euromex MZ.5000 Digital Software System User Manual

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System Introduction and Features

The MZ.5000's software is powerful, easy to use, built-in personalized interface editing function, template application, DXF import and application, automatic edge finding and absorbing function, horizontal vertical flip function, line/ circle calibration and other functions, and provide a variety of measurement tools such as "parallel line", "multi-point to line", "concentric circle" and so o This operating manual is intended for users who use this series of cameras and takes the MZ.5000 as an example

System Functions Introduction

- Boot interface

    After the camera is connected to all interfaces, power it on (12V lA power supply), the camera starts up and

    displays the boot interface. After the progress bar is completed, the main interface is displayed

- Main interface

    The user can edit the main interface layout according to the habit in "2.3.5 Advanced Settings – Interface

    Editing" (the auxiliary tools are not editable).
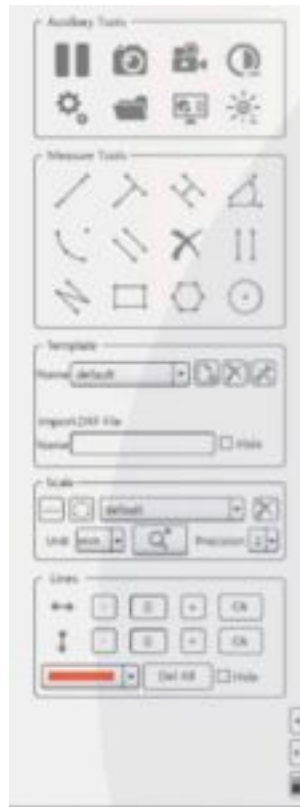
Auxiliary tool
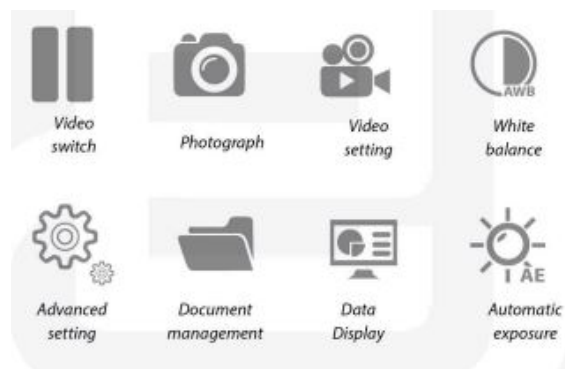
Video switch

- Photograph

  In video mode click (;) the video image will be saved to the external storage device in jpg format. Users can set their own naming rules, storage paths, and whether to save the image elements. Storage and naming settings refer to

- White balance

  White balance is required after determining the light source. In video mode click (the ll icon, and the camera will automatically adjust the white balance and stop automatically when the appropriate value is reached

- Automatic exposure

  In video mode, click -:('.:f; icon, the camera will enter the real-time automatic exposure status, and the camera will automatically adjust the exposure value in real-time according to the ambient brightness change to match the optimal brightness value setting. The optimal brightness value can be adjusted in "2.3.5 Advanced Settings -Video Settings", and click the -q; icon again to turn off the automatic exposure status
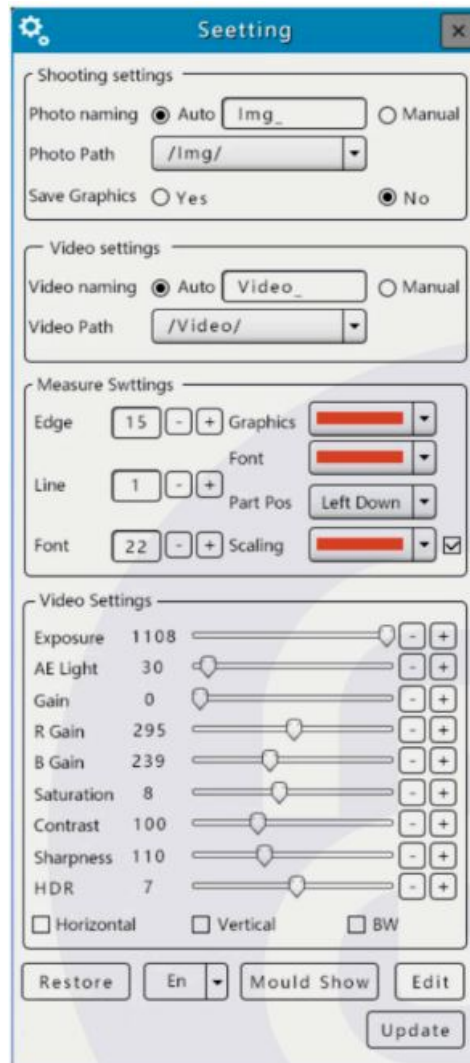
Advanced Settings

Photo setting

- The camera photo automatic naming rule is Img_N, the current total number of pictures taken by the camera minus 1 is "N", which is saved in the "img" folder in the U disk camera folder. External storage is recommended to use USB3.0 U disk, only supports FAT32 format, after the " Ill "icon below the main interface appears, set in "Advanced Settings"
- Select the "Manual" naming rule, then take a picture first, then name it. After the picture is taken, the naming dialog box will pop up, and the user can name it by himself
- "Save the picture element" function, select "Save", save the current measurement element on the picture when taking a picture, select "Do not save", then it will not save the current measurement element

Measurement setup

- Edge finding range: The value of the range in which the measuring point moves to the edge of the object in the measurement state after automatic edge finding
- Measuring line width: Adjust the width of the measuring element line
- Measure font: Adjust the font size of the measurement element information
- Color of the element: After adjusting the color of the element, close the "Advanced Settings" interface, re-

complete the drawing, and measuring element is the current color

- Font color: After adjusting the font color, close the "Advanced Settings" interface, re-complete the drawing of the element, and the measured data is the current color

- Calibration color: After adjusting the calibration color, close the "Advanced Settings" interface, the axis and scale color will change to the currently selected color. In the "Advanced Settings", the selected axis and scale will be displayed. If it is not selected, it will be hidden

Video settings

Used for detailed settings of parameters. Image horizontal flip, vertical flip, color and black white conversion
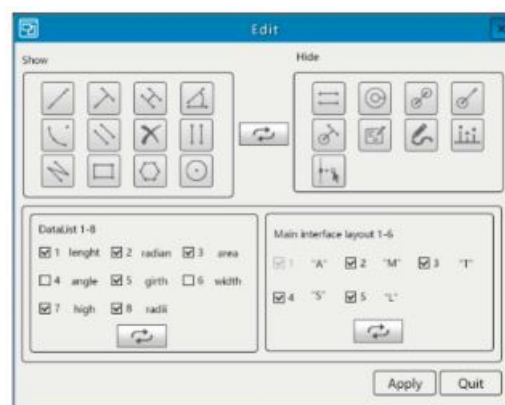
Restore factory settings

Click Restore factory settings to restore the parameters to their original state

Language switching

This product supports three language switching: Chinese (simplified), Chinese (traditional), and English

Interface Editing

This function can change the main menu layout according to the user's usage habits. Measurement tool display: The left side is for the display icon of the main page, the right side is for the hidden icon, select any one icon from the left side and another from the right side, and then click the middle exchange button. Click "Apply–Confirm" after completion
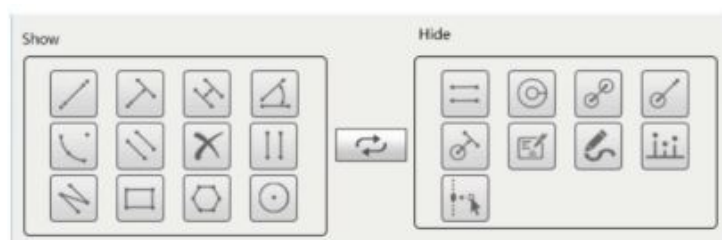
Data window display: Check to display, uncheck to hide, select two at any point and click to exchange the order. Click "Apply–Confirm" after completion
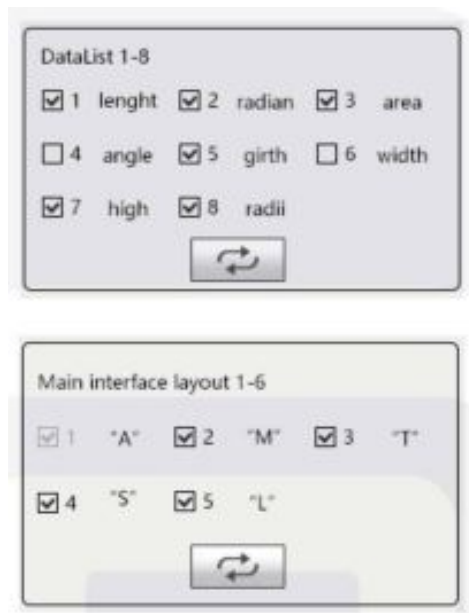
Main interface display: Check to display, unchecked to hide, select two at any point and then click to exchange the order (the auxiliary tools are not allowed to hide or change). Click "Apply–Confirm" after completion

Document management

icon to open File Management to view saved images, DXF, templates, and other files Right-click on any file name to delete, comparison of dynamic and static properties, copy, cut, rename, and so on. Right-click on a blank space to create a new folder

Data Display

	Name	Lenght	Radian	Area	Angle	Girth	Width	High	Radii	
1	L1	0.00	0.00	52.45	0.00	0.00	0.00	0.00	52.45	
2	A1	0.00	0.00	0.00	0.00	86.26	0.00	0.00	0.00	
3	A2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4		0.00	0.00	22.89	0.00	22.89	0.00	0.00	22.89	
5		0.00	0.00	77.01	0.00	77.01	0.00	0.00	77.01	
6		0.00	0.00	141.55	0.00	141.55	0.00	0.00	141.55	
7		311.95	774.03	190.14	311.95	190.14	774.03	311.95	190.14	
8		592.00	2170	22.89	592.00	22.89	2170	592.00	22.89	
9		0.00	0.00	190.14	0.00	190.14	0.00	0.00	190.14	
10	R1	454.26	0.00	107.90	454.26	107.90	0.00	454.26	107.90	
11	P1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Expart Data   mm ◀ ▶

This table shows the details of the drawn elements. Click on any set of data in the information bar, the corresponding element in the video area is yellow, and the data in the information bar can be modified by double-clicking with the mouse

- Right-click on the element in the video area, and its element information will automatically pop up in the lower information bar

- Click "Export Data" to import the current element information into an Excel file and import it into a U disk

- The measurement data display content can be adjusted through " 2.3.5 Advanced Settings – Interface Edit". For the adjustment method, see " 2.3.5.6 interface editing".

**Note:** Angles, broken lines, and polygons cannot be modified.
 Automatic edge finding
Click the "Automatic edge finding" button to make it sink. You can automatically identify the boundary of lines, circles, arcs, etc. according to the range of points, and select the nearest boundary as the measuring point. You can view and adjust the automatic edge-finding range in the "Advanced Settings" interface, which range can be customized in 5-25 pixel, this function can greatly improve the measurement accuracy

Measurement function
Measurement instructions

- After selecting the element, the mouse changes to the cross cursor in the video area to enter the drawing state and clicks the left mouse button to draw

- During the process, the complete drawing of the one measurement I element, X or drawing, the mouse does not exit the working state of the current measurement or drawing. Click the right mouse button to exit the state the right mouse button selects the element (except the key point), becomes the shape, drags the mouse, and the element will turn yellow and follows the movement.

- Right-click the mouse button to select the key point, turn it into a shape, and drag the mouse, the element will turn yellow and follow the position modification
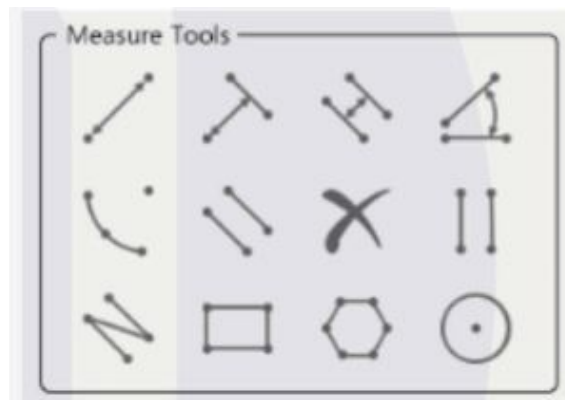
- Paint

  Click the t-, icon and click the left mouse button to drag, can draw any element. The element cannot be dragged or modified

- Comment

  Click th icon, click the left button on the screen where you want to comment, and drag the mouse. Click the second point to pop up the comment window. The user can input the content in the comment window using the soft keyboard or the physical keyboard. Click the "OK" button when finished

- Adsorption function

  Click the measurement tool to enter the measurement state, press the middle mouse button to open the adsorption function, automatically adsorb the key points of the existing element or adsorb the horizontal and vertical directions of the current key points, and the measurement is more accurate When the drawing of each element finished, the auto adsorption function will be automatically turned off. To continue drawing, you need to restart the "middle button"

- Calibration
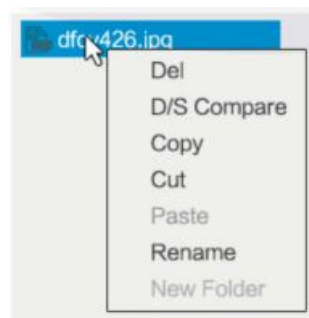
New calibration

The user can select "Line Calibration or Linear Circle Calibration" according to the need; click its button to enter the creation calibration state, and press the middle button to open the adsorption function to scale freely, horizontally or vertically in the video area. After determining the length of the calibration line by clicking the left button with the mouse, the information window of the following figure will pop up, enter the calibration information, and click OK to complete the calibration

Calibration setting
Users can create, delete, and set current units and precision as required
Custom template
New template

- When there is no measurement element in video mode, click the "New" button to enter the template mode, draw the picture element as needed, and input template name to save when the drawing is finished
- In the video mode, to measure and draw, click "New", convert the measurement element into a template, enter the template mode, adjust or draw the element according to the need, and input the template name to save when the drawing is finished
- Import the Dxf file, click "New", convert the graphic in dxf into a template, enter the template mode, adjust or draw the element according to the need, and input
- template name to save when the drawing is finished Templates are automatically saved in "internal storage", and users can copy and paste them according to their needs
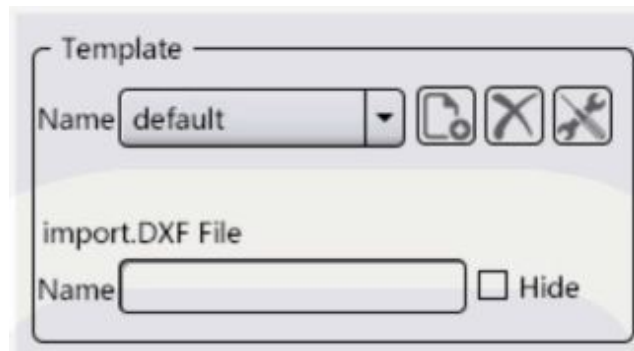
Template adjustment method
The template can be adjusted when it is newly created, or click "Modify" to enter the template state to adjust. After the adjustment is finished, click Save. The adjustment method is as follows:

1. Click the element with the left mouse button to select it, and the right mouse button can drag and move it
2. Left-click on the element to edit it, adjust its position and related parameters
3. Right-click the element to delete it

Import DXF files
Support for importing dxf files, users need to put the dxf file into a file named "dxf" in the camera folder of the U disk After the camera recognizes the U disk, open "File Management – External Storage -Dxf" and double-click the corresponding Dxffile

Scale

The scale is divided into horizontal 100 and vertical 100 scales Scale adjustment method:

1. Enter the horizontal and vertical scale numbers by "+,-" respectively, and click the "OK" button respectively. The current corresponding number of scales is displayed in the video frame

2. If the current number of scales is certain, it can only be"+". It is not supported to reduce the scale line on the screen by"-" in the current cross-state. You can delete it by right-clicking the edit delete or "delete all" function

3. Double click the right button on the scale and pop up the edit box to delete the current scale or adjust its position, angle, color, scale display and baseline settings. As shown in the figure below:

4. After the adjustment is completed, click the "X" in the upper right corner of the edit box to close it

5. Right-click any scale, the scale will turn yellow, and the mouse changes to the state, and the scale position can be moved

6. When the number of scales has been set and displayed in the video frame, if you add a scale, just click the "+" button to increase the quantity, and click "OK", the added scale will be displayed in the video frame

7. The color displayed in the current color display box is the new scale color

8. Click "Delete All" to delete all the current scales

9. Select the "Hide" button to hide the current scale, or uncheck it to display
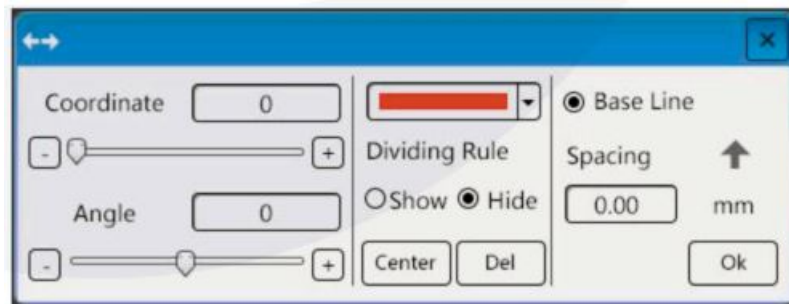
Documents / Resources

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