

GATING EFFECT EMULATION

A step by step tutorial

By Dahwoud

1. Introduction:

This tutorial explains how to make and then play in live gig typical gating effect with Ex5, considering that you don't have hardware or software **noise gate** processor with **Key Input** sometimes called a **sidechain input**.

In fact, Key Input allows a different signal to be patched in to govern the gating action (for example, using a kick drum as the key signal to turn a Pad level on and off in time with the kick's rhythm).

No more than Ex5/Ex7 or Ex5R with Midi controller keyboard are needed for this tutorial.

Procedures for working with **VOICES**, **PATTERNS** and **KEYMAP modes** have to be knowed by you, else keep the manual next to you.

2. Gating effect principle:

We simulate Key signal input by using a **Midi control change Pattern** which switches **Noise gate Ex5 insert effect output level** alternatively between 0 and 127.

The MIDI controls change used are **general purpose CC16,CC17,CC18,CC19**. which correspond to Midi controls change affected to **Ex5 Knobs controller 1 to 4**.

3. Preparing Voice:

- 3.1 Load the preset I2-051 Oasis from factory data (if you don't know how, see the **DISK mode** part in the manual).
- 3.2 Enter the **Edit Mode** by pressing **EDIT/Compare** button
- 3.3 Go to **EFCT section** and Enable **InSEF 2** for **Element 1**
- 3.4 Choose **InSEF2 44** (Noise Gate), let's default settings
- 3.5 Go to **CTR section**
- 3.6 Select **Controller Set 4** and enable it for **Element 1**
- 3.7 Let KN1 enabled
- 3.8 set **Dst** parameter to **023:EF2 Out Level**
- 3.9 set **Depth** or modulation amount parameter to +30
- 3.10 Go back to **OSC Wave screen**
- 3.11 Go to **ZONE section** and reduce notes zone to **C2 & G8** because we have to Keep C-2 to C2 zone for **KEYMAP**.
- 3.12 Store this modified Preset by pressing **STORE** and **ENTER** buttons.

4. Chopping pattern made with Ex5 PATTERN sequencer:

- 4.1 Jump to **PATTERN PLAY mode** by pressing **PATTERN** button
- 4.2 Record on track 1 a sequence composed by 2 notes separated by one octave (C2 /C3 for example as showed on next image) played alternatively, pattern must begin on first bar (16 bars length max)
- 4.3 Go to **JOB mode** by pressing **JOB** button
- 4.4 Go to **JOB3 section**
- 4.5 Select **SHIFT EVENT Function**
- 4.6 Select track 1

- 4.7 Set **Start** measure to 1 and **End** measure to 16
- 4.8 Set **Src Event** to **Note (Note#)**
- 4.9 Set **Dst Event** to **CC 016:general1**
- 4.10 Press **ENTER** to apply settings; in this way, Midi Notes events are replaced by Midi Controls change General purpose 1 events
- 4.11 Go back to **PATTERN PLAY mode** main screen
- 4.12 Press **EDIT/COMPARE button** to enter in **PATTERN EDIT mode**
- 4.13 you have to set each general purpose value alternatively between 127 & 0. start by 127 on first control change event. With C2/C3 example, Control changes with 127 value correspond to previous C2 notes.

5. Ex5 series synthesizers borned to be played in live:

KEYMAP is one of the less used ex5 features but it is in fact very powerfull even if triggering Stereo Samples is not possible.

- 5.1 Choose a key between C-2 & C2
- 5.2 Select **Ptn mode**, **Track 1**, **Pattern 01** and one of the 3 **trigger modes** provided excepting oneshot
- 5.3 Now, by simply pressing affected key, you can **swich on and of Gating effect**
- 5.4 If you have patterns affected to each Patterns tracks, affect those tracks to differents keys and modify gating rythm in real time ... very impressive
- 5.5 You could also use patterns to modify filter cutoff frequency or any other parameters available in modulation set ... sound even more evoluating.
- 5.6 In **PERFORMANCE mode**, you could modify Midi channel of each pattern tracks (see **TCH section** in **PATTERN PLAY mode**) allowing differents channel to be modified by gating effects
- 5.7 You could use CC7 Main Volume change instead of general

purpose control change (CC16) allowing to free insert
effect of element1 and knob 1, but result is less interesting.

6. About this tutorial:

6.2 Converted in PDF format using VISION PDF Creator V0.943 (freeware)
you can download it on <http://www.zdnet.com>

6.1 Written by Dahwoud
Email: dahwoud@wanadoo.fr
Dahwoud ex5 site URL: <http://www.multimania.com/dahwoud>
Dahwoud MP3: <http://www.mp3.com/dahwoud>