

RSX 1065

1 Byte waveform format

Baud Rate	Parity	Valid data bits	Stop bit value	Handshaking	Data type
19200	n	8	1	none	string

1. RSX1065 -> PC

Display data

Start	Count	ID	Type	Data						Chk
0xfe	0x31	0xc1	0x20	char1	...	char42	flag1	...	flag5	xx

char1~42:
ASCII Characters

flag1:	flag2:	flag3:	flag4:	flag5:
bit7 Optical	bit7 Dolby Digital	bit7 Preset	bit7 Zone	bit7 "FL"
bit6 Coaxial	bit6 Dolby Prologic	bit6 RDS	bit6 "5.1"	bit6 "C"
bit5 [1]	bit5 dts	bit5 Stereo[Tuner]	bit5 "7.1"	bit5 "FR"
bit4 [2]	bit4 THX	bit4 Tuned	bit4 ">"	bit4 "SL"
bit3 [3]	bit3 EX	bit3 Stby-LED	bit3 "<"	bit3 "SR"
bit2 [4]	bit2 DSP	bit2 "0"	bit2 "0"	bit2 "SW"
bit1 [5]	bit1 "0"	bit1 display mode1	bit1 "0"	bit1 "sbl"
bit0 [A]	bit0 "0"	bit0 display mode0	bit0 "sb"	bit0 "sbr"

	Normal	FL off
display mode1	0	1
display mode0	0	0

2. PC -> RSX1065

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xc1	0x10	xx	xx

key:		key:		key:		key:	
0x00	RMC Vol+	0x10	Bass-	0x20	Tune / Preset	0x30	7
0x01	RMC Vol-	0x11	Stereo	0x21	Preset Scan	0x31	8
0x02	CD	0x12	3 Stereo	0x22	Surround+	0x32	9
0x03	Tuner	0x13	Pro Logic	0x23	Zone 2 / Main	0x33	0
0x04	Tape	0x14	DSP	0x24	Band		
0x05	Video1	0x15	5.1CH[Multi Input]	0x25	Freq. Direct	0x44	RDS Display
0x06	Video2	0x16	Dynamic	0x26	Mono	0x45	RDS PTY
0x07	Video3	0x17	Rec	0x27	Memory/Enter	0x46	RDS TP
0x08	Video4	0x18	OSD Menu	0x28	Tuning+	0x47	RDS TA
0x09	Video5	0x19	OSD Enter	0x29	Tuning-		
0x0a	Power	0x1a	OSD Right(+)	0x2a	1	0x4a	Power Off
0x0b	Vol+	0x1b	OSD Left(-)	0x2b	2	0x4b	Power On
0x0c	Vol-	0x1c	OSD Up/Trim Sel	0x2c	3	0x4c	C
0x0d	Treble+	0x1d	OSD Down/Dynamic	0x2d	4	0x4d	S
0x0e	Treble-	0x1e	Mute	0x2e	5	0x4e	R
0x0f	Bass+	0x1f	Digital In Select	0x2f	6	0x4f	Filter (EQ)

key:		key:	
0x52	FL on/off	0x60	Neo6Music
0x53	ProLogic / 3 Stereo	0x61	Neo6Cinema
0x54	dts Neo:6	0x62	Panorama
0x55	FM	0x63	Dimension Up
0x56	AM	0x64	Dimension Down
0x57	Music1	0x65	Center Width Up
0x58	Music2	0x66	Center Width Down
0x59	Music3	0x67	
0x5a	Music4	0x68	DD EX On/Off
0x5b	5Ch Stereo	0x69	Tuning Select
0x5c	7Ch Stereo	0x6a	Preset Select
0x5d	PLII Cinema		
0x5e	PLII Music		
0x5f	PLII Emulation		
0x5g			
0x5h		0xff	Refresh

RSX 1065 RS232 Controller Command List

Table: RSX 1065 Waveform format expected:

Baud Rate	Parity	Valid Data Bits	Stop Bit Value	Handshaking	Data Type
19200	N	8	1	None	String

Table: RSX 1065 expected format of a request by RS232 controller:

Start	Count	Device ID	Type	Key	Checksum
0xFE	0x03	0xC1	0x10	0xFF	0xFF

Table 1: Type 10 Primary Command List

NOTE: The values in the table below show the exact byte sequence of all requests. The device will expect the bytes only - no spaces, no delimiter, etc. The controlling device may implement its own method to download each command sequence. The numerical values in the first column are Hexadecimal.

RSX 1065 HEX	Command	Command Description
FE 03 C1 10 00 D4	RMC Vol+	Remote Volume Up
FE 03 C1 10 01 D5	RMC Vol-	Remote Volume Down
FE 03 C1 10 02 D6	CD	Source CD
FE 03 C1 10 03 D7	Tuner	Source Tuner
FE 03 C1 10 04 D8	Tape	Source Tape
FE 03 C1 10 05 D9	Video 1	Source Video 1
FE 03 C1 10 06 DA	Video 2	Source Video 2
FE 03 C1 10 07 DB	Video 3	Source Video 3
FE 03 C1 10 08 DC	Video 4	Source Video 4
FE 03 C1 10 09 DD	Video 5	Source Video 5
FE 03 C1 10 0A DE	Power	Power Toggle
FE 03 C1 10 0B DF	Vol+	Volume Up
FE 03 C1 10 0C E0	Vol-	Volume Down
FE 03 C1 10 0D E1	Treble+	Treble Up
FE 03 C1 10 0E E2	Treble-	Treble Down
FE 03 C1 10 0F E3	Bass+	Bass Up
FE 03 C1 10 10 E4	Bass-	Bass Down
FE 03 C1 10 11 E5	Stereo	DSP Stereo
FE 03 C1 10 12 E6	3 Stereo	DSP Dolby 3 Stereo
FE 03 C1 10 13 E7	Pro Logic	DSP Pro Logic
FE 03 C1 10 14 E8	DSP	DSP Music
FE 03 C1 10 15 E9	Multi	Multi Input
FE 03 C1 10 16 EA	Dynamic	Dynamic Range
FE 03 C1 10 17 EB	Rec	Record
FE 03 C1 10 18 EC	OSD Menu	OSD Menu
FE 03 C1 10 19 ED	OSD Enter	OSD Enter
FE 03 C1 10 1A EE	OSD Right (+)	OSD Right
FE 03 C1 10 1B EF	OSD Left (-)	OSD Left
FE 03 C1 10 1C F0	OSD Up	OSD Up

RSX 1065 HEX	Command	Command Description
FE 03 C1 10 1D F1	OSD Down / Dynamic	OSD Down / Dynamic
FE 03 C1 10 1E F2	Mute	Mute
FE 03 C1 10 1F F3	Digital In Select	Digital Input Select
FE 03 C1 10 20 F4	Tune / Preset	Tune / Preset Toggle
FE 03 C1 10 21 F5	Preset Scan	Preset Scan
FE 03 C1 10 22 F6	Surround+	Next Surround Mode
FE 03 C1 10 23 F7	Zone 2 / Main	Zone
FE 03 C1 10 24 F8	Band	Tuner Band
FE 03 C1 10 25 F9	Freq. Direct	Tuner Frequency Direct
FE 03 C1 10 26 FA	FM Mono	Tuner FM Mono
FE 03 C1 10 27 FB	Memory / Enter	Tuner Memory Enter
FE 03 C1 10 28 FC	Tuning+	Tuner Up
FE 03 C1 10 29 FD	Tuning-	Tuner Down
FE 03 C1 10 2A FE	1	1
FE 03 C1 10 2B FF	2	2
FE 03 C1 10 2C 00	3	3
FE 03 C1 10 2D 01	4	4
FE 03 C1 10 2E 02	5	5
FE 03 C1 10 2F 03	6	6
FE 03 C1 10 30 04	7	7
FE 03 C1 10 31 05	8	8
FE 03 C1 10 32 06	9	9
FE 03 C1 10 33 07	0	0
FE 03 C1 10 44 18	Display	Tuner Display
FE 03 C1 10 45 19	PTY	RDS PTY
FE 03 C1 10 46 1A	TP	RDS TP
FE 03 C1 10 47 1B	TA	RDS TA
FE 03 C1 10 4A 1E	Power Off	Power Off
FE 03 C1 10 4B 1F	Power On	Power On
FE 03 C1 10 4C 20	C	Center
FE 03 C1 10 4D 21	S	Subwoofer
FE 03 C1 10 4E 22	R	Surround
FE 03 C1 10 4F 23	Filter (EQ)	Cinema EQ
FE 03 C1 10 52 26	FL On / Off	FL Display Toggle
FE 03 C1 10 53 27	Pro Logic / 3 Stereo	Dolby 3 Stereo
FE 03 C1 10 54 28	dts Neo:6	dts Neo:6
FE 03 C1 10 55 29	FM	FM
FE 03 C1 10 56 2A	AM	AM
FE 03 C1 10 57 2B	Music 1	Music 1
FE 03 C1 10 58 2C	Music 2	Music 2
FE 03 C1 10 59 2D	Music 3	Music 3
FE 03 C1 10 5A 2E	Music 4	Music 4
FE 03 C1 10 5B 2F	5Ch Stereo	5Ch Stereo
FE 03 C1 10 5C 30	7Ch Stereo	7Ch Stereo
FE 03 C1 10 5D 31	PLII Cinema	Dolby PLII Cinema
FE 03 C1 10 5E 32	PLII Music	Dolby PLII Music
FE 03 C1 10 5F 33	Pro Logic	Dolby Pro Logic
FE 03 C1 10 60 34	dts Neo:6 Music	dts Neo:6 Music

RSX 1065 HEX	Command	Command Description
FE 03 C1 10 61 35	dts Neo:6 Cinema	dts Neo:6 Cinema
FE 03 C1 10 62 36	PLII Panorama	PLII Panorama
FE 03 C1 10 63 37	PLII Dimension Up	PLII Dimension Up
FE 03 C1 10 64 38	PLII Dimension Down	PLII Dimension Down
FE 03 C1 10 65 39	PLII Center Width Up	PLII Center Width Up
FE 03 C1 10 66 3A	PLII Center Width Down	PLII Center Width Down
FE 03 C1 10 68 3C	DD EX On/Off	DD EX On/Off
FE 03 C1 10 69 3D	Tuning Select	Discrete Tune Select
FE 03 C1 10 6A 3E	Preset Select	Discrete Preset Select
FE 03 C1 10 7F 53	Null Key	Null Key
FE 03 C1 10 FF D3	Display Refresh	Display Refresh

Table 1A: Commands Sent with exceptions or modifications required

RSX 1065 HEX	Command Expected	Command
FE 03 C1 10 29 FD	FE 03 C1 10 29 FD 00	Tuner Down
FE 03 C1 10 2A FE	FE 03 C1 10 2A FD 01	1

The table above list commands with exceptions. To keep the RSX 1065 from encountering the start byte FE in any position other than as the start byte, any occurrence of the bytes FE or FD in the command string must be converted to either FD 00 (for FD) or FD 01 (for FE). This will allow the string to pass while masking any occurrence of the byte FE except as the start byte.