The 20 Things you Want to Know
without Reading the Manual

We get it. You don't want to read the manual. You've already figured out that the malletKAT is really powerful. I mean really, really powerful. Your guessing that harnessing this power requires knowing about lots of features, functions, etc. The size of the manual is really daunting. Yikes!

The really good news is that we figured out a way for you to not read the manual and still get great success. Throughout the years, the same questions keep on coming to us through phone calls and emails. Most folks don't care about all of the features, they just want to play. So below is the list of questions with details on solving the most important questions about the malletKAT! The trick is to find the question you need answered and just go there.

We are assuming that you are using the new malletKAT 7KS, with the Kurzweil Sounds built in. Smart move! Let's also make sure that we are starting at the beginning. Turn on your malletKAT 7KS, wait until it powers up, then make sure that you see "U" on the top line on the left of the screen. These are the User Kits. If you see the letter "F" or "C", on the top line, then you need to jump to the section called "Difference Between Factory, User Kits and Chains". Ok, here we go.

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BASIC INTERFACE

How do I Edit the malletKAT

You may have noticed that there aren't any buttons for editing with the exception of the volume buttons. Take a look at the "white" keys. Notice that there is a function listed directly underneath each pad. Getting at these functions require that you to step and hold down the EDIT footswitch. When you hold down the switch and then hit one of these pads, the screen changes and confirms that you want to change a value for that function.

Changing the value is performed by using the INCrement and DECrement keys. These are the highest C# and D# pads on the instrument.

So let's say that you want to change the octave range on a sound. You want to make the sound an octave higher. These are the steps:

Step on and hold down the EDIT Footswitch.
Tap on the "e natural" pad where the octave function is listed (the highest e on the malletKAT)
While the Footswitch is still held down, tap on the INC C# pad. Let go of the Footswitch.

This is how all of the editing is done on the malletKAT.

There is another very effective shortcut for entering values. Take a look at the "white" keys on the malletKAT. Notice there are numbers 1 - 10 starting on C# (not the Express)
This is the quickest way to enter a large number. Here's an example:

Let say you want to go to Program number 100:

Step on the Edit Footswitch and while it is held down, tap on the highest C on the malletKAT. This is the program function key. Now type in 100 (C#- A# A#). Let go of the Footswitch. Isn't that easier than hitting the increment key over and over!

CHANGE SOUNDS

Getting at Different Instrument Sounds

The simplest way to change a sound on the malletKAT is to tap on the Forward or Backward key twice. After the second hit, each subsequent hit increments or decrements through the 127 User Kits.

The 127 User Kits are preset for you. There is no programming required. Just play through them all. Eventually you will want to change the order of the sounds. That's where the CHAINS come in.

A User Kit is really a SETUP. In a setup you tell the malletKAT what sound you want, what octave range, the name of the setup, etc etc. Changing these things is what we call programming the malletKAT. Here we are just playing with the sounds.

Just so that you know, there are over 1000 sounds in the instrument. The malletKAT 7KS is ready to grow with you when you want to do fancy things like layering, splitting, etc.

There is a shortcut to get at a particular Setup or USER Kit. Let's say that you are on User Kit 5 and you want to go to Kit 75. Getting there the way just described would mean tapping on that Forward pad 70 times! Here's the shortcut:

Step on the Edit Footswitch and hold it down...
While held down tap on the SETUP pad (second highest C natural)
Now use the number pads (the "black" keys) to get to Kit 75
Tap on pads D# and and A#.... Let Go

So the black number pads are
C#=1
D#=2
F#=3
G#=4
A#=5
next octave up

C#=6
D#=7
F#=8
G#=9
A#=0

BANKS and PROGRAM CHANGES

Changing a sound on the malletKAT in a particular SETUP KIT that you are playing in is performed by:
Stepping on the Edit Footswitch,
While Held down, tap on the high C pad.
Change the sound by either using the INC or DEC (C#-D#) pads or by inputing the number using the black keys.

This is how you change the Program Number within the Setup. Even though the sound may change, the name of the kit does not. That is because in the SETUP, you create your own name.

You may also notice that while you are changing the program sounds, the name of a sound displays, but it does not match the sound. This is normal. Ignore these names. They are there if you are using a General MIDI synth. It is possible to block these names by changing the setting in the Global Screens.

If you tap on the program pad (c natural) twice and then use the INC or DEC pads, you will hear what sound you are calling up as you are auditioning them.

There are 127 programs in a bank. If you want to hear another bank of 127 programs, then you have to change the bank number.

Now you need to go to the back of the manual and look at the list of sounds for the malletKAT 7KS. On the top line of each list is a bank number. A bank number consists of two parts called MSB xx and LSB xx.

So supposed you like the name of a sound on Bank 2, program Six. First you need to change the Bank Number.

Step on the Edit Footswitch and Hold it Down
Now Step on the Kit Auxiliary Pad (2nd E natural from top).
Tap on the Forward Key three times.

Now you see the MSB, LSB Screen.

On the Kurzweil engine, all of the MSB numbers are always 00. If you don't see 00, then use the INC DEC pads to make it 00.

Now move to the LSB setting by using the Forward pad. Change it to 2 (our example) by using the INC or DEC pads.

Now let go of the Footswitch, and start again, but this time tap on the Program Pad again (high C). Use the INC DEC or Input numeric pads (black keys) to type in 6.

When you let go of the Footswitch, you will see on the bottom line of the screen B 00-02 P06 v80. The 00-02 represents the Bank Number and the P06 represents the Program Number.

VOLUME

There are two different kinds of volume. There is MIDI volume. This is a value that you set in the SETUP anywhere from 00 to 127 and there are the physical buttons on the malletKAT that is like the volume knob on a receiver.

The physical knobs control the overall volume of the entire instrument. The MIDI volume sets the volume range of the sound, and stores that value in the SETUP.

To store a value, Step on and hold down the KIT Edit Footswitch. Now tap on the high B natural pad. Use the INC or DEC pads to set the KIT volume.

DON'T HEAR ANY SOUNDS

There are several reasons why you might not hear sounds on the malletKAT 7KS. The very first thing to try is to make sure that the volume is up. There are two buttons in front of the instrument. Look for the up arrow and press on the button for several seconds. That could do it!

On the malletKAT, if you turn it off and then back on again too quickly, the sound card does not have enough time to reset itself, and the result is no sounds. The cure...simply shut off the instrument and wait 10 seconds. Turn it back on and viola!

The third reason might be because you are in Factory Kits, not User Kits. Make sure that you see a “U” as the very first character on the display. If you see an F, then you need to get back to User Kits.

Step on the Edit Footswitch.
While it is held down, tap on the BANK SELECT PAD (e natural, third from top). Now tap on the INC (D#) or DEC (C#) several times until you see USER Kits have been selected. Let go of the footswitch. That should take care of it.

RESET THE MALLETKAT
Performing a REINITIALIZE

Resetting the malletKAT back to the factory defaults is easy.

Step on the Edit Footswitch.
While held down press on BOTH the Forward and Backward pads at the same time. (the little pads on the far right of the instrument).
Look at the display, the malletKAT will ask you to also press on the A# pad, next to the backwards pad.
When all three pads are held down, the malletKAT warns you about the reset, then it sends out a series of beeps and the instrument is reset.

The malletKAT defaults back to Factory Kits. You need to use the USER Kits for the internal sound card. To do that...

Step on the Edit Footswitch.
While it is held down, tap on the BANK SELECT PAD (e natural, third from top). Now tap on the INC (D#) or DEC (C#) several times until you see USER Kits have been selected. Let go of the Footswitch.

MEMORY PROTECT
SAVING KITS

The malletKAT automatically saves any setting that you change as long as you are using USER Kits and the Memory Protection is set to OFF.

Factory Kits lose any changes that you make as soon as you leave the kit regardless of this setting.

If Memory Protection is set to ON, then no changes can be made.

To Turn ON Memory Protect,
Step on the Edit Footswitch.
While Held Down, press the GLOBAL AUXILIARY pad (d natural, third from top)

Now tap on the FORWARD pad once.

Use the INC (D#) or DEC (C#) to turn on Memory Protect (screen says PROTECTED) or turn off the Memory Protect (screen says NOT PROTECTED)

CHANGE THE OCTAVE

When playing the sounds on the malletKAT, you may want to shift the sound up or down an octave. Changing the octave is real easy on the malletKAT.

Step on the Edit Footswitch.
While held down, tap on the OCTAVE pad (highest e natural)
Use the INC or DEC pads (highest C#-D#) to raise or lower the octave.
Let go of the footswitch.

CONTROLLER ONE--CONTROLLER TWO

The malletKAT is like having two controllers in one. Each one of these controllers can have its own sound. These two sounds can be played separately (HANG MODE), or doubled (LAYER MODE) or split across the keyboard (SPLIT MODE). Each of these controllers can also have their own dedicated sustain footswitch.

In order to make your own two sounds play on a kit, you have to know a little bit about programming. The actual manual goes into detail on how to do this, but here is the nutshell of information needed to make this work.

Step on the Edit Footswitch.
While Held down, tap on the C# DEC or D# INC pad. Each tap toggles between Controller One and Two. You can only edit one Controller's information at a time.

In order to get two different sounds,
Each Controller MUST be on its own MIDI channel.
Each Controller MUST have its own BANK and Program Assignment.

Then you must decide if you want to be in HANG Mode, LAYER Mode or SPLIT Mode

Finally, you will need to adjust the GATE TIMES, OCTAVE and Velocity Settings.

HANG / SPLIT / LAYER
MODES of PLAYING

The malletKAT has Two Controllers built in, each capable of making their own sound. There are three basic ways of using these sounds.

HANG MODE.
In this mode, when using the Sustain 1 Footswitch, you are playing Controller One. When the Sustain 2 Footswitch is held down, the malletKAT plays Controller Two's sound. Why the word “hang”? It is possible to set Controller's Two sound to play “INFINITE” gate time. When the Gate time is set to infinite, the sound hangs on and plays until you step on the Sustain 2 Footswitch a second time. This means that you can create a pad underneath your normal playing by having chords sustain when playing your main sound.

To Set the malletKAT to HANG MODE, step on the Edit Footswitch and tap on the HANG (c natural, third from top) pad.

SPLIT MODE.
Like the word implies, you can split the keyboard so that you have one sound on the right and one sound on the left.

The malletKAT does something a bit more interesting. It allows you to overlap your Split points so that you can have a layered sound as well as split zones.

In order to make this work, you need first to be in CONTROLLER ONE. Then Step on the Edit Footswitch and tap on the SPLIT pad (d natural, third from top). The malletKAT now asks you to decide on the LOWEST note of the Split point for Controller One. This is the lowest pad that will play the sound from Controller One. Tap on the pad, and release the Footswitch.

Now you need to switch to Controller Two. (step on Edit Footswitch and tap on the INC or DEC pad). Let go.

Step on the Edit Footswitch again, and tap on the Split pad again. This time, tap on the pad that will play the HIGHEST note for Controller Two. Let go.

As long as you set each of the Controllers to their own MIDI Channel and Program Numbers, the Split Point will now work.

LAYER MODE.
When you Step on the Edit Footswitch and tap on the Layer Pad (e natural), both sounds will play at the same time.

NORMAL OR DAMPEN MODE

Dampening is a special technique that vibe players use to dampen the sound of a bar by pressing on the bar after the bar has been struck with the dampen pedal down.

The malletKAT can emulate this gesture simply by turning on DAMPEN Mode.
After you strike a pad with the sustain pedal down, you can dampen the sound by applying pressure to that pad.

To Turn on DAMPEN Mode
Step on the Edit Footswitch
While Held Down, tap on the Dampen pad (a natural 3rd from top). Let go of Footswitch.

If you want to shut Dampening off and use normal playing,

Step on the Edit Footswitch,
While Held Down, tap on the Normal pad (g natural 3rd from top). Let go of Footswitch.

SETUPS

VRS PROGRAMS or SOUNDS

Understanding the difference between a Setup, Program or Sound can be confusing. Often when thinking about calling up a specific sound,what's really wanted is a particular Setup.

Any sound that you hear on the malletKAT is really some Program Number. There are over 1000 sounds or Programs in the malletKAT. Each sound gets its own program number assignment. MIDI has 127 programs in a bank. So to get at all of the different sounds in the malletKAT means to know the Bank Number and Program Number.

A Setup in the malletKAT stores the Bank and Program Number you want as well as the octave setting, the gate time setting, the velocity setting, the kit name and other goodies. Because the malletKAT has TWO Controllers, the Setup also stores the same parameters just mentioned for Controller Two as well.

So when you call up a SETUP on the malletKAT, you are calling up a collection of parameters that make up the total sound. There are 127 USER SETUPS, also called KITS. In the User Kits, you can store your own collections of sounds and settings.

When you are in PLAY mode, (when you are just playing), you can change the SETUP by tapping on the Forward or Backward pads. Each time you do that, you will notice the the Setup (USER KIT NUMBER) changes.

It is also possible to JUMP to any SETUP number without using the Forward or Backward Keys.

Step on the Kit Edit Footswitch and Hold it Down
tap on the SETUP pad (c natural, 2nd from top).
Now use the “black keys” to enter in a number.

DIFFERENCE BETWEEN FACTORY KITS, USER KITS and CHAINS

A KIT is another word for SETUP. There are 127 FACTORY Setups in the malletKAT. These FACTORY Kits are designed to work with an EXTERNAL sound source that uses the GENERAL MIDI Standard. This is a collection of sounds that has a standardized Program Number List. These Kits can be temporarily edited, so that it can be stored to a USER kit, but the Factory Kits themselves can not be permanently altered. As soon as you leave a Kit, the default parameters return. Also, these FACTORY Kits are not meant to be used with the internal Kurzweil sound card built into the malletKAT. If you do call up a Factory Kit when using the internal sound, you will get unexpected sounds or no sounds at all. This is not a malfunction. When using the malletKAT 7KS, go to USER Kits.

There are 127 USER KITS stored into the malletKAT 7KS. These Kits have been preprogrammed at the factory, but they can be edited and saved by you. You can always get the original Kits back by performing a reinitialization of the malletKAT.

The sounds that you hear when going through the Setups are a sampling of the sounds that are built into the malletKAT.

Once you get going, you are going to want to put your favorite sounds in a particular order. That is what a CHAIN does. In other words, a CHAIN is a collection of your favorite SETUPS in the order that you want them. There are 16 different Chains, that is 16 different collections of Setups.

A Chain therefore is not an additional User Kit. So when you are editing a sound when you are in CHAIN Mode, you are really editing some User Kit. You can find out what SETUP you are working with in the CHAIN by tapping on the SETUP pad to see what USER KIT you are in.

We will explain how to make up your own CHAIN in the next question.

When you are looking at your display, notice the first letter on the screen. You will either see an (F) for Factory Kits, (U) for USER Kits or (CH) for CHAIN.

To go to these, step on the EDIT Footswitch and hold it down.
Tap on the F natural pad (3rd from top). It says BANK.

When you tap on the F natural pad, you will see that you have either selected FACTORY KITS, USER KITS or CHAINs. You can change what group of Kits you want by tapping on the INCrement D# or DECrement C# pads.

CHAINS
How do I make my own

If you are reading this section, it is probably because you have found some sounds that you really like, and want to put them in order so that you can call them up quickly when playing.

When making up a Chain, the first thing that you want to do is to write down the USER KIT NUMBERS that you want to use. Put them down on paper AND write down the order of sounds that you want on this list.

So image that you want User Kit numbers 1, 5, 10, and 15 in order.

A Chain is a collection of these User Kits. The malletKAT has 16 different Chains. Each Chain can have up to 16 User Kits stored in order. These are called “steps” in the CHAIN

So Lets set up Chain #1

Step on and Hold Down the Edit Footswitch
Now tap on the GLOBAL AUXILLARY PAD (d natural 3rd from top)
Now tap the number 46 (thats G# and C#)

The screen first shows you the Chain number and the Step number on the first line
On the Second Line, you will see the User Kit number.

Notice that there is a blinking cursor on the screen. You can move this cursor by using the Forward or Backwards pads. Make sure that you are in CHAIN #1. If not, use the Backward key to make the CHAIN number value blink, then use the INC or DEC pads to get the number to say 01.

Now move the cursor over to the STEP by using the Forward pad. Make sure that you are on step 01. If not, use the INC or DEC to get it there.

Now move the cursor again (forward pad) until it goes to the second line. The screen says SETUP. Change the value to 1. (our example)

Now you need to move the cursor back to STEP (use the backward pad). Now change the STEP to 2 using the INC.

Now more the cursor back to the second line, “SETUP”. Now change the value to 5 (our example).

Are you getting the idea?

When you finally finish, you will have
Chain 01 Step 1 =1
Chain 01 Step 2= 5
Chain 01 Step 3 = 10
Chain 01 Step 4 = 15

If you want to Loop this Chain, Go to Step 5. When you get to the SETUP number, go past 127. Now you will see that you have other choices where you can Loop the Chain, or Go to the Next Chain.

When you are finished, move the cursor down to the last line and ENABLE Chain mode

Let go of the Footswitch. Notice that you are now in Chain 01 in Play mode. Use the Forward or Backward pads to toggle through these setups.

Last thing. How do you go to a different CHAIN? Step on the Edit Footswitch, hold it down and tap on the Global pad again (d natural). Now when you tap on the INC or DEC pads, you will see the various CHAINS that you can call up.

GATE TIME
How long a sound sustains

If you just tapped the pad and there wasn't any Gate Time control, every sound would be extremely short. The Gate Time Setting allows you to decide how long the sound plays when you are not stepping on the sustain pedal.

On the malletKAT, the Gate time is set in milliseconds. 1000mS equals one second. If the Gate Time was set to .250mS, then that would equal 1/4 of a second of sustain.

To change the Gate Time:
Step on and Hold down the Edit Footswtich
Tap on the high D natural pad (GATE)

Use the Inc or Dec pads (C#-D#) to get the value you want.

When you go there, you might notice that the value is set to “VELOCITY”. That is because the malletKAT has the ability to change the gate length of a sound by how hard you are playing. This makes the notes sound more musical because every note is not the same length. If you Step on the Edit Footswitch, tap on the D pad and then Tap on the Forward Key, you will see some new screens.

The first tap you will see ROLL MODE. This mode should be turned on (by using the INC or DEC pads) if you are playing timpani or some other sound that want the roll effect.

If you tap on the Forward Key again, you will see the Velocity Shift settings.

There is a min and max setting. This is the range of Gate time going from soft to loud. Making a range say from 250-150 means that as you play harder, the sound will last a shorter amount of time.

You can navigate through the min and max setting by using the Forward or Backward pads, and you can change the values using the INC DEC pads.

PITCH BEND

The malletKAT has the ability to bend notes using the sustain two Footswitch. There are several things you need to set up to get this to happen.

Controller one and Controller Two must be on the same MIDI Channel
Controller Two's Gate Time should be set to a low value, say 100mS

When editing Controller TWO, tap on the MONO pad (the 2nd f natural) FOUR TIMES. You will see the word PTW. Let Go.

Now you are ready. This is what you have to do.

Play a note and hold down the sustain pedal so that the note is sounding.
While the note is playing, step on the sustain 2 pedal.
Now tap a pad on the malletKAT. You will notice the pitch bend. When you release the sustain two Footswitch, the bend goes back to normal.

Practice this gesture and you will get the hang of bending notes.
The white keys act like a big pitch wheel (the first three octaves).