

SIM2 Multimedia

Crystal4

RS-232 Control

Rev. 1.0 (13 March 2018)



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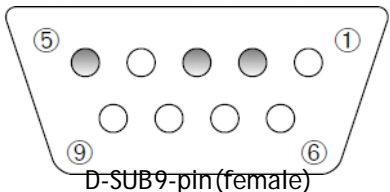
1. Introduction

This document describes how to interface the Crystal4 projector with a Home Theatre control system (or a PC) over a direct serial connection.

1.1. Setting up the RS-232C Serial connection

Follow these steps to configure the control system (or the PC) serial port.

- Switch off the control system (or the PC) and the projector.
- Use a standard straight¹ serial cable with 9 pin female to the control system (or the PC) and 9 pin female to the Projector:

RS-232C Control Port			
	Pin No	Signal	Definition
 D-SUB9-pin(female)	1	-	Not Used
	2	TD	Transmit Data
	3	RD	Receive Data
	4	-	Not Used
	5	GND	Ground
	6	-	Not Used
	7	-	Not Used
	8	-	Not Used
	9	-	Not Used

- Make sure the distances between equipment do not exceed the specification of the interface (15 m or 50 feet).
- Switch on the control system (or the PC) and, after start up, switch on the projector.
- Set the Serial Port Parameters as shown below:

Communication Parameters	
Parameter	Value
Transfer Rate	9600 bps
Data Bits	8
ParityBit	None
Stop Bit	1
FlowControl	None

- Set the control system (or the PC program) Communication Mode to Binary (or Hex). ASCII mode is supported request to SIM2 Tech support if needed.
- Set the control system interface (or the PC communication program) Display Mode to Hex.

¹A cable that connects identical pin numbers in each connector: pin 2 connects to pin 2, pin 3 to pin 3 and pin 5 to pin 5.

Power ON	6F 70 20 70 6F 77 65 72 2E 6F 6E 0D
Power Off	6F 70 20 70 6F 77 65 72 2E 6F 66 66 0D
HDMI 1	6F 70 20 73 6F 75 72 63 65 20 3D 20 30 0D
HDMI 2	6F 70 20 73 6F 75 72 63 65 20 3D 20 31 0D
HDMI 3	6F 70 20 73 6F 75 72 63 65 20 3D 20 32 0D
Aspect Fill	6F 70 20 61 73 70 65 63 74 2E 72 61 74 69 6F 20 3D 20 30 0D
Aspect 4:3	6F 70 20 61 73 70 65 63 74 2E 72 61 74 69 6F 20 3D 20 31 0D
Aspect 16:9	6F 70 20 61 73 70 65 63 74 2E 72 61 74 69 6F 20 3D 20 32 0D
Aspect 16:10	6F 70 20 61 73 70 65 63 74 2E 72 61 74 69 6F 20 3D 20 33 0D
Aspect Native	6F 70 20 61 73 70 65 63 74 2E 72 61 74 69 6F 20 3D 20 34 0D
Aspect 2.35:1	6F 70 20 61 73 70 65 63 74 2E 72 61 74 69 6F 20 3D 20 35 0D
Gamma 1.8	6F 70 20 67 61 6D 6D 61 20 3D 20 30 0D
Gamma 2.0	6F 70 20 67 61 6D 6D 61 20 3D 20 31 0D
Gamma 2.2	6F 70 20 67 61 6D 6D 61 20 3D 20 32 0D
Gamma 2.4	6F 70 20 67 61 6D 6D 61 20 3D 20 33 0D
Gamma S-Curve	6F 70 20 67 61 6D 6D 61 20 3D 20 34 0D
Gamma HDR	6F 70 20 67 61 6D 6D 61 20 3D 20 35 0D
Color Temp Warm	6F 70 20 63 6F 6C 6F 72 2E 74 65 6D 70 20 3D 20 30 0D
Color Temp Normal	6F 70 20 63 6F 6C 6F 72 2E 74 65 6D 70 20 3D 20 31 0D
Color Temp Cold	6F 70 20 63 6F 6C 6F 72 2E 74 65 6D 70 20 3D 20 32 0D
Lamp Boost	6F 70 20 6C 61 6D 70 2E 6D 6F 64 65 20 3D 20 30 0D
Lamp Default	6F 70 20 6C 61 6D 70 2E 6D 6F 64 65 20 3D 20 31 0D
Hi Altitude ON	6F 70 20 68 69 67 68 2E 61 6C 74 69 74 75 64 65 20 3D 20 31 0D
Hi Altitude OFF	6F 70 20 68 69 67 68 2E 61 6C 74 69 74 75 64 65 20 3D 20 30 0D
Lamp Hours	6F 70 20 6C 61 6D 70 2E 68 6F 75 72 73 20 3F 0D
Orientation Front Table	6F 70 20 6F 72 69 65 6E 74 61 74 69 6F 6E 20 3D 20 30 0D
Orientation Front Ceiling	6F 70 20 6F 72 69 65 6E 74 61 74 69 6F 6E 20 3D 20 31 0D
Orientation Rear Table	6F 70 20 6F 72 69 65 6E 74 61 74 69 6F 6E 20 3D 20 32 0D
Orientation Rear Ceiling	6F 70 20 6F 72 69 65 6E 74 61 74 69 6F 6E 20 3D 20 33 0D
Power Off	6F 70 20 70 6F 77 65 72 20 3D 20 30 0D
Power On	6F 70 20 70 6F 77 65 72 20 3D 20 31 0D
Picture Mode Movie	6F 70 20 70 69 63 74 2E 6D 6F 64 65 20 3D 20 30 0D
Picture Mode Presentation	6F 70 20 70 69 63 74 2E 6D 6F 64 65 20 3D 20 31 0D
Picture Mode Day	6F 70 20 70 69 63 74 2E 6D 6F 64 65 20 3D 20 32 0D
Picture Mode Night	6F 70 20 70 69 63 74 2E 6D 6F 64 65 20 3D 20 33 0D
Picture Mode User	6F 70 20 70 69 63 74 2E 6D 6F 64 65 20 3D 20 34 0D

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