QUEUESCAPE

LICENCE AND TECHNICAL INFORMATION

QUEUESCAPE IS VIRTUAL RECREATION OF AN IMAGINARY RETRO SYNTHESIZER PROGRAMMED IN NATIVE INSTRUMENTS KONTAKT SAMPLER, YOU NEED FULL VERSION OF KONTAKT 4.2 OR NEWER TO MAKE IT WORK.

YOU ARE LICENSED TO USE THIS DEVICE AND SAMPLES WHICH COME WITH IT, IN THE CREATION OF A RECORDED OR LIVE SOUND PERFORMANCE, FREE OR COMMERCIAL, WITHOUT PAYING ANY ADDITIONAL LICENSE FEES OR PROVIDING SOURCE ATTRIBUTION.

PLEASE DO NOT: INCLUDE PROVIDED SAMPLES OR SCRIPT IN ANY MUSIC LIBRARY OR SAMPLE LIBRARY; SELL, REPACKAGE OR RE-DISTRIBUTE THE SAMPLES OR SAMPLER PROGRAMS.

USE AT YOUR OWN RISK! THIS DEVICE IS PROVIDED `AS IS' AND THERE IS NO WARRANTY OF ANY KIND. IT IS EXPERIMENTAL DEVICE, THERE IS NO GUARANTEE IT WILL PRODUCE ANY PLEASANT OF USEFUL RESULTS.

QUEUESCAPE

QUEUESCAPE IS DEVICE DESIGNED TO QUICKLY CREATE EVOLVING COMBINATIONS OF SOUNDS IN KONTAKT. IT HAS A NUMBER OF SAMPLE GROUPS, BEING CALLED OSCILLATORS. EACH OSCILLATOR HAS A SET OF PARAMETERS, VOLUME, FILTERS CUTOFF AND RESONANCE, TUNING AND EFFECTS SEND LEVELS, EACH PARAMETER OF EACH OSCILLATOR HAS A DEDICATED 16 STEP SEQUENCER. YOU CAN PICK ONE OF 9 TRANSITION SHAPES FOR EACH OSCILLATOR, THE PARAMETER CHANGE BETWEEN STEP VALUES CAN BE SMOOTH, WITH VARIOUS CURVES, OR SHARP (INSTANT PARAMETER CHANGE AT PROGRAMMED TIME). QUEUESCAPE COMES WITH NUMBER OF SINGLE CYCLE WAVEFORMS, BUT YOU CAN HAVE ANY SAMPLE GROUP ACTING AS AN OSCILLATOR. EACH OSCILLATOR CAN HAVE IT'S CLUSTER OF SEQUENCERS RUNNING AT DIFFERENT SPEED.

THERE ARE TWO MODELS, MODEL 20 AND MODEL 10. THE ONLY DIFFERENCE IS THE NUMBER OF AVAILABLE OSCILLATORS (20 OR 10), SO THIS DOCUMENT WILL ADDRESS BOTH MODELS.

QUEUESCAPE USER INTERFACE HAS TWO SECTIONS, MULTI-PURPOSE TOUCH SCREEN DISPLAY ON THE LEFT AND SET OF KNOBS AND BUTTONS ON THE CONTROL PANEL TO THE RIGHT.

SELECTING AND ACTIVATING AN OSCILLATOR

HAVING MANY OSCILLATORS WORKING SIMULTANEOUSLY CAN BE CPU INTENSIVE. EACH OSCILLATOR IS PRODUCING A VOICE PER NOTE. SO IF YOU HAD E.G. 10 OSCILLATORS PLAYING, A THREE NOTE CHORD WOULD PRODUCE 30 VOICES. TO MAKE IT MORE USABLE, OSCILLATORS WHICH CANNOT GENERATE ANY AUDIBLE SOUND ACCORDING TO CURRENT PROGRAM, ARE DEACTIVATED. THE FIRST PROGRAM SEQUENCE, 'VOLUME' DETERMINES IF THE OSCILLATOR IS ACTIVE OR INACTIVE. IF ALL STEPS ARE SET TO VALUE OF ZERO, OSCILLATOR IS INACTIVE, THE DEVICE WILL NOT SEND NOTES TO OSCILLATOR GROUP. IF ANY OF THE STEPS IS SET TO VALUE GREATER THAN ZERO, THE OSCILLATOR IS ACTIVE.

IN START-UP STATE, OSCILLATOR 1 IS ACTIVE AND OTHER OSCILLATORS ARE OFF. AT THE BOTTOM OF DISPLAY THERE ARE OSCILLATOR SWITCHES, USE THEM TO SELECT OSCILLATOR FOR EDITING. YOU CAN DRAW A VOLUME SEQUENCE TO ACTIVATE THE OSCILLATOR, OR USE RESET OSC BUTTON TO QUICKLY SET IT UP. RESET OSC WORKS IN TOGGLE MANNER, PRESS ONCE TO RESET ALL OSCILLATOR PROGRAM TO DEFAULT AND SET VOLUME TO A STEADY LEVEL ACTIVATING THE OSCILLATOR. PRESS AGAIN AND OSCILLATOR WILL BE RESET AND TURNED OFF, BY CLEARING VOLUME SEQUENCE.

IT WOULD BE HARD TO REMEMBER WHICH OF 20 OSCILLATORS ARE CURRENTLY ON AND WHICH ARE OFF. USE SELECT BUTTON ON DISPLAY TO SWITCH TO NEXT ACTIVE OSCILLATOR.

ENGINE SETTINGS

QUEUESCAPE DOESN'T USE KONTAKT'S MODULATORS TO APPLY TRANSITION BETWEEN STEPS. IT CALCULATES PARAMETERS VALUES AND SETS THEM ACCORDING TO PROGRAM AND ENGINE FREQUENCY. FREQUENCY CAN BE SET WITH PRECISION KNOB, IN SEQUENCE SECTION. AT DEFAULT FREQUENCY, PARAMETERS ARE BEING SET 100 TIMES PER SECOND. SETTING HIGHER FREQUENCY MAY PRODUCE SMOOTHER TRANSITIONS AT COST OF CPU LOAD. REDUCING FREQUENCY, WILL MAKE TRANSITION STEPS MORE APPARENT. IT CAN BE EASILY HEARD WHEN CHANGING PITCH. IF YOU HAVE TUNE PROGRAM SET, AT LOW ENGINE FREQUENCY YOU WILL GET A KIND OF SYNTHETIC GLISSANDO INSTEAD OF A PITCH SWEEP.

RATE KNOB SETS THE SEQUENCER SPEED. THAT IS, HOW FAST WILL IT GO TO THE NEXT SEQUENCE STEP. OSCILLATOR SEQUENCE SPEED IS RELATIVE TO ENGINE SPEED, SO MANIPULATING RATE KNOB WILL AFFECT THE SPEED OF WHOLE PROGRAM. YOU CAN ASSIGN IT TO MOD WHEEL AND TWEAK WHILE PLAYING. EFFECTIVE SEQUENCE SPEED DEPENDS ON BOTH RATE AND FREQUENCY, SO WHEN YOU CHANGE ENGINE FREQUENCY, THE MACHINE WILL ADJUST ENGINE RATE SETTING TO KEEP THE CURRENT SPEED.

SYNC BUTTON WILL SYNCHRONIZE FREQUENCY AND RATE WITH CURRENT TEMPO. RATE KNOB WILL SET SEQUENCE SPEED TO A FRACTION OF NOTE LENGTH.

START AND LENGTH KNOBS CONTROL THE SIZE AND POSITION OF THE SEQUENCE. YOU CAN SET SHORTER SEQUENCE PERIOD THAN 16 STEPS AND MOVE IT THROUGH THE PROGRAM. THESE SETTINGS CAN BE AUTOMATED OR MANIPULATED WHILE PLAYING. THEY APPLY TO ALL OSCILLATORS.

VOLUME ENVELOPE

QUEUESCAPE HAS STANDARD AHDSR VOLUME ENVELOPE PER OSCILLATOR AND ADDITIONAL DELAY STAGE. WHEN DELAY IS SET, THE MACHINE WILL WAIT FOR SPECIFIED TIME, BEFORE SENDING THE NOTE TO OSCILLATOR. WHEN VOLUME ENVELOPE APPLY TO THE INSTRUMENT AS A WHOLE, A DELAY STAGE IS POINTLESS, BUT WHEN THERE ARE INDEPENDENT ENVELOPES FOR EACH OSCILLATOR, IT CAN BE USED TO CREATE MORE COMPLICATED SOUNDS.

TECHNICALLY THE DELAY IS NOT AN ENVELOPE STAGE, IT WILL SIMPLY DELAY TRIGGERING THE NOTE. SO WHEN THE KEY IS RELEASED AND A DELAYED OSCILLATOR HASN'T BEEN TRIGGERED YET, IT WILL REMAIN SILENT, EVEN IF OTHER OSCILLATORS ARE STILL IN RELEASE STAGE.

DELAY STAGE KNOB AND AHDSR KNOBS ARE LOCATED IN THE BOTTOM RIGHT CORNER OF THE CONTROL PANEL, LABELLED AS `ENVELOPE'.

NORMALLY MANIPULATING A KNOB WILL AFFECT SETTINGS OF CURRENTLY SELECTED OSCILLATOR. HOWEVER YOU CAN APPLY A SETTING TO ALL OSCILLATORS SIMULTANEOUSLY, USING GLOBAL SWITCH. WHEN IT'S ON, CHANGING AN ENVELOPE SETTING WILL CAST THIS SETTING TO ALL OSCILLATORS. IT WILL HAVE SIMILAR EFFECT WHEN USED WITH OTHER SETTINGS.

GLIDE AND MONOPHONIC MODE

THERE ARE CONTROLS FOR STANDARD GLIDE EFFECT, WHICH AS VOLUME ENVELOPE WORKS PER OSCILLATOR. GLIDE AMOUNT IS THE INTENSITY OF THE EFFECT, WHEN THE KNOB IS SET FULLY COUNTER-CLOCKWISE, THE EFFECT IF OFF. GLIDE SPEED IS THE SPEED OF PITCH SWEEP, COUNTER-CLOCKWISE SETTING IS THE FASTEST. AS ENVELOPE KNOBS, THESE WORK FOR SELECTED OSCILLATOR, UNLESS GLOBAL SWITCH IS ON, IN WHICH CASE THEY APPLY TO ALL OSCILLATORS.

MONO BUTTON WILL ACTIVATE/DEACTIVATE MONOPHONIC MODE. IN MONOPHONIC MODE, AS OPPOSED TO POLYPHONIC, WHEN A KEY IS BEING HELD, PRESSING ANOTHER KEY WILL CHANGE THE PITCH OF CURRENT NOTE, INSTEAD OF TRIGGERING A NEW NOTE. TWEAKING SPEED KNOB, WILL AFFECT THE SPEED OF PITCH SWEEP BETWEEN NOTES, IN THE SAME WAY AS GLIDE SPEED. WHEN RELEASING A KEY THE PITCH WILL RETURN TO THE VALUE OF NEWEST KEY, IN OTHER WORDS, THE MACHINE WILL REMEMBER THE ORDER OF PRESSING THE KEYS AND TRACK THEM BACK.

MONOPHONIC MODE CONTROLS ARE GROUPED WITH GLIDE CONTROLS, BUT THE EFFECTS ARE INDEPENDENT. ALSO MONOPHONIC MODE WORKS GLOBALLY, AFFECTING ALL OSCILLATORS, WHILE GLIDE SETTINGS CAN BE SET PER OSCILLATOR.

MONOPHONIC MODE IS DEPENDANT ON ENGINE FREQUENCY. AT HIGHER FREQUENCIES, THE TRANSITION BETWEEN NOTES WILL SOUND LIKE SYNTHESIZER PROTAMENTO. AT LOW ENGINE FREQUENCIES, THE PITCH STEPS CAN BE HEARD, AND THE EFFECT WILL SOUND LIKE A KIND SYNTHETIC GLISSANDO, RESEMBLING SPECIAL EFFECTS IN OLD VIDEOGAMES.

ALSO MONOPHONIC MODE CAN BE LIMITED TO A KEYBOARD RANGE. SO YOU CAN PLAY POLYPHONIC MELODY WITH ONE HAND AND MONOPHONIC PORTAMENTO WITH THE OTHER. KEYBOARD RANGE CONTROLS ARE LOCATED ON DISPLAY EFFECTS EDIT PAGE, ACTIVATED BY `EDIT FX' BUTTON. THE RANGE KNOBS WILL APPEAR UNDER THE SYNTHESIZER LOGO, WHEN MONOPHONIC MODE IS ACTIVE. FOR EASIER EDITING, MONOPHONIC KEYBOARD RANGE WILL BE COLOURED CYAN ON KONTAKT'S VIRTUAL KEYBOARD.

OSCILLATOR SETTINGS

THERE IS A SET OF GREEN KNOBS AND BUTTONS, LABELLED `OSCILLATOR'. THESE ARE OSCILLATOR GENERAL SETTINGS.

SOLO BUTTON WILL PUT SELECTED OSCILLATOR IN SOLO MODE. ONLY SELECTED OSCILLATOR CAN BE HEARD. IT'S PURPOSE IS TO HELP TWEAKING A PROGRAM AND IT'S STATE IS NOT BEING SAVED IN ANY WAY.

SHIFT SWITCH WILL AFFECT OSCILLATOR TUNING, WHICH CAN BE SHIFTED OCTAVE UP OR DOWN.

KEY-RANGE KNOBS CAN BE USED TO LIMIT THE KEYBOARD RANGE FOR SELECTED OSCILLATOR. THEY CAN BE USED TO EASILY CREATE KEYBOARD SPLITS.

INVERT BUTTON IS SIMPLY A PHASE INVERSION. IN MODEL 20, WHERE SOME OSCILLATORS SHARE THE SAME WAVEFORM, YOU CAN EASILY TEST IT. RESET BOTH OSCILLATORS, INVERT PHASE IN ONE OF THEM AND THEY WILL NULL EACH OTHER.

GLOBAL SWITCH WILL AFFECT THOSE SETTINGS, WITH OBVIOUS EXCEPTION OF SOLO BUTTON.

WAVEFORMS

QUEUESCAPE COMES WITH A SET OF SINGLE CYCLE WAVEFORMS. THERE ARE STANDARD WAVEFORMS: SINE, TRIANGLE, SAW, SQUARE, LESS COMMON PULSE AND IMPULSE TRAIN, WHICH HAD BEEN DIGITALLY GENERATED. THERE ARE ALSO MORE COMPLEX WAVEFORMS NAMED ANALOG, WHICH HAD BEEN GENERATED WITH ANALOG SYNTHESIZER.

MODEL 20 HAS ALTERNATIVE SET OF EXOTIC WAVEFORMS CUT FROM ACOUSTIC RECORDINGS, LIKE BICYCLE HORN, CAR ENGINE OR PENNY WHISTLE.

MODEL 20 ALSO HAS TWO NOISE OSCILLATORS, OSCILLATORS 19 AND 20, WHICH ALSO HAVE ACOUSTIC ALTER EGO, NOISE OF A WATERFALL AND A MOUNTAIN STREAM. THOSE OSCILLATORS DO NOT REACT TO NOTE PITCH AND ARE SET TO START AT RANDOM SAMPLE POINT TO AVOID FLANGING EFFECT.

IN MODEL 20 THERE IS ADDITIONAL CONTROL BUTTON ALTER, TO SWITCH THE OSCILLATOR TO ALTERNATIVE ACOUSTIC WAVEFORM. DEFAULT WAVEFORM SET IS DOUBLED, SO YOU HAVE COPIES OF NINE BASIC WAVEFORMS PLUS TWO NOISE SAMPLES, WITH ALTERNATIVE SET OF 18 WAVEFORMS AND 2 ALTERNATIVE ACOUSTIC NOISE LOOPS. THERE ARE 40 SAMPLE GROUPS, OF WHICH 20 CAN PLAY SIMULTANEOUSLY.

PROGRAMMING SEQUENCES

EACH OSCILLATOR HAS 17 PARAMETERS WHICH CAN BE SEQUENCED. YOU CAN EDIT SEQUENCES MANUALLY, DRAWING THEM WITH LIGHT PEN, GENERATE RANDOM PATTERNS OR TRANSFORM THEM IN MANY WAYS.

ALL SEQUENCES WOULDN'T FIT COMFORTABLY ON MACHINE'S DISPLAY, SO THEY HAVE BEEN SPLIT TO PAGES. YOU CAN SWITCH PAGES, USING CTRL/FX DISPLAY BUTTON.

PARAMETERS ON FIRST PAGE ARE: VOLUME, PANORAMA, HI-PASS FILTER CUTOFF, SELECTABLE FILTER CUTOFF AND RESONANCE, COMB FILTER CUTOFF AND RESONANCE AND SATURATION.

VOLUME SEQUENCE HAS BEEN MENTIONED ALREADY, IF IT'S EMPTY, THE OSCILLATOR IS DISABLED TO SAVE COMPUTING POWER. THIS SEQUENCE MODULATES INITIAL VOLUME OF THE OSCILLATOR.

PANORAMA SEQUENCE MODULATES OSCILLATOR POSITION IN STEREO FIELD.

NOW, THERE ARE 6 SEQUENCES MODULATING FILTER PARAMETERS. APART FROM MODULATING THE PARAMETERS, THE FILTERS CAN BE BYPASSED COMPLETELY. FILTER POWER BUTTONS ARE LOCATED ON CONTROL PANEL IN SECTION LABELLED FILTERS. BLUE LIGHT INDICATES THE FILTER IS ACTIVE, WHEN THE BUTTON IS WHITE, THE FILTER IS DISABLES, EVEN THOUGH IT'S VALUES ARE BEING MODULATED BY THE SEQUENCER. FILTER BUTTONS WORK PER OSCILLATOR AND ARE AFFECTED BY GLOBAL SWITCH.

APART FROM HI-PASS, COMB FILTER AND SATURATION, YOU CAN ACTIVATE ONE OF THREE TYPES OF FILTERS FOR THE OSCILLATOR - 4 POLE LOW PASS, 4 STAGE LADDER OR P53 FILTER. ACTIVE FILTER WILL BE MODULATED BY FILTER CUTOFF AND FILTER RESONANCE SEQUENCES.

SEQUENCES ON THE SECOND PAGE ARE TUNE, INSTABILITY, DRY LEVEL AND EFFECTS SEND LEVELS. PLUS A HIDDEN FINE-TUNE SEQUENCE.

TUNE SEQUENCE WILL MODULATE THE OSCILLATOR TUNING IN THE RANGE OF +/- 12 SEMITONES. YOU CAN USE IT TO PROGRAM PITCH SEQUENCE WITHIN A SINGLE NOTE. NOTE THAT NO SEQUENCE IS BEING RE-TRIGGERED BY NOTE MESSAGE, THEY ARE ALL RUNNING IN A LOOP, RESTARTING ON HOST START MESSAGE. TUNE SEQUENCE HAS A SPECIAL SNAP MODE, WHEN IT'S ACTIVATED, SEQUENCE PROGRAM WILL BE ALIGNED TO SEMITONES, ALSO ALL CHANGES TO THE PROGRAM WILL SNAP TO SEMITONES FROM NOW ON.

NEXT TO TUNE SEQUENCE PROGRAM THERE IS FINE BUTTON, IT WILL SWAP TUNE SEQUENCE WITH FINETUNE SEQUENCE ON DISPLAY. FINE TUNE SEQUENCE HAS RANGE OF +/- 6 CENTS, IT CAN BE USED TO SLIGHTLY DE-TUNE THE OSCILLATOR. IT RUNS A SEPARATE SEQUENCER AND IT'S EFFECT IS CUMULATIVE WITH TUNE SEQUENCE, INSTABILITY SEQUENCE AND SHIFT SETTING.

INSTABILITY SEQUENCE IS YET ANOTHER PITCH MODULATOR, IT ACTS LIKE RANDOMLY DRIFTING FINETUNE SETTING. SEQUENCE PROGRAM MODULATES THE AMOUNT OF THE EFFECT.

EFFECTS

THE MACHINE IS EQUIPPED WITH 5 EFFECTS RACK: PHASER, FLANGER, CHORUS, DELAY AND REVERB. THE EFFECTS SETTINGS ARE GLOBAL AND EACH OSCILLATOR HAS SEQUENCES FOR MODULATING SEND LEVELS TO EACH EFFECT. ON TOP OF THAT THERE IS DRY LEVEL SEQUENCE.

THIS ARCHITECTURE MAKES SOME STRANGE COMBINATIONS POSSIBLE. YOU CAN FOR EXAMPLE HAVE A DRY WAVEFORM MIXED WITH REVERB ECHO OF A DIFFERENT WAVEFORM, HAVE ONE OF THEM HAVING MODULATED PITCH OR HAVE THEM CHANGE PLACES FORTH AND BACK IN TIME.

WHEN DRY SEQUENCE AND ALL SEND LEVEL SEQUENCES ARE SET TO ZERO, THE OSCILLATOR WILL GENERATE NO SOUND, EVEN THOUGH IT WILL REMAIN ACTIVE. INITIAL VOLUME AND FILTERS ARE APPLIED BEFORE SENDING SIGNAL TO EFFECT PROCESSORS.

TO EDIT EFFECTS, SWITCH DISPLAY TO EFFECT EDIT MODE USING EDIT FX DISPLAY BUTTON. YOU CAN NOW TWEAK THE EFFECTS SETTINGS OR DISABLE SOME EFFECTS COMPLETELY. DISPLAY BUTTON LABELLED POWER WILL TURN THE EFFECT ON/OFF. IF POWER SWITCH IS OFF, ANY SIGNAL SENT TO THE EFFECT WILL BE MUTED. YOU CAN ALSO DISABLE DRY SIGNAL OUTPUT USING DISPLAY BUTTON BYPASS DRY, TRY IT WHEN GENERATING RANDOM PATCHES. SOMETIMES IT SOUNDS MORE INTERESTING WHEN DRY OUTPUT IS MUTED.

THERE ARE TWO MORE EFFECTS RELATED DISPLAY BUTTONS. RANDOMIZE EFFECTS WILL APPLY RANDOM VALUES TO ALL SETTINGS OF ACTIVE EFFECTS. DISABLED EFFECTS WILL BE SKIPPED. LOCK EFFECTS BUTTON WILL PROTECT EFFECTS SETTINGS FROM BEING OVERWRITEN WHEN GENERATING RANDOM PROGRAM, LOADING A SAVED PATCH OR RESETTING THE DEVICE.

TRANSITION SHAPES

QUEUESCAPE CAN MODULATE PARAMETERS BETWEEN SEQUENCE STEPS ACCORDING TO SELECTED SHAPE. THE MOST SIMPLE SHAPE IS SQUARE, IN THIS MODE A PARAMETER IS BEING SET TO NEW VALUE WHEN AT THE NEW STEP POINT AND THE VALUE REMAINS UNCHANGED UNTIL ANOTHER STEP IS REACHED. WHEN OTHER SHAPES ARE SELECTED, THE MACHINE WILL ATTEMPT TO MAKE MORE OR LESS SMOOTH TRANSITION BETWEEN VALUES. IN DEFAULT LINEAR MODE THE MACHINE WILL CALCULATE MODULATION SPEED AND CHANGE THE MODULATED PARAMETER IN SUCH MANNER THAT WHEN NEW STEP IS REACHED THE PARAMETER REACHES THE VALUE DEFINED IN THE STEP.

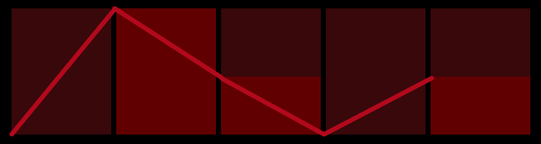
ON THE CONTROL PANEL IN TRANSITION SECTION THERE IS TYPE KNOB. YOU CAN USE IT, TO APPLY TRANSITION SHAPE TO SEQUENCES. ABOVE THE KNOB THERE IS A SMALL DISPLAY VISUALIZING THE SELECTED SHAPE. ON VIRTUAL MACHINE YOU CAN CLICK ON THE SHAPE TO SELECT IT FROM A DROP-DOWN MENU. EACH SEQUENCE CAN HAVE IT'S OWN SHAPE ASSIGNED. WHEN YOU SELECT NEW OSCILLATOR THE DISPLAY WILL BE SET TO THE SHAPE OF VOLUME SEQUENCE. NOTICE THAT THERE IS PICK DISPLAY SWITCH NEXT TO EACH SEQUENCE. IF YOU CHANGE THE STATE OF A PICK SWITCH, THE DISPLAY WILL BE SET TO THE SHAPE OF RELEVANT SEQUENCE.

WHEN ALL PICK SWITCHES ARE OFF, CHANGING THE SHAPE WILL APPLY TO TO ALL SEQUENCES OF SELECTED OSCILLATOR OR TO ALL SEQUENCES OF ALL OSCILLATORS, IF GLOBAL SWITCH IS ON. WHEN SOME PICK SWITCHES ARE ON, CHANGING SHAPE WILL ONLY APPLY TO PICKED SEQUENCES OF SELECTED OSCILLATOR, OR TO PICKED SEQUENCES OF ALL ACTIVE OSCILLATORS, IF GLOBAL SWITCH IS ON. CHANGING DISPLAY VIEW TO EDIT FX, WILL CLEAR ALL PICK SWITCHES, YOU CAN USE IT TO QUICKLY ERASE PICKS.

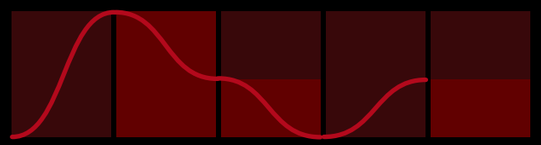
TRANSITION SHAPES

HERE'S THE LIST OF AVAILABLE TRANSITION SHAPES WITH GRAPHICAL PRESENTATION OF HOW THE PARAMETERS ARE BEING MODULATED ON EXAMPLE PROGRAM.

LINEAR

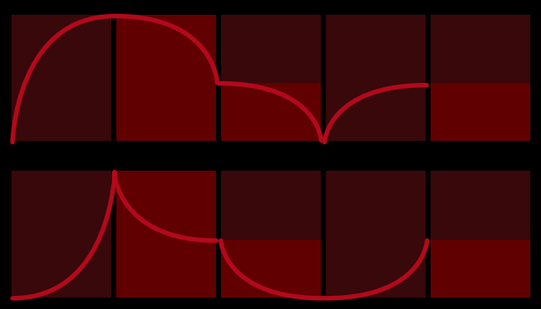


SINUSOIDAL



SQUARE

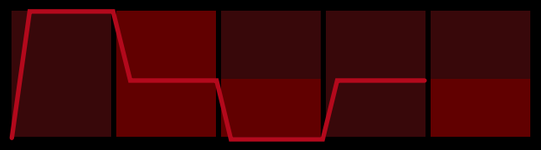
PARABOLIC



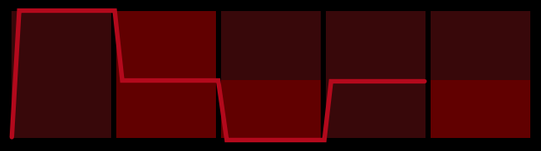
INVERSE PARABOLIC

LINEAR X2 + HOLD

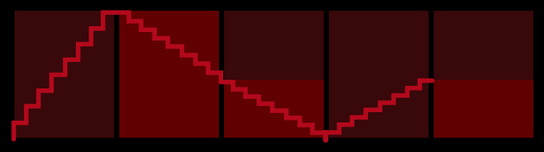
LINEAR X8 + HOLD



LINEAR X16 + HOLD



8 STEP LADDER



NOTE THAT NOT ALL PARAMETERS WORK IN LINEAR WAY. FOR EXAMPLE FOR VOLUME, PARABOLIC TRANSITION WILL SOUND MORE LIKE LINEAR BY EAR.

LINEAR X16 MODE SOUNDS ALMOST SQUARE AT FAST SPEEDS.

8 STEP LADDER IS APPROXIMATION OF EFFECT YOU WOULD GET BY SETTING THE ENGINE FREQUENCY LOW.

TRANSITION, PRECISION AND SPEED

THE TRANSITION IS BEING MADE IN A SERIES OF SMALL STEPS IN BETWEEN SEQUENCE STEPS, ACCORDING TO ENGINE FREQUENCY AND RATE. ENGINE FREQUENCY DEFINES, HOW OFTEN THE SMALL STEPS ARE BEING MADE AND RATE DEFINES, HOW MANY SMALL STEPS IT TAKES TO REACH THE NEXT SEQUENCE STEP. BECAUSE THE CHANGES IN BETWEEN STEPS ARE BEING STEP SEQUENCED TOO, AT LOW ENGINE FREQUENCIES YOU WILL NOTICE THE STEPS. IT'S LIKE HAVING ONE OF THE KIND ALIASING LFO.

TO MAKE IT MORE COMPLICATED EACH OSCILLATOR CAN BE SET TO A DIFFERENT SPEED. OSCILLATOR SEQUENCE SPEED IS DERIVED FROM ENGINE RATE. FASTEST SETTING IS /1, AT THIS SETTING, OSCILLATOR SEQUENCE STEP FREQUENCY IS EQUAL TO ENGINE RATE. AT NEXT SETTING, /2, THE OSCILLATOR SEQUENCES ARE RUNNING AT HALF SPEED, IT TAKES TWICE THE TIME TO REACH THE NEXT STEP AND SO ON. THE SLOWEST SETTING IS /16, WHERE IT TAKES 16 TIMES MORE TO MAKE A STEP. SO /16 OSCILLATOR WILL MAKE ONE ONLY STEP WHILE /1 OSCILLATOR WILL MAKE THE WHOLE 16 STEP LOOP. SPEED SETTINGS ARE AFFECTED BY GLOBAL SWITCH, WHEN IT'S ON YOU WILL SET THE SAME SPEED MODIFIER TO ALL OSCILLATORS.

TRANSFORMING SEQUENCES

APART FROM DRAWING SEQUENCE PROGRAM MANUALLY YOU CAN TRANSFORM IT USING MACHINE TRANSFORMATION TOOLS. TRANSFORMATION DISPLAY BUTTONS ARE VISIBLE NEXT TO PICK SWITCHES. TRANSFORMATIONS WILL APPLY TO VISIBLE SEQUENCES (SELECTED PAGE ONLY), WHEN THERE ARE PICKED SEQUENCES TRANSFORMATIONS WILL APPLY ONLY TO PICKED ONES. IF GLOBAL SWITCH IS ON, TRANSFORMATION WILL APPLY TO ALL ACTIVE OSCILLATORS, WITH RESPECT TO PICKED SEQUENCES. E.G. IF YOU PICK VOLUME SEQUENCE, TURN GLOBAL SWITCH ON AND APPLY A TRANSFORMATION, VOLUME SEQUENCES AND ONLY VOLUME SEQUENCES OF ALL ACTIVE OSCILLATORS WILL BE AFFECTED. ALSO TRANSFORMATIONS ARE LIMITED TO SEQUENCE LENGTH, IF YOU DECREASE SEQUENCE LENGTH AND CHANGE THE SEQUENCE START POSITION, TRANSFORMATIONS WILL ONLY APPLY TO VISIBLE PART OF THE SEQUENCE.

THE LIST OF AVAILABLE TRANSFORMATIONS:

CLEAR - AS IN RESET, IT WILL FILL SELECTED SEQUENCE WITH DEFAULT VALUES.

LEVEL - WILL COPY THE VALUE OF THE FIRST STEP TO OTHER STEPS IN SEQUENCE.

VECTOR - WILL MAKE TRANSITION BETWEEN FIRST AND LAST VALUE IN THE SEQUENCE.

FLIP - REVERSE THE ORDER OF SELECTED SEQUENCE.

MIRROR - WILL COPY FIRST HALF OF THE SEQUENCE OVER THE SECOND HALF IN REVERSED ORDER.

DOUBLE - COPY VALUES OF ODD STEPS TO EVEN STEPS.

SLIDE - SLIDE SELECTED SEQUENCE ONE STEP TO THE RIGHT, LAST STEP VALUE WILL MOVE TO THE FIRST POSITION.

COMB - INCREASE EVERY ODD STEP VALUE, DECREASE EVERY EVEN STEP VALUE.

FLUX - MODIFY EACH VALUE BY A SMALL RANDOM AMOUNT.

RAND - FILL SEQUENCE WITH RANDOM VALUES.

COMP - COMPRESS SEQUENCE, DECREASE THE AMPLITUDE OF THE WHOLE SEQUENCE.

EXP - EXPAND SEQUENCE, INCREASE AMPLITUDE OF THE WHOLE SEQUENCE.

RISE - INCREASE ALL VALUES BY THE SAME AMOUNT.

FALL - DECREASE ALL VALUES BY THE SAME AMOUNT.

FADE - APPLY FADE EFFECT, FIRST VALUE IN SEQUENCE IS UNAFFECTED THE LAST IS DECREASED ALMOST TO ZERO.

THERE ARE ALSO COPY AND PASTE BUTTONS, WHICH BEHAVE SLIGHTLY DIFFERENT. OBVIOUSLY COPY WILL COPY SEQUENCE DATA TO MEMORY AND PASTE WILL COPY IT BACK FROM MEMORY. THESE ALSO WORK ON SEQUENCE RANGE SET BY START AND LENGTH KNOBS. SO YOU CAN USE THEM E.G. TO MULTIPLY A SET OF VALUES OVER THE SAME SEQUENCE.

THE DIFFERENCE OF COPY/PASTE TRANSFORMATION IS FUNCTIONALITY OF PICK SWITCHES AND GLOBAL SWITCH. WHEN PICK SWITCHES ARE OFF, COPY/PASTE WILL APPLY NOT ONLY TO VISIBLE SEQUENCES, BUT TO ALL OSCILLATOR SEQUENCES. WHEN GLOBAL SWITCH IS ON, ALONG WITH SEQUENCE PROGRAM, OTHER OSCILLATOR SETTINGS WILL BE COPIED. SO WHEN PICK SWITCHES ARE OFF AND GLOBAL SWITCH IS ON, ALL OF OSCILLATOR SETTINGS ARE BEING COPIED.

SYNCHRONIZATION WITH HOST

THE MACHINE SEQUENCER IS SYNCHRONIZED WITH ENGINE COUNTER, IT WILL RESTART WHEN HOST STARTS PLAYBACK. IT WILL ALSO ATTEMPT TO SYNCHRONIZE WITH HOST PLAYBACK POSITION, IF IT IS TRIGGERED IN THE MIDDLE OF RECORDING. YOU WILL NOTICE THAT SEQUENCE PLAY POSITION WILL JUMP AROUND THE SEQUENCE WHEN CHANGING ENGINE RATE, IT IS SIDE EFFECT OF TRANSPORT SYNCHRONIZATION.

WHEN CHANGING ENGINE RATE, SEQUENCE START POSITION OR LENGTH, OR LOADING NEW PROGRAM, THE MACHINE WILL NOT SET NEW VALUES IMMEDIATELY. IT WILL RECALCULATE AND TRY TO CATCH UP WITH NEW PROGRAM ON NEXT CHECKPOINT, THAT IS PROGRAM STEP. THIS IS WHY IT TAKES A MOMENT UNTIL CHANGES MADE TO THE PROGRAM CAN BE HEARD.

SUSTAIN PEDAL

THE MACHINE WILL REACT TO SUSTAIN PEDAL MESSAGES. WHEN SUSTAIN PEDAL IS ON, NOTE OFF MESSAGES WILL BE POSTPONED UNTIL THE PEDAL IS RELEASED. THERE ARE TWO SUSTAIN PEDAL RELATED SWITCHES ON EDIT FX DISPLAY PAGE. POLARITY SWITCH WILL SIMPLY INVERSE PEDAL POLARITY. CC64 > MONOMODE SWITCH WILL CHANGE PEDAL FUNCTIONALITY. WHEN ACTIVATED, SUSTAIN PEDAL WILL CONTROL MONOPHONIC MODE SWITCH. PRESS POLARITY SWITCH TO CHANGE IT'S BEHAVIOUR FROM TOGGLE TO PRESS AND HOLD.

PRESSING CC64 > MONOMODE SWITCH WILL GENERATE NOTE OFF MESSAGE FOR ALL ACTIVE NOTES. IF BY CHANCE, YOU GET STUCK NOTES, IT CAN ACT AS PANIC BUTTON.

RESET, RANDOMIZE, SHUFFLE

THERE IS SET OF RED BUTTON ON CONTROL PANEL, LABELLED AS PROGRAM.

RESET BUTTON WILL RESET THE DEVICE, ALL OSCILLATOR PROGRAMS AND SETTINGS WILL BE SET TO DEFAULT VALUES. EFFECTS WILL BE RESET UNLESS THEY ARE LOCKED WITH LOCK BUTTON. ONLY SETTINGS NOT AFFECTED BY RESET PROCEDURE ARE ENGINE RATE, FREQUENCY AND SYNC MODE. AFTER RESETTING, IF GLOBAL SWITCH IS OFF, THE FIRST OSCILLATOR WILL BE ACTIVATED. IF GLOBAL SWITCH IS ON, ALL OSCILLATORS WILL BE INACTIVE AND THE MACHINE WILL BE MUTED.

RANDOM BUTTON WILL CALL UP RANDOMIZING PROCEDURE. IF GLOBAL SWITCH IS OFF, IT WILL RANDOMIZE SELECTED OSCILLATOR, IF GLOBAL SWITCH IS ON, IT WILL PICK A RANDOM NUMBER OF OSCILLATORS AND RANDOMIZE THEM. OTHER OSCILLATORS WILL BE UNAFFECTED, SO RANDOMIZING WILL MODIFY EXISTING PROGRAM, RATHER THAN CREATE A COMPLETELY NEW ONE. TO CREATE A FRESH RANDOM PATCH, TURN GLOBAL SWITCH ON, PRESS RESET (TO CLEAR ALL SEQUENCES) AND PRESS RANDOM.

RANDOMIZING PROCEDURE IS A BIT MORE SOPHISTICATED THAN RAND TRANSFORMATION, WHICH SIMPLY FILLS SEQUENCE WITH RANDOM NUMBERS. IT WILL ATTEMPT TO CREATE SOMEWHAT CONSISTENT PROGRAM.

RANDOM BUTTON WILL ALSO APPLY RANDOM SETTINGS TO ALL EFFECTS, UNLESS EFFECTS LOCK SWITCH IS ACTIVE.

SHUFFLE BUTTON WILL REARRANGE EXISTING PROGRAM. OSCILLATOR PROGRAM WILL NOT BE MODIFIED IN ANY WAY, BUT RE-ASSIGNED TO A DIFFERENT OSCILLATOR. SHUFFLE PROCEDURE ALWAYS APPLIES TO ALL OSCILLATORS. GLOBAL SWITCH HAS NO EFFECT ON ITS FUNCTIONALITY.

MEMORY FUNCTIONS

QUEUESCAPE CAN SAVE OR LOAD IT'S PROGRAM. MEMORY RELATED CONTROLS ARE LOCATED ON DISPLAY EDIT FX PAGE.

EXTERNAL MEMORY FUNCTIONS WILL DUMP OR LOAD PROGRAM TO/FROM EXTERNAL DATA STORAGE DEVICE. IN OTHER WORDS, THEY WILL SAVE PROGRAM TO FILE, OR LOAD A SAVED PROGRAM. THERE IS A NUMBER OF PATCHES SUPPLIED WITH THE DEVICE, THEY ARE LOCATED IN DATA FOLDER.

INTERNAL MEMORY, WORKS JUST AS SAVING PROGRAM TO FILE, BUT THE PROGRAM IS SAVED IN ONE OF FIVE INTERNAL MEMORY BANKS. SAVED PROGRAM CAN BE THEN LOADED QUICKLY WHILE PLAYING, BY DISPLAY BUTTON OF BY KEY PRESS, WITHOUT NEED TO BROWSE FILES. EACH MEMORY BANK HAS THREE CONTROL BUTTONS. LOAD BUTTON WILL LOAD PREVIOUSLY SAVED PROGRAM FROM THE BANK, IF NO PROGRAM IS SAVED, IT WILL DO NOTHING AND DISPLAY `MEMORY SLOT EMPTY' MESSAGE. SAVE BUTTON WILL SAVE CURRENT PROGRAM TO MEMORY SLOT, OVERWRITING ANY PREVIOUSLY SAVED CONTENT. FILE BUTTON WILL BRING FORTH FILE LOAD DIALOGUE AND LOAD PROGRAM DIRECTLY FROM FILE TO MEMORY SLOT, CURRENT PROGRAM WILL NOT BE AFFECTED BY THE OPERATION.

SELECT FROM KEYB DISPLAY BUTTON WILL ACTIVATE LOADING PROGRAM FROM MEMORY SLOTS BY MIDI KEY. THE SLIDER NEXT TO IT WILL POSITION KEY CLUSTER OVER THE KEYBOARD. SELECTED KEYS WILL STOP GENERATING NOTES AND ACT AS LOAD BUTTONS FROM NOW ON. THE KEY CLUSTER WILL BE MARKED RED ON KONTAKT VIRTUAL KEYBOARD. FOR CONVENIENCE, LAST USED KEY, WILL BE MARKED WITH GREEN COLOUR.

INTERNAL MEMORY SLOTS CONTENT IS NOT SAVED, WHEN SAVING PROGRAM TO FILE. HOWEVER IT IS SAVED WHEN SAVING KONTAKT PATCH, OR WHEN SAVING A PROJECT IN HOST.

SERVICE PAGE

CLICKING ON QUEUESCAPE LOGO ON EDIT FX PAGE WILL SWITCH DISPLAY TO SERVICE INFO PAGE. CLICK ON THE LOGO AGAIN TO RETURN. ON SERVICE PAGE THERE ARE SOME INTERNAL VALUES, INFORMATION ON SELECTED OSCILLATOR, INCLUDING THE LIST OF ALL SEQUENCES TRANSITION SHAPES, THE LIST OF LAST EVENTS AND TRANSITION SHAPE VISUALISATION TOOL.

MOD WHEEL

MOD WHEEL HAS BEEN MAPPED TO ENGINE RATE WITH KONTAKT MIDI AUTOMATION. IT'S JUST A SUGGESTION, IT'S EASY TO REMOVE MIDI ASSIGNMENT AND USE MOD WHEEL TO CONTROL ANY OTHER PARAMETER USING MIDI LEARN FUNCTION.

SOME HOSTS WILL RESET CONTROLLERS STATE WHEN PLAYBACK STOPS, AS A RESULT IT WILL ALSO RESET ENGINE RATE. TO AVOID THIS, DISABLE CONTROLLER RESET IN HOST OR REMOVE MIDI AUTOMATION (RIGHT CLICK ON ENGINE RATE).

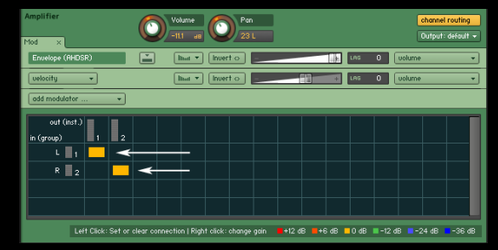
USING CUSTOM SAMPLES

QUEUESCAPE OSCILLATORS ARE BASED ON SINGLE CYCLE WAVEFORMS, BUT IN FACT YOU CAN USE ANY GROUP OF SAMPLES AS AN OSCILLATOR. IT CAN BE DONE WITH JUST FEW MOUSE CLICKS.

SUPPOSE YOU'D LIKE TO USE KONTAKT FACTORY UPRIGHT PIANO AS OSCILLATOR 1. OPEN UPRIGHT PIANO PATCH, CLICK ON WRENCH, ACTIVATE GROUP EDITOR AND MAPPING EDITOR. IN GROUP EDITOR SECTION SELECT `UPRIGHT PIANO', IN MAPPING EDITOR SECTION SELECT `SELECTED GROUPS ONLY'. NOW SELECT `SELECT ALL ZONES' FROM EDIT DROPDOWN MENU. GO TO EDIT DROPDOWN MENU AGAIN AND PICK COPY ZONES. NOW EXIT PATCH EDIT MODE BY PRESSING THE WRENCH. ENTER QUEUESCAPE EDIT MODE (THE WRENCH BUTTON AGAIN), ACTIVATE GROUP EDITOR AND MAPPING EDITOR. SELECT GROUP `01 SINE', DELETE EXISTING ZONE IN MAPPING EDITOR (RIGHT CLICK ON IT AND CHOOSE `DELETE ZONE' OR JUST SELECT IT AND PRESS `DEL' ON KEYBOARD), NOW SELECT PASTE ZONES FROM EDIT DROPDOWN MENU. YOU MAY WANT TO EDIT GROUP NAME FOR MODIFIED OSCILLATOR, SO THE PROPER NAME WOULD APPEAR ON DISPLAY. DOUBLE CLICK ON GROUP NAME AND TYPE THE NAME YOU WANT, LIKE `PIANO'.

NOW YOU MAY WANT TO DISABLE CHANNEL ROUTING, GO TO AMPLIFIER, CHANNEL ROUTING AND DESELECT YELLOW RECTANGLES. NORMALLY QUEUESCAPE IS USING A SEND FOR DRY SIGNAL, BYPASSING INSERT EFFECTS SECTION COMPLETELY. IF CHANNEL ROUTING IS NOT DISABLED THE SIGNAL WILL DOUBLE AND WILL SOUND DISTORTED. KONTAKT ENABLES CHANNEL ROUTING SEND BY DEFAULT WHEN PASTING A ZONE. ALTERNATIVELY, YOU MAY USE INSERT EFFECTS AND DISABLE DRY SEND COMPLETELY (BYPASS DRY SWITCH). HOWEVER YOU WOULD NEED TO SET CHANNEL ROUTING FOR REMAINING OSCILLATORS. AFTER MODIFYING A ZONE YOU MAY NEED TO SAVE AND RESTART THE PATCH, AS KONTAKT WILL LOOSE UI BACKGROUND ON THIS OPERATION.

TO ADJUST OSCILLATOR DEFAULT VOLUME, SELECT ALL ZONES IN MAPPING EDITOR AND ADJUST VOLUME ON ZONE LEVEL.



IN MODEL 20 THERE ARE 40 GROUPS, GROUPS 1-20 ARE DEFAULT WAVEFORMS, GROUPS 21-40 ARE FOR ALTERNATIVE WAVEFORMS. GROUPS 19,20,39 AND 40 ARE NOISE OSCILLATORS, THEY HAVE TRACKING DISABLED, SO IT'S BEST TO USE THEM FOR NON-MELODIC CONTENT.

THIS DOCUMENT ENDS HERE. HAVE FUN.

WWW.FAILRYCONFUSING.NET