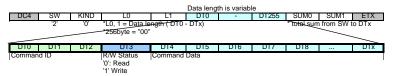
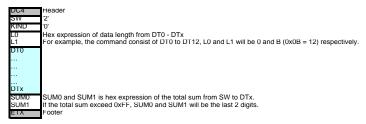
Commands from Host to Slave(Receiver)



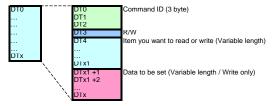
Extended command from the host to the receiver consist of the bytes as illustrated below.



When you read ore write some parameter, the command from the host will consist of the following structure.

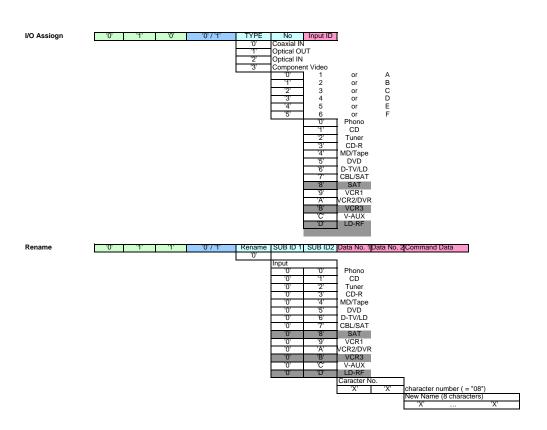


Following is the data structure from DT0 to DTx.



From the next page, Only from the DT0 to DTx byte will be illustrated.

	DT0	DT1	DT2	DT3	DT4	
System Information	,0,	,0,	,0,	,0,	ID	
				Read Only	'0' Zone2	
					'1' Tuner	
					'2' Video	
					'3' Effect ch	
					'4' Digital Format	
					'5' DC Trigger	
					'6' Preset	
Input Information	,0,	,0,	'1'	'0'	ID Read Only	
				Read Only	'0' SP Out	
					'1' Audio Input Anal	
					'2' Audio Input Optio	
					'3' Audio Input Coax	
					'4' Audio Input D.D.I	
					'5' Video Input Com	
					'6' Video Input Com	
					'7' Audio Output An	
					'8' Audio Output Op	liocai
					'9' Video Output Co	nposite / S
DSP Information	'0'	'0'	'2'	'0'	Pood Only	
DOF IIIIOIMATION	0	U		Read Only	ID Read Only '0' Program	
				Read Offig	'1' User Parameters	
					i User Parameters	



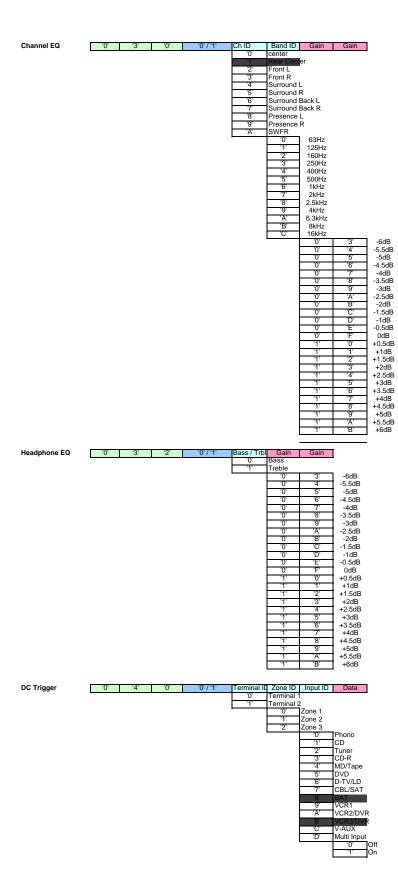
User Parameter

r	'0'	'2'	'0'	'0' / '1'	DSP ID		Parameter ID Parameter Data
					'0'	'0'	Hall A
					.0.	'1'	Hall B
					'0'	'2'	Hall C
	* See Ap	pendix 1 f	for the		'0'	'3'	
	DSP Pro	gram ID fo	or each M	lodel.	.0.	'4'	Hall D
					'0'	'5'	Hall E
					'0'	'6'	Live Concert
					,0,	'7'	
					'0'	'8'	Tokyo
					'0'	'9'	Freiburg
					.0.	'A'	Royaumont
					'0'	'B'	
					'0'	'C'	Village Gate
					'0'	'D'	Village Vanguard
					'0'	'E'	The Bottom Line
					'0'	'F'	
					'1'	'0'	Roxy Theatre
					'1'	'1'	Warehouse Loft
					'1'	'2'	Arena
					'1'	'3'	
					'1'	'4'	Disco
					'1'	'5'	Party
					'1'	'6'	Game
					'1'	'7'	6/8 ch Stereo
					'1'	'8'	Pop/Rock
					'1'	'9'	DJ ⁱ
					'1'	'A'	
					'1'	'B'	
					'1'	'C'	Classical / Opera
					'1'	'D'	Pavilion
					'1'	'E'	
					'1'	'F'	
					'2'	.0.	Mono Movie
					'2'	'1'	Variety / Sports
					'2'	'2'	
					'2'	'3'	
					'2'	'4'	Spectacle
					'2'	'5'	Sci-Fi
					'2'	'6'	
					'2'	'7'	
					'2'	'8'	Adventure
					'2'	'9'	General
					'2'	'A'	
					'2'	'B'	
					'2'	'C'	Normal
					'2'	'D'	Enhanced
					'2'	'E'	
					'2'	'F'	
					'3'	.0.	Pro Logic II Movie
					'3'	'1'	Pro Logic II Music
					'3'	'2'	NEO:6 Cinema
					'3'	'3'	NEO:6 Music
					'3'	'4'	2CH STEREO
					'3'	'5'	DIRECT STEREO
					'3'	'6'	THX CINEMA (ULTRA2)
					'3'	'7'	7
					'8'	'0'	STRAIGHT

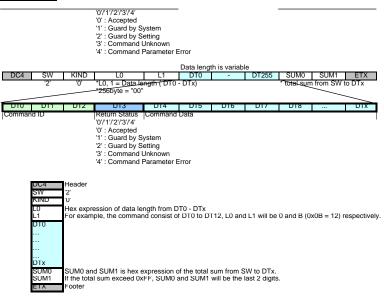
Parameter	ID	
'0'	'0'	P. Init. Delay
,0,	'1'	P. Room Size
'0'	'2'	P. Liveness
'0'	'3'	S. Delay (2ch)
.0,	'4'	S. Delay (Multi ch)
'0'	'5'	S. Init Delay
'0'	'6'	S. Room Size
.0.	'7'	S. Liveness
'0'	'8'	RC. Init. Delay
,0,	'9'	RC Room Size
.0.	'A'	RC Liveness
,0,	'B'	Rev. Time
'0'	'C'	Rev. Delay
'0'	,D,	Rev. Level
'0'	Ė	DSP Level
'0'	'F'	Panorama
'1'	'0'	Dimention
'1'	'1'	CT Width
'1'	'2'	C. Image
'1'	'3'	CT Level
'1'	'4'	RL Level
'1'	'5'	RC Level
'1'	'6'	RR Level
'1'	7'	FL Level
'1'	'8'	FR Level
'1'	'9'	SBL LEVEL
'1'	'A'	SBR LEVEL
'1'	B	MATRIX
'1'	Ċ	DIAL LIFT

	0	DI/ (L LII I		
		Parameter		ĺ
	Init. Delay	'X'	'X'	"01" - "63"
	Room Size	'X'	'X'	"01" - "14"
	. Liveness	,X,	'X'	"00" - "0A"
	Delay (2ch)	'X'	'X'	"0A" - "19"
	y (Multi ch)	'X'	'X'	"00" - "0F"
	. Init Delay	'X'	'X'	"00" - "1E"
	Room Size	'X'	'X'	"01" - "31"
	. Liveness	'X'	'X'	"00" - "0A"
	Init. Delay	'X'	'X'	"01" - "31"
	Room Size	'X'	'X'	"01" - "14"
R	C Liveness	'X'	'X'	"00" - "0A"
	Rev. Time	'X'	'X'	"0A"- "32"
	Rev. Delay	'X'	'X'	"00" - "FA"
	Rev. Level	'X'	'X'	"00" - "64"
	DSP Level	'X'	'X'	"00" - "09"
	Panorama	'X'	'X'	"00" - "01"
	Dimention	'X'	'X'	"00" - "06"
	CT Width	'X'	'X'	"00" - "07"
	C. Image	'X'	'X'	"00" - "05"
	CT Level	'X'	'X'	"00" - "64"
	RL Level	'X'	'X'	"00" - "64"
	RC Level	,X,	'X'	"00" - "64"
	RR Level	'X'	'X'	"00" - "64"
	FL Level	'X'	'X'	"00" - "64"
	FR Level	'X'	'X'	"00" - "64"
	BL LEVEL	'X'	'X'	"00" - "64"
S	BR LEVEL	'X'	'X'	"00" - "64"
	MATRIX			1
	DIAL LIFT			1

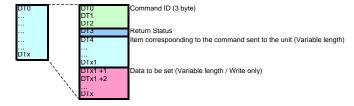
Parameter Initialize	'0'	'2'	'2'	'0' / '1'	DSP ID		
					'0'	'0'	Hall A
					'0'	'1'	Hall B
					'0'	'2'	Hall C
	* Soo Ar	pendix 1	'0'	'3'	Tiali C		
	Den Dre	pendix i	or each M	lodol	-0'	'4'	Hall D
	DSF FIC	grain iD i	or each w	iouei.	-0'	'5'	Hall E
					'0'		Live Concert
						'6'	Live Concert
					,0,	'7'	
					'0'	'8'	Tokyo
					'0'	'9'	Freiburg
					,0,	'A'	Royaumont
					'0'	'B'	
					,0,	'C'	Village Gate
					,0,	'D'	Village Vanguard
					,0,	'E'	The Bottom Line
					'0'	'F'	
					'1'	'0'	Roxy Theatre
					'1'	'1'	Warehouse Loft
					'1'	'2'	Arena
					'1'	'3'	
					'1'	'4'	Disco
					'1'	'5'	Party
					'1'	'6'	Game
					'1'	'7'	6/8 ch Stereo
					'1'	'8'	Pop/Rock
					'1'	'9'	DJ
					'1'	'A'	
					'1'	'B'	_
					'1'	'C'	Classical / Opera
					'1'	Ď,	Pavilion
					'1'	'E'	
					'1'	'F'	
					'2'	.0.	Mono Movie
					'2'	'1'	Variety / Sports
					'2'	'2'	Tamely Control
					'2'	-3'	_
					'2'	'4'	Spectacle
					'2'	'5'	Sci-Fi
					'2'	<u>'6'</u>	
					'2'	'7'	
					'2'	'8'	Adventure
					'2'	'9'	General
					'2'	'A'	
					'2'	'B'	-
					'2'	'Ċ'	Normal
					'2'	'D'	Enhanced
					'2'	'E'	Zimanood
					'2'	Ē	-
					-3'	.0.	Pro Logic II Movie
					'3'	'1'	Pro Logic II Music
					'3'	'2'	NEO:6 Cinema
					-3	'3'	NEO:6 Music
					'3'	'4'	2CH STEREO
					'3'	'5'	DIRECT STEREO
					3	'6'	THX CINEMA (ULTRA2)
							J 5 (52.10 tz)



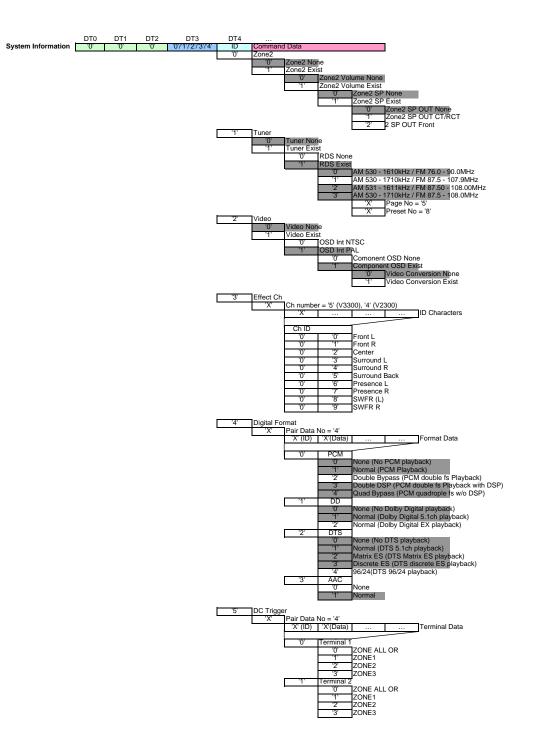
T	
Tuner	'0' '5' '0' '0'/'1' Band ID 1 Band ID 2 Band ID 3 Band Data
	'0' Current
	'1' Page A
	'2' Page B
	'3' page C
	'4' Page D
	'5' Page E
	'0' Current
	'1' No. 1
	'2' No. 2
	'3' No. 3
	'4' No. 4
	'5' No. 5
	6' No. 6
	7' No. 7
	8' No. 8
	10° AM
	''' FM
	Band Data (6 characters)
	* FM 94.7MHz = "094.70"
	AM 1710kHz = "001710"



Following is the data structure from DT0 to DTx.



From the next page, Only from the DT0 to DTx byte will be illustrated.

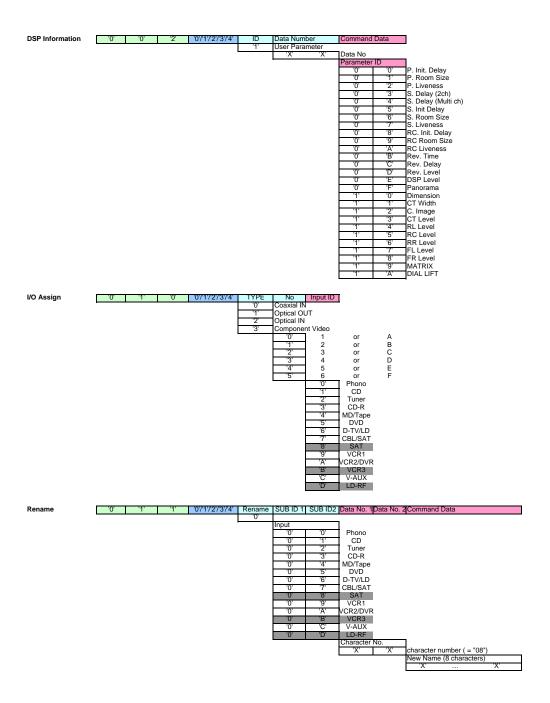


DSP Information

'0' | '0' | '2' | '0'/1/'2'/3'/4' | ID | Data Number | Command Data | '0' | Program

* See Appendix 1 for the DSP Program ID for each Model.

Data No		
Program ID)	1
'0'	'0'	Hall A
.0,	'1'	Hall B
'0'	'2'	Hall C
'0'	'3'	
.0.	'4'	Hall D
'0'	'5'	Hall E
'0'	'6'	Live Concert
.0.	-7'	
'0'	'8'	Tokyo
'0'	'9'	Freiburg
'0'	'À'	Royaumont
.0,	'B'	rtoyadillont
'0'	'C'	Village Gate
'0'	'D'	Village Vanguard
.0,	E.	The Bottom Line
	'F'	THE BOROTT LINE
'0' '1'		Days Theodes
	'0'	Roxy Theatre
'1'	'1'	Warehouse Loft
'1'	'2'	Arena
'1'	'3'	
'1'	'4'	Disco
'1'	'5'	Party
'1'	'6'	Game
'1'	'7'	6/8 ch Stereo
'1'	'8'	Pop/Rock
'1'	'9'	DJ
'1'	'A'	
'1'	'B'	
'1'	'C'	Classical / Opera
'1'	'D'	Pavilion .
'1'	'E'	
'1'	'F'	1
'2'	.0.	Mono Movie
'2'	'1'	Variety / Sports
'2'	'2'	Tamely , Spanis
'2'	'3'	
'2'	'4'	Spectacle
'2'	'5'	Sci-Fi
'2'	'6'	55
	7'	
'2'	'8'	Adventure
'2'	'9'	General
	'A'	General
<u></u>	'B'	
	'C'	Namel
'2'	D.	Normal
'2'		Enhanced
'2'	,E,	
'2'	'F'	
'3'	,0,	Pro Logic II Movie
'3'	'1'	Pro Logic II Music
'3'	'2'	NEO:6 Cinema
'3'	,3,	NEO:6 Music
'3'	'4'	2CH STEREO
'3'	'5'	DIRECT STEREO
'3'	'6'	THX CINEMA (ULTRA2)
'3'	'7'	1 ` ` ′
'8'	'0'	STRAIGHT
<u> </u>		1



User Parameter

* See Appendix 1 for the DSP Program ID for each Model.

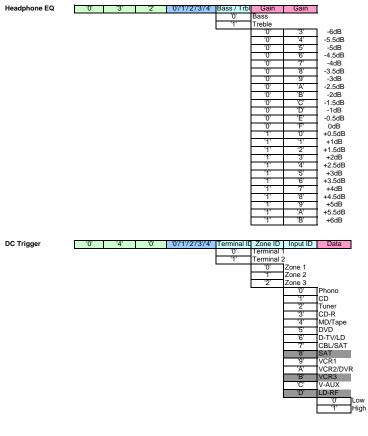
'0' '2' '0' '0'/1'/2'/3'/4' DSP ID Parameter ID Parameter Data Hall A Hall B Hall C Hall D Hall E Live Concert Tokyo Freiburg Royaumont Village Gate Village Vanguard The Bottom Line 'B' The Bottom Line
Roxy Theatre
Warehouse Loft
Arena
Disco
Party
Game
6/8 ch Stereo
Pop/Rock
DJ 'F' Classical / Opera Pavilion Mono Movie Variety / Sports Spectacle Sci-Fi Adventure General Normal Enhanced F Pro Logic II Movie
17 Pro Logic II Music
22 NEO.6 Cinema
33 NEO.6 Music
44 2CH STEREO
5 DIRECT STEREO
6 THX CINEMA (ULTRA2) STRAIGHT

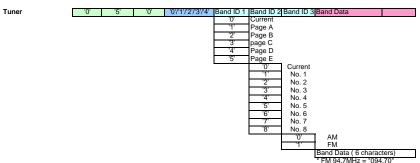
Paramete	r ID	1
'0'	'0'	P. Init. Delay
.0.	'1'	P. Room Size
'0'	'2'	P. Liveness
'0'	'3'	S. Delay (2ch)
.0.	'4'	S. Delay (Multi ch)
'0'	'5'	S. Init Delay
'0'	'6'	S. Room Size
.0.	7'	S. Liveness
'0'	'8'	RC. Init. Delay
'0'	'9'	RC Room Size
.0.	'A'	RC Liveness
'0'	'B'	Rev. Time
'0'	'C'	Rev. Delay
'0'	'D'	Rev. Level
'0'	'E'	DSP Level
'0'	'F'	Panorama
'1'	'0'	Dimension
'1'	'1'	CT Width
'1'	'2'	C. Image
'1'	'3'	CT Level
'1'	'4'	RL Level
'1'	'5'	RC Level
'1'	'6'	RR Level
'1'	'7'	FL Level
'1'	'8'	FR Level

•	Parameter	Data	
P. Init. Delay	,X,	'X'	"01" - "63"
P. Room Size	'X'	'X'	"01" - "14"
P. Liveness	'X'	'X'	"00" - "0A"
S. Delay (2ch)	'X'	'X'	"0A" - "19"
S. Delay (Multi ch)	'X'	'X'	"00" - "0F"
S. Init Delay	'X'	'X'	"00" - "1E"
S. Room Size	'X'	'X'	"01" - "31"
S. Liveness	'X'	'X'	"00" - "0A"
RC. Init. Delay	'X'	'X'	"01" - "31"
RC Room Size	'X'	'X'	"01" - "14"
RC Liveness	'X'	'X'	"00" - "0A"
Rev. Time	'X'	'X'	"0A"- "32"
Rev. Delay	'X'	'X'	"00" - "FA"
Rev. Level	'X'	'X'	"00" - "64"
DSP Level	'X'	'X'	"00" - "09"
Panorama	'X'	'X'	"00" - "01"
Dimension	'X'	'X'	"00" - "06"
CT Width	'X'	'X'	"00" - "07"
C. Image	'X'	'X'	"00" - "05"
CT Level	'X'	'X'	"00" - "64"
RL Level	'X'	'X'	"00" - "64"
RC Level	'X'	'X'	"00" - "64"
RR Level	'X'	'X'	"00" - "64"
FL Level	'X'	'X'	"00" - "64"
FR Level	'X'	'X'	"00" - "64"

Parameter Initialize	'0' '2' '2'	'0'/'1'/'2'/'3'/'4'	IDSP ID		1
· a.ao.oazo	0 2 2	071727071	'0'	'0'	Hall A
			, <u>0</u> ,	'1'	Hall B
			'0'	'2'	Hall C
	* See Appendix 1 for the		'0'	'3'	
	DSP Program ID for each Mo	odel.	.0.	'4'	Hall D
			'0'	'5'	Hall E
			'0'	'6'	Live Concert
			.0,	-7'	
			'0'	'8'	Tokyo
			'0'	'9'	Freiburg
			.0.	'A'	Royaumont
			'0'	'B'	
			'0'	'C'	Village Gate
			'0'	'D'	Village Vanguard
			'0'	'E'	The Bottom Line
			'0'	'F'	
			'1'	'0'	Roxy Theatre
			'1'	'1'	Warehouse Loft
			'1'	'2'	Arena
			'1'	'3'	
			'1'	'4'	Disco
			'1'	'5'	Party
			'1'	'6'	Game
			'1'	'7'	6/8 ch Stereo
			'1'	'8'	Pop/Rock
			'1'	'9'	DJ
			'1'	'A'	
			'1'	'B'	
			'1'	'C'	Classical / Opera
			'1'	'D'	Pavilion
			'1'	'E'	
			'1'	'F'	_
			'2'	'0'	Mono Movie
			'2'	'1'	Variety / Sports
			'2'	'2'	
			'2'	'3'	
			'2'	'4'	Spectacle
			'2'	'5'	Sci-Fi
			'2'	'6'	_
			'2'	'7'	
			'2'	'8'	Adventure
			'2'	'9'	General
			'2'	'A'	
			'2'	'B'	Name
			'2'	,D,	Normal Enhanced
			'2'	,E,	Ennanced
			'2'	'F'	
			'3'	-0-	Pro Logic II Movie
			'3'	'1'	Pro Logic II Music
			'3'	'2'	NEO:6 Cinema
			'3'	'3'	NEO:6 Music
			'3'	'4'	2CH STEREO
			'3'	'5'	DIRECT STEREO
			'3'	'6'	THX CINEMA (ULTRA2)
			'3'	'7'	1
			- '8'	'0'	STRAIGHT
			<u> </u>	·	⊣
Channel EQ	,0, ,3, ,0,	'07'17'27'37'4'	Ch ID	Band ID	Gain Gain
	·		'0'	center	_
			'1'	Rear Cer	n er
			'2'	Front L	
			'3'	Front R	
			'Δ'	Surround	11

								'3'	'7'			
								'8'	,0,	STRAIGHT	-	
										•		
Channel EQ	.0,		'3'	1	0'	'0'/'1'/'2'/	374	Ch ID	Band ID	Gain	Gain	1
0		_			_	0/1/2/	0, .	'0'	center	Cum	- Cuiii	ı
								'1'	Rear Cen	lor		
								'2'	Front L	lei.		
								'3'	Front R			
								'4'	Surround			
								'5'	Surround			
								'6'	Surround			
								'7'	Surround			
								'8'	Presence	L		
								'9'	Presence	R		
								'A'	SWFR			
									'0'	63Hz		
									'1'	125Hz		
									'2'	160Hz		
									'3'	250Hz		
									'4'	400Hz		
									'5'	500Hz		
									'6'	1kHz		
									'7'	2kHz		
									'8'			
										2.5kHz		
									'9'	4kHz		
									'A'	6.3kHz		
									'B'	8kHz		
									'C'	16kHz		
										.0.	'3'	-6dB
										'0'	'4'	-5.5dB
										'0'	'5'	-5dB
										'0'	'6'	-4.5dB
										'0'	'7'	-4dB
										'0'	'8'	-3.5dB
										'0'	'9'	-3dB
										-0,	'A'	-2.5dB
										'0'	'B'	-2.5dB
										'0'	. <u>C</u> .	-1.5dB
										'0'	,D,	-1dB
										'0'	'E'	-0.5dB
										'0'	'F'	0dB
										'1'	'0'	+0.5dB
										'1'	'1'	+1dB
										'1'	'2'	+1.5dB
										'1'	'3'	+2dB
										'1'	'4'	+2.5dB
										'1'	'5'	+3dB
										'1'	'6'	+3.5dB
										'1'	- 7'	+4dB
										'1'	'8'	+4.5dB
										'1'	·9'	+5dB
										'1'	'A'	+5.5dB
										'1'		
										T	'B'	+6dB





AM 1710kHz = "001710"

Appendix

1. DSP Program ID Table

Γable			
Program		1	RX-V2400
'0'	'0'	Hall A	Hall in Munch
,0,	'1'	Hall B	
'0'	'2'	Hall C	
'0'	'3'		
.0.	'4'	Hall D	
'0'	'5'	Hall E	
-'0'	'6'	Live Concert	Hall in Vienna
.0.	'7'	Live Concert	I Iali III Vicilia
'0'	'8'	Tokyo	
'0'	'9'	Freiburg	Church
			Church
'0'	'A'	Royaumont	
,0,	'B'		
'0'	'C'	Village Gate	
'0'	'D'	Village Vanguard	
.0,	E,	The Bottom Line	Jazz Club
,0,	'F'		
'1'	'0'	Roxy Theatre	Rock Concert
'1'	'1'	Warehouse Loft	
'1'	'2'	Arena	
'1'	'3'		
'1'	'4'	Disco	Disco
'1'	'5'	Party	
'1'	'6'	Game	Game
'1'	'7'	6/8 ch Stereo	7 ch Stereo
'1'	'8'	Pop/Rock	Pop/Rock
'1'	'9'	DJ	DJ
'1'	'A'		
'1'	'B'		
'1'	'C'	Classical / Opera	Opera
i -	,D,	Pavilion	Pavilion
'1'	'E'	- aviiion	
	'Ē'	1	
'2'	.0.	Mono Movie	Mono Movie
'2'	'1'	Variety / Sports	Variety / Sports
'2'	'2'	variety / Sports	variety / oports
'2'	'3'		
'2'	'4'	Spectacle	Canadaala
'2'	'5'	Sci-Fi	Spectacle Sci-Fi
'2'		SCI-FI	SCI-FI
	'6'		
'2'	'7'		
'2'	'8'	Adventure	Adventure
'2'	'9'	General	General
'2'	'A'		
'2'	'B'		
'2'	'C'	Normal	Normal
'2'	'D'	Enhanced	Enhanced
'2'	E,		
'2'	'F'		
'3'	.0,	Pro Logic II Movie	Pro Logic II Movie
'3'	'1'	Pro Logic II Music	Pro Logic II Music
'3'	'2'	NEO:6 Cinema	NEO:6 Cinema
'3'	.3.	NEO:6 Music	NEO:6 Music
'3'	'4'	2CH STEREO	2CH Stereo
'3'	'5'	DIRECT STEREO	Direct Stereo
'3'	'6'	THX CINEMA (ULTRA2)	
'3'	'7'	(= 111 = 7	
'8'	'0'	STRAIGHT	Straight
	·	1	