

**The A Team**

**Image Processing Tool for**

**Leidenfrost-Ratchet Systems**

**User Manual for Version 2.0 (First Draft)**

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**1. Introduction/Overview**

This User Manual will act like a guide for the user how to use the Image Processing Tool application.

1.1 Purpose of User Manual

The purpose of this document is to provide the users the Image Processing Tool application with information on how to install, run, use, and possibly troubleshoot the provided software.

1.2 Purpose of Software

The current purpose of the software is to efficiently track a drop of liquid and record measurements through images gathered from a high speed camera as the drop falls from an injection needle and travels along a ratchet surface.

1.3 Applicability

The User manual applies only to the Image Processing Tool version 2.0 supplied by the A-Team.

1.4 Users

The users of this document will be researchers involved in tracking the motion of a droplet as it falls onto a ratcheted surface. The group of researchers who will use this software includes but is not limited to: Dr. Ok and Dr. Guo.

**2. Installation**

This section will inform the user what system requirement are needed and how to install the application.

2.1 System Requirement

Before installing the Image Processing Tool application please ensure that your system meets the following requirements.

- Windows 7 Professional or newer

- Excel or spreadsheet application

2.2 System Installation

How to install the Image Processing Tool application:

1. Insert the disk into the drive
2. Copy the file labeled ImageProcessingTool.exe onto the hard drive
3. Create a Shortcut to the ImageProcessorTool.exe on your desktop by right clicking then sending to desktop as a shortcut
4. Double click the shortcut to run the Program

**3. Getting Started**

The user will be informed how to get started using the application.

3.1 Running Application

Double click on the ImageProcessingTool.exe icon to open the application.

3.2 Navigating the User Interface

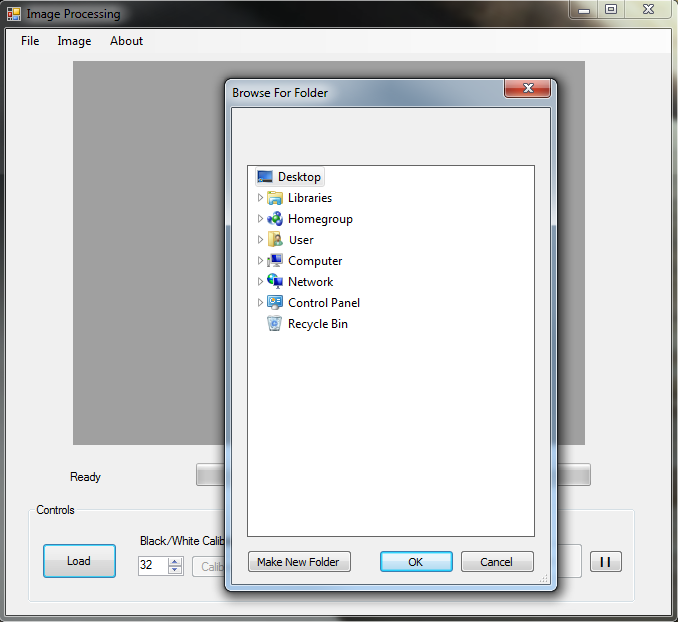
There is a single form that will let the user Load the folder of images, enter the required inputs, calibrate the process images, finally run the complete data set. The program will generate a Excel file that will let the user save and renamed.

**4. Processing Images**

This section is how to use the Image Processing Tool application step by step.

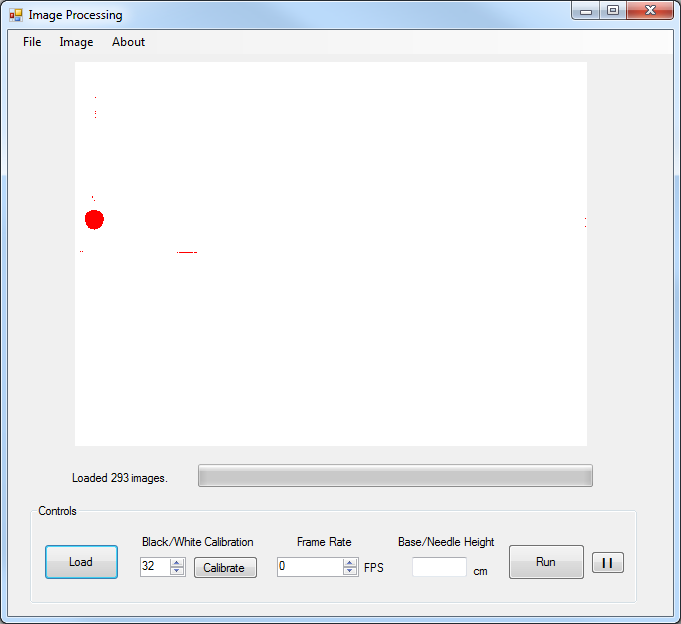
4.1 Load Image Folder

Click on the Load button to load the image folder.



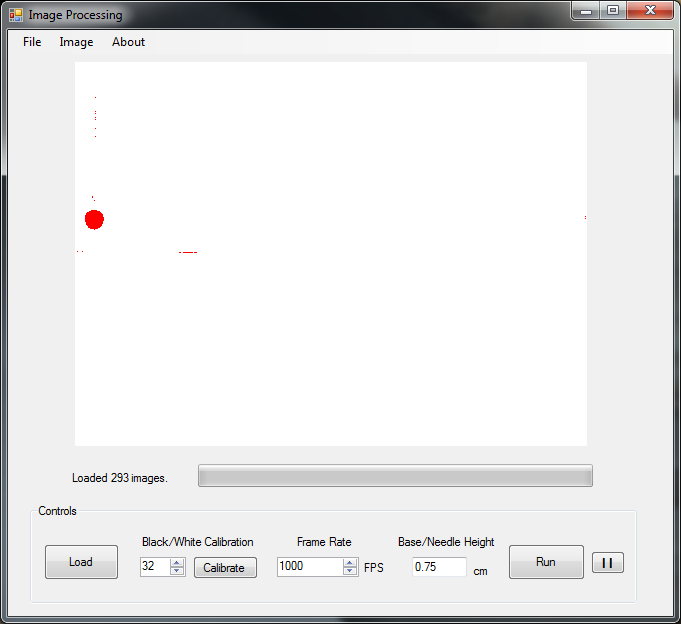
4.2 Adjust and Calibrate

Enter the correct data and calibrate the images as needed.



4.3 Run Application

Click the Run button to run the application.



4.4 Output file

Enter a name and save the output Excel file.

