FLASHPOINT

FPLFMF12DK1

MF12-DK1

MACRO DENTAL FLASH KIT

Important Safety Instructions

How to Use the Dental Flash System

This product is a professional photographic equipment, to be operated by professional personnel only.

The following basic safety precautions must be followed when using this product: All transport protective materials and packaging on the product must be removed before use.

1. Carefully read and fully understand the instruction manual before use and strictly follow the safety instructions. Failure to do so may result in death, serious injury, damage to the product, or other property damage.
2. This device (studio flash) must be connected to a grounded outlet.
3. High voltage exists when the flash is powered on. Internal capacitors will remain charged for some time after power off.
4. This product is a professional lighting fixture, children are prohibited from using it. Children must be closely supervised by adults when approaching the fixture, to prevent collisions with the fixture or unauthorized use that could cause personal injury.
5. This is not an ordinary lighting fixture and must not be used for general illumination. Anyone with a history of eye damage or sensitivity should avoid using this fixture or looking directly at it.
6. Extreme caution must be exercised when using it, do not touch high-temperature parts such as flash tubes to avoid burns.
7. Do not point the flash directly at the eyes (especially baby's eyes) under any circumstances, as this could impair vision in a short time. Turn off immediately if discomfort occurs, stop using, and seek medical attention promptly.
8. When using an on-camera flash with a reflector at a focal length of 14 mm, it is strictly prohibited to use the 1/1 power setting for an extended period of time. After reaching the maximum heat protection limit, a 10-minute pause is required before continuing to use the flash.
9. If the flash tube is damaged, stop using it immediately and contact the manufacturer, service agent, or qualified repair personnel for a replacement to prevent accidents.
10. Dot not use damaged equipment or accessories. Allow professional repair technicians to inspect and confirm normal operation before continuing use after repairs.

11. Disconnect power source or remove batteries (if it has one) before replacing flash tube, protective glass, or fuses. Allowing 10 minutes to cool before replacing flash tube, and wear insulated or heat resistant gloves when operating.
12. Turn off power before connecting or disconnecting plugs from outlets. Ensure plugs are fully inserted when connecting.
13. Stop using immediately if the product shell is cracked due to falling, squeezing, or strong impact, to avoid touching the internal electronic components and getting an electric shock.
14. If an extension cord is needed, use the original extension cord or choose one with a rated current equal to or greater than the device. Using an extension cord with a smaller rated current may overheat and catch fire.
15. Some products have long power cords, please place them properly to avoid contact with heat sources or tripping others. It is recommended to use the original power cord. Damage caused by non-original cords is not covered by the warranty.
16. The power plug of the studio flash can serve as a power-off switch, it should always be easily operable. Please disconnect the power when not in use.
17. Unplug the equipment power plug from the power socket before cleaning or maintenance. Do not pull the power cord forcibly, use both hands to hold the plug end and pull it out.
18. This device is not waterproof. Keep it dry and avoid immersing it in water or other liquids. It should be installed in a ventilated and dry location and avoid using in rainy, humid, dusty, or overheated environments. Do not place items above the device or allow liquids to flow into it to prevent danger.
19. Do not disassemble without authorization. If the product malfunctions, it must be inspected and repaired by our company or authorized repair personnel.
20. Before storing the device, ensure it has completely cooled down and the power cord is unplugged, then put it in the protective case or a ventilated dry location.
21. Do not place the device near alcohol, gasoline, or other flammable volatile solvents or gases such as methane and ethane.
22. Do not use or store this device in potentially explosive environments.

23. Maintain at least 1 meter distance between the lamp head and the user, other people, and heat-sensitive or flammable items during and after use.
24. Do not cover the heat dissipation port!
25. Do not use accessories not been approved by our company, as this may cause fire, electric shock or personal injury.
26. Clean gently with a dry cloth. Do not use a wet cloth as it may damage the device.
27. Some products are equipped with protective covers that must be removed before use.
28. This instruction manual is based on rigorous testing. Changes in design and specifications are subject to change without notice. Check official website for latest instruction manual and product updates.
29. Use only specified charger and follow proper usage instructions for certain products with built-in lithium batteries, within the rated voltage and temperature range.
30. Some products are powered by lithium batteries. These lithium-ion batteries have a limited lifespan and gradually lose their storage capacity, which is irreversible. As the battery ages, the product's battery life will decrease. The estimated lifespan of a lithium-ion battery is 2 to 3 years. Please regularly check the battery's condition, and if the charging time significantly increases or the battery life significantly decreases, consider replacing it with a new battery.
31. Some products are equipped with lithium batteries. The recommended storage guidelines are as follows: Before storage, charge the battery to approximately 50% capacity. Charge it to about 50% at least every six months. If the battery is removable, store it separately. The storage temperature should be within the range of 0°C to 40°C.
32. Some products are powered by lithium batteries. Please note:
    - Do not disassemble, crush, or puncture the battery.
    - Avoid short-circuiting the battery contacts.
    - Do not expose the battery to fire or water.
    - Do not expose the battery to temperatures above 60°C.
    - Keep out of reach of children.
    - Protect the battery from excessive shock or vibration.
    - Do not use a damaged battery.

- If the battery leaks, avoid contact with the leaking fluid.
- If the battery fluid comes into contact with your eyes, immediately rinse with water for at least 15 minutes. Lift your eyelids until there are no signs of fluid and seek medical attention promptly.

33. Some products are powered by alkaline batteries. Please note:
    - Use only the batteries or power sources specified in the instruction manual.
    - Keep batteries and other small accessories out of the reach of children and infants. If a battery or small accessory is accidentally swallowed, seek medical attention immediately.
    - If the battery leaks, changes color, deforms, smokes or emits an unusual smell, remove the battery immediately. Be careful during operation to avoid burns. Continued use may cause fire, electric shock, or skin burns.
    - Do not use any deformed or modified batteries.
    - Do not disassemble or modify the product or battery.
    - Avoid heating, welding, exposing the battery to fire or water.
    - Avoid strong impacts on the battery.
    - Do not mismatch positive and negative terminals of the battery, or mix old and new or different types of batteries.

Main Features

- Supports TTL automatic flash mode and M manual flash mode.
- Dedicated dental mode selectable in flash trigger menu.
- Features S1/S2 flash triggering mode.
- Equipped with a LED modeling Light.
- Utilizing professional optical lens for more even light distribution.
- Built-in lithium battery with USB Type-C port.
- Quick 1.7 secs recycle time and 500 full power pops.
- Dental bracket option available.

Foreword

Thank You for choosing FLASHPOINT!

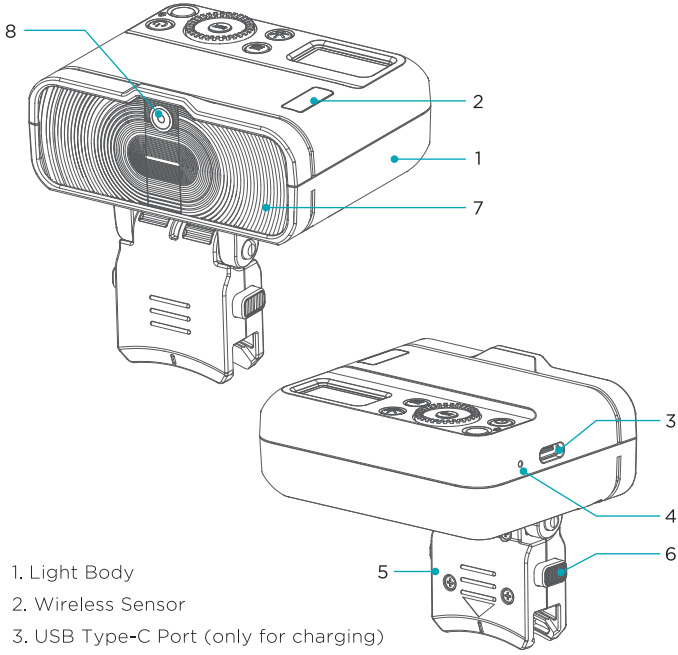
The MF12-DK1 is a dental flash system designed specifically for macro photography. The flash system includes two macro flashes, two dental diffusers, a dental flash trigger and more, and can be optionally paired with a dental bracket. MF12-DK1 is equipped with two flash modes, TTL and M (manual). It is easy to operate and has a short recycle time. Additionally, the MF12-DK1 features a professional optical lens design that enhances focusing performance, ensuring even light distribution in captured images. If you require dental photography, the MF12-DK1 is an ideal choice for you.

⚠ Warning

- Always keep this product dry.
- Do not disassemble. Should repairs become necessary, this product must be sent to an authorized maintenance center.
- Keep out of reach of children.
- Do not disassemble, hit, squeeze, or expose to open flame. If severe swelling occurs, do not continue to use.
- Do not leave or store the flash unit if the ambient temperature reads over 50°, otherwise the electronic parts may be damaged.
- Do not shoot the flash directly at human eyes (especially the eyes of infants), as this may cause visual impairment in a short period of time.
- Do not use the flash unit in the presence of flammable gases, chemicals and other similar materials. Under certain circumstances, these materials may be sensitive to the strong light emitted by this flash unit, which could cause a fire or electromagnetic interference.
- As this product is not waterproof, do not use in rain or damp conditions.
- Turn off the flash unit immediately in the event of a malfunction.

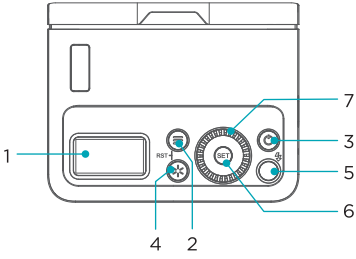
Name of Parts

Body



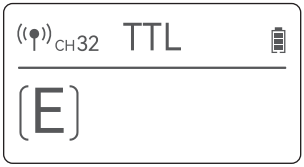
1. Light Body
2. Wireless Sensor
3. USB Type-C Port (only for charging)
4. Reset Hole
5. Angle Adjusting Bracket
6. Push Button of Bracket
7. Lens
8. Modeling Lamp

Control Pane

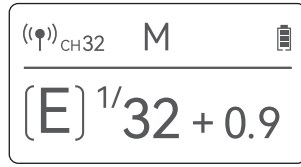


1. Display
2. Menu Button
3. Power Switch
4. Modeling Lamp Button
5. Test Button
6. Set Button
7. Select Dial

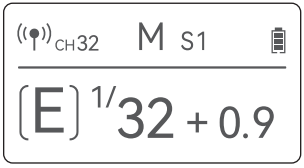
OLED Display

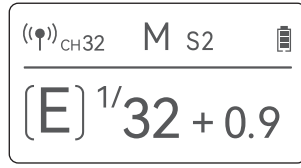


TTL Autoflash



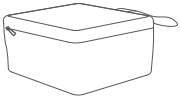
M Manual Flash





S1/S2

What's Inside



Storage
Case
x 1

Dental Flash
Trigger XProIIS+
x 1

Macro Flash
MF12
x 2

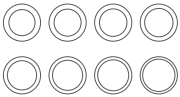
Dental Diffuser
MF-DD
x 2

Flash
Stand
x 2

Cold Shoe
Adapter
x 2

USB Type-C
Cable
x 2

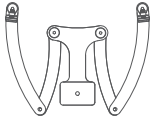
Mounting
Ring MF-AR
x 1



Adapter Rings
AR-R Kit
x 1

Instruction
Manual
x 1

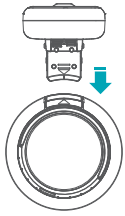
Optional Accessories



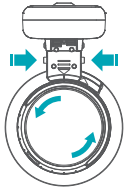
Dental Bracket
MF-DB
x 1

Install Accessories

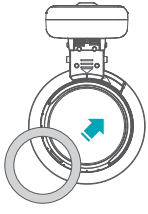
How to Attach the Mounting Ring / Adapter Rings



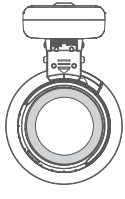
1 Aim the socket of the MF12 into the sliding block of the mounting ring and push it until a "click" can be heard.



2 MF12 can be rotated left or right by pressing the push button on the bracket.



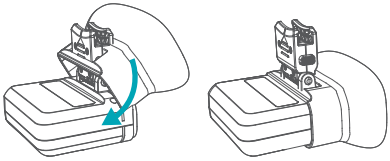
3 Slide one of the adapter rings into the mounting groove of the mounting ring. Eight types of adapter rings with different diameters (49mm, 52mm, 55mm, 58mm, 62mm, 67mm, 72mm, 77mm) are provided.



4 Attach the mounting ring onto the camera lens.

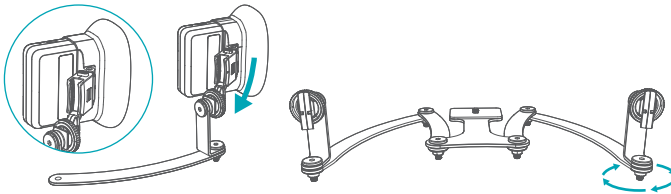
Install Accessories

How to Use the Dental Bracket



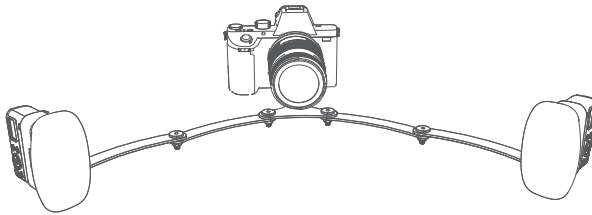
1 Insert the two dental diffusers through the bottom of the flash units and push them inside.

2 Slip the socket of MF12 all the way into the cold shoe and push it until a **'click'** can be heard, then use the knob located on both sides of the bracket body to tighten the locking system.

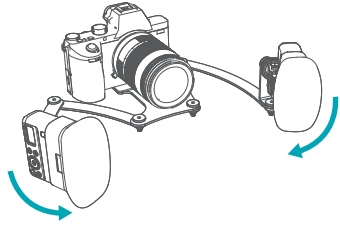


Note: The ball attachment at the ends of the two arms located on both sides of the bracket body can rotate 360 degrees around itself, which can orientate the flash at any angle.

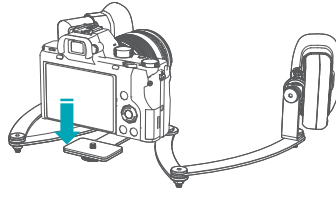
3 Each arm of the bracket has two sections with tension hinges in between and at both ends, extend the bracket to separate the flashes for anterior views.



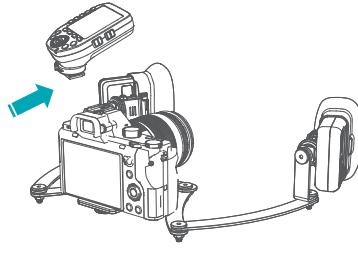
4 Or fold up the bracket to bring the flashes units in close to the lens for intraoral views.



5 Attach the camera onto the mounting thread of the dental bracket, align the holes and snaps in place.



6 Slip the dental flash trigger's mounting foot all the way into the camera's hot shoe until they click in place, and you are all set of the dental flash system.



Battery

1. This product uses a Li-ion battery that's non-detachable and has a long battery life.
2. It is safe and reliable. The inner circuit is against overcharge, overdischarge, overcurrent, and short circuit.
3. It takes only approx. 55 minutes (within 1 hour) to fully charge the battery by using the 5V/2A charger.

Battery Level Indicator

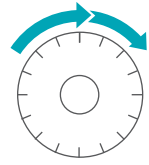
Battery Level	Meaning
3 Bars	Fully charged
2 Bars	Medium level
1 Bars	Low level
0 Bars	The battery level is low, please charge it promptly.
is displayed	The battery is depleted, and in this state, the flash function is not supported. The device will automatically power off after 10 minutes. **Note:** In this state, the device must be charged (within 10 days) before it can be used or stored.

The power switch controls the on and off of this product. Please turn off the power when not in use for an extended period of time.

Power Management

Auto Power off Mode Setting

Press the menu button, turn the Dial to select STBY, press the SET button, and then turn the Dial to select 30 min / 60 min / 90 min / OFF. After setting the auto power off mode, the flash will automatically turn off if it is left for a long time (more than 30 / 60 / 90 minutes). To awaken the device from automatic shutdown, please press the power switch button. Once the boot animation appears, you can operate the device by sliding the adjustment knob.



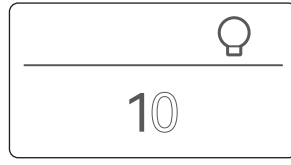
When using the flash separately from the camera, it is recommended to turn off the **"auto power off"** mode through C.Fn-STBY of custom setting functions.

Modeling Lamp

1. Modeling lamp power ON/OFF:

1.1 Short press the **<✲>** button to turn the LED modeling lamp on or off.

1.2 Long press the **<✲>** button to enter the modeling lamp interface and then short press SET button to turn the modeling lamp on or off.



2. Modeling lamp setting:

long press the **<✲>** button to enter modeling lamp interface.

2.1 Brightness setting: turn the select dial to adjust the brightness value from 1 to 10 levels.

Flash Mode Selection

MF12 flash has two modes:

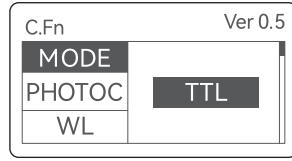
TTL autoflash and M manual flash. In TTL mode, the camera and the flash will work together to calculate the correct exposure for the subject and the background.

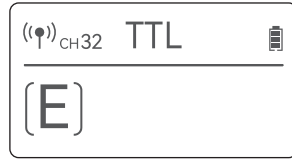
The main subject is correctly exposed regardless of the background brightness.

This is useful when you want to highlight the main subject or make exposure compensation.

In Manual flash photography, you need to select the aperture and flash output level. In this way, you can control the exposure and flash shooting distance when shooting subjects that are difficult to expose correctly in the TTL auto flash mode.

Short press the **<** ☰ **>** menu button and turn the select dial to select MODE. Then, short press the SET button and turn the select dial to select TTL or M mode. Then, short press the SET button to exit the Mode Selection.



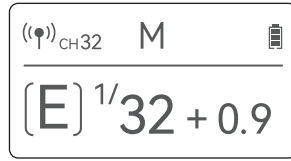


TTL Autoflash Mode

Select TTL mode and press the < ≡ > menu button to return to the interface and the flash will enter the TTL autoflash mode.

M Manual Flash Mode

The flash output is adjustable from 1/128 to 1/1 full power in 0.1 and 1 step increment.



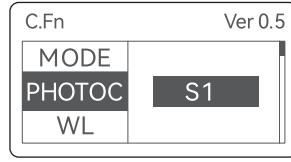
1. Select M and press the < ≡ > menu button to return to the main interface.
2. In M mode's main interface, turn the select dial to set the flash output value.
   To obtain a correct flash exposure, use a hand-held flash meter to determine the required flash output.

Light Control Flash (PHOTOC)

In M manual mode, press the < ⊡ > menu button to enter C.Fn and turn the select dial to choose PHOTOC. Then, press the SET button and turn the select dial to select S1 or S2 function.

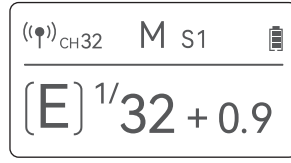
- **S1 Secondary Optic Triggering**

Select S1 light control synchronous. flash MF12 can be used as an auxiliary light to create a variety of lighting effects, which are suitable for manual flash environment. It will trigger the flash synchronously with the first flash of the main flash. The effect is the same as when you use the wireless flash guide, and the response is sensitive.



- **S2 Secondary Optic Triggering with Anti-preflash**

Select S2 light control to prevent pre flash, MF12 can be used as an auxiliary light, which is suitable for TTL automatic flash shooting environment. With high-energy anti pre flash function, when using the camera with a pre flash function, S2 light control pre flash function is used to achieve synchronous shooting. At the same time, it will trigger the flash synchronously with the second flash of the main flash with TTL function, that is, the second light-controlled trigger flash.



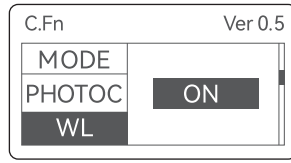
> ⚠ MF12 flash only supports S1/S2 light control flash in M manual flash mode.

Wireless Transmission

With built-in **Flashpoint** R2 2.4G wireless system, this MF12 can be used in combination with **Flashpoint** R2 XPro and R2 trigger. As an auxiliary unit, MF12 can be compatible with Canon, Nikon, Sony, Panasonic, Olympus/Fuji system. And it can be switched automatically. Nikon camera (using R2T-N), Canon camera (using R2T-C) and Sony camera (using R2T-S) can share one or more MF12's TTL functions.

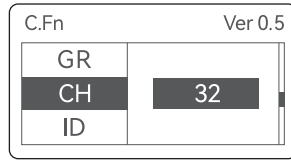
Wireless (WL) Setting

Press the < ⓜ > menu button to enter C.Fn custom setting. Turn the select dial to choose wireless WL, press the SET button, and turn the select dial to choose ON or OFF. OFF means the wireless function is turned off while ON means it's on.



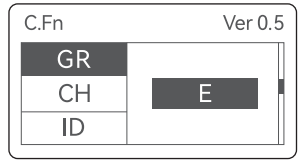
Channel (CH) Setting

If there are other wireless flash systems nearby, you can change the channels to prevent signal interference. The channel (CH) of the transmitter unit and the receiver unit(s) must be set to the same. Press the < ⓜ > menu button to enter C.Fn menu. Turn the select dial to select CH. Press the SET button and turn the select dial to select channel from 01-32. Then, short press the SET button to exit CH setting.



Group (GR) Setting

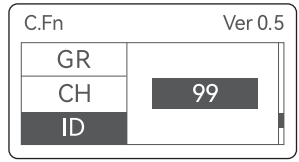
Enter C.Fn menu and turn the select dial to select GR. Press the SET button and turn the select dial to select group from A/B/C/D/E. Then, short press the SET button to exit GR setting.



ID Setting

Enter C.Fn menu and turn the select dial to select ID. Press the SET button and turn the select dial to select ID from OFF and 01 to 99. Then, short press the SET button to exit ID setting.

Note: only usable if the master unit has this function.



⚠ The Causes & Solutions of Non-triggering in Flashpoint 2.4G Wireless

1. Disturbed by the 2.4G signal in external environment (e.g. wireless base station, 2.4G wifi router, Bluetooth, etc.)

→ To adjust the channel CH setting on the flash trigger (add 10+ channels) and choose interference-free channels to work on, or turn off other 2.4G devices while working.

2. Please make sure that the flash has recycling or has caught up with the continuous shooting speed (the flash ready indicator lights up) and the flash is not in the state of over-temperature protection or other abnormal situation.

→ Please reduce the flash power output. If the flash is in TTL mode, please try to change it to M mode (a preflash is eeded in TTL mode).

3. Whether the distance between the flash trigger and the flash is too close or not.

→ Please turn on the **"close distance wireless mode"** on the flash trigger (< 0.5 m)

→ **R2 series:** Press and hold the flash button, then turn on the machine until the indicator light flashes twice.
X2, Xpro series: Set C.Fn-DIST to 0-30m.

4. Whether or not the flash trigger and the receiver are in the low battery states.

→ Please replace the battery (1.5V disposable alkaline batteries are recommended for flash triggers).

C.Fn: Setting Custom Functions

1. Press the < ⓜ > button to enter C.Fn and turn the select dial to select the custom setting functions.
2. Press the SET button and turn the select dial to set the parameters.
3. After finishing all the settings, press the SET button to confirm and press the < ⓜ > button to exit.

Custom Function	Functions	Settings	Settings & Descriptions
Signs MODE	Flash mode	M	Manual flash
		TTL	Auto flash
PHOTOC	S1/S2 Light controlled flash	OFF	Off
		S1	S1 Secondary Optic Triggering
		S2	S2 Secondary Optic Triggering with Anti-preflash
WL	Wireless setting	ON	Wireless on
		OFF	Wireless off
GR	Group setting	A/B/C/D/E	Choose any letters from A / B / C / D / E
CH	Channel setting	1-32	Choose any figure from 1 to 32
ID	ID setting	OFF/01-99	Choose any figure from 01 to 99 or OFF
STBY	Auto power off	OFF	Off
		30 min	The flash will automatically shut down if left unused for a long time (more than 30 / 60 / 90 minutes).
		60 min	
		90 min	

Forced Shutdown Function

In the event of a system crash or inability to operate the lamp, insert a pin into the reset hole to force the unit to shut down.

Over-Temperature Protection

When the continuous flashes fires up to 50 times in fast succession at 1/1 full power, an Over-Temperature Protection icon appears on the display to remind the user that the flash unit is overheated. It is recommended to temporarily stop the macro flash.

Reset Function

Long press < ☰ > menu button and < ✲ > modeling lamp button at the same time to realize the function of reset the settings.

Technical Data

Model	MF12
Built-in Lithium Battery	3.7V / 1700mAh
Guide No. (1/1 output)	GN = 16.1 (30.1)
Flash Power	12W
Output Level	8 levels: 1/128 ~ 1/1
Brightness of LED Modeling Lamp	1 ~ 10 Levels
Display	OLED Display
Optical Flash	S1 Secondary Optic Triggering
	S2 Secondary Optic Triggering with Anti-preflash
Flash Mode	TTL Autoflash, M manual flash
Flash Duration	1/1200s~1/34000s
2.4G Wireless Transmission	ON/OFF
Channel	32 channel: 1 ~ 32
Group	5 group: A / B / C / D / E
ID	OFF / 01 ~ 99
Transmission Distance	30m
Type-C Power Charging	5V 2A
Full Power Flashes	Approx. 500
Recycle Time	Approx. 0.01 ~ 1.7s
Battery Level Indication	Battery level indicator shows on the upper right corner of the display.
Power Saving	**30min / 60min / 90min:** It will automatically power off if it is unattended over 30min / 60min / 90minutes Turn off the auto power off mode, power saving function is invalid.
2.4G Wireless Frequency Range	2413.0MHz - 2464.5MHz
Dimension	81 x 76.5 x 64.3mm
Net Weight	≈144g

Application of Dental Photography

Having flashes on a bracket allows you to get very well-lit posterior shots because you can move the light very close to the lens and closer to your subject so the light reaches all the way to the back of the mouth.

Camera Settings:

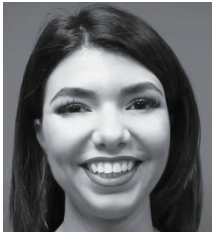
- Manual mode
- Standard Picture Style
- Aperture f25
- Shutter speed 1/200th sec
- ISO - 100 or Auto

Note:

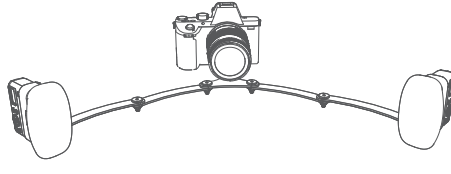
The following examples demonstrate basic and commonly used positions for the flash unit during dental photography. However, please note that these examples are not intended as specific guidelines, and we do not require you to strictly follow our suggested shooting methods. Dental photographers are encouraged to freely adjust the position of the flash unit according to their specific photography needs.

Extra-oral Views

Extra-oral full smile



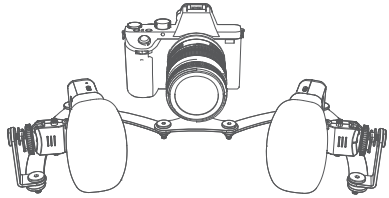
Positioning of flashes:
move the flash further apart



Intra-oral Views

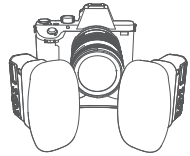
Buccal right / left

Positioning of flashes:
move the flash closer to the lens



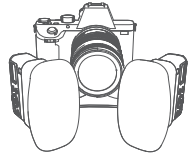
Maxillary / upper Mandibular / lower occlusal

Positioning of flashes:
move the flash closest to the lens



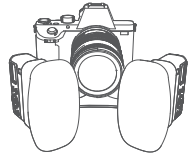
UR / UL lingual

Positioning of flashes:
move the flash closest to the lens



LR / LL lingual

Positioning of flashes:
move the flash closest to the lens



Maintenance

- Shut down the device immediately should abnormal operation be detected.
- Avoid sudden impacts and the product should be dedusted regularly.
- It is normal for the light beads to be warm when in use. Avoid continuous flashes if unnecessary.
- Maintenance of the light must be performed by our authorized maintenance department which can provide original accessories.
- This product, except consumables, is supported with a one-year warranty. Lithium battery is supported with six months warranty.
- Unauthorized service will void the warranty.
- If the product had failures or was wetted, do not use it until it is repaired by professionals.
- Changes made to the specifications or designs may not be reflected in this manual.

Applicable Products

The document applies to the products listed on the Product Maintenance Information (see below for further information). Other products or accessories (e.g. promotional items, giveaways and additional accessories attached, etc.) are not included in this warranty scope.

Inapplicable Cases

The guarantee and service offered by this document are not applicable in the following cases:

1. The product or accessory has expired its warranty period.
2. Breakage or damage caused by inappropriate usage, maintenance or preservation, such as improper packing, improper usage, improper plugging in/out external equipment, falling off or squeezing by external force, contacting or exposing to the improper temperature, solvent, acid, base, flooding and damp environments, etc.
3. Breakage or damage caused by non-authorized institution or staff in the process of installation, maintenance, alternation, addition and detachment.
4. The original identifying information of product or accessory is modified, alternated, or removed.
5. No valid warranty card.
6. Breakage or damage caused by using illegally authorized, nonstandard or non-public released software.
7. Breakage or damage caused by force majeure or accident.
8. Breakage or damage that could not be attributed to the product itself.

Once met these situations above, you should seek solutions from the related responsible parties and Flashpoint assumes no responsibility. The damage caused by parts, accessories and software that beyond the warranty period or scope is not included in our maintenance scope. The normal discoloration, abrasion and consumption are not the breakage within the maintenance scope.

One Year Flashpoint Limited Warranty

Flashpoint warrants to the original purchaser that your Flashpoint product shall be free from defects in material and workmanship for the period of one (1) years from the date of purchase (or delivery as may be required in certain jurisdictions), or thirty (30) days after replacement, whichever comes later.

Flash point's entire liability and your exclusive remedy for any breach of warranty shall be, at Flash point's option, to repair or replace the hardware, provided that the hardware is returned to the point of purchase or such other place as Flashpoint may direct with a copy of the sales receipt or dated itemized receipt. Flashpoint may, at its option, replace your product, offer to provide a functionally equivalent product, or repair any product with new, refurbished or used parts as long as such parts are in compliance with the product's technical specifications. Any replacement hardware product will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer, or for any additional period of time that may be applicable in your jurisdiction. If the product has been discontinued, the warranty provider reserves the right to replace it with a model of equivalent quality and function.

This warranty does not cover problems or damage resulting from accident, abuse, misapplication, or any unauthorized repair, modification or disassembly, improper operation or maintenance, normal wear and tear, or usage not in accordance with product instructions or connection to improper voltage supply, use of consumables, such as replacement batteries, not supplied by Flashpoint, except where such restriction is prohibited by applicable law.

Except where prohibited by applicable law, this warranty is nontransferable and is limited to the original purchaser and the country in which the product was purchased. This warranty gives you specific legal rights, and you may also have other rights, including a longer warranty duration that may vary under local laws.

To start a warranty claim contact the Flashpoint Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Flashpoint, along with the RMA number and proof of purchase.

Question about our product line? Need Product Support?

We are proud of our products and celebrate our customers. We are with you, from product selection to everyday use. Be secure with your purchase and reach us as you need.

212-647-9300

support@flashpointlighting.com

Flashpoint,
42 West 18th Street,
New York, NY 10011

You can always contact us at BRANDS@ADORAMA.COM for personal technical support. Our website contains a wide range of Support and FAQ pages with valuable technical assistance.

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