KT-M1

Quick Start Guide
(English)

KAT
PERCUSSION

Contents

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Version 3.3

Thank you…

for choosing a KAT Percussion KT-M1 module. You have chosen wisely. Your new sound module comes with an open sound architecture and a universal trigger interface. To get up and running with your KT-M1 module, we recommend taking the time to read this Quick Start manual.

It provides a concise presentation of all functions you need to be aware of and everything you need to know to come to grips with this feature-rich instrument.

Have fun!

1   First Steps

1.1   Connecting Pads

Connect your pads to the KT-M1 module. See **Chapter 6** for connectivity options.

Next, head over to the UNIT-TRIG menu and specify which pad types you connected. See **Chapter 13** for a list of options.

1.2   Connecting the Hi-Hat

To ensure your hi-hat responds as expected, there is some setting up and calibration you need to do. See **Chapter 5** for the required steps.

2 Operation

The module's user interface is highly intuitive and based on two menu items (UNIT and KIT), each with a number of parameter pages. The parameter pages can be selected sequentially using the PAGE UP and PAGE DOWN buttons. There are no secondary levels or hidden menu items.
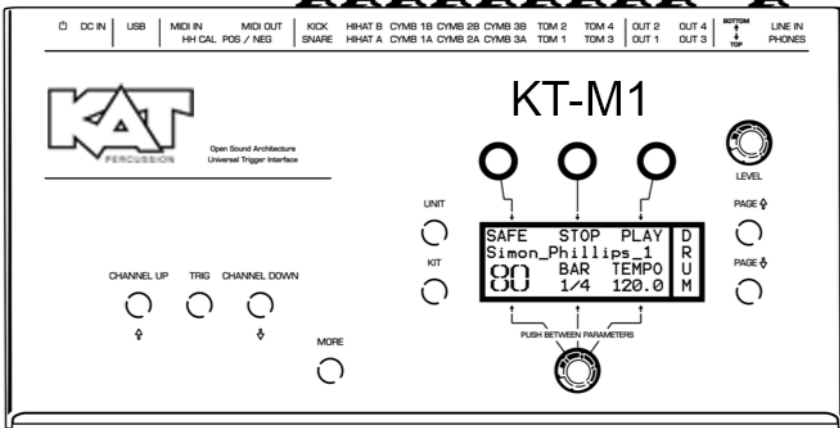
The main page comprises six logical areas. The three DATA buttons above the display are assigned to the values or functions that appear in the top row. Press the button above the desired entry to set values or select functions.

The three entries in the bottom row are controlled using the rotary knob below the display. This knob can be used to set the value of the parameter that is currently selected. To select a different parameter in the bottom row, simply press the knob. The flashing entry refers to the parameter that is currently selected. Hold MORE and press the knob to toggle between alternative parameters indicated by an arrow.
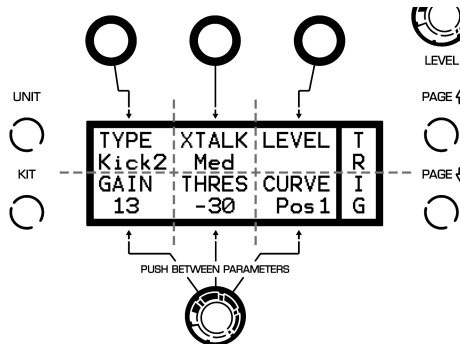
3　Menu Structure

UNIT Menu

The UNIT menu contains settings that apply to the module as a whole. This means that they affect all KITs (presets).

MIX:　　　This is where the internal mixer is located. The mixer allows you to set and balance the levels of all channels/instruments.

CHAN:　　This is where you can select trigger channels for editing (although you can also select trigger channels simply by hitting the corresponding pad).

TRIG:　　This is where you will find the main trigger settings for each channel. Here are a few examples: What pad type did you connect? How responsive should the pad be? Which dynamics curve best matches your playing style?
It would be a good idea to take some time to familiarize yourself with these settings. We are confident you will be impressed by the KT-M1 module's responsiveness once all settings are in place.

HCAL*:　This is where you set up your hi-hat and calibrate the corresponding pad. See below and the User Manual for a detailed discussion of these settings.

HSET*:　This page is used to fine-tune the settings you made on the HCAL page. Use it to ensure the response matches your playing style.

SPEC:　　This page allows you to set aspects that help you avoid double triggering and crosstalk. This is especially important for acoustic drum triggers you may be using.

INTF:　　This page is used to specify the MIDI and routing settings for each individual channel. Here you can select MIDI channels, route the signals to the mixer and assign the required channels to DIRECT OUTs.

OUT:　　This page allows you to set the output routing. Which signals should be assigned to the MAIN outputs (OUT 1 and 2) and which to the PHONES connector?

METR:　　This is where you select the sound of the built-in metronome.

MIDI:　　This page allows you to set global MIDI parameters. Should the module respond to program change messages, and which control change messages should the hi-hat transmit? These settings are important for recording MIDI data with your computer.

PREF: This page is used to manage the SAVE function and to reset the module to its factory defaults.

MEM: This is where you can check the remaining memory capacity for additional sounds.

INFO: This page displays the firmware's version number.

* (only available after selecting the hi-hat channel)

KIT Menu

The KIT menu allows you to manage and edit the internal memory slots. The module comes with 100 factory KITs (memory slots). Those KITs can be edited and overwritten with your own settings.

The KIT menu allows you to assign the desired sounds to the selected KIT, to edit their settings, to configure the metronome and playback functions and to adjust the built-in equalizer.

PROG: The KIT home page allows you to select a KIT and to start/stop the built-in metronome or song player.

DRUM: This page is used to assign a sound to the selected drum channel and to set the tuning and volume.
The channel can be selected using the CHANNEL buttons (left) or simply by hitting the assigned pad.
Note: The Rim channels of toms 1 through 4 and the snare (PERC 1~5) can be selected by simultaneously pressing the MORE and TRIG buttons.

ENV: This is where you fine-tune the selected sound and specify the loop setting for each channel.

CFNC: If you like, you can also assign a function to a pad rather than a sound. Doing so would allow you to start and stop the metronome, or to select the next KIT by hitting such a pad.

KFNC: The HHPOS function on this page allows you to set the hi-hat's opening level ("bashiness") without recalibrating the pad. This is especially useful if the left foot is used for something else (like double bass drum playing, for instance).

VOL: This is where you set the level and stereo placement (pan) of the selected channel.

EQ: Each KIT is equipped with a 3-band equalizer. It can either be applied to all instruments or just for a specific channel.

ACMP: This page contains the built-in player. Use it to specify whether you wish to play to a song or the built-in metronome. The metronome's settings and the tempo can be customized and saved.

4 Saving Your Settings

Any changes you make can be saved internally.

Important: Your settings can only be saved after unlocking the SAVE function in the UNIT-PREF menu (you only need to do so once). Press the leftmost DATA button to switch the SAVE function "On".

```
SAVE       P        SAVE       P
 Off       R         On        R
TRIG  INIT↓ E       TRIG  INIT↓ E
 -6      - F         -6      - F
```

Saving one KIT
Changes you wish to keep after editing the settings on a KIT page require that you save the KIT in question.

If the settings of selected KIT no longer correspond to the stored version, a "**?**" symbol appears next to **SAVE** on the KIT home page.

```
SAVE?  STOP  PLAY P
Simon_Phillips_1   R
 1        TIME PITCH O
 1        0:56  1.0 G
```

Press the leftmost DATA button above the display.

```
SAVE   FAVO        P
Simon_Phillips_1_  R
 1       KEY→ CUR← O
 1         T      1 G
```

Pressing the button above SAVE yet again will write your changes to the selected KIT.

Renaming a KIT

To rename a KIT, press the button above SAVE on the KIT home page.

```
┌─────────────────────┬───┐
│SAVE    FAVO         │ P │
│Simon_Phillips_1_    │ R │
│  1        KEY→ CUR← │ O │
│  1         T      1 │ G │
└─────────────────────┴───┘
```
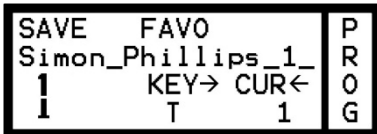
You can use uppercase and lowercase letters, numbers as well as several special characters for the names you enter. Use the knob to select the desired character (KEY flashes) or hold down the MORE button while pressing the knob to insert a space. Press the knob without holding down the MORE button to select the CUR parameter. Now, the knob can be used to move the flashing underline cursor to another position you want to edit.

Holding down the MORE button while rotating the knob towards the right allows you to insert new spaces. Rotating it to the left in this state deletes the character at the cursor position. To confirm the name, press the leftmost DATA button above the display (SAVE).

Copying, Moving and Swapping KITs

Existing KITs can be moved (MOVE) to a different memory slot, swapped with other KITs (SWAP) and copied (COPY).

Start by pressing the leftmost button above the display.

```
┌─────────────────────┬───┐
│SAVE    FAVO         │ P │
│Simon_Phillips_1_    │ R │
│  1        KEY→ CUR← │ O │
│  1         T      1 │ G │
└─────────────────────┴───┘
```

Rotate the knob to select the number of the KIT that should act as target for the currently selected KIT. After specifying the new KIT number, you can select among three functions: COPY, MOVE and SWAP.

```
┌─────────────────────┬───┐
│COPY    MOVE   SWAP  │ P │
│Simon_Phillips_1_    │ R │
│ 80        KEY→ CUR← │ O │
│ 80         S      1 │ G │
└─────────────────────┴───┘
```

Pressing the leftmost DATA button allows you to copy the selected KIT to the target memory. MOVE allows you to move the KIT towards the target memory (the KITs at and behind this position move one slot). SWAP, finally, causes the two selected KITs to change places. In this example, KIT no. 1 moves to memory 80, while the settings of KIT no. 80 move to memory location 1.

If you like, you can rename the settings during the COPY, MOVE or SWAP operation.

Saving Your UNIT Settings

When you change a setting in the UNIT menu, a "**?**" appears next to SAVE. Press the leftmost DATA button to save the changes if you want to keep them. The "**?**" disappears and your changes will be remembered. Please be aware that this is only possible if SAVE mode on the PREF page has been switched on. If the "**?**" doesn't disappear after pressing the leftmost DATA button, the SAVE function is currently disabled.

5 Setting Up and Calibrating the Hi-Hat

The hi-hat is the most complex instrument of your drum kit. The KT-M1 module has been designed to accommodate a vast number of hi-hat pads and controllers of several manufacturers. This flexibility, however, also means that there are a number of parameters that need to be set to take advantage of the KT-M1's full potential. In most instances, these setup and calibration steps only need to be performed once.

Just follow the steps below to set up your hi-hat within minutes.

1. Connect the hi-hat pad and optional hi-hat controller (if available) to the corresponding inputs on the module. Input A is to be used for the trigger signals while Input B is to be used for the control commands.

2. Navigate to the UNIT-HCAL page. Remember that this page is only displayed while the hi-hat channel is selected. Use the CHANNEL buttons to select the hi-hat channel or simply hit the hi-hat pad.

3. Next, specify the hi-hat type you connected.

DEF	All popular hi-hat types and brands
2BOXHH	2BOX DrumIt Five Hi-hat
ALEHH	Alesis Crimson hi-hat controller, KAT eHAT[2]

4. Start the calibration process:

4.1. Press the leftmost DATA button once. A closed hi-hat icon appears in the display and starts flashing.

```
CALIB RAW    LEVEL  H
  =●=       893      C
HTYP  POFF   PFACT  A
 DEF  28952    147  L
```

4.2. Close the hi-hat pad or press the controller's pedal with your foot.

4.3. Press the leftmost DATA button a second time. An open hi-hat icon appears in the display and starts flashing.

```
CALIB RAW    LEVEL  H
  =I=       893      C
HTYP  POFF   PFACT  A
 DEF  28952    147  L
```

4.4. Open the hi-hat pad or remove your foot from the pedal.

4.5. Press the leftmost DATA button yet again to exit the calibration function.

4.6. The display shows "done". The hi-hat has been successfully calibrated. If the message "NoChg" is displayed instead, the calibration could either not be performed or was repeated with the exact same settings. If the calibration routine failed, try adjusting the HH CAL screw on the back panel, then repeat steps 1~4 to calibrate your hi-hat again.

5. If the calibration was successful, you can now check whether the hi-hat responds to your playing as expected. If you are not happy with the response, either repeat the calibration steps or fine-tune the following parameters.

RAW (HH CAL back panel screw) This adjusts the hi-hat calibration range. Adjust this screw to shift the RAW values positive or negative. Changing the screw position will also change the PFACT value.

PFACT Increase this value to raise the calibration threshold. This is useful for a consistent "foot chick" (pedaled hi-hat) and "foot splash" (quick release of the pedal after a chick) sound. We recommend taking your time to find the setting that you are most comfortable with.

POFF   This parameter allows you to change the size of the the hi-hat's calibration range: higher values extend the range, while lower values narrow it down. Bear in mind that changing this setting also affects the PFACT setting. We recommend editing this parameter only once you are thoroughly familiar with the system.

6. Another important aspect is the hi-hat channel's trigger response. This can be set using the relevant menu items (see the downloadable User Manual for details).

UNIT-TRIG   This is where you set the hi-hat pedal's response and sensitivity. Set the main parameters (GAIN, THRES, CURVE) to match your playing style.

The most important of these is GAIN. Set it so that only the most forceful strikes produce a Level value of 0.0.

```
┌─────────────────────┬───┐
│ TYPE  XTALK L-2,2   │ T │
│ Kick2  Med  4▪▪▪▪▪  │ R │
│ GAIN  THRES CURVE   │ I │
│  13    -30   Pos1   │ G │
└─────────────────────┴───┘
```

UNIT-HSET   This page is used to set the hi-hat pedal's sensitivity/level (SENS) and its dynamic response (CURVE).

This completes the hi-hat settings!

6   KAT eHAT² Settings

GAIN = 0   PFACT = 60
THRESHOLD = -36   RAW = 847-997
TYPE = ALEHH   POFF = 27144
CURVE = NORM

Important: A **Mono** cable must be used with the eHAT2 with the ALEHH pedal type setting.

The POFF and RAW number values depend on where the HH CAL screw is set . The KAT eHAT2 has a very wide dynamic range, and can be successfully calibrated regardless of the HH CAL screw position. The settings above were calculated using the default HH CAL screw position.

7 Connections

This module provides the following inputs and outputs:

USB	Use a commercially available USB cable to connect the module to your computer.
12V DC	This is where you connect the external power supply.
MIDI IN	Connect this to the MIDI OUT socket on the external MIDI controller to allow the module to receive MIDI messages.
MIDI OUT	Connect this to the MIDI IN socket of the device that should receive MIDI messages from the module.
Channels	Connect your pads to the inputs that correspond to the instrument you wish to trigger. The hi-hat controller needs to be connected to the HIHAT B socket. The B channels of CYMB 1~3 are intended for pads that accommodate 2 stereo cables. For single zone pads and cymbals, a mono or stereo cable can be used. For 2 zone pads and cymbals, use a stereo cable.
OUT 1~4	These are the KT-M1's outputs, which can be connected to a mixer or amplifier. By default, OUT1 and 2 transmit the mixed stereo signal. OUT3 and 4, on the other hand, are assigned to BUS3 and BUS4 respectively. If necessary, OUT 1 and 2 can also output BUS signals (BUS1 and BUS2). This can be set on the UNIT-OUT page.
PHONES	This is where you can connect a commercially available pair of headphones (recommended impedance 32 Ω - 600 Ω).
LINE IN	This is where you can connect an external signal source. You can use a stereo cable (for your smartphone, for instance) or a mono cable (e.g. to listen to the monitor signal via the KT-M1 in a live setting).

8 USB

When the KT-M1 module is connected to a USB port on your computer (PC or Mac) and booted in USB mode, the computer will consider it a "regular" storage device. In this case, the module behaves exactly like a USB hard disk or an SD card (in a card slot). You can drag and drop sound files from your computer to your KAT module and exchange files between the module and the computer. Managing KAT sounds is thus as straight-forward and fast as exchanging digital photos, MP3 files and Office files. To boot the KT-M1 module in USB mode, press and hold the leftmost DATA button above the display while switching the module on.

```
USB   OS      Test
   DrumIt_Three
SerNr  BOOT
12345  1.32
```

The display now looks as follows:

```
   DrumIt_Three
 USB_Disconnected
SerNr  BOOT  Stat
12345  1.32
```

```
   DrumIt_Three
 USB_Connected
SerNr  BOOT  Stat
12345  1.32   R
```

No USB connection   Active USB connection

If the module is connected to and recognized by the computer, the letter "R" (below "Stat") refers to read mode, while "W" refers to write mode. Please bear in mind that severing the USB connection while the module is in Read (R) or Write (W) mode may damage the data file structure.

Below please find an explanation of the KT-M1's file and folder system.

9 File System

At the root level, you will find the following files:

.metadata_never_index	METADATA_NEVE...	0 KB
DrumItOS1.36.3.bin	BIN File	133 KB
Empty.dkit	DKIT File	151 KB
globalconfig.dcfg	DCFG File	10 KB
KT-M1 Quick Start Guide v3....	Adobe Acrobat D...	826 KB
TPK 4.01 FACTORY.syx	SYX File	35 KB
TPK 4.01 USER.syx	SYX File	35 KB
TPK 5.0KS FACTORY.syx	SYX File	35 KB
TPK 5.0KS USER.syx	SYX File	35 KB
TPK FACTORY KITS.dkit	DKIT File	151 KB
TPK USER KITS.dkit	DKIT File	151 KB

Empty.**dkit**   Standard blank KIT Bank. This file contains no KIT or UNIT settings.

TPK USER.**dkit**   This file contains the KIT and UNIT settings programmed at the factory for trapKAT User KITs.

TPK FACTORY.**dkit**   This file contains the KIT and UNIT settings programmed at the factory for trapKAT Factory KITs.

DrumItOS1.3x.xx.**bin**   Firmware (operating system) of the KT-M1.

TPK 4.01 FACTORY.**syx**   MIDI System Exclusive file for trapKAT 4.01 Factory Kits.

TPK 4.01 USER.**syx**   MIDI System Exclusive file for trapKAT 4.01 User Kits

TPK 5.0KS FACTORY.**syx**   MIDI System Exclusive file for trapKAT 5.0KS Factory Kits.

TPK 5.0KS USER.**syx**   MIDI System Exclusive file for trapKAT 5.0KS User Kits

KT-M1 x.x.**pdf**   Quick Start Guide in PDF format.

globalconfig.**dcfg**   Index file, which is required for Mac operating systems.

.metadata_never_index   System file.

Note: The trapKAT 6.0 contains both Factory and User Kits. An upgrade chip is available to upgrade from 4.01 or from 5.0KS to version 6.0. The .syx files contained on the KT-M1 memory card are for those who wish to keep their current trapKAT version, but still use the 6.0 KT-M1 KITs. Only one .syx file can be loaded into the trapKAT at a time. Each .syx file contains 24 KITs that can be loaded into the User Kits of the trapKAT.

Note: By pressing the MORE and the KIT button for 2 seconds you will enter a menu where you are able to switch to another KIT Bank. At next power up, KT-M1 will start with the last chosen KIT Bank.

The folders contain the KAT sound files in the **.dsnd** format.

1 KT Kick	File folder
2 KT Snare	File folder
2 KT Snare3zone	File folder
2 KT SnareClick	File folder
3 KT HiHat	File folder
4 KT Ride	File folder
5 KT Crash	File folder

805 10 Snare Amb.dsnd	DrumIt Instrument
Alu 14 Snare Amb.dsnd	DrumIt Instrument
AMC Piccolo Snare.dsnd	DrumIt Instrument
Birch 14x5 brush.dsnd	DrumIt Instrument
DaWe 14 Snare Amb.dsnd	DrumIt Instrument
DS Large Snare.dsnd	DrumIt Instrument
KA Snare 14 Amb D.dsnd	DrumIt Instrument

Feel free to change the folder structure so as to organize the files in a way that works for you. Given the KT-M1 module's display size, we recommend using short folder names and working with a limited number of folder levels.

10 KT-M1 Compatibility

The KT-M1 default programming is designed to be used with the trapKAT. The Sound Bank contains a collection of sounds from the 2 BOX Sound Library. There are 2 KIT Banks containing 24 KITs each for the 24 User and 24 Factory Kits available in the trapKAT. There are a wide variety of great sounding drum, percussion and electronic KITs. However, the KT-M1 is not limited to just the trapKAT. There are many instruments and controllers that are compatible with the KT-M1, and due to the open sound architecture, the operating system, Sound Bank and KITs for the 2 BOX Drumit 3 can also be used with the KT-M1.

For those who wish to use the 2 BOX Drumit 3 sounds and KITs, simply download the Drumit 3 card content on the 2 BOX website, connect the module to your computer, and replace the entire KT-M1 card content with the Drumit3 card files. The 2 BOX Drumit 3 KIT Bank contains 90 freely editable preset KITs plus 10 empty memory slots.

The first 40 KITs are a selection of various kits taken from the 2 BOX sound library. Amongst them are several Signature KITs recorded by the following artists: Randy Black, Simon Phillips, Mike Müller, and Marco Minneman.

Another 50 KITs were custom programmed to match various songs/artist. Feel free to edit them to fit your own style. These KITs contain typical sounds/loops/effects that you would associate with particular songs. This might be a finger snap on the rim of Tom 3, an 808 hand clap on Tom 4 or a set of timbales on Tom 3 and 4 – but of course always play the full drum set and enjoy these KITs in total. The name of the KIT gives you an idea which song/artist we had in mind when creating the preset. Play these KITs to the songs in question and have fun!

Finally, there are 10 empty memory slots for own creations. If there's a factory KIT which you like, and you want to edit it but still keep the original, then just copy this particular KIT to one of these empty slots and tweak it.

11 Editor Software

The KAT KT-M1 is fully compatible with the 2 BOX Drumit Editor. Using this free editor software, you can create your own sounds and set the main KIT parameters on your PC/Mac. The editor makes converting WAV files to highly usable KT-M1 sounds a breeze. This includes multi layers with up to 127 velocity levels!

To work with the editor software, you need to put the module in USB mode.(see section 8)

12 User Manual

On our web page, you will find a comprehensive KT-M1 manual that you can download free of charge as a PDF.

www.katpercussion.com

13 Sound Downloads

One special feature about the KT-M1 is its open sound architecture. You can transfer new sounds to your module and delete sound files you never use (consider backing them up on your computer, however).
You will find a host of additional sound files from the 2Box Sound Library which can be downloaded free of charge. Just help yourself to new signature sounds, specialty percussion instruments and/or legendary electronic drum sounds!

Download the desired ZIP archives and extract the sound files onto your computer. Those sound files can now be copied to the KT-M1 module via USB and used just like the original factory sounds.

www.2box-drums.com

14 Connecting FSR Pads

The KTB (KAT Trigger Box) and the FTB (FSR Trigger Box) are devices that enables you to use FSR (Force Sensing Resistor) heads and pads. The KTB and FTB can accommodate up to 12 single zone heads or 6 dual zone heads, as well as multi-zone FSR instruments such as Alternate Mode's jamKAT™ and hybriKIT™. The outputs of the KTB or FTB can then be connected directly to the KT-M1.

Compatible products for the KTB and FTB include:

Alternate Mode's hybriHEAD™, hybriPAD™ altZONE™ eRIM™, jamKAT™, hybriKIT™

Aquarian's onHEAD™ and inHEAD™

KAT's trigKAT™

Setting Up The KTB or FTB for FSR Heads and Pads

Plug in the AC adapter and turn the "Sensitivity" dial until it clicks. This powers on the unit.

For single zone heads, use a MONO 1/4" cable to connect from the head to the 1/4" input of the KTB/FTB. Use another MONO 1/4" cable to connect from the 1/4" output of the KTB/FTB to the KT-M1 Module.

For dual zone heads, use a STEREO 1/4" cable to connect from the head to the 1/4" input of the KTB/FTB. Use another STEREO 1/4" cable to connect from the 1/4" output of the KTB/FTB to the KT-M1 Module.

The center zone of the dual zone pad or head is the "HEAD" signal, and the outer zone is the "RIM" signal.

Important: The correct cable must be used or the pads and heads will not work.

Start with the following settings and adjust to your liking.

KTB/FTB Sensitivity = Set the Sensitivity Dial 3/4 up (or 3 o'clock)

Pad Type = PADPP
Gain = 4
Threshold = -38
XTalk = OFF
Curve = NEG1

Using Multi-Zone Instruments Such As The jamKAT™ and hybriKIT™ With The KTB or FTB

The KTB/FTB has a HD15 IN and a HD15 OUT connector. This is for connecting Alternate Mode's jamKAT™ or hybriKIT™ instruments to the KTB/FTB. Use Alternate Mode's "HD15 Input Cable" to connect from the jamKAT™ or hybriKIT™ to the HD15 IN on the KTB/FTB. The HD15 IN connector is routed to both the HD15 OUT and the 1/4" OUT connectors of the KTB/FTB simultaneously. This means you can either use the HD15 OUT connector or the 1/4" OUT connectors to connect to the KT-M1.

The best way to connect a multi-zone instrument from the KTB/FTB to the KT-M1 is to use Alternate Mode's "HD15 Output Cable". This breakout cable is a HD15 to 1/4" cable. The Mono plugs are numbered with the pad number it connects to (eg. TRS plug #1 connects to pad #1 of the instrument). Choose a KT-M1 channel for each pad on the instrument, plug the corresponding TRS jack into the KT-M1 input for that channel, and assign the desired sound to that channel.

HD15 Output Cable

Note: The KT-M1 has 10 trigger inputs. If using a multi-zone instrument with more than 10 zones, a "Y" cable must be used on any of the KT-M1's dual channel inputs. The Snare and Tom channels are all dual channel inputs. This will create an additional input for the instrument. From there, a sound can be assigned to each zone of that channel (Snare, Snare Rim or Tom, Tom Rim).

Refer to the KTB/FTB manual for more details on connectivity.

15 Compatibility List

The following list is not exhaustive, because testing all current and legacy pads on the market would be rather time-consuming. We do promise, however, to keep this list up-to-date whenever we are able to confirm the compatibility of products we haven't tested so far. If you don't see the type or manufacturer of (one of) your pads, please do not conclude that your pad(s) won't work with the KT-M1. Rather, compare the technical specifications of your pads with the requirements listed in the table below. If the specs match the listed requirements, your pads may work even though they do not appear in the list of compatible products. If in doubt, just ask your dealer or send an e-mail to: **drums@halleonard.com**

Pad type	Kick	Snare/Tom	Hi-hat pad	Hi-hat controller
Specifications	Piezo (head)	Piezo (head)	Piezo (bow)/Switch (edge)	Adjustable resistor, active hall generator or switch
		Piezo (head)/Piezo (rim)	Piezo (bow)	
		Piezo (head)/Switch (rim)		
		Piezo (head)/Switch (rim)/Switch (cross-stick)		
Products	2box	2box	2box	
	Alesis Crimson series	Alesis Crimson series	Alesis Crimson series	
	Alesis DM 10 series	Alesis DM 10 series	Alesis DM 10 series	
	Alesis Strike series	Millenium MPS series	Alesis Pro X	
	Roland KD120	Roland PD-100	Millenium	
	Roland KD140	Roland PD-125	Roland FD-7	
	Roland KD7	Roland PD-8	Roland VH-11	
	Yamaha KP-65	Roland PD-85	Roland VH-12	
	Yamaha KP100	Roland PDX-100	Yamaha RHH135	
		Roland PDX-8	Yamaha HH-65	
		Roland PDX-8		
	KAT Percussion	KAT Percussion	KAT Percussion	

Pad type	Cymbals	Trigger	Miscellaneous
Specifications	Piezo (bow)	Piezo (head)	Piezo
	Piezo (bow)/Switch (edge)	Piezo (head)/Piezo (rim)	
	Piezo (bow)/Switch (edge)/Bell (switch)		
Products	2box, KAT	2box TrigIt, KAT	DDrum Trigger Tube
	Alesis Crimson series	DDrum Chrome Elite	Roland BT-1
	Alesis DM 10 series	DDrum Pro	
	Millenium MPS series	DDrum Red Shot	
	Roland CY-12C	ddt AT series	
	Roland CY-13R	ddt Truss series	
	Roland CY-14C	Roland RT series	
	Roland CY-15R	TDrum Black Shot series	
	Roland CY-8	TDrum Pro series	
	Yamaha PCY100	Yamaha DT50 series	
	Yamaha PCY135		

16 Connection Options and Trigger Types

| Type | Brands (examples) | Zones – Configuration | | | | Information | Instru |
		Head/Bow	Rim/Edge	Cross-stick/Bell	Choke		Kick
PadP	2box, Roland,KAT	Piezo	Piezo	-			
PaPSS	Huaxin	Piezo	Switch	Switch			
PaPSY	Yamaha	Piezo	Switch	Switch			
PadPS	Roland, Alesis	Piezo	Switch	-			
Rim	Various		Piezo				
CyPSV	2box	Piezo	Switch	Velocity	yes		
CyPSB	Roland	Piezo	Switch	Switch	yes		
CyPS	Alesis, Roland	Piezo	Switch	-	yes		
CyPSS	Huaxin, Alesis	Piezo	Switch	Switch	yes		
CyPSY	Yamaha	Piezo	Switch	Switch	yes		
HiHat	Various	Piezo	Switch	-	-	Control to Input B	
AcTr1	2box, Ddrum	Piezo	Piezo			small drum	
AcTr2	2box, Ddrum	Piezo	Piezo			Medium drum	
AcTr3	2box, Ddrum	Piezo	Piezo			Big drum	
RubH1	2box	Piezo	Piezo			Rubber Heads S	
RubH2	2box	Piezo	Piezo			Rubber Heads M	
RubH3	2box	Piezo	Piezo			Rubber Heads XL	
Kick1	Various	Piezo				Faster response	x
Kick2	Various	Piezo				Slower response	x

	Instrument									
	Snare			Tom		Rim	Cymbal			Acoustic
	1 zone	2 zones	3 zones	1 zone	2 zones		1 zone	2 zones	3 zones	Trigger
	x	x		x	x					
			x							
			x							
		x			x					
						x				
									x	
									x	
							x	x		
									x	
									x	
										x
										x
										x

17 Important Safety Precautions

- Never try to open or modify the power supply adapter.

- If the power supply is damaged, be sure to purchase a new KAT adapter. When using a third-party adapter, make sure it is a 12V/1000mA DC power supply (100-240V).

- Never use the power supply outdoors or in damp locations.

- The KT-M1 module operates at low power and should therefore pose no particular hazard. We nevertheless urge you to operate it in a responsible manner.

- Do not allow any liquids to penetrate inside the unit.

- Never drop the unit.

- Never apply excessive force to the module or its controls.

- Never expose the module to extremely hot (>40°C) or cold (below 0°C) temperatures.

- Avoid covering the module's bottom or rear panel, or its power supply adapter with blankets and the like. These areas become hot while the unit is in use, and this heat needs to be dissipated in one way or another.

- In short: be sure to handle the KT-M1 module with the same care as any other electronic device you own. This will ensure maximum enjoyment for years to come.

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