

LUXONIX LFX-1310



Operation Manual

ENGLISH

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0. Install Guide

1) Files

LFX-1310 is given with the native installation.

| Filename | Remarks |
|-------------------------------|------------------------------|
| LUXONIX_LFX1310_x_x_x_win.exe | version x.x.x for PC Windows |
| LUXONIX_LFX1310_x_x_x_mac.pkg | version x.x.x for Mac OS X |

Below files can be created by using LFX-1310. You can save and restore these files manually. To initialize the setting, just delete these files and launch LFX-1310.

| Filename | Remarks |
|----------|-----------------------------|
| *.con | for Configuration |
| *.ma | for MIDI Assignment Setting |

2) System Requirements

Minimum Requirements

PC : Pentium III compatible 700MHz CPU or higher
16MB RAM or higher
Microsoft Windows 98/ME/2000/XP
VST 2.0 compatible host application

MAC : G3 700MHz CPU or higher
16MB RAM or higher
Mac OS X 10.3 or higher
VST 2.0 compatible host application

Recommended Requirements

PC : Pentium 4 compatible 1.6GHz CPU or Higher
64MB RAM or Higher
Microsoft Windows 2000/XP
VST 2.3 compatible host application

MAC : G4 1.2GHz CPU or Higher
64MB RAM or Higher
Mac OS X 10.3 or higher
VST 2.3 compatible host application

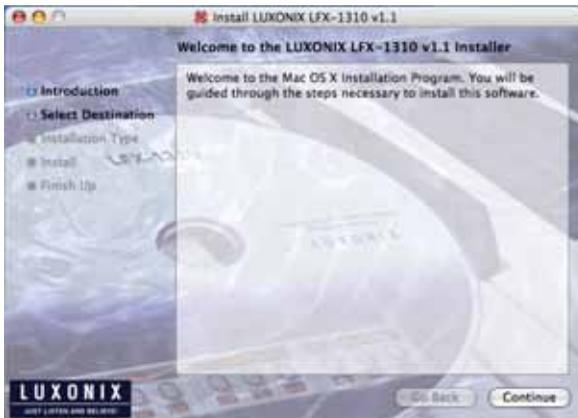
3) Installation

PC:



- Double-click **LUXONIX_LFX1310_x_x_x_wln.exe** file to launch the installer.

MAC:



- Double-click **LUXONIX_LFX1310_x_x_x_mac.dmg** to mount, then launch **LUXONIX_LFX1310_x_x_x_mac.pkg** in the mounted drive.

4) Support Information

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Korea, Republic of.

1. Introduction

1) Special Features

LFX-1310 is a virtual multi-effect processor, channel strip version of Effecting Module of Ravity(S)/(R).

LFX-1310 will be your best tool with which you can effectively express the musical feeling you have.

Fully Optimized Effecting Module (FOEM™)

The Effecting Module of LFX-1310, FOEM™, with simple parameters and optimized processing technologies, will let you enjoy handy and solid sound processing.

Total of 24 high-quality effector algorithms. 3 of them can be simultaneously used serially in a instance.

Hyper Layered MIDI learn System (HLMS™)

HLMS enables you to control the MIDI signal through the MIDI controller.

WYSIWYC ASSIGN-LAYER - What You See Is What You Control. You can control buttons or knobs as you see them on the screen; Individual ASSIGN-LAYER - You can make it possible to assign to all controls independently; Performance ASSIGN-LAYER - You can make various sounds through different MIDI assigns for each of your presets.

2) Specifications

128 factory sound presets
3 serial-routed slots
24 types of high-quality effector algorithm
32-bit sound processing
mono or stereo input / stereo output

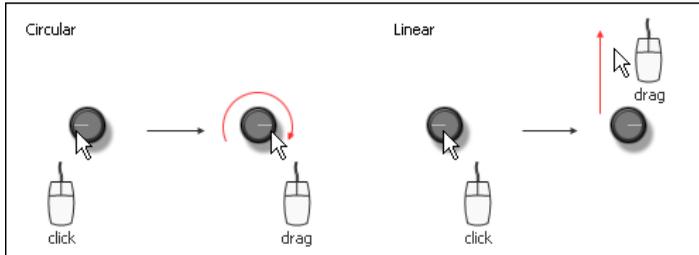
2. Functions

1) Basic Operations



1. **Peak Level Meter** : Indicates the peak level of input and output sound.
2. **EFFECT LCD** : Displays the name of the preset and detailed values of parameters of the currently selected Effector Slot. To edit the name of preset, simply click it and modify.
3. **Effector On/off Switch** : The Effector On/off switch can be used to activate or bypass the Effector Slot.
4. **Effector Name** : Displays the name of effector algorithm. To change the algorithm, click the name.
5. **Load/Save Program** : Loads or saves program preset within 128 preset slots in the current bank. You can use 'l' and 's' key.
6. **Previous/Next Program** : Navigates program presets. Click the buttons or press the arrow keys on your computer keyboard.
7. **Wet Only Switch** : Toggles the wet sound only mode for send-return routing. When it's on, the dry input sound is muted.
8. **Function Menu** : If you click the 'LFX-1310', the Function Menu will appear.
 - **Panic** : All Sound off.
 - **Show Manual** : Shows PDF Manual. (This document)
 - **Override Tempo** : You can force to set the tempo instead of sync with the host application.
 - **Program...** : Imports or exports program bank or patch file.
 - **MIDI Assign...** : Imports or exports MIDI Assignment Setting file, global functions, and an option for GUI.

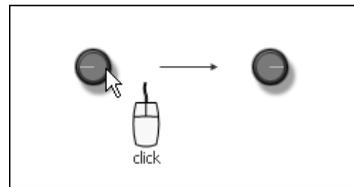
2) Knob Control



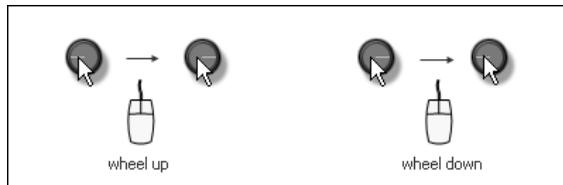
1. Both circular and linear types of control are possible with your mouse. The type of controlling knobs is set by the host application basically. If the host supports 'Relative Circular' type, you can switch it by the Alt/Option key pressed. **Some host applications do NOT support this function.*

- **Circular** : You can circularly fine-tune the knob by dragging your mouse to far away from the knob.
- **Linear** : You can linearly fine-tune the knob by dragging your mouse with the Shift key pressed.

2. In the circular mode, you can set the value of the knob by just clicking the value you want. In the linear mode, click the knob first and drag your mouse to adjust the value.



3. You can also use your mouse wheel to adjust the value. Roll the wheel with the mouse pointer over the knob. If



you want to fine-tune the value, roll the wheel with the Shift key pressed. **Some host applications do NOT support this function.*

4. To reset the value of the knob, click the knob with the Ctrl/Command key pressed. **Some host applications do NOT support this function.*

3) Automation

LFX-1310 can be automated using the automation functionality from your host application. Refer to your host application's manual to learn more about this. **Some host applications do NOT support this function.*

4) MIDI Assign : HLMS™

Developed independently by LUXONIX, HLMS™ is a brand-new MIDI control system which enables you to control the MIDI CC# through the MIDI controller. All parameters on LFX-1310 are controlled not only by MIDI CC# but also by extended signals like on/off velocity, pitch bend, aftertouch. **Some host applications do NOT support this function.*

You can use the 3 types of MIDI ASSIGN-LAYER. (LFX-1310 doesn't have Individual ASSIGN-LAYER)

| | WYSIWYC | Individual | Performance |
|-------------------|---------|------------|-------------|
| Individual assign | X | X | O |
| Only this preset | X | O | O |

1. WYSIWYC : What You See Is What You Control. This ASSIGN-LAYER can be effectively used to control the LFX-1310 through the hardware MIDI controller.

- Same CC# is assigned to knob or button on the every LAYER(PAD). But, you can only control the parameter which you can see now on the screen.
- When you're using many LFX-1310s simultaneously, same CC# is assigned to all LFX-1310s.

Tip! Controller with many knobs and faders : You can assign to all parameters through the WYSIWYC ASSIGN-LAYER.

Tip! Controller with about 4 knobs and faders : You can assign to QEK in the MAIN RACK through the WYSIWYC ASSIGN-LAYER.

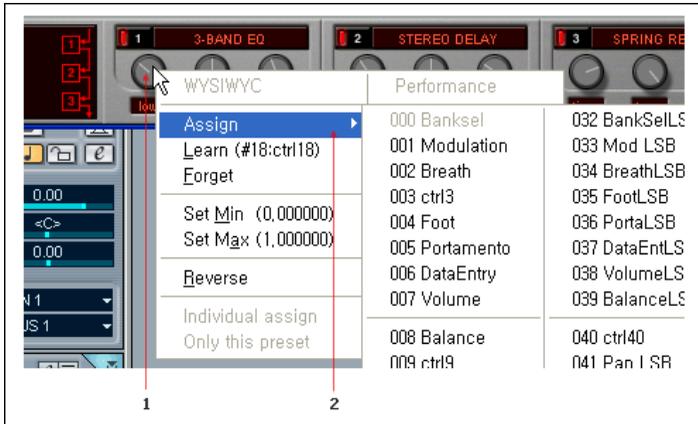
2. Individual : Makes it possible to independently assign to all controls.

- All parameters can be controlled independently, regardless of whether you can see them on the screen or not.
- When you're using many LFX-1310s simultaneously, same CC# is assigned to all LFX-1310s.

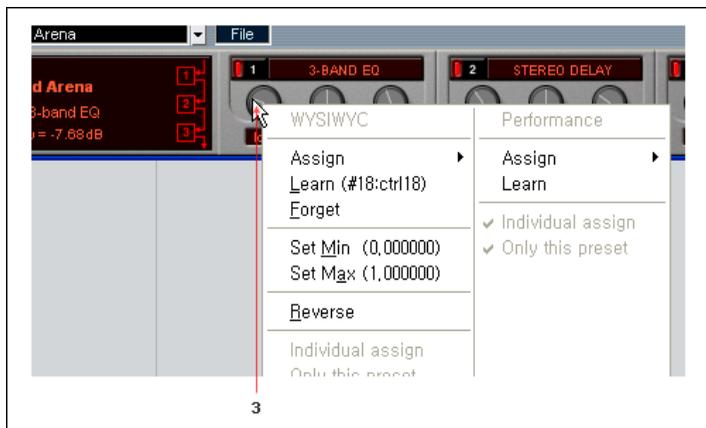
Tip! Controller with about 12 knobs and faders : You can assign to OEK in the MAIN RACK through the Individual ASSIGN-LAYER.

3. Performance : This MIDI ASSIGN-LAYER can be very useful for playing the expressive preset sounds.

Direct Assign



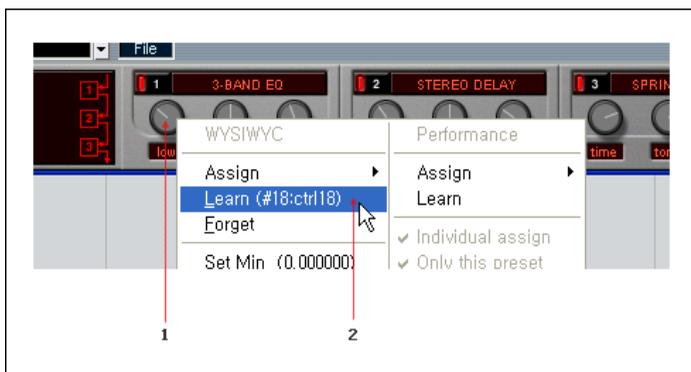
1. To control the parameter through the MIDI CC#, click the right button of your mouse on the knob or button and open the MIDI Assign menu.
2. Select a MIDI CC# from the Assign menu of the desired MIDI ASSIGN-LAYER.



3. To check the MIDI CC#, click the right button of your mouse again. (some items can disappear)

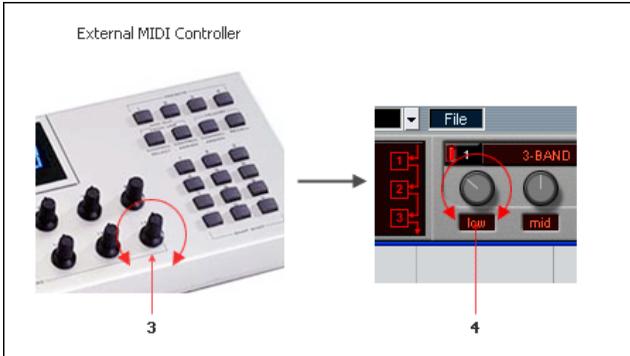
- **Forget** : Cancels the MIDI Assign.
- **Set Min** : Sets minimum value controllable by MIDI signal.
- **Set Max** : Sets maximum value controllable by MIDI signal.
- **Reverse** : Reverses the increase and decrease of the MIDI signal.

Learn Assign



1. Click the right button of your mouse on the knob or button and open the MIDI Assign menu.

2. If you select the Learn menu in one of these MIDI ASSIGN-LAYERS, LFX-1310 will be in the stand-by status to accept MIDI signal. If you select the Cancel menu, LFX-1310 will cancel the stand-by status. You can set multiple parameters to stand-by status, and make them to be controlled by the same MIDI CC#.

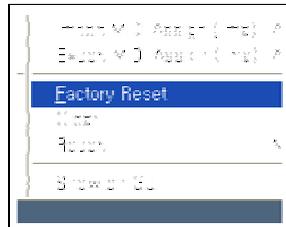


3. Tweak the knob or fader of your MIDI controller, so that LFX-1310 can learn the MIDI signal to assign.
4. The value of parameter will be effective as soon as you tweak the knob or fader.
5. Other functions work in the same way as in the Direct Assign.

Global Functions

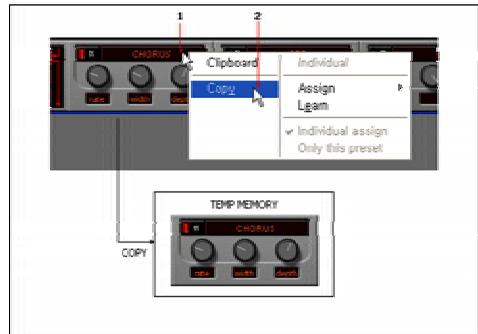
1. To reset or report the MIDI Assign setup, use the MIDI Assign Section on the Function Menu of LFX-1310.

- **Factory Reset** : Resets the MIDI Assign setup to factory default. (It will not apply to the Performance ASSIGN-LAYER)
- **Clear** : Clears all the MIDI Assign setup.
- **Report** : Makes a TXT file about the current MIDI Assign setup and displays it.
- **Show/Hide on GUI** : Toggles whether MIDI Assign setup shows on GUI or not.



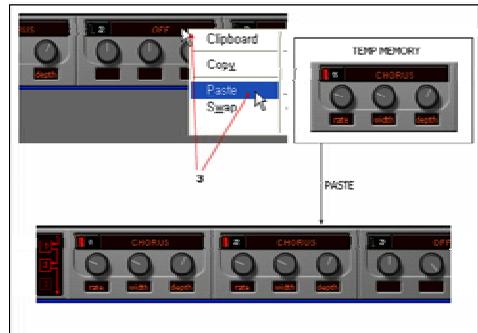
5) Clipboard Function

1. To open the Clipboard menu, click the right button of your mouse on one Effector Slot.

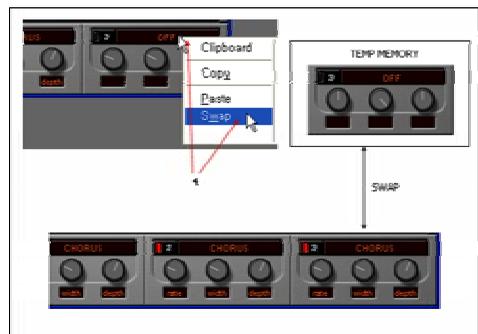


2. If you select the Copy, the setup of the Effector Slot is copied to the temporary memory.

3. If you want to use the setup the Clipboard on another Effector Slot, just right click on it and choose the Paste menu.



4. If you select the Swap on the Clipboard menu, the setup of the current Effector Slot and the one on the Clipboard are swapped.



5. The Clipboard is shared by multiple number of LFX-1310s on your system. So setups of different instances of LFX-1310 can be swapped, or copied and pasted to each other.

6) Tables of Hot-Keys

**Some host applications do NOT support using of your computer keyboard. Or when some options, such as 'Always On Top', are turned on, the computer keyboard may be unusable. Refer to the manual of your host application.*

| Key | Function |
|--------------------|---------------------------------|
| F1 | Show Manual |
| 'L'/'S' | Load/Save Preset |
| Up/Down/Left/Right | Navigate Preset |
| 'Z' | Panic (All Sound Off) |
| 'M' | Report MIDI Assign |
| 'I' | Show/Hide MIDI Assign on GUI |
| F9/F10 | Import/Export Bank (.fxb) |
| ©-F9/F10 | Import/Export Program (.fxp) |
| Ⓐ-F9/F10 | Import/Export MIDI Assign (.ma) |

| | PC | Macintosh |
|---|-------|------------|
| Ⓢ | Shift | Shift |
| Ⓒ | Ctrl | Command |
| Ⓐ | Alt | Alt/Option |

3. Types and Parameter

S-FILTER 12

A filter with parallel connected -12dB/oct type LPF and HPF.

| | |
|-----------|---|
| Cutoff | 20.0 ~ 20000.0 Hz |
| | Sets the cutoff frequency of the filter. |
| Resonance | 0.0 ~ 100.0 % |
| | Sets the resonance of filter. |
| Mix | L 100 ~ H 100 % |
| | Sets the volume balance between low passed and high passed sound. |

S-FILTER 24

A filter with parallel connected -24dB/oct type LPF and HPF.

| | |
|-----------|---|
| Cutoff | 20.0 ~ 20000.0 Hz |
| | Sets the cutoff frequency of the filter. |
| Resonance | 0.0 ~ 100.0 % |
| | Sets the resonance of the filter. |
| Mix | L 100 ~ H 100 % |
| | Sets the volume balance between low passed and high passed sound. |

3-BAND EQ

3-band equalizer modeling of channel EQs of famous analog mixers.

| | |
|------|--|
| Low | -12.04 ~ +12.04 dB |
| | Cuts or boosts the band of the low frequency under 80 Hz. |
| Mid | -12.04 ~ +12.04 dB |
| | Cuts or boosts the band of the middle frequency around 2.5KHz. |
| High | -12.04 ~ +12.04 dB |
| | Cuts or boosts the band of the high frequency over 12KHz. |

PEAK COMPRESSOR

Produces the compressed sound with the peak level detection.

| | |
|-----------|---------------------------------------|
| Threshold | -40.00 ~ 0.00 dB |
| | Sets the level of threshold. |
| Ratio | 1.0:1 ~ 20.0:1 |
| | Sets the ratio of compression. |
| Release | 10 ~ 5000 ms |
| | Sets the release time of compression. |

RMS COMPRESSOR

Produces the compressed sound with the RMS level detection.

| | |
|-----------|---------------------------------------|
| Threshold | -40.00 ~ 0.00 dB |
| | Sets the level of threshold. |
| Ratio | 1.0:1 ~ 20.0:1 |
| | Sets the ratio of compression. |
| Release | 10 ~ 5000 ms |
| | Sets the release time of compression. |

OVERDRIVE

Simulates the up-to-date overdriven effector.

| | |
|-------|---|
| Drive | 100 ~ 400 % |
| | Sets the intensity of overdriven sound. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of sound. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of the final output. |

DISTORTION

Simulates the powerful distortion effector.

| | |
|-------|--|
| Drive | 100 ~ 400 % |
| | Sets the intensity of distorted sound. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of sound. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of the final output. |

AMP DISTORTION

Simulates the distortion feature of the guitar amplifier.

| | |
|-------|--|
| Drive | 100 ~ 800 % |
| | Sets the intensity of distorted sound. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of sound. |
| Level | -∞ ~ 0.00 dB |
| | Sets the final level of output. |

CRUSHER

Modulates the sample rate and the bit depth of sound.

| | |
|-------------|-------------------------------|
| Sample rate | 1 ~ 192000 Hz |
| | Sets the sample rate. |
| Bits | 1.0 ~ 32.0 bits |
| | Sets the bit depth. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of sound. |

LP NOISE

Realizes the noise effect of the vintage LP turntable.

| | |
|---------|--------------------------------------|
| Crackle | 0.0 ~ 100.0 % |
| | Sets the level of the crackle noise. |
| Dirty | 0.0 ~ 100.0 % |
| | Sets the level of the white noise. |
| Year | 1950 ~ 2000 |
| | Sets the brightness of noise sound. |

STEREO IMAGE

Makes the stereo sound and sets the width of the stereo.

| | |
|---------|---|
| Time | R 10.0 ~ L 10.0 ms |
| | Sets the time lag between left and right channel. |
| Balance | L 100.0 % ~ R 100.0 % |
| | Sets the volume balance between left and right channel. |
| Width | 0.0 ~ 200.0 % |
| | Sets the width of the stereo. |

AUTO WAH

Offers the wah-wah effect using the LFO.

| | |
|--------|---|
| Rate | 8/1 ~ 1/32T note |
| | Sets the speed of the LFO. |
| Width | 0.0 ~ 100.0 % |
| | Sets the frequency width of modulation. |
| Center | 46.7 ~ 3937.9 Hz |
| | Sets the center frequency. |

Tip! To use the pedal wah, set the width as 0.0% on AUTO WAH and tweak the knob of Center real-time.

CHORUS

Realizes the chorus effect.

| | |
|-------|---------------------------------------|
| Rate | 0.10 ~ 20.00 Hz |
| | Sets the speed of the modulation. |
| Width | 0.0 ~ 100.0 % |
| | Sets the intensity of the modulation. |
| Depth | 0.0 ~ 100.0 % |
| | Sets the depth of the modulation. |

FLANGER

Realizes the flange effect of the tape reel.

| | |
|----------|---------------------------------------|
| Rate | 8/1 ~ 1/32T note |
| | Sets the speed of the modulation. |
| Width | 0.0 ~ 100.0% |
| | Sets the intensity of the modulation. |
| Feedback | 0.0 ~ 100.0 % |
| | Sets the level of feedback. |

PHASER

Realizes the phaser effect using the phase difference.

| | |
|----------|---------------------------------------|
| Rate | 8/1 ~ 1/32T note |
| | Sets the speed of the modulation. |
| Width | 0.0% ~ 100.0% |
| | Sets the intensity of the modulation. |
| Feedback | 0.0% ~ 100.0% |
| | Sets the level of feedback. |

TREMOLO

Changes the volume using the LFO.

| | |
|-------|--------------------------------------|
| Wave | Sine / Triangle / Sawtooth / Square |
| | Offers the LFO waveforms. |
| Rate | 8/1 ~ 1/32T note |
| | Sets the speed of the LFO. |
| Depth | 0.0 ~ 100.0 % |
| | Sets the depth of the volume change. |

AUTO PAN

changes the pan using the LFO.

| | |
|-------|-------------------------------------|
| Wave | Sine / Triangle / Sawtooth / Square |
| | Offers the LFO waveforms. |
| Rate | 8/1 ~ 1/32T note |
| | Set the speed of the LFO. |
| Depth | 0.0 ~ 100.0 % |
| | Sets the depth of the pan change. |

DELAY

Realizes the general echo.

| | |
|----------|----------------------------------|
| Time | 1/1 ~ 1/64T note |
| | Sets the delay time. |
| Feedback | 0.0 ~ 100.0 % |
| | Sets the ratio of feedback. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of relayed sound. |

STEREO DELAY

Realizes the stereo echo.

| | |
|----------|----------------------------------|
| Time | 1/1 ~ 1/64T note |
| | Sets the delay time. |
| Feedback | 0.0 ~ 100.0 % |
| | Sets the ratio of feedback. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of relayed sound. |

PING-PONG DELAY

Realizes the stereo ping-pong delay.

| | |
|----------|----------------------------------|
| Time | 1/1 ~ 1/64T note |
| | Sets the delay time. |
| Feedback | 0.0 ~ 100.0 % |
| | Sets the ratio of feedback. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of relayed sound. |

GATE REVERB

Simulates the reverb feature of the gate feedback.

| | |
|-------|---|
| Time | 0.00 ~ 5.00 sec |
| | Sets the reverb time. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of reverb with the reflector. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of reverb sound. |

ROOM REVERB

Simulates the reverb feature of the small room.

| | |
|-------|---|
| Time | 0.00 ~ 5.00 sec |
| | Sets the reverb time. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of reverb with the reflector. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of reverb sound. |

HALL REVERB

Simulates the reverb feature of the large hall.

| | |
|-------|---|
| Time | 0.00 ~ 5.00 sec |
| | Sets the reverb time. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of reverb with the reflector. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of reverb sound. |

SPRING REVERB

Simulates the reverb feature of the spring echo.

| | |
|-------|---|
| Time | 0.00 ~ 5.00 sec |
| | Sets the reverb time. |
| Tone | 0.0 ~ 100.0 % |
| | Sets the brightness of reverb with the reflector. |
| Level | -∞ ~ 0.00 dB |
| | Sets the level of reverb sound. |

MEMO

4. Appendix

1) Factory Default MIDI CC# Assignment Table

| MIDI CC# | Assignment Target |
|----------|---------------------------------|
| 016 | Effector Slot #1 - Type |
| 017 | Effector Slot #1 - On/off |
| 018 | Effector Slot #1 - Parameter #1 |
| 019 | Effector Slot #1 - Parameter #2 |
| 020 | Effector Slot #1 - Parameter #3 |
| 021 | Effector Slot #2 - Type |
| 023 | Effector Slot #2 - On/off |
| 024 | Effector Slot #2 - Parameter #1 |
| 025 | Effector Slot #2 - Parameter #2 |
| 026 | Effector Slot #2 - Parameter #3 |
| 027 | Effector Slot #3 - Type |
| 028 | Effector Slot #3 - On/off |
| 029 | Effector Slot #3 - Parameter #1 |
| 030 | Effector Slot #3 - Parameter #2 |

2) MIDI Implementation Chart

| Function | Recognised |
|---|----------------------------|
| Basic Channel Default Change | 1~16 1~16 |
| Mode Default Messages | Mode 1 X |
| Note number True Voice | 0~127 |
| Velocity - Note On - Note Off | O (v=1~127) O (v=1~127) |
| Aftertouch - Note - Channel | X O |
| Pitchbend | O |
| Control Change | O (0~127) |
| Program Change True# | O (0~127) |
| System Exclusive | X |
| System Common - Song Pos - Song Sel - Tune | X X X |
| System Real-time - Clock - Commands | X X |
| Aux Messages - Local On/off - All Notes Off - All Sound Off - Active Sense - Reset | X X O X O |

5. Credits

Produced by LUXONIX

<http://luxonix.com>

Product Concept & Management:

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Structure & Sound Design:

Jae-hyeong Suh

Programming:

Hae-seong Zo

Interface Graphic Design:

Hyeok-jae Cha

Beta Testers:

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Jeong-sik Choi, Jong-min Lee, Jun-ho Yun, Jun-o Lee,
Kwang-hui Lee, Mun-su Park, Ui-min Hwang,
Yeong-jun Kim, Yong Kim, Yun-sang Kim

Thanks to:

DJ Magik Cool J, Hyeon-kyeong Kim, So-yeong Jang,
Cubase5.net, MIDIUSER.NET, VSTGuru.COM

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