

## RSP 1069

### 1 Byte waveform format

Baud Rate	Parity	Valid data bits	Stop bit value	Handshaking	Data type
38400	n	8	1	none	string

### 1. RSP1069 -> PC

#### Display data

Start	Count	ID	Type	Data						Chk
0xfe	0x31	0xa2	0x20	char1	...	char42	flag1	...	flag5	xx

char1~42  
ASCII Characters

flag1:		flag2:		flag3:	
bit7	Optical	bit7	Dolby Digital	bit7	PRESET
bit6	Coaxial	bit6	Dolby Pro Logic	bit6	RDS
bit5	[1]	bit5	dts	bit5	Stereo (Tuner)
bit4	[2]	bit4	ES	bit4	Tuned
bit3	[3]	bit3	EX	bit3	Standby LED
bit2	[4]	bit2	HDMI	bit2	zone "2"
bit1	[5]	bit1	II	bit1	display mode1
bit0	[A]	bit0	x	bit0	display mode0

flag4:		flag5:	
bit7	Zone	bit7	"FL"
bit6	"5.1"	bit6	"C"
bit5	"7.1"	bit5	"FR"
bit4	">"	bit4	"SL"
bit3	"<"	bit3	"SR"
bit2	zone "3"	bit2	"SW"
bit1	zone "4"	bit1	"CBR"
bit0	"sb"	bit0	"CBL"

\*\*\* New feedback data added with Main Software V1.1.8

	Normal	FL off
display mode1	0	1
display mode0	0	0

## 2. PC -> RSP1069

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x10	xx	xx

key:		key:		key:		key:		key:	
0x00	RMC Vol+	0x10	Contour LF-	0x20		0x30		0x40	
0x01	RMC Vol-	0x11	Stereo	0x21		0x31		0x41	
0x02	CD	0x12	3 Stereo	0x22	Surround+	0x32		0x42	
0x03	Tuner	0x13	Pro Logic	0x23	Zone	0x33		0x43	
0x04	Tape	0x14	DSP	0x24		0x34		0x44	
0x05	Video1	0x15	5.1CH[Multi Input]	0x25		0x35		0x45	
0x06	Video2	0x16	Dynamic	0x26		0x36		0x46	
0x07	Video3	0x17	Rec	0x27		0x37		0x47	
0x08	Video4	0x18	OSD Menu	0x28		0x38		0x48	
0x09	Video5	0x19	OSD Enter	0x29		0x39		0x49	
0x0a	Power	0x1a	OSD Right(+)	0x2a		0x3a		0x4a	Power Off
0x0b	Vol+	0x1b	OSD Left(-)	0x2b		0x3b		0x4b	Power On
0x0c	Vol-	0x1c	OSD Up/Trim Sel	0x2c		0x3c		0x4c	C
0x0d	Contour HF+	0x1d	OSD Down/Dynamic	0x2d		0x3d		0x4d	S
0x0e	Contour HF-	0x1e	Mute	0x2e		0x3e		0x4e	R
0x0f	Contour LF+	0x1f	Digital In Select	0x2f		0x3f		0x4f	Filter (EQ)

key:		key:		key:	
0x50		0x60	Neo:6 Music	0x70	
0x51		0x61	Neo:6 Cinema	0x71	Power All Zones Off
0x52	Display On/Off	0x62	PLII Music Panorama on/off toggle	0x72	
0x53	PLII / 3 Stereo	0x63	PLII Music Dimension_up [0~6]	0x73	
0x54	dts Neo:6	0x64	PLII Music Dimension_down [0~6]	0x74	PLII Game
0x55		0x65	PLII Music CenterWidth_up [0~7]	0x75	Output Resolution
0x56		0x66	PLII Music CenterWidth_down [0~7]	0x76	
0x57	Music 1	0x67	Tone	0x77	
0x58	Music 2	0x68	DD EX / XS on/off	0x78	
0x59	Music 3	0x69		0x7a	
0x5a	Music 4	0x6a		0x7b	
0x5b	5 Ch Stereo	0x6b	Source	0x7c	
0x5c	7 Ch Stereo	0x6c	Mute On	0x7d	
0x5d	PLII Cinema	0x6d	Mute Off	0x7e	
0x5e	PLII Music	0x6e	Party Mode	0x7f	NULL Key
0x5f	Dolby Pro Logic	0x6f		0xff	DisplayRefresh

### 3. PC -> RSP1069 (Direct Select Main Zone)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x14	xx	xx

key:		key:	
0x00	RMC Vol+	0x1e	Mute
0x01	RMC Vol-		
0x02	CD	0x6c	Mute On
0x03	Tuner	0x6d	Mute Off
0x04	Tape		
0x05	Video1	0x71	Power Off All Zones
0x06	Video2		
0x07	Video3		
0x08	Video4		
0x09	Video5		
0x0a	Power		

### 4. PC -> RSP1069 (Direct Select Record Source)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x15	xx	xx

key:		key:	
0x02	CD	0x6b	Source
0x03	Tuner		
0x04	Tape		
0x05	Video1		
0x06	Video2		
0x07	Video3		
0x08	Video4		
0x09	Video5		

### 5. PC -> RSP1069 (Direct Select Zone 2)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x16	xx	xx

key:		key:	
0x00	RMC Vol+	0x1e	Mute
0x01	RMC Vol-		
0x02	CD	0x4a	Zone Power Off
0x03	Tuner	0x4b	Zone Power On
0x04	Tape		
0x05	Video1	0x6b	Source
0x06	Video2	0x6c	Mute On
0x07	Video3	0x6d	Mute Off
0x08	Video4	0x6e	Party Mode
0x09	Video5		
0x0a	Zone Power	0x71	Power Off All Zones

### 6. PC -> RSP1069 (Direct Select Zone 3)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x17	xx	xx

key:		key:	
0x00	RMC Vol+	0x1e	Mute
0x01	RMC Vol-		
0x02	CD	0x4a	Zone Power Off
0x03	Tuner	0x4b	Zone Power On
0x04	Tape		
0x05	Video1	0x6b	Source
0x06	Video2	0x6c	Mute On
0x07	Video3	0x6d	Mute Off
0x08	Video4	0x6e	Party Mode
0x09	Video5		
0x0a	Zone Power	0x71	Power Off All Zones

### 7. PC -> RSP1069 (Direct Select Zone 4)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x18	xx	xx

key:		key:	
0x00	RMC Vol+	0x1e	Mute
0x01	RMC Vol-		
0x02	CD	0x4a	Zone Power Off
0x03	Tuner	0x4b	Zone Power On
0x04	Tape		
0x05	Video1	0x6b	Source
0x06	Video2	0x6c	Mute On
0x07	Video3	0x6d	Mute Off
0x08	Video4	0x6e	Party Mode
0x09	Video5		
0x0a	Zone Power	0x71	Power Off All Zones

### 8. PC -> RSP1069 (Volume Direct)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x30	xx	xx

key:	_____	key:	_____
0x00	volume min	0x10	volume 16
0x01	volume 1		
0x02	volume 2	0x20	volume 32
0x03	volume 3		
0x04	volume 4	0x30	volume 48
0x05	volume 5		
0x06	volume 6	0x40	volume 64
0x07	volume 7		
0x08	volume 8	0x50	volume 80
0x09	volume 9		
0x0a	volume 10	0x63	volume 99
0x0b	volume 11	0x64	volume max
0x0c	volume 12		
0x0d	volume 13		
0x0e	volume 14		
0x0f	volume 15		

### 9. PC -> RSP1069 (Volume Direct Zone 2)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x32	xx	xx

key:	_____	key:	_____
0x00	volume min	0x10	volume 16
0x01	volume 1		
0x02	volume 2	0x20	volume 32
0x03	volume 3		
0x04	volume 4	0x30	volume 48
0x05	volume 5		
0x06	volume 6	0x40	volume 64
0x07	volume 7		
0x08	volume 8	0x50	volume 80
0x09	volume 9		
0x0a	volume 10	0x5f	volume 95
0x0b	volume 11	0x60	volume max
0x0c	volume 12		
0x0d	volume 13		
0x0e	volume 14		
0x0f	volume 15		

### 10. PC -> RSP1069 (Volume Direct Zone 3)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x33	xx	xx

key:	_____	key:	_____
0x00	volume min	0x10	volume 16
0x01	volume 1		
0x02	volume 2	0x20	volume 32
0x03	volume 3		
0x04	volume 4	0x30	volume 48
0x05	volume 5		
0x06	volume 6	0x40	volume 64
0x07	volume 7		
0x08	volume 8	0x50	volume 80
0x09	volume 9		
0x0a	volume 10	0x5f	volume 95
0x0b	volume 11	0x60	volume max
0x0c	volume 12		
0x0d	volume 13		
0x0e	volume 14		
0x0f	volume 15		

### 11. PC -> RSP1069 (Volume Direct Zone 4)

Start	Count	ID	Type	Key	Chk
0xfe	0x03	0xa2	0x34	xx	xx

key:	_____	key:	_____
0x00	volume min	0x10	volume 16
0x01	volume 1		
0x02	volume 2	0x20	volume 32
0x03	volume 3		
0x04	volume 4	0x30	volume 48
0x05	volume 5		
0x06	volume 6	0x40	volume 64
0x07	volume 7		
0x08	volume 8	0x50	volume 80
0x09	volume 9		
0x0a	volume 10	0x5f	volume 95
0x0b	volume 11	0x60	volume max
0x0c	volume 12		
0x0d	volume 13		
0x0e	volume 14		
0x0f	volume 15		

## RSP 1069 RS232 Controller Command List

**Table: RSP 1069 Waveform format expected:**

Baud Rate	Parity	Valid Data Bits	Stop Bit Value	Handshaking	Data Type
38400	N	8	1	None	String

**Table: RSP 1069 expected format of a request by RS232 controller:**

Start	Count	Device ID	Type	Key	Checksum
0xFE	0x03	0xA2	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.

RSP 1069 HEX	Command	Command Description
FE 03 A2 10 00 B5	RMC Vol+	Remote Volume Up
FE 03 A2 10 01 B6	RMC Vol-	Remote Volume Down
FE 03 A2 10 02 B7	CD	Source CD
FE 03 A2 10 03 B8	Tuner	Source Tuner
FE 03 A2 10 04 B9	Tape	Source Tape
FE 03 A2 10 05 BA	Video 1	Source Video 1
FE 03 A2 10 06 BB	Video 2	Source Video 2
FE 03 A2 10 07 BC	Video 3	Source Video 3
FE 03 A2 10 08 BD	Video 4	Source Video 4
FE 03 A2 10 09 BE	Video 5	Source Video 5
FE 03 A2 10 0A BF	Power	Power Toggle
FE 03 A2 10 0B C0	Vol+	Volume Up
FE 03 A2 10 0C C1	Vol-	Volume Down
FE 03 A2 10 0D C2	Treble+	Treble Up
FE 03 A2 10 0E C3	Treble-	Treble Down
FE 03 A2 10 0F C4	Bass+	Bass Up
FE 03 A2 10 10 C5	Bass-	Bass Down
FE 03 A2 10 11 C6	Stereo	DSP Stereo
FE 03 A2 10 12 C7	3 Stereo	DSP Dolby 3 Stereo
FE 03 A2 10 13 C8	Pro Logic	DSP Pro Logic
FE 03 A2 10 14 C9	DSP	DSP Music
FE 03 A2 10 15 CA	Multi	Multi Input
FE 03 A2 10 16 CB	Dynamic	Dynamic Range
FE 03 A2 10 17 CC	Rec	Record
FE 03 A2 10 18 CD	OSD Menu	OSD Menu
FE 03 A2 10 19 CE	OSD Enter	OSD Enter
FE 03 A2 10 1A CF	OSD Right (+)	OSD Right
FE 03 A2 10 1B D0	OSD Left (-)	OSD Left
FE 03 A2 10 1C D1	OSD Up	OSD Up

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 10 1D D2	OSD Down / Dynamic	OSD Down / Dynamic
FE 03 A2 10 1E D3	Mute	Mute
FE 03 A2 10 1F D4	Digital In Select	Digital Input Select
FE 03 A2 10 22 D7	Surround+	Next Surround Mode
FE 03 A2 10 23 D8	Zone 2 / Main	Zone
FE 03 A2 10 4A FF	Power Off	Power Off
FE 03 A2 10 4B 00	Power On	Power On
FE 03 A2 10 4C 01	C	Center
FE 03 A2 10 4D 02	S	Subwoofer
FE 03 A2 10 4E 03	R	Surround
FE 03 A2 10 4F 04	Filter (EQ)	Cinema EQ
FE 03 A2 10 52 07	FL On / Off	FL Display Toggle
FE 03 A2 10 53 08	Pro Logic / 3 Stereo	Dolby 3 Stereo
FE 03 A2 10 54 09	dts Neo:6	dts Neo:6
FE 03 A2 10 57 0C	Music 1	Music 1
FE 03 A2 10 58 0D	Music 2	Music 2
FE 03 A2 10 59 0E	Music 3	Music 3
FE 03 A2 10 5A 0F	Music 4	Music 4
FE 03 A2 10 5B 10	5Ch Stereo	5Ch Stereo
FE 03 A2 10 5C 11	7Ch Stereo	7Ch Stereo
FE 03 A2 10 5D 12	PLII Cinema	PLII Cinema
FE 03 A2 10 5E 13	PLII Music	PLII Music
FE 03 A2 10 5F 14	PLII Emulation	PLII Emulation
FE 03 A2 10 60 15	dts Neo:6 Music	dts Neo:6 Music
FE 03 A2 10 61 16	dts Neo:6 Cinema	dts Neo:6 Cinema
FE 03 A2 10 62 17	PLII Panorama	PLII Panorama
FE 03 A2 10 63 18	PLII Dimension Up	PLII Dimension Up
FE 03 A2 10 64 19	PLII Dimension Down	PLII Dimension Down
FE 03 A2 10 65 1A	PLII Center Width Up	PLII Center Width Up
FE 03 A2 10 66 1B	PLII Center Width Down	PLII Center Width Down
FE 03 A2 10 67 1C	Shift (Treble Bass)	Tone Controls
FE 03 A2 10 68 1D	DD EX On/Off	DD EX On/Off
FE 03 A2 10 6E 23	Party Mode	Party Mode Toggle
FE 03 A2 10 71 26	All Zones Off	Power Off All Zones
FE 03 A2 10 74 29	PLII Game	Dolby PLII Game
FE 03 A2 10 75 2A	Output Resolution	Output Resolution
FE 03 A2 10 78 2D	HDMI Amp Mode	HDMI Amp Mode
FE 03 A2 10 79 2E	HDMI TV Mode	HDMI TV Mode
FE 03 A2 10 7C 31	HDMI Bypass Off	HDMI Bypass Off
FE 03 A2 10 7D 32	HDMI Bypass On	HDMI Bypass On
FE 03 A2 10 FF B4	Display Refresh	Display Refresh

**Table 2: Type 14 Main Zone Command List**

NOTE: These commands are duplicate functions of the primary commands in the table above bearing the same name.

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 14 00 B9	RMC Vol+	Remote Volume Up
FE 03 A2 14 01 BA	RMC Vol-	Remote Volume Down
FE 03 A2 14 02 BB	Main CD	Main Zone Source CD
FE 03 A2 14 03 BC	Main Tuner	Main Zone Source Tuner
FE 03 A2 14 04 BD	Main Tape	Main Zone Source Tape
FE 03 A2 14 05 BE	Main Video 1	Main Zone Source Video 1
FE 03 A2 14 06 BF	Main Video 2	Main Zone Source Video 2
FE 03 A2 14 07 C0	Main Video 3	Main Zone Source Video 3
FE 03 A2 14 08 C1	Main Video 4	Main Zone Source Video 4
FE 03 A2 14 09 C2	Main Video 5	Main Zone Source Video 5
FE 03 A2 14 0A C3	Main Power	Main Zone Power Toggle
FE 03 A2 14 1E D7	Main Mute	Main Zone Mute
FE 03 A2 14 6C 25	Main Mute On	Main Zone Mute On
FE 03 A2 14 6D 26	Main Mute Off	Main Zone Mute Off

**Table 3: Type 15 Record Source Command List**

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 15 02 BC	Record CD	Record Source CD
FE 03 A2 15 03 BD	Record Tuner	Record Source Tuner
FE 03 A2 15 04 BE	Record Tape	Record Source Tape
FE 03 A2 15 05 BF	Record Video 1	Record Source Video 1
FE 03 A2 15 06 C0	Record Video 2	Record Source Video 2
FE 03 A2 15 07 C1	Record Video 3	Record Source Video 3
FE 03 A2 15 08 C2	Record Video 4	Record Source Video 4
FE 03 A2 15 09 C3	Record Video 5	Record Source Video 5
FE 03 A2 15 6B 25	Record Source	Record Source

**Table 4: Type 16 Zone 2 Command List**

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 16 00 BB	Vol+	Zone 2 Volume Up
FE 03 A2 16 01 BC	Vol-	Zone 2 Volume Down
FE 03 A2 16 02 BD	Zone 2 CD	Zone 2 Source CD
FE 03 A2 16 03 BE	Zone 2 Tuner	Zone 2 Source Tuner
FE 03 A2 16 04 BF	Zone 2 Tape	Zone 2 Source Tape
FE 03 A2 16 05 C0	Zone 2 Video 1	Zone 2 Source Video 1
FE 03 A2 16 06 C1	Zone 2 Video 2	Zone 2 Source Video 2
FE 03 A2 16 07 C2	Zone 2 Video 3	Zone 2 Source Video 3
FE 03 A2 16 08 C3	Zone 2 Video 4	Zone 2 Source Video 4
FE 03 A2 16 09 C4	Zone 2 Video 5	Zone 2 Source Video 5

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 16 0A C5	Zone 2 Power	Zone 2 Power Toggle
FE 03 A2 16 1E D9	Zone 2 Mute	Zone 2 Mute Toggle
FE 03 A2 16 4A 05	Zone 2 Power Off	Zone 2 Power Off
FE 03 A2 16 4B 06	Zone 2 Power On	Zone 2 Power On
FE 03 A2 16 6B 26	Zone 2 Source	Zone 2 Source
FE 03 A2 16 6C 27	Zone 2 Mute On	Zone 2 Mute On
FE 03 A2 16 6D 28	Zone 2 Mute Off	Zone 2 Mute Off
FE 03 A2 16 6E 29	Party Mode	Party Mode Toggle
FE 03 A2 16 71 2C	All Zones Off	Power Off All Zones

**Table 5: Type 17 Zone 3 Command List**

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 17 00 BC	Vol+	Zone 3 Volume Up
FE 03 A2 17 01 BD	Vol-	Zone 3 Volume Down
FE 03 A2 17 02 BE	Zone 3 CD	Zone 3 Source CD
FE 03 A2 17 03 BF	Zone 3 Tuner	Zone 3 Source Tuner
FE 03 A2 17 04 C0	Zone 3 Tape	Zone 3 Source Tape
FE 03 A2 17 05 C1	Zone 3 Video 1	Zone 3 Source Video 1
FE 03 A2 17 06 C2	Zone 3 Video 2	Zone 3 Source Video 2
FE 03 A2 17 07 C3	Zone 3 Video 3	Zone 3 Source Video 3
FE 03 A2 17 08 C4	Zone 3 Video 4	Zone 3 Source Video 4
FE 03 A2 17 09 C5	Zone 3 Video 5	Zone 3 Source Video 5
FE 03 A2 17 0A C6	Zone 3 Power	Zone 3 Power Toggle
FE 03 A2 17 1E DA	Zone 3 Mute	Zone 3 Mute Toggle
FE 03 A2 17 4A 06	Zone 3 Power Off	Zone 3 Power Off
FE 03 A2 17 4B 07	Zone 3 Power On	Zone 3 Power On
FE 03 A2 17 6B 27	Zone 3 Source	Zone 3 Source
FE 03 A2 17 6C 28	Zone 3 Mute On	Zone 3 Mute On
FE 03 A2 17 6D 29	Zone 3 Mute Off	Zone 3 Mute Off
FE 03 A2 17 6E 2A	Party Mode	Party Mode Toggle
FE 03 A2 17 71 2D	All Zones Off	Power Off All Zones

**Table 6: Type 18 Zone 4 Command List**

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 18 00 BD	Vol+	Zone 4 Volume Up
FE 03 A2 18 01 BE	Vol-	Zone 4 Volume Down
FE 03 A2 18 02 BF	Zone 4 CD	Zone 4 Source CD
FE 03 A2 18 03 C0	Zone 4 Tuner	Zone 4 Source Tuner
FE 03 A2 18 04 C1	Zone 4 Tape	Zone 4 Source Tape
FE 03 A2 18 05 C2	Zone 4 Video 1	Zone 4 Source Video 1
FE 03 A2 18 06 C3	Zone 4 Video 2	Zone 4 Source Video 2
FE 03 A2 18 07 C4	Zone 4 Video 3	Zone 4 Source Video 3
FE 03 A2 18 08 C5	Zone 4 Video 4	Zone 4 Source Video 4
FE 03 A2 18 09 C6	Zone 4 Video 5	Zone 4 Source Video 5

RSP 1069 HEX	Command	Command Description
FE 03 A2 18 0A C7	Zone 4 Power	Zone 4 Power Toggle
FE 03 A2 18 1E DB	Zone 4 Mute	Zone 4 Mute Toggle
FE 03 A2 18 4A 07	Zone 4 Power Off	Zone 4 Power Off
FE 03 A2 18 4B 08	Zone 4 Power On	Zone 4 Power On
FE 03 A2 18 6B 28	Zone 4 Source	Zone 4 Source
FE 03 A2 18 6C 29	Zone 4 Mute On	Zone 4 Mute On
FE 03 A2 18 6D 2A	Zone 4 Mute Off	Zone 4 Mute Off
FE 03 A2 18 6E 2B	Party Mode	Party Mode Toggle
FE 03 A2 18 71 2E	All Zones Off	Power Off All Zones

**Table 7: Type 30 Volume Direct Command List**

RSP 1069 HEX	Command	Command Description
FE 03 A2 30 00 D5	Volume Min	Volume Min
FE 03 A2 30 01 D6	Volume 1	Volume 1
FE 03 A2 30 02 D7	Volume 2	Volume 2
FE 03 A2 30 03 D8	Volume 3	Volume 3
FE 03 A2 30 04 D9	Volume 4	Volume 4
FE 03 A2 30 05 DA	Volume 5	Volume 5
FE 03 A2 30 06 DB	Volume 6	Volume 6
FE 03 A2 30 07 DC	Volume 7	Volume 7
FE 03 A2 30 08 DD	Volume 8	Volume 8
FE 03 A2 30 09 DE	Volume 9	Volume 9
FE 03 A2 30 0A DF	Volume 10	Volume 10
FE 03 A2 30 0B E0	Volume 11	Volume 11
FE 03 A2 30 0C E1	Volume 12	Volume 12
FE 03 A2 30 0D E2	Volume 13	Volume 13
FE 03 A2 30 0E E3	Volume 14	Volume 14
FE 03 A2 30 0F E4	Volume 15	Volume 15
FE 03 A2 30 10 E5	Volume 16	Volume 16
FE 03 A2 30 20 F5	Volume 32	Volume 32
FE 03 A2 30 30 05	Volume 48	Volume 48
FE 03 A2 30 40 15	Volume 64	Volume 64
FE 03 A2 30 50 25	Volume 80	Volume 80
FE 03 A2 30 5F 34	Volume 95	Volume 95
FE 03 A2 30 60 35	Volume Max	Volume Max

**Table 7A: Commands Sent with exceptions or modifications required**

RSP 1069 HEX	Command Expected	Command
FE 03 A2 30 28 FD	FE 03 A2 30 28 FD 00	Volume 40
FE 03 A2 30 29 FE	FE 03 A2 30 29 FD 01	Volume 41

The table above list commands with exceptions. To keep the RSP 1069 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.

**Table 8: Type 32 Zone 2 Volume Direct Command List**

RSP 1069 HEX	Command	Command Description
FE 03 A2 32 00 D7	Zone 2 Volume Min	Zone 2 Volume Min
FE 03 A2 32 01 D8	Zone 2 Volume 1	Zone 2 Volume 1
FE 03 A2 32 02 D9	Zone 2 Volume 2	Zone 2 Volume 2
FE 03 A2 32 03 DA	Zone 2 Volume 3	Zone 2 Volume 3
FE 03 A2 32 04 DB	Zone 2 Volume 4	Zone 2 Volume 4
FE 03 A2 32 05 DC	Zone 2 Volume 5	Zone 2 Volume 5
FE 03 A2 32 06 DD	Zone 2 Volume 6	Zone 2 Volume 6
FE 03 A2 32 07 DE	Zone 2 Volume 7	Zone 2 Volume 7
FE 03 A2 32 08 DF	Zone 2 Volume 8	Zone 2 Volume 8
FE 03 A2 32 09 E0	Zone 2 Volume 9	Zone 2 Volume 9
FE 03 A2 32 0A E1	Zone 2 Volume 10	Zone 2 Volume 10
FE 03 A2 32 0B E2	Zone 2 Volume 11	Zone 2 Volume 11
FE 03 A2 32 0C E3	Zone 2 Volume 12	Zone 2 Volume 12
FE 03 A2 32 0D E4	Zone 2 Volume 13	Zone 2 Volume 13
FE 03 A2 32 0E E5	Zone 2 Volume 14	Zone 2 Volume 14
FE 03 A2 32 0F E6	Zone 2 Volume 15	Zone 2 Volume 15
FE 03 A2 32 10 E7	Zone 2 Volume 16	Zone 2 Volume 16
FE 03 A2 32 20 F7	Zone 2 Volume 32	Zone 2 Volume 32
FE 03 A2 32 30 07	Zone 2 Volume 48	Zone 2 Volume 48
FE 03 A2 32 40 17	Zone 2 Volume 64	Zone 2 Volume 64
FE 03 A2 32 50 27	Zone 2 Volume 80	Zone 2 Volume 80
FE 03 A2 32 5F 36	Zone 2 Volume 95	Zone 2 Volume 95
FE 03 A2 32 60 37	Zone 2 Volume Max	Zone 2 Volume Max

**Table 8A: Commands Sent with exceptions or modifications required**

RSP 1069 HEX	Command Expected	Command
FE 03 A2 32 26 FD	FE 03 A2 32 26 FD 00	Zone 2 Volume 38
FE 03 A2 32 27 FE	FE 03 A2 32 27 FD 01	Zone 2 Volume 39

The table above list commands with exceptions. To keep the RSP 1069 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.

**Table 9: Type 33 Zone 3 Volume Direct Command List**

RSP 1069 HEX	Command	Command Description
FE 03 A2 33 00 D8	Zone 3 Volume Min	Zone 3 Volume Min
FE 03 A2 33 01 D9	Zone 3 Volume 1	Zone 3 Volume 1
FE 03 A2 33 02 DA	Zone 3 Volume 2	Zone 3 Volume 2
FE 03 A2 33 03 DB	Zone 3 Volume 3	Zone 3 Volume 3
FE 03 A2 33 04 DC	Zone 3 Volume 4	Zone 3 Volume 4
FE 03 A2 33 05 DD	Zone 3 Volume 5	Zone 3 Volume 5
FE 03 A2 33 06 DE	Zone 3 Volume 6	Zone 3 Volume 6
FE 03 A2 33 07 DF	Zone 3 Volume 7	Zone 3 Volume 7

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 33 08 E0	Zone 3 Volume 8	Zone 3 Volume 8
FE 03 A2 33 09 E1	Zone 3 Volume 9	Zone 3 Volume 9
FE 03 A2 33 0A E2	Zone 3 Volume 10	Zone 3 Volume 10
FE 03 A2 33 0B E3	Zone 3 Volume 11	Zone 3 Volume 11
FE 03 A2 33 0C E4	Zone 3 Volume 12	Zone 3 Volume 12
FE 03 A2 33 0D E5	Zone 3 Volume 13	Zone 3 Volume 13
FE 03 A2 33 0E E6	Zone 3 Volume 14	Zone 3 Volume 14
FE 03 A2 33 0F E7	Zone 3 Volume 15	Zone 3 Volume 15
FE 03 A2 33 10 E8	Zone 3 Volume 16	Zone 3 Volume 16
FE 03 A2 33 20 F8	Zone 3 Volume 32	Zone 3 Volume 32
FE 03 A2 33 30 08	Zone 3 Volume 48	Zone 3 Volume 48
FE 03 A2 33 40 18	Zone 3 Volume 64	Zone 3 Volume 64
FE 03 A2 33 50 28	Zone 3 Volume 80	Zone 3 Volume 80
FE 03 A2 33 5F 37	Zone 3 Volume 95	Zone 3 Volume 95
FE 03 A2 33 60 38	Zone 3 Volume Max	Zone 3 Volume Max

**Table 9A: Commands Sent with exceptions or modifications required**

<b>RSP 1069 HEX</b>	<b>Command Expected</b>	<b>Command</b>
FE 03 A2 33 25 FD	FE 03 A2 33 25 FD 00	Zone 3 Volume 37
FE 03 A2 33 26 FE	FE 03 A2 33 26 FD 01	Zone 3 Volume 38

The table above list commands with exceptions. To keep the RSP 1069 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.

**Table 10: Type 34 Zone 4 Volume Direct Command List**

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 34 00 D9	Zone 4 Volume Min	Zone 4 Volume Min
FE 03 A2 34 01 DA	Zone 4 Volume 1	Zone 4 Volume 1
FE 03 A2 34 02 DB	Zone 4 Volume 2	Zone 4 Volume 2
FE 03 A2 34 03 DC	Zone 4 Volume 3	Zone 4 Volume 3
FE 03 A2 34 04 DD	Zone 4 Volume 4	Zone 4 Volume 4
FE 03 A2 34 05 DE	Zone 4 Volume 5	Zone 4 Volume 5
FE 03 A2 34 06 DF	Zone 4 Volume 6	Zone 4 Volume 6
FE 03 A2 34 07 E0	Zone 4 Volume 7	Zone 4 Volume 7
FE 03 A2 34 08 E1	Zone 4 Volume 8	Zone 4 Volume 8
FE 03 A2 34 09 E2	Zone 4 Volume 9	Zone 4 Volume 9
FE 03 A2 34 0A E3	Zone 4 Volume 10	Zone 4 Volume 10
FE 03 A2 34 0B E4	Zone 4 Volume 11	Zone 4 Volume 11
FE 03 A2 34 0C E5	Zone 4 Volume 12	Zone 4 Volume 12
FE 03 A2 34 0D E6	Zone 4 Volume 13	Zone 4 Volume 13
FE 03 A2 34 0E E7	Zone 4 Volume 14	Zone 4 Volume 14
FE 03 A2 34 0F E8	Zone 4 Volume 15	Zone 4 Volume 15
FE 03 A2 34 10 E9	Zone 4 Volume 16	Zone 4 Volume 16
FE 03 A2 34 20 F9	Zone 4 Volume 32	Zone 4 Volume 32

<b>RSP 1069 HEX</b>	<b>Command</b>	<b>Command Description</b>
FE 03 A2 34 30 09	Zone 4 Volume 48	Zone 4 Volume 48
FE 03 A2 34 40 19	Zone 4 Volume 64	Zone 4 Volume 64
FE 03 A2 34 50 29	Zone 4 Volume 80	Zone 4 Volume 80
FE 03 A2 34 50 38	Zone 4 Volume 95	Zone 4 Volume 95
FE 03 A2 34 50 39	Zone 4 Volume Max	Zone 4 Volume Max