MONO IN [L/R MIX] - SINGLE

PARAM / INT PARAM = Parameter Name / Value Range / Preset Value

EXT CTRL ASSIGN = CTRL No. / PARAMETER NAME / MIN ~ MAX

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
1	REV1 HALL	PARAM	REV TIME	HIGH	DIFFUSION	INI DLY	HPF FRQ.	LPF FRQ.					
			0.3 ~ 480.0 s	x 0.1 ~ x 1.0	0 ~ 10	0.1 ~ 1000.0 ms	* 1	* 2					
			2.6 s	x 0.6	5	30.0 ms	THRU	8.0 kHz					
		INT PARAM	ER/REV BAL	REV DLY	DENSITY	TRG. LEVEL	TRG DLY	HOLD	RELEASE	A TRG. LVL	MIDI TRG.		
			0 ~ 100 %	0.1 ~ 300.0 ms	0 ~ 4	0 ~ 100	–100.0~100.0ms	1 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100	OFF, ON		
			50 %	0.1 ms	4	0	–7.0 ms	150 ms	5 ms	100	OFF		
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REV TIME	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
2	REV2 ROOM	PARAM	REV TIME	HIGH	DIFFUSION	INI DLY	HPF FRQ.	LPF FRQ.					
			0.1 ~ 480.0 s	x 0.1 ~ x 1.0	0 ~ 10	0.1 ~ 1000.0 ms	* 1	* 2					
			0.8 s	x 0.7	5	20.0 ms	THRU	8.0 kHz					
		INT PARAM	ER/REV BAL	REV DLY	DENSITY	TRG. LEVEL	TRG DLY	HOLD	RELEASE	A TRG. LVL	MIDI TRG.		
			0 ~ 100 %	0.1 ~ 300.0 ms	0 ~ 4	0 ~ 100	–100.0~100.0ms	1 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100	OFF, ON		
			50 %	0.1 ms	4	0	–7.0 ms	150 ms	5 ms	100	OFF		
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REV TIME	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
3	REV3 VOCAL	PARAM	REV TIME	HIGH	DIFFUSION	INI DLY	HPF FRQ.	LPF FRQ.					
			0.3 ~ 480.0 s	x 0.1 ~ x 1.0	0 ~ 10	0.1 ~ 1000.0 ms	* 1	* 2					
			2.4 s	x 0.5	5	45.0 ms	80 Hz	8.0 kHz					
		INT PARAM	ER/REV BAL	REV DLY	DENSITY	TRG. LEVEL	TRG DLY	HOLD	RELEASE	A TRG. LVL	MIDI TRG.		
			0 ~ 100 %	0.1 ~ 300.0 ms	0 ~ 4	0 ~ 100	–100.0~100.0ms	1 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100	OFF, ON		
			50 %	0.1 ms	4	0	–7.0 ms	150 ms	5 ms	100	OFF		
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REV TIME	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
4	REV4 PLATE	PARAM	REV TIME	HIGH	DIFFUSION	INI DLY	HPF FRQ.	LPF FRQ.					
			0.1 ~ 480.0 s	x 0.1 ~ x 1.0	0 ~ 10	0.1 ~ 1000.0 ms	* 1	* 2					
			1.8 s	x 0.7	5	10.0 ms	40 Hz	10 kHz					
		INT PARAM	ER/REV BAL	REV DLY	DENSITY	TRG. LEVEL	TRG DLY	HOLD	RELEASE	A TRG. LVL	MIDI TRG.		
			0 ~ 100 %	0.1 ~ 300.0 ms	0 ~ 4	0 ~ 100	–100.0~100.0ms	1 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100	OFF, ON		
			50 %	0.1 ms	4	0	–7.0 ms	150 ms	5 ms	100	OFF		
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REV TIME	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: THRU, 32 Hz ~ 1.0 kHz
* 2: 1.0 ~ 16 kHz, THRU

MONO IN [L/R MIX] - SINGLE

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
5	REV5 ECHO ROOM	PARAM	REV TIME	WIDTH	HEIGHT	DEPTH	WALL VARY	LIS. POSI.	HIGH	DIFFUSION	IDI DLY	HPF FRQ.	LPF FRQ.
			0.3 ~ 480.0 s	0.5 ~ 100.0 m	0.5 ~ 100.0 m	0.5 ~ 100.0 m	0 ~ 30	* 1	0.1 ~ 1.0	0 ~ 10	0.1 ~ 1000.0 ms	* 2	* 3
			1.5 s	19.4 m	8.3 m	13.7 m	7	FRONT	0.7	5	25.0 ms	THRU	8.0 kHz
			12	13	14	15	16	17	18				
			WIDTH FINE	HEIGHT FINE	DEPTH FINE	W. VARY FINE	W DECAY	H DECAY	D DECAY				
			– 100 ~ 100	– 100 ~ 100	– 100 ~ 100	– 100 ~ 100	RT x 0.1 ~ 10.0	RT x 0.1 ~ 10.0	RT x 0.1 ~ 10.0				
			0	0	0	0	1.0	1.0	1.0				
		INT PARAM	ER/REV BAL	REV DLY	DENSITY	TRG. LEVEL	TRG DLY	HOLD	RELEASE	A TRG. LVL	MIDI TRG.		
			0 ~ 100 %	0.1 ~ 300.0 ms	0 ~ 4	0 ~ 100	-100.0~100.0 ms	1 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100	OFF, ON		
			50 %	50.0 ms	4	0	–7.0 ms	150 ms	5 ms	100	OFF		
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1			BALANCE TYPE = 1					
			REV TIME	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
6	EARLY REF. 1	PARAM	TYPE	ROOM SIZE	LIVENESS	DIFFUSION	INI DLY	HPF FRQ.	LPF FRG.				
			* 4	0.1 ~ 25.0	0 ~ 10	0 ~ 10	0.1 ~ 1000.0 ms	* 2	* 3				
			S - HALL	2.0	5	5	10.0 ms	THRU	10 kHz				
		INT PARAM	ER NUMBER	FB DLY	FB GAIN	FB HIGH							
			1 ~ 19	0.1 ~ 2600.0 ms	– 99 ~ 99 %	0.1 ~ 1.0							
			19	150.0 ms	0 %	0.7							
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1			BALANCE TYPE = 1					
			TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
7	EARLY REF. 2	PARAM	TYPE	ROOM SIZE	LIVENESS	DIFFUSION	INI DLY	HPF FRQ.	LPF FRG.				
			* 4	0.1 ~ 25.0	0 ~ 10	0 ~ 10	0.1 ~ 1000.0 ms	* 2	* 3				
			S - HALL	2.0	5	5	10.0 ms	THRU	10 kHz				
		INT PARAM	ER NUMBER	FB DLY	FB GAIN	FB HIGH	DENSITY						
			1 ~ 19	0.1 ~ 2600.0 ms	– 99 ~ 99 %	0.1 ~ 1.0	1 ~ 3						
			19	150.0 ms	0 %	0.7	3						
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1			BALANCE TYPE = 1					
			TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
8	EARLY REF. 3	PARAM	TYPE	ROOM SIZE	LIVENESS	DIFFUSION	INI DLY	HPF FRQ.	LPF FRG.				
			* 5	0.1 ~ 25.0	0 ~ 10	0 ~ 10	0.1 ~ 1000.0 ms	* 2	* 3				
			USER - A	1.0	5	0	10.0 ms	THRU	10 kHz				
		INT PARAM	ER NUMBER	FB DLY	FB GAIN	FB HIGH	DENSITY						
			1 ~ 19	0.1 ~ 2600.0 ms	– 99 ~ 99 %	0.1 ~ 1.0	0 ~ 3						
			19	150.0 ms	0 %	0.7	0						
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1			BALANCE TYPE = 1					
			TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: FRONT, CENT., REAR
* 2: THRU, 32 Hz ~ 1.0 kHz
* 3: 1.0 ~ 16 kHz, THRU
* 4: S - HALL, L - HALL, RANDOM, REVERSE, PLATE, SPRING
* 5: USER - A, USER - B, USER - C, USER - D

MONO IN [L/R MIX] - SINGLE

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
9	GATE REVERB	PARAM	TYPE	ROOM SIZE	LIVENESS	DIFFUSION	INI DLY	HPF FRQ.	LPF FRG.				
			TYPE A, B	0.1 ~ 25.0	0 ~ 10	0 ~ 10	0.1 ~ 1000.0 ms	* 1	* 2				
			TYPE - A	2.0	5	5	10.0 ms	THRU	10 kHz				
		INT PARAM	ER NUMBER	FB DLY	FB GAIN	FB HIGH	DENSITY						
			1 ~ 19	0.1 ~ 2600.0 ms	– 99 ~ 99 %	0.1 ~ 1.0	0 ~ 3						
			19	150.0 ms	0 %	0.7	2						
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
10	REVERSE GATE	PARAM	TYPE	ROOM SIZE	LIVENESS	DIFFUSION	INI DLY	HPF FRQ.	LPF FRG.				
			TYPE A, B	0.1 ~ 25.0	0 ~ 10	0 ~ 10	0.1 ~ 1000.0 ms	* 1	* 2				
			TYPE - A	2.0	5	5	10.0 ms	THRU	10 kHz				
		INT PARAM	ER NUMBER	FB DLY	FB GAIN	FB HIGH	DENSITY						
			1 ~ 19	0.1 ~ 2600.0 ms	– 99 ~ 99 %	0.1 ~ 1.0	0 ~ 3						
			19	150.0 ms	0 %	0.7	2						
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
11	DELAY L, C, R	PARAM	Lch DLY	Rch DLY	Cch DLY	Cch LVL							
			0.1 ~ 5200.0 ms	0.1 ~ 5200.0 ms	0.1 ~ 5200.0 ms	– 200 ~ 200 %							
			100.0 ms	200.0 ms	0.1 ms	0 %							
		INT PARAM	FB1 DLY	FB1 GAIN	FB2 DLY	FB2 GAIN	HIGH	HRF FRQ	LPF FRQ.				
			0.1 ~ 5200.0 ms	– 99 ~ 99 %	0.1 ~ 5200.0 ms	– 99 ~ 99 %	x 0.1 ~ x 1.0	* 1	* 2				
			100.0 ms	0 %	200.0 ms	0 %	1.0	THRU	THRU				
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			Lch DLY	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
12	STEREO ECHO	PARAM	LFB DLY	Lch F.B.	RFB DLY	Rch F.B.	HIGH						
			0.1 ~ 2600.0 ms	– 99 ~ + 99 %	0.1 ~ 2600.0 ms	– 99 ~ + 99 %	x 0.1 ~ x 1.0						
			170.0 ms	+ 60 %	178.0 ms	+ 58 %	0.9						
		INT PARAM	LINI DLY	RINI DLY	HRF FRQ.	LPF FRQ.							
			0.1 ~ 2600.0 ms	0.1 ~ 2600.0 ms	* 1	* 2							
			0.1 ms	0.1 ms	THRU	THRU							
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			Lch DLY	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: THRU, 32 Hz ~ 1.0 kHz
* 2: 1.0 ~ 16 kHz, THRU

MONO IN [L/R MIX] - SINGLE

Memory No.	Program Name	Function Key	Parameter 1	2	3	4	5	6	7	8	9	10	11
13	STEREO FLANGE A	PARAM	MOD. FRQ.	MOD. DEPTH	MOD. DLY	F.B. GAIN							
			0.05 ~ 40.0 Hz	0 ~ 100 %	0.1 ~ 100.0 ms	0 ~ 99 %							
			0.7 Hz	70 %	1.2 ms	35 %							
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			MOD. FRQ.	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
14	STEREO FLANGE B	PARAM	MOD. FRQ.	MOD. DEPTH 1	MOD. DLY 1	MOD. DEPTH 2	MOD. DLY 2	PHASE	FB GAIN				
			0.05 ~ 40.0 Hz	0 ~ 100 %	0 ~ 100.0 ms	0 ~ 100 %	0.1 ~ 100.0 ms	– 180.0 ~ + 180.0 deg	0 ~ 99 %				
			1.25 Hz	70 %	1.2 ms	70 %	0.4 ms	+ 90.0 deg	60 %				
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			MOD. FRQ.	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
15	CHORUS	PARAM	MOD. FRQ.	DM. DEPTH	AM. DEPTH								
			0.05 ~ 40.0 Hz	0 ~ 100 %	0 ~ 100 %								
			0.20 Hz	50 %	40 %								
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			MOD. FRQ.	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
16	STEREO PHASING	PARAM	MOD. FRQ.	MOD. DEPTH	MOD. DLY								
			0.05 ~ 40.0 Hz	0 ~ 100 %	0.1 ~ 5.0 ms								
			1.10 Hz	100 %	3.0 ms								
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			MOD. FRQ.	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: THRU, 32 Hz ~ 1.0 kHz
* 2: 1.0 ~ 16 kHz, THRU

MONO IN [L/R MIX] - SINGLE

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
17	TREMOLO	PARAM	MOD. FRQ.	MOD. DEPTH									
			0.05 ~ 40.0 Hz	0 ~ 100 %									
			6.00 Hz	50 %									
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			MOD. FRQ.	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
18	SYMPHONIC	PARAM	MOD. FRQ.	MOD. DEPTH									
			0.05 ~ 40.0 Hz	0 ~ 100 %									
			0.70 Hz	50 %									
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			MOD. FRQ.	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
19	ADR-NOISE GATE	PARAM	TRG. LEVEL	TRG. DLY	TRG. MSK	ATTACK	DECAY	DECAY LVL	HOLD	RELEASE	A TRG. LVL	MIDI TRG.	
			0 ~ 100	-100.0~100.0ms	3 ~ 24000 ms	3 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100 %	1 ~ 24000 ms	3 ~ 24000 ms	0 ~ 100	OFF, ON	
			65	– 7.0 ms	5 ms	5 ms	5 ms	100 %	90 ms	5 ms	100	OFF	
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			TRG. LEVEL	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
20	PITCH CHANGE-1	PARAM	1 PITCH	1 FINE	1 DLY	1 F. B.	1 LEVEL	2 PITCH	2 FINE	2 DLY	2 F. B.	2 LEVEL	
			– 24 ~ 24	–100 ~ +100	0.1 ~ 2300.0 ms	– 99 ~ + 99 %	0 ~ +100 %	– 24 ~ 24	– 100 ~ 100	0.1 ~ 2300.0 ms	– 99 ~ 99 %	0 ~ +100 %	
			0	+ 8	0.1 ms	0	+100 %	0	– 8	20.0 ms	0 %	+100 %	
		INT PARAM	BASE KEY										
			OFF C 1 ~ C 6										
			C3										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			1 PITCH	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: THRU, 32 Hz ~ 1.0 kHz
* 2: 1.0 ~ 16 kHz, THRU

MONO IN [L/R MIX] - SINGLE

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
21	PITCH CHANGE 2	PARAM	L PITCH	L FINE	L DLY	L. F. B.	R PITCH	R FINE	R DLY	R F. B.			
			– 24 ~ 24	– 100 ~ +100	0.1 ~ 2300.0 ms	– 99 ~ + 99 %	– 24 ~ + 24	– 100 ~ + 100	0.1 ~ 2300.0 ms	– 99 ~ + 99 %			
			0	8	0.1 ms	0 %	0	– 8	0.1 ms	0 %			
		INT PARAM	BASE KEY										
			OFF C 1 ~ C 6										
			C 3										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			L PITCH	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
22	PITCH CHANGE 3	PARAM	1 PITCH	1 FINE	1 DLY	1 LEVEL	2 PITCH	2 FINE	2 DLY	2 LEVEL	3 PITCH	3 FINE	3 DLY
			– 24 ~ +24	– 100 ~ + 100	0.1 ~ 4600.0ms	0 ~ +100 %	– 24 ~ + 24	– 100 ~ + 100	0.1 ~ 4600.0 ms	0 ~ + 100 %	– 24 ~ + 24	– 100 ~ + 100	0.1 ~ 4600.0 ms
			0	0	0.1 ms	100 %	+ 4	0	0.1 ms	100 %	+ 7	0	0.1 ms
			12										
			3 LEVEL										
			0 ~ +100 %										
			+100 %										
		INT PARAM	BASE KEY										
			OFF C 1 ~ C 6										
			C 3										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			1 PITCH	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
23	FREEZE 1	PARAM	REC. MODE	TRG. DLY	RECORD	OVER DUB	START	END	PITCH	PITCH FINE			
			MANUAL AUTO	–5800~+1000ms			0 ~ 5800 ms	0 ~ 5800 ms	– 24 ~ +24	– 100 ~ +100			
			AUTO	– 50 ms			0 ms	5800 ms	0	0			
		INT PARAM	INPUT TRG	ANALOG TRG	TRG. MSK	BASE KEY							
			OFF, ON	OFF, ON	8 ~ 3000 ms	OFF, C 1 ~ C 6							
			OFF	OFF	93 ms	C 3							
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REC. MODE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
24	FREEZE 2	PARAM	REC. MODE	TRG. DLY	RECORD	OVER DUB	START	LOOP	LOOP FINE	END	PITCH	PITCH FINE	
			MANUAL AUTO	–5800~+1000ms			0 ~ 5800 ms	0 ~ 5800 ms	– 200 ~ + 200	0 ~ 5800 ms	– 24 ~ + 24	– 100 ~ + 100	
			AUTO	– 50 ms			0 ms	4000 ms	0	5800 ms	0	0	
		INT PARAM	BASE KEY										
			OFF, C 1 ~ C 6										
			C 3										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REC. MODE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

MONO IN [L/R MIX] - SINGLE

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
25	PAN	PARAM	PAN TYPE	SPEED	F/R DEPTH	L/R DEPTH							
			* 1	0.05 ~ 40.00 Hz	0 ~ 100 %	0 ~ 100 %							
			L – TURN	0.50 Hz	80 %	80 %							
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 2	* 3									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			PAN TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
26	TRIGGERED PAN	PARAM	TRG. LEVEL	TRG. DLY	TRG. MSK	ATTACK	PANNING	RELEASE	DIRECTION	L/R BALANCE	A TRG. LVL	MIDI TRG.	
			1 ~ 100	–100.0~100.0ms	3 ~ 24000 ms	3 ~ 24000 ms	3 ~ 24000 ms	3 ~ 24000 ms	L → R, L ← R	0 ~ 100 %	0 ~ 100	OFF, ON	
			65	– 10.0 ms	1000 ms	23 ms	500 ms	850 ms	L → R	30	100	OFF	
		INT PARAM	HPF FRQ.	LPF FRQ.									
			* 1	* 2									
			THRU	THRU									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			TRG. LEVEL	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
27	DISTORTION	PARAM	DISTORTION	MID FRQ.	MID GAIN	TREBLE	DELAY						
			0 ~ 100 %	250Hz ~ 5.6kHz	– 12 ~ 12 dB	– 12 ~ 12 dB	0.1 ~ 1000.0 ms						
			100 %	280 Hz	+ 4 dB	+ 2 dB	0.1 ms						
		INT PARAM	TRG. LEVEL	RELEASE									
			0 ~ 100	3 ~ 24000 ms									
			10	106 ms									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			DISTORTION	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: L → R, L ← R, L ↔ R, L - TURN, R - TURN
* 2: THRU, 32 Hz ~ 1.0 kHz
* 3: 1.0 ~ 16 kHz, THRU

MONO IN [L/R MIX] - MULTI

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
28	MULTI (CHO & REV)	PARAM	CO DI CH RV	CO DI CH RV	CO DI CH RV	CO DI CH RV	CH. FREQ	CH. DM DEPTH	CH. AM DEPTH	RV. RT	RV. HIGH	RV. DLY	RV. MIX
			❍ CO, ● CO	❍ DI, ● DI	❍ CH, ● CH	❍ RV, ● RV	0.05 ~ 40.00 Hz	0 ~ 100 %	0 ~ 100 %	0.3 ~ 480.0 s	0.1 ~ 1.0	0.1 ~ 1000.0 ms	0 ~ 100 %
			● CO	❍ DI	● CH	● RV	0.60 Hz	60 %	30 %	2.4 s	0.6	10.0 ms	25 %
		INT PARAM	CO. ATTACK	CO. RELS	CO. THRSLD	CO. RATIO	DI. DIST	DI. MID F	DI. MID G	DI. TRBL	TRG. LEVEL	RELEASE	
			1 ~ 40 ms	10 ~ 1000 ms	– 42 ~ –12 dB	1.0 ~ 20.0	0 ~ 100 %	250 Hz ~ 5.6 kHz	– 12 ~ 12 dB	– 12 ~ 12 dB	0 ~ 100	3 ~ 24000 ms	
			23 ms	200 ms	– 15 dB	5.0	100 %	900 Hz	0 dB	0 dB	65	106 ms	
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			❍ CO, ● CO	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
29	MULTI (SYM + REV)	PARAM	CO DI SY RV	CO DI SY RV	CO DI SY RV	CO DI SY RV	SY FREQ	SY DEPTH	RV. RT	RV. HIGH	RV. DLY	RV. MIX	
			❍ CO, ● CO	❍ DI, ● DI	❍ SY, ● SY	❍ RV, ● RV	0.05 ~ 40.0 Hz	0 ~ 100 %	0.3 ~ 480.0 s	0.1 ~ 1.0	0.1 ~ 1000.0 ms	0 ~ 100 %	
			● CO	❍ DI	● SY	● RV	0.85 Hz	50 %	0.4 s	0.6	40.0 ms	30 %	
		INT PARAM	CO. ATTACK	CO. RELS	CO. THRSLD	CO. RATIO	DI. DIST	DI. MID F	DI. MID G	DI. TRBL	TRG. LEVEL	RELEASE	
			1 ~ 40 ms	10 ~ 1000 ms	– 42 ~ –12 dB	1.0 ~ 20.0	0 ~ 100 %	250 Hz ~ 5.6 kHz	– 12 ~ 12 dB	– 12 ~ 12 dB	0 ~ 100	3 ~ 24000 ms	
			23 ms	500 ms	– 12 dB	7.0	100 %	900 Hz	0 dB	0	58	150 ms	
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			❍ CO, ● CO	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
30	MULTI (EXC & REV)	PARAM	CO DI EX RV	CO DI EX RV	CO DI EX RV	CO DI EX RV	EX. HPF F	EX. ENHANCE	EX. MIX LVL	RV. RT	RV. HIGH	RV. DLY	RV. MIX
			❍ CO, ● CO	❍ DI, ● DI	❍ EX, ● EX	❍ RV, ● RV	500 Hz ~ 16 kHz	0 ~ 100 %	0 ~ 100 %	0.3 ~ 480.0 s	0.1 ~ 1.0	0.1 ~ 1000.0 ms	0 ~ 100 %
			● CO	❍ DI	● EX	● RV	4.0 kHz	50 %	60 %	1.2 s	0.7	20.0 ms	20 %
		INT PARAM	CO. ATTACK	CO. RELS	CO. THRSLD	DI. RATIO	DI. DIST	DI. MID F	DI. MID G	DI. TRBL	TRG. LEVEL	RELEASE	
			1 ~ 40 ms	10 ~ 1000 ms	– 42 ~ –12 dB	1.0 ~ 20.0	0 ~ 100 %	250 Hz ~ 5.6 kHz	– 12 ~ 12 dB	– 12 ~ 12 dB	0 ~ 100	3 ~ 24000 ms	
			20 ms	200 ms	– 12 dB	7.0	100 %	900 Hz	0 dB	0	10	106 ms	
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			❍ CO, ● CO	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

2CH IN

Memory No.	Program Name	Function Key	Parameter 1	2	3	4	5	6	7	8	9	10	11
31	PLATE + HALL	PARAM	**PLT RT**	**PLT HIGH**	**PLT DIFF**	**PLT DLY**	**HAL RT**	**HAL HIGH**	**HAL DIFF**	**HAL DLY**			
			0.3 ~ 480.0 s	0.1~ 1.0	0 ~ 10	0.1 ~ 1000.0 ms	0.3 ~ 480.0 s	0.1 ~ 1.0	0 ~ 10	0.1 ~ 1000.0 ms			
			2.6 s	0.6	5	30.0 ms	2.6 s	0.6	5	30.0 ms			
		INT PARAM	**OUT MODE**	**PLT LPF**	**HAL LPF**								
			ST, MONO x 2	* 2	* 2								
			ST	8.0 kHz	8.0 kHz								
		EXT CTRL ASSIGN	**1**	**2**	EQ TYPE = 2		BALANCE TYPE = 2						
			PLT RT	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
32	ER + REV	PARAM	**ER TYPE**	**ROOM SIZE**	**LIVENESS**	**ER DIFF**	**ER DLY**	**REV TIME**	**HIGH**	**REV DIFF**	**REV DLY**		
			* 1	0.1 ~ 25.0	0 ~ 10	0 ~ 10	0.1 ~ 1000.0 ms	0.3 ~ 480.0 s	0.1 ~ 1.0	0 ~ 10	0.1~ 1000.0 ms		
			L - HALL	0.5	5	5	30.0 ms	2.6 s	0.6	5	30.0 ms		
		INT PARAM	**OUT MODE**	**REV LPF**									
			ST, MONO x 2	* 2									
			ST	8.0 kHz									
		EXT CTRL ASSIGN	**1**	**2**	EQ TYPE = 2		BALANCE TYPE = 2						
			ER TYPE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
33	ECHO + REV	PARAM	**Lch DLY**	**Lch F. B.**	**Rch DLY**	**Rch F. B.**	**ECHO HIGH**	**REV TIME**	**REV HIGH**	**REV DIFF**	**REV DLY**		
			0.1 ~ 1000.0 ms	– 99 ~ +99 %	0.1 ~ 1000.0 ms	– 99 ~ +99 %	0.1 ~ 1.0	0.3 ~ 480.0 s	0.1 ~ 1.0	0 ~ 10	0.1 ~ 1000.0 ms		
			100.0 ms	+50 %	30.0 ms	+50 %	0.5	2.6 s	0.5	5	30.0 ms		
		INT PARAM	**OUT MODE**	**LINI DLY**	**RINI DLY**	**REV LPF**							
			ST, MONO x 2	0.1 ~ 1000.0 ms	0.1 ~ 1000.0 ms	* 2							
			ST	0.1 ms	0.1 ms	8.0 kHz							
		EXT CTRL ASSIGN	**1**	**2**	EQ TYPE = 2		BALANCE TYPE = 2						
			Lch DLY	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: S - HALL, L - HALL, RANDOM, REVERSE, PLATE, SPRING
* 2: 1.0 ~ 16 kHz, THRU

2CH IN

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
34	CHORUS + REV	PARAM	MOD. FRQ	DM DEPTH	AM DEPTH	REV TIME	HIGH	REV DIFF	REV DLY				
			0.05 ~ 40.00 Hz	0 ~ 100 %	0 ~ 100 %	0.3 ~ 480 s	0.1 ~ 1.0	– 0 ~ 10	0.1 ~ 1000.0 ms				
			0.20 Hz	50 %	40 %	2.6 s	0.5	5	30.0 ms				
		INT PARAM	OUT MODE	REV LPF									
			ST, MONO x 2	* 1									
			ST	8.0 kHZ									
		EXT CTRL ASSIGN	1	2	EQ TYPE = 2		BALANCE TYPE = 2						
			MOD. FRQ	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
35	PAN + PAN	PARAM	1 PAN TYP	1 SPEED	1 F/R DPT	1 L/R DPT	1 DLY	2 PAN TYP	2 SPEED	2 F/R DPT	2 L/R DPT	2 DLY	PHASE
			* 2	0.05 ~ 40.00 Hz	0 ~ 100 %	0 ~ 100 %	0.1 ~ 1000.0 ms	* 2	0.05 ~ 40.00Hz	0 ~ 100 %	0 ~ 100 %	0.1 ~ 1000.0 ms	* 3
			L → R	0.50 Hz	100 %	100 %	0.1 ms	L ← R	0.50 Hz	100 %	50 %	0.1 ms	0.0 deg
		INT PARAM	NOT AVAILABLE										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 2		BALANCE TYPE = 2						
			1 PAN TYP	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: 1.0 ~ 16 kHz, THRU
* 2: L → R, L ← R, L ↔ R, L - TURN, R - TURN
* 3: – 180.0 ~ +180.0 deg

STEREO IN

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
36	COMPRESSOR	PARAM	ATTACK	RELEASE	THRESHOLD	RATIO	EXPAND THRS	EXPND RATIO	DELAY	DET. DLY			
			1 ~ 40 ms	10 ~ 2000 ms	– 48 ~ – 6 dB	1.0 ~ 20.0	– 72 ~ – 30 dB	1.0 ~ 5.0	0.1 ~ 2300.0 ms	– 50.0 ~ 50.0 ms			
			18 ms	200 ms	– 24 dB	3.0	– 42 dB	2.0	0.1 ms	0.0 ms			
		INT PARAM	DET. HPF										
			* 1										
			THRU										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			ATTACK	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
37	LO LVL EXPANDER	PARAM	THRESHOLD	RATIO	DELAY								
			– 72 ~ – 30 dB	1.0 ~ 5.0	0.1 ~ 2300.0 ms								
			– 42 dB	2.0	0.1 ms								
		INT PARAM	NOT AVAILABLE										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			THRESHOLD	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
38	AURAL EXCITER	PARAM	HPF FRQ	ENHANCE	MIX LVL	DELAY							
			500 Hz ~ 16 kHz	0 ~ 100 %	0 ~ 100 %	0.1 ~ 1000.0 ms							
			1.6 kHz	50 %	50 %	0.1 ms							
		INT PARAM	NOT AVAILABLE										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			HPF FRQ	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

* 1: THRU, 500 Hz ~ 8.0 kHz

STEREO IN

Memory No.	Program Name	Function Key	Parameter										
			1	2	3	4	5	6	7	8	9	10	11
39	STEREO PITCH	PARAM	PITCH	PITCH FINE	DELAY	FB GAIN							
			– 24 ~ 24	– 100 ~ +100	0.1 ~ 2300.0 ms	– 99 ~ +99 %							
			0	0	0.1 ms	0 %							
		INT PARAM	BASE KEY										
			OFF, C 1 ~ C 6										
			C 3										
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			PITCH	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									
40	STEREO FREEZE	PARAM	REC. MODE	TRG. DLY	RECORD	OVER DUB	START	END	PITCH	PITCH FINE			
			MANUAL, AUTO	–2900~1000 ms			0 ~ 2900 ms	0 ~ 2900 ms	– 24 ~ 24	– 100 ~ +100			
			AUTO	– 50 ms			0	2900 ms	0	0			
		INT PARAM	INPUT TRG	ANALOG TRG	TRG. MSK	BASE KEY							
			OFF, ON	OFF, ON	8 ~ 3000 ms	OFF, C 1 ~ C 6							
			OFF	OFF	93 ms	C 3							
		EXT CTRL ASSIGN	1	2	EQ TYPE = 1		BALANCE TYPE = 1						
			REC. MODE	BALANCE									
			0.0 ~100.0 %	0.0 ~100.0 %									

EQUALIZER

TYPE	MEM No.	Program No.	Function Key	PARAMETER									
				1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	1 ~ 30, 36 ~ 40	**[MONO IN / STEREO] TYPE**	EQ	EQ / OFF / D. FLT	LOW EQ	LOW FRQ	LOW GAIN	LOW Q	HI EQ	HI FRQ	HI GAIN	HI Q	CTL TYPE
		Displays 2 ~ 9 on EQ		EQ / OFF / D. FLT	PEAK, SHLV	32 ~ 2.2 kHz	– 15 ~ 15 dB	0.1 ~ 5.0	PEAK, SHLV	500 ~ 16 kHz	– 15 ~ 15 dB	0.1 ~ 5.0	* 2
		Displays 10 ~ 18 on D.FLT LEVEL		OFF	PEAK	100 Hz	0 dB	0.7	PEAK	10 kHz	0 dB	0.7	LFO
		Displays 10 ~ 15, 19 on D.FLT LFO	↑	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	
				FLT TYPE	F CENTER	F DEPTH	GAIN * 4	Q	SHIFT	SENSITIVITY	DECAY	LFO FRQ	
				* 3	32 ~ 16 kHz	0 ~ 8 oct	* 1	LOW, HIGH	UP, DOWN	1 ~ 10	1 ~ 10	0.1 ~ 10.0 Hz	
				LPF	1.0 kHz	4 oct	– 12 dB	HIGH	DOWN	5	5	2.5 Hz	
			↑										
2	31 ~ 35	**[2 CHIN] TYPE**	EQ	EQ / OFF / D. FLT	L LOW EQ	L LOW F	L LOW G	L LOW Q	L HI EQ	L HI F	L HI G	L HI Q	R LOW EQ
		Displays 2 ~ 17 on EQ		EQ / OFF / D. FLT	PEAK, SHLV	32 ~ 2.2 kHz	– 15 ~ 15 dB	0.1 ~ 5.0	PEAK, SHLV	500 ~ 16 kHz	– 15 ~ 15 dB	0.1 ~ 5.0	PEAK / SHLV
		Displays 18 ~ 26 on D.FLT LEVEL		OFF	PEAK	100 Hz	0 dB	0.7	PEAK	10 kHz	0 dB	0.7	PEAK
		Displays 18 ~ 23, 27 on D.FLT LFO	↑	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
				R LOW F	R LOW G	R LOW Q	R HI EQ	R HI F	R HI G	R HI Q	CTL TYPE	FLT TYPE	F CENTER
				32 ~ 2.2 kHz	– 15 ~ 15 dB	0.1 ~ 5.0	PEAK, SHLV	500 ~ 16 kHz	– 15 ~ 15 dB	0.1 ~ 5.0	* 2	* 3	32 ~ 16 kHz
				100 Hz	0 dB	0.7	PEAK	10 kHz	0 dB	0.7	LFO	LPF	1.0 kHz
			↑	**21**	**22**	**23**	**24**	**25**	**26**	**27**			
				F DEPTH	GAIN * 4	Q	SHIFT	SENSITIVITY	DECAY	LFO FRQ.			
				0 ~ 8 oct	* 1	LOW, HIGH	UP, DOWN	1 ~ 10	1 ~ 10	0.1 ~ 10.0 Hz			
				4 oct	– 12 dB	HIGH	DOWN	5	5	2.5 Hz			

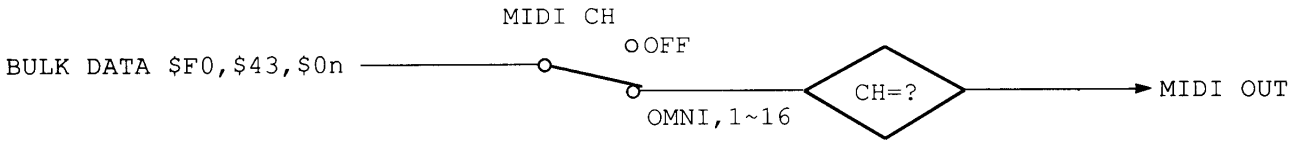
* 1 = – 18, – 12, – 6, 6, 12, 18 (dB)
* 2 = LEVEL, LFO
* 3 = LPF, HPF, BPF, PEQ
* 4 = Display on FLT TYPE = PEQ only

BALANCE

TYPE	MEM No.	Program No.	Function Key	PARAMETER									
				1	2	3	4	5	6	7	8	9	10
1	1 ~ 30, 36 ~ 40	[MONO IN / STEREO] TYPE	BAL	BALANCE	OUT LVL								
				0 ~ 100 %	0 ~ 200 %								
				100 %	100 %								
			↑										
			↑										
2	31 ~ 35	[2 - CH, IN] TYPE	BAL	BALANCE 1	OUT LVL 1	BALANCE 2	OUT LVL 2						
				0 ~ 100 %	0 ~ 200 %	0 ~ 100 %	0 ~ 200 %						
				100 %	100 %	100 %	100 %						
			↑										
			↑										

MIDI DATA FORMAT

1.Transmitting Conditions



2.Transmitting Data

2.1 System information

1) System Exclusive Messages

① MEMORY BULK DATA

MIDI DATA FORMAT Transmission is enabled on the MIDI channel of the currently selected bank. Data is transmitted when BULK OUT 1 is displayed and BULK OUT is executed, and when the MEMORY BULK DUMP REQUEST message is received. The data to be transmitted is the program of the memory number indicated. If the memory number is "*", data is sent from Memory 41 to Memory 99 in succession.

① DONNEES DE BLOC DE MEMOIRES

La transmission du format des données MIDI (MIDI DATA FORMAT) est validée sur le canal MIDI du bank actuellement sélectionné. Les données sont transmises lorsque BULK OUT1 est affiché et BULK OUT est exécuté ainsi que lorsque le message "MEMORY BULK DUMP REQUEST" (demande de vidage de bloc de mémoire) est reçu. Les données à transmettre sont le programme du numéro de mémoire indiqué. Si le numéro de mémoire est "*", les données sont transmises de la mémoire 41 à la mémoire 99 à la suite les unes des autres.

① Speicherblockdaten

Die Übertragung erfolgt auf dem Kanal der gerade angewählten Bank. Wird die Meldung "BULK OUT 1" angezeigt nd geht ein Blockabwurfbefehl (Bulk dump request) ein, so wird ein Blockabwurf (Bulk dump) ausgeführt. Es werden dann die Daten übertragen, deren Speichernummer gerade angezeigt wird. Lautet die Speichernummer "*", werden alle Benutzer-Speicher (41~99) der Reihe nach gesendet.

STATUS	11110000(F0H)	
ID No.	01000011(43H)	
SUB STATUS	0000nnnn(0nH)	n=0(channel number1)~15 (channel number16)
FORMAT No.	01111110(7EH)	
BYTE COUNT	00000010(02H)	
BYTE COUNT	00001010(0AH)	
	01001100(4CH)"L"	
	01001101(4DH)"M"	
	00100000(20H)SPACE	
	00100000(20H)SPACE	
	00111000(38H)"8"	
	00110011(33H)"3"	
	00110111(37H)"7"	
	00111000(38H)"8"	
DATA NAME	01001101(4DH)"M"	
MEMORY	0mmmmmmm	M=1(MEMORY No.1)~99(MEMORY No.99)
DATA	0ddddddd	
	↓	256BYTE
	0ddddddd	
CHECK SUM	0eeeeeee	
EOX	11110111(F7H)	

② Bank Program Change Chart Bulk Data
Transmission is enabled on the MIDI channel of the currently selected bank. Data is transmitted when BULK OUT 1 is displayed and BULK OUT is executed, and when the PROGRAM CHANGE CHART BULK DUMP REQUEST message is received. The data to be transmitted is the program change chart (the chart showing the correspondence between program numbers and memory numbers). If the bank number is "*", the data from banks 1 - 4 (A - D) is transmitted in succession.

② Données en bloc de la table des changements de programme du bank (Bank Programm Change Chart Bulk Data)
La transmission est possible sur le canal MIDI du bank actuellement sélectionné, Les données sont transmises lorsque BULK OUT1 est affiché et BULK OUT est exécuté ainsi que lorsque le message PROGRAM CHANGE CHART BULK DUMP REQUEST (demande de vidage en bloc de la table des changements de programme) est reçu. Les données à transmettre sont le tableau des changements de programme (le tableau indiquant la correspondance entre le numéros de programme et les numéros de mémoire). Si le numéro de programme est "*", les données des banks 1-4 (A-D) sont transmises les unes après les autres.

② Blockdaten der Programmwechsel-Zuordnungstabelle einer Bank
Die Übertragung erfolgt auf dem Kanal der gerade angewählten Bank. Wird die Meldung "BULK OUT 2" angezeigt und geht ein Blockabwurfbefehl der Programmwechsel-Zuordnungstabelle (Program change chart bulk dump request) ein, so wird der Abwurf ausgeführt. Es werden dann die Daten der Programmwechsel-Zuordnungstabelle übertragen. (In dieser Tabelle wird jeder Speichernummer des SPX1000 eine MIDI-Programmwechselnummer zugeordnet). Lautet die Banknummer "*", werden die Daten aller Bänke (A~D) der Reihe nach gesendet.

STATUS	11110000(F0H)	
ID No.	01000011(43H)	
SUB STATUS	0000nnnn(0nH)	n=0(channel number1)~15 (channel number16)
FORMAT No.	01111110(7EH)	
BYTE COUNT	00000001(01H)	
BYTE COUNT	00001010(0AH)	
	01001100(4CH)"L"	
	01001101(4DH)"M"	
	00100000(20H)SPACE	
	00100000(20H)SPACE	
	00111000(38H)"8"	
	00110011(33H)"3"	
	00110111(37H)"7"	
	00111000(38H)"8"	
DATA NAME	01010100(54H)"T"	
BANK No.	0zzzzzzz	Z=BANK 1~4(1=A, 2=B, 3=C, 4=D)
DATA	0ddddddd	128BYTE
	0ddddddd	
CHECK SUM	0eeeeeee	
EOX	11110111(F7H)	

③ User ER Pattern Bulk Data
Transmission is enabled on the MIDI channel of the currently selected bank. Data is transmitted when BULK OUT 2 is displayed and BULK OUT is executed, and when the USER ER PATTERN BULK DUMP REQUEST message is received. The data to be transmitted is that of the indicated pattern number. If the pattern number is "*", patterns 1 - 4 (A - D) are transmitted in succession.

③ Données en bloc de motifs USER ER.
La transmission est validée sur le canal MIDI du bank actuellement sélectionné. Les données sont transmises lorsque BULK OUT 2 est affiché et BULK OUT est exécuté ainsi que lorsque le message USER ER PATTERN BULK DUMP REQUEST (demande de vidage en bloc de motifs de réflexions précoces de l'utilisateur) est reçu. Les données à transmettre sont celles des numéros de motifs indiqués. Si le numéro de motif est "*", les motifs 1-4 (A-D) sont transmis l'un après l'autre.

③ User ER-Programmblockdaten
Die Übertragung erfolgt auf dem Kanal der gerade angewählten Bank. Wird die Meldung "BULK OUT 2" angezeigt und geht ein Blockabwurfbefehl der Erstreflexions-Musterprogramme (User ER pattern bulk dump request) ein, so wird der Abwurf ausgeführt. Es werden dann die Daten des angezeigten Speichers übertragen. Lautet die Speichernummer "*", werden die Daten aller vier User-Speicher (A~D) der Reihe nach gesendet.

STATUS	11110000(F0H)	
ID No.	01000011(43H)	
SUB STATUS	0000nnnn(0nH)	n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110(7EH)	
BYTE COUNT	00000001(01H)	
BYTE COUNT	01101110(6EH)	
	01001100(4CH)"L"	
	01001101(4DH)"M"	
	00100000(20H)SPACE	
	00100000(20H)SPACE	
	00111000(38H)"8"	
	00110011(33H)"3"	
	00110111(37H)"7"	
	00111000(38H)"8"	
DATA NAME	01000101(45H)"E"	
ER PATTERN No.	0zzzzzzz	Z=ER PATTERN 1~4(1=A, 2=B, 3=C, 4=D)
DATA	0ddddddd	228BYTE
	0ddddddd	
CHECK SUM	0eeeeeee	
EOX	11110111(F7H)	

④ System Setup Bulk Data
Transmission is enabled on the MIDI channel of the currently selected bank. Data is transmitted when BULK OUT 2 is displayed and BULK OUT is executed, and when the SYSTEM SETUP DATA DUMP REQUEST message is received.

④ Données en bloc de configuration du système
La transmission est validée sur le canal MIDI du bank actuellement sélectionné. Les données sont transmises lorsque BULK OUT 2 est affiché et BULK OUT est exécuté ainsi que lorsque le message SYSTEM SETUP DATA DUMP REQUEST (demande de vidage des données de configuration du système) est reçu. -3-

④ Systemblockdaten
Die Übertragung erfolgt auf dem Kanal der gerade angewählten Bank. Die Daten werden nur gesendet, wenn "BULK OUT 2" angezeigt und wenn ein Systemdaten-Abwurfbefehl (System setup data dump request) eingeht.

STATUS	11110000(F0H)	
ID No.	01000011(43H)	
SUB STATUS	0000nnnn(0nH)	n=0(Channel NO.1)~15(Channel No.16)
FORMAT No.	01111110(7EH)	
BYTE COUNT	00000000(00H)	
BYTE COUNT	00011100(1CH)	
	01001100(4CH)"L"	
	01001101(4DH)"M"	
	00100000(20H)SPACE	
	00100000(20H)SPACE	
	00111000(38H)"8"	
	00110011(33H)"3"	
	00110111(37H)"7"	
	00111000(38H)"8"	
DATA NAME	01010011(53H)"S"	
	00100000(20H)SPACE	
SOFT VERSION No.	0vvvvvvv	
SOFT VERSION No.	0rrrrrrr	
DATA	0ddddddd	16BYTE
	0ddddddd	
CHECK SUM	0eeeeeee	
EOX	11110111(F7H)	

⑤ 59 Memory/All Banks/All ER Patterns/System Setup Data/Bulk Data
Transmission is enabled on the MIDI channel of the currently selected bank. Data is transmitted when BULK OUT 1 is displayed and ALL BULK OUT is executed. The data to be transmitted is the programs of Memory Nos. 41 - 99, all programs of the 4 bank change charts, the four ER patterns, and the System Setup data. The transmission order is as follows: programs of Memory Nos. 41 to 99, Bank A program change chart to Bank D program change chart, ER pattern A to ER pattern D, and System Setup data.

⑤ Données en bloc de 59 mémoires /Tous les banks/Tous les motifs ER/ Données de configuration du système La transmission est validée sur le canal MIDI du bank actuellement sélectionné. Les données sont transmises lorsque BULK OUT1 est affiché et l'instruction ALL BULK OUT est exécutée. Les données à transmettre sont les programmes des mémoires Nos 41 - 99, tous les programmes des tables de changements de programmes des 4 banks, les quatres motifs ER et les données de configuration du système. L'ordre de transmission est le suivant: programmes de mémoires Nos 41 à 99, tables des changements de programmes des banks A à D, motifs ER A à D et données de configuration du système.

⑤ 59 Speicher/Alle Bänke/Alle ER-Speicher/System-Daten als Block
Die Übertragung erfolgt auf dem Kanal der gerade angewählten Bank. Die Daten werden nur gesendet, wenn "BULK OUT 1" angezeigt und wenn der Befehl "ALL BULK OUT" ausgeführt wird. Es werden folgende Daten übertragen: RAM-Speicher 41~99, alle Daten der vier Programmwechsel-Zuordnungstabellen, die vier User-ER Speicher und die System-Daten. Die Übertragungsreihenfolge ist: RAM-Speicher, Programmwechseltabelle A~D, ER-Speicher A~D und die System-Daten.

STATUS	11110000(F0H)		MEMORY 41
ID No.	01000011(43H)		
SUB STATUS	0000nnnn(0nH)	n=0(Channel No.1)~15(Channel No.16)	
FORMAT No.	01111110(7EH)		
BYTE COUNT	00000010(02H)		
BYTE COUNT	00001010(0AH)		
	01001100(4CH)	"L"	
	01001101(4DH)	"M"	
	00100000(20H)	SPACE	
	00100000(20H)	SPACE	
	00111000(38H)	"8"	
	00110011(33H)	"3"	
	00110111(37H)	"7"	
	00111000(38H)	"8"	
DATA NAME	01001101(4DH)	"M"	
MEMORY No.	0mmmmmmm	M=41(Memory No.41)~99(Memory No.99)	
DATA	0ddddddd	256BYTE	
	↓		
	0ddddddd		
CHECK SUM	0eeeeeee		
EOX	11110111(F7H)		

STATUS	11110000(F0H)	MEMORY42
EOX	11110111(F7H)	
⋮		
STATUS	11110000(F0H)	MEMORY99
EOX	11110111(F7H)	

STATUS	11110000(F0H)		BANK A
ID No.	01000011(43H)		
SUB STATUS	0000nnnn(0nH)	n=0(Channel No.1)~15(Channel No.16)	
FORMAT No.	01111110(7EH)		
BYTE COUNT	00000001(01H)		
BYTE COUNT	00001010(0AH)		
	01001100(4CH)	"L"	
	01001101(4DH)	"M"	
	00100000(20H)	SPACE	
	00100000(20H)	SPACE	
	00111000(38H)	"8"	
	00110011(33H)	"3"	
	00110111(37H)	"7"	
	00111000(38H)	"8"	
DATA NAME	01010100(54H)	"T"	
BANK No.	0zzzzzzz	Z=BANK1~4(1=A,2=B,3=C,4=D)	

Continuous

DATA	0ddddddd ↓ 0ddddddd	128BYTE
CHECK SUM	0eeeeeee	
EOX	11110111(F7H)	

STATUS	11110000(F0H)	BANK B
EOX	11110111(F7H)	
STATUS	11110000(F0H)	BANK C
EOX	11110111(F7H)	
STATUS	11110000(F0H)	BANK D
EOX	11110111(F7H)	

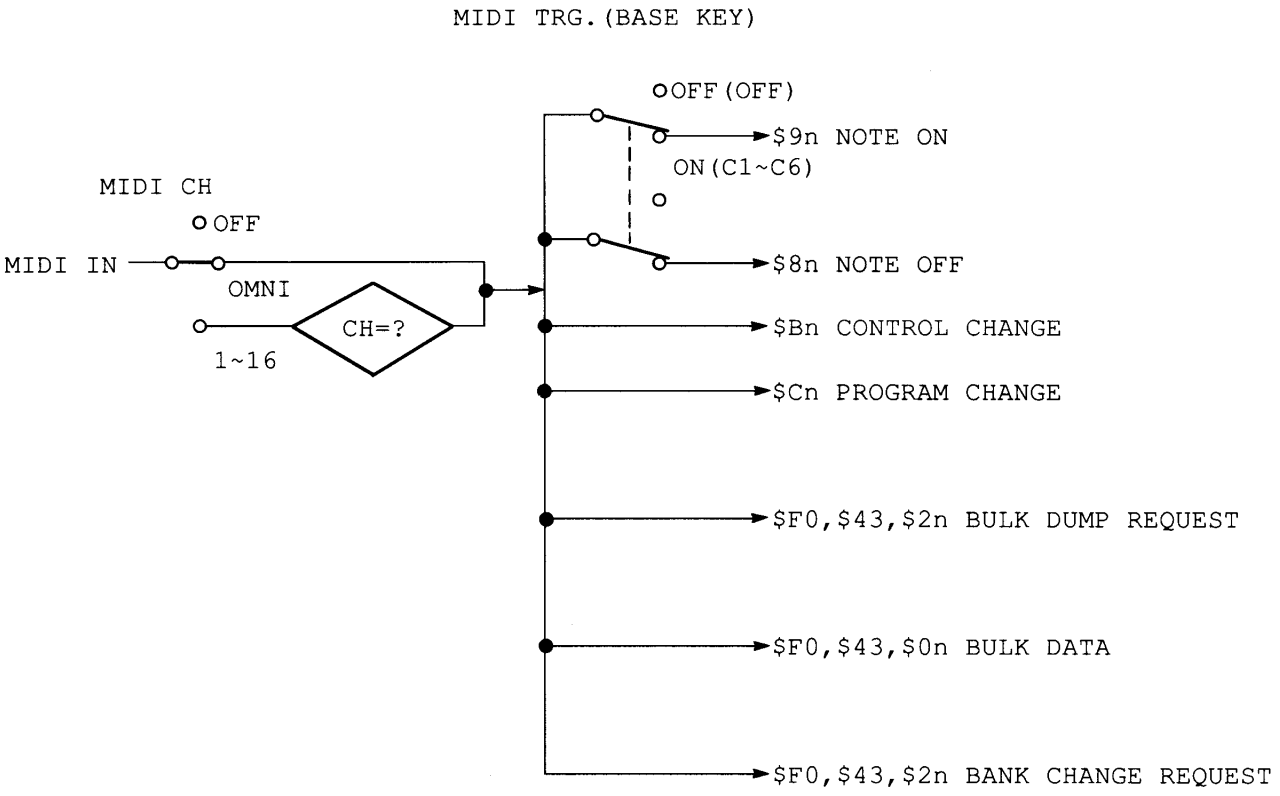
ER PATTERN A

STATUS	11110000(F0H)	
ID No.	01000011(43H)	
SUB STATUS	0000nnnn(0nH)	n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110(7EH)	
BYTE COUNT	00000001(01H)	
BYTE COUNT	01101110(6EH)	
	01001100(4CH)"L"	
	01001101(4DH)"M"	
	00100000(20H)SPACE	
	00100000(20H)SPACE	
	00111000(38H)"8"	
	00110011(33H)"3"	
	00110111(37H)"7"	
	00111000(38H)"8"	
DATA NAME	01000101(45H)"E" ER PATTERN	
ER PATTERN No.	0zzzzzzz	Z=BANK1~4(1=A,2=B,3=C,4=D)
DATA	0ddddddd ↓ 0ddddddd	228BYTE
CHECK SUM	0eeeeeee	
EOX	11110111(F7H)	

STATUS	11110000(F0H)	ER PATTERN B
EOX	11110111(F7H)	
STATUS	11110000(F0H)	ER PATTERN C
EOX	11110111 (F7H)	
STATUS	11110000 (F0H)	ER PATTERN D
EOX	11110111 (F7H)	

STATUS	11110000	(F0H)
ID No.	01000011	(43H)
SUB STATUS	0000nnnn	(0nH) n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110	(7EH)
BYTE COUNT	00000000	(00H)
BYTE COUNT	00011100	(1CH)
	01001100	(4CH)"L"
	01001101	(4DH)"M"
	00100000	(20H)SPACE
	00100000	(20H)SPACE
	00111000	(38H)"8"
	00110011	(33H)"3"
	00110111	(37H)"7"
	00111000	(38H)"8"
DATA NAME	01010011	(53H)"S"
	00100000	(20H)
SOFT VERSION No.	0vvvvvvv	
SOFT VERSION No.	orrrrrrr	
	0ddddddd	
	0ddddddd	16BYTE
CHECK SUM	0eeeeeee	
EOX	11110111	(F7H)

3.Receiving Conditions



4. Reception Data

4-1. Channel information

1) Channel voice messages

① Note On

Reception is enabled on the MIDI channel of the currently selected bank. For programs of Memory Nos. 1 - 5, 19, and 26, if the parameter of MIDI TRG. is ON, this is received as a trigger.
For programs of Memory Nos. 20 - 24, 39, and 40, this is received as a message to control pitch variation. The velocity value is ignored. Reception is not possible when the Base Key parameter is OFF.

① Note activée

La réception est validée sur le canal MIDI du bank actuellement sélectionné. Pour les programmes de mémoire Nos 1-5, 19 et 26, si le paramètre de MIDI TRG. est ON, ceci est reçu en tant que message de déclenchement. Pour les programmes des mémoires Nos 20 - 24, 39 et 40, ceci est reçu en tant que message de contrôle de la variation de hauteur. La valeur de vélocité est ignorée. La réception n'est pas possible lorsque le paramètre "Base Key" est OFF.

① Note An

Der Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Ist die MIDI TRIGGER-Funktion der Programme 1~5, 19 und 26 eingeschaltet, gelten die empfangenen Meldungen als Auslöser (Trigger).
Für die Programme 20~24, 39 und 40 werden die empfangenen Meldungen zur Steuerung der Tonhöhe verwendet. Die Anschlagdynamik wird nicht ausgewertet. Der Empfang ist nur möglich, wenn der BASE KEY-Paremeter eingeschaltet ist.

STATUS	1001nnnn (9nH)	n=0(Channel No.1)~15(Channel No.16)
NOTE No.	0kkkkkkk	k=0(C-2)~127 (G8)
VELOCITY	ovvvvvvv	v=0~127

② Note Off
This message is used when playback of the Memory No. 24 FREEZE 2 is finished. The velocity value is ignored. The reception conditions are the same as in ① Note On.

② Note désactivée
Ce message est utilisé lorsque la reproduction de la mémoire No 24 FREEZE 2 est terminée. La valeur de vélocité est ignorée. Les conditions de réception sont les mêmes que pour 1> Note activée.

② Note Aus
Diese Meldung ist nur am Ende der Wiedergabe des Programmes 24. Freeze 2 notwendig. Die Anschlagdynamik wird nicht ausgewertet. Die Empfangsbedingugen sind dieselben wie die der Note-An-Meldungen (1).

STATUS	1000nnnn (8nH)	n=0(Channel No.1)~15(Channel No.16)
NOTE No.	0kkkkkkk	k=0(C-2)~127(G8)
VELOCITY	ovvvvvvv	v=0~127

③ Control Change
Reception is enabled on the MIDI channel of the currently selected bank. When receiving, parameters can be controlled. Change them by using the corresponding controller based on the Control Assignment List.

③ Changements de commande
La réception est validée sur le canal MIDI du bank actuellement sélectionné. Pendant la réception, les paramètres peuvent être contrôlés. Les changer en utilisant les commandes correspondantes spécifiées dans la liste des assignations de commandes.

③ Steuerelementänderung
Der Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Mit den Steuerelement-Meldungen kann man bestimmte Parameter steuern. Hierfür muß ein Steuerelement zugeteilt werden.

STATUS	1011nnnn (BnH)	n=0(CHANNEL NO.1)~15(CHANNEL NO.16)
CONTROL NO.	0ccccccc	c=0~120
CONTROL VALUE	0vvvvvvv	v=0~127

④ Program Change
Reception is enabled on the MIDI channel of the currently selected bank. When receiving, the desired program can be loaded, based on the program change chart of that particular bank.

④ Changement de programme
La réception est validée sur le canal MIDI du bank actuellement sélectionné. Pendant la réception, un programme appartenant au bank sélectionné peut être chargé.

④ Programmwechsel
Der Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Jede beliebige Speichernummer kann jeder beliebigen Programmwechselnummer zugeordnet werden.

STATUS	1100nnnn (CnH)		n=0(CHANNEL NO.1)~15(CHANNEL NO.16)
PROGRAM No.	0ppppppp		p=0~127

4-2. System Information

1) System exclusive messages

① Memory Bulk Dump Request

Reception is enabled on the MIDI channel of the currently selected bank. When this message is received, BULK OUT is executed for the program of the indicated memory number.

① Demande de vidage en bloc de mémoires

La réception est validée sur le canal MIDI du bank actuellement sélectionné. Lorsque ce message est reçu, BULK OUT est exécuté pour le programme du numéro de mémoire indiqué.

① Speicherblockabwurf-Befehl

Der Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Sobald dieser Befehl eingeht, wird der Blockabwurf (Bulk out) für den gerade aufgerufenen Speicher ausgeführt.

STATUS	11110000 (F0H)		
ID No.	01000011 (43H)		
SUB STATUS	0010nnnn (2nH)		n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110 (7EH)		
	01001100 (4CH)	"L"	
	01001101 (4DH)	"M"	
	00100000 (20H)	SPACE	
	00100000 (20H)	SPACE	
	00111000 (38H)	"8"	
	00110011 (33H)	"3"	
	00110111 (37H)	"7"	
	00111000 (38H)	"8"	
DATA NAME	01001101 (4DH)	"M"	
MEMORY No.	0mmmmmmm		M=41(memory No.41)~99(MEMORY No.99)
EOX	11110111 (F7H)		

② Program Change Chart Bulk Dump Request

Reception is enabled on the MIDI channel of the currently selected bank. When this message is received, BULK OUT is executed for the program change chart (the chart showing the correspondence between program numbers and memory numbers) of the indicated bank.

② Demande de vidage en bloc de la table des changements de programme

La réception est validée sur le canal MIDI du bank actuellement sélectionné. Lorsque ce message est reçu, BULK OUT est exécuté pour la table des changements de programme (la table indiquant la correspondance entre les numéros de programme et les numéros de mémoires) du bank indiqué.

② Blockdaten der Programmwechsel-Zuordnungstabelle einer Bank

Der Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Geht ein Blockabwurfbefehl der Programmwechsel-Zuordnungstabelle (Program change chart bulk dump request) ein, so wird der Abwurf ausgeführt. Es werden dann die Daten der Programmwechsel-Zuordnungstabelle übertragen.

STATUS	11110000	(F0H)	
ID No.	01000011	(43H)	
SUB STATUS	0010nnnn	(2nH)	n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110	(7EH)	
	01001100	(4CH)"L"	
	01001101	(4DH)"M"	
	00100000	(20H)SPACE	
	00100000	(20H)SPACE	
	00111000	(38H)"8"	
	00110011	(33H)"3"	
	00110111	(37H)"7"	
	00111000	(38H)"8"	
DATA NAME	01010100	(54H)"T"	
BANK No.	0zzzzzzz		Z=BANK1~4(1=A,2=B,3=C,4=D)
EOX	11110111	(F7H)	

③ User ER Pattern Bulk Dump Request
Reception is enabled on the MIDI channel of the currently selected bank. When this message is received, BULK OUT is executed for the data of the indicated ER pattern number.

③ Demande de vidage en bloc des motifs ER de l'utilisateur
La réception est validée sur le canal MIDI du bank actuellement sélectionné. Lorsque ce message est reçu, BULK OUT est exécuté pour les données du numéro de motif ER indiqué.

③ User ER-Programmblockdaten
Der Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Geht ein Blockabwurfbefehl der Erstreflexions-Musterprogramme (User ER pattern bulk dump request) ein, so wird der Abwurf ausgeführt. Es werden dann die Daten des angezeigten Speichers übertragen.

STATUS	11110000	(F0H)	
ID No.	01000011	(43H)	
SUB STATUS	0010nnnn	(2nH)	n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110	(7EH)	
	01001100	(4CH)"L"	
	01001101	(4DH)"M"	
	00100000	(20H)SPACE	
	00100000	(20H)SPACE	
	00111000	(38H)"8"	
	00110011	(33H)"3"	
	00110111	(37H)"7"	
	00111000	(38H)"8"	
DATA NAME	01000101	(45H)"E"	
ER PATTERN No.	0zzzzzzz		Z=ER PATTERN1~4(1=A,2=B,3=C,4=D)
EOX	11110111	(F7H)	

④ System Setup Data Bulk Dump Request
Reception is enabled on the MIDI channel of the currently selected bank. When this message is received, BULK OUT is executed for System Setup data.

④ Demande de vidage en bloc des données de configuration de système
La réception est validée sur le canal MIDI du bank actuellement sélectionné. Lorsque ce message est reçu, BULK OUT est exécuté pour les données de configuration du système.

④ Systemblockdaten
Er Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Die Daten werden nur gesendet, wenn ein Systemdaten-Abwurfbefehl (System setup data dump request) eingeht.

STATUS	11110000	(F0H)	
ID No.	01000011	(43H)	
SUB STATUS	0010nnnn	(2nH)	n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110	(7EH)	
	01001100	(4CH)"L"	
	01001101	(4DH)"M"	
	00100000	(20H)SPACE	
	00100000	(20H)SPACE	
	00111000	(38H)"8"	
	00110011	(33H)"3"	
	00110111	(37H)"7"	
	00111000	(38H)"8"	
DATA NAME	01010011	(53H)"S"	
	00100000	(20H)	
EOX	11110111	(F7H)	

⑤ Bank Change Request
Reception is enabled on the MIDI channel of the currently selected bank. When this message is received, the desired bank can be switched to.

⑤ Demande de changement de bank
La réception est validée sur le canal MIDI du bank actuellement sélectionné. Lorsque ce message est reçu, le bank souhaité peut être sélectionné.

⑤ Bankanwahlbefehl
Er Empfang erfolgt auf dem Kanal der gerade angewählten Bank. Sobald dieser Befehl eingeht, kann die gewünschte Bank aufgerufen werden.

STATUS	11110000	(F0H)	
ID No.	01000011	(43H)	
SUB STATUS	0010nnnn	(2nH)	n=0(Channel No.1)~15(Channel No.16)
FORMAT No.	01111110	(7EH)	
	01001100	(4CH)"L"	
	01001101	(4DH)"M"	
	00100000	(20H)SPACE	
	00100000	(20H)SPACE	
	00111000	(38H)"8"	
	00110011	(33H)"3"	
	00110111	(37H)"7"	
	00111000	(38H)"8"	
DATA NAME	01010101	(55H)"U"	
BANK No.	0zzzzzzz		Z=BANK1~4(1=A,2=B,3=C,4=D)
EOX	11110111	(F7H)	

⑥ Memory Bulk Data
Same as "Memory Bulk Data" for transmission.

⑥ Données de bloc de mémoire Idem que pour la transmission.

⑥ Speicherblockdaten
Siehe die "Speicherblockdaten" der Übertragung.

⑦ Bank Program Change Chart Bulk Data
Same as "Bank Program Change Chart Bulk Data" for transmission.

⑦ Données en bloc des tables de changements de programme du bank
Idem que pour la transmission

⑦ Blockdaten der Programmwechsel-Zuordnungstabelle einer Bank
Siehe die "Blockdaten der Programmwechsel-Zuordnungstabelle einer Bank" der Übertragung.

⑧ User ER Pattern Bulk Data
Same as "User ER Pattern Bulk Data" for transmission.

⑧ Données en bloc des motifs ER de l'utilisateur
Idem que pour la transmission.

⑧ User ER-Programmblockdaten
Siehe die "User ER-Programmblockdaten" der Übertragung.

⑨ System Setup Bulk Data
Same as "System Setup Bulk Data" for transmission.

⑨ Données en bloc de configuration du système
Idem que pour la transmission.

⑨ Systemblockdaten
Siehe die "Systemblockdaten" der Übertragung.

When receiving from the MIDI Data Filer MDF1, a computer, or other sources, the time interval between data exchanges (F7 ~ F0) with the other unit must be set to 30msec or longer.

Lorsque les données sont reçues d'un "MIDI Data Filer" MDF1, d'un ordinateur ou d'une autre source, l'intervalle d'attente entre les échanges de données (F7 ~ F0) avec l'autre appareil doit être fixé à 30 msec ou plus.

Sollen Daten vom MDF1 MIDI Data Filer, einem Computer oder anderen Geräten geladen werden, muß die Pause zwischen zwei Dateneinheiten (F7 ~ F0) zumindest 30mSek betragen.

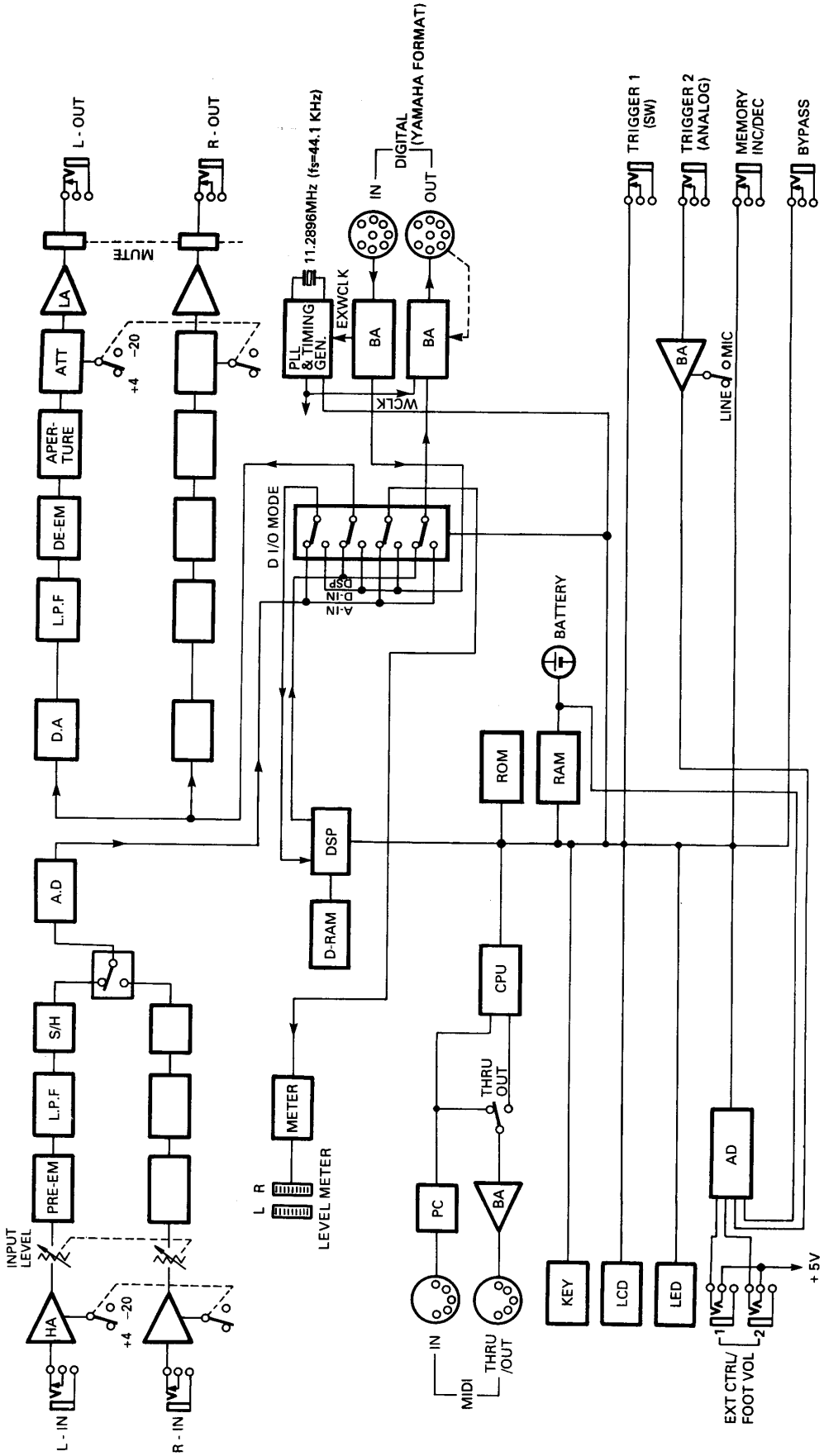
YAMAHA [Professional Multi - Effect Processor] Date : 8/5, 1988
Model SPX1000 MIDI Implementation Chart Version : 1.0

Function ...	Transmitted	Recognized	Remarks
Basic Default	x	1 - 16, off	memorized
Channel Changed	x	1 - 16, off	
Mode Default	x	OMNIoff/OMNIon	memorized
Mode Messages	x	x	
Mode Altered	**********	x	
Note Number :	x	0 - 127	
Note Number : True voice	**********	x	
Velocity Note ON	x	x	
Velocity Note OFF	x	x	
After Touch Key's	x	x	
After Touch Ch's	x	x	
Pitch Bender	x	x	
Control Change 0 - 120	x	o	
Prog Change :	x	o 0 - 127	*1
Prog Change : True #	**********		
System Exclusive	o	o	Bulk Dump
System Common : Song Pos	x	x	
System Common : Song Sel	x	x	
System Common : Tune	x	x	
System Real Time : Clock	x	x	
System Real Time : Commands	x	x	
Aux Mes- sages : Local ON/OFF	x	x	
Aux Mes- sages : All Notes OFF	x	x	
Aux Mes- sages : Active Sense	x	o	*2
Aux Mes- sages : Reset	x	x	

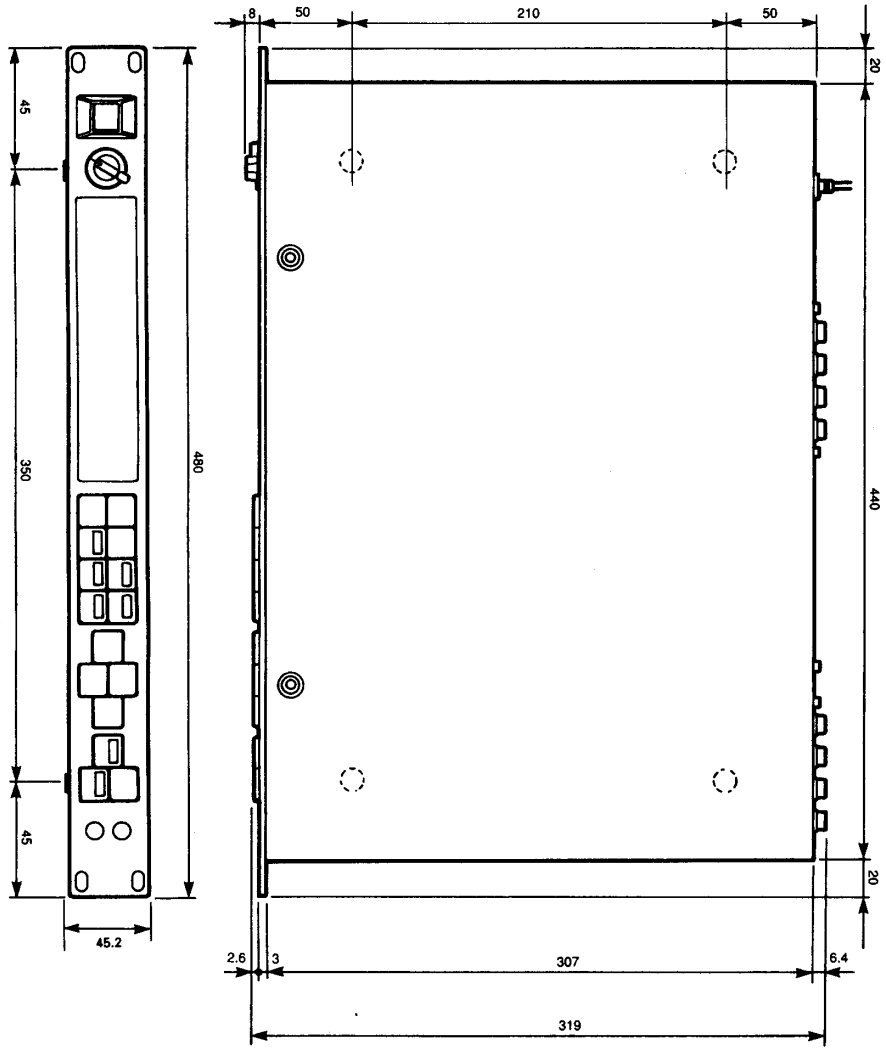
Notes: *1 = For program 1 - 128, memory #1 - #99 is selected.
*2 = Active sensing is recognized only in "freeze".

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO x : No

BLOCK DIAGRAM



DIMENSIONS



(unit: mm)

For European Model
Purchaser/User Information specified in EN55103-1 and EN55103-2.
Inrush Current: 4A
Conformed Environment: E1, E2, E3 and E4

Pour le modèle européen
Informations pour l'acheteur/usager spécifiées dans EN55103-1 et EN55103-2.
Courant de démarrage: 4A
Environnement adapté: E1, E2, E3 et E4

Für das europäische Modell
Kunden-/Benutzerinformation nach EN55103-1 und EN55103-2.
Einschaltstrom: 4A
Entspricht den Umweltschutzbestimmungen: E1, E2, E3 und E4

SPECIFICATIONS

ELECTRICAL CHARACTERRISTICS

FREQ. RESPONSE	20Hz ~ 20kHz
DYNAMIC RANGE	90dB (TYPICAL)
DISTORTION	0.03% (@1kHz)

INPUT

NUMBER OF CHANNEL	UNBALANCED × 2(PHONE JACK)
NOMINAL LEVEL	+4/-20dBm SWITCHABLE
IMPEDANCE	50kΩ (STEREO-IN), 25kΩ (MONO)
LEVEL CONTROL	ROTARY CONTINUOUS

A/D CONVERSION

NUMBER OF CHANNELS	2 (AD CONVERTER × 1)
SAMPLING FREQ.	44.1kHz (EXCEPT D-IN)
QUANTIZATION	16bits

D/A CONVERSION

NUMBER OF CHANNELS	2
SAMPLING FREQ.	44.1kHz (EXCEPT D-IN)
QUANTIZATION	16bits

OUTPUT

NUMBER OF CHANNEL	UNBALANCED × 2(PHONE JACK)
NOMINAL LEVEL	+4/-20dBm SWITCHABLE
IMPEDANCE	220Ω

MEMORY

PRESETS (ROM)	1 ~ 40
USER MEMORY (RAM)	41 ~ 99

MIDI CONTROL

PROGRAM CHANGE (MEMORY SELECT)
NOTE ON (MIDI BASE KEY SELECT, TRIGGER)
CONTROL CHANGE
BULKDUMP & LOAD (PARAMERTER DUMP)

FRONT PANEL

CONTROLS	INPUT LEVEL
KEYS	PARAM. INC/DEC, PARAMETER, SCROLL BACK, LEVEL EQ, INT. PARAM, EXT CTRL ASSIGN STORE, MEMORY INC/DEC, RECALL, UTILITY, TRIGGER, BYPASS
DISPLAY	16 CHARA. × 2 LINE LCD 2 DIGIT 7 SEGMENT LED (MEM#) 2 ch. 8 SEGMENT LED (LEVEL METER)
CONNECTORS	EXT CTRL/FOOT VOL JACK × 2

REAR PANEL

CONNECTORS	INPUT (PHONE JACK × 2) OUTPUT (PHONE JACK × 2) MIDI IN, THRU/OUT (DIN 5P × 2) DIGITAL I/O (DIP 8P × 2) TRIGGER1 SW (PHONE JACK) TRIGGER2 SW (ANALOG) (PHONE JACK) MEMORY INC/DEC (PHONE JACK) BYPASS (PHONE JACK)
SWITCHS	INPUT LEVEL SW, OUTPUT LEVEL SW MIDI THRU/OUT SW TRIGGER2 (ANALOG) LEVEL SW

GENERAL

POWER SUPPLY	US & CANADA: 120V, 60Hz, 22W GENERAL: 220-240V, 50/60Hz, 22W
DIMENSIONS (W × H × D)	480 × 45.2 × 319 (mm)
WEIGHT	3.7 kg

• 0dB=0.775Vr.m.s
• Specifications and appearance subject to change without notice.

CARACTERISTIQUES TECHNIQUES

CARACTERISTIQUES ELECTRIQUES

Réponse en fréquence	20Hz ~ 20kHz
Plage dynamique	90dB (TYPIQUE)
Distorsion	0,03% (à 1kHz)

ENTREE

Nombre de canaux	Asymétriques × 2 (Prise "Jack")
Niveau nominal	+4 / –20dBm (commutable)
Impĕdance	50kΩ (STEREO IN), 25kΩ (MONO)
Commande de niveau	Rotative continue

CONVERSION A/N

Nombre de canaux	2 (Convertisseuranalogique/numérique × 1)
Fréquence d'échantillonnage	44,1kHz (sauf D-IN)
Quantification	16bits

CONVERSION N/A

Nombre de canaux	2
Fréquence d'échantillonnage	44,1kHz (sauf D-IN)
Quantification	16bits

SORTIE

Nombre de canaux	Asymétriques × 2 (Prise "Jack")
Niveau nominal	+4 / –20dBm (commutable)
Impédance	220Ω

MEMOIRE

Présélections (ROM)	1 ~ 40
Mémoire de l'utilisateur (RAM)	41 ~ 99

COMMANDE MIDI

Changement de programme ("PROGRAM CHANGE") - Sélection des mémoires
Note activée ("NOTE ON") - Sélection de la touche de base MIDI, Déclenchement (Trigger)
Changement de commande ("CONTROL CHANGE")
Vidage et chargement de bloc (BULK DUMP & LOAD) - Vidage de paramètres

PANNEAU AVANT

Commandes	Niveau d'entrée
TOUCHES	Incrémentation/décrémentation de paramètres, Paramètre, Défilement arrière (SCROLL BACK), Egalisation, Niveau , Paramètres internes , Assignation de commande externe, Mémorisation (STORE), Incrémentation/décrémentation de mémoire, Rappel (RECALL), Utilitaire, Déclenchement (TRIGGER), Con tournement (BYPASS)
Affichage	16 caractères × 2 lignes (Afichage à cristaux liquides) DEL de 2 chiffres à 7 segments (No de mémoire) 2 × 8 segments DEL (indicateur de niveau)
Connecteurs	Commande externe (EXT CTRL), prise de commande de volume au pied (FOOT VOL) × 2

PANNEAU ARRIERE

Connecteurs	Entrée (Prise "jack" × 2) Sortie (Prise "jack" × 2) MIDI IN, THRU/OUT (Din 5 broches × 2) Entrée/sortie numériques (Prise DIP 8 broches × 2) TRIGGER 1 SW (Prise "jack") TRIGGER 2 SW (analogique) (Prise "jack") MEMORY IN/DEC (Prise "jack")
Commutateurs	Niveau d'entrée, Niveau de sortie MIDI THRU/OUT Niveau du déclencheur 2 (analogique)

Caractéristiques générales

Alimentation	US et Canada: 120V, 60Hz, 22W Modèle général: 220-240V, 50/60Hz, 22W
Dimensions:	480 × 45,2 × 319 (mm)
Poids	3,7 kg

• 0dB = 0,775V r.m.s.
• Caractéristiques et présentation susceptibles d'être modifiées sans préavis

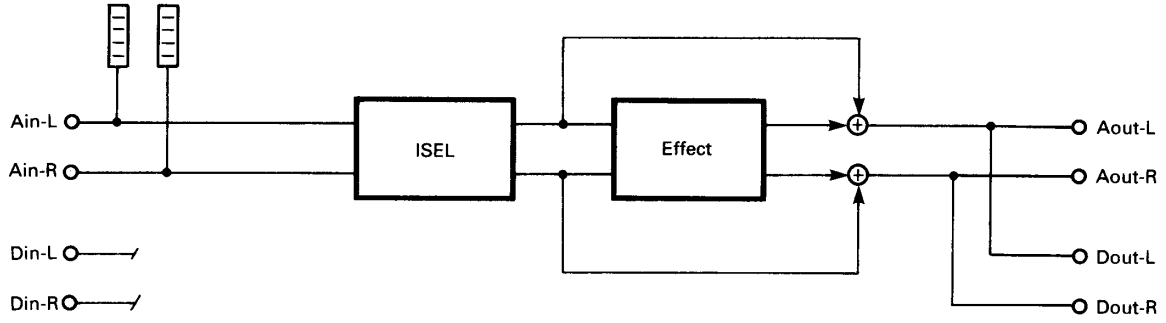
TECHNISCHE DATEN

ELEKTRISCHE WERTE	
Frequenzgang	20Hz ~ 20kHz
Dynamikbereich~	90dB
Klirrfaktor	0,03% (@ 1kHz)
EINGÄNGE	
Anzahl Kanäle	Unsymmetrisch×2 (Klinken)
Nennpegel	+4/–20dBm, UMSCHALTBAR
Impedanz	50kΩ (STERE)-IN), 25kΩ. (MONO)
Input-Regler	Rotierend-Rontinvierlich
A/D-UMWANDLUNG	
Anzahl Kanäle	2 (A/D Wandler × 1)
Abtastrate	44,1kHz (außer D-IN)
Quantisierung	16Bit
D/A-UMWANDLUNG	
Anzahl Kanäle	2
Abtastrate	44,1kHz (außer D-IN)
Quantisierung	16Bit
AUSGÄNGE	
Anzahl Kanäle	Unsymmetrisch × 2 (Klinken)
Nennpegel~	+4 / –20dBm UMSCHALTBAR
Last	220Ω
SPEICHER	
PRESET	1 ~ 40 (ROM)
USER	41 ~ 99 (RAM)
MIDI	
	Programmwechsel (Speicheranwahl)
	Note-An (BASE KEY-Bestimmung), Trigger
	Steuerelementänderung
	Blockabwurf & empfang (Parameterübertragung)
FRONTPLATTE	
Regler	Eingangspegel
Tasten	EQ, PARAM, SCROLL BACK, PARAMETER EVEL/DELAY, STORE, MEMORY INC/DEC, RECALL, ONT. PARAM, TRIGGER, UTILITY, BYPASS
DISPLAY	16 Zeichen × 2 Zeilen (Flüssigkristall), 2 Ziffern (Leuchtdioden), 8 gliedrige
LED-Kette	
ANSCHLÜSSE	FOOT VR JACK × 2
RÜCKSEITE	
ANSCHLÜSSE	INPUT (Klinke × 2)
	OUTPUT (Klinke × 2)
	MIDI IN, MIDI THRU/OUT (DIN × 2)
	DIGITAL I/O (DIP 8P × 2)
	TRIGGER1 SW (Klinke)
	TRIGGER2 SW ANALOG (Klinke)
	MEMORY INC/DEC (Klinke)
	BYPASS (Klinke)
SCHALTER	INPUT LEVEL, OUTPUT LEVEL
	MIDI THRU/OUT SW
	TRIGGER2 ANALOG LEVEL
ALLGEMEINES	
Stromanforderungen	USA & Kanada: 120V, 60Hz, 22W
	Allgemeines Modell: 220-240V, 50/60Hz, 22W
ABMESSUNGEN	480 × 45,2 × 319 mm
Gewicht	3,7 kg

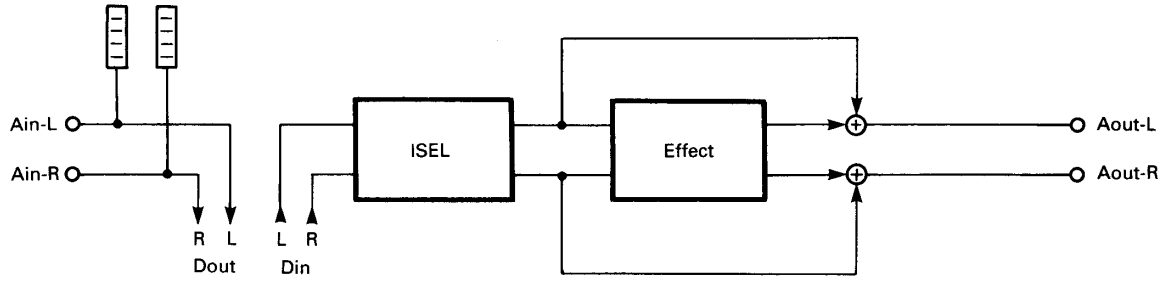
- 0dB= 0,775 V r.m.s.
- Änderungen der technischen Daten ohne vorherige Ankündigung vorbehalten.

DIO Mode

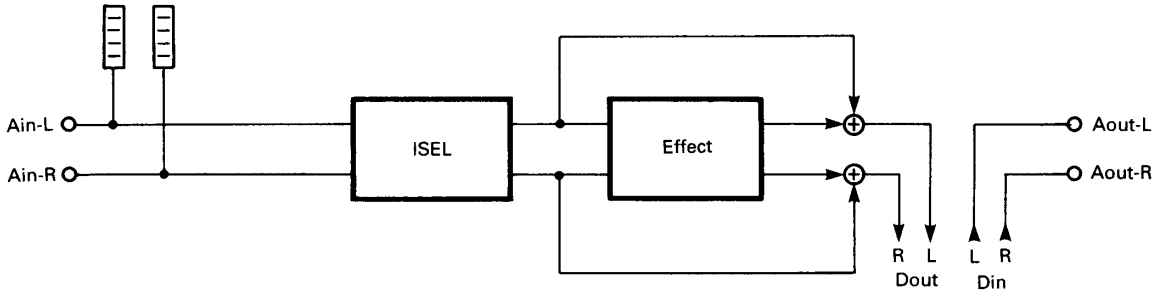
① Analog



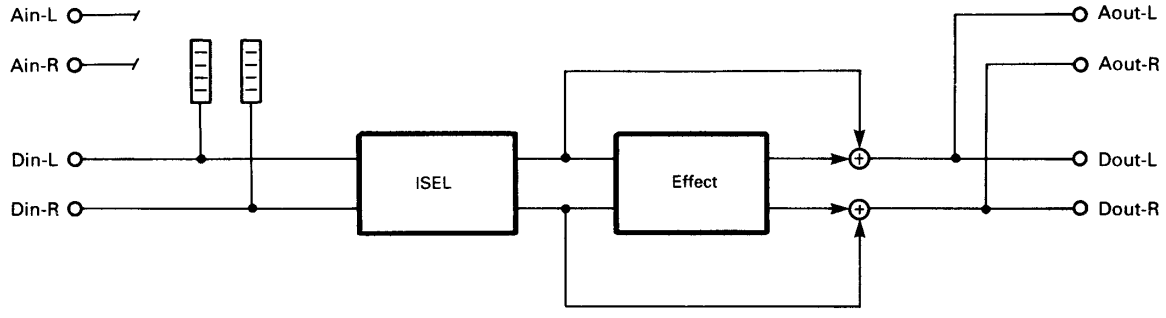
② Pre



③ Post

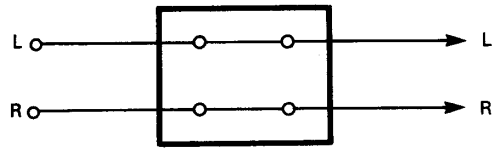


④ Digital

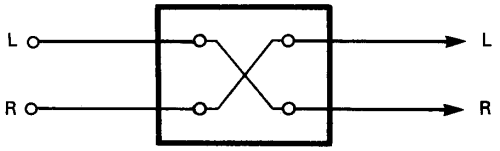


Input Mode

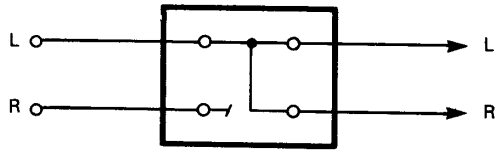
① Stereo Normal



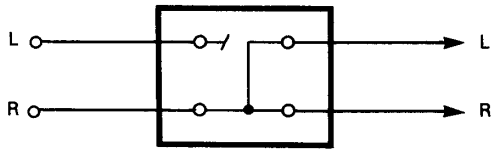
② Stereo Reverse



③ Mono L

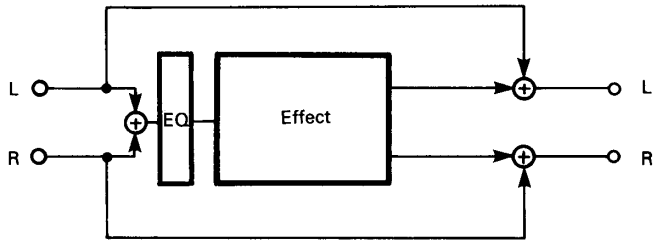


④ Mono R

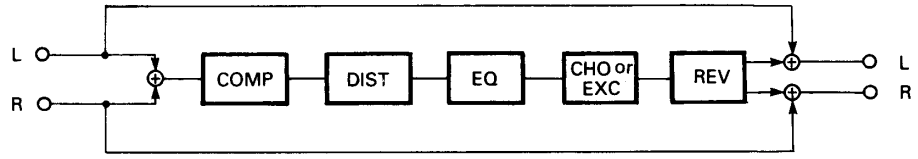


Effect Mode

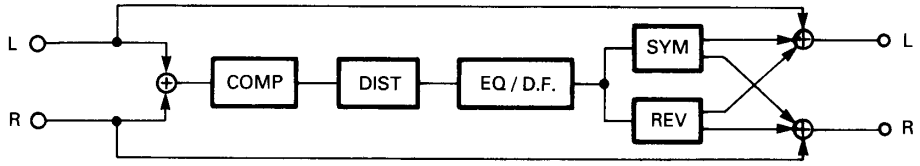
① **Single** No. 1~27



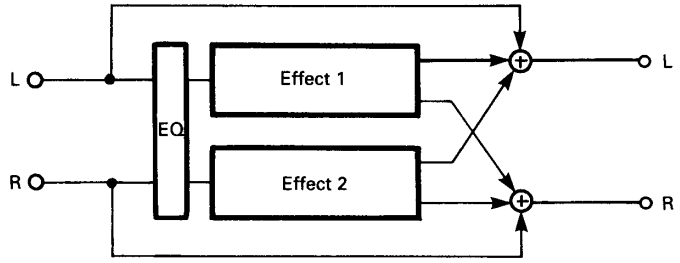
② **Multi** No. 28, 30



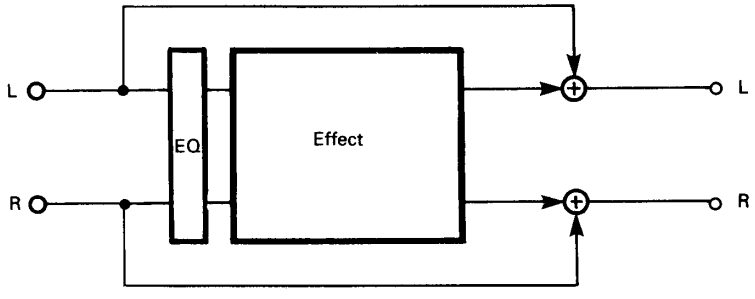
No. 29



③ **2ch In** No. 31~35



④ **Stereo** No. 36~40



SPX1000 USER PROGRAMMING TABLE

Date: _____ Programmer: _____

Memory No.	Program Title	Memory No.	Program Title	Memory No.	Program Title
1	REV 1 HALL	34	CHORUS + REV	67	
2	REV 2 ROOM	35	PAN + PAN	68	
3	REV3 VOCAL	36	COMPRESSOR	69	
4	REV 4 PLATE	37	LO LVL EXPANDER	70	
5	REV 5 ECHO ROOM	38	EXCITER	71	
6	EARLY REF. 1	39	STEREO PITCH	72	
7	EARLY REF. 2	40	STEREO FREEZE	73	
8	EARLY REF. 3	41		74	
9	GATE REVERB	42		75	
10	REVERSE GATE	43		76	
11	DELAY L, C, R	44		77	
12	STEREO ECHO	45		78	
13	STEREO FLANGE A	46		79	
14	STEREO FLANGE B	47		80	
15	CHORUS	48		81	
16	STEREO PHASING	49		82	
17	TREMOLO	50		83	
18	SYMPHONIC	51		84	
19	ADR-NOISE GATE	52		85	
20	PITCH CHANGE-1	53		86	
21	PITCH CHANGE-2	54		87	
22	PITCH CHANGE-3	55		88	
23	FREEZE 1	56		89	
24	FREEZE 2	57		90	
25	PAN	58		91	
26	TRIGGERED PAN	59		92	
27	DISTORTION	60		93	
28	MULTI (CHO & REV)	61		94	
29	MULTI (SYM + REV)	62		95	
30	MULTI (EXC & REV)	63		96	
31	PLATE + HALL	64		97	
32	ER + REV	65		98	
33	ECHO + REV	66		99	

SPX1000 USER PROGRAMMING TABLE

Memory No.: _____ Date: _____

Program Title: _____ Programmer: _____

Function Key	Parameter										
	1	2	3	4	5	6	7	8	9	10	11
PARAM	12	13	14	15	16	17	18	19	20	21	22
INT PARAM											
EQ											
LEVEL											
EXT CTRL ASSIGN											

SPX1000

MIDI PROGRAM CHANGE NUMBER VS MEMORY (PROGRAM) NUMBER

BANK: _____ ch= _____ Date: _____ Programmer: _____

PGM	MEM	PGM	MEM	PGM	MEM
PGM 1	MEM	PGM 44	MEM	PGM 87	MEM
PGM 2	MEM	PGM 45	MEM	PGM 88	MEM
PGM 3	MEM	PGM 46	MEM	PGM 89	MEM
PGM 4	MEM	PGM 47	MEM	PGM 90	MEM
PGM 5	MEM	PGM 48	MEM	PGM 91	MEM
PGM 6	MEM	PGM 49	MEM	PGM 92	MEM
PGM 7	MEM	PGM 50	MEM	PGM 93	MEM
PGM 8	MEM	PGM 51	MEM	PGM 94	MEM
PGM 9	MEM	PGM 52	MEM	PGM 95	MEM
PGM 10	MEM	PGM 53	MEM	PGM 96	MEM
PGM 11	MEM	PGM 54	MEM	PGM 97	MEM
PGM 12	MEM	PGM 55	MEM	PGM 98	MEM
PGM 13	MEM	PGM 56	MEM	PGM 99	MEM
PGM 14	MEM	PGM 57	MEM	PGM 100	MEM
PGM 15	MEM	PGM 58	MEM	PGM 101	MEM
PGM 16	MEM	PGM 59	MEM	PGM 102	MEM
PGM 17	MEM	PGM 60	MEM	PGM 103	MEM
PGM 18	MEM	PGM 61	MEM	PGM 104	MEM
PGM 19	MEM	PGM 62	MEM	PGM 105	MEM
PGM 20	MEM	PGM 63	MEM	PGM 106	MEM
PGM 21	MEM	PGM 64	MEM	PGM 107	MEM
PGM 22	MEM	PGM 65	MEM	PGM 108	MEM
PGM 23	MEM	PGM 66	MEM	PGM 109	MEM
PGM 24	MEM	PGM 67	MEM	PGM 110	MEM
PGM 25	MEM	PGM 68	MEM	PGM 111	MEM
PGM 26	MEM	PGM 69	MEM	PGM 112	MEM
PGM 27	MEM	PGM 70	MEM	PGM 113	MEM
PGM 28	MEM	PGM 71	MEM	PGM 114	MEM
PGM 29	MEM	PGM 72	MEM	PGM 115	MEM
PGM 30	MEM	PGM 73	MEM	PGM 116	MEM
PGM 31	MEM	PGM 74	MEM	PGM 117	MEM
PGM 32	MEM	PGM 75	MEM	PGM 118	MEM
PGM 33	MEM	PGM 76	MEM	PGM 119	MEM
PGM 34	MEM	PGM 77	MEM	PGM 120	MEM
PGM 35	MEM	PGM 78	MEM	PGM 121	MEM
PGM 36	MEM	PGM 79	MEM	PGM 122	MEM
PGM 37	MEM	PGM 80	MEM	PGM 123	MEM
PGM 38	MEM	PGM 81	MEM	PGM 124	MEM
PGM 39	MEM	PGM 82	MEM	PGM 125	MEM
PGM 40	MEM	PGM 83	MEM	PGM 126	MEM
PGM 41	MEM	PGM 84	MEM	PGM 127	MEM
PGM 42	MEM	PGM 85	MEM	PGM 128	MEM
PGM 43	MEM	PGM 86	MEM		

ADVARSEL!
Lithiumbatteri-Eksplosionsfare ved fejlagtig handtering. Udskiftning ma kun ske med batteri af samme fabrikat og type. Lever det brugte batteri tilbage til leverandoren.

VARNING
Explosionsfara vid felaktigt batteribyte. Anvand samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera anvant batteri enligt fabrikantes instruktion.

VAROITUS
Paristo voi rajahtaa, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Havita kaytetty paristo valmistajan ohjeiden mukaisesti.

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