

1. RECOGNIZED RECEIVE DATA

■ CHANNEL VOICE MESSAGE

● Note On

Status	Second	Third
9nH	kkH	vvH
n = MIDI Channel:		0H - FH (ch.1 - ch.16)
kk = Note Number:		00H - 7FH (0 - 127)
vv = Velocity:		01H - 7FH (1 - 127)

* By Specifying these messages as a CONTROLLER of "CONTROL ASSIGN," you can use Note On messages to control TARGET PARAMETER.

● Control Change

Status	Second	Third
BnH	ccH	vvH
n = MIDI Channel:		0H - FH (ch.1 - ch.16)
cc = Controller Number:		00H (0) 01H - 1FH (1 - 31) 40H - 5FH (64 - 95)
vv = Control Value:		00H - 7FH (0 - 127)

* A controller number of 00H is recognized as a Bank Select message. 02H (LSB of Bank Select) is ignored.

* The Bank Select setting makes the callup of the Program Number change when a Program Change message is received.

Bank Select	switch to
00H	Program Change Number of the Program Change Map
01H	User Bank Program from 1 to 100
02H	Preset Bank Program from 1 to 100
03H - 0CH	Card Bank(A-J) Program from 1 to 100
0DH -	Received data is ignored, regardless of the value.

* Bank Select Processing is held until a Program Change message is received.

* By Specifying these messages as a CONTROLLER of "CONTROL ASSIGN," you can use Control Change messages to control TARGET PARAMETER.

● Program Change

Status	Second
CnH	ppH
n = MIDI Channel:	0H - FH (ch.1 - ch.16)
pp = Program Number:	00H - 7FH (No.1 - No.100)

* Programs will be selected according to the program number that is received.

* The program changes individually, according to the BANK SELECT value.

● Channel Pressure (Aftertouch)

Status	Second
DnH	vvH
n = MIDI Channel:	0H - FH (ch.1 - ch.16)
vv = Pressure Value:	00H - 7FH (0 - 127)

* By Specifying these messages as a CONTROLLER of "CONTROL ASSIGN," you can use Channel Pressure (Aftertouch) messages to control TARGET PARAMETER.

● Pitch Bend Change

Status	Second	Third
EnH	llH	mmH
n = MIDI Channel:		0H - FH (ch.1 - ch.16)
ll = Data LSB:		00H - 7FH (0 - 127)
mm = Data MSB:		00H - 7FH (0 - 127)

* By Specifying these messages as a CONTROLLER of "CONTROL ASSIGN," you can use Pitch Bend Change messages to control TARGET PARAMETER.

* Data LSB is ignored.

■ SYSTEM EXCLUSIVE MESSAGE

Status	Data Byte	Status
F0H	iiH, ddH ... eeH	F7H
F0H =		System Exclusive
ii =		Manufacturer ID: 41H (Roland)
dd ... ee =		Data: 00H - 7FH (0 - 127)
F7H =		EOX (End of Exclusive/System common)

* For more details, please refer to "Roland Exclusive Message."

2. TRANSMITTED DATA

■ SYSTEM EXCLUSIVE MESSAGE

Status	Data Byte	Status
F0H	iiH, ddH... eeH	F7H
F0H =		System Exclusive
ii =		Manufacturer ID: 41H (Roland)
dd ... ee =		Data: 00H - 7FH (0 - 127)
F7H =		EOX (End of Exclusive/System common)

* For more details, please refer to "Roland Exclusive Message."

3. EXCLUSIVE COMMUNICATION

On the SRV-3030/3030D, exclusive messages can be used as follows.
 - Transmit/receive SRV-3030/3030D system and program data.
 The model ID for SRV-3030/3030D exclusive messages is 00H 12H.

■ ONE WAY COMMUNICATION

● Request Data1 RQ1 (11H)

Byte	Description
F0H	Exclusive Status
41H	Manufacturer ID (Roland)
Dev	Device ID (Dev=00H-7EH)
00H	Model ID MSB (SRV-3030/3030D)
12H	Model ID LSB (SRV-3030/3030D)
11H	Command ID (RQ1)
aaH	Address MSB
bbH	Address
ccH	Address
ddH	Address LSB
ssH	Size MSB
ttH	Size
uuH	Size
vvH	Size LSB
sum	Checksum
F7H	EOX (End of System Exclusive)

* SRV-3030/3030D does not transmit this message.

● Data Set1 DT1 (12H)

Byte	Description
F0H	Exclusive Status
41H	Manufacturer ID (Roland)
Dev	Device ID (Dev=00H-7EH)
00H	Model ID MSB (SRV-3030/3030D)
12H	Model ID LSB (SRV-3030/3030D)
12H	Command ID (DT1)
aaH	Address MSB
bbH	Address
ccH	Address
ddH	Address LSB
eeH	Data
:	:
ffH	Data
sum	Checksum
F7H	EOX (End of System Exclusive)

4. PARAMETER MAPPING OF PARAMETERS (Model ID = 00 12H)

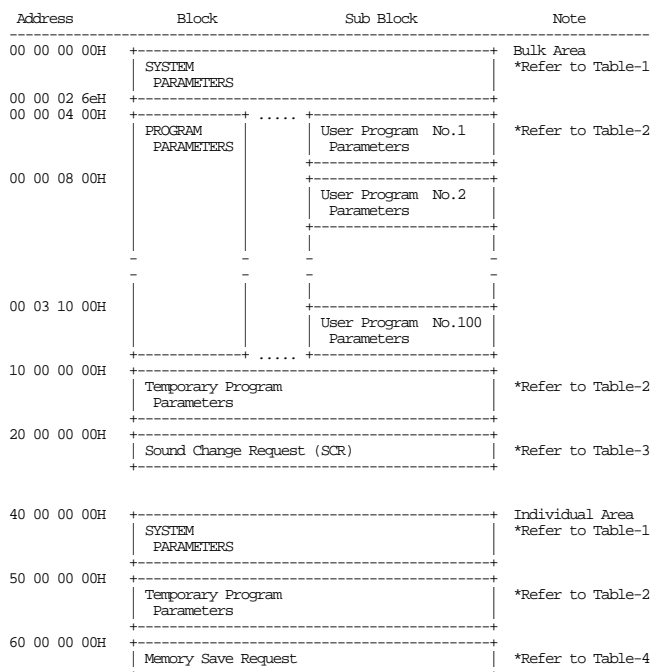
The address and size are displayed under 7-bit hexadecimal notation.

Address	MSB	LSB		
Binary	0aaa aaaa	0bbb bbbb	0ccc cccc	0ddd dddd
7-bit Hexadecimal	AA	BB	CC	DD
Size	MSB	LSB		
Binary	0sss ssss	0ttt tttt	0uuu uuuu	0vvv vvvv
7-bit Hexadecimal	SS	TT	UU	VV

■ Parameter base address

* The actual address of each parameter is the start address of the block plus the offset address.

Address Block Map



- * SRV-3030/3030D has two types of communication: Individual Parameters and Bulk Dump.
- * When receiving BULK LOAD data, it is necessary SRV-3030/3030D is set in the state of BULK LOAD RECEIVE. If in other states, BULK LOAD data is ignored.
- * A Sound Change Request (SCR) is valid only for the Temporary Area (Bulk). To Change data in the Temporary Area(Bulk) using Exclusive(SysEx) messages, it is necessary to first send the parameter data, then send the data to the SCR address.
- * When using Individual Parameters, be sure to state the value for one parameter in a packet from F0 to F7, with no excess or lack. Data Set1 (DT1) for Individual Parameters can be recognized in all states of the unit.
- * When starting to send the data of BULK DUMP, the MIDI THRU/OUT connector of the unit behaves as MIDI OUT. After sending all data of BULK DUMP, it returns to behave as MIDI THRU.
- * Request Data (RQ1) is recognized in the all state of the unit. Be careful that the MIDI THRU/OUT connector change to behave as MIDI OUT while sending System Exclusive messages in response to Request Data. After sending all data, it returns to behave as MIDI THRU.
- * In response to receiving Request Data1 (RQ1) for Bulk Area, the unit send all packets including the requested data without regard of requested size.
- * Memory Save Request (MSR) is valid for SYSTEM and USER PROGRAM. If the unit recognize this message, the data of SYSTEM and USER PROGRAM are memorized. To memorize the data of SYSTEM and USER PROGRAM for Bulk/Individual Area using Exclusive (SysEx) message, it is necessary to first send the parameter data, then send the data to the MSR.

Table-1. SYSTEM PARAMETERS

Offset(H)	Size(H)	Data(H)	Description
00 00 00 00	00 00 00 01	00 - 02	INPUT LEVEL SW -20dBm(00H), -10dBm(01H), +4dBm(02H)
00 00 00 01	00 00 00 01	00 - 5B	INPUT VOLUME Mute(00H), -60dB(01H)..+6dB(5BH) * refer to table-5
00 00 00 02	00 00 00 01	00 - 02	OUTPUT LEVEL SW -20dBm(00H), -10dBm(01H), +4dBm(02H)
00 00 00 03	00 00 00 01	00 - 5B	OUTPUT VOLUME Mute(00H), -60dB(01H)..+6dB(5BH) * refer to table-5
00 00 00 04	00 00 00 01	00 - 5B	DIGITAL INPUT VOLUME Mute(00H), -60dB(01H)..+6dB(5BH) * refer to table-5
00 00 00 05	00 00 00 01	00 - 5B	DIGITAL OUTPUT VOLUME Mute(00H), -60dB(01H)..+6dB(5BH) * refer to table-5
00 00 00 06	00 00 00 01	00 - 02	MASTER CLOCK 44.1kHz(00H), 48kHz(01H), EXT(02H)
00 00 00 07	00 00 00 01	00 - 01	DRY OUT OFF(00H), ON(01H)
00 00 00 08	00 00 00 01	00 - 64	DRY OUT PAN A L50(00H)..0(32H)..R50(64H)
00 00 00 09	00 00 00 01	00 - 64	DRY OUT PAN B L50(00H)..0(32H)..R50(64H)
00 00 00 0A	00 00 00 01	00 - 01	PREVIEW FUNCTION OFF(00H), ON(01H)
00 00 00 0B	00 00 00 01	00 - 01	PREVIEW REPEAT OFF(00H), ON(01H)
00 00 00 0C	00 00 00 01	00 - 01	RSS MODE SPKR(00H), HEAD(01H)
00 00 00 0D	00 00 00 01	00 - 0A	LCD CONTRAST 0(00H)..10(0AH)
00 00 00 0E	00 00 00 01	00 - 01	DISPLAY TYPE STRC(00H), PTRN(01H)
00 00 00 0F	00 00 00 01	00 - 02	FOOT SW CONTROL OFF(00H), BYPS(01H), PREV(02H)
00 00 00 10	00 00 00 01	00 - 01	FOOT SW TYPE MOM(00H), LTCH(01H)
00 00 00 11	00 00 00 01	00 - 01	POWER UP:MODE USRSET(00H), LSTSET(01H)
00 00 00 12	00 00 00 01	00 - 01	POWER UP:BANK PRESET(00H), USER(01H)
00 00 00 13	00 00 00 01	00 - 63	POWER UP:NUMBER 1(00H)..100(63H)
00 00 00 14	00 00 00 01	00 - 10	MIDI RX CHANNEL 1ch(00H)..16ch(0FH), OMNI(10H)
00 00 00 15	Reserved		
00 00 00 16	00 00 00 01	00 - 3F	CC ASSIGN:PREVIEW OFF(00H), CC1(01H)..CC31(1FH), CC64(20H)..CC95(3FH)
00 00 00 17	00 00 00 01	00 - 3F	CC ASSIGN:BYPASS OFF(00H), CC1(01H)..CC31(1FH), CC64(20H)..CC95(3FH)
00 00 00 18	00 00 00 01	00 - 3F	CC ASSIGN:INPUT VOLUME OFF(00H), CC1(01H)..CC31(1FH), CC64(20H)..CC95(3FH)
00 00 00 19	00 00 00 01	00 - 5B	CC ASSIGN:MIN VAL Mute(00H), -60dB(01H)..+6dB(5BH) * refer to table-5
00 00 00 1A	00 00 00 01	00 - 5B	CC ASSIGN:MAX VAL Mute(00H), -60dB(01H)..+6dB(5BH) * refer to table-5
00 00 00 1B	Reserved		
:	:		
00 00 00 6B	Reserved		
00 00 00 6C	00 00 00 01	00 - 0D	PC MAP:PC#1 BANK OFF(00H), BYPASS(01H), PRESET(02H), USER(03H), CARD-A(04H)..J(0DH)
00 00 00 6D	00 00 00 01	00 - 63	PC MAP:PC#1 NUMBER 1(00H)..100(63H)
00 00 00 6E	00 00 00 01	00 - 0D	PC MAP:PC#2 BANK OFF(00H), BYPASS(01H), PRESET(02H), USER(03H), CARD-A(04H)..J(0DH)
00 00 00 6F	00 00 00 01	00 - 63	PC MAP:PC#2 NUMBER 1(00H)..100(63H)
:	:		
00 00 02 6A	00 00 00 01	00 - 0D	PC MAP:PC#128 BANK OFF(00H), BYPASS(01H), PRESET(02H), USER(03H), CARD-A(04H)..J(0DH)
00 00 02 6B	00 00 00 01	00 - 63	PC MAP:PC#128 NUMBER 1(00H)..100(63H)
00 00 02 6C	Reserved		
00 00 02 6D	Reserved		
00 00 02 6E	Reserved		

Table-2. PROGRAM PARAMETERS (User Program/Temporary Program)

[NAME/PREVIEW]

Offset(H)	Size(H)	Data(H)	Description
00 00 00 00	00 00 00 01	20 - 7F	1st character of name * refer to table-6
00 00 00 01	00 00 00 01	20 - 7F	2nd character of name * refer to table-6
:	:	:	:
00 00 00 0D	00 00 00 01	20 - 7F	14th character of name * refer to table-6

[EZ EDIT]

Offset(H)	Size(H)	Data(H)	Description
00 00 00 0E	00 00 00 01	00 - 64	EZ EDIT:REV TIME A REV/GRV:0sec(00H)..100sec(64H), NLR:0.0sec(00H)..1.2sec(0CH)
00 00 00 0F	00 00 00 01	00 - 63	EZ EDIT:REV TIME A:Suborder REV/GRV:0.00sec(00H)..0.99sec(63H), NLR:0.000sec(00H)..0.099sec(63H)
00 00 00 10	00 00 00 01	00 - 64	EZ EDIT:LIVENESS A 0(00H)..100(64H)
00 00 00 11	00 00 00 01	00 - 64	EZ EDIT:ROOM SIZE A 0(00H)..100(64H)
00 00 00 12	00 00 00 01	00 - 64	EZ EDIT:WALL TYPE A 0(00H)..100(64H)
00 00 00 13	00 00 00 01	00 - 64	EZ EDIT:DISTANCE A 0(00H)..100(64H)
00 00 00 14	00 00 00 01	00 - 64	EZ EDIT:EFFECT 0(00H)..100(64H)
00 00 00 15	00 00 00 01	00 - 64	EZ EDIT:REV UNIT OUTPUT LEVEL A 0(00H)..100(64H)
00 00 00 16	00 00 00 01	00 - 64	EZ EDIT:MIX BALANCE 0(00H)..100(64H)
00 00 00 17	Reserved		
00 00 00 18	00 00 00 01	00 - 64	EZ EDIT:REV TIME B REV/GRV:0sec(00H)..100sec(64H), NLR:0.0sec(00H)..1.2sec(0CH)
00 00 00 19	00 00 00 01	00 - 63	EZ EDIT:REV TIME B:Suborder REV/GRV:0.00sec(00H)..0.99sec(63H), NLR:0.000sec(00H)..0.099sec(63H)
00 00 00 1A	00 00 00 01	00 - 64	EZ EDIT:LIVENESS B 0(00H)..100(64H)
00 00 00 1B	00 00 00 01	00 - 64	EZ EDIT:ROOM SIZE B 0(00H)..100(64H)
00 00 00 1C	00 00 00 01	00 - 64	EZ EDIT:WALL TYPE B 0(00H)..100(64H)
00 00 00 1D	00 00 00 01	00 - 64	EZ EDIT:DISTANCE B 0(00H)..100(64H)
00 00 00 1E	Reserved		
00 00 00 1F	00 00 00 01	00 - 64	EZ EDIT:REV UNIT OUTPUT LEVEL B 0(00H)..100(64H)
00 00 00 20	Reserved		
00 00 00 21	Reserved		

[STRUCTURE]

Offset(H)	Size(H)	Data(H)	Description
00 00 00 22	00 00 00 01	00 - 03	REV TYPE A REV(00H), GRV(01H), AMB(02H), NLR(03H)
00 00 00 23	00 00 00 01	00 - 03	REV TYPE B REV(00H), GRV(01H), AMB(02H), NLR(03H)
00 00 00 24	00 00 00 01	00 - 03	STRUCTURE DUAL(00H), SERS(01H), INDV(02H), STE(03H)
00 00 00 25	00 00 00 01	00 - 64	MIX BALANCE 0(00H)..100(64H)
00 00 00 26	00 00 00 01	00 - 03	EFFECT ROUTING OFF(00H), [A](01H), [B](02H), MSTR(03H)
00 00 00 27	00 00 00 01	00 - 03	RSS ROUTING OFF(00H), [A](01H), [B](02H), MSTR(03H)
00 00 00 28	00 00 00 01	00 - 04	DYNAMIC SEPARATOR:TYPE OFF(00H), ATCK(01H), LOUD(02H), NOTE(03H), DRUM(04H)
00 00 00 29	00 00 00 01	00 - 01	DYNAMIC SEPARATOR:DESTINATION [A](00H), [B](01H)
00 00 00 2A	00 00 00 01	00 - 64	DYNAMIC SEPARATOR:RATE 0(00H)..100(64H)
00 00 00 2B	00 00 00 01	00 - 0A	DYNAMIC SEPARATOR:FREQUENCY 0(00H),10(01H),20(02H)..100(0AH) (step:10)
00 00 00 2C	00 00 00 01	00 - 64	DYNAMIC SEPARATOR:SENS 0(00H)..100(64H)
00 00 00 2D	00 00 00 01	00 - 64	DYNAMIC SEPARATOR:SENS LOW 0(00H)..100(64H)
00 00 00 2E	00 00 00 01	00 - 17	PRE-LOW-PASS FREQ A 1.6k(00H)..20kHz(16H), OFF(17H) * refer to table-7
00 00 00 2F	00 00 00 01	00 - 17	PRE-LOW-PASS FREQ B 1.6k(00H)..20kHz(16H), OFF(17H) * refer to table-7
00 00 00 30	00 00 00 01	00 - 29	PRE-HIGH-PASS FREQ A OFF(00H), 20(01H)..2.0kHz(29H) * refer to table-8
00 00 00 31	00 00 00 01	00 - 29	PRE-HIGH-PASS FREQ B OFF(00H), 20(01H)..2.0kHz(29H) * refer to table-8
00 00 00 32	00 00 00 01	00 - 64	UNIT INPUT LEVEL A 0(00H)..100(64H)
00 00 00 33	00 00 00 01	00 - 64	UNIT INPUT LEVEL B 0(00H)..100(64H)
00 00 00 34	00 00 00 01	00 - 64	UNIT OUTPUT LEVEL A 0(00H)..100(64H)
00 00 00 35	00 00 00 01	00 - 64	UNIT OUTPUT LEVEL B 0(00H)..100(64H)
00 00 00 36	Reserved		
00 00 00 37	Reserved		

MIDI Implementation

[REVERB A]

REV TYPE A: REVERB (REV)

Offset(H)	Size(H)	Data(H)	Description
00 00 00 38	00 00 00 01	00 - 0B	VARIATION ROOM1..3, HALL1..3,GARAGE, PLATE1..5 * refer to table-9
00 00 00 39	00 00 00 01	00 - 64	REV TIME 0sec(00H)..100sec(64H)
00 00 00 3A	00 00 00 01	00 - 63	REV TIME:Suborder 0.00sec(00H)..0.99sec(63H)
00 00 00 3B	00 00 00 01	00 - 64	REV LEVEL 0(00H)..100(64H)
00 00 00 3C	00 00 00 01	00 - 64	REV LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 3D	00 00 00 01	00 - 51	REV LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 3E	00 00 00 01	00 - 0D	PRE DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 3F	00 00 00 01	00 - 64	PRE DELAY BALANCE 0(00H)..100(64H)
00 00 00 40	00 00 00 01	00 - 64	PRE DELAY BALANCE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 41	00 00 00 01	00 - 01	PRE DELAY BALANCE:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 42	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 00 43	00 00 00 01	00 - 64	DENSITY:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 44	00 00 00 01	00 - 01	DENSITY:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 45	00 00 00 01	00 - 64	PLATE DEPTH 0(00H)..100(64H)
00 00 00 46	00 00 00 01	xx - xx	REV SIZE * refer to table-11
00 00 00 47	00 00 00 01	00 - 64	RELEASE DENSITY 0(00H)..100(64H)
00 00 00 48	00 00 00 01	00 - 64	BRILLIANCE 0(00H)..100(64H)
00 00 00 49	00 00 00 01	00 - 64	EDGE 0(00H)..100(64H)
00 00 00 4A	00 00 00 01	00 - 65	REV OUTPUT PAN WIDTH 0(00H)..100(64H), 3D(65H)
00 00 00 4B	00 00 00 01	00 - 64	COMPRESSOR:RATIO 0(00H)..100(64H)
00 00 00 4C	00 00 00 01	00 - 64	COMPRESSOR:ATTACK 0(00H)..100(64H)
00 00 00 4D	00 00 00 01	00 - 64	COMPRESSOR:RELEASE 0(00H)..100(64H)
00 00 00 4E	00 00 00 01	00 - 19	LF DAMP:FREQ 50kHz(00H)..4.0kHz(19H) * refer to table-12
00 00 00 4F	00 00 00 01	00 - 64	LF DAMP:GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 50	00 00 00 01	00 - 17	HF DAMP:FREQ 3.5kHz(00H)..20kHz(17H) * refer to table-13
00 00 00 51	00 00 00 01	00 - 64	HF DAMP:GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 52	00 00 00 01	00 - 64	ER LEVEL 0(00H)..100(64H)
00 00 00 53	00 00 00 01	00 - 64	ER LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 54	00 00 00 01	00 - 01	ER LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 55	00 00 00 01	01 - 64	ER TIME RATIO 1%(01H)..100%(64H)
00 00 00 56	00 00 00 01	01 - 64	ER DIFFUSE SIZE 1(01H)..100(64H)
00 00 00 57	00 00 00 01	00 - 64	ER DIFFUSION 0(00H)..100(64H)
00 00 00 58	00 00 00 01	00 - 64	ER DIFFUSION DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 59	00 00 00 01	00 - 01	ER DIFFUSION DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 5A	00 00 00 01	00 - 5D	ER TAP#1:DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 5B	00 00 00 01	00 - 64	ER TAP#1:LEVEL 0(00H)..100(64H)
00 00 00 5C	00 00 00 01	00 - 66	ER TAP#1:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 00 5D	00 00 00 01	00 - 1B	ER TAP#1:HI CUT FREQ 200Hz(00H)..20kHz(1AH), OFF(1BH) * refer to table-15
00 00 00 5E	00 00 00 01	00 - 5D	ER TAP#2:DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 5F	00 00 00 01	00 - 64	ER TAP#2:LEVEL 0(00H)..100(64H)
00 00 00 60	00 00 00 01	00 - 66	ER TAP#2:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 00 61	00 00 00 01	00 - 1B	ER TAP#2:HI CUT FREQ 200Hz(00H)..20kHz(1AH), OFF(1BH) * refer to table-15
00 00 00 62	00 00 00 01	00 - 5D	ER TAP#3:DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 63	00 00 00 01	00 - 64	ER TAP#3:LEVEL 0(00H)..100(64H)
00 00 00 64	00 00 00 01	00 - 66	ER TAP#3:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 00 65	00 00 00 01	00 - 1B	ER TAP#3:HI CUT FREQ 200Hz(00H)..20kHz(1AH), OFF(1BH) * refer to table-15
00 00 00 66	00 00 00 01	00 - 5D	ER TAP#4:DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 67	00 00 00 01	00 - 64	ER TAP#4:LEVEL 0(00H)..100(64H)
00 00 00 68	00 00 00 01	00 - 66	ER TAP#4:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 00 69	00 00 00 01	00 - 1B	ER TAP#4:HI CUT FREQ 200Hz(00H)..20kHz(1AH), OFF(1BH) * refer to table-15
00 00 00 6A	Reserved	:	:
00 00 01 0B	Reserved	:	:

REV TYPE A: GATE REVERB (GRV)

Offset(H)	Size(H)	Data(H)	Description
00 00 00 38	00 00 00 01	00 - 0B	VARIATION ROOM1..3, HALL1..3,GARAGE, PLATE1..5 * refer to table-9
00 00 00 39	00 00 00 01	00 - 64	GATE REV LEVEL 0(00H)..100(64H)
00 00 00 3A	00 00 00 01	00 - 64	GATETIME:HOLD TIME 1msec(00H)..4.0sec(64H) * refer to table-16
00 00 00 3B	00 00 00 01	00 - 64	THRESHOLD 0(00H)..100(64H)
00 00 00 3C	00 00 00 01	00 - 64	GATETIME:DECAY RATE 0(00H)..100(64H)
00 00 00 3D	00 00 00 01	00 - 64	GATETIME:RELEASE TIME 1msec(00H)..4.0sec(64H) * refer to table-16
00 00 00 3E	00 00 00 01	00 - 5D	PRE DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 3F	00 00 00 01	00 - 64	PRE DELAY BALANCE 0(00H)..100(64H)
00 00 00 40	00 00 00 01	00 - 64	PRE DELAY BALANCE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 41	00 00 00 01	00 - 01	PRE DELAY BALANCE:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 42	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 00 43	00 00 00 01	00 - 64	DENSITY:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 44	00 00 00 01	00 - 01	DENSITY:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 45	00 00 00 01	xx - xx	REV SIZE * refer to table-11
00 00 00 46	00 00 00 01	00 - 65	REV OUTPUT PAN WIDTH 0(00H)..100(64H), 3D(65H)
00 00 00 47	00 00 00 01	00 - 64	COMPRESSOR:RATIO 0(00H)..100(64H)
00 00 00 48	00 00 00 01	00 - 64	COMPRESSOR:ATTACK 0(00H)..100(64H)
00 00 00 49	00 00 00 01	00 - 64	COMPRESSOR:RELEASE 0(00H)..100(64H)
00 00 00 4A	00 00 00 01	00 - 19	LF DAMP:FREQ 50kHz(00H)..4.0kHz(19H) * refer to table-12
00 00 00 4B	00 00 00 01	00 - 64	LF DAMP:GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 4C	00 00 00 01	00 - 17	HF DAMP:FREQ 3.5kHz(00H)..20kHz(17H) * refer to table-13
00 00 00 4D	00 00 00 01	00 - 64	HF DAMP:GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 4E	Reserved	:	:
00 00 01 0B	Reserved	:	:

REV TYPE A: AMBIENCE (AMB)

Offset(H)	Size(H)	Data(H)	Description
00 00 00 38	00 00 00 01	01 - 08	VARIATION AMB1(01H)..AMB8(08H)
00 00 00 39	00 00 00 01	00 - 64	AMB LEVEL 0(00H)..100(64H)
00 00 00 3A	00 00 00 01	00 - 64	AMB LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 3B	00 00 00 01	00 - 01	AMB LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 3C	00 00 00 01	01 - 64	AMB ROOM SIZE 1%(01H)..100%(64H)
00 00 00 3D	00 00 00 01	00 - 64	HF DAMP GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 3E	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 00 3F	00 00 00 01	00 - 14	TAP#1:TIME 0.0sec(00H)..2.0sec(14H)
00 00 00 40	00 00 00 01	00 - 63	TAP#1:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 00 41	00 00 00 01	00 - 64	TAP#1:LEVEL 0(00H)..100(64H)
00 00 00 42	00 00 00 01	00 - 66	TAP#1:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 00 43	00 00 00 01	00 - 1A	TAP#1:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 00 44	00 00 00 01	00 - 64	TAP#1:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 45	00 00 00 01	00 - 14	TAP#2:TIME 0.0sec(00H)..2.0sec(14H)
00 00 00 46	00 00 00 01	00 - 63	TAP#2:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 00 47	00 00 00 01	00 - 64	TAP#2:LEVEL 0(00H)..100(64H)
00 00 00 48	00 00 00 01	00 - 66	TAP#2:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 00 49	00 00 00 01	00 - 1A	TAP#2:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 00 4A	00 00 00 01	00 - 64	TAP#2:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 00 4B	00 00 00 01	00 - 14	TAP#3:TIME 0.0sec(00H)..2.0sec(14H)
00 00 00 4C	00 00 00 01	00 - 63	TAP#3:TIME:Suborder 0.000sec(00H)..0.099sec(63H)

00 00 00 4D	00 00 00 01	00 - 64	TAP#3:LEVEL	0(00H)..100(64H)	
00 00 00 4E	00 00 00 01	00 - 66	TAP#3:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 4F	00 00 00 01	00 - 1A	TAP#3:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 50	00 00 00 01	00 - 64	TAP#3:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 51	00 00 00 01	00 - 14	TAP#4:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 52	00 00 00 01	00 - 63	TAP#4:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 53	00 00 00 01	00 - 64	TAP#4:LEVEL	0(00H)..100(64H)	
00 00 00 54	00 00 00 01	00 - 66	TAP#4:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 55	00 00 00 01	00 - 1A	TAP#4:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 56	00 00 00 01	00 - 64	TAP#4:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 57	00 00 00 01	00 - 14	TAP#5:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 58	00 00 00 01	00 - 63	TAP#5:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 59	00 00 00 01	00 - 64	TAP#5:LEVEL	0(00H)..100(64H)	
00 00 00 5A	00 00 00 01	00 - 66	TAP#5:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 5B	00 00 00 01	00 - 1A	TAP#5:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 5C	00 00 00 01	00 - 64	TAP#5:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 5D	00 00 00 01	00 - 14	TAP#6:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 5E	00 00 00 01	00 - 63	TAP#6:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 5F	00 00 00 01	00 - 64	TAP#6:LEVEL	0(00H)..100(64H)	
00 00 00 60	00 00 00 01	00 - 66	TAP#6:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 61	00 00 00 01	00 - 1A	TAP#6:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 62	00 00 00 01	00 - 64	TAP#6:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 63	00 00 00 01	00 - 14	TAP#7:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 64	00 00 00 01	00 - 63	TAP#7:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 65	00 00 00 01	00 - 64	TAP#7:LEVEL	0(00H)..100(64H)	
00 00 00 66	00 00 00 01	00 - 66	TAP#7:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 67	00 00 00 01	00 - 1A	TAP#7:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 68	00 00 00 01	00 - 64	TAP#7:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 69	00 00 00 01	00 - 14	TAP#8:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 6A	00 00 00 01	00 - 63	TAP#8:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 6B	00 00 00 01	00 - 64	TAP#8:LEVEL	0(00H)..100(64H)	
00 00 00 6C	00 00 00 01	00 - 66	TAP#8:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 6D	00 00 00 01	00 - 1A	TAP#8:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 6E	00 00 00 01	00 - 64	TAP#8:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 6F	00 00 00 01	00 - 14	TAP#9:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 70	00 00 00 01	00 - 63	TAP#9:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 71	00 00 00 01	00 - 64	TAP#9:LEVEL	0(00H)..100(64H)	
00 00 00 72	00 00 00 01	00 - 66	TAP#9:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 73	00 00 00 01	00 - 1A	TAP#9:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 74	00 00 00 01	00 - 64	TAP#9:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 75	00 00 00 01	00 - 14	TAP#10:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 76	00 00 00 01	00 - 63	TAP#10:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 77	00 00 00 01	00 - 64	TAP#10:LEVEL	0(00H)..100(64H)	
00 00 00 78	00 00 00 01	00 - 66	TAP#10:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 79	00 00 00 01	00 - 1A	TAP#10:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 00 7A	00 00 00 01	00 - 64	TAP#10:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 00 7B	00 00 00 01	00 - 14	TAP#11:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 00 7C	00 00 00 01	00 - 63	TAP#11:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 00 7D	00 00 00 01	00 - 64	TAP#11:LEVEL	0(00H)..100(64H)	
00 00 00 7E	00 00 00 01	00 - 66	TAP#11:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 00 7F	00 00 00 01	00 - 1A	TAP#11:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 00	00 00 00 01	00 - 64	TAP#11:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 01	00 00 00 01	00 - 14	TAP#12:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 01 02	00 00 00 01	00 - 63	TAP#12:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 03	00 00 00 01	00 - 64	TAP#12:LEVEL	0(00H)..100(64H)	
00 00 01 04	00 00 00 01	00 - 66	TAP#12:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 05	00 00 00 01	00 - 1A	TAP#12:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 06	00 00 00 01	00 - 64	TAP#12:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 07	Reserved	:	:	:	:
00 00 01 0B	Reserved	:	:	:	:

REV TYPE A: NON LINEAR (NLR)

Offset(H)	Size(H)	Data(H)	Description
00 00 00 38	00 00 00 01	00 - 02	VARIATION L-R(00H), NORMAL(01H), L-R(02H)
00 00 00 39	00 00 00 01	00 - 64	NLR LEVEL 0(00H)..100(64H)
00 00 00 3A	00 00 00 01	00 - 64	NLR LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 3B	00 00 00 01	00 - 5D	NLR LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 3C	00 00 00 01	00 - 01	PRE DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 00 3D	00 00 00 01	00 - 64	PRE DELAY BALANCE 0(00H)..100(64H)
00 00 00 3E	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 00 3F	00 00 00 01	00 - 64	DENSITY:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 00 40	00 00 00 01	00 - 01	DENSITY:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 00 41	00 00 00 01	00 - 64	REV OUTPUT PAN WIDTH 0(00H)..100(64H), 3D(65H)
00 00 00 42	00 00 00 01	01 - 65	ENV TIME RATIO 1&(01H)..100%(64H)
00 00 00 43	00 00 00 01	00 - 0C	ENVELOPE:TIME1 0.0sec(00H)..1.2sec(0CH)
00 00 00 44	00 00 00 01	00 - 63	ENVELOPE:TIME1:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 00 45	00 00 00 01	00 - 0C	ENVELOPE:TIME2 0.0sec(00H)..1.2sec(0CH)
00 00 00 46	00 00 00 01	00 - 63	ENVELOPE:TIME2:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 00 47	00 00 00 01	00 - 0C	ENVELOPE:TIME3 0.0sec(00H)..1.2sec(0CH)
00 00 00 48	00 00 00 01	00 - 63	ENVELOPE:TIME3:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 00 49	00 00 00 01	00 - 0C	ENVELOPE:TIME4 0.0sec(00H)..1.2sec(0CH)
00 00 00 4A	00 00 00 01	00 - 63	ENVELOPE:TIME4:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 00 4B	00 00 00 01	00 - 64	ENVELOPE:LEVEL1 0(00H)..100(64H)
00 00 00 4C	00 00 00 01	00 - 64	ENVELOPE:LEVEL2 0(00H)..100(64H)
00 00 00 4D	00 00 00 01	00 - 64	ENVELOPE:LEVEL3 0(00H)..100(64H)
00 00 00 4E	Reserved	:	:
00 00 01 0B	Reserved	:	:

[REVERB B]

REV TYPE B: REVERB (REV)

Offset(H)	Size(H)	Data(H)	Description
00 00 01 0C	00 00 00 01	00 - 0B	VARIATION ROOM1..3, HALL1..3,GARAGE, PLATE1..5 * refer to table-9
00 00 01 0D	00 00 00 01	00 - 64	REV TIME 0sec(00H)..100sec(64H)
00 00 01 0E	00 00 00 01	00 - 63	REV TIME:Suborder 0.00sec(00H)..0.99sec(63H)
00 00 01 0F	00 00 00 01	00 - 64	REV LEVEL 0(00H)..100(64H)
00 00 01 10	00 00 00 01	00 - 64	REV LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 11	00 00 00 01	00 - 01	REV LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 12	00 00 00 01	00 - 5D	PRE DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 01 13	00 00 00 01	00 - 64	PRE DELAY BALANCE 0(00H)..100(64H)
00 00 01 14	00 00 00 01	00 - 64	PRE DELAY BALANCE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 15	00 00 00 01	00 - 01	PRE DELAY BALANCE:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 16	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 01 17	00 00 00 01	00 - 64	DENSITY:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 18	00 00 00 01	00 - 01	DENSITY:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 19	00 00 00 01	00 - 64	PLATE DEPTH 0(00H)..100(64H)
00 00 01 1A	00 00 00 01	xx - xx	REV SIZE * refer to table-11
00 00 01 1B	00 00 00 01	00 - 64	RELEASE DENSITY 0(00H)..100(64H)
00 00 01 1C	00 00 00 01	00 - 64	BRILLIANCE 0(00H)..100(64H)

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00 00 01 1D	00 00 00 01	00 - 64	EDGE	0(00H)..100(64H)	
00 00 01 1E	00 00 00 01	00 - 65	REV OUTPUT PAN WIDTH	0(00H)..100(64H), 3D(65H)	
00 00 01 1F	00 00 00 01	00 - 64	COMPRESSOR:RATIO	0(00H)..100(64H)	
00 00 01 20	00 00 00 01	00 - 64	COMPRESSOR:ATTACK	0(00H)..100(64H)	
00 00 01 21	00 00 00 01	00 - 64	COMPRESSOR:RELEASE	0(00H)..100(64H)	
00 00 01 22	00 00 00 01	00 - 19	LF DAMP:FREQ	50kHz(00H)..4.0kHz(19H)	* refer to table-12
00 00 01 23	00 00 00 01	00 - 64	LF DAMP:GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 24	00 00 00 01	00 - 17	HF DAMP:FREQ	3.5kHz(00H)..20kHz(17H)	* refer to table-13
00 00 01 25	00 00 00 01	00 - 64	HF DAMP:GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 26	00 00 00 01	00 - 64	ER LEVEL	0(00H)..100(64H)	
00 00 01 27	00 00 00 01	00 - 64	ER LEVEL:DYNAMIC CONTROL	0(00H)..100(64H)	
00 00 01 28	00 00 00 01	00 - 01	ER LEVEL:DYNAMIC POLARITY	NOR(00H), INV(01H)	
00 00 01 29	00 00 00 01	01 - 64	ER TIME RATIO	1%(01H)..100%(64H)	
00 00 01 2A	00 00 00 01	01 - 64	ER DIFFUSE SIZE	1(01H)..100(64H)	
00 00 01 2B	00 00 00 01	00 - 64	ER DIFFUSION	0(00H)..100(64H)	
00 00 01 2C	00 00 00 01	00 - 64	ER DIFFUSION DYNAMIC CONTROL	0(00H)..100(64H)	
00 00 01 2D	00 00 00 01	00 - 01	ER DIFFUSION DYNAMIC POLARITY	NOR(00H), INV(01H)	
00 00 01 2E	00 00 00 01	00 - 5D	ER TAP#1:DELAY TIME	1msec(00H)..700msec(5DH)	* refer to table-10
00 00 01 2F	00 00 00 01	00 - 64	ER TAP#1:LEVEL	0(00H)..100(64H)	
00 00 01 30	00 00 00 01	00 - 66	ER TAP#1:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 31	00 00 00 01	00 - 1B	ER TAP#1:HI CUT FREQ	200Hz(00H)..20kHz(1AH), OFF(1BH)	* refer to table-15
00 00 01 32	00 00 00 01	00 - 5D	ER TAP#2:DELAY TIME	1msec(00H)..700msec(5DH)	* refer to table-10
00 00 01 33	00 00 00 01	00 - 64	ER TAP#2:LEVEL	0(00H)..100(64H)	
00 00 01 34	00 00 00 01	00 - 66	ER TAP#2:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 35	00 00 00 01	00 - 1B	ER TAP#2:HI CUT FREQ	200Hz(00H)..20kHz(1AH), OFF(1BH)	* refer to table-15
00 00 01 36	00 00 00 01	00 - 5D	ER TAP#3:DELAY TIME	1msec(00H)..700msec(5DH)	* refer to table-10
00 00 01 37	00 00 00 01	00 - 64	ER TAP#3:LEVEL	0(00H)..100(64H)	
00 00 01 38	00 00 00 01	00 - 66	ER TAP#3:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 39	00 00 00 01	00 - 1B	ER TAP#3:HI CUT FREQ	200Hz(00H)..20kHz(1AH), OFF(1BH)	* refer to table-15
00 00 01 3A	00 00 00 01	00 - 5D	ER TAP#4:DELAY TIME	1msec(00H)..700msec(5DH)	* refer to table-10
00 00 01 3B	00 00 00 01	00 - 64	ER TAP#4:LEVEL	0(00H)..100(64H)	
00 00 01 3C	00 00 00 01	00 - 66	ER TAP#4:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 3D	00 00 00 01	00 - 1B	ER TAP#4:HI CUT FREQ	200Hz(00H)..20kHz(1AH), OFF(1BH)	* refer to table-15
00 00 01 3E	Reserved				
00 00 01 3F	Reserved				

REV TYPE B: GATE REVERB (GRV)

Offset(H)	Size(H)	Data(H)	Description
00 00 01 0C	00 00 00 01	00 - 0B	VARIATION ROOM1..3, HALL1..3,GARAGE, PLATE1..5 * refer to table-9
00 00 01 0D	00 00 00 01	00 - 64	GATE REV LEVEL 0(00H)..100(64H)
00 00 01 0E	00 00 00 01	00 - 64	GATE TIME:HOLD TIME 1msec(00H)..4.0sec(64H) * refer to table-16
00 00 01 0F	00 00 00 01	00 - 64	THRESHOLD 0(00H)..100(64H)
00 00 01 10	00 00 00 01	00 - 64	GATE TIME:DECAY RATE 0(00H)..100(64H)
00 00 01 11	00 00 00 01	00 - 64	GATE TIME:RELEASE TIME 1msec(00H)..4.0sec(64H) * refer to table-16
00 00 01 12	00 00 00 01	00 - 5D	PRE DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 01 13	00 00 00 01	00 - 64	PRE DELAY BALANCE 0(00H)..100(64H)
00 00 01 14	00 00 00 01	00 - 64	PRE DELAY BALANCE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 15	00 00 00 01	00 - 01	PRE DELAY BALANCE:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 16	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 01 17	00 00 00 01	00 - 64	DENSITY:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 18	00 00 00 01	00 - 01	DENSITY:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 19	00 00 00 01	xx - xx	REV SIZE * refer to table-11
00 00 01 1A	00 00 00 01	00 - 65	REV OUTPUT PAN WIDTH 0(00H)..100(64H), 3D(65H)
00 00 01 1B	00 00 00 01	00 - 64	COMPRESSOR:RATIO 0(00H)..100(64H)
00 00 01 1C	00 00 00 01	00 - 64	COMPRESSOR:ATTACK 0(00H)..100(64H)
00 00 01 1D	00 00 00 01	00 - 64	COMPRESSOR:RELEASE 0(00H)..100(64H)
00 00 01 1E	00 00 00 01	00 - 19	LF DAMP:FREQ 50kHz(00H)..4.0kHz(19H) * refer to table-12
00 00 01 1F	00 00 00 01	00 - 64	LF DAMP:GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 20	00 00 00 01	00 - 17	HF DAMP:FREQ 3.5kHz(00H)..20kHz(17H) * refer to table-13
00 00 01 21	00 00 00 01	00 - 64	HF DAMP:GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 22	Reserved		
00 00 01 5F	Reserved		

REV TYPE B: AMBIENCE (AMB)

Offset(H)	Size(H)	Data(H)	Description
00 00 01 0C	00 00 00 01	01 - 08	VARIATION AMB1(01H)..AMB8(08H)
00 00 01 0D	00 00 00 01	00 - 64	AMB LEVEL 0(00H)..100(64H)
00 00 01 0E	00 00 00 01	00 - 64	AMB LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 0F	00 00 00 01	00 - 01	AMB LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 10	00 00 00 01	01 - 64	AMB ROOM SIZE 1%(01H)..100%(64H)
00 00 01 11	00 00 00 01	00 - 64	HF DAMP GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 12	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 01 13	00 00 00 01	00 - 14	TAP#1:TIME 0.0sec(00H)..2.0sec(14H)
00 00 01 14	00 00 00 01	00 - 63	TAP#1:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 15	00 00 00 01	00 - 64	TAP#1:LEVEL 0(00H)..100(64H)
00 00 01 16	00 00 00 01	00 - 66	TAP#1:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 01 17	00 00 00 01	00 - 1A	TAP#1:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 01 18	00 00 00 01	00 - 64	TAP#1:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 19	00 00 00 01	00 - 14	TAP#2:TIME 0.0sec(00H)..2.0sec(14H)
00 00 01 1A	00 00 00 01	00 - 63	TAP#2:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 1B	00 00 00 01	00 - 64	TAP#2:LEVEL 0(00H)..100(64H)
00 00 01 1C	00 00 00 01	00 - 66	TAP#2:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 01 1D	00 00 00 01	00 - 1A	TAP#2:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 01 1E	00 00 00 01	00 - 64	TAP#2:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 1F	00 00 00 01	00 - 14	TAP#3:TIME 0.0sec(00H)..2.0sec(14H)
00 00 01 20	00 00 00 01	00 - 63	TAP#3:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 21	00 00 00 01	00 - 64	TAP#3:LEVEL 0(00H)..100(64H)
00 00 01 22	00 00 00 01	00 - 66	TAP#3:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 01 23	00 00 00 01	00 - 1A	TAP#3:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 01 24	00 00 00 01	00 - 64	TAP#3:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 25	00 00 00 01	00 - 14	TAP#4:TIME 0.0sec(00H)..2.0sec(14H)
00 00 01 26	00 00 00 01	00 - 63	TAP#4:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 27	00 00 00 01	00 - 64	TAP#4:LEVEL 0(00H)..100(64H)
00 00 01 28	00 00 00 01	00 - 66	TAP#4:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 01 29	00 00 00 01	00 - 1A	TAP#4:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 01 2A	00 00 00 01	00 - 64	TAP#4:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 2B	00 00 00 01	00 - 14	TAP#5:TIME 0.0sec(00H)..2.0sec(14H)
00 00 01 2C	00 00 00 01	00 - 63	TAP#5:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 2D	00 00 00 01	00 - 64	TAP#5:LEVEL 0(00H)..100(64H)
00 00 01 2E	00 00 00 01	00 - 66	TAP#5:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 01 2F	00 00 00 01	00 - 1A	TAP#5:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 01 30	00 00 00 01	00 - 64	TAP#5:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 31	00 00 00 01	00 - 14	TAP#6:TIME 0.0sec(00H)..2.0sec(14H)
00 00 01 32	00 00 00 01	00 - 63	TAP#6:TIME:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 33	00 00 00 01	00 - 64	TAP#6:LEVEL 0(00H)..100(64H)
00 00 01 34	00 00 00 01	00 - 66	TAP#6:PAN 3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)
00 00 01 35	00 00 00 01	00 - 1A	TAP#6:HI CUT FREQ 200Hz(00H)..20kHz(1AH) * refer to table-17
00 00 01 36	00 00 00 01	00 - 64	TAP#6:HI CUT GAIN -36.0dB(00H)..0.0dB(64H) * refer to table-14
00 00 01 37	00 00 00 01	00 - 14	TAP#7:TIME 0.0sec(00H)..2.0sec(14H)

00 00 01 38	00 00 00 01	00 - 63	TAP#7:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 39	00 00 00 01	00 - 64	TAP#7:LEVEL	0(00H)..100(64H)	
00 00 01 3A	00 00 00 01	00 - 66	TAP#7:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 3B	00 00 00 01	00 - 1A	TAP#7:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 3C	00 00 00 01	00 - 64	TAP#7:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 3D	00 00 00 01	00 - 14	TAP#8:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 01 3E	00 00 00 01	00 - 63	TAP#8:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 3F	00 00 00 01	00 - 64	TAP#8:LEVEL	0(00H)..100(64H)	
00 00 01 40	00 00 00 01	00 - 66	TAP#8:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 41	00 00 00 01	00 - 1A	TAP#8:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 42	00 00 00 01	00 - 64	TAP#8:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 43	00 00 00 01	00 - 14	TAP#9:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 01 44	00 00 00 01	00 - 63	TAP#9:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 45	00 00 00 01	00 - 64	TAP#9:LEVEL	0(00H)..100(64H)	
00 00 01 46	00 00 00 01	00 - 66	TAP#9:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 47	00 00 00 01	00 - 1A	TAP#9:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 48	00 00 00 01	00 - 64	TAP#9:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 49	00 00 00 01	00 - 14	TAP#10:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 01 4A	00 00 00 01	00 - 63	TAP#10:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 4B	00 00 00 01	00 - 64	TAP#10:LEVEL	0(00H)..100(64H)	
00 00 01 4C	00 00 00 01	00 - 66	TAP#10:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 4D	00 00 00 01	00 - 1A	TAP#10:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 4E	00 00 00 01	00 - 64	TAP#10:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 4F	00 00 00 01	00 - 14	TAP#11:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 01 50	00 00 00 01	00 - 63	TAP#11:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 51	00 00 00 01	00 - 64	TAP#11:LEVEL	0(00H)..100(64H)	
00 00 01 52	00 00 00 01	00 - 66	TAP#11:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 53	00 00 00 01	00 - 1A	TAP#11:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 54	00 00 00 01	00 - 64	TAP#11:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 55	00 00 00 01	00 - 14	TAP#12:TIME	0.0sec(00H)..2.0sec(14H)	
00 00 01 56	00 00 00 01	00 - 63	TAP#12:TIME:Suborder	0.000sec(00H)..0.099sec(63H)	
00 00 01 57	00 00 00 01	00 - 64	TAP#12:LEVEL	0(00H)..100(64H)	
00 00 01 58	00 00 00 01	00 - 66	TAP#12:PAN	3DL(00H), L50(01H)..0(33H)..R50(65H), 3DR(66H)	
00 00 01 59	00 00 00 01	00 - 1A	TAP#12:HI CUT FREQ	200Hz(00H)..20kHz(1AH)	* refer to table-17
00 00 01 5A	00 00 00 01	00 - 64	TAP#12:HI CUT GAIN	-36.0dB(00H)..0.0dB(64H)	* refer to table-14
00 00 01 5B	Reserved				
:	:				
00 00 01 5F	Reserved				

REV TYPE B: NON LINEAR (NLR)

Offset(H)	Size(H)	Data(H)	Description
00 00 01 0C	00 00 00 01	00 - 02	VARIATION L-R(00H), NORMAL(01H), L-R(02H)
00 00 01 0D	00 00 00 01	00 - 64	NLR LEVEL 0(00H)..100(64H)
00 00 01 0E	00 00 00 01	00 - 64	NLR LEVEL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 0F	00 00 00 01	00 - 01	NLR LEVEL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 10	00 00 00 01	00 - 5D	PRE DELAY TIME 1msec(00H)..700msec(5DH) * refer to table-10
00 00 01 11	00 00 00 01	00 - 64	PRE DELAY BALANCE 0(00H)..100(64H)
00 00 01 12	00 00 00 01	00 - 64	DENSITY 0(00H)..100(64H)
00 00 01 13	00 00 00 01	00 - 64	DENSITY:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 14	00 00 00 01	00 - 01	DENSITY:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 15	00 00 00 01	00 - 65	REV OUTPUT PAN WIDTH 0(00H)..100(64H), 3D(65H)
00 00 01 16	00 00 00 01	01 - 64	ENV TIME RATIO 1*(01H)..100*(64H)
00 00 01 17	00 00 00 01	00 - 0C	ENVELOPE:TIME1 0.0sec(00H)..1.2sec(0CH)
00 00 01 18	00 00 00 01	00 - 63	ENVELOPE:TIME1:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 19	00 00 00 01	00 - 0C	ENVELOPE:TIME2 0.0sec(00H)..1.2sec(0CH)
00 00 01 1A	00 00 00 01	00 - 63	ENVELOPE:TIME2:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 1B	00 00 00 01	00 - 0C	ENVELOPE:TIME3 0.0sec(00H)..1.2sec(0CH)
00 00 01 1C	00 00 00 01	00 - 63	ENVELOPE:TIME3:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 1D	00 00 00 01	00 - 0C	ENVELOPE:TIME4 0.0sec(00H)..1.2sec(0CH)
00 00 01 1E	00 00 00 01	00 - 63	ENVELOPE:TIME4:Suborder 0.000sec(00H)..0.099sec(63H)
00 00 01 1F	00 00 00 01	00 - 64	ENVELOPE:LEVEL1 0(00H)..100(64H)
00 00 01 20	00 00 00 01	00 - 64	ENVELOPE:LEVEL2 0(00H)..100(64H)
00 00 01 21	00 00 00 01	00 - 64	ENVELOPE:LEVEL3 0(00H)..100(64H)
00 00 01 22	Reserved		
:	:		
00 00 01 5F	Reserved		

[3 BAND EQ A]

Offset(H)	Size(H)	Data(H)	Description
00 00 01 60	00 00 00 01	00 - 28	LOW BAND EQ:FREQUENCY 20Hz(00H)..2.0kHz(28H) * refer to table-18
00 00 01 61	00 00 00 01	00 - 5C	LOW BAND EQ:GAIN -12.0dB(00H)..12.0dB(5CH) * refer to table-21
00 00 01 62	00 00 00 01	00 - 35	LOW BAND EQ:Q SHELIVING(00H), 0.3(01H)..10.0(35H) * refer to table-22
00 00 01 63	00 00 00 01	00 - 20	MID BAND EQ:FREQUENCY 200Hz(00H)..8.0kHz(20H) * refer to table-19
00 00 01 64	00 00 00 01	00 - 5C	MID BAND EQ:GAIN -12.0dB(00H)..12.0dB(5CH) * refer to table-21
00 00 01 65	00 00 00 01	01 - 35	MID BAND EQ:Q 0.3(01H)..10.0(35H) * refer to table-23
00 00 01 66	00 00 00 01	00 - 16	HIGH BAND EQ:FREQUENCY 1.6kHz(00H)..20kHz(16H) * refer to table-20
00 00 01 67	00 00 00 01	00 - 5C	HIGH BAND EQ:GAIN -12.0dB(00H)..12.0dB(5CH) * refer to table-21
00 00 01 68	00 00 00 01	00 - 35	HIGH BAND EQ:Q SHELIVING(00H), 0.3(01H)..10.0(35H) * refer to table-22

[3 BAND EQ B]

Offset(H)	Size(H)	Data(H)	Description
00 00 01 69	00 00 00 01	00 - 28	LOW BAND EQ:FREQUENCY 20Hz(00H)..2.0kHz(28H) * refer to table-18
00 00 01 6A	00 00 00 01	00 - 5C	LOW BAND EQ:GAIN -12.0dB(00H)..12.0dB(5CH) * refer to table-21
00 00 01 6B	00 00 00 01	00 - 35	LOW BAND EQ:Q SHELIVING(00H), 0.3(01H)..10.0(35H) * refer to table-22
00 00 01 6C	00 00 00 01	00 - 20	MID BAND EQ:FREQUENCY 200Hz(00H)..8.0kHz(20H) * refer to table-19
00 00 01 6D	00 00 00 01	00 - 5C	MID BAND EQ:GAIN -12.0dB(00H)..12.0dB(5CH) * refer to table-21
00 00 01 6E	00 00 00 01	01 - 35	MID BAND EQ:Q 0.3(01H)..10.0(35H) * refer to table-23
00 00 01 6F	00 00 00 01	00 - 16	HIGH BAND EQ:FREQUENCY 1.6kHz(00H)..20kHz(16H) * refer to table-20
00 00 01 70	00 00 00 01	00 - 5C	HIGH BAND EQ:GAIN -12.0dB(00H)..12.0dB(5CH) * refer to table-21
00 00 01 71	00 00 00 01	00 - 35	HIGH BAND EQ:Q SHELIVING(00H), 0.3(01H)..10.0(35H) * refer to table-22

[EFFECT]

Offset(H)	Size(H)	Data(H)	Description
00 00 01 72	00 00 00 01	00 - 02	EFFECT TYPE RESONATOR(00H), PHASER(01H), FLANGER/CHORUS(02H)
00 00 01 73	00 00 00 01	00 - 64	SEPARATION 0(00H)..100(64H)
00 00 01 74	00 00 00 01	00 - 64	MANUAL 0(00H)..100(64H)
00 00 01 75	00 00 00 01	00 - 64	MANUAL:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 76	00 00 00 01	00 - 01	MANUAL:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 77	00 00 00 01	00 - 64	RESONANCE 0(00H)..100(64H)
00 00 01 78	00 00 00 01	00 - 64	RESONANCE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 79	00 00 00 01	00 - 01	RESONANCE:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 7A	00 00 00 01	00 - 64	BALANCE 0(00H)..100(64H)
00 00 01 7B	00 00 00 01	00 - 64	BALANCE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 7C	00 00 00 01	00 - 01	BALANCE:DYNAMIC POLARITY NOR(00H), INV(01H)
00 00 01 7D	00 00 00 01	00 - 64	LFO RATE 0(00H)..100(64H)
00 00 01 7E	00 00 00 01	00 - 64	LFO RATE:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 01 7F	00 00 00 01	00 - 01	LFO RATE:DYNAMIC POLARITY NOR(00H), INV(01H)

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00 00 02 00 00 00 00 01 00 - 64 LFO DEPTH 0(00H)..100(64H)
00 00 02 01 00 00 00 01 00 - 64 LFO DEPTH:DYNAMIC CONTROL 0(00H)..100(64H)
00 00 02 02 00 00 00 01 00 - 64 LFO DEPTH:DYNAMIC POLARITY NOR(00H), INV(01H)
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[NAME/PREVIEW]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 03	00 00 00 01	00 - 05	CATEGORY * refer to table-24
00 00 02 04	00 00 00 01	00 - 1C	PREVIEW TONE * refer to table-25
00 00 02 05	00 00 00 01	00 - 02	PREVIEW PATTERN STANDARD(00H), CRESCENDO(01H), L-R(02H)
00 00 02 06	Reserved		

[DIRECT EDIT ASSIGN 1]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 07	00 00 00 01	00 - 01	LINK A/B OFF(00H), ON(01H)
00 00 02 08	00 00 00 01	00 - 04	TARGET A:TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), EQ A(03H), EFFECT(04H)
00 00 02 09	00 00 00 01	00 - xx	TARGET A:TARGET PARAMETER * refer to table-26
00 00 02 0A	00 00 00 01	xx - xx	RANGE A:MIN VALUE *1
00 00 02 0B	00 00 00 01	xx - xx	RANGE A:MAX VALUE *1
00 00 02 0C	00 00 00 01	00 - 04	TARGET B:TARGET BLOCK OFF(00H), STRUCT(01H), REV B(02H), EQ B(03B), EFFECT(04H)
00 00 02 0D	00 00 00 01	00 - xx	TARGET B:TARGET PARAMETER * refer to table-26
00 00 02 0E	00 00 00 01	xx - xx	RANGE B:MIN VALUE *1
00 00 02 0F	00 00 00 01	xx - xx	RANGE B:MAX VALUE *1
00 00 02 10	Reserved		
00 00 02 11	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME (REV TYPE: REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

[DIRECT EDIT ASSIGN 2]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 12	00 00 00 01	00 - 01	LINK A/B OFF(00H), ON(01H)
00 00 02 13	00 00 00 01	00 - 04	TARGET A:TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), EQ A(03H), EFFECT(04H)
00 00 02 14	00 00 00 01	00 - xx	TARGET A:TARGET PARAMETER * refer to table-26
00 00 02 15	00 00 00 01	xx - xx	RANGE A:MIN VALUE *1
00 00 02 16	00 00 00 01	xx - xx	RANGE A:MAX VALUE *1
00 00 02 17	00 00 00 01	00 - 04	TARGET B:TARGET BLOCK OFF(00H), STRUCT(01H), REV B(02H), EQ B(03B), EFFECT(04H)
00 00 02 18	00 00 00 01	00 - xx	TARGET B:TARGET PARAMETER * refer to table-26
00 00 02 19	00 00 00 01	xx - xx	RANGE B:MIN VALUE *1
00 00 02 1A	00 00 00 01	xx - xx	RANGE B:MAX VALUE *1
00 00 02 1B	Reserved		
00 00 02 1C	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME (REV TYPE: REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

[DIRECT EDIT ASSIGN 3]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 1D	00 00 00 01	00 - 01	LINK A/B OFF(00H), ON(01H)
00 00 02 1E	00 00 00 01	00 - 04	TARGET A:TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), EQ A(03H), EFFECT(04H)
00 00 02 1F	00 00 00 01	00 - xx	TARGET A:TARGET PARAMETER * refer to table-26
00 00 02 20	00 00 00 01	xx - xx	RANGE A:MIN VALUE *1
00 00 02 21	00 00 00 01	xx - xx	RANGE A:MAX VALUE *1
00 00 02 22	00 00 00 01	00 - 04	TARGET B:TARGET BLOCK OFF(00H), STRUCT(01H), REV B(02H), EQ B(03B), EFFECT(04H)
00 00 02 23	00 00 00 01	00 - xx	TARGET B:TARGET PARAMETER * refer to table-26
00 00 02 24	00 00 00 01	xx - xx	RANGE B:MIN VALUE *1
00 00 02 25	00 00 00 01	xx - xx	RANGE B:MAX VALUE *1
00 00 02 26	Reserved		
00 00 02 27	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME (REV TYPE: REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

[CONTROL ASSIGN 1]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 28	00 00 00 01	00 - 06	TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), REV B(03H), EQ A(04H), EQ B(05H), EFFECT(06H)
00 00 02 29	00 00 00 01	00 - xx	TARGET PARAMETER * refer to table-26
00 00 02 2A	00 00 00 01	xx - xx	MIN VALUE *1
00 00 02 2B	00 00 00 01	xx - xx	MAX VALUE *1
00 00 02 2C	00 00 00 01	00 - 43	CONTROLLER PEDAL(00H), P.BEND(01H), AFTERT(02H), NOTE#(03H), VELO(04H), CC1(05H)..CC31(23H), CC64(24H)..CC95(43H)
00 00 02 2D	Reserved		
00 00 02 2E	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME (REV TYPE: REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

[CONTROL ASSIGN 2]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 2F	00 00 00 01	00 - 06	TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), REV B(03H), EQ A(04H), EQ B(05H), EFFECT(06H)
00 00 02 30	00 00 00 01	00 - xx	TARGET PARAMETER * refer to table-26
00 00 02 31	00 00 00 01	xx - xx	MIN VALUE *1
00 00 02 32	00 00 00 01	xx - xx	MAX VALUE *1
00 00 02 33	00 00 00 01	00 - 43	CONTROLLER PEDAL(00H), P.BEND(01H), AFTERT(02H), NOTE#(03H), VELO(04H), CC1(05H)..CC31(23H), CC64(24H)..CC95(43H)
00 00 02 34	Reserved		
00 00 02 35	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME (REV TYPE: REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

[CONTROL ASSIGN 3]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 36	00 00 00 01	00 - 06	TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), REV B(03H), EQ A(04H), EQ B(05H), EFFECT(06H)
00 00 02 37	00 00 00 01	00 - xx	TARGET PARAMETER * refer to table-26
00 00 02 38	00 00 00 01	xx - xx	MIN VALUE *1
00 00 02 39	00 00 00 01	xx - xx	MAX VALUE *1
00 00 02 3A	00 00 00 01	00 - 43	CONTROLLER PEDAL(00H), P.BEND(01H), AFTERT(02H), NOTE#(03H), VELO(04H), CC1(05H)..CC31(23H), CC64(24H)..CC95(43H)
00 00 02 3B	Reserved		
00 00 02 3C	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME (REV TYPE: REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

[CONTROL ASSIGN 4]

Offset(H)	Size(H)	Data(H)	Description
00 00 02 3D	00 00 00 01	00 - 06	TARGET BLOCK OFF(00H), STRUCT(01H), REV A(02H), REV B(03H), EQ A(04H), EQ B(05H), EFFECT(06H)
00 00 02 3E	00 00 00 01	00 - xx	TARGET PARAMETER * refer to table-26
00 00 02 3F	00 00 00 01	xx - xx	MIN VALUE *1
00 00 02 40	00 00 00 01	xx - xx	MAX VALUE *1
00 00 02 41	00 00 00 01	00 - 43	CONTROLLER PEDAL(00H), P.BEND(01H), AFTERT(02H), NOTE#(03H), VELO(04H), CC1(05H)..CC31(23H), CC64(24H)..CC95(43H)
00 00 02 42	Reserved		
00 00 02 43	Reserved		

*1 If TARGET PARAMETER is assigned to REV TIME(REV TYPE:REV), refer to table-27. In other case, refer to Data Range of the parameter assigned as TARGET PARAMETER.

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Table-3. Sound Change Request (SCR) (Write Only)

Address(H)	Size(H)	Data(H)	Description
20 00 00 00	00 00 00 01	00	Sound Change Request

* When this address is accessed after a Bulk Load has been performed in the Temporary Area(Bulk), the loaded data is changed.

52	3.6 dB
53	3.8 dB
54	4.0 dB
55	4.2 dB
56	4.5 dB
57	4.8 dB
58	5.1 dB
59	5.4 dB
5A	5.7 dB
5B	6.0 dB

Table-4. Memory Save Request (MSR) (Write Only)

Address(H)	Size(H)	Data(H)	Description
60 00 00 00	00 00 00 01	00	Memory Save Request

* When this address is access after a Bulk Load has been performed for the data of SYSTEM and USER PROGRAM, the loaded data is memorized.

Table-5. [INPUT/OUTPUT VOLUME]

SYSTEM: INPUT VOLUME, OUTPUT VOLUME, DIGITAL INPUT VOLUME, DIGITAL OUTPUT VOLUME, CC ASGN MIN VAL, CC ASGN MAX VAL

Data(H)	Description
00	Mute
01	-60.0 dB
02	-50.0 dB
03	-45.0 dB
04	-40.0 dB
05	-36.0 dB
06	-32.0 dB
07	-28.0 dB
08	-26.0 dB
09	-24.0 dB
0A	-22.0 dB
0B	-20.0 dB
0C	-19.0 dB
0D	-18.0 dB
0E	-17.0 dB
0F	-16.0 dB
10	-15.0 dB
11	-14.0 dB
12	-13.0 dB
13	-12.0 dB
14	-11.0 dB
15	-10.0 dB
16	-9.6 dB
17	-9.2 dB
18	-8.8 dB
19	-8.4 dB
1A	-8.0 dB
1B	-7.6 dB
1C	-7.2 dB
1D	-6.8 dB
1E	-6.4 dB
1F	-6.0 dB
20	-5.7 dB
21	-5.4 dB
22	-5.1 dB
23	-4.8 dB
24	-4.5 dB
25	-4.2 dB
26	-3.9 dB
27	-3.6 dB
28	-3.3 dB
29	-3.0 dB
2A	-2.8 dB
2B	-2.6 dB
2C	-2.4 dB
2D	-2.2 dB
2E	-2.0 dB
2F	-1.8 dB
30	-1.6 dB
31	-1.4 dB
32	-1.2 dB
33	-1.0 dB
34	-0.8 dB
35	-0.6 dB
36	-0.4 dB
37	-0.2 dB
38	-0.1 dB
39	0.0 dB
3A	0.0 dB
3B	0.0 dB
3C	0.0 dB
3D	0.0 dB
3E	0.0 dB
3F	0.0 dB
40	0.1 dB
41	0.2 dB
42	0.4 dB
43	0.6 dB
44	0.8 dB
45	1.0 dB
46	1.2 dB
47	1.4 dB
48	1.6 dB
49	1.8 dB
4A	2.0 dB
4B	2.2 dB
4C	2.4 dB
4D	2.6 dB
4E	2.8 dB
4F	3.0 dB
50	3.2 dB
51	3.4 dB

Table-6. Charactor of NAME (ASCII)

Data(H)	Description
20	(space)
21	!
22	
23	#
24	\$
25	%
26	
27	,
28	(
29)
2A	*
2B	+
2C	,
2D	-
2E	.
2F	/
30	0
31	1
32	2
33	3
34	4
35	5
36	6
37	7
38	8
39	9
3A	:
3B	;
3C	
3D	=
3E	
3F	?
40	@
41	A
42	B
43	C
44	D
45	E
46	F
47	G
48	H
49	I
4A	J
4B	K
4C	L
4D	M
4E	N
4F	O
50	P
51	Q
52	R
53	S
54	T
55	U
56	V
57	W
58	X
59	Y
5A	Z
5B	[
5C	\
5D]
5E	^
5F	~
60	
61	a
62	b
63	c
64	d
65	e
66	f
67	g
68	h
69	i
6A	j
6B	k
6C	l
6D	m
6E	n
6F	o
70	p
71	q
72	r
73	s
74	t
75	u
76	v
77	w
78	x
79	y
7A	z
7B	{
7C	}
7D	
7E	~
7F	.

Table-7. [PRE-LOW-PASS FREQ A/B]

Data (H)	Description		
00	1.6 kHz	0B	12 msec
01	1.8 kHz	0C	14 msec
02	2.0 kHz	0D	16 msec
03	2.2 kHz	0E	18 msec
04	2.5 kHz	0F	20 msec
05	2.8 kHz	10	22 msec
06	3.2 kHz	11	24 msec
07	3.6 kHz	12	26 msec
08	4.0 kHz	13	28 msec
09	4.5 kHz	14	30 msec
0A	5.0 kHz	15	32 msec
0B	5.6 kHz	16	34 msec
0C	6.3 kHz	17	36 msec
0D	7.1 kHz	18	38 msec
0E	8.0 kHz	19	40 msec
0F	9.0 kHz	1A	42 msec
10	10 kHz	1B	44 msec
11	11 kHz	1C	46 msec
12	13 kHz	1D	48 msec
13	14 kHz	1E	50 msec
14	16 kHz	1F	52 msec
15	18 kHz	20	54 msec
16	20 kHz	21	56 msec
17	OFF	22	58 msec
		23	60 msec
		24	65 msec
		25	70 msec
		26	75 msec
		27	80 msec
		28	85 msec
		29	90 msec
		2A	95 msec
		2B	100 msec
		2C	110 msec
		2D	120 msec
		2E	130 msec
		2F	140 msec
		30	150 msec
		31	160 msec
		32	170 msec
		33	180 msec
		34	190 msec
		35	200 msec
		36	210 msec
		37	220 msec
		38	230 msec
		39	240 msec
		3A	250 msec
		3B	260 msec
		3C	270 msec
		3D	280 msec
		3E	290 msec
		3F	300 msec
		40	310 msec
		41	320 msec
		42	330 msec
		43	340 msec
		44	350 msec
		45	360 msec
		46	370 msec
		47	380 msec
		48	390 msec
		49	400 msec
		4A	410 msec
		4B	420 msec
		4C	430 msec
		4D	440 msec
		4E	450 msec
		4F	460 msec
		50	470 msec
		51	480 msec
		52	490 msec
		53	500 msec
		54	520 msec
		55	540 msec
		56	560 msec
		57	580 msec
		58	600 msec
		59	620 msec
		5A	640 msec
		5B	660 msec
		5C	680 msec
		5D	700 msec

Table-8. [PRE-HIGH-PASS FREQ A/B]

Data (H)	Description		
00	OFF	2A	95 msec
01	20 Hz	2B	100 msec
02	22 Hz	2C	110 msec
03	25 Hz	2D	120 msec
04	28 Hz	2E	130 msec
05	32 Hz	2F	140 msec
06	36 Hz	30	150 msec
07	40 Hz	31	160 msec
08	45 Hz	32	170 msec
09	50 Hz	33	180 msec
0A	56 Hz	34	190 msec
0B	63 Hz	35	200 msec
0C	71 Hz	36	210 msec
0D	80 Hz	37	220 msec
0E	90 Hz	38	230 msec
0F	100 Hz	39	240 msec
10	112 Hz	3A	250 msec
11	125 Hz	3B	260 msec
12	140 Hz	3C	270 msec
13	160 Hz	3D	280 msec
14	180 Hz	3E	290 msec
15	200 Hz	3F	300 msec
16	224 Hz	40	310 msec
17	250 Hz	41	320 msec
18	280 Hz	42	330 msec
19	315 Hz	43	340 msec
1A	355 Hz	44	350 msec
1B	400 Hz	45	360 msec
1C	450 Hz	46	370 msec
1D	500 Hz	47	380 msec
1E	560 Hz	48	390 msec
1F	630 Hz	49	400 msec
20	710 Hz	4A	410 msec
21	800 Hz	4B	420 msec
22	900 Hz	4C	430 msec
23	1.0 kHz	4D	440 msec
24	1.1 kHz	4E	450 msec
25	1.3 kHz	4F	460 msec
26	1.4 kHz	50	470 msec
27	1.6 kHz	51	480 msec
28	1.8 kHz	52	490 msec
29	2.0 kHz	53	500 msec
		54	520 msec
		55	540 msec
		56	560 msec
		57	580 msec
		58	600 msec
		59	620 msec
		5A	640 msec
		5B	660 msec
		5C	680 msec
		5D	700 msec

Table-9. [REV/GRV: VARIATION]

Data (H)	Description		
00	ROOM1		
01	ROOM2		
02	ROOM3		
03	HALL1		
04	HALL2		
05	HALL3		
06	GARAGE		
07	PLATE1		
08	PLATE2		
09	PLATE3		
0A	PLATE4		
0B	PLATE5		

Table-10. [PRE DELAY TIME, DELAY TIME]

REV/GRV/NLR: PRE DELAY TIME
REV: ER TAP#1-4 DELAY TIME

Data (H)	Description
00	1 msec
01	1 msec
02	2 msec
03	3 msec
04	4 msec
05	5 msec
06	6 msec
07	7 msec
08	8 msec
09	9 msec
0A	10 msec

Table-11. [REV/GRV: REV SIZE]

VARIATION	Data (H)	Description
ROOM1	01..0C	1..12
ROOM2	01..09	1..9
ROOM3	06..20	1..27
HALL1	01..0C	1..12
HALL2	01..09	1..9
HALL3	04..26	1..35
GARAGE	01..09	1..9
PLATE1	01..0A	1..10
PLATE2	01..0A	1..10
PLATE3	01..0A	1..10
PLATE4	01..0A	1..10
PLATE5	06..22	1..29

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Table-12. [REV/GRV: LF DAMP FREQ]

Data (H)	Description
00	50 Hz
01	60 Hz
02	70 Hz
03	80 Hz
04	90 Hz
05	100 Hz
06	120 Hz
07	150 Hz
08	200 Hz
09	250 Hz
0A	300 Hz
0B	350 Hz
0C	400 Hz
0D	500 Hz
0E	600 Hz
0F	700 Hz
10	800 Hz
11	900 Hz
12	1.0 kHz
13	1.2 kHz
14	1.5 kHz
15	2.0 kHz
16	2.5 kHz
17	3.0 kHz
18	3.5 kHz
19	4.0 kHz

Table-13. [REV/GRV: HF DAMP FREQ]

Data (H)	Description
00	3.5 kHz
01	4.0 kHz
02	4.5 kHz
03	5.0 kHz
04	5.5 kHz
05	6.0 kHz
06	6.5 kHz
07	7.0 kHz
08	7.5 kHz
09	8.0 kHz
0A	8.5 kHz
0B	9.0 kHz
0C	9.5 kHz
0D	10 kHz
0E	11 kHz
0F	12 kHz
10	13 kHz
11	14 kHz
12	15 kHz
13	16 kHz
14	17 kHz
15	18 kHz
16	19 kHz
17	20 kHz

Table-14. [REV/GRV/AMB: LF/HF DAMP GAIN]

REV/GRV/AMB: LF DAMP GAIN, HF DAMP GAIN
 AMB: TAP#1-12 HI CUT GAIN

Data (H)	Description
00	-36.0 dB
01	-35.5 dB
02	-35.0 dB
03	-34.5 dB
04	-34.0 dB
05	-33.5 dB
06	-33.0 dB
07	-32.5 dB
08	-32.0 dB
09	-31.5 dB
0A	-31.0 dB
0B	-30.5 dB
0C	-30.0 dB
0D	-29.5 dB
0E	-29.0 dB
0F	-28.5 dB
10	-28.0 dB
11	-27.5 dB
12	-27.0 dB
13	-26.5 dB
14	-26.0 dB
15	-25.5 dB
16	-25.0 dB
17	-24.5 dB
18	-24.0 dB
19	-23.5 dB
1A	-23.0 dB
1B	-22.5 dB
1C	-22.0 dB
1D	-21.5 dB
1E	-21.0 dB
1F	-20.5 dB
20	-20.0 dB
21	-19.5 dB
22	-19.0 dB
23	-18.5 dB
24	-18.0 dB
25	-17.5 dB
26	-17.0 dB
27	-16.5 dB
28	-16.0 dB
29	-15.5 dB
2A	-15.0 dB
2B	-14.5 dB
2C	-14.0 dB
2D	-13.5 dB
2E	-13.0 dB

2F	-12.5 dB
30	-12.0 dB
31	-11.5 dB
32	-11.0 dB
33	-10.5 dB
34	-10.0 dB
35	-9.5 dB
36	-9.0 dB
37	-8.5 dB
38	-8.0 dB
39	-7.5 dB
3A	-7.0 dB
3B	-6.5 dB
3C	-6.0 dB
3D	-5.7 dB
3E	-5.4 dB
3F	-5.1 dB
40	-4.8 dB
41	-4.5 dB
42	-4.2 dB
43	-3.9 dB
44	-3.6 dB
45	-3.3 dB
46	-3.0 dB
47	-2.9 dB
48	-2.8 dB
49	-2.7 dB
4A	-2.6 dB
4B	-2.5 dB
4C	-2.4 dB
4D	-2.3 dB
4E	-2.2 dB
4F	-2.1 dB
50	-2.0 dB
51	-1.9 dB
52	-1.8 dB
53	-1.7 dB
54	-1.6 dB
55	-1.5 dB
56	-1.4 dB
57	-1.3 dB
58	-1.2 dB
59	-1.1 dB
5A	-1.0 dB
5B	-0.9 dB
5C	-0.8 dB
5D	-0.7 dB
5E	-0.6 dB
5F	-0.5 dB
60	-0.4 dB
61	-0.3 dB
62	-0.2 dB
63	-0.1 dB
64	0.0 dB

Table-15. [REV: ER TAP#1-4 HI CUT FREQ]

Data (H)	Description
00	200 Hz
01	250 Hz
02	300 Hz
03	350 Hz
04	400 Hz
05	500 Hz
06	600 Hz
07	700 Hz
08	800 Hz
09	900 Hz
0A	1.0 kHz
0B	1.2 kHz
0C	1.5 kHz
0D	2.0 kHz
0E	2.5 kHz
0F	3.0 kHz
10	3.5 kHz
11	4.0 kHz
12	5.0 kHz
13	6.0 kHz
14	7.0 kHz
15	8.0 kHz
16	9.0 kHz
17	10 kHz
18	12 kHz
19	15 kHz
1A	20 kHz
1B	OFF

Table-16. [GRV: GATETIME HOLD TIME, GATETIME RELEASE TIME]

Data (H)	Description
00	1 msec
01	1 msec
02	2 msec
03	3 msec
04	4 msec
05	5 msec
06	6 msec
07	7 msec
08	8 msec
09	9 msec
0A	10 msec
0B	10 msec
0C	20 msec
0D	30 msec
0E	40 msec
0F	50 msec
10	60 msec
11	70 msec
12	80 msec
13	90 msec
14	100 msec
15	110 msec
16	120 msec
17	130 msec
18	140 msec
19	150 msec
1A	160 msec
1B	170 msec
1C	180 msec
1D	190 msec
1E	200 msec
1F	220 msec
20	240 msec
21	260 msec
22	280 msec
23	300 msec
24	320 msec
25	340 msec
26	360 msec
27	380 msec
28	400 msec
29	420 msec
2A	440 msec
2B	460 msec
2C	480 msec
2D	500 msec
2E	520 msec
2F	540 msec
30	560 msec
31	580 msec
32	600 msec
33	620 msec
34	640 msec
35	660 msec
36	680 msec
37	700 msec
38	720 msec
39	740 msec
3A	760 msec
3B	780 msec
3C	800 msec
3D	820 msec
3E	840 msec
3F	860 msec
40	880 msec
41	900 msec
42	920 msec
43	940 msec
44	960 msec
45	980 msec
46	1,0 sec
47	1.1 sec
48	1.2 sec
49	1.3 sec
4A	1.4 sec
4B	1.5 sec
4C	1.6 sec
4D	1.7 sec
4E	1.8 sec
4F	1.9 sec
50	2.0 sec
51	2.1 sec
52	2.2 sec
53	2.3 sec
54	2.4 sec
55	2.5 sec
56	2.6 sec
57	2.7 sec
58	2.8 sec
59	2.9 sec
5A	3.0 sec
5B	3.1 sec
5C	3.2 sec
5D	3.3 sec
5E	3.4 sec
5F	3.5 sec
60	3.6 sec
61	3.7 sec
62	3.8 sec
63	3.9 sec
64	4.0 sec

Table-17. [AMB: TAP#1-12 HI CUT FREQ]

Data (H)	Description
00	200 Hz
01	250 Hz
02	300 Hz
03	350 Hz
04	400 Hz
05	500 Hz
06	600 Hz
07	700 Hz
08	800 Hz
09	900 Hz
0A	1.0 kHz
0B	1.2 kHz
0C	1.5 kHz
0D	2.0 kHz
0E	2.5 kHz
0F	3.0 kHz
10	3.5 kHz
11	4.0 kHz
12	5.0 kHz
13	6.0 kHz
14	7.0 kHz
15	8.0 kHz
16	9.0 kHz
17	10 kHz
18	12 kHz
19	15 kHz
1A	20 kHz

Table-18. [LOW BAND EQ A/B: FREQUENCY]

Data (H)	Description
00	20 Hz
01	22 Hz
02	25 Hz
03	28 Hz
04	32 Hz
05	36 Hz
06	40 Hz
07	45 Hz
08	50 Hz
09	56 Hz
0A	63 Hz
0B	71 Hz
0C	80 Hz
0D	90 Hz
0E	100 Hz
0F	112 Hz
10	125 Hz
11	140 Hz
12	160 Hz
13	180 Hz
14	200 Hz
15	224 Hz
16	250 Hz
17	280 Hz
18	315 Hz
19	355 Hz
1A	400 Hz
1B	450 Hz
1C	500 Hz
1D	560 Hz
1E	630 Hz
1F	710 Hz
20	800 Hz
21	900 Hz
22	1.0 kHz
23	1.1 kHz
24	1.3 kHz
25	1.4 kHz
26	1.6 kHz
27	1.8 kHz
28	2.0 kHz

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Table-19. [MID BAND EQ A/B: FREQUENCY]

Data (H)	Description
00	200 Hz
01	224 Hz
02	250 Hz
03	280 Hz
04	315 Hz
05	355 Hz
06	400 Hz
07	450 Hz
08	500 Hz
09	560 Hz
0A	630 Hz
0B	710 Hz
0C	800 Hz
0D	900 Hz
0E	1.0 kHz
0F	1.1 kHz
10	1.3 kHz
11	1.4 kHz
12	1.6 kHz
13	1.8 kHz
14	2.0 kHz
15	2.2 kHz
16	2.5 kHz
17	2.8 kHz
18	3.2 kHz
19	3.6 kHz
1A	4.0 kHz
1B	4.5 kHz
1C	5.0 kHz
1D	5.6 kHz
1E	6.3 kHz
1F	7.1 kHz
20	8.0 kHz

Table-20. [HIGH BAND EQ A/B: FREQUENCY]

Data (H)	Description
00	1.6 kHz
01	1.8 kHz
02	2.0 kHz
03	2.2 kHz
04	2.5 kHz
05	2.8 kHz
06	3.2 kHz
07	3.6 kHz
08	4.0 kHz
09	4.5 kHz
0A	5.0 kHz
0B	5.6 kHz
0C	6.3 kHz
0D	7.1 kHz
0E	8.0 kHz
0F	9.0 kHz
10	10 kHz
11	11 kHz
12	13 kHz
13	14 kHz
14	16 kHz
15	18 kHz
16	20 kHz

Table-21. [3 BAND EQ A/B: GAIN]

Data (H)	Description
00	-12.0 dB
01	-11.5 dB
02	-11.0 dB
03	-10.5 dB
04	-10.0 dB
05	-9.5 dB
06	-9.0 dB
07	-8.5 dB
08	-8.0 dB
09	-7.5 dB
0A	-7.0 dB
0B	-6.5 dB
0C	-6.0 dB
0D	-5.5 dB
0E	-5.0 dB
0F	-4.5 dB
10	-4.0 dB
11	-3.8 dB
12	-3.6 dB
13	-3.4 dB
14	-3.2 dB
15	-3.0 dB
16	-2.8 dB
17	-2.6 dB
18	-2.4 dB
19	-2.2 dB
1A	-2.0 dB
1B	-1.9 dB
1C	-1.8 dB
1D	-1.7 dB
1E	-1.6 dB
1F	-1.5 dB
20	-1.4 dB
21	-1.3 dB
22	-1.2 dB
23	-1.1 dB
24	-1.0 dB
25	-0.9 dB
26	-0.8 dB
27	-0.7 dB
28	-0.6 dB
29	-0.5 dB
2A	-0.4 dB
2B	-0.3 dB
2C	-0.2 dB
2D	-0.1 dB

2E	0.0 dB
2F	0.1 dB
30	0.2 dB
31	0.3 dB
32	0.4 dB
33	0.5 dB
34	0.6 dB
35	0.7 dB
36	0.8 dB
37	0.9 dB
38	1.0 dB
39	1.1 dB
3A	1.2 dB
3B	1.3 dB
3C	1.4 dB
3D	1.5 dB
3E	1.6 dB
3F	1.7 dB
40	1.8 dB
41	1.9 dB
42	2.0 dB
43	2.2 dB
44	2.4 dB
45	2.6 dB
46	2.8 dB
47	3.0 dB
48	3.2 dB
49	3.4 dB
4A	3.6 dB
4B	3.8 dB
4C	4.0 dB
4D	4.5 dB
4E	5.0 dB
4F	5.5 dB
50	6.0 dB
51	6.5 dB
52	7.0 dB
53	7.5 dB
54	8.0 dB
55	8.5 dB
56	9.0 dB
57	9.5 dB
58	10.0 dB
59	10.5 dB
5A	11.0 dB
5B	11.5 dB
5C	12.0 dB

Table-22. [LOW BAND EQ A/B, HIGH BAND EQ A/B: Q]

Data (H)	Description
00	SHELVING
01	0.3
02	0.4
03	0.5
04	0.6
05	0.7
06	0.8
07	0.9
08	1.0
09	1.2
0A	1.4
0B	1.6
0C	1.8
0D	2.0
0E	2.2
0F	2.4
10	2.6
11	2.8
12	3.0
13	3.2
14	3.4
15	3.6
16	3.8
17	4.0
18	4.2
19	4.4
1A	4.6
1B	4.8
1C	5.0
1D	5.2
1E	5.4
1F	5.6
20	5.8
21	6.0
22	6.2
23	6.4
24	6.6
25	6.8
26	7.0
27	7.2
28	7.4
29	7.6
2A	7.8
2B	8.0
2C	8.2
2D	8.4
2E	8.6
2F	8.8
30	9.0
31	9.2
32	9.4
33	9.6
34	9.8
35	10.0

Table-23. [MID BAND EQ A/B: Q]

Data (H)	Description
01	0.3
02	0.4
03	0.5
04	0.6
05	0.7
06	0.8
07	0.9
08	1.0
09	1.2
0A	1.4
0B	1.6
0C	1.8
0D	2.0
0E	2.2
0F	2.4
10	2.6
11	2.8
12	3.0
13	3.2
14	3.4
15	3.6
16	3.8
17	4.0
18	4.2
19	4.4
1A	4.6
1B	4.8
1C	5.0
1D	5.2
1E	5.4
1F	5.6
20	5.8
21	6.0
22	6.2
23	6.4
24	6.6
25	6.8
26	7.0
27	7.2
28	7.4
29	7.6
2A	7.8
2B	8.0
2C	8.2
2D	8.4
2E	8.6
2F	8.8
30	9.0
31	9.2
32	9.4
33	9.6
34	9.8
35	10.0

Table-24. [CATEGORY]

Data (H)	Description
00	STANDARD
01	VOCAL
02	INSTRUMENT
03	DRUMS/PERC
04	STEREO
05	SPECIAL

Table-25. [PREVIEW TONE]

Data (H)	Description
00	VOICE
01	PIANO
02	MUTE GUITAR
03	SAX
04	SNARE
05	B. DRUM
06	DRUMS
07	CLAVES
08	IMPULSE
09	CARD 1
0A	CARD 2
0B	CARD 3
0C	CARD 4
0D	CARD 5
0E	CARD 6
0F	CARD 7
10	CARD 8
11	CARD 9
12	CARD 10
13	CARD 11
14	CARD 12
15	CARD 13
16	CARD 14
17	CARD 15
18	CARD 16
19	CARD 17
1A	CARD 18
1B	CARD 19
1C	CARD 20

Table-26. [TARGET PARAMETER]

TARGET BLOCK: STRUCT	
Data (H)	Description
00	MIX BALANCE
01	INPUT LEVEL A(B)
02	OUTPUT LEVEL A(B)
03	DYN SEP DEST
04	DYN SEP RATE
05	DYN SEP FREQ
06	DYN SEP SENS
07	DYN SEP SENS LOW
08	PRE LFF FREQ A(B)
09	PRE HPF FREQ A(B)

TARGET BLOCK: REV A/B (REV TYPE: REV)

Data (H)	Description
00	REV TIME
01	REV LEVEL
02	REV LEVEL DYN CTRL
03	PRE-DLY
04	PRE-DLY BALANCE
05	PRE-DLY BAL.DYN CTL
06	DENSITY
07	DENSITY DYN CTRL
08	PLT DEP
09	REV SIZE
0A	REL DENS
0B	BRILLIANCE
0C	EDGE
0D	PAN WIDTH
0E	COMP RATIO
0F	COMP ATTACK
10	COMP RELEASE
11	LF DAMP FREQ
12	LF DAMP GAIN
13	HF DAMP FREQ
14	HF DAMP GAIN
15	ER LEVEL
16	ER LEVEL DYN CTRL
17	ER TIME
18	ER DIF SIZE
19	ER DIFFUSE
1A	ER DIF DYN CTRL
1B	ER TAP 1 DLY TIME
1C	ER TAP 1 LEVEL
1D	ER TAP 1 PAN
1E	ER TAP 1 HC FREQ
1F	ER TAP 2 DLY TIME
20	ER TAP 2 LEVEL
21	ER TAP 2 PAN
22	ER TAP 2 HC FREQ
23	ER TAP 3 DLY TIME
24	ER TAP 3 LEVEL
25	ER TAP 3 PAN
26	ER TAP 3 HC FREQ
27	ER TAP 4 DLY TIME
28	ER TAP 4 LEVEL
29	ER TAP 4 PAN
2A	ER TAP 4 HC FREQ

TARGET BLOCK: REV A/B (REV TYPE: GRV)

Data (H)	Description
00	REV TIME
01	GATE HOLDTIME
02	GATE THRESHOLD
03	GATE DECAY
04	GATE RELEASE
05	PRE-DLY
06	PRE-DLY BALANCE
07	PRE-DLY BAL.DYN CTL
08	DENSITY
09	DENSITY DYN CTRL
0A	REV SIZE
0B	PAN WIDTH
0C	COMP RATIO
0D	COMP ATTACK
0E	COMP RELEASE
0F	LF DAMP FREQ
10	LF DAMP GAIN
11	HF DAMP FREQ
12	HF DAMP GAIN

TARGET BLOCK: REV A/B (REV TYPE: AMB)

Data (H)	Description
00	AMB LEVEL
01	AMB LEVEL DYN CTRL
02	AMB SIZE
03	AMB HF DAMP
04	DENSITY

TARGET BLOCK: REV A/B (REV TYPE: NLR)

Data (H)	Description
00	NLR LEVEL
01	NLR LEVEL DYN CTRL
02	PRE-DLY
03	PRE-DLY BALANCE
04	DENSITY
05	DENSITY DYN CTRL
06	PAN WIDTH
07	NLR ENV TIME
08	NLR ENV LEVEL 1
09	NLR ENV LEVEL 2
0A	NLR ENV LEVEL 3

MIDI Implementation

TARGET BLOCK: EQ A/B			
Data(H)	Description		
00	LOW EQ FREQ	52	6.40 sec
01	LOW EQ GAIN	53	6.50 sec
02	LOW EQ Q	54	6.60 sec
03	MID EQ FREQ	55	6.70 sec
04	MID EQ GAIN	56	6.80 sec
05	MID EQ Q	57	6.90 sec
06	HIGH EQ FREQ	58	7.00 sec
07	HIGH EQ GAIN	59	7.10 sec
08	HIGH EQ Q	5A	7.20 sec
		5B	7.30 sec
		5C	7.40 sec
		5D	7.50 sec
		5E	7.60 sec
		5F	7.70 sec
TARGET BLOCK: EFFECT			
Data(H)	Description		
00	FX SEPARATE	60	7.80 sec
01	FX MANUAL	61	7.90 sec
02	FX MANUAL DYN CTRL	62	8.00 sec
03	FX RESO	63	8.10 sec
04	FX RESO DYN CTRL	64	8.20 sec
05	FX BALANCE	65	8.30 sec
06	FX BALANCE DYN CTRL	66	8.40 sec
07	FX LFO RATE	67	8.50 sec
08	FX LFO RATE DYN CTL	68	8.60 sec
09	FX LFO DEPTH	69	8.70 sec
0A	FX LFO DEP DYN CTRL	6A	8.80 sec
		6B	8.90 sec
		6C	9.00 sec
		6D	9.10 sec
		6E	9.20 sec
		6F	9.30 sec
		70	9.40 sec
		71	9.50 sec
		72	9.60 sec
		73	9.70 sec
		74	9.80 sec
		75	9.90 sec
		75	10.0 sec
		76	11.0 sec
		77	12.0 sec
		78	13.0 sec
		79	14.0 sec
		7A	15.0 sec
		7B	20.0 sec
		7C	30.0 sec
		7D	40.0 sec
		7E	50.0 sec
		7F	100 sec

Table-27. [MIN/MAX VALUE of REV TIME (REV TYPE: REV)]

DIRECT EDIT ASSIGN 1-3, CONTROL ASSIGN 1-4

Data(H)	Description		
00	0.01 sec		
01	0.02 sec		
02	0.03 sec		
03	0.04 sec		
04	0.05 sec		
05	0.06 sec		
06	0.07 sec		
07	0.08 sec		
08	0.09 sec		
09	0.10 sec		
0A	0.15 sec		
0B	0.20 sec		
0C	0.25 sec		
0D	0.30 sec		
0E	0.35 sec		
0F	0.40 sec		
10	0.45 sec		
11	0.50 sec		
12	0.55 sec		
13	0.60 sec		
14	0.65 sec		
15	0.70 sec		
16	0.75 sec		
17	0.80 sec		
18	0.85 sec		
19	0.90 sec		
1A	0.95 sec		
1B	1.00 sec		
1C	1.10 sec		
1D	1.20 sec		
1E	1.30 sec		
1F	1.40 sec		
20	1.50 sec		
21	1.60 sec		
22	1.70 sec		
23	1.80 sec		
24	1.90 sec		
25	2.00 sec		
26	2.10 sec		
27	2.20 sec		
28	2.30 sec		
29	2.40 sec		
2A	2.50 sec		
2B	2.60 sec		
2C	2.70 sec		
2D	2.80 sec		
2E	2.90 sec		
2F	3.00 sec		
30	3.10 sec		
31	3.20 sec		
32	3.30 sec		
33	3.40 sec		
34	3.50 sec		
35	3.60 sec		
36	3.70 sec		
37	3.80 sec		
38	3.90 sec		
3A	4.00 sec		
3B	4.10 sec		
3C	4.20 sec		
3D	4.30 sec		
3E	4.40 sec		
3F	4.50 sec		
40	4.60 sec		
41	4.70 sec		
42	4.80 sec		
43	4.90 sec		
44	5.00 sec		
45	5.10 sec		
46	5.20 sec		
47	5.30 sec		
48	5.40 sec		
49	5.50 sec		
4A	5.60 sec		
4B	5.70 sec		
4C	5.80 sec		
4D	5.90 sec		
4E	6.00 sec		
4F	6.10 sec		
50	6.20 sec		
51	6.30 sec		