



## ***WELCOME to the PanKAT Quick–Start Guide!***

Congratulations! You have purchased the world’s first MIDI Steel Pan Controller. This *Quick Start Guide* is designed to get you up and running quickly. The full manual has all the technical info you’ll ever need and will give you more info on programming and tweaking when you’re ready to dive deeper into the panKAT. Since the panKAT is based on the malletKAT software, the panKAT is an incredibly powerful instrument. So please, take a few moments to read this .....

### **WHAT IS THE PANKAT? WHAT IS A MIDI CONTROLLER?**

Looking at the panKAT, it’s obvious that the pads resemble a standard C or D pan layout. Yes, the instrument is tuned in 5th’s, so if you pick up the mallets, you will instantly be able to make music. After just a few minutes of playing on the panKAT, you will discover that the flat layout of the panKAT makes playing easy and natural. Using four mallets to play is not as challenging or difficult.

We didn’t just make the panKAT so that you could emulate a steel pan. No, the panKAT was designed to offer you a whole new vocabulary of expression that is just not possible on an acoustic drum. Here are some examples...

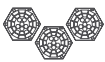
### **SOUNDS**

Now you can sound like any instrument, thanks to MIDI (more on MIDI later). The panKAT has a built in sound card with 128 instruments like pianos, basses, guitars, strings, drums and percussion and more. You can use headphones to practice or you can plug the panKAT right into an amplifier so that the world can hear you.

*Regarding the WS version of the panKAT.*

The sound card in the panKAT is not a steel drum sound card. It is a standard General MIDI card that contains basic keyboard sounds to help you get started using a MIDI controller. Alternate Mode will be offering extensive sound libraries of pans, marimbas, vibes, etc that will be preset to play with the panKAT. We will offer these sounds in several SAMPLER formats such as Reason NXT20, Kompact, Direct Wave, etc. Please contact us if you have a Sampler in a different format.

Using the MIDI outputs, you can access 1000’s of other synthesizers and sound modules. We offer the Kurzweil PC2R and the Yamaha MOTIF ES. These synths sound beautiful. You can watch the malletKAT vidoes on our website to hear what they sound like. If you get one of these sound modules, we offer a special software chip for the panKAT that makes them work right out of the box. In other words, you don’t have to program the panKAT or the sound module. You just “pick up your sticks and play”.



## **ARTICULATIONS**

When you first started studying how to play steel drums, you had to learn the layout of the “land”. The panKAT is much the same, only it has an enormous “land”. For example, you can learn how to bend notes like a guitar or flute player, add vibrato to your sound, dampen notes like a vibe player, control how long a tone lasts or change the octave on the fly. You can have several instrument sounds layered on top of each other and you can control these sounds by how hard or soft you are playing. Each of these articulations require a gesture movement on your part, and incorporating these new moves into your playing style will allow you to express how you feel in ways that will “move” you! This is the heart and soul of panKAT playing.

## **LAYOUTS**

Although the panKAT comes out of the box tuned in fifths, with just a touch of a pad, the panKAT’s pads can be transposed into blues scales, diminished scales, drum set layouts and more. You can change a traditional pad layout into any key instantly. You can permanently save these “kit” layouts into memory so that you can have immediate recall of these layouts when playing live.

This is new uncharted fun! We have already set up many of the FACTORY kits in the panKAT for these alternate tunings so that you can experiment and see what works for you.

## **MIDI CONTROL**

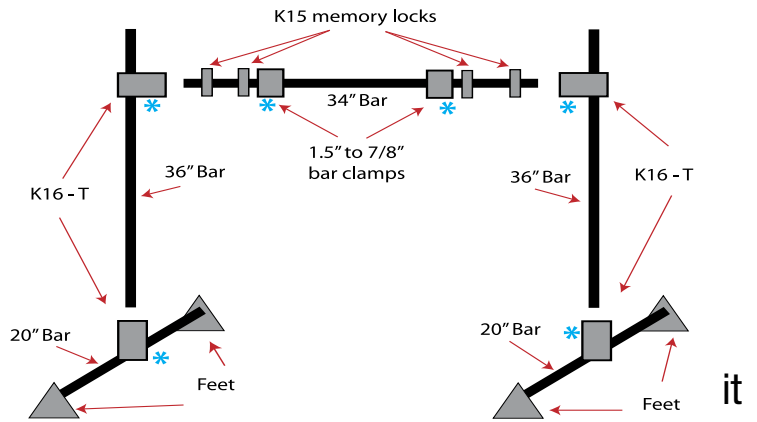
MIDI is the digital language that allows us to communicate our playing into sounds. A “controller” like the panKAT allows us to teach the panKAT how we want to sound. We can train the pads to respond to dynamics the way we like. We can tell the panKAT to remember what sound we want on what pad and how loud it is going to play. We can send our playing performance to a computer using a sequencer software program so that our performance can be played back or even scored automatically. The possibilities are endless. The panKAT is a powerful MIDI controller. You will be able to do things you haven’t even imagined yet!



## BUILDING THE PANKAT's OPTIONAL RACK

The first thing to do is set-up the pankAT rack. Look at the diagram to see how to connect the pipes but don't start yet. You should have (2) 36" vertical leg bars, (1) 34" cross bar and (2) 24" leg pieces.

The pankAT has two brackets that must be attached to the back of the pankAT in order for to lock



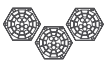
into the top rack bar. Lay the pankAT on it's pads, on a flat surface and put the brackets on the pankAT now. Each bracket is mounted with four supplied 10/32" screws.

Find the top rack pipe and put on two bracket holders and bar clamps. Don't tighten them yet because you will need to line them up to the pankAT's attached brackets. While the pankAT is still on it's pads, attach the top rack pipe to the brackets on the pankAT so that it is easy to put the bar clamps in the right position.

Center the bar on the back of the pankAT so that an equal amount of tubing hangs over each side. Now you can tighten up the bar clamps.

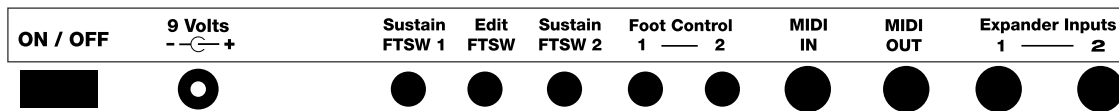
The 4 memory locks prevent the pankAT from rotating on the bar. Use one for each of the bar clamps (tighten these) and one each for the T clamps that are attaching the cross bar to the vertical leg bars (don't tighten these yet). Now put each vertical bar into a leg section and tighten. Insert the bar that holds the pankAT into the T clamps on each of the vertical bars. Adjust the pankAT to a comfortable playing level and angle and tighten the T clamp and the memory lock on each side.





## CONNECTIONS ON THE PANKAT

Let's take a look at all of the connections and buttons on the panKAT. The panKAT should be on the rack now. The display on the panKAT should be on the top right corner. Walk behind the rack and look at the back connections. Here's what you should see...



### ON/OFF Switch.

Turns the panKAT on and off.

### DC INPUT.

Make sure that you are using a KAT transformer or an adapter that matches our power specifications (9Volt 1.6Amps, Positive Tip). Our power supplies have a special screw in connector so that it stays attached during performances.

### SUSTAIN FTSW 1

Use this foot switch when you want to sustain the sound that you are playing. It is very similar to the sustain pedal on a piano. The panKAT comes with a sustain pedal (a square black foot switch - KF1). You can use this foot switch on any of the FTSW inputs. They can also be used on Foot Control inputs under certain circumstances. You might want to get some extra foot switches if you plan on doing editing and if you want to use all of the FTSW functions at the same time.

### EDIT FOOTSWITCH

Insert a foot switch here when you want to edit the panKAT. With the exception of changing kits (sounds), all of the editing functions are a combination of pressing the footswitch and hitting a pad.

### SUSTAIN FTSW 2

This is the coolest foot switch input. Depending on the kit, when you step on this foot switch a pre-defined function will happen. This includes pitch bending, octave shifting, or a different sound playing. You will have plenty of time to check out these functions later.

### FOOT CONTROL 1 and FOOT CONTROL 2

Unlike the foot switch inputs that “see” an on/off connection, these programmable input jacks require a special controller pedal. These pedals move from up to down in increments.



Depending on the function, they can control the volume of a sound, or affect the pitch of a note. There's a long list of other things that these pedals can do and the complete manual will go into the details of these functions.

## MIDI IN

You can attach a MIDI cable to this connection, when you want to have some other MIDI device “share” your sounds (like a “sequencer” or your keyboard player).

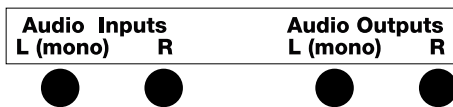
## MIDI OUT

Plug a MIDI cable into this OUT jack when you want to connect the panKAT to another sound module like the Kurzweil PC2r, to a sequencer, or to a data storage device. Make sure that you plug the other end of the cable into the MIDI IN jack on the receiving device.

## EXPANDER INPUTS

These input jacks will be used for EXPANDERS in future versions of the panKAT. You will be able to plug in up to 2 octave malletKAT EXPANDERS for example. We are also planning different panKAT configuration EXPANDERS. Because these EXPANDERS use the processing power built into the panKAT, you will soon be able to have multiple controllers for a fraction of the price. Imagine a Pan Ensemble. We are!

## AUDIO INPUT / AUDIO OUT JACKS *(For the panKAT WS only)*



The panKAT WS has 2 audio inputs and 2 audio outputs. The left pair of inputs are INPUT jacks. You can plug your CD/MP3 player into these jacks and

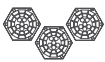
play along with it. The audio coming from these inputs automatically gets routed to the headphones and the audio out jacks.

The right pair of outputs are your AUDIO OUT jacks. Take two audio cables and plug them into your amplifier or mixer. If you only have one input on your amp, use the jack that says MONO. The panKAT automatically takes both the left and right audio signals and merges them to the mono jack.

## VOLUME BUTTONS / HEADPHONE JACK

On the next panel down are the volume buttons and headphone jack. When you continue pressing on it, the volume gets louder. The DOWN button, well it brings the volume down.





## **PLAYING SOUNDS**

Are you ready to check out the panKAT? Turn it on now and start playing. When you want to change a sound, tap on either of the rectangles labeled FORWARD or BACKWARD. It will take two strikes on these pads in succession for the kits for change. Once they start changing, each single strike on the pad will increment or decrement the kit (sound) by one. There are 128 Factory Kits and 128 User Kits built in.

You will soon notice that some kits are not in the standard 5ths layout. Surprise! Take a look at the kit listing on pages 13-14 to see what is happening to these kits.

## **BASIC EDITING to the PANKAT**

We kept most of the technical talk out of this guide until now, but there are a few basic editing concepts that must be understood if you want to make any changes to the panKAT. The first thing to look at is the pad layout on the next page.

The Outer Ring's number system goes from pad 1 to pad 12 in a counter clockwise position. Pad One is in the 6 o'clock position. It is the low C natural in a C pan configuration. The Middle Ring starts on pad 13 directly above pad one. It goes to pad 24 counter clockwise. The Inner Ring Starts also at 6 o'clock on pad 25. It goes to pad 29. The Center Pad is pad 30.

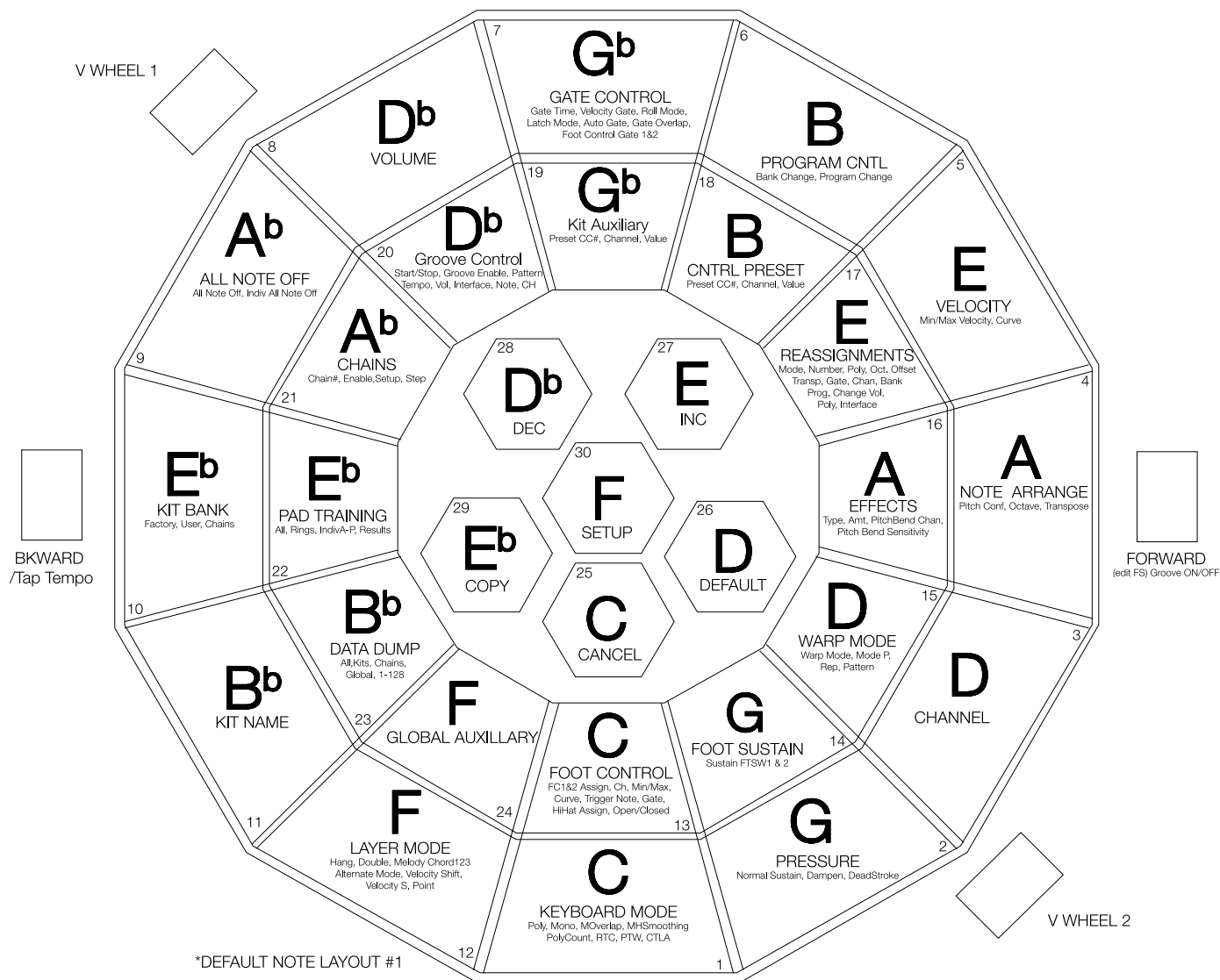
## **HOW TO EDIT**

All of the Editing Functions on the panKAT are performed by stepping down on the Edit Foot switch, and then while that foot switch is held down, you hit one of the pads. Each one of the pads are assigned a function or a group of related functions. As soon as you hit one of the pads with the foot switch held down, the function is displayed on the screen.

What is a FUNCTION anyway?

A FUNCTION on the panKAT controls how the panKAT operates when you strike on it. If you look at the diagram of the panKAT, you will see lots of words in CAPS. These are the FUNCTIONS that reside under those pads. Sometimes there are a group of FUNCTIONS that are closely related to a TYPE of FUNCTION.

Look at pad 12 LAYER MODE. This Mode tells the panKAT if it is going to play one sound (HANG MODE), layered sounds (DOUBLE MODE), etc.



## CHANGING VALUES

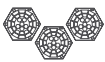
Just for fun, step on the Edit foot switch and while it is held down, hit pad 3. You are calling up the CHANNEL FUNCTION (MIDI channel). The display will say the word CHANNEL. You will also notice that 01 is blinking on the next line. This is the parameter that can be changed on this screen. In this case, Channels can be a number from 1 to 16.

The way that you change VALUES on the panKAT is to use the INCREMENT (Pad 27) and DECREMENT (Pad 28) pads. Try changing the CHANNEL VALUE from one to six.

The steps are:

Step on the Edit Foot switch and hold it down. The display changes and says EDIT CONTROLLER 1 or EDIT CONTROLLER 2. Now hit pad 3.

The screen should say EDIT CONTROLLER 1 or 2 on the second line. The third line



says CHANNEL. This is the function that we are editing.

The fourth line says 01 and it is blinking.

Now tap on pad 27 (the increment pad) FIVE TIMES. Each time that you tap on it, the value increments by one. It will go from one to six. When you release the foot switch, that value is now loaded into the kit setup.

Try it again, but this time, get the value back to Channel One.

So now you know that VALUES are changed by using pads 28 and 27. You know that they are VALUES because they are BLINKING.

## **CHANGING FUNCTIONS**

But what happens if there is more than one function on a pad. Let's check out the LAYER MODE (Pad 12).

Step on the Edit foot switch and while it is held down, hit pad 12.

The display now says Layer Mode on the third line.

Notice on the Fourth Line, HANG is showing. It is not blinking because it is a FUNCTION, not a VALUE. If you want to change to another Layer Mode, hit pad 12 again. The Mode changes from HANG to DOUBLE MODE. Each time you strike the pad, another Layer Mode is displayed. When there are no more Layer Modes available, it stops advancing. If you want to see them again, release the foot switch and hit the same pad again. All of the possible Layer Modes that are possible on that pad is displayed one at a time with each subsequent hit on the pad. It starts from the beginning and goes down the list.

Take a look at the chart. It will show you what Modes are on each pad.

So now we know that there are two ways to move things around on the panKAT. We use the INC and DEC pads to change VALUES. We hit the pad repeatedly if we want to change FUNCTIONS.

In some cases we also need to use the BACKWARDS and FORWARD pads. These are used when we need to move the CURSOR to a different location on the Screen. More about that later.





## **WHAT is the DISPLAY SAYING?**

There are four lines of text on the display. The display changes its look as different features are called up. Let's begin with the first Line

### **KIT NUMBERS**

The very first character on Line one will either be:

**F** - followed by a number. Example F 01 meaning Factory Kit 1 or

**U** - followed by a number. Example U 89 meaning User Kit 89 or

**C** - followed by a group of numbers. Example. C02-12 Meaning Chain Two, Setup 12.

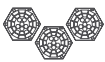
The F stands for FACTORY KITS. There are 128 Factory Kits that are permanently stored in the panKAT memory. This means that any changes that you make to the FACTORY Kits are gone as soon as you leave the KIT going to another KIT number. If you want to make permanent changes to a FACTORY Kit, then you will need to save them in a USER KIT.

The name of the KIT displayed on line three is a GENERAL MIDI Name. These names will only line up with the names that are on your sound source if your module or keyboard has the GM logo on it. If you do not have a GM synth, the panKAT has no way of knowing what sound source it is connected to. You will need to go to the User Kits to make your own KIT names. The panKAT WS is General MIDI, so the names you see in the Factory Kits correspond to the sounds that you will hear.

If you see a U followed by a number on the first line, then you are in the USER KITS. There are also 128 USER KITS in the panKAT. Here you can name your own kits, change any parameter and have them stored into permanent memory. If you see a number looking like C01-01, then you are in CHAIN MODE. CHAIN MODE allows you to arrange your KITS in any order you like. You can store 16 Chains, each having the ability to arrange 16 KITS in each Chain.

### **CHANGING KIT BANKS (FACTORY, USER and CHAIN)**

You can jump between these three modes by holding down the EDIT FOOTSWITCH and hitting pad 10, (Eb on the Outer Ring). It says KIT BANK under the pad. Use the DECrement, INCrement pads (pads 28 & 27, Db-E on the Inner Ring) to change modes.



## CHANGING KITS

You can change KITS at any time by using the Backward /Forward Pads. (The little pads (outside the Rings) on the panKAT). Strike the pad twice to get your direction going.

There are several other ways to change kits. For more information regarding KITS and CHAINS, refer to the Index in the full manual for specific pages on these subjects.

## LAYER MODE

Immediately following the KIT NUMBER, you will see on the first line of the display one of the following LAYER MODES on the screen.

**Hang** = Hang Mode

**Doub** = Double Mode

**Mel1** = Melody Chord Mode 1

**Mel2** = Melody Chord Mode 2

**Mel3** = Melody Chord Mode 3

**VeIS** = Velocity Shift Mode

**Alt** = Alternate Mode

Layer Modes tell the panKAT how to control its sound layers. These layers are called CONTROLLER ONE and CONTROLLER TWO. These Layers can be total independent, layered, velocity shifted, alternated, or used as a controller function.

You will learn more about Layer Modes in the panKAT manual.

## PRESSURE MODES

The panKAT can detect continuous pressure on a pad. This gesture of applying pad pressure can be interpreted by the panKAT to perform specific functions such as mallet dampening, dead stroking, or pressure sustaining.

On the first line of the display on the far right of the screen, there are several choices of Pressure Modes. They are:

**Normal.** This is the standard normal pressure mode.

**DAMPEN.** After you strike a note with the sustain pedal down, in this mode you can dampen the note by applying pressure to the pad.



**DEADSTROKE.** After you strike a note, you can get another sound from the same pad by applying pressure to the pad.

You will learn more about Pressure Modes in the panKAT manual.

## **CONTROLLER ONE and TWO CONTROLLER FUNCTIONS**

On the second line of the Display, you will see the word “Controller” followed by 1 or 2. Basically, each controller can represent a different sound. Whenever you edit the panKAT, you need to know what layer you are working on.

You can change what Controller you are using by stepping on the EDIT Footswitch and while held down, tap the INC or DEC pads (pads 28-27(Db-E) on inner ring). The display will show the current Controller Number.

On line two, immediately after the Controller number is displayed, a choice of what Keyboard mode is also displayed. The Keyboard Modes are:

**Poly, Mono, RTC, PTW, CTLA**

You will learn more about Keyboard Modes in the panKAT manual.

## **INSTRUMENT NAMES / KIT NAMES / NONE**

On the third line of the display, you can choose one of three options for what will be displayed on that line. This option is decided in the GLOBAL AUX Screens (Pad 5, E on the Outer Ring).

## **INSTRUMENT NAMES**

These are the General MIDI Program Names. In the Factory Kits, you cannot change these names. The Instrument Names correspond to the Program Numbers that have been assigned to them.

If you have a General MIDI sound module, the INSTRUMENT NAMES on the panKAT display will automatically correspond to the screen names and sounds of your synthesizer.

If you have customized your sound source, are using a non standard sound source, or a different sound bank on a GM compatible synthesizer, the names will NOT correspond. You should then go to the USER KITS and use the KIT NAME option, or just ignore the name of the KIT in the FACTORY KIT setting.

**KIT NAMES** In the USER KITS on the panKAT, you can choose to name your own kits. This is helpful when creating a KIT that has combinations of sounds in them. This mode should



be used if you are using a sound source that is not GM compatible.

This option is decided in the GLOBAL AUX Screens (Program String Names).

The KIT NAME is the same for BOTH CONTROLLERS. The length of the name can be a total of 12 characters. It is programmed by pressing the Edit Footswitch (Pad 11 (Bb on the Outer Ring)). Use the Forward/Backward pads to move the cursor across the name. Use the INC/DEC pads to change the letter or number or the name.

## **BANK, PROGRAM and VOLUME INFO**

There is much information packed on the fourth line of the display.

First, is the MSB, LSB Bank Change information. You will see a number like this: B 01-02. The B stands for BANK, the first number 01 is the MSB number. The dash separates the LSB number from the MSB.

You can change the Bank Number by hitting pad 6 (B on the Outer Ring) while the Edit Footswitch is held down. Use the FORWARD/BACKWARD pads to move the cursor and the INC/DEC pads to change the value.

Following the Bank Number Display is the letter P followed by a number. This is the PROGRAM CHANGE number. There are 127 Program Change numbers available, each number representing a sound on your synthesizer.

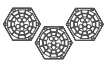
Finally there is the letter V. This represents the Volume Number.

As you can see, each kit in the pankAT stores a Bank, Program and Volume Number. It acts like a mixer, completely setting up your synth with the right sound and the right volume. You'll almost never need to touch the sound module.



# panKAT Factory Kit Listing

Factory Kit	Prog Chng	INST Name	Note Arrange (pitchConfig)	Layer Mode	KeMode Cntl 1	KeMode Cntl 2	Octave Cntrl1	Octave Cntrl2	Warp Cntrl 1
1	0	Grand Piano	C pan	Hang	Poly	Poly	4	3	Off
2	1	Brite Piano	D pan	Double	Poly	Poly	4	3	Off
3	2	E Grand	C pan	Hang	Poly	Poly	3	2	Off
4	3	Honky Tonk	Blues	Double	Poly	Poly	4	5	Off
5	4	E Piano 1	C pan	Hang	Poly	Poly	3	2	Off
6	5	E Piano 2	C mi	Hang	Poly	Poly	4	3	Off
7	6	Harpsi	C dim	Hang	Poly	Poly	4	3	Off
8	7	Clavinet	C pan	Double	Poly	Poly	3	3	Off
9	8	Celesta	C pan	VelShift	Poly	Poly	4	2	Off
10	9	Glockenspiel	C pan	Hang	Poly	Poly	4	3	Off
11	10	Music Box	C pan	Alt	Poly	Poly	4	3	Off
12	11	Vibes	C7	Hang	Poly	Poly	4	3	Off
13	12	Marimba	C pan	VelShift	Poly	Poly	4	3	Off
14	13	Xylophone	C pan	Hang	Poly	Poly	4	3	Off
15	14	Tubul Bells	Chromatic	Double	Poly	Poly	4	3	Off
16	15	Dulcimer	D pan	Alt	Poly	Poly	4	3	Off
17	16	Draw Organ	C pan	Hang	Poly	Poly	4	3	Off
18	17	Perc Organ	C Pent	Hang	Poly	Poly	4	3	Off
19	18	Rock Organ	C pan	Hang	Poly	Poly	4	3	Off
20	19	Church Organ	C dim	Hang	Poly	Poly	4	3	Off
21	20	Reed Organ	C minor	Hang	Poly	Poly	4	3	Off
22	21	Accordion	C pan	Hang	Mono	Poly	4	3	Off
23	22	Harmonica	Major	Hang	Mono	Poly	4	3	Off
24	23	Tango Acd	C pan	Hang	Mono	Poly	4	3	Off
25	24	Nylon Guitar	C pan	Alt	Poly	Poly	4	3	Off
26	25	Steel Guitar	D pan	Double	Poly	Poly	4	3	Off
27	26	Jazz Guitar	In Fourths	Hang	Poly	Poly	3	2	Off
28	27	Clean Guitar	C pan	Double	Poly	Poly	3	2	On
29	28	Muted Guitar	C pan	Double	Poly	Poly	3	2	Off
30	29	OverDrive	D pan	Double	Poly	Poly	3	2	Off
31	30	Dist Guitar	C pan	VelShift	Poly	Poly	4	3	On
32	31	Guitar Harmonic	C Dim in 3rds	Alt	Poly	Poly	4	3	Off
33	32	Acoustic Bass	C pan	Hang	Mono	PTW	1	3	Off
34	33	Finger Bass	C pan	Hang	Mono	PTW	1	3	Off
35	34	Pick Bass	C pan	Hang	Mono	PTW	1	3	Off
36	35	Fretless	C pan	Hang	Mono	PTW	1	3	Off
37	36	Slap Bass 1	C pan	Hang	Mono	PTW	1	3	Off
38	37	Slap Bass 2	C pan	Hang	Mono	PTW	1	3	Off
39	38	Synth Bass 1	C Pent	Hang	Mono	PTW	1	3	Off
40	39	Synth Bass 2	C mi Pent	Hang	Mono	PTW	4	3	Off
41	40	Violin	Chromatic	Hang	Mono	Poly	4	3	Off
42	41	Viola	C min in thirds	Hang	Mono	Poly	4	3	Off
43	42	Cello	C pan	Hang	Poly	Poly	2	2	Off
44	43	Contrabasoon	C pan	VelShift	Mono	Mono	3	2	Off
45	44	Trem Strings	C Maj in Thirds	Hang	Poly	Poly	4	3	On
46	45	Pizz Strings	D pan	Alt	Poly	Poly	4	3	On
47	46	Harp	C pan	Hang	Poly	Poly	4	3	Off
48	47	Timpani	C in Fourths	Hang	Poly	Poly	3	2	Off
49	48	Strings 1	Whole Tone	Hang	Poly	Poly	4	3	Off
50	49	Strings 2	C pan	Double	Poly	Poly	4	3	Off
51	50	Syn Strings	C pan	Hang	Poly	Poly	4	3	Off
52	51	Syn Strings 2	C Major Pent	Hang	Poly	Poly	5	4	Off
53	52	Choir Aah	C pan	Double	Poly	Poly	4	3	Off
54	53	Voice Ooh	C pan	Double	Mono	Mono	4	3	Off
55	54	Synth Voice	C pan	Double	Mono	Mono	4	3	Off
56	55	Orch Hit	Chromatic	Hang	Poly	Poly	4	3	Off
57	56	Trumpet	C pan	Hang	Mono	PTW	4	3	Off
58	57	Trombone	C pan	Hang	Mono	PTW	3	3	Off
59	58	Tuba	C pan	Hang	Mono	PTW	3	3	Off
60	59	Mute Trumpet	C pan	Hang	Mono	PTW	3	3	Off
61	60	French Horn	C pan	Hang	Poly	Poly	4	3	Off
62	61	Brass Section	C mi Pent	Hang	Poly	Poly	4	3	Off
63	62	Synth Brass 1	C pan	Hang	Poly	Poly	4	3	Off
64	63	Synth Brass 2	C pan	Hang	Mono	Mono	4	3	Off



## panKAT Factory Kit Listing (page 2)

Factory Kit	Prog Chng	INST Name	Note Arrange (pitch Config)	Layer Mode	KeyMode Cntrl1	KeyMode Cntrl2	Octave Cntrl1	Octave Cntrl2	Warp Cntrl1
65	64	Soprano Sax	C pan	Hang	Mono	PTW	4	3	Off
66	65	Alto Sax	C dim	Hang	Mono	PTW	4	3	Off
67	66	Tenor Sax	Blues	Hang	Mono	PTW	3	3	Off
68	67	Baritone Sax	C minor	Hang	Mono	PTW	3	3	Off
69	68	Oboe	C pan	Hang	Mono	PTW	4	3	Off
70	69	Eng Horn	In Fourths	Hang	Mono	PTW	4	3	Off
71	70	Bassoon	Chromatic	Hang	Mono	Mono	2	1	Off
72	71	Clarinet	C7	Hang	Mono	Mono	4	3	Off
73	72	Piccolo	C Major	Hang	Mono	PTW	5	3	Off
74	73	Flute	C pan	Hang	Mono	PTW	4	3	Off
75	74	Recorder	C in Fourths	Hang	Mono	PTW	4	4	Off
76	75	Pan Flute	C pan	Hang	Mono	PTW	4	3	Off
77	76	Bottle	C min in thirds	Hang	Mono	PTW	4	3	Off
78	77	Shakhchi	C pan	Hang	Mono	PTW	4	3	Off
79	78	Whistle	C pan	Hang	Mono	PTW	4	3	Off
80	79	Ocarina	C Maj Pent	Hang	Mono	PTW	5	4	Off
81	80	Square Lead	C min Pent	Hang	Mono	PTW	4	3	Off
82	81	Saw Lead	Whole Tone	Hang	Poly	Poly	4	3	Off
83	82	Caliop Lead	C pan	Hang	Mono	Poly	3	4	Off
84	83	Chiff Lead	C Dim in 3rds	Hang	Mono	Poly	4	3	Off
85	84	Charan Lead	C in Fourths	Hang	Mono	Poly	4	3	Off
86	85	Voice Lead	C pan	Hang	Poly	Poly	4	3	Off
87	86	Fifth Lead	C pan	Hang	Mono	Mono	4	3	Off
88	87	Bass and Lead	C Maj Pent	Hang	Mono	Mono	4	3	Off
89	88	New Age Pad	C pan	Hang	Poly	Poly	4	3	Off
90	89	Warm Pad	C pan	Hang	Poly	Poly	4	3	Off
91	90	Poly Synth Pad	C pan	Hang	Poly	Poly	4	3	Off
92	91	Choir Pad	C pan	Hang	Poly	Poly	4	3	Off
93	92	Bowed Pad	C pan	Hang	Mono	Mono	4	3	Off
94	93	Metal Pad	C pan	Hang	Mono	Mono	4	3	Off
95	94	Halo Pad	C pan	Hang	Poly	Poly	4	3	Off
96	95	Sweep Pad	C pan	Hang	Poly	Poly	4	3	Off
97	96	Rain	C pan	Hang	Poly	Poly	4	3	Off
98	97	Sound Track	C pan	Hang	Poly	Poly	4	3	On
99	98	Crystal	C pan	Alt	Poly	Poly	4	3	
100	99	Atmosphere	C pan	Hang	Poly	Poly	4	3	
101	100	Bright	C pan	Hang	Poly	Poly	4	3	
102	101	Goblins	C pan	Hang	Poly	Poly	4	3	
103	102	Echoes	C pan	VelShift	Poly	Poly	4	3	
104	103	Sci_Fi	Chromatic	VelShift	Poly	Poly	4	3	
105	104	Sitar	Dim	Hang	Poly	Poly	3	2	
106	105	Banjo	C Dim in 3rds	Hang	Poly	Poly	4	3	
107	106	Shamisen	C Pent	Hang	Poly	Poly	4	3	
108	107	Koto	C Minor Pent	Hang	Poly	Poly	4	3	
109	108	Kalimba	C minor	Hang	Poly	Poly	4	3	
110	109	Bagpipe	C pan	Hang	Poly	Poly	4	3	
111	110	Fiddle	C pan	Hang	Poly	Poly	4	3	
112	111	Shanai	C 7	Hang	Poly	Poly	4	3	
113	112	Tinkle Bell	C pan	Hang	Poly	Poly	4	3	
114	113	Agogo	C pan	Hang	Poly	Poly	4	3	
115	114	Steel Drum	C pan	Hang	Poly	Poly	4	3	
116	115	Wood Block	C pan	Hang	Poly	Poly	4	3	
117	116	Taiko Drum	Chromatic	Hang	Poly	Poly	4	3	
118	117	Melodic Tom	Chromatic	Hang	Poly	Poly	4	3	
119	118	Synth Drum	Chromatic	Hang	Poly	Poly	4	3	
120	119	Rev Cymbale	Chromatic	Hang	Poly	Poly	4	3	
121	120	Fret Noiz	Chromatic	Hang	Poly	Poly	4	3	
122	121	Breath Noize	C pan	Hang	Poly	Poly	4	3	
123	122	Seashore	Chromatic	Hang	Poly	Poly	4	3	
124	123	Tweet	Chromatic	Hang	Poly	Poly	4	3	
125	124	Telephone	Chromatic	Hang	Poly	Poly	4	3	
126	125	Helicopter	Chromatic	Hang	Poly	Poly	4	3	
127	126	Applause	Chromatic	Hang	Poly	Poly	4	3	
128	127	Gunshot	Chromatic	Hang	Poly	Poly	4	3	



Here's how to read the panKAT Factory Kit Chart.

The first column is the FACTORY KIT Number. On the top line of the display on the panKAT you will see a number like F22. This means that you are hearing and playing on Factory KIT number 22.

On the third line on the display you will see the Instrument Name of F22 Accordion. These instrument names correspond to this chart.

Next on this sheet is NOTE ARRANGE or PITCH CONFIGURATIONS. This is the pitch arrangements of the 30 pads. C Pan and D Pan are the standards. We have created lots of kits that do not use these standard Pitch Configurations so that you can learn about the panKAT. If you want to CHANGE THE PITCH CONFIGURATION, Do the following

STEP ON THE EDIT FOOTSWITCH and HOLD IT DOWN.

TAP ON PAD 4, (NOTE ARRANGE) ONCE

Use the INC Pad (#27) to scroll through the various PITCH CONFIGURATIONS,

When you see the one you want, RELEASE THE FOOTSWITCH

The next item on the sheet is called Layer Mode. The panKAT can play one sound or two sounds at the same time. It can also alternate between sounds. Below is a one sentence explanation of the Layer Modes.

**HANG.** When you step on Sustain Foot switch 2, you will either hear another sound, or the same sound in a different octave.

**DOUBLE.** This means that you are either hearing two different sounds at the same time or you are hearing the same sound in octaves.

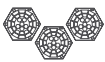
**VelShift.** There are two sounds available, and how hard you play determines which sound you are going to hear.

**ALT.** Two sounds alternate every time you hit the same pad.

**KEY Mode (Keyboard Mode).** There are lots of Keyboard Modes in the panKAT. In the Factory Kits, we use only three of them. Notice also that there is Controller One and Controller Two. That is because the panKAT is really two controllers at the same time. It can control two different sounds at once. If you are pressing on Sustain Footswitch 1, and you are in Hang Mode, you are using Controller One. When you step on the Sustain Footswitch 2, Controller number 2 is active.

**Poly.** This means that you can play more than one note at the same time. This is the normal mode for instruments like piano.

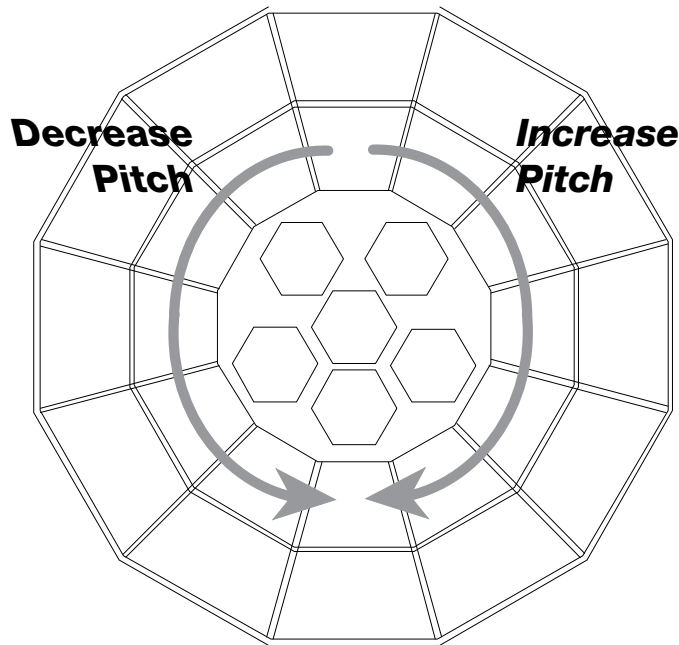
**Mono.** This means that you can only play one note at a time. This is the normal mode for instruments like flute that can note play chords, but sound just one note at a time.



**PTW (PiTchWheel).** This is a special mode. When you are playing on controller one, you can pitch bend notes. *Important:* In order to hear the pitch bend effect, you must be sustaining (having foot switch 1 held down) and be playing a sound set up for PTW on controller 2 (refer to the Factory Kit Listing for this info under KeyMode Cntrl 2).

To increase the pitch... hit and sustain a note, hold down sustain foot switch 2 and hit a pad on the Middle circle of pads in a clockwise motion.

To decrease the pitch... hit and sustain a note, hold down sustain foot switch 2 and hit a pad on the Middle circle of pads in a counter-clockwise motion.



The last two rows are the octave number. The higher the number, the higher the pitches are on the keyboard. There is a different assignment of octaves for both controllers 1 and controllers 2.





## panKAT Pad Functions

PAD #	FUNCTION NAME	PAD STRIKES	Dec/ Inc.	Back/ Forwd.	PAD #	FUNCTION NAME	PAD STRIKES	Dec/ Inc.	Back/ Forwd.
1	KEYBOARD	Polyphonic Monophonic RTC RTC+Velocity		MonoOverlap	24	GLOBAL AUX	Global Aux Functions	Yes	Memory Protect MIDI Merge Data Dump Receive Threshold Adj Back Thres Adj Forw Thres Adj Inc Prg Ch Rec Foot Control 1 Train Foot Control 2 Train Beeper On/Off Screen Angle Instrument ID Debounce Count Dampen Threshold Dampen Count Dead Stroke Damp Count Foot Controller 1 Perf Foot Controller 2 Perf Incoming Channel Route Incoming Sys Message MIDI IN PC Routes Program String Names Chord Mode Window After Touch Mask Count After Touch Depth Bank Select Enable Tune Instrument Fine Tune Routing Damp Mode Scan Count Norm Mode Scan Count Dampen Ratio Virtual Control Wheel A Virtual Control Wheel B Reassignment Screens Memory Protect
2	PRESSURE MODE	Normal Dampen Dead Stroke							
3	CHANNEL		Yes						
4	NOTE ARRANGE	Pitch Config Octave Transpose	Yes Yes Yes						
5	VELOCITY	Minimum Velocity Maximum Velocity Velocity Curve	Yes Yes Yes						
6	PROGRAM CONTROL	Bank msb lsb Program Change	Yes Yes	Yes (cursor)					
7	GATE CONTROL	Gate Time Min Max Gate Roll Mode Auto Gate Control	Yes Yes Yes Yes	Yes (cursor) Yes (cursor) Yes (cursor)					
8	VOLUME	Volume	Yes						
9	ALL NOTES OFF	All Notes Off Individual All Notes Off							
10	KIT BANK	Kit Setup	Yes						
11	KIT NAME	Kit Name	Yes	Yes (cursor)					
12	LAYER MODE	Hang Mode Double Mode Melody Chord 1 Melody Chord 2 Melody Chord 3 Alternate Mode Velocity Shift		Vel. Shift Point					
13	FOOT CONTROL	Foot Cont. 1 Assign Foot Cont. 2 Assign FSW MIDI NOTE	Yes Yes Yes	Yes (cursor)	25	CANCEL			
14	FOOT SUSTAIN	FTSW1 Sustains FTSW2 Sustains	Yes Yes		26	DEFAULT			
15	WARP MODE	Warp	Yes	Yes (cursor)	27	INCREMENT	Controller One Controller Two		
16	EFFECTS	Reverb Select Pitch Bend Sens.	Yes Yes	Yes (cursor)	28	DECREMENT	Controller One Controller Two		
17	REASSIGNMENTS	Reassign Mode Reassign # Reassign PC Reassign Interface	Yes Yes Yes Yes	Yes (cursor) Yes (cursor) Yes (cursor) Yes (cursor)	29	COPY	Copy Setup Hit Setup Copy		
18	CONTROLLER EFX	Kit Ctrl Number	Yes	Yes (cursor)	30	SETUP	Setup		
19	KIT AUX	Interface Mode	Yes	Data Strip Mode	V WHEEL 1		V Wheel Screen Here		
20	GROOVE CONTROL	Groove Enable/Dis	Yes	Yes (cursor)	V WHEEL 2		V Wheel Screen Here		
21	CHAINS	Chains	Yes	Yes (cursor)					
22	PAD TRAINING	Train Pad		Pad Grps, Ind Pads A-P					
23	DATA DUMP	Dump Type	Yes						



*For more information on the panKAT, please refer to the full manual. You can also access our website 24/7 at [AlternateMode.com](http://AlternateMode.com) for videos and the user forum. Enjoy the panKAT and remember, you're only limited by your imagination.*

## **Alternate Mode Inc.**

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