MShot Image Analysis System

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Introduction

MShot Image Analysis System is independently designed by GuangZhou Micro-shot Technology Co., Ltd special for basic microscope imaging with Mshot cameras.

Fit to Windows Win7/8/10 (32bit & 64bit).
### Main Function list

#### Featured functions
- Burst
- Timelapse
- Smart Denoise
- Counting point
- Anti-flicker: 50Hz, 60Hz

#### System logs & account control
- Dynamic multi-images merge
- Connect 4 cameras ones time
- **Auto image splicing**
- **Auto extend depth of field**

#### Fluorescence imaging
- Histogram
- Maximum & Minimum value
- RGB channel
- Input levels & Output levels
- Dynamic multi-image merge
- Merge channels
- **Shifting correction**
- Split RGB channel
- Quickly RGB dye
- Line profile
- Graying

#### Image Capture & Video
- **Exposure controls:** Auto exposure, Exposure time, Global & Regional exposure, Gain, Overexposure correction
- **Color adjustment:** Automatic white balance, Global & Regional white balance, Monochrome, Invert, RGB separate adjustment, Saturation
- **Resolution:** Preview resolution & Capture resolution, ROI
- **Frame rate:** Normal speed, high speed
- Image flip: Horizontal, Vertical
- Image color depth: 8bit, 12bit (16bit for FIT image)

#### Imaging processing
- Dynamic: Gamma, Contrast, Sharpness, Denoise
- Static: Brightness, Contrast, Color phase, Saturation, Gamma, Smart brightness
- **Color adjustment:** Automatic white balance, Global & Regional white balance, Monochrome, Invert, RGB separate adjustment, Saturation

#### Measurement & Calibration
- Text, Counting point, Straight Line, Segment Line, Rectangle, Polygon, Angle, Ellipse, Circle,
- Diameter Circle, Perimeter Circle, Parallel Line, Arrow, Scale Bar, Line Profile, Scale bar
- **Export data to Excel**
Simplified UI

- Open PC files
- Open Images
- Pause/Play
- Fit on screen/1:1
- Photography/Switch to camera
- Start recording video

Not connected to any device

Camera in-time status

Camera state: play | Preview resolution: 0*0 | Definition: 0 | Capture frame rate: 0fps | Frame rate: 0fps | Position: x:164,y:1,5 R:23,G:24,B:26,gray:24
Live view and capture image in PC files
Zoom in and zoom out image freely in full screen
All-in-one Toolbox panel

- In-time connect and move to different cameras in one software no waiting
- Camera item and resolution
- Objective times

Image setting: capture/view resolution, ROI, etc.
Exposure control: gain, exposure time, etc.
Image processing: contrast, sharpness, gama, etc.
Color control: RGB, saturation.
Measurement: captured and live image measure.
Static image processing: image crop, multichannel synthesis, etc.
Fluorescence processing: in time fluorescence combination, fluorescence color adjustment, shifting correction, etc.
White blance
Histogram
Measurement, Calibration, Text

- Variety of measurement tools for captured image and live view image
- Free set line size and color
- Support different units
- Calibration
Measurement demonstration

Text anywhere on the image

Measurement record moveable
Remove measurement data

Step 1: Cancel choose measure tool till panel gray

Step 2: Choose measure data, press PC keyboard Delete button

Can draw measure data to it remove

Clear all measurement
Simple manual count
Static image processing tools
Double click to edit image name

Make image in order by capture time or name

Quick auto dye image in RGB
Show light intensity
Histogram easy to get better fluorescence and reduce image noise
Merge Channels

- Merge different color fluorescence images into a multi-color fluorescence image.
Shifting and color correction
Merged fluorescence image
Quickly dye

- Just choose R/G/B channel to dye the monochrome fluorescence image for quickly observation.
Auto image splicing

Auto extend depth of field
Record user login time
Set file, format, timing, language, etc
Capture image in interval time

Capture image of every frame rate in set time, such as 5s has 20fps, it will takes 20 images of every fps

Image format: jpg, tif, bmp
Support 16bit color depth

Set capture image auto name rules
Correct RGB calculating value to revise color balance

Correct image brightness and color uniform when connecting camera

Eliminate image dead pixels when connecting camera