the shape and characteristics of a 'tube' that your sound goes through. This is a sophisticated filter effect, where you model a vocal cavity, and is one that warrants experimentation. Summed in, mono out.

12 Freqshift Flange {L}

This is a different kind of flanger using the frequency shifter. The use of feedback yields a very subtle resonance. Mono in, stereo out.

13 Hiccup Chorus {L}

A stuttering, tremolo effect. You can engage an external control to change the rate. This chorus variation adds a hiccup sounding vibrato. Notice the slew rates that slightly round the hiccups square wave. Summed in, stereo out.

14 Leslie Simulator {L}

Basic rotating speaker effect with a little reverb. There are actually two speakers (high and low) and you can alter each to your taste. When you load this preset, the settings are for what we believe to be most natural. This patch is essentially an auto version of "External Controlled Leslie." Mono in, stereo out.

15 Leslie-like {L}

A combination of chorus, delay and phaser that gives you that rotating speaker effect. Another version of a Leslie sound, not as smooth as some, but, none the less, interesting. Mono in, mono out.

16 Manual Tape Flanger {L}

A manual tape flanger. Run your signal through the 4000 and turn the knob. Flanging occurs when flange and delay are close to each other. Depth controls how much of the flange delay is mixed in. Good for when you simply need to ride that exact sweet spot. Stereo in, stereo out.

17 Mess With Stereo {L}

The left/right input is converted to sum/difference. Then, a number of modifiers act upon the signal. Finally, it is converted back to left/right. This gives some interesting stereo enhancements. Note: There is a slight delay in processing. This is an unusual sum and difference program that does, in fact, let you mess with the stereo field. It offers capabilities not found elsewhere. Stereo in, stereo out.

18 Phaser {L}

An old fashioned phaser. Use with sound going through the effect. This is the classic sound, from the people who brought you the Instant Phaser. Mono in, mono out.

19 Phase Flange {L}

A different flanger, because the component phases move instead of the delay. Adjust <delay mod> to get the delay moving also. This patch is an auto version of "Ext Phase Flange." Mono in, mono out.

20 Real Chorus {L}

A simulation of having eight more of the input. This gives a sophisticated chorus effect, which is very rich, yet subtle. Mono in, stereo out.

21 Real Chorus TNG {L}

Real Chorus - The Next Generation. A very special preset that simulates what happens in a real choir. Voices 'hunt' and then fall into pitch. This very sophisticated process begins chorused and then settles. Cool! A simulation of additional musicians. It is best on single-note instruments. Note: Some instruments don't hunt. (Keyboard, drums, etc.) Mono in, stereo out.

22 Reso-Control {L}

Remotely controls the frequencies of two comb filters, one for each channel. This could also be described as external control of dual mono flangers. The parameters are preset with rather resonant peaks. Stereo in, stereo out.

23 Sky Slaw {L}

Modulated deep, resonant flange feeds a second resonant, sweeping flange. Great for guitar. This simulation of a famous texture has a full and deep sweep pattern. Try with clean, as well as distorted or complex sources. Mono in, stereo out.

24 St.Phaser & Reverb {L}

Stereo phase shifter with reverb. True stereo phaser and verb with very short running time, giving a very smooth result. Stereo in, stereo out.

25 Stereo Chorus {L}

Eight moving delays, each with its own LFO. Summed inputs into eight modulating delays give a very full and stereo field. Independent LFO's offer complex sweep patterns. Mono in, stereo out.

26 Stereoize {L}

Adds a stereo-ized chorus to a mono signal. Like "Stereo Chorus," this *plex* version creates a rich, stereo field. Mono in, stereo out.

27 Stereo Flange {L}

Two flangers with a common LFO. Run your sound through this preset for the proper mix. A true stereo version of the classic flanger. Stereo in, stereo out.

28 Stereo Flange 1968 {L}

A nice, stereo flange. There are separate delay controls but a common LFO. Another variation of a true stereo flanger, this one tweaked with much more subtlety. Stereo in, stereo out.

29 Stereo Tremolo {L}

This gives you the tremolo effect in stereo. Just as the title implies. Stereo in, stereo out.

30 StereoMUTRONPhaser {L}

This sounds like that classic phaser. Everything you want in a phase shifter. Please notice that regardless of the title, this is not a true stereo effect patch. Mono in, stereo out.

31 Str. Smoove Flange {L}

This is a smooth, subtle, stereo flanger. Another tweak of "Stereo Flange 1968." Stereo in, stereo out.

32 Strata Chorus {L}

This is a tight chorus with some reverb added in. For the experimenter, there are a lot of adjustments. This 'crystals' program (with feedback at zero) creates a nice chorus and verb preset. Stereo in, stereo out.

33 Swirl Flanges {L}

Four flangers that also pan around you. This is a tweak of "Panning Delays." Stereo in, stereo out.

34 Tripple Track {L}

Adds a triple-track effect to vocals and instruments, with chorus and delay. You also can add other effects. To add reverb, turn up reverb level and decay time. With EQ, shifting, modulating delay and verb, this preset gives a very rich double (or triple) effect. Mono in, stereo out.

35 Vox Duble and Slap

This is a doubler and a slap echo. Good for vocals. You can add reverb by tuning the reverb level and decay time. Very warm vocal process. With EQ, subtle detuning, modulating delay and verb. The reverb is defaulted at zero decay time and -40 dB output. Mono in, stereo out.

36 We're Triplets

Three distinct voices. The higher one sometimes gets a little behind the others, then catches up. HINT: Use less 'pitch' for higher input voices. This is a very unusual program which replicates the randomness of timing and pitch to give a more realistic double or triple effect. Summed in, stereo out.

4 Small Spaces

This Bank of reverb effects replicate tight ambiances. Great for 'enhancement,' when all that is needed is a little 'air' around your source.

These more subtle effects are particularly useful to give a more natural sound to synthesizers and other 'dry' signal sources, and are also useful to 'warm up' drums or DI guitar/bass, without adding muddiness.

1 Bass Space {L}

Slight ambience with an adjustable delay, initially set very small. Sounds good on bass, too. This is a real nice, small verb for bass. It won't eat up space, but will instead give you some. Mono in, stereo out.

2 Chorus & Plate {L}

Nice, tight ambience with some built-in chorusing. A very slow and smooth chorus and small, tight reverb. Adds a slight warmth and shimmer. This is a very useable preset. Stereo in, stereo out.

3 Close Nonlinear

Bright, small, non-real, nonlinear decaying space. Great on drums and all types of pitched sounds. This preset shows off the ability to create nonlinear reverberant spaces. Mono in, stereo out.

4 Drew's Closet {L}

Andrew's master bedroom closet, with the door open. Never having been to this location on the planet, I cannot tell you whether or not it is accurate. The door may be ajar. Stereo in, stereo out.

5 Drew's Double Closet {L}

A semi-closed-in space like a large closet with a touch of slap delay adds presence, but has very short decay time. Brighter and with more sparkle than this gentleman's 'single' closet, this reverb will certainly stay out of your way while giving you a nice ambience. Mono in, stereo out.

6 Empty Swimming Pool {L}

Sounds like my friend's swimming pool in the winter. A nice, tight slap and very short diffuse tail. Stereo in, stereo out.

7 Masterverb Room 1 {L}

Sounds like someone down the hall playing in the living room. Natural, tight ambience. This reverb adds more distance and several reflections. Stereo in, stereo out.

8 Medium Booth {L}

Small and square, like an old classmate of mine. Ringy, reflective space. This preset is very simple to control, notwithstanding old classmates. Mono in, stereo out.

9 New Air {L}

Very small, ambient space that stereoizes a signal and adds a bit of 'air' around instruments. Using a very diffused reverb, this extremely unobtrusive space might be just the touch needed to sit the track into the mix, or give it a little 'room' to breath in. Mono in, stereo out.

10 Pantry {L}

Muted space. Cans, cupboards and towels are probably deadening it. Like all the small spaces, this unobtrusive reverb adds just a touch of color to your sound. Mono in, stereo out.

11 Shifting Booth

This little booth is not quite rectangular and one wall is on wheels, slightly shifting its size. The subtle shift of the wall gives this space life and randomness. Mono in, stereo out.

12 Small Ambience {L}

Small, office sized reverb/ambience. Slightly more reflective than "Pantry," this one has a little more color...if that's what you are after. Stereo in, stereo out.

13 Soft'n Small Room {L}

Self descriptive. This one is damper than "Small Ambience." Stereo in, stereo out.

14 Stereo Mic's w/Room

Stereoizes a mono signal and adds a close-miked air and ambience, something sounding like a little room leakage. It all adds up to a very nice room simulation, which adds life to any source. Mono in, stereo out.

5 Room Reverbs

Larger than small spaces, this Bank offers rooms and chambers. These presets include emulations of real and imaginary environments.

Room reverbs are typically used where more ambience is needed than the 'small rooms' can offer, but where a natural sound is wanted, without a distinct 'reverb' effect being audible. These reverbs are also useful for adding a stereo depth-of-field to a mono source.

Some of the wilder effects may not suit all applications.

1 Basic Reverb C {L}

Nice, basic version of our famous *Reverb_C*. This is a good one to experiment with. All the basic ingredients - diffusion and reverb. Set up with some space, and some ringing. Mono in, stereo out.

2 Big Room {L}

Sounds pretty close to a large, recording-studio room. This is a more sophisticated patch than those before it. Like all reverbs, you usually have to find the preset that is close to what you are after, and then turn a knob or two. This has a nice atmosphere, although, notwithstanding the title, there is some swimming in this 'room.' Stereo in, stereo out.

3 Blue Box Verb {L}

Medium size, and medium-bright room. The addition of a two-octave downward pitch, felt more than heard, gives this verb a twist. Try with a slap-guitar (as if you were playing funk bass). Mono in, stereo out.

4 Boston Chamber {L}

This is a large, warm room/small hall reverb, with tone controls in and out. It gives a natural sounding space, with very slight motion to stop resonances. Mono in, stereo out.

5 Chamber2 {L}

This boy is a large room. He is bright as well, with a slap (but not much tickle). Mono in, stereo out.

6 Denny's Echo Room {L}

Dense *reverb_a* based verb, with two discrete delay lines causing interesting reflections in the room. Reflection times and levels can be adjusted on reverb page 2. More dampened than "Chamber 2," this reverb with left and right reflections has audible walls. Mono in, stereo out.

7 Der Verb {L}

Switchable stereo in and out reverb, built of discrete delays and *reverb_a* module. The result is very similar to "Denny's Echo Room," but this one gives you control of the input and output EQ's. Stereo in, stereo out.

8 Don's Small Room {L}

A very sizzly, metal and concrete room. You wouldn't want to sleep here. Stereo in, stereo out.

9 Drew's Small Room {L}

Warm, small room, like an old, conference room with 15-foot ceilings. Yes, Jeeves, coffee and brandy...there's a good lad. Stereo in, stereo out.

10 Drews Dense Room

Warm example of a simple stereo version of *reverb_a* module. This variation of "Drew's Small Room" is larger, and adds multitaps for a denser and more diffuse space. Mono in, stereo out.

11 FIR Glass Shower

Bright and evened, this is an FIR filter (Finite Impulse Response, the engineering term for a filter that uses fixed amount of delay taps). Gated type reverb sound. This tweak of "Drews Dense Room" is bright and evenly reflective. Mono in, stereo out.

12 Funny Gated Room

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. This is a very unusual reverb structure, which is a must for experimentation. It defaults with the envelope filter bypassed. Mono in, stereo out.

Try adjusting *sweepwidth* to a negative number! Lower your monitor volume while carefully adjusting filter, since instabilities will occur with extreme settings and low Q's. The filter Q is adjustable on second press of Env Filt key. Envelope filter has a bypass switch at lower right. Press 'select' key or turn knob to bypass. Disable gate by turning *thresh* to -100 or *ungated lvl* to 100.

13 GaderVerb

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. This variation of "Funny Gated Room" places the gate monitor on the first menu for convenience. Mono in, stereo out.

14 Gated Water Snare

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. This tweak of "Funny Gated Room" was set up with percussion in mind. Lively and reflective. Mono in, stereo out.

15 Gym Shower

A really big, tiled shower, built of discrete *delays* and *diffusors*. This *plexverb* program is bright and diffuse with a slight modulation. Mono in, stereo out.

16 LRMS reverb

The left/right input is converted to sum/difference. Each of the four signals then go through a reverb. The reverberated sum/difference is converted back to left/right and mixed with the reverberated left/right. You get an echo-y reverb with an interesting space quality. This true stereo reverb uses sum/difference information to create an extremely wide and dense field through four independent reverbs. Cool ! Stereo in, stereo out.

17 Masterverb Dullroom

Small, muted, wooden room. This "Masterverb" tweak is just the ticket for a close, non-reflective atmosphere. Stereo in, stereo out.

18 Masterverb Hall 1

Large VFW type room, with input and output EQ. Larger and brighter than "Masterverb Dullroom," this smooth space has no motion. Stereo in, stereo out.

19 Masterverb Room 2

Small, wooden room. This tweak of "Masterverb Dullroom" has less emphasis on the 'dull.' Stereo in, stereo out.

20 Medium Chamber

This is a bright, reflective room, with built-in pre-delay. It is a chamber reverb which has the sparkle, without the sizzle. Nice and reflective. Mono in, stereo out.

21 Noo Room!

A versatile, bright EQ'd room. Bright, and without the *multitaps* of "Medium Chamber," this empty space may be just right. Stereo in, stereo out.

22 Reverb w/Diff & EQ

Another bright, medium-room reverb. It is larger, roomier and more diffuse than some. This general reverb is reflective, with a perceptible wave build up. Mono in, stereo out.

23 RMX Simu Ambience

Gated room kinda sound. Nice on kick drums and other percussion. Although the parameter layout is not the same, this verb creates a texture reminiscent of that now classic British box. Mono in, stereo out.

24 Roomy Hall

Nice room with a warm hall body and a touch of chorus. Two reverbs give this space independent build and area. A very nice, diffuse space adds character. Stereo in, stereo out.

25 Semi-Gated Room

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. This tweak of "Gated Room" with the filter in gives a new twist to the normal 'gated reverb.' Mono in, stereo out.

26 Slight Chorus Room {L}

Deep room with a dash of chorus. Goes well with white meat. Easy parameter layout let you quickly change this preset to your exact tastes...meat or fish. Mono in, stereo out.

27 Small Club {L}

This simulates a small, concrete-floored club. There's a Greenwich Village pub under a building with scrap in front that sounds just like this. Not desiring to be under any building, scrap or not, I'll take your word for it. Oh look, the sun is out. Mono in, stereo out.

28 Small Drum Room

Small verbette, nice on drums but also on Armenian Sazbush. In the finest tradition of Mullah Nassr Eddin, we decline to comment further. Stereo in, stereo out.

29 UK Ambience

Short and bright, this 'gatey' type reverb has input and output tone controls. This little guy has a bit more sizzle via the *multitaps*. Mono in, stereo out.

30 UK Bright

A short and bright room. Watch your levels. This variation is a bit longer and brighter. Mono in, stereo out.

31 UK Nonlinear

An FIR-type filter with a short, gated sound. This preset is another simulation of the now classic UK gated reverb. Mono in, stereo out.

32 Wooden Mens Room {L}

Effective emulation of one of those big, old, hotel bathrooms. Has a slow sweep added. You guys just have to get out more. Well, OK, we all know what a good tiled room can do for a sound. Hey! Who stole my towel ! Mono in, stereo out.

6 Hall Reverbs

Halls being more reverberant than rooms, these presets offer a wide variety of large and (some) unusual reverb spaces and effects.

A hall reverb, as the name suggests, usually has a more profound reverb effect than a room, often with distinct echoes and reflections. These will usually be used when a noticeable reverberant background is wanted.

1 Arena Soundcheck {L}

Sounds like a huge arena. Testing 1,2,3... 10 to 1 says he can't make it up to 4. Mono in, stereo out.

2 Barking Chamber {L}

Severely EQ'd verb with midrange bark. Post reverb EQ keeps the dog under control. Pets aside, it is a nice, middy (as opposed to muddy) sounding reverb that can take up some space. Mono in, stereo out.

3 Beeg Garage {L}

This sounds like a huge, city, parking garage. Closets, basements, bathrooms and now garages... take a nice, long walk in the woods...or something ! Mono in, stereo out.

4 Big Hall {L}

Large, hall-like reverb with EQ and delay control. Very nice. Smooth, diffuse and rich. Mono in, stereo out.

5 Big Hall 2 {L}

Newer version of "Big Hall" with extra accessibility. Very, very nice, this update of the popular preset is even smoother. Mono in, stereo out.

6 Big Hall/Med Hall {L}

Two reverbs - one on left input, one on the right. They are sub-mixed at the output. Dual machine mode. Great for two signals, amps etc., or as a way to avoid load times. Sound good too...two... Dual mono in, stereo out.

7 Big Room Reverb {L}

Big, rich, room echo, for use with mono or stereo input. Use 'Muting' switch to test echo characteristic. A tunable version of this patch is "Big Hall." Switchable mono/stereo inputs. This is the broadcast version of "Big Hall," for the easiest control possible. Stereo in, stereo out.

8 Black Hole {L}

An abnormally large reverb, sucking everything into a bottomless chamber. Try setting the diffuser to 68 and the size to 91 for a reverse hole. This creature is made from *diffusers* only and is a good way to get to know them, as they can be good friends. Very cool, 'spatial' effect. Mono in, stereo out.

9 Bob's New Room {L}

Large, warm hall built of discrete *delays*, *diffusers* and *plexes*. One definitely hears the walls in this very nice and animated space. Mono in, stereo out.

10 Dynamic Reverb {L}

A versatile reverb with gate and dynamic filter built in. The filter is controlled by an envelope follower, unlike some other effects, whose filter is controlled by a less dynamic gate envelope. . Mono in, stereo out.

11 E-noseChorusCanyon {L}

Giant, chорusy, canyon-sized verb. This *plexverb* gives a large, ambient space, with a smooth and rich chorus without pitch artifacts in the reverb. Mono in, stereo out.

12 Enormo Hall {L}

Big and deep. This environment may not be a place to live, but could certainly be useful in many applications where reality is not the goal. Very smooth and slow decay. Mono in, stereo out.

13 Gated Splash {L}

Nice, gated reverb, where the gate is triggered by reverb level. Try on snares. If you don't know what a gated reverb is for, experiment with this. The suggestion is well advised. Stereo in, stereo out.

14 GloriousFlngCanyon {L}

Huge canyons, with flange on reverb. Another *plexverb*, this one has a different build up of echoes from "E-noseChorusCanyon." Mono in, stereo out.

15 Jr. High School Gym {L}

Sounds like a junior high school gymnasium. Not all of us can remember that far back, but this is an evocative reminder. Mono in, stereo out.

16 Master Hall {L}

Big, warm, concert hall with input and output EQ. Stereo in, stereo out.

17 Masterverb Hall 2 {L}

Warm, medium hall. Larger version of "Masterverb Hall 1." Stereo in, stereo out.

18 Matt's Fat Room {L}

Warm, slightly chорusy room with input and output EQ. Stereo in, stereo out.

19 Medium Hall {L}

Large sizzly room, with a nice sizzle tail. Mono in, stereo out.

20 Mono Easytap Hall {L}

Large, bright, hissy verb. One of many with input and output EQ. Mono in, stereo out.

21 Ridiculous Room {L}

An over-the-top room program with a huge low end. This may best be suited to percussion, as the modulation of the reverb pitches the source. Mono in, stereo out.

22 SIZ Verb 7 {L}

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. Try adjusting 'sweepwidth' to a negative number! You can effectively disable gate by turning thresh to -100 and hold time to nine seconds. Mono in, stereo out.

23 SplashVerb {L}

A very long, tunnel-like hall, with gateable inputs. Stereo in, stereo out.

24 Stereo room {L}

Nice, wide, stereo room. Stereo in, stereo out.

25 Swept Hall {L}

A somewhat modulated hall reverb, with interesting flutters. Mono in, stereo out.

26 Swept Room {L}

Large, sweepable room. Has output EQ. Mono in, stereo out.

27 The Megaverb Final {L}

Bright and large, this reverb has input and output tone controls. Mono in, stereo out.

28 Wormhole {L}

Mega-sized, tilting reverb. Mono in, stereo out.

7 Plate Reverbs

With some smooth, some metallic and some swept, this Bank contains plate and spring emulations for all occasions.

A plate used to be just what the name suggests, being preferred to the cheaper spring alternative. They are particularly popular among vocalists, who want a diffuse background, without recognizable reflections or placement cues.

Spring reverbs are also included for the traditionalists who long for the simplicity of that 'retro' sound.

1 EMT-style Plate {L}

Warm emulation of a big plate, with childproof controls. Mono in, stereo out.

2 Cheap Springverb {L}

Bright, dense, medium long and somewhat fluttery, this verb is reminiscent of an older type of medium-to-high-quality spring reverb. Mono in, stereo out.

3 Great Plate

Nice, basic, stereo-plate, reverb effect. Brighter than "EMT," this plate is in vibration. Stereo in, stereo out.

4 Metallic Plate {L}

Bright, dense and metallic, exactly as the name says. Mono in, stereo out.

5 Pretty Smooth Plate

Large, bright plate with input and output tone controls. This is a smoother tweak of "Metallic Plate," without the sizzle. Mono in, stereo out.

6 Sizzler Plate

Sizzly sounding, platelike reverb. This plate has lots of color...and it's all you can eat! Mono in, stereo out.

7 Spring Reverb

A boinky, little thing and very bright. I'm not sure if 'boinky' refers to shape or motion, but it is appropriate. Mono in, stereo out.

8 Springverb {L}

A boinky, ringy, cheapo-spring reverb sound. As used in all the most economical studios. Mono in, stereo out.

9 St.Plate+Chorus {L}

A stereo input goes to left and right tone controls, then to a chorus and a plate-like reverb. Stereo in, stereo out.

10 Stereo Plate

Dense, midrange-y plate. A little like most plates, but yet discreetly different. This very nice plate simulation has just the right color and motion. Stereo in, stereo out.

11 Swept Plate

Platelike with EQ's built in. There is a very smooth and dense texture to this dark plate reverb. Mono in, stereo out.

8 Alternative Verbs

These presets show off some of the more unusual possibilities in our modular architecture. With effects combined and/or imbedded inside the reverbs themselves, new and exciting effects are now possible.

This Bank offers a range from the unusual to the absurd, giving a number of effects not found on any other signal processing platform.

1 Cheap Verb

A reverb that is inexpensive in terms of DSP resources. Very discrete. This mini *plexverb* is good for embedding into other programs when you need...something. Mono in, stereo out.

2 Choruspace O'Brian {L}

A huge *plexverb* run through stereo delays set to heavy chorus. Both verb and direct get chorused, good for slow, melodic, attack sounds. Extremely long-lived, reverberant and chorused field. Mono in, stereo out.

3 E-noseFlangedCanyon {L}

Large, booming reverbs, built of flanged delays. This *plexverb* has a slightly shorter life than "Choruspace O'Brian," and a smoother flanged texture. It is one of many unusual sonic beds available on the 4000 platform. Mono in, stereo out.

4 Flutter booth {L}

Try to find this sound elsewhere! A deeply fluttering ambience. Almost a post production or sound design effect. This long-lived verb is aptly named. Mono in, stereo out.

5 Gated Gong Verb

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. Try adjusting 'sweepwidth' to a negative number! You can effectively disable gate by turning thresh to -100 and hold time to nine seconds. This unusual texture is a variant of "Gated Room." Note there are no gate monitors. Very hip. Mono in, stereo out.

6 Ghost Air {L}

A deep backwards, breathing reverb, with EQ. Built from a *tone* module and three *diffusors*, this preset creates a reverse reverb build up of delays, which is very resonant in the bass. Mono in, stereo out.

7 GloriousChrsCanyon {L}

Friggin huge, canyon verb with adjustable EQ and chorus. This is a *plexverb* tweak of "FlangedCanyon," with a richer chorus, but similar texture. Mono in, stereo out.

8 Gong Swell Verb 7

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. Try adjusting 'sweepwidth' to a negative number! You can effectively disable gate by turning thresh to -100 and hold time to nine seconds. This is a tweak of "Gated Room" with the gate swelling open, adding a very distinct color to the verb. Mono in, stereo out.

9 Horrors {L}

Squeaking and squelching, this big, cave reverb is aptly named. The program is actually a multi-effects patch, with a pitch shifter going into a delay set, and finally a reverb. The overall effect is a really weird reverb. What does one do with a pitch shifter three octaves up? Well, here is a truly unusual sound. Stereo in, stereo out.

10 Jurassic Space {L}

It's almost a delay, yet it's thick like a reverb. Has EQ, too. A tweak of "Ghost Air," this version has more highs and deeper modulation. Mono in, stereo out.

11 Key Morphic Reverb

Hitting the 'morph' softkey will cause this reverb to morph between two settings. Note: To adjust the allpass expert parameters, use the patch editor. This unusual 'staggering' morph between two reverbs could be used for an quirky segue at its default settings of smooth if set to higher values and/or glide rates. Summed in, stereo out.

12 Kickback {L}

An early reflection type effect, with a large, adjustable predelay. This is a sophisticated and very diffuse slap effect with a lot of controls. Its short-lived ambience may be just the thing to fill space. Mono in, stereo out.

13 MetallicChamber {L}

Another pitch shift going into a *reverb_c*. Through four voices of detuning, diffusion and reverb, these resonant reflections may lift your sound or, conversely, bury it. Stereo in, stereo out.

14 Phantom & Reverb {L}

Unusual sliding harmony mixed with input and thrown into an airy reverb. Try on moody vocals. Never sounds the same twice. These resonant and long-lived ghost notes might be just that strange texture you are after. Lots of mixing parameters for the exact balance needed. Try it with harmonics and wammy bar. Mono in, stereo out.

15 Phaser and Reverb {L}

A nice mixture of verb and phaser. Stereo in, stereo out.

16 Pop Up

A multitude of soft delays that can be radically manipulated. Try going to expert and, on the taps controls page, scroll to delays and hit select button (while listening). This one is set up as a 'face slap' verb effect. Tweaking radically alters the texture. Mono in, stereo out.

17 Predelay Nonlin

A popular sounding, nonlinear verb with a long predelay set. The addition of predelay places the build up perceptibly after the source. Mono in, stereo out.

18 Preverberator

Input is delayed 0.5 to 1.2 seconds, while repeats grow and echo. All fx fade out once input hits threshold. A good pre-echo for sound effects or music, this unusual 'post/broadcast' effect is set up with cohesive and accessible parameters. Stereo in, stereo out.

19 Reverse Nonlinear

Another version of a nonlinear reverb, with extreme predelay. This reverse reverb preset is extremely diffuse and linear...ah...non...linear...well...no...linear! Mono in, stereo out.

20 Reverserize Hall {L}

Multitap with linearly increasing levels, feeding a large hall reverb. Gives you a backwards sound even while the words are forward. Through the use of both the *multitap* and a verb, this preset gives real character to your source, while at the same time staying out of the way. Mono in, stereo out.

21 Shift Verb

You won't hear this anywhere else (except Klikton, the undiscovered planet in our solar system). It is a UFO taking off from a giant canyon. Might be a great effect to end a song with. I'm sorry to contradict the gentleman, but as everyone (in the know) knows, the tenth planet in our system is Yuggoth. The astronomers have, unwittingly, coined her Persephone, as she is just beyond Pluto. Mono in, stereo out.

22 Sizzle Verb

Large, alternative, sizzly verb. Easy to control. This gives a very bright texture built from parallel delay paths with non-diffuse delay patterns. Mono in, stereo out.

23 SplashVerb maxsweep

A unique, swept reverb with some unusual gating options on the input. A gate for each input, used as envelope modifiers into a stereo reverb. The gates loose the transient nature of the source, and the reverbs sweep turns it into Turkish taffy. Stereo in, stereo out.

24 Square Tremolo Verb {L}

Reverb with modulation of the tail's decay. With your source sustaining, this verb gives a choppy flutter/trem on the tail. When using staccato sources, the flutter feels much more pronounced. Mono in, stereo out.

25 Stereo Deetoon Room

This is a multi-effect that is mostly reverb to the ear, made of *shift*, *reverb*, and *EQ* modules in series. Thick doubling and detune into reverb. With the necessary mixing on board, this is a powerful tool. Stereo in, stereo out.

26 Swell Verb 9

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. Try adjusting 'sweepwidth' to a negative number! Lower your monitor volume, while carefully adjusting filter, since instabilities will occur with extreme settings and low Q's. This tweak of "Gong Swell" has a much smoother and diffuse build up. A very interesting effect. Mono in, stereo out.

27 Thicken Verb {L}

A short, dark ambience deepens anything applied. This verb gives a resonant low end and detuned tail. Mono in, stereo out.

28 Tremolo Ambience {L}

Small ambience with add-able shake. The cyclic quality of the tremolo in this reverb would be quite nice when in time to your tempo. With that in mind, note that the 'trem freq' parameter IS actually in Hz, not percents! Mono in, stereo out.

29 Vibra Spread

A variation on Vibra pan, with a wide, stereo effect with increasing delays. The long *multitap* builds into a diffuse verb. With percussives, it is reminiscent of the dreaded 'vibra.' Mono in, stereo out.

30 Zipper Up {L}

Fast, increasing, diffused echoes with reverb. The tonality of this metallic *multitap* adds a prominent and unnatural build up to this reverb. Mono in, stereo out.

9 Vocal Processors

This is a Bank of basic vocal enhancers and tools. It includes presets to change pitch for effects, as well as others to correct out-of-tune vocals. In addition, there are a number of unusual reverbs particularly suitable for vocal use.

1 Big Voice

Very smooth voice shifter down to one and a half octaves below original. True stereo or mono. Adjustable echo depth with auto control ('blur') based on voice level. Stereo in, stereo out.

2 Ext Pitch Correct

Use this to change or correct pitch. 'Manual' or MOD-1 will shift the pitch by the amount in 'shift mod.' By using a modulation to sweep pitch, very smooth corrections are possible. Note that if you have redirected MOD-1 and no mod source is present, random shifts may occur - look at the 'pos' monitor to see if this is happening. Stereo in, stereo out.

3 FixaVocal: 1/2 step

Pitch shift set up to enable the 'fix it in the mix' engineer to ride flat vocals with the pitch wheel of a MIDI keyboard. Plug keyboard's MIDI out to this MIDI in. This is another variant to externally correct pitch, so the note above applies. In this one, a simplified control layout has been used. Mono in, mono out.

4 Phased Vocal Reverb

Not much of a challenge to figure out what "Phased Vocal Reverb" does. It has a smooth, slow sweep pattern on the phase, and then a basic reverb. Mono in, stereo out.

5 Auto Pitch Correct

Automatically corrects any vocal that is within half a semitone of where it should be. Outside of this range it will pull to the next note. Note that this process will quantize the pitch of the signal (you do have control over the quantize factor), so be careful, as you may lose slides and inflection. Mono in, stereo out.

6 Rap Bass Hype

Bass hype effect for rap vocals. This stereo effect is a pair of selectable filters. It defaults as lowpass, with a slight resonant peak from the 'q' setting. This cuts highs as opposed to adding lows, so you will not muddy the sound. Stereo in, stereo out.

7 Voice Disguise

Disguises voice for stool pigeon to appear on "60 Minutes." Pitch shifts up and down using random lengths and random directions. Mono in, mono out.

8 Voice Processor

Make your voice tracks more compelling. Automatic upward leveling, full EQ, DS, limiting. Save a version for each vocalist. Caution: Includes one-second delay. This post/broadcast effect is well thought out, and is laid out very clearly. Great for easy control of normally cumbersome processing. A useful tool. Mono in, mono out.

9 Vox Shimmer

Beautiful, complex, multi-effect vocal processor. This is a tweak of "Voxplate/Chorus." Stereo in, stereo out.

10 Voxplate / Chorus

Excellent one-stop vocal treatment. Has EQ for left and right inputs, a *pitchshifter* for thickening, a *reverb*, and a *delay* with modulation capabilities. Stereo in, stereo out.

10 Drum Processors

A large variety of delay and reverbs setup for percussion. These include room and ambience processes, as well as some unusual effects that will clearly color and alter your source material.

Among these effects are a number of 'gated' reverbs, as well as 'nonlinear' effects, where the reverb reflections get louder as they decay.

1 1+a Delay

Creates echoes in the rhythm pattern. 'One and a.' An eighth-note (the input) followed by two sixteenths. This patch is a "Number Of Echos" tweak for rhythmic structures. Note the delay percentage values. This preset, like all delay-based percussion effects, is excellent for creating patterns that may not have been obvious. For machines, players and prerecorded tracks. All that, and it also creates a stereo field ! Mono in, stereo out.

2 1e+a Delay

Produces the three last sixteenth notes of a 120 beat. 'One ee and a.' A "1+a Delay" tweak for rhythmic structures, with an alternate rhythm. This preset, like all delay-based percussion effects, is excellent for creating patterns that may not have been obvious. For machines, players and prerecorded tracks. All that, and it also creates a stereo field ! Mono in, stereo out.

3 4 Your Toms Only

Tom ambience, with a little verb, a little chorus, a little EQ, a little anchovy sauce. This seems to smear the attack slightly, something between a brush and a flam. Great for adding an 'ensemble' or 'tribal' feel. Mono in, stereo out.

4 808 Rumble Tone

Adds subharmonics to a kick drum. An oscillator is gated until triggered. Serious low-end subs are created. Note that the tone of the sub can be varied, but does not follow the source. Be careful with the monitor level ! Mono in, mono out.

5 Arena Soundcheck

Huge, empty arena, and there's this guy on a mic saying 'test 1,2,3' over and over. This is definitely not a subtle ambience. Large, reflective and a few noticeable slaps. Mono in, stereo out.

6 Basement Drums

Giant basement underneath Shea stadium. Some employee brought his drums in and it sounds like this. I'm not sure if he's in the basement or on the rafters. Long predelay and lots of taps, give a big backlash effect. Mono in, stereo out.

7 Beatbox Reverb

One-of-a-kind talking reverb, with adjustable vowels and words. Another tweak of "VerbTrashSweeping," this one set for drums. It has very unusual vocal formants for percussion. With hats you get an odd flanged/filtered sort of deal - with high toms, you get these vocalizations very up front. Try it out. Mono in, stereo out.

8 Big Bottom

Really smooth and thick, it has an elegant interconnection of *diffusors*. Check out the patch. This one gives a lot of depth and distance and weight. Mono in, stereo out.

9 Big Gateverb

A gated-type ambience good on snare. Uses lots of delay taps thrown into a short reverb. The taps add snares to a snare drum. The short verb time stays out of the way but adds...well...verb. Mono in, stereo out.

10 Big UK

A gated-type ambience good on snare, made popular by British engineers. Uses lots of delay taps thrown into a short reverb. This tweak of "Big Gateverb" has much more low-end roll off on the reverb's decay, and fewer taps. Although similar, this one feels a little tighter. Mono in, stereo out.

11 Chim-Chiminee

Unusual, rhythmic pitch shifts that go chim-chiminee. Chim-Chiminee ? I've never heard it. I've used this on lots of sources and its cool. On a hi-hat pattern, you get a synthetic rhythm going - on toms, and stuff you get pitched delays that retune the drums. Mono in, stereo out.

12 Clap Thickener

A beautiful shifter useful to thicken percussives. It changes its pitch parms slightly between every clap. By randomly triggering new values to the shifter parameters, you get a nice, non-mechanical and live feel to this enhancement. A very short verb is added to give depth. Mono in, stereo out.

13 Drew's Drum Box

Tight, flanging ambience. Interesting on overheads. This is a nice space. The slow modulation may or may not work for you - on low frequency material, it adds a neat feel, whereas on rim shots and cymbals, etc., it's much more noticeable. Mono in, stereo out.

14 Drew's Drumsqueez

Sloooowww, flangy effect with close ambient delays. The motion on this one is blatant. Again, the higher frequencies are swept in a more obvious manner. Mono in, stereo out.

15 Drum Chamber

Really bitey, snare ambience. EQ'd. This nice chamber is hip on the kit, too! Mono in, stereo out.

16 Drum Filter

Excellent, triggered filter. Has sweep rate and envelope parameters. This guy 'woofs' on mid toms. Very throaty, but not over the top filter effect. Mono in, mono out.

17 Drum Flanger

Another flanger tweaked for drums. As with all modulation-based percussion effects, try 'em, you may like 'em. This is a nice, smooth and slow flange. Stereo in, stereo out.

18 Drum Flutters

Unusual fluttery, gated-sounding thing. Sampled industrial dishwasher? Could be...or maybe a marching band in low gravity with some knucklehead changing the air density control ? Mono in, stereo out.

19 Firecracker Snare

A versatile reverb with gate and dynamic filter built in. The filter is controlled by an envelope follower, unlike "Dynamic Reverb" whose filter is controlled by a less dynamic gate envelope. This tweak of "Funny Gated Room" is aptly named, and the same hints apply. A very diffuse and filtered pattern after the source sounds like the reflections of a firecracker, especially on snares. Mono in, stereo out.

20 Frippertronics

A long delay with feedback that turns a single drum into a tribe of percussionists. Know delay looping, love delay looping, live delay looping. Be a 'human' sequencer for a change. Mono in, stereo out.

21 Group Claps

A useful clap thickener built from eight pitch shifters with delays. While we're on a 'tribal' note, this one is very cool for 'ensemble' toms and tribal fills. Layer it with some un-thickened sources. And yes, it works on claps as well. Mono in, stereo out.

22 Hat Flange

Guess what this does? Well, if it doesn't do my laundry...how about windows ? This is another tweak of "Drum Flange," with a somewhat faster sweep pattern. Mono in, stereo out.

23 Li'l Drum Space

Tight space, reminds us of our unfinished rear basement. This is a real nice ambience. Mono in, stereo out.

24 Liquid Toms

Watery, band delays. Tweaked on tom drums. This unusual textural thickener is, again, aptly named. Mono in, stereo out.

25 Live Nonlin Room

Small, little ambience that can add a touch of reality to close mics or drum machines. The non-linear build of this verb certainly adds dimension to drums. Reality...? Mono in, stereo out.

26 Live Snare Verb

Resonant reverb, good on snares. There is definitely a peaky standing wave to this reverb. I've played there before. Mono in, stereo out.

27 Medium Gateverb

Self-descriptive. As I have been asked to describe these...well...gates close the reverb tail, so it doesn't get in the way, i.e., muddy, etc., and this is done...well...medium. Pass the fries. Mono in, stereo out.

28 Nerve Drums

Ringy, close delay taps. Cool. This resonance effect for drums is great for eel-ectronic musics. Imparts a tonality to the source. Mono in, stereo out.

29 Nonlinear#1

A little nonlinear ambience. Has gated effect, nice on snare. This little gem will also add 'artillery' factor to kicks. As with all presets, experiment and tweak to taste. Dual mono in, stereo out.

30 Panning Delays

A delay with auto-panning. This straightforward preset may be just the thing at the break, or possibly the outro. Mono in, stereo out.

31 PercussBoingverb

Bizarre, boingy verb. Need a new color for that off-color song? You may grow to love this cartoonish little imp. Mono in, stereo out.

32 Percussion Industry

This patch will turn incoming percussive signals into noisy industrial percussion. Use the external controls MOD-1 and MOD-2 to modify filter frequency and Q. This percussion preset adds a very distinctive color. Tweak to taste. Lots of possibilities with this expressive sound modifier. Mono in, mono out.

33 Percussion Room DMC

A very bright-room program, optimized for high-end percussion, like cowbells, shakers, etc. Very diffuse reverb. I agree, it's great on high-end material. I even like it on toms and kicks, when played sparsely and with ambience, i.e., space. Mono in, stereo out.

34 Rhythm Delay

A number of echoes with new parameters. Sounds kinda bossa nova. Another tweak of "1+a Delay." Very nice rhythm on this one. Play sparse and inside the feel. Mono in, stereo out.

35 Ring Snareverb

Very pitchy reverb. Emphasizes ring frequencies. May be used in conjunction with other snare reverb. The resonance of this reverb is strong and colorful. If that is what you are after, give it a listen. Mono in, mono out.

36 Small Drumspace

Nice ambience reminiscent of long, unfinished, basement room. Like all drum reverbs, does it fit the flavor of the tune ? This is a nice, general verb. Stereo in, stereo out.

37 Small Drumspace II

Small basement-type ambience. Put some carpet in, will you? This is a tweak of "Drumspace," with a tighter tail. Mono in, stereo out.

38 Small Gateroom

Small Gated Reverb. Nice on kick, snare, over salads, pasta. This general-purpose gated reverb preset is a nice starting place. Adds just enough texture and does not get obnoxious or unruly. And...ah...pass the pepper. Mono in, stereo out.

39 Sonar Room

A dynamic reverb with headroom, gate and envelope filter built in. The dynamic envelope filter offers possibilities found in no other reverb units. Try adjusting 'sweepwidth' to a negative number! You can effectively disable gate by turning thresh to -100 and hold time to nine seconds. Yet another tweak of "Funny Gated Room." This one gives the resonance (via the gated filter) of a sonar blip. Mono in, stereo out.

40 Stereo Delays

A stereo multitap, simple to control. This tweak of "1+a Delay" has yet another rhythm pattern. Try with shakers and incidental percussion, as well as 'kit' stuff. Mono in, stereo out.

41 Swept Band Delay

Rhythmic up-sweeping band delays. Very high tech. This 'band delay' effect is much more severe than "Liquid Toms." Give it a listen. Mono in, stereo out.

42 Techno Clank

Shaky, metallic resonance, with vowel-shaping. This can be truly undefinable. Kind of like... you know... the ..sound...of..a dropped coffee pot, triggered. This tweak of "FatFunkVocalFilter" has different formants, etc. Mono in, stereo out.

43 The Ambience Kit

Cute little FIR-type ambience. Try on snare. It has a very diffuse and thick texture, and is worth a try on shakers, and other incidental percussion. Mono in, stereo out.

44 Tight Snare Verb

Very ringy reverb, meant for snares. It gives a clear edge to the snares and rims. Mono in, stereo out.

45 Trigger Tone 4

An adjustable oscillator is gated on and off when the input on the left channel exceeds a user-settable threshold. This program differs from Rumble Tone in that the oscillator level is not dynamic. It is turned all the way on. Attack, hold, and decay controls available. This is a more aggressive tweak of "808 Rumble Tone," whose comment also applies. Note that this guy is much louder, so be more careful with monitor levels ! Mono in, mono out.

46 Vibra Pan

This uses panning delays from left to right, to form an FIR panning ambience. Well, let's make it clearer. This uses 'panned' delays whose image is left to right with each consecutive tap. Add diffusion and verb and there you have it. This preset imparts a metallic quality to the source. Mono in, stereo out.

47 Wide Room

Complex reverb, that sounds much like the size of some recording studio rooms. This guy keeps the source right up front and does add width, more so than depth. Mono in, stereo out.

11 Guitar Effects

A short list of basic guitar presets. These include rack emulations, Stomp Boxes (you know those cute little boxes, that the guitarist keeps tripping over), reverbs and distortions as well as some artist presets. A much wider range of guitar effects can be found in the GTR4000.

1 1st Reich {L}

With this preset, you get eight pitch shifts with delay. A modern jazz sound, maybe. It has multiple shifts and delays, giving a nice arpeggiation on slow, sustained chords or intervals. Mono in, stereo out.

2 Bass Suite {L}

This patch consists of a compressor, an octaver, a four-band EQ, and a phaser. MOD-1 controls the octaver level, and MOD-2 controls the phaser level. This patch can definitely beef up your signal, and is useful with guitar or bass. The EQ is set to zero defaults, so you can dial in your tone. Mono in, mono out.

3 Fuzz-o-mania Four {L}

Hard distortion with compression, EQ, shifters, chorus, reverb and more. Very synthetic timbre with this fuzz box (with toys included). Mono in, stereo out.

4 Gig Reverb {L}

Just a pitch shift into reverb. Simple to use. With the shifter at zero (default), you get a slight thickening. The reverb is straight ahead and easy to control. It does sound like those places we've all played in. Mono in, stereo out.

5 Guitar Mania {L}

Tone, shift, phaser, chorus, and delay. The almost everything rack. There's a lot going on here, so the sound is complex and lush. Mono in, mono out.

6 Inst Process {L}

This preset gives you a pitch shift, phaser, chorus, and delay rack. Octave up, phased chorused and delayed. Another straightforward feel disguises a lot of subtle tweaking. Shiny and in slow constant motion. Mono in, mono out.

7 Kill the Guy {L}

One-of-a-kind, envelope-triggered 'talking effect.' Apply input and play with vowels for new filtering. Used on Steve Vai's "Kill the Guy with the Ball" from his Alien Love Secrets CD. Mono in, mono out.

8 Jan&Jeff {L}

As in, Hammer and Beck. Synth will follow your input guitar line... sorta. If you don't understand it, you're too young. An interesting patch. Yes, this is a mono 'guitar synth.' Mono in, stereo out.

9 Little Man {L}

A *plex* loop with reverse shifters and filters inside. I think this little man is trying to say something. Mono in, stereo out.

10 Octave Box {L}

This is what people used before Eventide invented the pitch shifter. The effect is a square wave an octave below your input. The volume of the output follows your input. Adjust the lowpass filter on the input to get the output pitch to track. Adjust the lowpass filter on the output for the timbre you want. Many of us have played or owned one of those little blue boxes. Here emulated with all its quirky behavioral artifacts. Mono in, mono out.

11 Phaser Rack {L}

This rack includes EQ, compressor, pitch shift, delay and phaser. This tweak of "Guitar Mania" achieves more sparkle from the phaser. This is not surprising, given the title. A few soft delay repeats give this preset a nice tail. Summed in, mono out.

12 Pickers Paradise {L}

This rack has compressor, EQ, delay chorus, reverb and tremolo. With a 100% wet mix you get a swimmy trem, but with a 50/50 wet/dry mix, you get a beautiful and very subtle animated halo around your sound. I like 'em both. One is retro, one is modern. Summed in, stereo out.

13 Soft Attack Fuzz {L}

Four-band distortion with envelope control. This is one of many multi-band distortion presets. Like a bunch of fuzz boxes and a crossover. Each 'band' gets its own treatment. This version, with envelope control of the attack and decay, set up with a slight swell effect to mute the attack. Summed in, stereo out.

14 Tremolo Rack {L}

This is a rack with EQ, compressor, chorus, reverb, and a nice stereo tremolo. General-purpose rig with lots of useful effects, especially for 'twang' guitar styles. Mono in, stereo out.

15 Vai-a-tonic Trio {L}

Now you have three other guitarists, each with a different sound. Player three likes his fuzz. Mono in, stereo out.

16 Virtual Pedalboard

Rather than lug your pedalboard and rack into the studio, try this pedalboard emulation. Six separate effects, each with individual controls. Mono in, mono out.

17 W-I-D-E Solo {L}

Uses a lot of very small pitch shifts to widen the stereo image. Mono in, stereo out.

12 Dynamics

Our basic dynamics Bank. These presets include everything from compression to duckers to gates. Also perfect for patch construction as the building blocks of larger programs.

Dynamic effects primarily are automatic gain controls, used to increase or reduce the 'dynamic range' of a signal, whether to avoid overloading following equipment, or, alternatively, to increase the subjective loudness of the sound.

1 4-band compress

Compresses four bands separately for punchier voices. Separate De-Esser in Compress menu. Save a different version for each announcer! Mono in, mono out.

2 Auto V/O Ducker

Smoothly fades music (or sfx) before voice or other 'priority' signal. No pumping, unaffected by input level over threshold. Includes one-second delay. Mono in, mono out.

3 Bigger is Wider

Energy below 200 Hz (bass notes and male voices) triggers stereo width enhancement. Completely compatible - mono listeners hear original signal. Summed in, stereo out.

4 Compressor & EQ

The two left faders are the left and right inputs to compressor. There's one band of EQ and hi/lo shelving followed by an output level fader. The compressor is built from four *compressor* modules, two for each channel. Use the input controls on left to set level and compressor drive. Stereo in, stereo out.

5 Dual Gates

Two independent gates, each with its own attack, decay and threshold. Check patch for simplicity. Dual mono in, dual mono out.

6 Ext Control Panner

Does exactly what you might think. MOD-1 controls position. Note: Global Mix MUST be set to 100 percent. Mono in, stereo out.

7 Ext Gain Control

MOD-1 controls the gain of both channels. I've used a modified version of this in many presets as the smoothest External Volume Pedal I could find. A good tutorial in patch creation. Stereo in, stereo out.

8 Man's Pan

Pans left input with an LFO. Four waveforms available. At 60 percent, full pan will occur. Above 60 percent and you will engage 3-D effect. Mono in, stereo out.

9 Quad Pan Chorus's

Four delays are panned and swept with eight oscillators, creating a rich but tight field of voices. Stereo in, stereo out.

10 Ramp Up/Ramp Down

This preset gives you the ability to create audio fades in and out, either exponentially, linearly, or define your own envelope. Stereo in, stereo out.

11 SemiClassic Squeeze

A classic compressor topology is used in this algorithm. Has a knee, and considerable overshoot. You can overload a little without harsh clipping. Dual mono in, dual mono out.

12 Stereo Compressor

This compressor is built from four compressors, two for each channel. They're set to provide a knee function. All you have to adjust is the input drive fader. Stereo in, stereo out.

13 Stereo Two-Bander

Each channel is split into two bands (high and low freq) which are processed separately, while preserving the high frequency stereo imaging. Dual mono in, dual mono out.

14 Top 40 Compressor

A classic compressor topology is used in this algorithm. Has a knee and considerable overshoot. You can overload a little without harsh clipping. Dual mono in, dual mono out.

15 Tremolo Lux

Tremolo with some envelope modulation. Has rate and tremolo depth. A classic amp tremolo simulation with input level as a possible (user defined) mod source to the effect. Stereo in, stereo out.

16 2 Mono Compressors

Two independent compressors, with delays placed to achieve predictive attacks and decays. Not optimized for true stereo operation. Dual mono in, dual mono out.

13 EQ/Filters

This Bank shows off the sonic clarity of our digital EQ's. From single filter examples to full-blown stereo EQ's, band delays and even some very unusual wa-wa pedals.

These effects are particularly useful in the digital domain, where sophisticated EQ control is often hard to achieve.

1 Mono Filter {L}

A single, mono filter. Our simplest example of EQ/filtering, this is a perfect place to start experimenting with the *filter* module, and for use in patch creation. Mono in, mono out.

2 Stereo Filter {L}

Two filters with common controls. No surprise, this is a stereo version of "Mono Filter." Stereo in, stereo out.

3 100\300^1K^3K10K/4K

This is a stereo six-band parametric EQ. The first and last band are shelving EQ's. The name lists the center frequencies. Bandwidth is in octaves. Check mix mode! Stereo in, stereo out.

4 100^400^1K5^4K8K15K {L}

This is a stereo six-band parametric EQ. The name lists the center frequencies. Bandwidth is in octaves. Check mix mode! Stereo control of these EQ's lets you get deeper into the *eq* modules. This preset defaults with one octave bandwidth or 'Q,' but the parameters are available to you for experimentation. As it says above, be conscious of the mix mode. Stereo in, stereo out.

EQ works in parallel with the dry signal as part of the *eq* module itself, so if you have the global wet/dry mix at 50 percent, you 'lighten' the effect (which may be what you want), but be aware of the situation.

5 Two Band Crossover {L}

Two-band crossover high and low bands out. This preset lets you choose second or fourth order filters and the crossover frequency. Mono in, dual mono out.

6 40^100^300^1K^5K10K {L}

This is a stereo six-band parametric EQ. The name lists the center frequencies. Bandwidth is in octaves. Check mix mode! Another tweak of a stereo six band EQ. This one with different center frequencies. And, again, you probably want to feed through 100 percent wet, so watch the mix level and/or console situation. Stereo in, stereo out.

7 60\100^500^1K4K/1K5

This is a stereo six-band parametric EQ. The first and last band are shelving EQ's. The name lists the center frequencies. Bandwidth is in octaves. Check mix mode! Another tweak of a stereo six band EQ. This one with different center frequencies. And, again, you probably want to feed through 100 percent wet, so watch the mix level and/or console situation. Stereo in, stereo out.

8 80\160^400^2K^5K/2K {L}

This is a stereo six-band parametric EQ. The first and last band are shelving EQ's. The name lists the center frequencies. Bandwidth is in octaves. Check mix mode! Another tweak of a stereo six band EQ. This one with different center frequencies. And, again, you probably want to feed through 100 percent wet, so watch the mix level and/or console situation. Stereo in, stereo out.

9 80^200^500^2K6K12K

This is a stereo six-band parametric EQ. The name lists the center frequencies. Bandwidth is in octaves. Check mix mode! Another tweak of a stereo six band EQ, this one has different center frequencies. And, again, you probably want to feed through 100 percent wet, so watch the mix level and/or console situation. Stereo in, stereo out.

10 Band Delay

Breaks mono signal into eight bands, delays each, sums all in a stereo mixer. By filtering delay lines, each 'tap' has a significant frequency peak, giving each tap an independent flavor. This preset tastes somewhat watery. Mono in, stereo out.

11 Band Filter

This is a band-pass filter where you set the upper and lower frequencies of the band. A simple and variable filter, this one should be self evident. Summed in, mono out.

12 Big Dipper

This is one sharp filter (actually eight). Dips at tuned frequency and at the next seven harmonics. Variable tuned filters add resonance to source. For percussion, this would give the feel of being in tune. Mono in, mono out.

13 Crossover/Limiter

Two-band crossover. Mono in, high and low bands out. This one has phase-invert switches, microdelay, limiters. Great for regaining control of an instrument such as bass. Very controllable. Tweak to taste and need. Mono in, stereo out.

14 Cup Mute {L}

Simulates the sound of a trumpet-like bell with a cup mute. A generalized mod input is accepted to modulate the input on the fly. Hit parameter to get second page of parameters. Another tweak of "Ext Wave Guide." In this preset you have the ability to model a vocal cavity. Mono in, stereo out.

15 Detuned Band Delay

Eight bands, each with a *delay* and *detuner* built in. This flavor of 'band delay' effects uses *detuners* for both detuning and delay length, which adds richness and beating to the effect. This one has an odd envelope filter feeling to it. Mono in, mono out.

16 Down Band Delay

Twelve bands, each with a delay. Set for high frequencies first. This Twelve-band delay uses straight delays and filters. Like "Detuned Band Delay," it has an envelope follower feel because the frequencies are descending. Mono in, mono out.

17 Envelope Filter {L}

Two filters controlled by the signal level. This is a classic envelope follower effect. Note that input is from the left channel. Mono in, mono out.

18 Ext Mono Wah-wah {L}

Just a wah-wah. You select the on (pedal down) and off (pedal up) frequencies and Q. MOD-1 sweeps the effect. Does anything need to be said about this process? In this preset you have the ability to determine the wah characteristics ... a far cry from ... well another cry. Mono in, mono out.

19 Ext Stereo Wah-wah {L}

Externally controlled dual filters. MOD-1 is the external control. You can specify the frequency and Q at each end of the external sweep. A dual mono version of "Ext Mono Wah-Wah." This means you tweak each channel independently. Stereo in, stereo out.

20 Ext Vocal Wah-wah {L}

A different kind of wah-wah where you sweep through a vocal filter. MOD-1 sweeps the effect. This is a pedal controlled version of our now infamous "Ai-Yai-Yai"/"Kill The Guy" effect. The pedal sweeps the filters, which are set up as vocal formants where you choose the vowel. Mono in, mono out.

21 LMS Filter

This is an adaptive filter. Signal goes in on the left, noise goes in on the right. There is a delay for the noise input. Signal minus noise comes out left. Noise from signal comes out right. Check out the LMS module in the manual. This useful preset is used for such tasks as removing SMPTE that has bled across adjacent tracks of tape. Dual mono in, dual mono out.

22 Mono Eight Band EQ {L}

This is a mono, eight-band, full parametric EQ. The same thoughts apply to this version of an EQ as to the others. Mono in, mono out.

23 Mouth-a-lator

Another version of the 'I-Yai-Yai' program with different settings. This is another tweak of this notorious effect. Mono in, mono out.

24 Simple Vocoder

A simple, ten-band channel vocoder. Not as intelligible as a real vocoder, but useful for vocal-like effects. The ratio control shifts the formants (0.5 = octave down, 2 = octave up). You also have control over the individual bands. Analysis left, and play right on this basic vocoder effect. Dual mono in, dual mono out.

25 SweepBand Delay

A much deeper and intriguing effect on this tweak of "Band Delays."

26 Up Band Delay

Twelve bands, each with a delay, set for low frequencies first. There is an upward motion on this tweak of "Down Band Delay." Mono in, mono out.

27 VerbTrashSweeping

Talking, reverby, and resonant with an LFO vibrato applied - it's hard to describe. An unusual combination of reverb and vocal formants swept by an envelope-triggered LFO. Worth a listen. Mono in, stereo out.

28 Vocal Filter

Vocal filter consists of three filters that are adjusted to simulate the human vocal tract, making vowels. You get to choose which vowels to sweep between, and the signal envelope will sweep the filters. This is an envelope follower version of "Kill The Guy/Yai-Yai." Mono in, mono out.

29 VocalFilterModwheel

Nice MIDI modulateable vocal filter. Uses mod wheel. It is basically an external control version of "Vocal Filter." Mono in, mono out.

14 Distortion

Our basic distortion Bank. From 'Stomp Box' replications to Class-A enhancement to sophisticated multi-band arrays. Something for everyone. Again, look to the GTR4000 for more sophisticated distortion effects.

1 CrudeDistortion Tap {L}

A fuzz, ambience effect. The rectified signal is put through two *multitaps* where the signal is inverted for one of the *multitaps*. Mono in, stereo out.

2 ARKHAMLEAD {L}

Fun distortion box, with a couple of delays thrown in. Sounds nice. Summed in, stereo out.

3 Band Distort {L}

Several distortion methods are applied to the left input. The top and bottom halves of a waveform are distorted independently with a nonlinear curve and slew rate limiting. The distorted signal is passed through some complex shifting and mixed to stereo outputs. Mono in, stereo out.

4 Ben's Grungy Guitar {L}

Compressor followed by tube-like distorters and EQ. Input gain on first page. Overdrive type sound adds color. Mono in, mono out.

5 Big Muff {L}

Full and fat, a guitar straight in the minus ten inputs is all you'll need for pretty pumpin' sound. Try rolling off more top if you use a direct guitar input. This sounds like its nine-volt has seen better days as well. Mono in, stereo out.

6 Big Muff w/ Dead 9v {L}

Sounds like its time to change that nine-volt battery in your distortion pedal. Distortion and EQ. Careful on loading this puppy. Mono in, mono out.

7 Bite Distort {L}

User-definable distortion curves open up new possibilities. Offers control over several distorted signals (some pitch shifted), summed back together in a pannable stereo field. Tweak of "Band Distort," with the shift set to detune. Again, a very synthetic sounding fuzz. Mono in, stereo out.

8 Chorus Distort {L}

Fat and effected distortion program. User-definable distortion curves. Chorusing can be mixed separately. A variant of "Band Distort." On this one, the shifter is set for a chorusing effect. Mono in, stereo out.

9 Class A Distortion {L}

This is a second harmonic generator. A lowpass circuit is used to limit input bandwidth to distortion cell and to prevent alienism. The left two faders are separate left and right input levels. The fader on the right is output level. Meters 1 and 2 show left and right distortion (THD). The distortion induced is not guitar-type hard clipping - it is subtle and can be applied to stereo signals to make them more 'analog.' Use *amt* fader to control second harmonic distortion. Stereo in, stereo out.

10 Crunchy {L}

Metal-type distortion combined with chorus, EQ and gate. Mono in, mono out.

11 Fluxion Distort {L}

Like normal distortions, this will warp the amplitude of the wave. In addition, this will warp the flux of the wave. (Flux is how fast the wave moves from one amplitude to another.) Mono in, stereo out.

12 Fuzz Frippertronics {L}

A dirty distortion is followed by a serious delay - up to five seconds for looping and playing (along) with yourself. Mono in, mono out.

13 Fuzz Maker {L}

Two distortion approaches are combined here. One is a slew rate limiter, the other is a user-definable gain curve. Mono in, mono out.

14 Fuzz-o-mania {L}

Rasty fuzz made from hard clippers with shifters, modulating delays and phaser. Mono in, stereo out.

15 Fuzz-o-mania Too {L}

Hard clipper followed by compressor. EQ, phaser, and full reverb to embellish the distorted signal. Mono in, stereo out.

16 Fuzz-o-mania Tree {L}

Hard clipper mixed with original signal, compressed and sent to effects with a slow, phaser sweep. Mono in, stereo out.

17 Hmmm Distort {L}

User-defined curves induce distortion on left input. Has several shifters all sub-mixed and panned at the stereo output. Mono in, stereo out.

18 QuadHyperMod {L}

A rich, full distortion with a modulatable delay on it. Summed in, stereo out.

19 Thick Distort {L}

Extreme fuzzed, user-settable distortion is filled out with multiple pitch shifters. Mono in, stereo out.

20 Transistor Distort {L}

Simulates distortion of a transistor amplifier. Has gain adjust and EQ before, and after, the transistor simulator. Mono in, mono out.

21 Tubey Distortion {L}

This preset is similar to "Transistor Distort," but, instead, simulates the distortion of a tube amplifier. Has gain adjust and EQ before, and after, the tube simulator. Mono in, mono out.

15 Mastering Suite

These sophisticated dynamics programs are designed for stereo digital I/O, and set for your two track mixes, as well as being very useful for individual sources. These presets will often allow complex mastering operations to be performed on a DSP4000 alone, saving the expense of otherwise little-used outboard equipment. An enhanced set of mastering presets is available on the "Masderring Labs" program card.

1 Compress Highs Only

A stereo compressor is followed by a compressor that limits a band or a shelving response. Use as a de-esser or other versatile frequency, conscious processor. Stereo in, stereo out.

The left two faders on the Main page are separate left and right input levels. First meter is compression, second is H.F. limiting. Output level adjust is on the right. Duplicate controls and meters are found on different pages for convenience. They will always match. 12dB of internal headroom is allowed for processing of full-scale signals. Often you can just adjust the input levels to drive into compression.

The unit must be 100 percent wet, or in Studio (no mix) mode for proper, comb-free operation.

Designed for use in digital domain. Analog inputs (turn knob right) will probably write to digital outputs with emphasis on. Emphasized digital inputs will be stripped of their 'emphasis on' bits, although emphasis is rare in professional 44.1 kHz masters. Future revisions will allow more flexibility.

The first compressor acts as a peak limiter, rarely if ever active. The D-S part is set up as a shelf, so that everything above a given frequency is compressed. This is a popular way to allow greater amounts of compression before low frequencies (like kick drum) 'pump' the source.

For DAT-to-DAT mastering, hook output of source DAT (either AES or SP/DIF) to DSP4000's digital inputs. Hit Setup to change audio mode (turn knob right->) to the desired AES/EBU or S/P DIF inputs and outputs. Connect digital output of DSP4000 to destination DAT with unit in record pause. The DSP4000 will indicate it is receiving digital input under setup/audio page.

For Hard Disk Editors After editing, it is usually more flexible to go from HD through the DSP4000 back to destination DAT. 44.1 or 48kHz. This EQ is before compression.

2 Dist Master Box

A stereo compressor is followed by a compressor that limits the high-frequency response. Can be used as a de-esser. The left two faders are separate left and right input levels. First meter is compression, second is high-frequency limiting. An output level adjust is on the right. Stereo in, stereo out.

3 Grunge Compress

A stereo compressor is followed by a compressor that limits a band or a shelving response. Use as a de-esser or other versatile frequency, conscious processor. Stereo in, stereo out.

4 Radio Compress

A stereo compressor is followed by a compressor that limits a band or a shelving response. Use as a de-esser or other versatile frequency, conscious processor. Stereo in, stereo out.

16 Mixdown Suite

This Bank of mixer's tools includes "NemWhippers," created for Bob Clearmountain and used to precisely correct pitch in vocal tracks. Also featured are the "Mixer's Toolbox" presets (sophisticated preset structures that include multi-effect arrays).

1 Clrmtn's NemWhipper

This is a pitch shifter set up to allow precise correction of out-of-tune notes. Each of four selectable settings permits specifying of a maximum and minimum pitch shift limit, so the engineer can 'whip' the knob quickly to the desired degree of correction, without fear of overshooting. The response of the knob may be set with the 'scaler' parameter. Summed in, mono out.

2 Mixer's Toolbox #1

This preset is the ultimate mixing tool for producers. It provides EQ, pitch shift, reverb and an all-purpose delay, along with a flexible routing and mixing scheme. The delay has high cut on the input, as well as on the regeneration path, to warm up the signal and offer more of an analog sound. The output mixer provides level control of the shifted, reverb and delay signals, as well as the pan placement of the delay and shifted signals. Additional parameters allow you to separately set the amount of shifted signal sent into the reverb and delay, providing endless variations. Refer to the Manual for more detail and a patch diagram. Mono in, stereo out.

3 Mixer's Toolbox #2

Similar to "Mixer's Toolbox #1," except that you can also send the delay into the reverb, adding a higher degree of flexibility and even more permutations. Keep in mind that the balance/mix set at the shift/delay parameter determines what type of mix of direct and shifted signals is sent into the delay, as well as appearing as the 'delayed' signal entering the verb. Mono in, stereo out.

4 Mixer's Toolbox #3

Similar to "Mixer's Toolbox #2," but uses a reverse pitch shifter. Refer to the User's Manual for more detail. The reverse pitch shifter allows 'crystal echoes' to be added to the signal path. Mono in, stereo out.

5 Mixer's Toolbox #4

Similar to "Mixer's Toolbox #2," but uses a reverse pitch shifter. Refer to the Users Manual for more detail. Mono in, stereo out.

6 NemWhipper Stereo

This is a pitch shifter set up to allow precise correction of out-of-tune notes. It is a stereo version of "Clrmtn's NemWhipper," above. Stereo in, stereo out.

7 NemWhipper Dual

This is a pitch shifter set up to allow precise correction of out-of-tune notes. It is a dual mono version of "Clrmtn's NemWhipper," above. Dual mono in, dual mono out.

8 Pickshift Paradise {L}

This rack includes compressor, EQ, pitch shift, reverb and tremolo. A 'complete' guitar rig, with a very nice tone. Clean and ringing. Summed in, stereo out.

17 Post Suite

This Bank of Post/Broadcast type effects are simple to use, great fun and very useful. From "Solo Zappers" to "Timesqueeze(R)" to telephone filters, and other useful Post and Broadcast effects.

A wider range of this type of effect, including enhanced versions of these, is available on the "Broadcast/Production Preset Library" card.

1 33 RPM w/ scratches

Bandwidth limiting, stereo blend and scratches! Use 'Quality' setting for quick choices, or choose custom settings. Ticks have 33 1/3 RPM rhythm. Stereo in, stereo out.

2 Bell Constr. Kit

Create any telephone or beeper 'chirp' with complete control. USER-2 makes it ring... bounce a bunch together for ambience. Nothing in, mono out.

3 Headphone Filter

Makes left input sound like a set of headphones on the floor. Mono in, mono out.

4 Long Distance

Select the long distance phone company of your choice, changing filters, echo, crosstalk, discounts, etc. Select L or R input. Works best with voice. Summed in, mono out.

5 Noise Cancellor

Audio in = Left, noise in = Right Uses LMS filter. Proper adjustment should allow one to subtract out noise from a signal. You must put the noise source into right channel and, with proper alignment, that noise should be eliminated from the source to be fixed (on the left input). Dual mono in, dual mono out.

6 Plug Puller

Imagine you've got a disk on a turntable, or a cart playing. Imagine you pull the plug. Now you can do the same effect to CDs, DATs and network! Stereo in, stereo out.

7 Public Address

Typical auditorium with feedback, slap and reverb. 'Freq' sets feedback pitch, 'Thresh' sets volume (at that pitch) that will start feedback. 'Amt' sets feedback volume. 'Echo' sets slap and reverb simultaneously. If it howls because you set 'Amt' too high, remove the input and it will stop. Summed in, stereo out.

8 Real Call-in

Mixes host and phone-patch output with equalization on phone line, automatic ducking of caller when host talks, and adjustable reverb on entire mix. Dual mono in, stereo out.

9 Real Dialer

Hi-lite on-screen button and hit SELECT to advance through a full dial tone and dialing sequence. Adjust speed, rhythm and real phone number to fit the copy. Try stepping through client's number in time with the jingle! Uses real telco tones. Nothing in, mono out.

10 Sharp Vocal Filter

Unusual, resonant, talking filters. Gotta try it! This is another variation of "Vocal Filter." This one is tuned to different formants. Mono in, mono out.

11 Solo Zapper

Adjust 'locate' for minimum soloist, then slowly raise 'bottom' to preserve bass. 'Width' restores stereo, yet is mono compatible. Looks for mono solo in stereo mix, but can't read your mind - most pop music zaps well, leaving just echo, but singer with solo acoustic doesn't do as well, whereas mono sources and old Beatle records won't zap at all. Stereo in, stereo out.

12 TimeSqueeze(R)

Stereo shift with a percentage pitch change. Have the math done for you to re-pitch to a vari-speed source. Note the range control in the expert menu, instead of the usual min/max pitch limits. Stereo in, stereo out.

13 Woosh Maker

Turns your DSP4000 into analog synth, for classic 'woosh' sound effects. Fine-tune the sound from the EXPERT menu while pressing USER-1 to trigger. Nothing in, stereo out.

18 H3000 Emulation

Replication of some favorites from the industry standard. A Bank of fun and useful H3000-type effects. The 3000 was introduced in the late eighties and is both useful and popular today. These effects were produced in response to repeated requests from our users.

1 470 PhoneRingDelay

Delays timed to sound like an old, phone-ring effect. Stereo in, stereo out.

2 474 Sextuplets

This is, well, sextuplet delays. Stereo in, stereo out.

3 502 Analog Thick {L}

A warm, chorused, echo sound. Two adjustable, lowpass filters provide the warmth. Mono in, stereo out.

4 507 DGDLY+WAH+MICRO {L}

This is an unusual combination of a digital delay, a cycling 'wah-wah' filter, and a micro pitch shift. Mono in, stereo out.

5 533 Voice Doubler {L}

Sweeps two pitch shifters in opposite directions, giving a convincing doubling effect. Mono in, stereo out.

6 535 Analog Delays {L}

Warm echoes provided by lowpass filters. Mono in, stereo out.

7 537 Circles {L}

A stereo delay-effect that seems to circle around your head. The effect is most noticeable on short sounds, like hand-claps. Stereo in, stereo out.

8 542 Fat Slap {L}

A slap delay, with an ambient sound. Stereo in, stereo out.

9 546 Ping Pong Ball {L}

Another echo that bounces side-to-side, but the echo shortens with time. Stereo in, stereo out.

10 550 Subtle Sweep {L}

Two subtle, sweeping delays. This is ideal for turning mono sources into stereo. Pan original source to one side and its sweeping delay to the other. Use on two sources. Very unobtrusive. Stereo in, stereo out.

11 560 De-Burr {L}

Takes the edge off sharp attacks. Mono in, stereo out.

12 598 Random Gate {L}

A 'gated reverb' sound created with the *multitap* module. Great for drums. Stereo in, stereo out.

13 605 A Minor Chords {L}

Play or sing a solo line in A minor. The DSP4000 will generate two perfect 'in-key' harmonies. Stereo in, stereo out.

14 606 Arpeggios {L}

Adds a fifth and an octave rhythmically, along with a short delay. Stereo in, stereo out.

15 608 Deepen {L}

Adds lower octave harmonies with a pitch shifter sweep. Mono in, stereo out.

16 609 Diatonic Dance {L}

You play a note and, after half a second, you get a harmony. Use only one note at a time and in an effect loop. Mono in, stereo out.

17 612 Gregorian Chant {L}

This program filters and pitch shifts input voices to produce a chorus of droning monks. Mono in, stereo out.

18 613 H949 {L}

This gives you what the H949 gave you. One output is a straight delay, while the other is pitch shifted. Both outputs are fed back to the input. Stereo in, stereo out.

19 623 Pitch Quantize

Automatically corrects any vocal that is within half a semitone from where it should be. Outside this range it will pull to the next note. Summed in, stereo out.

20 625 Third & Fifth {L}

Generates an 'in-key' third and fifth above the input. Stereo in, stereo out.

21 626 Third & Octave {L}

This generates a diatonic third above and an octave below the input. Stereo in, stereo out.

22 630 Aliens

Transforms voice into a rough, alien-like sound. Stereo in, stereo out.

23 640 Cannons

A unique, sweeping sound that's great on drums. Try playing a tom solo through this. Stereo in, stereo out.

24 641 Critical Band {L}

Close approximation to Fletcher/Munson band-pass curves. Use to brighten signal, or key compressor and gates to frequencies to which our ears are most sensitive. Mono in, stereo out.

25 644 Filter Pan {L}

A filter sweep that seems to pan as it sweeps. Stereo in, stereo out.

26 645 Future Shift {L}

A shimmering, orchestral effect. Try on swelling monophonic synths or single-line voices. Stereo in, stereo out.

27 657 Scary Movie {L}

This program uses reverse-shift to create an evil-sounding voice. Use with guitar to create that tape splice, psychedelic sound. Stereo in, stereo out.

19 Bizarre

This is a short Bank of very different effect types, includes environmental backgrounds, as well as some processors of a highly unusual sort. Each of these is different, so give them an ear and judge for yourself. Some of these are sound generators rather than effects processors.

1 7 Spacer

Endless, rising echoes diffusing into noise. This 'sound effect' effect would make an interesting background texture or segue effect between movements. Summed in, stereo out.

2 Enoesque 1

Slight pitch shift with feedback goes through a bit of chorus and finally into a reverb. Warble and detune are the name of this game. Very rich and full. Mono in, stereo out.

3 Enoesque 2

This is kinda chorusy and wobbly, but real strange. Less warble, and a true pitch-shift interval give this tweak of "Enoesque 1" an almost vocal quality. Mono in, stereo out.

4 Fantasy Backgrounds

Generates randomly changing, different sci-fi or fantasy environments, also 'relaxation' backgrounds. Experiment with settings. This 'post/broadcast' type effect is a sound source, not a sound modifier. Nothing in, stereo out.

5 Time+Pitch Manifold

This preset rearranges the time and pitch of whatever you play into it. Summed in, stereo out.

6 VR Backgr01

Generates randomly changing, different sci-fi or fantasy environments, also 'relaxation' backgrounds. Experiment with settings. This tweak of "Fantasy Backgrounds" starts machine-like, and rises to an eerie wind. Very reminiscent of "Forbidden Planet." Nothing in, stereo out.

7 VR Backgr02

Generates randomly changing, different sci-fi or fantasy environments, also 'relaxation' backgrounds. Experiment with settings. Ditto for this one, which is a much more aggressive background. There are sirens in that howling wind. Nothing in, stereo out.

8 Warm Chorpustle

A real squishy, sloshy sort of pitch-shifted echo. Sounds like the blood traveling through your veins. Might be time for a cardio vascular checkup. Mono in, stereo out.

20 Curiosities

This Bank contains some of the more unusual programs on the DSP4000. This bank includes 'adaptive' reverbs, 'crystal' effects and others. These need to be experienced rather than described. They may be just the thing for that unique sound treatment.

1 5th Mega {L}

An interesting effect texture with a fifth shift, reverb and flange. This is a tweak of "Fuzz-o-mania," with the distortion down, and a nice shimmering effect. Mono in, stereo out.

2 5th Quantizer {L}

An interesting tremolo-echo effect. Square wave modulation on the delays in this patch give a gurgling trem/shift effect. Mono in, stereo out.

3 Adaptive Reverb {L}

The delays of a reverb follow the pitch of your input. Make sure you have a good, strong input for the pitch detect. Difficult to describe the oddness, as parts of this reverb react drastically to the source material. Very unusual. Would be good for sound effects or as a highlight. Mono in, stereo out.

4 Angel Echos {L}

Angelic echoes with chorus and reverb. If you're an experimenter, this preset has lots of control for different sounds. The beat created by the delay gives a definite pulse, and the shimmer of the verb and the shift a very nice atmospheric quality. Best for sparse playing styles. Stereo in, stereo out.

5 Computerizer {L}

Kinda makes your instrument sound like a computer from the 1950's trying to figure something out. Mono in, stereo out.

6 Crystal 5th Caves {L}

Simpler, pitched echoes with reverb. Try different shift amounts. This 'crystal' effect has a long decay characteristic through the reverb, creating a very dense atmosphere with little source material. Mono in, stereo out.

7 Crystal Heaven {L}

Octaves chorused and reverbed. This 'crystal' effect with its octave shifts is very smooth and warm. Summed in, stereo out.

8 Crystal Octaves {L}

Octave echoes build upon each other to add a crystalline string sound to your instrument. With a quicker delay time and less rolloff of the feedback's high end, this version of 'crystals' would work well if you wanted the effect to really cut through, or with volume swells. Summed in, stereo out.

9 Crystal Sevenths {L}

Just like "Crystal Octaves" except some fifths are thrown in for a more organ-like effect. This tweak adds a pair of sevenths to the octaves. Summed in, stereo out.

10 Crystal Worlds {L}

A mellow, crystal octave effect. A darker effect than "Crystal Octaves," this preset seems the estranged brother to "Crystal Heaven." Stereo in, stereo out.

11 Dinosaur Legs {L}

Somehow, "Dinosaur Legs" seems the best description for this preset. This tweak of "Crystal World" shifts downward giving a very different feel to this 'crystal' effect. Summed in, stereo out.

12 DrWho Diatonic 6ths {L}

A synth-like effect in which a square wave shifts the sound up and down an octave. This is after you have a diatonic sixth shift. Unusual 'sound effect' type patch. So, if you are in need of something really different... Mono in, mono out.

13 Duck Soup {L}

Very weird, swept pitch shift and delays. But it will duck out of the way when you play something. Another 'sound effect' type patch, this one sits more in the background and reminds me of helicopters. Could be used for a mood atmosphere with sparse playing. Stereo in, stereo out.

14 Ducked Tails {L}

Adds rising or falling echo, but only on the ends of sounds, never during a sound. Raise 'sens' until effect does not compete with input... it will be there when the input stops. HINT: A slow, upward tail makes a nice transition to cover pauses when playing songs from the same CD. This 'broadcast' effect gives a strange machine-like warble to your sound while you sustain the notes, then well... Stereo in, stereo out.

15 Garmonbozia {L}

Does all sorts of unnatural things to the left input: reverse, shift, and psychotic panning. Large and lumbering reverse effect. It can certainly...well... it does... Mono in, stereo out.

16 Genesis Worlds {L}

A simple note creates a myriad of repeating, pitch-shifted delays with a nice reverb. Play simply for best results. By using the length and delay parameters, this tweak of "Crystal Worlds" gives an almost bouncing, very full and rich sonic texture. Stereo in, stereo out.

17 Heen {L}

A sequence of random notes. Try playing with the sample freq and droop. This arpeggiated sequence preset is a sound 'source' not a sound 'modifier.' Nothing in, mono out.

18 Latin Cathedral {L}

An interesting reverb made by using reverse delays. I've found this preset to be great for segues with other presets, as it has a very distinct quality when contrasted with other delay effects. Mono in, stereo out.

19 Mod-U-Mania {L}

Phaser and modulated delay. Very altered echoes. With a very deep warble through the phaser and the chorus, the delays each get a different twist. Mono in, mono out.

20 Pitch->FreqShift {L}

A pitch shifter into a frequency shifter produces some very interesting modulations. This is a very squeaky, 'klang' type ring modulator effect that certainly is 'tuned' A 440. Mono in, mono out.

21 Sample Hold Filter {L}

A random signal feeds a sample hold which then controls a filter. Gives a watery effect. You definitely will hear water drips in this one. If that's what you are after, this program's ability to 'track' the input lends it variety. Mono in, mono out.

22 Smooth Crystals {L}

Very smooth, crystal octave effect. With the high end rolloff of the feedback here kept off the menus, the pilot can't let this one get too far out of control. Mono in, stereo out.

23 Squareworld Shifter {L}

Modulated pitch shifts give you a computer synth-sound. Mono in, stereo out.

24 Star Space {L}

Octave-shifted echoes. A combination of pitch shift, chorus, reverb. This program does lend an almost epic quality to a sound. Try playing sparsely. Mono in, stereo out.

25 Synth Reverb {L}

A mono FM type synth driven by your input with a reverb. 'Freqmult-1' will tune the synth. This is one of a few monophonic 'guitar' synth patches. Nice timbre. Mono in, stereo out.

26 Triggered Arpeggio {L}

You strike a note and this preset will pitch shift a scale. You can dial in your own melody if you want. Add more flash to your flash, they won't know what's up. Mono in, mono out.

27 UFO in My Church {L}

Close Encounters sequencer with reverb. This one, like "Heen," is a sound source, not a sound modifier. Nothing in, stereo out.

28 War with PhaserGuns {L}

If you put in two or more voices of tones which are shifting slowly, this program will make all sorts of nifty ray gun and explosion noises. Another highly unusual sound effect. You'll just have to try it. Mono in, stereo out.

29 Waterized {L}

An underwater reverb. Highly modulated . May sit best with drones, and low ones especially. Mono in, stereo out.

30 WeKnowBeetBoxTrtMe {L}

This is something between a choir and a washing machine. Should this not be what you seek, try it with percussives. Mono in, mono out.

21 Dual Effects

These dual machine mode presets (in this case dual mono in and out) are primarily for independent processing of two signals. Also great for immediate switching of two effects or parallel processing of one source.

A dual machine is one that acts as two distinct effects boxes, with a different and possibly unrelated effect on each of two channels, often used to treat two separate signals. These are also known as A/B or L/R machines.

1 2Reverb-C/1L,1R

Two identical, mono reverbs. One for each channel. Adjust to taste. These dual reverbs are set to default symmetrically. This is a good general reverbs preset. Note that outs are stereo. Dual mono in, stereo out.

2 A-B Synth & Drums

Two sets of EQ, stereo chorus and reverb. Left is a huge, synth-chorus space, right is chorused short drum slaps. Tone, chorus and reverb on each side. The left or A side is set up with chorus and a longer verb. The right or B side has no chorus and a smaller unencumbered verb. Nice. Dual mono in, stereo out.

3 Dualverb

Two mono in, stereo out reverbs summed at the outputs. Dual machine mode. EQ, diffusion and reverb, times two. The inners of each are defaulted the same, but the global parameters are set differently - A is brighter and larger, B has a predelay. Dual mono in, stereo out.

4 Glistenrb/Ekoplex

Left input: EQ, pitch shift, reverb. Right input: EQ and Echoplex. Like all dual effects there are many times when this is useful. This one offers a nice combination of general effects paths. Good for two sources or for parallel processing. Dual mono in, stereo out.

5 Gtr/Kbd ChorVerbDly {L}

Chorus and reverb for guitar on left, for keyboard on right. This patch is also nice as a dual parallel effect, each with EQ, chorus and verb. Great for avoiding load times. Dual mono in, stereo out.

6 L=Shift/R=Reverb {L}

Left, pitch shift. Right, reverb. Again, great for parallel processing of your signal. Simple to navigate. Dual mono in, dual mono out.

7 Leddroom/ Flanger

Left input EQ, pitch-shift, reverb. Right input EQ, flanger. This tweak of "Glistenverb/Eckoplex" shows off its versatility. The name tells the tale. Dual mono in, stereo out.

8 RoomA / HallB {L}

Two independent reverbs. Left input goes to Room A, and right input to Hall B. This one is great if you have two sources, or put your clean sound in one side and your overdrive in the other. Dual mono in, stereo out.

9 Sml Booth/Sml Room

Left, a small, booth reverb. Right, a small, room reverb. Great for when two verbs are the ticket. This tweak of "Dualverb" is a nice tutorial in verb-alise. Dual mono in, stereo out.

10 Sml Room/Big Plate

Left input, small, room reverb. Right input, big, plate reverb. Ditto and ditto. Dual mono in, stereo out.

11 Tunnel/Burrow

You have two independent effects chains with EQ, chorus and reverb. This tweak of "A-B Synth & Drums" contains two intriguing textures, but not of this earth. Dual mono in, stereo out.

22 Multiple Effects

A set of multi-effects and some dual machine mode programs, again showing just some of the many possibilities with our open architecture.

Most of these effects offer a combination of distinct processes, which would otherwise require a number of dedicated or less capable units.

1 2Reverb-C/STEREO

Two identical, *reverb_c* type reverbs. Adjust to taste. The order of the effects is not the order of the menu layout, so for your edification: each channel goes into a *diffusor* (Allpass) then into a reverb. The EQ is high and low decay of the reverbs. The delays are the verbs' internal delay characteristics. Dual mono in, stereo out.

2 4 FShifts+Delay {L}

Four frequency *shifters* each with a *delay*. Very unusual echoes. Unusual texture, where beating occurs through harmonic shifting instead of from the sweep of an oscillator, so it is very rich. This one is also shifted enough to get detuned. Stereo in, stereo out.

3 Big Squeezolo {L}

Squish! Octave shifting with slight modulation for thickness. Hey, what's that on your shoe? Mono in, stereo out.

4 Chorus Delay {L}

A chorus followed by a delay. The delay gets a mix of dry and chorus. Your basic deal here. Nice general-purpose effect. Stereo in, stereo out.

5 Combi EFX #3 {L}

This has octave-shifted echoes. There is a reverb that you can turn up. There is a rich, yet straightforward feel to this sophisticated preset. It can be very moody if you play sparsely. For your edification, the inputs feed an *Eq+Shifter+Reverb*, the shifter also feeds another *Eq+Delay*. Summed in, stereo out.

6 Detune & Reverb {L}

Micro pitch shift into reverb. Exactly like it says, detuning for thickness and reverb for depth. Stereo in, stereo out.

7 Dist Leslie Verb {L}

Goes into tube distortion, through a rotating speaker system, into a room. Mono in, stereo out.

8 Easternizer {L}

This preset has the combination of a flanger, a fifth-shift, and a reverb. With all the mixing onboard, you can do a lot with this one. Here it is set up with a slow, watery flange that implies phasing. Very 'retro.' Summed in, stereo out.

9 Env Filtered Reverb {L}

A reverb with an envelope filter on the output. A different kind of space here, with the reverb tail into an envelope follower. Very animated. Stereo in, stereo out.

10 FatFunkVocal Filter

Vocal filter after a reverb. The sweep of the vocal filter is triggered by your sound. The reverb makes your sound hang on while being swept by the filter. This is a tweak of "VerbTrashSweeping," with a different feel. Mono in, mono out.

11 Gig Echo & Verb {L}

Echo fed into a reverb. You can add some pitch shifting into the echo if you like, too. The shifter here used as a delay only, with an edgy sort of verb. Mono in, stereo out.

12 Gig Pitch & Reverb {L}

Pitch shift feeds into a reverb. This is a tweak of "Gig Echo & Verb," with the pitch set one octave up Mono in, stereo out.

13 Glitterous Verb {L}

A shifted echo and your sound go through a reverb. This very cool program shows what two octaves up can do to your instrument. Dry and shift into a diffuse and extremely long verb. Try it with volume swells and harmonics, clean and distorted ! Stereo in, stereo out.

14 L=Rev-C/R=f1/fln/ddlRcFfIDDI {L}

Left input feeds a *reverb*. Right input feeds a rack consisting of two *filters*, *flanger* and a *delay*. Outputs of both chains summed to stereo. Dual machine mode. Gives a very complex tone that has no interaction, as the verb is fed the dry signal. Great for two sources, as well as from two amps, etc. Dual mono in, stereo out.

15 M Sh,L=DDL,R=no DDL {L}

The delayed left input and straight right input are summed and feed a four output *multishift*. To translate: *multishift*, left with delay, right without. The shifter here used as smooth detuners for a natural chorus sound. Dual mono in, stereo out.

16 Moon Solo {L}

Unique combination of *pitch shift*, *phaser*, *chorus*, and *delay*. The most prominent thing here is the deep sweep pattern. Lots of shimmer and stuff. Mono in, mono out.

17 Octashift Glissverb {L}

Flanger, octave shift and reverb. With an octave up and a slow sweep on the delay this preset has a very clear ringing quality. Stereo in, stereo out.

18 Pitch & Reverb {L}

An octave pitch shift into a reverb. This is a tweak of "Gig Pitch&Reverb," with some of the dry mixed into the verb, whose decay sounds more natural as a result. Mono in, stereo out.

19 Rev-C/4 PitchShifts {L}

Left input feeds a reverb. Right input feeds a four output *multishifter*. Outputs are then summed to stereo. Dual machine mode. Nice verb for one source, and pitch shifting (set up here as detuning for a natural chorus) on the other. Dual mono in, stereo out.

20 ReverseVerb 6/4 8v {L}

Neat reverb with reversed echoes. Use with mix or an effect loop. Nothing else shimmers like upward reverse shifting. Here a pair into a dense reverb. This type of thing is great on volume swells. Also try swelling only the signal to the effect, adding it to your clean sound. Stereo in, stereo out.

21 Reverse Worlds {L}

Much like "Mixer's Toolbox," but with a reverse shifter instead of a regular shifter. Input and output EQ included. Very powerful. This variation of "Octashift Glissverb" features reverse shifting. A more aggressive sound than "ReverseVerb 6/4 8v" because of its feedback characteristic. Mono in, stereo out.

22 Room 2 Go Dowlndelay {L}

This has chorus and strange rhythmic echoes going into a reverb. This tweak of "Octashift Glissverb" has a detune and delay atmosphere rather than an octave effect. Nice polyrhythm to the delays. Hit a note and a very definite sense of rhythm pulls you in while still being much subtler than other delay presets. Also, there's some gremlin running around in there on load up ! Mono in, stereo out.

23 Space Station {L}

Big, thick, echoey reverb, but there's a lot more going on here. Very atmospheric texture. Lots going on and staying on. Great for volume swells, wammy-bar, etc. Very smooth and animated. Mono in, stereo out.

24 StereoDelay>Flanger {L}

With this preset, each channel has a delay that goes into a flanger. Lots of interaction and swimming if you feed it a mono signal, so in a true stereo situation this is very wide and rich. Stereo in, stereo out.

25 Str2Flt/Cmp/Flng/DdlSf/c/F/d {L}

A stereo rack consisting of filters, compressors, flangers and delays. With very slow and very deep modulation, the feedback on these flanger/delays cause pitch bend. The stereo delay at the end is set to default at zero, but try playing with it for adding a second rhythm. Unusual feel. Summed in, stereo out.

26 Tremolo Reverb

A reverb followed by a tremolo. The tremolo rate is modified by the input level. An unusual combination, the tremolo wavers the decay of the reverb. It has a smooth and light texture. Stereo in, stereo out.