

Electone® *STAGEA*®

ELS-02

ELS-02C

MIDI Reference

Contents

MIDI Data Format	2
MIDI Implementation Chart	15

MIDI Data Format

1. Channel Messages

“x” indicates “Not available.”

“O” indicates “Available.”

1.1 EL Mode

Code (Hexadecimal)	Function	Receive	Transmit	Remarks
8n, nn, 00-7F	Note Off	1ch 2ch 3ch (4ch)* 5-14ch 15ch	x x x x x x	UK LK PEDAL LEAD 1 XG Keyboard Percussion
9n, nn, 00 9n, nn, 01-7F	Note Off Note On	1ch 2ch 3ch (4ch)* 5-14ch 15ch	(1ch)* (2ch)* (3ch)* x x x	UK LK PEDAL LEAD 1 XG Keyboard Percussion
An, nn, 00-7F	Polyphonic After Touch	5-14ch	x	XG
Bn, 00, 00-7F Bn, 20, 00-7F	Bank select	5-14ch	x	XG
Bn, 01, 00-7F	Modulation	5-14ch	x	XG
Bn, 04, 00-7F	2nd Expression	16ch (4ch)*	16ch (4ch)**	Control LEAD 1 (ELS-02C only transmitted)
Bn, 05, 00-7F	Portamento Time	5-14ch	x	XG
Bn, 06, 00-7F Bn, 26, 00-7F	Data Entry	5-14ch	x	XG
Bn, 07, 00-7F	Volume	5-14ch	x	XG
Bn, 0A, 00-7F	Pan	5-14ch	x	XG
Bn, 0B, 00-7F	Expression	16ch 5-14ch	(16ch)*	Control XG
Bn,10, 00-7F	VA After Touch	1ch	(1ch)*	UK (ELS-02C only)
Bn, 40, 00-7F	Hold	5-14ch	x	XG
Bn, 41, 00-7F	Portamento	5-14ch	x	XG
Bn, 42, 00-7F	Sostenuto	5-14ch	x	XG
Bn, 43, 00-7F	Soft Pedal	5-14ch	x	XG
Bn, 47, 00-7F	Resonance	5-14ch	x	XG
Bn, 48, 00-7F	Release Time	5-14ch	x	XG
Bn, 49, 00-7F	Attack Time	5-14ch	x	XG
Bn, 4A, 00-7F	Brightness	5-14ch	x	XG
Bn, 4B, 00-7F	Decay Time	5-14ch	x	XG
Bn, 4C, 00-7F	Vibrato Rate	5-14ch	x	XG
Bn, 4D, 00-7F	Vibrato Depth	5-14ch	x	XG
Bn, 4E, 00-7F	Vibrato Delay	5-14ch	x	XG
Bn, 54, 00-7F	Portamento Control	5-14ch	x	XG
Bn, 5B, 00-7F	Reverb Send Level	5-14ch	x	XG
Bn, 5D, 00-7F	Chorus Send Level	5-14ch	x	XG
Bn, 5E, 00-7F	Variation Effect Send Level	5-14ch	x	XG
Bn, 60, 00-7F Bn, 61, 00-7F	Data Increment Data Decrement	5-14ch	x	XG
Bn, 62, 00-7F Bn, 63, 00-7F	NRPN LSB NRPN MSB	5-14ch	x	XG

Code (Hexadecimal)	Function	Receive	Transmit	Remarks
Bn, 64, 00-7F Bn, 65, 00-7F	RPN LSB RPN MSB	5-14ch	×	XG
Bn, 78, 00 Bn, 79, 00 Bn, 7B, 00 Bn, 7C, 00 Bn, 7D, 00 Bn, 7E, 00 Bn, 7F, 00	All Sound Off Reset All Controllers All Note Off Omni Off Omni On Mono Poly	5-14ch	×	XG
Cn, nn	Program Change	5-14ch 16ch	×	XG Control
Dn, 00-7F	After Touch	1ch 2ch 3ch (4ch)* 5-14ch	(1ch)* (2ch)* (3ch)*	UK LK PEDAL LEAD 1 XG
En, 00-7F, 00-7F	Pitch Bend	1ch 2ch (4ch)* ×	(1ch)* (2ch)* ×	UK LK LEAD 1 2nd Expression (ELS-02C only) XG
		×	(1-16ch)* ×	

* Can be changed in the MIDI settings.

** Can be output when assigned to channel 4.

1.2 XG Mode

Code (Hexadecimal)	Function	Receive	Transmit	Remarks
8n, nn, 00-7F	Note Off	1-16ch	×	
9n, nn, 00 9n, nn, 01-7F	Note On Note Off		(1ch)* (2ch)* (3ch)*	UK LK PEDAL
		1-16ch		
An, nn, 00-7F	Polyphonic After Touch	1-16ch	×	
Bn, 00, 00-7F Bn, 20, 00-7F	Bank select	1-16ch	×	
Bn, 01, 00-7F	Modulation		×	
		1-16ch		
Bn, 04, 00-7F	2nd Expression	×	16ch (4ch)**	Control LEAD 1 (ELS-02C only)
Bn, 05, 00-7F	Portamento Time	1-16ch	×	
Bn, 06, 00-7F Bn, 26, 00-7F	Data Entry	1-16ch	×	
Bn, 07, 00-7F	Volume	1-16ch	×	
Bn, 0A, 00-7F	Pan	1-16ch	×	
Bn, 0B, 00-7F	Expression		(16ch)*	Control
		1-16ch		
Bn,10, 00-7F	VA After Touch	×	(1ch)*	UK (ELS-02C only)
Bn, 40, 00-7F	Hold	1-16ch	×	
Bn, 41, 00-7F	Portamento	1-16ch	×	
Bn, 42, 00-7F	Sostenuto	1-16ch	×	
Bn, 43, 00-7F	Soft Pedal	1-16ch	×	
Bn, 47, 00-7F	Resonance	1-16ch	×	
Bn, 48, 00-7F	Release Time	1-16ch	×	
Bn, 49, 00-7F	Attack Time	1-16ch	×	
Bn, 4A, 00-7F	Brightness	1-16ch	×	
Bn, 4B, 00-7F	Decay Time	1-16ch	×	
Bn, 4C, 00-7F	Vibrato Rate	1-16ch	×	

Code (Hexadecimal)	Function	Receive	Transmit	Remarks
Bn, 4D, 00-7F	Vibrato Depth	1-16ch	×	
Bn, 4E, 00-7F	Vibrato Delay	1-16ch	×	
Bn, 54, 00-7F	Portamento Control	1-16ch	×	
Bn, 5B, 00-7F	Reverb Send Level	1-16ch	×	
Bn, 5D, 00-7F	Chorus Send Level	1-16ch	×	
Bn, 5E, 00-7F	Variation Effect Send Level	1-16ch	×	
Bn, 60, 00-7F	Data Increment	1-16ch	×	
Bn, 61, 00-7F	Data Decrement			
Bn, 62, 00-7F	NRPN LSB	1-16ch	×	
Bn, 63, 00-7F	NRPN MSB			
Bn, 64, 00-7F	RPN LSB	1-16ch	×	
Bn, 65, 00-7F	RPN MSB			
Bn, 78, 00	All Sound Off	1-16ch	×	
Bn, 79, 00	Reset All Controllers			
Bn, 7B, 00	All Note Off			
Bn, 7C, 00	Omni Off			
Bn, 7D, 00	Omni On			
Bn, 7E, 00	Mono			
Bn, 7F, 00	Poly			
Cn, 00-7F	Program Change	1-16ch	16ch	Control
Dn, 00-7F	After Touch	1-16ch	(1ch)* (2ch)* (3ch)*	UK LK PEDAL
En, 00-7F, 00-7F	Pitch Bend	1-16ch	(1ch)* (2ch)* (1-16ch)* ×	UK LK 2nd Expression (ELS-02C only)

* Can be changed in the MIDI settings.

** Can be output when assigned to channel 4.

2. Realtime Messages

Code (Hexadecimal)	Function	Receive	Transmit	Remarks
F8	Clock	○*	○	
FA	Start	○	○	
FC	Stop	○	○	
FE	Active Sensing	○	○	
FF	Reset	×	×	

* Received only when in the Ext. mode

3. System Exclusive Messages

3.1 Format

Universal Realtime Messages

Code (Hexadecimal)	Message	Receive	Transmit
F0, 7F, 7F, 04, 01, SS, TT, F7 XN	GM2 Master Volume	○	×
F0, 7F, 7F, 04, 03, SS, TT, F7 XN	GM2 Master Fine Tuning	○	×
F0, 7F, 7F, 04, 04, 00, TT, F7 XN	GM2 Master Coarse Tuning	○	×
F0, 7F, 7F, 04, 05, 01, 01, 01, 01, 01, PP, VV, ..., F7 XN	GM2 Reverb Parameter	○	×
F0, 7F, 7F, 04, 05, 01, 01, 01, 01, 02, PP, VV, ..., F7 XN	GM2 Chorus Parameter	○	×
F0, 7F, 7F, 09, 01, 0n, PP, VV, ..., F7 XN	GM2 After Touch Parameter	○	×
F0, 7F, 7F, 09, 03, 0n, CC, PP, VV, ..., F7 XN	GM2 Control Change Parameter	○	×
F0, 7F, 7F, 0A, 01, 0n, KK, CC, PP, VV, ..., F7 XN	GM2 Key-Based Controller	○	×

Universal Non-Realtime Messages

Code (Hexadecimal)	Message	Receive	Transmit
F0, 7E, 7F, 09, 01, F7 XN	GM ON	○	×
F0, 7E, 7F, 09, 03, F7 XN	GM2 ON	○	×
F0, 7E, 7F, 09, 02, F7 XN	GM OFF	○	×
F0, 7E, 7F, 08, 08, JJ, GG, MM, ..data..., F7 XN	GM2 Scale/Octave Tuning	○	×

XG Native

Code (Hexadecimal)	Message	Receive	Transmit
F0, 43, 1N, 4C, AH, AM, AL, ..data..., F7	XG Parameter Change	○	×
F0, 43, 0N, 4C, BH, BL, AH, AM, AL, ..data..., cc, F7	XG Bulk Dump	○	×
F0, 43, 1N, 27, 30, 00, 00, MM, LL, cc, F7	XG Master Tuning	○	×

Clavinova Exclusive

Code (Hexadecimal)	Message	Receive	Transmit
F0, 43, 73, 01, 02, F7 03	Request for Internal Sync. Mode	○	×
	Request for External Sync. Mode	○	×

Message Exclusive

Code (Hexadecimal)	Message	Receive	Transmit
F0, 43, 60, 7A, F7	Rhythm Start	○	×
F0, 43, 60, 7D, F7	Rhythm Stop	○	×

Electone Exclusive

Code (Hexadecimal)	Message	Receive	Transmit
F0, 43, 70, ID, 00, F7	Model ID Data	×	○
F0, 43, 70, 70, 30, F7	Request-to-Send Model ID Data	○	×
F0, 43, 70, 70, 40, nn(*1), 7F, F7 00	Switch ON Switch OFF	○ ○	○ ○
F0, 43, 70, 70, 40, 50, TL, TH, F7	Tempo	○	○
F0, 43, 70, 78, 41, cc, dd, F7(*2)	Panel Switch Events	○	○
F0, 43, 70, 78, 42, 3C, ...data..., F7	Current Registration Data	○	○
F0, 43, 70, 78, 44, ...data...(*3), F7	MIDI Parameters	○	○
F0, 43, 70, 70, 70, nn(*4), F7	MDR	○	×
F0, 43, 70, 70, 73, F7	EL ON	○	×
F0, 43, 70, 70, 78, 00, 00, F7	Bar Signal	×	○

×: don't care

N: Device Number ("0" on ELS-02/ELS-02C)

ID: Model ID (ELS-02=53, ELS-02C=54)

*1. Switches

nn	Switch	Receive	Transmit
45H	Left Footswitch	○	○
47H	Knee Lever	○	○

*2. Panel Switch Events

MIDI Exclusive Format

F0, 43, 70, 78, 41, cc, dd, F7

Selectors

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
0F	Registration Memory [1-16]	○	[00-0F]	×	-	

Volume

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
12	Upper Keyboard Voice 1 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
13	Lower Keyboard Voice 1 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
14	Upper Keyboard Voice 2 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
15	Lower Keyboard Voice 2 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
16	Lead Voice 1 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
17	Pedal Voice 1 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
18	Pedal Voice 2 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
19	Lead Voice 2 Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
1A	Percussion Volume	○	[00-7F]	○	[00-7F]	Volume Data 00: MAX, 7F: MIN
1B	Reverb Depth	○	[00-7F]	○	[00-7F]	Depth Data 00: MAX, 7F: MIN

Organ Flute Voice

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
30	Upper Organ Flute Voice [U. ORGAN FLUTES]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
31	Lower Organ Flute Voice [L. ORGAN FLUTES]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

To Lower

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
36	Lead Voice 1 To Lower [TO LOWER ▼]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
37	Pedal Voice 1 To Lower [TO LOWER ▲]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
38	Pedal Voice 2 To Lower [TO LOWER ▲]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

Solo Mode

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
39	Lead Voice 2 Solo (Knee) [SOLO (KNEE)]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

Brilliance

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
42	Upper Keyboard Voice 1 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
43	Lower Keyboard Voice 1 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
44	Upper Keyboard Voice 2 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
45	Lower Keyboard Voice 2 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
46	Lead Voice 1 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
47	Pedal Voice 1 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
48	Pedal Voice 2 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW
49	Lead Voice 2 Brilliance	○	[00-06]	○	[00-06]	00: BRILLIANT, 06: MELLOW

Sustain

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
50	Upper Sustain [UPPER (KNEE)]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
51	Lower Sustain [LOWER (KNEE)]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
52	Pedal Sustain [PEDAL]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

Solo Bar

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
59	Solo Bar	○	[00-01]	×	-	00: OFF, 01: ON

Keyboard Percussion

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
5B	Keyboard Percussion [1]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
5C	Keyboard Percussion [2]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

Disable

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
5F	Disable [D.]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

Rotary Speaker

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
60	Rotary Speaker Speed [ROTARY SP SPEED]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

Rhythm Sequence

cc	Switch	dd				Remarks
		Receive	Rx Range	Transmit	Tx Range	
61	Sequence 1 [SEQ.1]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
62	Sequence 2 [SEQ.2]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
63	Sequence 3 [SEQ.3]	○	[00-01]	○	[00-01]	00: OFF, 01: ON
64	Sequence 4 [SEQ.4]	○	[00-01]	○	[00-01]	00: OFF, 01: ON

*3. MIDI Parameter

Voice Section Parameters

Panel Voice Parameters

(Address mm: 0 – 7 = UK1, UK2, LK1, LK2, LEAD 1, LEAD 2, PEDAL 1, PEDAL 2)

MIDI Exclusive Format

F0, 43, 70, 78, 44, hh, mm, ll, ..., F7

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
10	00-07	00-0D	5	00-7F 00-7F 00-02 00-7F 00-0F	Voice Assign Number	00-7F 00-7F 00-02 00-7F 00-0F	○	00-7F 00-7F 00-02 00-7F 00-0F	○	00-7F 00-7F 00-02 00-7F 00-0F
10	00-07	10	1	00-0D	Voice Selector Number	00-0D	○	00-0D	○	00-0D
10	00-07	11	1	00-7F	Volume	00: MIN 7F: MAX	○	00-7F	×	-
10	00-07	12	1	00-7F	Reverb (Send Level)	00: MIN 7F: MAX	○	00-7F	○	00-7F
10	00-07	13	1	00-7F	Brilliance	00: BRILLIANT 40: CENTER 7F: MELLOW	○	00-7F	×	-
10	00-07	14	1	00-04	Feet	00: PRESET 01: 16' 02: 8' 03: 4' 04: 2'	○	00-7F	○	00-04
10	00-07	15	1	00-7F	Pan	00: LEFT 40: CENTER 7F: RIGHT	○	00-7F	○	08-78
10	00-07	16	1	00-7F	Touch Tone Initial Touch	00: MIN 7F: MAX	○	00-7F	○	00-7F
10	00-07	17	1	00-7F	Touch Tone After Touch	00: MIN 7F: MAX	○	00-7F	○	00-7F
10	00-07	18	1	00-7F	Pitch After Touch	00: NARROW 7F: WIDE	○	00-7F	○	32-4E
10	00-07	19	1	00-7F	User Vibrato	00: PRESET 01: USER	○	00-7F	○	00-01
10	00-07	1A	1	00-7F	Vibrato Delay	00: SHORT 7F: LONG	○	00-7F	○	02-1A
10	00-07	1B	1	00-7F	Vibrato Depth	00: MIN 7F: MAX	○	00-7F	○	00-54
10	00-07	1C	1	00-7F	Vibrato Speed	00: SLOW 7F: FAST	○	00-7F	○	3C-6C
10	00-05	1D	1	00-7F	Pitch Horizontal Touch	00: NARROW 7F: WIDE	○	00-7F	○	00-7F
10	00-07	1E	1	00-7F	Touch Vibrato (On/Off)	00: OFF 7F: ON	○	00-7F	○	00-7F
10	04-07	1F	1	00-7F	TO LOWER ▲▼/SOLO (KNEE)	00: OFF 01: ON	○	00-7F	×	-
10	04-05	20	1	00-02	Slide (On/Knee Lever/Off)	00: OFF 01: ON 02: Knee Lever	○	00-02	○	00-02

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
10	04-05	21	1	00-7F	Slide Time	00: FAST 7F: SLOW	○	00-7F	○	02-7F
10	00-07	22	1	00-7F	Tune/Detune	00: Down 40: Center 7F: Up	○	00-7F	○	00-7F
10	00-01/ 04-07	23	1	00-7F	2nd Expression Pitch Bend	00: OFF 01: ON	○	00-7F	○	00-01
10	00-05	24	1	00-7F	Footswitch Glide Control	00: OFF 01: ON	○	00-7F	○	00-01
10	00-07	25	1	3A-46	Transpose	3A: KeyDown 40: Normal 46: KeyUp	○	3A-46	○	3A-46
10	06-07	28	1	00-7F	Poly (On/Off)	00: Mono 01: Poly	○	00-7F	○	00-01
10	05	29	1	00-7F	Priority (Last/Top)	00: TOP 01: LAST	○	00-7F	○	00-01
10	00-07	2A	1	00-7F	Volume Mute	00: Mute OFF 01: Mute ON	○	00-7F	○	00-01
10	00-07	40	3	00 00-7F 00-7F	Effect 1 Type MSB/LSB	00 00-7F 00-7F	○	00 00-7F 00-7F	○	00 00-7F 00-7F
10	00-07	41	2	0000-7F7F	Effect 1 Parameter 1 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	42	2	0000-7F7F	Effect 1 Parameter 2 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	43	2	0000-7F7F	Effect 1 Parameter 3 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	44	2	0000-7F7F	Effect 1 Parameter 4 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	45	2	0000-7F7F	Effect 1 Parameter 5 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	46	2	0000-7F7F	Effect 1 Parameter 6 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	47	2	0000-7F7F	Effect 1 Parameter 7 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	48	2	0000-7F7F	Effect 1 Parameter 8 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	49	2	0000-7F7F	Effect 1 Parameter 9 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	4A	2	0000-7F7F	Effect 1 Parameter 10 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	4B	2	0000-7F7F	Effect 1 Parameter 11	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	4C	2	0000-7F7F	Effect 1 Parameter 12	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	4D	2	0000-7F7F	Effect 1 Parameter 13	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	4E	2	0000-7F7F	Effect 1 Parameter 14	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	4F	2	0000-7F7F	Effect 1 Parameter 15	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	50	2	0000-7F7F	Effect 1 Parameter 16	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	51	3	00 00-7F 00-7F	Effect 2 Type MSB/LSB	00 00-7F 00-7F	○	00 00-7F 00-7F	○	00 00-7F 00-7F
10	00-07	52	2	0000-7F7F	Effect 2 Parameter 1 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	53	2	0000-7F7F	Effect 2 Parameter 2 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	54	2	0000-7F7F	Effect 2 Parameter 3 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	55	2	0000-7F7F	Effect 2 Parameter 4 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	56	2	0000-7F7F	Effect 2 Parameter 5 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	57	2	0000-7F7F	Effect 2 Parameter 6 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	58	2	0000-7F7F	Effect 2 Parameter 7 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	59	2	0000-7F7F	Effect 2 Parameter 8 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	5A	2	0000-7F7F	Effect 2 Parameter 9 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	5B	2	0000-7F7F	Effect 2 Parameter 10 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	5C	2	0000-7F7F	Effect 2 Parameter 11	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	5D	2	0000-7F7F	Effect 2 Parameter 12	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	5E	2	0000-7F7F	Effect 2 Parameter 13	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	5F	2	0000-7F7F	Effect 2 Parameter 14	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	60	2	0000-7F7F	Effect 2 Parameter 15	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	61	2	0000-7F7F	Effect 2 Parameter 16	0000-7F7F	○	0000-7F7F	○	0000-7F7F
10	00-07	63	1	00-7F	Sustain Length	7F: Hold 7E: Long 00: Short	○	00-7F	○	00-7F

MIDI Data Format

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
10	00-07	64	1	00-02	ARTICULATION FOOT SW LEFT	00: OFF 01: ART.1 02: ART.2	○	00-02	○	00-02
10	00-07	65	1	00-7F	ARTICULATION AUTO	01: ON 00: OFF	○	00-7F	○	00-7F

Organ Flute Voice Parameters (Address mm: 0 – 1 = UK, LK)

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
11	00-01	00	1	00-7F	Footage 16'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	01	1	00-7F	Footage 8'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	02	1	00-7F	Footage 5-1/3'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	03	1	00-7F	Footage 4'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	04	1	00-7F	Footage 2-2/3'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	05	1	00-7F	Footage 2'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	06	1	00-7F	Footage 1-3/5'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	07	1	00-7F	Footage 1-1/3'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	08	1	00-7F	Footage 1'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	09	1	00-7F	Response	00: FAST 7F: SLOW	○	00-7F	○	00-7F
11	00-01	0A	1	00-7F	Attack 4'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	0B	1	00-7F	Attack 2-2/3'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	0C	1	00-7F	Attack 2'	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	0D	1	00-7F	Attack Length	00: Short 7F: Long	○	00-7F	○	00-7F
11	00-01	10	1	00-7F	Organ Flutes (On/Off)	00: OFF 01: ON	○	00-7F	×	-
11	00-01	11	1	00-7F	Volume	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	12	1	00-7F	Reverb (Send Level)	00: MIN 7F: MAX	○	00-7F	○	00-7F
11	00-01	13	1	00-7F	Type (Sine/Vintage/Euro)	00: Sine 01: Vintage 02: Euro	○	00-7F	○	00-02
11	00-01	19	1	00-7F	Vibrato On/Off	00: OFF 01: ON	○	00-7F	○	00-01
11	00-01	1B	1	00-7F	Vibrato Depth	00: MIN 7F: MAX	○	00-7F	○	00-02
11	00-01	1C	1	00-7F	Vibrato Speed	7F: Fast 00: Slow	○	00-7F	○	00-3F
11	00-01	40	3	00 00-7F 00-7F	Effect Type MSB/LSB	00 00-7F 00-7F	○	00 00-7F 00-7F	○	00 00-7F 00-7F
11	00-01	41	2	0000-7F7F	Effect Parameter 1 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	42	2	0000-7F7F	Effect Parameter 2 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	43	2	0000-7F7F	Effect Parameter 3 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	44	2	0000-7F7F	Effect Parameter 4 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	45	2	0000-7F7F	Effect Parameter 5 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	46	2	0000-7F7F	Effect Parameter 6 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	47	2	0000-7F7F	Effect Parameter 7 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	48	2	0000-7F7F	Effect Parameter 8 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	49	2	0000-7F7F	Effect Parameter 9 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
11	00-01	4A	2	0000-7F7F	Effect Parameter 10 MSB/LSB	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	4B	2	0000-7F7F	Effect Parameter 11	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	4C	2	0000-7F7F	Effect Parameter 12	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	4D	2	0000-7F7F	Effect Parameter 13	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	4E	2	0000-7F7F	Effect Parameter 14	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	4F	2	0000-7F7F	Effect Parameter 15	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	50	2	0000-7F7F	Effect Parameter 16	0000-7F7F	○	0000-7F7F	○	0000-7F7F
11	00-01	63	1	00-7F	Sustain Length	7F: Hold 7E: Long 00: Short	○	00-7F	○	15-3D, 7F

Keyboard Parameters

Sustain Parameters (Address mm: 0 – 2 = UK, LK, PEDAL)

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
12	00-02	00	1	00-7F	Sustain (On/Off)	00: OFF 01: ON	○	00-7F	×	-
12	00-02	01	1	00-7F	Length	00: Short 7F: Long	○	00-7F	×	-

Keyboard Percussion Parameters (Address mm: 1 – 2 = K.B.P. [1], K.B.P. [2])

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
12	01-02	10	1	00-7F	Keyboard Percussion (On/Off)	00: OFF 01: ON	○	00-7F	×	-
12	01-02	11	1	00-28	Keyboard Percussion Menu	00: PRESET 01-28: USER 1 – USER 40	○	00-28	○	00-28

Rhythm

Rhythm Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	00	00-0B	3	00-7F 00-7F 00-01	Rhythm Assign Number	00-7F 00-7F 00-01	○	00-7F 00-7F 00-01	○	00-7F 00-7F 00-01
13	00	10	1	00-0B	Rhythm Selector Number	00-0B	○	00-0B	○	00-0B
13	00	11	1	00-7F	Percussion Volume	00: MIN 7F: MAX	○	00-7F	×	-
13	00	12	1	00-7F	Percussion Reverb (Send Level)	00: MIN 7F: MAX	○	00-7F	○	00-7F
13	00	13	1	00-7F	2nd Expression Tempo Control (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	14	1	00-7F	Footswitch Rhythm Control	00: INTRO 1 01: INTRO 2 02: INTRO 3 08: MAIN A 09: MAIN B 0A: MAIN C 0B: MAIN D 18: BREAK 20: ENDING 1 21: ENDING 2 22: ENDING 3 7E: STOP 7F: OFF (INTRO 1 – STOP)	○	00-7F	○	00-7F
13	00	15	1	00-7F	Add Drum (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	16	1	00-7F	Main Drum (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	17	1	00-7F	Chord 1 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01

MIDI Data Format

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	00	18	1	00-7F	Chord 2 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	19	1	00-7F	Pad (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	1A	1	00-7F	Phrase 1 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	1B	1	00-7F	Phrase 2 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	00	1C	1	00-7F	Auto Fill (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01

Rhythm Sequence Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	01	00-03	1	00-7F	Sequence [SEQ.1] – [SEQ.4]	00: OFF 01: ON	○	00-7F	×	-

Accompaniment Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	02	11	1	00-7F	Accompaniment Volume	00: MIN 7F: MAX	○	00-7F	○	00-7F
13	02	12	1	00-7F	Accompaniment Reverb (Send Level)	00: MIN 7F: MAX	○	00-7F	○	00-7F

A.B.C. Function Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	03	00	1	00-7F	Auto Bass Chord Mode	00: OFF 01: Single Finger 02: Fingered 03: Custom A.B.C.	○	00-7F	○	00-03
13	03	01	1	00-7F	Lower Memory (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	03	02	1	00-7F	Pedal Memory (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01

M.O.C. Function Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	04	00	1	00-7F	Melody On Chord Mode	00: OFF 01: 1 02: 2 03: 3	○	00-7F	○	00-03
13	04	01	1	00-7F	M.O.C. Knee Lever Control (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01

Section Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	05	00	1	00-7F	Intro 1 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	01	1	00-7F	Intro 2 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	02	1	00-7F	Intro 3 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	08	1	00-7F	Main A (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	09	1	00-7F	Main B (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	0A	1	00-7F	Main C (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	05	0B	1	00-7F	Main D (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	18	1	00-7F	Break (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	20	1	00-7F	Ending 1 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	21	1	00-7F	Ending 2 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01
13	05	22	1	00-7F	Ending 3 (On/Off)	00: OFF 01: ON	○	00-7F	○	00-01

Keyboard Percussion Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
13	10	11	1	00-7F	Volume	00: MIN 7F: MAX	○	00-7F	○	00-7F
13	10	12	1	00-7F	Reverb (Send Level)	00: MIN 7F: MAX	○	00-7F	○	00-7F

Overall

System Parameters

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
14	00	00	1	00-7F	Disable (On/Off)	00: OFF 01: ON	○	00-7F	×	-
14	00	01	1	00-7F	Organ Flute Attack Mode	00: Each 01: First	○	00-7F	○	00-01
14	00	02	1	3A-46	Transpose	3A: KeyDown 40: Normal 46: KeyUp	○	3A-46	○	3A-46
14	00	03	1	01-0C	2nd Expression Range	01: 100 C 0C: 1200 C	○	01-0C	○	01-0C
14	00	04	1	00-7F	Footswitch Mode	00: OFF 01: Rhythm 02: Glide 03: Rotary Speaker	○	00-7F	○	00-03
14	00	05	1	00-7F	Pitch	00: PitchDown 40: Normal 7F: PitchUp	○	00-7F	○	00-7F
14	00	06	1	00-7F	Footswitch Glide Time	00: FAST 7F: SLOW	○	00-7F	○	04-1C
14	00	08	1	00-7F	MIDI Control Expression (INT/EXT)	00: Internal 01: External	○	00-7F	×	-
14	00	09	1	00-7F	MIDI Control Lead 1 (INT/EXT)	00: Internal 01: External	○	00-7F	×	-
14	00	0A	3	00-04 00-16 00-0B	Registration Menu	00-04 00-16 00-0B	○	00-04 00-16 00-0B	○	00-04 00-16 00-0B
14	00	0B	1	00-01	Disable Mode	00: Normal 01: Tempo	○	00-01	○	00-01

Effect Parameters (Overall): Reverb

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
14	01	00	1	00-7F	Reverb Depth	00: MIN 7F: MAX	○	00-7F	×	-
14	01	01	1	00-7F	Reverb Time (Panel)	00: FAST 7F: SLOW	○	00-7F	○	00-45
14	01	02	3	00 00-7F 00-7F	Reverb Type (Panel)	00 00-7F 00-7F	○	00 00-7F 00-7F	○	00 00-7F 00-7F

Effect Parameters (Overall): Rhythm Reverb

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
14	02	01	1	00-7F	Reverb Time (Rhythm)	00: FAST 7F: SLOW	○	00-7F	○	00-45
14	02	02	3	00 00-7F 00-7F	Reverb Type (Rhythm)	00 00-7F 00-7F	○	00 00-7F 00-7F	○	00 00-7F 00-7F

Effect Parameters (Overall): Rotary Speaker

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
14	03	00	1	00-7F	Rotary Speaker Speed (On/Off)	00: OFF 01: ON	○	00-7F	×	-
14	03	01	1	00-7F	Rotary Speaker Speed Control Mode	00: STOP 01: SLOW	○	00-7F	○	00-01
14	03	02	2	0000- 007F	Rotary Speaker Speed Control Speed	0000: SLOW 007F: FAST	○	0000-007F	○	0040-007F

Other

Address			Size	Data	Parameter	Data	Receive	Rx Range	Transmit	Tx Range
hh	mm	ll								
7E	00	00	1	00-04	Regist Bank	00-04: Bank A – E	○	00-04	○	00-04

*4. MDR

nn	Command	Receive	Transmit
01H	Play Start	○	×
02H	Play Stop	○	×
03H	Record Start	○	×
04H	Record Stop	○	×
05H	Fast Forward Start	○	×
06H	Fast Forward Stop	○	×
09H	Rhythm Pointer Reset	○	×

MIDI Implementation Chart

YAMAHA [Electone-EL mode] / Model: ELS-02/ELS-02C

Date: 20-Nov-2013
Version: 1.00

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1, 2, 3, 16 (*1) 1-16	1-3, 5-16 (*2) 4	
Mode	Default Messages Altered	Mode 3 × *****	Mode 3 × ×	
Note Number	:True Voice	36-96 (*3) *****	0-127 (*4)	
Velocity	Note on Note off	○ 9nH, v=1-127 × 9nH, v=0	○ 9nH, v=1-127 × 9nH, v=0 or 8nH	
After Touch	Key's Ch's	× ○	○ (*6) ○	
Pitch Bend		○ (*5)	○	
Control Change	0, 32 1, 5, 7, 10 4 6, 38 11 16 96, 97 64-67 71-78 84, 91, 93, 94 98-99, 100-101	× × ○ (*7, *12) × ○ (*7) ○ (*8, *12) × × × × × ×	○ (*6) ○ (*6) ○ (*7) ○ (*6) ○ (*6, 7) ○ (*8, *12) ○ (*6) ○ (*6) ○ (*6) ○ (*6) ○ (*6) ○ (*6)	Bank Select 2nd Expression Data Entry Expression VA After Touch Data Entry SW Sound Controller NRPN, RPN
Program Change	:True number	○ (*10) *****	○ (*11)	
System Exclusive		○	○	
System Common	:Song Position :Song Select :Tune	× × ×	× × ×	
System Real Time	:Clock :Commands	○ ○	○ (*9) ○	(FAH, FCH)
Aux Messages	:All Sound Off :Reset All Cntrls :Local On/Off :All Notes Off :Active Sense :Reset	× × × × ○ ×	○ (120) (*6) ○ (121) (*6) × ○ (123-127) (*6) ○ ×	
Notes		*1: 1ch: UK, 2ch: LK, 3ch: PEDAL, 16ch: CONTROL *2: 1ch: UK, 2ch: LK, 3ch: PEDAL, 4ch: LEAD1, 5-14ch: XG, 15ch: KEYBOARD PERCUSSION, 16ch: CONTROL *3: UK: 36-96, LK: 36-96, PEDAL: 36-60 *4: UK, LK, PEDAL, LEAD1: 36-96, XG: 0-127, PERCUSSION: 3-127 *5: UK: UK HorizontalTouch, LK: LK HorizontalTouch *6: XG only *7: CONTROL only *8: UK only *9: External Mode only *10: CONTROL: 0-15 *11: UK, LK, PEDAL, CONTROL: 0-15 XG: 0-127 *12: ELS-02C only		

Mode 1 : OMNI ON, POLY
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO
Mode 4 : OMNI OFF, MONO

○ : Yes
× : No

Function		Transmitted (*1)	Recognized	Remarks
Basic Channel	Default Changed	1, 2, 3, 16 1-16	1-16 1-16	
Mode	Default Messages Altered	Mode 3 × *****	Mode 3 × ×	
Note Number	:True Voice	36-96 *****	0-127	
Velocity	Note on Note off	○ 9nH, v=1-127 ○ 9nH, v=0	○ 9nH, v=1-127 × 9nH, v=0 or 8nH	
After Touch	Key's Ch's	× ○	○ ○	
Pitch Bend		○	○	
Control Change	0, 32 1, 5, 7, 10 4 6, 38 11 16 96, 97 64-67 71-78 84, 91, 93, 94 98-99, 100-101	× × ○ (*2) × ○ ○ (*2) × × × × × ×	○ ○ × ○ ○ × ○ ○ ○ ○ ○ ○	Bank Select 2nd Expression Data Entry Expression VA After Touch Data Entry SW Sound Controller NRPN, RPN
Program Change	:True number	○ 0-15 *****	○	
System Exclusive		○	○	
System Common	:Song Position :Song Select :Tune	× × ×	× × ×	
System Real Time	:Clock :Commands	○ ○	× ×	
Aux Messages	:All Sound Off :Reset All Cntrls :Local On/Off :All Notes Off :Active Sense :Reset	× × × × ○ ×	○ (120) ○ (121) × ○ (123-127) ○ ×	
Notes		*1; Same as that in the EL mode *2; ELS-02C only		

Mode 1 : OMNI ON, POLY
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO
Mode 4 : OMNI OFF, MONO

○ : Yes
× : No