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" is a registered trademark of the Association of Manufacturers of Electronic Instruments (AMEI).

■MIDI Terminals

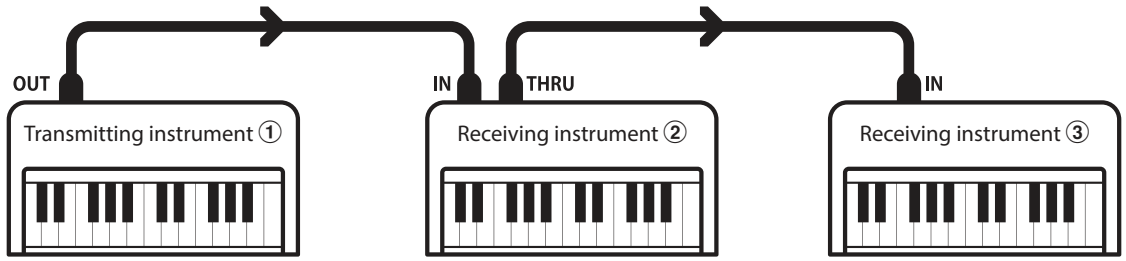
The MIDI has two types of terminals: MIDI IN and MIDI OUT. These terminals must be connected via dedicated cables.

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.

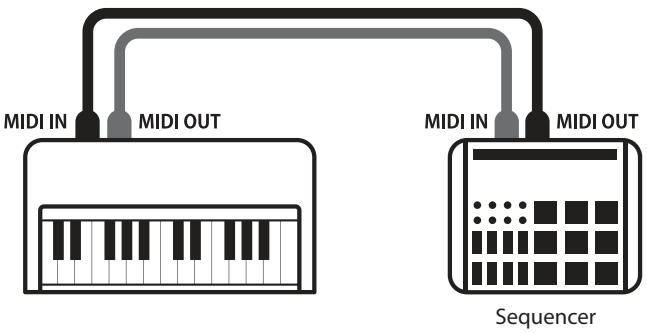


Transmitting instrument ① sends transmit channel and keyboard information to receiving instruments ②/③.
The information arrives at the receiving instruments ②/③.
Receiving instruments ②/③ will respond to MIDI data that is sent if their receive channel is the same as the transmit channel of the transmitting 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 ES920 digital piano can be used to record and playback multi-track songs, with separate sounds playing simultaneously on each channel.



MIDI Settings

■MIDI Functions

The ES920 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 program change information

Transmit/receive program change data 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 pedal data

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

Transmit/receive exclusive data

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

Receive volume data

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

Multi-timbral mode setting

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

* Please refer to the "MIDI Implementation Chart" on page 12 for further information regarding the MIDI capabilities of the ES920 digital piano.

■MIDI Settings

Page no.	Setting	Description	Default setting
6-1	MIDI Channel	Specify the channel that is used to transmit/receive MIDI information.	1
6-2	Send PGM Change #	Send a MIDI program change number from 1 to 128.	1
6-3	Local Control	Specify whether internal sounds will be heard when the keyboard is pressed.	On
6-4	Trans. PGM Change	Specify whether program change data is sent when sounds are changed.	On
6-5	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

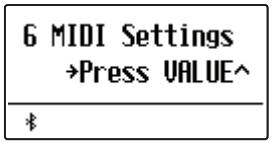
* Default settings will be shown in the first OLED display illustration (i.e. Step 1) for each setting explanation below.

■Entering the MIDI Settings menu

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

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

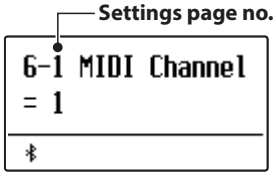
The first page of the MIDI Settings menu will be shown in the OLED display.



■Selecting the desired setting

After entering the MIDI Settings menu:

Press the ∨ or ∧ MENU buttons to cycle through the different settings pages.



MIDI Settings

6-1 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).

■Changing the MIDI Channel value

After entering the MIDI Settings menu (page 2):

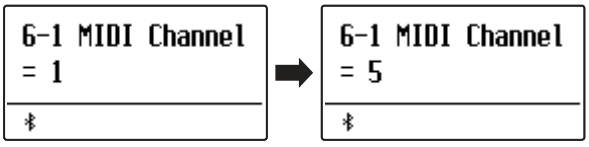
The MIDI Channel setting will be selected automatically.

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 ES920 Owner's Manual page 36 for more information.

Press the EXIT button to exit the MIDI Channel setting and return to the main settings menu.



■Omni mode

When the ES920 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".
Press the ∨ and ∧ VALUE buttons simultaneously to reset the set channel and return to "omni mode on".

■Multi-timbral mode and Split/Dual mode

Using Split mode with Multi-timbral mode enabled	Using Dual 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.	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

6-2 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.

■Specifying and transmitting a Program Change Number

After entering the MIDI Settings menu (page 2):

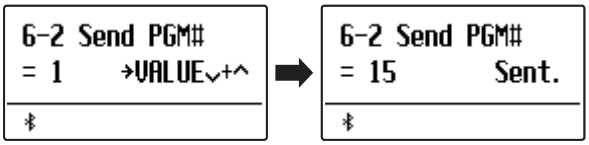
Press the ∨ or ∧ MENU buttons to select the Send Program Change Number function.

Press the ∨ or ∧ 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 ∨ and ∧ VALUE buttons simultaneously to send the specified Program Change Number.

Press the EXIT button to exit the Program Change Number function and return to the main settings menu.



MIDI Settings

6-3 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 ES920 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

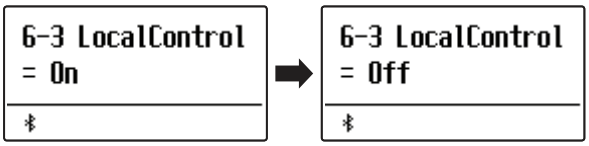
After entering the MIDI Settings menu (page 2):

Press the ∨ or ∧ MENU buttons to select 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 ES920 Owner's Manual page 36 for more information.

Press the EXIT button to exit the Local Control setting and return to the main settings menu.



6-4 Transmit Program Change Numbers

The Transmit Program Change Numbers setting determines whether the ES920 digital piano will transmit program change information via MIDI when the instrument's panel buttons are pressed.
Apart from the sound button setting, the multi-timbral setting, tuning setting, temperament setting, and channel mute setting can also be transmitted as MIDI exclusive data.

■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.

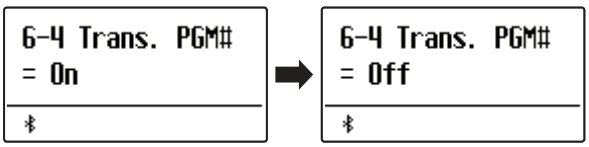
* Please refer to the "Program Change Number List" on page 9.

■Changing 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.

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 ES920 Owner's Manual page 36 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.

6-5 Multi-timbral Mode

The Multi-timbral Mode setting determines whether or not the ES920 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 (default)	Only data received from the designated system channel will be sent to the panel setting. The sound shown in the left column is selected*.
On1	Data received from all MIDI channels (ch1~ch16) will be sent to 16 multi timbral tracks. The sound shown in the left column is selected*.
On2	Data received from all MIDI channels (ch1~ch16) will be sent to 16 multi timbral tracks. The sound shown in the right column is selected*.

* Please refer to the "Program Change Number List" on page 9.

■Changing the Multi-timbral Mode setting

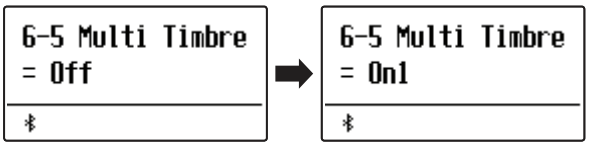
After entering the MIDI Settings menu (page 2):

Press the ∨ or ∧ MENU buttons to select the Multi-timbral Mode setting.

Press the ∨ or ∧ 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 ES920 Owner's Manual page 36 for more information.

Press the EXIT button 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.

■Changing the Channel Mute setting

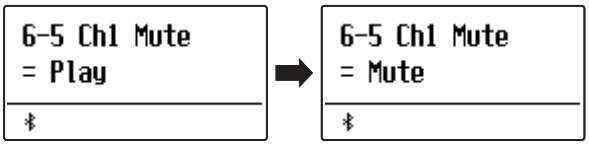
After setting the Multi-timbral Mode to "On1" or "On2":

Press the ∨ or ∧ MENU buttons to select the Channel Mute setting for each MIDI channel.

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 ES920 Owner's Manual page 36 for more information.

Press the EXIT button to exit the Channel Mute setting and return to the main settings menu.



Program Change Number List

Sound Name	Multi-timbral mode = off/on1	Multi-timbral mode = on2		
	Program Number	Program Number	Bank MSB	Bank LSB
PIANO1				
SK ConcertGrand	1	1	121	0
EX ConcertGrand	2	1	95	27
Jazz Clean	3	1	121	1
Warm Grand	4	1	121	2
Pop Grand	5	1	95	28
PIANO2				
SK-5 GrandPiano	6	1	95	30
Upright Piano	7	1	95	25
Pop Grand 2	8	1	95	31
Modern Piano	9	2	121	0
Rock Piano	10	2	121	1
E.PIANO				
Classic E.Piano	11	5	121	0
Classic E.P. 2	12	5	95	5
Classic E.P. 3	13	5	121	1
60's E.Piano	14	5	121	3
60's E.Piano 2	15	5	95	7
Modern E.Piano	16	6	121	0
ORGAN				
Jazz Organ	17	18	121	0
Drawbar Organ	18	17	121	0
Ballad Organ	19	17	95	5
Principal Oct.	20	20	95	24
Church Organ	21	20	121	0
HARPSI/MALLETS				
Harpsichord	22	7	121	0
Vibraphone	23	12	121	0
Clavi	24	8	121	0
Marimba	25	13	121	0
STRINGS/CHOIR				
String Ensemble	26	49	121	0
Slow Strings	27	45	95	1
String Pad	28	49	95	8
Warm Strings	29	49	95	1
Choir Ooh/Aah	30	54	95	53
Pop Ensemble	31	54	95	7
Square Pad	32	90	95	5
New Age Pad	33	89	121	0
BASS				
Electric Bass	34	34	121	0
Electric Bass 2	35	34	95	4
Electric Bass 3	36	34	95	5
Wood Bass	37	33	121	0
W. Bass & Ride	38	33	95	1

Program Change Number List

■MIDI

* RS = Rhythm Section / Selectable when Multi-timbral Mode = On1 / On2

Sound Name	Multi-timbral mode = off/on1	Multi-timbral mode = on2		
	Program Number	Program Number	Bank MSB	Bank LSB
Concert Grand	39	1	95	22
Studio Grand	40	1	95	23
Studio Grand 2	41	1	95	24
Classic E.P.	42	5	95	3
Vibraphone	43	12	121	1
String Ensemble	44	49	95	2
Wood Bass	45	33	95	2
Electric Bass	46	34	95	1
Fretless Bass	47	36	95	1
Drawbar Organ 3	48	17	95	1
Jazzer	49	18	95	1
Perc. Organ	50	18	121	1
Rock Organ	51	19	121	0
Nylon Acoustic	52	25	121	0
Ballad Guitar	53	26	95	6
Modern Jazz Gtr	54	27	95	10
Cutting Guitar	55	28	95	3
Cutting Guitar3	56	28	95	5
Muted Electric	57	29	121	0
OverdriveGuitar	58	30	121	0
Wood Bass 4	59	33	95	5
Electric Bass 3	60	34	95	6
FingerSlap Bass	61	34	121	1
Pick Bass	62	35	121	0
Synth Bass 2	63	40	121	0
Synth Bass 4	64	40	121	1
Strings sf.	65	49	95	9
StringEnsemble2	66	50	121	0
Euro Hit	67	56	121	3
Synth Brass	68	63	121	0
Jump Brass	69	63	121	3
SequencedAnalog	70	82	121	4
Bright Warm Pad	71	90	95	1
Bowed	72	93	121	0
Multi Sweep	73	96	95	1
Brightness 2	74	101	95	1
GtrCuttingNoise	75	121	121	1
CuttingNoise 2	76	121	95	1
Analog Set	77	26	120	0
Ambience Set	78	33	120	0
Platinum Set	79	1	120	0
Ballad Set	80	9	120	0

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	Start code
2	40	Kawai ID number
3	00 - 0F	MIDI channel
4	10, 30	Function code (30 when setting Multi-timbre On/Off)
5	04	Indicates that the instrument is an electric piano
6	21	Indicates that the piano is a ES920 model
7	data 1	See table below
8	data 2	
9	data 3	
10	F7	End code

data 1	data 2	data 3	Function
00	00	-	Multi-timbre Off
01	00	-	Multi-timbre On 1
02	00	-	Multi-timbre On 2
0F	00 - 7F	-	Split Point: A0 - C8
14	00 - 7F	-	Dual/Split balance
16	1F - 60	-	Tune, 40: 440 Hz
17	00, 7F	-	00: Program Change Off, 7F: Program Chage On
19	00 - 03	-	Lower Octave Shift
20	00 - 25	00 - 25	Dual, data 2: Right sound, data 3: Left sound
21	00 - 25	00 - 25	Split, data 2: Upper sound, data 3: Lower sound
25	00 - 08	00 - 0B	data2: Temperament 00 : Equal, 01 : Pure Major, 02 : Pythagorean, 03 : Meantone, 04 : Werkmeister, 05 : Kirnberger, 07 : Pure Minor, 09 : User data3: Key
26	00, 7F	00 - 0F	Multi-timbre, data 2: 00 (Mute), 7F (Play), data 3: Channel

MIDI Implementation Chart

■Kawai ES920 digital piano

Date: May 2020 Version: 1.0

Function		Transmit	Receive	Remarks
Basic channel	At power-up	1	1	
	Settable	1 - 16	1 - 16	
Mode	At power-up	Mode 3	Mode 1	* The default for the OMNI mode is On. Specifying MIDI channels automatically turns it Off.
	Message	×	Mode 1, 3	
	Alternative	*********	×	
Note number		9 - 120**	0 - 127	** The value depends on the Transpose setting.
	Range	*********	0 - 127	
Velocity	Note on	○	○	
	Note off	○	○	
After touch	Key specific	×	×	
	Channel specific	×	×	
Pitch bend		×	×	
Control change	0, 32	○	○	Bank Select *1
	7	×	○	Volume
	10	×	○	Panpot
	11	×	○	Expression Pedal
	64	○	○	Sustain Pedal
	66	○ *2	○	Sostenuto Pedal
	67	○ *2	○	Soft Pedal
Program change		○ 0-127	○	*1
	True	********		
Exclusive		○	○	On/Off Selectable
Common	Song position	×	×	
	Song selection	×	×	
	Tune	×	×	
Real time	Clock	×	×	
	Commands	×	×	
Other functions	Local On / Off	×	○	
	All notes Off	×	○ (123 - 127)	
	Active sensing	×	○	
	Reset	×	×	

*1 Please refer to the Program Change Number List on page 9.
*2 Applicable only when the optional GFP-3 or F-302 triple pedal unit is connected.

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

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