

BLIPS - TIPS & TRICKS

BLIPS, the thinnest Macro and Micro lenses for smartphones in the world, can guarantee an excellent picture quality for photos and videos, but they need some simple tricks to get the best result:

The lens must be perfectly aligned with the smartphone lens.





- The surface of both camera and lens must be **cleaned by any impurity** (dents, hairs, granules, dust, etc.) before application.
- The lens adheres electrostatically to the lens of the phone. Gently
 press the lens once applied to improve its adhesion. In case of low
 adhesion to the glass, heating up the film by some degree after
 cleaning it can significantly improve its adhesion.

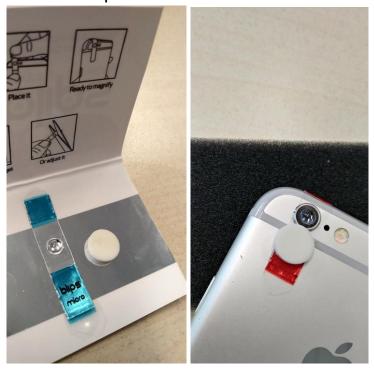
- An extra support is guaranteed by two adhesive bands on the sides of the film. These are especially useful for those smartphones with a dull surface (eg Iphone 6). Beware of intensive use: dust and dirt may decrease the adhesive capacity of the bands. In any case, replacement adhesive tapes are available.
- For those smartphones which have the camera in a corner of the body, Blips ideal positioning requires that the longer end, the one with the writings, goes on the front of the phone, as can be seen in the following images:



- Be careful not to create air bubbles between camera and lens.
- A simple test that can be done to verify the correct application of the lens involves your index finger: if you lay it against the lens and then move it away gradually, at some point you should find the ideal focal length where the images appear correctly in focus. In this case, the details of the fingerprint should be distinguished:



• If necessary, you can trim the Blips film to give it the right shape to fit your smartphone. Of course, the lens should not be cut, and remember to take care of it: if it is crushed, scratched or deformed, it may not guarantee high quality performance. You can also use the soft bumpers of the card for protecting the lenses:





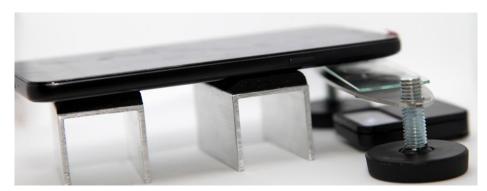
• For an optimal use of Blips, we suggest to install our **free app**, available for <u>iOS (iPhone or iPad)</u> and <u>Android</u>. This allows, among other things, **to keep the flash light on, even when you are not shooting** (a blocked feature in many cell phones).

If you do not want to install the app or your operative system does not support it, you can use the camera of your smartphone. In this case, we suggest you check **the correct illumination of the subjects** you want to shoot. Main differences between Blips models are about focal length and optical magnification (the digital zoom of the camera is not considered):

Model	Focal length	Aprox. Magnification level
Macro plus	20 mm	5 X
Macro	12 mm	10 X
Micro	6 mm	20 X
Ultra	3 mm	33 X

- For subjects that cannot be approached too much (i.e. the iris of the eye) or are difficult to shoot (i.e. insects on the move) the ideal solution are Macro and Macro plus; these lenses constitute the Macro Kit and are also included in the Full Kits.
- Subjects for which a larger detail is needed can be shot with the Micro lens.
- The **Ultra lens**, given its strong magnifying factor, can allow the observation of tiny details, such as tissue cells of animals and plants. However, such a magnification requires a smartphone support (vibrations make free-hand observation very difficult) and a transmitting light (as on the optical microscope).

In fact, the ideal solution for the Ultra lens is the associated **LabKit2**, which includes a light source and a phone support:



To get the best results from your LabKit2, remember some simple rules:

- Stick the adhesive rubber on the **U-shaped parts**, as shown in the previous image. Screw the rubber feet in the metallic plate for about 10-15mm.
- Lay the glass slide on the stage. The transparent foils can be used like coverslips, for your preparations. Cut them, if necessary.
- Well align the light source under the sample. For checking the light alignment, place the paper sheet with the dashed lines under rubber feet and light source. Stick the light source on its place, on the sheet. Attach the 4 bumpers in the 4 small circles.
- Lay the phone on the U-shaped stands, with the camera aligned with the light source. **Gently tilt the phone** to understand if the sample is too close or too far from the phone camera. Screw the rubber feet for rising or lowering the sample.
- **Digitally zoom** the sample for fine tuning; lock the automatic focusing.
- Find tutorials, instructions, videos and our free SMO App at www.blips.pro
- Keep in mind that virtually all smartphones on the market are compatible with Blips. Accidental problems on focus or poor quality images are generally caused by misuse of the lens and not by incompatibility with the device used.