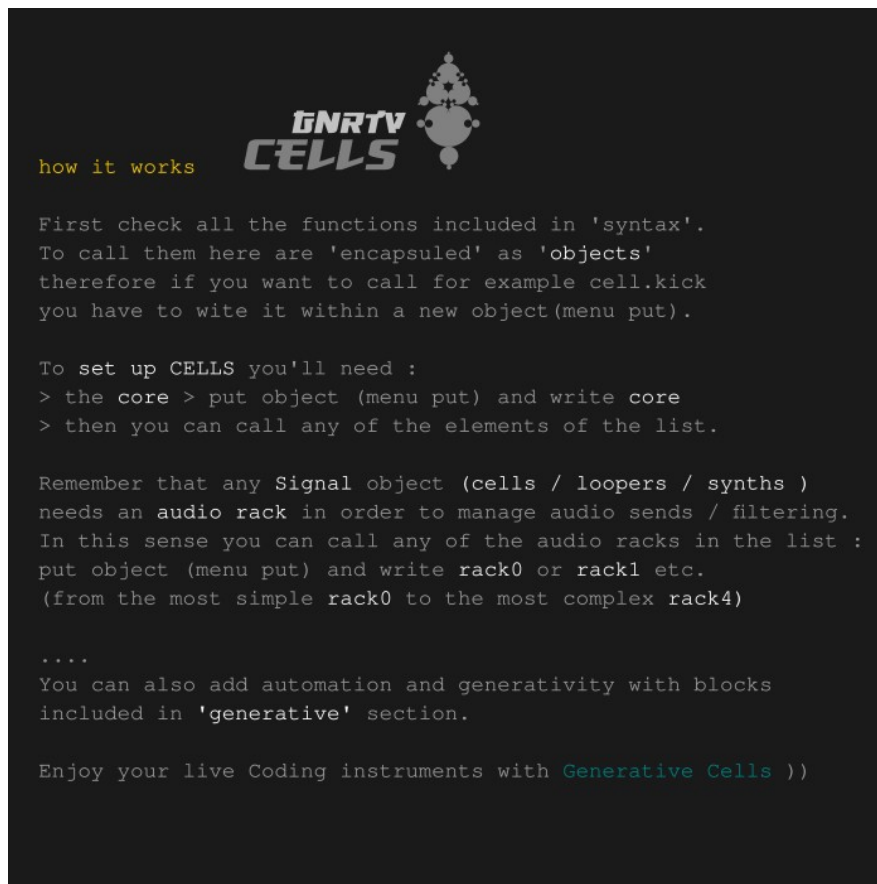


GNRTV.CELLS

LIVE CODING MODE



GNRTV.CELLS is an algorithmic sound production tool that allows different uses such as sound design and interaction design.

On the other hand, it also offers another perspective and use: taking into account the use of tools and languages that have been created in recent years by the practice of the **Live Coding***, Gnrtv.Cells has a **mode** or version where we can directly build the objects and/or blocks in a very agile way for live performances and spontaneous creations.

Note: This mode is not so recommended for creating automated applications or immersive applications, facilities, etc. just for Live Coding purposes

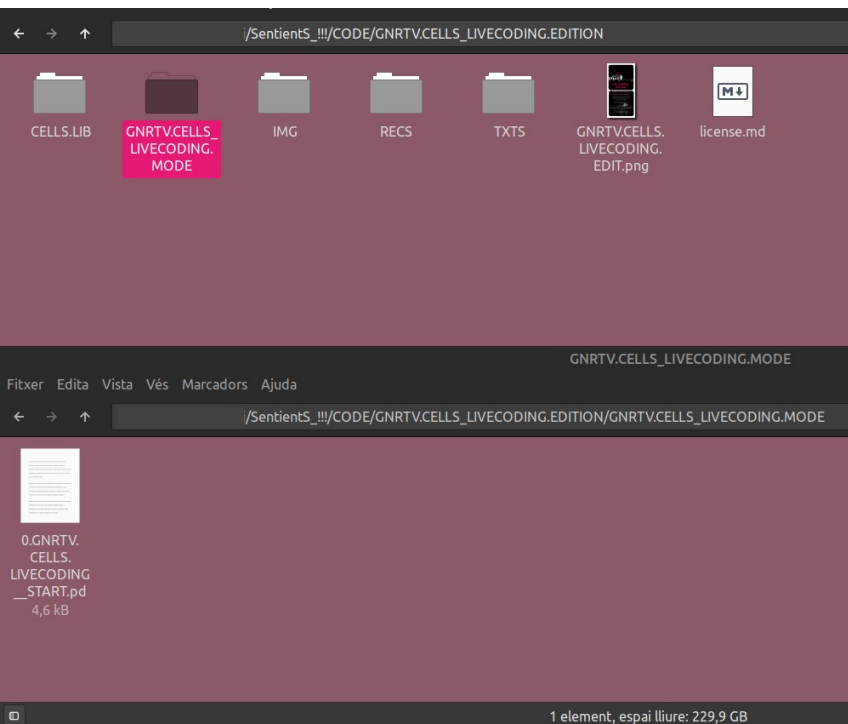
*Live Coding is an experimental format of electronic music creation, where the process of algorithmic programming and execution is shown in the musical and / or visual performance itself.

Info & Repo <https://github.com/xamanza/GNRTV.CELLS>

Package https://github.com/xamanza/GNRTV.CELLS/raw/main/GNRTV.CELLS_LIVECODING.EDITION.zip

In order to start *GNRTV.CELLS* in LiveCoding mode be sure you have the package
https://github.com/xamanza/GNRTV.CELLS/blob/main/GNRTV.CELLS_LIVECODING.EDITION.zip

Once you have it, unzip the package and save it in a desired location in your OS.
The package has this structure :



Directories are structured in this way, for functional purposes:

CELLS.LIB contains all Cells and Blocks

IMG contains GUI images

REC Directory of recorded sessions

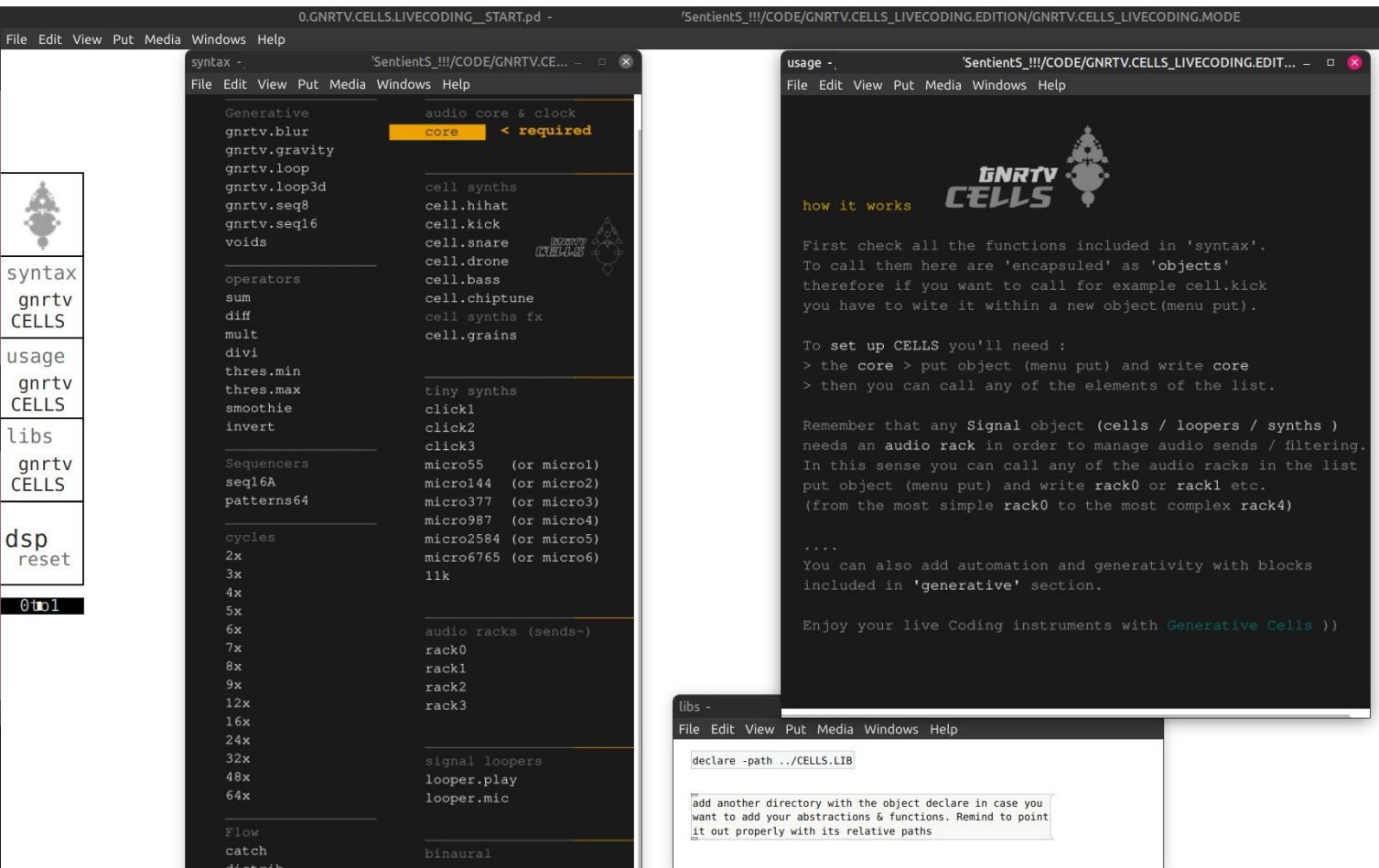
TXTS Directory for txt information (sequencers and other data driven elements which needs txt files)

To use live coding tool, keep previous directories without changes,..just enter in

GNRTV.CELLS_LIVECODING.MODE Directory and open with *pd*, *pd-l2ork* or *purr-data* the patch :

0.GNRTV.CELLS.LIVECODING__START.pd

Once opened you'll find a bunch of buttons :



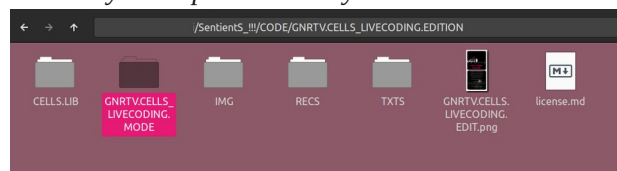
>**syntax** > a reference of functions and blocks we can write
(just write as an object > menu put > object and write the desired function that appears in syntax)

>**usage** is a summary of the tool. Read it before usage

>**libs** Is the path which includes all the functions, blocks and cells in this toolkit.
You can add your custom objects or abstractions by adding another directory with 'declare' function :
[declare -path /your/location]

or

[declare -path ../YourAbstractions] in case that you keep the directory 'YourAbstractions' in the same level as the rest of the toolkit, that is to say



>**dsp reset** is a button useful to turn off and on rapidly the dsp. This is useful in some cases of dsp blocking or not rendering properly the sound. Therefore we can click it to reset the sonic render.

In Live Coding mode we will call functions, blocks and cells by writing it in a new patch.
That is to say, we will create a new object in the Edit menu Pd-l2ork / Purrr-data or PD and write the desired function.
The 'chuleta' of the function.Calls will be found on the Gnrtv.Cells Syntax button.
In the next pictures you can see a small demo of how the blocks are built in situ, for example if we write an object with [Cell.kick] we give us the cell of the drum we have seen previously in this chapter.
See examples in the following catches.

Exemples de Codi en mode Live.Coding Generative BLOCKS

The screenshot displays the Gnrtv.Cells Live Coding environment, which is a Pure Data patch. The interface is divided into several sections:

- Top Bar:** Shows the current patch name as "0.GNRTV.CELL" and the active mode as "AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE".
- Left Panel (Syntax Menu):** A vertical list of functions categorized into:
 - Generative:** gnrtv.blur, gnrtv.gravity, gnrtv.loop, gnrtv.loop3d, gnrtv.seq8, gnrtv.seq16
 - operators:** 0tol, sum, diff, mult, div, max, min, smooth
 - Sequencers:** seq16A, patterns64
 - cycles:** 2x, 3x, 4x, 5x, 6x, 7x, 8x, 9x, 12x, 16x, 24x, 32x, 48x, 64x, 24x
 - Flow:** catch, distrib, distrib_delay
- Right Panel (Signal Processing):** A list of objects categorized into:
 - SIGNAL~:** audio core & clock, **core** (highlighted with a yellow bar and labeled "< required"), cell synths, cell.hihat, cell.kick, cell.cymbals, cell.snare, cell.sub, cell.drone, cell.bass, cell.riff, cell.arpegg, cell.bounce, cell.chiptune
 - audio racks (sends~):** rack0, rack1, rack2, rack3, rack4, rack5, rack6, rackgnrtv
 - cell synths fx:** cell.grains
 - signal loopers:** looper, looper.mic
 - tiny synths:** tiny1, tiny2, tiny3, tiny4, tiny5
- Usage Window (Bottom Left):** A window titled "usage - /home/oh/CODE/Pd-/NuEnergyCELLS.LAST/GNRTV" providing instructions on how to use the cells. It explains that functions are 'encapsulated' as 'obj' and must be called within a new object. It also mentions the need to set up the 'core' object and manage audio racks.

```
usage - /home/oh/CODE/Pd-/NuEnergyCELLS.LAST/GNRTV
File Edit View Put Media Windows Help

syntax
gnrtv
CELLS

usage
First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object(me

To set up CELLS you'll need :
> the core > put object (menu put) and wri
> then you can call any of the elements of

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the nummber of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge
```
- Patch Area (Right):** The main workspace where the patch is built. It shows a single object named "cell.kick" which is highlighted with an orange box.

0.GNRTV.CELL

File Edit View Put Media Windows Help

usage

usage

First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object (me

GNRTV
CELLS

usage

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the nummber of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge

GNRTV.CELLS.syntax

Generative

gnrtv.blur
gnrtv.gravity
gnrtv.loop
gnrtv.loop3d
gnrtv.seq8
gnrtv.seq16

SIGNAL-

audio core & clock

core < required

operators

Otol
sum
diff
mult
div
max
min
smooth

Sequencers

seq16A
patterns64

cycles

2x
3x
4x
5x
6x
7x
8x
9x
12x
16x
24x
32x
48x
64x
24x

Flow

catch
distrib
distrib relay

cell synths

cell.hihat
cell.kick
cell.cymbals
cell.snare
cell.sub
cell.drone
cell.bass
cell.riff
cell.arpegg
cell.bounce
cell.chiptune

audio racks (sends-)

rack0
rack1
rack2
rack3
rack4
rack5
rack6
rackgnrtv

cell synths fx

cell.grains

signal loopers

looper
looper.mic

tiny synths

tiny1
tiny2
tiny3
tiny4
tiny5

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

cell.synth

vol
-speed+
5tons
octave
decay
voids
48. 0
k!ck

out

on-off~

Lo..H
Grains~
FX~
L-R data~

0.GNRTV.CELL

File Edit View Put Media Windows Help

usage

usage

First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object (me

GNRTV
CELLS

usage

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the nummber of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge

GNRTV.CELLS.syntax

Generative

gnrtv.blur
gnrtv.gravity
gnrtv.loop
gnrtv.loop3d
gnrtv.seq8
gnrtv.seq16

SIGNAL-

audio core & clock

core < required

operators

Otol
sum
diff
mult
div
max
min
smooth

Sequencers

seq16A
patterns64

cycles

2x
3x
4x
5x
6x
7x
8x
9x
12x
16x
24x
32x
48x
64x
24x

Flow

catch
distrib
distrib relay

cell synths

cell.hihat
cell.kick
cell.cymbals
cell.snare
cell.sub
cell.drone
cell.bass
cell.riff
cell.arpegg
cell.bounce
cell.chiptune

audio racks (sends-)

rack0
rack1
rack2
rack3
rack4
rack5
rack6
rackgnrtv

cell synths fx

cell.grains

signal loopers

looper
looper.mic

tiny synths

tiny1
tiny2
tiny3
tiny4
tiny5

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

cell.synth

vol
-speed+
5tons
octave
decay
voids
48. 0
k!ck

out

on-off~

Lo..H
Grains~
FX~
L-R data~

core

0.GNRTV.CELL

File Edit View Put Media Windows Help

usage

usage

First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object (me

usage

To set up CELLS you'll need :
> the core > put object (menu put) and wri
> then you can call any of the elements of

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the nummber of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge

GNRTV.CELLS.syntax

Generative

gnrtv.blur
gnrtv.gravity
gnrtv.loop
gnrtv.loop3d
gnrtv.seq8
gnrtv.seq16

SIGNAL~

audio core & clock

core < required

operators

0tol
sum
diff
mult
div
max
min
smooth

Sequencers

seq16A
patterns64

cycles

2x
3x
4x
5x
6x
7x
8x
9x
12x
16x
24x
32x
48x
64x
24x

Flow

catch
distrib
distrib.relay

cell synths

cell.hihat
cell.kick
cell.cymbals
cell.snare
cell.sub
cell.drone
cell.bass
cell.riff
cell.arpegg
cell.bounce
cell.chiptune

audio racks (sends~)

rack0
rack1
rack2
rack3
rack4
rack5
rack6
rackgnrtv

cell synths fx

cell.grains

signal loopers

looper
looper.mic

tiny synths

tiny1
tiny2
tiny3
tiny4
tiny5

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

-speed+
range
gravity

cell.synth

vol out
-speed+
5tons
octave
decay
voids
48. 222

on.off~

Lo..H
Grains~
FX~
L.R da~ X

clock bpm135 ms111 core FX Low.Pa.s ~mixer vol.D.ay reinje

on.off < click or Space

dac~

rec~ sta

0.GNRTV.CELL

File Edit View Put Media Windows Help

usage

usage

First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object (me

usage

To set up CELLS you'll need :
> the core > put object (menu put) and wri
> then you can call any of the elements of

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the number of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge

GNRTV.CELLS.syntax

Generative

gnrtv.blur
gnrtv.gravity
gnrtv.loop
gnrtv.loop3d
gnrtv.seq8
gnrtv.seq16

SIGNAL~

audio core & clock

core < required

operators

0tol
sum
diff
mult
div
max
min
smooth

Sequencers

seq16A
patterns64

cycles

2x
3x
4x
5x
6x
7x
8x
9x
12x
16x
24x
32x
48x
64x
24x

Flow

catch
distrib
distrib.relay

cell synths

cell.hihat
cell.kick
cell.cymbals
cell.snare
cell.sub
cell.drone
cell.bass
cell.riff
cell.arpegg
cell.bounce
cell.chiptune

audio racks (sends~)

rack0
rack1
rack2
rack3
rack4
rack5
rack6
rackgnrtv

cell synths fx

cell.grains

signal loopers

looper
looper.mic

tiny synths

tiny1
tiny2
tiny3
tiny4
tiny5

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

-speed+
range
gravity

cell.synth

vol out
-speed+
5tons
octave
decay
voids
48. 222

on.off~

Lo..H
Grains~
FX~
L.R da~ X

clock bpm135 ms111 core FX Low.Pa.s ~mixer vol.D.ay reinje

on.off < click or Space

dac~

rec~ sta

0.GNRTV.CELL

File Edit View Put Media Windows Help

usage - /home/oh/CODE/Pd-/NuEnergyCELLS.LAST/GNRTV

File Edit View Put Media Windows Help

usage

First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object(me

To set up CELLS you'll need :
> the core > put object (menu put) and wri
> then you can call any of the elements of

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the nummber of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge

Generative

gnrtv.blur
gnrtv.gravity
gnrtv.loop
gnrtv.loop3d
gnrtv.seq8
gnrtv.seq16

SIGNAL~

audio core & clock

core < required

operators

0tol
sum
diff
mult
div
max
min
smooth

Sequencers

seq16A
patterns64

cycles

2x
3x
4x
5x
6x
7x
8x
9x
12x
16x
24x
32x
48x
64x
24x

Flow

catch
distrib
distrib.relay

cell synths

cell.hihat
cell.kick
cell.cymbals
cell.snare
cell.sub
cell.drone
cell.bass
cell.riff
cell.arpegg
cell.bounce
cell.chiptune

audio racks (sends~)

rack0
rack1
rack2
rack3
rack4
rack5
rack6
rackgnrtv

cell synths fx

cell.grains

signal loopers

looper
looper.mic

tiny synths

tiny1
tiny2
tiny3
tiny4
tiny5

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

-speed+
range
gravity

diff

vdL out

-speed+
5tons

dtave

decay

voids

48. 111

k!ck

cell.synth

on-off~

Lo..Hl
Grains~
FX~
L+R daL~

clock

bpm135 ms111

core

FX

Low+Pa+s

~mixer

vol.D:lay

reinje

on-off < click or Space

dac~

rec~ sta

0.GNRTV.CELL

File Edit View Put Media Windows Help

usage - /home/oh/CODE/Pd-/NuEnergyCELLS.LAST/GNRTV

File Edit View Put Media Windows Help

usage

First check all the functions included in
To call them here are 'encapsuled' as 'obj'
therefore if you want to call for example
you have to wite it within a new object(me

To set up CELLS you'll need :
> the core > put object (menu put) and wri
> then you can call any of the elements of

Remember that any Signal object (cells / l
needs an audio rack in order to manage aud
In this sense you can call any of the audi
put object (menu put) and write rack0 or r
(the nummber of the rack features is indic
from the most simple rack0 to the most com
....
Add automation and generativity with gnrtv
Enjoy your live Coding instruments with Ge

Generative

gnrtv.blur
gnrtv.gravity
gnrtv.loop
gnrtv.loop3d
gnrtv.seq8
gnrtv.seq16

SIGNAL~

audio core & clock

core < required

operators

0tol
sum
diff
mult
div
max
min
smooth

Sequencers

seq16A
patterns64

cycles

2x
3x
4x
5x
6x
7x
8x
9x
12x
16x
24x
32x
48x
64x
24x

Flow

catch
distrib
distrib.relay

cell synths

cell.hihat
cell.kick
cell.cymbals
cell.snare
cell.sub
cell.drone
cell.bass
cell.riff
cell.arpegg
cell.bounce
cell.chiptune

audio racks (sends~)

rack0
rack1
rack2
rack3
rack4
rack5
rack6
rackgnrtv

cell synths fx

cell.grains

signal loopers

looper
looper.mic

tiny synths

tiny1
tiny2
tiny3
tiny4
tiny5

AST/GNRTV.CELLS/GNRTV.CELLS_LIVECODING.MODE

-speed+
range
gravity

diff

vdL out

-speed+
5tons

dtave

decay

voids

48. 222

k!ck

cell.synth

on-off~

Lo..Hl
Grains~
FX~
L+R daL~

clock

bpm135 ms111

core

FX

Low+Pa+s

~mixer

vol.D:lay

reinje

on-off < click or Space

dac~

rec~ sta

Info & Repo <https://github.com/xamanza/GNRTV.CELLS>

Package https://github.com/xamanza/GNRTV.CELLS/raw/main/GNRTV.CELLS_LIVECODING.EDITION.zip

N • JOY!!!