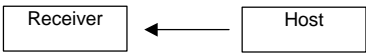


Extende RS-232C Command Protocol

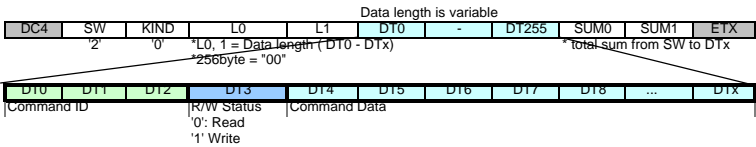
Com port setting and the pin configuration is same as standard RS-232C protocol of RX-Z9.

Commands from Host to Slave(Receiver)

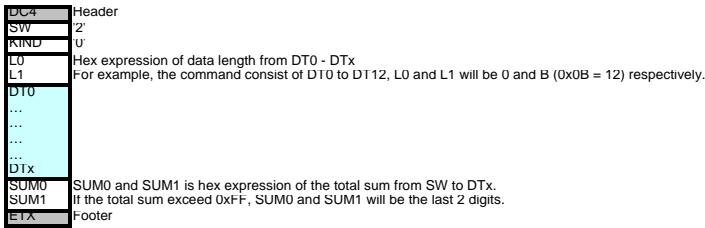


- There are two types of command from the host to the Receiver.
- 1) Read Item
 - 2) Write Item

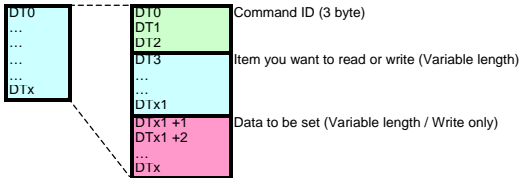
Extended command from the host to the receiver consist of the bytes as illustrated below.



When you read 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
Input Information	0	0	1	0	ID	Read Only
	Read Only				0	SP Out
					1	Audio Input Analog
					2	Audio Input Optical
					3	Audio Input Coaxial
					4	Audio Input D.D.RF
					5	Video Input Composite / S
					6	Video Input Component
					7	Audio Output Analog
					8	Audio Output Optical
DSP Information	0	0	2	0	ID	Read Only
	Read Only				0	Program
					1	User Parameters
I/O Assiogn	0	1	0	0 / 1	TYPE	No
	Read '0'				0	Coaxial IN
	Write '1'				1	Optical OUT
					2	Optical IN
					3	Component Video
					4	iLink
					5	Multi Ch BGV
					No	
					0	1
					1	2
					2	3
					3	4
					4	5
					5	6
					6	7
					7	8
					8	9
					9	10
					A	11
					B	12
					C	13
					Input ID	
					0	Phono
					1	CD
					2	Tuner
					3	CD-R
					4	MD/Tape
					5	DVD
					6	D-TV/LD
					7	Cable
					8	SAT
					9	VCR1
					A	VCR2
					B	DVR
					C	V-AUX
					D	Multi Ch
					E	DD RF

Rename	0'	1'	1'	0' / 1'	Rename	SUB ID 1	SUB ID2	Data No. 1	Data No. 4	Command Data
				Read '0' Write '1'	0'					
					Input					
					0'	0'	Phono			
					0'	1'	CD			
					0'	2'	Tuner			
					0'	3'	CD-R			
					0'	4'	MD/Tape			
					0'	5'	DVD			
					0'	6'	D-TV/LD			
					0'	7'	Cable			
					0'	8'	SAT			
					0'	9'	VCR1			
					0'	A'	VCR2			
					0'	B'	DVR			
					0'	C'	V-AUX			
					0'	D'	Multi Ch			
							Character No.			
							X'	X'	character number (= "08")	
									New Name (8 characters)	
									X' ... X'	

Input Trim	0'	1'	2'	0' / 1'	Rename	SUB ID 1	SUB ID2	Data 1	Data 2
				Read '0' Write '1'	0'				
					Input				
					0'	0'	Phono		
					0'	1'	CD		
					0'	2'	Tuner		
					0'	3'	CD-R		
					0'	4'	MD/Tape		
					0'	5'	DVD		
					0'	6'	D-TV/LD		
					0'	7'	Cable		
					0'	8'	SAT		
					0'	9'	VCR1		
					0'	A'	VCR2		
					0'	B'	DVR		
					0'	C'	V-AUX		
					0'	D'	Multi Ch		
					1'	E'	2ch (Pure)		
							Trim Value		
							X'	X'	'00' - '18'

Input and Level Trim	0'	1'	3'	0' / 1'	Rename	SUB ID 1	SUB ID2	Data
				Read '0' Write '1'	0'			
					Input			
					0'	0'	Phono	
					0'	1'	CD	
					0'	2'	Tuner	
					0'	3'	CD-R	
					0'	4'	MD/Tape	
					0'	5'	DVD	
					0'	6'	D-TV/LD	
					0'	7'	Cable	
					0'	8'	SAT	
					0'	9'	VCR1	
					0'	A'	VCR2	
					0'	B'	DVR	
					0'	C'	V-AUX	
					0'	D'	Multi Ch	
					1'	E'	2ch (Pure)	
							Status	
							0'	OFF
							1'	ON

User Parameter

0'	2'	0'	0' / 1'	DSP ID	Parameter ID	Parameter Data
----	----	----	---------	--------	--------------	----------------

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

0'	0'	Hall A
0'	1'	Hall B
0'	2'	Hall C
0'	3'	Hall D
0'	4'	Hall E
0'	5'	Hall F
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'	
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'	THX MUSIC
3'	8'	PRO LOGIC II Game
3'	9'	HALL F
3'	A'	HALL G
3'	B'	HALL H
3'	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'	SB INIT.DELAY
0' 9'	SB ROOM SIZE
0' A'	SB 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'	SB LEVEL
1' 6'	RR LEVEL
1' 7'	PL LEVEL
1' 8'	PR LEVEL
1' 9'	SBL LEVEL
1' A'	SBR LEVEL
1' B'	MATRIX
1' C'	DIAL LIFT
1' D'	THX DEC
1' E'	PL2x

*MATRIX	'00'	Pro Logic
	'01'	PLII Movie
	'02'	PLII Music
	'03'	PLII Game
	'04'	DTS Neo:6 Cinema
	'05'	DTS Neo:6 Music
	'06'	PLIIX Movie
	'07'	PLOOX Music
	'08'	PLIIX Game

Parameter Data		
P. Init. Delay	X	X
P. Room Size	X	X
P. Liveness	X	X
S. Delay (2ch)	X	X
S. Delay (Multi ch)	X	X
S. Init Delay	X	X
S. Room Size	X	X
S. Liveness	X	X
RC. Init. Delay	X	X
RC Room Size	X	X
RC Liveness	X	X
Rev. Time	X	X
Rev. Delay	X	X
Rev. Level	X	X
DSP Level	X	X
Panorama	X	X
Dimention	X	X
CT Width	X	X
C. Image	X	X
CT Level	X	X
RL Level	X	X
RC Level	X	X
RR Level	X	X
FL Level	X	X
FR Level	X	X
SBL LEVEL	X	X
SBR LEVEL	X	X
MATRIX	X	X
DIAL LIFT		
THX DEC		
PL2x		

Maker Parameter

0'	2'	0'	0' / 1'	DSP ID	Type	Parameter ID	Parameter Data
Read '0'			Write '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'	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'		
				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'	THX MUSIC	
				3'	8'	PRO LOGIC II Game	
				3'	9'	HALL F	
				3'	A'	HALL G	
				3'	B'	HALL H	
				8'	0'	STRAIGHT	
					Type		
					0'	Current	
					1'	2ch	
					2'	AAC	
					3'	DTS	
					4'	DD	
					5'	AAC+6.1	
					6'	DTS+6.1	
					7'	DD+6.1	
					8'	analog Multi	
					9'	Multi+6.1	

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

*MATRIX	'00'	Pro Logic
	'01'	PLII Movie
	'02'	PLII Music
	'03'	PLII Game
	'04'	DTS Neo:6 Cinema
	'05'	DTS Neo:6 Music
	'06'	PLIIx Movie
	'07'	PLIIx Music
	'08'	PLIIx Game

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'	SB INIT.DELAY
'0'	'9'	SB ROOM SIZE
'0'	'A'	SB 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'	SB LEVEL
'1'	'6'	RR LEVEL
'1'	'7'	PL LEVEL
'1'	'8'	PR LEVEL
'1'	'9'	SBL LEVEL
'1'	'A'	SBR LEVEL
'1'	'B'	MATRIX
'1'	'C'	DIAL LIF.
'1'	'D'	THX DEC.
'1'	'E'	PL2x
		Parameter Data
P. Init. Delay	'X'	'X'
P. Room Size	'X'	'X'
P. Liveness	'X'	'X'
S. Delay (2ch)	'X'	'X'
S. Delay (Multi ch)	'X'	'X'
S. Init Delay	'X'	'X'
S. Room Size	'X'	'X'
S. Liveness	'X'	'X'
RC. Init. Delay	'X'	'X'
RC Room Size	'X'	'X'
RC Liveness	'X'	'X'
Rev. Time	'X'	'X'
Rev. Delay	'X'	'X'
Rev. Level	'X'	'X'
DSP Level	'X'	'X'
Panorama	'X'	'X'
Dimention	'X'	'X'
CT Width	'X'	'X'
C. Image	'X'	'X'
CT Level	'X'	'X'
RL Level	'X'	'X'
RC Level	'X'	'X'
RR Level	'X'	'X'
FL Level	'X'	'X'
FR Level	'X'	'X'
SBL LEVEL	'X'	'X'
SBR LEVEL	'X'	'X'
MATRIX	'X'	'X'
DIAL LIF.	'X'	'X'
THX DEC.	'X'	'X'
PL2x	'X'	'X'

Parameter Initialize	0'	2'	2'	0' / 1'	DSP ID	
				Read '0' Write '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'				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'	9ch 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'	
	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'	THX MUSIC
	3'				8'	PRO LOGIC II Game
	3'				9'	HALL F
	3'				A'	HALL G
	3'				B'	HALL H

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

Channel EQ

0'	3'	0'	0' / 1'	Ch ID	Band ID	Gain
Read '0' Write '1'				0	CENTER	
				1	SUR BACK L	
				2	FRONT L	
				3	FRONT R	
				4	SUR L	
				5	SUR R	
				6	SUR BACK L	
				7	SUR BACK R	
				8	PRESENCE L	
				9	PRESENCE R	
				A	SWFR(1)	
				B	SWFR(2)	
				Band ID		
				0	63Hz	
				1	125Hz	
				2	180Hz	
				3	250Hz	
				4	400Hz	
				5	500kHz	
				6	1kHz	
				7	2kHz	
				8	2.5kHz	
				9	4kHz	
				A	6.3kHz	
				B	8kHz	
				C	16kHz	
				Gain		
				00	-6.0dB	
				01	-5.5dB	
				02	-5.0dB	
				03	-4.5dB	
				04	-4.0dB	
				05	-3.5dB	
				06	-3.0dB	
				07	-2.5dB	
				08	-2.0dB	
				09	-1.5dB	
				0A	-1.0dB	
				0B	-0.5dB	
				0C	0.0dB	
				0D	0.5dB	
				0E	1.0dB	
				0F	1.5dB	
				10	2.0dB	
				11	2.5dB	
				12	3.0dB	
				13	3.5dB	
				14	4.0dB	
				15	4.5dB	
				16	5.0dB	
				17	5.5dB	
				18	6.0dB	

Cinema EQ

0'		3'		1'		0' / 1'		Ch ID		ON/OFF		Band ID 1		Band ID 2		Gain			
Read '0' Write '1'								0'		L, C, R									
								1'		Presence									
								2'		Surround LR									
								3'		Surround Back LR									
								ON/OFF											
								0'												OFF
								1'		ON									
								Band ID											
								0'		0'		1kHz							
								0'		1'		1.3kHz							
								0'		2'		1.6kHz							
								0'		3'		2.0kHz							
								0'		4'		2.5kHz							
								0'		5'		3.2kHz							
								0'		6'		4.0kHz							
								0'		7'		5.0kHz							
								0'		8'		5.7kHz							
								0'		9'		6.3kHz							
								0'		A'		7.1kHz							
								0'		B'		8.0kHz							
								0'		C'		9.0kHz							
								0'		D'		10.1kHz							
								0'		E'		11.3kHz							
								0'		F'		12.7kHz							
								1'		0'		Thr							
								Gain											
								00				-6.0dB							
								01				-5.5dB							
								02				-5.0dB							
								03				-4.5dB							
								04				-4.0dB							
								05				-3.5dB							
								06				-3.0dB							
								07				-2.5dB							
								08				-2.0dB							
								09				-1.5dB							
								0A				-1.0dB							
								0B				-0.5dB							
								0C				0.0dB							
								0D				0.5dB							
								0E				1.0dB							
								0F				1.5dB							
								10				2.0dB							
								11				2.5dB							
								12				3.0dB							
								13				3.5dB							
								14				4.0dB							
								15				4.5dB							
								16				5.0dB							
								17				5.5dB							
								18				6.0dB							

Headphone EQ

0'	3'	2'	0' / 1'	Bass / Trbl	Gain
Read '0' Write '1'				0'	Bass
				1'	Treble
				3'	-6dB
				4'	-5dB
				5'	-4dB
				6'	-3dB
				7'	-2dB
				8'	-1dB
				9'	0dB
				A'	1dB
				B'	2dB
				C'	3dB

Tone Control

'0'	'3'	'3'	'0'/'1'	SP/HP	Bass / Trb	Turn Over	Gain
Read '0'				'0'	SP		
Write '1'				'1'	HP		
					Bass / Trb		
				'0'	Bass		
				'1'	Treble		
					Turn Over		
				'0'	Low		
				'1'	Mid		
				'2'	High		
					Gain		
				'00'	-6.0dB		
				'01'	-5.5dB		
				'02'	-5.0dB		
				'03'	-4.5dB		
				'04'	-4.0dB		
				'05'	-3.5dB		
				'06'	-3.0dB		
				'07'	-2.5dB		
				'08'	-2.0dB		
				'09'	-1.5dB		
				'0A'	-1.0dB		
				'0B'	-0.5dB		
				'0C'	0.0dB		
				'0D'	0.5dB		
				'0E'	1.0dB		
				'0F'	1.5dB		
				'10'	2.0dB		
				'11'	2.5dB		
				'12'	3.0dB		
				'13'	3.5dB		
				'14'	4.0dB		
				'15'	4.5dB		
				'16'	5.0dB		
				'17'	5.5dB		
				'18'	6.0dB		

DC Trigger

0'	4'	0'	0' / 1'	Terminal ID	Zone ID	Input ID	Data
			Read '0'	0'	Terminal 1		
			Write '1'	1'	Terminal 2		
					Zone ID		
				0'	Zone 1		
				1'	Zone 2		
				2'	Zone 3		
					Input ID		
				0'	PHONO		
				1'	CD		
				2'	TUNER		
				3'	CD-R		
				4'	MD/TAPE		
				5'	DVD		
				6'	D-TV/LD		
				7'	CABLE(CBL/SAT)		
				8'	SAT		
				9'	VCR1		
				A'	VCR2		
				B'	DVR		
				C'	V-AUX		
				D'	Multi CH		
					Data		
					0'	Off	
					1'	On	

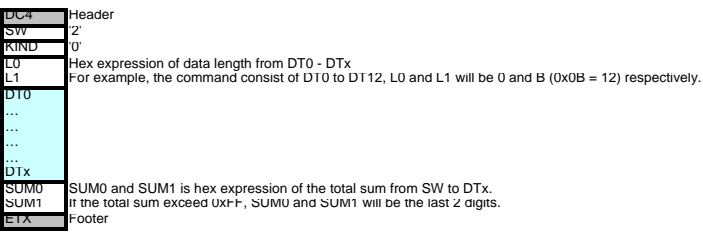
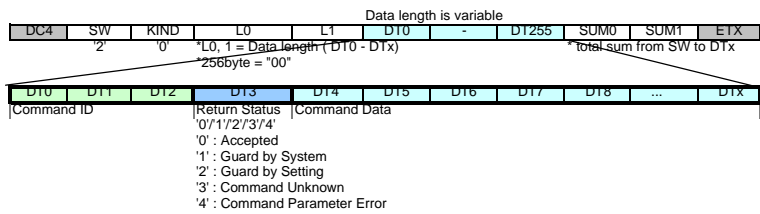
Speaker Distance

0'	4'	1'	0' / 1'	Terminal ID	Zone ID	Input ID	Data
			Read '0'	0'	Terminal 1		
			Write '1'	1'	Terminal 2		
					Zone ID		
				0'	Zone 1		
				1'	Zone 2		
				2'	Zone 3		
					Input ID		
				0'	PHONO		
				1'	CD		
				2'	TUNER		
				3'	CD-R		
				4'	MD/TAPE		
				5'	DVD		
				6'	D-TV/LD		
				7'	CABLE(CBL/SAT)		
				8'	SAT		
				9'	VCR1		
				A'	VCR2		
				B'	DVR		
				C'	V-AUX		
				D'	Multi CH		
					Data		
					0'	Off	
					1'	On	

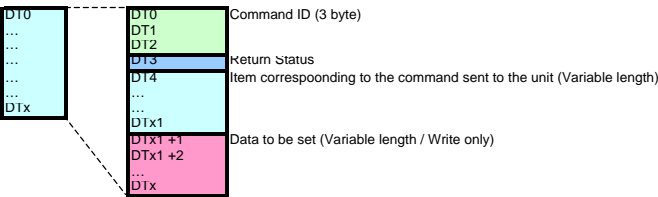
Tuner

0	5	0	0 / 1	Preset Pag	Preset No	Band	Freq
Read '0' Write '1'				0	Current		
				1	Page A		
				2	Page B		
				3	page C		
				4	Page D		
				5	Page E		
				Preset No			
				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		
				Band			
				0	FM		
				1	AM		
				Band Data (6 characters)			
				* FM 94.7MHz = "094.70"			
				AM 1710kHz = "001710"			

Return Commands from Slave to Host



Following is the data structure from DT0 to DTx.



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

System Information

0	0	0	0/1/2/3/4	ID	Command Data
0	0	0	0	Zone2	Zone2 None
0	0	0	1	Zone2 Exist	Zone2 None
0	0	0	0	Zone2 Volume	Zone2 Volume None
0	0	0	1	Zone2 Volume Exist	Zone2 Volume None
0	0	0	0	Zone2 SP	Zone2 SP None
0	0	0	1	Zone2 SP Exist	Zone2 SP None
0	0	0	0	Zone2 SP OUT	Zone2 SP OUT None
0	0	0	1	Zone2 SP OUT CT/RCT	Zone2 SP OUT CT/RCT
0	0	0	2	2 SP OUT Front	2 SP OUT Front
1	1	1	0	Tuner	Tuner None
1	1	1	1	Tuner Exist	Tuner None
1	1	1	0	RDS	RDS None
1	1	1	1	RDS Exist	RDS None
1	1	1	0	AM 530 - 1610kHz / FM 76.0 - 90.0MHz	AM 530 - 1610kHz / FM 76.0 - 90.0MHz
1	1	1	1	AM 530 - 1710kHz / FM 87.5 - 107.9MHz	AM 530 - 1710kHz / FM 87.5 - 107.9MHz
1	1	1	2	AM 531 - 1611kHz / FM 87.50 - 108.00MHz	AM 531 - 1611kHz / FM 87.50 - 108.00MHz
1	1	1	3	AM 530 - 1710kHz / FM 87.5 - 108.0MHz	AM 530 - 1710kHz / FM 87.5 - 108.0MHz
1	1	1	X	Page No = '5'	Page No = '5'
1	1	1	X	Preset No = '8'	Preset No = '8'
2	2	2	0	Video	Video None
2	2	2	1	Video Exist	Video None
2	2	2	0	OSD Int NTSC	OSD Int NTSC
2	2	2	1	OSD Int PAL	OSD Int PAL
2	2	2	2	OSD Int MULTI	OSD Int MULTI
2	2	2	0	Comonent OSD None	Comonent OSD None
2	2	2	1	Comonent OSD Exist	Comonent OSD Exist
2	2	2	0	Video Conversion None	Video Conversion None
2	2	2	1	Video Conversion Analog	Video Conversion Analog
2	2	2	2	Video Conversion Digital	Video Conversion Digital
2	2	2	0	GUI None	GUI None
2	2	2	1	GUI Exist	GUI Exist
3	3	3	0	Effect Ch	Effect Ch
3	3	3	X	Ch number = '5' (V3300), '4' (V2300)	Ch number = '5' (V3300), '4' (V2300)
3	3	3	X	ID Characters	ID Characters
3	3	3	0	Ch ID	Ch ID
3	3	3	0	0	CENTER
3	3	3	1	1	SUR L/R
3	3	3	2	2	SUR BACK
3	3	3	3	3	PRESENCE L/R
3	3	3	4	4	SWFR
3	3	3	5	5	SWFR 2
3	3	3	6	6	SUR BACK R
3	3	3	7	7	
3	3	3	8	8	
3	3	3	9	9	
4	4	4	0	Digital Format	Digital Format
4	4	4	X	Pair Data No = '4'	Pair Data No = '4'
4	4	4	X	(ID)	(ID)
4	4	4	X	(Data)	(Data)
4	4	4	...	...	...
4	4	4	...	...	...
4	4	4	0	PCM	PCM
4	4	4	0	None (No PCM playback)	None (No PCM playback)
4	4	4	1	Normal (PCM Playback)	Normal (PCM Playback)
4	4	4	2	Double Bypass (PCM double fs Playback)	Double Bypass (PCM double fs Playback)
4	4	4	3	Double DSP (PCM double fs Playback with DSP)	Double DSP (PCM double fs Playback with DSP)
4	4	4	4	Quad Bypass (PCM quadrople fs w/o DSP)	Quad Bypass (PCM quadrople fs w/o DSP)
4	4	4	5	Quad DSP	Quad DSP
4	4	4	1	DD	DD
4	4	4	0	None (No Dolby Digital playback)	None (No Dolby Digital playback)
4	4	4	1	Normal (Dolby Digital 5.1ch playback)	Normal (Dolby Digital 5.1ch playback)
4	4	4	2	Normal (Dolby Digital EX playback)	Normal (Dolby Digital EX playback)
4	4	4	2	DTS	DTS
4	4	4	0	None (No DTS playback)	None (No DTS playback)
4	4	4	1	Normal (DTS 5.1ch playback)	Normal (DTS 5.1ch playback)
4	4	4	2	Matrix ES (DTS Matrix ES/EX playback)	Matrix ES (DTS Matrix ES/EX playback)
4	4	4	3	Discrete ES (DTS discrete ES playback)	Discrete ES (DTS discrete ES playback)
4	4	4	4	96/24(DTS 96/24 playback)	96/24(DTS 96/24 playback)
4	4	4	3	AAC	AAC
4	4	4	0	None	None
4	4	4	1	Normal	Normal
4	4	4	4	DSD	DSD
4	4	4	0	None	None
4	4	4	1	Normal	Normal
5	5	5	0	DC Trigger	DC Trigger
5	5	5	X	Pair Data No = '4'	Pair Data No = '4'
5	5	5	X	(ID)	(ID)
5	5	5	X	(Data)	(Data)
5	5	5	...	...	...
5	5	5	...	...	...
5	5	5	0	Terminal 1	Terminal 1
5	5	5	0	ZONE ALL OR	ZONE ALL OR
5	5	5	1	ZONE1	ZONE1
5	5	5	2	ZONE2	ZONE2
5	5	5	3	ZONE3	ZONE3
5	5	5	1	Terminal 2	Terminal 2
5	5	5	0	ZONE ALL OR	ZONE ALL OR
5	5	5	1	ZONE1	ZONE1
5	5	5	2	ZONE2	ZONE2
5	5	5	3	ZONE3	ZONE3
6	6	6	0	Preset	Preset
6	6	6	X	Home Preset No. = '6'	Home Preset No. = '6'
6	6	6	X	Volume Preset No = '6'	Volume Preset No = '6'
6	6	6	X	Zone2 Volume Preset No = '6'	Zone2 Volume Preset No = '6'
7	7	7	0	Zone3	Zone3
7	7	7	0	Zone3 None	Zone3 None
7	7	7	1	Zone3 Exist	Zone3 Exist
7	7	7	0	Zone3 Volume	Zone3 Volume None
7	7	7	1	Zone3 Volume Exist	Zone3 Volume None
7	7	7	0	Zone3 SP	Zone3 SP None
7	7	7	1	Zone3 SP Exist	Zone3 SP None
7	7	7	0	Zone3 SP OUT	Zone3 SP OUT None
7	7	7	1	Zone3 SP OUT CT/RCT	Zone3 SP OUT CT/RCT
7	7	7	2	Zone3 SP OUT Front	Zone3 SP OUT Front
8	8	8	0	iLink	iLink
8	8	8	0	iLink None	iLink None
8	8	8	1	iLink Exist	iLink Exist

Input Information

0'	0'	1'	0/1/2/3/4'	ID	Data Number	Command Data
				0'	SP OUT	
					X' X'	Data No
						Ch ID
						0' 0' MAIN L
						0' 1' MAIN R
						0' 2' CENTER
						0' 3' SUR L
						0' 4' SUR R
						0' 5' SB (L)
						0' 6' PRESENCE L
						0' 7' PRESENCE R
						0' 8' SWPR (1)
						0' 9' SWPR 2
						0' A' SB R
1'						
2'						
3'						
4'						
5'						
6'						
7'						
8'						
9'						
					X' X'	Data No
						Ch ID
						0' 0' Phono
						0' 1' CD
						0' 2' Tuner
						0' 3' CD-R
						0' 4' MD/Tape
						0' 5' DVD
						0' 6' D-TV/LD
						0' 7' CBL/SAT
						0' 8' SAT
						0' 9' VCR1
						0' A' VCR2/DVR
						0' B' VCR3
						0' C' V-AUX
						0' D' MULTI CH

DSP Information

0'	0'	2'	0/1/2/3/4'	ID	Data Number	Command Data
				0'	Program	
				X'	X'	Data No
						Program ID
				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'	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'	9 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'	
				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'	THX MUSIC
				3'	8'	Pro Logic II Gaming
				3'	9'	HALL F
				3'	A'	HALL G
				3'	B'	HALL H
				8'	0'	STEREO

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

DSP Information	0	0	2	0/1/2/3/4	ID	Data Number	Command Data
					1	User Parameter	
					X	X	Data No
							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(DIRECT)
					0	5	S.INIT.DELAY
					0	6	S.ROOM.SIZE
					0	7	S.LIVENESS
					0	8	SB INIT.DELAY
					0	9	SB ROOM.SIZE
					0	A	SB 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	SB LEVEL
					1	6	RR LEVEL
					1	7	PL LEVEL
					1	8	PR LEVEL
					1	9	SBL LEVEL
					1	A	SBR LEVEL
					1	B	MATRIX
					1	C	DIAL LIFT
					1	D	THX DEC
					1	E	PL2x

I/O Assign	0	1	0	0/1/2/3/4	TYPE	No	Input ID
					0	Coaxial IN	
					1	Optical OUT	
					2	Optical IN	
					3	Component Video	
					0	1	or A (C.VIDEO)
					1	2	or B (C.VIDEO)
					2	3	or C (C.VIDEO)
					3	4	
					4	5	
					5	6	
					6	7	
					7	8	
					8	9	
					9	10	
					A	11	
					B	12	
					XX	XX+1 (Link = 0 - 62)	
					0	PHONO	
					1	CD	
					2	TUNER	
					3	CD-R	
					4	MD/TAPE	
					5	DVD	
					6	D-TV/LD	
					7	CABLE(CBL/SAT)	
					8	SAT	
					9	VCR1	
					A	VCR2	
					B	DVR	
					C	V-AUX	
					D	MULTI CH	
					E	LD RF	

Rename	0	1	1	0/1/2/3/4	Rename	SUB ID 1	SUB ID2	Data No. 1	Data No. 4	Command Data
					0					
						Input				
						0	0	Phono		
						0	1	CD		
						0	2	Tuner		
						0	3	CD-R		
						0	4	MD/Tape		
						0	5	DVD		
						0	6	D-TV/LD		
						0	7	Cable		
						0	8	SAT		
						0	9	VCR1		
						0	A	VCR2		
						0	B	DVR		
						0	C	V-AUX		
						0	D	MULTI CH		
								Character No.		
							X	X	character number (= "08")	
									New Name (8 characters)	
									X ... X	

User Parameter

0	2	0	0/1/2/3/4	DSP ID	Parameter ID	Parameter Data
0				0	0	Hall A
0				0	1	Hall B
0				0	2	Hall C
0				0	3	
0				0	4	Hall D
0				0	5	Hall E
0				0	6	Live Concert
0				0	7	
0				0	8	Tokyo
0				0	9	Freiburg
0				0	A	Royaumont
0				0	B	
0				0	C	Village Gate
0				0	D	Village Vanguard
0				0	E	The Bottom Line
0				0	F	
1				0	0	Roxy Theatre
1				1	1	Warehouse Loft
1				1	2	Arena
1				1	3	
1				1	4	Disco
1				1	5	Party
1				1	6	Game
1				1	7	9ch Stereo
1				1	8	Pop/Rock
1				1	9	DJ
1				1	A	
1				1	B	
1				1	C	Classical / Opera
1				1	D	Pavilion
1				1	E	
1				1	F	
2				0	0	Mono Movie
2				1	1	Variety / Sports
2				2	2	
2				2	3	
2				2	4	Spectacle
2				2	5	Sci-Fi
2				2	6	
2				2	7	
2				2	8	Adventure
2				2	9	General
2				2	A	
2				2	B	
2				2	C	Normal
2				2	D	Enhanced
2				2	E	
2				2	F	
3				0	0	Pro Logic II Movie
3				1	1	Pro Logic II Music
3				2	2	NEO-6 Cinema
3				3	3	NEO-6 Music
3				4	4	2CH STEREO
3				5	5	DIRECT STEREO
3				6	6	THX CINEMA (ULTRA2)
3				7	7	THX MUSIC
3				8	8	PRO LOGIC II Game
3				9	9	HALL F
3				A	A	HALL G
3				B	B	HALL H

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

*MATRIX	00	Pro Logic
	01	PLII Movie
	02	PLII Music
	03	PLII Game
	04	DTS Neo:6 Cinema
	05	DTS Neo:6 Music
	06	PLIIx Movie
	07	PLIIx Music
	08	PLIIx Game

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	SB INIT.DELAY
0	9	SB ROOM SIZE
0	A	SB 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	SB LEVEL
1	6	RR LEVEL
1	7	PL LEVEL
1	8	PR LEVEL
1	9	SBL LEVEL
1	A	SBR LEVEL
1	B	MATRIX
1	C	DIAL LIFT
1	D	THX DEC
1	E	PLIIx
Parameter Data		
P.INIT.DELAY	X	X
P.ROOM.SIZE	X	X
P.LIVENESS	X	X
S.DELAY 2CH	X	X
	X	X
	X	X
	X	X
	X	X
S.DELAY DIRECT	X	X
S.INIT.DELAY	X	X
S.ROOM SIZE	X	X
S.LIVENESS	X	X
SB INIT.DELAY	X	X
SB ROOM SIZE	X	X
SB LIVENESS	X	X
REV.TIME	X	X
REV.DELAY	X	X
REV. LEVEL	X	X
DSP LEVEL	X	X
PANORAMA	X	X
DIMENSION	X	X
CT WIDTH	X	X
C.IMAGE	X	X
CT LEVEL	X	X
RL LEVEL	X	X
SB LEVEL	X	X
RR LEVEL	X	X
PL LEVEL	X	X
PR LEVEL	X	X
SBL LEVEL	X	X
SBR LEVEL	X	X
MATRIX	X	X
DIAL LIFT	X	X
THX DEC	X	X
PL2x	X	X

Pro Logic, PLII Movie
PLII Music
Neo:6
Other
for Multi Ch

Maker Parameter

0'	2'	0'	0/1/2/3/4'	DSP ID	Parameter ID	Type	Parameter Data
				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'	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'	9ch 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'		
				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'	THX MUSIC	
				3'	8'	PRO LOGIC II Game	
				3'	9'	HALL F	
				3'	A'	HALL G	
				3'	B'	HALL H	
						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'	SB INIT.DELAY	
				0'	9'	SB ROOM SIZE	
				0'	A'	SB 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'	SB LEVEL	
				1'	6'	RR LEVEL	
				1'	7'	PL LEVEL	
				1'	8'	PR LEVEL	
				1'	9'	SBL LEVEL	
				1'	A'	SBR LEVEL	
				1'	B'	MATRIX	
				1'	C'	DIAL LIFT	
				1'	D'	THX DEC	
				1'	E'	PLix	
						Type	
				0'		Current	
				1'		2ch	
				2'		AAC	
				3'		DTS	
				4'		Dolby Digital	
				5'		AAC + 6.1	
				6'		DTS + 6.1	
				7'		Dolby Digital + 6.1	
				8'		Analog Multi	
				9'		Multi + 6.1	

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

*MATRIX	'00'	Pro Logic
	'01'	PLII Movie
	'02'	PLII Music
	'03'	PLII Game
	'04'	DTS Neo:6 Cinema
	'05'	DTS Neo:6 Music
	'06'	PLIIx Movie
	'07'	PLOOx Music
	'08'	PLIIx Game

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'
	X	X	'00'-'0F'
	X	X	'00'-'1E'
	X	X	'01'-'31'
S.DELAY DIRECT	X	X	'00'-'0F'
S.INIT.DELAY	X	X	'01'-'31'
S.ROOM.SIZE	X	X	'01'-'14'
S.LIVENESS	X	X	'00'-'0A'
SB INIT.DELAY	X	X	'01'-'31'
SB ROOM.SIZE	X	X	'01'-'14'
SB 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'
SB LEVEL	X	X	'00'-'64'
RR LEVEL	X	X	'00'-'64'
PL LEVEL	X	X	'00'-'64'
PR LEVEL	X	X	'00'-'64'
SBL LEVEL	X	X	'00'-'64'
SBR LEVEL	X	X	'00'-'64'
MATRIX	X	X	'00'-'08'
DIAL LIF1	X	X	'00'-'05'
THX DEC	X	X	'00'-'02'
PL2x	X	X	'00'/01'

Pro Logic, PLII Movie
PLII Music
Neo:6
Other
for Multi Ch

Parameter Initialize	0	2	2	0/1/2/3/4	DSP ID	
	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			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		9ch 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		
	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		THX MUSIC
	3			8		PRO LOGIC II Game
	3			9		HALL F
	3			A		HALL G
	3			B		HALL H

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

Channel EQ

0	3	0	0/1/2/3/4	Ch ID	Band ID	Gain
				0	CENTER	
				1	SUR BACK	
				2	FRONT L	
				3	FRONT R	
				4	SUR L	
				5	SUR R	
				6	SUR BACK L	
				7	SUR BACK R	
				8	PRESENCE L	
				9	PRESENCE R	
				A	SWFR(1)	
				B	SWFR(2)	
				0	63Hz	
				1	125Hz	
				2	160Hz	
				3	250Hz	
				4	400Hz	
				5	500kHz	
				6	1kHz	
				7	2kHz	
				8	2.5kHz	
				9	4kHz	
				A	6.3kHz	
				B	8kHz	
				C	16kHz	
				00	-6.0dB	
				01	-5.5dB	
				02	-5.0dB	
				03	-4.5dB	
				04	-4.0dB	
				05	-3.5dB	
				06	-3.0dB	
				07	-2.5dB	
				08	-2.0dB	
				09	-1.5dB	
				0A	-1.0dB	
				0B	-0.5dB	
				0C	0.0dB	
				0D	0.5dB	
				0E	1.0dB	
				0F	1.5dB	
				10	2.0dB	
				11	2.5dB	
				12	3.0dB	
				13	3.5dB	
				14	4.0dB	
				15	4.5dB	
				16	5.0dB	
				17	5.5dB	
				18	6.0dB	

Cinama EQ

0'	3'	1'	0/1/2/3/4'	CH ID	ON/OFF	HSF FREQ	HSF GAIN	PEQ FREQ	PEQ GAIN
				0	L/C/R				
				1	Presence				
				2	Sur L/R				
				3	S.Back L/R				
				ON/OFF					
				0	OFF				
				1	ON				
				HSF FREQ					
				0	1K				
				1	1.3K				
				2	1.6K				
				3	2.0K				
				4	2.5K				
				5	3.2K				
				6	4.0K				
				7	5.0K				
				8	5.7K				
				9	6.3K				
				A	7.1K				
				B	8.0K				
				C	9.0K				
				D	10.1K				
				E	11.3K				
				F	12.7K				
				10	thr				
				HSF GAIN					
				0	-9.0 dB				
				1	-8.5 dB				
				2	-8.0 dB				
				3	-7.5 dB				
				4	-7.0 dB				
				5	-6.5 dB				
				6	-6.0dB				
				7	-5.5dB				
				8	-5.0dB				
				9	-4.5dB				
				A	-4.0dB				
				B	-3.5dB				
				C	-3.0dB				
				D	-2.5dB				
				E	-2.0dB				
				F	-1.5dB				
				10	-1.0dB				
				11	-0.5dB				
				12	0.0dB				
				13	0.5dB				
				14	1.0dB				
				15	1.5dB				
				16	2.0dB				
				17	2.5dB				
				18	3.0dB				
				PEQ FREQ					
				0	1K				
				1	1.3K				
				2	1.6K				
				3	2.0K				
				4	2.5K				
				5	3.2K				
				6	4.0K				
				7	5.0K				
				8	5.7K				
				9	6.3K				
				A	7.1K				
				B	8.0K				
				C	9.0K				
				D	10.1K				
				E	11.3K				
				F	12.7K				
				10	thr				
				PEQ GAIN					
				0	-9.0 dB				
				1	-8.5 dB				
				2	-8.0 dB				
				3	-7.5 dB				
				4	-7.0 dB				
				5	-6.5 dB				
				6	-6.0dB				
				7	-5.5dB				
				8	-5.0dB				
				9	-4.5dB				
				A	-4.0dB				
				B	-3.5dB				
				C	-3.0dB				
				D	-2.5dB				
				E	-2.0dB				
				F	-1.5dB				
				10	-1.0dB				
				11	-0.5dB				
				12	0.0dB				
				13	0.5dB				
				14	1.0dB				
				15	1.5dB				
				16	2.0dB				
				17	2.5dB				
				18	3.0dB				

Headphone EQ	0	3	2	0/1/2/3/4	Bass / Treble	Gain
					0	Bass
					1	Treble
					3	-6dB
					4	-5dB
					5	-4dB
					6	-3dB
					7	-2dB
					8	-1dB
					9	0dB
					A	1dB
					B	2dB
					C	3dB

DC Trigger	0	4	0	0/1/2/3/4	Terminal ID	Zone ID	Input ID	Data
					0	Terminal 1		
					1	Terminal 2		
						Zone ID		
						0	Zone 1	
						1	Zone 2	
						2	Zone 3	
						Input ID		
						0	Phono	
						1	CD	
						2	Tuner	
						3	CD-R	
						4	MD/Tape	
						5	DVD	
						6	D-TV/LD	
						7	CBL/SAT	
						8	SAT	
						9	VCR1	
						A	VCR2	
						B	DVR	
						C	V-AUX	
						D	MULTI CH	
						Data		
						0	OFF	
						1	ON	

Tuner	0	5	0	0/1/2/3/4	Preset Pag	Preset No	Band	Freq
					0	Current		
					1	Page A		
					2	Page B		
					3	Page C		
					4	Page D		
					5	Page E		
						Preset No		
						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	
						Band		
						0	AM	
						1	FM	
						Band Data (6 characters)		
								* FM 94.7MHz = "094.70"
								AM 1710kHz = "001710"

Appendix

1. DSP Program ID Table

(RX-Z9)

Program ID			
0	0	Hall A	Munch A
0	1	Hall B	Munch B
0	2	Hall C	Frankfurt
0	3		
0	4	Hall D	Stuttgart
0	5	Hall E	Vienna
0	6	Live Concert	Live Concert
0	7		
0	8	Tokyo	Tokyo
0	9	Freiburg	Freiburg
0	A	Royaumont	Royaumont
0	B		
0	C	Village Gate	Village Gate
0	D	Village Vanguard	Village Vanguard
0	E	The Bottom Line	The Bottom Line
0	F		
1	0	Roxy Theatre	The Roxy Theater
1	1	Warehouse Loft	Warehouse Loft
1	2	Arena	Arena
1	3		
1	4	Disco	Disco
1	5	Party	Party
1	6	Game	Game
1	7	9ch Stereo	9ch Stereo
1	8	Pop/Rock	Pop/Rock
1	9	DJ	DJ
1	A		
1	B		
1	C	Classical / Opera	Classical / Opera
1	D	Pavilion	Pavilion
1	E		
1	F		
2	0	Mono Movie	Mono Movie
2	1	Variety / Sports	Variety / Sports
2	2		
2	3		
2	4	Spectacle	Spectacle
2	5	Sci-Fi	Sci-Fi
2	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	
3	1	Pro Logic II Music	
3	2	NEO:6 Cinema	
3	3	NEO:6 Music	
3	4	2CH STEREO	2CH STEREO
3	5	DIRECT STEREO	DIRECT STEREO
3	6	THX CINEMA (ULTRA2)	THX CINEMA (ULTRA2)
3	7	THX MUSIC	THX MUSIC
3	8	PRO LOGIC II Game	
3	9	HALL F	Amsterdam
3	A	HALL G	USA Hall A
3	B	HALL H	USA Hall B