

MSU LOGO REMOVER 3.0B USER GUIDE

April 2011 CS MSU Graphics&Media Lab Video Group

http://www.compression.ru/video/

Contents

1	Brief description	3
2	Mode selection	4
3	Detection mode	5
4	Removal mode	6

1 Brief description

This plug-in for VirtualDub is intended to remove logos from video sequences.

The main principles of this plug-in are:

- Automatic logo detection
- Plugin can deal with:
 - Static opaque logos
 - Static semi transparent logo
 - Animated opaque logos
- Three types of logo removing:
 - Spatial extrapolation of neighbor pixels
 - Spatial extrapolation + motion information analysis (Effect of objects "crawling" over the logo)
 - Subtraction of semi transparent logo using statistical data

Here is the window for parameters selection for MSU Logo Remover

U Logo Remover 3.0b Configuration	
⊢ Working mode	
Detection (first pass)	
C Removal (second pass)	GRAPHICS & MEDIA LAB
Logo detection (first pass)	Logo location
Letterbox (black bars around video)	
Logo type:	
C Opaque	
Semi transparent	
C Animated	¢
Logo removal (second pass)	
Subtract transparent logo	
C Blur only	
C Motion compensation	
Keep logo data in tmp.logopack	Browse
Home page	OK Cancel

2 Mode selection

The filter can operate in two modes:

- Detection the filter will detect logo location and mask and put them into file
- Removal using information from previous step the filter will remove logo

Note: usually when you need to remove logo from the video, you need to run filter in detection mode first and then in removal mode.

• Working mode • Detection (first pass) • Removal (second pass)

3 Detection mode

In this mode the filter subsequently performs three actions:

- Detection of logo position
- Detection of logo mask (mask can be dynamic for animated logos)
- Collecting of logo data into logo package file (*.LOGOPACK)

To activate this mode you need:

- Select "Detection (first pass)" option in the filter configure dialog.
- Choose which type of logo you want to detect:
 - Static opaque logo
 - Static semi transparent logo
 - Animated opaque logo
- Check letter box option if the source video has letterbox or crop it manually for more accurate result
- (Optional) Specify logo position
- (Optional) Specify where the filter should put *.LOGOPACK file

Note: once the filter put logo data into file, you can use this file to remove logos from other videos containing the same logo.

Note: in animated logo detection mode the first 1800 frames of filter output would be blank.



4 Removal mode

In this mode the filter use information from file, written on the previous step to completely remove logo from source video.

To activate this mode you need:

- Select "Removal (second pass)" option
- Choose removing method
 - Subtract transparent logo will remove semi transparent logo using statistical data from previous step (only for semi transparent logos)
 - o Blur only the logo area will be just blurred
 - \circ Motion compensation the motion information from previous frame would be used
- (Optional) Specify where the filter should get *.LOGOPACK file

Note: once the filter put logo data into file, you can use this file to remove logos from other videos containing the same logo.

Note: when removing animated logo you should start removal process from the frame where detection process was started. This is required for correct period match. For example if the detection of animated logo was started on the first video frame, you should start removal process from the first frame also.

 Logo remova 	l (second	l pass)
---------------------------------	-----------	---------

Subtract transparent logo

Blur only

Motion compensation