

MIDI インプリメンテーション

Model : GT-6 GUITAR EFFECTS PROCESSOR

Date : Jun. 25, 2001

Version : 1.00

1. 受信データ

チャンネル・ボイス・メッセージ

コントロール・チェンジ

ステータス	第2バイト	第3バイト
BnH	ccH	vvH

n = MIDI チャンネル・ナンバー : 0H - FH (ch.1 - ch.16)

cc = コントローラー・ナンバー : 00H, 20H (0, 32)

01H - 1FH (1 - 31)

40H - 5FH (64 - 95)

vv = バリュース : 00H - 7FH (0 - 127)

コントローラー・ナンバーが 00H, 20H の場合、バンク・セレクトとして認識します。
00H の場合 : バリュースが 03H 以下の場合にはバリュース値に応じて受信プログラム・チェンジ・マップを切り替えます。

バリュースが 04H 以上の場合には受信したデータを無視します。

20H の場合 : バリュースに関係なく受信したデータを無視します。
「パラメーターのリアルタイム・コントロール」のための Source として設定すると、コントロール・チェンジで Target がコントロールできます。

プログラム・チェンジ

ステータス	第2バイト
CnH	ppH

n = MIDI チャンネル・ナンバー : 0H - FH (ch.1 - ch.16)

pp = プログラム・ナンバー : 00H - 7FH (No.1 - No.128)

受信したプログラム・ナンバーに応じてパッチが切り替わります。
切り替え時に参照するプログラム・チェンジ・マップは 4 枚あり、バンク・セレクトによって切り替えられます。

システム・リアルタイム・メッセージ

タイミング・クロック

ステータス
F8H

アクティブ・センシング

ステータス
FEH

アクティブ・センシングを受信すると、それ以降のすべてのメッセージ間隔を監視する状態になります。メッセージ間隔が 400msec. を超えると、MIDI Off Line! を表示します。

システム・エクスクルーシブ・メッセージ

ステータス	データ・バイト	ステータス
F0H	iiH, ddH...eeH	F7H

F0H = システム・エクスクルーシブ

ii = マニファクチャラー ID : 41H (Roland)

dd...ee = データ : 00H - 7FH (0 - 127)

F7H = EOX (End of Exclusive/System common)

詳細は「ローランドのエクスクルーシブ・メッセージについて」を参照してください。

2. 送信データ

チャンネル・ボイス・メッセージ

コントロール・チェンジ

ステータス	第2バイト	第3バイト
BnH	ccH	vvH

n = MIDI チャンネル・ナンバー : 0H - FH (ch.1 - ch.16)

cc = コントローラー・ナンバー : 00H, 20H (0, 32)

01H - 1FH (1 - 31)

21H - 5FH (33 - 95)

vv = バリュース : 00H - 7FH (0 - 127)

システム・パラメーター 'MIDI PC OUT' を 'On' に設定すると、パッチ切り換え時にバンク・セレクト (00H, 20H) が送信されます。

システム・パラメーター 'MIDI EXP Number' でコントロール・チェンジ・ナンバーを設定すると、EXP ペダル操作時にコントロール・チェンジ情報が送信されます。

システム・パラメーター 'MIDI CTL Number' でコントロール・チェンジ・ナンバーを設定すると、CTL ペダル操作時にコントロール・チェンジ情報が送信されます。

システム・パラメーター 'MIDI SUB CTL1 Number' でコントロール・チェンジ・ナンバーを設定すると、外部接続の CTL1 ペダル操作時 (SUB EXP ペダル操作時) にコントロール・チェンジ情報が送信されます。

システム・パラメーター 'MIDI SUB CTL2 Number' でコントロール・チェンジ・ナンバーを設定すると、外部接続の CTL2 ペダル操作時にコントロール・チェンジ情報が送信されます。

プログラム・チェンジ

ステータス	第2バイト
CnH	ppH

n = MIDI チャンネル・ナンバー : 0H - FH (ch.1 - ch.16)

pp = プログラム・ナンバー : 00H - 7FH (No.1 - No.128)

システム・パラメーター 'MIDI PC OUT' を 'On' に設定すると、パッチ切り換え時にプログラム・チェンジ情報が送信されます。

システム・リアルタイム・メッセージ

スタート

ステータス
FAH

ストップ

ステータス
FCH

システム・エクスクルーシブ・メッセージ

ステータス	データ・バイト	ステータス
F0H	iiH, ddH...eeH	F7H

F0H = システム・エクスクルーシブ

ii = マニファクチャラー ID : 41H (Roland)

dd...ee = データ : 00H - 7FH (0 - 127)

F7H = EOX (End of Exclusive/System common)

詳細は「ローランドのエクスクルーシブ・メッセージについて」を参照してください。

MIDI マシン・コントロール (MMC)

ステータス	データ・バイト	ステータス
F0H	iiH, ddH...eeH	F7H

F0H = システム・エクスクルーシブ

7FH = ID ナンバー (ユニバーサル・リアルタイム・メッセージ)

7FH = デバイス ID (Broadcast)

06H = サブ ID#1 (Machine Control Command)

com = サブ ID#2 (MMC Command)

F7H = EOX (End of Exclusive/System common)

GT-6 で送信する com (MMC Command) は次の通りです。

```
com
01H Stop
02H Play
```

3. エクスクルーシブ・コミュニケーション

GT-6 はエクスクルーシブ・メッセージによってシステム / パッチ・データの送受信が行えます。
GT-6 のエクスクルーシブ・メッセージのモデル ID は 00H 46H、デバイス ID は 00H ~ 1FH で設定可能です。

ワン・ウェイ・コミュニケーション

リクエスト・データ 1RQ1(11H)

バイト	解説
F0H	エクスクルーシブ・ステータス
41H	マニファクチャラー ID (Roland)
Dev	デバイス ID (Dev=00H-1FH)
00H	モデル ID (GT-6) MSB
46H	モデル ID (GT-6) LSB
11H	コマンド ID (RQ1)
aaH	アドレス MSB
bbH	アドレス
ccH	アドレス
ddH	アドレス LSB
ssH	サイズ MSB
ttH	サイズ
uuH	サイズ
vvH	サイズ LSB
sum	チェック・サム
F7H	EOX (エンド・オブ・エクスクルーシブ)

このメッセージは受信だけが可能で、GT-6 本体からは送信しません。

データ・セット 1DT1(12H)

バイト	解説
F0H	エクスクルーシブ・ステータス
41H	マニファクチャラー ID (Roland)
Dev	デバイス ID (Dev=00H-1FH)
00H	モデル ID (GT-6) MSB
46H	モデル ID (GT-6) LSB
12H	コマンド ID (DT1)
aaH	アドレス MSB
bbH	アドレス
ccH	アドレス
ddH	アドレス LSB
eeH	データ
:	:
ffH	データ
sum	チェック・サム
F7H	EOX (エンド・オブ・エクスクルーシブ)

4. パラメーター・アドレス・マップ

アドレスおよびサイズは、7ビットごとの 16 進表示です。

アドレス	MSB			LSB
バイナリー	0aaa aaaa	0bbb bbbb	0ccc cccc	0ddd dddd
7ビット・16進	AA	BB	CC	DD

サイズ	MSB			LSB
バイナリー	0sss ssss	0ttt tttt	0uuu uuuu	0vvv vvvv
7ビット・16進	SS	TT	UU	VV

アドレス・ブロック・マップ

Address	Block	Sub Block	Note
00 00 00 00	TUNER	Bulk
			*Refer to Table TUNER
01 00 00 00	OUTPUT SELECT	Bulk
			*Refer to Table OUTPUT
02 00 00 00	UTILITY	GLOBAL	*Refer to Table GLOBAL
02 01 00 00		SYSTEM	*Refer to Table SYSTEM
02 02 00 00		MIDI	*Refer to Table MIDI
02 03 00 00			

02 04 00 00	METER		
02 05 00 00	HARMONIST SCALE		*Refer to Table HARMONIST
02 06 00 00	AUTO RIFF PHRASE		*Refer to Table AUTO RIFF
02 07 00 00	PREAMP Customaize		*Refer to Table PREAMP
02 08 00 00	OD/DS Customaize		*Refer to Table OD/DS
03 00 00 00	WAH Customaize		*Refer to Table WAH
04 00 00 00	MANUALBulk	*Refer to Table MANUAL
05 00 00 00	Quick Setting	ROM AreaBulk(Read Only) *Refer to Table Quick Fx
06 00 00 00		ROM Area(Name)Bulk(Read Only) *Refer to Table Quick Fx
06 01 00 00	User Patch	Patch Bank01-1Bulk *Refer to Table Patch
:	:	:	
06 7F 00 00		Patch Bank32-4	
07 00 00 00		Patch Bank33-1	
:	:	:	
07 0B 00 00		Patch Bank35-4	
08 00 00 00	ROM Patch	Patch Bank36-1Bulk(Read Only) *Refer to Table Patch
08 01 00 00		Patch Bank36-2	
:	:	:	
08 7F 00 00		Patch Bank67-4	
09 00 00 00		Patch Bank68-1	
:	:	:	
09 47 00 00		Patch Bank85-4	
0A 00 00 00	Temporary Buffer	 Bulk *Refer to Table Patch
0B 00 00 00	Temporary Buffer		... Individual(Write Only) *Refer to Table Patch

GT-6には、インディビジュアル・パラメーターとバルク・ダンプの2種類のコミュニケーション方法があります。
 バルクのデータは、ユーティリティー内でバルク・ロード待機させておけば受信可能です。
 インディビジュアルのデータは常に受信可能ですが、必ず [F0...F7] の1パケットには1つのパラメーターに対するバリューを過不足なく記述してください。
 データ・リクエストを受信するには、ユーティリティー内でバルク・ロード待機させておいてください。
 「#」のついているアドレスは、先頭アドレスとして使用しないで下さい。
 Sizeが2以上のパラメーターは、分割せずに必ず同じパケット内で送ってください。

Table TUNER <TUNER>

Address(H)	Size(H)	Data(H)	Parameter	Description
00 00 00 00	00 00 00 01	00 - 0A	TUNER Pitch	435Hz - 445Hz
00 00 00 01	00 00 00 01	00 - 01	TUNER Out	00 : Mute 01 : Bypass

Table OUTPUT <OUTPUT Select>

Address(H)	Size(H)	Data(H)	Parameter	Description
01 00 00 00	00 00 00 01	00 - 07	OUTPUT Select	00 : JC-120 01 : SMALL AMP 02 : COMBO AMP 03 : STACK AMP 04 : COMBO Return 05 : STACK Return 06 : LINE/PHONES 07 : LINE(PA)

Table GLOBAL <UTILITY : GLOBAL>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 00 00 00	00 00 00 01	00 - 28	Low EQ	-20dB - +20dB
02 00 00 01	00 00 00 01	00 - 28	High EQ	-20dB - +20dB
02 00 00 02	00 00 00 01	00 - 28	NS Threshold	-20dB - +20dB
02 00 00 03	00 00 00 01	00 - 64	Reverb Level	00 : 0% 01 : 2% 02 : 4% : 64 : 200%

Table SYSTEM <UTILITY : SYSTEM>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 01 00 00	00 00 00 01	00 - 0F	LCD Contrast	1 - 16
02 01 00 01	00 00 00 01	00 - 54	BANK Extent	00 : 1 01 : 2 : 54 : 85
02 01 00 02	00 00 00 01	00 - 01	PatchChange Mode	00 : Immediate 01 : Wait for a Number
02 01 00 03	00 00 00 01	00 - 01	EXP Pedal Hold	00 : Off 01 : On
02 01 00 04	00 00 00 01	00 - 01	Dial Function	00 : Patch No.& VALUE 01 : VALUE Only
02 01 00 05	00 00 00 01	00 - 01	Knob Mode	00 : Immediate 01 : Current Setting
02 01 00 06	00 00 00 01	00 - 01	Pedal Tuner SW	00 : Off 01 : On
02 01 00 07	00 00 00 01	00 - 01	Amp Switch Mode	00 : Amp On/Off 01 : Toggle to Knobs
02 01 00 08	00 00 00 01	00 - 04	Sub CTL1 Function	00 : Assignable 01 : MANUAL On/Off 02 : TUNER On/Off 03 : MIDI Start/Stop 04 : MMC Play/Stop
02 01 00 09	00 00 00 01	00 - 04	Sub CTL2 Function	00 : Assignable 01 : MANUAL On/Off 02 : TUNER On/Off 03 : MIDI Start/Stop 04 : MMC Play/Stop

Table MIDI <UTILITY : MIDI>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 02 00 00	00 00 00 01	00 - 0F	MIDI Rx Channel	00 : 1 : 0F : 16
02 02 00 01	00 00 00 01	00 - 01	MIDI Omni Mode	00 : Omni Off 01 : Omni On
02 02 00 02	00 00 00 01	00 - 10	MIDI Tx Channel	00 : 1 : 0F : 16 10 : Rx
02 02 00 03	00 00 00 01	00 - 01	MIDI Sync Clock	00 : Auto 01 : Internal
02 02 00 04	00 00 00 01	00 - 01	MIDI PC OUT	00 : Off 01 : On
02 02 00 05	00 00 00 01	00 - 5E	MIDI EXP OUT	
02 02 00 06	00 00 00 01	00 - 5E	MIDI EXP SW OUT	
02 02 00 07	00 00 00 01	00 - 5E	MIDI CTL OUT	
02 02 00 08	00 00 00 01	00 - 5E	MIDI SubCTL1 OUT	
02 02 00 09	00 00 00 01	00 - 5E	MIDI SubCTL2 OUT	00 : Off 01 : 1 : 1F : 31 20 : 33 : 5E : 95
02 02 00 0A	00 00 00 01	00 - 01	MIDI Map Select	00 : Fix 01 : Prog
02 02 10 00	00 00 00 02	00 00	MIDI Program Map	MIDI Map Select = Prog
02 02 10 01#	- 02 53		B#0 P#1	00 00 : #01-1(User) : 00 7F : #32-4(User) 01 00 : #33-1(User) : 01 7F : #64-4(Preset) 02 00 : #65-1(Preset) : 02 53 : #85-4(Preset)
02 02 10 02	00 00 00 02	00 00	MIDI Program Map	
02 02 10 03#	- 02 53		B#0 P#2	
02 02 11 7E	00 00 00 02	00 00	MIDI Program Map	
02 02 11 7F#	- 02 53		B#0 P#128	
02 02 12 00	00 00 00 02	00 00	MIDI Program Map	
02 02 12 01#	- 02 53		B#1 P#1	
02 02 14 00	00 00 00 02	00 00	MIDI Program Map	
02 02 14 01#	- 02 53		B#2 P#1	
02 02 16 00	00 00 00 02	00 00	MIDI Program Map	
02 02 16 01#	- 02 53		B#3 P#1	
02 02 17 7E	00 00 00 02	00 00	MIDI Program Map	
02 02 17 7F#	- 02 53		B#3 P#128	

Table HARMONIST <HARMONIST SCALE>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 04 00 00	00 00 00 01	00 - 30	Scale 1 C	
02 04 00 01	00 00 00 01	00 - 30	Scale 1 Db	
02 04 00 02	00 00 00 01	00 - 30	Scale 1 D	
02 04 00 03	00 00 00 01	00 - 30	Scale 1 Eb	
02 04 00 04	00 00 00 01	00 - 30	Scale 1 E	
02 04 00 05	00 00 00 01	00 - 30	Scale 1 F	
02 04 00 06	00 00 00 01	00 - 30	Scale 1 F#	
02 04 00 07	00 00 00 01	00 - 30	Scale 1 G	
02 04 00 08	00 00 00 01	00 - 30	Scale 1 Ab	
02 04 00 09	00 00 00 01	00 - 30	Scale 1 A	
02 04 00 0A	00 00 00 01	00 - 30	Scale 1 Bb	
02 04 00 0B	00 00 00 01	00 - 30	Scale 1 B	
02 04 01 00	00 00 00 01	00 - 30	Scale 2 C	
02 04 01 01	00 00 00 01	00 - 30	Scale 2 Db	
02 04 01 02	00 00 00 01	00 - 30	Scale 2 D	
02 04 01 03	00 00 00 01	00 - 30	Scale 2 Eb	
02 04 01 04	00 00 00 01	00 - 30	Scale 2 E	
02 04 01 05	00 00 00 01	00 - 30	Scale 2 F	
02 04 01 06	00 00 00 01	00 - 30	Scale 2 F#	
02 04 01 07	00 00 00 01	00 - 30	Scale 2 G	
02 04 01 08	00 00 00 01	00 - 30	Scale 2 Ab	


```
02 04 15 05 00 00 00 01 00 - 30 Scale 22 F
02 04 15 06 00 00 00 01 00 - 30 Scale 22 F#
02 04 15 07 00 00 00 01 00 - 30 Scale 22 G
02 04 15 08 00 00 00 01 00 - 30 Scale 22 Ab
02 04 15 09 00 00 00 01 00 - 30 Scale 22 A
02 04 15 0A 00 00 00 01 00 - 30 Scale 22 Bb
02 04 15 0B 00 00 00 01 00 - 30 Scale 22 B
02 04 16 00 00 00 00 01 00 - 30 Scale 23 C
02 04 16 01 00 00 00 01 00 - 30 Scale 23 Db
02 04 16 02 00 00 00 01 00 - 30 Scale 23 D
02 04 16 03 00 00 00 01 00 - 30 Scale 23 Eb
02 04 16 04 00 00 00 01 00 - 30 Scale 23 E
02 04 16 05 00 00 00 01 00 - 30 Scale 23 F
02 04 16 06 00 00 00 01 00 - 30 Scale 23 F#
02 04 16 07 00 00 00 01 00 - 30 Scale 23 G
02 04 16 08 00 00 00 01 00 - 30 Scale 23 Ab
02 04 16 09 00 00 00 01 00 - 30 Scale 23 A
02 04 16 0A 00 00 00 01 00 - 30 Scale 23 Bb
02 04 16 0B 00 00 00 01 00 - 30 Scale 23 B
02 04 17 00 00 00 00 01 00 - 30 Scale 24 C
02 04 17 01 00 00 00 01 00 - 30 Scale 24 Db
02 04 17 02 00 00 00 01 00 - 30 Scale 24 D
02 04 17 03 00 00 00 01 00 - 30 Scale 24 Eb
02 04 17 04 00 00 00 01 00 - 30 Scale 24 E
02 04 17 05 00 00 00 01 00 - 30 Scale 24 F
02 04 17 06 00 00 00 01 00 - 30 Scale 24 F#
02 04 17 07 00 00 00 01 00 - 30 Scale 24 G
02 04 17 08 00 00 00 01 00 - 30 Scale 24 Ab
02 04 17 09 00 00 00 01 00 - 30 Scale 24 A
02 04 17 0A 00 00 00 01 00 - 30 Scale 24 Bb
02 04 17 0B 00 00 00 01 00 - 30 Scale 24 B
02 04 18 00 00 00 00 01 00 - 30 Scale 25 C
02 04 18 01 00 00 00 01 00 - 30 Scale 25 Db
02 04 18 02 00 00 00 01 00 - 30 Scale 25 D
02 04 18 03 00 00 00 01 00 - 30 Scale 25 Eb
02 04 18 04 00 00 00 01 00 - 30 Scale 25 E
02 04 18 05 00 00 00 01 00 - 30 Scale 25 F
02 04 18 06 00 00 00 01 00 - 30 Scale 25 F#
02 04 18 07 00 00 00 01 00 - 30 Scale 25 G
02 04 18 08 00 00 00 01 00 - 30 Scale 25 Ab
02 04 18 09 00 00 00 01 00 - 30 Scale 25 A
02 04 18 0A 00 00 00 01 00 - 30 Scale 25 Bb
02 04 18 0B 00 00 00 01 00 - 30 Scale 25 B
02 04 19 00 00 00 00 01 00 - 30 Scale 26 C
02 04 19 01 00 00 00 01 00 - 30 Scale 26 Db
02 04 19 02 00 00 00 01 00 - 30 Scale 26 D
02 04 19 03 00 00 00 01 00 - 30 Scale 26 Eb
02 04 19 04 00 00 00 01 00 - 30 Scale 26 E
02 04 19 05 00 00 00 01 00 - 30 Scale 26 F
02 04 19 06 00 00 00 01 00 - 30 Scale 26 F#
02 04 19 07 00 00 00 01 00 - 30 Scale 26 G
02 04 19 08 00 00 00 01 00 - 30 Scale 26 Ab
02 04 19 09 00 00 00 01 00 - 30 Scale 26 A
02 04 19 0A 00 00 00 01 00 - 30 Scale 26 Bb
02 04 19 0B 00 00 00 01 00 - 30 Scale 26 B
02 04 1A 00 00 00 00 01 00 - 30 Scale 27 C
02 04 1A 01 00 00 00 01 00 - 30 Scale 27 Db
02 04 1A 02 00 00 00 01 00 - 30 Scale 27 D
02 04 1A 03 00 00 00 01 00 - 30 Scale 27 Eb
02 04 1A 04 00 00 00 01 00 - 30 Scale 27 E
02 04 1A 05 00 00 00 01 00 - 30 Scale 27 F
02 04 1A 06 00 00 00 01 00 - 30 Scale 27 F#
02 04 1A 07 00 00 00 01 00 - 30 Scale 27 G
02 04 1A 08 00 00 00 01 00 - 30 Scale 27 Ab
02 04 1A 09 00 00 00 01 00 - 30 Scale 27 A
02 04 1A 0A 00 00 00 01 00 - 30 Scale 27 Bb
02 04 1A 0B 00 00 00 01 00 - 30 Scale 27 B
02 04 1B 00 00 00 00 01 00 - 30 Scale 28 C
02 04 1B 01 00 00 00 01 00 - 30 Scale 28 Db
02 04 1B 02 00 00 00 01 00 - 30 Scale 28 D
02 04 1B 03 00 00 00 01 00 - 30 Scale 28 Eb
02 04 1B 04 00 00 00 01 00 - 30 Scale 28 E
02 04 1B 05 00 00 00 01 00 - 30 Scale 28 F
02 04 1B 06 00 00 00 01 00 - 30 Scale 28 F#
02 04 1B 07 00 00 00 01 00 - 30 Scale 28 G
02 04 1B 08 00 00 00 01 00 - 30 Scale 28 Ab
02 04 1B 09 00 00 00 01 00 - 30 Scale 28 A
02 04 1B 0A 00 00 00 01 00 - 30 Scale 28 Bb
02 04 1B 0B 00 00 00 01 00 - 30 Scale 28 B
02 04 1C 00 00 00 00 01 00 - 30 Scale 29 C
02 04 1C 01 00 00 00 01 00 - 30 Scale 29 Db
02 04 1C 02 00 00 00 01 00 - 30 Scale 29 D
02 04 1C 03 00 00 00 01 00 - 30 Scale 29 Eb
02 04 1C 04 00 00 00 01 00 - 30 Scale 29 E
02 04 1C 05 00 00 00 01 00 - 30 Scale 29 F
02 04 1C 06 00 00 00 01 00 - 30 Scale 29 F#
02 04 1C 07 00 00 00 01 00 - 30 Scale 29 G
02 04 1C 08 00 00 00 01 00 - 30 Scale 29 Ab
02 04 1C 09 00 00 00 01 00 - 30 Scale 29 A
02 04 1C 0A 00 00 00 01 00 - 30 Scale 29 Bb
02 04 1C 0B 00 00 00 01 00 - 30 Scale 29 B
```

以下では DIR (ダイレクト) が "C" の場合を例にあげて Description の値の説明をしています。C 以外の場合はそれぞれ置き換えてください。

```
00 : Pitch = -C ↓↓
01 : Pitch = -Db ↓
02 : Pitch = -D ↓
03 : Pitch = -Eb ↓
04 : Pitch = -E ↓
05 : Pitch = -F ↓
06 : Pitch = -F# ↓
07 : Pitch = -G ↓
08 : Pitch = -Ab ↓
09 : Pitch = -A ↓
0A : Pitch = -Bb ↓
0B : Pitch = -B ↓
0C : Pitch = -C ↓
0D : Pitch = -Db
0E : Pitch = -D
0F : Pitch = -Eb
10 : Pitch = -E
11 : Pitch = -F
12 : Pitch = -F#
13 : Pitch = -G
14 : Pitch = -Ab
15 : Pitch = -A
16 : Pitch = -Bb
17 : Pitch = -B
```

18 : Pitch = C
 19 : Pitch = +Db
 1A : Pitch = +D
 1B : Pitch = +Eb
 1C : Pitch = +E
 1D : Pitch = +F
 1E : Pitch = +F#
 1F : Pitch = +G
 20 : Pitch = +Ab
 21 : Pitch = +A
 22 : Pitch = +Bb
 23 : Pitch = +B
 24 : Pitch = +C ↑
 25 : Pitch = +Db ↑
 26 : Pitch = +D ↑
 27 : Pitch = +Eb ↑
 28 : Pitch = +E ↑
 29 : Pitch = +F ↑
 2A : Pitch = +F# ↑
 2B : Pitch = +G ↑
 2C : Pitch = +Ab ↑
 2D : Pitch = +A ↑
 2E : Pitch = +Bb ↑
 2F : Pitch = +B ↑
 30 : Pitch = +C ↑↑

Table AUTO RIFF <AUTO RIFF PHRASE>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 05 00 00	00 00 00 01	00 - 32	User 1 C Step1	
02 05 00 01	00 00 00 01	00 - 32	User 1 C Step2	
02 05 00 02	00 00 00 01	00 - 32	User 1 C Step3	
02 05 00 03	00 00 00 01	00 - 32	User 1 C Step4	
02 05 00 04	00 00 00 01	00 - 32	User 1 C Step5	
02 05 00 05	00 00 00 01	00 - 32	User 1 C Step6	
02 05 00 06	00 00 00 01	00 - 32	User 1 C Step7	
02 05 00 07	00 00 00 01	00 - 32	User 1 C Step8	
02 05 00 08	00 00 00 01	00 - 32	User 1 C Step9	
02 05 00 09	00 00 00 01	00 - 32	User 1 C Step10	
02 05 00 0A	00 00 00 01	00 - 32	User 1 C Step11	
02 05 00 0B	00 00 00 01	00 - 32	User 1 C Step12	
02 05 00 0C	00 00 00 01	00 - 32	User 1 C Step13	
02 05 00 0D	00 00 00 01	00 - 32	User 1 C Step14	
02 05 00 0E	00 00 00 01	00 - 32	User 1 C Step15	
02 05 00 0F	00 00 00 01	00 - 32	User 1 C Step16	
02 05 00 10	00 00 00 01	00 - 32	User 1 Db Step1	
02 05 00 11	00 00 00 01	00 - 32	User 1 Db Step2	
02 05 00 12	00 00 00 01	00 - 32	User 1 Db Step3	
02 05 00 13	00 00 00 01	00 - 32	User 1 Db Step4	
02 05 00 14	00 00 00 01	00 - 32	User 1 Db Step5	
02 05 00 15	00 00 00 01	00 - 32	User 1 Db Step6	
02 05 00 16	00 00 00 01	00 - 32	User 1 Db Step7	
02 05 00 17	00 00 00 01	00 - 32	User 1 Db Step8	
02 05 00 18	00 00 00 01	00 - 32	User 1 Db Step9	
02 05 00 19	00 00 00 01	00 - 32	User 1 Db Step10	
02 05 00 1A	00 00 00 01	00 - 32	User 1 Db Step11	
02 05 00 1B	00 00 00 01	00 - 32	User 1 Db Step12	
02 05 00 1C	00 00 00 01	00 - 32	User 1 Db Step13	
02 05 00 1D	00 00 00 01	00 - 32	User 1 Db Step14	
02 05 00 1E	00 00 00 01	00 - 32	User 1 Db Step15	
02 05 00 1F	00 00 00 01	00 - 32	User 1 Db Step16	
02 05 00 20	00 00 00 01	00 - 32	User 1 D Step1	
02 05 00 21	00 00 00 01	00 - 32	User 1 D Step2	
02 05 00 22	00 00 00 01	00 - 32	User 1 D Step3	
02 05 00 23	00 00 00 01	00 - 32	User 1 D Step4	
02 05 00 24	00 00 00 01	00 - 32	User 1 D Step5	
02 05 00 25	00 00 00 01	00 - 32	User 1 D Step6	
02 05 00 26	00 00 00 01	00 - 32	User 1 D Step7	
02 05 00 27	00 00 00 01	00 - 32	User 1 D Step8	
02 05 00 28	00 00 00 01	00 - 32	User 1 D Step9	
02 05 00 29	00 00 00 01	00 - 32	User 1 D Step10	
02 05 00 2A	00 00 00 01	00 - 32	User 1 D Step11	
02 05 00 2B	00 00 00 01	00 - 32	User 1 D Step12	
02 05 00 2C	00 00 00 01	00 - 32	User 1 D Step13	
02 05 00 2D	00 00 00 01	00 - 32	User 1 D Step14	
02 05 00 2E	00 00 00 01	00 - 32	User 1 D Step15	
02 05 00 2F	00 00 00 01	00 - 32	User 1 D Step16	
02 05 00 30	00 00 00 01	00 - 32	User 1 Eb Step1	
02 05 00 31	00 00 00 01	00 - 32	User 1 Eb Step2	
02 05 00 32	00 00 00 01	00 - 32	User 1 Eb Step3	
02 05 00 33	00 00 00 01	00 - 32	User 1 Eb Step4	
02 05 00 34	00 00 00 01	00 - 32	User 1 Eb Step5	
02 05 00 35	00 00 00 01	00 - 32	User 1 Eb Step6	
02 05 00 36	00 00 00 01	00 - 32	User 1 Eb Step7	
02 05 00 37	00 00 00 01	00 - 32	User 1 Eb Step8	
02 05 00 38	00 00 00 01	00 - 32	User 1 Eb Step9	
02 05 00 39	00 00 00 01	00 - 32	User 1 Eb Step10	
02 05 00 3A	00 00 00 01	00 - 32	User 1 Eb Step11	
02 05 00 3B	00 00 00 01	00 - 32	User 1 Eb Step12	
02 05 00 3C	00 00 00 01	00 - 32	User 1 Eb Step13	
02 05 00 3D	00 00 00 01	00 - 32	User 1 Eb Step14	
02 05 00 3E	00 00 00 01	00 - 32	User 1 Eb Step15	
02 05 00 3F	00 00 00 01	00 - 32	User 1 Eb Step16	
02 05 00 40	00 00 00 01	00 - 32	User 1 E Step1	
02 05 00 41	00 00 00 01	00 - 32	User 1 E Step2	
02 05 00 42	00 00 00 01	00 - 32	User 1 E Step3	
02 05 00 43	00 00 00 01	00 - 32	User 1 E Step4	
02 05 00 44	00 00 00 01	00 - 32	User 1 E Step5	
02 05 00 45	00 00 00 01	00 - 32	User 1 E Step6	
02 05 00 46	00 00 00 01	00 - 32	User 1 E Step7	
02 05 00 47	00 00 00 01	00 - 32	User 1 E Step8	
02 05 00 48	00 00 00 01	00 - 32	User 1 E Step9	
02 05 00 49	00 00 00 01	00 - 32	User 1 E Step10	
02 05 00 4A	00 00 00 01	00 - 32	User 1 E Step11	
02 05 00 4B	00 00 00 01	00 - 32	User 1 E Step12	
02 05 00 4C	00 00 00 01	00 - 32	User 1 E Step13	
02 05 00 4D	00 00 00 01	00 - 32	User 1 E Step14	
02 05 00 4E	00 00 00 01	00 - 32	User 1 E Step15	
02 05 00 4F	00 00 00 01	00 - 32	User 1 E Step16	
02 05 00 50	00 00 00 01	00 - 32	User 1 F Step1	
02 05 00 51	00 00 00 01	00 - 32	User 1 F Step2	
02 05 00 52	00 00 00 01	00 - 32	User 1 F Step3	
02 05 00 53	00 00 00 01	00 - 32	User 1 F Step4	
02 05 00 54	00 00 00 01	00 - 32	User 1 F Step5	
02 05 00 55	00 00 00 01	00 - 32	User 1 F Step6	
02 05 00 56	00 00 00 01	00 - 32	User 1 F Step7	


```

:
02 05 10 00 00 00 00 01 00 - 32 User 9 C Step1
:
02 05 12 00 00 00 00 01 00 - 32 User 10 C Step1
:
02 05 12 3F 00 00 00 01 00 - 32 User 10 B Step16

```

以下では IN (イン) が “C” の場合を例にあげて Description の値の説明をしています。C 以外の場合はそれぞれ置き換えてください。

```

00 : Pitch = -C ↓↓
01 : Pitch = -Db ↓
02 : Pitch = -D ↓
03 : Pitch = -Eb ↓
04 : Pitch = -E ↓
05 : Pitch = -F ↓
06 : Pitch = -F# ↓
07 : Pitch = -G ↓
08 : Pitch = -Ab ↓
09 : Pitch = -A ↓
0A : Pitch = -Bb ↓
0B : Pitch = -B ↓
0C : Pitch = -C ↓
0D : Pitch = -Db
0E : Pitch = -D
0F : Pitch = -Eb
10 : Pitch = -E
11 : Pitch = -F
12 : Pitch = -F#
13 : Pitch = -G
14 : Pitch = -Ab
15 : Pitch = -A
16 : Pitch = -Bb
17 : Pitch = -B
18 : Pitch = C
19 : Pitch = +Db
1A : Pitch = +D
1B : Pitch = +Eb
1C : Pitch = +E
1D : Pitch = +F
1E : Pitch = +F#
1F : Pitch = +G
20 : Pitch = +Ab
21 : Pitch = +A
22 : Pitch = +Bb
23 : Pitch = +B
24 : Pitch = +C ↑
25 : Pitch = +Db ↑
26 : Pitch = +D ↑
27 : Pitch = +Eb ↑
28 : Pitch = +E ↑
29 : Pitch = +F ↑
2A : Pitch = +F# ↑
2B : Pitch = +G ↑
2C : Pitch = +Ab ↑
2D : Pitch = +A ↑
2E : Pitch = +Bb ↑
2F : Pitch = +B ↑↑
30 : Pitch = +C ↑↑
31 : Pitch = -
32 : Pitch = end

```

Table PREAMP <PREAMP Customaize>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 06 00 00	00 00 00 01	00 - 06	Custom1 Basic Type	00 : JC Clean 01 : TW Clean 02 : Crunch 03 : VO Lead 04 : BG Lead 05 : MS1959 Stk 06 : Modern9 Stk
02 06 00 01	00 00 00 01	00 - 0A	Custom1 Bottom	
02 06 00 02	00 00 00 01	00 - 0A	Custom1 Edge	
02 06 00 03	00 00 00 01	00 - 0A	Custom1 Bass Frequency	
02 06 00 04	00 00 00 01	00 - 0A	Custom1 Treble Frequency	
02 06 00 05	00 00 00 01	00 - 0A	Custom1 Preamp Low	
02 06 00 06	00 00 00 01	00 - 0A	Custom1 Preamp High	
02 06 00 07	00 00 00 01	00 - 0A	Custom1 Speaker Low	
02 06 00 08	00 00 00 01	00 - 0A	Custom1 Speaker High	00 : -50 01 : -40 02 : -30 : 09 : +40 0A : +50
02 06 01 00	00 00 00 01	00 - 06	Custom2 Basic Type	
02 06 01 01	00 00 00 01	00 - 0A	Custom2 Bottom	
02 06 01 02	00 00 00 01	00 - 0A	Custom2 Edge	
02 06 01 03	00 00 00 01	00 - 0A	Custom2 Bass Frequency	
02 06 01 04	00 00 00 01	00 - 0A	Custom2 Treble Frequency	
02 06 01 05	00 00 00 01	00 - 0A	Custom2 Preamp Low	
02 06 01 06	00 00 00 01	00 - 0A	Custom2 Preamp High	
02 06 01 07	00 00 00 01	00 - 0A	Custom2 Speaker Low	
02 06 01 08	00 00 00 01	00 - 0A	Custom2 Speaker High	
02 06 02 00	00 00 00 01	00 - 06	Custom3 Basic Type	
02 06 02 01	00 00 00 01	00 - 0A	Custom3 Bottom	
02 06 02 02	00 00 00 01	00 - 0A	Custom3 Edge	
02 06 02 03	00 00 00 01	00 - 0A	Custom3 Bass Frequency	
02 06 02 04	00 00 00 01	00 - 0A	Custom3 Treble Frequency	
02 06 02 05	00 00 00 01	00 - 0A	Custom3 Preamp Low	
02 06 02 06	00 00 00 01	00 - 0A	Custom3 Preamp High	
02 06 02 07	00 00 00 01	00 - 0A	Custom3 Speaker Low	
02 06 02 08	00 00 00 01	00 - 0A	Custom3 Speaker High	

Table OD/DS <OD/DS Customaize>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 07 00 00	00 00 00 01	00 - 07	Custom1 Type	00 : OD-1 01 : OD-2 02 : CRUNCH 03 : DS-1 04 : DS-2 05 : METAL-1 06 : METAL-2 07 : FUZZ

```

02 07 00 01 00 00 00 01 00 - 0A Custom1 Bottom
02 07 00 02 00 00 00 01 00 - 0A Custom1 Top
02 07 00 03 00 00 00 01 00 - 0A Custom1 Low
02 07 00 04 00 00 00 01 00 - 0A Custom1 High
                                00 : -50
                                01 : -40
                                02 : -30
                                :
                                09 : +40
                                0A : +50

02 07 01 00 00 00 00 01 00 - 07 Custom2 Type
02 07 01 01 00 00 00 01 00 - 0A Custom2 Bottom
02 07 01 02 00 00 00 01 00 - 0A Custom2 Top
02 07 01 03 00 00 00 01 00 - 0A Custom2 Low
02 07 01 04 00 00 00 01 00 - 0A Custom2 High
    
```

Table WAH <WAH Customaize>

Address(H)	Size(H)	Data(H)	Parameter	Description
02 08 00 00	00 00 00 01	00 - 04	Custom1 Basic Type	00 : CRY WAH 01 : VO WAH 02 : Fat WAH 03 : Light WAH 04 : 7String WAH
02 08 00 01	00 00 00 01	00 - 0A	Custom1 Q	
02 08 00 02	00 00 00 01	00 - 0A	Custom1 Range Low	
02 08 00 03	00 00 00 01	00 - 0A	Custom1 Range High	
02 08 00 04	00 00 00 01	00 - 0A	Custom1 Presence	00 : -50 01 : -40 02 : -30 : 09 : +40 0A : +50
02 08 01 00	00 00 00 01	00 - 04	Custom2 Basic Type	
02 08 01 01	00 00 00 01	00 - 0A	Custom2 Q	
02 08 01 02	00 00 00 01	00 - 0A	Custom2 Range Low	
02 08 01 03	00 00 00 01	00 - 0A	Custom2 Range High	
02 08 00 04	00 00 00 01	00 - 0A	Custom2 Presence	
02 08 02 00	00 00 00 01	00 - 04	Custom3 Basic Type	
02 08 02 01	00 00 00 01	00 - 0A	Custom3 Q	
02 08 02 02	00 00 00 01	00 - 0A	Custom3 Range Low	
02 08 02 03	00 00 00 01	00 - 0A	Custom3 Range High	
02 08 00 04	00 00 00 01	00 - 0A	Custom3 Presence	

Table MANUAL <MANUAL>

Address(H)	Size(H)	Data(H)	Parameter	Description
03 00 00 00	00 00 00 01	00 - 0A	Pedal 1	
03 00 00 01	00 00 00 01	00 - 0A	Pedal 2	
03 00 00 02	00 00 00 01	00 - 0A	Pedal 3	
03 00 00 03	00 00 00 01	00 - 0A	Pedal 4	
03 00 00 04	00 00 00 01	00 - 0A	Bank Down	
03 00 00 05	00 00 00 01	00 - 0A	Bank Up	00 : FX1 01 : WAH 02 : OD/DS 03 : PREAMP/SP SIM 04 : EQ 05 : FX2 06 : DD 07 : CE 08 : RV 09 : NS 0A : TUNER

Table Quick Fx <Quick Setting>

Address(H)	Size(H)	Data(H)	Parameter	Description
04 00				P1 (Read Only)
04 01				P2 (Read Only)
04 02				P3 (Read Only)
04 03				P4 (Read Only)
..
↑ ↑				
↑ ↑				
↑ ↑				
↑ ↑				
↑ ↑				

上位 4bit と下位 4bit をそれぞれ 1byte 毎に分けて、上位から順に扱います。
 ↓↓ 例) 64H を扱う場合
 ↓↓ 奇数アドレスは、06H
 ↓↓ 偶数アドレスは、04H

--- FX 1 ---

```

** ** 00 00 00 00 00 02 00 - 08 FX1:FX Select
** ** 00 02# 00 00 00 02 00 - 64 CS :Sustain
                                00 00 00 02 00 - 64 LM :Threshold
                                00 00 00 02 00 - 64 AC :Top
                                00 00 00 02 00 - 02 PIC:Type
                                00 00 00 02 00 - 64 TR :Wave Shape
                                00 00 00 02 00 - 64 SG :Sensitivity
                                00 00 00 02 00 - 01 FB :Mode
                                00 00 00 02 00 - 64 AFB:Freq1
                                00 00 00 02 00 - 64 FRT:Tone
** ** 00 04# 00 00 00 02 00 - 64 CS :Attack
                                00 00 00 02 00 - 64 LM :Release
                                00 00 00 02 00 - 64 AC :Body
                                00 00 00 02 00 - 64 PIC:Tone
                                00 00 00 02 00 - 71 TR :Rate
                                00 00 00 02 00 - 64 SG :Rise Time
                                00 00 00 02 00 - 64 FB :Rise Time
                                00 00 00 02 00 - 64 AFB:Depth1
                                00 00 00 02 00 - 64 FRT:Sensitivity
** ** 00 06# 00 00 00 02 00 - 64 CS :Tone
                                00 00 00 02 00 - 64 LM :Tone
                                00 00 00 02 00 - 64 AC :Level
                                00 00 00 02 00 - 64 PIC:Level
                                00 00 00 02 00 - 64 TR :Depth
                                SG :---
                                00 00 00 02 00 - 64 FB :Rise Time(▲)
                                00 00 00 02 00 - 64 AFB:Freq2
                                00 00 00 02 00 - 64 FRT:Attack
** ** 00 08# 00 00 00 02 00 - 64 CS :Level
                                00 00 00 02 00 - 64 LM :Level
                                AC :---
                                PIC:---
    
```

```
TR :---
SG :---
00 00 00 02 00 - 64 FB :F.B.Level
00 00 00 02 00 - 64 AFB:Depth2
00 00 00 02 00 - 64 FRT:Depth
** ** 00 0A#
CS :---
LM :---
AC :---
PIC:---
TR :---
SG :---
00 00 00 02 00 - 64 FB :F.B.Level(▲)
00 00 00 02 00 - 64 AFB:Freq3
00 00 00 02 00 - 64 FRT:Reso
** ** 00 0C#
CS :---
LM :---
AC :---
PIC:---
TR :---
SG :---
00 00 00 02 00 - 64 FB :Vibrato Rate
00 00 00 02 00 - 64 AFB:Depth3
00 00 00 02 00 - 64 FRT:Effect Level
** ** 00 0E#
CS :---
LM :---
AC :---
PIC:---
TR :---
SG :---
00 00 00 02 00 - 64 FB :Vibrato Depth
00 00 00 02 00 - 64 AFB:---
00 00 00 02 00 - 64 FRT:Direct Level

--- WAH ---
** ** 01 00 00 00 00 02 00 - 01 WAH:FX Select
** ** 01 02# 00 00 00 02 00 - 07 WAH:Type
** ** 01 04# 00 00 00 02 00 - 64 WAH:Pdl Position
** ** 01 06# 00 00 00 02 00 - 64 WAH:Level
** ** 01 08# 00 00 00 02 00 - 01 AW :Mode
** ** 01 0A# 00 00 00 02 00 - 01 AW :Polarity
** ** 01 0C# 00 00 00 02 00 - 64 AW :Sensitivity
** ** 01 0E# 00 00 00 02 00 - 64 AW :Frequency
** ** 01 10# 00 00 00 02 00 - 64 AW :Peak
** ** 01 12# 00 00 00 02 00 - 71 AW :Rate
** ** 01 14# 00 00 00 02 00 - 64 AW :Depth
** ** 01 16# 00 00 00 02 00 - 64 AW :Level
** ** 01 18# 00 00 00 02 00 - 07 FW :Type
** ** 01 1A# 00 00 00 02 00 - 64 FW :Pdl Position
** ** 01 1C# 00 00 00 02 00 - 64 FW :Level

--- OD/DS ---
** ** 02 00 00 00 00 02 00 - 11 OD :Type
** ** 02 02# 00 00 00 02 00 - 64 OD :Drive
** ** 02 04# 00 00 00 02 00 - 64 OD :Bass
** ** 02 06# 00 00 00 02 00 - 64 OD :Treble
** ** 02 08# 00 00 00 02 00 - 64 OD :Level

--- PREAMP/SP SIM ---
** ** 03 00 00 00 00 02 00 - 20 PRE/SP:Type
** ** 03 02# 00 00 00 02 00 - 64 PRE/SP:Gain
** ** 03 04# 00 00 00 02 00 - 64 PRE/SP:Bass
** ** 03 06# 00 00 00 02 00 - 64 PRE/SP:Middle
** ** 03 08# 00 00 00 02 00 - 64 PRE/SP:Treble
** ** 03 0A# 00 00 00 02 00 - 64 PRE/SP:Presence
** ** 03 0C# 00 00 00 02 00 - 64 PRE/SP:Amp Level
** ** 03 0E# 00 00 00 02 00 - 01 PRE/SP:Bright
** ** 03 10# 00 00 00 02 00 - 02 PRE/SP:Gain SW
** ** 03 12# 00 00 00 02 00 - 01 PRE/SP:Speaker SW
** ** 03 14# 00 00 00 02 00 - 06 PRE/SP:Speaker Type
** ** 03 16# 00 00 00 02 00 - 0A PRE/SP:Mic Setting
** ** 03 18# 00 00 00 02 00 - 64 PRE/SP:Mic Level
** ** 03 1A# 00 00 00 02 00 - 64 PRE/SP:Direct Level

--- EQ ---
** ** 04 00 00 00 00 02 00 - 28 EQ :Low EQ
** ** 04 02# 00 00 00 02 00 - 14 EQ :Low-Middle Frequency
** ** 04 02# 00 00 00 02 00 - 05 EQ :Low-Middle Q
** ** 04 06# 00 00 00 02 00 - 28 EQ :Low-Middle EQ
** ** 04 08# 00 00 00 02 00 - 14 EQ :High-Middle Frequency
** ** 04 0A# 00 00 00 02 00 - 05 EQ :High-Middle Q
** ** 04 0C# 00 00 00 02 00 - 28 EQ :High-Middle EQ
** ** 04 0E# 00 00 00 02 00 - 28 EQ :High EQ
** ** 04 10# 00 00 00 02 00 - 28 EQ :Level

--- FX 2 ---
** ** 05 00 00 00 00 02 00 - 0F FX2:FX Select
** ** 05 02# 00 00 00 02 00 - 03 PH :Type
00 00 00 02 00 - 71 FL :Rate
00 00 00 02 00 - 02 HR :Voice
00 00 00 02 00 - 02 PS :Voice
00 00 00 02 00 - 30 PB :Pitch Min
00 00 00 02 00 - 64 2CE:Xover Frequency
00 00 00 02 00 - 64 PAN:Wave Shape
00 00 00 02 00 - 71 VB :Rate
00 00 00 02 00 - 71 UV :Rate
00 00 00 04 00 00 -
- 03 17
00 00 00 02 00 - 02 HU :Mode
00 00 00 02 00 - 01 RM :Mode
00 00 00 02 00 - 13 SL :Pattern
00 00 00 02 00 - 27 AR :Phrase
00 00 00 02 00 - 64 SYN:Sensitivity
00 00 00 02 00 - 28 SEQ:Low EQ
** ** 05 04# 00 00 00 02 00 - 71 PH :Rate
00 00 00 02 00 - 64 FL :Depth
00 00 00 02 00 - 39 HRL:Harmony
00 00 00 02 00 - 02 PSl:Mode
00 00 00 02 00 - 30 PB :Pitch Max
00 00 00 02 00 - 71 2CE:Low Rate
00 00 00 02 00 - 71 PAN:Rate
00 00 00 02 00 - 64 VB :Depth
00 00 00 02 00 - 64 UV :Depth
00 00 00 02 00 - 64 SDD:(LSB)
```

```
00 00 00 02 00 - 04 HU :Vowel 1
00 00 00 02 00 - 64 RM :Freq
00 00 00 02 00 - 71 SL :Rate
00 00 00 02 00 - 01 AR :Loop
00 00 00 02 00 - 03 SYN:Wave
00 00 00 02 00 - 14 SEQ:Low-Middle Frequency
** ** 05 06# 00 00 00 02 00 - 64 PH :Depth
00 00 00 02 00 - 64 FL :Manual
00 00 00 04 00 00 - HRL:Pre Delay
- 02 33
00 00 00 02 00 - 30 PSl:Pitch
00 00 00 02 00 - 64 PB :Pdl Position
00 00 00 02 00 - 64 2CE:Low Depth
00 00 00 02 00 - 64 PAN:Depth
00 00 00 02 00 - 01 VB :Trigger
00 00 00 02 00 - 64 UV :Level
00 00 00 02 00 - 64 SDD:Feedback
00 00 00 02 00 - 04 HU :Vowel 2
00 00 00 02 00 - 64 RM :Effect Level
00 00 00 02 00 - 64 SL :Trigger Sens
00 00 00 02 00 - 71 AR :Tempo
00 00 00 02 00 - 01 SYN:Chromatic
00 00 00 02 00 - 05 SEQ:Low-Middle Q
** ** 05 08# 00 00 00 02 00 - 64 PH :Manual
00 00 00 02 00 - 64 FL :Resonance
HRL:(LSB)
00 00 00 02 00 - 64 PSl:Fine
00 00 00 02 00 - 64 PB :Effect Level
00 00 00 02 00 - 50 2CE:Low Pre Delay
PAN:---
00 00 00 02 00 - 64 VB :Rise Time
UV :---
00 00 00 02 00 - 78 SDD:Effect Level
00 00 00 02 00 - 64 HU :Sensitivity
00 00 00 02 00 - 64 RM :Direct Level
SL :---
00 00 00 02 00 - 64 AR :Sensitivity
00 00 00 02 00 - 02 SYN:Octave Shift
00 00 00 02 00 - 28 SEQ:Low-Middle EQ
** ** 05 0A# 00 00 00 02 00 - 64 PH :Resonance
00 00 00 02 00 - 64 FL :Separation
00 00 00 02 00 - 64 HRL:Feedback
00 00 00 04 00 00 - PSl:Pre Delay
- 02 33
00 00 00 02 00 - 64 PB :Direct Level
00 00 00 02 00 - 64 2CE:Low Level
PAN:---
VB :---
UV :---
SDD:---
00 00 00 02 00 - 64 HU :Rate
RM :---
SL :---
00 00 00 02 00 - 0B AR :Key
00 00 00 02 00 - 64 SYN:PWM Rate
00 00 00 02 00 - 14 SEQ:High-Middle Frequency
** ** 05 0C# 00 00 00 02 00 - 01 PH :Step
00 00 00 02 00 - 64 FL :Effect Level
00 00 00 02 00 - 64 HRL:Level
PSl:(LSB)
PB :---
00 00 00 02 00 - 71 2CE:High Rate
PAN:---
VB :---
UV :---
SDD:---
00 00 00 02 00 - 64 HU :Depth
RM :---
SL :---
00 00 00 02 00 - 64 AR :Attack
00 00 00 02 00 - 64 SYN:PWM Depth
00 00 00 02 00 - 05 SEQ:High-Middle Q
* ** 05 0E# 00 00 00 02 00 - 71 PH :Step Rate
00 00 00 02 00 - 64 FL :Direct Level
00 00 00 02 00 - 39 HR2:Harmony
00 00 00 02 00 - 64 PSl:Feedback
PB :---
00 00 00 02 00 - 64 CE:High Depth
PAN:---
VB :---
UV :---
SDD:---
00 00 00 02 00 - 64 HU :Manual
RM :---
SL :---
00 00 00 02 00 - 01 AR :Hold
00 00 00 02 00 - 64 SYN:Cutoff Frequency
00 00 00 02 00 - 28 SEQ:High-Middle EQ
* ** 05 10# 00 00 00 02 00 - 64 PH :Effect Level
FL :---
00 00 00 04 00 00 - HR2:Pre Delay
- 02 33
00 00 00 02 00 - 64 PSl:Level
PB :---
00 00 00 02 00 - 50 2CE:High Pre Delay
PAN:---
VB :---
UV :---
SDD:---
00 00 00 02 00 - 64 HU :Level
RM :---
SL :---
00 00 00 02 00 - 64 AR :Effect Level
00 00 00 02 00 - 64 SYN:Resonance
00 00 00 02 00 - 28 SEQ:High EQ
** ** 05 12# 00 00 00 02 00 - 64 PH :Direct Level
FL :---
HR2:(LSB)
00 00 00 02 00 - 64 PS2:Mode
PB :---
00 00 00 02 00 - 64 2CE:High Level
PAN:---
VB :---
UV :---
SDD:---
HU :---
RM :---
SL :---
```

```
00 00 00 02 00 - 64 AR :Direct Level
00 00 00 02 00 - 64 SYN:FLT.Sens
00 00 00 02 00 - 28 SEQ:Level
** ** 05 14#
00 00 00 02 00 - 64 HR2:Level
00 00 00 02 00 - 30 PS2:Pitch
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
00 00 00 02 00 - 64 SYN:FLT.Decay
SEQ:----
PH :----
FL :----
00 00 00 02 00 - 0B HR :Key
00 00 00 02 00 - 64 PS2:Fine
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
00 00 00 02 00 - 64 SYN:FLT.Depth
SEQ:----
PH :----
FL :----
** ** 05 18#
00 00 00 02 00 - 64 HR :Direct Level
00 00 00 04 00 00 - PS2:Pre Delay
- 02 33
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
00 00 00 02 00 - 65 SYN:Attack
SEQ:----
PH :----
FL :----
HR :----
PS2:(LSB)
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
00 00 00 02 00 - 64 SYN:Release
SEQ:----
PH :----
FL :----
HR :----
** ** 05 1C#
00 00 00 02 00 - 64 PS2:Level
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
00 00 00 02 00 - 64 SYN:Velocity
SEQ:----
PH :----
FL :----
HR :----
** ** 05 1E#
00 00 00 02 00 - 64 PS :Direct Level
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
00 00 00 02 00 - 01 SYN:Hold
SEQ:----
PH :----
FL :----
HR :----
PS :----
PB :----
2CE:----
PAN:----
VB :----
UV :----
SDD:----
HU :----
RM :----
SL :----
AR :----
** ** 05 20#
00 00 00 02 00 - 64 SYN:Synth Level
SEQ:----
PH :----
FL :----
** ** 05 22#
```

```

HR :---
PS :---
PB :---
2CE:---
PAN:---
VB :---
UV :---
SDD:---
HU :---
RM :---
SL :---
AR :---
00 00 00 02 00 - 64 SYN:Direct Level
SEQ:---

--- DELAY ---
** ** 06 00 00 00 00 02 00 - 01 DD :Type
** ** 06 02# 00 00 00 02 00 - 67 DD :DlyTime
** ** 06 04# 00 00 00 02 00 - 14 DD :DlyTime(Fine)
** ** 06 06# 00 00 00 02 00 - 64 DD :Tap Time
** ** 06 08# 00 00 00 02 00 - 64 DD :Feedback
** ** 06 0A# 00 00 00 02 00 - 09 DD :High Cut Filter
** ** 06 0C# 00 00 00 02 00 - 78 DD :Effect Level

--- CHORUS ---
** ** 07 00 00 00 00 02 00 - 01 CE :Mode
** ** 07 02# 00 00 00 02 00 - 71 CE :Rate
** ** 07 04# 00 00 00 02 00 - 64 CE :Depth
** ** 07 06# 00 00 00 02 00 - 50 CE :Pre Delay
** ** 07 08# 00 00 00 02 00 - 09 CE :High Cut Filter
** ** 07 0A# 00 00 00 02 00 - 64 CE :Effect Level

--- REVERB ---
** ** 08 00 00 00 00 02 00 - 04 RV :Type
** ** 08 02# 00 00 00 02 00 - 63 RV :Reverb Time
** ** 08 04# 00 00 00 02 00 - 64 RV :Pre Delay
** ** 08 06# 00 00 00 02 00 - 09 RV :Low Cut Filter
** ** 08 08# 00 00 00 02 00 - 09 RV :High Cut Filter
** ** 08 0A# 00 00 00 02 00 - 0A RV :Density
** ** 08 0C# 00 00 00 02 00 - 64 RV :Effect Level

--- EXP PEDAL ---
該当する項目はありません。

--- EXP PEDAL SW ---
** ** 09 00 00 00 00 04 00 00 - PEDAL:Target
** ** 09 02# 00 00 00 04 - 01 6C *Refer to Table QuickFx:Target
** ** 09 04# 00 00 00 04 00 00 - PEDAL:Target Min
** ** 09 06# 00 00 00 04 - $$$
** ** 09 08# 00 00 00 04 00 00 - PEDAL:Target Max
** ** 09 0A# 00 00 00 04 - $$$
** ** 09 0C# 00 00 00 02 00 - 01 PEDAL:Target Mode

--- CTL PEDAL ---
** ** 0A 00 00 00 00 04 00 00 - PEDAL:Target
** ** 0A 02# 00 00 00 04 - 01 6C *Refer to Table QuickFx:Target
** ** 0A 04# 00 00 00 04 00 00 - PEDAL:Target Min
** ** 0A 06# 00 00 00 04 - $$$
** ** 0A 08# 00 00 00 04 00 00 - PEDAL:Target Max
** ** 0A 0A# 00 00 00 04 - $$$
** ** 0A 0C# 00 00 00 02 00 - 01 PEDAL:Target Mode

--- ASSIGN ---
** ** 0B 00 00 00 00 04 00 00 - Assign:Target
** ** 0B 02# 00 00 00 04 - 01 6C *Refer to Table QuickFx:Target
** ** 0B 04# 00 00 00 04 00 00 - Assign:Target Min
** ** 0B 06# 00 00 00 04 - $$$
** ** 0B 08# 00 00 00 04 00 00 - Assign:Target Max
** ** 0B 0A# 00 00 00 04 - $$$
** ** 0B 0C# 00 00 00 02 00 - 45 Assign:Source
** ** 0B 0E# 00 00 00 02 00 - 01 Assign:Source Mode
** ** 0B 10# 00 00 00 02 00 - 7F Assign:Source Act.Range Low
** ** 0B 12# 00 00 00 02 00 - 7F Assign:Source Act.Range High

Table Patch <Patch>
-----
Address(H)  Size(H)  Data(H)  Parameter  Description
-----
--- FX 1 ---
** ** 00 00 00 00 00 01 00 - 01 FX1:On/Off 00 : Off
** ** 00 01 00 00 00 01 00 - 23 FX1:Quick Setting 01 : On
** ** 00 02 00 00 00 01 00 - 08 FX1:FX Select 00 : CS
01 : LM
02 : AC
03 : PIC
04 : TR
05 : SG
06 : FB
07 : AFB
08 : FRT
** ** 00 03 00 00 00 01 00 - 64 CS :Sustain 0 - 100
** ** 00 04 00 00 00 01 00 - 64 CS :Attack 0 - 100
** ** 00 05 00 00 00 01 00 - 64 CS :Tone -50 - +50
** ** 00 06 00 00 00 01 00 - 64 CS :Level 0 - 100
** ** 00 07 00 00 00 01 00 - 64 LM :Threshold 0 - 100
** ** 00 08 00 00 00 01 00 - 64 LM :Release 0 - 100
** ** 00 09 00 00 00 01 00 - 64 LM :Tone -50 - +50
** ** 00 0A 00 00 00 01 00 - 64 LM :Level 0 - 100
** ** 00 0B 00 00 00 01 00 - 64 AC :Top 0 - 100
** ** 00 0C 00 00 00 01 00 - 64 AC :Body 0 - 100
** ** 00 0D 00 00 00 01 00 - 64 AC :Level 0 - 100
** ** 00 0E 00 00 00 01 00 - 02 PIC:Type 00 : 'S'to'H'
01 : 'H'to'S'
02 : 'H'to'HF'
** ** 00 0F 00 00 00 01 00 - 64 PIC:Tone -50 - +50
** ** 00 10 00 00 00 01 00 - 64 PIC:Level 0 - 100
** ** 00 11 00 00 00 01 00 - 64 TR :Wave Shape 0 - 100
** ** 00 12 00 00 00 01 00 - 71 TR :Rate *Refer to Table Rate

```

```

** ** 00 13 00 00 00 01 00 - 64 TR :Depth 0 - 100
** ** 00 14 00 00 00 01 00 - 64 SG :Sensitivity 0 - 100
** ** 00 15 00 00 00 01 00 - 64 SG :Rise Time 0 - 100
** ** 00 16 00 00 00 01 00 - 01 FB :Mode 00 : OSC
01 : Natural
** ** 00 17 00 00 00 01 00 - 64 FB :Rise Time 0 - 100 Mode=OSC
** ** 00 18 00 00 00 01 00 - 64 FB :Rise Time(▲) 0 - 100 Mode=OSC
** ** 00 19 00 00 00 01 00 - 64 FB :F.B.Level 0 - 100
** ** 00 1A 00 00 00 01 00 - 64 FB :F.B.Level(▲) 0 - 100 Mode=OSC
** ** 00 1B 00 00 00 01 00 - 64 FB :Vibrato Rate 0 - 100 Mode=OSC
** ** 00 1C 00 00 00 01 00 - 64 FB :Vibrato Depth 0 - 100 Mode=OSC
** ** 00 1D 00 00 00 01 00 - 64 AFB:Freq1 0 - 100
** ** 00 1E 00 00 00 01 00 - 64 AFB:Depth1 0 - 100
** ** 00 1F 00 00 00 01 00 - 64 AFB:Freq2 0 - 100
** ** 00 20 00 00 00 01 00 - 64 AFB:Depth2 0 - 100
** ** 00 21 00 00 00 01 00 - 64 AFB:Freq3 0 - 100
** ** 00 22 00 00 00 01 00 - 64 AFB:Depth3 0 - 100
** ** 00 23 00 00 00 01 00 - 64 FRT:Tone 0 - 100
** ** 00 24 00 00 00 01 00 - 64 FRT:Sensitivity 0 - 100
** ** 00 25 00 00 00 01 00 - 64 FRT:Attack 0 - 100
** ** 00 26 00 00 00 01 00 - 64 FRT:Depth 0 - 100
** ** 00 27 00 00 00 01 00 - 64 FRT:Resonance 0 - 100
** ** 00 28 00 00 00 01 00 - 64 FRT:Effect Level 0 - 100
** ** 00 29 00 00 00 01 00 - 64 FRT:Direct Level 0 - 100

```

--- WAH ---

```

** ** 01 00 00 00 00 01 00 - 01 WAH:On/Off 00 : Off
01 : On
** ** 01 01 00 00 00 01 00 - 0F WAH:Quick Setting
** ** 01 02 00 00 00 01 00 - 02 WAH:FX Select 00 : WAH
01 : AW
02 : FW
** ** 01 03 00 00 00 01 00 - 07 WAH:Type 00 : CRY WAH
01 : VO WAH
02 : Fat WAH
03 : Light WAH
04 : 7String WAH
05 : Custom1
06 : Custom2
07 : Custom3
0 - 100
** ** 01 04 00 00 00 01 00 - 64 WAH:Pedal Position 0 - 100
** ** 01 05 00 00 00 01 00 - 64 WAH:Level 0 - 100
** ** 01 06 00 00 00 01 00 - 01 AW :Mode 00 : LPF
01 : BPF
** ** 01 07 00 00 00 01 00 - 01 AW :Polarity 00 : Down
01 : Up
0 - 100
** ** 01 08 00 00 00 01 00 - 64 AW :Sensitivity 0 - 100
** ** 01 09 00 00 00 01 00 - 64 AW :Frequency 0 - 100
** ** 01 0A 00 00 00 01 00 - 64 AW :Peak 0 - 100
** ** 01 0B 00 00 00 01 00 - 71 AW :Rate *Refer to Table Rate
** ** 01 0C 00 00 00 01 00 - 64 AW :Depth 0 - 100
** ** 01 0D 00 00 00 01 00 - 64 AW :Level 0 - 100
** ** 01 0E 00 00 00 01 00 - 07 FW :Type 00 : CRY WAH
01 : VO WAH
02 : Fat WAH
03 : Light WAH
04 : 7String WAH
05 : Custom1
06 : Custom2
07 : Custom3
0 - 100
** ** 01 0F 00 00 00 01 00 - 64 FW :Pdl Position 0 - 100
** ** 01 10 00 00 00 01 00 - 64 FW :Level 0 - 100

```

--- OD/DS ---

```

** ** 02 00 00 00 00 01 00 - 01 OD :On/Off 00 : Off
01 : On
** ** 02 01 00 00 00 01 00 - 0A OD :Quick Setting
** ** 02 02 00 00 00 01 00 - 11 OD :Type 00 : Blues OD
01 : Turbo OD
02 : Booster
03 : Distortion
04 : American DS
05 : GUV_DS
06 : OD-1
07 : T-Scream
08 : DST+
09 : '60s FUZZ
0A : Oct FUZZ
0B : BIG MUFF
0C : Metal Zone
0D : R-MAN
0E : Heavy Metal
0F : Custom1
10 : Custom2
11 : External
0 - 100
** ** 02 03 00 00 00 01 00 - 64 OD :Drive -50 - +50
** ** 02 04 00 00 00 01 00 - 64 OD :Bass -50 - +50
** ** 02 05 00 00 00 01 00 - 64 OD :Treble 0 - 100
** ** 02 06 00 00 00 01 00 - 64 OD :Level 0 - 100

```

--- PREAMP/SP SIM ---

```

** ** 03 00 00 00 00 01 00 - 01 PRE/SP:On/Off 00 : Off
01 : On
** ** 03 01 00 00 00 01 00 - 0C PRE/SP:Quick Setting
** ** 03 02 00 00 00 01 00 - 20 PRE/SP:Type 00 : JC-120
01 : Jazz Combo
02 : Full Range
03 : Clean TWIN
04 : Pro Crunch
05 : Tweed
06 : Crunch
07 : Blues
08 : StackCrunch
09 : VO Drive
0A : VO Lead
0B : VO Clean
0C : MATCH Drive
0D : MATCH Lead
0E : Fat MATCH
0F : BG Lead
10 : BG Drive
11 : BG Rhythm
12 : MS1959(1)
13 : MS1959(1+2)
14 : MS HiGain

```



```

15 : R-Fier Red
16 : R-FierOrang
17 : R-FierVint
18 : SLDN
19 : Drive Stack
1A : Lead Stack
1B : 5150 Drive
1C : Metal Stack
1D : Metal Lead
1E : Custom1
1F : Custom2
20 : Custom3

** ** 03 03 00 00 00 01 00 - 64 PRE/SP:Gain 0 - 100
** ** 03 04 00 00 00 01 00 - 64 PRE/SP:Bass 0 - 100
** ** 03 05 00 00 00 01 00 - 64 PRE/SP:Middle 0 - 100
** ** 03 06 00 00 00 01 00 - 64 PRE/SP:Treble 0 - 100
** ** 03 07 00 00 00 01 00 - 64 PRE/SP:Presence 0 - 100 (-100 - 0)
** ** 03 08 00 00 00 01 00 - 64 PRE/SP:Amp Level 0 - 100
** ** 03 09 00 00 00 01 00 - 01 PRE/SP:Bright 00 : Off
01 : On

** ** 03 0A 00 00 00 01 00 - 02 PRE/SP:Gain SW 00 : Low
01 : Middle
02 : High

** ** 03 0B 00 00 00 01 00 - 01 PRE/SP:Speaker SW 00 : Off
01 : On

** ** 03 0C 00 00 00 01 00 - 05 PRE/SP:Speaker Type 00 : 1x10"
01 : 1x12"
02 : 2x12"
03 : 4x12"
04 : 8x12"
05 : ORIGINAL

** ** 03 0D 00 00 00 01 00 - 0A PRE/SP:Mic Setting 00 : Center OUTPUT Select = LINE(PHONES or PA)
01 : 1cm
02 : 2cm
03 : 3cm
04 : 4cm
05 : 5cm
06 : 6cm
07 : 7cm
08 : 8cm
09 : 9cm
0A : 10cm

** ** 03 0E 00 00 00 01 00 - 64 PRE/SP:Mic Level 0 - 100 OUTPUT Select = LINE(PHONES or PA)
** ** 03 0F 00 00 00 01 00 - 64 PRE/SP:Direct Level 0 - 100 OUTPUT Select = LINE(PHONES or PA)

--- EQ ---
** ** 04 00 00 00 00 01 00 - 01 EQ :On/Off 00 : Off
01 : On

** ** 04 01 00 00 00 01 00 - 0B EQ :Quick Setting
** ** 04 02 00 00 00 01 00 - 28 EQ :Low EQ -20dB - +20dB
** ** 04 03 00 00 00 01 00 - 14 EQ :Low-Middle Frequency *Refer to Table EQ_Mid_f
** ** 04 04 00 00 00 01 00 - 05 EQ :Low-Middle Q *Refer to Table EQ_Mid_Q
** ** 04 05 00 00 00 01 00 - 28 EQ :Low-Middle EQ -20dB - +20dB
** ** 04 06 00 00 00 01 00 - 14 EQ :High-Middle Frequency *Refer to Table EQ_Mid_f
** ** 04 07 00 00 00 01 00 - 05 EQ :High-Middle Q *Refer to Table EQ_Mid_Q
** ** 04 08 00 00 00 01 00 - 28 EQ :High-Middle EQ -20dB - +20dB
** ** 04 09 00 00 00 01 00 - 28 EQ :High EQ -20dB - +20dB
** ** 04 0A 00 00 00 01 00 - 28 EQ :Level -20dB - +20dB

--- FX 2 ---
** ** 05 00 00 00 00 01 00 - 01 FX2:On/Off 00 : Off
01 : On

** ** 05 01 00 00 00 01 00 - 50 FX2:Quick Setting
** ** 05 02 00 00 00 01 00 - 0F FX2:FX Select 00 : PH
01 : FL
02 : HR
03 : PS
04 : PB
05 : 2CE
06 : PAN
07 : VB
08 : UV
09 : SDD
0A : HU
0B : RM
0C : SL
0D : AR
0E : SYN
0F : SEQ

** ** 05 03 00 00 00 01 00 - 03 PH :Type 00 : 4 Stage
01 : 8 Stage
02 : 12 Stage
03 : Bi-Phase

** ** 05 04 00 00 00 01 00 - 71 PH :Rate *Refer to Table Rate
** ** 05 05 00 00 00 01 00 - 64 PH :Depth 0 - 100
** ** 05 06 00 00 00 01 00 - 64 PH :Manual 0 - 100
** ** 05 07 00 00 00 01 00 - 64 PH :Resonance 0 - 100
** ** 05 08 00 00 00 01 00 - 01 PH :Step 00 : Off
01 : On

** ** 05 09 00 00 00 01 00 - 71 PH :Step Rate *Refer to Table Rate
** ** 05 0A 00 00 00 01 00 - 64 PH :Effect Level 0 - 100
** ** 05 0B 00 00 00 01 00 - 64 PH :Direct Level 0 - 100
** ** 05 0C 00 00 00 01 00 - 71 FL :Rate *Refer to Table Rate
** ** 05 0D 00 00 00 01 00 - 64 FL :Depth 0 - 100
** ** 05 0E 00 00 00 01 00 - 64 FL :Manual 0 - 100
** ** 05 0F 00 00 00 01 00 - 64 FL :Resonance 0 - 100
** ** 05 10 00 00 00 01 00 - 64 FL :Separation 0 - 100
** ** 05 11 00 00 00 01 00 - 64 FL :Effect Level 0 - 100
** ** 05 12 00 00 00 01 00 - 64 FL :Direct Level 0 - 100
** ** 05 13 00 00 00 01 00 - 02 HR :Voice 00 : 1-Voice
01 : 2-Mono
02 : 2-Stereo

** ** 05 14 00 00 00 01 00 - 39 HR :HR1 Harmony *Refer to Table HR_Scale
** ** 05 15 00 00 00 02 00 00 - HR :HR1 Pre Delay *Refer to Table PreDly
** ** 05 16# - 02 33
** ** 05 17 00 00 00 01 00 - 64 HR :HR1 Feedback 0 - 100
** ** 05 18 00 00 00 01 00 - 64 HR :HR1 Level 0 - 100
** ** 05 19 00 00 00 01 00 - 39 HR :HR2 Harmony *Refer to Table HR_Scale
** ** 05 1A 00 00 00 02 00 00 - HR :HR2 Pre Delay *Refer to Table PreDly
** ** 05 1B# - 02 33
** ** 05 1C 00 00 00 01 00 - 64 HR :HR2 Level 0 - 100
** ** 05 1D 00 00 00 01 00 - 0B HR :Key C(Am) - B(G#m)
** ** 05 1E 00 00 00 01 00 - 64 HR :Direct Level 0 - 100
** ** 05 1F 00 00 00 01 00 - 02 PS :Voice 00 : 1-Voice
01 : 2-Mono
02 : 2-Stereo

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** ** 05 20 00 00 00 01 00 - 02 PS :PS1 Mode 00 : Fast
01 : Medium
02 : Slow
03 : Mono
** ** 05 21 00 00 00 01 00 - 30 PS :PS1 Pitch -24 - +24
** ** 05 22 00 00 00 01 00 - 64 PS :PS1 Fine -50 - +50
** ** 05 23 00 00 00 01 00 00 - PS :PS1 Pre Delay *Refer to Table PredLy
** ** 05 24# - 02 33
** ** 05 25 00 00 00 01 00 - 64 PS :PS1 Feedback 0 - 100
** ** 05 26 00 00 00 01 00 - 64 PS :PS1 Level 0 - 100
** ** 05 27 00 00 00 01 00 - 02 PS :PS2 Mode 00 : Fast
01 : Medium
02 : Slow
03 : Mono
** ** 05 28 00 00 00 01 00 - 30 PS :PS2 Pitch -24 - +24
** ** 05 29 00 00 00 01 00 - 64 PS :PS2 Fine -50 - +50
** ** 05 2A 00 00 00 01 00 00 - PS :PS2 Pre Delay *Refer to Table PredLy
** ** 05 2B# - 02 33
** ** 05 2C 00 00 00 01 00 - 64 PS :PS2 Level 0 - 100
** ** 05 2D 00 00 00 01 00 - 64 PS :Direct Level 0 - 100
** ** 05 2E 00 00 00 01 00 - 30 PB :Pitch Min -24 - +24
** ** 05 2F 00 00 00 01 00 - 30 PB :Pitch Max -24 - +24
** ** 05 30 00 00 00 01 00 - 64 PB :Pdl Position 0 - 100
** ** 05 31 00 00 00 01 00 - 64 PB :Effect Level 0 - 100
** ** 05 32 00 00 00 01 00 - 64 PB :Direct Level 0 - 100
** ** 05 33 00 00 00 01 00 - 10 2CE:Xover Frequency *Refer to Table Xover f
** ** 05 34 00 00 00 01 00 - 71 2CE:Low Rate *Refer to Table Rate
** ** 05 35 00 00 00 01 00 - 64 2CE:Low Depth 0 - 100
** ** 05 36 00 00 00 01 00 - 50 2CE:Low Pre Delay 0.0ms - 40.0ms (0.5ms step)
** ** 05 37 00 00 00 01 00 - 64 2CE:Low Level 0 - 100
** ** 05 38 00 00 00 01 00 - 71 2CE:High Rate *Refer to Table Rate
** ** 05 39 00 00 00 01 00 - 64 2CE:High Depth 0 - 100
** ** 05 3A 00 00 00 01 00 - 50 2CE:High Pre Delay 0.0ms - 40.0ms (0.5ms step)
** ** 05 3B 00 00 00 01 00 - 64 2CE:High Level 0 - 100
** ** 05 3C 00 00 00 01 00 - 64 PAN:Wave Shape 0 - 100
** ** 05 3D 00 00 00 01 00 - 71 PAN:Rate *Refer to Table Rate
** ** 05 3E 00 00 00 01 00 - 64 PAN:Depth 0 - 100
** ** 05 3F 00 00 00 01 00 - 71 VB :Rate *Refer to Table Rate
** ** 05 40 00 00 00 01 00 - 64 VB :Depth 0 - 100
** ** 05 41 00 00 00 01 00 - 01 VB :Trigger 00 : Off
01 : On
0 - 100
** ** 05 42 00 00 00 01 00 - 64 VB :Rise Time 0 - 100
** ** 05 43 00 00 00 01 00 - 71 UV :Rate *Refer to Table Rate
** ** 05 44 00 00 00 01 00 - 64 UV :Depth 0 - 100
** ** 05 45 00 00 00 01 00 - 64 UV :Level 0 - 100
** ** 05 46 00 00 00 02 00 00 - SDD:Delay Time *Refer to Table SDD_DlyTime
** ** 05 47# - 03 17
** ** 05 48 00 00 00 01 00 - 64 SDD:Feedback 0 - 100
** ** 05 49 00 00 00 01 00 - 78 SDD:Effect Level 0 - 120
** ** 05 4A 00 00 00 01 00 - 02 HU :Mode 00 : Picking
01 : Auto
02 : Random
** ** 05 4B 00 00 00 01 00 - 04 HU :Vowel 1 Mode = Picking, Auto
** ** 05 4C 00 00 00 01 00 - 04 HU :Vowel 2 00 : 'a'
01 : 'e'
02 : 'i'
03 : 'o'
04 : 'u'
0 - 100 Mode = Picking
** ** 05 4D 00 00 00 01 00 - 64 HU :Sensitivity 0 - 100 Mode = Picking
** ** 05 4E 00 00 00 01 00 - 71 HU :Rate *Refer to Table Rate
** ** 05 4F 00 00 00 01 00 - 64 HU :Depth 0 - 100
** ** 05 50 00 00 00 01 00 - 64 HU :Manual 0 - 100 Mode = Auto
** ** 05 51 00 00 00 01 00 - 64 HU :Level 0 - 100
** ** 05 52 00 00 00 01 00 - 01 RM :Mode 00 : Normal
01 : Intelligent
0 - 100
** ** 05 53 00 00 00 01 00 - 64 RM :Freq 0 - 100
** ** 05 54 00 00 00 01 00 - 64 RM :Effect Level 0 - 100
** ** 05 55 00 00 00 01 00 - 64 RM :Direct Level 0 - 100
** ** 05 56 00 00 00 01 00 - 13 SL :Pattern 00 : P1
13 : P20
** ** 05 57 00 00 00 01 00 - 71 SL :Rate *Refer to Table Rate
** ** 05 58 00 00 00 01 00 - 64 SL :Trigger Sens 0 - 100
** ** 05 59 00 00 00 01 00 - 27 AR :Phrase Preset1 - Preset30, User1 - User10
** ** 05 5A 00 00 00 01 00 - 01 AR :Loop 00 : Off
01 : On
** ** 05 5B 00 00 00 01 00 - 71 AR :Tempo *Refer to Table Rate
** ** 05 5C 00 00 00 01 00 - 64 AR :Sensitivity 0 - 100
** ** 05 5D 00 00 00 01 00 - 0B AR :Key C(Am) - B(G#m) Phase = Preset 1-30
** ** 05 5E 00 00 00 01 00 - 64 AR :Attack 0 - 100
** ** 05 5F 00 00 00 01 00 - 01 AR :Hold 00 : Off
01 : On
0 - 100
** ** 05 60 00 00 00 01 00 - 64 AR :Effect Level 0 - 100
** ** 05 61 00 00 00 01 00 - 64 AR :Direct Level 0 - 100
** ** 05 62 00 00 00 01 00 - 64 SYN:Sensitivity 0 - 100
** ** 05 63 00 00 00 01 00 - 03 SYN:Wave 00 : Square
01 : Saw
02 : Brass
03 : Bow
** ** 05 64 00 00 00 01 00 - 01 SYN:Chromatic 00 : Off Wave = Square, Saw
01 : On
** ** 05 65 00 00 00 01 00 - 02 SYN:Octave Shift 00 : 0 Wave = Square, Saw
01 : -1
02 : -2
0 - 100 Wave = Square
** ** 05 66 00 00 00 01 00 - 64 SYN:PWM Rate 0 - 100 Wave = Square
** ** 05 67 00 00 00 01 00 - 64 SYN:PWM Depth 0 - 100 Wave = Square
** ** 05 68 00 00 00 01 00 - 64 SYN:Cutoff Frequency 0 - 100
** ** 05 69 00 00 00 01 00 - 64 SYN:Resonance 0 - 100
** ** 05 6A 00 00 00 01 00 - 64 SYN:FLT.Sens 0 - 100
** ** 05 6B 00 00 00 01 00 - 64 SYN:FLT.Decay 0 - 100
** ** 05 6C 00 00 00 01 00 - 64 SYN:FLT.Depth 00 : -100
01 : -98
63 : +98
64 : +100
** ** 05 6D 00 00 00 01 00 - 65 SYN:Attack 00 : Decay
01 : 0
65 : 100
0 - 100
** ** 05 6E 00 00 00 01 00 - 64 SYN:Release 0 - 100
** ** 05 6F 00 00 00 01 00 - 64 SYN:Velocity 0 - 100
** ** 05 70 00 00 00 01 00 - 01 SYN:Hold 00 : Off Wave = Square, Saw
01 : On
0 - 100
** ** 05 71 00 00 00 01 00 - 64 SYN:Synth Level 0 - 100
** ** 05 72 00 00 00 01 00 - 64 SYN:Direct Level 0 - 100
** ** 05 73 00 00 00 01 00 - 28 SEQ:Low EQ -20dB - +20dB
** ** 05 74 00 00 00 01 00 - 14 SEQ:Low-Middle Frequency *Refer to Table EQ_Mid_f
** ** 05 75 00 00 00 01 00 - 05 SEQ:Low-Middle Q *Refer to Table EQ_Mid_Q

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** ** 05 76 00 00 00 01 00 - 28 SEQ:Low-Middle EQ -20dB - +20dB
** ** 05 77 00 00 00 01 00 - 14 SEQ:High-Middle Frequency *Refer to Table EQ_Mid_f
** ** 05 78 00 00 00 01 00 - 05 SEQ:High-Middle Q *Refer to Table EQ_Mid_Q
** ** 05 79 00 00 00 01 00 - 28 SEQ:High-Middle EQ -20dB - +20dB
** ** 05 7A 00 00 00 01 00 - 28 SEQ:High EQ -20dB - +20dB
** ** 05 7B 00 00 00 01 00 - 28 SEQ:Level -20dB - +20dB

--- DELAY ---
** ** 06 00 00 00 00 01 00 - 01 DD :On/Off 00 : Off
01 : On
** ** 06 01 00 00 00 01 00 - 0A DD :Quick Setting
** ** 06 02 00 00 00 01 00 - 01 DD :Type 00 : Single
01 : Pan
** ** 06 03 00 00 00 01 00 - 67 DD :DlyTime *Refer to Table DD_DlyTime
** ** 06 04 00 00 00 01 00 - 14 DD :DlyTime.F 0 - 20ms
** ** 06 05 00 00 00 01 00 - 64 DD :Tap Time 0% - 100% Type = Pan
** ** 06 06 00 00 00 01 00 - 64 DD :Feedback 0 - 100
** ** 06 07 00 00 00 01 00 - 09 DD :High Cut Filter *Refer to Table High_Cut
** ** 06 08 00 00 00 01 00 - 78 DD :Effect Level 0 - 120

--- CHORUS ---
** ** 07 00 00 00 00 01 00 - 01 CE :On/Off 00 : Off
01 : On
** ** 07 01 00 00 00 01 00 - 0A CE :Quick Setting
** ** 07 02 00 00 00 01 00 - 01 CE :Mode 00 : Mono
01 : Stereo
** ** 07 03 00 00 00 01 00 - 71 CE :Rate *Refer to Table Rate
** ** 07 04 00 00 00 01 00 - 64 CE :Depth 0 - 100
** ** 07 05 00 00 00 01 00 - 50 CE :Pre Delay 0.0ms - 40.0ms(0.5ms step)
** ** 07 06 00 00 00 01 00 - 09 CE :High Cut Filter *Refer to Table High_Cut
** ** 07 07 00 00 00 01 00 - 64 CE :Effect Level 0 - 100

--- REVERB ---
** ** 08 00 00 00 00 01 00 - 01 RV :On/Off 00 : Off
01 : On
** ** 08 01 00 00 00 01 00 - 0A RV :Quick Setting
** ** 08 02 00 00 00 01 00 - 04 RV :Type 00 : Room 1
01 : Room 2
02 : Hall 1
03 : Hall 2
04 : Plate
** ** 08 03 00 00 00 01 00 - 63 RV :Reverb Time 0.1s - 10.0s
** ** 08 04 00 00 00 01 00 - 64 RV :Pre Delay 0ms - 100ms
** ** 08 05 00 00 00 01 00 - 09 RV :Low Cut Filter *Refer to Table Low_Cut
** ** 08 06 00 00 00 01 00 - 09 RV :High Cut Filter *Refer to Table High_Cut
** ** 08 07 00 00 00 01 00 - 0A RV :Density 0 - 10
** ** 08 08 00 00 00 01 00 - 64 RV :Effect Level 0 - 100

--- MASTER ---
** ** 09 00 00 00 00 01 00 - 01 NS :On/Off 00 : Off
01 : On
** ** 09 01 00 00 00 01 00 - 64 NS :Threshold 0 - 100
** ** 09 02 00 00 00 01 00 - 64 NS :Release 0 - 100
** ** 09 03 00 00 00 01 00 - 64 Patch Level 00 : 0%
01 : 2%
:
64 : 200%
** ** 09 04 00 00 00 02 00 00 - Master BPM 00 00 : 40
** ** 09 05# - 01 52 :
00 7F : 167
01 00 : 168
:
01 52 : 250
** ** 09 06 00 00 00 01 00 - 64 FV : Level 0 - 100

--- Effect Chain ---
** ** 0A 00 00 00 00 01 00 - 0A Chain 1 *Refer to Table Chain
** ** 0A 01# 00 00 00 01 00 - 0A Chain 2 *Refer to Table Chain
** ** 0A 02# 00 00 00 01 00 - 0A Chain 3 *Refer to Table Chain
** ** 0A 03# 00 00 00 01 00 - 0A Chain 4 *Refer to Table Chain
** ** 0A 04# 00 00 00 01 00 - 0A Chain 5 *Refer to Table Chain
** ** 0A 05# 00 00 00 01 00 - 0A Chain 6 *Refer to Table Chain
** ** 0A 06# 00 00 00 01 00 - 0A Chain 7 *Refer to Table Chain
** ** 0A 07# 00 00 00 01 00 - 0A Chain 8 *Refer to Table Chain
** ** 0A 08# 00 00 00 01 00 - 0A Chain 9 *Refer to Table Chain
** ** 0A 09# 00 00 00 01 00 - 0A Chain 10 *Refer to Table Chain
** ** 0A 0A# 00 00 00 01 00 - 0A Chain 11 *Refer to Table Chain

--- NAME ---
** ** 0B 00 00 00 00 01 20 - 7F Name 1 *Refer to Table Name
** ** 0B 01# 00 00 00 01 20 - 7F Name 2 *Refer to Table Name
: :
** ** 0B 0F# 00 00 00 01 20 - 7F Name 16 *Refer to Table Name

--- EXP PEDAL ---
** ** 0C 00 00 00 00 01 00 - 01 EXP PEDAL:On/Off 00 : Off
01 : On
** ** 0C 01 00 00 00 01 00 - 64 EXP PEDAL:Foot Vol Min 0 - 100
** ** 0C 02 00 00 00 01 00 - 64 EXP PEDAL:Foot Vol Max 0 - 100

--- EXP PEDAL SW ---
** ** 0D 00 00 00 00 01 00 - 01 EXP PEDAL SW:On/Off 00 : Off
01 : On
** ** 0D 01 00 00 00 01 00 - 0A EXP PEDAL SW:Quick Setting
** ** 0D 02 00 00 00 02 00 00 - EXP PEDAL SW:Target *Refer to Table Patch:Assign Target
** ** 0D 03# - 01 6C
** ** 0D 04 00 00 00 02 00 00 - EXP PEDAL SW:Target Min
** ** 0D 05# - $$ $$
** ** 0D 06 00 00 00 02 00 00 - EXP PEDAL SW:Target Max
** ** 0D 07# - $$ $$
** ** 0D 08 00 00 00 01 00 - 01 EXP PEDAL SW:Source Mode 00 : Normal
01 : Toggle

--- CTL PEDAL ---
** ** 0E 00 00 00 00 01 00 - 01 CTL PEDAL:On/Off 00 : Off
01 : On
** ** 0E 01 00 00 00 01 00 - 0A CTL PEDAL:Quick Setting
** ** 0E 02 00 00 00 02 00 00 - CTL PEDAL:Target *Refer to Table Patch:Assign Target
** ** 0E 03# - 01 6C

```

```

** ** 0E 04 00 00 00 02 00 00 - CTL PEDAL:Target Min
** ** 0E 05# - $$$
** ** 0E 06 00 00 00 02 00 00 - CTL PEDAL:Target Max
** ** 0E 07# - $$$
** ** 0E 08 00 00 00 01 00 - 01 CTL PEDAL:Source Mode 00 : Normal
                                01 : Toggle

--- Assign 1 ---
** ** 0F 00 00 00 00 01 00 - 01 Assign 1:On/Off 00 : Off
                                01 : On
** ** 0F 01 00 00 00 01 00 - 0A Assign 1:Quick Setting
** ** 0F 02 00 00 00 02 00 00 - Assign 1:Target *Refer to Table Patch:Assign Target
** ** 0F 03# - 01 6C
** ** 0F 04 00 00 00 02 00 00 - Assign 1:Target Min
** ** 0F 05# - $$$
** ** 0F 06 00 00 00 02 00 00 - Assign 1:Target Max
** ** 0F 07# - $$$
** ** 0F 08 00 00 00 01 00 - 44 Assign 1:Source *Refer to Table Source
** ** 0F 09 00 00 00 01 00 - 01 Assign 1:Source Mode 00 : Normal
                                01 : Toggle
** ** 0F 0A 00 00 00 01 00 - 7F Assign 1:Source Act.Range Low 0 - 127
** ** 0F 0B 00 00 00 01 00 - 7F Assign 1:Source Act.Range High 0 - 127

--- Assign 2 ---
** ** 10 00 00 00 00 01 00 - 01 Assign 2:On/Off 00 : Off
                                01 : On
** ** 10 01 00 00 00 01 00 - 0A Assign 2:Quick Setting
** ** 10 02 00 00 00 02 00 00 - Assign 2:Target *Refer to Table Patch:Assign Target
** ** 10 03# - 01 6C
** ** 10 04 00 00 00 02 00 00 - Assign 2:Target Min
** ** 10 05# - $$$
** ** 10 06 00 00 00 02 00 00 - Assign 2:Target Max
** ** 10 07# - $$$
** ** 10 08 00 00 00 01 00 - 44 Assign 2:Source *Refer to Table Source
** ** 10 09 00 00 00 01 00 - 01 Assign 2:Source Mode 00 : Normal
                                01 : Toggle
** ** 10 0A 00 00 00 01 00 - 7F Assign 2:Source Act.Range Low 0 - 127
** ** 10 0B 00 00 00 01 00 - 7F Assign 2:Source Act.Range High 0 - 127

--- Assign 3 ---
** ** 11 00 00 00 00 01 00 - 01 Assign 3:On/Off 00 : Off
                                01 : On
** ** 11 01 00 00 00 01 00 - 0A Assign 3:Quick Setting
** ** 11 02 00 00 00 02 00 00 - Assign 3:Target *Refer to Table Patch:Assign Target
** ** 11 03# - 01 6C
** ** 11 04 00 00 00 02 00 00 - Assign 3:Target Min
** ** 11 05# - $$$
** ** 11 06 00 00 00 02 00 00 - Assign 3:Target Max
** ** 11 07# - $$$
** ** 11 08 00 00 00 01 00 - 44 Assign 3:Source *Refer to Table Source
** ** 11 09 00 00 00 01 00 - 01 Assign 3:Source Mode 00 : Normal
                                01 : Toggle
** ** 11 0A 00 00 00 01 00 - 7F Assign 3:Source Act.Range Low 0 - 127
** ** 11 0B 00 00 00 01 00 - 7F Assign 3:Source Act.Range High 0 - 127

--- Assign 4 ---
** ** 12 00 00 00 00 01 00 - 01 Assign 4:On/Off 00 : Off
                                01 : On
** ** 12 01 00 00 00 01 00 - 0A Assign 4:Quick Setting
** ** 12 02 00 00 00 02 00 00 - Assign 4:Target *Refer to Table Patch:Assign Target
** ** 12 03# - 01 6C
** ** 12 04 00 00 00 02 00 00 - Assign 4:Target Min
** ** 12 05# - $$$
** ** 12 06 00 00 00 02 00 00 - Assign 4:Target Max
** ** 12 07# - $$$
** ** 12 08 00 00 00 01 00 - 44 Assign 4:Source *Refer to Table Source
** ** 12 09 00 00 00 01 00 - 01 Assign 4:Source Mode 00 : Normal
                                01 : Toggle
** ** 12 0A 00 00 00 01 00 - 7F Assign 4:Source Act.Range Low 0 - 127
** ** 12 0B 00 00 00 01 00 - 7F Assign 4:Source Act.Range High 0 - 127

--- Assign 5 ---
** ** 13 00 00 00 00 01 00 - 01 Assign 5:On/Off 00 : Off
                                01 : On
** ** 13 01 00 00 00 01 00 - 0A Assign 5:Quick Setting
** ** 13 02 00 00 00 02 00 00 - Assign 5:Target *Refer to Table Patch:Assign Target
** ** 13 03# - 01 6C
** ** 13 04 00 00 00 02 00 00 - Assign 5:Target Min
** ** 13 05# - $$$
** ** 13 06 00 00 00 02 00 00 - Assign 5:Target Max
** ** 13 07# - $$$
** ** 13 08 00 00 00 01 00 - 44 Assign 5:Source *Refer to Table Source
** ** 13 09 00 00 00 01 00 - 01 Assign 5:Source Mode 00 : Normal
                                01 : Toggle
** ** 13 0A 00 00 00 01 00 - 7F Assign 5:Source Act.Range Low 0 - 127
** ** 13 0B 00 00 00 01 00 - 7F Assign 5:Source Act.Range High 0 - 127

--- Assign 6 ---
** ** 14 00 00 00 00 01 00 - 01 Assign 6:On/Off 00 : Off
                                01 : On
** ** 14 01 00 00 00 01 00 - 0A Assign 6:Quick Setting
** ** 14 02 00 00 00 02 00 00 - Assign 6:Target *Refer to Table Patch:Assign Target
** ** 14 03# - 01 6C
** ** 14 04 00 00 00 02 00 00 - Assign 6:Target Min
** ** 14 05# - $$$
** ** 14 06 00 00 00 02 00 00 - Assign 6:Target Max
** ** 14 07# - $$$
** ** 14 08 00 00 00 01 00 - 44 Assign 6:Source *Refer to Table Source
** ** 14 09 00 00 00 01 00 - 01 Assign 6:Source Mode 00 : Normal
                                01 : Toggle
** ** 14 0A 00 00 00 01 00 - 7F Assign 6:Source Act.Range Low 0 - 127
** ** 14 0B 00 00 00 01 00 - 7F Assign 6:Source Act.Range High 0 - 127

--- Assign 7 ---
** ** 15 00 00 00 00 01 00 - 01 Assign 7:On/Off 00 : Off
                                01 : On
** ** 15 01 00 00 00 01 00 - 0A Assign 7:Quick Setting
** ** 15 02 00 00 00 02 00 00 - Assign 7:Target *Refer to Table Patch:Assign Target
** ** 15 03# - 01 6C
** ** 15 04 00 00 00 02 00 00 - Assign 7:Target Min
** ** 15 05# - $$$

```

```

** ** 15 06 00 00 00 02 00 00 - Assign 7:Target Max
** ** 15 07# - $$ $$
** ** 15 08 00 00 00 01 00 - 44 Assign 7:Source *Refer to Table Source
** ** 15 09 00 00 00 01 00 - 01 Assign 7:Source Mode 00 : Normal
01 : Toggle
** ** 15 0A 00 00 00 01 00 - 7F Assign 7:Source Act.Range Low 0 - 127
** ** 15 0B 00 00 00 01 00 - 7F Assign 7:Source Act.Range High 0 - 127

--- Assign 8 ---
** ** 16 00 00 00 00 01 00 - 01 Assign 8:On/Off 00 : Off
01 : On
** ** 16 01 00 00 00 01 00 - 0A Assign 8:Quick Setting
** ** 16 02 00 00 00 02 00 00 - Assign 8:Target *Refer to Table Patch:Assign Target
** ** 16 03# - 01 6C
** ** 16 04 00 00 00 02 00 00 - Assign 8:Target Min
** ** 16 05# - $$ $$
** ** 16 06 00 00 00 02 00 00 - Assign 8:Target Max
** ** 16 07# - $$ $$
** ** 16 08 00 00 00 01 00 - 44 Assign 8:Source *Refer to Table Source
** ** 16 09 00 00 00 01 00 - 01 Assign 8:Source Mode 00 : Normal
01 : Toggle
** ** 16 0A 00 00 00 01 00 - 7F Assign 8:Source Act.Range Low 0 - 127
** ** 16 0B 00 00 00 01 00 - 7F Assign 8:Source Act.Range High 0 - 127
** **:メモリー・エリアの指定ができます。
06H 00H - 07H 0BH ( Patch Memory UG01-1 - UG35-4 )
08H 00H - 09H 47H ( Patch Memory PG36-1 - PG85-4 )
0AH 00H ( Temporary Buffer Area(Bulk) )
0BH 00H ( Temporary Buffer Area(Individual) )

```

\$\$: Assign Target に選ばれたパラメーターのデータ最大値に従います。

エフェクト・ポジションの入れ替えルール

同じエフェクトを複数使用しないでください。

Table Target <QuickFx:Assign Target>

Data(H)	Description
00 00 00 00	FX1:On/Off
00 00 00 01	FX1:FX Select
00 00 00 02	CS :Sustain
00 00 00 03	CS :Attack
00 00 00 04	CS :Tone
00 00 00 05	CS :Level
00 00 00 06	LM :Threshold
00 00 00 07	LM :Release
00 00 00 08	LM :Tone
00 00 00 09	LM :Level
00 00 00 0A	AC :Top
00 00 00 0B	AC :Body
00 00 00 0C	AC :Level
00 00 00 0D	PIC:Type
00 00 00 0E	PIC:Tone
00 00 00 0F	PIC:Level
00 00 01 00	TR :Wave Shape
00 00 01 01	TR :Rate
00 00 01 02	TR :Depth
00 00 01 03	SG :Sensitivity
00 00 01 04	SG :Rise Time
00 00 01 05	FB :Mode
00 00 01 06	FB :Rise Time
00 00 01 07	FB :Rise Time(▲)
00 00 01 08	FB :F.B.Level
00 00 01 09	FB :F.B.Level(▲)
00 00 01 0A	FB :Vibrato Rate
00 00 01 0B	FB :Vibrato Depth
00 00 01 0C	AFB:Freq1
00 00 01 0D	AFB:Depth1
00 00 01 0E	AFB:Freq2
00 00 01 0F	AFB:Depth2
00 00 02 00	AFB:Freq3
00 00 02 01	AFB:Depth3
00 00 02 02	FRT:Tone
00 00 02 03	FRT:Sensitivity
00 00 02 04	FRT:Attack
00 00 02 05	FRT:Depth
00 00 02 06	FRT:Resonance
00 00 02 07	FRT:Effect Level
00 00 02 08	FRT:Direct Level
00 00 02 09	WAH:On/Off
00 00 02 0A	WAH:FX Select
00 00 02 0B	AW :Mode
00 00 02 0C	AW :Polarity
00 00 02 0D	AW :Sensitivity
00 00 02 0E	AW :Frequency
00 00 02 0F	AW :Peak
00 00 03 00	AW :Rate
00 00 03 01	AW :Depth
00 00 03 02	AW :Level
00 00 03 03	FW :Type
00 00 03 04	FW :Pedal Position
00 00 03 05	FW :Level
00 00 03 06	OD :On/Off
00 00 03 07	OD :Type
00 00 03 08	OD :Drive
00 00 03 09	OD :Bass
00 00 03 0A	OD :Treble
00 00 03 0B	OD :Level
00 00 03 0C	PRE/SP:On/Off
00 00 03 0D	PRE/SP:Type
00 00 03 0E	PRE/SP:Gain
00 00 03 0F	PRE/SP:Bass
00 00 04 00	PRE/SP:Middle
00 00 04 01	PRE/SP:Treble
00 00 04 02	PRE/SP:Presence
00 00 04 03	PRE/SP:Amp Level
00 00 04 04	PRE/SP:Bright
00 00 04 05	PRE/SP:Gain SW
00 00 04 06	PRE/SP:Speaker SW
00 00 04 07	PRE/SP:Speaker Type
00 00 04 08	PRE/SP:Mic Setting
00 00 04 09	PRE/SP:Mic Level
00 00 04 0A	PRE/SP:Direct Level
00 00 04 0B	EQ :On/Off
00 00 04 0C	EQ :Low EQ
00 00 04 0D	EQ :Low-Middle Frequency
00 00 04 0E	EQ :Low-Middle Q

```

00 00 04 0F EQ :Low-Middle EQ
00 00 05 00 EQ :High-Middle Frequency
00 00 05 01 EQ :High-Middle Q
00 00 05 02 EQ :High-Middle EQ
00 00 05 03 EQ :High EQ
00 00 05 04 EQ :Level
00 00 05 05 FX2:On/Off
00 00 05 06 FX2:FX Select
00 00 05 07 PH :Type
00 00 05 08 PH :Rate
00 00 05 09 PH :Depth
00 00 05 0A PH :Manual
00 00 05 0B PH :Resonance
00 00 05 0C PH :Step
00 00 05 0D PH :Step Rate
00 00 05 0E PH :Effect Level
00 00 05 0F PH :Direct Level
00 00 06 00 FL :Rate
00 00 06 01 FL :Depth
00 00 06 02 FL :Manual
00 00 06 03 FL :Resonance
00 00 06 04 FL :Separation
00 00 06 05 FL :Effect Level
00 00 06 06 FL :Direct Level
00 00 06 07 HR :Voice
00 00 06 08 HR :HR1 Harmony
00 00 06 09 HR :HR1 Pre Delay
00 00 06 0A HR :HR1 Feedback
00 00 06 0B HR :HR1 Level
00 00 06 0C HR :HR2 Harmony
00 00 06 0D HR :HR2 Pre Delay
00 00 06 0E HR :HR2 Level
00 00 06 0F HR :Key
00 00 07 00 HR :Direct Level
00 00 07 01 PS :Voice
00 00 07 02 PS :PS1 Mode
00 00 07 03 PS :PS1 Pitch
00 00 07 04 PS :PS1 Fine
00 00 07 05 PS :PS1 Pre Delay
00 00 07 06 PS :PS1 Feedback
00 00 07 07 PS :PS1 Level
00 00 07 08 PS :PS2 Mode
00 00 07 09 PS :PS2 Pitch
00 00 07 0A PS :PS2 Fine
00 00 07 0B PS :PS2 Pre Delay
00 00 07 0C PS :PS2 Level
00 00 07 0D PS :Direct Level
00 00 07 0E 2CE:Xover Frequency
00 00 07 0F 2CE:Low Rate
00 00 08 00 2CE:Low Depth
00 00 08 01 2CE:Low Pre Delay
00 00 08 02 2CE:Low Level
00 00 08 03 2CE:High Rate
00 00 08 04 2CE:High Depth
00 00 08 05 2CE:High Pre Delay
00 00 08 06 2CE:High Level
00 00 08 07 PAN:Wave Shape
00 00 08 08 PAN:Rate
00 00 08 09 PAN:Depth
00 00 08 0A VB :Rate
00 00 08 0B VB :Depth
00 00 08 0C VB :Trigger
00 00 08 0D VB :Rise Time
00 00 08 0E UV :Rate
00 00 08 0F UV :Depth
00 00 09 00 UV :Level
00 00 09 01 SDD:Delay Time
00 00 09 02 SDD:Feedback
00 00 09 03 SDD:Effect Level
00 00 09 04 HU :Mode
00 00 09 05 HU :Vowel 1
00 00 09 06 HU :Vowel 2
00 00 09 07 HU :Sensitivity
00 00 09 08 HU :Rate
00 00 09 09 HU :Depth
00 00 09 0A HU :Manual
00 00 09 0B HU :Level
00 00 09 0C RM :Mode
00 00 09 0D RM :Freq
00 00 09 0E RM :Effect Level
00 00 09 0F RM :Direct Level
00 00 0A 00 SL :Pattern
00 00 0A 01 SL :Rate
00 00 0A 02 SL :Trigger Sens
00 00 0A 03 AR :Phrase
00 00 0A 04 AR :Loop
00 00 0A 05 AR :Tempo
00 00 0A 06 AR :Sensitivity
00 00 0A 07 AR :Key
00 00 0A 08 AR :Attack
00 00 0A 09 AR :Hold
00 00 0A 0A AR :Effect Level
00 00 0A 0B AR :Direct Level
00 00 0A 0C SYN:Sensitivity
00 00 0A 0D SYN:Wave
00 00 0A 0E SYN:Chromatic
00 00 0A 0F SYN:Octave Shift
00 00 0B 00 SYN:PWM Rate
00 00 0B 01 SYN:PWM Depth
00 00 0B 02 SYN:Cutoff Frequency
00 00 0B 03 SYN:Resonance
00 00 0B 04 SYN:FLT.Sens
00 00 0B 05 SYN:FLT.Decay
00 00 0B 06 SYN:FLT.Depth
00 00 0B 07 SYN:Attack
00 00 0B 08 SYN:Release
00 00 0B 09 SYN:Velocity
00 00 0B 0A SYN:Hold
00 00 0B 0B SYN:Synth Level
00 00 0B 0C SYN:Direct Level
00 00 0B 0D SEQ:Low EQ
00 00 0B 0E SEQ:Low-Middle Frequency
00 00 0B 0F SEQ:Low-Middle Q
00 00 0C 00 SEQ:Low-Middle EQ
00 00 0C 01 SEQ:High-Middle Frequency
00 00 0C 02 SEQ:High-Middle Q
00 00 0C 03 SEQ:High-Middle EQ
00 00 0C 04 SEQ:High EQ

```

```

00 00 0C 05 SEQ:Level
00 00 0C 06 DD :On/Off
00 00 0C 07 DD :Type
00 00 0C 08 DD :DlyTime
00 00 0C 09 DD :DlyTime.F
00 00 0C 0A DD :Tap Time
00 00 0C 0B DD :Feedback
00 00 0C 0C DD :High Cut Filter
00 00 0C 0D DD :Effect Level
00 00 0C 0E CE :On/Off
00 00 0C 0F CE :Mode
00 00 0D 00 CE :Rate
00 00 0D 01 CE :Depth
00 00 0D 02 CE :Pre Delay
00 00 0D 03 CE :High Cut Filter
00 00 0D 04 CE :Effect Level
00 00 0D 05 RV :On/Off
00 00 0D 06 RV :Type
00 00 0D 07 RV :Reverb Time
00 00 0D 08 RV :Pre Delay
00 00 0D 09 RV :Low Cut Filter
00 00 0D 0A RV :High Cut Filter
00 00 0D 0B RV :Density
00 00 0D 0C RV :Effect Level
00 00 0D 0D NS :On/Off
00 00 0D 0E NS :Threshold
00 00 0D 0F NS :Release
00 00 0E 00 Patch Level
00 00 0E 01 Master BPM
00 00 0E 02 FV :Level
00 00 0E 03 MANUAL On/Off
00 00 0E 04 TUNER On/Off
00 00 0E 05 Master BPM(Tap)
00 00 0E 06 Delay Time(Tap)
00 00 0E 07 MIDI Start/Stop
00 00 0E 08 MMC Play/Stop
00 00 0E 09 Patch Level Inc1
00 00 0E 0A Patch Level Inc2
00 00 0E 0B Patch Level Dec1
00 00 0E 0C Patch Level Dec2

```

Table Rate <Rate>

Data(H)	Description
00	0
:	:
64	100
65	1/4*BPM
66	1/3*BPM
67	3/8*BPM
68	1/2*BPM
69	2/3*BPM
6A	3/4*BPM
6B	1.0*BPM
6C	4/3*BPM
6D	1.5*BPM
6E	2.0*BPM
6F	8/3*BPM
70	3.0*BPM
71	4.0*BPM

Table EQ_Mid_f <EQ :Lo(Hi) Mid f>

Data(H)	Description
00	100Hz
01	125Hz
02	160Hz
03	200Hz
04	250Hz
05	315Hz
06	400Hz
07	500Hz
08	630Hz
09	800Hz
0A	1.00kHz
0B	1.25kHz
0C	1.60kHz
0D	2.00kHz
0E	2.50kHz
0F	3.15kHz
10	4.00kHz
11	5.00kHz
12	6.30kHz
13	8.00kHz
14	10.0kHz

Table EQ_Mid_Q <EQ :Lo(Hi) Mid Q>

Data(H)	Description
00	0.5
01	1
02	2
03	4
04	8
05	16

Table HR_Harm <HR:Harm>

Data(H)	Description
00	-2oct
01	-14th
02	-13th
03	-12th
04	-11th
05	-10th
06	-9th
07	-1oct
08	-7th
09	-6th
0A	-5th
0B	-4th
0C	-3rd
0D	-2nd
0E	Unison
0F	+2nd
10	+3rd

11	+4th	26	Scale 10
12	+5th	27	Scale 11
13	+6th	28	Scale 12
14	+7th	29	Scale 13
15	+1oct	2A	Scale 14
16	+9th	2B	Scale 15
17	+10th	2C	Scale 16
18	+11th	2D	Scale 17
19	+12th	2E	Scale 18
1A	+13th	2F	Scale 19
1B	+14th	30	Scale 20
1C	+2oct	31	Scale 21
1D	Scale 1	32	Scale 22
1E	Scale 2	33	Scale 23
1F	Scale 3	34	Scale 24
20	Scale 4	35	Scale 25
21	Scale 5	36	Scale 26
22	Scale 6	37	Scale 27
23	Scale 7	38	Scale 28
24	Scale 8	39	Scale 29
25	Scale 9		

Table HR_Scale <Harmony Scale>

Harmony	User Scale	Input note											
		C	C#	D	D#	E	F	F#	G	G#	A	A#	B
		Harmony note(Default)											
-2oct	Scale 1	-C↓	-C#↓	-D↓	-D#↓	-E↓	-F↓	-F#↓	-G↓	-G#↓	-A↓	-A#↓	-B↓
-14th	Scale 2	-D↓	-D#↓	-E↓	-F↓	-F↓	-G↓	-G#↓	-A↓	-A#↓	-B↓	-C↓	-C↓
-13th	Scale 3	-E↓	-E↓	-F↓	-F#↓	-G↓	-A↓	-A#↓	-B↓	-B↓	-C↓	-C#↓	-D↓
-12th	Scale 4	-F↓	-F#↓	-G↓	-G#↓	-A↓	-B↓	-B↓	-C↓	-C↓	-D↓	-D#↓	-E↓
-11th	Scale 5	-G↓	-G↓	-A↓	-A↓	-B↓	-B↓	-C↓	-C↓	-D↓	-D↓	-E↓	-F↓
-10th	Scale 6	-A↓	-A#↓	-B↓	-B↓	-C↓	-D↓	-D↓	-E↓	-E↓	-F↓	-F↓	-G↓
-9th	Scale 7	-B↓	-B↓	-C↓	-C↓	-D↓	-D↓	-E↓	-E↓	-F↓	-F↓	-G↓	-A↓
-1oct	Scale 8	-C↓	-C#↓	-D↓	-D#↓	-E↓	-F↓	-F#↓	-G↓	-G#↓	-A↓	-A#↓	-B↓
-7th	Scale 9	-D	-D#	-E	-F	-F	-G	-G#	-A	-A#	-B	-B	-C
-6th	Scale 10	-E	-E	-F	-F#	-G	-A	-A#	-B	-B	-C	-C#	-D
-5th	Scale 11	-F	-F#	-G	-G#	-A	-B	-B	-C	-C#	-D	-D#	-E
-4th	Scale 12	-G	-G	-A	-A	-B	-C	-C	-D	-D	-E	-E	-F
-3rd	Scale 13	-A	-A#	-B	-B	-C	-D	-D	-E	-E	-F	-F#	-G
-2nd	Scale 14	-B	-B	-C	-C	-D	-E	-E	-F	-F	-G	-G	-A
Unison	Scale 15	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
+2nd	Scale 16	+D	+D#	+E	+F	+F	+G	+G#	+A	+A#	+B	+C	+C
+3rd	Scale 17	+E	+E	+F	+F#	+G	+A	+A#	+B	+B	+C	+C#	+D
+4th	Scale 18	+F	+F#	+G	+G#	+A	+B	+B	+C	+C#	+D	+D#	+E
+5th	Scale 19	+G	+G	+A	+A	+B	+C	+C	+D	+D	+E	+E	+F
+6th	Scale 20	+A	+A#	+B	+B	+C	+D	+D	+E	+E	+F	+F#	+G
+7th	Scale 21	+B	+B	+C	+C	+D	+E	+E	+F	+F	+G	+G	+A
+1oct	Scale 22	+C↑	+C#↑	+D↑	+D#↑	+E↑	+F↑	+F#↑	+G↑	+G#↑	+A↑	+A#↑	+B↑
+9th	Scale 23	+D↑	+D#↑	+E↑	+F↑	+F↑	+G↑	+G#↑	+A↑	+A#↑	+B↑	+C↑	+C↑
+10th	Scale 24	+E↑	+E↑	+F↑	+F#↑	+G↑	+A↑	+A#↑	+B↑	+B↑	+C↑	+C#↑	+D↑
+11th	Scale 25	+F↑	+F#↑	+G↑	+G#↑	+A↑	+B↑	+B↑	+C↑	+C#↑	+D↑	+D#↑	+E↑
+12th	Scale 26	+G↑	+G↑	+A↑	+A↑	+B↑	+C↑	+C↑	+D↑	+D↑	+E↑	+E↑	+F↑
+13th	Scale 27	+A↑	+A#↑	+B↑	+B↑	+C↑	+D↑	+D↑	+E↑	+E↑	+F↑	+F#↑	+G↑
+14th	Scale 28	+B↑	+B↑	+C↑	+C↑	+D↑	+E↑	+E↑	+F↑	+F↑	+G↑	+G↑	+A↑
+2oct	Scale 29	+C↑↑	+C#↑↑	+D↑↑	+D#↑↑	+E↑↑	+F↑↑	+F#↑↑	+G↑↑	+G#↑↑	+A↑↑	+A#↑↑	+B↑↑

Key = C(Am) とした場合のハーモニー出力です。

Table PreDly <PreDly>

Data(H)	Description
00 00	0ms
00 01	1ms
:	:
00 7F	127ms
01 00	128ms
:	:
01 7F	255ms
02 00	256ms
:	:
02 2C	300ms
02 2D	4.0*BPM
02 2E	3.0*BPM
02 2F	8/3*BPM
02 30	2.0*BPM
02 31	1.5*BPM
02 32	4/3*BPM
02 33	1.0*BPM

Table Xover_f <2CE Xover f>

Data(H)	Description
00	100Hz
01	125Hz
02	160Hz
03	200Hz
04	250Hz
05	315Hz
06	400Hz
07	500Hz
08	630Hz
09	800Hz
0A	1.00kHz
0B	1.25kHz
0C	1.60kHz
0D	2.00kHz

0E	2.50kHz
0F	3.15kHz
10	4.00kHz

Table SDD_DlyTime <SDD DlyTime>

Data(H)	Description
00 00	0ms
00 01	1ms
:	:
00 7F	127ms
01 00	128ms
:	:
01 7F	255ms
02 00	256ms
:	:
02 7F	383ms
03 00	384ms
:	:
03 10	400ms
03 11	4.0*BPM
03 12	3.0*BPM
03 13	8/3*BPM
03 14	2.0*BPM
03 15	1.5*BPM
03 16	4/3*BPM
03 17	1.0*BPM

Table DD_DlyTime <DD DlyTime>

Data(H)	Description
00	0ms
01	20ms
:	:
5A	1800ms
5B	4.0*BPM
5C	3.0*BPM

5D	8/3*BPM
5E	2.0*BPM
5F	1.5*BPM
60	4/3*BPM
61	1.0*BPM
62	3/4*BPM
63	2/3*BPM
64	1/2*BPM
65	3/8*BPM
66	1/3*BPM
67	1/4*BPM

Table High_Cut <High Cut>

Data(H)	Description
00	700Hz
01	1.00kHz
02	1.40kHz
03	2.00kHz
04	3.00kHz
05	4.00kHz
06	6.00kHz
07	8.00kHz
08	11.0kHz
09	Flat

Table Low_Cut <Low Cut>

Data(H)	Description
00	55.0Hz
01	110Hz
02	165Hz
03	200Hz
04	280Hz
05	340Hz
06	400Hz
07	500Hz
08	630Hz
09	800Hz

Table Chain <Chain>

Data(H)	Description
00	FX1
01	Wah
02	Overdrive/Distortion
03	Preamp/Speaker Simulator
04	Equalizer
05	FX2
06	Delay
07	Chorus
08	Reverb
09	Noise Suppressor
0A	Foot Volume

Table Name <Name Edit>

Data(H)	Description
20	
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 Target <Patch:Assign Target>

Data(H)	Description
00 00	FX1:On/Off
00 01	FX1:FX Select
00 02	CS :Sustain
00 03	CS :Attack
00 04	CS :Tone
00 05	CS :Level
00 06	LM :Threshold
00 07	LM :Release
00 08	LM :Tone
00 09	LM :Level
00 0A	AC :Top
00 0B	AC :Body
00 0C	AC :Level
00 0D	PIC:Type
00 0E	PIC:Tone
00 0F	PIC:Level
00 10	TR :Wave Shape
00 11	TR :Rate
00 12	TR :Depth
00 13	SG :Sensitivity
00 14	SG :Rise Time
00 15	FB :Mode
00 16	FB :Rise Time
00 17	FB :Rise Time(▲)
00 18	FB :F.B.Level
00 19	FB :F.B.Level(▲)
00 1A	FB :Vibrato Rate
00 1B	FB :Vibrato Depth
00 1C	AFB:Freq1
00 1D	AFB:Depth1
00 1E	AFB:Freq2
00 1F	AFB:Depth2
00 20	AFB:Freq3
00 21	AFB:Depth3
00 22	FRT:Tone
00 23	FRT:Sensitivity
00 24	FRT:Attack
00 25	FRT:Depth
00 26	FRT:Resonance
00 27	FRT:Effect Level
00 28	FRT:Direct Level
00 29	WAH:On/Off
00 2A	WAH:FX Select
00 2B	AW :Mode
00 2C	AW :Polarity
00 2D	AW :Sensitivity
00 2E	AW :Frequency
00 2F	AW :Peak
00 30	AW :Rate
00 31	AW :Depth
00 32	AW :Level
00 33	FW :Type
00 34	FW :Pedal Position
00 35	FW :Level
00 36	OD :On/Off
00 37	OD :Type
00 38	OD :Drive
00 39	OD :Bass
00 3A	OD :Treble
00 3B	OD :Level
00 3C	PRE/SP:On/Off
00 3D	PRE/SP:Type
00 3E	PRE/SP:Gain
00 3F	PRE/SP:Bass
00 40	PRE/SP:Middle
00 41	PRE/SP:Treble
00 42	PRE/SP:Presence
00 43	PRE/SP:Amp Level
00 44	PRE/SP:Bright
00 45	PRE/SP:Gain SW
00 46	PRE/SP:Speaker SW
00 47	PRE/SP:Speaker Type
00 48	PRE/SP:Mic Setting
00 49	PRE/SP:Mic Level
00 4A	PRE/SP:Direct Level

00 4B	EQ :On/Off	01 41	SEQ:High-Middle Frequency
00 4C	EQ :Low EQ	01 42	SEQ:High-Middle Q
00 4D	EQ :Low-Middle Frequency	01 43	SEQ:High-Middle EQ
00 4E	EQ :Low-Middle Q	01 44	SEQ:High EQ
00 4F	EQ :Low-Middle EQ	01 45	SEQ:Level
00 50	EQ :High-Middle Frequency	01 46	DD :On/Off
00 51	EQ :High-Middle Q	01 47	DD :Type
00 52	EQ :High-Middle EQ	01 48	DD :DlyTime
00 53	EQ :High EQ	01 49	DD :DlyTime.F
00 54	EQ :Level	01 4A	DD :Tap Time
00 55	FX2:On/Off	01 4B	DD :Feedback
00 56	FX2:FX Select	01 4C	DD :High Cut Filter
00 57	PH :Type	01 4D	DD :Effect Level
00 58	PH :Rate	01 4E	CE :On/Off
00 59	PH :Depth	01 4F	CE :Mode
00 5A	PH :Manual	01 50	CE :Rate
00 5B	PH :Resonance	01 51	CE :Depth
00 5C	PH :Step	01 52	CE :Pre Delay
00 5D	PH :Step Rate	01 53	CE :High Cut Filter
00 5E	PH :Effect Level	01 54	CE :Effect Level
00 5F	PH :Direct Level	01 55	RV :On/Off
00 60	FL :Rate	01 56	RV :Type
00 61	FL :Depth	01 57	RV :Reverb Time
00 62	FL :Manual	01 58	RV :Pre Delay
00 63	FL :Resonance	01 59	RV :Low Cut Filter
00 64	FL :Separation	01 5A	RV :High Cut Filter
00 65	FL :Effect Level	01 5B	RV :Density
00 66	FL :Direct Level	01 5C	RV :Effect Level
00 67	HR :Voice	01 5D	NS :On/Off
00 68	HR :HR1 Harmony	01 5E	NS :Threshold
00 69	HR :HR1 Pre Delay	01 5F	NS :Release
00 6A	HR :HR1 Feedback	01 60	Patch Level
00 6B	HR :HR1 Level	01 61	Master BPM
00 6C	HR :HR2 Harmony	01 62	FV :Level
00 6D	HR :HR2 Pre Delay	01 63	MANUAL On/Off
00 6E	HR :HR2 Level	01 64	TUNER On/Off
00 6F	HR :Key	01 65	Master BPM(Tap)
00 70	HR :Direct Level	01 66	Delay Time(Tap)
00 71	PS :Voice	01 67	MIDI Start/Stop
00 72	PS :PS1 Mode	01 68	MMC Play/Stop
00 73	PS :PS1 Pitch	01 69	Patch Level Inc1
00 74	PS :PS1 Fine	01 6A	Patch Level Inc2
00 75	PS :PS1 Pre Delay	01 6B	Patch Level Dec1
00 76	PS :PS1 Feedback	01 6C	Patch Level Dec2
00 77	PS :PS1 Level		
00 78	PS :PS2 Mode		
00 79	PS :PS2 Pitch		
00 7A	PS :PS2 Fine		
00 7B	PS :PS2 Pre Delay		
00 7C	PS :PS2 Level		
00 7D	PS :Direct Level		
00 7E	2CE:Xover Frequency		
00 7F	2CE:Low Rate		
01 00	2CE:Low Depth		
01 01	2CE:Low Pre Delay		
01 02	2CE:Low Level		
01 03	2CE:High Rate		
01 04	2CE:High Depth		
01 05	2CE:High Pre Delay		
01 06	2CE:High Level		
01 07	PAN:Wave Shape		
01 08	PAN:Rate		
01 09	PAN:Depth		
01 0A	VB :Rate		
01 0B	VB :Depth		
01 0C	VB :Trigger		
01 0D	VB :Rise Time		
01 0E	UV :Rate		
01 0F	UV :Depth		
01 10	UV :Level		
01 11	SDD:Delay Time		
01 12	SDD:Feedback		
01 13	SDD:Effect Level		
01 14	HU :Mode		
01 15	HU :Vowel 1		
01 16	HU :Vowel 2		
01 17	HU :Sensitivity		
01 18	HU :Rate		
01 19	HU :Depth		
01 1A	HU :Manual		
01 1B	HU :Level		
01 1C	RM :Mode		
01 1D	RM :Freq		
01 1E	RM :Effect Level		
01 1F	RM :Direct Level		
01 20	SL :Pattern		
01 21	SL :Rate		
01 22	SL :Trigger Sens		
01 23	AR :Phrase		
01 24	AR :Loop		
01 25	AR :Tempo		
01 26	AR :Sensitivity		
01 27	AR :Key		
01 28	AR :Attack		
01 29	AR :Hold		
01 2A	AR :Effect Level		
01 2B	AR :Direct Level		
01 2C	SYN:Sensitivity		
01 2D	SYN:Wave		
01 2E	SYN:Chromatic		
01 2F	SYN:Octave Shift		
01 30	SYN:PWM Rate		
01 31	SYN:PWM Depth		
01 32	SYN:Cutoff Frequency		
01 33	SYN:Resonance		
01 34	SYN:FLT.Sens		
01 35	SYN:FLT.Decay		
01 36	SYN:FLT.Depth		
01 37	SYN:Attack		
01 38	SYN:Release		
01 39	SYN:Velocity		
01 3A	SYN:Hold		
01 3B	SYN:Synth Level		
01 3C	SYN:Direct Level		
01 3D	SEQ:Low EQ		
01 3E	SEQ:Low-Middle Frequency		
01 3F	SEQ:Low-Middle Q		
01 40	SEQ:Low-Middle EQ		

Table Source <Assign Source>

<u>Data(H)</u>	<u>Description</u>
00	EXP PEDAL
01	EXP PEDAL SW
02	CTL PEDAL
03	SUB EXP PEDAL
04	SUB CTL 1
05	SUB CTL 2
06	MIDI CTL# 1
:	:
24	MIDI CTL# 31
25	MIDI CTL# 64
:	:
44	MIDI CTL# 95

ローランドのエクスクルーシブ・メッセージについて

1. メッセージのフォーマット

ローランドのエクスクルーシブ・フォーマット（タイプIV）はすべて以下の表のようになっています。

バイト	説明
F0H	エクスクルーシブ・ステータス
41H	ローランドID
DEV	デバイスID
MDL	モデルID
CMD	コマンドID
[BODY]	データ本体
F7H	エンド・オブ・エクスクルーシブ

MIDIステータス [MIDI status] (F0H),(F7H)

エクスクルーシブ・メッセージは2つのステータスによって囲まれ、(F0H)の次には「マニファクチャラーID」を必要とします。
(MIDI規格Ver1.0による。)

マニファクチャラーID [Manufacturer ID] (41H)

ローランドのIDです。「マニファクチャラーID」により、どのメーカーのエクスクルーシブ・メッセージであるかを判断することができます。

デバイスID [Device-ID] DEV

複数の機器を区別するためにあります。通常「ベーシック・チャンネル」から1を引いた値(00H-0FH)が使用されますが、複数のベーシック・チャンネルを持つ機器などでは(00H-1FH)を設定して使用することもあります。

モデルID [Model-ID] MDL

機種ごとに決まった値を持ちます。ただし、機種が違っても同じデータを使うものは共通に使用されます。
拡張のために(00H)を使用し、(00H)の個数によっても各々区別されます。
例えば、

(01H),
(02H),
(03H),
(00H,01H),
(00H,02H),
(00H,00H,01H)

は各々、別の機種を表します。

コマンドID [Command-ID] CMD

メッセージの役割を表します。
拡張のために(00H)を使用し、(00H)の個数によっても各々区別されます。
例えば、

(01H),
(02H),
(03H),
(00H,01H),
(00H,02H),
(00H,00H,01H)

は各々、別の役割を表します。

データ本体 [BODY]

送受信されるデータ本体。「モデルID」および「コマンドID」によってサイズや内容が変わります。

2. アドレス・マッピング方式によるデータ転送

アドレス・マッピング方式とは1.のフォーマットにしたがったデータ転送の方式です。この方式では、波形データ、音色データ、スイッチ情報やパラメーターなどを、その機種ごとに設定したアドレス空間に割り付けることによって、さまざまなデータを、そのアドレスを示すことで、データの転送を行います。

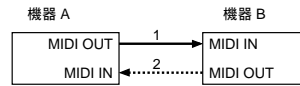
以上により、機種やデータの種類によってデータの転送方法が変わることはありません。転送方法としては、ワン・ウェイ方式とハンドシェイク方式の2方式があります。

機器によって、データの種類により、2方式を使い分けていたり、1つの方式しかできない場合もあります。

ワン・ウェイ方式 (3.参照)

この方式は、比較的少ないデータの転送に適しており、一方的にエクスクルーシブ・メッセージを送信することによってデータ転送を行っています。

接続図

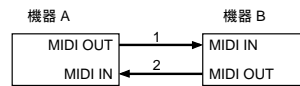


「データ要求」(3.参照)を使用するとき、2の接続が必要です。

ハンドシェイク方式 (本機では対応していません)

この方式は、送る側と受ける側で互いに確認(ハンドシェイク)をしてデータ転送を行っています。多量のデータの転送では、信頼性が高く、転送速度も速くなります。

接続図



必ず1及び2の接続が必要です。

上記2方式について

* 転送方式により「コマンドID」が決まっています。

* 機器Aおよび機器Bが各々、同じ方式を採用しており、データ転送ができる状態にあって、さらに、「デバイスID」と「モデルID」が一致していなければ、データ転送を行なうことはできません。

3. ワン・ウェイ方式によるデータ転送

この方式は比較的少量のデータを転送するときにメッセージごとの確認を行わず一方的に送る方法です。ただし多量のデータを続けて送る時は、適当な時間間隔(20msec以上)を取って送ります。この方式では受信側はその時間内で正しくデータを受け取らなければなりません。

メッセージの種類

メッセージ	コマンドID
データ要求1	RQ1 (11H)
データ・セット1	DT1 (12H)

データ要求1 [Request data 1] RQ1 (11H)

相手の機器からデータを送ってもらうときに送信します。アドレスとサイズで要求するデータと量を示しています。

このメッセージを受信した場合、その機器がデータを送られる状態にあり、アドレスとサイズが適当なものであれば、要求されたデータを「データ・セット1」メッセージで送信します。そうでない場合は何も送信をしません。

バイト	説明
F0H	エクスクルーシブ・ステータス
41H	ローランドID
DEV	デバイスID
MDL	モデルID
11H	コマンドID
aaH	アドレスMSB
⋮	⋮
⋮	⋮
⋮	⋮
⋮	LSB
ssH	サイズMSB
⋮	⋮
⋮	⋮
⋮	⋮
⋮	LSB
sum	チェックサム
F7H	エンド・オブ・エクスクルーシブ

- * サイズは要求するデータ全体のアドレスを示しており、1つの「データ・セット1」のメッセージのデータのバイト数ではありません。
- * 機種ごとに、データの種類によって1度に転送するデータの数があらかじめ決まっていたり、決められたアドレスで区切って送受信しなければならない場合もあります。
- * アドレスとサイズは同じバイト数で、「モデルID」ごとに決められます。
- * チェックサムは、アドレス、サイズ、及びチェックサム自身を加算した値の下位7ビットがゼロになる値になっています。

データ・セット1 [Data set 1] DT1 (12H)

実際のデータの転送を行いません。
データはそれぞれ1バイトごとにアドレスを持ちますが、このメッセージでは、1つまたは、複数データの先頭のアドレスと、データだけをアドレス順にならべたものを送ることができます。

MIDI規格により、リアルタイムメッセージ以外のメッセージはエクスクルーシブメッセージにはわり込めません。ローランドでは、ソフト・スルーする機器を考慮して、1つの「データ・セット1」メッセージで転送するデータを最大256バイトとしていますので、256バイトを超えるような多量のデータは、区切って何回かに分けて送ります。

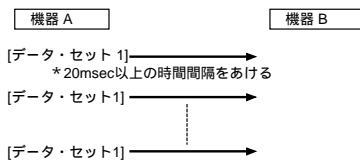
バイト	説明
FOH	エクスクルーシブ・ステータス
41H	ローランド ID
DEV	デバイス ID
MDL	モデル ID
12H	コマンド ID
aaH	アドレス MSB
⋮	⋮
⋮	⋮
	LSB
ddH	データ MSB
⋮	⋮
⋮	⋮
	LSB
sum	チェックサム
F7H	エンド・オブ・エクスクルーシブ

- * このメッセージは、「データ要求1」メッセージで示される範囲の中で有効な部分のみを転送することができます。
- * 機種ごとに、データの種類によって1度に転送するデータの数があらかじめ決まっていたり、決められたアドレスで区切って送受信しなければならない場合もあります。
- * アドレスのバイト数では、「モデルID」ごとに決められます。
- * チェックサムは、アドレス、データ、及びチェックサム自身を加算した値の下位7ビットがゼロになる値になっています。

送受信の例

機器Aが機器Bにデータを転送するとき。

単に「データ・セット1」のメッセージを送信します。



機器Bが機器Aからデータを転送してもらうとき。

最初に「データ要求1」メッセージを送信します。そして、機器Aは「データ・セット1」メッセージを送信します。

