

# User Guide

## Normalization Heuristics

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### Normalization Heuristics Demo

This demo accompanies the NVIDIA white paper entitled "Normalization Heuristics: Performance vs. Quality on GeForce FX"; *Document No WP-01164-001\_v03*.

The purpose of the demo is to show how different normalization approaches affect the performance and quality of rendering. To use the demo, run it and try toggling various settings to compare the resulting frame rate and quality of rendering.

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### Hardware Requirements

This demo requires the NVIDIA GeForce FX.

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### Keyboard Controls

#### Cube Maps

- [v]: Toggle V normalization cube map.
- [l]: Toggle L normalization cube map.
- [h]: Toggle H normalization cube map.
- [n]: Toggle N normalization cube map.
  
- [o]: Toggle Dot Product "optimization".
  
- [8]: Toggle 8-bit / 16-bit (HILO) normalization cube maps.
- [m]: Toggle normalization cube map mipmaps.

- [-]: Decrease maximum mip level (decreases speed, error).
- [+(=)]: Increase maximum mip level (increases speed, error).
- [f]: Toggle float / half computation (32-bit / 16-bit).

## Miscellaneous

- [p]: Print the currently active fragment program.
- [?]: Print these instructions.
- [`]: Display Parameter Sliders
- [r]: Reset view orientation
- [q/ESC]: Quit

## Mouse Controls

- Left Button + Drag: rotate.
- SHIFT + Left Button + Drag: translate.
- CTRL + Left Button + Drag: zoom.



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