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FIMrecorder

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2 Installation

See `README.md` in the repository.

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3.3 Configuration

To adjust settings not visible in the UI, click the button labelled *Settings*. This will launch your favourite text editor allowing you to edit the main configuration.

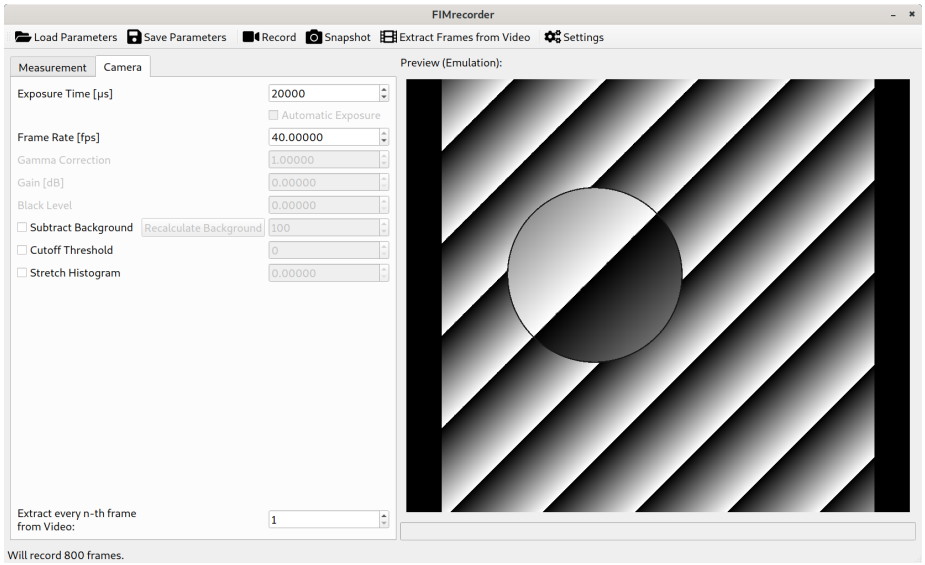

Figure 1: The main UI components of *FIMrecorder*

3.3.1 `settings.json`

`settings.json` is the primary configuration file and can be edited using any text editor. It contains data (`"Parameters"`) relevant to your measurement (see Measurement Annotations for a detailed description). More importantly, it contains a `"Settings"` section controlling the behaviour of the application. The following options can be modified:

`Background Frames to average:` Number of Frames that should be used to construct an averaged static background image for background subtraction.
`default: 100`

`Configuration Directory:` Path of the directory where additional configurations files should be stored.
`settings.json` is **not** stored here.
`default: "config"`

`Default Camera Parameters:` `default: "FIM_NodeMap.pfs"`

`Extract every n-th Frame:` `default: 1`

`Logging Configuration:` `default: "loggingconf.json"`

`Single Image Format:` `supported: ".tif", ".tiff", ".png"`
`default: ".tif"`

`Snapshot Directory:` `default: "snapshots"`

`Video Codec:` `default: "XVID"`

`Video Container Format:` `default: ".avi"`

FIMrecorder will fall back to hard-coded defaults and create a new configuration file if you happen to delete it.

3.3.2 `.pfs` Files

In addition to `settings.json` there are `.pfs` files in your `Configuration Directory` for every camera model you've used in *FIMrecorder*. Those text files are being generated when you use a device for the first time with *FIMrecorder* and include all the parameters of the specific model.

Those files can be used to modify the resolution, offset and binning parameters of your device. If in doubt, take a look at your `Default Camera Parameters` for a comparison. It is recommended to not change other parameters other than those in these files unless you've read the documentation for your camera model provided by Basler.

3.4 Recording Workflow

3.4.1 Pre-Recording

3.4.1.1 Checking Setup

1. Adjusting field of view.
2. Adjust aperture.
3. Adjust focus. Use the magnifying feature by scrolling on the preview for more control.

3.4.1.2 Measurement Annotations

3.4.1.3 Applying Camera parameters

3.4.1.4 Real-Time Signal Modifications

3.4.2 Post-Recording

3.4.2.1 Locating Recorded Data

3.4.2.2 Extracting Frames from Video Files

4 Troubleshooting

Feel free to open an issue on github.

4.1 Logging

4.1.1 `loggingconf.json`

See `logging.config`