Slit Scan – Generate an effect similar to 2001's star gate sequences

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Contents

1   slit-scan

1.1   Created By

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1.2   Introduction

Slit-Scan is the command-line tool that allow you to create slit-scans similar to the star-gate sequences in 2001: A Space Odyssey. The idea here is to add a lot of flexibility to allow you to acheive results even beyond what was acheived in what is arguably the greatest Science Fiction film of all time.

1.3   Mathematics

Here, we fully specify the mathematics involved with the slit-scan function. Firstly, we define the slit function as a function between 2 points.

t is time, in seconds, and

p_1, p_2 are points defining tbe beginning and ending of the slit, and

$$f(p_1, p_2) = some function$$

Secondly, we define the movement of the slit across an image:

$$x = \sqrt{b} \tag{1}$$

Thirdly, we define the compositor function:

$$x = \sqrt{b} \tag{2}$$