

USB Microscope – 5MP interpolated 220x magnification / 8 LEDs



DESCRIPTION

As electronics get smaller and smaller, you'll need a hand examining PCBs and this little USB microscope is the perfect tool. Its smaller and lighter than a large optical microscope but packs quite a bit of power in its little body. There's a 5.0 megapixel sensor inside and an optical magnifier that can adjust from 20x (for basic PCB inspection) to 220x (for detailed inspection). Eight white LEDs are angled right onto whatever you're examining so you get enough lighting to see, and are smoothly adjustable via a dial on the side.

New! We've upgraded this microscope to 5.0 Megapixel (from 2.0M) and this one comes with two removable plastic caps to get close ups for a wider focusing range.

If you plug this into any computer, it just shows up as a standard USB camera (we used this for our weekly Ask an Engineer show) and the Windows/Mac software lets you take snapshots using the button on the side of the microscope or direct from the software (so you don't move the camera).

We tried a bunch of different USB microscopes and found this one to be the best combination of optical clarity, usability, and price. It's perfect for electronics hacking, rework, SMT (de)soldering, inspection, and soon you'll find yourself pulling it out to look and photograph all sort of cool small stuff around your lab and home.

We took some snaps of this 'scope while looking at [a tiny 0201-populated GPS board at 20x magnification](#) and then at [a raw die at 200x](#)

Package comes with a USB microscope with 4.5ft/140cm long cord and adjustable stand.

. TECHNICAL DETAILS

- Image Sensor: 2.0 megapixel w/high-speed DSP for 5MP interpolation (We compared the output with a non-interpolated 2MP microscope and it does look clearer with the interpolation!)
 - 20x/220x axis micro-lens
 - Adjustable focal length, from 10mm-50mm
 - Snapshots via software or pressing the button
 - Image capture: 2560x2048 (5M Pixel), 2304x1738 (4M Pixel), 1600x1200 (2MPixel), 1280x1024 (1.3MPixel), 1280x960, 1024x768, 800x600, 640x480, 352x288, 320x240, 160x120.
 - Video rate of 30f/s at a brightness of 600 lux
 - Flicker control for 50Hz/60Hz
 - Video format: AVI
 - Photo format: JPG or BMP
 - 8 white LED light, 40000mLux
 - 20x/200x magnification
 - USB port powered
 - TWAIN compatible
 - Size: 112mm long x 33mm diameter
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Color may vary

[Software & Driver download](#) – There's a manual in the ZIP but its for the older version of this camera, the specifications listed there will be for the older camera which you can disregard. Software is not compatible with MacOS X Mavericks – we suggest [mixscope](#) if you need really good Mac Microscope software, not free but definitely worth purchasing!

For more information visit <https://www.adafruit.com/product/636>