

## MIDI Settings

The term MIDI is an acronym for Musical Instrument Digital Interface, an international standard for connecting musical instruments, computers, and other devices to allow the exchange of performance data.

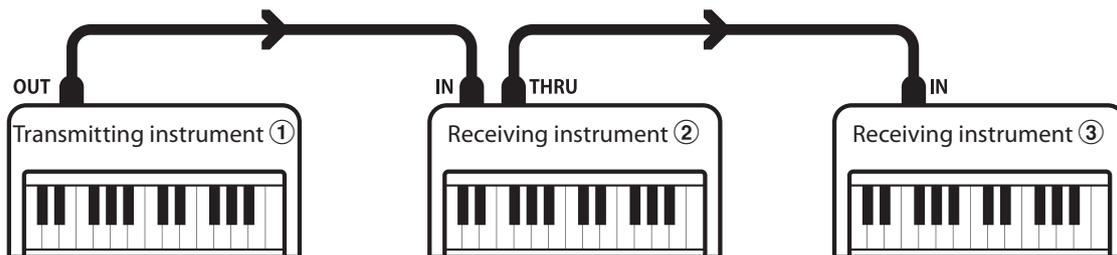
### ■ MIDI terminals

MIDI terminal	Function
MIDI IN	Receiving note, program change, and other data.
MIDI OUT	Sending note, program change, and other data.

### ■ MIDI channels

MIDI uses channels to exchange data back and forth between MIDI devices. There are receive (MIDI IN) and transmit (MIDI OUT) channels. Most musical instruments or devices with MIDI functions are equipped with both MIDI IN and OUT jacks and are capable of transmitting and receiving data via MIDI. The receive channels are used to receive data from another MIDI device and the transmit channels are used to transmit data to another MIDI device.

The illustration below shows three musical instruments, connected together using MIDI.



Transmitting instrument ① sends transmit channel and keyboard information to receiving instruments ②/③.

The information arrives at the receiving instruments ②/③.

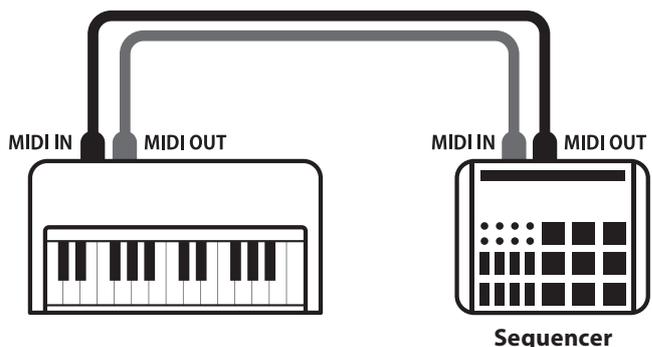
Receiving instruments ②/③ will respond to MIDI data that is sent if their receive channel is the same as the transmit channel of the transmitting instrument ①.

If the channels do not match, then the receiving instruments ②/③ will not respond to any data that is sent.

For both receiving and transmitting, channels 1~16 can be used.

### ■ Recording/playing with a sequencer

When connected to a sequencer, the CA48 digital piano can be used to record and playback multi-track songs, with separate sounds playing simultaneously on each channel.



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### ■ MIDI functions

The CA48 digital piano supports the following MIDI functions:

#### Transmit/receive note information

Transmit/receive note information from a MIDI-connected musical instrument or device.

#### Transmit/receive channel settings

Specify transmit/receive channels within the range of 1 to 16.

#### Transmit/receive exclusive data

Transmit/receive front panel or menu function settings as exclusive data.

#### Multi-timbral mode setting

Receive multiple channel MIDI data from a MIDI-connected musical instrument or device.

\* Multi-timbral mode setting must be enabled.

#### Transmit/receive Program Change number

Transmit/receive program change data to/from a MIDI-connected musical instrument or device.

#### Transmit/receive pedal data

Transmit/receive sustain, sostenuto, and soft pedal data from a MIDI-connected musical instrument or device.

#### Receive volume data

Receive MIDI volume data sent from a MIDI-connected musical instrument or device.

\* Please refer to the 'MIDI Implementation Chart' on page 8 for further information regarding the MIDI capabilities of the CA48 digital piano.

### ■ MIDI settings

Function name	Description	Default setting
Transmit Program Change Number	Specify whether or not program change information is sent when sounds are changed. Send a MIDI program change number from 1 to 128.	On
Local Control	Specify whether or not internal sounds will be heard when the keyboard is pressed.	On
MIDI Channel	Specify the channel used to transmit/receive MIDI information.	1ch
Multi-timbral Mode	Specify whether or not MIDI information can be received on more than one channel.	Off

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### Transmit MIDI Program Change

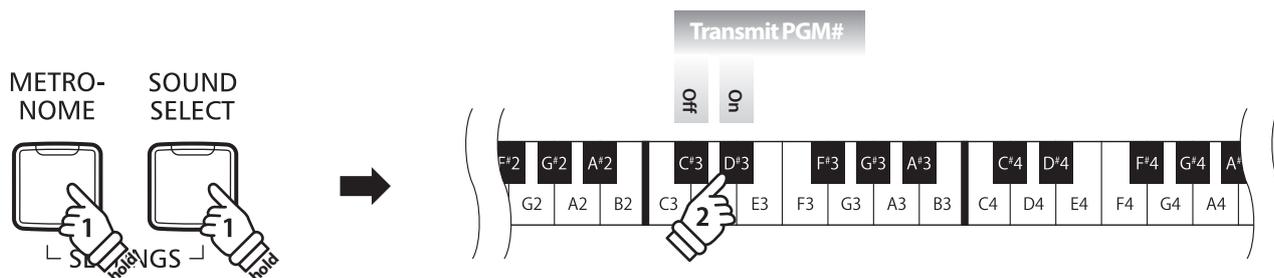
The Send Program Change Number setting determines whether or not the CA48 digital piano will transmit program change information when sounds are changes. It is also possible to transmit a program change number (ranging from 1 to 128) in order to change the sound of an external MIDI device.

#### Transmit MIDI Program Change settings

Transmit PGM#	Description
Off	The instrument will NOT transmit program change numbers when changing sounds.
On (default)	The instrument will transmit program change numbers when changing sounds.

#### Changing the Transmit MIDI Program Change setting

Press and hold the METRONOME and SOUND SELECT buttons, then press the key assigned to the desired Transmit MIDI Program Change setting.

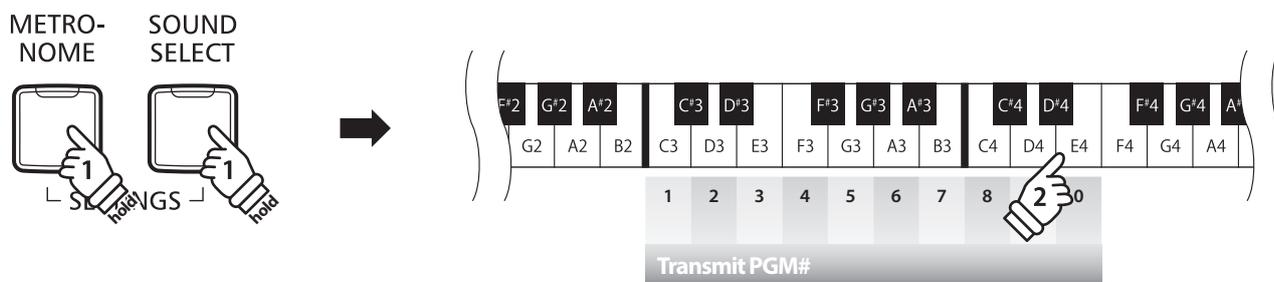


\* Any changes made to the Transmit MIDI Program Change setting will remain until the power is turned off.

\* Preferred Transmit MIDI Program Change settings can be stored to the Startup Settings memory for automatic selection when the instrument is turned on. Please refer to Owner's Manual page 39 for more information.

#### Sending a Program Change number

Press and hold the METRONOME and SOUND SELECT buttons, then enter the desired program change number to send using the number keys.



**Example: Transmit PGM#064**  
Enter 0, 6, then 4

\* Program change numbers are specified as three digits within the range of 001~128.

\* The program change number will be transmitted automatically when the key for the third digit number is pressed.

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### Local Control

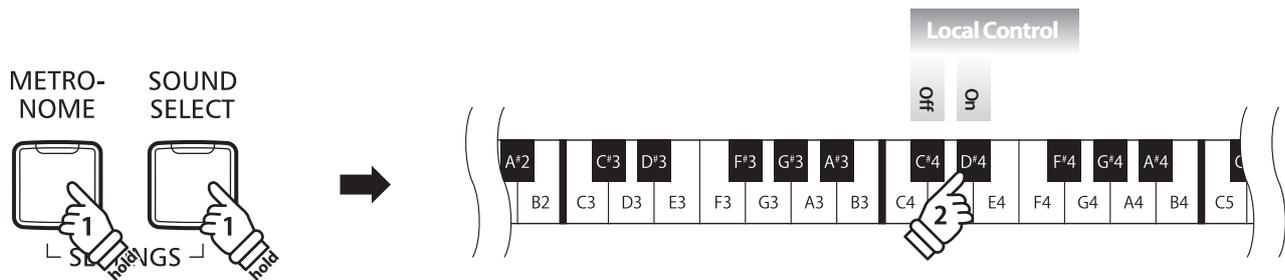
The Local Control setting determines whether the instrument will play an internal sound when the keys are pressed. This setting may be useful when using the CA48 digital piano to control an external MIDI device.

#### Local Control settings

Local Control	Description
Off	The instrument will transmit information to an external MIDI device only.
On (default)	The instrument will play an internal sound and transmit information to an external MIDI device.

#### Changing the Local Control setting

Press and hold the METRONOME and SOUND SELECT buttons, then press the key assigned to the desired Local Control setting.



\* Any changes made to the Local Control setting will remain until the power is turned off.

\* Preferred Local Control settings can be stored to the Startup Settings memory for automatic selection when the instrument is turned on. Please refer to Owner's Manual page 39 for more information.

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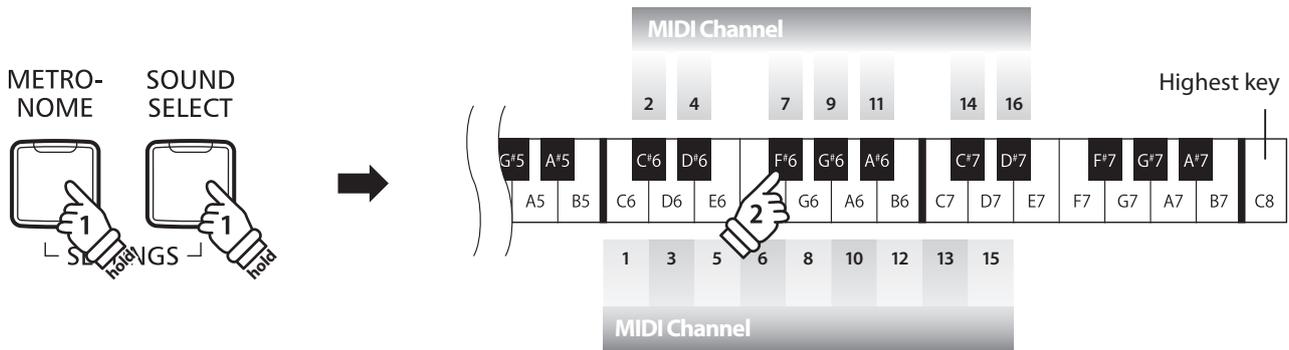
## MIDI Settings

### MIDI Channel (transmit/receive)

The MIDI Channel setting allows the transmit/receive channel to be specified. The selected channel will function as both the transmit and receive channel (separate transmit/receive channels cannot be specified).

#### ■ Changing the MIDI Channel setting

Press and hold the METRONOME and SOUND SELECT buttons, then press the key assigned to the desired MIDI channel.



\* The MIDI channel can be specified within the range of 1~16.

\* The MIDI channel is automatically set to '1' when the instrument is turned on (default setting).

\* Preferred MIDI Channel settings can be stored to the Startup Settings memory for automatic selection when the instrument is turned on. Please refer to Owner's Manual page 39 for more information.

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## MIDI Settings

### Multi-timbral Mode

The Multi-timbral mode setting determines whether or not the CA48 digital piano is able to receive MIDI information on more than one MIDI channel simultaneously. This allows the instrument to play back multi-track, multi-timbral performance data sent from an external MIDI device.

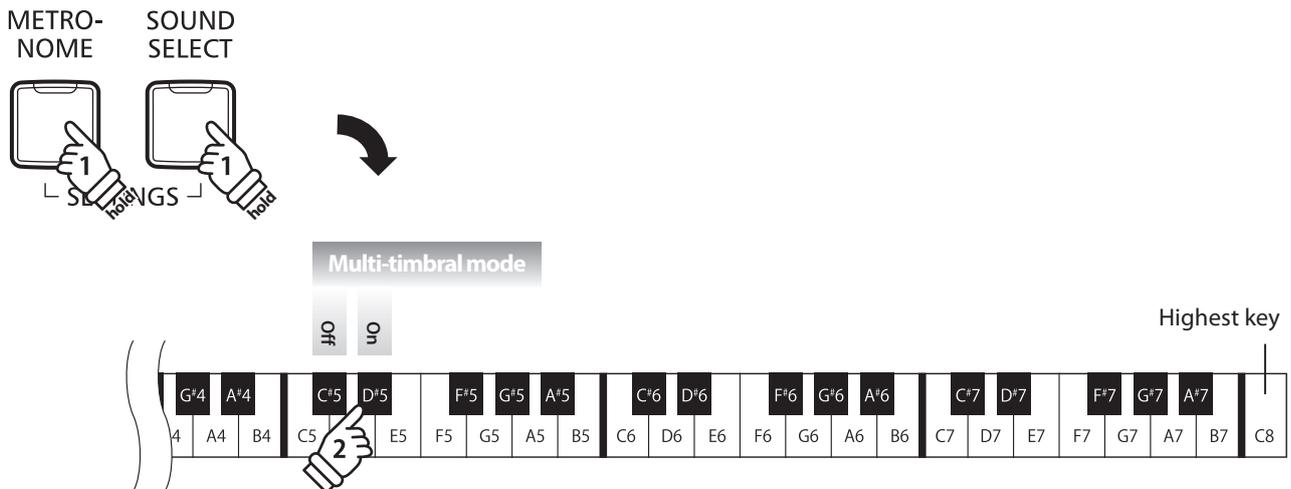
#### Multi-timbre settings

Multi-timbre	Description
Off (default)	Multi-timbral mode disabled
On	Multi-timbral mode enabled*

\* Please refer to the 'Program Change Number List' on page 7.

#### Changing the Multi-timbral mode setting

Press and hold the METRONOME and SOUND SELECT buttons, then press the key assigned to the desired Multi-timbre setting.



\* MIDI data received through channel 10 will not be performed when Multi-timbre is enabled.

## Program Change Number List

### ■ Program Change Number List

Sound name	Multi-timbral mode Off	Multi-timbral mode On		
	Program number	Program number	Bank MSB	Bank LSB
SK Concert Grand	1	1	121	0
EX Concert Grand	2	1	95	27
Upright Piano	3	1	95	25
Studio Grand	4	1	121	1
Studio Grand 2	5	1	95	28
Mellow Grand	6	1	121	2
Mellow Grand 2	7	1	95	29
Modern Piano	8	2	121	1
Classic E.Piano	9	5	121	0
Modern E.Piano	10	6	121	0
Jazz Organ	11	18	121	0
Church Organ	12	20	121	0
Harpichord	13	7	121	0
Vibraphone	14	12	121	0
String Ensemble	15	49	121	0
Slow Strings	16	45	95	1
Choir	17	53	121	0
New Age Pad	18	89	121	0
Atmosphere	19	100	121	0

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## MIDI Implementation Chart

### ■ Kawai CA48 digital piano

Date : November 2017 Version : 1.0

Function	Transmit	Receive	Remarks	
Basic channel	At power-up Settable	1 1 - 16	1 1 - 16	
Mode	At power-up Message Alternative	Mode 3 X *****	Mode 1 Mode 1, 3** X	** Omni mode is on at power-up. Omni mode can be turned off through MIDI channel setting operations.
Note number	Range	15 - 113* *****	0 - 127 0 - 127	* 15 - 113, including transpose
Velocity	Note on Note off	0 0	0 0	
After touch	Key specific Channel specific	X X	X X	
Pitch bend		X	X	
Control change	7 64 66 67	X O (Right pedal) O (Middle pedal) O (Left pedal)	O O O O	Volume Damper pedal Sostenuto pedal Soft pedal
Program change settable range		O (0 - 127) *****	O	(Please refer to the 'Program Change Number List')[page 7]
Exclusive		O	O	Transmission can be selected
Common	Song position Song selection Tune	X X X	X X X	
Real time	Clock Commands	X X	X X	
Other functions	Local On / Off All notes Off Active sensing Reset	X X X X	O O O X	
Remarks				

Mode 1: omni mode On, Poly  
Mode 3: omni mode Off, Poly

Mode 2: omni mode On, Mono  
Mode 4: omni mode Off, Mono

O : Yes  
X : No