## Process for integrating new programs into a Kronos with no available program banks (2021)

One of the great things about the Kronos is the huge number of programs and libraries that are available. The related downside is the shortage of program banks to store them. Many of us filled all internal program banks years ago.

Korg is unwilling to make any improvements in program bank storage, so loading new banks and libraries is like playing this puzzle:



Suppose you find some programs you want to load. Sound designers continue to create excellent programs for the Kronos. But the installation procedures assume your Kronos is essentially unchanged from the Factory programs, with many empty banks.

You might not be able to load the new programs (or risk losing existing programs if you follow the provided instructions) if you are in one or more of these situations:

- 1) The Program Banks used by the new patches are already used and/or the wrong type (HD1 vs EXi)
- 2) Program Banks are almost full
- 3) The Factory programs are not in the same location as the Kronos 2 Preload (often as a result of operating in state 2 for many years). This affects the ability to load 3<sup>rd</sup> party Combis that expect a specific layout of factory programs.

You can always audition new programs one at a time by using the Kronos Disk function to Open a PCG and keep selecting Open (not Load) until you get down to individual programs. From that display you can scroll the cursor around and audition programs one by one. But what if you want to audition Combis? Well, you can't without having the programs loaded into the Kronos, and the Combi references correct.

Here is a process for doing that, which relies on the excellent <u>PCGtools program</u>.

**Step 1:** Before starting, make sure you have a full back up! Use Disk / Save / Save All on the Kronos, and copy the backup files from the Kronos to your computer. If you are familiar with PCGTools, this should be a familiar process. Working with PCGtools, open your full bankset PCG from the Kronos (we'll call it MYFULLKRONOS.PCG), find programs that are unreferenced that you are willing to delete. (Note - by default PCGtools does not show reference count because it slows display refresh – to make reference counts visible: Setting / PCG Window / Show #refs) Another tool is "Kronos Usage Report Formatter" – which has an ASCII visualizer which might be helpful to find a place to start.

**Step 2:** Create enough available slots in the banks to fit in the new programs (keeping in mind the separate bank designations and sizes needed for each of EXi and HD-1). Use the PCGtools Compact function to make contiguous ranges in the banks as needed. (Note: creating the largest possible contiguous ranges in the existing banks makes the mapping process easier)

Step 3: Open your new program's PCG in PCGtools – call it "NEWSOUNDS.PCG. Using Copy / Paste, copy the programs from NEWSOUNDS.PCG and paste into your main bankset (MYFULLKRONOS.PCG), sizing the block copied to fit the contiguous ranges you've opened up. I recommend creating a spreadsheet as a guide. Use PCGtools to create a patch list. From the NEWSOUNDS.PCG, "Generate List", select CSV for output. This will open in Excel. Open the example spreadsheet Kronos\_Combi\_Remapping.xlsx (see below). Copy the programs from your NEWSOUNDS patch list CSV into your Kronos\_Remapping.xlsx spreadsheet, replacing columns A – C. Delete the example locations in column D, and enter your own, corresponding to the blocks of the banks you have opened up. If you like you can keep track of the programs that were displaced by copying them into Column G, but that is options. As you use PCGtools to copy the groups of programs from NEWSOUNDS .PCG into your Kronos PCG image, update the spreadsheet. You can use Excel borders to show the contiguous groups that were copied. Save the PCG frequently as a new filename as you work. I created a series of backups (NEWKRONOS 01.pcg, NEWKRONOS 02.pcg, etc.) after copy operation of a block of programs.

**Step 4:** If NEWSOUNDS .PCG contains Combis, you will need to re-map their program references. When you complete the process of copying the programs and entering your new locations for the programs in column D of the spreadsheet, the needed PCGtools Reference Changer data will be created in Column I.

If the Combis also reference factory programs, and you have moved those factory programs, generate the PCGtools Combi Content List, List Subtype "Long", and uncheck "ignore muted/off

timbres". It will generate a list of the programs used. Look for any that are not part of the program banks provided in NEWSOUNDS .PCG – they are probably factory programs. It is likely the program names will be shown as "???" if the NEWSOUNDS .PCG bank does not contain the factory programs. This is where the PCGtools Master File is used. Open the factory sounds "K2-PRELOAD.PCG" in PCGtools and under "Tools / Master Files." Select "Set PCG as Master File". Now run the Combi Content List again, and the factory program names should be shown in the Timbres based on the names in the factory set. You can check and see if they have been moved in your banks, and if so, add those mappings in the spreadsheet columns A-D, and copy the equations in column I down to extend the remapping list.

Highlight and copy all the remapping data in column I, and paste it into a text editor, and save it as a text file. Open the NEWSOUNDS.PCG in PCGtools and save it as a new name such as "NEWSOUNDS &REFS.PCG". On the PCGtools menus, use Tools / Program Reference Changer. Click on From File, and open the text file you just created. This step will fix the references in any Combis to the programs.

**Step 5:** Open the final version of your "NEWKRONOSnn.PCG" with all the new programs copied into it in PCGtools. Copy the new Combis as a group from "NEWSOUNDS &REFS.PCG" and paste them into your choice of Combi slots in your NEWKRONOSnn.PCG. (My experience is there are plenty of Combi slots available, so finding open ones is not difficult.) Review the references in the Combi in PCGtools using the Timbres button - they should point to the correct new programs at your new locations.

**Step 6:** Copy NEWKRONOSnn.PCG back to the Kronos and load it and test out the new programs and Combis. In case something goes wrong, you still have the backup file MYFULLKRONOS.PCG made in step 1 to revert to.