

## Photo Tips:

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## Flash Brackets for Macro Photography



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### INTRODUCTION

In our last two articles we discussed the importance of light in dental photography (Devigus et al. 2017) and the impact of different lighting setups (Devigus 2017). In this issue we want to explore different flash brackets to help you position flash heads at a distance from the lens for ideal illumination. Flash brackets are one of the essentials for digital dental photo documentation.

Flash brackets connect with a screw to the tripod socket at the bottom of the camera body. Different models are available in various sizes, weights, shapes and mounts for flash heads.

Before you decide on a particular model, you should know what you want to use it for.

Some indications for using flash brackets are:

- Color, tooth-shade communication
- Texture of the front teeth
- A more 3D look to the teeth and soft tissue
- Portraits

### LIGHT DISTRIBUTION AND ILLUMINATION

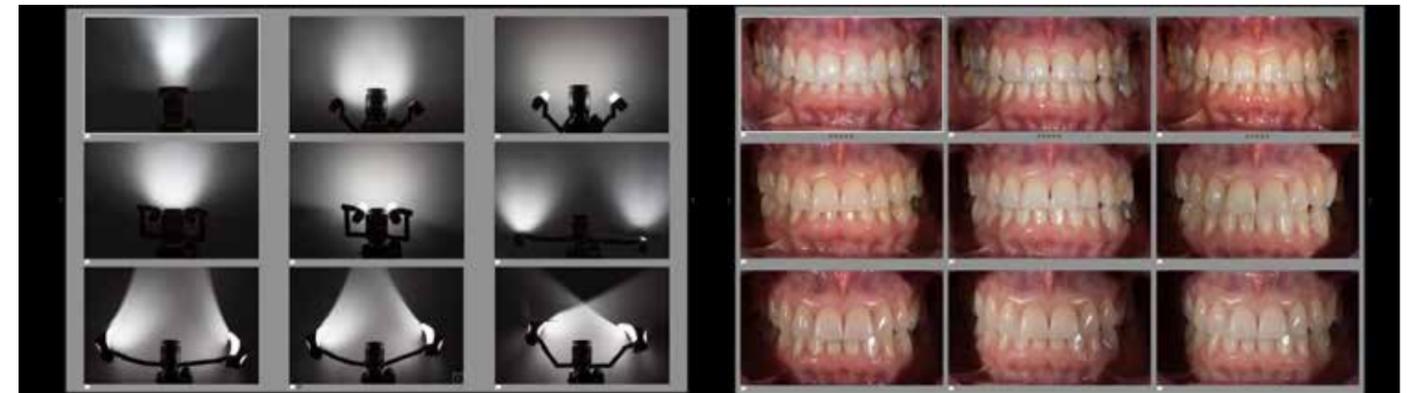


Fig. 1: Light distribution and illumination of the oral cavity from different light sources and setups



Fig. 2: Light distribution from the Ring Flash Metz MS-1





Fig. 3: Light distribution in the oral cavity from the Ring Flash Metz MS-1



Fig. 4: Light distribution from the Nikon SB-R200 mounted on the PhotoMed bracket with Lumiquest bouncers



Fig. 5: Light distribution from the Nikon SB-R200 mounted on the PhotoMed bracket in the oral cavity



Fig. 6: Light distribution from Ring Flash (left) and dual flash on the bracket (right)



Fig. 7: Clinical example of the photo with dual flash on the bracket



Fig. 8: Clinical example of the use of the bracket but with single flash active

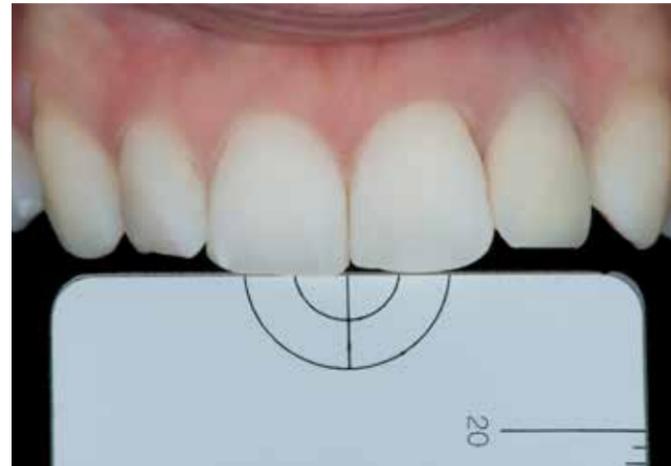


Fig. 9: Clinical application of the bracket for color transfer

**FLASH BRACKETS AVAILABLE ON THE MARKET**

Companies worldwide offer a few models of brackets that can be used in dental photo documentation. Some of the brackets are specially designed for dental photography, others are used in macro photography. We have tested the most popular brackets available on the market and would like to share with you our personal opinion on them.

## PHOTOMED R2 DUAL POINT FLASH BRACKET – MADE IN THE USA

PhotoMed is a worldwide leader in dental photography. The R2 Bracket (Fig. 10) is available with two different flash mounts: Nikon (R2-N) and Universal (R2-U). While the R2-N can only be used with Nikon SB-R200 flash heads (part of R1C1 Nikon system), the R2-U is universal and works with every flash head with a shoe foot (Canon 270EX II, Nissin i40, etc.).

**Characteristics**

PhotoMed offers a selection of different models, sizes, and mounts, high-quality finish, light weight – especially the classic model. Ball attachments and wider arms increase the weight of the set. Their brackets are made of black anodized aluminum and plastic. While PhotoMed offers worldwide deliveries, orders outside the US require direct email contact with the shop.

The fixing screw that connects the bracket to the camera (tripod socket) needs to be fixed securely to avoid movement of the bracket.

**Bracket specification:****PhotoMed R2 Dual Point Flash Bracket (original)**

Max span: 22"/ 55 cm  
Weight: 8 oz./225 g  
Mount: Nikon or Universal  
Price: \$ 279

**PhotoMed R2 Wide Bracket**

Max span: 29"/73 cm  
Weight: 10 oz./285 g  
Mount: Nikon or Universal  
Price: \$ 319

**PhotoMed R2 Ballhead Bracket**

Max span: 24"/ 61 cm  
Weight: 13 oz./370 g  
Mount: Nikon or Universal  
Price: \$ 319

Website: [www.photomed.net](http://www.photomed.net)



Fig. 10: PhotoMed bracket

## AGNO'S BRACKETS – MADE IN ITALY

The company offers two models: Scorpion (basic, shorter arms) and Albatros with longer arms.

**Characteristics**

The advantage of Agno's Brackets (Fig. 11) is that you can easily upgrade your bracket from Scorpion to Albatros by attaching extension arms. The company offers an additional bracket element, "bracket upper", for big-sized (also bigger) DSLR cameras or for cameras with battery grips attached. Prices are attractive.

Arms are connected and tightened with regular screws with knobs for easy assembly, but they loosen after manipulation of the arms and need tightening more often.

**Bracket specification****Medical Close-Up Bracket "Scorpion"**

Max span: 28 cm  
Weight: 400 g without vertical arm – 550 g with vertical arm  
Mount: Nikon SB-R200 and universal  
Price: EUR 125

Website: [www.agnos.com](http://www.agnos.com)



Fig. 11: Agno's Brackets Albatros

## OWL BRACKET – MADE IN TURKEY

The company offers three models: Classic, Large, and Ballhead.

**Characteristics**

Owl brackets (Fig. 12) are beautiful in design and offer excellent quality and a very stable connection. A high-quality pouch for storing is available. Printed marks allow easy setup of arms and their angulations. Lightweight. Special editions with name, different colors and mounts are available upon request.

**Bracket specification****Owl Bracket Classic (Owlbrckt® C)**

Max span: 55 cm  
Weight: 236 g  
Mount: Nikon or Universal  
Price: \$ 300

**Owl Bracket Large (Owlbrckt® L)**

Max span: 75 cm  
Weight: 276 g  
Mount: Nikon or Universal  
Price: \$ 350

**Owl Bracket Ballhead (Owlbrckt® BH)**

Max span: 60 cm  
Weight: 324 g  
Mount: Nikon or Universal  
Price: \$ 350

Website: [www.owlbracket.com](http://www.owlbracket.com)



Fig. 12: Owlbracket Classic

## NOVOFLEX DUO FLASH HOLDER (XXL-HALTER) – MADE IN GERMANY

Brackets offered by Novoflex (Fig. 13) are for general use, with some models dedicated to macro photography. Originally Novoflex offered two models that can be used in digital dental photography, but one of them – the Novoflex Uniset with adjustable rods and ballheads with shoe adapter – is now only available on the second-hand market. The second – the Novoflex Duo Flash Holder – is smaller but is still available from Novoflex.

**Characteristics**

Simple design and easy setup, but Duo Flash Holder has a limited span of 36cm.

**Bracket specification****Novoflex Duo Flash Holder**

Max span: 36 cm  
Weight: 370 g  
Price: \$ 263

Website: [www.novoflex.com](http://www.novoflex.com) or  
[www.bhphotovideo.com](http://www.bhphotovideo.com)



Fig. 13: Novoflex Duo Flash Holder Bracket

**AXIS DUAL POINT FLASH BRACKET – MADE IN GERMANY**

The Axis Bracket (Fig. 14) was developed by MDT Sascha Hein in cooperation with spectrolab. The bracket is specially designed and dedicated to use with eLABor\_aid® protocol for color transfer. The fixed position of the arms guarantees the same position of the flashes and angulation to the front teeth. It has limited application in intraoral photography with mirrors.

**Bracket specification**

**Axis Dual Point Flash Bracket**

Max span: fixed  
 Weight: 120 g  
 Mount: Nikon SB-R200 and Universal (Canon and others)  
 Price: EUR 199 plus VAT (Europe), \$ 225 (USA)



Fig. 14: Axis Duo Flash Holder Bracket

**Characteristics**

The axis bracket combines a slick, elegant design with functionality at a minimum weight and size. At a total weight of only 120 g, it is one of the lightest flash brackets available today. It provides fixed oblique 45°/0° illumination suitable for 70–105 mm macro lenses. The modular design allows for interchangeable use of the Nikon R1C1 system as well as Canon MT-24EX, the new Canon MT-26EX or any other flash systems using a conventional hot-shoe connection, all included in the box.

Website: [www.emulation.me](http://www.emulation.me) or [www.photomed.net](http://www.photomed.net)

**MOLARIS DUAL POINT FLASH BRACKET – MADE IN ROMANIA**

The Molaris Bracket (Fig. 15) was developed by MDT Miladinov Milos with the intent to create a universal bracket.

**Bracket specification**

**Molaris Dual Point Flash Bracket**

Max span: 80 cm  
 Weight: 450 g  
 Mount: Nikon SB-R200 and Universal (Canon and others)  
 Price: EUR 350 (VAT included)



Fig. 15: Molaris Duo Flash Holder Bracket

**Characteristics**

The Molaris Bracket has a new design for improved grip and stability of the twin flash kit. It has a multi-articulated construction and is made of light aluminum. It offers the freedom to fix flashes in any position, angle and distance in an easy way. The twin flash is equipped with a mount for Canon and Nikon flashes.

Website: [www.dentalphotography.ro](http://www.dentalphotography.ro)

**SUMMARY**

A bracket is an additional piece of equipment intended for use in combination with a dual flash system. The primary indications for use are correct flash head positioning for color transfer and achieving dental photographs showing the texture of the teeth and soft tissue.

**CLINICAL IMPLICATIONS**

We recommend using a dual flash bracket for prosthodontics, restorative dentistry, anterior teeth, and a ring flash for regular case documentation and surgery.

Summary of the brackets	Agno's Scorpion bracket	Agno's Albatros basic bracket	Agno's Albatros bracket Full	Axis bracket	Molaris bracket	Novoflex Duo Flash Holder	Owl Bracket Classic	Owl Bracket Large	Owl Bracket Ballhead	PhotoMed R2 bracket	Photo-Med R2 Wide Bracket	Photo-Med R2 Ballhead Bracket
<b>Weight</b>	400/550 g	400/550 g	400/550 g	120 g	450 g	370 g	236 g	276 g	324 g	225 g	285 g	370 g
<b>Max. span</b>	28 cm	?	?	34 cm	80 cm	36 cm	55 cm	75 cm	60 cm	55 cm	73 cm	61 cm
<b>Articulated arms</b>	yes	yes	yes	no	yes	no	yes	yes	yes	yes	yes	yes
<b>Ballhead joint</b>	no	no	no	no	no	yes	no	no	yes	no	no	yes
<b>Nkon SB-R200 mount</b>	yes	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	yes
<b>Canon/Universal shoe mount</b>	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
<b>Price</b>	EUR 125	EUR 155	EUR 225	\$ 225	EUR 350	\$ 263	\$ 300	\$350	\$ 350	\$ 279	\$ 319	\$ 319

**WHICH BRACKET TO CHOOSE?**

For dental technicians working with the eLABor\_aid system, we recommend the Axis bracket. For surgeons we recommend choosing a more compact model like the PhotoMed R2 or the Owl Classic. It is recommended only for documentation of cases in the anterior region. For restorative and general use, we suggest paying attention to the available span and weight of the bracket. Keep in mind the weight of your camera, lens, flash and light modifiers.

More information can be found on the Dental Photo Master online platform, where you can find a large number of video tutorials on flash brackets and more.

**REFERENCES**

Devigus A., Bazos P. & Hein S. (2017) Light in Dental Photography. *Forum Implantologicum* 13: 64–71.

Devigus A. (2017) Show Yourself in the best Light, *Forum Implantologicum* 13: 184–186.

[www.dentalphotomaster.com](http://www.dentalphotomaster.com)