Kronos Karma Combi Switching Technique Summary

Early Kronos owners discovered <u>that the original mute behavior was not always desirable</u>. Many live players desire to have a "palette" of programs available for layering sounds, and to use a single button press to enable and disable the desired timbres. The original Kronos mute behavior only muted the audio. The downsides of this are

- 1) Polyphony is still consumed by any muted voices,
- 2) Un-muting a Timbre while playing any sounds that are sustaining (e.g. strings) will instantly pop them into the mix in a very un-musical way.

The original Kronos mute behavior was in contrast to the Kurzweil PC3, which (in effect) mutes Timbres on the MIDI feed, addressing both issues.

In Kronos OS v2.02, a Live Mute feature was introduced that provides a global option to change the Mute behavior so it controls the MIDI input to Timbres (Kronos Parameter Guide, Global PO: Basic Setup 0–1: Basic Setup, Mute Mode in Combination mode). This enhancement solves the issue in 95% of the cases. The <u>one remaining issue</u> is the use of the Mix Play/Mute buttons related to the fixed configurations of the control surface. The control surface must be in Timbre/Track mode to enable the Mix Play/Mute function. Selecting this mode means giving up the real-time knobs and Karma controls, which some people find is not desirable for their live control surface configuration requirements.

For the cases where the player wants to have the Realtime controls (the 8 knobs) available (and is not using Karma for any "real" Karma functions in that Combi), an alternate procedure is possible: Route MIDI through Karma to control the MIDI flow to Timbres. This is very similar to the Live Mute mode, but uses buttons on the RT/Karma control surface (Mix Select / Karma Switches).

In addition to making the Realtime Controls operational, there are a couple other potential benefits to this approach (compared to the Live Mute feature):

- 1) The Karma Scenes buttons are also available for configuring and selecting more complex changes of mute / unmute with a single button press.
- 2) Each of the 4 Karma-controlled MIDI channels can control multiple Timbres. For example, you could have four controlled groups of four timbres. Button 1 controls Timbres 1-4 on MIDI ch 2, Button 2 controls Timbres 5-8 on MIDI ch 3, and so on. Using Live Mute, there is no grouping possible. If you wanted to mute 8 timbres and enable the other 8 timbres, it would require 17 button presses (one extra to change banks). Karma and Karma Scenes lets you do it with one button press.

Of course, this approach has limitations also. The key reasons why you would not use the Karma approach and need to use Live Mute instead are:

- 1) Your Combi is already using Karma for the purpose it is really intended for
- 2) You need to have mute control in more than 4 groups

This procedure has a long history, started by <u>damiwild for the M3</u>, and further developed by Stephen Kay into a tip for the OASYS. The application for the Kronos was first discussed in <u>this thread</u>, and Stephen presents the instructions for the Kronos, but all the details are not in one place. This document is based on Stephen's instructions in the thread, but attempts to include other necessary information to capture everything in one document.

- 1. Start with an Init Combi. (it is also possible to use an existing Combi, but there may be issues)
- 2. Set 4 different program sounds in the first 4 timbres, i.e. piano, strings, organ, brass.
 - i) Copy programs into Combi using "Copy From Program" on the Page Menu
 - ii) <u>Do not</u> check the box "With Karma" in "Copy From Program" selection dialog (Figure 1)

Copy From Program		
Program: 📎 I-A000: S	RONOS German Grand	
	🔳 i F Xa - Al I	IFX1-All used
	MEXa	TFX:
	with KARMA	🔳 with Drum Track
To: 📀 Timbrell 1	Nodule:	Ø^
Drum Track:	🕑 Timbre 18	
G	ancel	OK



iii) On the Timbre Parameter / MIDI page, change the <u>MIDI channels of Timbres 1 to 4</u> (or the ones you want to control, whichever they are) to MIDI channels different than the General Channel (which is usually 1).
I used 2, 3, 4, and 5 respectively.

If you leave the MIDI channel on "01G", the Timbre will always play, regardless of the Karma switch setting.

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3. On the KARMA GE Setup page, turn off <u>Run</u> on Module A (on by default). (Figure 3)

<u>Note</u>: If you are modifying an existing Combi, and **Run** is turned on but grayed out so it cannot be turned off, unassign any mapping of Parameter to switches by un-checking any module selections in the columns A through D (Perf RTP Tab, Figure 4), and then try again to turn off Run for every module. Also verify that the MIDI source in Global Settings is set to Internal or Auto. Also ensure that Run for Module B, C, and D are also turned off. If the Run controls remain grayed out, it may be necessary to save the Combi and restart the Kronos as a last resort.

a. Set the MIDI I/O Output channels to the same <u>channels</u> you selected for the Timbres above

COMBINATION P7:KARMA	GE Setup/Key Zones	~
USER-G 064 Bell Lyper	Load GE Octions Auto RTC Setup KARMA DE/TS J	- 103.00
Hodule Arprove 8091: Gamelans 1 RTC Model: 21 - Comp/Lead 1		
GE Set o		
Run Solo Arpeggio B F >) 00091; Gamelans 1 >>) 00005	Run Solu Arressio C Run Solo Arressio D Run Solo	>Rrpess
Zone Stra C-1 Ton 169 Zone		Ten Ico
		100 103
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Thru Out Z Trans: +88	Out Z Trans: +80 Thru Out Z Trans: +80 Thru Out Z T	rans: +88
MIDI 1/0		
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C Gch		
0 Gch 🔲 🕨 85 📲		
GE Setup/ MID1 Filter Key Zones CE Offset Contr	rol Trigger GERTP PerfRTP Dynamic Random Seeds of	e Map
Play EQ/Vector Timbre	NIDI Filter KARMA	NEX /T

Figure 3

If you are using an external keyboard or another MIDI Input (besides the Kronos keyboard), you can change the "<u>Input Ch</u>" to the desired channel of the MIDI source.

Turn off any "Timbre Thru" boxes that are checked:

4. On the Karma / Perf RTP Page (which has nothing assigned), set rows 1 to 4 to Key Zones, Thru Inside Zone. (Leave Min Max and Value at Default settings) (Figure 4) 5. Check Modules A, B, C, D respectively on the four rows, in sequence. (Figure 4) 6. Set Assign to the 4 rows, in sequence, to SW1, SW2, SW3, SW4. (Figure 4) Perf Real-Time Parameters COMBINATION P7:KARMA J = 103.00 USER-G 064: Bell Lager Perf Real-Time Parameters D 4 Assign Polarity в С ٨ Parameter Min Max Value Group 0 + +8081 +8888 O SW1 +0000 1 🕑 Key Zones Thru Inside Zone 0 . OSW2 +8881 +0000 +9009 2 Key Zones Thru Inside Zone €sw3 0 + +0000 +0001 +0000 3 🕑 Key Zones Thru Inside Zone 0 -OSW4 +0000 Thru Inside Zone +0000 +8081 4 Key Zones 0 . 0---+0000 +0000 +0000 5 0 011 0. 0---+0000 +0000 +0000 6 Doff Θ 0 . 0--+0000 +8008 +0000 7 Ooff δ 0 -0-+0000 +0000 +0000 8 0011 Ο Random Name/ Dynamic GE RTP MIDI Filter GE Setup/ Perf RTP Trigger Note Map Control MIDI Seeds Scenes CC Offset Key Zones Timbre MID1 Filter KARMA IFX MEX/TEX EQ/Vector Paramete

Figure 4

7. Turn Karma Qn. Switch the Control surface to RT/KARMA.



8. The first four KARMA switches should now activate the 4 timbres individually. Since these are stored in a scene, you can turn on SW1 in Scene 1, SW2 in scene 2, SW3 in scene 3, SW 4 in scene 4 (while turning the others off), or any mix of them in a particular scene. The reason to use the Scene switches is that one button push turns off one timbre switch and turns on another, or turns on several while turning off several. You could just do it manually as well within a single scene.





Other Notes from Stephen in the thread:

BTW, "Thru In Zone" refers to sending notes thru, if they happen to be in the range of the KARMA input zone key range on the KARMA GE Setup page. So you could actually set up different zones here, for different timbres. By default, the zone is 0~127 (the whole range) C-1 to G8 or whatever it is.

The concept of how this works is: A KARMA Module can take input notes from the input key zone, and "do stuff" with them. It can also, in addition, simply send them thru to the timbres. With the "Run" checkbox off, KARMA is not going to do any arpeggio or riff generation, but the Thru In Zone/Out Zone feature still works. You can send them thru "In Zone", whereby they are layered on top of what the KARMA GE is generating (or not, if Run is off), or you can send them "Thru Out Zone", in which case, you can make a split, and the bottom or top half goes into KARMA, while the rest of them (outside of the zone) are sent directly thru to the timbre.

In this case, with an INIT Combi, the key zone is set to the full range, so turning on the switch sends the notes thru to the timbre, for the entire keyboard; turning off the switch sends NO notes thru to the timbre. Hope that makes sense. This blocks the MIDI notes from going to the timbre; hence, it uses no polyphony.

If you don't start with an INIT combi, there are all sorts of other settings that may interfere or interact with what you are trying to do, because they are already programmed.

I can explain more about that if necessary, but the first step is to see if you can reproduce the example with an INIT combi.

Caveat: I didn't write the PDF in the referenced post, in fact, if you read the thread, the whole thing was a surprise to me...although they tried to say I told them about it myself (!), well maybe, but I really don't remember that. In any case, it's a really useful "trick".

Tutorial compiled by Tim Godfrey. Original text by Stephen Kay and others from Karma Labs Forums <<u>http://www.karma-lab.com/forum</u>>, and the Kronos forums at <<u>http://www.korgforums.com</u>> 22 December 2014 Revised 27 April 2015