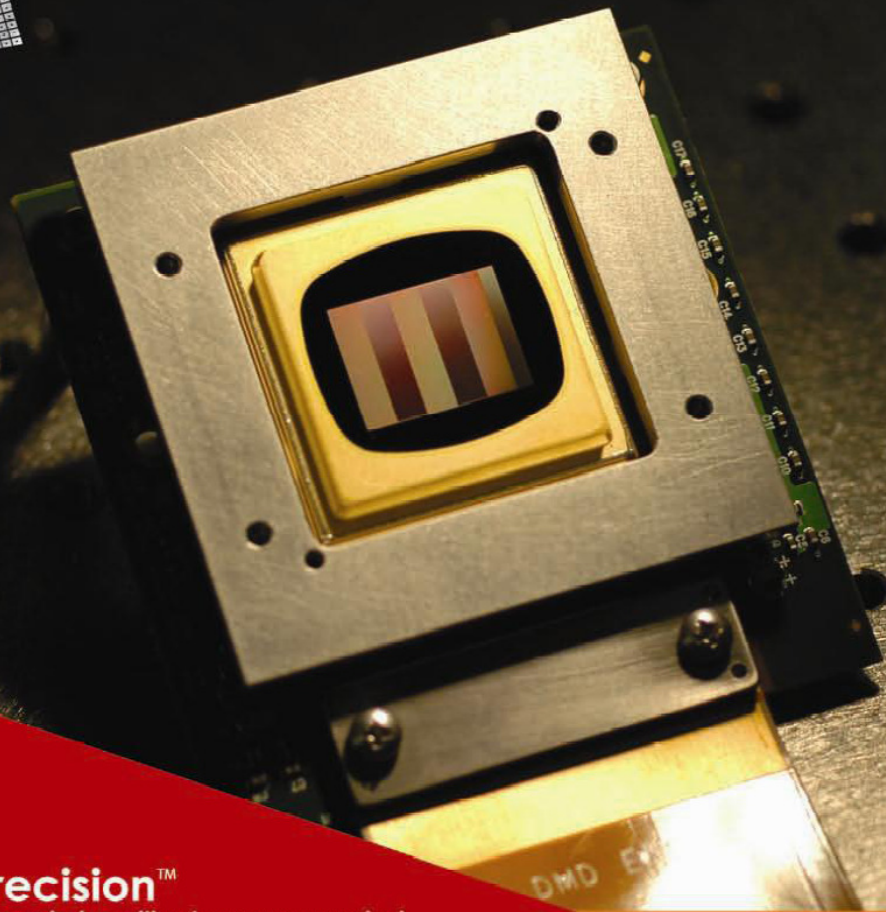




**Pixel**  
Precision



**Presenting Pixel Precision™**  
The easiest way to control the DMD precisely – without any programming!

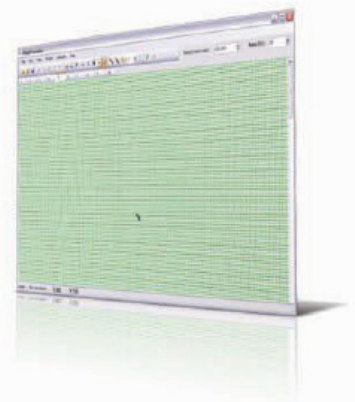
**Pixel Precision** is a software tool that interfaces seamlessly with the DLP® Discovery™ line of products from Texas Instruments (TI). It provides the user with quick and precise control over individual DMD pixel elements/micro-mirrors. Pixel Precision removes the need for extensive programming through its intuitive user interface and existing API.

### **From Months to Minutes: Simpler, Faster, Smarter**

Precise control over the DMD typically involves significant programming, coding, and time-consuming routines for animated sequences. Pixel Precision provides a user friendly UI with powerful editing capabilities that help simplify the process. What used to take days, weeks, or months is now completed in a fraction of the time without the need for costly programming.

Pixel Precision presents the user with a model of a DMD array, with the mirrors in the DMD represented by a large grid of rectangles in the screen window. The dimensions of this grid correspond to the dimensions of the DMD in the DLP® Discovery™ system being used.

By simply using the drawing tool to “paint” an image on the grid, users can create a sequence of up to 700 frames. Additional tools allow the user to modify, tweak, replicate, adjust, flip, and animate individual frames.





## Features and Functionality of Pixel Precision:

### **Unified User-Friendly Interface:**

Previously disparate functions are now integrated into one application. With Pixel Precision the user does not need to use multiple tools or call routines/programs for different functions.

Pixel Precision provides a unified solution for everything - pixel editing, sequence design, and DLP® Discovery™ interface all in one.

### **Individual Micro-mirror Control**

The Pixel Precision GUI provides users a graphical grid that represents the individual micro-mirrors of the DMD array. Users can zoom in and exercise precise control over one million micro-mirrors through simple point-and-click activation.

### **Develop Complex Animation Sequences**

Pixel Precision provides the ability to design and display a lengthy series of frames. Sequences up to 700 frames in length can be designed and displayed. Once each frame in the sequence is designed, controlling the animation merely involves setting its frame rate.

Pixel Precision provides users with two ways to control and adjust the frames – Frame Period or Frame Rate. This feature enables users to:

- Quickly adjust the speed of a sequence.
- Adjust from 1 fps to the maximum of the DLP® Discovery™ system.
- Perform “On-the-fly” adjustments.

### **Powerful Editing Capabilities**

With a robust set of drawing and editing tools, Pixel Precision makes it easy for the user to design and control complex frames as well as sequences. Some of the tools available include:

- Pen and Eraser Tools
- Color Template
- Cut, Copy, and Paste.
- Frame Flip, Frame Clear, Frame Invert, and Frame Duplicate.

### **Import, Save and Re-start: Extensive File Operations**

Jump-start the process by importing an image file into the program and then use the tools to build upon it. Complicated sequences can be saved at any time throughout the process.

Import image files  
 Open uncompressed AVI files  
 Save to disk operations



#### **System Requirements**

- Processor 500 MHz Or Greater
- Memory 512 MB
- Hard disk 10 MB free space
- Monitor Resolution 1024 x 768 or better.
- Interface USB 2.0 Port
- Operating System Windows XP® Service Pack 2 or Windows Vista
- Discovery™ Digital Controller
- Discovery™ Controller Software

#### **Supported DLP® Discovery™ Devices**

Precision Pixel supports both the DLP® Discovery™ 3000 and 4000 devices. Note that the DLP® Discovery™ 4000 is supported with or without the ALP, whereas the DLP® Discovery™ 3000 is supported only in a configuration with the ALP.

- 3000 XGA with ALP
- 3000 SXGA+ with ALP
- 3000 XGA with ALP (Basic)
- 3000 SXGA+ with ALP (Basic)
- 4000 for both XGA and 1080p DMD

#### **Individual Micro-mirror Control**

- *Precise point-and-click control of over 1 million micro-mirrors*

#### **Import Image Files and AVI Files**

- *Ability to import image files into the program and play AVI files*

#### **Complex Animation Sequences**

- *Create sequences up to 700 frames in length*

#### **Powerful Editing Capabilities**

- *Pen and Eraser Tools*
- *Color Template*
- *Cut, Copy, and Paste*
- *Frame Flip and Frame Invert*
- *Frame Duplicate and Frame Clear*
- **Easily Adjustable Frame Rates**
- *Adjustable from 1 fps to the maximum capabilities of the DLP® Discovery™*
- *“On-the-fly” adjustments*

#### **Extensive File Operations**

- *Complicated sequences can be saved to disk for later use*
- *Image and AVI file import*

#### **A Unified User-Friendly Interface**

- *Previously disparate functions are now integrated into one application.*
- *Pixel editing, sequence design, and DLP® Discovery™ interface all in one*



3dicon Corporation, Pixel Precision is subject to protections provided by US Patent Laws

www.PixelPrecision.net