MIDIPLUS

BK492
Owner's Manual

CONTENTS

Preface

Congratulations on your purchase of MIDIPLUS BK492 MIDI Controller. Designed for both the studio and the concert. The BK492 offers 49 velocity-sensitive keys. The BK492 provides extensive controllers for virtual instruments, Dews, hardware synthesizers, samplers and any other MIDI compatible device. The eight fully assignable knobs and sliders allow for instant control of your software's features and can pick up just where you left off.

The versatile and easy-to-use BK492 is a great controller in the studio and concert.

What's in the Box?

The following items should be in your package.

- BK492 MIDI Controller.
- Owner's Manual.
- One standard USB Cable.

BK492 Keyboard Overview

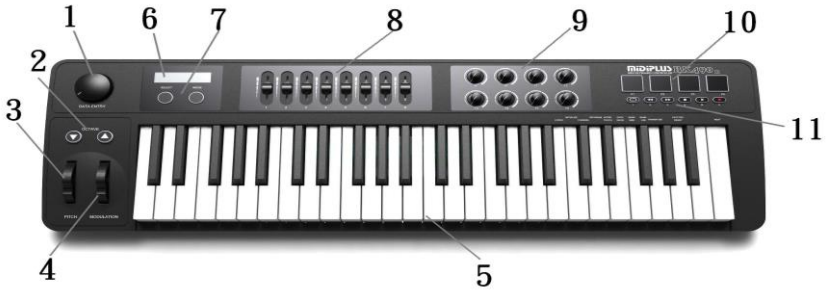
Here are the features including in the BK492 keyboard:

- 49 velocity-sensitive piano-style keys.
- Eight fully assignable 40mm sliders.
- Eight fully programmable knobs.
- Pitch Bend Wheel.
- Modulation Wheel.
- Four trigger pads.
- Six transport controls.
- Sustain pedal interface (sustain pedal does not include).
- Several velocity curves for choosing.
- BK492 connect to PC through USB
- The supplied USB MIDI OUT and KEYBOARD MIDI OUT can connect to other MIDI device by oneself.
- Power Supply: USB power or 6 AA type batteries.

Chapter 1：Quick Start

1.1 BK492 Overview

1.1.1 Front panel Overview



1.1.2 Rear panel overview

12 13 14 15 16

1.1.3 Controllers description

These controllers are referred by name.

1. Data Entry	9. 8 Programmable Knobs
2. Octave Buttons (Up & Down)	10. Trigger Pads
3. Pitch Bend Wheel	11. Transport Controls
4. Modulation Wheel	12. Sustain Pedal
5. Standard 49Key keyboard	13. Keyboard MIDI OUT
6. LCD display screen	14. USB MIDI OUT
7. 2 Edit Buttons	15. USB interface
8. 8 Assignable Sliders	16. Power Selector Switch

1.2 Minimum System Requirement

If you are using your BK492 with a computer, the following minimum system requirements need:

Windows	Mac OS
Pentium 3 800MHz or higher	Macintosh G3*800/G4*733MHz or higher
(CPU requirement may be higher laptops)	(CPU requirement may be higher for laptops)
256 MB RAM	OS X 10.3.9 with 256 MB RAM
DirectX 9.0b or higher	OS X 10.4.2 or greater with 512 MB RAM
Windows XP(SP2) or higher	*G3/G4 accelerator cards are not supported.

(Attention：Window98/ME/2000 are not supported)

MIDIPLUS suggests that you connect directly to your computer built in USB ports.

1.3 Installation

BK492 does not need other driver to work with a computer, only needs the USB Audio Driver built in the system.

The first time you connect BK492 to your computer, it will automatically install the general USB-Audio Driver. After installation, the system will tell you the "new hardware" is ready to use.

1.3.1 Play with your Application Software

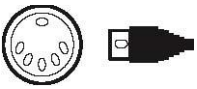
Generally, in PC or Mac, most MIDI software will have a MIDI port configuration or settings, sometimes it called "MIDI Devices" or "MIDI Setup". You can choose and enable your MIDI input and output devices in it.

If the BK492 driver is properly installed, and there is not other MIDI device connected, the MIDI In port of BK492 In-1 (or "Port 1"on the Mac) will be selected as the first midi input, while the MIDI Out port of BK492 Out-1 (or Port 1) will be selected as the first midi output.

If the MIDI software runs, and the MIDI-In and Out port in BK492 are selected, the MIDI message will be received when playing the BK492 keyboard. Also, the soft can send the midi message out to other device through the BK492 "USB"MIDI OUT. You can connect this USB MIDI OUT port with the other sound module or virtual instrument.

1.4 MIDI Connection

MIDI connector is a standard 5-pin DIN connector which is used to connect the BK492 to sound module or virtual instrument interface" with a MIDI cable.



If you need to transmit MIDI data from your keyboard to other professional MIDI instruments, please purchase a standard MIDI cable and use it to connect the Keyboard or USB MIDI OUT jack in BK492 rear panel labeled "Keyboard "or "USB "to the MIDI IN jack of the other instrument.

1.5 Power supply

Power switch has two options can be " USB" or "Battery".

Connect an USB cable from your computer to the BK492. The unit will be powered by the computer USB.

Alternatively, if you do not want to use a computer for power, you can also use 6 AA type batteries.

Chapter 2：The basic MIDI Controllers

Because BK492 does not contain built-in soundcard, play the keyboard will only send MIDI data out including the midi message. A virtual instrument can change it into a track of your DAW software and creates the sound based on the MIDI message received from BK492. For more details on using virtual instruments, please refer to the documentation in your DAW software.

2.1 BK492 Function Buttons

2.1.1 BK492 Function Buttons Screenshot

2.1.2 Set Controller Buttons

There are knobs, sliders, trigger pads and transport which can be used to send any MIDI controller data on any MIDI channel. All the knobs and sliders can be stored into 16 different groups at any time. Also, you can use the "SELECT" Button to choose any setting of different controllers in just a few steps.
In order to activate this function, you need to do as follows:

- Press the "SELECT" Button and the LED under the button will light on.
- Move the "DATA ENTRY" Knob to select a desired number. (1-16)
- Press the "SELECT" Button again (LED lights off) to complete the process. The selected group will activate soon.

2.1.3 Set Mode Button

Pressing the Mode Button, then you can configure the device with the labeled key and edit all the controllers (include knobs, sliders, pads, Transpose buttons).In order to change the configuration of the device or edit the controllers, you need to do as follows:

- Press the "MODE" Button and the LED under the button will light on.

- Press the labeled key or select the controller you want to edit
- Adjust the "DATA ENTRY" Knob or press the "Octave UP & Down" Buttons to select the desired number. You can see the number on the LCD screen.
- Press the "MODE" Button again (LED lights off) to save the edit. And the selected value will activate soon.

Note: If you press the "SELECT" Button, the edit also can be saved successfully.

2.2 Setting

To make music on your keyboard is a very simple way. You just need to get familiar with the related features with the instrument. The following sections will discuss each of these features in detail.

2.2.1 Velocity Curve

When you're using a keyboard to play back a sample, you may find that it doesn't respond what you want. Pressing a key lightly may sound too quiet, and pressing a key hardly may sound too loud. Then you can use the Velocity Curve to change the responds to your key when pressed. Since MIDI supports 127 different velocity values (from 1 to 127), this function will allow you to choose the velocity curve you want. There are 8 velocity curves for different people. You can choose the velocity curve from the following setting steps:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "Curve" Key.
- LCD will display the current velocity curve number.
- You can choose the velocity curve you want by using "OCTAVE UP&DOWN" Buttons or "DATA ENTRY" knob.
- The selected velocity curve will activate.
- Press the "MODE" Button again (LED lights off) to save the edit.

2.2.2 Initialization

The initialization will restore BK492's factory settings, which will erase all the presets and the saved values.

To do the Initialization, you need to do as follows:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "Initialize" key.

- LCD will show "Enter to perform".
- Press the "NEXT" key. (The key on the keyboard marked "NEXT") .
- LCD will show "Enter to confirm".
- Press the "NEXT" key to confirm.
- When Initialization is done, the LCD will go back to EDIT scene.
- Press the "MODE" Button again (LED lights off) to save the edit.

2.2.3 Global Channel

Use this function to select different MIDI commands using certain keys from your keyboard. Activating this function the keyboard becomes a set of function Buttons for setting MIDI parameter commands.

The BK492's global MIDI channel is assigned by the following steps:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "Channel" key.
- Use "OCTAVE UP & DOWN" Buttons or "DATA ENTRY" to select the desired channel (1-16).
- Press the "MODE" Button again (LED lights off) to save the edit.

2.2.4 Program & Bank

Program message (commonly referred to program changing) is used to select different instrument sounds in a MIDI device. Program message covers a range of 128 instruments. These instruments are accessed by sending program number 0 to 127.

Some MIDI devices have more than 128 instruments. In this case, the instruments will be separated into groups by 128, called bank. You can send bank MSB and bank LSB messages to enter into these different banks. Please look over the owner's manual to see how the bank change number changes the sounds on your device.

To send a program change:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "Program" key.
- Use "DATA ENTRY" Knob or move "Octave UP & Down" Buttons to select a desired number.
- Press the "MODE" Button again (LED lights off) to save the edit.

Bank change:

Actually the Bank Select message is the MIDI Controller messages, just like Volume, Pan, Sustain Pedal, Wind, and other controllers. Specifically, the controller number for the "Most Significant Byte" (i.e., MSB) of Bank Select is controller "0" The controller number for "Least Significant Byte" (i.e., LSB) of Bank Select is controller "32". The data of these messages is the bank number you want to select. (Sometimes the MSB Bank Select is referred to the rough adjustment, and the LSB Bank Select is referred to the subtle adjustment).

2.2.5 Transpose

The "Octave UP&DOWN" Buttons can be used to transpose your keyboard. Some players want to play in a particular key like C or F, for example. Transpose lets you change the pitch you are controlling and continue to play in the key that is most comfortable for you.

It is possible to transpose up or down by as much as 12 MIDI notes (or semitones). This means if you press one of the transpose Buttons 12 times, the tone will sound exactly one octave higher or lower.

To do the Transpose, you need to do as follows:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "Transpose" Button.
- Use "DATA ENTRY" Knob or move “Octave UP & Down" Buttons to select a desired number.
- Press the "MODE" Button again (LED lights off) to save the edit.

2.2.6 Controller Select

The Control Select function (CTRL SEL) will allow you to begin.

Programming the controller channel, the knobs, sliders, trigger pads and transport, Sustain pedal, Data Entry and Modulation wheel. In order to change the value of each controller, you need to do as follows:

- Press the "MODE" Button and the LED under the button will light on.
- Select the controller you want to edit by pressing or turning.
- Tum the "Data Entry" Knob or press the "Octave UP & Down" button to choose the control number you want to edit. You can see the Control Number on the LCD screen.
- Press the "Next" Key to set the channel.
- Turn the "Data Entry" Knob or Press the "Octave UP & Down" button to

choose the channel. You can see the channel number on the LCD screen.

- Press the "MODE" Button again (LED lights off) to save the edit.

To program the controller of Data Entry, it is a little difference to others; you need to do as follows:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "DATA KNOB" key.
- Tum the "Data Entry" Knob or press the "Octave UP & Down" button to choose the control number you want to edit. You can see the Control Number on the LCD screen.
- Press the "Next" Key to set the channel.
- Turn the "Data Entry" Knob or Press the "Octave UP & Down" button to choose the channel. You can see the channel number on the LCD screen.
- Press the "MODE" Button again (LED lights off) to save the edit.

2.2.7 Reset

To restore BK492's factory settings, which will erase any presets or other saved value; you need to do as follows:

- Press the "MODE" Button and the LED under the button will light on.
- Press the "FACTORY RESET" key
- LCD will show "Enter to perform".
- Press the "NEXT" Key.
- LCD will show "Enter to confirm".
- Press the "NEXT" Key to confirm the operation.
- LCD will show "Resetting is done"
- Press the "MODE" Button again (LED lights off) to save the edit.

Velocity Curve

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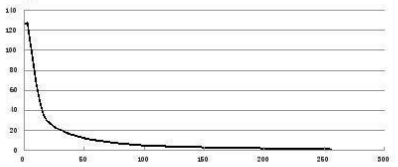

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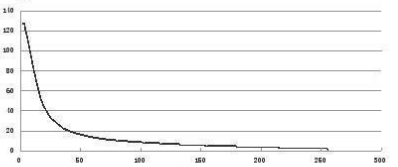

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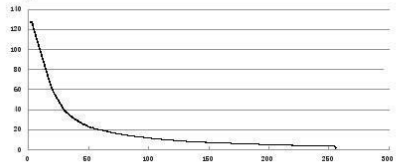

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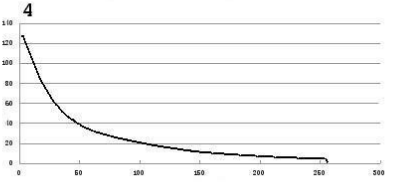

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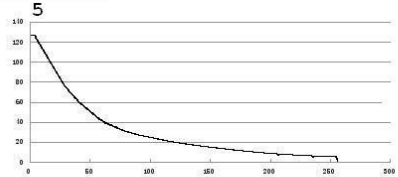
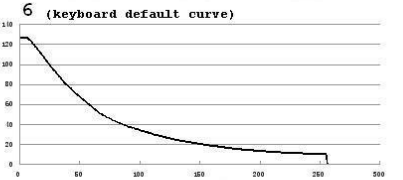


6 (keyboard default curve)



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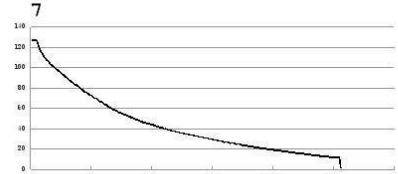

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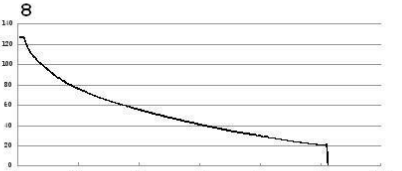

Trigger pads Controller Information

note	standard	note	standard
27-D#1	High Q	58-A#3	Vibraslap
28-E1	Slap	59-B3	Ride Cymbal 2
29-F1	Scratch Push	60-C4	Hi Bongo
30-F#1	Scratch Pull	61-C#4	Low Bongo
31-G1	Sticks	62-D4	Mute Hi Conga
32-G#1	Square Click	63-D#4	Open Hi Conga
33-A1	Metronome Click	64-E4	Low Conga
34-A#1	Metronome Bell	65-F4	High Timbale
35-B1	STD1 Kick2	66-F#4	Low Timbale
36-C2	STD1 Kick1	67-G4	High Agogo
37-C#2	Side Stick	68-G#4	Low Agogo
38-D2	STD1 Snare1	69-A4	Cabasa
39-D#2	Hand Clap	70-A#4	Maracas
40-E2	Snare Drum 2	71-B4	Short Whistle[EXC2]
41-F2	Low Floor Tom	72-C5	Long Whistle[EXC2]
42-F#2	Closed Hi-Hat [EXC1]	73-C#5	Short Guiro[EXC3]
43-G2	High Floor Tom	74-D5	Long Guiro[EXC3]
44-G#2	Pedal Hi-Hat[EXC1]	75-D#5	Claves
45-A2	Low Tom	76-E5	Hi Wood Block
46-A#2	Open Hi-Hat[EXC1]	77-F5	Low Wood Block
47-B2	Low Mid Tom	78-F#5	Mute Cuica[EXC4]
48-C3	Hi Mid Tom	79-G5	Open Cuica[EXC4]
49-C#3	Crash Cymbal 1	80-G#5	Mute Triangle[EXC5]
50-D3	High Tom	81-A5	Open Triangle[EXC5]
51-D#3	Ride Cymbal 1	82-A#5	Shaker
52-E3	Chinese Cymbal	83-B5	Jingle Bell
53-F3	Ride Bell	84-C6	Belltree
54-F#3	Tambourine	85-C#6	Castanets
55-G3	Splash Cymbal	86-D6	Mute Surdo[EXC6]
56-G#3	Cowbell	87-D#6	Open Surdo[EXC6]
57-A3	Crash Cymbal 2		

Transport Controls Information

MMC	Command	MMC	Command
01	STOP	07	RECORD EXIT
02	PLAY	08	RECORD PAUSE
03	DEFERRED PLAY	09	PAUSE
04	FORWARD	10	EJECT
05	REWIND	11	CHASE
06	RECORD STROBE	12	COMMAND ERROR REST

Specification

General	
Product Name	BK492
Keyboard	49 velocity-sensitive piano-style keys
Maximum polyphony	49 notes
Display	2x16 LCD screen display
Button	Octave up & down, select, mode, trigger pads, transport
Wheels	pitch and mod wheels
Knobs	8 Programmable Knobs
slider	8 Assignable Sliders
Jacks	Power Jack, USB, USB/Keyboard MIDI OUT, Sustain Switch
Power supply	USB / Batteries
Accessories	User’s Manual, USB cable
Inputs/outputs	
MIDI OUT	5-pin DIN*2
USB	USB-B
Sustain Pedal	1/4 " pedal jack