Macrobat for ClyphX v2.0.2

OVERVIEW

Macrobat adds additional functionality to Racks (any type of Rack that has Macros on it) in Live while maintaining the default functionality of the Rack. Racks that access this additional functional are referred to as Macrobat Racks.

To access the additional functionality, the Rack's name needs to start with a particular word/phrase and, in most cases, the names of the Rack's Macros need to start with particular words/phrases. Rack/Macro names shouldn't include special characters (like umlauts). Also, naming is not case-sensitive except where noted.

After you've changed the name of a Rack or Macro, you will need to reselect the Track the Rack is on in order for your changes to take effect. You can reselect by selecting another Track and then reselecting the Track the Rack is on.

Finally, except where noted, Macrobat Racks can exist on any type of Track and can be nested inside of other Racks. However, in order to be able to work with nested Macrobat Racks, you need to use Live 8.2.2 or later.

NOTE: *If the Macro or On/Off switch of a Macrobat Rack is controlled by another Macro, the Macro or On/Off switch will not be able to access Macrobat functionality.*

RACK TYPES

Macrobat provides 9 Rack types:

- Track – This type can control mixer parameters (Volume, Pan and Sends) of the Track it is on.

- Receiver – This type can control the Macros of other Racks in your Set.

- DR Rack – This type can control the parameters of an instance of Simpler/Sampler inside of a Drum Rack on the Track it is on.

- DR Multi Rack – This type can control the parameters of multiple instances of Simpler/Sampler inside of a Drum Rack on the Track it is on.

- Chain Mix Rack – This type can control the mixer parameters (Volume, Pan and Mute) of the Chains of a Rack on the Track it is on.

- Learn Rack – This type allows you to use a Macro to control the last selected parameter in Live.

- RnR Racks – This type can Reset or Randomize parameters of the Devices on the Track it is on.

- Sidechain Rack – This type allows you to connect Macros to the output level of the Track it is on

- MIDI Rack – This type allows you to send MIDI messages (Control Changes, Program Changes and SysEx).

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nK TRACK

The Track Rack can control mixer parameters (Volume, Pan and Sends) of the Track it is on. You can have multiple Track Racks on a Track, but only one Macro should control a parameter. So you shouldn't have two Macros that both control a Track's Volume for example.

RACK NAME:
The Rack's name needs to start with *NK TRACK*.

MACRO NAMES:
Macro Names can be the names of Track mixer parameters to control. *VOL* (Track Volume), *PAN* (Track Pan) or *SEND x* (Track Send where x is the Send letter).

EXTRA FUNCTIONS:
The parameters that you've assigned to the Macros can be reset to their default value by toggling the Track Rack's On/Off switch (turn if off and then on again).

NOTE: *This Rack type has no effect on Tracks with no Audio Output or on the sub-tracks of a Drum or Instrument Track.*

nK RECEIVER

The Macros of a Receiver Rack (referred to as Receivers) can control the Macros of other Racks (referred to as Senders) in your Set. Each Receiver should only have one Sender and vice versa.

In order to accomplish this, the name of the Receiver and Sender both need to contain a unique Identifier. The format of the Identifier is *(*identifier*).* For example: *(*ID*)* or *(*1*)*

RACK NAME:
The Rack's name needs to start with *NK RECEIVER.*

MACRO NAMES:
Macro Names can include Identifiers.

NOTE: *The names of Senders and Receivers cannot contain any other parentheses aside from the ones used in the Identifier.*

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nK DR **(requires Live 8.2.2 or later)**

The DR Rack can control the parameters of an instance of Simpler/Sampler (that is not nested within another Rack) inside of a Drum Rack on the Track it is on. The DR Rack will operate on the first Drum Rack (that is not nested within another Rack) found on the Track.

You can have multiple DR Racks on a Track, but only one Macro should control a parameter. So you shouldn't have two Macros that both control a Simpler's Volume for example.

RACK NAME:
The Rack's name needs to start with *NK DR.* After this name, you will specify the name or number of the Simpler/Sampler instance to control.

To specify a name, you can see the names of each Simpler/Sampler instance by looking at the Drum Rack's pads. You should enter the name exactly as it appears (the name **is** case-sensitive). For example: *NK DR My Drum*

If more than one instance of Simpler/Sampler in the Drum Rack has the same name, you will only be able to control the last of these. In this case, you should specify the Simpler/Sampler number instead.

To specify a number, look at the Chain List of the Drum Rack. The first chain listed is 1, second is 2, etc. For example: *NK DR 6*

MACRO NAMES:
Macro names can be the name of a Simpler/Sampler parameter to control.

EXTRA FUNCTIONS:
The parameters that you've assigned to the Macros can be reset to their default value by toggling the DR Rack's On/Off switch (turn if off and then on again).

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nK DR MULTI **(requires Live 8.2.2 or later)**

The DR Multi Rack is basically identical to the DR Rack, but in reverse. It can control the same parameter of multiple instances of Simpler/Sampler inside of a Drum Rack on the Track it is on.

RACK NAME:
Rack Name needs to start with *NK DR MULTI***.** After this name, you will specify the name of the Simpler/Sampler parameter to control.

MACRO NAMES:
Macro names can be the name or number of the Simpler/Sampler instance to control.

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nK CHAIN MIX **(requires Live 8.2.2 or later)**

The Chain Mix Rack can control the mixer parameters (Volume, Pan and Mute) of a Rack on the Track it is on. The Chain Mix Rack will operate on the first Rack (that is not nested within another Rack and is not a Midi Effects Rack) found on the Track.

You can have multiple Chain Mix Racks on a Track, but only one Macro should control a parameter. So you shouldn't have two Macros that both control a Chain's Volume for example.

RACK NAME:
The Rack's name needs to start with *NK CHAIN MIX*. After this name, you will specify the Chain mixer parameter to control. *VOL* (Chain Volume), *PAN* (Chain Pan) or *MUTE* (Chain Mute).

MACRO NAMES:
Macro Names can be the number of the Chain to operate on. To find the number of a Chain, look at the Chain List of the Rack. The first chain listed is 1, second is 2, etc. For example: *NK CHAIN MIX 6*

EXTRA FUNCTIONS:
The parameters that you've assigned to the Macros can be reset to their default value by toggling the Chain Mix Rack's On/Off switch (turn if off and then on again).

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nK LEARN **(requires Live 8.2.2 or later)**

The Learn Rack allows you to use the first Macro of the Rack to control the last parameter that was selected in Live. You can only have one Learn Rack in your Set and it can only exist on the Master Track.

You can select a parameter to control by clicking on it with your mouse.

RACK NAME:
The Rack's name needs to start with *NK LEARN*.

MACRO NAMES:
Doesn't apply.

EXTRA FUNCTIONS:
The parameter that is assigned to the first Macro can be reset to its default value by toggling the Learn Rack's On/Off switch (turn if off and then on again).

NOTE: *Although all parameters in Live can be clicked on, not all of them are classified as parameters that can be selected and so cannot be controlled with the Learn Rack. As an example, none of the parameters of a Clip can be controlled. Also, each time you select a new parameter, the first Macro on the Learn Rack will update, which will create an undo point (or multiple undo points).*

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nK RNR

RnR Racks can Reset or Randomize parameters of the Devices on the Track they are on. RnR Racks don't make use of Macros, they strictly use the Rack's On/Off Switch. To access the function of these Racks, just change the state of the On/Off switch (if it's on, turn if off or vice versa).

RnR Racks are position-sensitive. This means that they way the operate depends on where they are located. If the RnR Rack is a top level Rack (not nested inside of another Rack), the RnR Rack will apply to other Devices on the Track. If the RnR Rack is nested inside of another Rack, the RnR Rack will apply to other Devices on the same Device Chain.

RnR Racks will not affect each other or other Macrobat Racks (except for the MIDI Rack), only other Devices on the Track/Device Chain.

RACK NAME:
There are 4 types of RnR Racks, the names of which need to start with the following list of words/phrases:

NK RST – Reset the parameters of the Device to the right of this Rack.

NK RST ALL – Reset the parameters of all Devices on the Track/Device Chain.

NK RND – Randomize the parameters of the Device to the right of this Rack.

NK RND All – Randomize the parameters of all Devices on the Track/Device Chain.

MACRO NAMES:
Doesn't apply.

NOTE: *Chain Selectors, on/off switches and multi-option controls (such as a filter type chooser) will not be reset/randomized.*

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nK SIDECHAIN

The Macros on the Sidechain Rack can be connected to the output level of the Track it is on.

RACK NAME:
The Rack's name needs to start with *NK SIDECHAIN*.

MACRO NAMES:
To connect a Macro to the output level of the Track, the Macro's name needs to start with *[SC]*

EXTRA FUNCTIONS:
You can turn the sidechaining on/off with the Rack's On/Off switch.

IMPORTANT NOTE: *Each movement of a Macro is considered an undoable action in Live. For that reason, when using a Sidechain Rack, you will not be able to reliably undo while the sidechaining is in effect.*

nK MIDI

The MIDI Rack allows you to send MIDI messages (Control Change, Program Change and SysEx) from the Macros.

RACK NAME:
The Rack's name needs to start with *NK MIDI*.

MACRO NAMES:
Macro names can start with the following list of words/phrases:

[CCx] – Control Change message where x is the Control Change number to send. This number should be in the range of 0 – 127.

[PC] – Program Change message.

The MIDI Rack can also send SysEx messages. In order to access this functionality, you'll first need to create a SysEx List composed of the SysEx messages you'd like to send. You'll do this in your UserConfig file.

To access the SysEx messages from Macros, you'll use the Identifiers you specified in your SysEx List for the Macro Names

EXTRA FUNCTIONS:
By default, the MIDI Rack will send out on MIDI Channel 1. You can override this by adding *[CHx]* to the end of the Rack's name where x is the MIDI Channel number. This number should be in the range of 1 – 16. For example: *NK MIDI [CH6]*

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nK MIDI RACK ROUTING OPTIONS

The MIDI data that the MIDI Rack sends can be used in a variety of ways via several routing options:

OPTION A – This is the only option useable with SysEx data. Data to external MIDI device. In order to accomplish this, select the external MIDI device as the Output of the ClyphX Control Surface.

The next two options require a loopback device such as MIDI Yoke or IAC.

OPTION B – This is the recommended option, but is not compatible with SysEx (see Note on next page). Data to loopback, re-routed back into Live as Track data. This option allows the MIDI data to be sent into MIDI Tracks

in Live. From there, the data can be rerouted via the MIDI Track's output routing and/or recorded.

In order to accomplish this, select the loopback device as the Output of the ClyphX Control Surface. Turn the Track switch on for the loopback device's input.

For any MIDI Tracks you wish to use this with, leave the Track's input set to 'All Ins' or choose the loopback device as the input. Leave the Track's input channel set to 'All Channels'. Arm the Track or set it's Monitor to 'In'.

OPTION C – Data to loopback, re-routed back into Live as Remote data. This option allows the MIDI data to be sent back into Live as Remote data (for MIDI mapping parameters). In order to accomplish this, select the loopback device as the Output of the ClyphX Control Surface. Turn the Remote switch on for the loopback device's input.

Live's Remote facilities do not support PCs or SysEx, so you should not set up a Macro to send a PC or SysEx when using Option C. You should use CCs only.

Also, in order to do the actual MIDI mapping, you will need a controller as you cannot turn the Macros with your mouse while in MIDI mapping mode. You can turn them with a controller though.

NOTE: *If you'd like to use SysEx and still maintain the flexibility that Option B provides, you can use an application such as Bome's MIDI Translator Pro to receive the SysEx from the loopback device and send it to your external MIDI device(s).*

USERCONFIG FILE

If you'd like to send SysEx data with the MIDI Rack, you'll need to create a SysEx List in the file named MacrobatUserConfig.py, which you'll find in the ClyphX folder.

You can modify this file with any text editor (like Notepad or TextEdit). The file itself includes instructions on how to modify it.

NOTE: *You may see two files named MacrobatUserConfig in the ClyphX folder. One of them is a *.pyc file (you cannot modify this) and the other is a *.py file. You should modify the *.py file.*

SIMPLER/SAMPLER PARAMETER NAMES

If following charts show the names of Simpler and Sampler parameters for use with the DR Rack and DR Multi Rack.

SIMPLER PARAMETER NAMES

Ve Attack	Fe Attack	L Attack	Pe Attack
Ve Decay	Fe Decay	L Rate	Pe Decay
Ve Sustain	Fe Sustain	L R < Key	Pe Sustain
Ve Release	Fe Release	L Wave	Pe Release
S Start	Filter Freq	Vol < LFO	Glide Time
S Loop Length	Filter Res	Filt < LFO	Spread
S Length	Filt < Vel	Pitch < LFO	Pan
S Loop Fade	Fe < Env	Pan < LFO	Volume

SAMPLER PARAMETER NAMES

Volume	Filter Type	Fe Attack	L 1 Wave
Ve Attack	Filter Morph	Fe Decay	L 1 Sync
Ve Decay	Filter Freq	Fe Sustain	L 1 Sync Rate
Ve Sustain	Filter Res	Fe Release	L 1 Rate
Ve Release	Filt < Vel	Fe End	Vol < LFO
Vol < Vel	Filt < Key	Fe Mode	Filt < LFO
Ve R < Vel	Fe < Env	Fe Loop	Pan < LFO
Time	Shaper Amt	Fe Retrig	Pitch < LFO
L 2 Wave	L 3 Wave	O Mode	Transpose
L 2 Sync	L 3 Sync	O Volume	Spread
L 2 Sync Rate	L 3 Sync Rate	O Coarse	Pe < Env
L 2 Rate	L 3 Rate	O Fine	Pe Attack
L 2 R < Key	L 3 R < Key	Oe Attack	Pe Peak
L 2 St Mode	L 3 St Mode	Oe Decay	Pe Decay
L 2 Spin	L 3 Spin	Oe Sustain	Pe Sustain
L 2 Phase	L 3 Phase	Oe Release	Pe Release