



# A-Z INDEX OF CDP FUNCTIONS

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*The use of brackets in a name indicates the CDP function group to which that process or function has been allocated, within the reference documentation.*

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## A

[MCTOOLKIT] **ABFPAN**

Apply fixed or orbiting 1<sup>st</sup> order B-Format pan to a mono soundfile

[MCTOOLKIT] **ABFPAN2**

Apply fixed or orbiting 2<sup>nd</sup> order B-Format pan to a mono soundfile

FOCUS **ACCU**

Sustain each spectral band, until louder data appears in that band

SUBMIX **ADDTOMIX**

Add soundfiles to an existing mixfile

[SYSUTILS] **ALIAS**

Create a shortcut to a soundfile (PC only)

GRAIN **ALIGN**

Synchronise grain onsets in 2<sup>nd</sup> grainy sound with those in the 1<sup>st</sup>

PITCH **ALTHARMS**

Delete alternate harmonics

PVOC **ANAL**

Convert soundfile to spectral file

REPITCH **ANALENV**

Extract the window-loudness envelope of an analysis file

[SPEC] **ANALJOIN**

Join analysis files together

REPITCH **APPROX**

Make an approximate copy of a pitchfile

HILITE **ARPEG**

Arpeggiate the spectrum

GRAIN **ASSESS**

Estimate best gate value for gain extraction

SUBMIX **ATSTEP**

Convert a list of soundfiles to a mixfile

ENVEL **ATTACK**

Emphasize the attack of a sound

SUBMIX **ATTENUATE**

Alter the overall level of a mixfile

DISTORT **AVERAGE**

Average the waveshape over  $N$  'wavecycles'

BLUR **AVRG**

Average spectral energy over  $N$  adjacent channels

## B

EXTEND **BAKTOBAK**

Join backwards copy to forwards original, in that order

HOUSEKEEP **BAKUP**

Concatenate soundfiles into one backup file, with silences between

SUBMIX **BALANCE**

Mix between 2 soundfiles, using a balance function

## HILITE **BAND**

Split spectrum into bands and process these individually

## FILTER **BANK**

Bank of filters, with time-variable Q

## FILTER **BANKFRQS**

Generate a list of frequencies for use in a filter bank (add amplitudes to the text file for use with FILTER USERBANK)

## SPEC **BARE**

Zero the data in channels that do not contain harmonics

## HOUSEKEEP **BATCHEXPAND**

Expand an existing batchfile

## HILITE **BLTR**

Blur the spectral data over time, and TRACE the partials

## BLUR **BLUR**

Blur the spectral data over time

## MODIFY **BRASSAGE**

Granular reconstitution of a soundfile

## MORPH **BRIDGE**

Make a bridging interpolation between two sound spectra by interpolating between 2 time-specified windows in the 2 infiles

## ENVEL **BRKTOENV**

Convert (text) breakpoint envelope to binary envelope file

## [REPITCH] **BRKTOPI**

Convert a breakpoint pitch data file to a binary pitch data file

## HOUSEKEEP **BUNDLE**

List filenames in textfile for sorting, backup or creating a dummy mixfile

## C

## [SFEDIT] **CANTOR**

Cut holes in a sound in the manner of a cantor set (holes within holes within holes)

## [SYSUTILS] **CDPCONV**

Utility to convert analysis files from PPC to Intel format (MAC only)

## [EXTEND] **CERACU**

Repeat the source sound in several cycles that synchronise after specified counts

## SNDINFO **CHANDIFF**

Compare channels in a stereo soundfile

## SPECINFO **CHANNEL**

Returns PVOC channel number corresponding to frequency given

## [MCTOOLKIT] **CHANNELX**

Extract all or selected channels from a multi-channel soundfile

## [HOUSEKEEP] **CHANPHASE**

Invert phase of one channel of an input sound

## HOUSEKEEP **CHANS**

Extract or convert channels of a soundfile

## PSOW **CHOP**

Cut sound into sections between specified grain (chunks)

## PITCH **CHORD**

Transposed versions of a sound are superimposed on the original

## PITCH **CHORDF**

Transposed versions of the spectrum are superimposed within the existing spectral envelope

## SYNTH **CHORD**

Generate a chord with a simple waveform

## [MCTOOLKIT] **CHORDER**

Reorder soundfile channels in a multi-channel soundfile

## BLUR **CHORUS**

Add random variation to amplitude or frequency in analysis channels

## [MCTOOLKIT] **CHXFORMAT**

Modify WAVE\_EX header to change GUID and/or speaker positions

## SPEC **CLEAN**

Remove noise from PVOC analysis file

## SPECNU **CLEAN**

Eliminate from the source file any persisting signal that falls below a threshold (defined by the *noisfile*)

## SYNTH **CLICKS**

Create a click track from tempo, meter & barring data

## [SYSUTILS] **COLUMNS**

Manipulate or generate columns of numbers

## ONEFORM **COMBINE**

Generate a new sound from pitch information and a single-moment-formant

## REPITCH **COMBINE**

Generate transposition data from 2 sets of pitch data, or transpose pitch data with transposition data, or combine 2 sets of transposition data to form new transposition data, producing a binary pitch data file output

## REPITCH **COMBINEB**

Generate transposition data from 2 sets of pitch data, or transpose pitch data with transposition data, or combine 2 sets of transposition data to form new transposition data, producing a *time value* breakpoint file output

## [SFEDIT] **CONSTRUCT**

Shorten the length of any silences in a sound

## PITCHINFO **CONVERT**

Convert a binary pitch data file to a *time frequency* breakpoint text file

## MODIFY **CONVOLVE**

Convolve the first sound with the second

## HOUSEKEEP **COPY**

Produce or delete copies of the infile

## [MCTOOLKIT] **COPYSFX**

Copy soundfiles / convert from one format to another

## GRAIN **COUNT**

Count grains found in a sound (at given *gate* and *minhole* values)

## ENVEL **CREATE**

Create an envelope

## SUBMIX **CROSSFADE**

Quick crossfade between soundfiles (with same number of channels)

## ENVEL **CURTAIL**

Curtail a soundfile by fading to zero at some time within it

## REPITCH **CUT**

Cut out and keep a segment of a binary pitch data file

## SFEDIT **CUT**

Cut and keep a segment of a sound

## SPEC **CUT**

Cut a section out of an analysis file, between *starttime* and *endtime* (seconds)

## PSOW **CUTATGRAIN**

Cut at exact FOF-grain time

## SFEDIT **CUTEND**

Cut and keep end portion of a sound

**SFEDIT CUTMANY**

Cut and keep several segments of a sound

**DISTORT CYCLECNT**

Count 'wavecycles' in soundfile

**ENVEL CYCLIC**

Create a sequence of repeated envelopes, in a binary envelope file

**D**
**ENVEL DBTOENV**

Convert a (text) breakpoint file with values in dB to an envelope file

**ENVEL DBTOGAIN**

Convert (text) breakpoint file with dB values to gain values (0-1)

**TEXTURE DECORATED**

Create a texture with decorations

**HOUSEKEEP DEGLITCH**

Attempt to deglitch a soundfile

**DISTORT DELETE**

Time-contract file by deleting 'wavecycles'

**PSOW DELETE**

Time shrink sound by deleting a proportion of the pitch-synchronised FOF-grains

**COMBINE DIFF**

Find (and retain) the difference between two spectra

**SNDINFO DIFF**

Compare two sound, analysis, pitch, transposition, envelope or formant files

**[SYSUTILS] DIRSF**

Soundfile directory listing

**HOUSEKEEP DISK**

Display available space on disk

**DISTORT DIVIDE**

Distortion by dividing 'wavecycle' frequency

**[MODIFY] DSHIFT**

Add Doppler effect to a panned soundfile

**EXTEND DOUBLETS**

Divide a sound into segments that repeat, and splice them together

**ENVEL DOVETAIL**

Dovetail soundfile by enveloping the start and end of it

**BLUR DRUNK**

Modify sound by a drunken walk along analysis windows

**EXTEND DRUNK**

Splice segments of source file end-to-end: start times (in source file) of segments chosen by 'drunken walk' through source file; in Mode 2, Source file plays soberly at holds

**SUBMIX DUMMY**

Convert a list of soundfiles into a basic mixfile (for editing)

**PSOW DUPL**

Timestretch/ transpose a sound by duplicating the pitch-synchronised FOF-grains

**GRAIN DUPLICATE**

Duplicate grains in a grainy sound

## E

### [EXTEND] SFECHO **ECHO**

Repeat a sound with timing and level adjustments between repeats

### HOUSEKEEP **ENDCLICKS**

Remove clicks from start or end of file

### DISTORT **ENVEL**

Impose envelope over each group of *cyclecnt* 'wavecycles'

### ENVEL **ENVTOBRK**

Convert a binary envelope file to a (text) breakpoint envelope

### ENVEL **ENVTODB**

Convert a binary envelope file to a (text) breakpoint envelope with dB values

### FOCUS **EXAG**

Exaggerate the spectral contour

### REPITCH **EXAG**

Exaggerate pitch contour

### SFEDIT **EXCISE**

Discard specified chunk of sound, closing up the gap

### SFEDIT **EXCISES**

Discard specified chunks of a sound, closing up the gaps

### ENVNU **EXPDECAY**

Produce a true exponential decay to zero on a sound

### ENVEL **EXTRACT**

Extract envelope from an input soundfile

### HOUSEKEEP **EXTRACT**

Extract significant data from recorded soundfiles

### PVOC **EXTRACT**

Analyse, then resynthesise with various options

## F

### SUBMIX **FADERS**

Mix several soundfiles using a time-changing level-balance function

### [REVERB] **FASTCONV**

Multi-channel FFT-based convolution

### PSOW **FEATURES**

Impose new features on vocal-type sound, preserving or modifying FOF-grains

### SUBMIX **FILEFORMAT**

Returns information about mixfile fileformats

### DISTORT **FILTER**

Time-contract sound by filtering out 'wavecycles'

### HILITE **FILTER**

Hipass, lopass, bandpass and notch filters, on spectral data

### [FILTER] **FILTRAGE**

Generate randomised VARIBANK filterbank files

### REPITCH **FIX**

Massage pitch data in a binary pitchfile

### GRAIN **FIND**

Locate timings of grain onsets in a grainy sound

### SNDINFO **FINDHOLE**

Find largest low level hole in a soundfile

### MODIFY **FINDPAN**

Find stereo pan-position of a sound in a stereo file

### **FILTER FIXED**

Cut or boost, above, below or around a given frequency

### **[MULTICHANNEL] FLUTTER**

Add multi-channel distributed tremolo to a multi-channel file

### **[MCTOOLKIT] FMDCODE**

Decode 1<sup>st</sup> or 2<sup>nd</sup> order B-Format soundfile to a choice of speaker layouts

### **FOCUS FOCUS**

Focus spectral energy onto the peaks in the spectrum

### **FOCUS FOLD**

Octave-transpose spectral components into a specified frequency range

### **DISTORT FRACTAL**

Superimpose miniature copies of source 'wavecycles' onto themselves

### **[MULTICHANNEL] FRACTURE**

Disperse a mono signal into fragments spread over  $N$ -channel space

### **[MULTICHANNEL] FRAME SHIFT**

Reorient or rotate a multi-channel file

### **EXTEND FREEZE**

Freeze a segment of a sound by iteration in a fluid manner

### **FOCUS FREEZE**

Freeze the spectral characteristics in a sound, at given times, for specified durations

### **SPECINFO FREQUENCY**

Returns centre frequency of PVOC channel specified

## **G**

### **ENVEL GAINTODB**

Convert (text) breakpoint file with gain (0&150;1) values to dB values

### **SPEC GAIN**

Amplify or attenuate the spectrum

### **[HOUSEKEEP] GATE**

Remove low-level sound from signal

### **HOUSEKEEP GATE**

Cut file at zero amplitude points

### **SPEC GATE**

Eliminate channel data below a threshold amplitude

### **REPITCH GENERATE**

Create binary pitch data from a textfile of *time midi* value pairs

### **FORMANTS GET**

Extract evolving formant envelope from an analysis file

### **ONEFORM GET**

Extract formant-envelope at a specific time in an existing CDP formant file

### **[SYSUTILS] GETCOL**

Extract a column of numbers from a textfile

### **SUBMIX GETLEVEL**

Test the maximum level of a mix, defined in a mixfile and suggest a gain factor to avoid overload, if necessary

### **[SPECINFO] GET\_PARTIALS**

Extract relative amplitude of partials in a pitched source

### **REPITCH GETPITCH**

Extract pitch from spectrum to a pitch data file

### **FORMANTS GETSEE**

Get formant data from an analysis file and write as a pseudo-soundfile for viewing

## STRANGE **GLIS**

Create glissandi inside the (changing) spectral envelope of the original sound

## [HILITE] **GLISTEN**

Randomly partition the spectrum into bins and play back in order

## PSOW **GRAB**

Grab a pitch-synchronised grain from a file, and use it to create a new sound

## SPEC **GRAB**

Grab a single analysis window at time point specified

## HILITE **GREQ**

Graphic eq type filter on the spectrum

## GRAIN **GREV**

Find and manipulate 'grains', using envelope troughs and zero-crossings

## [GRAIN] **GRAINEX**

Find grains in a sound and extend the area that contains them

## TEXTURE **GROUPEd**

Create textures from groups of events

## H

## DISTORT **HARMONIC**

Harmonic distortion by superimposing 'harmonics' onto 'wavecycles'

## PITCHINFO **HEAR**

Convert binary pitchfile to analysis test tone file (resynthesise to hear pitch)

## FOCUS **HOLD**

Hold sound spectrum, at given times

## [EXTEND] **HOVER**

Move through a file, zig-zag reading it at a given frequency

## I

## ENVEL **IMPOSE**

Impose an envelope on an input soundfile

## PSOW **IMPOSE**

Impose vocal FOFs in 1<sup>st</sup> sound onto the 2<sup>nd</sup> sound

## SUBMIX **INBETWEEN**

Generate a set of sounds inbetween the 2 input sounds (same number of channels) through weighted mixes of the input sounds, from mostly sound 1 to mostly sound 2

## SUBMIX **INBETWEEN2**

Generate a set of sounds inbetween the 2 input sounds (same number of channels) through interpolation pegged to zero-crossings

## PITCHINFO **INFO**

Display information about pitch data in pitchfile

## SFEDIT **INSERT**

Insert a 2<sup>nd</sup> sound into an existing sound

**REPITCH INSERTSIL**

Mark areas as silent in a pitch data file

**REPITCH INSERTZEROS**

Mark areas as unpitched in a pitch data file

**SFEDIT INSIL**

Insert silence into an existing sound

**DISTORT INTERACT**

Time-domain interaction of sounds

**COMBINE INTERLEAVE**

Interleave (groups of) windows of several spectra

**PSOW INTERLEAVE**

Interleave FOF-grains from two different soundfiles

**SUBMIX INTERLEAVE**

Interleave mono *infile*s to make a multi-channel *outfile*

**[MCTOOLKIT] INTERLX**

Interleave mono or stereo files into a multi-channel file

**PSOW INTERP**

Interpolate between 2 pitch-synchronised grains, to produce a new sound

**REPITCH INTERP**

Replace noise or silence by pitch interpolated from existing pitches

**DISTORT INTERPOLATE**

Timestretch file by repeating 'wavecycles' and interpolating between them

**REPITCH INVERT**

Invert pitch contour of a pitch data file

**STRANGE INVERT**

Invert the spectrum

**[SFEDIT] ISOLATE**

Disjunct portions of soundfile are specified by textfile or dB loudness

**EXTEND ITERATE**

Iterate an input sound in a fluid manner

**FILTER ITERATED**

Iterate sound, with cumulative filtering by a filterbank

**[EXTEND] ITERLINE**

Iterate an input sound, following a transposition line

**ITERLINEF**

Iterate an input sound set, following a transposition line

**J**

**SFEDIT JOIN**

Join files together, one after another

**SFEDIT JOINDYN**

Join soundfiles in loudness-patterned sequence

**SFEDIT JOINSEQ**

Join soundfiles in patterned sequence

**L**

**SPECINFO LEVEL**

Convert (varying) level of analysis file to a pseudo-soundfile, for viewing (1 window -> 1 sample)



**SNDINFO LEN**  
Display duration of a soundfiling-system file

**SNDINFO LENS**  
List durations of several soundfiling-system files

**[SYSUTILS] LISTAUDEVS**  
List available audio devices

**PSOW LOCATE**  
Locate exact start time of the nearest grain

**FILTER LOHI**  
Fixed low-pass or high-pass filter

**EXTEND LOOP**  
Loop inside a soundfile

**SNDINFO LOUDCHAN**  
Find loudest channel in a stereo soundfile

**MODIFY LOUDNESS**  
Adjust loudness of a soundfile

## M

**[EXTEND] MADRID**  
Spatially syncopate repetitions of the source soundfile(s)

**SPEC MAGNIFY**  
Expand (in duration) a single analysis window

**COMBINE MAKE**  
Generate an analysis file from data in a formant data file and a pitch data file

**COMBINE MAKE2**  
Generate a spectrum from only pitch, formant & envelope data

**[SFEDIT] MANYSIL**  
Insert many silences into a soundfile

**COMBINE MAX**  
Retain loudest channel components per window amongst several spectra

**SNDINFO MAXI**  
List levels of several soundfiles

**SNDINFO MAXSAMP**  
Find maximum sample in soundfile or binary data file

**SNDINFO MAXSAMP2**  
Find maximum sample within a specified timerange in a soundfile

**[MULTICHANNEL] MCHANPAN**  
Pan sounds around a multi-channel space

**[MULTICHANNEL] MCHANREV**  
Create multi-channel Echoes or Reverb

**[MULTICHANNEL] MCHITER**  
Iterate the input sound in a fluid manner, scattering around a multi-channel space

**[MULTICHANNEL] MCHSHRED**  
Multi-channel shred: cut sound into random segments and re-assemble them in random order within the original duration

**[MULTICHANNEL] MCHSTEREO**  
Combine two stereo files in a multi-channel output

**[MULTICHANNEL] MCHZIG ZAG**  
Extend by reading back and forth in the soundfile, while panning to a new channel at each 'zog' or 'zag'

**COMBINE MEAN**  
Generate the mean of two spectra

**SUBMIX MERGE**  
Quick mix of 2 soundfiles (with same number of channels)

**SUBMIX MERGEMANY**

Quick mix of several soundfiles (with the same number of channels)

**SUBMIX MIX**

Mix sounds as instructed in a mixfile

**SUBMIX MODEL**

Replace soundfiles in an existing mixfile

**TEXTURE MOTIFS**

Create a texture with motifs

**TEXTURE MOTIFSIN**

Create a texture with motifs forced onto a harmonic field

**[MULTICHANNEL] MTON**

Create a multi-channel equivalent of a mono soundfile

**[MULTICHANNEL] MULTIMIX**

Create a multi-channel mixfile

**DISTORT MULTIPLY**

Distortion by multiplying 'wavecycle' frequency

**N**

**[MODIFY] NEWDELAY**

Delay with pitch-defined output sound

**[MULTICHANNEL] NEWMIX**

Mix from a multi-channel mixfile to give a multi-channel soundfile output

**[MODIFY] NEWMORPH & NEWMORPH2**

Morph between dissimilar spectra

**[GRAIN] NEWTEX**

Generate a texture of grains made from a source sound or sounds

**[SYNTH] NEWSYNTH**

Generate complex spectra from fundamental and partial balance information

**[MCTOOLKIT] NJOIN**

Concatenate multiple soundfiles, with optional CUE list for CD burning

**[MCTOOLKIT] NMIX**

Simple mix of two multi-channel soundfiles, with optional offset

**BLUR NOISE**

Add noise to spectrum

**SYNTH NOISE**

Generate noise

**SFEDIT NOISECUT**

Suppress noise in a (mono) soundfile, replacing with silence

**GRAIN NOISE\_EXTEND**

Find and timestretch noise component in a sound

**REPITCH NOISETOSIL**

Replace unpitched windows by silence

**O**

**PITCH OCTMOVE**

Octave transpose without a formant shift (becomes inharmonic)

**SPECINFO OCTVU**

Text display of time varying amplitude of spectrum, within octave bands

**DISTORT OMIT**

Omit A out of every B 'wavecycles', replacing them by silence

**GRAIN OMIT**

Omit a proportion of grains from a grainy sound

**SUBMIX ONGRID**

Convert listed soundfiles to a basic mixfile on timed grid (for editing)

**TEXTURE ORNATE**

Create a texture with ornaments

**DISTORT OVERLOAD**

Clip the signal with noise or a (possibly timevarying) waveform

**P**

**[SFEDIT] PACKET**

Isolate or generate a sound packet

**SUBMIX PAN**

Pan a mixfile

**[MULTICHANNEL] PANORAMA**

Distribute *N* source files in a panorama across a specified angle of a sound-surround loudspeaker array

**[MCTOOLKIT] PAPLAY**

Playback of multi-channel soundfiles

**[SFEDIT] PARTITION**

Partition a mono soundfile into disjunct files in blocks defined by groups of wavesets

**REPITCH PCHSHIFT**

Transpose pitches in a pitch data file by a constant number of semitones (becomes inharmonic)

**REPITCH PCHTOTEXT**

Convert binary pitch data to textfile

**SPECINFO PEAK**

Locate time varying energy centre of spectrum (text display)

**ENVNU PEAKCHOP**

Isolate peaks and rearrange by changing the tempo (Mode 1) OR:

Output a peak-isolating envelope (Mode 2)

**[SPECINFO] PEAK EXTRACT**

Extract peaks from an analysis file and write to a text file

**[SNDINFO] PEAKFIND**

Find the times of the loudness peaks in a sound

**[MODIFY] PHASE**

Invert phase or enhance stereo separation of a sound

**FILTER PHASING**

Phase shift a sound, or produce a 'phasing' effect

**PITCH PICK**

Only retain channels which might hold specified partials

**DISTORT PITCH**

Pitchwarp 'wavecycles' of sound

**REPITCH PITCHTOSIL**

Replace pitched windows by silence

**ENVEL PLUCK**

Pluck start of sound (mono files only)

**HILITE PLUCK**

Emphasise spectral changes (use e.g. with HILITE ARPEG)

**TEXTURE POSTDECOR**

Create a texture with decorations following events

**TEXTURE POSTORNATE**

Create a texture with ornaments following events

**TEXTURE PREDECOR**

Create a texture with decorations preceding events

**[SFEDIT] PREFIX SILENCE**

Add silence to the beginning of a soundfile

**TEXTURE PREORNATE**

Create a texture with ornaments preceding events

**SPECINFO PRINT**

Print data in an analysis file as text to file

**SNDINFO PRNTRSND**

Print sound sample data to a textfile

**SNDINFO PROPS**

Display properties of a soundfiling-system file

**[PSOW] PTOBRK**

Convert binary pitch trace file (.frq) to breakpoint textfile format for PSOW

**DISTORT PULSED**

Impose regular pulsations on a sound

**ONEFORM PUT**

Impose the formant-envelope in a single-moments-formant datafile onto the sound in an analysis file

**FORMANTS PUT**

Impose formants in a formant data file on the spectrum in a PVOC analysis file

**[SYSUTILS] PUTCOL**

Place a column of numbers into a textfile

**[SYSUTILS] PVPLAY**

Play back (audition) an analysis or soundfile

## Q

**REPITCH QUANTISE**

Quantise pitches in a pitch data file

## R

**SPECNU RAND**

Randomise the order of spectral windows

**SNDINFO RANDCHUNKS**

Cut chunks from a soundfile, randomly

**SNDINFO RANDCUTS**

Cut a soundfile into pieces, with cuts at random times

**REPITCH RANDOMISE**

Randomise pitch line

**MODIFY RADICAL**

Radical changes to the sound

**[SYSUTILS] RECSF**

Record, creating a soundfile (PC only)

**DISTORT REFORM**

Modify shape of 'wavecycles'

- 
- PSOW REINFORCE**  
Reinforce the harmonics in a FOF-grain soundfile
- GRAIN REMOTIF**  
Change pitch and rhythm of grains in a grainy sound
- HOUSEKEEP REMOVE**  
Remove existing copies of a soundfile
- SPECNU REMOVE**  
Remove a pitched component from the spectrum of a sound
- GRAIN REORDER**  
Reorder grains in a grainy sound
- DISTORT REPEAT**  
Timestretch file by repeating 'wavecycles'
- GRAIN REPITCH**  
Repitch grains in a grainy sound
- DISTORT REPLACE**  
Strongest 'wavecycle' in each *cyclecnt* replaces others
- ENVEL REPLACE**  
Replace the existing envelope of an input soundfile with a different envelope
- PSOW REPLACE**  
Combine FOFs of 1<sup>st</sup> sound with the pitch of the 2<sup>nd</sup> sound
- SFEDIT REPLACE**  
Insert a 2<sup>nd</sup> sound into an existing sound, replacing part of the original
- DISTORT REPLIM**  
Timestretch by repeating 'wavecycles' (below a specified frequency)
- ENVEL REPLOT**  
Warp the envelope in a (text) breakpoint envelope file
- SPECINFO REPORT**  
Text report on location of frequency peaks in the evolving spectrum
- GRAIN REPOSITION**  
Reposition grain onsets in a grainy sound
- GRAIN RERHYTHM**  
Change rhythm of grains in a grainy sound
- ENVEL RESHAPE**  
Warp the envelope in a binary envelope file
- HOUSEKEEP RESPEC**  
Alter the specification of a soundfile
- [SFEDIT] RETIME**  
Rearrange and retime events within a soundfile
- MODIFY REVECHO**  
Create reverb, echo or resonance around a sound
- [REVERB] REVERB**  
Multi-channel reverberation
- DISTORT REVERSE**  
Cycle-reversal distortion, 'wavecycles' reversed in groups
- GRAIN REVERSE**  
Reverse order of grains in a grainy sound, without reversing the grains themselves
- GRAIN R\_EXTEND**  
Extend sounds that are iterative
- [MCTOOLKIT] RMSINFO**  
Scan file and report RMS and average power level statistics
- [REVERB] ROOMRESP**  
Create early reflections data file for REVERB, ROOMVERB and TAPDELAY
- [REVERB] ROOMVERB**  
Multi-channel reverberation with room simulation

# S

## MODIFY **SAUSAGE**

Granular reconstitution of several soundfiles scrambled together

## ENVEL **SCALED**

Impose envelope, scaling envelope times to soundfile duration

## MODIFY **SCALEDPAN**

Distribute sound in stereo space, scaling pan data to soundfile duration

## BLUR **SCATTER**

Randomly thin out the spectrum

## EXTEND **SCRAMBLE**

Cut random chunks from soundfile and splice end to end; Or, Cut file into random chunks and rearrange; repeat differently, etc.

## FORMANTS **SEE**

Convert formant data in binary formant data file to a pseudo soundfile for viewing

## PITCHINFO **SEE**

Convert binary pitchfile or transposition file to a pseudo-soundfile, for viewing

## [BLUR] **SELSIM**

Replace spectral windows with the most similar, louder window(s)

## EXTEND **SEQUENCE**

Produce a sequence from one sound, with timed transpositions

## EXTEND **SEQUENCE2**

Produce a sequence from several sounds, with timed transpositions

## [MCTOOLKIT] **SFPROPS**

Display soundfile details, with WAVE\_EX speaker positions

## STRANGE **SHIFT**

Linear frequency shift of (part of) the spectrum (becomes inharmonic)

## [EXTEND] **SHIFTER**

Generate simultaneous repetition cycles, shifting focus from one to another

## [EXTEND] **SHRINK**

Repeat a sound, shortening it on each repetition

## MODIFY **SHUDDER**

Shudder a soundfile

## BLUR **SHUFFLE**

Shuffle analysis windows according to a specific scheme

## DISTORT **SHUFFLE**

Distortion by shuffling 'wavecycles'

## SUBMIX **SHUFFLE**

Shuffle the data in a mixfile

## SEARCH **SIGSTART**

Find earliest time at which there is signal in two or more soundfiles.

## SYNTH **SILENCE**

Make a silent soundfile

## [SFEDIT] **SILEND**

Add silence to end of file

## TEXTURE **SIMPLE**

Create textures from single events

## SPECNU **SLICE**

Divide an analysis file into individual frequency bands, saving each as a separate analysis file

## REPITCH **SMOOTH**

Smooth pitch contour in a pitch data file

## SNDINFO **SMPTIME**

Convert sample count to time in soundfile

**HOUSEKEEP SORT**

Sort files listed in a textfile

**MODIFY SPACE**

Create or later the distribution of sound in stereo space

**PSOW SPACE**

Distribute the alternate FOFs in the sound over a stereo space

**MODIFY SPACEFORM**

Create a sinusoidal spatial distribution data file

**SUBMIX SPACEWARP**

Alter spatial distribution of a mixfile

**[SPECINFO] SPECGRIDS**

Partition the spectrum into parts, over a grid

**[COMBINE] SPECROSS PARTIALS**

Interpolate partials of pitched *inanalfile1* towards those of pitched *inanalfile2*

**[COMBINE] SPECSPHINX**

Impose the channel amplitudes of *analfile2* onto the channel frequencies of *analfile1*

**SYNTH SPECTRA**

Generate both channels of a stereo spectral band

**STRETCH SPECTRUM**

Stretch/compress the frequencies in the spectrum

**[COMBINE] SPECTWIN**

Combine the formant and/or total spectral envelopers of two spectra

**MODIFY SPEED**

Change the speed and pitch of the source sound

**SFEDIT SPHINX**

Switch between several files, with different switch times, to make new sound

**PSOW SPLIT**

Split vocal FOFs into subharmonic and upwardly transposed pitch regions

**BLUR SPREAD**

Spread spectral peaks

**SPECNU SQUEEZE**

Squeeze the spectrum into a frequency range, around a specified centre frequency

**MODIFY STACK**

Create a mix that stacks transposed versions of the source on top of one another

**FOCUS STEP**

Step-frame through a sound by freezing the spectrum at regular time intervals

**[MULTICHANNEL] STRANS MULTI**

Change the speed or pitch of a multi-channel sound, or add vibrato

**PSOW STRETCH**

Timestretch/transpose a sound by repositioning the pitch-synchronised grains. The grains themselves are not time-stretched

**[STRETCH] STRETCHA**

Utility to calculate *timestretch* factor for use with STRETCH TIME

**PSOW STRTRANS**

Timestretch/transpose a sound by repositioning the pitch-synchronised grains, with overlap

**[SFEDIT] SUBTRACT**

Subtract one file from another

**SPECNU SUBTRACT**

Eliminate from the source file any persisting signal that falls below a threshold (defined by the *noisfile*) AND subtract the amplitude of the noise in the *noisfile* from any source file signal that is passed

**COMBINE SUM**

Add one spectrum to another

## SNDINFO **SUMLEN**

Sum durations of several soundfiling-system files

## [FOCUS] **SUPERACCU**

Sustain each spectral band until louder data appears in that band

## BLUR **SUPPRESS**

Suppress the most prominent channel data

## PSOW **SUSTAIN**

Sustain a pitch-synchronised FOF-grain within a sound – a freeze effect with optional vibrato

## PSOW **SUSTAIN2**

Sustain a time-specified (start-end) FOF within a sound – a freeze effect with optional vibrato

## FILTER **SWEEPING**

Filter whose focus-frequency sweeps over a range of frequencies

## ENVEL **SWELL**

Cause sound to fade in and out from a peak moment

## SFEDIT **SYLLABLES**

Separate out vocal syllables

## SUBMIX **SYNC**

Synchronise soundfiles in a mixfile, or generate such a mixfile from a list of soundfiles

## SUBMIX **SYNCATTACK**

Synchronise attacks of soundfiles in a mixfile, or generate such a mixfile from a list of soundfiles

## PSOW **SYNTH**

Impose vocal FOFs on a stream of synthesised sound

## PVOC **SYNTH**

Convert spectral file to soundfile

## REPITCH **SYNTH**

Create spectrum of vowel sounds, following pitch contour in pitch data file

## T

## [REVERB] **TAPDELAY**

Stereo multi-tapped delay line with feedback

## [MULTICHANNEL] **TANGENT group**

Place one or more mono soundfiles along a tangent path to an 8-channel array

## DISTORT **TELESCOPE**

Time-contract sound by telescoping *cyclecnt* 'wavecycles' to 1

## SUBMIX **TEST**

Test the syntax of a mixfile

## [MULTICHANNEL] **TEXMCHAN**

Create textures over a multi-channel frame

## STRETCH **TIME**

Stretch/ compress a sound in time without changing the pitch

## TEXTURE **TIMED**

Create a texture with timed single events

## SNDINFO **TIMEDIFF**

Find difference in duration of two sound files

## ENVEL **TIMEGRID**

Partition a soundfile into a sequence of 'windows' separated by silence

## SNDINFO **TIMESMP**

Convert time to sample count in soundfile



## GRAIN **TIMEWARP**

Stretch (or shrink) the duration of a grainy sound, without stretching the grains themselves

## SUBMIX **TIMEWARP**

Timewarp the data in a mixfile

## TEXTURE **TGROUPED**

Create a texture with timed event groups

## TEXTURE **TMOTIFS**

Create a texture with timed motifs

## TEXTURE **TMOTIFSIN**

Create a texture with timed motifs forced onto a harmonic field

## [ENVEL] **TOPANTAIL2**

Gated sound extraction with end trims and backtracking

## HILITE **TRACE**

Highlight  $n$  loudest partials, at each moment (window) in time

## [MULTICHANNEL] **TRANSIT group**

Place one or more mono soundfiles on a path into and across an 8-channel array

## PITCH **TRANSP**

Shift pitch of (part of) the spectrum, keeping harmonic relationships

## REPITCH **TRANSPOSE**

Transpose spectrum (spectral envelope also moves)

## REPITCH **TRANSPOSEF**

Transpose spectrum: but retain original spectral envelope

## [ENVEL] **TREMOLO**

Apply width-controlled tremolo to a soundfile

## ENVEL **TREMOLO**

Tremolo a sound

## PITCH **TUNE**

Replace spectral frequencies by harmonics of specified pitch(es)

## [PITCH] **TUNEVARY**

Replace spectral frequencies with the harmonics of specified pitch(es), in a time-varying manner

## SFEDIT **TWIXT**

Switch between several files, to make a new sound

## U

## SNDINFO **UNITS**

Convert between different units

## FILTER **USERBANK**

User-defined filterbank, with time-variable  $Q$

## V

## FILTER **VARIABLE**

Lo-pass, high-pass, band-pass or notch filter, with variable frequency

## FILTER **VARIBANK**

User-define time-varying filterbank, with time-variable  $Q$

## [SYSUTILS] **VECTORS**

Numerical operations between two columns of figures

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**FILTER VFILTERS**

Make (text) datafiles for fixed-pitch FILTER VARIBANK filters

**REPITCH VIBRATO**

Add vibrato to pitch in a pitch data file

**FORMANTS VOCODE**

Impose spectral envelope of one 2<sup>nd</sup> sound onto 1<sup>st</sup> sound

**HILITE VOWELS**

Impose vowels on a sound

**REPITCH VOWELS**

Create spectrum of vowel sounds, following pitch contour in a pitch data file

## W

**SYNTH WAVE**

Generate simple waveforms

**STRANGE WAVER**

Oscillate between harmonic and inharmonic state

**BLUR WEAVE**

Weave amongst the analysis windows in a specified pattern

**SPECINFO WINDOWCNT**

Returns the number of analysis windows in *infile*

**[GRAIN] WRAPPAGE**

Granular reconstitution of one or more soundfiles over multi-channel space

## Z

**SNDINFO ZCROSS**

Display fraction of zero-crossings in a soundfile

**SFEDIT ZCUT**

Cut and keep a segment of a MONO soundfile, cutting at zero crossings (no splices)

**SFEDIT ZCUTS**

Cut and keep segments of a MONO soundfile, cutting at zero crossings (no splices)

**PITCHINFO ZEROS**

Shows whether a pitch file contains uninterpolated zeros (unpitched windows)

**EXTEND ZIGZAG**

Read back and forth inside a soundfile