

Photographing Small Animate Subjects

By Ken Timm

Why use flash?

1. To stop motion;
2. To control light;
3. To increase Depth-of-Field;
4. To increase sharpness and color;
5. Mobility (try getting into position with a tripod while photographing close-ups of butterflies).

Why use a flash bracket?

To avoid lens shadow and get light on the subject when working close;

- Macro photography often requires manual focus so you need 3 hands to hold flash off-camera.

One, Two, or Ring-Flash?

- Ring-flash generally creates “flat” lighting, produces “donut” reflections and is expensive;
- George Lepp recommends (and sells) two-flash brackets; John Shaw recommends one, saying it creates more sharpness, doesn’t get a “double-sun” effect and is less costly.

Why not use a commercially available bracket?

- Those that attach on the lens can cause lens-mount problems and they’re costly;
- Others, generally made for wedding photography are often heavy and bulky;
- Many are quite versatile but will cost much more than this home-made type.

What tools and materials are needed to make one?

- A clamp or vise helps to hold the metal if you’re cutting, drilling or bending;
- A hack-saw, drill with $\frac{1}{4}$ ” metal bit, and small metal file to smooth edges after cutting.
- Anodized strap aluminum $\frac{1}{8}$ ” x 1” x 20” (or two 10” lengths);
- Four $\frac{1}{4}$ ” x 20 x $\frac{1}{2}$ ” machine bolts plus two matching wing-nuts.

Optional: 4" piece of foam pipe insulation; quick-release plates for camera-to-bracket; and very small ball-head unit (highly recommended!) to attach under the flash.

*** You also will need an off-camera flash cord and possibly the connecting shoe.

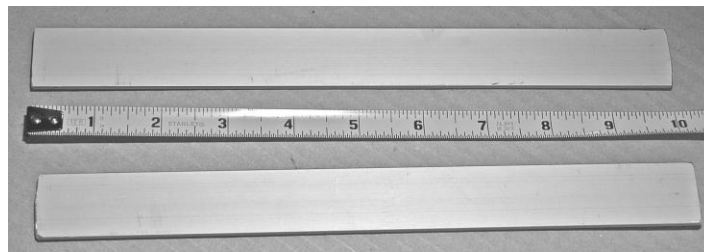
OTHER: Flash brackets are also used to avoid eye-shine (or **red-eye**). Here is the formula to avoid it:

Flashhead To lens center	Subject distance, feet
12	20*
7	11
4	8
2	4

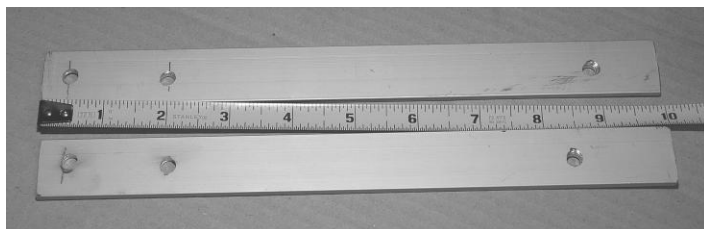
*The home-made bracket norm

MAKE YOUR OWN MACRO FLASH BRACKET for less than \$10.00!

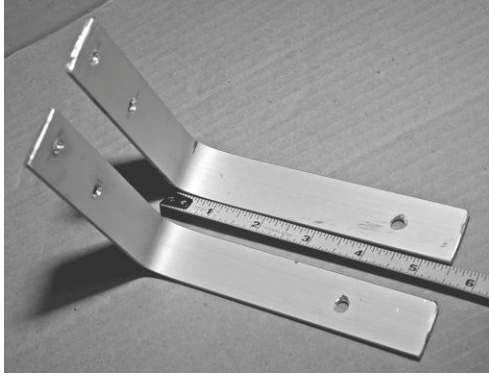
Step One - From a piece of anodized strap-aluminum $\frac{1}{8}$ " x 1" x ?" cut 2 pieces 10" long:



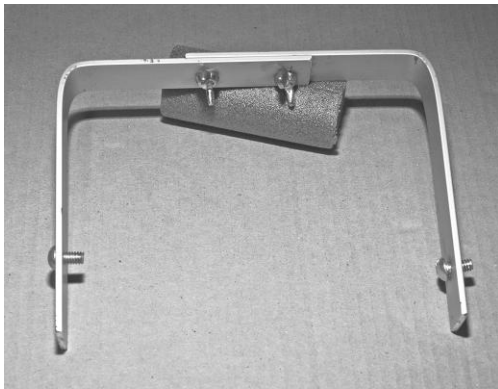
Step Two - Drill $\frac{1}{4}$ " holes as follows: TOP right, 1" from end; BOTTOM right, $1\frac{1}{2}$ " from end; then drill 2 sets of aligned holes, $\frac{1}{2}$ " and 2" from the opposite end:



Step Three - Bend each piece $5\frac{1}{2}$ " from the end where the camera/flash will be attached:



Step Four - Assemble, using (4) $\frac{1}{4}$ " x 20 x $\frac{1}{2}$ " machine bolts and (2) matching wing nuts:



OPTIONS: Use 1" x 4" foam pipe insulation over wing nuts for comfort; use quick-release shoe for camera; use a small flash; use a very small ball-head under flash to give flexibility; undo the top bolt to easily fold the unit to half-size; and use a 30° - 45° flash-to-subject angle. Experiment with exposures (if flash exposure is too close to natural light you may get ghost images). No need for a soft-box with macro. See John Shaw's Close-ups in Nature pp. 90-93 or Nature Photographers Complete Guide pp.112-114 for a more sophisticated homemade flash bracket.