D10

DLP™ VIDEO
PROJECTOR

RS-232C CONTROL SPECIFICATIONS

Document Revision 1.1 (06 November 2007)

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Revision History:

Revision	Date	Software Version	Description of Change
1.1	06 November 2007	P01 or higher	Source selection: changed commands for Sources 1-5; added commands for HDMI(6) and RGBs.
1.0	10 October 2007	P01 or higher	Initial version.

1. Introduction

This document describes the communication and data formats used to control SIM2 D10 projector via RS-232C port.

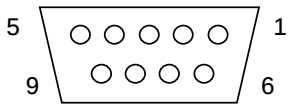
2. Connection

Switch off the Personal Computer and the Projector before connecting RS 232C cable.
Use a standard serial cable with 9 pin female to the Personal Computer and 9 pin male to the Projector: pin 2 connects to pin2, pin 3 to pin 3 and pin 5 to pin 5.

SIM2 D10 RS-232C Port is described as follows.

SIM 2 D10 RS-232C Control Port:

D-SUB 9-pin
(female)



Pin No	Signal	Definition
1	N/A	Not used
2	TD	Transmit data
3	RD	Receive data
4	N/A	Not used
5	GND	Ground
6	N/A	Not used
7	N/A	Not used
8	N/A	Not used
9	N/A	Not used

Switch on the Personal Computer and, after start up, switch on the Projector.

Load a suitable communication software onto your Personal Computer, and set the Serial Port Parameters as shown below.

Communication Parameters:

Parameter	Value
Transfer Rate	19200 bps
Data Bits	8
Parity Bit	None
Stop Bit	1
Flow Control	None

Set Send Mode and Read Mode to HEX.

3. Commands

The following commands send simulated Remote Control input to SIM2 D10 projector.

Remote Control Keycodes:

Key	Command
POWER ON	02 14 00 04 00 34 02 00 00 4E
POWER OFF	02 14 00 05 00 34 02 09 11 00 69
SOURCE : Composite video (1)	02 14 00 04 00 34 D0 35 04 55
SOURCE : S-Video (2)	02 14 00 04 00 34 D0 35 05 56
SOURCE : Component video (3)	02 14 00 04 00 34 D0 35 03 54
SOURCE : Graphic RGB (4)	02 14 00 04 00 34 D0 35 00 51
SOURCE : DVI (5)	02 14 00 04 00 34 D0 35 01 52
SOURCE : HDMI (6)	02 14 00 04 00 34 D0 35 02 53
SOURCE : RGBs	02 14 00 04 00 34 D0 35 06 57
ENTER	02 14 00 05 00 34 02 09 1A 00 72
CURSOR UP	02 14 00 05 00 34 02 09 17 00 6F
CURSOR LEFT	02 14 00 05 00 34 02 09 18 00 70
CURSOR RIGHT	02 14 00 05 00 34 02 09 19 00 71
CURSOR DOWN	02 14 00 05 00 34 02 09 1B 00 73
MENU	02 14 00 05 00 34 02 09 1C 00 74
EXIT	02 14 00 05 00 34 02 09 1D 00 75
USER MEMORY 1	02 14 00 05 00 34 02 09 1E 00 76
USER MEMORY 2	02 14 00 05 00 34 02 09 1F 00 77
USER MEMORY 3	02 14 00 05 00 34 02 09 20 00 78
CONTRAST	02 14 00 05 00 34 02 09 21 00 79
BRIGHTNESS	02 14 00 05 00 34 02 09 22 00 7A
ASPECT	02 14 00 05 00 34 02 09 23 00 7B
GAMMA	02 14 00 05 00 34 02 09 24 00 7C
OVERSCAN	02 14 00 05 00 34 02 09 25 00 7D
KEYSTONE	02 14 00 05 00 34 02 09 26 00 7E
AUTO	02 14 00 05 00 34 02 09 27 00 7F
BLANK	02 14 00 05 00 34 02 09 28 00 80

4. Examples

1. **Send the simulated "SWITCH ON FROM STANDBY" Remote Control keycode.**
   Remote Control allows Switching on from Standby via the key " POWER ON ".
   Send the code relative to key " POWER ON ":
   `02140004003402000 04E.`
   The projector switches on and the last source memorised prior to switch off is automatically selected.
   The projector returns the response code: `031400000014` (Acknowledged with no error).

2. **Send the simulated "MENU" Remote Control keycode.**
   Send the packet:
   `02140005003402091C0074.`
   The OnScreen Display appers on the screen.
   The projector returns no response code.

5. Warning

Command execution time may vary from few milliseconds to 500 milliseconds, depending on the operation that have been requested.
If the unit is busy when a command is sent, the unit may not accept the command. If several commands are to be sent one after the other, sufficient time between them should be allowed.