

## Commands used in terminal

# Update and upgrade the raspberry pi firmware

Sudo apt-get update

Sudo apt-get upgrade

#Ensure raspberry pi cam is switched on within raspi config.

Sudo raspi-config (Camera – Enable)

#update raspberry pi cam firmware (optional)

sudo apt-get install rpi-update

sudo rpi-update

sudo reboot

#Download the Motion-mmal.tar.gz

Sudo apt-get install motion-mmal

#Download jpeg library (libjpeg62)

Sudo apt-get install libjpeg62

#Access the (motion-mmalcam.conf) Motion configuration file

Sudo nano /etc/motion/motion-mmalcam.conf

→below are the default mmalcam.config file settings.

#####

# Daemon

#####

# Start in daemon (background) mode and release terminal (default: off)

daemon off

# File to store the process ID, also called pid file. (default: not defined)

process\_id\_file /var/run/motion/motion.pid

#####

# Basic Setup Mode

#####

# Start in Setup-Mode, daemon disabled. (default: off)

setup\_mode off

# Use a file to save logs messages, if not defined stderr and syslog is used. (default: not defined)

logfile /home/pi/motion.log

# Level of log messages [1..9] (EMR, ALR, CRT, ERR, WRN, NTC, INF, DBG, ALL). (default: 6 / NTC)

log\_level 5

# Filter to log messages by type (COR, STR, ENC, NET, DBL, EVT, TRK, VID, ALL). (default: ALL)

log\_type all

#####

# Capture device options

#####

```
# Videodevice to be used for capturing (default /dev/video0)

# for FreeBSD default is /dev/bktr0

#videodevice /dev/video0

# v4l2_palette allows you to choose a palette to be used by motion
# to capture from those supported by your videodevice. (default: 17)
# E.g. if your videodevice supports both V4L2_PIX_FMT_SBGGR8 and
# V4L2_PIX_FMT_MJPEG then motion will by default use V4L2_PIX_FMT_MJPEG.
# Setting v4l2_palette to 2 forces motion to use V4L2_PIX_FMT_SBGGR8
# instead.

#

# Values :

# V4L2_PIX_FMT_SN9C10X : 0 'S910'
# V4L2_PIX_FMT_SBGGR16 : 1 'BYR2'
# V4L2_PIX_FMT_SBGGR8 : 2 'BA81'
# V4L2_PIX_FMT_SPCA561 : 3 'S561'
# V4L2_PIX_FMT_SGBRG8 : 4 'GBRG'
# V4L2_PIX_FMT_SGRBG8 : 5 'GRBG'
# V4L2_PIX_FMT_PAC207 : 6 'P207'
# V4L2_PIX_FMT_PJPG : 7 'PJPG'
# V4L2_PIX_FMT_MJPEG : 8 'MJPEG'
# V4L2_PIX_FMT_JPEG : 9 'JPEG'
# V4L2_PIX_FMT_RGB24 : 10 'RGB3'
# V4L2_PIX_FMT_SPCA501 : 11 'S501'
# V4L2_PIX_FMT_SPCA505 : 12 'S505'
```

# V4L2\_PIX\_FMT\_SPCA508 : 13 'S508'

# V4L2\_PIX\_FMT\_UYVY : 14 'UYVY'

# V4L2\_PIX\_FMT\_YUYV : 15 'YUYV'

# V4L2\_PIX\_FMT\_YUV422P : 16 '422P'

# V4L2\_PIX\_FMT\_YUV420 : 17 'YU12'

#

v4l2\_palette 17

# Tuner device to be used for capturing using tuner as source (default /dev/tuner0)

# This is ONLY used for FreeBSD. Leave it commented out for Linux

; tunerdevice /dev/tuner0

# The video input to be used (default: -1)

# Should normally be set to 0 or 1 for video/TV cards, and -1 for USB cameras

input -1

# The video norm to use (only for video capture and TV tuner cards)

# Values: 0 (PAL), 1 (NTSC), 2 (SECAM), 3 (PAL NC no colour). Default: 0 (PAL)

norm 0

# The frequency to set the tuner to (kHz) (only for TV tuner cards) (default: 0)

frequency 0

# Rotate image this number of degrees. The rotation affects all saved images as

# well as movies. Valid values: 0 (default = no rotation), 90, 180 and 270.

rotate 0

# Image width (pixels). Valid range: Camera dependent, default: 352

width 1024

# Image height (pixels). Valid range: Camera dependent, default: 288

height 576

# Maximum number of frames to be captured per second.

# Valid range: 2-100. Default: 100 (almost no limit).

framerate 2

# Minimum time in seconds between capturing picture frames from the camera.

# Default: 0 = disabled - the capture rate is given by the camera framerate.

# This option is used when you want to capture images at a rate lower than 2 per second.

minimum\_frame\_time 0

# URL to use if you are using a network camera, size will be autodetected (incl http:// ftp:// mjpg://  
or file:///)

# Must be a URL that returns single jpeg pictures or a raw mjpeg stream. Default: Not defined

;netcam\_url http://127.0.0.1/cgi-bin/raspicam.sh

# Username and password for network camera (only if required). Default: not defined

# Syntax is user:password

; netcam\_userpass value

# The setting for keep-alive of network socket should improve performance on compatible net cameras.

# off: The historical implementation using HTTP/1.0, closing the socket after each http request.

# force: Use HTTP/1.0 requests with keep alive header to reuse the same connection.

# on: Use HTTP/1.1 requests that support keep alive as default.

# Default: off

netcam\_keepalive off

# URL to use for a netcam proxy server, if required, e.g. "http://myproxy".

# If a port number other than 80 is needed, use "http://myproxy:1234".

# Default: not defined

; netcam\_proxy value

# Set less strict jpeg checks for network cameras with a poor/buggy firmware.

# Default: off

netcam\_tolerant\_check off

# Let motion regulate the brightness of a video device (default: off).

# The auto\_brightness feature uses the brightness option as its target value.

# If brightness is zero auto\_brightness will adjust to average brightness value 128.

# Only recommended for cameras without auto brightness

auto\_brightness off

# Set the initial brightness of a video device.

# If auto\_brightness is enabled, this value defines the average brightness level

# which Motion will try and adjust to

# Valid range 0-255, default 0 = disabled

brightness 0

# Set the contrast of a video device.

# Valid range 0-255, default 0 = disabled

contrast 0

# Set the saturation of a video device.

# Valid range 0-255, default 0 = disabled

saturation 0

# Set the hue of a video device (NTSC feature).

# Valid range 0-255, default 0 = disabled

hue 0

#####

# File "camera" support - read raw YUV data from a file

#####

#filecam\_path /home/pi/test-cap/motion-mmal.capture

#####

# OpenMax/MMAL camera support for Raspberry Pi

#####

mmalcam\_name vc.ril.camera

#mmalcam\_control\_params

```
#mmalcam_raw_capture_file /home/pi/motion-mmal.capture
```

```
# Switch this setting to "on" to use the still image mode of the Pi's camera
```

```
# instead of video. This gives a wider field of view, but requires
```

```
# a much slower frame-rate to achieve exposure stability
```

```
# (e.g. 0.25 fps or slower). You can use the minimum_frame_time
```

```
# parameter above to achieve this
```

```
mmalcam_use_still off
```

```
#####
```

```
# Round Robin (multiple inputs on same video device name)
```

```
#####
```

```
# Number of frames to capture in each roundrobin step (default: 1)
```

```
roundrobin_frames 1
```

```
# Number of frames to skip before each roundrobin step (default: 1)
```

```
roundrobin_skip 1
```

```
# Try to filter out noise generated by roundrobin (default: off)
```

```
switchfilter off
```



#####

# Motion Detection Settings:

#####

# Threshold for number of changed pixels in an image that

# triggers motion detection (default: 1500)

threshold 1500

# Automatically tune the threshold down if possible (default: off)

threshold\_tune off

# Noise threshold for the motion detection (default: 32)

noise\_level 32

# Automatically tune the noise threshold (default: on)

noise\_tune on

# Despeckle motion image using (e)rode or (d)ilate or (l)abel (Default: not defined)

# Recommended value is EedDI. Any combination (and number of) of E, e, d, and D is valid.

# (l)abeling must only be used once and the 'l' must be the last letter.

# Comment out to disable

despeckle\_filter EedDI

# Detect motion in predefined areas (1 - 9). Areas are numbered like that: 1 2 3

# A script (on\_area\_detected) is started immediately when motion is 4 5 6

# detected in one of the given areas, but only once during an event. 7 8 9

# One or more areas can be specified with this option. Take care: This option

# does NOT restrict detection to these areas! (Default: not defined)

; area\_detect value

# PGM file to use as a sensitivity mask.

# Full path name to. (Default: not defined)

; mask\_file value

# Dynamically create a mask file during operation (default: 0)

# Adjust speed of mask changes from 0 (off) to 10 (fast)

smart\_mask\_speed 0

# Ignore sudden massive light intensity changes given as a percentage of the picture

# area that changed intensity. Valid range: 0 - 100 , default: 0 = disabled

lightswitch 0

# Picture frames must contain motion at least the specified number of frames

# in a row before they are detected as true motion. At the default of 1, all

# motion is detected. Valid range: 1 to thousands, recommended 1-5

minimum\_motion\_frames 1

# Specifies the number of pre-captured (buffered) pictures from before motion

# was detected that will be output at motion detection.

# Recommended range: 0 to 5 (default: 0)

# Do not use large values! Large values will cause Motion to skip video frames and  
# cause unsmooth movies. To smooth movies use larger values of post\_capture instead.

pre\_capture 0

# Number of frames to capture after motion is no longer detected (default: 0)

post\_capture 0

# Event Gap is the seconds of no motion detection that triggers the end of an event.

# An event is defined as a series of motion images taken within a short timeframe.

# Recommended value is 60 seconds (Default). The value -1 is allowed and disables

# events causing all Motion to be written to one single movie file and no pre\_capture.

# If set to 0, motion is running in gapless mode. Movies don't have gaps anymore. An

# event ends right after no more motion is detected and post\_capture is over.

event\_gap 60

# Maximum length in seconds of a movie

# When value is exceeded a new movie file is created. (Default: 0 = infinite)

max\_movie\_time 0

# Always save images even if there was no motion (default: off)

emulate\_motion off

#####

# Image File Output

#####

# Output 'normal' pictures when motion is detected (default: on)

# Valid values: on, off, first, best, center

# When set to 'first', only the first picture of an event is saved.

# Picture with most motion of an event is saved when set to 'best'.

# Picture with motion nearest center of picture is saved when set to 'center'.

# Can be used as preview shot for the corresponding movie.

output\_pictures on

# Output pictures with only the pixels moving object (ghost images) (default: off)

output\_debug\_pictures off

# The quality (in percent) to be used by the jpeg compression (default: 75)

quality 75

# Type of output images

# Valid values: jpeg, ppm (default: jpeg)

picture\_type jpeg

#####

# FFMPEG related options

# Film (movies) file output, and deinterlacing of the video input

# The options movie\_filename and timelapse\_filename are also used

# by the ffmpeg feature

#####

# Use ffmpeg to encode movies in realtime (default: off)

ffmpeg\_output\_movies on

# Use ffmpeg to make movies with only the pixels moving

# object (ghost images) (default: off)

ffmpeg\_output\_debug\_movies off

# Use ffmpeg to encode a timelapse movie

# Default value 0 = off - else save frame every Nth second

ffmpeg\_timelapse 0

# The file rollover mode of the timelapse video

# Valid values: hourly, daily (default), weekly-sunday, weekly-monday, monthly, manual

ffmpeg\_timelapse\_mode daily

# Bitrate to be used by the ffmpeg encoder (default: 400000)

# This option is ignored if ffmpeg\_variable\_bitrate is not 0 (disabled)

ffmpeg\_bps 500000

# Enables and defines variable bitrate for the ffmpeg encoder.

# ffmpeg\_bps is ignored if variable bitrate is enabled.

# Valid values: 0 (default) = fixed bitrate defined by ffmpeg\_bps,

# or the range 2 - 31 where 2 means best quality and 31 is worst.

ffmpeg\_variable\_bitrate 0

# Codec to used by ffmpeg for the video compression.

# Timelapse mpegs are always made in mpeg1 format independent from this option.

# Supported formats are: mpeg1 (ffmpeg-0.4.8 only), mpeg4 (default), and msmpeg4.

# mpeg1 - gives you files with extension .mpg

# mpeg4 or msmpeg4 - gives you files with extension .avi

# msmpeg4 is recommended for use with Windows Media Player because

# it requires no installation of codec on the Windows client.

# swf - gives you a flash film with extension .swf

# flv - gives you a flash video with extension .flv

# ffv1 - FF video codec 1 for Lossless Encoding ( experimental )

# mov - QuickTime ( testing )

# ogg - Ogg/Theora ( testing )

ffmpeg\_video\_codec mpeg4

# Use ffmpeg to deinterlace video. Necessary if you use an analog camera

# and see horizontal combing on moving objects in video or pictures.

# (default: off)

ffmpeg\_deinterlace off

#####

# SDL Window

#####

# Number of motion thread to show in SDL Window (default: 0 = disabled)

#sdl\_threadnr 0

#####

# External pipe to video encoder

# Replacement for FFMPEG builtin encoder for ffmpeg\_output\_movies only.

# The options movie\_filename and timelapse\_filename are also used

# by the ffmpeg feature

#####

# Bool to enable or disable extpipe (default: off)

use\_extpipe off

# External program (full path and opts) to pipe raw video to

# Generally, use '-' for STDIN...

;extpipe mencoder -demuxer rawvideo -rawvideo w=320:h=240:i420 -ovc x264 -x264encopts

bframes=4:frameref=1:subq=1:scenecut=-

1:nob\_adapt:threads=1:keyint=1000:8x8dct:vbv\_bufsize=4000:crf=24:partitions=i8x8,i4x4:vbv\_maxr

ate=800:no-chroma-me -vf denoise3d=16:12:48:4,pp=lb -of avi -o %f.avi - -fps %fps

#####

# Snapshots (Traditional Periodic Webcam File Output)

#####

# Make automated snapshot every N seconds (default: 0 = disabled)

snapshot\_interval 0

#####

# Text Display

# %Y = year, %m = month, %d = date,

# %H = hour, %M = minute, %S = second, %T = HH:MM:SS,

# %v = event, %q = frame number, %t = thread (camera) number,

# %D = changed pixels, %N = noise level, \n = new line,

# %i and %j = width and height of motion area,

# %K and %L = X and Y coordinates of motion center

# %C = value defined by text\_event - do not use with text\_event!

# You can put quotation marks around the text to allow

# leading spaces

#####

# Locate and draw a box around the moving object.

# Valid values: on, off, preview (default: off)

# Set to 'preview' will only draw a box in preview\_shot pictures.

locate\_motion\_mode off

# Set the look and style of the locate box if enabled.

# Valid values: box, redbox, cross, redcross (default: box)

# Set to 'box' will draw the traditional box.

# Set to 'redbox' will draw a red box.



# Set to 'cross' will draw a little cross to mark center.

# Set to 'redcross' will draw a little red cross to mark center.

locate\_motion\_style box

# Draws the timestamp using same options as C function strftime(3)

# Default: %Y-%m-%d\n%T = date in ISO format and time in 24 hour clock

# Text is placed in lower right corner

text\_right %Y-%m-%d\n%T-%q

# Draw a user defined text on the images using same options as C function strftime(3)

# Default: Not defined = no text

# Text is placed in lower left corner

; text\_left CAMERA %t

# Draw the number of changed pixed on the images (default: off)

# Will normally be set to off except when you setup and adjust the motion settings

# Text is placed in upper right corner

text\_changes off

# This option defines the value of the special event conversion specifier %C

# You can use any conversion specifier in this option except %C. Date and time

# values are from the timestamp of the first image in the current event.

# Default: %Y%m%d%H%M%S

# The idea is that %C can be used filenames and text\_left/right for creating

# a unique identifier for each event.

text\_event %Y%m%d%H%M%S

# Draw characters at twice normal size on images. (default: off)

text\_double on

# Text to include in a JPEG EXIF comment

# May be any text, including conversion specifiers.

# The EXIF timestamp is included independent of this text.

;exif\_text %i%J/%K%L

#####

# Target Directories and filenames For Images And Films

# For the options snapshot\_, picture\_, movie\_ and timelapse\_filename

# you can use conversion specifiers

# %Y = year, %m = month, %d = date,

# %H = hour, %M = minute, %S = second,

# %v = event, %q = frame number, %t = thread (camera) number,

# %D = changed pixels, %N = noise level,

# %i and %J = width and height of motion area,

# %K and %L = X and Y coordinates of motion center

# %C = value defined by text\_event

# Quotation marks round string are allowed.

#####

```
# Target base directory for pictures and films

# Recommended to use absolute path. (Default: current working directory)
target_dir /home/pi

# File path for snapshots (jpeg or ppm) relative to target_dir
# Default: %v-%Y%m%d%H%M%S-snapshot
# Default value is equivalent to legacy oldlayout option
# For Motion 3.0 compatible mode choose: %Y/%m/%d/%H/%M/%S-snapshot
# File extension .jpg or .ppm is automatically added so do not include this.
# Note: A symbolic link called lastsnap.jpg created in the target_dir will always
# point to the latest snapshot, unless snapshot_filename is exactly 'lastsnap'
snapshot_filename %v-%Y%m%d%H%M%S-snapshot

# File path for motion triggered images (jpeg or ppm) relative to target_dir
# Default: %v-%Y%m%d%H%M%S-%q
# Default value is equivalent to legacy oldlayout option
# For Motion 3.0 compatible mode choose: %Y/%m/%d/%H/%M/%S-%q
# File extension .jpg or .ppm is automatically added so do not include this
# Set to 'preview' together with best-preview feature enables special naming
# convention for preview shots. See motion guide for details
picture_filename %v-%Y%m%d%H%M%S-%q

# File path for motion triggered ffmpeg films (movies) relative to target_dir
# Default: %v-%Y%m%d%H%M%S
# Default value is equivalent to legacy oldlayout option
```

# For Motion 3.0 compatible mode choose: %Y/%m/%d/%H%M%S

# File extension .mpg or .avi is automatically added so do not include this

# This option was previously called ffmpeg\_filename

movie\_filename %v-%Y%m%d%H%M%S

# File path for timelapse movies relative to target\_dir

# Default: %Y%m%d-timelapse

# Default value is near equivalent to legacy oldlayout option

# For Motion 3.0 compatible mode choose: %Y/%m/%d-timelapse

# File extension .mpg is automatically added so do not include this

timelapse\_filename %Y%m%d-timelapse

#####

# Global Network Options

#####

# Enable or disable IPV6 for http control and stream (default: off )

ipv6\_enabled off

#####

# Live Stream Server

#####

# The mini-http server listens to this port for requests (default: 0 = disabled)

stream\_port 8081

# Quality of the jpeg (in percent) images produced (default: 50)

stream\_quality 50

# Output frames at 1 fps when no motion is detected and increase to the

# rate given by stream\_maxrate when motion is detected (default: off)

stream\_motion off

# Maximum framerate for stream streams (default: 1)

stream\_maxrate 1

# Restrict stream connections to localhost only (default: on)

stream\_localhost off

# Limits the number of images per connection (default: 0 = unlimited)

# Number can be defined by multiplying actual stream rate by desired number of seconds

# Actual stream rate is the smallest of the numbers framerate and stream\_maxrate

stream\_limit 0

# Set the authentication method (default: 0)

# 0 = disabled

# 1 = Basic authentication

# 2 = MD5 digest (the safer authentication)

stream\_auth\_method 0

# Authentication for the stream. Syntax username:password

# Default: not defined (Disabled)

; stream\_authentication username:password

#####

# HTTP Based Control

#####

# TCP/IP port for the http server to listen on (default: 0 = disabled)

webcontrol\_port 8080

# Restrict control connections to localhost only (default: on)

webcontrol\_localhost on

# Output for http server, select off to choose raw text plain (default: on)

webcontrol\_html\_output on

# Authentication for the http based control. Syntax username:password

# Default: not defined (Disabled)

; webcontrol\_authentication username:password

#####

# Tracking (Pan/Tilt)

#####

# Type of tracker (0=none (default), 1=stepper, 2=iomojo, 3=pwc, 4=generic, 5=uvvideo, 6=servo)

# The generic type enables the definition of motion center and motion size to

# be used with the conversion specifiers for options like on\_motion\_detected

track\_type 0

# Enable auto tracking (default: off)

track\_auto off

# Serial port of motor (default: none)

;track\_port /dev/ttyS0

# Motor number for x-axis (default: 0)

;track\_motorx 0

# Set motorx reverse (default: 0)

;track\_motorx\_reverse 0

# Motor number for y-axis (default: 0)

;track\_motory 1

# Set motory reverse (default: 0)

;track\_motory\_reverse 0

# Maximum value on x-axis (default: 0)

;track\_maxx 200

# Minimum value on x-axis (default: 0)

;track\_minx 50

# Maximum value on y-axis (default: 0)

;track\_maxy 200

# Minimum value on y-axis (default: 0)

;track\_miny 50

# Center value on x-axis (default: 0)

;track\_homex 128

# Center value on y-axis (default: 0)

;track\_homey 128

# ID of an iomojo camera if used (default: 0)

track\_iomojo\_id 0

# Angle in degrees the camera moves per step on the X-axis

# with auto-track (default: 10)

# Currently only used with pwc type cameras

track\_step\_angle\_x 10



# Angle in degrees the camera moves per step on the Y-axis

# with auto-track (default: 10)

# Currently only used with pwc type cameras

track\_step\_angle\_y 10

# Delay to wait for after tracking movement as number

# of picture frames (default: 10)

track\_move\_wait 10

# Speed to set the motor to (stepper motor option) (default: 255)

track\_speed 255

# Number of steps to make (stepper motor option) (default: 40)

track\_stepsize 40

#####

# External Commands, Warnings and Logging:

# You can use conversion specifiers for the on\_XXXX commands

# %Y = year, %m = month, %d = date,

# %H = hour, %M = minute, %S = second,

# %v = event, %q = frame number, %t = thread (camera) number,

# %D = changed pixels, %N = noise level,

# %i and %j = width and height of motion area,

# %K and %L = X and Y coordinates of motion center

```
# %C = value defined by text_event

# %f = filename with full path

# %n = number indicating filetype

# Both %f and %n are only defined for on_picture_save,

# on_movie_start and on_movie_end

# Quotation marks round string are allowed.

#####

# Do not sound beeps when detecting motion (default: on)

# Note: Motion never beeps when running in daemon mode.

quiet on

# Command to be executed when an event starts. (default: none)

# An event starts at first motion detected after a period of no motion defined by event_gap

; on_event_start value

# Command to be executed when an event ends after a period of no motion

# (default: none). The period of no motion is defined by option event_gap.

; on_event_end value

# Command to be executed when a picture (.ppm|.jpg) is saved (default: none)

# To give the filename as an argument to a command append it with %f

; on_picture_save value

# Command to be executed when a motion frame is detected (default: none)
```

; on\_motion\_detected value

# Command to be executed when motion in a predefined area is detected

# Check option 'area\_detect'. (default: none)

; on\_area\_detected value

# Command to be executed when a movie file (.mpg|.avi) is created. (default: none)

# To give the filename as an argument to a command append it with %f

; on\_movie\_start value

# Command to be executed when a movie file (.mpg|.avi) is closed. (default: none)

# To give the filename as an argument to a command append it with %f

; on\_movie\_end value

# Command to be executed when a camera can't be opened or if it is lost

# NOTE: There is situations when motion don't detect a lost camera!

# It depends on the driver, some drivers doesn't detect a lost camera at all

# Some hangs the motion thread. Some even hangs the PC! (default: none)

; on\_camera\_lost value

#####

# Common Options for database features.

# Options require database options to be active also.

#####

# Log to the database when creating motion triggered picture file (default: on)

; sql\_log\_picture on

# Log to the database when creating a snapshot image file (default: on)

; sql\_log\_snapshot on

# Log to the database when creating motion triggered movie file (default: off)

; sql\_log\_movie off

# Log to the database when creating timelapse movies file (default: off)

; sql\_log\_timelapse off

# SQL query string that is sent to the database

# Use same conversion specifiers has for text features

# Additional special conversion specifiers are

# %n = the number representing the file\_type

# %f = filename with full path

# Default value:

# Create tables :

##

# Mysql

# CREATE TABLE security (camera int, filename char(80) not null, frame int, file\_type int, time\_stamp timestamp(14), event\_time\_stamp timestamp(14));

#

# Postgresql

```
# CREATE TABLE security (camera int, filename char(80) not null, frame int, file_type int, time_stamp
timestamp without time zone, event_time_stamp timestamp without time zone);
```

```
#
```

```
# insert into security(camera, filename, frame, file_type, time_stamp, text_event) values('%t', '%f',
'%q', '%n', '%Y-%m-%d %T', '%C')
```

```
; sql_query insert into security(camera, filename, frame, file_type, time_stamp, event_time_stamp)
values('%t', '%f', '%q', '%n', '%Y-%m-%d %T', '%C')
```

```
#####
```

```
# Database Options
```

```
#####
```

```
# database type : mysql, postgresql, sqlite3 (default : not defined)
```

```
; database_type value
```

```
# database to log to (default: not defined)
```

```
; database_dbname value
```

```
# The host on which the database is located (default: localhost)
```

```
; database_host value
```

```
# User account name for database (default: not defined)
```

```
; database_user value
```

```
# User password for database (default: not defined)
```

```
; database_password value
```

```
# Port on which the database is located

# mysql 3306 , postgresql 5432 (default: not defined)

; database_port value
```

```
#####
```

```
# Database Options For SQLite3
```

```
#####
```

```
# SQLite3 database (file path) (default: not defined)

; sqlite3_db value
```

```
#####
```

```
# Video Loopback Device (vloopback project)
```

```
#####
```

```
# Output images to a video4linux loopback device

# The value '-' means next available (default: not defined)

; video_pipe value
```

```
# Output motion images to a video4linux loopback device

# The value '-' means next available (default: not defined)

; motion_video_pipe value
```

#####

# Thread config files - One for each camera.

# Except if only one camera - You only need this config file.

# If you have more than one camera you MUST define one thread

# config file for each camera in addition to this config file.

#####

# Remember: If you have more than one camera you must have one

# thread file for each camera. E.g. 2 cameras requires 3 files:

# This motion.conf file AND thread1.conf and thread2.conf.

# Only put the options that are unique to each camera in the

# thread config files.

; thread /usr/local/etc/thread1.conf

; thread /usr/local/etc/thread2.conf

; thread /usr/local/etc/thread3.conf

; thread /usr/local/etc/thread4.conf