RX-V3300 and V2300 Extended RS-232C Protocol

Commands from Host to Slave(Receiver)

Data length is variable

DC4	SW	KIND	L0	L1	DT0	-	DT255	SUM0	SUM1	ETX

*L0, 1 = Data length (DT0 - DTx)
*256byte = "00"

* total sum from SW to DTx

DT0	DT1	DT2	DT3	DT4	DT5	DT6	DT7	DT8	...	DTx
Command ID			R/W Status '0': Read '1' Write	Command Data						

System Information

DT0	DT1	DT2	DT3	DT4	…
'0'	'0'	'0'	'0' Read Only	ID	
				'0'	Zone2
				'1'	Tuner
				'2'	Video
				'3'	Effect ch
				'4'	Digital Format
				'5'	DC Trigger
				'6'	Preset

Input Information

DT0	DT1	DT2	DT3	DT4	
'0'	'0'	'1'	'0' Read Only	ID	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 Optiocal
				'9'	Video Output Composite / S

DSP Information

DT0	DT1	DT2	DT3	DT4	
'0'	'0'	'2'	'0' Read Only	ID	Read Only
				'0'	Program
				'1'	User Parameters

I/O Assiogn

'0'	'1'	'0'	'0' / '1'	TYPE	No	Input ID
				'0'	Coaxial IN	
				'1'	Optical OUT	
				'2'	Optical IN	
				'3'	Component Video	
					'0' 1 or A	
					'1' 2 or B	
					'2' 3 or C	
					'3' 4 or D	
					'4' 5 or E	
					'5' 6 or F	
						'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/DVR
						'B' VCR3
						'C' V-AUX
						'D' LD-RF

Rename

'0'	'1'	'1'	'0' / '1'	Rename	SUB ID 1	SUB ID2	Data No. 1	Data No. 2	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'	CBL/SAT		
					'0'	'8'	SAT		
					'0'	'9'	VCR1		
					'0'	'A'	VCR2/DVR		
					'0'	'B'	VCR3		
					'0'	'C'	V-AUX		
					'0'	'D'	LD-RF		
							Caracter No.		
							'X'	'X'	character number (= "08")
									New Name (8 characters)
									'X' ... 'X'

User Parameter

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

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

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'	'E'	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

	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"
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"

Parameter Initialize	'0'	'2'	'2'	'0' / '1'

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

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'	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

Channel EQ

'0'	'3'	'0'	'0' / '1'	Ch ID	Band ID	Gain
				'0'	center	
				'1'	Rear Center	
					'0'	100 Hz
					'1'	300 Hz
					'2'	1 kHz
					'3'	3 kHz
					'4'	10 kHz
						'3' -6dB
						'4' -5dB
						'5' -4dB
						'6' -3dB
						'7' -2dB
						'8' -1dB
						'9' 0dB
						'A' 1dB
						'B' 2dB
						'C' 3dB
						'D' 4dB
						'E' 5dB
						'F' 6dB

Headphone EQ

'0'	'3'	'2'	'0' / '1'	Bass / Trbl	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

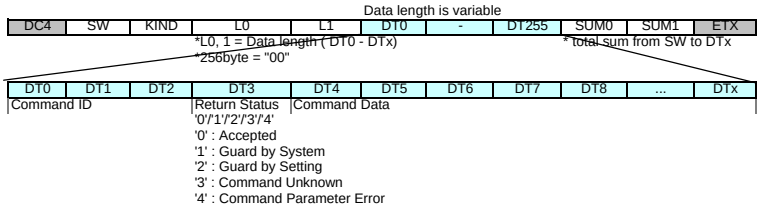
'0'	'4'	'0'	'0' / '1'	Terminal ID	Zone ID	Input ID	Data
				'0'	Terminal 1		
				'1'	Terminal 2		
					'0'	Zone 1	
					'1'	Zone 2	
						'0'	Phono
						'1'	CD
						'2'	Tuner
						'3'	CD-R
						'4'	MD/Tape
						'5'	DVD
						'6'	D-TV/LD
						'7'	CBL/SAT
						'8'	SAT
						'9'	VCR1
						'A'	VCR2/DVR
						'B'	VCR3
						'C'	V-AUX
						'D'	LD-RF
							'0' Low
							'1' High

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	
						'0' AM	
						'1' FM	
							Band Data (6 characters)

* FM 94.7MHz = "094.70"
AM 1710kHz = "001710"

Return Commands from Slave to Host



System Information

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

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'	Rear L
						'0'	'4'	Rear C
						'0'	'5'	Rear R
						'0'	'6'	Front L
						'0'	'7'	Front R
						'0'	'8'	SWFR (L)
						'0'	'9'	SWFR R
				'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			
				'9'	Video Output Composite / S			
					'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'	LD-RF

DSP Information

'0'	'0'	'2'	'0'/'1'/'2'/'3'/'4'	ID	Data Number	Command Data
				'0'	Program	
					'X' 'X'	Data No

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

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'	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

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 (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

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
					'1'	2 or B
					'2'	3 or C
					'3'	4 or D
					'4'	5 or E
					'5'	6 or F

'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/DVR
'B'	VCR3
'C'	V-AUX
'D'	LD-RF

Rename

'0'	'1'	'1'	'0'/'1'/'2'/'3'/'4'	Rename	SUB ID 1	SUB ID2	Data No. 1	Data No. 2	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'	CBL/SAT
'0'	'8'	SAT
'0'	'9'	VCR1
'0'	'A'	VCR2/DVR
'0'	'B'	VCR3
'0'	'C'	V-AUX
'0'	'D'	LD-RF

		Character No.
'X'	'X'	character number (= "08")
		New Name (8 characters)
'X'	...	'X'

User Parameter

'0'	'2'	'0'	'0'/'1'/'2'/'3'/'4'

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

DSP ID		Parameter ID	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'	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	

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'	'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'	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' 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

*** 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'	Rear Center		
					'0'	100 Hz	
					'1'	300 Hz	
					'2'	1 kHz	
					'3'	3 kHz	
					'4'	10 kHz	
						'3'	-6dB
						'4'	-5dB
						'5'	-4dB
						'6'	-3dB
						'7'	-2dB
						'8'	-1dB
						'9'	0dB
						'A'	1dB
						'B'	2dB
						'C'	3dB
						'D'	4dB
						'E'	5dB
						'F'	6dB

Headphone EQ

'0'	'3'	'2'	'0'/'1'/'2'/'3'/'4'	Bass / Trbl	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			
					'0'	Zone 1		
					'1'	Zone 2		
						'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/DVR	
						'B'	VCR3	
						'C'	V-AUX	
						'D'	LD-RF	
							'0'	Low
							'1'	High

Tuner

'0'	'5'	'0'	'0'/'1'/'2'/'3'/'4'	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		
						'0'	AM	
						'1'	FM	
							Band Data (6 characters)	

* FM 94.7MHz = "094.70"
AM 1710kHz = "001710"

Appendix

1. DSP Program ID Table

Program ID			RX-V3300	RX-V2300
'0'	'0'	Hall A	Hall A	Hall 1
'0'	'1'	Hall B	Hall B	
'0'	'2'	Hall C		
'0'	'3'			
'0'	'4'	Hall D	Hall C	
'0'	'5'	Hall E		
'0'	'6'	Live Concert	Live Concert	Hall 2
'0'	'7'			
'0'	'8'	Tokyo		
'0'	'9'	Freiburg	Freiburg	
'0'	'A'	Royaumont	Royaumont	Church
'0'	'B'			
'0'	'C'	Village Gate	Village Gate	
'0'	'D'	Village Vanguard		
'0'	'E'	The Bottom Line	The Bottom Line	Jazz Club
'0'	'F'			
'1'	'0'	Roxy Theatre	Roxy Theatre	Rock Concert
'1'	'1'	Warehouse Loft		
'1'	'2'	Arena	Arena	
'1'	'3'			
'1'	'4'	Disco	Disco	Disco
'1'	'5'	Party		
'1'	'6'	Game	Game	Game
'1'	'7'	6/8 ch Stereo	6/8 ch Stereo	6/8 ch Stereo
'1'	'8'	Pop/Rock	Pop/Rock	Music Video
'1'	'9'	DJ	DJ	
'1'	'A'			
'1'	'B'			
'1'	'C'	Classical / Opera	Opera	
'1'	'D'	Pavilion	Pavilion	
'1'	'E'			
'1'	'F'			
'2'	'0'	Mono Movie	Mono Movie	
'2'	'1'	Variety / Sports	Variety / Sports	Variety / Sports
'2'	'2'			
'2'	'3'			
'2'	'4'	Spectacle	Spectacle	Spectacle
'2'	'5'	Sci-Fi	Sci-Fi	Sci-Fi
'2'	'6'			
'2'	'7'			
'2'	'8'	Adventure	Adventure	Adventure
'2'	'9'	General	General	General
'2'	'A'			
'2'	'B'			
'2'	'C'	Normal	Normal	Normal
'2'	'D'	Enhanced	Enhanced	Enhanced
'2'	'E'			
'2'	'F'			
'3'	'0'	Pro Logic II Movie	Pro Logic II Movie	Pro Logic II Movie
'3'	'1'	Pro Logic II Music	Pro Logic II Music	Pro Logic II Music
'3'	'2'	NEO:6 Cinema	NEO:6 Cinema	NEO:6 Cinema
'3'	'3'	NEO:6 Music	NEO:6 Music	NEO:6 Music