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MicroVue

High Definition Digital Microscope

User Guide

Edition 2.0

ITEM# 26700-140

Technical Data

Specification	Model	26700-140
	Series	Industrial HDMI Camera w/ Measurement
	Sensor size	Sony 1/2" Sensor
	Effective pixels	Full HD
	Frame rate	1920*1080P@ 60FPS
	Output	HDMI, USB, SD card
	Pixel size	3.75 x 3.75μm
	Power	DC-12V/2A
Features	Mark function	Point coordinates, Reticle, Coordinates, Text annotation
	Length measurement	Straight length, broken line length, curve line length, distance between parallel lines, point-line distance
	Center distance of circles	Circle from a radius, two-point circle, three-point circle
	Geometric measurement	Line length, Circle from a radius, two-point circle, three-point circle, concentric circles
	Geometry area	Polygon, Rectangle
	Image capture	Supports 2 million static photos
	Video record	Supports 1080p video
	Other features	Horizontal/Vertical mirror, monochrome color, image freeze, image contrast
Package	Accessory	DC-12V Power adapter
Magnification		17x-110x (Based on the built-in monitor) 30X - 176X (Based on an external 22" monitor)

On-Screen Tools

Image capture: Click and capture image

Video: Click and record video

Preview: Click and view the captured image and video

Measurement: Click and enter measuring interface

Setting: Click and enter the setting interface

Menu at the bottom of the screen

Zoom in: Digitally enlarge image

Zoom out: Reduce image size

Mirror: Image flips horizontally

Flip: Flip image vertically

Setting: Changes image to high quality monochrome.

HDR: Turn on the high dynamic image mode

Freeze: Locks the on-screen image

Grid: Opens grid options
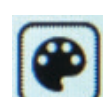
Color: Set the line/font color/line size/font size

Compare: Compare live image with a captured image

Setting Introduction

- **Auto exposure**: If selecting the option, it will be under auto exposure. If not selecting it, you can drag the slide bar to adjust the exposure.

- **Auto Gain**: If selecting the option, it will auto adjust the signal. If not, you can drag the slide bar to adjust it.

- **White balance**:Select Auto or One push to adjust the white balance.

- **Anti-flicker**: Select 50Hz or 60Hz based on your requirement

- **Contrast**: Use the mouse to adjust the contrast

- **Brightness**: Use the mouse to adjust the brightness

- **Sharpness**: Use the mouse to adjust the sharpness

- **De-noise**: Use the mouse to adjust the de-noise ratio

- **Red**: Adjust the value of the primary color red in the image

- **Green**: Adjust the value of the primary color green in the image

- **Blue**: Adjust the value of the primary color green in the image

- **Color temperature**: Use the mouse to adjust the Color temperature parameter.

- **Language**: Simplified Chinese, Traditional Chinese, English, German, French, Japanese, Korean optional

- **Time**: Click the right mouse, then you can set the time.

- **Storage**: Can use USB stick or external SD card, and can format it.

Measurement Tools

Polygon: Click anywhere to determine one angle, and it will increase one angle when clicked each time. Measures the area of the polygon.

Coordinate point: Draw a marker over the image, and it indicates the coordinate point value

Circle radius measurement: Click any point in the interface to determine the center of the circle, and click second time to determine the distance between the circle center and the point on the circle, which is radius.

2 point circle: Click any point in the interface to determine the point on the circle. And then click to determine the diameter distance between two points and the value is the radius.

3 point setting circle: Click any point in the interface to determine the point on the circle. And then click the distance between the diameter and the point. Thirdly, click the distance between the circle and the second point. The value is the radius.

Center distance: Choosing one of three ways to draw a circle, then measure the distance between two circle center

Concentric circle: Click to determine the center of the circle at any point in the interface. Secondly,click to determine the distance between the center of two circles. Thirdly, click to determine the distance between the center of two circles. Then measuring the radius of the two circles

Distance between circle and line: Click anywhere to determine the circle center, and click again to determine the center distance. Measure the radius

Polygon: Click anywhere to determine one angle, and it will increase one angle when click each time. Measure the area of the polygon

Crosshair: Click anywhere then you can draw crosshair and show the coordinate

Rectangle: Click anywhere on the screen to determine the right-angle, and click again to determine the rectangle area. The result is the rectangle area

Measurement Tools

Broken line: Click anywhere on the screen as a start, and click again to determine the distance between start and end, and the second point also is the start of the new line

Arc: Click anywhere on the screen as a start, and click again to determine the distance between start and end, and the second point also is the start of the new line...The measurement is the total length.

Curve: Click anywhere as a start point, and the path that the mouse goes through is the curve length. Click again to determine the end.

Straight line: Can click anywhere on the screen as start point, and click again to determine the distance between the start and end

Vertical line: Click anywhere as a start point, click again to determine the straight line. Click again to complete.

Parallel lines: Click anywhere to determine the start point, and click again to determine straight line. Click again to determine the parallel line. Measure the distance between parallel lines.

Angle: Click anywhere as a start point, click again to determine the straight line. Click third time to determine the second line. Measure the angle between two lines.

Text: After clicking the button, the dialog box will pop up for annotation.
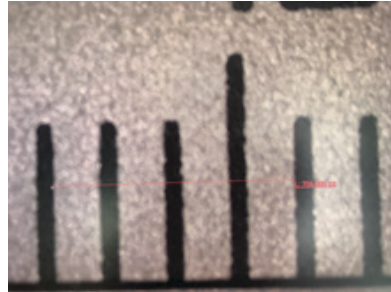
Delete All: Delete all items

Select and Delete: Delete selected items

Screenshot: Save an image file of the screen

Calibration

Note: Before measurement, please check the microscope magnification and image preview resolution. Click Edit to enter the list

1. Click the "+" to start the calibration.
2. Click any point as a start, and click again The one in the picture is 706.000px
3. Input the number in the Actual length option based on the actual length, and select the length unit. The picture is 4.000nm
4. Calibration will calculate the ratio based on the actual lengthand pixel length
5. After confirming, click "OK"

Move the mouse to the bottom of the screen and click the Grid to enter the grid setting

1. Click 'enable all', 8 sets of grid will display on the monitor.   Horizontal 8+vertical 8
2. Click the box behind the 'Object', and choose the horizontal line or vertical line that needs to be edit   V1-V8 means vertical lines, H1-H8 means horizontal lines
3. Choose the amount of the vertical lines or horizontal lines.
4. Line width   support 4 kinds of line width
5. Color   Support 9 colors
6. If you need to use scale, then click the box in front of the scale.

Assembly Instructions:
26700-140 | MicroVue

❖ Contents

➢ 1x Camera with Integrated LED Ring Light and 11.6" Monitor
➢ 1x Post with Dovetail Mount and Height Adjustment Knobs
➢ 1x Post Stand Base
➢ 3x Screws
➢ 3x Washers
➢ 1x 3mm Hex Key
➢ 1x 2mm Hex Key
➢ 1x 1.5mm Hex Driver
➢ 1x AC Adapter & Power Cord
➢ 1x Wireless Mouse
➢ 1x USB storage drive
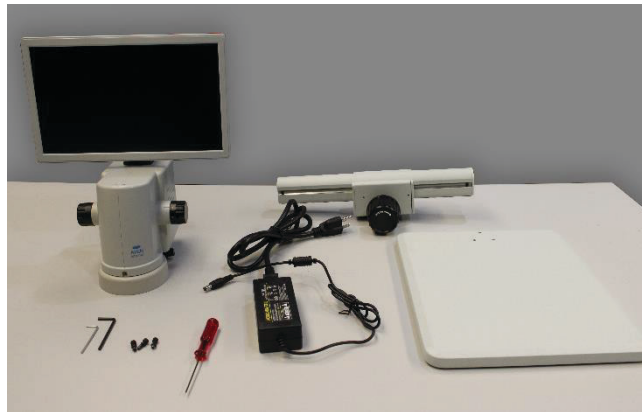
❖ Procedure

➢ Step 1: Assemble the Post Stand

▪ Turn the base on its side and align the screw holes on the post with those on the base
▪ In this case, the washers will serve as spacers between the base and the screw. Place one washer on each screw and hand tighten the screws through the bottom of the base.
▪ Finish tightening using the 3mm Hex Key. The post should be flush with the base to prevent future tilting of the post.

➢ Step 2: Attach the Camera to the Post
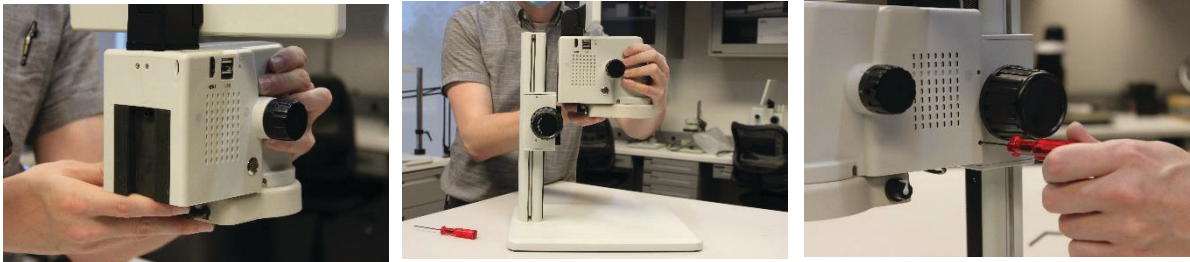
- Align the back of the camera with the dovetail mount, and gently lower it onto the post.
- **WARNING:** The edges are sharp. To avoid injury, keep hands away from the dovetail while attaching the camera or removing it from the post.
- Using the 1.5mm Hex Driver, secure the camera onto the post as shown in the photo.

➢ Step 3: Plug in the AC Adapter and Attach Peripherals

- The port for the AC Adapter will be found on the underside of the camera, near the power button. Plugged in, the adapter supplies power to the camera, monitor and ring light. A separate power switch can be found on the back of the LED ring light as well as a brightness controller on one side (opposite the camera's power button).
- 1 HDMI port is available for connecting an external HDMI monitor. 2 USB ports are available for connecting a mouse and USB drive. Alternatively, a TF card slot can be found on the back of the camera. This allows the use of a microSD card for storage instead of a USB drive.