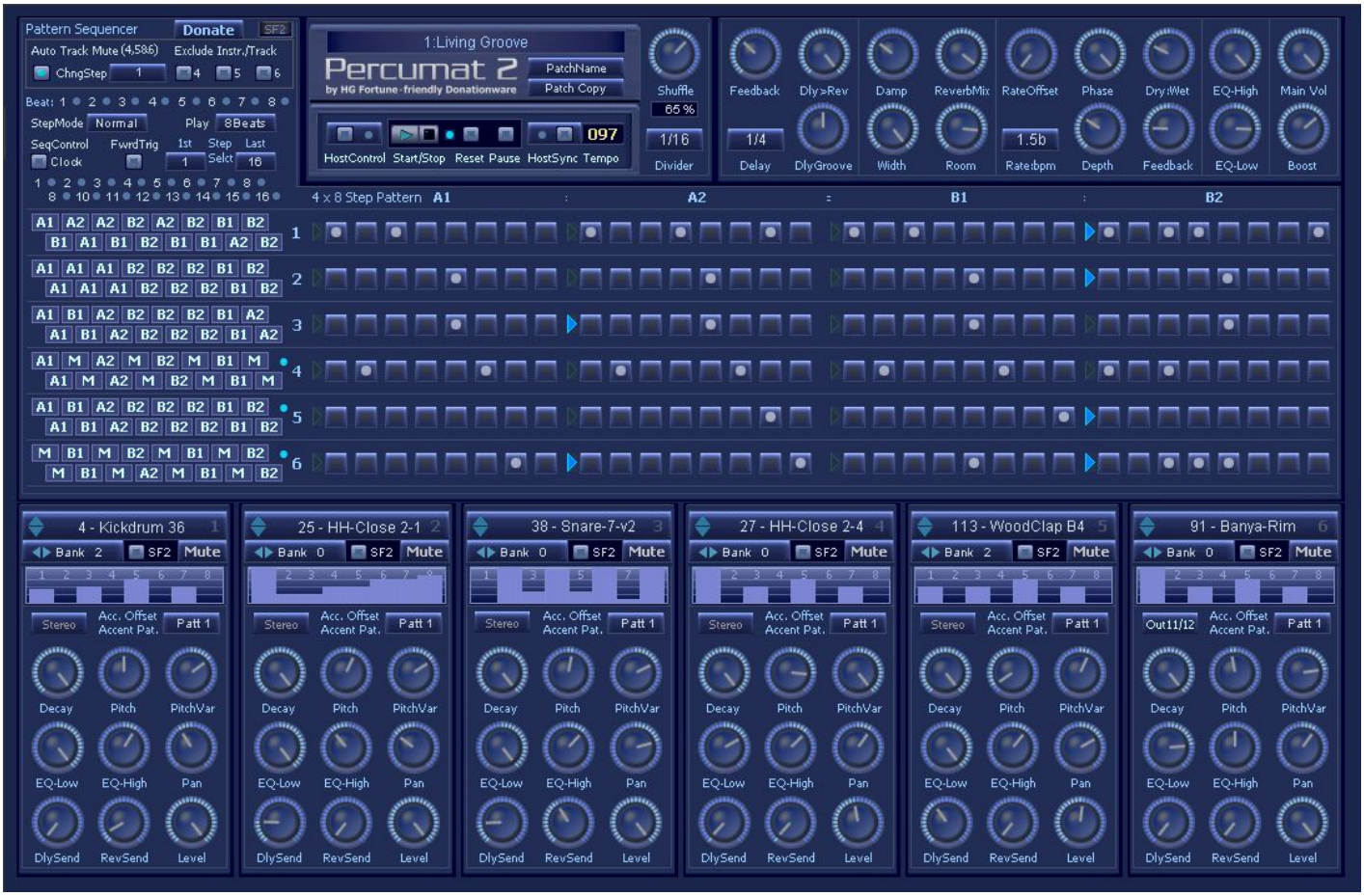
Percumat 2

Rhythm machine for backing drums & percussion



This is a versatile Rhythm machine for backing drums percussion so definitively not an 808 or 909 type thingie. It features 6 instrument parts / slots to choose from 512 inbuilt drum & percussions sounds. There are two step sequencers one for setting up the beat steps in groups of 4 x 8 steps (or 4 x half a bar) labeled A1, A2, B1 & B2, while the 2nd sequencers on the left allows you to control a sequence of the 8 step beat groups in 16 steps. Thus it is easy to get variations without having to program complete 16 step bars. In addition to that there is an Auto Track Mute feature for tracks 4, 5 and 6 to have one or two tracks muted for a certain range.

The beat step sequencer does offer two additional features: StepMode and Play number of Beats i.e. Steps so you can have a 7/8, 6/8, 5/8 or even 3/8 beats while Step Mode changes the order of steps to play in jumping to every 3rd, 4th, 5th etc. step with setting at 7 steps playing the sequence backwards. This is a real playground not only for the lovers of experimental rhythms.

The unit comprises 512 drum & percussion sounds in four banks which are sorted in a similar way:
1 - 16 = Kicks, 17 - 32 = HiHats, 33 - 46 = Snares, 47 - 52 = Toms, 53 - 62 = Cymbals, 63 - 66 = Tambourines, 67 - 75 = Shaker, Maracas etc., 76 - 80 = Rattles, 81 - 100 = Ethnic perc (Tabla, Udu etc.), 101 - 105 = Blips, Claps, 106 - 111 Conga, Bongo, 112 - 128 various percussion.

Instrument slots

There are six identical instrument slots
Top section: selector for instrument, bank, button to switch between internal sf2 or wave file loading and a Mute button.
Please read appendix 3 on loading wave files.
Accent Offset setup for 8 steps via graphic display in 8 'sliders' plus pattern selector for different presets. Changing a preset pattern and saving the patch will memorize the edited settings. The Stereo button allows to switch each slot individually to a single output pair slot 1=3&4, slot 2=5&6, to slot 6=1&2, as slot 1 is used for kick in most cases single out 3&4 are used etc. Note:*This is a global setting valid for all patches in a bank!*
Knob section:Top row:
Decay - turning to left will shorten the decay and
Pitch - allows to adjust the instrument from -1 to +1 octave in semitone steps
Pitch Variation - adds an adjustable amount of human touch to the instrument play
Mid row:
EQ Low to adjust low frequency response approx. -/+ 12 db
EQ High to adjust high frequency response approx. -/+ 12 db
Pan - pan prosition to the instrument
Bottom Row:
Delay Send - sends amount to the master stereo delay
Reverb Send - sends amount to the master stereo reverb
Level - volume setting of the instrument

Master section

Stereo delay: with bpm related delay setting, Delay Groove (offsetting the delay), Feedback and Delay to Reverb send.

Stereo Reverb: Width, Room, Damp and Reverb mix to main signal

Stereo Flanger: bpm related tempo setting and manual Rate offset, Depth, Feedback, Phase between left and right channel to emphasize stereo effect, Dry : Wet Mix.

Main EQ:
EQ Low to adjust low frequency response approx. -/+ 12 db
EQ High to adjust high frequency response approx. -/+ 12 db
Boost gives some saturation or enhanced 'presence' to the sound
Main Vol - the overall volume

Main Control section

Top section:
internal Patch selector
Patch Name ro name or rename a patch (don't forget to save then)
Patch Copy to copy one patch to a different program number

Lower section:
Host Control set to active allows to start and stop the machine via 'Space bar' of PC keyboard in a host application While Start/Stop button allows to Start and Stop the machine manually.
With Host Sync set to active the Tempo will be controlled by the host application while set to off Tempo can be adjusted by the big numbered tempo display via click and drag.

Internal Tempo setting (76 bpm shown in image above) is limited from 50 to 130 which is the recommended range for use with this instrument. This can be overridden by syncing to host tempo via Host Sync button.

On the right:
Divider for the beat which is usually set to 1/16.
Knob for shuffle amount with display in percentage

Pattern Sequencer section

Please notice in the top row the ***Donate*** button if you appreciate my work and want to support it by a donation of an amount this instrument seem to be worth to you - Thank you very much for this.

Anyway lets have a look at this section starting with the Beat row which is a line of 8 LED indicators following the beats played. Below this row are the selectors for Step Mode and Play (number of beats) of the 8 steps. Step Mode changes the order of steps to play in jumping to every 3rd, 4th, 5th etc. step with setting at 7 steps playing the sequence backwards. This is a real playground not only for the lovers of experimental rhythms.

Play number of beats i.e. steps allows to set a number of steps played from 1 to 8 so you can have a 7/8, 6/8, 5/8 or even 3/8 beats while Normal is 8 steps to be played.

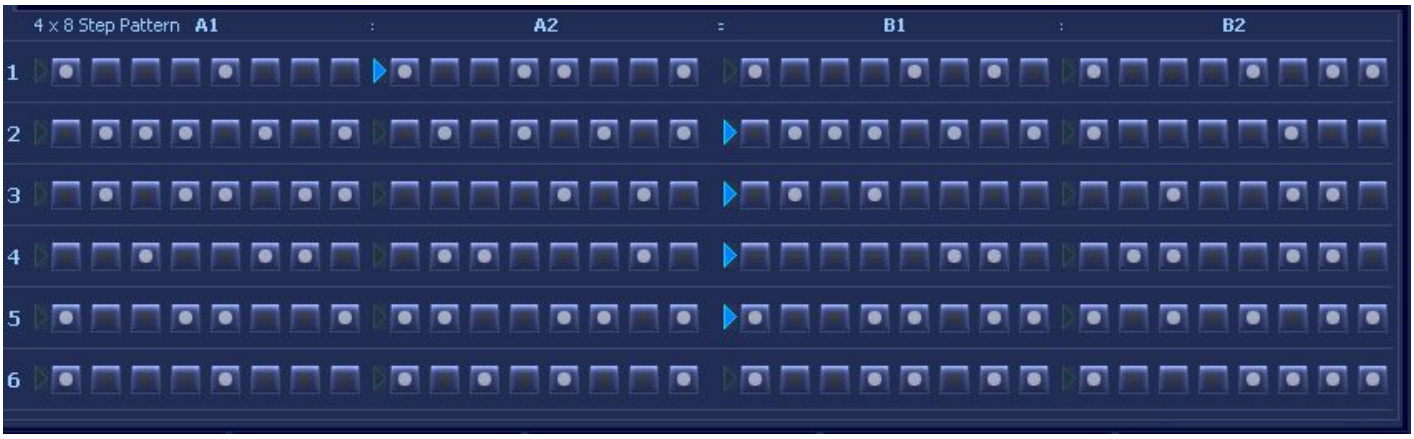
The next row shows some controls for the pattern sequencer which are present mainly to ease programming the 8 step beat patterns.
You might set the control for the Pattern seq. to Manual so the currently selected Pattern step will be repeated. You can can manually advance to next pattern step by the Forward Trigger button. Also you may set 1st and last step to be played within the Pattern seq up to 8 for editing or set to 16 for normal play.

The following row displays to lines of LED for the 16 steps of the Pattern Seq.

Below are the groups of 16 selectors for each track to set Beat pattern A1, A2, B1 B2 or M for mute

The Auto Track Mute feature on top of this sections allows muting of one or two tracks from tracks 4, 5 and 6 for a certain range. The Change Trigger can be set by the Change Step selector which is reffering to the 16 steps of Pattern sequencer. Also you can exclude tracks from being affected by the Auto Track Mute feature.
In general this Auto Track Mute is helpful when improvising while having Percumat 2 play some rhythm in the background.

The actual beats of the 8 step Pattern are programmed via the matrix shown in the image - simply set step to on or off



FAQ: Why are there no rhythm kits selectable?
A: You can use presets to set up rhythm kits :p
FAQ: How to load SF2 files
A: there is a small button labeled SF2 right to the Donate button ;-)
FAQ: Sometimes I get multiple additional beats after Stop and Start again?
A: To exclude such behaviour proceed as follows: Stop, set to Pause, Reset, Start and set Pause to off

Explicit thanks for patches, betatesting and/or other valuable assistance go to:
Dimitri Schkoda, Lloyd McKay, Marnix Praet, Bob O'Donnell, debbie (on kvr), & Heinrich Horstmann

This VSTi was created with SynthEdit by Jeff McClintock using further modules by Kelly D. Lynch, David Haupt, Lance Putnam, Oli Larkin and Peter Schoffhauzer - thank you guys ;-)

Have fun
H.G. Fortune
www.hgf-synthesizer.de
on MySpace:
http://www.myspace.com/hgfortune

Just a sidenote to this VSTi:
This one is Donationware that means you may freely use it and if you like it you are requested to make a donation to me via Paypal (Moneybookers on request) of an amount you can afford and this instrument is worth to you. You can also make a donation if you simply wish to support my work in general ;-)
Thank you in advance.

As it is Donationware it can be distributed freely according to the Terms of License Agreement (see end of manual) and for updates or additions, more patches you might check my webpage or my support thread in the forum on kvraudio.com.

List of drum & percussion waves - Bank 0

000 Kickdrum 1	032 StdSnare 2-2	064 AsiaTambShrt	096 Udu-1-3
001 Kickdrum 2	033 Snare-1-v2	065 AsiaTambourin	097 Udu-2-2
002 StdMedKick1	034 Snare-2-v2	066 Shaker	098 Udu-2
003 Kickdrum 4	035 Snare-5-v2	067 Shaker-Shrt	099 Conguduhg1
004 Kickdrum 5	036 Snare-5-v3	068 Shaker-Soft	100 Blips
005 StdMedKick4	037 Snare-7-v2	069 Maracas	101 BellBlip
006 Kickdrum 7	038 Snare-8-v3	070 Maracas-Shrt	102 Claps
007 Kickdrum 8	039 StdSnare2	071 Maracas-Soft	103 Woodstick
008 Kickdrum 9	040 RimShot	072 Cabasa	104 DryStick
009 Kickdrum 10	041 RimShot-2	073 Cabaserie-2	105 Conga-Lo
010 Kickdrum 11	042 Stick-2-2	074 Cabasa-v3	106 Conga-Hi
011 Kickdrum 12	043 RimShot-3	075 Rattlings2	107 Conga-Snap
012 Kickdrum 13	044 MetalRim	076 FishStroke	108 Bongo-Lo
013 E-Kicks1-42	045 ArtifSnr1hg	077 Rattlings3-3	109 Bongo-Hi
014 Kickdrum 15	046 StdToms2	078 Castanett	110 Bongo-Snap
015 Kickdrum 16	047 Toms 2-2	079 CastanettP	111 E-PercRattle
016 HGNoiseHH1	048 WoodyTom	080 Tabludu-up	112 IndiaTambourin
017 HGNoiseHH2	049 DuoDr1hg1	081 Tabludu-Mid	113 IndiaPerc2-3
018 HGNoiseHH4	050 TympDrum	082 Tabludu-Lo	114 IndiaPerc2
019 HGNoiseHH7	051 E-FMTom	083 Tabla	115 KalimPalam
020 HHClose1	052 Cymb-Cup	084 Tabla-v2	116 E-PercSnare
021 HHClose1-v3	053 Cymbal2	085 Tabla-Snap	117 FM-Kalimba
022 HHClose2-v2	054 Cymbal2-2	086 IndiaPerc3	118 HardStick
023 HHClose3	055 Cymbal2-3	087 IndiaPerc3-3	119 AsiaPerc2
024 HH-Close 2-1	056 Cymbal3-2	088 Tabloid	120 AsiaDrumHi
025 HH-Close 2-3	057 Cymbal3-3	089 Banya Skin	121 K-AmarettoBot1
026 HH-Close 2-4	058 Bell-Cup	090 Banya-Rim	122 K-FryingPan-1b
027 HHOpen 2	059 E-Metal	091 Banya-Slap	123 K-Instant-Tea2
028 HHOpen1	060 FM-Perc-1	092 Udu-Ou-up	124 K-KasseroleTop
029 HHOpen2	061 FM-Perc-2	093 Udu-Ouup	125 K-MonArc-1
030 HHOpen 2-2	062 Tambourin	094 Udu-Mix	126 K-NuToka-1
031 HHopen 3-3	063 Tambouria	095 Udu-1-2	127 K-Delmontbody

List of drum & percussion waves - Bank 1

000 Kickdrum 17	032 Snaredrum12	064 Tambourine 17	096 ArtifDr3hg1
001 Kickdrum 18	033 Snaredrum13	065 Tambourin 3-2	097 AsiaMtl1a
002 Kickdrum 19	034 Snaredrum14	066 Tambourine2-S	098 Timbalidhg1
003 Kickdrum 20	035 Snaredrum16	067 Shaker 26	099 MetalCan
004 Kickdrum 21	036 Snaredrum17	068 Shaker 4	100 BlipBlop
005 Kickdrum 22	037 Snaredrum01B	069 Shaker 5	101 Blips-3
006 Kickdrum 23	038 Snaredrum 18	070 Shaker 6	102 Blips-2
007 StdLiteKicks1	039 Snaredrum 19	071 Shaker 7	103 Droppy
008 Kickdrum 25	040 Snaredrum 20	072 Cabasa Up	104 Stick-2
009 Kickdrum 26	041 Snaredrum 21	073 Cabasa -2	105 Conga 3
010 Kickdrum 27	042 Snaredrum 22	074 Cabaserie	106 Conga 12
011 Kickdrum 28	043 Snaredrum 23	075 Cabaserie -3	107 Conga 14
012 Kickdrum 29	044 Snaredrum 24	076 Rattle 14	108 Conga 15
013 Kickdrum 30	045 Rimshot 21	077 Rattlings	109 Bongo 13
014 Kickdrum 31	046 Taiko	078 Rattlings -2	110 Bongo 14
015 Kickdrum 32	047 StdToms2-2	079 Ratsche	111 E-Clap
016 Cl-Hihat 11	048 TRToms-v3	080 Bata-1	112 E-Clap-3
017 Cl-Hihat 12	049 StdToms1-3	081 Bata-2	113 E-Clap-2
018 Cl-Hihat 13	050 Tom 16	082 Bata-3	114 Swishyhg
019 Cl-Hihat 14	051 Tom 17	083 Udu-1	115 Med3Dr2hg1
020 Cl-Hihat 1-3	052 Cymbal1	084 Udu-Snap	116 K-Delmont-top2
021 Cl-Hihat 15	053 Cymbal-3	085 Udu-Mix-2	117 K-Delmont-body
022 Cl-Hihat 16	054 Cymbal3	086 Udu-Mix-3	118 MetlSnap
023 HCl-Hihat 11	055 Cymbal5-3	087 Uduiqehg	119 IndiaPerc1
024 HCl-Hihat 12	056 AsiaCymbal	088 TaBlop	120 K-Instant-Tea1
025 HCl-Hihat 13	057 AsiaPerc1	089 Watabla	121 LitningCymb 3
026 HCl-Hihat 14	058 AsiaPerc1-2	090 Banyidhg2	122 K-FryingPan-1
027 HCl-Hihat 15	059 Smallbell	091 IndiaPerc2-2	123 NoiseCup
028 HCl-Hihat 16	060 LongBell	092 IndiaPerc3-2	124 AvantgdHH
029 HCl-Hihat 17	061 ShortBell	093 CannyDrhg1	125 AvantgdSnr2
030 HH-Open1-3	062 Tambourine 15	094 IndiaPerc1-2	126 K-Kasserole-Dbl
031 HH-Open3	063 Tambourine 16	095 WetBody2	127 K-AmarettoBot2

List of drum & percussion waves - Bank 2

000 Kickdrum 33	032 Snare B1	064 Tambourin B3	096 India B17
001 Kickdrum 34	033 Snare B2	065 Tambourin B4	097 India B18
002 Kickdrum 35	034 Snare B3	066 Shakey B1	098 India B19
003 Kickdrum 36	035 Snare B4	067 Shakey B2	099 India B20
004 Kickdrum 37	036 Snare B5	068 Shakey B3	100 Blip B1
005 Kickdrum 38	037 Snare B6	069 Shakey B4	101 FSnap
006 Kickdrum 39	038 Snare B7	070 Shakey B5	102 Clap B1
007 Kickdrum 40	039 Snare B8	071 Shakey B6	103 Woodstick B1
008 Kickdrum 41	040 Snare B9	072 Shakey B7	104 Woodstick B2
009 Kickdrum 42	041 Snare B10	073 Shakey B8	105 Conga B1
010 Kickdrum 43	042 Snare B11	074 Shakey B9	106 Conga B2
011 Kickdrum 44	043 Snare B12	075 Rattling B1	107 CongaSlap B3
012 Kickdrum 45	044 Snare B13	076 Rattling B2	108 CongaSlap B4
013 Kickdrum 46	045 Snare B14	077 Rattling B3	109 Bonconga B5
014 Kickdrum 47	046 Tom B1	078 Rattling B4	110 Bongo B6
015 Kickdrum 48	047 Tom B2	079 Rattling B5	111 Clap B3
016 HiHat B1	048 Tom B3	080 India B1	112 WoodClap B4
017 HiHat B2	049 Tom B4	081 India B2	113 Casta
018 HiHat B3	050 Tom B5	082 India B3	114 Rattle Slow
019 HiHat B4	051 Tom B6	083 India B4	115 Rattle Release
020 HiHat B5	052 Cymbal B1	084 India B5	116 Rattle Short
021 HiHat B6	053 Cymbal B2	085 India B6	117 Thing B1
022 HiHat B7	054 Cymbal B3	086 India B7	118 Thing B2
023 HiHat B8	055 Cymbal B4	087 India B8	119 Thing B3
024 HiHat B9	056 Cymbal B5	088 India B9	120 Thing B4
025 HiHat B10	057 Cymbal B6	089 India B10	121 Thing B4rev
026 HiHat B11	058 Bell B7	090 India B11	122 Thing B5
027 HiHat B12	059 Bell B8	091 India B12	123 Stroke
028 HiHat B13	060 Bell B9	092 India B13	124 K-Shakey-rev
029 HiHat B14	061 Bell B10	093 India B14	125 K-SideNoise1
030 HiHat B15	062 Tambourin B1	094 India B15	126 K-SideNoise2
031 HiHat B16	063 Tambourin B2	095 India B16	127 K-SideNoise3

List of drum & percussion waves - Bank 3

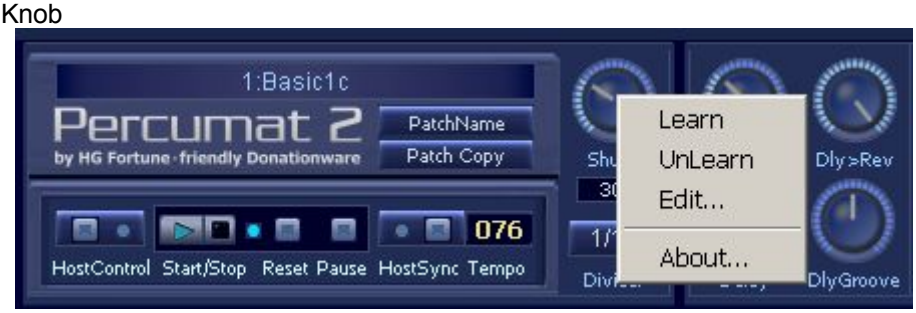
000 Kickdrum 49	032 Snare B15	064 Tambourin B7	096 K-Asia B17
001 Kickdrum 50	033 Snare B16	065 Tambourin B8	097 Asia B18
002 Kickdrum 51	034 Snare B17	066 Shakey B10	098 Asai B19
003 Kickdrum 52	035 Snare B18	067 Shakey B11	099 Asia B20
004 Kickdrum 53	036 Snare B19	068 Shakey B12	100 Blip B2
005 Kickdrum 54	037 Snare B20	069 Shakey B13	101 WoodBlip B3
006 Kickdrum 55	038 Snare B21	070 Shakey B14	102 Clap B2
007 Kickdrum 56	039 Snare B22	071 Shakey B15	103 Woodstick B3
008 Kickdrum 57	040 Snare B23	072 Shakey B16	104 Woodstick B4
009 Kickdrum 58	041 Snare B24	073 Shakey B17	105 Conga B7
010 Kickdrum 59	042 Snare B26	074 Shakey B18	106 Conga B8
011 Kickdrum 60	043 Snare B26a	075 Rattling B6	107 Conga B9
012 Kickdrum 61	044 Snare B27	076 Rattling B7	108 CongaSlap B10
013 Kickdrum 62	045 Snare B27a	077 Rattling B8	109 BongoSlap B11
014 Kickdrum 63	046 Tom B7	078 Rattling B9	110 Bonconga B12
015 Kickdrum 64	047 Tom B8	079 Rattling B10	111 K-Tom1
016 HiHat B17	048 Tom B9	080 Asia B1	112 K-Tom 2
017 HiHat B18	049 Tom B10	081 K-Asia B2	113 K-Tom 3
018 HiHat B19	050 Tom B11	082 Asia B3	114 K-Tom4
019 HiHat B20	051 Tom B12	083 Asia B4	115 K-HiHat
020 HiHat B21	052 Cymbal B11	084 Asia B4a	116 K-Cymbal
021 HiHat B22	053 Cymbal B12	085 K-Asia B5	117 K-Cup 1
022 HiHat B23	054 Cymbal B13	086 Asia B6	118 K-Cup 2
023 HiHat B24	055 Cymbal B14	087 Asia B7	119 K-Cup 3
024 HiHat B25	056 Cymbal B15	088 K-Asia B8	120 K-Rattle
025 HiHat B26	057 Cymbal B16	089 K-Asia B9	121 K-Shakey
026 HiHat B27	058 Bell B17	090 K-Asia B10	122 K-SnareStick
027 HiHat B28	059 Bell B18	091 K-Asia B11	123 K-BellCup
028 HiHat B29	060 Bell B19	092 K-Asai B12	124 K-Bell 1
029 HiHat B30	061 Bell B20	093 K-Asia B13	125 K-Bell 2
030 HiHat B31	062 Tambourin B5	094 Asia B14	126 K-Bell 3
031 HiHat B32	063 Tambourin B6	095 Asia B16	127 K-SideNoise

Appendix 1:
Trigger via MIDI keys had to be removed as it did give some issues not to be solved in short.

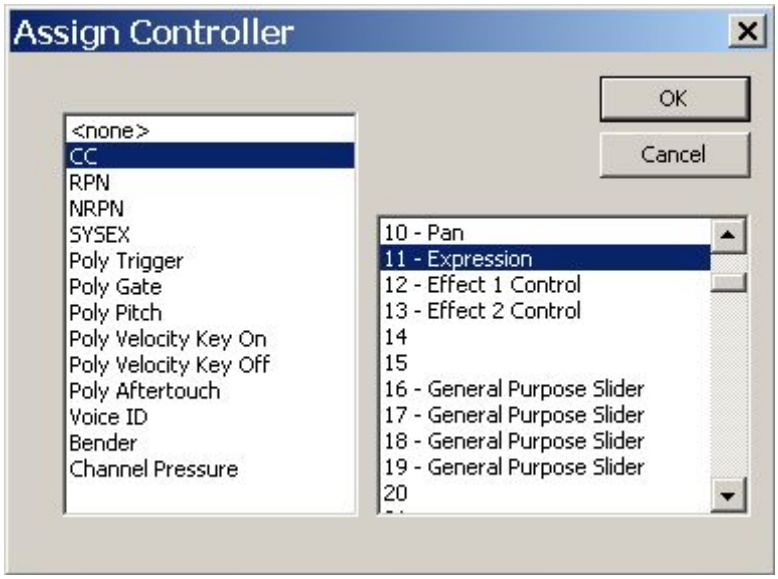
Appendix 2:

MIDI CC - are not implemented as you can do your own assignment of controllers !!!
One exception CC#7 for Main Volume is set.
Simply click on a resp knob you want to set a MIDI CC for, then left click the mouse and a popup menu will appear offering MIDI Learn and Edit

Example for Shuffle Knob



After left clicking on the Shuffle Knob a popup selector appears to Learn, UnLearn or Edit MIDI Controller,
For editing the following window allows to set a Controller:



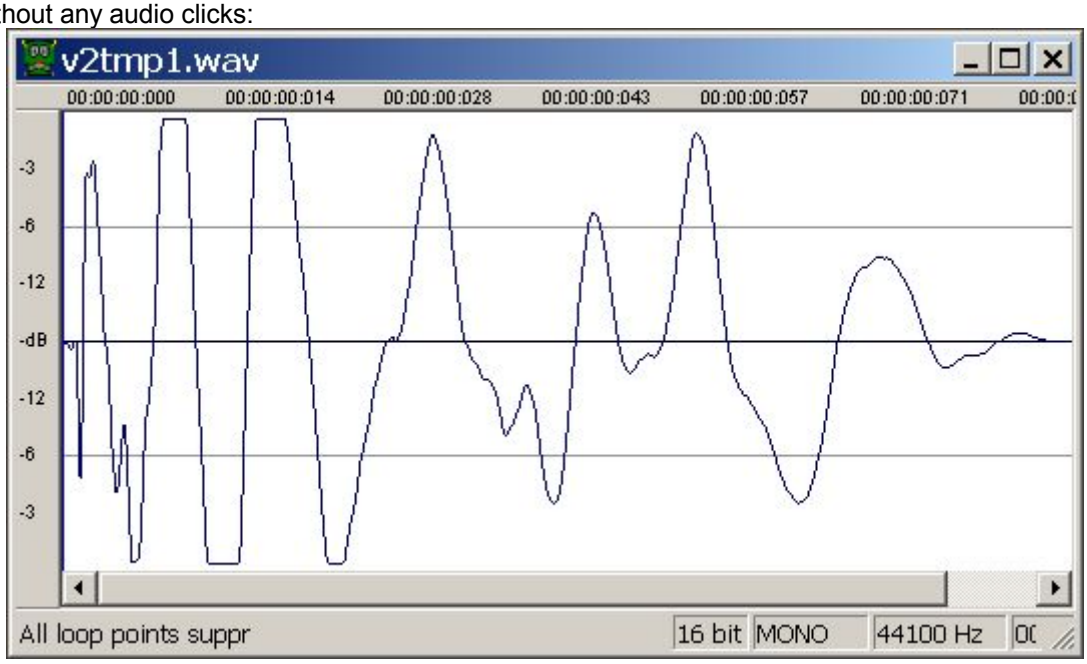
Appendix 3 on sf2:
this shows the typical keyrange for a percussion instrument used for a *melodic* preset in sf2 files to be used for Percumat 2 .

red marker indicates root note of #60 and a range of plus/minus approx. 1 octav which is the range required at minimum

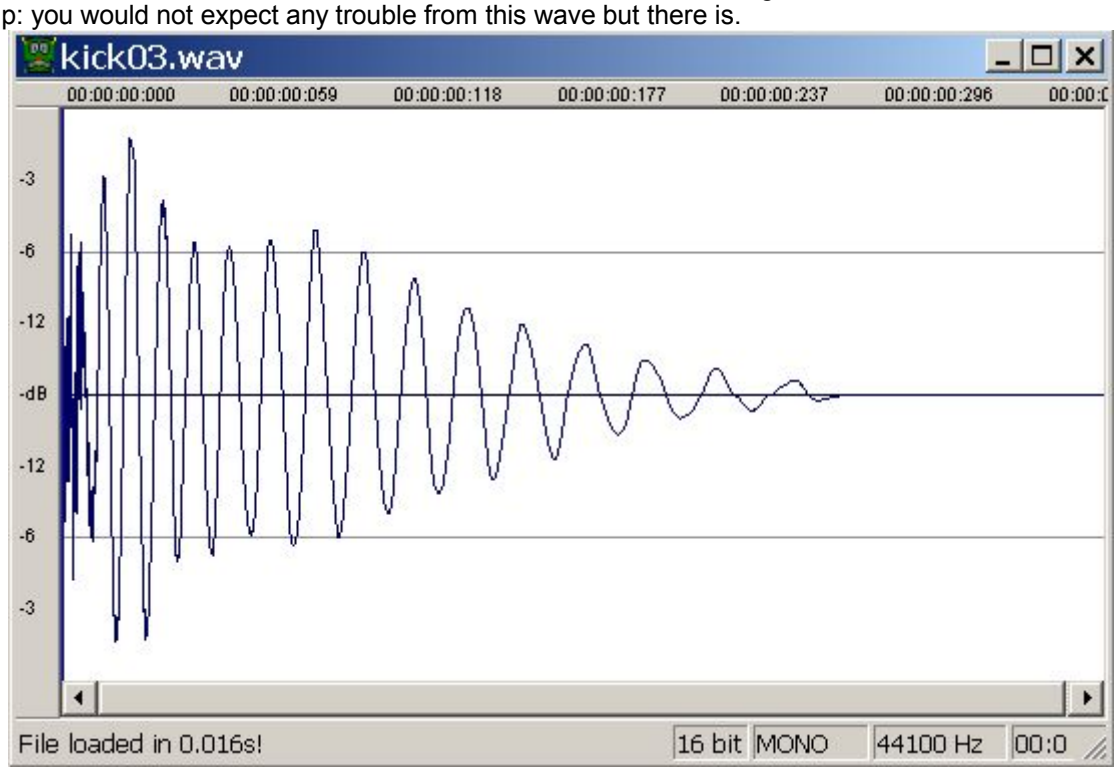
Appendix 3 on loading wave files:
Basically this works fine nevertheless you might experience some audio clicks with some lower frequency samples like kicks, toms or so esp. when transposing down so transposing up is a possible remedy in many cases.

Here are two examples showing those audio clicks are definitively not due to clipped peaks in a sample or so.

This is kickdrum # 13 (12 in sf2 number) of the internal set bank 0 You'll notice it has quite a lot of peaks clipped but it works fine without any audio clicks:



on the other hand this is one kick which did show audio clicks while sounding without those clicks when transposed 13 semitones up: you would not expect any trouble from this wave but there is.



Terms of License Agreement:
This software instrument is supplied as is. The copyright is maintained by H.G. Fortune (Guenter Hager).

You are NOT ALLOWED to sell the program and/or charge for the access to it.
You are allowed to distribute the program (online or on magazine CD's) as long as You do not charge for this program!
Anyway in such You are requested to send an info in such a case. (please email to fortune@flomo-art.de).
Remind: Not doing so is violating the terms of this License Agreement!

A credit is obligatory when using the VSTi within any commercial project or for any commercial purpose!

You are not allowed to modify, decompile or reverse-engineer the program.

This program is not copy-protected but protected by national & international (copyright-) laws.

Changes & enhancements may be made without prior notice and a grant that further editions will read patches from former version cannot be given.

Use this program on Your own risk and Your own responsibility.

H. G. Fortune
Alfter (Germany)
February, 2010