

WELCOME TO THE *vibeKAT*

The original malletKAT was first introduced in 1984 by KAT Inc. For over 30 years the instrument has been upgraded and improved making it the most expressive MIDI mallet controller ever invented. The price for all of this power and creativity however was an instrument that could be quite difficult to program as there are 100's of parameters that can be modified.

The thought came to us to make a new malletKAT with all of the expression, dynamics and sensitivity of the original but without all of the programmability. The *vibeKAT* was born. Yes this malletKAT can still dampen notes, and velocity can control sustain, and even some programs have split mode or are layered, etc but now these KITS (SETUPS) are preset.

There is still some programmability available, but only the most crucial features are malleable. The great exciting news is that you don't need to know about Bank Changes, Program Changes, MIDI Changes, etc etc. Just call up the Preset Setup and ENJOY!

THE SIMPLE MANUAL

FOOTSWITCHES and PEDALS and MIDI

Notice on the back of the *vibeKAT*, there are a bunch of inputs. Looking from the back, the very first one (on the left looking from the back) is labelled SUSTAIN ONE. This is your main sustain footswitch. When you press on it, the sound stays on until you release it.



The next input jack to the right is the EDIT FOOTSWITCH. You step on this footswitch if you want to do some editing explained below. The next input to the right is the SUSTAIN TWO footswitch. When you step on this footswitch, different things happen depending on the setup. Most of the time, it just changes the octave up or down. But you might be surprised to find that another sound is played or that you can control pitch bend.

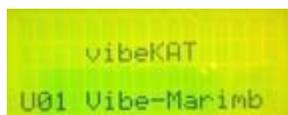
The other two inputs are not footswitches but FOOT CONTROLLER INPUTS. These are optional pedals that you can buy that can control the volume or modulation or vibrato of a sound. Each SETUP has programmed them separately depending on the needs of the sound.

Notice there are two jacks called MIDI IN and MIDI OUT. Use the MIDI IN if you want an external controller to use the sounds inside the *vibeKAT*. This is perfect for folks using the DITI / jamKAT and want to use the sound module for BOTH the *vibeKAT* and an External Controller at the SAME TIME.

The MIDI OUT is used if you want to use the *vibeKAT* to control an external sound module. All of the setups send note data on **channel one**. Setup **100** should be used for playing external sounds because it is the only setup that does not send out any Bank or Program Change information. You can change the octave, and gate (sustain)..... More on that later.

SOUNDS (SETUPS) on the *vibeKAT*

When you turn on the *vibeKAT*, after a few moments of initializing the sound card, The PLAY MODE is displayed.



On the bottom line you will see a number (SETUP #) and the name of the Sound.

To advance to the next Setup or Sound, simply tap on the FORWARD KEY Twice. The FORWARD KEY is the little pad on the far right of the keyboard. Every tap thereafter advances the sound by one. If you want to go backwards, tap on the BACKWARDS KEY. (left of the FORWARD KEY).

There are 100 SETUPS or Sounds in the Instrument. They are grouped together in what we call SOUND GROUPS.

GETTING AROUND THE SOUND GROUPS

We believe that most likely you will be using one of these SOUND GROUPS for performing. There is a quick way to get to these groupings.

USE YOUR EDIT FOOTSWITCH. Step on it and hold it down. Now TAP on the HIGHEST C Natural NOTE. The malletKAT will DISPLAY one the SOUND GROUPS. You can jump to any GROUP by re-tapping on that high C pad while the footswitch is still held down. The screen will toggle through the 10 SOUND GROUPS as long as you keep your footswitch down. Release the footswitch.

Now the sounds you need are really close to each other and you should use the FORWARD /BACKWARD keys to increment or decrement through the sounds.

What is really happening is that the SETUPS are in order from 1-100. The SOUND GROUP just JUMPS up or down by 10 setups every time you tap on the Increment D# or Decrement C# pads.

THERE IS A THIRD WAY TO JUMP TO A SETUP

This feature is often used on the malletKAT PRO. If you step on the edit footswitch and tap on the second highest C (labelled SETUP), you can call up any of the 100 kits by using the “numeric black keys”. Notice that the “black” keys on the *vibeKAT* have a label underneath them going from 1 to 0. Step on the footswitch, tap on the second highest C labelled SETUP, then tap in a number. If you want to go to setup 9, then tap in 09. (A#, G#)

Here is a List of the Sound Groups

SHOW = setups 1-10. These setups are the sounds you most likely would use in a show. They include timpani, bells, xylophone, vibes, etc.



1	Vibe Marimba
2	Marimba Vibes
3	Xylo Bells
4	Bells Xylo
5	Chimes Bells
6	Orch Timp
7	Orch Perc
8	Tam Tam
9	Temple Block
10	Natural Perc

CLUB = setups 11-20. These setups are the sounds you most likely would use when doing gigs. They include sounds like vibes, marimba, steel pan, percussion, piano, etc.



11	Thick Vibes
12	Double Marim
13	Steel Pan
14	Dyn Perc
15	Anniv Drums
16	Real Nylon
17	Emo Verser
18	Chem Lead
19	Upright Bass
20	Piano Recital

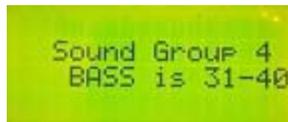
DRUMS+PERCUSSION = setups 21-30. These setups are a collection of drums and percussion.



21	Rhythm Reel
22	Modern Block
23	Skullophonic
24	Open Rock
25	Full Room
26	Brushes
27	Birt Natural
28	Vibra Kit
29	J Geils

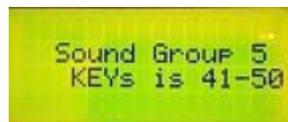
30	Pomele
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BASS = setups 31-40. These setups are a collection of bass sounds.



31	P Bass
32	E Bass
33	Bootsey
34	Jaco Fretless
35	Upright
36	Levin Bass
37	Finger Bass
38	Heavy Pick
39	EberhH Fretless
40	Sly Bass

KEYS/SPLITS = setups 41-50. These setups are a collection of keyboard sounds and sounds that have a split, meaning that if you step on the sustain two footswitch, the second sound appears.



41	Piano Strings
42	Steves Rhodes
43	Hardstr EP
44	Bcow Clav
45	DX Rhodes
46	softall Stops
47	Bass Vocal
48	Vibes Gtr
49	Synth Bass

50	Piano Bass
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VIBES = setups 51-60. Here are a collection of vibe sounds.



51	Real Vibes
52	Thick Vibes
53	Chorus Vibes
54	Vibe Dream
55	Creamy Vibes
56	YellowVibra
57	Golden Vibes
58	Crystal Vibes
59	Vibe Trance
60	Surreal Vibes

MARIMBA = setups 61-70. Here are a collection of marimba sounds.



61	Double Marimba
62	Rich Marimba
63	Tempered Marim
64	Subtle Marimba
65	Magic Marimb
66	Marimba Squash
67	Mellow Marimba
68	Lonely Marimba
69	Solo Marimba
70	MagicMarimb2

STRINGS = setups 71-80. Here are a collection of string sounds.



Sound Group 8
STRINGS 71-80

71	Dark NY
72	Pizzacato
73	SlowQuad
74	Le Pesque
75	Studio A Strings
76	Tender Strings
77	Fast Violins
78	Viola
79	Cello
80	Pizz and Perc

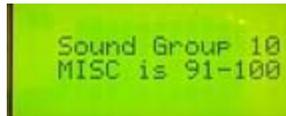
BRASS & WOODWINDS = setups 81-90. Here are a collection of brass and woodwind sounds.



Sound Group 9
BRASS/WINDS 81-90

81	Flutes
82	Trombones
83	Low Orch Brass
84	Bari Horns
85	Trem Flute
86	Oboe
87	Clarinet
88	Trumpets
89	Muted Trpts
90	Woodwinds

MISCELLANEOUS = setups 91-100. There are some cool miscellaneous sounds included in the setup. Setup 100 sends out NO Bank or Program information. This setup is used when using the *vibeKAT* with an external sound source using MIDI on channel ONE.



91	Catherdal
92	Mixed Choir
93	Jazzy Vox
94	Solo Timp
95	Harp
96	EvilOctWheel
97	Med Crunch
98	Pipe Stop
99	Accordian
100	EXTERNAL

THINGS THAT YOU CAN PROGRAM ON YOUR *vibeKAT*

There are a few things that we felt we had to include on the *vibeKAT*. The functions listed below all use the same procedure.

1- STEP on the EDIT FOOTSWITCH and hold it down. then....

2- Tap on one of the pads on the highest octave. These are all on the top octave of the *vibeKAT*. When the EDIT Footswitch is held down, these keys become function keys for the *vibeKAT*.

Their function is listed on the label below the pad.

3- Use the INCREMENT / DECREMENT pads (high C#-D#) also labelled to change the value.

4- Release the EDIT FOOTSWITCH. The new values are automatically saved.

FUNCTIONS

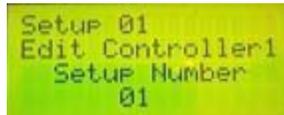
HIGHEST OCTAVE

AUTO SAVE

Whenever you make any changes on the **vibeKAT**, such as the octave, volume, gate time, etc., the **vibeKAT** automatically saves them to the User Preset Setup. You do not have to perform any other function or procedure in order for your setup adjustment to take place.

C= SETUP (second highest C natural on the **vibeKAT**).

This is how you jump to any SETUP.



There are 100 Setups or Sounds available on the **vibeKAT**. Use this function when you want to jump from one sound to another. Notice starting on the third octave's black keys there are numbers under each pad. Over the third and second octave, black keys are numbered 1 to 0.

Step on the footswitch, tap on the second highest C natural (SETUP FUNCTION), and type in a two or three digit number to jump to that sound or setup.

Remember you can always use the FORWARD or BACKWARD keys to scroll through the setups sequentially without having to step on the edit footswitch. You need to tap either of these little functions pads twice to get the setups to change, but then each additional tap advances by one.

SEE ALSO SOUND GROUPS ABOVE. This mode jumps setups by 10. This function is on the highest C natural on the instrument.

C#= THRESHOLD ADJUST

This setting affects how soft you have to play before the **vibeKAT** responds. A value of "10" is default.

You can lower it, but if you go too low, the instrument may false trigger.



With the Edit Footswitch down, tap on the C# pad to get into Threshold Adjust Mode, then tap on the pad that you want to examine or change. The second line displays what pad you are

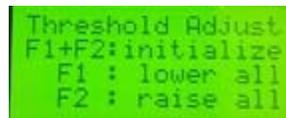
looking at. The third line displays the actual threshold the computer has set for minimum response. With the footswitch held down, in this mode you can jump to any pad or pads.

The third line is the Margin. Its a margin of safety. 10 is safe but some players may want to lower that margin in order to get better low end sensitivity. Other players may prefer to raise the margin so that there is reduced chance for false triggering.

The method just described is for changing the threshold margin value on one or more pads. This is helpful if one pad seems to respond slightly different from another pad. If you want to change the threshold margin on the entire instrument, then you will need to perform a Global Threshold Adjust.

GLOBAL THRESHOLD ADJUST

To change the Margin Globally (all of the pads), step on the EDIT footswitch and the SUSTAIN TWO footswitch at the SAME TIME. You will notice the display changes to.

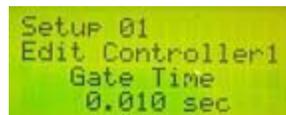


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Threshold Adjust
F1+F2:initialize
F1 : lower all
F2 : raise all
```

Now use the little function pads on the right to RAISE or LOWER the Margin. The Left function pad L1 lowers the margin. The Right function pad L2 raises the margin. Note that there isn't any visual or audible feedback as you perform this, but the threshold is being adjusted.

D= GATE TIME

On this screen, you can control how long a sound will play without the sustain footswitch held down. The screen displays the length of the sound in milliseconds. 1000mS = one second. .250mS equals one quarter of a second.



```
Setup 01
Edit Controller1
Gate Time
0.010 sec
```

Note: If the Gate Time is set to Velocity, that means that we have preprogrammed a special gate time for that sound. As you play harder, the sound gets shorter.

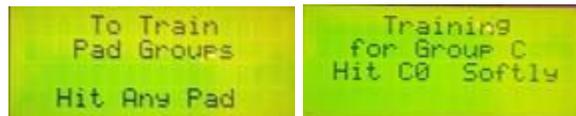
D#= GROUP TRAIN (individual octave training)

Training the **vibeKAT** is an important step to having the instrument respond to your personal taste. Normally, you only need to Train one pad for the entire instrument.

SEE BELOW GLOBAL TRAINING PAD G. Go there first!

There may be times however when you want to train one octave differently than the rest. In this case you have the option to train Each Octave independently from the next.

The octaves have been categorized by Groups. On a three octave instrument, the lowest octave is Group C0, the second octave is Group C+1, the third is C+2. On a four octave, the lowest Group is C-1. Group C-2 does not apply to the vibeKAT.



To Train each Group,

Step on the Edit Footswitch and while held down, tap on the D# pad. The screen shows the function and asks you to hit any pad. When you do, the Group Training screen appears. Use the FORWARD, BACKWARD keys to move through the different octaves. Training for each Group is on the C natural pad for that octave. The screen will ask you to Hit Soft, then to Hit Hard.

When you finish training, Step on the Edit Footswitch again to get back to Play Mode.

E = OCTAVE SHIFT

Here you can raise or lower the sound by an octave across the keyboard.



There is a 10 octave MIDI range. Use the INCRement / DECrement pads, (C#-D#) to change the octave range of the sound. When you release the Edit Footswitch, the sound will have been affected across the entire keyboard.

F= MINIMUM VELOCITY

This controls how soft a sound will play when you play soft. If you raise this, a soft hit produces a louder sound.



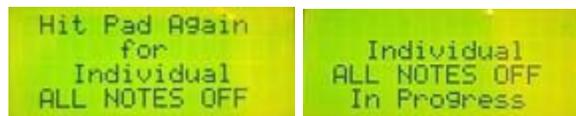
Setup 01
Edit Controller1
Minimum Velocity
22

This setting affects The volume on the softest strike. Use the Inc /Dec pads to change the value from 00-127.

NOTE: On the **vibeKAT**, the maximum velocity setting is pre programmed at 127.

F#= ALL NOTES OFF

If a note ever gets stuck on, tapping on this pad will shut off the note stuck on.



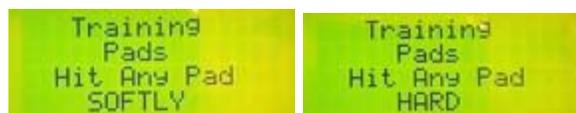
Hit Pad Again
for
Individual
ALL NOTES OFF

Individual
ALL NOTES OFF
In Progress

If you strike the F# pad once, it will send out a general note off command. If you strike the pad again, the **vibeKAT** will send individual note offs for every note on every MIDI channel. This will take a couple of seconds. Usually just striking the pad once is enough to shut off a stuck note.

G= GLOBAL TRAIN

One of the most important features of the **vibeKAT** is that you can train your instrument to the way that you play. You “teach” the **vibeKAT** what your soft and hard hits are. It takes these values and imposes them over the softest and hardest velocities of the sound. When you tap on the G pad with the Edit Footswitch held down, the **vibeKAT** will ask you to hit any pad “Soft”, and then after a moment will ask you to hit that pad again “Hard”. Make sure that you are realistic in your training. Don’t TRAIN softer than you play soft and don’t TRAIN harder than you play hard. How you train your **vibeKAT** has a tremendous effect on how the instrument responds.



Training
Pads
Hit Any Pad
SOFTLY

Training
Pads
Hit Any Pad
HARD

G#= FACTORY / USER KIT (Setup) SELECTION



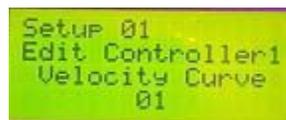
There are two sets of Kits (or Setups) in the **vibeKAT**. FACTORY KITS (setups) are to be used only when the malletKAT is connected to a GENERAL MIDI SOUND SOURCE. There are 127 General MIDI pre-programmed on the vibeKAT in FACTORY KITS mode.

USER KITS (SETUPS) are built into the **vibeKAT** especially for the Kurzweil Sound Card built inside the instrument. This is what you will be using unless you specifically need to use a GM sound module.

When you step on the EDIT FOOTSWITCH and tap on the G# pad, you will see the selected Kits. Tap the pad again (footswitch down) and it will toggle between Factory and User.

NOTE: If you reinitialize the **vibeKAT**, the instrument defaults to Factory KITS (SETUPS). You will need to also step on the Edit Footswitch and to tap on the highest G# pad to get the instrument in USER KIT (built in sounds) Mode.

A= VELOCITY CURVE



Besides TRAINING the pads and Setting the Minimum Velocity, there is another way to change how the pads respond to your soft and hard hits. That is the Velocity Curve Setting. Velocity Curves change how fast the **vibeKAT** goes from soft to loud as you play from soft to loud. Velocity Curve 01 is the default (01), but there are 11 other Curve responses to experiment if you feel the need to tweak the **vibeKAT's** response to velocity.

A#= ALL MEMORY DUMP



Also functions as Decrement Pad on Subsequent Strikes.

If you make lots of changes to the kits, you can save your edited kits. When you tap this key, SYSEX data is sent out the MIDI out port. You need a computer to store this. The **vibeKAT** will automatically take a SYSEX dump back in.

Alternate Mode can modify settings to the User Setups and send them to you via SYSEX. This is an advanced feature.

B= VOLUME

You can preset the volume of the sound here. The range goes from 00 -127. Usually, the volume is set to the maximum, so think of this as an attenuation of the sound.



HOW TO REINITIALIZE THE VIBEKAT

If you want to return the **vibeKAT** to it's original factory settings, step on the Edit Footswitch and while held down, press on both the Forward and Backward keys. When you do this, the screen will say

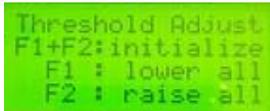


The display then asks you all also hold down the A# pad next to the Backward key. When all three pads are held down, the **vibeKAT** then re initializes itself, and defaults back to Factory KITS (SETUPS).

Because there are sounds built into the **vibeKAT**, you will also want to put the instrument into USER KIT mode. Step on the Edit Footswitch and tap on the highest G# pad.

HOW TO RESET THE THRESHOLDS

You can Globally reset the **vibeKAT's** pad thresholds by stepping on the EDIT FOOTSWITCH AND SUSTAIN TWO FOOTSWITCH at the same time. The screen will display



```
Threshold Adjust
F1+F2:initialize
F1 : lower all
F2 : raise all
```

Now with both of these pedals held down, press both the Forward and Backwards Keys. The **vibeKAT** will now reset the thresholds