

CYCLONE To Do List

List of relevant new objects to be include (suggested by Porres)

01- [lodmess] Takes has a message (one atom or list) as sends it at load time. It's like [loadbang] into a message box, but more convenient as a single object.

02- [scale] & [scale~] They rescale a given range (given as a min/max pair \$f1 & \$f1) into another given range (\$f3 & \$f4. Doable in expr as [expr (\$f1-\$f2) * (\$f4-\$f5) / (\$f2-\$f3) + \$f4]. I made [scale~] as an abstraction btw.

03- [pong] Data version of the already available [pong~].

04- [pak] A version of [pack] that is like [bondo] connected to [pack].

05- [join] Similar to [pak].

06- [combine] Combines atoms into a symbol.

07- [if] Conditional statement in if/then/else form with option to route to different outputs according to the conditionals.

08- [degrade~] Reduces the signal quality: bit depth & sample rate (in a sample and hold fashion).

09- [downsamp~] Reduces the sample rate (downsamples in a sample and hold fashion).

10- [rate~] Time scales the output of a [phasor~]

11- [round~] Rounds the signal input

12- [normalize~] Performs a real-time normalization - I made something similar as a vanilla patch

13- [gate~] Route signal to different outputs

14- [selector~] Assign one of several inputs

15- [atodb] / [dbtoa] & [atodb~] / [dbtoa~] Converts linear amplitude to dBFS and vice versa - I made externals but still need to convert lists.

16- [trunc~] Truncate signal values - I made an external but still need to convert lists.

17- [biquad~] Different than in Pd, the Max version takes input values in the audio rate - I made an abstraction.

18- [filtercoeff~] Calculates signal coefficients for the max version of biquad according to several filter types - I'm almost done making an abstraction that covers all of it.

19- [hilbert~] it's a 6th order filter, different than the Pd abstraction which is a 4th order.

20- [cross~] 3rd order Crossover filter.

21- [freqshift~] Time domain frequency shifter - I made an abstraction

22- [phaseshift~] 2nd order allpass filter - I made an abstraction

23- [thresh~] Signal threshold (schmidt trigger) - I made an abstraction

24- [tri~] / [saw~] / [rect~] Band limited oscillators with phase sync input - I made very CPU expensive abstractions.

- 25- **[oscbank~]** & **[ioscbank~]** Oscillator banks.
- 26- **[fffb~]** Resonant filter bank.
- 27- **[sync~]** Synchronize to external sources
- 28- **[phaseshift~]** 2nd order allpass filter - I made an abstraction
- 29- **[seq~]** Signal driven event sequencer
- 30- **[techno~]** Signal driven step sequencer
- 31- **[adsr~]** Signal rate / sample accurate envelope generator
- 32- **[sfinfo~]** Reports audio file information
- 33- **[stutter~]** Signal capture for granular playback
- 34- **[groove~]** Variable rate looping sample playback
- 35- **[zigzag~]** Multisegment linear ramp generator
- 36- **[function]** Breakpoint function editor GUI, similar to [envgen]
- 37- **[zplane~]** GUI that plots zeros and poles
- 38- **[cascade~]** Cascade of biquad sections
- 39- **[filtergraph~]** GUI for generating biquad and cascade coefficients
- 40- **[tempo]** Output numbers at metronomic tempo