Grandstage 88/73

MIDI Guide

KORG   <u>E 1</u>

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About MIDI

MIDI stands for **M**usical **I**nstrument **D**igital **I**nterface, and is a world-wide standard for exchanging various types of musical data between electronic musical instruments and computers.

When MIDI cables are used to connect two or more MIDI devices, performance data can be exchanged between the devices, even if they were made by different manufacturers.

A USB cable can be used to connect the Grandstage to a personal computer. See "Connecting the Grandstage to your computer via USB" on page 5.

Connecting the Grandstage to a MIDI device or computer

The MIDI connectors of the Grandstage can be connected to the MIDI connectors of an external device to exchange MIDI information.

Note: To exchange data, you will need to set the MIDI channels on the transmitting and receiving end to the same channel.

MIDI IN connector

The Grandstage receives MIDI messages via the MIDI IN connector, from the MIDI OUT connector of an external device when connected.

MIDI OUT connector

The Grandstage sends MIDI messages via the MIDI OUT connector, to the MIDI IN connector of an external device when connected.

## Controlling an external MIDI tone generator from the Grandstage

When you want to use the Grandstage's keyboard and controllers etc. to play an external MIDI tone generator, use a MIDI cable to connect the Grandstage's MIDI OUT connector to the MIDI IN connector of the external MIDI tone generator.
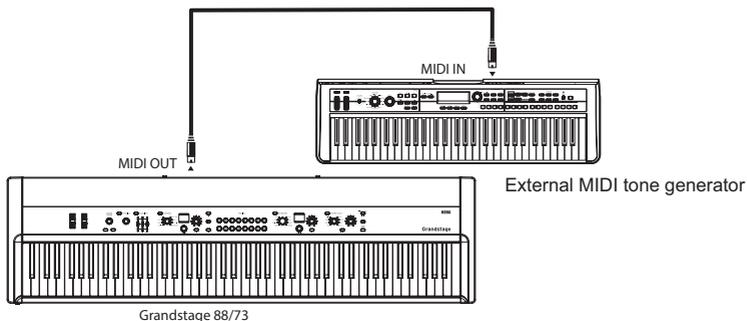
Tip: The Grandstage can also control an external MIDI source using its split function, by transmitting messages on two separate MIDI channels, one for the upper part (higher note range) and one for the lower part (lower note range). Refer to "MIDI channel setting (MIDI Channel)" on page 6, "MIDI Ch Mode (MIDI channel mode)" on page 6 and "MIDI Ch (Lower) settings (MIDI channel for the lower part)" on page 7 for how to configure the settings.

## Controlling the Grandstage's tone generator from an external MIDI device

When you want to play or control the Grandstage's tone generator from an external MIDI keyboard or sequencer etc., use a MIDI cable to connect the MIDI OUT connector of the external MIDI device to the MIDI IN connector of the Grandstage.
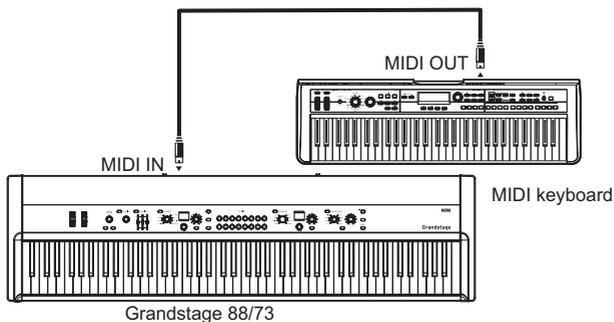
Connecting an external MIDI sequencer or computer etc.

If you want to record your performance on the Grandstage's keyboard into your external MIDI sequencer/computer (via a MIDI interface), or use the Grandstage as a combination of controller keyboard and MIDI sound module, or use the Editor/Librarian software included with the Grandstage, then you'll need to connect the Grandstage's MIDI OUT and MIDI IN connectors to the MIDI IN and MIDI OUT connectors respectively of your external MIDI sequencer or computer.

Tip: It's convenient to use the USB port when connecting the Grandstage to your computer.
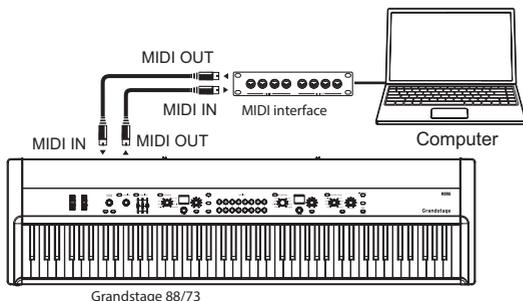
Grandstage 88/73

Tip: The KEYBOARDS and ENSEMBLE sections can be set to separate MIDI channels.
You can connect an external MIDI sequencer or a computer to the Grandstage to control the Grandstage's two separate sound generators.
Refer to "MIDI channel setting (MIDI Channel)" on page 6, "MIDI Ch Mode (MIDI channel mode)" on page 6 and "MIDI Ch (Lower) settings (MIDI channel for the lower part)" on page 7 for how to configure the settings.

Connecting the Grandstage to your computer via USB

In order to use a USB connection, you must install the Korg USB-MIDI driver on your computer. Download the Korg USB-MIDI driver from the Korg website, and install it as directed by the accompanying documentation.
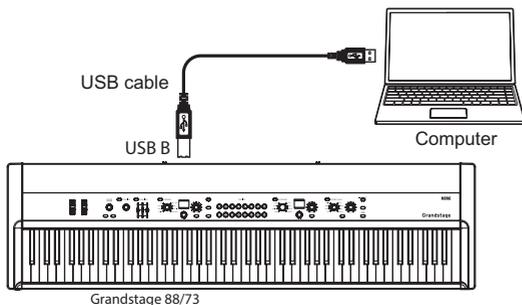
Note: The Grandstage is compatible with USB 2.0 devices.

USB A port

USB storage devices such as USB flash drives can be connected.

USB B port

Connect this port to the USB A port on a Windows PC or Mac to exchange MIDI message data.

USB cable

USB B

Computer

Grandstage 88/73

MIDI-related settings

MIDI channel setting (MIDI Channel)

In order to exchange data with a connected external MIDI device, you must set the Grandstage's MIDI channel to match the MIDI channel of the external MIDI device.
Set the MIDI channel using the steps below.

Setting the Grandstage's MIDI channel

1 **Press the SYSTEM button.**
   The SYSTEM button will blink, and the word "SYSTEM" will show on the top line of the KEYBOARDS section display.

2 **Select the "MIDI Channel" parameter on the second line of the display with the VARIATION knob.**

3 **Set the channel using the LEVEL knob in the KEYBOARDS section.**

4 **After you are finished with the settings, press the SYSTEM button or the EXIT button.**
   The SYSTEM button will go dark.

MIDI Ch Mode (MIDI channel mode)

This selects the MIDI channel mode used by the Grandstage to transmit and receive MIDI data.

Global Only: Uses only the channels set in "MIDI Channel". When playing in layered or split mode, this keyboard will transmit and receive on only one channel.

U/L Individual (Upper/Lower Individual): The channels set using the "MIDI Channel" and "MIDI Ch (Lower)" settings will be used to transmit and receive MIDI data for the KEYBOARDS and ENSEMBLE sections. (The default channels are 1 and 2 respectively.)
Select this if you want to control external MIDI devices in split mode via different MIDI channels, or if you want to play the two layered sounds of the Grandstage from an external MIDI device via different MIDI channels.
Normally, this is set to "Global Only". The default setting is "Global Only".

1 **Press the SYSTEM button.**
   The SYSTEM button will blink, and the word "SYSTEM" will show on the top line of the KEYBOARDS section display.

2 **Select the "MIDI Ch Mode" parameter on the second line of the display with the VARIATION knob.**

3 **Use the LEVEL knob in the KEYBOARDS section to set this to either "Global Only" or "U/L Individual".**

4 **After you are finished with the settings, press the SYSTEM button or the EXIT button.**
   The SYSTEM button will go dark.

MIDI Ch (Lower) settings (MIDI channel for the lower part)

This setting is enabled when the MIDI Ch Mode is set to "U/L Individual". This specifies the MIDI channels on which the Grandstage will transmit and receive for the lower ENSEMBLE section note range (normally, this is the lower part).

Note: The MIDI channels for the KEYBOARDS section are set using "MIDI Channel" (normally, this is the upper part).

On the Grandstage, different MIDI channels can be set for the KEYBOARDS section (usually the upper part of the keyboard) and the ENSEMBLE section (usually the lower part of the keyboard), to play an external MIDI device at the same time as the Grandstage's keyboard; or to connect to an external MIDI sequencer in order to control the Grandstage's keyboard as a multi-timbral sound generator. Refer to "MIDI Ch Mode (MIDI channel mode)" on page 6.

1 **Press the SYSTEM button.**
The SYSTEM button will blink, and the word "SYSTEM" will show on the top line of the KEYBOARDS section display.

2 **Select the "MIDI Ch (Lower)" parameter on the second line of the display with the VARIATION knob.**

3 **Set the channel using the LEVEL knob in the KEYBOARDS section.**

4 **After you are finished with the settings, press the SYSTEM button or the EXIT button.**
The SYSTEM button will go dark.

MIDI "LOCAL" setting when connecting an external MIDI sequencer or computer

If notes are sounding doubled when the Grandstage is connected to an external MIDI sequencer or computer, turn the Local setting off. If the Grandstage is connected to an external MIDI sequencer or computer, and the Echo Back setting of the external MIDI sequencer or computer is turned on while the Grandstage's Local Control setting is also on, the performance data that's generated when you play the Grandstage's keyboard will be sent to the external MIDI sequencer, and will also be echoed-back to sound the Grandstage's tone generator a second time. To prevent each note from being sounded twice, once directly from the keyboard and once from the echoed-back note, you must turn the Grandstage's Local Control setting off (SYSTEM - Local Control).

Setting the MIDI local control on the Grandstage

1 **Press the SYSTEM button.**
The SYSTEM button will blink, and the word "SYSTEM" will show on the top line of the KEYBOARDS section display.

2 **Select the "Local Control" parameter on the second line of the display with the VARIATION knob.**

3 **Set the value to "Off" using the LEVEL knob in the KEYBOARDS section.**

4 **After you are finished with the settings, press the SYSTEM button or the EXIT button.**
The SYSTEM button will go dark.

Applying transposition or velocity curve to MIDI

Use the "Convert Position" (SYSTEM–Convert Position) parameter to specify the position at which the transposition and velocity curve will apply. This setting will affect the MIDI data that is transmitted and received, but it does not have an effect when playing the Grandstage's own sounds using this keyboard.

The default setting is "Pre-MIDI".

Pre-MIDI:

Transposes and applies the velocity curve to data immediately after it is outputted from the keyboard.

- Velocity curve and transpose settings are applied to the note data played on the keyboard, and this data is transmitted via MIDI OUT. The MIDI OUT data is affected.

- MIDI data received via MIDI IN will be sent to the sound generator unchanged.
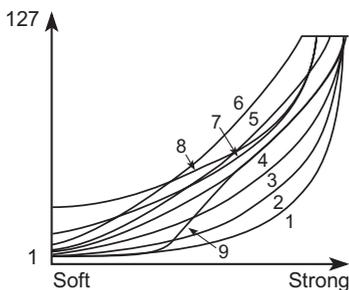
Post-MIDI:

Transposes and applies the velocity curve to data before it enters the sound generator.

- The note data played on the keyboard will be transmitted via MIDI OUT unchanged. The MIDI OUT data will not be affected.

- Velocity curve and transpose settings are applied to the note data received via MIDI IN, and this data is sent to the sound generator.
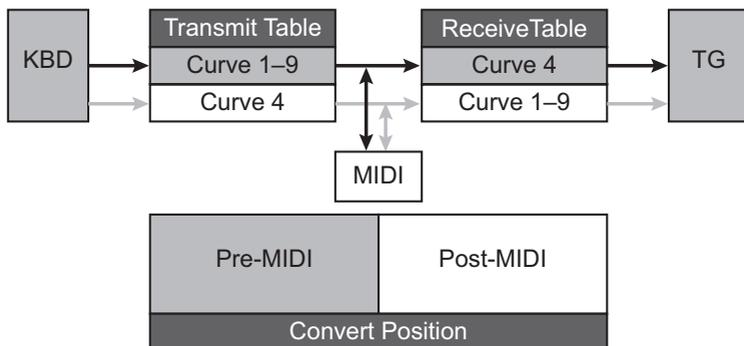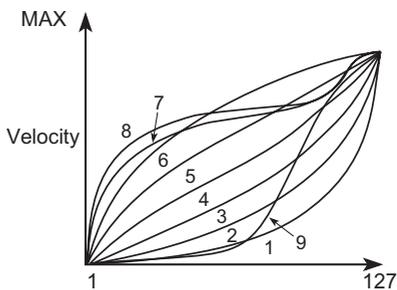
Messages transmitted and received by the Grandstage

In the text below, […] indicates hexadecimal notation

MIDI channels

Global MIDI channnel
MIDI uses sixteen channels, numbered 1–16.
MIDI messages can be exchanged when the transmitting and receiving devices are set to the same MIDI channel.

The default channels for the programs in both the KEYBOARDS and ENSEMBLE sections are set to the same MIDI channel.
This MIDI channel will be the base channel to transmit and receive MIDI data to/from the Grandstage.

Lower part MIDI channel
The ENSEMBLE section program uses the lower part of the keyboard, and can be set to transmit and receive using the lower part MIDI channel. Refer to "MIDI-related settings" on page 6 for how to configure these settings.

MIDI Channel Mode
Refer to "MIDI Ch Mode (MIDI channel mode)" on page 6.

MIDI messages
Various types of MIDI messages are sent and received to indicate the beginning or end of notes, the selection of a program, and control of the sound.
The following section explains the main types of MIDI message used by the Grandstage.

Note-on/Note-off
A note-on message indicates the beginning of a note, and a note-off message indicates the end of a note.
The Grandstage transmits a note-on when you press a key, and a note-off when you release the key. When the Grandstage receives a note-on message, its internal sound generator will produce sound corresponding to the note number and velocity of that note-on. When it receives a note-off message, that sound will turn off.

Note-on [9n, kk, vv]

Note-off [8n, kk, vv]
n: channel; kk: note number; vv: velocity

The receiving/transmitting channel for note-on and note-off will differ, depending on the MIDI Ch Mode settings.
Refer to "MIDI Ch Mode (MIDI channel mode)" on page 6.

Note: Although not many devices can transmit and receive note-off velocity data, the Grandstage can.

Switching between favorites

The favorites on the Grandstage can be switched using a program change message.

Program change [CN, pp]
(n: channel; pp: up to 64 sounds can be selected using program numbers)

The favorites on the Grandstage (000–063) can be switched using program change messages [Cn, 00]–[Cn, 3F].
Messages will be transmitted using the MIDI channel (global MIDI channel), regardless of the MIDI Ch Mode settings.

Switching Favorite
When you switch fevorites on the Grandstage, program change message are transmitted. When the Grandstage receives this message, it will switch to the correspondingly numbered fevorite.

Controlling sounds

Pitch bend
Operating the pitch bend wheel on the Grandstage will apply the pitch bend effect, and transmit a pitch bend change message at the same time. The pitch bend effect will be applied on the sound of the receiving device.
The range of effect for the pitch bend is optimized for each program.

Pitch bend change [En, bb, mm]
(n: channel; bb: low position; mm: high position)

High position	Low position	Pitch bend value	Actual pitch (bend range value = +2)
127	127	8191	+2
64	00	0	0
00	00	−8192	−2

Control changes
Use control change messages to control the volume and sound. The Grandstage transmits control change messages when the modulation wheel, foot controller or other controllers are operated.
Also, when a control change message is received, various effects are applied according to the control change numbers to which they are allocated.

Control changes [Bn, cc, vv]
(n:channel, cc:control change no., vv:value)

The receiving/transmitting channel for pitch bend changes and control changes will differ, depending on the MIDI Ch Mode settings. (Refer to "MIDI Ch Mode (MIDI channel mode)" on page 6.)

- When the MIDI Ch Mode is set to "U/L Individual"

Tip: Transmission and reception of CC#64 (damper pedal) messages can be turned on and off from "EDIT - Damper Off/On" for each section. In the same way, transmission and reception of control change messages configured for the pitch bend, CC#1 (modulation wheel), and foot switch/pedal can be turned on and off from "EDIT - Other Controls Off/On".

Note: When a layer or split has been set, CC#80 (SW1 modulation) and CC#81 (SW2 modulation) will be transmitted and received only via the global MIDI channel, and will only be enabled for the KEYBOARDS section.

Using control changes on the Grandstage

There are 128 control changes:CC#0–CC#127. The effect or function of each control change number is defined by the MIDI specification.

Controlling the sound	CC#0–95 and CC#102–119
Editing a value or function	CC#96–101
Controlling or initializing the sound generator	CC#120–127

The Grandstage provides for you to use control change messages (CC#0–95 and CC#102–119) to modify the sound.

Frequently used control changes

Of the control change messages that are supported by the Grandstage, here are some of the most frequently used.

Note: The functions described here are the factory settings.

Using the modulation wheel to add modulation

CC#01: Modulation Depth [Bn, 01, vv]
(Default:Modulation Wheel)
Controls the vibrato effect applied to the sound.
When the modulation wheel is used on the Grandstage, the modulation depth value is transmitted.
At the lowest position where the modulation wheel stops, a value of "0" is transmitted.
When a modulation wheel depth value is received by another device, a similar effect to the one that is applied when operating the modulation wheel on the Grandstage will apply.

Volume control

CC#11: Expression [Bn, 0B, vv]
Adjusts the volume of the program. This controls the volume on the output line for both the KEYBOARDS and ENSEMBLE sections.

Note: On the CX-3 type organ programs, this controls the volume before the rotary speaker input. Recreates the effect of an expression pedal used with drawbar organs. The expression pedal effect can be recreated in the same way for VOX organ and electric organ programs as well.

Note: This functions differently from normal in some programs. For programs that include the words "Pedal Wah", the pedal controls the pedal wah effect within the program, not the volume.

When the "Foot - Pedal" function in system settings is set to "Expression (CC#11)" and the pedal is operated, an expression message will be transmitted, and the volume will change. When an expression message is received by another device, a similar effect to the one that is applied when operating the pedal on the Grandstage will apply.

CC#07: Volume [Bn, 07, vv]

Adjusts the volume of the program. This controls the volume on the output line for both the KEYBOARDS and ENSEMBLE sections.

When the "Foot - Pedal" function in system settings is set to "Volume (CC#07)" and the pedal is operated, a volume message will be transmitted, and the volume will change. When a volume message is received by another device, a similar effect to the one that is applied when operating the pedal on the Grandstage will apply.

Note: The program volume settings are combination of the LEVEL knob value, the volume message value and the expression message value.

Note: Using a universal system exclusive master volume message allows you control the volume of all outputs, including the REVERB/DELAY section and the equalizer (Refer to "Master volume" on page 16).

Panpot (stereo position) control

CC#10: Panpot [Bn, 0A, vv]

This controls the stereo position of the sound.

This controls the panpot on the output line for both the KEYBOARDS and ENSEMBLE sections. When the "Foot - Pedal" function in system settings is set to "CC#10" and the pedal is operated, a panpot message will be transmitted, and the position of the sound will change.

When this message is received, the pan position will change in the range of left-center-right according to the received value of "0" – "64" – "127".

Control using various controllers

Here is an explanation of typical ways to use various controllers.

You can select "MIDI CC#00" through "MIDI CC#119" using "Foot - Pedal" and "Switch" in system settings.

CC#64 Damper pedal [Bn, 40, vv]

(Default:Damper pedal)

When the damper pedal (DS-1H, included) connected to the DAMPER jack is operated, this message will be transmitted, switching the damper effect ON/OFF.

When using the DS-1H, a half-damper effect is applied. When a damper message is received by another device, a similar effect to the one that is applied when operating the damper pedal on the Grandstage will apply.

CC#80:SW1 Modulation [Bn, 50, vv]

CC#81:SW2 Modulation [Bn, 51, vv]

(Default:SW1 button, SW2 button)

When the SW1 or SW2 buttons are operated, a "vv=127[7F]" message (when ON) or a "vv=0[00]" message (when OFF) is transmitted, switching the effect set for each program ON or OFF. When this message is received by another device, a similar effect to the one that is applied when operating the SW1 or SW2 buttons on the Grandstage will apply. (Note that when the "vv" value is "63[3F]" or less, the switch is OFF; and when the "vv" value is "64[40]" or more, the switch is ON.)

CC#66: Sostenuto [Bn, 42, vv]

When the "Foot - Switch" function in system settings is set to the CC# shown above, operating this keyboard will transmit a "vv=127[7F]" message (when ON) or a "vv=0[00]" message (when OFF), switching the sostenuto effect ON or OFF. When a sostenuto message is received by another device, a similar effect to the one that is applied when operating the foot switch on the Grandstage will apply. (Note that when the "vv" value is "63[3F]" or less, the switch is OFF; and when the "vv" value is "64[40]" or more, the switch is ON.)

CC#67: Soft pedal [Bn, 43, vv]

When the "Foot - Switch" function in system settings is set to the CC# shown above, operating this keyboard will transmit a "vv=127[7F]" message (when ON) or a "vv=0[00]" message (when OFF), applying a soft pedal effect. When a soft pedal message is received by another device, a similar effect to the one that is applied when operating the foot switch on the Grandstage will apply. (Note that when the "vv" value is "63[3F]" or less, the switch is OFF; and when the "vv" value is "64[40]" or more, the switch is ON.)

Controlling or initializing the sound generator

Special control messages are provided for initializing the sound generator. These messages are for reception only; they cannot be transmitted.

CC#123: All note off [Bn, 7B, vv]

CC#120: All sound off [Bn, 78, vv]

When the all note off message is received, all notes currently sounding on that channel will turn off. Since the notes are turned off in the same way as when you release your hand from the keyboard, the decay portion of the notes will still be heard.

When the all sound off message is received, all sound being produced on that channel will turn off. Unlike the all note off message, this forcibly stops all sounds that are being produced, so the decay portion of the notes will not be heard.

These silencing messages are for use in emergencies. They are not for use during a performance.

CC#121: Reset all controller [Bn, 79, vv]

When this message is received, the values of all controllers operating on that channel will be reset to zero.

System real-time messages

Active sensing [FE]

This MIDI message is used to prevent trouble when playing, such as when the device sending a MIDI message while playing is switched OFF, when a MIDI cable is accidentally pulled out, or when there is a short. If the next message does not arrive within about 300msec or more of receiving an active sensing message, the device determines that some kind of trouble has occurred with the MIDI cable, and the sounds triggered by MIDI are stopped and the controller values are reset.

System exclusive messages

In addition to channel messages that store performance information, MIDI allows for messages to be transmitted and received between MIDI devices, including information, control commands and settings. These are called "system messages".

Some of these MIDI messages that allow for manufacturer-specific expanded functions are called "system exclusive messages". The Grandstage does not support either transmitting or receiving system exclusive messages.

Universal system exclusive message (Non-Realtime)

Certain system exclusive messages are publicly defined for a specific use, and these are called "universal system exclusive messages".

The Grandstage uses the following five universal system exclusive messages.

- **Inquiry message request**

  [F0, 7E, nn, 06, 01, F7]
  3rd byte nn : Channel
  = 0 - F : Global Channel
  = 7F : Any Channel

- **Inquiry message**

  [F0, 7E, 0g, 06, 02, (9 byte), F7]

  When an inquiry message request is received, the Grandstage will respond by transmitting an inquiry message that means "I am a Korg Grandstage, with system version …"

  [F0, 7E, 0g, 06, 02, 42, 48, 01, mm, 00, vv, ww, xx, 00, F7]

  3rd byte g : Global Channel

  6th byte 42 : KORG ID

  7th byte 48 : Grandstage series LSB ID

  8th byte 01 : Grandstage series MSB ID

  9th byte mm :

  Grandstage-88 member code mm = 17

  Grandstage-73 member code mm = 0E

  11th byte vv : System Version 1st (1 -)
  12th byte ww : System Version 2nd (0 -)
  13th byte xx : System Version 3rd (0 -)
  (i.e. Version 1.0.2:vv=01, ww=00, xx=02)

Universal system exclusive message (Realtime)

- **Master volume**

  [F0, 7F, 0g, 04, 01, vv, mm, F7]

  (3rd byte g : Global Channel, vv:lower byte of the value, mm:upper byte of the value, together indicating 16384 steps)

  When the "Foot - Pedal" function in system settings is set to "Master Volume" and the pedal is operated, this message will be transmitted, and the volume at the final stage will be changed. When a volume message is received by another device, a similar effect to the one that is applied when operating the pedal on the Grandstage will apply.

- **Master fine tuning**

  [F0, 7F, nn, 04, 03, vv, mm, F7]

  (A value of 8192 [mm, vv=40, 00] is center, 4096 [mm, vv=20, 00] is –50 cents, and 12288 [mm, vv=60, 00] is +50 cents.)

  When this is received, the "Master Tune", SYSEM settings will be set.

  3rd byte nn : Channel

  = 0 - F : Global Channel

  = 7F : Any Channel

- **Master coarse tuning**

  [F0, 7F, nn, 04, 04, vv, mm, F7]

  (Normally only the upper byte mm is used. A value of 8192 [mm, vv=40, 00] is center, 6656 [mm, vv=34, 00] is –12 semitones, and 9728 [mm, vv=4C, 00] is +12 semitones.)

  When this is received, "Transpose" parameter will be set.

  3rd byte nn : Channel

  = 0 - F : Global Channel

  = 7F : Any Channel

How the Grandstage handles control changes that are sent and received

The handling of control changes received by the Grandstage, how the Grandstage's controllers operate for control changes and the relationship between settings are shown below.

Note: A MIDI channel is used to send and receive control changes. When transmitting and receiving these parameters between two Grandstages, the programs of both the transmitting and receiving side must use the same settings.

Control change numbers from "MIDI CC#00" through "MIDI CC#119" can be assigned using the "Foot - Pedal" and "Switch" in system settings. All values when transmitting using the pedal are from 0–127, and all values when transmitting using the switch are either "0" (OFF) or "127" (ON).

CC#	Control	Value	Function	
0	Bank Select (MSB)	0...127	-	
1	Modulation wheel	0...127	Equivalent to using the modulation wheel	
2	Breath controller	0...127	-	
3	-	-	-	
4	Foot controller	0...127	-	
5	Portamento time	0...127	-	
6	Data entry (MSB)	0...127	-	
7	Volume	0...127	Volume (on the output line for both the KEYBOARDS and ENSEMBLE sections)	*1
8	Balance	0...127	-	
9	-	-	-	
10	Panpot	0...127	Pan (on the output line for both the KEYBOARDS and ENSEMBLE sections)	
11	Expression	0...127	Volume (on the output line for both the KEYBOARDS and ENSEMBLE sections)	*1
12	Effect control 1	0...127	-	
13	Effect control 2	0...127	-	
14...15	-	-	-	
16	General Purpose Controller 1	0...127	-	
17	General Purpose Controller 2	0...127	-	
18	General Purpose Controller 3	0...127	-	
19	General Purpose Controller 4	0...127	-	
20...31	-	-	-	
32	Bank Select (LSB)	0...127	-	
33...37	-	-	-	
38	Data entry (LSB)	0...127	-	
39...63	-	-	-	
64	Damper	0...127	Damper effect	
65	Portamento On/Off	0...63 (Off), 64...127 (On)	-	
66	Sostenuto On/Off	0...63 (Off), 64...127 (On)	Sostenuto effect ON/OFF	
67	Soft	0...127	Soft pedal effect	
68...69	-	-	-	

70...79	Sound controller 1 ... 10	0...127	-	
80	Controller (CC#80)	0...63 (Off), 64...127 (On)	Equivalent to SW1 ON/OFF operation	
81	Controller (CC#81)	0...63 (Off), 64...127 (On)	Equivalent to SW2 ON/OFF operation	
82...90	-	-	-	
91	-	-	-	
92	-	-	-	
93	-	-	-	
94	-	-	-	
95	-	-	-	
96	Data increment	-	-	
97	Data decrement	-	-	
98	NRPN (LSB)	-	-	
99	NRPN (MSB)	-	-	
100	RPN (LSB)	0	-	
		1	-	
		2	-	
101	RPN (MSB)	0	-	
102...119	-	-	-	

*1: Volume control via MIDI channel messages from the Grandstage is a combination of the volume (CC#07) and expression (CC#11).

Appendices

Troubleshooting

If the Grandstage does not function as you expect, check the following points.

MIDI transmit and receive is not working correctly with external devices.

☐ Are the MIDI cables connected correctly?

☐ If connecting via USB-MIDI, is the USB cable correctly plugged in to the USB B port?

☐ Is the Grandstage set to transmit and receive MIDI data on the same channel as the external MIDI device?

☐ Are MIDI messages being transmitted and received that are compatible with the Grandstage?

The Grandstage is not responding to MIDI program change messages.

☐ The Grandstage supports MIDI program change messages for selecting favorites. However, sound programs on the KEYBOARDS and ENSEMBLE sections cannot be selected using MIDI program change messages.

The sound seems to be doubled.

☐ Have the local settings been turned OFF?
   → Turn "Local Control" OFF. (Refer to page 7.)

* Specifications and appearance are subject to change without notice for improvement.

* All product names and company names are the trademarks or registered trademarks of their respective owners.

[Stage Piano]
Model: Grandstage
MIDI implementation chart

Date: Feb. 18. 2017
Version: 1.00

Function...		Transmitted	Received	Remarks
Basic Channel	Default	1–16	1–16	Memorized
	Changed	1–16	1–16	
Mode	Default	3	3	
	Messages	X	X	
	Altered	**************		
Note Number		16–112 / 9–120	0–127	16–112(Grandstage 73) / 9–120(Grandstage 88)
	True Voice	**************	0–127	Some sounds will not play across the entire note range
Velocity	Note On	O 9n, V=1–127	O 9n, V=1–127	
	Note Off	O 8n, V=1–64	O 8n, V=0–127	
After Touch	Key's	X	X	
	Channel	X	X	
Pitch Bend		O	O	
Control Change	1	O	O	Modulation
	7	O	O	Volume *1
	10	X	O	Pan
	11	O	O	Expression *1, *3
	64	O	O	Damper
	66	X	O	Sostenuto *2
	67	O	O	Soft *2
	80, 81	O	O	SW1, SW2
	0–95, 102–119	O	X	Transmits when assigned to the foot switch or foot pedal
	120, 121	X	O	All Sounds Off, Reset All Controller
Program Change		O 0–63	O 0–63	Switches between favorites
	True Number	**************	0–63	
System Exclusive		O	O	*4
System Common	Song Position	X	X	
	Song Select	X	X	
	Tune Request	X	X	
System Real Time	Clock	X	X	
	Commands	X	X	
Aux Meassages	Local On/Off	X	O	
	All Notes Off	X	O 123–127	
	Active Sense	O	O	
	System Reset	X	X	

Notes
*1: Sent via foot pedal operations when assigned to the foot pedal function in System Edit.
*2: Sent via foot switch operations when assigned to the foot switch function in System Edit.
*3: Controls the wah effect for the Pedal Wah program.
*4: Supports device inquiry of universal system exclusive messages, master volume, master fine tuning and master coarse tuning.

Mode 1: Omni On, Poly	Mode 2: Omni On, Mono	O: Yes
Mode 3: Omni Off, Poly	Mode 4: Omni Off, Mono	X: No

Consult your local Korg distributor for more information on MIDI IMPLEMENTATION.