

**C3XE**  
DLP™ VIDEO  
PROJECTOR



**RS-232C**  
**CONTROL**  
**SPECIFICATIONS**

Document Revision 1.0 (18 May 2007)





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### *Revision History:*

Revision	Date	Software Version	Description of Change
1.0	18 May 2007	3.11.51 F or higher	Initial version.

## 1. Introduction

This document describes the communication and data formats used to control SIM2 C3XE projector via RS-232C port.

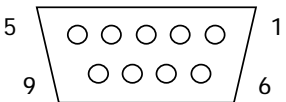
## 2. Connection

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 C3XE RS-232C Port is described as follows.

### ***SIM 2 C3XE 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 C3XE projector.

**Remote Control Keycodes:**

Key	Command
STANDBY	BE EF 02 06 00 51 E4 48 01 00 00 00 00
0 / ON <sup>(1)</sup>	BE EF 02 06 00 6B E6 52 01 00 00 00 00
1 <sup>(2)</sup>	BE EF 02 06 00 80 E5 49 01 00 00 00 00
2 <sup>(2)</sup>	BE EF 02 06 00 B3 E5 4A 01 00 00 00 00
3 <sup>(2)</sup>	BE EF 02 06 00 62 E4 4B 01 00 00 00 00
4 <sup>(2)</sup>	BE EF 02 06 00 D5 E5 4C 01 00 00 00 00
5 <sup>(2)</sup>	BE EF 02 06 00 04 E4 4D 01 00 00 00 00
6 <sup>(2)</sup>	BE EF 02 06 00 37 E4 4E 01 00 00 00 00
7 <sup>(3)</sup>	BE EF 02 06 00 E6 E5 4F 01 00 00 00 00
8 <sup>(3)</sup>	BE EF 02 06 00 89 E7 50 01 00 00 00 00
9 <sup>(3)</sup>	BE EF 02 06 00 58 E6 51 01 00 00 00 00
ESC	BE EF 02 06 00 0D E6 54 01 00 00 00 00
CURSOR UP	BE EF 02 06 00 DC E7 55 01 00 00 00 00
CURSOR LEFT	BE EF 02 06 00 EF E7 56 01 00 00 00 00
CURSOR RIGHT	BE EF 02 06 00 3E E6 57 01 00 00 00 00
CURSOR DOWN	BE EF 02 06 00 C1 E6 58 01 00 00 00 00
MENU LEFT (-)	BE EF 02 06 00 10 E7 59 01 00 00 00 00
MENU RIGHT (+)	BE EF 02 06 00 23 E7 5A 01 00 00 00 00
FREEZE	BE EF 02 06 00 F2 E6 5B 01 00 00 00 00
MEMORY	BE EF 02 06 00 45 E7 5C 01 00 00 00 00
MEMORY 1 RECALL	BE EF 02 06 00 A8 F2 A1 01 00 00 00 00
MEMORY 2 RECALL	BE EF 02 06 00 9B F2 A2 01 00 00 00 00
MEMORY 3 RECALL	BE EF 02 06 00 4A F3 A3 01 00 00 00 00
MEMORY 4 RECALL	BE EF 02 06 00 FD F2 A4 01 00 00 00 00
MEMORY 5 RECALL	BE EF 02 06 00 2C F3 A5 01 00 00 00 00
MEMORY 6 RECALL	BE EF 02 06 00 1F F3 A6 01 00 00 00 00
F1	BE EF 02 06 00 94 E6 5D 01 00 00 00 00
F2	BE EF 02 06 00 76 E7 5F 01 00 00 00 00
INFO	BE EF 02 06 00 A7 E6 5E 01 00 00 00 00
AUTO	BE EF 02 06 00 79 E2 60 01 00 00 00 00
ASPECT	BE EF 02 06 00 A8 E3 61 01 00 00 00 00

ASPECT NORMAL	BE EF 02 06 00 2A F4 83 01 00 00 00 00
ASPECT ANAMORPHIC	BE EF 02 06 00 9D F5 84 01 00 00 00 00
ASPECT LETTERBOX	BE EF 02 06 00 4C F4 85 01 00 00 00 00
ASPECT PANORAMIC	BE EF 02 06 00 7F F4 86 01 00 00 00 00
ASPECT SUBTITLE	BE EF 02 06 00 62 F5 8B 01 00 00 00 00
ASPECT PIXEL TO PIXEL	BE EF 02 06 00 AE F5 87 01 00 00 00 00
ASPECT USER 1	BE EF 02 06 00 51 F5 88 01 00 00 00 00
ASPECT USER 2	BE EF 02 06 00 80 F4 89 01 00 00 00 00
ASPECT USER 3	BE EF 02 06 00 B3 F4 8A 01 00 00 00 00

(1)

- When the unit is in Standby state, this command switches the unit on and the last source memorised prior to switch off is automatically selected.
- When the unit is on, this command displays the Source Selection windows of the OSD.

(2)

When the unit is in Standby state, this command switches the unit on and the corresponding source is selected.

(3)

When the unit is in Standby state, this command switches the unit on.

The response of the unit to a correct Remote Control Key Code consists of a single byte: 06.

## 4. Example

### 1. Send the simulated "SWITCH ON FROM STANDBY" Remote Control keycode.

Remote Control allows Switching on from Standby via the key "0".

Send the code relative to key "0":

```
BEEF0206006BE6520100000000.
```

The projector switches on and the last source memorised prior to switch off is automatically selected.

The projector returns the response code: 06 (Acknowledged with no error).

### 2. Send the simulated "MENU RIGHT" Remote Control keycode.

Send the packet:

```
BEEF02060023E75A0100000000.
```

The OnScreen Display appers on the screen.

The projector returns the response code: 06 (Acknowledged with no error).

## 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.