

Korg Kronos Workflow for Worship

I have been playing Korg keyboards since the OASYS in 2005. Korg has graciously carried over most of the workflow to their current product – the Korg Kronos. This keyboard is singularly powerful and is a great fit for contemporary worship due to its incredible breadth of sounds included with the keyboard, and the ease of layering multiple sounds together. This article will describe the basic workflow of the keyboard and the approach I take for using it in a worship application.

The Basics

The Kronos has several main operating modes, selected by the buttons right of the screen. The main modes are Set List, Program, Combi, and Sequence.

Program – This is the single sound mode of the keyboard, used for auditioning sounds in the keyboard and for creating new sounds.

Combi – This mode is the main performance mode of the Kronos where multiple sounds can be combined and layered or split across the keyboard.

Set List – Set List mode allows you to order combis or programs so they can be easily recalled in order for a set. You can add notes for each set list item for lyric cues or notes about the sounds.

Workflow Overview

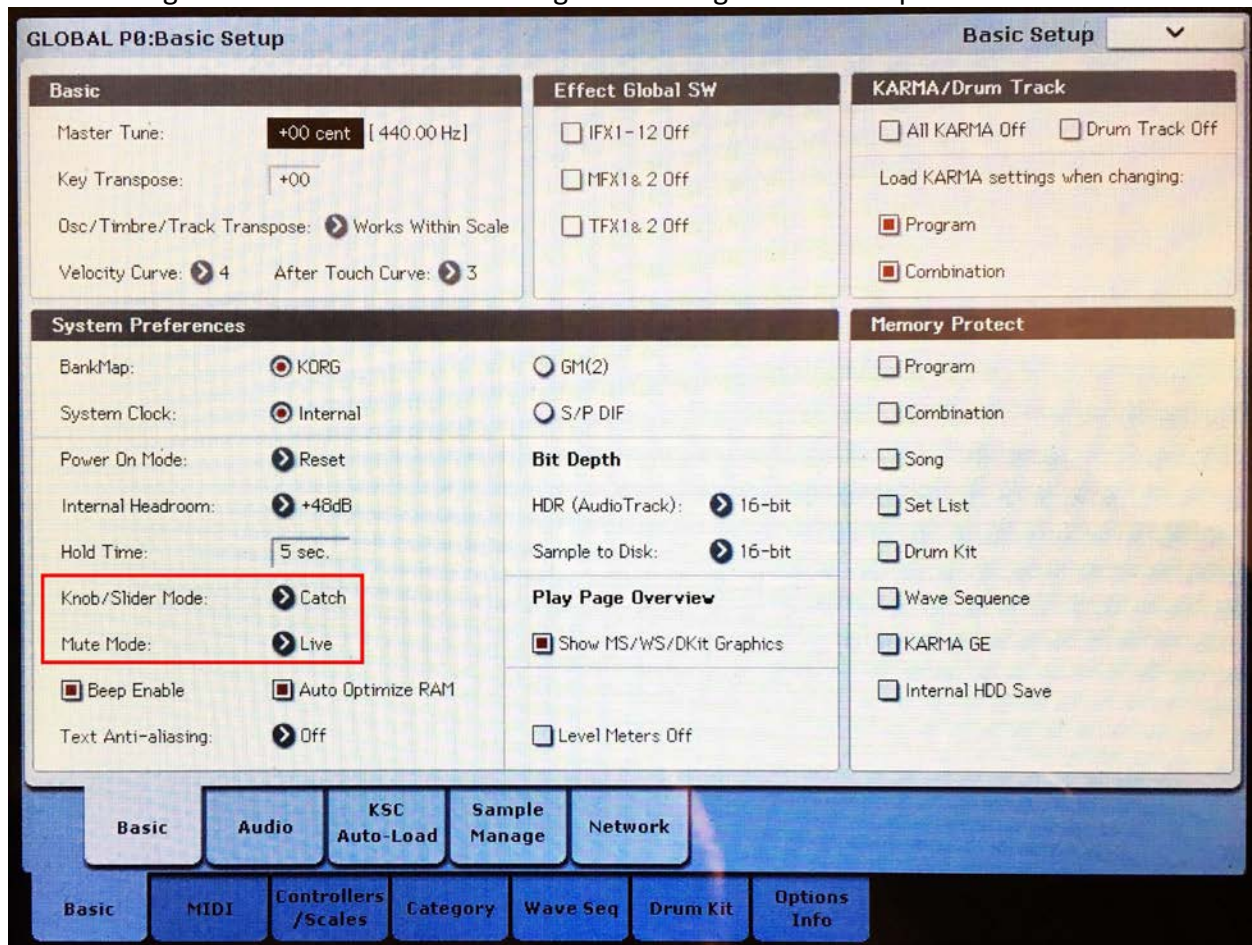
The basic Kronos workflow is:

1. Create a combi with the basic settings and preferences which you will use as a template for future combis (one time task only)
2. Copy your template combi to a free combi location
3. Choose Programs in Program mode and note the bank and program numbers
4. Use the “Copy from Program” function in the upper right drop down menu of Combi mode to copy your program(s) into slots into your combi
5. Adjust combi settings – pitch, layer/split points, effects
6. VERY IMPORTANT – Adjust timbre volume levels
7. Save the combi
8. Optional - Create a Set List entry for the combi

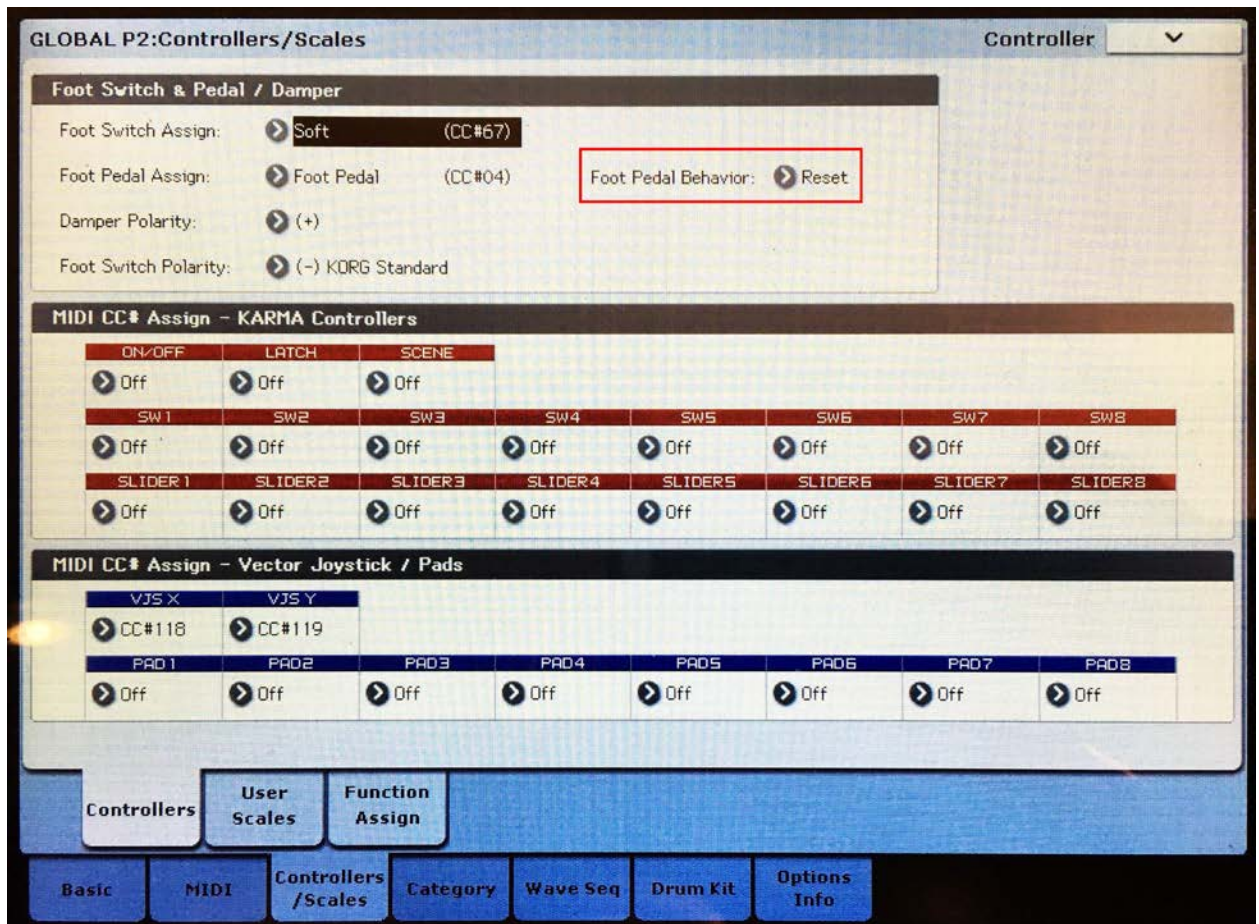
These items will be discussed in more detail below.

Initial setup – Global Settings

The Kronos is very flexible, and can be used in many situations – both for live performance and for recording workflows. There are a few global settings that are helpful for live use.

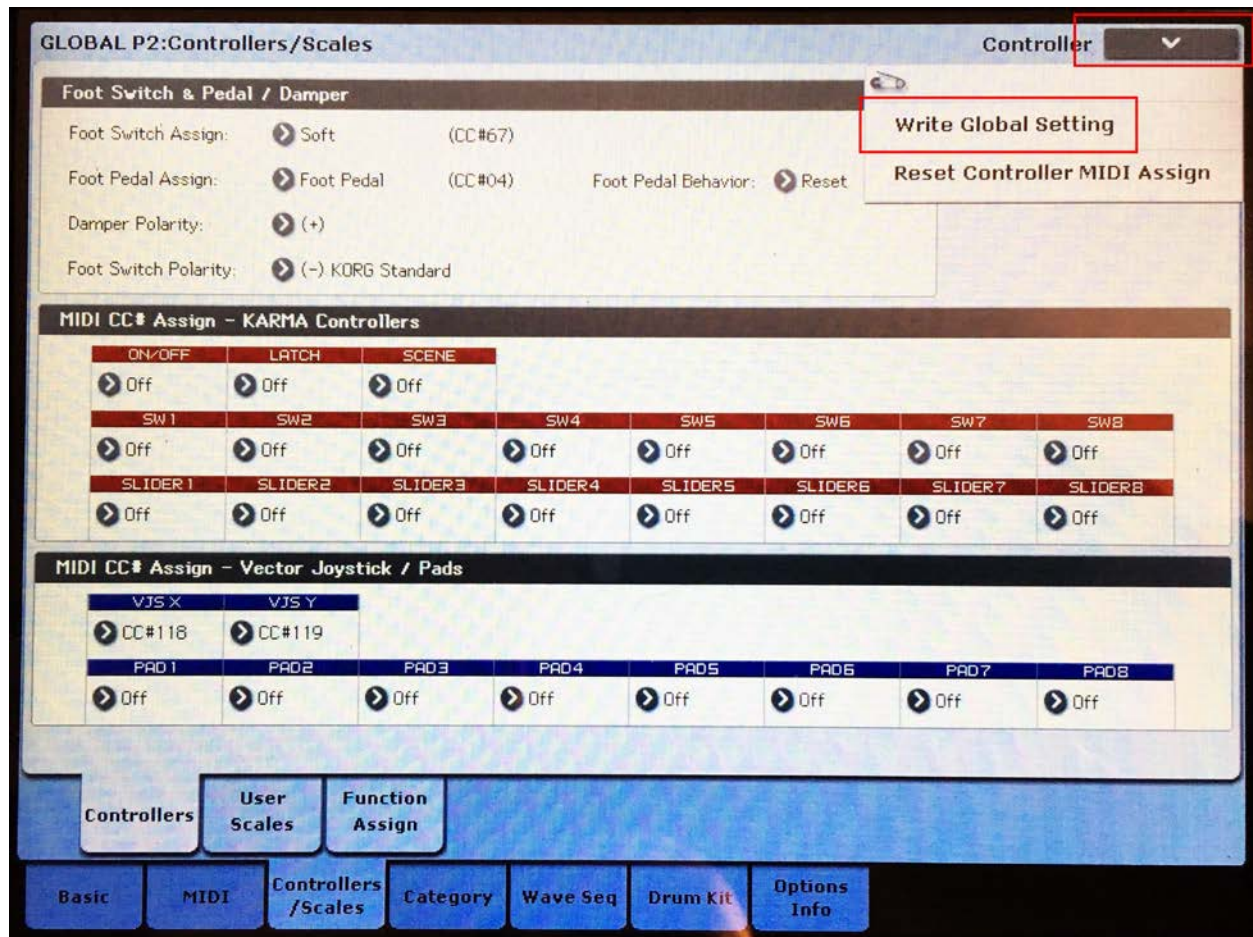


- **Basic -> Basic -> Knob/Slider Mode** – set to **Catch**. This means the sliders will not begin controlling the timbre level until they are physically moved to match the virtual level. This prevents sudden volume surprises that can happen in “Jump” mode.
- **Basic -> Basic -> Mute Mode** Set this to **Live**. This means that muted combi channels don’t use polyphony.



Controllers/Scales -> Controllers -> Foot Pedal Behavior Set this to **Reset**. This will cause the foot pedal (the volume pedal if you have one) to reset to the saved value of your sound, rather than remaining where it was on the last sound. This is an important setting if you use the foot pedal for controlling volume of a sound – commonly done with organ sounds.

Be sure to save your global settings changes.



Initial Setup – Template Combi

I have found it extremely helpful to have a combi setup with basic sounds, settings, and routings that can be used as a starting point for new combis. It's worth spending a fair bit of time getting this right, as you will make many copies. This is critically important, but can be a bit arduous. I will describe the process of creating my template combi in a future article. You can choose to follow that article to create your own template combi, or you can start with my PCG file which contains the template combi I created.

Sound Order

The first decision you will need to make whether you make your own combi or use mine is how to order your sounds in your combi. There are two primary options – either ordering your sounds in order of importance putting the dominant sound on timbre one, the next on timbre two, etc., or by ordering your sounds by category – i.e. piano always goes on timbre 1, pads/strings on timbres 2-3, lead sounds on 4, etc.

I have adopted the category method, as I find it easier to keep track of sounds if I know they are always in the same order, even if that means on some songs I'm only using higher-numbered timbres.

This is my layout:

1. Acoustic piano
2. Pad 1 – lowest intensity/simplest
3. Pad 2 – medium intensity
4. Pad 3 – highest intensity/most complicated
5. Electric Piano
6. Lead
7. Pulse
8. Organ
16. Click

It is important to note that not every combi I create has all of these things in them – that would create significant polyphony (how many notes can be played at a time) and effect slot problems. Rather, every combi I create follows this pattern. For example, if I need a combi with an electric piano and a pad, I will use only timbre 2 for the pad and timbre 4 for the electric piano.

My basic template combi has only piano on timbre 1 and click track on timbre 16. I also have a template combi that contains two pad sounds and a Hammond Organ sound.

Click Track

The Kronos' drum track function is extremely useful as a basic click track. Once it is configured in the template combi it is very easy to use – enter the tempo you desire into the combi, then press the Drum Track button to start the click running. Press Drum Track again to stop the click.

I have configured the click track to operate on timbre 16 and be output to the Output 1 jack.

Effects

The Kronos has several kinds of effects – MFX, TFX, and IFX. MFX are master effects that can be used like effects on a sound board – there are two MFX channels, and each combi timbre has a level control to each of these two MFX channels. TFX (total effects) are always on in the chain and affect the entire combi output. I don't typically use these. IFX (insert effects) are the primary source of effects for individual programs in the combi.

IFX

IFX settings get populated when additional programs are copied into the combi.

MFX

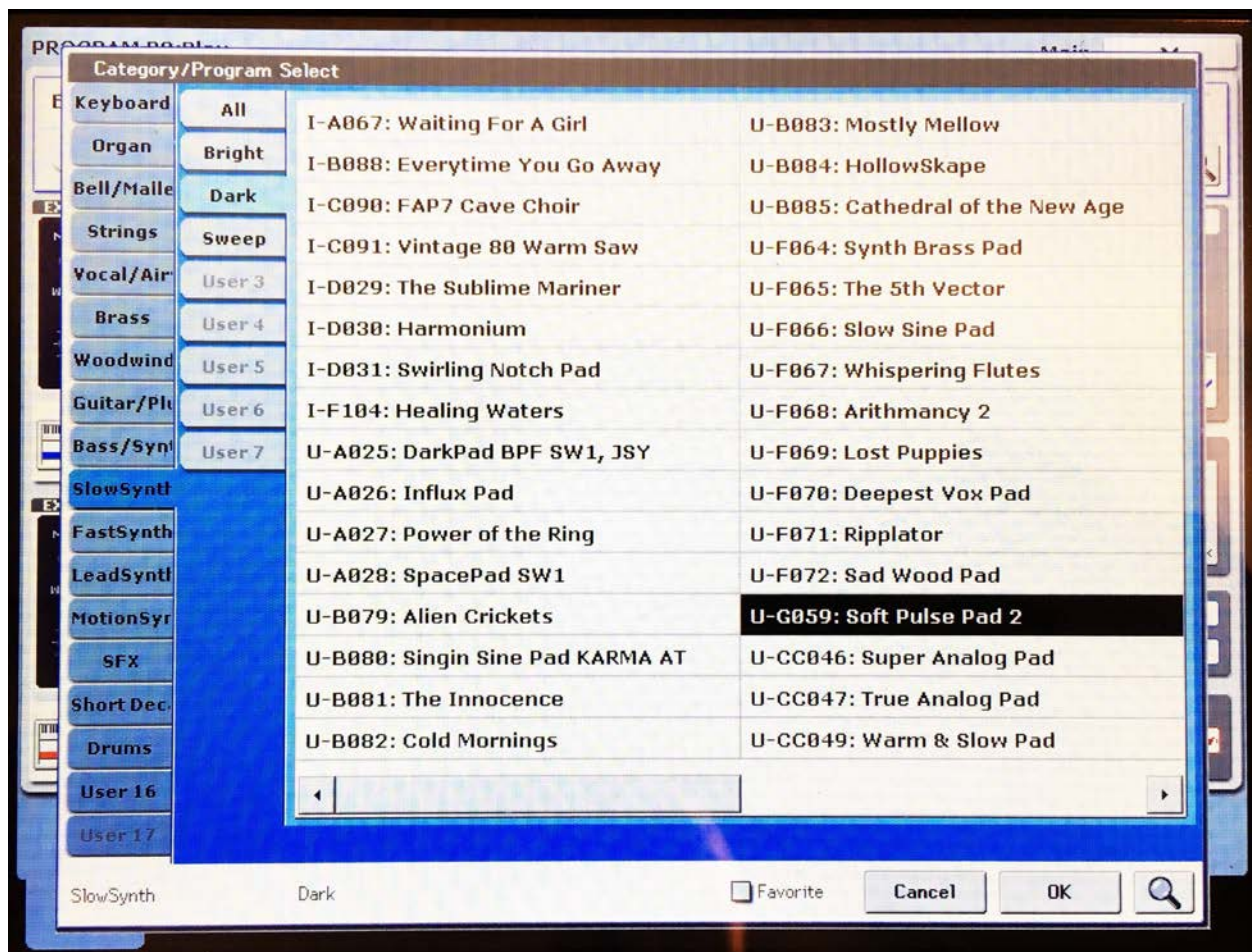
I have set mine up as MFX 1 reverb and MFX 2 Delay. The input level controls to these MFX are found on the **IFX -> Insert FX** page. Note that you need to go to the **IFX -> Routing** page to see where each timbre maps to the IFX in use so you know which level you need to edit.

Choosing Programs

Now that we have a template combi, we can choose sounds for it. This step is both fun and frustrating. It is fun to dial through all the sounds that come in the board, but it can also be frustrating that there are so many sounds that come stock in the board, and finding what you need can take a while. Remembering the sounds you like can be difficult as well. Fortunately, the Kronos has a couple tools to help with this.

For this section, make sure you are in **Program** mode.

Category selection



The easiest way to start auditioning sounds is to turn the wheel and start playing; however, the Kronos' sound list is massive and it's not ordered in a particularly structured way. Category mode is much easier to use. To select sounds by category, click the **Category** field at the top of

the screen. The left list contains the main sound categories and the right list subcategories. There are still many sounds to audition and sometimes sounds – particularly synth sounds – may be described by more than one category, but this narrows the field considerably.

Sound Addressing

Once you find a sound you like, you need to note its bank and program number. The Kronos is organized into banks – Int-A, User-B, etc., and then program numbers 0-127. Both bank and program number are required to recall the correct sound. For example (in the default Kronos 2 sound set), **KRONOS German Grand** is **Int-C:000**.

Favorites

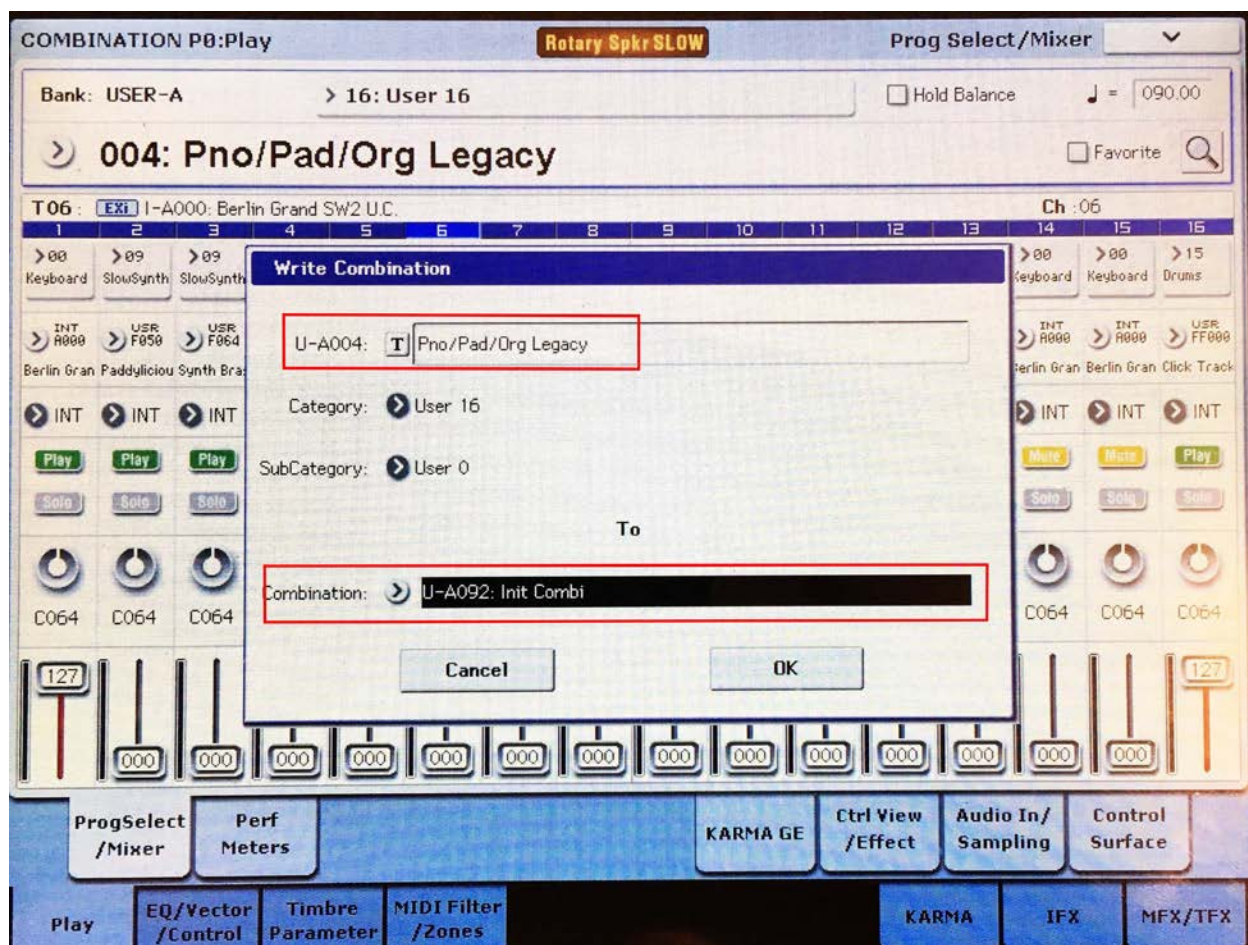
Once you have found some sounds you like, The Kronos has an additional tool to flag them for easier recall – setting the Favorite flag. To flag a sound as a favorite, click the drop-down menu in the upper right of the screen and select **Favorite**, then save the sound (upper right drop-down menu -> Save).

After you have saved a number of sounds with the favorite flag, you can filter on these when you search for new sounds by checking the Favorite box in either the program select or category select windows.

Creating a new combi from your template combi

Switch back to **Combi** mode if you haven't already done so.

It's a good habit to always copy your template combi into a new combi slot before you start making changes so you don't accidentally change your template.



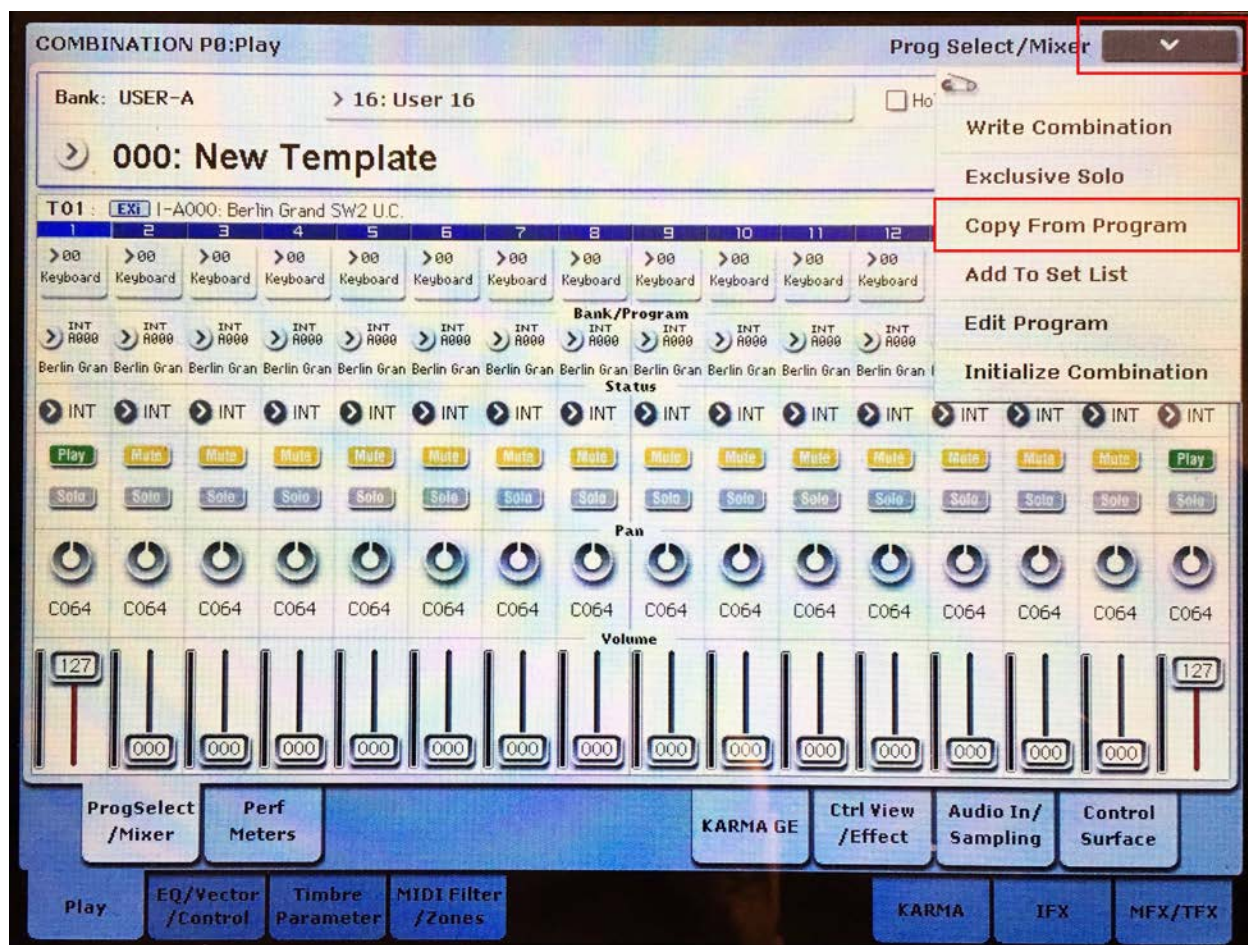
To copy your template combi, select your template combi, click the upper right drop-down menu, and choose **Save**. Change the combi slot to a free location and name the new combi. Press **OK**.

A note on combi naming – My combis are named either descriptively for what they are, or as the name of the song. Some combis are very specific to a particular song, and for these it's an obvious choice to name the combi after the song. Other combis are more generic – a piano with a couple pads that I may use on several songs. Those generic combis I may name something like “Piano with brass pad”. Since I nearly always play with a click track, generic combis tend to become sub templates, and I will usually make a copy of that generic combi, set the tempo for the song, and then save it as the name of the song just to capture the tempo. If you aren't going to be using the click track function, you may be able to use the generic combi model.

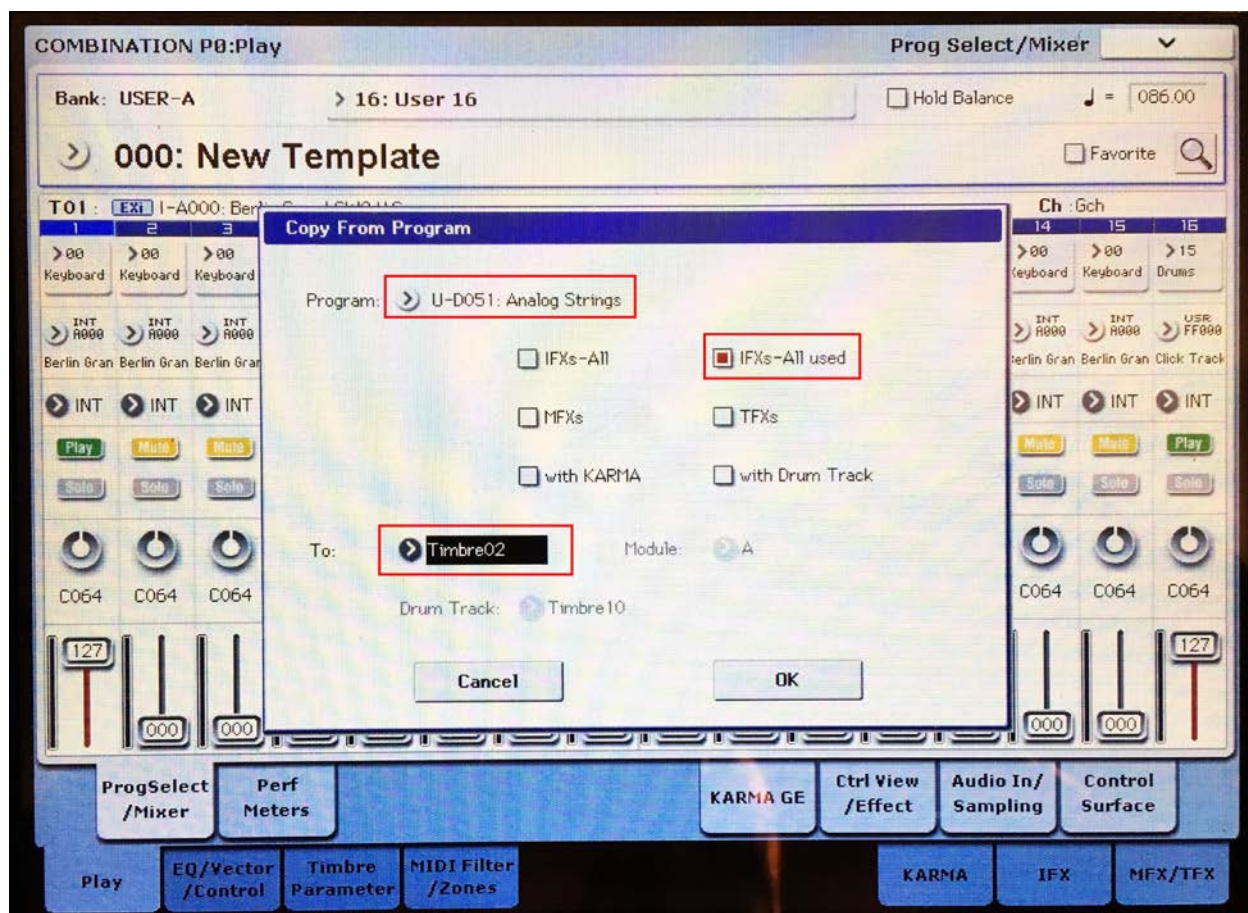
Copy the Programs into your new combi

Make sure you are editing the new combi and not your template!!

Press the upper right drop-down menu and select **Copy from Program**.



The screen that appears has several important settings.



The **Program Name** field is where you select the program you want to import. The **Timbre** field is which timbre the program will be imported into. The other settings relate to how the program's effects will be handled. I nearly always use the **IFX All Used** setting which imports only the insert effects used by the program. You probably don't want to select MFX or TFX, as these will overwrite the effects setting for the entire combi.

After choosing your program, selecting the destination timbre number, and selecting the effects you want to import, click **OK**.

Test out the imported program, making sure it sounds the same as it did in program mode, and that it responds to the correct timbre slider. If everything checks out, save your combi, and repeat the Copy From Program process for any additional sounds you want to import. If there is a problem, either revert to your saved combi and try the import again, or check out the Troubleshooting section at the end of the article.

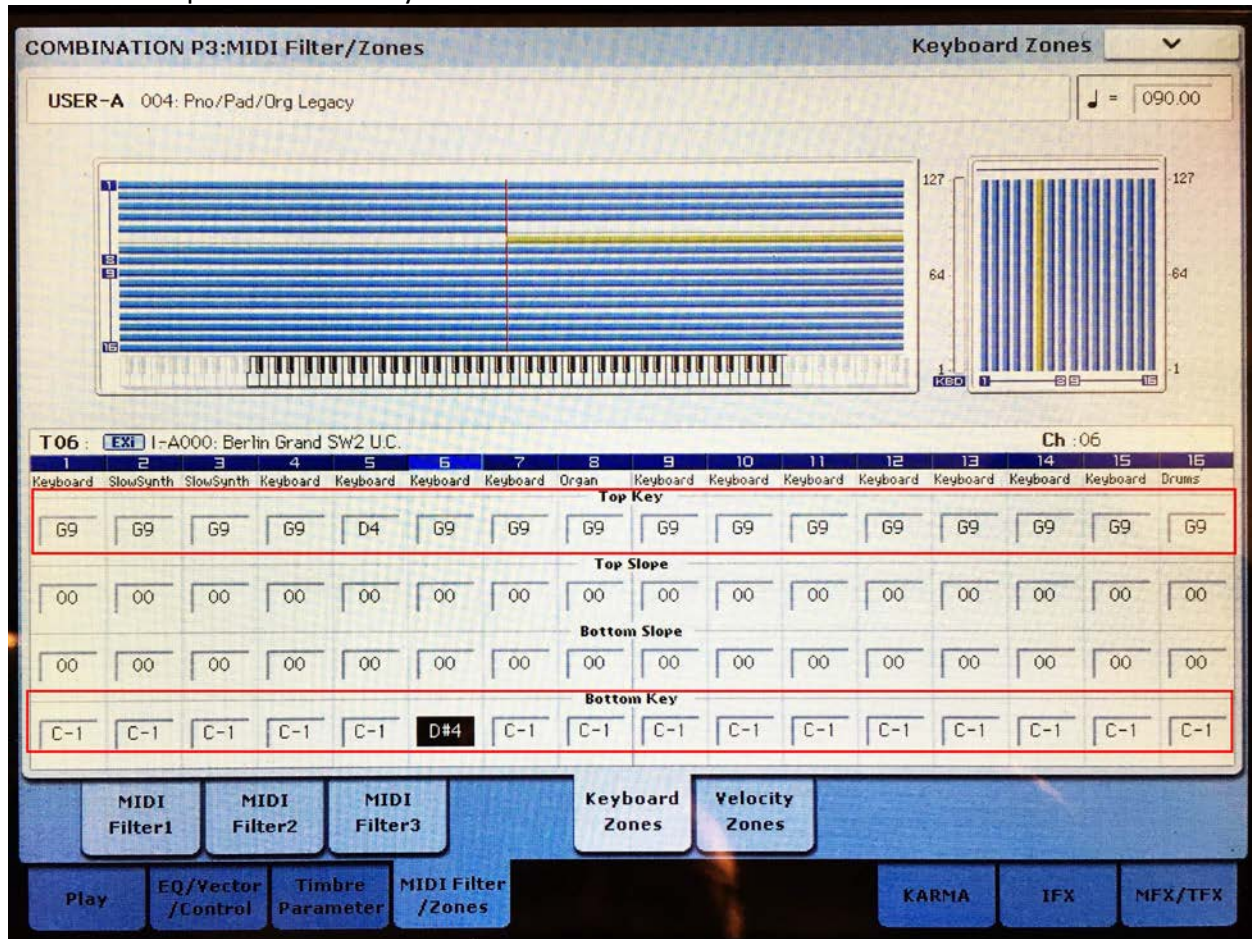
Note – if you are using my template combi, sounds will probably have a delay assigned. See the section below for how to turn that off.

Adjust Combi Settings

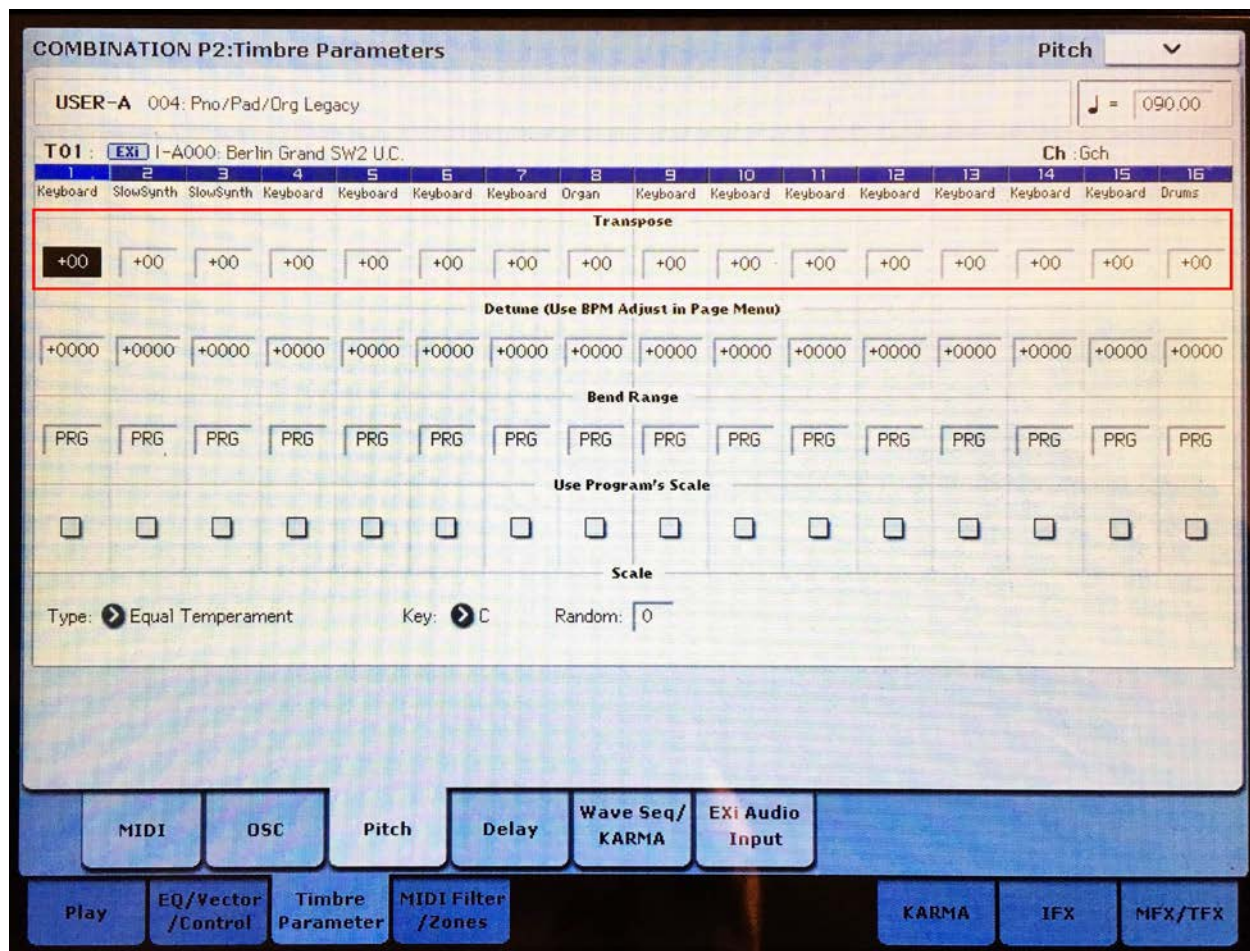
Programs get imported into the combi for the most part as they are. Sometimes things need to be adjusted. Here are a few common adjustments:

Split/Layer points and Pitch

When programs are imported, they cover the whole key range. This is sometimes desirable – i.e. you may want to layer a pad sound with a piano, and is sometimes not desirable. To change the key range of a timbre, go to the **MIDI Filter/Zones -> Kbd/Vel Zones** screen. Here you can choose the top and bottom key for each timbre.



You may also want to change the pitch of a timbre, for example if a layered pad is playing in the wrong octave. To change the pitch of a timbre, go to the **Timbre Parameter -> Pitch/Delay** screen and adjust the Transpose setting for the timbre in question.



To make an octave adjustment, change the value to +12 to go up an octave or -12 to go down an octave.

Effects

You may want to adjust the insert or master effects for your timbres. This is particularly true for delay – frequently programs are set with the MFX sends all the way up. If you have delay setup in your template combi, this will cause your program to have delay in the combi, even if it didn't have delay when it was a program.

The Kronos' effects system is very powerful and most of the time the IFX numbers will not correspond to the timbre numbers, either because some programs use no IFX, or because some programs use more than one IFX. Because of this we need to check the effects mapping to see how the effects are wired. Go to the **IFX -> Routing** page and you can see how each timbre is wired up.

COMBINATION P8:Insert Effect

Routing1

IFX1 ☒ Stereo Parametric 4EQ

IFX2 ☒ Stereo Modulation Delay

IFX3 ☒ Pitch Shifter

IFX4 ☒ Stereo Harmonic Chorus

IFX5 ☒ Multitap Cho/Delay 4Taps

IFX6 ☒ Stereo Parametric 4EQ

IFX7 ☒ Stereo Wah/Auto Wah

IFX8 ☒ Stereo Phaser

IFX9 ☒ Stereo Mastering Limiter

IFX10 ☐ No Effect

IFX11 ☐ No Effect

IFX12 ☐ No Effect

USER-A 004: Pno/Pad/Drq Legacy

T01: ☒ I-A000: Berlin Grand SW2 U.C.

Ch: Gch

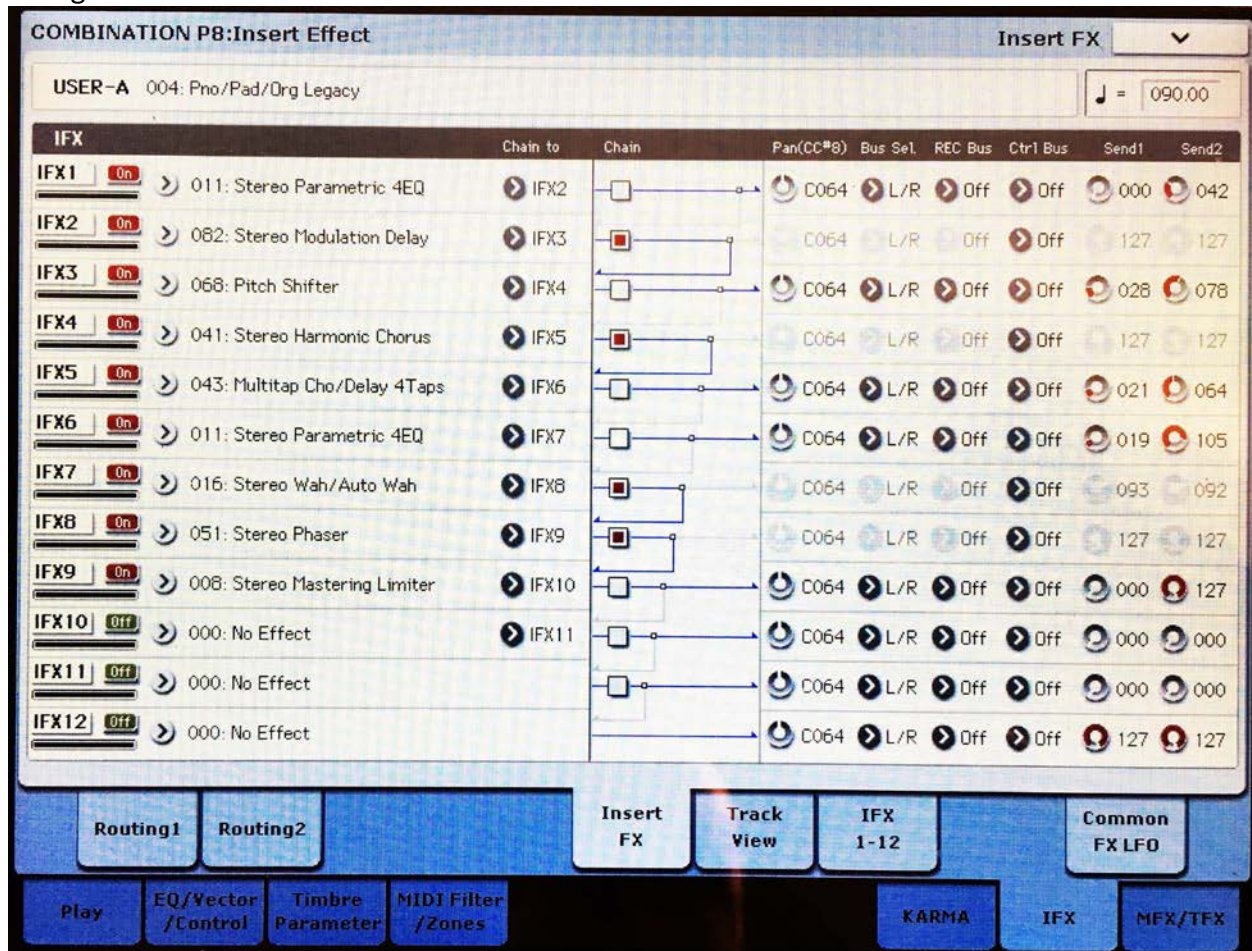
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Keyboard	SlowSynth	SlowSynth	Keyboard	Keyboard	Keyboard	Keyboard	Organ	Keyboard	Keyboard	Keyboard	Keyboard	Keyboard	Keyboard	Keyboard	Drums
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<input checked="" type="checkbox"/> IFX 1	<input checked="" type="checkbox"/> IFX 2	<input checked="" type="checkbox"/> IFX 4	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> IFX 7	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> IFX 6	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> L/R	<input checked="" type="checkbox"/> 1
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Routing1 Routing2 Insert FX Track View IFX 1-12 Common FX LFO

Play EQ/Vector/Control Timbre Parameter MIDI Filter/Zones KARMA IFX MFX/TFX

Once you know which settings you need to change, go to the **IFX – Insert FX** page to make basic

changes.

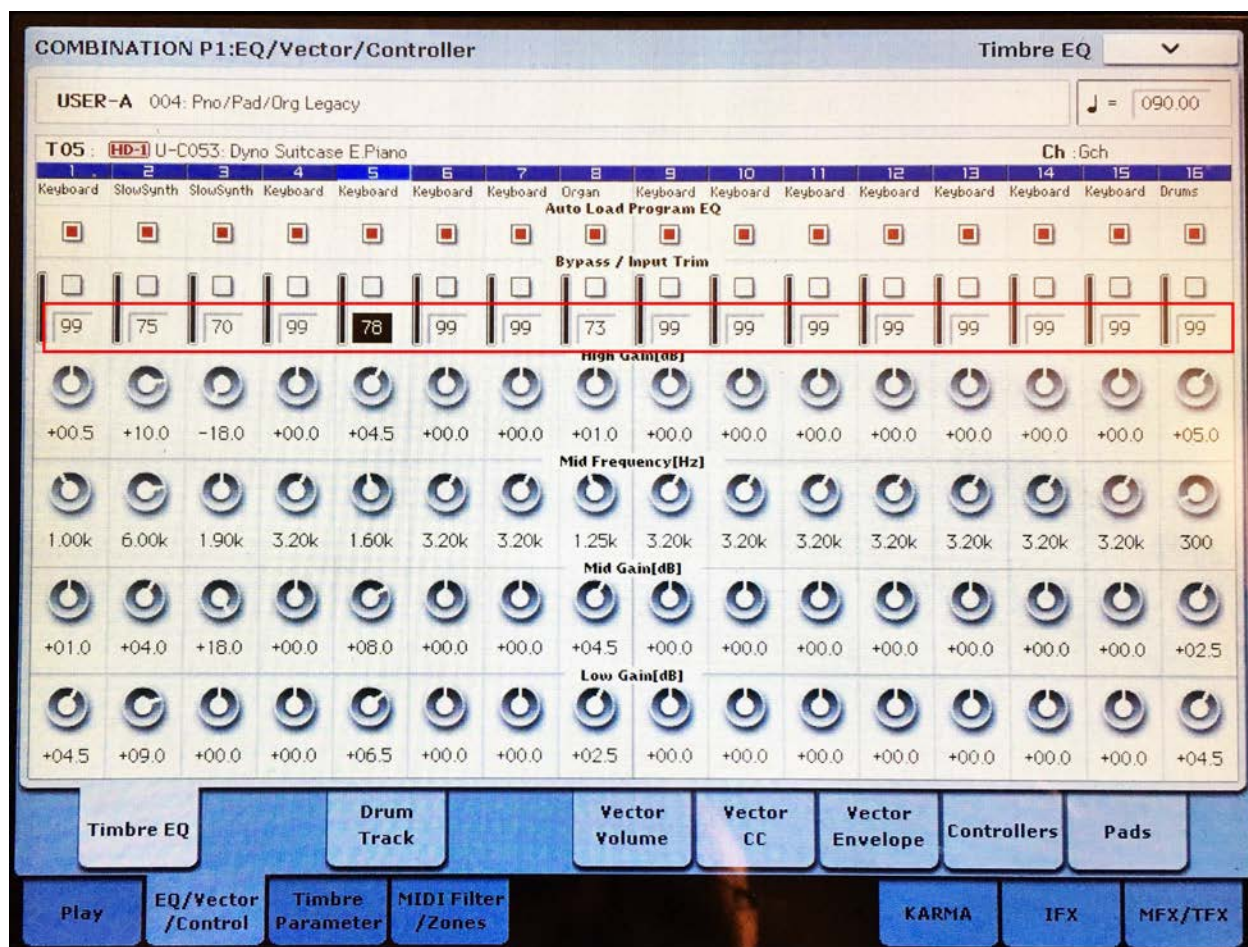


The MFX sends come from the last IFX for the timbre. To turn off the undesirable delay for a program, turn down either the Send 1 or Send 2 knob (my template combi has delay set on Send 1).

Adjusting Timbre Volume, aka Normalizing your sounds

An extremely critical step is to level your sounds so you are sending the sound person consistent and usable levels, so he or she doesn't have to chase you around every time you switch sounds. I cannot emphasize enough how important this step is.

The main sliders can control timbre volume, of course, but it is difficult to return to a preset volume once you make a change. Also, some sounds may be way too loud for their function in the combi - the slider may be barely above zero, making it difficult to have fine control over the part level. There is another control that helps get the volume in the ballpark – **Input Trim**.



Go to the **EQ/Vector Control->Timbre EQ** page. The row of numbers below the bypass button is the input trim volume control. This range is 0-99. Loud sounds can be tamed here, making them easier to control with the faders.

The primary goal of normalizing is to send predictable and even levels of all your parts to the sound system. Most of the time the best starting point is to leave the sliders all the way up and use the Input Trim controls to adjust each part level for the correct balance.

Balance

Note that balance doesn't necessarily mean each part has the same perceived volume; rather that each part is the level it should be for the role in the song. For example, usually piano sounds are dominant, while pads are quieter. In this case, you would adjust the Input Trim levels so the pads are somewhat quieter than the piano sound.

Work with your sound person and ask him or her how you're doing with your parts. The sound person can hear the whole band and can give much more objective information than what is apparent while at the keyboard. I have observed that most keyboard players overestimate the dynamics needed – loud parts are played too loudly, and quiet parts are played too quietly.

Save the combi!!

Remember to save your combi frequently. We've covered basic saving (upper right drop-down menu -> Save Combi), but this only saves the combi into the running memory of the keyboard. This memory does persist when you power down the keyboard (NOTE – wait at least 10 seconds after making a change before powering down the keyboard to ensure your change is saved to running memory), but it is a good idea to periodically save the entire keyboard's memory to disk, and ideally also to a USB drive.

These functions are in Disk mode (right of the screen). To save the running memory to disk, select the upper right drop-down menu and choose **Save PCG**. Make sure all items are checked, and name the file.

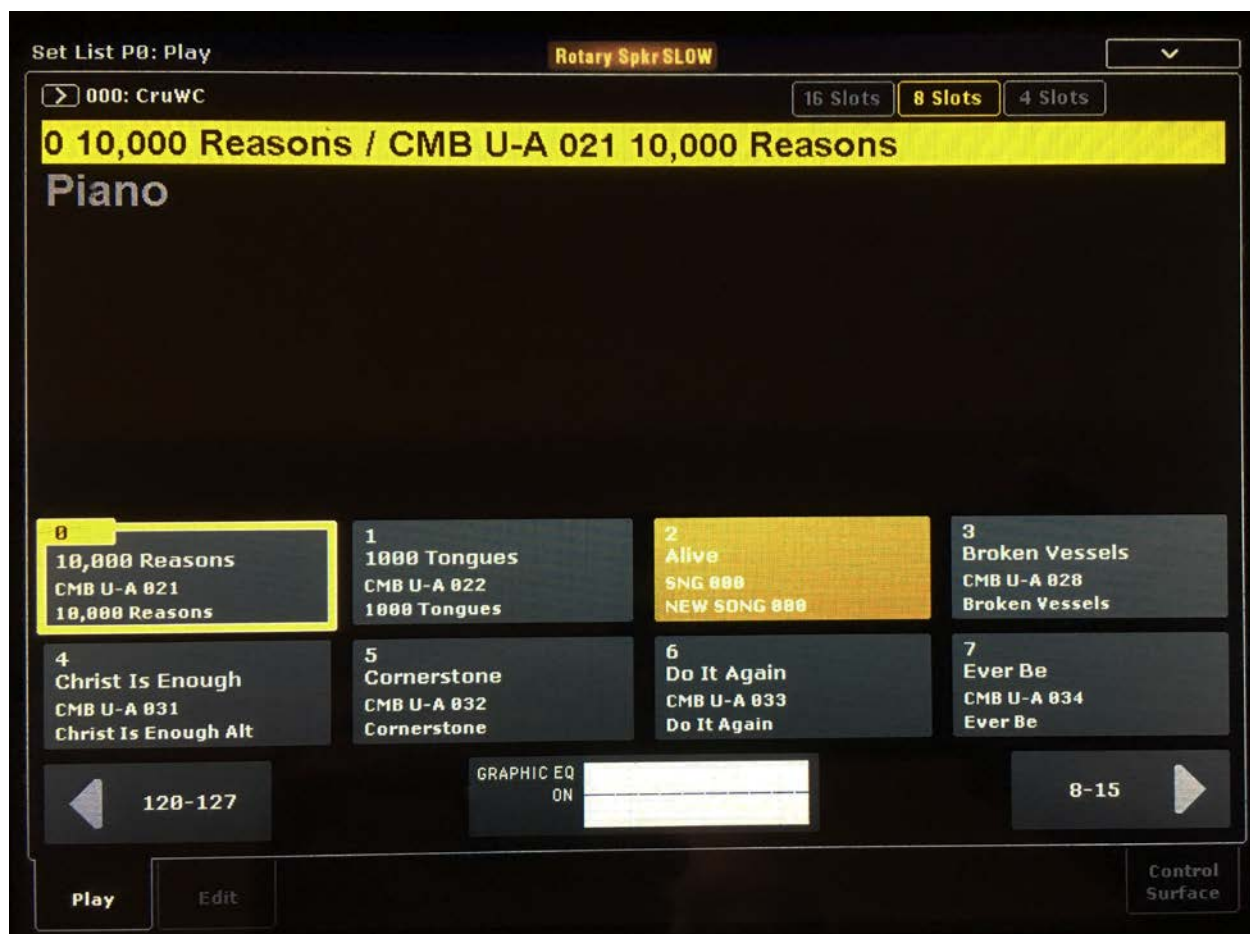
To save to a different drive than the internal drive, insert a USB drive in the keyboard, wait a few seconds, then drop the drive selection at the bottom of the screen down and choose the other menu choice (name will vary). Press the upper right drop-down menu and choose **Save PCG**. Make sure all items are checked, and name the file.

Setlist Mode

Setlist mode is a convenient way to organize combis so they can be recalled in order during a performance. Setlist items are pointers to combis or programs – they are not sounds themselves, so if you update a combi or program, that updated combi will be reflected in your setlist object. Setlist objects also can be titled something different than the program or combi name, and have a notes section.

Important: After making your setlist changes, remember to save your setlist! Go to the upper right drop-down menu and save the setlist. If you do not save your setlist, your changes will be lost when you power off the keyboard.

Enter Setlist mode by pressing the **Setlist** button immediately right of the screen.



Press the **Edit** tab at the bottom of the screen to enter edit mode.



Select the slot type – combi or program, then select the program or combi number. Give your setlist slot a name. Select the **Comment** tab and enter a comment if you'd like – song key, roadmap, a few hard to remember lyrics, etc.

To duplicate a setlist slot, select the slot to be copied, press **copy**, go to the destination slot and press **paste**. To insert a new setlist item, first select the source setlist item and press **copy**, then select the setlist item AFTER where you would like the new setlist item and press **Insert**.

After making your setlist changes, remember to save your setlist! Go to the upper right drop-down menu and save the setlist.

Notes:

- Make sure you save your setlist!! Go to the upper right drop-down menu and save the setlist.
- Comments are saved as part of the setlist entry, not the combi or program object.
- I like making a master alphabetical list of songs in the catalog starting at the beginning of the setlist file, and then copying setlist entries from the master list to free slots later in the setlist for the actual set. For example, slots 1-30 are filled with songs in the repertoire, complete with comments. The first song of a set would start at the next

empty page after the master list – in this case, number 32. I copy the second song from the master list to slot 33, etc. This way I am never working out of the “master” setlist objects, but rather a copy of them later in the file.

- Color-coding setlist objects is very helpful. For example, the first song of a set is red, the last song of the set or last song before a break blue.
- If you edit a program or combi that is referenced in a setlist, your changes in combi or program mode will be reflected in setlist mode – you will be working from your latest copy.
- If you edit a program or combi object referenced in setlist mode but then save it to a different combi or program bank or slot, setlist mode will NOT be updated – the setlist slot will continue to point to the original combi or program slot.