

■ DISPLAY MESSEGES

Message	Meaning
BULK: Byte Count Mismatch!	The byte count of the received Bulk Dump data is not correct.
BULK: Check Sum Error!	The check sum of the received Bulk Dump data is not correct.
BULK: Memory Protected!	The Bulk Dump data cannot be stored because the destination is write-protected.
DIGITAL IN Sync Error!	This warning message appears if digital signals from the Digital Stereo Coaxial In or Option I/O inputs are not wordclock synchronized with the 01V. Make sure that all digital equipment is wordclock synchronized to a common wordclock source. See "Setting the Wordclock" on page 209 for more information.
FOR EFFECT2 ONLY.	The selected effect program can be recalled only to Effect 2.
LOW BATTERY!!	The internal battery voltage is getting very low. Back up the Setup data by using Bulk Dump, and replace the battery.
Memory Protected	Cannot execute as selected scene memory is protected.
MIDI IN: Framing Error!	An incorrect signal may have been input to the MIDI IN.
MIDI IN: Data Overrun!	An incorrect signal may have been input to the MIDI IN.
MIDI: Rx Buffer Full!	The 01V is probably receiving too much MIDI data.
MIDI: Tx Buffer Full!	The 01V is probably transmitting too much MIDI data.
NO DATA	Cannot execute as no data has been stored.
Now Fading(Fade Time).	Local Control cannot be turned off while a mix-scene fade is in progress (Fade Time).
Read Only	Cannot execute as selected scene memory is read only.
Selected channel: CHxx	CHxx is the selected channel.
Preparing to LOCAL OFF..	The MIDI Local Control function is preparing for use.
TO HOST: Framing Error!	An incorrect signal may have been input to the TO HOST connector.
TO HOST: Data Overrun!	An incorrect signal may have been input to the TO HOST connector.
TO HOST: Data Parity Error!	An incorrect signal may have been input to the TO HOST connector.
TO HOST: Rx Buffer Full!	The 01V is probably receiving too much MIDI data at the TO HOST connector.
TO HOST: Tx Buffer Full!	The 01V is probably transmitting too much MIDI data from the TO HOST connector.
WRONG WORD CLOCK!	The received wordclock is not correct and the 01V cannot synchronize correctly. Select a suitable wordclock, or use the AUTO NAVIGATE function on the SETUP page 1.

■ ディスプレイメッセージ一覧

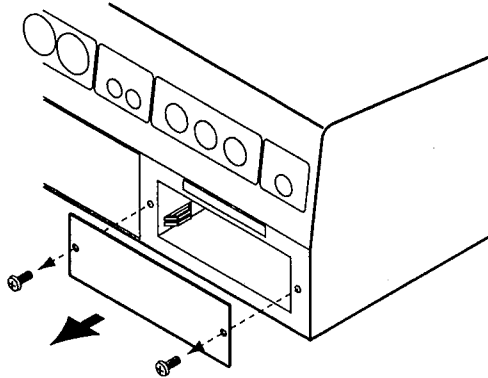
BULK:Byte Count Mismatch!	受信したバルクデータのバイトカウントが不正です。
BULK:Check Sum Error!	受信したバルクデータのチェックサムが不正です。
BULK:Memory Protected!	データの格納先にプロテクトが施されているため受信したバルクデータを格納できません。
DIGITAL IN Sync Error!	DIGITAL STEREO INに入力されている信号がワードクロックマスターに同期していません。そのまま使用すると音声にノイズが混入する可能性がありますので、正しく同期の取れた信号を入力してください。 (このメッセージはUTILITY画面のPREFERENCESページで表示しないように設定することも出来ます。)
For Effect2 Only.	選択しているエフェクトプログラムはEFFECT2にのみリコールが可能です。
LOW BATTERY!!	内蔵バッテリーの寿命が近付いています。01Vに保存されているデータのバックアップをとったうえでバッテリーの交換を行なって下さい。
Memory Protected.	選択しているメモリにデータがストアされていないため実行できません。
MIDI IN:Data Overrun!	MIDI IN端子に適正でない信号が入力されていることが考えられます。
MIDI IN:Framing Error!	MIDI IN端子に適正でない信号が入力されていることが考えられます。
MIDI:Rx Buffer Full!	01VへのMIDIデータの流入量が多すぎることが考えられます。
MIDI:Tx Buffer Full!	01VからのMIDIデータの送信量が多すぎることが考えられます。
No Data.	データがストアされていないため実行できません。
Now Fading (Fade Time).	現在フェードタイム機能が動作中のため、Local ControlをOffできません。
OPTION IN Sync Error!	OPTION I/Oカードの入力端子に入力されている信号がワードクロックマスターに同期していません。そのまま使用すると音声にノイズが混入する可能性がありますので、正しく同期の取れた信号を入力してください。 (但し、同期システムが正しく構築されていてもデジタルMTRがチェイス状態になるまでの間クロックが不安定になりこのメッセージが表示される場合があります。)
Preparing to LOCAL-OFF...	MIDI LOCAL OFF機能の実行準備中です。
Read Only.	選択しているメモリーが読み出し専用のため実行できません。
Selected channel:CHxx.	選択されたチャンネルはCHxxです。
TO HOST:Framing Error!	TO HOST端子に適正でない信号が入力されていることが考えられます。

TO HOST:Data Overrun!	TO HOST端子に適正でない信号が入力されていることが考えられます。
TO HOST:Data Parity Error!	TO HOST端子に適正でない信号が入力されていることが考えられます。
TO HOST:Rx Buffer Full!	TO HOST端子へのデータの流入量が多すぎることが考えられます。
TO HOST:Tx Buffer Full!	01VからのTO HOST端子へのデータ送信量が多すぎることが考えられます。
WRONG WORD CLOCK!!	01Vが選択した同期すべき接続機器からのワードクロックが適切ではありません。その設定では同期システムが構築出来ないということです。システムの接続状態の見直しやSETUPページ1の“AUTO NAVIGATE”機能を利用するなどして適正なワードクロックを選択し直してください。

■ INSTALLING OPTION I/O CARDS

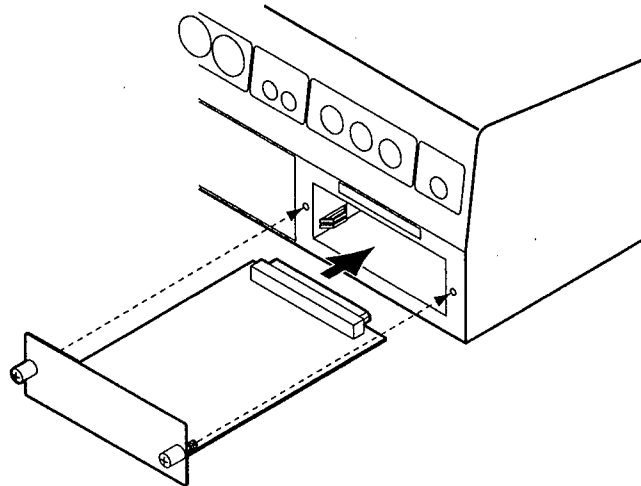
Warning: Turn off the 01V before installing an Option I/O card. Failure to do so is an electrical shock hazard and may cause serious damage.

1. Turn off the 01V.
2. Undo the two fixing screws and remove the slot cover, as shown below.



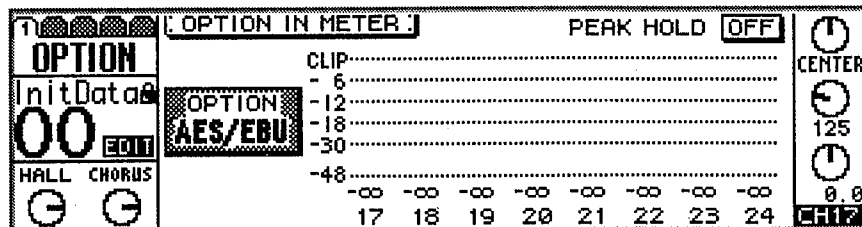
Keep the cover in a safe place for future use.

3. Insert the card into the slot as shown below. Push it in all the way so that the card's connector mates correctly with the internal 01V connector.



4. Secure the card using the two fixing screws.
5. Turn on the 01V.

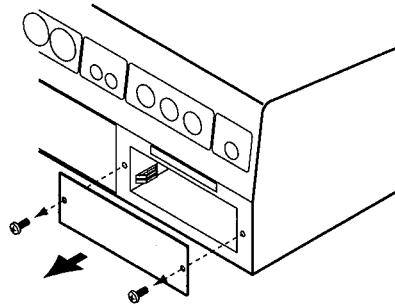
The 01V checks to see what type of Option I/O card is installed when it's turned on. If installation is successful, the type of card installed is displayed on OPTION page 1, as shown below.



■ OPTION I/Oカードの装着

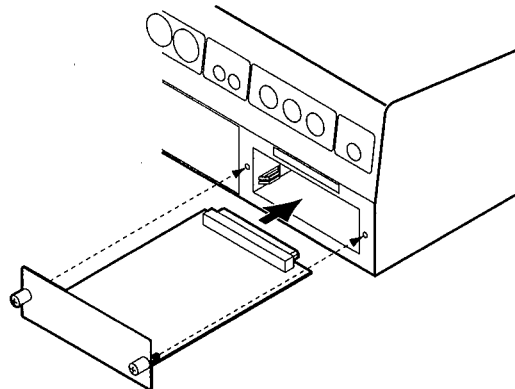
重要注意: OPTION I/Oカードを取り付ける前に、必ず01Vの電源を切ってください。これを守らないと、感電の危険があり、また本体やカードが損傷する場合があります。

1. 01Vの電源をオフにします。
2. 次の図のように2本のネジをゆるめてスロットカバーを取り外します。



カバーは今後のために安全な場所に保管してください。

3. 次の図のようにカードをスロットに挿入します。カードの端子部分が01V内部の端子に正しくはまるよう、カードをいっぱいまで押し込んでください。

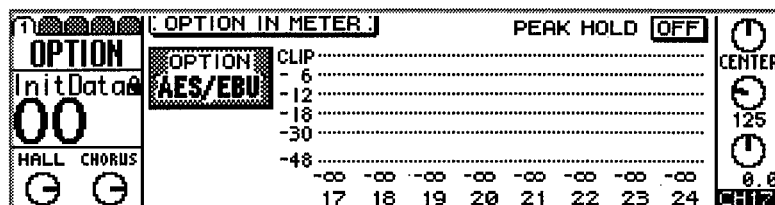


4. 2本のネジでカードを固定します。

注: ネジをしっかり締めずゆるいままにしておくと、正しくアースがとれないことがありますので注意してください。

5. 01Vの電源を入れます。

電源が入ると01Vは装着されているOPTION I/Oカードの種類を点検します。カードが正しく装着され、正常に作動する場合は、OPTIONページ1にカードの種類が表示されます。



MIDI DATA FORMAT

1. TRANSMIT/RECEIVE DATA

1.1 CHANNEL MESSAGE

1.1.1 NOTE OFF (8n)

Reception

Received if [Rx CH] matches.

Used for EFFECT control. See below for details.

STATUS	1000nnnn	8n	Note Off Message
DATA	0nnnnnnn	nn	Note No.
	0vvvvvvvv	vv	Velocity (ignored)

1.1.2 NOTE ON (9n)

Reception

Received if [Rx CH] matches.

Used for EFFECT control. See below for details.

A velocity of 0x00 is the same as NOTE OFF.

STATUS	1001nnnn	9n	Note On Message
DATA	0nnnnnnn	nn	Note No.
	0vvvvvvvv	vv	Velocity (1-127:On, 0:off)

* Using Note data for EFFECT control

1: Dynamic Flange/Dynamic Phase/Dynamic Filter

When the SOURCE parameter is set to MIDI, Velocity will be used together with Note On/Off to control the frequency width of Modulation.

2: Freeze

When PLAY MODE is MOMENT or CONTINUE, a Note On message will start play. However, this is only when the note number specified for MIDI TRG is received. Also, play will not occur if there is no recorded data.

Regardless of the Note Number, a Note Off message will stop play if PLAY MODE is MOMENT.

1.1.3 CONTROL CHANGE (Bn)

Reception

Received when [Control Change RX] is ON and the [Rx CH] matches. However if [OMNI] is ON, this message is received regardless of the channel.

When [Control Change ECHO] is ON, this message will be echoed. Parameters will be controlled according to the settings of the [control assign table].

Control of specific faders can be disabled by the [midi fader control input mute] settings.

If this message is received while the [control assign table] page is displayed, the cursor location will move to that control number.

Transmission

If [Control Change TX] is ON, this message is transmitted on the [Tx CH] whenever a parameter specified in the [control assign table] is operated.

If [Control Change ECHO] is ON, these messages will be merged with the unit's own output while taking advantage of running status.

STATUS	1011nnnn	Bn	Control Change
DATA	0ccccccc	cc	Control No. (0-95, 102-119)
	0vvvvvvvv	vv	Control Value (0-127)

The control value is converted to the parameter value according to the following equation.

$C = 128$ (byte parameter)

16384 (word parameter)

$S =$ number of total possible steps for the parameter

$C / S = X$ remainder Y

$INT((Y+1)/2) = Z$

If (MIDI DATA - Z) < 0 then -> param = 0
 If ((MIDI DATA - Z)/X) > MAX then -> param = MAX
 In other cases -> param =

$INT((MIDI DATA - Z)/X)$

1.1.4 PROGRAM CHANGE (Cn)

Reception

Received when [Program Change RX] is ON if the [Rx CH] matches. However if [OMNI] is ON, this is received regardless of the channel. This is echoed if [Program Change ECHO] is ON.

A scene memory will be recalled according to the settings of the [Program change table].

Transmission

If [Program Change TX] is ON, this is transmitted on the [Tx CH] channel when a scene memory is recalled.

If two or more program numbers have been assigned to the memory number which was recalled, the lowest numbered program number will be transmitted.

This message is echoed if [Program Change ECHO] is ON. (If a memory number which is not specified in the [Midi Program Change Assign Table] is recalled, the Parameter Change (Function Call) described below will be transmitted.)

STATUS	1100nnnn	Cn	Program Change
DATA	0nnnnnnn	nn	Program No. (0-127)

1.2 EXCLUSIVE MESSAGE (F0-F7)

1.2.1 MOTION CONTROL STATE (MCS)

MMC STOP/PLAY/FORWARD/REWIND/RECORD/PAUSE

Transmission

In the [REMOTE-MMC] page, this is transmitted by key operations. The [DEVICE NO.] specifies the transmission destination.

STATUS	11110000	F0	System Exclusive Message
ID No.	01111111	7F	Real Time System Exclusive
Device ID	0ddddd	dd	Destination (00-7E, 7F:all call)
Command	00000110	06	Machine Control Command(mcc) sub-id
	0ccccccc	cc	Command String
			[1]:Stop
			[2]:Play
			[4]:Fast Forward
			[5]:Rewind
			[6]:Record Strobe
			[9]:Pause
EOX	11110111	F7	End Of Exclusive

1.2.2 MOTION CONTROL PROCESS (MCP)

MMC LOCATE (target)

Transmission

In the [REMOTE-MMC] page, this is transmitted by key operations. The [DEVICE NO.] specifies the transmission destination. (The ID of the receiving device must be set.)

STATUS	11110000	F0	System Exclusive Message
ID No.	01111111	7F	Real Time System Exclusive
Device ID	0ddddd	dd	Destination (00-7E, 7F:all call)
Command	00000110	06	Machine Control Command(mcc) sub-id
	01000100	04	Locate
	00000110	06	byte count
	00000001	01	"target" sub command
	0hhhhhhh	hh	hour
	0mmmmmmm	mm	minute
	0sssssss	ss	second
	0ffffff	ff	frame
	0sssssss	ss	sub-frame(only '0')
EOX	11110111	F7	End Of Exclusive

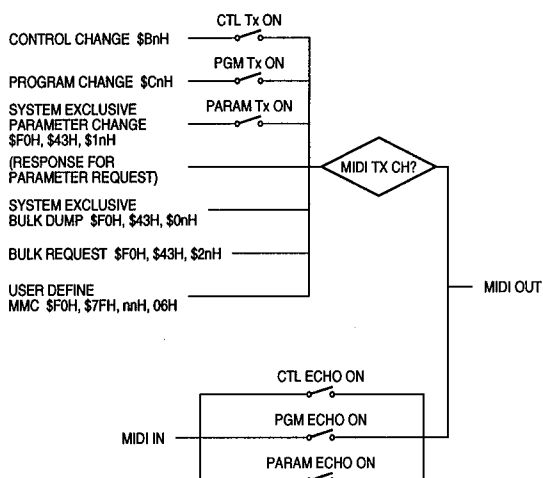
1.3 ACTIVE SENSING (Fe)

Reception

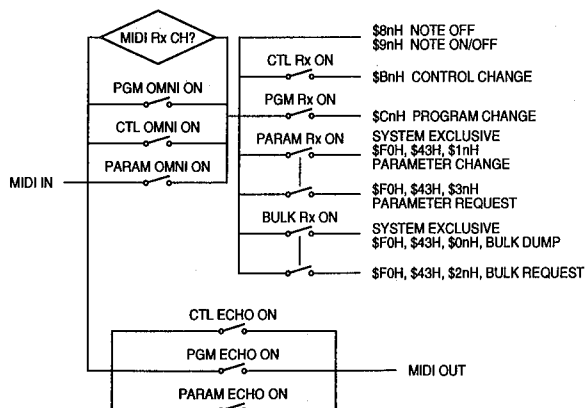
Once this message has been received, an interval of 300ms or more during which no message is received will cause MIDI communications to be initialized, clearing Running Status etc.

STATUS 11111110 FE Active Sensing

2. TRANSMISSION CONDITION



3. RECEIVE CONDITION



4. PARAMETER CHANGE

BASIC FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0ppnnnn	pn	p=mode 1:parameter change or response for request, 3:parameter request n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID (digital mixer)
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	0ttttttt	tt	(type)
DATA	0ddddd	dd0	data 0
	:	:	
	0ddddd	ddn	data n
EOX	11110111	F7	End Of Exclusive

type

0x00	edit buffer ...byte operation format
0x01	system memory (setup, backup) ...byte operation format
0x02	function call (mem/lib recall, mem/lib store, clear, title)
0x03	controller (LCD/fader mode)...byte operation format
0x04	multiple link (fader mode, solo mode, title,...)
0x05	remote meter (meter data)
0x10	edit buffer ...7bit operation format
0x40	edit buffer ...bit operation format
0x41	system memory (setup, backup) ...bit operation format
0x43	controller (key remote) ...bit operation format

PARAMETER CHANGE (byte operation for type 0x00:edit buffer)

Reception

This message is received if [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in the SUB STATUS. If [Parameter Change ECHO] is ON, this will be echoed. The specified parameter will be controlled when this message is received.

Transmission

If [Parameter Change TX] is ON, this message will be transmitted on the [Tx CH] Device Channel when a parameter that is not specified in the [Control Assign Table] is modified.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change or response n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00000000	00	byte operation for edit buffer (type)
DATA	0aaaaaaaa	dd1	address(H) high 7 bits of 14 bits address
	0aaaaaaaa	dd2	address(L) low 7 bits of 14 bits address
	0000ddddd	dd3	data(H) high 4 bits of 8 bits data
	0000ddddd	dd4	data(L) low 4 bits of 8 bits data
	:	:	: continuous address datas
EOX	11110111	F7	End Of Exclusive

The valid range of addresses is 0x0000 - 0x03FF

PARAMETER CHANGE (7bit operation for type 0x10:edit buffer)

Reception

This message is received if [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in the SUB STATUS. This is echoed if [Parameter Change ECHO] is ON. When this is received, the specified parameter will be controlled.

Transmission

If [Parameter Change TX] is ON, this message is transmitted on the [Tx CH] Device Channel when a parameter not specified in the [Control Assign Table] is modified.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00010000	10	7bit operation for edit buffer (type)
DATA	0aaaaaaa	dd0	address(H) high 7 bits of 14 bits address
	0aaaaaaa	dd1	address(L) low 7 bits of 14 bits address
	0ddddddd	dd2	data 7bit
	:	:	:
EOX	11110111	F7	End Of Exclusive

The valid range of addresses is 0x0000 - 0x03FF

PARAMETER CHANGE (bit operation for type 0x40:edit buffer)

Reception

When [Parameter Change RX] is ON, this message is received if the [Rx CH] matches the Device Channel included in the SUB STATUS. If [Parameter Change ECHO] is ON, this message will be echoed. When this message is received, the specified parameter will be controlled.

Transmission

If [Parameter Change TX] is ON, this message is transmitted on the [Tx CH] Device Channel when a parameter not specified in the [Control Assign Table] is modified.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	01000000	40	bit operation for edit buffer (type)
DATA	0aaaaaaa	dd0	address(H) high 7 bits of 14 bits address
	0aaaaaaa	dd1	address(L) low 7 bits of 14 bits address
	0ddddddd	dd2	data(bit0-2:change bit no.0-7, bit3:0=reset 1=set)
	:	:	:
EOX	11110111	F7	End Of Exclusive

The valid range of addresses is 0x0000 - 0x03FF

PARAMETER CHANGE (byte operation for type 0x01:system memory)

Reception

When [Parameter Change RX] is ON, this message is received if the [Rx CH] matches the Device Channel included in the SUB STATUS. When [Parameter Change ECHO] is ON, this is echoed. When this is received, the specified parameter will be controlled.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change or response n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00000001	01	byte operation for system memory (type)
DATA	0aaaaaaa	dd0	address(H) high 7 bits of 14 bits address
	0aaaaaaa	dd1	address(L) low 7 bits of 14 bits address
	0000dddd	dd2	data(H) high 4 bits of 8 bits data
	0000dddd	dd3	data(L) low 4 bits of 8 bits data
	:	:	: continuous address datas
EOX	11110111	F7	End Of Exclusive

The system memory will depend on the address, as follows.

0x0000 - 0x007F	: setup memory(128byte)
0x0080 - 0x0147	: backup memory(200byte)
0x0200	: card type(1byte)

PARAMETER CHANGE (bit operation for type 0x41:system memory)

Reception

When [Parameter Change RX] is ON, this message is received if the [Rx CH] matches the Device Channel included in the SUB STATUS. When [Parameter Change ECHO] is ON, this is echoed. When this is received, the specified parameter will be controlled.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change or response n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	01000001	41	bit operation for system memory (type)
DATA	0aaaaaaa	dd0	address(H) high 7 bits of 14 bits address
	0aaaaaaa	dd1	address(L) low 7 bits of 14 bits address
	0ddddddd	dd2	data(bit0-2:change bit no.0-7, bit3:0=reset 1=set)
	:	:	:
EOX	11110111	F7	End Of Exclusive

The system memory will depend on the address, as follows.

0x0000 - 0x007F	: setup memory(128byte)
0x0080 - 0x0147	: backup memory(200byte)

PARAMETER VALUE REQUEST (type 0x00:edit buffer, 0x01:system memory)

Reception

When [Parameter Change RX] is ON, this message is received if the [Rx CH] matches the Device Channel included in the SUB STATUS. When [Parameter Change ECHO] is ON, this message will be echoed if the device itself did not receive the message. When this message is received, the value of the specified parameter will be transmitted as a Parameter Change message.

Transmission

When [Parameter Change ECHO] is ON, this message will be transmitted without change if the device itself did not receive the message.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0011nnnn	3n	parameter request n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00tttttt	tt	00:edit buffer, 01:system memory (type)
DATA	0aaaaaaa	dd0	address(H) high 7 bits of 14 bits address
	0aaaaaaa	dd1	address(L) low 7 bits of 14 bits address
	0ddddd	dd	count
EOX	11110111	F7	End Of Exclusive

The system memory will depend on the address, as follows.

- 0x0000 - 0x007F : setup memory(128byte)
- 0x0080 - 0x0147 : backup memory(200byte)
- 0x0200 : card type(1byte)

PARAMETER CHANGE (type 0x02:function call)

Reception

When [Parameter Change RX] is ON, this message is received if the [Rx CH] matches the Device Channel included in the SUB STATUS. When [Parameter Change ECHO] is ON, this message will be echoed. When this message is received, the corresponding memory/library/table will be recalled/stored/cleared.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00000010	02	function call
DATA	0ddddd	dd0	function
	0ddddd	dd1	number
	0ddddd	dd2	channel
EOX	11110111	F7	End Of Exclusive

function	number	channel	Tx/Rx
0x00 scene recall	0-99(memory 0-99)	0x7f	Tx*/Rx
0x01 eq lib recall	0-79(library 1-80)	0-19,22	Tx/Rx
0x02 dyn lib recall	0-79(library 1-80)	0-13,16-19,22	Tx/Rx
0x03 eff lib recall	0-98(library 1-99)	0,1	Tx/Rx
0x10 scene store	1-99(memory 1-99)	0x7f	Rx only
0x11 eq lib store	40-79(library 41-80)	0-19,22	Rx only
0x12 dyn lib store	40-79(library 41-80)	0-13,16-19,22	Rx only
0x13 eff lib store	42-98(library 43-99)	0,1	Rx only

Channel 0-11(ch1-12), 12-13(13/14-15/16), 14-15(return 1-2), 16-19(aux 1-4), 22(st mas), 23-30(ch17-24)
0,1(EFF1,2 for eff lib recall/store), 0x7f(current/edit buffer)

* [0x00:scene recall] is transmitted only when a program which is not assigned to the program change table has been recalled. In other cases, a program change will normally be transmitted.

PARAMETER CHANGE (type 0x02:function call(title))

Reception

When [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in the SUB STATUS, this message will be received. When [Parameter Change ECHO] is ON, this message will be echoed. When this message is received, the title of the corresponding memory/library will be modified.

Transmission

Parameter Change messages are transmitted on the [Rx CH] channel in response to a request.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change or response n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00000010	02	function call
DATA	0ddddd	dd0	function
	0ddddd	dd1	number
	0ddddd	dd2	title1(If data is empty, TITLES are not transmitted.)
	:	:	:
	0ddddd	ddn	title-n
EOX	11110111	F7	End Of Exclusive

If 01V receives a bulk request for an empty memory, TITLES are not transmitted.

function	number	
0x30 scene title	0-99(mem 0-99),0x7f(edit buffer)	for response for Rx
0x31 eq lib title	0-79(library 1-80)	for response for Rx
0x32 dynamics lib title	0-79(library 1-80)	for response for Rx
0x33 eff lib title	0-98(library 1-99)	for response for Rx

PARAMETER VALUE REQUEST (type 0x02:function call(title))

Reception

When [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in the SUB STATUS, this message will be received. When [Parameter Change ECHO] is ON and the 01V itself did not receive the message, the message will be echoed. When this is received, the title of the corresponding memory/library will be transmitted.

Transmission

When [Parameter Change ECHO] is ON and the 01V itself did not receive the message, the message will be echoed.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0011nnnn	3n	parameter request n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00000010	02	function call
DATA	0ddddd	dd0	function
	0ddddd	dd1	number
EOX	11110111	F7	End Of Exclusive

function	number
0x30 scene title	0-99(mem 0-99),0x7f(edit buffer)
0x31 eq lib title	0-79(library 1-80)
0x32 dynamics lib title	0-79(library 1-80)
0x33 eff lib title	0-98(library 1-99)

PARAMETER CHANGE (type operation for type 0x03:controller(LCD-Fader mode))

Reception

When [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in the SUB STATUS, the message will be received.

When [Parameter Change ECHO] is ON, this message will be echoed.

When this message is received, the LCD screen, the corresponding Fader Mode, and the specified channel will be selected.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	01000011	03	controller (type)
DATA	00000001	01	control No.(LCD-Fader mode)
	0ddddd	dd	channel select(0-30)
	0ddddd	dd	LCD select No.(0-17)
	0000dd	dd	PAGE No.(0-4)
EOX	11110111	F7	End Of Exclusive

PARAMETER CHANGE (bit operation for type 0x43:controller(key remote))

Reception

When [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in the SUB STATUS, this message will be received.

When [Parameter Change ECHO] is ON, this message will be echoed.

When this message is received, the same processing will be performed as when the specified key (refer to the table below) is pressed (released).

Transmission

When [Parameter Change ECHO] is ON, this message will be transmitted without change.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	parameter change n=0-15(Device Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	01000011	43	controller
DATA	00000000	00	control no.(0:key remote)
	0ddddd	dd	No. 0-10,99-102(key 1-11,100-103)
	0000dd	dd	data(bit0-2:change bit no.0-7, bit3:0=reset 1=set)
EOX	11110111	F7	End Of Exclusive

KEY	key no.	bit0	bit1	bit2	bit3	bit4	bit5	bit6	bit7
key1	0	ON1	ON2	ON3	ON4	ON5	ON6	ON7	ON8
key2	1	ON9	ON10	ON11	ON12	ON13-14	ON15-16	ONSTOUT	-----
key3	2	SOLO1	SOLO2	SOLO3	SOLO4	SOLO5	SOLO6	SOLO7	SOLO8
key4	3	SOLO9	SOLO10	SOLO11	SOLO12	SOLO13-14	SOLO15-16	-----	-----
key5	4	SEL1	SEL2	SEL3	SEL4	SEL5	SEL6	SEL7	SEL8
key6	5	SEL9	SEL10	SEL11	SEL12	SEL13-14	SEL15-16	SEL STO	-----
key7	6	ONRTN1	ONRTN2	SOLORT1	SOLORT2	SELRTN1	SELRTN2	HOME	MEMORY
key8	7	AUX1	AUX2	AUX3	AUX4	EFFECT1	EFFECT2	OPTION	REMOTE
key9	8	LOW	L-MID	H-MID	HIGH	-----	-----	-----	-----
key10	9	UP	LEFT	RIGHT	DOWN	ENTER	INC	DEC	-----
key11	10	DYNAMIX EQ	DELAY	PAN	UTILITY	MIDI	SETUP	VIEW	-----
key100	99	FRZ-REC	FRZ-PLAY	-----	-----	-----	-----	-----	-----
key101	100	SOLO1	SOLO2	SOLO3	SOLO4	SOLO5	SOLO6	SOLO7	SOLO8
key102	101	SOLO9	SOLO10	SOLO11	SOLO12	SOLO13-14	SOLO15-16	SOLO-RTN1	SOLO-RTN2
key103	102	SOLO17	SOLO18	SOLO19	SOLO20	SOLO21	SOLO22	SOLO23	SOLO24

* Normally, data should be transmitted as "set(bit3=1)." In this case, the 01V will determine that that switch has been pressed and then immediately released, and will perform the appropriate processing. This means that you will not have to transmit "reset(bit3=0)" separately.

* The keys followed by 100 are virtual key, it would be the keys on LCD.

PARAMETER CHANGE (type 0x04:multiple linking)

This message is valid only for the connector that has been specified as the LINK PORT.

When two '01V' units have been connected by a cable, some of the functions (refer to the following table) will be linked.

The same LINK PORT connector settings must be made on both units.

Reception

This message is always received, and will execute the LINK function (refer to the following table). (This is not dependent on MIDI-SETUP.)

Transmission

This message is transmitted when LINK-related functions (refer to following table) are performed. (This is not dependent on MIDI-SETUP.)

When [Parameter Change ECHO] is ON, this message is transmitted without change.

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn	1n	n=0-15(Tx/Rx Channel No.1-16)
GROUP ID	00111110	3e	MODEL ID
MODEL ID	00000100	04	Device code (01V)
PARAM TYPE	00000100	04	multiple linking
DATA	0mmffff	mf	data format (bit6-5:status, bit4-0:contents)
	0ddddd	dd0	data #0
	0ddddd	dd1	data #1
	:	:	:
EOX	11110111	F7	End Of Exclusive

Status	Function	Note
0x00	scene recall	Recall the specified memory number
0x01	scene store	Store to the specified memory number with title (Assign the same title to all)
0x02	scene title edit	If the title was modified, make it the same, make it match
0x48	solo mode bit6: enable/disable bit5: on/off bit2: recording/mixdown bit1: sel mix/last bit0: after fader/pre fader	Match the solo mode
0x60	display call	When the screen (Fader Mode) is changed, make it match
0x61	metering point	Make the meter points match
0x62	peak hold	Make the meter Peak Hold ON/OFF match

PARAMETER CHANGE(type 0x05:remote meter)

When the following request is received to enable transmission, the specified parameter data will be transmitted at 30 msec intervals for five seconds. If you want meter data to be transmitted continuously, you must continue transmitting requests less than five seconds apart.

Reception

When [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel that is included in the SUB STATUS, this message is received.

When [LOCAL OFF] is ON, the incoming meter data will be displayed. In other cases it will be ignored.

Transmission

When transmission is enabled by a request, this will be transmitted every 30msec on the [Rx CH] channel, for five seconds. Transmission will be disabled when the power is turned on, and when PORT settings have been modified.

STATUS	11110000 F0	System Exclusive Message
ID No.	01000011 43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0001nnnn 1n	n=0-15(Tx/Rx Channel No.1-16)
GROUOP ID	00111110 3e	MODEL ID
MODEL ID	00000100 04	Device code (01V)
PARAM TYPE	00000101 05	remote meter
DATA	0sgttttt tt	meter no.(s:special bit, g:gr bit)
	0mmmmmmmm mm0	
	0mmmmmmmm mm1	
	:	:
	:	:
EOX	11110111 F7	End Of Exclusive

In the Meter no., bit 6 is the special bit, and bit 5 is the gr bit. When the Gr bit is on, the single byte gr will be added uniformly to the end of the data string. When the Special bit is on, the two bytes stLED L/R will be added uniformly to the end of the data string. When both are on, gr comes first, and stLED L/R come later.

PARAMETER VALUE REQUEST(type 0x05:remote meter)

This message is used to obtain meter data from the 01V. It is used in LOCAL OFF MODE to display the meter of the remote device, or to display the meter on the screen of a personal computer, etc. In order to obtain meter data, the meter whose data is required must be displayed in the LCD of the remote device. This means that before transmitting this request, you must first transmit the above-described "4.6.4.11 PARAMETER CHANGE (type 0x03:bit operation for controller(LCD-Fader mode))" to display the appropriate meter in the LCD screen of the remote device.

Reception

When [Parameter Change RX] is ON and the [Rx CH] matches the Device Channel included in SUB STATUS, this message will be received.

When this message is received, Parameter Change (remote meter) messages will begin to be transmitted on the [Rx CH] channel.

Transmission

When [LOCAL OFF] is ON, transmit a meter data request for the currently displayed meter on the [Tx CH]. For each request, meter data will be transmitted for five seconds. If you want meter data continuously for longer than this, you will need to transmit requests at intervals of five seconds or less. When the 01V is in LOCAL OFF MODE, transmit requests at approximately one-second intervals. When [Parameter Change ECHO] is ON and the 01V itself did not receive this message, the message will be echoed.

STATUS	11110000 F0	System Exclusive Message
ID No.	01000011 43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0011nnnn 3n	n=0-15(Tx/Rx Channel No.1-16)
GROUOP ID	00111110 3e	MODEL ID
MODEL ID	00000100 04	Device code (01V)
PARAM TYPE	00000101 05	remote meter
DATA	0sgttttt tt	meter no.(s:special bit, g:gr bit)
EOX	11110111 F7	End Of Exclusive

Table of signal levels and codes

Level	code	Level	code	Level	code
-72dB	0x1F	-30dB	0x57	-9dB	0x72
-68dB	0x24	-27dB	0x5A	-8dB	0x73
-64dB	0x29	-24dB	0x5F	-7dB	0x75
-60dB	0x2F	-21dB	0x62	-6dB	0x77
-56dB	0x33	-18dB	0x67	-5dB	0x78
-51dB	0x3A	-16dB	0x69	-4dB	0x79
-48dB	0x3F	-15dB	0x6A	-3dB	0x7A
-46dB	0x41	-14dB	0x6B	-2dB	0x7B
-42dB	0x47	-13dB	0x6D	-1dB	0x7D
-39dB	0x4A	-12dB	0x6F	0dB	0x7E
-36dB	0x4F	-11dB	0x70	CLIP	0x7F
-33dB	0x52	-10dB	0x71		

5. SYSTEM EXCLUSIVE MESSAGE (Bulk Dump) & REQUEST

These messages input and output the contents of various types of internal memory.

The unique header identifies whether or not the data is for the 01V. The CHECK SUM is calculated by adding the data following the BYTE COUNT(LOW) until the data preceding the CHECK SUM, then inverting the bits (2's complement), and setting bit 7 to 0. CHECK SUM = (-sum) & 0x7F

Reception

This is received if [Bulk RX] is ON and the [Rx CH] matches the Device Channel that is included in SUB STATUS.

When a BULK DUMP is received, it will immediately be written into the specified memory.

When a BULK DUMP REQUEST is received, a bulk dump will be transmitted immediately.

Transmission

In the [MIDI-BULK] page, this is transmitted on the [Tx CH] channel by key operations.

In response to a Bulk Dump Request, a Bulk Dump Message is transmitted on the [Rx CH] channel.

data name	rx/tx	function
'M'	rx/tx	Scene Memory & Request
'S'	rx/tx	Setup Memory & Request
'T'	rx/tx	Remote(Internal Parameter) Memory & Request
'L'	rx/tx	Remote(MMC) Memory & Request
'U'	rx/tx	Remote(User Define) Memory & Request
'C'	rx/tx	Control Change Assign Table & Request
'P'	rx/tx	Program Change Assign Table & Request
'Q'	rx/tx	Equalizer Library & Request
'Y'	rx/tx	Dynamics Library & Request
'E'	rx/tx	Effect Library & Request

SCENE MEMORY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT (HIGH)	00010000	10	2048(2038+10)bytes
BYTE COUNT (LOW)	00001010	00	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01001101	4D	'M'
	0nnnnnnnn	nn	m=0-99,127(Scene Memory No.0-99, edit buffer)
DATA	0ddddddd	ds	Receive is effective No.1-99,127 Scene Memory(10+(1014*2) bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

The ten bytes at the beginning are the ID + title, and are 7 bit data.
The subsequent 1014 bytes are all split into 4 bit data.

SCENE MEMORY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01001101	4D	'M'
	0nnnnnnnn	nn	m=0-99,127(Scene Memory No.0-99,cur- rent)
EOX	11110111	F7	End Of Exclusive

SETUP MEMORY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT (HIGH)	00000010	02	266(256+10)bytes
BYTE COUNT (LOW)	00001010	0A	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010011	53	'S'
	00100000	20	''
DATA	0ddddddd	ds	Setup Memory(128*2bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

All data is split into 4 bit.

SETUP MEMORY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010011	53	'S'
	00100000	20	''
EOX	11110111	F7	End Of Exclusive

REMOTE(Internal Parameter) MEMORY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT (HIGH)	00000000	00	100(90+10)bytes
BYTE COUNT (LOW)	01100100	64	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01001001	49	'T'
	0bbbbbbb	bb	b = 0-3(bank no.1-4)
DATA	0ddddddd	ds	Remote(Internal Parameter) Mem- ory(90bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

All data is 7 bit data.

REMOTE(Internal Parameter) MEMORY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01001001	49	'T'
	0bbbbbbb	bb	b = 0-3(bank no.1-4)
EOX	11110111	F7	End Of Exclusive

REMOTE(MMC) MEMORY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT(HIGH)	00000000	00	34(24+10)bytes
BYTE COUNT(LOW)	00100010	22	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01001100	4C	'L'
	00100000	20	''
DATA	0ddddddd	ds	Remote(MMC) Memory(24bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

All data is 7 bit data.

REMOTE(MMC) MEMORY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01001100	4C	'L'
	00100000	20	''
EOX	11110111	F7	End Of Exclusive

REMOTE(User Define) MEMORY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT(HIGH)	00001011	0B	1450(1440+10)bytes
BYTE COUNT(LOW)	00101010	2A	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010101	55	'U'
	0bbbbbbb	bb	bb = 0-3(bank no. 1-4)
DATA	0ddddddd	ds	Remote(User Define) Memory(1440bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

All data (word) is split into 7 bit.

REMOTE(User Define) MEMORY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010101	55	'U'
	0bbbbbbb	bb	bb = 0-3(bank no. 1-4)
EOX	11110111	F7	End Of Exclusive

EQUALIZER LIBRARY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT(HIGH)	00000000	00	46(36+10)bytes
BYTE COUNT(LOW)	00101110	2E	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010001	51	'Q'
	0mmmmmmmm	mm	m= 0-79 (Equalizer Library No.1-80) 96-124(ch1-12,13/14,15/16,RTN1/2,AUX 1-4,ST MAS,ch17-24) Receive is effective No.40-79,96-125
DATA	0ddddddd	ds	Equalizer Library Mem- ory(12+(12*2)bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

The twelve bytes at the beginning are the title, and are 7 bit data. The following twelve bytes are all split into 4 bit data.

EQUALIZER LIBRARY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010001	51	'Q'
	0mmmmmmmm	mm	m= 0-79 (Equalizer Library No.1-80) 96-124(ch1-12,13/14,15/16,RTN1/2,AUX 1-4,ST MAS,ch17-24)
EOX	11110111	F7	End Of Exclusive

DYNAMICS LIBRARY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT (HIGH)	00000000	00	36(26+10)bytes
BYTE COUNT (LOW)	00100100	24	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01011001	59	'Y'
	0mmmmmmmm	mm	m= 0-79 (Dynamics Library No.1-80) 96-114(ch1-12,13/14,15/16,AUX1-4,ST MAS) Receive is effective No.40-79,96-115 Dynamics Library Mem- ory(12+(7*2)bytes)
DATA	0ddddddd	ds	
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

The first twelve bytes are the title, and are 7 bit data. The following seven bytes are all split into 4 bit data.

DYNAMICS LIBRARY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01011001	59	'Y'
	0mmmmmmmm	mm	m= 0-79 (Dynamics Library No.1-80) 96-114(ch1-12,13/14,15/16,AUX1-4,ST MAS)
EOX	11110111	F7	End Of Exclusive

EFFECT LIBRARY BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT (HIGH)	00000000	00	104(94+10)bytes
BYTE COUNT (LOW)	01101000	68	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01000101	45	'E'
	0mmmmmmmm	mm	m= 0-98 (Effect Library No.1-99) 112-113(Effect1, Effect2) Receive is effective 42-98,112-113 Effect Library Memory(12+(41*2)bytes)
DATA	0ddddddd	ds	
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

The first twelve bytes are the title, and are 7 bit data. The following 41 bytes are all split into 4 bit data.

EFFECT LIBRARY BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01000101	45	'E'
	0mmmmmmmm	mm	m= 0-98 (Effect Library No.1-99) 112-113(Effect1, Effect2)
EOX	11110111	F7	End Of Exclusive

PROGRAM CHANGE ASSIGNMENT TABLE BULK DUMP FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT(HIGH)	00000001	01	138(128+10)bytes
BYTE COUNT(LOW)	00001010	0A	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010000	50	'P'
	00100000	20	''
DATA	0ddddddd	ds	Program Change Table(128bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

All data is 7 bit data.

PROGRAM CHANGE ASSIGNMENT TABLE BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01010000	50	'P'
	00100000	20	''
EOX	11110111	F7	End Of Exclusive

Control Change Assignment Table Bulk Dump Format

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID No.(YAMAHA)
SUB STATUS	0000nnnn	0n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
BYTE COUNT(HIGH)	00000010	02	352(342+10)bytes
BYTE COUNT(LOW)	01100000	60	
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01000011	43	'C'
	00100000	20	''
DATA	0ddddddd	ds	Control Change Table(114x3bytes)
	:	:	
	0ddddddd	de	
CHECK SUM	0eeeeeee	ee	ee=(INVERT('L'+ 'M'+...+ds+...+de)+1) AND 7Fh
EOX	11110111	F7	End Of Exclusive

All data is 7 bit data.

CONTROL CHANGE ASSIGNMENT TABLE BULK DUMP REQUEST FORMAT

STATUS	11110000	F0	System Exclusive Message
ID No.	01000011	43	Manufacturer's ID (YAMAHA)
SUB STATUS	0010nnnn	2n	n=0-15(Device Channel No.1-16)
FORMAT No.	01111110	7E	Universal Bulk Dump
	01001100	4C	'L'
	01001101	4D	'M'
	00100000	20	''
	00100000	20	''
	00111000	38	'8'
	01000010	42	'B'
	00110011	33	'3'
	00110100	34	'4'
DATA NAME	01000011	43	'C'
	00100000	20	''
EOX	11110111	F7	End Of Exclusive

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1-16 1-16	1-16 1-16	Memorized
Mode	Default Messages Altered	X X *****	OMNI off/OMNI on X X	Memorized
Note Number	True Voice	X *****	0-127 X	
Velocity	Note On Note Off	X X	O O	
After Touch	Keys Ch's	X X	X X	
Pitch bend		X	X	
Control Change	0-95, 102-119	O	O	Assignable
Prog Change	:True#	0-127 *****	0-127 0-99	Assignable
System Exclusive		O	O	*1
System Common	:Song Pos :Song Sel :Tune	X X X	X X X	
System Real Time	:Clock :Commands	X X	X X	
Aux Messages	:Local ON/OFF :All Notes OFF :Active Sense :Reset	X X X X	X X O O	
Notes	MTC quarter frame message is recognized *1: Bulk Dump/Request, Parameter Change/Request, and MMC. For MIDI Remote, ALL messages can be transmitted.			