

# KAWAI

16 BIT DIGITAL PERCUSSION SYNTHESIZER

# XD-5

## WAVE LIST

## MIDI DATA FORMAT

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GROUP	No.	NAME	GROUP	No.	NAME	
DC	001	SINE		079	CONGA SLAP	
	002	SINE 13		080	BOB TOM	
	003	BRASS		081	BONGO	
	004	SQUARE 1		082	TIMBALE HI	
	005	RANDOM		083	TIMBALE LO	
	006	E. PNO 1		084	TABLA	
	007	E. BASS 1		085	TALKING DRUM	
	008	AC. BASS 1		086	UDU	
	009	E. PNO 2		087	SLIT DRUM	
	010	E. PNO 3		088	WOOD BLOCK	
	011	E. PNO 4		089	XYLOPHONE	
	012	DBL. REED		090	CLAVE	
	013	SAWTOOTH		091	BOB CLAVE	
	014	E. PNO 5		092	CASTANET	
	015	E. PNO 6		093	COWBELL	
	016	HARMONICS 1		094	AGOGO	
	017	E. BASS 2		095	BOB COWBELL	
	018	E. BASS 3		096	TAMBOURINE	
	019	BELL 1		097	TRIANGLE	
	020	E. PNO 7		098	WUHAN GONG	
	021	CHIME 1		099	MARK CHIME	
	022	HARMONICS 2		100	WHISTLE	
	023	CHIME 2		101	CUICA	
	024	ORGAN MELLOW		102	CABASA	
	025	ORGAN BRIGHT		103	SHAKER LOOP	
	026	HARMONICS 5		104	SHAKER 1 SHOT	
	027	HIGH HARM 1		105	ANALOG MARACA	
	028	HIGH HARM 2		106	BRASS HIT	
	029	HARMONICS 4		107	TIMPANI	
	030	HARMONICS 5		108	BASS	
	031	HIGH HARM 3		109	BOTTLE	
	032	HIGH HARM 4		110	ICE BELL	
	033	FRETLESS BASS		111	PIPE	
	034	SQUARE 2		112	NEW DOOR	
	035	OCTAVE SQUARE		113	CLICK	
	036	PULSE		114	METAL HIT	
	037	AC. BASS 2		115	GLASS MAX	
	038	E. BASS 4		116	WHITE NOISE	
	039	AC. BASS 3		117	R DRY KICK	
	040	BELL 2		118	R DRY LITE KICK	
	041	PIANO		119	R ULTRA KICK	
	KICK	042	SUB WOOFER		120	R CAN KICK
		043	DRY KICK		121	R BIG ROOM
		044	DRY LITE KICK		122	R SURDU
		045	ULTRA KICK		123	R BOB KICK
		046	CAN KICK		124	R STWCOPEQ SN
		047	BIG ROOM		125	R JAZZ SN
048		SURDU		126	R 7 MAPLE SN	
049		BOB KICK		127	R RADIO SN	
SNARE	050	STWCOPEQ SN		128	R DEEP SN	
	051	JAZZ SN		129	R COMPREGGAE SN	
	052	7 MAPLE SN		130	R CLANK SN	
	053	RADIO SN		131	R POP SNARE	
	054	DEEP SN		132	R CAMEO SNARE	
	055	COMPREGGAE		133	R BOB SNARE	
	056	CLANK SN		134	R X STICK	
	057	POP SNARE		135	R BOB RIM	
	058	CAMEO SNARE		136	R POWER TOM 10	
	059	BOB SNARE		137	R POWER TOM 12	
RIM	060	X STICK		138	R POWER TOM 16	
	061	BOB RIM		139	R KITCHEN TOM HI	
TOM	062	POWER TOM 10		140	R KITCHEN TOM LOW	
	063	POWER TOM 12		141	R PLANT TOM	
	064	POWER TOM 16		142	R HH OPEN	
	065	KITCHEN TOM HI		143	R HH CLOSED	
	066	KITCHEN TOM LOW		144	R HH FOOT	
HH	067	PLANT TOM		145	R BOB HAT	
	068	HH OPEN		146	R SIDE CYMBAL	
	069	HH CLOSED		147	R HEAVY EDGE	
CYM	070	HH FOOT		148	R BELL	
	071	BOB HAT		149	R LIGHT EDGE	
	072	SIDE CYMBAL		150	R BOB CLAPS	
	073	HEAVY EDGE		151	R SNAP	
PERC	074	BELL		152	R CONGA OPEN	
	075	LIGHT EDGE		153	R CONGA SLAP	
	076	BOB CLAPS		154	R BOB TOM	
	077	THE SNAP		155	R BONGO	
	078	CONGA OPEN		156	R TIMBALE HI	
			PITCHED	106	BRASS HIT	
			INDUSTRIAL	107	TIMPANI	
				108	BASS	
				109	BOTTLE	
			REVERSE KICK	110	ICE BELL	
				111	PIPE	
				112	NEW DOOR	
				113	CLICK	
				114	METAL HIT	
				115	GLASS MAX	
				116	WHITE NOISE	
				117	R DRY KICK	
				118	R DRY LITE KICK	
				119	R ULTRA KICK	
				120	R CAN KICK	
				121	R BIG ROOM	
				122	R SURDU	
			SNARE	123	R BOB KICK	
				124	R STWCOPEQ SN	
				125	R JAZZ SN	
				126	R 7 MAPLE SN	
				127	R RADIO SN	
				128	R DEEP SN	
				129	R COMPREGGAE SN	
				130	R CLANK SN	
				131	R POP SNARE	
				132	R CAMEO SNARE	
				133	R BOB SNARE	
				134	R X STICK	
			RIM	135	R BOB RIM	
			TOM	136	R POWER TOM 10	
				137	R POWER TOM 12	
				138	R POWER TOM 16	
				139	R KITCHEN TOM HI	
				140	R KITCHEN TOM LOW	
				141	R PLANT TOM	
			HH	142	R HH OPEN	
				143	R HH CLOSED	
				144	R HH FOOT	
				145	R BOB HAT	
			CYM	146	R SIDE CYMBAL	
				147	R HEAVY EDGE	
				148	R BELL	
				149	R LIGHT EDGE	
			PERC	150	R BOB CLAPS	
				151	R SNAP	
				152	R CONGA OPEN	
				153	R CONGA SLAP	
				154	R BOB TOM	
				155	R BONGO	
				156	R TIMBALE HI	

GROUP	No.	NAME	GROUP	No.	NAME
	157	R TIMBALE LO		207	B POWER TOM 16
	158	R TALKING DRUM		208	B KITCHEN TOM HI
	159	R UDU		209	B KITCHEN TOM LOW
	160	R SLIT DRUM		210	B PLANT TOM
	161	R WOOD BLOCK	CYM	211	B SIDE CYMBAL
	162	R XYLOPHONE		212	B HEAVY EDGE
	163	R CLAVE		213	B BELL
	164	R BOB CLAVE		214	B LIGHT EDGE
	165	R CASTANET	PERC	215	B CONGA OPEN
	166	R COWBELL		216	B CONGA SLAP
	167	R AGOGO		217	B BONGO
	168	R BOB COWBELL		218	B TIMBALE LO
	169	R TAMBOURINE		219	B WUHANGONG
	170	R WUHAN GONG		220	B TIMPANI
	171	R MARK CHIME	IND	221	B ICE BELL
	172	R WHISTLE		222	B PIPE
	173	R CUICA		223	B NEW DOOR
	174	R CABASA		224	B METAL HIT
	175	R SHAKER 1 SHOT	SHORT-HEAD	225	SH DRY LITE KICK
	176	R ANALOG MARACA		226	SH RADIO SN
PITCHED	177	R BRASS HIT		227	SH CLANK SN
	178	R TIMPANI		228	SH POWER TOM 10
	179	R BASS		229	SH PLANT TOM
IND	180	R ICE BELL		230	SH SIDE CYMBAL
	181	R PIPE	REVERSE-HEAD	231	RH DRY KICK
	182	R NEW DOOR		232	RH 7 MAPLE SN
	183	R CLICK		233	RH HH OPEN
	184	R METAL HIT	OMNIBUS	234	OMNI 1
	185	R GLASS MAX		235	OMNI 2
REPEAT	186	SLIT DRUM REPEAT		236	OMNI 3
	187	WOOD BLOCK REPEAT		237	OMNI 4
	188	METAL HIT REPEAT		238	OMNI 5
BODY KICK	189	B DRY KICK		239	OMNI 6
	190	B DRY LITE KICK		240	OMNI 7
	191	B ULTRA KICK		241	OMNI 8
	192	B CAN KICK		242	OMNI 9
	193	B BIG ROOM KICK		243	OMNI 10
SN	194	B STWCOPEQ SN		244	OMNI 11
	195	B JAZZ SN		245	OMNI 12
	196	B 7 MAPLE SN		246	OMNI 13
	197	B RADIO SN		247	OMNI 14
	198	B DEEP SN		248	OMNI 15
	199	B COMPREGGAE	RANDOM	249	RANDOM NOISE 1
	200	B CLANK SN		250	RANDOM NOISE 2
	201	B POP SNARE		251	RANDOM NOISE 3
	202	B CAMEO SNARE		252	RANDOM NOISE 4
	203	B BOB SNARE	11 SPLIT	253	SP1 STANDARD A GROUP*1
RIM	204	B X STICK		254	SP2 STANDARD B GROUP*2
TOM	205	B POWER TOM 10		255	SP3 LATIN GROUP*3
	206	B POWER TOM 12		256	SP4 HH GROUP*4

- \*1 DRY KICK(043), DRY LITE KICK(044), STWCOPEQ SN(050), JAZZ SN(051), 7 MAPLE SN(052), X STICK(060), POWER TOM 10(062), POWER TOM 12(063), SIDE CYMBAL(072), LIGHT EDGE(075), HEAVY EDGE(073)
- \*2 ULTRA KICK(045), CAN KICK(046), BIG ROOM(047), RADIO SN(053), DEEP SN(054), COMPREGGAE(055), CLANK SN(056), POWER TOM 16(064), PLANT TOM(067), BOB CLAPS(076), BOB SNARE(059)
- \*3 CONGA OPEN(078), BONGO(081), TIMBALE LO(083), TIMBALE HI(082), COWBELL(093), AGOGO(094), TAMBOURINE(096), CASTANET(092), ANALOG MARACA(105), TIMPANI(107), CLICK(113)
- \*4 R BIG ROOM(121), R 7 MAPLE SN(126), HH OPEN(068), HH CLOSED(069), HH FOOT(070), R HH OPEN(142), MARK CHIME(099), SHAKER 1 SHOT(104), CABASA(102), CUICA(101), TRIANGLE(097)

## 1. RECOGNIZED RECEIVED DATA

1st	2nd	3rd	Description
1000nnnn	0kkkkkkk	0vvvvvvv	Note off kkkkkk=0~120 vvvvvv=ignore
1001nnnn	0kkkkkkk	0vvvvvvv	Note on/off kkkkkk=0~120 vvvvvv=1~127 Note on vvvvvv=0 off
1011nnnn	00000111	0vvvvvvv	Main Volume Program Change pppppp=0~63 Single A-1~D-16 pppppp=64~79KIT (INT) 1~16 pppppp=80~95KIT (EXT) 1~16
1011nnnn	01111011	00000000	All Notes off Active Sensing
1110nnnn	0ppppppp		

nnnn=Channel no.

## 2. EXCLUSIVE DATA FORMAT

### 2-1. KAWAI FORMAT

Followings is the exclusive data format of the XD-5 and is based on the "KAWAI MIDI EXCLUSIVE FORMAT".

#### XD-5 MIDI EXCLUSIVE FORMAT

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	0f f f f f		
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	ID. no.
Sub1	0s s s s s		Sub command1
Sub2	0s s s s s		Sub command2
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
EOX	11110111	F7H	

The Exclusive data is received only when the system RCV EXCL=ON, except ID request.

Function no. , Sub1 and Sub2 are listed in FUNCTION TABLE.

### 2-2. UNIVERSAL SYSTEM EXCLUSIVE FORMAT

XD-5 uses non-real time format for ID request. The following is the standard of the non-real time system exclusive messages.

Status	11110000	F0H	System exclusive
ID no.	01111110	7EH	Non-real time
Channel no.	0nnnnnnn		
Sub ID #1	0xxxxxxx		
Sub ID #2	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
EOX	11110111	F7H	

## 3. EXCLUSIVE TRANSMITTED DATA

### 3-1. ONE SINGLE/KIT DATA DUMP

This message is transmitted after receiving the ONE BLOCK DATA REQ, the XD-5 transmits the one block data which is decided by it. See SINGLE DATA LIST regarding the data.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100000	20H	One patch data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H: int/02H:ext
Sub status 2	0xxxxxxx		0~63 SINGLE A-1 ~ D-16 64~79 KIT 1 ~ 16
data	0xxxxxxx		patch data s0/k0
data	0xxxxxxx		patch data s1/k1
data	0xxxxxxx		patch data s2/k2
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
EOX	11110111	F7H	

### 3-2. ONE OUTPUT PATCH DATA DUMP

This message is transmitted after receiving the ONE PATCH DATA REQ, the XD-5 transmits the one output patch data which is decided by it. See OUTPUT PATCH DATA LIST regarding the data.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100000	20H	One patch data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x1	0xH	01H:int/03H:ext
Sub status 2	0000xxxx		0~15 output patch 1~16
data	0xxxxxxx		patch data o0
data	0xxxxxxx		patch data o1
data	0xxxxxxx		patch data o2
data	0xxxxxxx		
data	0xxxxxxx		
data	0xxxxxxx		
EOX	11110111	F7H	



### 3-5. ALL PATCH DATA DUMP

This message is transmitted when MIDI DUMP SELECT=ALL, or when "ALL PATCH DATA REQUEST" is received.  
 XD-5 transmits all singles at first and all kits and all outputs.  
 The XD-5 aborts the data dump.

See KIT DATA LIST regarding the data.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100001	22H	All block data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H:int, 02H:ext
Sub status 2	00000000	00H	
data	0xxxxxxx		A-1 s0 data
data	0xxxxxxx		A-1 s1 data
data	0xxxxxxx		A-1 s2 data
data	0xxxxxxx		A-1 s3 data
data	0xxxxxxx		D-16 s127 data
data	0xxxxxxx		D-16 s128 data
data	0xxxxxxx		D-16 s129 data
data	0xxxxxxx		D-16 s130 data
data	0xxxxxxx		1 k0 data
data	0xxxxxxx		1 k1 data
data	0xxxxxxx		1 k2 data
data	0xxxxxxx		1 k3 data
data	0xxxxxxx		16 k449 data
data	0xxxxxxx		16 k450 data
data	0xxxxxxx		16 k451 data
data	0xxxxxxx		16 k452 data
data	0xxxxxxx		OUTPUT PATCH-1 o0 data
data	0xxxxxxx		OUTPUT PATCH-1 o1 data
data	0xxxxxxx		OUTPUT PATCH-1 o2 data
data	0xxxxxxx		OUTPUT PATCH-1 o3 data
data	0xxxxxxx		OUTPUT PATCH-16 o5 data
data	0xxxxxxx		OUTPUT PATCH-16 o6 data
data	0xxxxxxx		OUTPUT PATCH-16 o7 data
data	0xxxxxxx		OUTPUT PATCH-16 o8 data
EOX	11110111	F7H	

### 3-6. WRITE COMPLETE

When the received dump data has been completely written, the XD-5 transmits this message.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	01000000	40H	Write complete
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
EOX	11110111	F7H	

### 3-7. WRITE ERROR

If illegal data is found in the received dump data, the XD-5 transmits this message.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	010000xx	41H	write error
		42H	write error (protect)
		43H	write error (no card)
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
EOX	11110111	F7H	

### 3-8. IDENTITY REPLY

Receiving the ID request, the XD-5 transmits this message.

Status	11110000	F0H	System exclusive
ID no.	01111110	7EH	Non-real time
Channel no.	0nnnnnnn		
Sub ID #1	00000110	06H	General informaion
Sub ID #2	00000010	02H	Device identity reply
Kawai id	01000000	40H	Manufacturers ID
device family	00000000	00H	synth group LSB
device family	00000000	00H	synth group MSB
device no.	00000110	06H	XD-5 ID LSB
device no.	00000000	00H	XD-5 ID MSB
format spec.	00000000	00H	format no. 00
format spec.	00000000	00H	format no. 00
format spec.	00000000	00H	format no. 00
format spec.	00000000	00H	format no. 00
EOX	11110111	F7H	

## 4. EXCLUSIVE RECOGNIZED RECEIVED DATA

### 4-1. ONE SINGLE/KIT DATA REQUEST

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00000000	00H	One patch data request
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H:int/02H:ext
Sub status 2	0bbbbbbb		single or kit patch no.
EOX	11110111	F7H	

### 4-2. ONE OUTPUT PATCH DATA REQUEST

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00000000	00H	One patch data request
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x1	0xH	01H:int/03H:ext
Sub status 2	00bbbbbb	0-0FH	output patch no.
EOX	11110111	F7H	

### 4-3. BLOCK SINGLE/KIT DATA REQUEST

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00000001	01H	block patch data request
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000X0	0XH	00H:int/02H:ext
Sub status 2	0x000000	00H	single
		40H	kit
EOX	11110111	F7H	

### 4-4. BLOCK OUTPUT PATCH DATA REQUEST

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00000001	01H	block patch data request
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x1	0xH	01H:int/03H:ext
Sub status 2	0x000000	00H	
EOX	11110111	F7H	

#### 4-5. ALL DATA REQUEST

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00000010	02H	all patch data request
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	00000000	00H	00H:int/02H:ext
Sub status 2	00000000	00H	
EOX	11110111	F7H	

#### 4-6. ONE SINGLE/KIT DATA DUMP

After receiving this message, the XD-5 transmits "WRITE COMPLETE" if it is okay, or "WRITE ERROR" if it is not.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100000	20H	One patch data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H:int/02H:ext
Sub status 2	0xxxxxxx		0~63 SINGLE A-1~D-16
data	0xxxxxxx		64~79 KIT 1~16
data	0xxxxxxx		patch data s0/k0
data	0xxxxxxx		patch data s1/k1
data	0xxxxxxx		patch data s2/k2
data	0xxxxxxx		patch data s92/k450
data	0xxxxxxx		patch data s93/k451
data	0xxxxxxx		patch data s94/k452
EOX	11110111	F7H	

#### 4-7. ONE OUTPUT PATCH DATA DUMP

After receiving this message, the XD-5 transmits "WRITE COMPLETE" if it is okay, or "WRITE ERROR" if it is not.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100000	20H	One patch data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x1	0xH	01H:int/03H:ext
Sub status 2	0000xxxx		0~15 output 1~16
data	0xxxxxxx		patch data o0
data	0xxxxxxx		patch data o1
data	0xxxxxxx		patch data o2
data	0xxxxxxx		patch data o6
data	0xxxxxxx		patch data o7
data	0xxxxxxx		patch data o8
EOX	11110111	F7H	

#### 4-8. BLOCK SINGLE/KIT DATA DUMP

After receiving this message, the XD-5 transmits "WRITE COMPLETE" if it is okay, or "WRITE ERROR" if it is not.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100001	21H	block data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H:int/02H:ext
Sub status 2	0x000000	00H	all singles
		40H	all kits
data	0xxxxxxx		A-1 s0/1 k0 data
data	0xxxxxxx		A-1 s1/1 k1 data
data	0xxxxxxx		A-1 s2/1 k2 data
data	0xxxxxxx		A-1 s3/1 k3 data
data	0xxxxxxx		A-1 s91/1 k449 data
data	0xxxxxxx		A-1 s92/1 k450 data
data	0xxxxxxx		A-1 s93/1 k451 data
data	0xxxxxxx		A-1 s94/1 k452 data
data	0xxxxxxx		A-2 s0/2 k0 data
data	0xxxxxxx		A-2 s1/2 k1 data
data	0xxxxxxx		A-2 s2/2 k2 data
data	0xxxxxxx		A-2 s3/2 k3 data
data	0xxxxxxx		A-2 s91/2 k449 data
data	0xxxxxxx		A-2 s92/2 k450 data
data	0xxxxxxx		A-2 s93/2 k451 data
data	0xxxxxxx		A-2 s94/2 k452 data
data	0xxxxxxx		A-3 s0/3 k0 data
data	0xxxxxxx		A-3 s1/3 k1 data
data	0xxxxxxx		A-3 s2/3 k2 data
data	0xxxxxxx		A-3 s3/3 k3 data
data	0xxxxxxx		A-3 s91/3 k449 data
data	0xxxxxxx		A-3 s92/3 k450 data
data	0xxxxxxx		A-3 s93/3 k451 data
data	0xxxxxxx		A-3 s94/3 k452 data
data	0xxxxxxx		A-4 single patch data/4 kit patch data
data	0xxxxxxx		A-5 single patch data/5 kit patch data
data	0xxxxxxx		A-16 single patch data/16 kit patch data
data	0xxxxxxx		D-13 single patch data
data	0xxxxxxx		D-14 single patch data
data	0xxxxxxx		D-15 single patch data
data	0xxxxxxx		D-16 s0 data
data	0xxxxxxx		D-16 s1 data
data	0xxxxxxx		D-16 s2 data
data	0xxxxxxx		D-16 s3 data
data	0xxxxxxx		D-16 s91 data
data	0xxxxxxx		D-16 s92 data
data	0xxxxxxx		D-16 s93 data
data	0xxxxxxx		D-16 s94 data
EOX	11110111	F7H	

#### 4-9. BLOCK OUTPUT DATA DUMP

After receiving this message, the XD-5 transmits "WRITE COMPLETE" if it is okay, or "WRITE ERROR" if it is not.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100001	21H	block data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H:int/02H:ext
Sub status 2	00000000	00H	all output
data	0xxxxxxx		OUTPUT PATCH-1 o0 data
data	0xxxxxxx		OUTPUT PATCH-1 o1 data
data	0xxxxxxx		OUTPUT PATCH-1 o2 data
data	0xxxxxxx		OUTPUT PATCH-1 o3 data
.	.		.
.	.		.
data	0xxxxxxx		OUTPUT PATCH-1 o5 data
data	0xxxxxxx		OUTPUT PATCH-1 o6 data
data	0xxxxxxx		OUTPUT PATCH-1 o7 data
data	0xxxxxxx		OUTPUT PATCH-1 o8 data
data	0xxxxxxx		OUTPUT PATCH-2 o0 data
data	0xxxxxxx		OUTPUT PATCH-2 o1 data
data	0xxxxxxx		OUTPUT PATCH-2 o2 data
data	0xxxxxxx		OUTPUT PATCH-2 o3 data
.	.		.
.	.		.
data	0xxxxxxx		OUTPUT PATCH-2 o5 data
data	0xxxxxxx		OUTPUT PATCH-2 o6 data
data	0xxxxxxx		OUTPUT PATCH-2 o7 data
data	0xxxxxxx		OUTPUT PATCH-2 o8 data
	OUTPUT PATCH-3 patch data		
	OUTPUT PATCH-4 patch data		
	OUTPUT PATCH-5 patch data		
.	.		.
.	.		.
	OUTPUT PATCH-13 patch data		
	OUTPUT PATCH-14 patch data		
	OUTPUT PATCH-15 patch data		
data	0xxxxxxx		OUTPUT PATCH-16 o0 data
data	0xxxxxxx		OUTPUT PATCH-16 o1 data
data	0xxxxxxx		OUTPUT PATCH-16 o2 data
data	0xxxxxxx		OUTPUT PATCH-16 o3 data
.	.		.
.	.		.
data	0xxxxxxx		OUTPUT PATCH-16 o5 data
data	0xxxxxxx		OUTPUT PATCH-16 o6 data
data	0xxxxxxx		OUTPUT PATCH-16 o7 data
data	0xxxxxxx		OUTPUT PATCH-16 o8 data
EOX	11110111	F7H	

#### 4-10. ALL PATCH DATA DUMP

After receiving this message, the XD-5 transmits "WRITE COMPLETE" if it is okay, or "WRITE ERROR" if it is not.

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00100010	22H	All block data dump
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
Sub status 1	000000x0	0xH	00H:int/02H:ext
Sub status 2	0x000000	00H	
data	0xxxxxxx		A-1 s0 data
data	0xxxxxxx		A-1 s1 data
data	0xxxxxxx		A-1 s2 data
data	0xxxxxxx		A-1 s3 data
.	.		.
.	.		.
data	0xxxxxxx		D-16 s91 data
data	0xxxxxxx		D-16 s92 data
data	0xxxxxxx		D-16 s93 data
data	0xxxxxxx		D-16 s94 data
data	0xxxxxxx		1 k0 data
data	0xxxxxxx		1 k1 data
data	0xxxxxxx		1 k2 data
data	0xxxxxxx		1 k3 data
.	.		.
.	.		.
data	0xxxxxxx		16 k449 data
data	0xxxxxxx		16 k450 data
data	0xxxxxxx		16 k451 data
data	0xxxxxxx		16 k452 data
data	0xxxxxxx		OUTPUT PATCH-1 o0 data
data	0xxxxxxx		OUTPUT PATCH-1 o1 data
data	0xxxxxxx		OUTPUT PATCH-1 o2 data
data	0xxxxxxx		OUTPUT PATCH-1 o3 data
.	.		.
.	.		.
data	0xxxxxxx		OUTPUT PATCH-16 o5 data
data	0xxxxxxx		OUTPUT PATCH-16 o6 data
data	0xxxxxxx		OUTPUT PATCH-16 o7 data
data	0xxxxxxx		OUTPUT PATCH-16 o8 data
EOX	11110111	F7H	

#### 4-11. WRITE COMPLETE

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	01000000	40H	Write complete
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
EOX	11110111	F7H	

#### 4-12. WRITE ERROR

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	010000xx	41H	write error
		42H	write error (protect)
		43H	write error (no card)
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID. no.
EOX	11110111	F7H	

#### 4-13. IDENTITY REQUEST

Receiving this message, the XD-5 transmits identity reply.

Status	11110000	F0H	System exclusive
ID no.	01111110	7EH	Non-real time
Channel no.	0nnnnnnn		
Sub ID #1	00000110	06H	General informaion
Sub ID #2	00000001	01H	Identity request
EOX	11110111	F7H	

**4-14. PARAMETER SEND**

(SINGLE)

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00010000	10H	Parameter send
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID no.
Sub status 1	00pppppp		0~44 parameter no.
Sub status 2	00000ssd		ss 0/S1, 1/S2, 2/S3, 3/S4, d=Value's MSB
data	0xxxxxxx		Value dxxxxxxx
EOX	11110111	F7H	

(KIT)

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00010000	10H	Parameter send
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID no.
Sub status 1	00pppppp		45~61 parameter no.
Sub status 2	0sssssss		sssss 0~87 key no.
data	0xxxxxxx		Value dxxxxxxx
EOX	11110111	F7H	

(OUTPUT)

Status	11110000	F0H	System exclusive
Kawai ID no.	01000000	40H	
Channel no.	0000nnnn	0nH	
Function no.	00010000	10H	Parameter send
Group no.	00000000	00H	Synthesizer group
Machine ID no.	00000110	06H	XD-5 ID no.
Sub status 1	00111101	3EH	Parameter no. 62 (pan)
Sub status 2	00000ssd		sss 0~7 submix ch, d=Value's MSB
data	0xxxxxxx		Value dxxxxxxx
EOX	11110111	F7H	

**5. SINGLE DATA LIST**

NO.	BYTE	PARAMETER NO.	NAME	DESCRIPTION
<COMMON>				
s00	0nnnnnnn	0	name1	ascii
s01	0nnnnnnn	1	name2	-
s02	0nnnnnnn	2	name3	-
s03	0nnnnnnn	3	name4	-
s04	0nnnnnnn	4	name5	-
s05	0nnnnnnn	5	name6	-
s06	0nnnnnnn	6	name7	-
s07	0nnnnnnn	7	name8	-
s08	0nnnnnnn	8	name9	-
s09	0nnnnnnn	9	name10	-
s10	0vvvvvvv	10	volume	0~100
s11	000eeeee	11	output patch	0~15/1~16
s12	00000sss	12	submix select	0~7/A~H
s13	000000ss	13	source mode	0/ONE, 1/TWIN, 2/DBL
	0000pp00	14	poly mode	0/PLY1, 1/PLY2, 2/SOLO
	000c0000	15	am S1-S2	0/off, 1/on
	00c00000	16	am S3-S4	0/off, 1/on
s14	0000000a		S1 mute	0/mute, 1/not mute
	000000b0		S2 mute	0/mute, 1/not mute
	00000c00		S3 mute	0/mute, 1/not mute
	0000d000		S4 mute	0/mute, 1/not mute
s15	0t111111	17	auto bend time	0~100
s16	0aaaaaaa	18	auto bend depth	0~100 (±50)
s17	0vvvvvvv	19	auto bend vel-dep	0~100 (±50)

<SOURCES>

s18	0ddddddd	20	S1 delay	0~100
s19	-	-	S2 -	-
s20	-	-	S3 -	-
s21	-	-	S4 -	-
s22	0000000x	21	S1 wave select h	MSB xxxxxxxx 0~255/1~256
s23	-	-	S2 -	-
s24	-	-	S3 -	-
s25	-	-	S4 -	-
s26	0wwwwwww	21	S1 wave select l	0~127
s27	-	-	S2 -	-
s28	-	-	S3 -	-
s29	-	-	S4 -	-
s30	00cccccc	22	S1 coarse	coarse 00~48/±24
	0t 000000	23	S1 key track	0/off, 1/on
s31	-	-	S2 -	-
s32	-	-	S3 -	-
s33	-	-	S4 -	-
s34	0ccccccc	24	S1 fix	fix 0~115/C-2~G7
s35	-	-	S2 -	-
s36	-	-	S3 -	-
s37	-	-	S4 -	-
s38	0ffffff f	25	S1 fine	0~100 (±50)
s39	-	-	S2 -	-
s40	-	-	S3 -	-
s41	-	-	S4 -	-
s42	000000v0	26	S1 a. bend sw	0/off, 1/on
	000vvv00	27	S1 vel curve	0~7/1~8
s43	-	-	S2 -	-
s44	-	-	S3 -	-
s45	-	-	S4 -	-

<DCA>

s46	0eeeeeee	28	S1 envelope level	0~100
s47	-	-	S2 -	-
s48	-	-	S3 -	-
s49	-	-	S4 -	-
s50	0eeeeeee	29	S1 envelope attack	0~100
s51	-	-	S2 -	-
s52	-	-	S3 -	-
s53	-	-	S4 -	-
s54	0eeeeeee	30	S1 envelope decay	0~100
s55	-	-	S2 -	-
s56	-	-	S3 -	-
s57	-	-	S4 -	-
s58	0eeeeeee	31	S1 envelope sustain	0~100
s59	-	-	S2 -	-
s60	-	-	S3 -	-
s61	-	-	S4 -	-
s62	0eeeeeee	32	S1 envelope release	0~100
s63	-	-	S2 -	-
s64	-	-	S3 -	-
s65	-	-	S4 -	-
s66	0ddddddd	33	S1 level mod vel	0~100 (±50)
s67	-	-	S2 -	-
s68	-	-	S3 -	-
s69	-	-	S4 -	-
s70	0eeeeeee	34	S1 decay mod on vel	0~100 (±50)
s71	-	-	S2 -	-
s72	-	-	S3 -	-
s73	-	-	S4 -	-

<DCF>

s74	0ccccccc	35	F1 cutoff	0~100
s75	-	-	F2 -	-
s76	00000rrr	36	F1 resonance	0~7/1~8
s77	-	-	F2 -	-
s78	0ddddddd	37	F1 cutoff mod vel	0~100 (±50)
s79	-	-	F2 -	-
s80	0eeeeeee	38	F1 dcf env dep	0~100 (±50)
s81	-	-	F2 -	-
s82	0eeeeeee	39	F1 dcf env vel dep	0~100 (±50)
s83	-	-	F2 -	-
s84	0eeeeeee	40	F1 dcf env attack	0~100
s85	-	-	F2 -	-
s86	0eeeeeee	41	F1 dcf env decay	0~100
s87	-	-	F2 -	-
s88	0eeeeeee	42	F1 dcf env sustain	0~100
s89	-	-	F2 -	-
s90	0eeeeeee	43	F1 dcf env release	0~100
s91	-	-	F2 -	-
s92	0eeeeeee	44	F1 dcf decay mod on vel	0~100 (±50)
s93	-	-	F2 -	-
s94	0ddddddd		check sum	0~127

Note  
Check sum value (s94) is the sum of the A5H and s0-s93.

## 6. KIT DATA LIST

NO.	BYTE	PARAMETER NO.	NAME	DESCRIPTION
<b>&lt;KIT COMMON&gt;</b>				
k0	0nnnnnnn	45	name1	ascii
k1	0nnnnnnn	46	name2	-
k2	0nnnnnnn	47	name3	-
k3	0nnnnnnn	48	name4	-
k4	0nnnnnnn	49	name5	-
k5	0nnnnnnn	50	name6	-
k6	0nnnnnnn	51	name7	-
k7	0nnnnnnn	52	name8	-
k8	0nnnnnnn	53	name9	-
k9	0nnnnnnn	54	name10	-
k10	0vvvvvvv	55	volume	0~100
k11	0000eeee	56	output patch	0~15/1~16
<b>&lt;KEY NO. 1 (A-1)&gt;</b>				
k12	00aaaaaa	57	Single no.	0~63/A-1~D-16
k13	00000sss	61	submix ch	0~7/A~H
k14	0eeeeeee	60	level	0~100
k15	0t t t t t t	58	pitch note	0~115/C-2~G7
k16	0uuuuuuu	59	tune	0~100(0~±50)
<b>&lt;KEY NO. 2 (A#-1)&gt;</b>				
k17	00aaaaaa	57	Single no.	0~63/A-1~D-16
k18	00000sss	61	submix ch	0~7/A~H
k19	0eeeeeee	60	level	0~100
k20	0t t t t t t	58	pitch note	0~115/C-2~G7
k21	0uuuuuuu	59	tune	0~100(0~±50)
<b>&lt;KEY NO. 3 (B-1)&gt;</b>				
k22~k26				
<b>&lt;KEY NO. 4 (C0)&gt;</b>				
k27~k31				
<b>&lt;KEY NO. 5 (C#0)&gt;</b>				
k32~k36				
.....				
<b>&lt;KEY NO. 6 (D0)&gt; ~ &lt;KEY NO. 85 (A6)&gt;</b>				
.....				
<b>&lt;KEY NO. 86 (A#6)&gt;</b>				
k437~k441				
<b>&lt;KEY NO. 87 (B6)&gt;</b>				
k442~k446				
<b>&lt;KEY NO. 88 (C7)&gt;</b>				
k447	00aaaaaa	57	Single no.	0~63/A-1~D-16
k448	00000sss	61	submix ch	0~7/A~H
k449	0eeeeeee	60	level	0~100
k450	0t t t t t t	58	pitch note	0~115/C-2~G7
k451	0uuuuuuu	59	tune	0~100(0~±50)
k452	0ccccccc		check sum	0~127
<b>Note</b>				
Check sum value (k452) is the sum of A5H and k0~k451.				

## 7. OUTPUT PATCH DATA LIST

NO.	BYTE	PARAMETER NO.	NAME	DESCRIPTION
<b>&lt;A&gt;</b>				
o0	000ppppp	62	pan	0~14/0~±7, 15~20/11~16
<b>&lt;B&gt;</b>				
o1	000ppppp	62	pan	0~14/0~±7, 15~20/11~16
<b>&lt;C&gt;</b>				
o2			.	
<b>&lt;D&gt;</b>				
o3			.	
<b>&lt;E&gt;</b>				
o4			.	
<b>&lt;F&gt;</b>				
o5			.	
<b>&lt;G&gt;</b>				
o6			.	
<b>&lt;H&gt;</b>				
o7	000ppppp	62	pan	0~14/0~±7, 15~20/11~16
o8	0ddddddd		check sum	0~127
<b>Note</b>				
Check sum value (o8) is the sum of the A5H and o0~o7.				

**8. EXCLUSIVE FUNCTION TABLE**

FUNCTION	FUNCTION NO.	SUB CMND 1	SUB CMND 2	DESCRIPTION	TRS	RCV
One Patch Dump Request	0 (00H)	0	0~63	ONE INT SINGLE DATA REQUEST	X	O
		0	64~79	ONE INT KIT DATA REQUEST	X	O
		1	0~15	ONE INT OUTP.P DATA REQUEST	X	O
		2	0~63	ONE EXT SINGLE DATA REQUEST	X	O
		2	64~79	ONE EXT KIT DATA REQUEST	X	O
Block Patch Dump Request	1 (01H)	3	0~15	ONE EXT OUTP.P DATA REQUEST	X	O
		0	0	ALL INT SINGLE DATA REQUEST	X	O
		0	64	ALL INT KIT DATA REQUEST	X	O
		1	0	ALL INT OUTP.P DATA REQUEST	X	O
		2	0	ALL EXT SINGLE DATA REQUEST	X	O
All Patch Dump Request	2 (02H)	2	64	ALL EXT KIT DATA REQUEST	X	O
		3	0	ALL EXT OUTP.P DATA REQUEST	X	O
		0	0	ALL INT DATA REQUEST	X	O
		2	0	ALL EXT DATA REQUEST	X	O
		Parameter Send	16 (10H)	0ppppppp	0ssssssd	PARAMETER ppppppp 0~44, 62 sssssss 0~7 d MSB of data
0ppppppp	0sssssss			ppppppp 45~61 sssssss 0~87	X	O
One Patch Data Dump	32 (20H)	0	0~63	ONE INT SINGLE DATA DUMP	O	O
		0	64~79	ONE INT KIT DATA DUMP	O	O
		1	0~15	ONE INT OUTP.P DATA DUMP	O	O
		2	0~63	ONE EXT SINGLE DATA DUMP	O	O
		2	64~79	ONE EXT KIT DATA DUMP	O	O
Block Patch Data Dump	33 (21H)	3	0~15	ONE EXT OUTP.P DATA DUMP	O	O
		0	0	ALL INT SINGLE DATA DUMP	O	O
		0	64	ALL INT KIT DATA DUMP	O	O
		1	0	ALL INT OUTP.P DATA DUMP	O	O
		2	0	ALL EXT SINGLE DATA DUMP	O	O
All Patch Data Dump	34 (22H)	2	64	ALL EXT KIT DATA DUMP	O	O
		3	0	ALL EXT OUTP.P DATA DUMP	O	O
		0	0	ALL INT DATA DUMP	O	O
		2	0	ALL EXT DATA DUMP	O	O
		Program Change	48 (30H)	0	0	INT
2	0			EXT	O	O
Write Complete	64 (40H)	-	-		O	O
Write Error	65 (41H)	-	-		O	O
Write Error (Protect)	66 (42H)	-	-		O	O
Write Error (No Card)	67 (43H)	-	-		O	O

**9. PROGRAM NO. CONVERT TABLE**

NO.	SINGLE				KIT	
	INT/EXT				INT	EXT
	A	B	C	D		
1	0 (00H)	16 (10H)	32 (20H)	48 (30H)	64 (40H)	80 (50H)
2	1 (01H)	17 (11H)	33 (21H)	49 (31H)	65 (41H)	81 (51H)
3	2 (02H)	18 (12H)	34 (22H)	50 (32H)	66 (42H)	82 (52H)
4	3 (03H)	19 (13H)	35 (23H)	51 (33H)	67 (43H)	83 (53H)
5	4 (04H)	20 (14H)	36 (24H)	52 (34H)	68 (44H)	84 (54H)
6	5 (05H)	21 (15H)	37 (25H)	53 (35H)	69 (45H)	85 (55H)
7	6 (06H)	22 (16H)	38 (26H)	54 (36H)	70 (46H)	86 (56H)
8	7 (07H)	23 (17H)	39 (27H)	55 (37H)	71 (47H)	87 (57H)
9	8 (08H)	24 (18H)	40 (28H)	56 (38H)	72 (48H)	88 (58H)
10	9 (09H)	25 (19H)	41 (29H)	57 (39H)	73 (49H)	89 (59H)
11	10 (0AH)	26 (1AH)	42 (2AH)	58 (3AH)	74 (4AH)	90 (5AH)
12	11 (0BH)	27 (1BH)	43 (2BH)	59 (3BH)	75 (4BH)	91 (5BH)
13	12 (0CH)	28 (1CH)	44 (2CH)	60 (3CH)	76 (4CH)	92 (5CH)
14	13 (0DH)	29 (1DH)	45 (2DH)	61 (3DH)	77 (4DH)	93 (5DH)
15	14 (0EH)	30 (1EH)	46 (2EH)	62 (3EH)	78 (4EH)	94 (5EH)
16	15 (0FH)	31 (1FH)	47 (2FH)	63 (3FH)	79 (4FH)	95 (5FH)

# **KAWAI**

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