pi@raspberrypi:~ $ libcamera-hello --help

Valid options are:

-h [ --help ] [=arg(=1)] (=0) Print this help message

--version [=arg(=1)] (=0) Displays the build version number

--list-cameras [=arg(=1)] (=0) Lists the available cameras attached to the system.

--camera arg (=0) Chooses the camera to use. To list the available indexes, use the

--list-cameras option.

-v [ --verbose ] [=arg(=2)] (=1) Set verbosity level. Level 0 is no output, 1 is default, 2 is verbose.

-c [ --config ] [=arg(=config.txt)] Read the options from a file. If no filename is specified, default to

config.txt. In case of duplicate options, the ones provided on the command line

will be used. Note that the config file must only contain the long form

options.

--info-text arg (=#%frame (%fps fps) exp %exp ag %ag dg %dg)

Sets the information string on the titlebar. Available values:

%frame (frame number)

%fps (framerate)

%exp (shutter speed)

%ag (analogue gain)

%dg (digital gain)

%rg (red colour gain)

%bg (blue colour gain)

%focus (focus FoM value)

%aelock (AE locked status)

%lp (lens position, if known)

%afstate (AF state, if supported)

--width arg (=0) Set the output image width (0 = use default value)

--height arg (=0) Set the output image height (0 = use default value)

-t [ --timeout ] arg (=5000) Time (in ms) for which program runs

-o [ --output ] arg Set the output file name

--post-process-file arg Set the file name for configuring the post-processing

--rawfull [=arg(=1)] (=0) Force use of full resolution raw frames

-n [ --nopreview ] [=arg(=1)] (=0) Do not show a preview window

-p [ --preview ] arg (=0,0,0,0) Set the preview window dimensions, given as x,y,width,height e.g. 0,0,640,480

-f [ --fullscreen ] [=arg(=1)] (=0) Use a fullscreen preview window

--qt-preview [=arg(=1)] (=0) Use Qt-based preview window (WARNING: causes heavy CPU load, fullscreen not

supported)

--hflip [=arg(=1)] (=0) Request a horizontal flip transform

--vflip [=arg(=1)] (=0) Request a vertical flip transform

--rotation arg (=0) Request an image rotation, 0 or 180

--roi arg (=0,0,0,0) Set region of interest (digital zoom) e.g. 0.25,0.25,0.5,0.5

--shutter arg (=0) Set a fixed shutter speed in microseconds

--analoggain arg (=0) Set a fixed gain value (synonym for 'gain' option)

--gain arg Set a fixed gain value

--metering arg (=centre) Set the metering mode (centre, spot, average, custom)

--exposure arg (=normal) Set the exposure mode (normal, sport)

--ev arg (=0) Set the EV exposure compensation, where 0 = no change

--awb arg (=auto) Set the AWB mode (auto, incandescent, tungsten, fluorescent, indoor, daylight,

cloudy, custom)

--awbgains arg (=0,0) Set explict red and blue gains (disable the automatic AWB algorithm)

--flush [=arg(=1)] (=0) Flush output data as soon as possible

--wrap arg (=0) When writing multiple output files, reset the counter when it reaches this

number

--brightness arg (=0) Adjust the brightness of the output images, in the range -1.0 to 1.0

--contrast arg (=1) Adjust the contrast of the output image, where 1.0 = normal contrast

--saturation arg (=1) Adjust the colour saturation of the output, where 1.0 = normal and 0.0 =

greyscale

--sharpness arg (=1) Adjust the sharpness of the output image, where 1.0 = normal sharpening

--framerate arg (=-1) Set the fixed framerate for preview and video modes

--denoise arg (=auto) Sets the Denoise operating mode: auto, off, cdn\_off, cdn\_fast, cdn\_hq

--viewfinder-width arg (=0) Width of viewfinder frames from the camera (distinct from the preview window

size

--viewfinder-height arg (=0) Height of viewfinder frames from the camera (distinct from the preview window

size)

--tuning-file arg (=-) Name of camera tuning file to use, omit this option for libcamera default

behaviour

--lores-width arg (=0) Width of low resolution frames (use 0 to omit low resolution stream

--lores-height arg (=0) Height of low resolution frames (use 0 to omit low resolution stream

--mode arg Camera mode as W:H:bit-depth:packing, where packing is P (packed) or U

(unpacked)

--viewfinder-mode arg Camera mode for preview as W:H:bit-depth:packing, where packing is P (packed)

or U (unpacked)

--buffer-count arg (=0) Number of in-flight requests (and buffers) configured for video, raw, and

still.

--viewfinder-buffer-count arg (=0) Number of in-flight requests (and buffers) configured for preview window.

--autofocus-mode arg (=default) Control to set the mode of the AF (autofocus) algorithm.(manual, auto,

continuous)

--autofocus-range arg (=normal) Set the range of focus distances that is scanned.(normal, macro, full)

--autofocus-speed arg (=normal) Control that determines whether the AF algorithm is to move the lens as quickly

as possible or more steadily.(normal, fast)

--autofocus-window arg (=0,0,0,0) Sets AfMetering to AfMeteringWindows an set region used, e.g.

0.25,0.25,0.5,0.5

--lens-position arg Set the lens to a particular focus position, expressed as a reciprocal distance

(0 moves the lens to infinity), or "default" for the hyperfocal distance

--hdr [=arg(=1)] (=0) Enable (1) or disable (0) High Dynamic Range, where supported

--metadata arg Save captured image metadata to a file or "-" for stdout

--metadata-format arg (=json) Format to save the metadata in, either txt or json (requires --metadata)