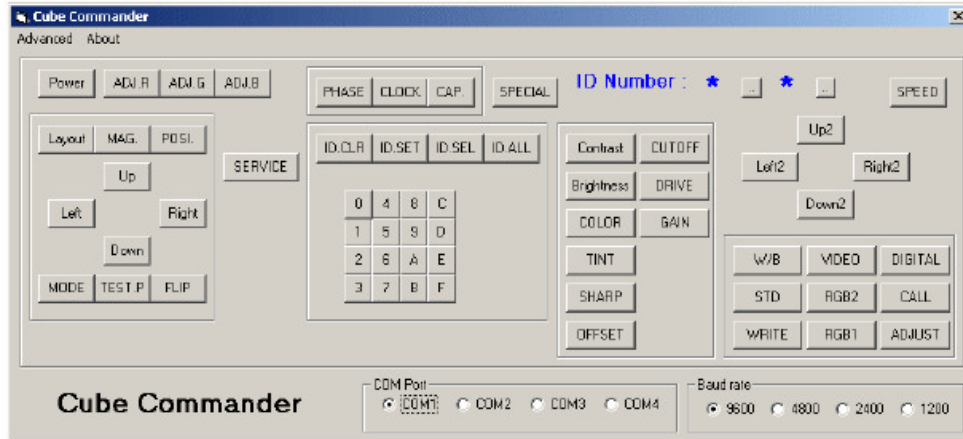


HOW TO USE CUBE COMMANDER SOFTWARE

Cube Commander™ is control software for Toshiba's P500DL series DLP Projectors.

Minimum Operating System requirement is Windows 98/2000 and XGA monitor



1. Setting Display I.D

- Select **ADJUST** to enter Adjust Mode OSD
- Select **ID.ALL** ' Input I.D Number' will appear and a two (2) digit I.D can now be entered using the alpha numeric key pad (Example A1)
- Once I.D is inputed, click on **ID.SEL** three (3) times followed by **ID.SET** to assign the I.D. **Note:** OSD will disappear and the display will return to normal mode, this indicates I.D. is complete, continue to next display

2. Clearing an I.D. **ID.CLR**

- Select **ADJUST** to enter Adjust Mode OSD
- Select **ID.ALL** to enter I.D. (Do Not enter I.D. at this time)
- Select **ID.SEL** 3 times followed by **ID.CLR** to erase the current I.D

3. Image Magnification **MAG.**



A single image can be displayed over multiple displays using the magnification function in Adjust Mode

- Select **ADJUST** to enter Adjust Mode OSD
- Select **ID Number : * * * *** Entering * * via the I.D. number pad will select all displays for MAG adjustment
- Select **MAG.** to view current magnification number (factory default is 11) of each display
- Using the alpha numeric key pad change magnification number




Examples: 2x2 display MAG=22 (Hor./Vert.)
 2x3 display MAG=32 (Hor./Vert.)
 3x5 display MAG=53 (Hor./Vert.)

- Select **MAG.** to view new magnified image on all displays

4. Lay Out Adjustment

- Select  to enter Adjust Mode OSD
- Select  and use OSD arrows to select image portion in multi screen display

5. Position Adjustment

- Select  to enter Adjust Mode OSD
- Select  and use OSD arrows to electronically position image in multi screen display
- Select  to save adjustments

6. Source Selection






The P500DL has four types of input selection. In normal operating mode, input source selection is achieved by clicking on one of the following buttons



Doing this will automatically change input signal selection and display new selection on screen OSD






7. Cutoff Adjustment

For low level adjustment for white balancing display, use color test software and set IRE level to 20% and adjust RGB levels

- Select  to enter Adjust Mode OSD
- Select  to adjust **Red** intensity
- Select  to adjust **Green** intensity
- Select  to adjust **Blue** intensity
- Select  to save adjustments

8. Drive Adjustment

For high level adjustment for white balancing display, use color test software and set IRE level to 80% and adjust RGB levels

- Select  to enter Adjust Mode OSD
- Select  to adjust **Red** intensity
- Select  to adjust **Green** intensity
- Select  to adjust **Blue** intensity
- Select  to save adjustments









9. Offset Adjustment

For low level adjustment for white balance using an external source
(See Cut Off procedure)

Gain Adjustment



For high level adjustment for white balance using an external source
(See Drive procedure)

10. Special Tab

- Select  to enter Adjust Mode
- Select  "A" to change OSD to **RED**
- Select  "B" to change OSD to **Green**
- Select  "C" to change OSD to **Blue**
- Select  "D" to display firmware version
- Select  "E" to display elapsed lamp timer
- Select  "F" to reset lamp timer
- Select  "9" to set power on delay (0.5sec inc. / 0-5sec)


11. Internal Test Pattern 

Use internal test pattern 07 for mechanical adjustment of display

- Select  to enter Adjust Mode
- Select  and enter "07" on alpha numeric key pad


Mechanically adjust display (see page 24-25 in service manual)

12. Call Tab 

In normal mode Select  to view general information such as input selection and source frequency of display




13. White Balance Tab 


There are 3 White Balance settings to choose from. WB1, WB2, and WB3

In normal mode select  to choose color temperature setting for display

14. Phase and Clock Tab  

Phase adjustment and clock frequency adjustment are performed to eliminate any moiré and jitter

- Select  to enter Adjust Mode
- Select  and use Left 2 and Right 2 arrows to adjust
- Select  and use Left 2 and Right 2 arrows to adjust

15. Video Input Selection 

When video input (NTSC) is selected the following adjustments are available in Adjust Mode



16. Standard Button 

Selecting this tab will reset the display to all factory default settings. The OSD will prompt user for confirmation before any reset is performed

17. Flip Tab 

Selecting this tab will rotate the image up, down, left, and right