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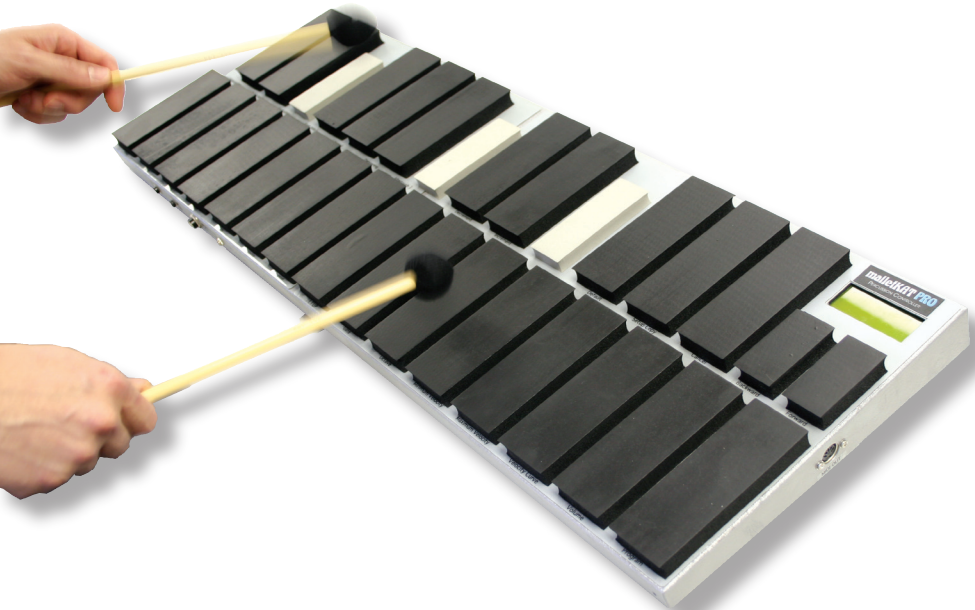


**www.** **AlternateMode** **.com**

*KAT Percussion Controllers and Accessories*

**malletKAT PRO / With Sounds**

**malletKAT EXPRESS / With Sounds**



**WHY YOU**

**SHOULD BE PLAYING A MALLETKAT?**



# malletKAT Pro Overview

The malletKAT Pro is a powerful MIDI controller that is designed to capture your playing gestures and performance. It transforms your performance into musical notes (MIDI data), noticing the details of dynamics, pressure, speed, dampening, etc., creating an incredible musical representation of your playing. It is this attention to nuance and detail, combined with the marvel of FSR\* technology, that makes this instrument so enjoyable to play. It is by far the most powerful percussion controller ever created.

The malletKAT is really several instruments in one. It is broken down into two basic keyboards, called Controller One and Controller Two. Each of these Controllers are independent from each other. They can have their own sounds, dynamic response, keyboard and octave range, etc. These sounds can be activated by stepping on a footswitch. They can be layered so that both play at the same time or they can be split or overlapped so that both sounds are active at the same time.

The malletKAT also has a third layer called a Reassignment Layer. Every note on this layer can



be programmed by the User to play any note on any octave on any of the 16 MIDI channels simultaneously. MIDI notes do not have to be contiguous. This means that you can set up special arrangements of non-pitched sounds on any pad, or you can set up your own scales etc. This Reassignment Layer can be used in combination with the other Controllers

or it can replace them. There are 14 programmable Reassignments stored in memory that can be assigned to any of the 128 User Kits.

The malletKAT can also be used as an alternate MIDI controller that is designed to control notes instead of playing them. The “black” keys can be assigned to Continuous Controller Numbers while the “white” keys send discreet values to these controllers.

The malletKAT can use dynamics and note position to create **X,Y sensing** so that multiple parameters can be controlled by how hard you are playing and where you are playing on the keyboard at the same time.

There are special latch functions that can toggle notes on and off at will. Pads can be assigned to send out program changes instead of notes. Combining these features in a User Setup is a powerful way to control programs for MIDI Light Control or Loop Sequencers such as Ableton's LIVE or Spectrasonics STYLUS RMX.

The malletKAT has 2 Foot Controller Inputs, three momentary inputs and a breath controller input. All of these inputs are user programmable, offering tremendous power to the performer. In any particular performance, you can add subtle vibrato, pitch bend, sustain and gate time variances, blending of sounds, filter control, etc. just by using these input controls while playing on the pads. It is possible to suddenly shift octaves, change sounds, sustain chords, etc. while the "main" sound is active on the keyboard.

You will notice that there are no buttons on the malletKAT for editing. We have created an interface that allows for total programming without having to put down your mallets. Notice the words underneath the "white" keys. When stepping on the Edit footswitch these pads turn into editing functions. This allows for instantaneous adjustments in playing such as octave range, gate time, velocity range, program change, volume change, etc. This is an incredibly easy interface that allows you to quickly change parameters to your hearts content, even while you are playing live.

The malletKAT has **128 Factory Setups**, **128 User Setups** and **16 Chain Setups**. Each Setup is a complete assignment of the sounds and functions. You can name your own User Kits, store bank and program change information, create your own MIDI mixer with stored volume change commands. Every User Kit has its own velocity response settings, gate time settings, octave range etc. Chains allow for non contiguous arrangements of your Setups. This

is an extremely useful feature for setting up quick sound changes in a performance situation. These changes can be accessed by stepping on a footswitch or by hitting the backward/forward function pads.

The Factory Setups are pre-programmed for **General MIDI**. That means that if you have a sound source that responds to General MIDI (it should have a GM MIDI logo displayed on it), the malletKAT is ready to go without any programming involved. The instrument name that you see on the display is the sound that you will hear on your synth.



### \* **What is FSR and why do I need it?**

*FSR stands for Force Sensor Resistor. It is the magic inside the malletKAT that makes it so sensitive. Unlike standard piezo sensors that respond to vibration and are susceptible to cross talk, FSR responds only to pressure. This technology offers superior tracking across the entire dynamic spectrum and is only available on KAT MIDI Controllers.*

There are currently two versions of software available regarding pre-programming of the User Kits. One is for the **Yamaha Motif ES** and the other is for the **Kurzweil Pc2R**. When the malletKAT is reinitialized with this software, 128 User Kits are installed for one of these instruments. In other words, we pre-programmed the malletKAT especially for one of these sound sources.



You can alter any of these settings of course, but this is a great way to get started when using these instruments. You may never have to do any programming because we have done it for you. Please note that both the Yamaha and Kurzweil Sound Modules are also preloaded at our factory before they leave. If you have purchased one of these sound sources from somewhere else, you can



go online to our website and

download the **free SYSEX file** for these instruments in order to get a turn key environment on your malletKAT.

The **Muse Receptor** is a computer based sound module that is capable of playing many popular "soft" synthesizers, drum modules and samplers. Alternate Mode has a dedicated mallet, timpani and percussion sound library that is included in the **Receptor AM**. Because of its' large RAM and 160 GIG Hard Drive, unprecedented realism in acoustic instrument emulation is now possible.



**THE POWER TO CONTROL = THE POWER TO CREATE**

**W**e are sure by now, that as you read this introduction, you realize the incredible power that lies within the malletKAT! The real power however is not just in the bells and whistles. It's the creative software in the malletKAT that gives you the capability for real expression and musicality. Here are just a few of these powerful features.

### **Individual Pad Training**

Everyone plays differently. The malletKAT has a feature that "learns" your playing style. When you train it, the malletKAT converts your softest and hardest hits from 256 possible levels into the 128 velocity dynamics that's offered in MIDI. This gives the instrument the widest dynamic range possible.

### **Dynamic Articulations**

Every Kit stores a set of minimum and maximum velocity ranges along with velocity curves to get the instrument dynamics tailored to personal taste. Dynamics can be used to change a sound at a particular velocity point. Besides setting any "gate" length of a sound, dynamics can also control how long a sound speaks. These "gate time settings" can also be controlled by a foot or breath controller.

### **Acoustic Emulations**

The malletKAT can recognize "dampen" strokes, a common vibraphone technique and now "dead" strokes, a common marimba style of articulation. Like Individual Pad Training, dampening and dead stroke articulations can be tailored to respond to your personal style of playing.

### **Mono Modes**

Special Mono Modes have been developed to allow you to play solo instruments such as flutes or lead lines without the "bleeding" of sounds heard when using a sustain pedal on a synth. Instead, the sustain pedal in this mode creates a legato single line passage. It is now possible to create staccato / legato articulations effortlessly. Auto Gate functions also help control the "bleeding" of sounds when playing fast passages. The length of a sound can vary depending on how fast you are playing.

# HERE'S WHY **YOU** **NEED** A MALLETKAT...

## **SENSITIVITY**

Our newest generation of FSR\* sensors combined with our most powerful software to date makes the malletKAT incredibly sensitive and durable. Versions 4 thru 6.1 are a significant improvement over previous 3.x versions of software.

## **FEEL**

We've changed the size and feel of our pads/bars. They are thicker, quieter, more responsive and feel really great to play on. They have more give for dynamic performance.

## **DYNAMICS**

The malletKAT "sees" 256 levels of dynamics. That's twice the resolution of MIDI. Now you can train each octave and individual pads independently to your own dynamic range. Tailor the malletKAT to your own personal playing style.

## **EXPRESSION**

Judge the quality of an instrument by how expressive and responsive it is. No one wants each sound to speak the same length (gate) or volume (velocity). That would make the instrument sound static and boring (every non KAT drum/mallet controller does this). We've created new modes that adjust the gate by how fast your playing (Auto Gate Mode). This makes your music sound much more musical, preventing note bleeding overlaps when playing fast and avoiding aggressive staccato strokes when wanting to play legato passages. The malletKAT also has "Roll Modes". If your playing a timpani roll for example, you would want the roll to sound like a roll, not the dreaded "machine gun" effect. The power of the malletKAT gives you this control. We also have Velocity Gate control modes that affect the sound by how hard or soft your playing in real time. These features have a dramatic overall effect on the expressive musicality and potential of this instrument.

## **LIGHT WEIGHT**

The malletKAT Express weights less than 8 lbs! It is made out of durable aluminum. Expanders weight under 4 lbs. The standard malletKAT is still extremely light compared to wood, only about 29 pounds.

## **EXPANDABILITY**

malletKATs range from the 2 Octave Express (expandable up to 4 octaves) to the 3 Octave malletKAT that is expandable to a full FIVE octaves.

## **UPGRADABLE/ WAR ON OBSOLESCENCE**

The malletKAT has been growing since the 1980's from version 1.0 to the current 6.x family. Imagine a controller still going strong after 20 years! The malletKAT continues to grow as new software ideas are imagined or requested by malletKAT users.

## **BUILT IN SOUNDS**

Once again, the malletKAT WS is available with a General MIDI sound source built in. Great for practicing, travel and on the go gigs. The malletKAT WS has two audio inputs so that you can add a CD player or another instrument in the headphones or stereo out jacks.

## **TURN KEY SOLUTIONS (NO PROGRAMMING NECESSARY)**

Don't let our software scare you. Our 128 FACTORY KITS are preset for any GM (General MIDI) Sound Module. If you see the "GM" symbol on the synth or use a malletKAT WS, the sound module will work 100% right out of box. If you get a KURZWEIL PC2R or YAMAHA MOTIF ES sound module from us (highly recommended) our 128 USER KIT SETUPS are also completely setup for you. You may never need to program anything. Just call up your sound and start playing!

## **SUPPORT / BUILT IN THE USA**

From our online videos, forum and e-mail, to our new KAT Knowledge Database and phone tech help, no other company offers our level of comfort and support. We're proud to offer our USA made products which are vital for fast turn-around for upgrades and repairs.

## ACCESSORIES

We offer stands, mallets, amps, sound modules, pedals and more; all tested and approved for malletKAT playing.

## WISE INVESTMENT

The malletKAT is perhaps the only electronic instrument that INCREASES in value over time.

## **ADVANCED FEATURE SET**

The malletKAT/Express has an enormous musical vocabulary. These features provide the tools necessary for the color and expression needed for making a Controller a REAL musical instrument. Below is a sampling of some functions available on the malletKAT PRO.

### **DAMPENING** [video1](#) [video2](#) [video3](#)

Now the mallet player can use their natural dampening techniques to cause individual notes to be quieted. This is like the dampen technique used on a vibraphone/vibraharp. Dampen Mode also has a unique function when controlling loops.

### **DEAD STROKING** [video1](#)

This mallet gesture is now implemented on the malletKAT. The dead stroke sound on a malletKAT can be any alternate sound and can be used for interesting new effects.

### **VIRTUAL PITCH & MOD WHEEL** [video1](#) [video2](#)

Imaging bending notes and adding vibrato to any sound without having to find a pitch wheel. Simply program the third footswitch to perform this function on the fly.

### **VELOCITY SWITCHING** [video1](#)

Now you can automatically switch sounds depending on how hard you play. Switch back and forth instantly with precision and speed.

### **HANG MODE** [video1](#) [video2](#) [video3](#) [video4](#) [video5](#) [video6](#) [video7](#)

This feature allows you to accompany yourself. Use the sustain two footswitch to play one sound sustained underneath while you play a different sound on the main controller.

## **LAYER MODE** [video1](#) [video2](#) [video3](#) [video4](#)

You can play up to THREE sounds at once by layering them. Each sound is independently assigned its own channel, gate, etc.

## **SPLIT MODE** [video1](#) [video2](#) [video3](#) [video4](#)

Instantly Split or OVERLAP the keyboard so that you can play different sounds at once without needing a footswitch to access them.

## **LATCH MODES**

You can set up individual pads as toggles for loop control or you can use the “black” keys as a loop on and the “white” keys as loop offs. The malletKAT memorizes what notes are on so that one key can toggle groups of notes on and off.

## **MONO MODE** [video1](#) [video2](#)

This mode is designed for working with solo lead instruments. The sustain pedal acts as a legato pedal, giving total control over staccato/legato passages. Solo instruments like a flute only plays one note at a time. The malletKAT recreates this allowing for a realistic monophonic representation of these sounds complete with overlapping note adjustments for added expression.

## **ROLL MODES** [video1](#) [video2](#)

This mode is a necessary feature when playing drum and timpani rolls. This helps eliminate the dreaded machine gun effect when rolling on drum machines and other sound modules.

## **ALTERNATE NOTE** [video1](#)

Each stroke on the keyboard alternates between two sounds. Each sound is totally independent from each other.

## **AUTO MELODY / CHORD MODE** [video1](#)

Want to accompany yourself? No problem. In this mode, the malletKAT “knows” if you are playing a melody line or a chord. It will switch sounds automatically depending on how you are playing. There are three variations of this incredible feature built into version 6.1.

## **REASSIGNMENT MODES** [video1](#) [video2](#) [video3](#)

There are 14 reassignments. You can layer three sounds per setup, or use the new reassignments to LATCH certain pads in combination with your existing layer. These latch pads can control your loops with Start/Stop Commands. Reassignment mode can also replace your normal chromatic pad layout to any MIDI note and channel assignment you desire per pad. Great for special “percussion setups”. Reassignment 14 is designed to send out program changes instead of note numbers. Used to control MIDI lighting and other devices that need program change commands.

## **VELOCITY GATE CONTROL** [video1](#)

Automatically control the length of a sound by how hard or soft you play. Adds expression and realism to any performance simply by naturally using your dynamics while playing.

## **AUTO GATE** [video1](#)

Playing fast runs with the sustain pedal down can be tricky business when trying to control note bleed. Auto Gate helps by making notes shorter when playing fast. Of course, this feature is programmable.

## **128 FACTORY KITS / 128 USER KITS**

The malletKAT has 128 GENERAL MIDI set ups that are pre programmed as well as 128 User KITS. These USER KITS are also pre-programmed to be used right out of the box with the KURZWEIL PC2R and the YAMAHA MOTIF ES.

## **CHAIN MODE**

Now you can organize the 128 User Kits into groups (chains). There are 16 Chains each with 16 Steps. Arrange any sound next to any sound for instant access. A must for live performance!

## **KIT NAMING**

You can name your own 128 User Setups, use the General MIDI instrument names or eliminate all instrument names completely, allowing more data to show on the display.

## **BUILT IN METRONOME AND TAP TEMPO**

Assign any MIDI note and channel to the list of rhythms (sequences) built in. Tap in your tempo and go. Great for practicing. Many odd time patterns available.

## **SYNTH CONTROL**

A controller needs to automatically set up your synths and sound modules, and nothing does it better than malletKAT v6. The malletKAT sends out three bank change (MSB, LSB), program change, and volume change commands per kit. It also sends out “controller values” so you can preset settings for reverb, chorus, delay and more, automatically. You can further adjust these settings via our two controller pedal inputs and one breath control input. Velocity ranges, octave range, gate times, channel assignment, etc. are also stored in one of the 128 USER Setups. You have the ultimate control you need to make music. The malletKAT acts as a MIDI Mixer built right into each setup.

## **DJ SURFACE CONTROL (Real Time Control Mode)**

Turn your malletKAT into a virtual surface controller. Control programs like REASON and LIVE right from the malletKAT. In this mode, the malletKAT’s black keys represent the knobs and buttons on your synth. The white keys move the knobs left (low notes) to right (hi notes). Play rhythms in real time to create effects only possible with the malletKAT. Use the malletKAT’s other controller (layer) to play live on top of these effects.

## **WARP MODE** [video1](#) [video1](#) [video1](#)

Explore new exciting rhythms with this built in feature. Call up a pattern, assign the amount of repeats and feedback, and start a rhythmic jam. These MIDI echoes are also transposable. You can create thousands of rhythmic and melodic motifs that react and interact with your playing.

## **MIDI MERGING ROUTING**

The malletKAT can function as a MIDI Merger. Incoming MIDI channel information can be filtered, routed, etc. A real time saver in the studio.

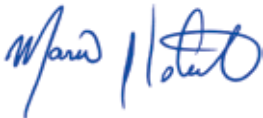
## **PROGRAMMABLE FOOTSWITCHES & CONTROLLERS**

You can assign special functions to the footswitches such as pitch bend, combine sustain functions, even play MIDI notes (up to four) on the footswitch. The two Controller Pedals can send out data on any of the 128 CC numbers. Special functions such as Blend, Warp, etc. are also featured as well as the option to use these inputs as KIT INCREMENT and DECREMENT for fast Setup changes.

## **TWEAKABLES**

Lots of new global “geek” controls like auto train value adjustments, synth fine tuning adj., data stripping, CC# assignments, scan control, MIDI routing, etc.

We trust you will discover that the malletKAT pro is like no other instrument made on this planet. Our passion for excellence is represented by the detail in design, expression and functionality built into every KAT controller created. The longevity of the malletKAT has matured its software and playability, enabling unprecedented control for a musician's personal expression. We look forward to having you become part of the KAT family!



**President, Alternate Mode Inc**

## A SAMPLING OF SHOWS & ARTISTS USING KAT CONTROLLERS...

Aida	Les Miserables
Alan Goldberg - Julio Eglasias	Lion King
Alan White - Yes	Little Shoppe of Horrors
Ashwin Sood - Sarah McLachlan	Mark Schulman - Cher
Balancing Act	Mary Poppins
Bashiri Johnson	Mickey Hart
Beauty and the Beast	Miss Siagon
Big	Neil Peart - RUSH
Billy Mason - Tim McGraw	Peter Erskin
Blast Incorporated	Paul Van Patten
Boy from Oz	Ricky Lawson
Brendan Buckley - Shakira	Rod Morganstein
Chad Wackerman	Roy Ayers
Chess	Russ Miller
Chester Thompson - Genesis	Santa Fe Opera
Chitty Chitty Bang Bang	Secret Garden
Chorus Line	Shawn Pelton - SNL
Christmas from Heart-Kenny Rodgers	Shubert Theater - Tap Dogs
Christopher Cross	Silence of the Lambs
Cirque du Soleil	Sonny Emery
Crazy for You	Spelling Bee
Cyrano	Stewart Copeland
Danny Gottlieb	Survivor TV Show
Darrell Tibbs - Donna Summer	Taku Hirano
Dave Samuels	Tarzan
Dirty Rotten Scoundrels	The Full Monty
Dr. Zhivago	The Wiz
Jesus Christ SuperStar	Alliance Theatre, Atlanta
Jim Bogios - Cheryl Crow	5th Ave. PlayHouse, Seattle, WA
Joe Dorosz - Backstreet Boys	Muni Theatre, St Louis
Joey Kramer - Aerosmith	Vanities
Joey Waronker - Beck	Will Calhoun - Living Color
John Blackwell - Prince	Will Rodgers Follies
Johnny Rabb	Wizard of OZ
LaStatt	Your a Good Man Charlie Brown

**Over 1000 schools, 100's of theaters and shows and 1000's of Artists have found the Power of KAT Controllers!**

# Accessories For Your malletKAT...

## Expander Pro & Expander *EXPRESS*



The MalletKAT Expander adds one octave to your MalletKAT Pro or MalletKAT Pro WS. The three octave MalletKAT is expandable up to 5 octaves. The 2 octave Express is expandable up to 4 octaves.

Two versions of the Expander are available... the original Expander Pro (steel chassis - 10lbs) and Expander Express (aluminum chassis - 4lbs).

Each Expander comes with expander cable and connecting bars.

## STANDS



### **2GoKAT**

This stand on wheels is perfect for the classroom when needing to move around. Instrument locks in for security and is height adjustable. (not for malletKAT Express)



### **MK Pro**

Best for malletKAT's with Expanders as it offers support on the ends. Height Adjustable.



### **"X"**

Perfect for Quick Set-ups. Height Adjustable.

## CASES

We offer cases in 2, 3 and 4 octave configurations.



### **Express Case**



### **4 Octave Case**

## PEDALS



### **VFP1**

Our Premium Footswitch for Sustain or Editing



### **VFP2**

A double version of the VFP1



### **KF1**

Our Standard Footswitch for Sustain for Editing



### **CP1**

This is a Continuous Controller Pedal used for volume, modulation, pitch bend and special functions

## BREATH CONTROLLER



### **BC3**

The Yamaha Breath Controller turns your breath into a controllable CC event. Used for pitch bend, volume changes, etc.

## MALLETS

Our rattan mallets offer the perfect blend of feel and rebound. The mk102 and mk103 have a similar feel, but the 102 has a slightly harder head. Great for acoustic instruments as well.



### **mk102**



### **mk103**

## CLAM BUSTERS

Clambusters fill in the space between the "black notes". The Clambuster cushions the blow and deadens the sound when missing your intended note.



# malletKAT Specifications

## malletKAT Pro/WS:

Size:	47"x11"x2.5"
Weight (steel):	28 lbs.
Pad Surfaces:	39
MIDI Inputs:	1
MIDI Outputs:	2
Expander Inputs:	2
Audio Inputs:	2 (WS model)
Audio Outputs:	2 (WS model)
Headphone Output:	1 (WS model)
Volume Control:	Yes (WS model)
Onboard Sounds:	127 (WS model)
Display:	4x16 LCD
Footswitch Inputs:	3(1 Edit, 2 Sustain)
MIDI Channels:	16
User Kits:	128
Factory Kits:	128
Program Changes per Kit:	3
Controller Inputs:	2
Breath Controller Input:	1
Pad Training:	Individual, Global, Octave

## malletKAT Pro Expander:

Size:	15"x11"x2.5"
Weight (steel):	10 lbs.
Pad Surfaces:	12
Expander Output:	2

## malletKAT ~~EXPRESS~~ /WS:

Size:	32"x11"x2.5"
Weight (aluminium):	8 lbs. (wow)
Pad Surfaces:	27
MIDI Inputs:	1
MIDI Outputs:	2
Expander Inputs:	2
Audio Inputs:	2 (WS model)
Audio Outputs:	2 (WS model)
Headphone Output:	1 (WS model)
Volume Control:	Yes (WS model)
Onboard Sounds:	127 (WS model)
Display:	4x16 LCD
Footswitch Inputs:	3(1 Edit, 2 Sustain)
MIDI Channels:	16
User Kits:	128
Factory Kits:	128
Program Changes per Kit:	3
Controller Inputs:	2
Breath Controller Input:	1
Pad Training:	Individual, Global, Octave

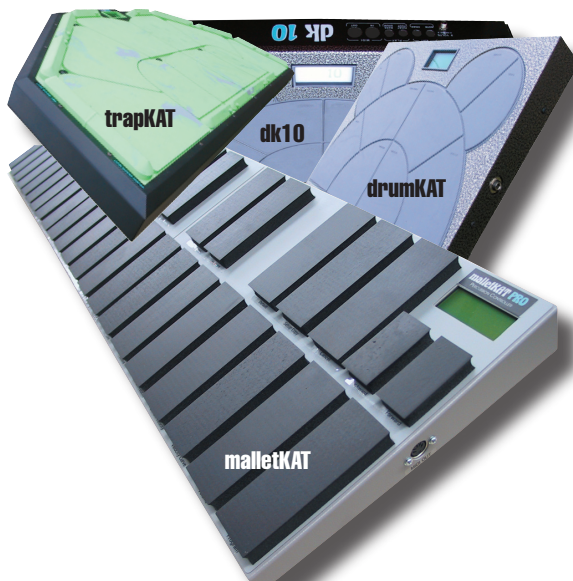
## malletKAT ~~EXPRESS~~ Expander:

Size:	15"x11"x2.5"
Weight (aluminium):	4 lbs.
Pad Surfaces:	12
Expander Output:	1

# Alternate Mode Inc.

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Visit [www.alternatemode.com](http://www.alternatemode.com)  
for specs, applications, artist info, videos, accessories and more.