♦USB output

Software Installation

* Download the software first: https://rb.gy/dmapd0 https://bit.ly/33JvL7k

So far the measuring software "Andonstar" can only support Windows system. If you can't open the links or get problem with downloading these files, please ask customer service to send you separately. You can also go visit our website and download from there.

*System support:

Windows XP SP3, Windows 7, Windows8, Windows10

*Process circumstances:

Microsoft.Net Framework 4.0

Microsoft Visual C++ 2010 Runtime

If there isn't either of the runtimes above mentioned, there would be mistake during installation.

* Open the zip file that you've download and run it.

Software Operation

***Icons Definitions**

\oplus	Zoom In	20.	Measuring a 3points angle (degree)
\otimes	Normal	_	Distance of parallel lines(Length)
Θ	Zoom out	Ţ	Distance of a point and a line (Length)
•	Undoes the last action	\bigcirc	Distance of 2 circles (Radius, length)
\oplus	Cross hairs (crosier,4 grid, 8 grid)	0	Distance of a line and a circle(Radius, length)
H	Distance of 2 horizontal points	Ι	Add a square mark
I	Distance of 2 vertical points	\square	Add a circle mark
T	Distance of any 2 points	Α	Add text
	Measuring a rectangular	1	Distance of 2 lines(Length)
	(width,height, circumference&area)		
\bigcirc	Measuring an ellipse(Long-axis radius, short-axis	\bigcirc	3 points circle
	radius, circumference&area)	\bigcirc	(radius, circumference&area)
Θ	Measuring a radius circle(radius, circumference&area)	V	Edge detection
	Measuring a diameter circle	-À	Brightness increase/decrease
0	(diameter, circumference&area)	Ŕ	
O	Measuring a 3 points circle(radius, circumference&area)		Flip horizontal
\cap	Measuring a 3 points arc		Sharpen
((radius,degree,circumference&area)		
0	Measuring a polygon (circumference&area)		Smooth
Z	Measuring fold-lines (length)	\bigcirc	Take a picture

 \leq

Measuring a 4 points angle (degree)

Take a video

* Interface Definitions and Functions



①Main menu:

Here, users can open different devices or lead in pictures to observe or edit, do video setting or save setting, choose which windows to show or hide etc.

②toolbar:

Here are the tools that would be useful for users to do measuring and image analysis. Definition and function of different tools would be given in chapter "Icons definitions". Users can choose to hide or show this toolbar in "View→Toolbars and Docking Windows→Standard".

③Pictures browser:

Here is where users can review all pictures they've captured. Users can also edit the picture by right clicking the picture and open it in the main operating window. Choose "View→Toolbars and Docking Windows→Picture browser" to show or hide this window.

④ Secondary operating window:

The image showing in this window always follows your cursor, and with a bigger magnification. With help of this window, the result of measuring can be much more precisely.

It belongs to window "Pictures browser".

5 Main operating window:

This windows shows the full view from the microscope. And it is also the place where users do measuring and image analysis.

6 Calibration Management and Measuring Results:

These two windows shows at the same place, users can switch at the bottom of this window.

Calibration Management Results

Calibration Management



 \rightarrow Shows the list of different Calibrations. Users can apply or delete the one they want.

→Where to set new Calibrators. (The details of how to set calibrator would be given in another chapter)

Doe		
	cument Propert	v
		1
	Image width	640.000000
	Image height	480.000000
	Calibrator	Uncalibrated
	Unit	nn
Ke:	asure Result Angle 0	
1	Angle 22.8	63 °
-	Angie 1	20.0
1	Line 2	07
1	Length 6.2	97 nn
E	Distance of a	point and a lin
1	Length 7.0	52 mm
Ė	Distance of 2	2 circles 4
-	Radius 6.5	49 mm
	Length 13.	865 mm
-	Radius 4.5	52 mm"
=	Distance of a	a line and a cire
-	Kadius 5.1	04 mm
- 1	Line 6	048 лл
di la	CTHC 0	
Ē	Length 8 1	00 mm
	Length 8.1 Circle 7	00 mm
	Length 8.1 Circle 7 Radius 12.	00 mm 099 mm
	Length 8.1 Circle 7 Radius 12. Girth 76.0	00 mm 099 mm 19 mm
	Length 8.1 Circle 7 Radius 12. Girth 76.0 Area 459.8	00 mm 099 mm 19 mm 73 mm ²

Measure Results

→ Shows the size of the whole view. Users Can change it in "File→ Videosetting→Video capture pin→(S)".

 \rightarrow Shows all results of measuring.

* Operating Steps

1) Material: PC (Windows system, with software "Andonstar"); USB microscope (device name: "Andonstar Camera"), Ruler.

2) Steps:

1, Connect the microscope unit to the computer with the attached USB cable, and select "PC Camera" from the microscope interface using the down keys on the screen or remote control.

2, Open the software "Andonstar".

3, Click "File" \rightarrow "Open" \rightarrow "Open Device" \rightarrow "USB MODE" \rightarrow "Andonstar Camera".

Select Device	
OUSB MODE	WiFi MODE
Andonstar Camera	•
ОК	Cancel

* Functions

1) Calibration

1, Put the ruler under the digital microscope, adjust the focus wheel and the height of the stand, to get the best clearance. (during the rest of the process, do not change the object distance any more).

2, In the "Calibration management" set the name and unit length of the new calibration(refer the picture on the right). Then, click "Calibration", meanwhile, the " ," in the toolbar should have been chosen automatically. If not, please choose it yourselves.

3, Move the cursor to the main operation window, draw a line (the length is the unit length which has been set in step 2) with help of the ruler. After these, click the "Finish" button in the bottom of the "Calibration Management" window.

4, Check. The length of the line you draw in step 3 should become as the unit length. The name of the new calibration should have showed in the list of calibrations.

Name 123456 Unit mm Length 1.0		
Unit mm Length 1.0	Name	123456
Length 1.0	Unit	mm
	Length	1.0



L:1.000m L:1.000m L:1.000m

4)

2) Measuring

1, Choose the tool you need to do measuring in the toolbar.

2, Click dots or draw lines that you need to measure in the main operating window.

3, Place the results of measuring in a proper place around the target.

3) Special Effect

·Includes: Edge detection, Inverse color, Flip horizontal, Relief, Sharpen and Smooth. ·Steps:

1, Choose the special effect you need in the toolbar.

2, In the main operating window, long press the Left to draw a rectangle which can covers the whole target area, loose the Left, get the special effect result.

3, Click Left again, end the special effect.

PS: If you want to use "Flip horizontal", draw a random rectangle in the view, and the whole view would be flipped. Click Left again, end the special effect.

4) Capture and Recording

·Capture

1, Click "^O" to capture.

2, The result of capture can be checked and deleted in the "Picture browser" window.

3, Check and change the save path: "File \rightarrow Save Setting \rightarrow Path".

Recording

- 1, Choose the size of the view as 640*480 in "File \rightarrow Video Setting \rightarrow Video Capture Pin \rightarrow Output size(S)"
- 2, Click "¹", set some other things and start to record.

Recording Time	10	Seconds
FPS	15	FPS
Resolution	640x480	Unlimited

Compressor:		OK
Full Frames (Uncompress	ed) 🔻	Cancel
Compression Quality: 11	00	Configure
¢	,	About

- 3, On the top left corner there shows "recording" and a timer. It means it's recording.
- 4, Check and change the save path: "File \rightarrow Save Setting \rightarrow Path".