

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.

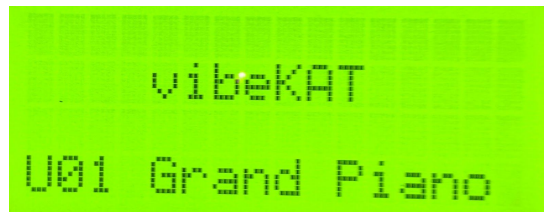
The other two inputs are not footswitches but FOOT CONTROLLER INPUTS. These are optional pedals that you can buy that can control the volume or modulation or vibrato of a sound. Each SETUP has programmed them separately depending on the needs of the sound.

Notice there are two jacks called MIDI IN and MIDI OUT on the rear panel. Plug a MIDI cable to either one of the MIDI out jacks on the vibekAT to the MIDI IN port on the KETRON SD 1000.

The MIDI IN port is used if you want to MERGE another controller with the vibekAT to your sound source.

SOUNDS (SETUPS) on the *vibeKAT*

When you turn on the *vibeKAT*, The PLAY MODE is displayed. This manual shows sounds Kits for the KETRON SD 1000



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 127 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 1-127. The SOUND GROUP just advances and jumps to the next group of setups that are organized by how they sound. Every time you tap on the Increment D# or Decrement C# pads it moves through these 127 Setups. For example, the KEYS Sound Group starts on Setup 1. When you advance to the next sound group, it jumps to GUITARS, which start on User Kit 22. This saves time finding the sound that you want to use.

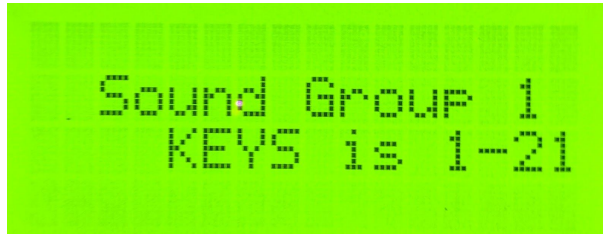
THERE IS A THIRD WAY TO JUMP TO A SETUP

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

1	Keys 1-21
2	Guitars 22-44
3	Basses 45-57
4	Solos 58-67
5	Mixed 68-75
6	Acoustics 76-84
7	Synths 85-93
8	Orch 94-110
9	Drums 111-115
10	Chr Perc 116-128

SOUND GROUP ONE = KEYS.



This sound group contains lots of keyboard sounds. User Setups 1-21

1	Grand Piano
2	Layer Piano
3	Latin Piano
4	Piano String
5	Jingle
6	Para Harp
7	Harp
8	Hot Organ
9	Deep Jazz
10	Percussive
11	FM Thin
12	RX Operator
13	Twin Electro
14	Huge FM
15	Elo Piano
16	Electro Pad
17	Mark
18	DX Piano
19	EL Piano 1

20	EL Piano 2
21	Phaze Electro

SOUND GROUP TWO = GUITARS



This Sound Group has some of the Guitar Patches found in the Ketron. On the malletKAT, they are in Setups 22 through 44

4

22	Open Country
23	Golden Steel
24	Twin Folk
25	Finger Slide
26	Nylon Theme
27	Finger Guitar
28	Funky Muted
29	Jazz Combo
30	Classical Bright
31	Start Folk
32	Clean Chorus
33	Metal
34	Strato FX
35	12 String
36	Western

5

37	Wha Guitar
38	Hawaiian
39	Django
40	Classic FX
41	Nylon
42	Steel
43	Muted
44	Lute

SOUND GROUP THREE= BASSES



VibeKAT Setups 45 to 57 are some of the bass guitar sounds found in the Ketron.

45	Smooth Bass
46	Acoustic Bass
47	60 Stopped
48	Muted Velo
49	Solid Body
50	Precision Bass
51	Reso Bass
52	Finger Bass
53	Fretless

54	Slap Bass
55	Synth Bass
56	Synth Bass 2
57	Acoustic Bass

SOUND GROUP FOUR = SOLOS



This next group is a collection of single line instruments. User Kits 58 through 67 represent this group.

58	Bandoneon
59	Blowing
60	Brass Hits
61	Alpin Muset
62	Trombone
63	Horn Pad
64	Pipe
65	Drama
66	Odyssey
67	Solist

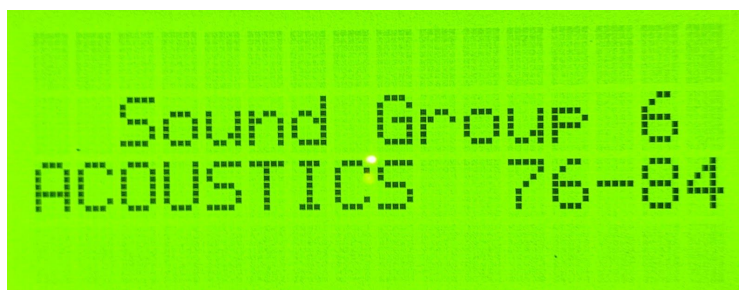
SOUND GROUP FIVE = MIXED



This next group is a collection of mixed bag sounds like we chose to make setups for. Setups 68 through 75 are used for this Sound Group

68	Glockpad
69	Udpad
70	F Musette
71	Cassotto
72	Daa
73	Girl Doos
74	Laah
75	Voices

SOUND GROUP SIX = ACOUSTICS



This group includes some brass, woodwinds and flute instruments. User Kits 76 through 84

76	Trumpet
----	---------

77	Flugel
78	Soprano
79	Tenor
80	Soft Trombone
81	Latin Flute
82	Pop Flute
83	Andes
84	Voice Flute

SOUND GROUP SEVEN = SYNTHS



This Group of User Kits from 85 to 93 are various synth sounds.

85	Wow
86	Poly Synth
87	Trance
88	Rave
89	Percussive
90	Dark B3
91	House Synth
92	Resonance
93	OBX Poly

SOUND GROUP EIGHT = ORCH



This Group contains Horns, Strings and other orchestral and non orchestral sounds. Setups 94-110

94	Muted Trumpet
95	French Horn
96	English Horn
97	Clarinet
98	Pan Flute
99	Sawtooth
100	Cliff Lead
101	Sound Track
102	Star Theme
103	Horn Cresc
104	Slow Violin
105	Staccato
106	Quartet
107	Octa Strings
108	Slow Arco
109	Dark Strings
110	String Ensemble

SOUND GROUP NINE = DRUMS



This Group contains Drum Sets. User Kits 111-115

111	Hip Hop Drums
112	H Pop Drums
113	Disco Drums
114	Standard Drums 2
115	Standard Drums 1

SOUND GROUP TEN = CHROMATIC PERCUSSION



This Group contains vibes, marimbas and other goodies. User Kits 116 through 128

116	Tinkles
-----	---------

117	Kalimba
118	Etnowood
119	Karimba
120	Vibraphone
121	FM Marimba
122	Toy Box
123	Mbira
124	Steel Pan
125	Marimba
126	Bright Vibes
127	Vibrabrato
128	Chorus Vibes

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

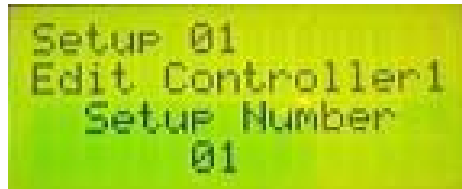
HIGHEST OCTAVE

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.



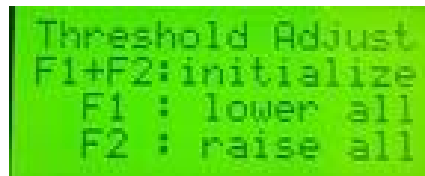
With the Edit Footswitch down, tap on the C# pad to get into Threshold Adjust Mode, then tap on the pad that you want to examine or change. The second line displays what pad you are looking at. The third line displays the actual threshold the computer has set for minimum response. With the footswitch 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.



```
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.

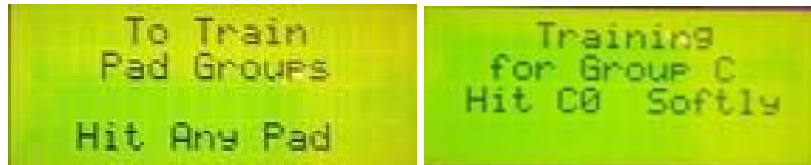
D# = GROUP TRAIN (individual octave training)

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.



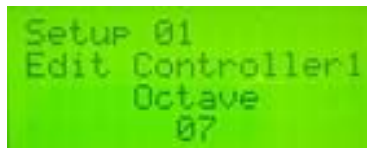
To Train each Group,

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.



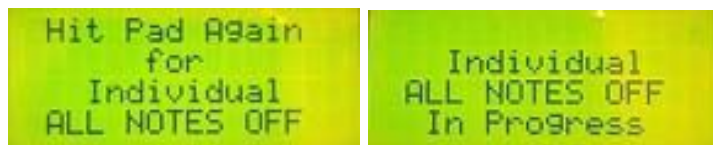
```
Setup 01
Edit Controller1
Minimum Velocity
22
```

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.

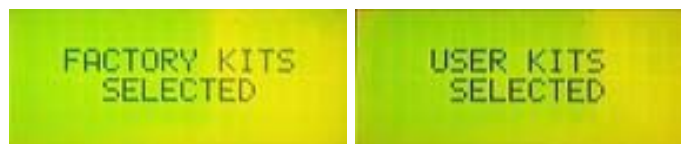
G= GLOBAL TRAIN

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.



G#= FACTORY / USER KIT (Setup) SELECTION



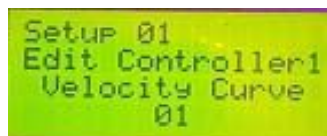
There are two sets of Kits (or Setups) in the **vibeKAT**. FACTORY KITS (setups) are to be used only when the malletKAT is connected to a GENERAL MIDI SOUND SOURCE. There are 127 General MIDI pre-programmed on the **vibeKAT** in FACTORY KITS mode.

USER KITS (SETUPS) are built into the **vibeKAT** especially for the Ketron Sound Module that you connected to the **vibeKAT** via the MIDI cable. 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 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 its 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



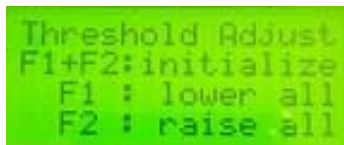
```
To Initialize
Device
<--- hold down
<---- A# pad
```

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

**USER SETUPS for the KETRON SD1000
vibeKAT and malletKAT**

U01	Grand Piano	U33	Metal	U65	Drama	U97	Clarinet
U02	Layer Piano	U34	Strato FX	U66	Odessey	U98	Pan Flute
U03	Latin Piano	U35	12 String	U67	Solist	U99	Sawtooth
U04	Piano String	U36	Western	U68	Glockpad	U100	Cliff Lead
U05	Jingle	U37	Wha Guitar	U69	Udpad	U101	Sound Track
U06	Para Harp	U38	Hawaian	U70	F Musette	U102	Star Theme
U07	Harp	U39	Django	U71	Cassotto	U103	Horn Cresc
U08	Hot Organ	U40	Classic FX	U72	Daa	U104	Slow Violin
U09	Deep Jazz	U41	Nylon	U73	Girl Doos	U105	Staccato
U10	Percussive	U42	Steel	U74	Laah	U106	Quartet
U11	FM Thin	U43	Muted	U75	Voices	U107	OctaStrings
U12	RX Operator	U44	Lute	U76	Trumpet	U108	Slow Arco
U13	Twin Electro	U45	Smooth Bass	U77	Flugel	U109	Dark Strings
U14	Huge FM	U46	Acoustic Bass	U78	Soprano	U110	String Ensemble
U15	Elo Piano	U47	60 Stopped	U79	Tenor	U111	Hip Hop Drums
U16	Electro Pad	U48	Muted Velo	U80	Soft Trombone	U112	H Pop Drums
U17	Mark	U49	Solid Body	U81	Latin Flute	U113	Disco Drums
U18	DX Piano	U50	Precision Bass	U82	Pop Flute	U114	Stand Drums 2
U19	EL Piano 1	U51	Reso Bass	U83	Andes	U115	Stand Drums 1
U20	EL Piano 2	U52	Finger Bass	U84	Voice Flute	U116	Timkles
U21	Phaze Electro	U53	Fretless	U85	Wow	U117	Kalimba
U22	Open Country	U54	Slap Bass	U86	Poly Synth	U118	Etnowood
U23	Golden Steel	U55	Synth Bass	U87	Trance	U119	Karimba
U24	Twin Folk	U56	Synth Bass 2	U88	Rave	U120	Vlbraphone
U25	Finger Slide	U57	Acoustic Bass	U89	Percussive	U121	FM Marimba
U26	Nylon Theme	U58	Bandoneon	U90	Dark B3	U122	Toy Box
U27	Finger Guitar	U59	Blowing	U91	House Synth	U123	Mbira
U28	Funky Muted	U60	Brass Hits	U92	Resonance	U124	Steel Pan
U29	Jazz Combo	U61	Alpin Muset	U93	OBX Poly	U125	Marimba
U30	Classical Bright	U62	Trombone	U94	Muted Trumpet	U126	Bright Vibe
U31	Start Folk	U63	Horn Pad	U95	French Horn	U127	Vibrabrato
U32	Clean Chorus	U64	Pipe	U96	English Horn	U128	Chorus Vibes

