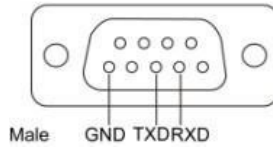


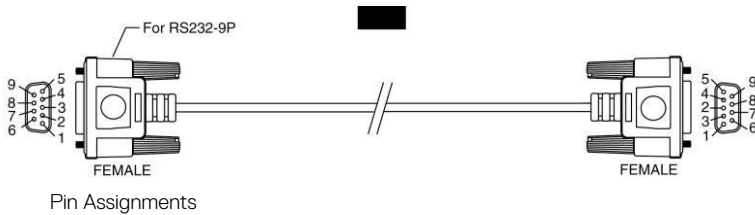


Dell™ C5518QT/C8618QT RS232 Protocol Document


- **RS232 Projector Pin Assignment (Facing Monitor)**



- **RS232 Serial Communication Cable Pin Assignment (Facing Cable)**



RS232	PIN DESCRIPTION	RS232
1	-	
2	TXD	2
3	RXD	3
4	-	
5	GROUND	5
6	-	
7	Not Used	7
8	Not Used	8
9	-	

 Note 1: The RS232 (pin2-3 swap) cable is not provided by Dell.

• RS232 Protocol

Communication Settings

Connection Settings	Value
Baud Rate	9600 bps
Data Bits	8 bits
Parity	None
Stop Bits	1 bit
Flow control	None

Control Command Syntax (From PC to Monitor)

[H0][H1][Len][R/W][Cmd][Data0]...[DataN][Chk]

[H0] = 0x37

[H1] = 0x51

[Len] = Length

[R/W] = Read/Write

Read = 0xEB

Write = 0xEA

[Cmd] = Command

[Data0]...[DataN] = Data0~N

[Chk] = Check Sum

Reply Command Syntax (From Monitor to PC)

[H2][H3][Len][Reply][RC][Cmd][Data0]...[DataN][Chk]

[H2] = 0x6F

[H3] = 0x37

[Len] = Length

[Reply] = Reply (0x02)

[RC] = Result Code

0 = Success

1 = Timeout

2 = Parameters Error

3 = Not connected

4 = Other Failure

[Cmd] = Command

[Data0]...[DataN] = Data0~N

[Chk] = Check Sum

Example: Get Monitor Name

[From PC to Monitor] = 37, 51, 02, EB, 01, 8E

[From Monitor to PC] = 6F, 37, 0F, 02, 00, 01, 44, 65, 6C, 6C, 20, 43, 35, 35, 31, 38, 51, 54, 1A

Checksum calculation

Xor byte by byte from first byte to the end of the command data stream.

Control Commands List

Command Description	Firm / Return / Comments	Command																Reply																						
		HEAD_0	HEAD_1	LEN	R/W	CMD	D0	D1	D2	D3	CHK	HEAD_1	LEN	Reply	Result	CMD	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	CHK											
/* MONITOR MANAGEMENT */																																								
GetMonitorName	chars (in ASCII)	37	51	02	EB	01						BE	6F	37	0F	02	00	01	*D*	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	1A	
GetMonitorSerialNumber	12 chars (in ASCII)	37	51	02	EB	02						BD	6F	37	0F	02	00	02	*W*	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	"_"	5D	
GetBacklightHours	*Monitor Backlight Hours (WORD) 0 - 65535*	37	51	02	EB	04						BB	6F	37	05	02	00	04	01	00																		5A		
/* POWER MANAGEMENT */																																								
GetPowerState	Power State (BYTE) 0 - off 1 - on	37	51	02	EB	20						AF	6F	37	04	02	00	20	01																			7F		
SetPowerState - off		37	51	03	EA	20	00					AF	6F	37	04	02	00	20	00																			7E		
SetPowerState - on	2 - standby	37	51	03	EA	20	01					AE	6F	37	04	02	00	20	01																			7C		
SetPowerState - standby		37	51	03	EA	20	02					AD	6F	37	04	02	00	20	02																			7F		
GetPowerLED	Power LED Setting (BYTE) 0 - off during Active 1 - on during Active	37	51	02	EB	21						AE	6F	37	04	02	00	21	01																			7E		
SetPowerLED - off during active		37	51	03	EA	21	00					AE	6F	37	04	02	00	21	00																			7E		
SetPowerLED - on during active		37	51	03	EA	21	01					AF	6F	37	04	02	00	21	01																			7C		
SetPowerUSB - off during standby	Power USB Setting (BYTE) 0 - off during Standby 1 - on during Standby	37	51	03	EA	22	00					AD	6F	37	04	02	00	22	00																			7C		
SetPowerUSB - on during standby		37	51	03	EA	22	01					AC	6F	37	04	02	00	22	01																			7D		
ResetPower	1	37	51	03	EA	2F	01					A1	6F	37	04	02	00	2F	01																			70		
/* IMAGE ADJUSTMENT */																																								
GetBrightness	Brightness (BYTE) 0 - 100	37	51	02	EB	30						BF	6F	37	04	02	00	30	4B																			25		
SetBrightness - 75	values in increments of 1	37	51	03	EA	30	4B					F4	6F	37	04	02	00	30	4B																			25		
SetBrightness - 100		37	51	03	EA	30	64					DB	6F	37	04	02	00	30	64																			0A		
SetBrightness - 0		37	51	03	EA	30	00					BF	6F	37	04	02	00	30	00																			6E		
SetBrightnessStep - Decrease	Brightness Step 0 - Decrease (-)	37	51	03	EA	35	00					BA	6F	37	04	02	00	35	00																				6B	
SetBrightnessStep - Increase	1 - Increase (+)	37	51	03	EA	35	01					BB	6F	37	04	02	00	35	01																				6A	
GetContrast	Contrast (BYTE) 0 - 100	37	51	02	EB	31						BE	6F	37	04	02	00	31	4B																			24		
SetContrast - 75	values in increments of 1	37	51	03	EA	31	4B					F5	6F	37	04	02	00	31	4B																			24		
SetContrast - 100		37	51	03	EA	31	64					DA	6F	37	04	02	00	31	64																				0B	
SetContrast - 0		37	51	03	EA	31	00					BE	6F	37	04	02	00	31	00																			6F		
StepContrastStep - Decrease	Contrast Step 0 - Decrease (-)	37	51	03	EA	36	00					B9	6F	37	04	02	00	36	00																				6B	
StepContrastStep - Increase	1 - Increase (+)	37	51	03	EA	36	01					BB	6F	37	04	02	00	36	01																				69	
GetAspectRatio	Aspect Ratio (BYTE) 0 - Wide 16:9 2 - 4:3 4 - 5:4	37	51	02	EB	33						BC	6F	37	04	02	00	33	00																					6D
SetAspectRatio - Wide 16:9		37	51	03	EA	33	00					BC	6F	37	04	02	00	33	00																				6D	
SetAspectRatio - 4:3		37	51	03	EA	33	02					BE	6F	37	04	02	00	33	02																				6F	
SetAspectRatio - 5:4		37	51	03	EA	33	04					BB	6F	37	04	02	00	33	04																				69	
GetSharpness	Sharpness (BYTE) 0 - 100	37	51	02	EB	34						BB	6F	37	04	02	00	34	32																				58	
SetSharpness - 50	values in increments of 10	37	51	03	EA	34	32					B9	6F	37	04	02	00	34	32																				58	
SetSharpness - 100		37	51	03	EA	34	64					DF	6F	37	04	02	00	34	64																				0E	
SetSharpness - 0		37	51	03	EA	34	00					BB	6F	37	04	02	00	34	00																			6A		
/* COLOR MANAGEMENT */																																								
GetColorTempCaps	Bitwise representation of color temperatures (DWORD)	37	51	02	EB	42						CD	6F	37	07	02	00	42	3F	0	0	0	0															2D		
GetColorTemp	(DWORD)	37	51	02	EB	45						CC	6F	37	07	02	00	45	04	00	00	00																1A		
SetColorTemp - 5000K	0x00000001 - 5000K 0x00000002 - 5700K	37	51	06	EA	45	01	00	00	00	00	C8	6F	37	07	02	00	45	01	00	00	00	00																1F	
SetColorTemp - 5700K	0x00000002 - 5700K 0x00000004 - 6500K	37	51	06	EA	45	02	00	00	00	00	C8	6F	37	07	02	00	45	02	00	00	00	00																1C	
SetColorTemp - 6500K	0x00000004 - 6500K 0x00000008 - 7500K	37	51	06	EA	45	04	00	00	00	00	CD	6F	37	07	02	00	45	04	00	00	00	00															1A		
SetColorTemp - 7500K	0x00000008 - 7500K 0x00000010 - 10000K	37	51	06	EA	45	08	00	00	00	00	C1	6F	37	07	02	00	45	08	00	00	00	00															1B		
SetColorTemp - 9500K		37	51	06	EA	45	10	00	00	00	00	D9	6F	37	07	02	00	45	10	00	00	00	00														0E			
SetColorTemp - 10000K		37	51	06	EA	45	20	00	00	00	00	E9	6F	37	07	02	00	45	20	00	00	00	00															3E		
GetInputColorFormat	Input Color Format (BYTE) 0 - RGB 1 - YPbPr	37	51	02	EB	46						C9	6F	37	04	02	00	46	01																				19	
SetInputColorFormat - RGB		37	51	03	EA	46	00					C9	6F	37	04	02	00	46	00																			1B		
SetInputColorFormat - YPbPr		37	51	03	EA	46	01					C8	6F	37	04	02	00	46	01																			19		
GetColorPresetsCaps	0x00000001 - Standard 0x00000000 - ContentView	37	51	02	EB	47						C8	6F	37	07	02																								

