MIDI Settings

MIDI Overview

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.

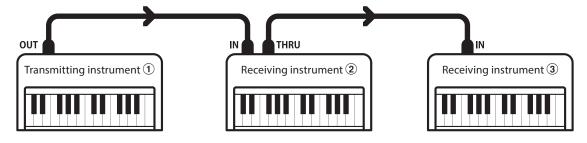
■ MIDI Terminals

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.



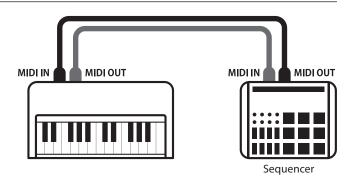
Transmitting instrument ① sends transmit channel and keyboard information to receiving instruments 2/3. The information arrives at the receiving instruments 2/3.

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, 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 (or a computer running MIDI sequencing software), the CN35 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 CN35 digital piano supports the following MIDI functions:

Transmit/receive note information

Transmit/receive note information to/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.

Transmit/receive program change information

Transmit/receive program change data to/from a MIDIconnected musical instrument or device.

Transmit/receive pedal data

Transmit/receive sustain, sostenuto, and soft pedal data to/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 10 for further information regarding the MIDI capabilities of the CN35 digital piano.

■ MIDI Settings

Page no.	Setting	Description	Default setting
4-1	MIDI Channel	Specify the channel that is used to transmit/receive MIDI information.	1
4-2	Send PGM Change #	Send a MIDI program change number from 1 to 128.	1
4-3	Local Control	Specify whether internal sounds will be heard when the keyboard is pressed.	On
4-4	Trans. PGM Change	Specify whether program change data is sent when sounds are changed.	On
4-5	Multi-timbral Mode	Specify whether the instrument can receive Multi-timbral MIDI information.	Off
	Channel Mute	Specify which channels (1-16) are activated to receive MIDI information.	Play All

^{*} Default settings will be shown in the first LCD display illustration (i.e. Step 1) for each setting explanation below.

■Entering the MIDI Settings menu

While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons to select the MIDI Settings menu, then press the VALUE ▲ button to enter the menu.

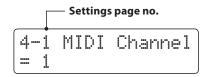
The first page of the MIDI Settings menu will be shown in the LCD display.

4 MIDI Settin9s →Press VALUE*

■ Selecting the desired setting

After entering the MIDI Settings menu:

Press the ∇ or \triangle MENU buttons to cycle through the different settings pages.



MIDI Settings

MIDI Channel

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).

1. Selecting the MIDI Channel setting

After entering the MIDI Settings menu (page 2):

The MIDI Channel setting will be selected automatically.

2. Changing the MIDI Channel value

Press the ▼ or ▲ VALUE buttons to decrease or increase the value of the MIDI Channel setting.

- * The MIDI Channel setting can be adjusted within the range of 1 16.
- * Any changes made to the MIDI Channel setting will remain until the power is turned off.
- * Preferred MIDI Channel settings can be stored to a Registration memory for convenient recall. Please refer to CN35 Owner's Manual page 34 for more information.



4-1 MIDI Channel = 5

3. Exiting the MIDI Channel setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the MIDI Channel setting and return to the main settings menu.

■Omni mode

When the CN35 digital piano is turned on, the instrument is automatically set to 'omni mode on', allowing MIDI information to be received on all MIDI channels (1-16). When the MIDI Channel setting is used to specify a transmit/receive channel, the instrument will be set to 'omni mode off'.

■ Multi-timbral mode and Split/Dual mode

Using Split mode with Multi-timbral mode enabled

Notes played in the lower section of the keyboard will be transmitted on the channel that is 1 channel higher than the specified channel. For example, if the MIDI channel is set to 3, notes played in the lower section of the keyboard will be transmitted on channel 4.

Using Dual mode with Multi-timbral mode enabled

Notes played will be transmitted on two channels: the specified channel and the channel that is 1 channel higher.

For example, if the MIDI channel is set to 3, notes played on the keyboard will be transmitted on channels 3 and 4.

^{*} If the specified MIDI channel is 16, the lower section / layered part will be transmitted on channel 1.

MIDI Settings

Send Program Change Number

The Send Program Change Number function is used to send a Program Change Number (1-128) to the connected MIDI device.

1. Selecting the Send Program Change Number function

After entering the MIDI Settings menu (page 2):

Press the \blacktriangledown or \blacktriangle MENU buttons to select the Send Program Change Number function.

2. Specifying and transmitting a Program Change Number

Press the \blacktriangledown or \blacktriangle VALUE buttons to decrease or increase the Program Change Number.

* The program change number can be set within the range of 1-128.

Press the \blacktriangledown and \blacktriangle VALUE buttons simultaneously to send the specified Program Change Number.

3. Exiting the Program Change Number function

Press the ▼ and ▲ MENU buttons simultaneously to exit the Program Change Number function and return to the main settings menu.

MIDI Settings

Local Control

The Local Control setting determines whether the instrument will play an internal sound when the keys are pressed. This setting is useful when using the CN35 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.

1. Selecting the Local Control setting

After entering the MIDI Settings menu (page 2):

Press the \blacktriangledown or \blacktriangle MENU buttons to select the Local Control setting.

2. Changing the Local Control setting

Press the ▼ or ▲ VALUE buttons to turn the Local Control setting on or off.

- * Any changes made to the Local Control setting will remain until the power is turned off.
- * Preferred Local Control settings can be stored to a Registration memory for convenient recall. Please refer to CN35 Owner's Manual page 34 for more information.



3. Exiting the Local Control setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Local Control setting and return to the main settings menu.

MIDI Settings

Transmit Program Change Numbers

The Transmit Program Change Numbers setting determines whether the CN35 digital piano will transmit program change information via MIDI when the instrument's panel buttons are pressed.

■ Transmit Program Change Numbers settings

Transmit PGM# Multi-timbral setting		Effect of pressing panel buttons		
On (default)	Off, On1	SOUND buttons will send PGM# shown in the left column*.		
On	On2	SOUND buttons will send PGM# shown in the right column*.		
Off	Off	Program Change information will not be transmitted via MIDI.		

^{*} Please refer to the 'Program Change Number List' on page 125 of "CN35 Owner's Manual".

1. Selecting the Transmit Program Change Numbers setting

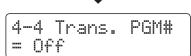
After entering the MIDI Settings menu (page 2):

Press the ▼ or ▲ MENU buttons to select the Transmit Program Change Numbers setting.

2. Changing the Transmit Program Change Numbers setting

Press the ▼ or ▲ VALUE buttons to turn the Transmit Program Change Numbers setting on or off.

- * Any changes made to the Transmit Program Change Numbers setting will remain until the power is turned off.
- * Preferred Transmit Program Change Numbers settings can be stored to a Registration memory for convenient recall. Please refer to CN35 Owner's Manual page 34 for more information.



■ Program Change Numbers and Dual/Split mode

- When using Dual or Split mode, On/Off information and sound type settings for are transmitted as exclusive data, however program change numbers will not be transmitted.
- Program change numbers will also be transmitted when Multi-timbral mode is set to On1 or On2.

MIDI Settings

Multi-timbral Mode

The Multi-timbral Mode setting determines whether or not the CN35 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-timbral Mode settings

Multi-timbral Mode	Effect on sound heard
Off	The sound shown in the left column is selected*.
On1 (default)	The sound shown in the left column is selected*.
On2	The sound shown in the right column is selected*.

^{*} Please refer to the 'Program Change Number List' on page 125 of "CN35 Owner's Manual".

1. Selecting the Multi-timbral Mode setting

After entering the MIDI Settings menu (page 2):

Press the \blacktriangledown or \blacktriangle MENU buttons to select the Multi-timbral Mode setting.

2. Changing the Multi-timbral Mode setting

Press the \blacktriangledown or \blacktriangle VALUE buttons to change the Multi-timbral Mode setting.

- * Any changes made to the Multi-timbral Mode setting will remain until the power is turned off.
- * Preferred Multi-timbral Mode settings can be stored to a Registration memory for convenient recall. Please refer to CN35 Owner's Manual page 34 for more information.



3. Exiting the Multi-timbral Mode setting

Press the \blacktriangledown and \blacktriangle MENU buttons simultaneously to exit the Multi-timbral Mode setting and return to the main settings menu.

MIDI Settings

Channel Mute

The Channel Mute setting determines which MIDI channels (1-16) are activated to receive MIDI information when Multi-timbral mode is enabled.

* This setting is only available when the Multi-timbral Mode setting is set to 'On1' or 'On2'.

■Channel Mute settings

Channel Mute	Description
Play (default)	The instrument will receive MIDI information on the specified MIDI channel.
Mute	The instrument will not receive MIDI information on the specified MIDI channel.

1. Selecting the Channel Mute setting

After setting the Multi-timbral Mode to 'On1' or 'On2':

Press the \blacktriangledown or \blacktriangle MENU buttons to select the Channel Mute setting for each MIDI channel.

2. Changing the Channel Mute setting

Press the ▼ or ▲ VALUE buttons to alternate between 'Play' and 'Mute' settings

- * Any changes made to the Channel Mute setting will remain until the power is turned off.
- * Preferred Channel Mute settings can be stored to a Registration memory for convenient recall. Please refer to CN35 Owner's Manual page 34 for more information.



3. Exiting the Channel Mute setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Channel Mute setting and return to the main settings menu.

MIDI Exclusive Data Format

1st byte	2nd byte	3rd byte	4th byte	5th byte	6th byte	7th byte	8th byte	9th byte	10th byte
1	2	3	4	5	6	7	8	9	10

Byte	ID	Description		
1	F0	tart code		
2	40	Kawai ID number		
3	00 - 0F	MIDI channel		
4	10, 30	unction code (30 when setting Multi-timbre On/Off)		
5	04	Indicates that the instrument is an electric piano		
6	02	Indicates that the piano is a CN model		
7	data 1			
8	data 2	See table below		
9	data 3			
10	F7	End code		

data 1	data 2	data 3	Function			
00	00	-	Multi-timbre Off			
02	00	-	Aulti-timbre On 1			
01	00	-	Multi-timbre On 2			
0F	15 - 6C	-	Split Point: A0 - C8			
14	00 - 7F	-	Dual/Split balance			
16	1F - 60	-	une, 40: 440 Hz			
17	00, 7F	-	00: Program Change Off, 7F: Program Chage On			
18	00 - 07	-	00: Light, 01: Normal, 02: Heavy, 03: Off, 04: Light +, 05: Heavy +, 06: User1, 07: User2			
19	00 - 03	-	Lower Octave Shift			
20	00 - 7F	00 - 7F	Dual, data 2: Main sound, data 3: Layer sound			
21	00 - 7F	00 - 7F	Split, data 2: Upper sound, data 3: Lower sound			
22	00 - 7F	00 -7F	Four Hands, data2: Right sound, data3: Left sound			
25	00 - 09	00 - 0B	data2: Temperament 00: Equal(Stretch Off), 01: Pure Major, 02: Pythagorean, 03: Meantone, 04: Werkmeister, 05: Kirnberger, 06: Equal(Stretch On), 07: Pure Minor, 08: Equal(Piano Only), 09:User, data3: Key			
26	00, 7F	00 - 0F	Multi-timbre, data 2: 00 (Mute), 7F (Play), data 3: Channel			
27	00 - 02	00 - 02	Dual/Split, Right (Upper)/Left (Lower), sound Bank LSB			

MIDI Implementation Chart

■ Kawai CN35 digital piano

Date: June 2014 Version: 1.0

F	unction	Transmit	Receive	Remarks
Basic channel	At power-up	1	1	
Dasic Chamilei	Settable	1 - 16	1 - 16	
	At power-up	Mode 3	Mode 1	* The default for the OMNI
Mode	Message	×	Mode 1, 3	mode is On.
	Alternative	******	×	Specifying MIDI channels automatically turns it Off.
		9 - 120**	0 - 127	** The value depends on the
Note number	Range	******	0 - 127	Transpose setting.
	Note on	0	0	
Velocity	Note off	0	0	
	Key specific	×	×	
After touch	Channel specific	×	0	
Ditab based	Channel specific	×	0	
Pitch bend	0, 32	0	0	Bank Select *1
	0, 32	×	0	Modulation
	5	×	0	Portament Time
	6, 38	×	Ö	Data Entry
	7	○ (*2)	0	Volume
	10	×	0	Panpot
	11	×	0	Expression Pedal
	64	○ (Right pedal)	0	Sustain Pedal
	65	×	0	Portament
	66	O (Center pedal)	0	Sostenuto Pedal
	67	○ (Left pedal)	0	Soft Pedal
	69	0	0	Hold 2
Control change	70	×	0	Sustain Level
-	71	_ I	_	Resonance
	72 73	×	0	Release Time Attack Time
	73 74	×	0	Cuttoff
	74 75	×	0	Decay Time
	76	×	Ö	Vibrato Speed
	77	×	Ö	Vibrato Depth
	78	×	Ö	Vibrato Delay
	84	×	Ö	Portament Control
	91	×	0	Reverb Send Level
	93	×	0	Chorus Send Level
	98, 99	×	0	NRPN LSB, MSB
	100, 101	X	0	RPN LSB, MSB
Program change		O 0-127	0	*1
	True	*****		
Exclusive		0	0	On/Off Selectable
	Song position	×	×	
Common	Song selection	×	×	
	Tune	×	×	
Real time	Clock	×	×	
	Commands	×	×	
Other functions	All sound Off	×	O (120)	
	Reset all controller	×	○ (121)	
	Local On / Off	×	0	
	All notes Off	×	O (123 - 127)	
	Active sensing	×	0	
	Reset	×	×	
1 Please refer to the Pr	neset		^	

^{*1} Please refer to the Program Change Number List on page 125 of "CN35 Owner's Manual".

Mode 1: omni mode On, Poly Mode 3: omni mode Off, Poly Mode 2: omni mode On, Mono Mode 4: omni mode Off, Mono ○ : Yes × : No

^{*2} When the Multi-timbral mode is ON, sound data is transmitted through the BALANCE slider.