

**0. Setup**

**RS-232**

**IR**

Controller CXMA

|                   |   |
|-------------------|---|
| Cable             | Supplied w/ Projector (P/N 645 039 7219)                                    |
| Connections       | Computer: DB9; Projector: 8 Pin DIN Control Port                            |
| Pinouts: Transmit | Computer: Pin 3; Projector: Pin 6   |
| Pinouts: Receive  | Computer: Pin 2; Projector: Pin 1   |
| Pinouts: Ground   | Computer: Pin 5; Projector: Pin 4   |
| Settings          | 19,200 baud, 8N1  |
| Delimiter         | (after each command) CR   |
| Minimum Interval  | Command: 1 second; Status Read: 2 seconds; Input or Mode Change: 5 seconds. |

**1. Control Commands**

**RS-232 Command (ASCII)**

**IR Command (HEX)**

|                             | RS-232 Command (ASCII) | IR Command (HEX) |
|-----------------------------|------------------------|------------------|
| Power ON                    | C00                    |                  |
| Power OFF                   | C02                    | 00               |
| Compulsory Power OFF        | C01                    |                  |
| Input 1                     | CF_INPUT_1             | 38               |
| Input 2                     | CF_INPUT_2             | 39               |
| Input 3                     | CF_INPUT_3             | 05               |
| Volume +                    | C09                    | 1D               |
| Volume -                    | C0A                    | 1E               |
| Audio mute ON               | C0B                    |                  |
| Audio mute OFF              | C0C                    | 0B               |
| No Show ON                  | C0D                    |                  |
| No Show OFF                 | C0E                    | 8B               |
| Regular video image (4:3)   | C0F                    |                  |
| Wide video image (16:9)     | C10                    |                  |
| Menu ON                     | C1C                    |                  |
| Menu OFF                    | C1D                    | 1C               |
| Display clear               | C1E                    |                  |
| Image (toggle)              | C27                    | 0C               |
| Digital Zoom +              | C30                    | 01               |
| Digital Zoom -              | C31                    | 02               |
| Pointer right               | C3A                    | 1D               |
| Pointer left                | C3B                    | 1E               |
| Pointer up                  | C3C                    | 8C               |
| Pointer down                | C3D                    | 8D               |
| Select                      | C3F                    | 0F               |
| Freeze ON                   | C43                    |                  |
| Freeze OFF                  | C44                    | 43               |
| Zoom down                   | C46                    | 46               |
| Zoom up                     | C47                    | 47               |
| Focus down                  | C4A                    | 4B               |
| Focus up                    | C4B                    | 4A               |
| Lens shift up               | C5D                    | 5D               |
| Lens shift down             | C5E                    | 5E               |
| Auto PC Adj.                | C89                    | 89               |
| Presentation timer (on/off) | C8A                    | 8A               |
| Digital Keystone +          | C8E                    | 5B, 8C           |
| Digital Keystone -          | C8F                    | 5B, 8D           |
| Digital Keystone Left       | CF_KEYSTONE_LEFT       | 5B, 1E           |
| Digital Keystone Right      | CF_KEYSTONE_RIGHT      | 5B, 1D           |
| Source - Digital            | CF_SOURCE_DIGITAL      |                  |
| Source - Analog             | CF_SOURCE_ANALOG       |                  |
| Source - Wireless           | CF_SOURCE_WI           |                  |
| Source - MCI                | CF_SOURCE_MCI          |                  |
| Source - Auto               | CF_SOURCE_AUTO         |                  |
| Source - Video              | CF_SOURCE_VIDEO        |                  |
| Source - S-Video            | CF_SOURCE_S-VIDEO      |                  |
| Source - Component          | CF_SOURCE_YPBPR        |                  |
| Lamp Mode - Full            | CF_LAMPMODE_FUL        |                  |
| Lamp Mode - Eco             | CF_LAMPMODE_ECO        |                  |

**2. Status Read**

**RS-232 in ASCII**

|                   |     |
|-------------------|-----|
| Power Status Read | CR0 |
| Input mode Read   | CR1 |
| Lamp time Read    | CR3 |
| Setting Read      | CR4 |
| Temp. Read        | CR6 |

2.1 Power Status - CR0

Reply

|                          |    |
|--------------------------|----|
| Power ON                 | 00 |
| Stand by                 | 80 |
| Count down               | 40 |
| Cooling down             | 20 |
| Power abnormality        | 10 |
| Temperature abnormality  | 28 |
| Temperature abnormality  | 08 |
| Temperature abnormality  | 88 |
| Key input prohibition    | 02 |
| Power Management Cooling | 24 |
| Power Management         | 04 |

2.2 Input Mode - CR1

Reply

|                    |   |
|--------------------|---|
| Computer - Input 1 | 1 |
| Computer - Input 2 | 3 |
| Video - Input 3    | 2 |

2.3 Lamp Time - CR3

Reply

|         |      |
|---------|------|
| 4 digit | #### |
|---------|------|

2.4 Setting Read - CR4

Reply

|                         |    |
|-------------------------|----|
| Normally                | 11 |
| Top/Bottom reversal     | 10 |
| Left/Right reversal     | 01 |
| Top/Bottom & Left/Right | 00 |

2.4 Temp Read - CR6

Reply

|                          |                 |
|--------------------------|-----------------|
| Each sensor, in °Celcius | _##.#_##.#_##.# |
|--------------------------|-----------------|

Other Commands and Status Checks are available if required, from EIKI Today.