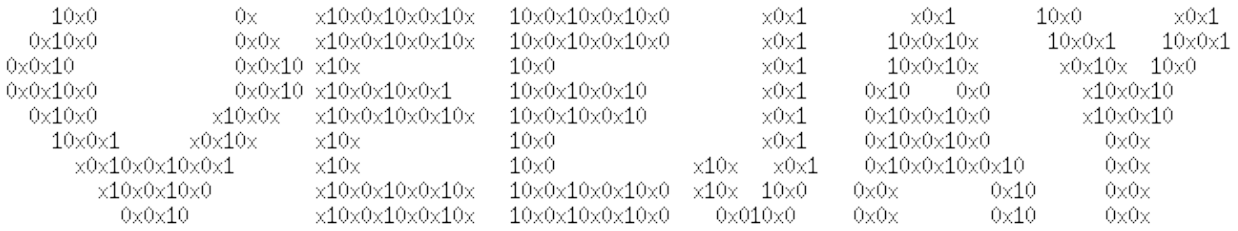

VEEJAY 1.0
FX MANUAL

Motion mapping

Environment:

Static background image

Description:

Motion Detection.

Technique:

The motion mapping filter analyzes the amount of activity (“movement energy”) and constructs a difference frame on the fly. The white pixels represents those pixels that have changed whilst the black pixels indicate no change.
Each incoming frame is processed and an activity value is calculated. This value is stored and averaged over a period of N frames. The final activity value is an linearly interpolated value between the previous and the new activity value.
When the motion mapping filter is running, some (1) FX will use this filter to scale a subset of their parameters using the activity as a scaling value.
To compensate for jumpy FX results, linear interpolation is used to produce a new FX frame from the previous FX result and the new FX result.

#	Parameter	Description
0	Threshold	Global threshold level of minimum change before accepting pixel
1	Activity Limit	Limit acitivy to an absolute value (affects linked FX)
2	Draw difference frame	Switch to Draw or Process frame
3	Histogram Length	The activity level is the average of

4 Opacity	Opacity of reaction frames. When > 0, Up to 55 frames will be recorded into memory and played once the activity level hits the limit. Recording or Playback will start when limit is hit.

Linked FX: (1)

Magic Mirror, Bathroom Window, Displacement Mapping, Multi Mirrors, Sinoids, Slice Window, Smear, ChameleonTV, Time Distortion TV

ChameleonTV

By contrast, when you switch from "disappearing mode" to "appearing mode", moving objects are not shown, and a still object appears after seconds.

Environment:

Static background image

Description:

When you are still in the sight of the camera for a second, you will be vanishing into the background, and disappear. When you move again, you will appear normally.

Technique:

Accumulated substraction/addition buffers

#	Parameter	Description
0	Mode	Disappearing = 0 Appearing = 1
1	Reset background	Resets the background

Magic Mirrors

Description:

Like if you were looking in a funhouse mirror

#	Parameter	Description
0	X	Mirrors in X direction
1	Y	Mirrors in Y direction
2	Deg X	X curve
3	Deg Y	Y curve

Multi Mirrors

Description:

Slice the image and apply a mirror on each slice

#	Parameter	Description
0	Mode	0=Horizontal 1=Vertical
1	Number	The number of mirrors

Time Distortion

Description

Distorts moving objects in the sight. When it detects a moving part, it rollbacks to an old frame around that.

Techniques

This effect employs "time-buffer" like QuarkTV or SpiralTV. (Both not in Veejay). When it detects a moving part, it shows 32 frames old pixel for that part, then it becomes fresh slowly. It applys a low-pass filter to spread the time-shift effect to nieghbor pixels.

#	Parameter	Description
0	Threshold	Global threshold level

APPENDIX I

Acknowledgements

FX Name	Author:
ChameleonTV	FUKUCHI Kentaro http://effectv.sourceforge.net)
TimeDistortion	Ryota Koiwa, Kentaro Fukuchi