



OPERATOR'S MANUAL

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FRONT PANEL OVERVIEW



- LCD The display is used for navigating menus, displaying data, and affecting change on MPK49's options and parameters.
- [VALUE] (Push to Enter) This dial is used to increment and decrement Presets, parameter values and settings. This dial also functions as an [ENTER] button when it is pressed down.
- [<] AND [>] BUTTONS These buttons are used to navigate through the fields of menus and options. The [<] button also functions as a [CANCEL] button.
- 4. [PRESET] This button calls up Preset Mode. You can select and recall different Preset programs in this mode.
- [EDIT] This button calls up Edit Mode, which allows you to edit the behavior of the keyboard, pads, knobs, buttons, sliders and default settings for each preset.
- [GLOBAL] This button calls up Global Mode, where MIDI reset commands and global system preferences are set.
- [PREVIEW] This button allows you to see 7. what value will be sent by a controller, without actually sending the value. This gives you precise control over your parameters and helps avoid erroneous controller data being sent to your devices due to the physical position of the controller. This is especially useful when switching between control banks where, for example, the physical position of a slider may not correspond to the last value sent by the controller. Holding down [PREVIEW] allows you to view the original value and adjust the physical position of the slider as necessary before transmitting any values.

- [PROGRAM CHANGE] Pressing this button will enter Program Change mode. In this mode, you can send a *Program Change* or *Program with Bank* Change message to a hardware or software module.
- TRANSPORT CONTROL BUTTONS These five buttons are dedicated buttons for sending transport control commands. The transport control buttons can be set to transmit either MMC (MIDI Machine Control), MMC/MIDI SysEx, MIDI START/STOP or pre-assigned MIDI CC values.
- 8 ASSIGNABLE KNOBS –Each 360-degree knob can be used to send continuous control data to a desktop audio workstation or external MIDI device.
- 8 ASSIGNABLE SLIDERS Each slider can be used to send continuous control data to a desktop audio workstation or external MIDI device.
- 12. 8 ASSIGNABLE BUTTONS These buttons can be used as MIDI CC switches or Program Change switches. They can function in momentary or toggle modes. When [TIME DIVISION] has been activated, these 8 buttons are used to set the time division of the Arpeggiator and Note Repeat features.
- 13. [CONTROL BANK] The MPK49 features 3 independent banks of continuous controllers. Effectively, this allows you to control up to 72 independent parameters with the knobs, sliders and buttons on the MPK49. The [CONTROL BANK] button is used to switch among the 3 banks. The LEDs above the button will reflect the currently selected control bank.



- 14. 12 MPC PRESSURE AND VELOCITY SENSITIVE PADS – The pads can be used to trigger drum hits or samples on your software or hardware module. The pads are pressure and velocity sensitive, which makes them very responsive and intuitive to play.
- 15. PAD BANK buttons These 4 buttons switch among pad banks A, B, C, D. Each bank can address a unique set of 12 sounds, giving you access of up to 48 different sounds you can trigger with the pads. The currently selected pad bank will be indicated on the LCD display
- [FULL LEVEL] When [FULL LEVEL] is activated, the pads always play back at a maximum velocity (127), no matter how hard or soft you hit them.
- 17. [12 LEVEL] When [12 LEVEL] is activated, you can use the 12 pads to change a selected sound's velocity in 12 steps. When you press the [12 LEVEL] button, the last pad that was hit gets mapped to all 12 pads. The pads will now output the same note number and pressure controller as the initial pad, but

velocity the is fixed at the values shown in the diagram on the right, regardless of how hard you hit them. This allows you to have more control over the velocity of a sound.

110	120	127
78	89	100
45	56	67
12	23	34

- 18. [NOTE REPEAT] Holding this button while striking a pad causes the pad to retrigger at a rate based on the current Tempo and Time Division settings. The Note Repeat feature can be synced to an internal or external MIDI Clock source. [NOTE REPEAT] can function as a latching or momentary button
- [TIME DIVISION] This button is used to specify the rate of the Note Repeat and Arpeggiator features. When [TIME DIVISION] is activated, you can press one of the 8 switches to specify a time division. [TIME DIVISION] can function as a momentary or toggle button.

Please note that while [TIME DIVISION] is active, the 8 assignable buttons will not function as MIDI CC or Program Change switches until [TIME DIVISION] has been deactivated.

- 20. [ARP ON/OFF] This button enables and disables the internal Arpeggiator. The Arpeggiator will only function on notes being played on the keyboard. The Arpeggiator feature on the MPK49 works in conjunction with the Tempo and Time Division settings, which specify the rate of arpeggiator. Please note that the Arpeggiator can be synced either to an internal or external MIDI Clock source (such as a software DAW or a MIDI device).
- 21. [LATCH] This button works in conjunction with the Arpeggiator. When the Arpeggiator is turned on and [LATCH] has been enabled, you can hold down a combination of keys -- the Arpeggiator will memorize and continue to arpeggiate these notes, even if you depress the keys. There are a couple of ways to use the [LATCH] function:
 - a. While holding down the keys, you can add more notes to the sequence by pressing down additional keys.
 - b. If you depress the keys, release them, and then press down a new combination of notes, the Arpeggiator will memorize and arpeggiate the new notes.
- 22. [OCTAVE + / -] These buttons can be used to shift the keyboard's range up and down. The display will indicate which octave you have shifted to. If both buttons are pressed at the same time, the octave shift will reset to 0.
- 23. [TAP TEMPO] This button allows you to tap in a new tempo. If the preset is reloaded, the tempo will revert to the saved tempo value. (Please note that a preset's default tempo can be set in Edit Mode). Tap Tempo does not work when the MPK49 is set to External sync.
- PITCH BEND WHEEL Transmits MIDI Pitch Bend information on a selected MIDI channel and port.
- MODULATION WHEEL This wheel can be used to transmit continuous controller data. By default, the modulation wheel will transmit MIDI CC #01.



REAR PANEL OVERVIEW



- DC POWER ADAPTER INPUT Plug in a 6V-1A DC power adapter if you do not wish to power the MPK49 through the USB connection.
- POWER ADAPTER RESTRAINT You can secure the power adapter cord to this restraint to prevent accidental unplugging.
- USB CONNECTION Plug a standard USB cable into this outlet and into the USB port of your computer. The computer's USB port will provide power to the MPK49. This connection is used to send and receive MIDI data to and from your computer and may also be used to send MIDI data from your computer to a device attached to the MIDI OUT port of the MPK49.
- MIDI OUT Use a five-pin MIDI cable to connect the MIDI OUT of the MPK49 to the MIDI IN of an external device.
- MIDI IN Use a five-pin MIDI cable to connect the MIDI OUT of an external MIDI device to the MIDI IN of the MPK49.
- SUSTAIN PEDAL Connect a ¼" TS sustain pedal to this input. We recommend using the Alesis Sustain Pedal.
- EXPRESSION PEDAL INPUT Connect a ¼" TRS expression pedal to this input. We recommend using the Alesis F2 expression pedals.



HOOKUP DIAGRAM

Please refer to the following scenario for connecting the MPK49.



EXTERNAL SOUND MODULE

- Connect a USB cable from your computer to the MPK49. The unit will be powered through the USB connection. Alternatively, if you do not wish to use a computer in your setup or if you wish to power the MPK49 externally, please plug in the included 6V-1A DC power adapter.
- If you would like to use an external sound module, connect a 5-pin MIDI cable from the MIDI OUT of the MPK49 to the MIDI IN of the external device.
- If you would like to use another MIDI controller in your setup, connect a 5-pin MIDI cable from the MIDI OUT of the controller to the MIDI IN of the MPK49.



A NOTE ABOUT USING THE MPK49 WITH SOFTWARE

- Make sure that the MPK49 and all external devices are connected and that the USB cable is connected to your computer *before* opening any software applications on your computer with which you might want to use the MPK49. If the unit is *not* plugged in before, your software application might not recognize the MPK49 as an available device.
- 2. In your software application, you will need to set the MPK49 as a default MIDI input device. This is usually done in the MIDI section of the Preferences menu.
- 3. If you would like to use tempo-synced features, such as Note Repeat and Arpeggiator, you will also need to slave the MPK49 to a MIDI Clock generated by your software DAW. Make sure that your software is set up to send MIDI clock to the MPK49 and that the unit's MIDI Clock setting is set to "External" (see Global Mode). This will ensure that the Arpeggiator and Beat Repeat are synchronized to the tempo selected in your software DAW.

IMPORTANT

The operation of the MIDI OUT port changes depending on whether or not a USB cable is connected to the MPK49.

- USB cable connected: MIDI data from your computer is passed to the MIDI OUT port. When a USB cable is connected, you should activate "MIDI echo" in your sequencer if you want the MPK49 to control another external device.
- USB cable not connected:
 Whatever you play on the MPK49 is sent to the MIDI OUT port.
 Note: If you have another device connected to the MPK49's MIDI IN port, that device's
 MIDI information will be ignored.



DISPLAYING INFORMATION

As you are working with the MPK49, the LCD will help you keep track of what values and parameters are entered and sent to external devices. There are several kinds of information that the MPK49 will display while in use: OCTAVE, TRANSPOSITION, NOTE, AFTERTOUCH (Channel Pressure), CONTROL CHANGE, MIDI MACHINE CONTROL (MMC), and PREVIEW MODE information.

OCTAVE AND TRANSPOSITION

When using the keyboard, the LCD will display the current octave and any transposition setting which you may have applied.

Note: The octave settings will apply to individual presets while transposition will affect all presets globally.

NOTE

When a **PAD** is hit, the MPK49 will output *MIDI Note On* messages to trigger sounds on your DAW or external device. Each pad can have a MIDI Note Number associated with it. When you hit a pad, the screen will display the MIDI Note Number, the MIDI Port and Channel which the pad is using, as well as the pad bank and velocity (how hard you hit the pad).

→ Please see 'Editing Pads'(page 13) for more information on MIDI Notes and Pads.

OCTAVE SHIFT

NOTE AFTERTOUCH (Channel Pressure)

When enabled, **AFTERTOUCH** is MIDI data sent when pressure is applied to one of the pads after it has been struck and while it is being held down. It will be displayed on the far right of the display as you apply pressure to the pad.



AFTERTOUCH VALUE

AFTERTOUCH VALUE IS ALSO DISPLAYED WITH BAR METER

CONTROL CHANGE

When a **KNOB** or **SLIDER** is used, the MPK49 will output MIDI Control Change data. This data is used to change certain parameters on your DAW or external sound module. When you move a knob or slider, the screen will indicate the Control Change (CC) Number, value, and MIDI Channel.

⇒ Please see 'Editing Knobs and Sliders' (page 16) for more information on Control Change.





CONTROL AFTERTOUCH

The knobs and sliders on the MPK49 can also be set to transmit **AFTERTOUCH** information.

➡ Please see 'Editing Knobs and Sliders' (page 16) for more information on setting knobs and sliders to transmit Aftertouch.



PAD BANK

MIDI MACHINE CONTROL COMMAND (MMC)

MIDI MACHINE CONTROL (MMC) is commonly used to send transport control messages to hardware record or playback machines. For example: Pressing [PLAY] on the MPK49 sends an *MMCPLAY* message to a connected multi-track recorder, which begins playing. When [STOP] is pressed on the MPK49, the deck also stops.



PREVIEWING

When the **[PREVIEW]** button is held down, and a slider or knob is moved, the LCD displays the screen on the right. The display shows the assigned event and the last sent value of moved knob or slider. While the **[PREVIEW]** button is held, the slider of knob will not be transmitting any information until **[PREVIEW]** is released and the slider or knob is used again. At that point, the slider or knob will begin transmitting from the value selected in the New Value field while in Preview mode.

THE ADVANTAGES OF PREVIEWING

The **[PREVIEW]** button allows you to see what value will be sent by a controller, without actually sending the value. This gives you precise control over your parameters and helps avoid erroneous controller data being sent to your devices due to the physical position of the controller. For example, imagine that slider S1 is being used to send three different MIDI CC numbers, depending on the control bank which you are currently in. Let's assume that S1 is assigned to MIDI CC#10 in control bank A and MIDI CC#11 in control bank B. While in control bank A, you adjust S1 (MIDI CC#10) to a value of 40. Now you switch over to control bank B and adjust S1 (MIDI CC#11) to a value of 80. If you now switch back to control bank A and try to adjust S1 (MIDI CC#10), you will notice that the transmitted values will begin at 80 (instead of 40), due to the physical location of the slider. To prevent this, you can hold down **[PREVIEW]** and move S1 back to a value of 40 (which will be shown in the "Last" value readout on the display). The slider will not be transmitting information while the **[PREVIEW]** button. Adjusting S1 (MIDI CC#10) will now give you a nice starting point at a value of 40.





ABOUT MODES

The MPK49 has four different modes of operation. Each mode can be accessed by pressing the corresponding button on the MPK49. Following is a short description of each mode:

Preset Mode



This mode allows you to load, save and copy Presets. A Preset is a collection of information about how different sliders, knobs, and pads will behave. Using Presets allows you to save different configurations so you can quickly load them when you need them, without having to reprogram the MPK49 every time. (page 9)

Edit Mode



This mode allows you to edit the configuration of the MPK49. Edit Mode is a powerful tool for customizing your set-up. In this mode, you can make changes to how the keyboard, pads, knobs and sliders are behaving. For example, you may wish to have a slider or a knob transmit only a limited range of MIDI data, or you may wish to have a pad that transmits on a different MIDI Channel. You can change these and other various parameters in Edit Mode. (page 10)

Global Mode



This mode allows you to set global parameters and make general changes to how your MPK49 is functioning. For example, in Global Mode you can change how the pads respond to the touch, or change the brightness of the LCD screen. The parameters that you can modify in Global Mode also include controller resets, pad response curves, display brightness, and more. (page 31)

Program Change Mode

PROGRAM CHANGE

This mode allows you to transmit various Program Change messages. In this mode, you can tell your DAW or an external device to switch to a different program bank of sounds. This way, you can avoid having to manually switch between different programs on your DAW or external device. (page 35)



PRESET MODE

What is a Preset?

A Preset is a collection of information about how the MPK49's keyboard, sliders, knobs, and pads will behave. Using Presets allows you to save different configurations so you can quickly load them when you need them, without having to reprogram the MPK49 every time.

The MPK49 features different Preset banks that you can load and write to. When you turn on the MPK49, it will automatically go into Preset Mode and Preset 1 will be displayed on the screen. You can also press the **[PRESET]** button at any time to call up this mode. In Preset Mode you can load, save/copy and rename Presets – each of these functions can be accessed through the 3 different pages. You can navigate between these pages with the **[<]** and **[>]** buttons.

PAGE 1 - LOAD PRESET

 While you are in Preset Mode, you can change Presets with the [VALUE] dial below the screen. Turning the dial increments or decrements the current Preset number and displays the screen on the right:

When you do this, you will notice that 'PRESS ENTER' will begin to blink.

2. Pressing **[ENTER]** loads the selected Preset. Pressing **[<]** button or **[PRESET]** button cancels and returns you to the Preset that was last selected.

PAGE 2 – SAVE/COPY PRESET

In Preset Mode, you can also save and copy a Preset to a new location. This allows you to save any changes that you have made to the Preset.

Note that if you are saving the Preset to the same location (same preset number) the screen will say 'SAVE TO' and if you are saving to a different location (different preset number), the screen will display 'COPY TO'.

- 1. While you are in Preset Mode, press [>] button until you see the 'SAVE TO' screen similar to the one shown above.
- 2. You can select the location where you want to save the Preset by turning the [VALUE] knob.

When you do this, you will notice that the 'PRESS ENTER' segment will begin to blink.

Press [ENTER] to save current Preset to the destination. Pressing [<] button or [PRESET] button cancels the operation and returns you to the Preset play mode.

PAGE 3 – NAME PRESET

While you are in Preset Mode, you can also change the Preset name. This way you can assign specific names to different Presets so you can quickly identify and access different controller configurations.

- 1. To name or rename the Preset, press the [>] button until you see 'Preset Name' displayed on the screen.
 - You will notice that the first letter of the name will begin blinking.
- 2. Turn the [VALUE] dial to change the blinking character.
- 3. To move between the characters, use [<] and [>] buttons.
- 4. When done, press [PRESET] again. The name will be saved.



ENTER PRESET NAME IN THIS FIELD



DESTINATION

А



reset2



9



EDIT MODE

Pressing the **[EDIT]** button calls up Edit Mode. In this mode, you can edit the settings of the currently selected Preset. The settings vary depending on the controller you are editing and are described below.

Please note that the changes you make will only apply to the currently selected Preset.

NAVIGATING EDIT MODE

- 1. Press the [EDIT] button.
- To select the controller you wish to edit, simply engage it this will prompt the screen to display the properties of the particular controller (Page 1).
- If there are multiple properties for the selected controller, turn the [VALUE] dial to select the property you wish to edit. Press [ENTER] to view the parameters of the selected property, if available (Page 2).
- To move between the parameter fields on Page 2, use the [<] and [>] buttons. To change the values of the fields, turn the [VALUE] dial.
- When finished editing the controller, press [ENTER] to accept the change or press [<] to cancel.

You can use the example screenshot on the right to help you determine where the Page 2 parameters described on the following page will appear on the screen.





EDIT MODE PARAMETERS

CONTROLLER SELECTED	PAGE 1	PAGE 2
	OCTAVE	KEYBOARD MIDI CHANNEL (field 1)
		KEYBOARD MIDI CHANNEL (field 1)
KEYBOARD	AFTERTOUCH	ON/OFF BEHAVIOR (field 4)
	VELOCITY	KEYBOARD MIDI CHANNEL (field 1)
		MIDI CHANNEL (field 1)
	NOTE	NOTE NUMBER (field 2)
	NOTE	ON/OFF BEHAVIOR (field 3)
PADS		MIDI CHANNEL (field 1)
	PROGRAM CHANGE	PROGRAM CHANGE NUMBER (field 2)
	THOULAW ON ANGE	BANK M (MSB) (field 3)
		MIDI CHANNEL (field 1)
	CONTROL CHANGE	CC NUMBER (field 2)
	Contribe of white	RANGE – MINIMUM VALUE (field 3)
KNOBS AND SLIDERS		MIDI CHANNEL (field 1)
	AFTERTOUCH	CC NUMBER (field 2)
	7.1 1211100011	RANGE – MINIMUM VALUE (field 3)
		MIDI CHANNEL (field 1)
	CONTROL CHANGE	CC NUMBER (field 2)
BUTTONS		BUTTON MODE (field 4) MIDI CHANNEL (field 1)
20110110	RECORDANA CUANCE	PROGRAM CHANGE NUMBER (field 2)
	PROGRAM CHANGE	BANK M (MSB) (field 3)
		BANK L (LSB) (field 4)
	TYPE/RANGE/TOGGLE	ARPEGGIO RANGE (field 3)
ARP ON/OFF		ARPEGGIO TOGGLE BEHAVIOR (field 4)
	GATE/SWING	ARPEGGIO GATE VALUE (field 2) ARPEGGIO SWING VALUE (field 4)
	TOGGLE/MOMENTARY	BUTTON MODE (field 2)
NOTE REPEAT	GATE/SWING	NOTE REPEAT GATE VALUE (field 2)
		DEFAULT TIME DIVISION (field 2)
TIME DIVISION	DIVISION	BUTTON MODE (field 4)
PITCH BEND WHEEL	PITCH BEND	MIDI CHANNEL (field 1)
		CC NUMBER (field 2)
MODULATION WHEEL	MODULATION WHEEL	RANGE – MINIMUM VALUE (field 3)
TRANSPORT		RANGE – MAXIMUM VALUE (field 4)
TAP TEMPO	TEMPO	BPM (field 2)
		MIDI CHANNEL (field 1)
	CNTL CHANGE	CC NUMBER (field 2)
		RANGE – MINIMUM VALUE (field 3) BANGE – MAXIMUM VALUE (field 4)
EXPRESSION PEDAL		
	AFTERTOUCH	MIDI CHANNEL (field 1) RANGE - MINIMUM VALUE (field 2)
		RANGE – MAXIMUM VALUE (field 4)
		MIDI CHANNEL (field 1)
	MIDI CC	CC NUMBER (field 2)
		BUTTON MODE (field 4)
	DRUM PAD	PAD NUMBER (field 4)
	TIME DIV	-
SUSTAIN PEDAL	TAP TEMPO	
	BANK CHANGE	_
	PLAY/RECORD	-
	ARP ON/OFF	
	ABPLATCH	



EDITING THE KEYBOARD

When editing the keyboard, please note that the changes will affect all the keys on the MPK49. The keyboard properties you can edit include MIDI Channel, Octave, Aftertouch, and Velocity.

MIDI CHANNEL – This is the MIDI Channel on which the keyboard will be transmitting information.

1.

1.

2.

3.

4.

dial.

OCTAVE - This is the default octave shift that will be applied to the keyboard when the current Preset is loaded.

AFTERTOUCH – Aftertouch describes pressure applied to the keys after they have been pressed. Aftertouch can often be used to control the vibrato, sustain or decay of a sound. The Aftertouch setting on the MPK49 can be set to either "On" or "Off". When set to "Off", the MPK49 will ignore Aftertouch.

VELOCITY – Velocity describes how hard the keys are struck. Most often, velocity is directly mapped to the perceived loudness of a sound; so the harder you play the keys, the louder the sound will be. The Velocity setting on the MPK49 can be set to either "On" or "Off". When set to "On", the keyboard will detect how hard the keys are pressed and translate these values into corresponding MIDI velocities. When set to "Off", MPK49 will output a constant MIDI velocity, no matter how hard the keys are pressed.





PRESS ENTER TO EDIT

KEYBOARD OCTAVE



- Now select the keyboard for editing by pressing one of the keys.
 You will see Page 1 displayed on the screen (shown on the left).
- Turn the [VALUE] dial to select the property you wish to edit (Octave, Aftertouch, Velocity).

To edit the keyboard, press the [EDIT] button to enter Edit Mode.

- 5. Press [ENTER] to edit the selected property.
- In the first field of this page, you can set the keyboard's MIDI channel field by turning the [VALUE] dial.
- 2. Press [>] to edit the Octave shift.
- The Octave shift field will begin to blink. Set the shift by turning the [VALUE] dial (default shift is set to "0").

You can set the keyboard's MIDI channel field by turning the [VALUE]

The Aftertouch field will begin to blink. Turn the [VALUE] dial to turn

4. When finished, press [ENTER] to return to Page 1.

When done, press [>] to edit Aftertouch.

Aftertouch "On" or "Off" (default is set to "On").

When finished, press [ENTER] to return to Page 1.

OCTAVE SHIFT FIELD



KEYBOARD VELOCITY





- You can set the keyboard's MIDI channel field by turning the [VALUE] dial.
- 2. When done, press [>] to edit Velocity.
- The Velocity field will begin to blink. Turn the [VALUE] dial to turn Velocity "On" or "Off" (default is set to "On").
- 4. When finished, press [ENTER] to return to Page 1.

VELOCITY FIELD



EDITING THE PADS

The pads on the MPK49 can be set to transmit **Note** or **Program Change** information when they are hit. The default operation of the pads is set to Note, which means that when a pad is hit it will generate Note On/Off messages to trigger sounds. The pads may also be set up to transmit Program Change information, which allows you to switch to different programs (instruments or sound banks) on your DAW or external device by hitting the pads. If you would like to know more about Program Change, please read 'Program Change Mode' on page 34.

What is a Note Message?

A Note Message is a MIDI message that tells an instrument to play a note. More generally, this means that Note Messages are used to start and stop sounds. When you press one of the pads, a 'Note On' message is sent to your DAW or external device. This toggles a note or sample. When you release the pad, a 'Note Off' message is sent. This message will stop the note or sample.

What is a Program Change?

A Program Change Message allows you to tell your DAW or external device to switch to a new program. Most often, these programs are collections of samples or instruments. You can use Program Change to tell your DAW or external device to switch to a new instrument or bank of sounds.

For more information, see 'Program Change Mode' on page 34.



SELECT PAD EVENT TYPE IN THIS FIELD.

- 1. Press [EDIT] button to enter EDIT MODE.
- 2. Press the pad that you would like to edit.
- 3. On Page 1, turn the [VALUE] dial to select 'NOTE' or 'PROG CHANGE' (Program Change) as the event type.
- 4. Press [ENTER] to view Page 2.

Depending on which event type you select on Page 1, parameter options on Page 2 will be changed.

5. Use [<] and [>] buttons to move through fields on the second page.

The parameter fields available for each event type are outlined in the following pages.



NOTE PARAMETERS

The following list of parameters can be accessed if the pad event type is set to Note.

MIDI CHANNEL FIELD



MIDI PORT/CHANNEL FIELD

NOTE FIELD



NOTE FIELD

PLAY MODE FIELD

PLAY MODE FIELD

PLAY MODE FIELD



This field sets the MIDI Port and Channel which the pad will use to transmit messages. You can assign pads to one of two MIDI Ports, A or B, and to one of 16 MIDI Channels on each port (i.e. B11). You may also assign the pad to the MIDI Common Channel.

- 1. Use the [<] button to select MIDI Port/Channel field.
- While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.
- 3. Use the [>] button to select the next field.

Note: When not used via USB, only pads assigned to port A will transmit MIDI information via the 5-pin MIDI port on the back of the MPK49.

This field sets the MIDI Note Number that the pad will transmit when it is hit.

- 1. Use [<] or [>] buttons to select Note field.
- While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.
- 3. Use the [>] button to select the next field.

Note: Software modules or drum machines are often programmed to trigger sounds based on specific Note Numbers associated with each sample. You may have to experiment setting different Note Numbers on the MPK49 to find the range that is suited for your application.

Here, you can select whether the pad transmits *Note On/Off* information in a standard momentary *(MTY)* way like a keyboard, where hitting the pad generates a *Note On* and releasing it a *Note Off* message, or in a toggle *(TGL)* way where the first hit of the pad outputs a *Note On*, the second hit transmits a *Note Off*.

- 1. Use [<] or [>] buttons to select Play Mode field.
- 2. While in Play Mode field, use [VALUE] dial to select desired Play Mode.
- 3. Use the [>] button to select the next field.

Here, you can select whether the pad transmits *Note On/Off* information in a standard momentary (*MTY*) way like a keyboard, where hitting the pad generates a *Note On* and releasing it a *Note Off* message, or in a toggle (*TGL*) way where the first hit of the pad outputs a *Note On*, the second hit transmits a *Note Off*.

- 1. Use the [>] button to select Pressure field.
- 2. While in Pressure field, use [VALUE] dial to select "OFF", "CPR", or "MTY".



PROGRAM CHANGE PARAMETERS

The following list of parameters can be accessed if the pad event type is set to **Program Change**.

MIDI CHANNEL FIELD



MIDI PORT/CHANNEL FIELD

PROGRAM CHANGE FIELD

5e	tting	
	003 000	ÖÖO
А	PRESS ENTER	

PORGRAM CHANGE FIELD

BANK M FIELD

1. Use the [<] button to select MIDI Port/Channel field. 2. While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.

Program Change messages can be sent on one of two MIDI Ports, A or B, and

one of 16 MIDI Channels on each port (i.e. A7). You may also assign Program

3. Use the [>] button to select the next field.

Change to use the MIDI Common Channel.

In this field you can set which Program Change Number the pad will transmit when it is pressed.

- 1. Use [<] or [>] buttons to select Program Change field.
- 2. While in Program Change field, use [VALUE] dial to select desired Program Change Number.
- 3. Use the [>] button to select the next field.



BANK M FIELD

BANK L FIELD



Bank M describes the Most Significant Bit (MSB) of information.

- 1. Use [<] or [>] buttons to select Bank M field.
- 2. While in Bank M field, use [VALUE] dial to select desired value.
- 3. Use the [>] button to select the next field.

Bank L describes the Least Significant Bit (MSB) of information.

- 1. Use the [<] or [>] buttons to select Bank L field.
- 2. While in Bank L field, use [VALUE] dial to select desired value.

Note:

You can also configure pads to send Program Change messages only, without specifying Bank M and Bank L. While editing Bank M and Bank L fields of a pad, use [VALUE] dial to set Bank M and Bank L to 'OFF' (beyond 000). This will cause the pad to transmit only a Program Change message.



EDITING KNOBS AND SLIDERS

The knobs and sliders on the MPK49 are controllers which can be set to transmit **Control Change** or **Aftertouch** information. In addition, the endless knobs may also be assigned as an **Increment/Decrement** function. The default operation of knobs and sliders is to transmit Control Change information when used.

What is Control Change?

Control Change refers to the use of MIDI Continuous Controller data. Continuous Controller (CC) data are MIDI messages capable of transmitting a range of values, usually 0-127. CC's are commonly used for controlling volume, pan, mod wheel (#1) and other variable parameters on your DAW or sound module.

What is Aftertouch?

Aftertouch refers to MIDI data sent when pressure is applied to a pad after it has been struck, and while it is being held down or sustained. Aftertouch is often routed to control vibrato, volume, and other parameters. On the MPK49, the knobs and sliders can also be assigned to transmit Aftertouch information.



SELECT SLIDER EVENT TYPE IN THIS FIELD.

- 1. Press [EDIT] button to enter EDIT MODE.
- 2. Move the slider or turn the knob which you would like to edit.
- On Page 1, turn the [VALUE] dial to select 'CTRL CHANGE' (Control Change) or 'AFTERTOUCH' as the event type.
- 4. Press [ENTER] to view Page 2.

Depending on which event type you select on Page 1, parameter options on Page 2 will be changed.

5. Use [<] and [>] buttons to move through fields on the second page.

The parameter fields available for each event type are outlined in the following pages.



CONTROL CHANGE PARAMETERS

The following list of parameters can be accessed if the pad event type is set to "Note".

when it is pressed.

Change Number.

Controller Number.

MIDI CHANNEL FIELD



MIDI PORT/CHANNEL FIELD

This field sets the MIDI Port and Channel which the knob or slider will use to transmit messages. You can assign knobs and sliders to one of two MIDI Ports, A or B, and to one of 16 MIDI Channels on each port (i.e. A14). You can also assign a knob or slider to use the MIDI Common Channel.

1. Use the [<] button to select MIDI Port/Channel field.

1. Use [<] or [>] buttons to select Control Change field.

 While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.

In this field you can set which Control Change Number the pad will transmit

2. While in Control Change field, use [VALUE] dial to select desired Control

Note: To be able to control a parameter in your DAW or sound module with

a knob or slider, both the parameter and the knob need to be set to the same

3. Use the [>] button to select the next field.

3. Use the [>] button to select the next field.

Note: When not used via USB, only knobs and sliders assigned to port A will be transmitted via the 5-pin MIDI port on the back of the MPK49.

CONTROL CHANGE FIELD



CONTROL CHANGE FIELD

MINIMUM RANGE FIELD

This field is used to specify the minimum value that the knob or slider can output.

- 1. Use [<] or [>] buttons to select Minimum Range field.
- 2. While in Minimum Range field, use [VALUE] dial to select desired minimum value.
- 3. Use the [>] button to select the next field.

Tip: Sometimes you might not want the full 0-127 range of control that a slider automatically defaults to. Often, reducing the value range of the slider might actually give you more precise control over the parameter it is controlling. For example, if you are using one of the sliders to control a synced delay line, there might only be about 10 available values for the sync delay time (1/2, 1/4, 1/8 note, etc.). Therefore, it wouldn't make much sense to have the slider transmit the full 128 MIDI control values, since that only gives you a tenth of the full slider range. Instead, try setting the maximum value of that slider to 10 and you will see how much more precise control this allows you to have

MAXIMUM RANGE FIELD



MAXIMUM RANGE FIELD

This field is used to specify the maximum value that the knob or slider can output.

- 1. Use the [<] or [>] buttons to select Maximum Range field.
- 2. While in Maximum Range field, use [VALUE] dial to select desired maximum value.

Tip: Setting the maximum value of a controller lower than the minimum value will cause the knob or slider to behave inversely. For example, if you are controlling an interface or plug-in that operates with a drawbar structure, such as organ instruments, it might be more intuitive to invert your sliders



AFTERTOUCH PARAMETERS

For some applications, you might wish to use the sliders or knobs as Aftertouch controllers. In this scenario, the knob or slider will be transmitting Aftertouch information which could be used to control, say, a vibrato of a device that the MPK49 is controlling. The following list of parameters can be accessed if "Aftertouch" is selected as the event type for the selected knob or slider.

MIDI CHANNEL FIELD



MIDI PORT/CHANNEL FIELD

MINIMUM RANGE FIELD



This field sets the MIDI Port and Channel which the knob or slider will use to transmit messages. You can assign knobs and sliders to one of two MIDI Ports, A or B, and to one of 16 MIDI Channels on each port (i.e. A14). You can also assign a knob or slider to use the MIDI Common Channel.

- 1. Use the [<] button to select MIDI Port/Channel field.
- 2. While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.
- 3. Use the [>] button to select the next field.

Note: When not used via USB, only knobs and sliders assigned to port A will be transmitted via the 5-pin MIDI port on the back of the MPK49.

This field is used to specify the minimum value that the aftertouch will transmit.

- 1. Use [<] or [>] buttons to select Minimum Range field.
- 2. While in Minimum Range field, use [VALUE] dial to select desired minimum aftertouch value.
- 3. Use the [>] button to select the next field.

MAXIMUM RANGE FIELD

tinq ппп Α

MAXIMUM BANGE FIELD

This field is used to specify the maximum value that the knob or slider can output.

- 1. Use the [<] or [>] buttons to select Maximum Range field.
- 2. While in Maximum Range field, use [VALUE] dial to select desired maximum value.



INCREMENT/DECREMENT PARAMETERS (knobs only)

The endless knobs on the MPK49 may also be used as an increment/decrement NRPN function. This allows you to use the knob to increment and decrement through parameters as opposed to sending an absolute value. Please note that the implementation of NRPN functions depends strictly on the software with which you will be using the MP49. Please consult your software's documentation to find out how NRPN functions are supported.

MIDI CHANNEL FIELD

Setting	
CC NRPNOOD	00 1
A PRESS ENTER	

This field sets the MIDI Port and Channel which the knob will use to transmit messages. You can assign the knobs to one of two MIDI Ports, A or B, and to one of 16 MIDI Channels on each port (i.e. A14). You can also assign a knob or slider to use the MIDI Common Channel.

- 1. Use the [<] button to select MIDI Port/Channel field.
- While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.
- 3. Use the [>] button to select the next field.

Note: When not used via USB, only knobs assigned to port A will be transmitted via the 5-pin MIDI port on the back of the MPK49.

MIDI PORT/CHANNEL FIELD

BANK M FIELD



BANK M FIELD

BANK L FIELD



Bank M describes the Most Significant Bit (MSB) of information. 1. Use [<] or [>] buttons to select Bank M field.

- 2. While in Bank M field, use [VALUE] dial to select desired value.
- 3. Use the [>] button to select the next field.

Bank L describes the Least Significant Bit (MSB) of information.

- 1. Use the [<] or [>] buttons to select Bank L field.
- 2. While in Bank L field, use [VALUE] dial to select desired value.

BANK L FIELD



EDITING BUTTONS

The buttons on the MPK49 can be used to transmit Control Change or Program Change information.



SELECT BUTTON EVENT TYPE IN THIS FIELD.

- 1. Press [EDIT] button to enter EDIT MODE.
- 2. Press the button you would like to edit.
- 3. On Page 1, turn the [VALUE] dial to select 'CTRL CHANGE' (Control Change) or 'PROG CHANGE' (Program Change) as the event type.
- 4. Press [ENTER] to view Page 2.

Depending on which event type you select on Page 1, parameter options on Page 2 will be changed.

5. Use [<] and [>] buttons to move through fields on the second page.

CONTROL CHANGE PARAMETERS

The following list of parameters can be accessed if "Control Change" is selected as the event type for the selected button.

MIDI CHANNEL FIELD



MIDI PORT/CHANNEL FIELD

This field sets the MIDI Port and Channel which the button will use to transmit messages. You can assign the button to one of two MIDI Ports, A or B, and to one of 16 MIDI Channels on each port (i.e. A14). You can also assign the button to use the MIDI Common Channel.

- 1. Use the [<] button to select MIDI Port/Channel field.
- While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI Port and Channel.
- 3. Use the [>] button to select the next field.

Note: When not used via USB, only buttons assigned to port A will be transmitted via the 5-pin MIDI port on the back of the MPK49.

CONTROL CHANGE FIELD



CONTROL CHANGE FIELD

PLAY MODE



In this field you can set which Control Change Number the button will transmit when it is pressed.

- 1. Use [<] or [>] buttons to select Control Change field.
- 2. While in Control Change field, use [VALUE] dial to select desired Control Change Number.
- 3. Use the [>] button to select the next field.

Here, you can select whether the button transmits MIDI CC information in a momentary (MOM) way, where pressing the button outputs 127 and releasing it transmits 0, or in a toggle (*TGL*) way where the first press outputs 127, the second hit transmits 0.

- 1. Use [>] button to select Play Mode field.
- 2. While in Play Mode field, use [VALUE] dial to select desired Play Mode.

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PROGRAM CHANGE PARAMETERS

The following list of parameters can be accessed if the button event type is set to "Program Change".

Port and Channel.

Change to use the MIDI Common Channel. 1. Use the [<] button to select MIDI Port/Channel field.

3. Use the [>] button to select the next field.

MIDI CHANNEL FIELD



MIDI PORT/CHANNEL FIELD

PROGRAM CHANGE FIELD

Sett	in9	
	000 (30	ÕÕO
A	PRESS ENTER	

PORGRAM CHANGE FIELD

BANK M FIELD

In this field you can set which Program Change Number the button will transmit when it is pressed.

Program Change messages can be sent on one of two MIDI Ports, A or B, and

one of 16 MIDI Channels on each port (i.e. A7). You may also assign Program

2. While in MIDI Port/Channel field, use [VALUE] dial to select desired MIDI

- 1. Use [<] or [>] buttons to select Program Change field.
- 2. While in Program Change field, use [VALUE] dial to select desired Program Change Number.
- 3. Use the [>] button to select the next field.



BANK M FIELD

BANK L FIELD



BANK L FIELD

- Bank M describes the Most Significant Bit (MSB) of information.
- 1. Use [<] or [>] buttons to select Bank M field.
- 2. While in Bank M field, use [VALUE] dial to select desired value.
- 3. Use the [>] button to select the next field.

Bank L describes the Least Significant Bit (MSB) of information.

- 1. Use the [<] or [>] buttons to select Bank L field.
- 2. While in Bank L field, use [VALUE] dial to select desired value.

Note:

You can also configure buttons to send Program Change messages only, without specifying Bank M and Bank L. While editing Bank M and Bank L fields of a button, use [VALUE] dial to set Bank M and Bank L to 'OFF' (beyond 000). This will cause the button to transmit only a Program Change message.



EDITING THE ARPEGGIATOR

The built-in Arpeggiator is one of the features which sets the MPK49 apart from other controllers. The Arpeggiator allows you to arpeggiate a sequence of notes by holding down a combination of keys. The Arpeggiator will be synced to the tempo parameter of the MPK49. Please note that tempo can be generated internally or can be synced to an external source, such as a DAW.

The following arpeggio settings may be edited:

ARP TYPE - This is the arpeggio type, which describes how the notes held will be arpeggiated.

RANGE – This setting describes the range, in octaves, that the arpeggio will span.

BUTTON MODE - This describes whether the [ARP ON/OFF] button functions in a momentary or toggle fashion.

GATE - The gate parameter describes the duration of the arpeggiated notes.

SWING - The swing parameter describes the swing offset for the even notes in the arpeggiated sequence.



PRESS ENTER TO EDIT

While editing the Arpeggiator, please also refer to the following examples to better understand how the parameters function:



Let's take the arpeggiated sequence on the left as an example.

To edit the Arpeggiator, press the [EDIT] button to enter Edit Mode.

Now select the Arpeggiator for editing by pressing [ARP ON/OFF].

Turn the [VALUE] dial to select the property cluster you wish to edit

You will see Page 1 displayed on the screen (shown on the left).

- (Type, Range, Button Mode) or (Gate, Swing).

Press [ENTER] to edit the selected property cluster.

With a long gate time (100), the duration of the notes in the sequence will be longer.

With a short gate time (25), the duration of the notes in the sequence will be shorter.

Now, if we add some swing to our original sequence, you will see that the even notes will become shifted in time. The larger the selected swing, the larger this shift will be.

Now if we were to extend the range of our original sequence to +1 scale, the ascending notes will be duplicated 1 octave up before beginning to descent.



ARPEGGIO PARAMETERS - TYPE, RANGE, BUTTON MODE

The following parameters can be edited by selecting "TYP RNG TGL" on Page 1.

ARP TYPE



Select one of the following arpeggio types in this field - Up, Down, Incl, Excl, Rand, Chrd,

- 1. While in Arp Type field, use [VALUE] dial to select Arp Type.
- 2. Use the [>] button to select the next field.

ARP TYPE









-	_	_	_	_	_	_	_	_	_
-	_	_	_	_	_	_	_	_	
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	_	_		_	_	_	_	_	
		_	_				_	_	

Arp Type descriptions:

UP - Notes arpeggiate from the lowest note to the highest note held.

DOWN - Notes arpeggiate from the highest note down to the lowest note.

INCL (Inclusive) - Notes arpeggiate from lowest to highest notes and back down. Lowest and highest notes are retriggered at the direction change.

EXCL (Exclusive) - Notes arpeggiate from lowest to highest notes and back down. Lowest and highest notes are not be retriggered at the direction change.

RAND (Random) - Plays held notes in random selection.



CHRD (Chord) - Repeats the held notes.

Select the arpeggiator range in this field.

1. Use [<] or [>] buttons to select Range field.

3. Use the [>] button to select the next field.

2. While in Range field, use [VALUE] dial to select Range.

RANGE



RANGE

BUTTON MODE



In this field, you can select whether the [ARP ON/OFF] button will behave in a momentary (MTY) fashion, where pressing the button will turn on the Arpeggiator function and releasing it will turn it off, or in a toggle (TGL) manner, where pressing the button turns on the Arpeggiator function and pressing again turns it off.

- 1. Use [>] button to select Range field.
- 2. While in Range field, use [VALUE] dial to select Range.
- 3. Use the [>] button to select the next field.

MODE





ARPEGGIO PARAMETERS - GATE, SWING

The following parameters can be edited by selecting "GATE SWING" on Page 1.

GATE



Select the arpeggiator Gate in this field.

- 1. While in Gate field, use [VALUE] dial to select Gate duration.
- 2. Use the [>] button to select the next field.

SWING



- Select the arpeggiator Swing in this field.
- 1. Use the [>] button to select the Swing field.
- 2. While in Gate field, use [VALUE] dial to select Gate duration.



EDITING NOTE REPEAT

The MPK49 features the Note Repeat function, which can be found on our legendary Music Production Center (MPC) models. With Note Repeat enabled, you can repeatedly trigger a sound by simply holding down a pad. The sound will be retriggered at a rate equivalent to the Time Division currently selected on the MPK49. With the Note Repeat feature, you can record a phrase that would be difficult to record in real time, such as 16 beat hi hat, snare roll, etc...

The following Note Repeat settings may be edited:

BUTTON MODE (TOGGL/MOTRY) – This describes whether the [NOTE REPEAT] button functions in a momentary or toggle fashion.

GATE - The gate parameter describes the duration of the repeated notes.

SWING - The swing parameter describes the swing offset for the even notes in the repeated sequence.



- To edit Note Repeat, press the [EDIT] button to enter Edit Mode.
- . Now select Note Repeat for editing by pressing [NOTE REPEAT].
- 3. You will see Page 1 displayed on the screen (shown on the left).
 - Turn the [VALUE] dial to select the property you wish to edit (Button Mode) or (Gate, Swing).
 - Press [ENTER] to edit the selected property.

Please refer to the following illustrations to help you understand how Note Repeat parameters affect the triggered sequence:



Let's take the kick drum sequence shown on the left as an example. This sequence was generated with the Note Repeat feature with a Time Division setting of 1/4 note.

Now, if we decrease the Gate parameter, the sequence will look like this.

Conversely, if we increase the Gate parameter, the sequence will look like this.

Now, if we were to add some swing to our original sequence, we will end up with a sequence like this. Notice how each even note in the sequence is being pushed back in time to create the swing effect. If we keep increasing the Swing value, these notes will occur closer and closer to the odd notes.

Please note:

For the Gate effect to be perceived, the sounds you are triggering need to have a long decay.



NOTE REPEAT BUTTON MODE

The following screen will appear if you select "TOGGL-MOTRY" on Page 1. In this field, you can select whether the [NOTE REPEAT] button will behave in a momentary (MTY) fashion, where pressing the button turns on the Note Repeat function and releasing it turns it off, or in a toggle (TGL) manner, where pressing the button turns on the Note Repeat function and pressing again turns it off.



- 1. While in Button Mode field, use [VALUE] dial to select Button Mode (Toggle or Momentary).
- 2. Press [ENTER] to accept change.

BUTTON MODE

NOTE REPEAT PARAMETERS - GATE, SWING

The following parameters can be adjusted if you select "GATE SWING" on Page 1.

GATE



Select the Note Repeat Gate in this field.

- 1. While in Gate field, use [VALUE] dial to select Gate duration.
- 2. Use the [>] button to select the next field.

SWING



Select the Note Repeat Swing in this field.

- 1. Use the [>] button to select the Swingfield
- 2. While in Swing field, use [VALUE] dial to select Gate duration.
- 3. Press [ENTER] to accept changes.



EDITING TIME DIVISION

The Time Division feature works in conjunction with Note Repeat and the Arpeggiator. When Note Repeat or the Arpeggiator is enabled, the MPK49 will output notes at a rate equivalent to the Time Division setting. To change to a new Time Division setting, press [TIME DIVISION] and select a new rate.

Please refer to the following illustrations to better understand how the Time Division feature works with Note Repeat and the Arpeggiator:



With an 1/8 note Time Division setting, the sequence will look like this.

With an 1/8T note Time Division setting, the sequence will look like this.

With a 1/16 note Time Division setting, the sequence will look like this.

With a 1/16T note Time Division setting, the sequence will look like this.

With a 1/32 note Time Division setting, the sequence will look like this.

With a 1/32T note Time Division setting, the sequence will look like this.

The following Time Division settings may be edited:

1

2.

3.

Edit Mode.

DEFAULT DIVISION - Describes the default time division which will be set when the current Preset is loaded. BUTTON MODE (TOGGL/MOTRY) - Describes whether the [TIME DIVISION] button functions in a momentary or toggle fashion.

Set.	Time
] IV IS ION
A (PRESS

PRESS ENTER TO EDIT

DEFAULT TIME DIVISION



DEFAULT DIVISION FIELD

BUTTON MODE



You will see Page 1 displayed on the screen (shown on the left). Press [ENTER] to edit the Time Division settings. 4.

To edit the Time Division setting, press the [EDIT] button to enter

Now select Time Division for editing by pressing [TIME DIVISION].

Each Preset can have a default Time Division setting which is set every time the Preset is loaded.

- 1. While in Default Time Division field, use [VALUE] dial to select Gate duration.
- 2. Use the [>] button to select the next field.

In this field, you can select whether the [TIME DIVISION] button will behave in a momentary (MTY) fashion, where pressing the button will turn on the Time Division function and releasing it will turn it off, or in a toggle (TGL) manner, where pressing the button turns on the Time Division function and pressing again turns it off

- 1. Use the [>] button to select Button Mode field.
- 2. Turn [VALUE] dial to select the Button Type.

BUTTON MODE FIELD



EDITING THE PITCH BEND WHEEL

1.

2. з.

4.

2

The Pitch Bend wheel can be assigned to transmit pitch bend information on a specific MIDI Channel.



PITCH-BEND



Now select the Pitch Bend wheel for editing by moving the wheel.

You will see Page 1 displayed on the screen (shown on the left).

Press [ENTER] to accept the change.

Press the [EDIT] button to enter Edit Mode.

Press [ENTER] to edit the Pitch Bend settings.

MIDI CHANNEL FIELD

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EDITING THE MODULATION WHEEL

The Modulation wheel can be edited to transmit a range of values on a specific MIDI Channel and MIDI CC.



PRESS ENTER TO EDIT

MIDI CHANNEL



MIDI CHANNEL FIELD

MIDI CC



MIDI CC FIELD

MINIMUM VALUE



MINIMUM VALUE

MAXIMUM VALUE



MAXIMUM VALUE

1. To edit the Modulation wheel settings, press the [EDIT] button to enter Edit Mode.

- 2. Now select the Modulation wheel for editing by moving the wheel.
- 3. You will see Page 1 displayed on the screen (shown on the left).
- 4. Press [ENTER] to edit the Pitch bend settings.

In this field, you can specify which MIDI channel the Modulation wheel will be using to transmit information.

- 1. Use the [<] button to select MIDI Channel field.
- 2. Turn [VALUE] dial to select the desired MIDI Channel.
- 3. Use the [>] button to go to next field.

In this field, you can specify which MIDI CC the Modulation wheel will be transmitting.

- 1. Use the [>] button to select MIDI CC field.
- 2. Turn [VALUE] dial to select the desired MIDI CC.
- 3. Use the [>] button to go to next field.

In this field, you can specify the minimum value that the Modulation wheel can transmit.

- 1. Use the [>] button to select minimum value field.
- 2. Turn [VALUE] dial to select the desired minimum value.
- 3. Use the [>] button to go to next field.

In this field, you can specify the maximum value that the Modulation wheel can transmit.

- 1. Use the [>] button to select maximum value field.
- 2. Turn [VALUE] dial to select the desired maximum value.

Note: Setting the maximum value lower than the minimum will cause the Modulation wheel to work in reverse.

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EDITING TRANSPORT CONTROL

The transport control section on the MPK49 can be configured to send transport control information in a variety of ways: MMC (MIDI Machine Control), MMC/MIDI, MIDI, or CTRL. Some applications and devices have dedicated MMC functions and will only respond to MMC messages, while others may not have reserved MMC functions but implement transport control via MIDI SysEx or MIDI CC messages. To account for these scenarios, we have provided a way to edit the messages sent by the transport control buttons. This allows you to customize the MPK49's transport to best work with your application or external device.



PRESS ENTER TO EDIT



- 1. To edit transport control settings, press the [EDIT] button to enter Edit Mode.
- Now select the transport control for editing by pressing [<<], [>>], [STOP], [PLAY], or [REC].
- 3. You will see Page 1 displayed on the screen (shown on the left).
- 4. Press [ENTER] to edit transport control settings.
- 5. When on Page 2, use the [VALUE] dial to select the format of the transport control messages (MMC, MMC/MIDI, MIDI, CTRL).
- 6. Press [ENTER] to accept the change or [<] to cancel.

EDITING TAP TEMPO

6.

Each Preset on the MPK49 can have a default tempo associated with it. Every time that the Preset is loaded, the BPM setting will be loaded automatically.





- 1. To edit the default tempo, press the [EDIT] button to enter Edit Mode.
 - Now select tempo for editing by pressing [TAP TEMPO].
 - . You will see Page 1 displayed on the screen (shown on the left).
 - . Press [ENTER] to edit the default tempo for the current Preset.
- 5. On Page 2, use the [VALUE] dial to adjust the tempo.
 - Press [ENTER] to accept the change or [<] to cancel.



GLOBAL MODE

In Global Mode, you can send global messages and make general changes to the way that your MPK49 functions. Global Mode options are organized under different pages and include the list of options shown on the right:

To enter Global Mode, press the [GLOBAL] button. To scroll among the different pages, use the [<] and [>] buttons.

KILL MIDI	Page 1
MIDI COMMMON CHANNEL	Page 2
LCD CONTRAST	Page 3
PAD SENSITIVITY	Page 4
PAD VELOCITY CURVE	Page 5
KEYBOARD TRANSPOSITION	Page 6
MIDI CLOCK	Page 7
TAP TEMPO AVERAGE	Page 8
SAVE GLOBAL	Page 9
SYSEX TX	Page 10
VERSION	Page 11

KILL MIDI – Page1



KILL MIDI allows you to send either an *ALL NOTES OFF* message on each MIDI Channel or a *RESET ALL CONTROLLERS* command.

ALL NOTES OFF is a special MIDI message used to turn off any notes that might be playing on the MPK49. It is often used to recover from erroneous stuck notes. Sometimes an ALL NOTES OFF command can be used to stop an instrument from sounding before some specific commands are issued, such as program change commands.

RESET ALL CONTROLLERS is a MIDI message used to return all values such as pitch bend, modulation, and aftertouch to their default settings. It is not uncommon in live performance and/or complex sequencing for one or more controllers to be left in a state that can cause the next patch or program to sound strange. Control reset will return all values to their default settings.

- 1. Press [GLOBAL] button to enter Global Mode. Kill MIDI will be the first option which appears on the screen.
- 2. Turn [VALUE] dial to select either an ALL NOTES OFF or a RESET ALL CONTROLLERS message.
- 3. Press [ENTER] to transmit the message.

MIDI COMMON CHANNEL – Page 2



MIDI COMMON CHANNEL FIELD

You can assign the MIDI Common Channel to a desired MIDI Channel. Any and all pads, buttons, knobs, sliders or keyboard assigned to the MIDI Common Channel (CC) will transmit MIDI information via the channel number that you select in this field.

- 1. While in Global Mode, use [>] button to scroll to MIDI Common Channel (page 2).
- 2. Turn [VALUE] dial to select desired MIDI Channel.
- 3. Press [ENTER] to set the MIDI Channel.

Note: If you change which channel the MIDI Common Channel is using, you also need to set any device that is controlled by the Common Channel to that channel number as well.



LCD CONTRAST – Page 3



LCD CONTRAST

PAD SENSITIVITY - Page 4



PAD SENSITIVITY FIELD

The contrast of the LCD can be adjusted for optimal viewing.

- While in Global Mode, use [>] button to scroll to LCD CONT (page 3).
- 2. Turn [VALUE] dial to select a contrast level.
- 3. Press [ENTER] to set contrast level.

PAD SENSITIVITY allows you to adjust how sensitive the pads will be to the touch. Adjust this setting if you find it hard to achieve maximum velocity when you hit the pads hard, or if you are getting high velocities when you hit softly.

If the Pad Sensitivity number is set to low number, it's harder to get a high velocity value even if you hit a pad hard. If the Pad sensitivity number is set to high number, it may become too easy to get high velocities even when you hit a pad softly.

- While in Global Mode, use [>] button to scroll to PadSens (page 4).
- 2. Turn [VALUE] dial to change Pad Sensitivity.
- 3. Press [ENTER] to set Pad Sensitivity.

PAD VELOCITY CURVE - Page 5



PAD VELOCITY CURVE FIELD

A **PAD VELOCITY CURVE** describes how the pads on the MPK49 are outputting MIDI velocities, based on a certain ratio of the input / output velocity that characterizes the particular curve. The Pad Velocity Curve feature is intended to help you optimize the pads on the MPK49 to your particular playing style and can add expressivity and control to your performance. If you find it difficult to achieve a comfortable velocity range for your playing style (you cannot get a velocity of 127 even if you hit the pad very hard, or vice versa, you get velocity 127 easily even if you hit the pad softly) you can adjust the velocity curve as desired.

- 1. While in Global Mode, use [>] button to scroll to PadCurve (page 5).
- 2. Turn [VALUE] dial to change Pad Sensitivity.
- 3. Press [ENTER] to set Pad Sensitivity.





PAD THRESHOLD – Page 6



PAD THRESHOLD FIELD

PAD THRESHOLD is the minimum force required to activate the pads. If you experience "ghost" triggering due to stage vibrations, you may wish to set this threshold higher. On the other hand, if you find it difficult to cause the pads to output sounds when playing them lightly, you may wish to set this value to a lower number.

- While in Global Mode, use [>] button to scroll to PdThresh (page 6).
- 2. Turn [VALUE] dial to select Transposition in semi-tones.
- 3. Press [ENTER] to set Transposition.

Note: Transposing the keyboard will have a global effect on the MPK49.

KEYBOARD TRANSPOSITION – Page 7



MIDI CLOCK – Page 8



KEYBOARD TRANSPOSITION allows you to transpose MPK49's keyboard up or down.

- While in Global Mode, use [>] button to scroll to Transpos (page 7).
- 2. Turn [VALUE] dial to select Transposition in semi-tones.
- 3. Press [ENTER] to set Transposition.

Note: Transposing the keyboard will have a global effect on the MPK49.

MIDI CLOCK is used to synchronize devices together. In addition, MIDI Clock on the MPK49 is used in conjunction with the Note Repeat and Arpeggiator features to determine the location of the MIDI notes output when using either of these features. The MPK49 can be a master or slave for MIDI Clock transmission and reception. MIDI Clock

- While in Global Mode, use [>] button to scroll to MIDI CLK (page 8).
- Turn [VALUE] dial to select "Internal" if you would like to generate MIDI Clock internally or "External" if you would like to slave the MPK49 to an external MIDI Clock source.
- 3. Press [ENTER] to set MIDI Clock source.

Note: If "External" has been selected as a MIDI Clock source, the [TAP TEMPO] button will be disabled.

TAP TEMPO AVERAGE – Page 9



TAP AVERAGE FIELD

When using [TAM TEMPO] button to set the tempo, the MPK49 averages a number of taps in order to determine the tempo. You can set the number of taps used to determine the **TAP TEMPO AVERAGE** in this field.

- While in Global Mode, use [>] button to scroll to Tap AVG (page 9).
- 2. Turn [VALUE] dial to select number of taps.
- 3. Press [ENTER] to set tap average.



SAVE GLOBAL – Page 10



SAVE GLOBAL allows you to save all of the global parameters on the MPK49, including MIDI Common Channel, LCD Contrast, Pad Sensitivity, Pad Velocity Curve, Keyboard Transposition, MIDI Clock, Tap Tempo Average, Preset and SysEx information.

- While in Global Mode, use [>] button to scroll to Globals (page 10). You will see "Save Setup" displayed on the screen.
- 2. Press [ENTER] to save all the global settings on the MPK49.

PRESS ENTER TO SAVE

SYSEX TX – Page 11



PRESS ENTER TO TRANFER

SYSEX TX allows you to transfer Preset data from the MPK49, including Controller Numbers, MIDI Channels and various other parameters via SysEx.

- While in Global Mode, use [>] button to scroll to SysEx Tx (page 11).
- 2. Turn the [VALUE] dial to select which Preset's information you would like to transfer.
- 3. Press [ENTER] to save all the global settings on the MPK49.

SysEx transfers to the MPK49

You can also load preset data into the MPK49 from an external source by "playing" a SysEx file into the MPK49. This can be done with a variety of SysEx applications, many of which are widely and freely available over the Internet.

- 1. Make sure that the device is connected to the MPK49 either via the USB or the MIDI IN port.
- 2. Make sure that you are in Preset Mode.
- 3. "Play" the SysEx file on your external device or computer.

Please note that when transferring SysEx information into the MPK49, the data will override the data of the original Preset which was sent to your SysEx editor. For example, if you transfer Preset 5 to your SysEx editor and then send it back to the MPK49, the data will overwrite Preset 5.

VERSION – Page 12



VERSION allows you to see what version of the operating system and firmware is currently loaded onto the MPK49.

While in Global Mode, use [>] button to scroll to Ver (page 12) for version information.



PROGRAM CHANGE MODE

A *Program Change*, often referred to as a *Patch Change*, is a MIDI message used for sending data to devices to cause them to change to a new program. This allows you to tell a hardware or software device which sound to play. For example, if your MPK49 is controlling a piano patch on your DAW or an external device, using a *Program Change* command allows you to easily switch to a synth patch.

There are two different types of Program Change messages on the MPK49:

PROG CHANGE – This event will transmit a regular *Program Change* message (0-127) to your DAW or an external device, allowing you to switch between 128 different program banks.

PROG+BANK – This event transmits a *Program Change* message (0-127), along with a *Bank L (Least Significant Bit) Change* message (0-127) and a *Bank M (Most Significant Bit) Change* message (0-126), which allows access of up to 16384 different program banks. You can use PROG+BANK if your DAW or external device supports LSB and MSB.

To enter Program Change mode, press the [PROGRAM CHANGE] button. Then, turn value to select either a PROG CHANGE or PROG+BANK event.

PROG CHANGE (Program Change)





PROG CHANGE allows you to transmit a regular Program Change message.

- 1. Select PROG CHANGE with the [VALUE] dial.
- 2. Press [ENTER] to see the next page of parameters.
- Press the [<] button to access the MIDI CH field this is the MIDI Channel which will be used to transmit the Program Change message. You can change the MIDI Channel by turning the [VALUE] dial. Then, press [>] to go to the next field.
- 4. In the PROG field, choose the program number with the [VALUE] dial.
- 5. Press [ENTER] to send the Program Change message.

PROG+BANK (Program Change with Bank Change)



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PROG+BANK allows you to send a Program Change with Bank Change message to your DAW or external sound module.

- 1. Select PROG+BANK with the [VALUE] dial.
- 2. Press [ENTER] to see the next page of parameters.
- Press the [<] button to access the MIDI CH field this is the MIDI Channel which will be used to transmit the message. You can change the MIDI Channel by turning the [VALUE] dial. Then, press [>] to go to the next field.
- 4. In the PROG field, choose the program number with the [VALUE] dial. Press [>] to go to the next field.
- In the BANK M field, select the MSB (Most Significant Bit) of information. Press [>] to go to the next field.
- 6. In the BANK L field, select the LSB (Least Significant Bit) of information.
- 7. Press [ENTER] to send the Bank and Program event.



FREQUENTLY ASKED QUESTIONS

Question: Answer:	Does the MPK49 have internal sounds? No. The MPK49 is a MIDI-controller, which means that it does not contain any sounds inside but is instead used to control external sound devices, such as hardware and software synthesizers, sequencers and drum machines.
Question: Answer:	Can the MPK49 be synced to external devices? Yes, the MPK49 can receive MIDI Clock through both the USB and the MIDI IN connection. This means that you can synchronize tempo-based features, such as Note Repeat and the Arpeggiator, to an external source. To synchronize the MPK49 to an external MIDI Clock source, please enter Global Mode, scroll to MIDI Clock and select "External".
Question: Answer:	Do I need to use a power adapter if I am using the MPK49 with a computer? No. The MPK49 will draw power directly from the USB port. However, if your USB port does not supply enough power or if you are using a USB hub, it may be necessary to use the adapter.
Question: Answer:	What software applications is the MPK49 compatible with? The MPK49 is compatible with any software or hardware device which supports the MIDI protocol. Please consult your specific hardware or software device's documentation for instructions on enabling the MPK49 as a MIDI input device.
Question:	Can I use the MPK49 as a MIDI interface for other MIDI devices?
Answer:	Yes. The MPK49 functions as a MIDI interface and can be used to send or receive MIDI to and from other MIDI devices connected to it.
Question:	Can I control multiple devices with the MPK49?
Answer:	res. The MPK49 can transmit information on 16 MIDI channels on 2 ports for a total of 32 different MIDI Channels .
Question:	How many different Presets can the MPK49 hold? The MPK40 age hold 20 Preset actings which allow you to store different configurations for you with various
Answer.	software and hardware modules. Presets can easily be copied, edited and stored for quick recall of desired configurations.
Question: Answer:	Can I send Program Change messages to my software or hardware devices? Yes. You can send program change messages in Program Change mode. In addition, pads and buttons may also be assigned to transmit program change messages.
Question: Answer:	Are the pads on the MPK49 velocity and pressure sensitive? Yes. The MPK49 sports MPC-style velocity and pressure sensitive pads. This allows you to be extremely expressive with your programming and performance.
Question: Answer:	What is the octave range of the keyboard? The MPK49 has a 4-octave physical range (49 keys). However, you can access 10-octaves simply by transposing the keyboard up or down with the [OCTAVE] buttons.
Question: Answer:	Does the MPK49 function as an audio interface? No. The MPK49 does not have a built-in audio interface.
Question: Answer:	What type of pads is used on the MPK49? The MPK49 features the same exact pads which are used on the Akai MPC500.
Question: Answer:	Are the knobs on the MPK49 endless? The knobs on the MPK49 are endless pots. This allows you to limit the range of the knobs, as well as use them as increment/decrement controls. Please note that your software application must be able to receive and recognize NRPNs for Increment/decrement functions to work.
Question:	I see 8 knobs, 8 sliders, 8 buttons, and 12 pads. Is that all I get?
Answer:	No. The MPK49 features multiple banks of controllers and pads, which can be accessed with the [PAD BANK] and [CONTROL BANK] buttons. This allows you to access significantly more parameters than the amount of physical controllers. There are 3 control banks, which effectively give you 72 (3x24) controllers. There are also 4 different pad banks which give you a total of 48 (4x12) pads.
Question: Answer:	Are the Pitch Bend and Mod wheels freely assignable? The Pitch Bend wheel transmits dedicated pitch bend information and cannot be freely assigned to another controller value. The Mod wheel, on the other hand, can be assigned to transmit CC information on any MIDI CC#.
Question:	Does the Note Repeat feature on the MPK49 work similarly to Note Repeat on the Akai MPC series?
Answer:	Yes, the MPK49 features the same Note Repeat algorithm as can be found on the legendary Akai MPC series. This feature allows you to perform and program rhythm patterns that would otherwise be nearly impossible to do by hand.



TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION		
The display does not light	No power.	Please make sure that the MPK49 is connected to your computer and that the computer is powered on.		
up.		If using a power adapter, please make sure that the adapter is plugged into a live power outlet.		
	MPK49 not properly	Check your computer's USB connection to confirm that the MPK49 is recognized. If necessary, replug the connection and restart your computer.		
	connected.	If controlling an external hardware module, make sure that the MIDI cable is connected from the MPK49 to the device's MIDI IN port.		
No sound from target	MPK49 connected after software application has started.	Restart the software application with the controller plugged in.		
device.	Problem is caused by use of a USB hub.	Unplug the MPK49 from the USB hub and connect directly to the computer.		
	Software application not set to receive MIDI data from the MPK49.	Ensure that the MPK49 or "USB" MIDI device is listed as an active MIDI source in your application. Usually, the MIDI settings can be accessed through the application's Preferences menu.		
	MPK49's MIDI channel not the same as application's incoming MIDI chanel.	Make sure that the MPK49 is sending MIDI information on the channel that the target device expects.		
Notes sustain continuously.	Sustain pedal was plugged in after the MPK49 was powered on.	Turn the unit's power off, wait a moment and then turn it on again.		
· · · · · · · · · · · · · · · · · · ·	Stuck notes due to incomplete MIDI data.	Turn the unit's power off, wait a moment and then turn it on again.		
Sustain pedal works in reverse. Sustain pedal was plugged in after power was turned on.		With the pedal plugged in, turn the unit's power off, wait a moment, and turn it on again.		
Arpeggiator and Note Repeat features are not synchronized to my clock source.	Clock source on MPK49 set to "Internal".	In Global Mode, change the MIDI Clock setting to "External". Also, make sure that the software you are using is set to send MIDI Clock to the MPK49.		
Arpeggiator and Note Repeat features are not working and my Seq/DAW is sending clock.	Software DAW is not in play mode.	If your software DAW is not playing, it will not be sending clock.		
My slider, knob or mod wheel works in reverse.		Edit the controller and set the minimum value to be lower than the maximum.		
Transport control does not work. START/STOP or the MIDI CC mode.		Edit the transport control to send MIDI messages instead. Make sure that the Transport mode you are using on the MPK matches the receive modes of your software.		
I am only hearing one sound when I hit different pads	12 Level function is engaged.	When engaged, the 12 Level function will map the last hit pad to all 12 pads. Deactivate 12 Level to return to normal operation.		
The pads always play at maximum velocity (127).	Full Level feature is engaged.	When engaged, the Full Level function will cause all the pads to output maximum velocity, no matter how hard they are hit. Turn off Full Level to return to normal operation.		



TECHNICAL SPECIFICATIONS

GENERAL	
Display	custom LCD w/ backlight
Dimensions (WxDxH)	730mm x 300mm x 100mm
Weight	5.8kg
Power	~100mA, 5V DC via USB ~1A, 6V DC via external adaptor
Number of Presets	30
MIDI output channels over USB	48 (16 channels x 3 ports)
MIDI output channels from 5-pin MIDI	16
Keyboard	49 Semi-Weighted keyboard (velocity and channel pressure sensitive)
Drum pads	12 (velocity and pressure sensitive)
Drum pad banks	4
Sliders	8
360 degree knobs	8
Switches	8
Accessories	User's manual USB cable (1m) CD-ROM disc
INPUTS/OUTPUTS	
MIDI inputs	5-pin DIN x 1
MIDI outputs	5-pin DIN x 1
USB	Slave connector x 1 (MIDI over USB)
DC IN	6V DC, 1A

CONTACT INFORMATION

Please visit the Akai Professional website (**www.akaipro.com**) regularly for additional information, news and firmware upgrades for the MPK49.

For additional technical support:

EMAIL: support@akaipro.com TEL: 401.658.4032 (U.S) MANUAL REVISION 1.1