impact™

VSD Series Monolight
INSTRUCTIONS

Thank you for purchasing an Impact VSD Series Monolight. This device is proof that highly-functional monolights can be affordable. The VSD Series Monolight provides enough stored power to light a portrait or small still-life setup and offers features found on monolights costing twice as much. We expect that you will get many years of trouble-free service and enjoyment from your Impact VSD Monolight. Please read these operating instructions and safety precautions carefully before operating this equipment.

Features

- Four-stop range – full power to 1/16 power in .10 f/stop increments
- Large LCD screen
- Built-in optical slave
- "Auto-Dump" feature automatically fires the flash when you step down power
- Modeling lamp can be set proportionally or independently of flash power
- Cushioned "touch-pad" function control buttons
- Tactile, "grippy" feel that resists slipping and shock damage
- Accepts Bowen-style reflectors and head accessories (7-inch grid reflector included)
- User-replaceable flashtube
- Commonly available 1/8˝ mini-plug sync input

Power Requirements

This light is designed for use with 110/120V AC power only and is supplied with a three-prong, grounded plug. Do not attempt to defeat this safety feature. If necessary, use only grounded extension cords rated for 6 amps or greater.

Warning

There are no user-serviceable parts inside the unit. Only qualified service engineers should access the inside of the case (Danger – high-voltage parts inside). Avoid damage to both the flashtube and modeling lamp. If the modeling lamp or flashtube become cracked or damaged in any way, they should be replaced immediately. Do not use your flash unit in an environment where moisture or flammable vapor is likely to come in contact with the unit. Turn the power off and unplug the power cord when the unit is not in use. Always remove the modeling lamp and replace the protective cap when transporting the unit.

All images in this manual are for illustrative purposes only. Your unit may differ slightly from the one pictured.

Preparing Your Monolight for Use

Contents of carton

Carefully remove the monolight from the box. You should have the following:

- 110-120V monolight with protective cap and flashtube installed
- 100W modeling lamp *(60W with VSD-160 model)*
- 7″ grid reflector
- sync cable
- power cable
- user manual

Mount on a stand

(1) Select a stand or support system of suitable weight and dimensions to ensure stable operation of the unit.

Install Reflector & Modeling Lamp

(2) Depress the latch on top of the monolight, pressing it toward the back of the unit. Rotate the protective cap counter-clockwise. Pull the cap off and set aside.
(3) Install the modeling lamp by screwing it into the threaded socket.

CAUTION: Do not touch the lamp with your bare hands. Oil residue from your fingers can cause the surface of the lamp to heat unevenly and explode. Use white cotton gloves or a clean cloth. (4) Install the reflector where the protective cap was before. Align the three pegs on the reflector with the three slots, press the reflector in and rotate clockwise until it locks in place.

Note: Take care when fitting or removing reflectors or softboxes to not damage the flashtube assembly. The flashtube is very delicate. Always switch off the unit and disconnect the power before fitting or changing lamps, flashtubes, reflectors, or softboxes.


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SYNC
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USE ONLY WITH A 250V FUSE
120V/60Hz
S

Operating Instructions

Legend

A – Digital Power Readout
B – Modeling Light Control – Up
C – Modeling Light Control – Down
D – Flash Power Control – Up
E – Flash Power Control – Down
F – Modeling Lamp Control
G – Modeling Lamp LED – Free
H – Modeling Lamp LED – Proportional
I – Recycle Tone Control
J – Recycle Tone LED
K – Photo Slave Control
L – Photo Slave LED
M – Test Fire Button
N – Full Recycle Status LED
O – Mini-plug Sync Jack
P – On/Off Switch
Q – Power Socket
R – Fuse Holder
S – Umbrella Holder
T – Photocell

Power Supply

Plug the power cord into the back of the flash unit. Before plugging the power cord into the wall socket, make certain that the power switch is set to the OFF (circle) position. The VSD is designed to automatically flash, if necessary, when turned off. The resistive dump will continue to reduce any remaining energy while the unit is off. This is a safety feature and cannot be disabled.

Note: The VSD flash unit is designed to work on 110-120V 50/60Hz AC current.

Power Switch

Turn the power switch to the ON (line) position. The flash will sound a beep and the LCD will show the current flash power setting. We recommend charging the flash unit for one hour prior to its initial use and after an extended period of inactivity (more than two weeks). If the unit is left unused for a few months, or the unit has been used predominantly at low power settings, we recommend that the power be increased to the maximum and the unit left switched on (with the modeling lamp OFF) for at least 30 minutes, to help preserve the life of the capacitors.

Flash Settings

Flash Output

The flash power output is variable over a four f/stop range (five f/stops) from full power to 1/16 power in 1/10 f/stop increments. The power is displayed on the LCD screen. Minimum setting is 2.0 and the maximum is 6.0. Pressing the up and down touch-pad buttons under the LCD changes the value by 0.1 f-stop (a total of 40 values). If the current value is 5.6 and you want to reduce the power by one stop, set the power to 4.6.

Setting	Power
6.0	Full Power
5.0	1/2 Power
4.0	1/4 Power
3.0	1/8 Power
2.0	1/16 Power

"Auto-Dump" Feature

While raising the flash power requires no special consideration, lowering the power does. Excess power that has built up in the system's capacitors must be released. The VSD Monolight employs an "auto-dump" or "auto-bleed" feature to accomplish this, in order to avoid the necessity of manually popping the flash after every adjustment. When lowering the power, expect the flash to automatically fire to release the excess power.

Caution: To avoid eye damage, do not look into the strobe while firing. Do not fire the flash in close proximity to the face. Turn the unit off when changing attachments.

Modeling Lamp Settings

There are three modes for the modeling light: Proportional, Full, and Off. You can choose a mode by pressing the modeling lamp control button, which is to the left of the **FULL** and **PROP** LEDs. Each time you press, the mode will change.

Proportional Mode

During normal use, most photographers will use a monolight in "proportional" mode. The modeling light intensity will increase or decrease in response to changes in the flash power. In this mode, the **PROP** LED will be lit and adjustments to the flash power buttons will also adjust the power to the modeling lamp proportionally.

Full Mode

The VSD allows you to set the flash and modeling light to different intensities. You may wish to reduce the intensity of the modeling lamp but keep the flash power where it is. Depress the up or down modeling lamp buttons to the desired level on the digital readout (2.0 to 6.0). When you are finished adjusting the modeling light, the digital readout will blink four times before returning to display flash power. The **FULL** status LED will be lit during this mode.

Off

To turn off the modeling light, depress the modeling light button until the lamp is extinguished. The **PROP** and **FULL** status LEDs will be off.

Modeling light and flash power are controlled simultaneously.

Modeling light and flash power are controlled independently.

Modeling light is off.

Triggering the Flash

TEST Button

There are three ways to trigger your flash, but the simplest is to press the TEST button. This is useful when you need to discharge the power built up in the flash unit, for example just before replacing the flashtube (more on that later).

Sync Connection

The sync jack on the VSD Monolight may be used for direct connection to a camera set to 'X' synchronization. Insert the "PC" end of the supplied sync cord into the connection on your camera and the other mini-plug end into the sync jack on the back panel of the VSD. A radio slave receiver may also be plugged into this jack.

Sync connection: step 1

Photocell

The VSD Monolight features a photocell which allows the flash unit to be triggered by another flash. This is called "optical slave mode." The photocell is located underneath the red transparent cover on top of the unit. The photocell is very sensitive but some experimentation with positioning may be necessary to ensure a reliable trigger, particularly if the cell is not in the direct line of sight of the triggering flash unit. Avoid directly illuminating the photocell from a continuous light source (such as ceiling lights or windows) since this can prevent correct operation. Very high ceilings can also affect the operation of the photocell.

Sync connection: step 2

To operate your VSD as a "slave" to another flash, disconnect any sync cords and press the "eye" button until the bottom status LED is on. The two LEDs above this light are reserved for future features. The bottom LED must be lit to be in slave mode.

Slave Mode

Audible Beep Settings

To Turn the Audible Beep Off

A beep will sound when the flash has recycled and is ready to flash again. You can turn this audible beep off by pressing the AUDIO button with the musical eighth notes. The small LED next to this button will not be lit when the audible beep has been turned off.

If you have turned the audible beep off, you can still confirm that the flash has recycled and is ready to fire by looking at the small LED next to the TEST button. When the flash has recycled, this LED will be lit.

Audible beep is off.

Use of Umbrellas and Softboxes

Umbrellas

An umbrella with a shaft diameter of up to 8mm can be secured in the umbrella holder. Firmly press the umbrella shaft through the holder. The locking knob is located beneath the holder. Do not overtighten to avoid damaging the shaft of the umbrella.

The monolight can be pointed up or down by loosening the release lever. Adjust to your preferred angle and then tighten the lever back down.

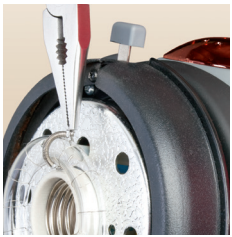
Softboxes

The VSD Monolight accepts softboxes with a Bowen mount-design speed ring. Install the softbox the same way you install reflectors. Match up the three tabs at the back of the softbox speed ring with the three slots on the flash head. Press in and turn clockwise until the softbox locks in place.

Changing the Flashtube

Discharge the Flash Unit

The charge in the flash unit must be discharged before removing the flashtube. Make sure the flash unit is on. Push the TEST button on the rear panel of the flash. The unit will flash, discharging the power. Immediately turn off the power switch on the rear panel. Unplug the power cord from the power source. It is advisable to wait at least 30 minutes before touching or removing the flashtube.



Remove Old Flashtube

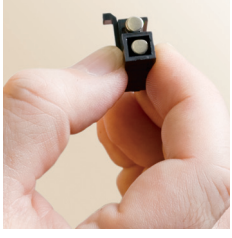
First, remove the reflector. Then, using white cotton gloves or a clean cloth, remove the modeling lamp. You will need to remove the retention spring wrapped around the top of the flashtube. With needle-nose pliers, unhook the retention spring loop. Using white cotton gloves or a clean cloth, grip the base of the flashtube on each side. Carefully pull the flashtube from the flash unit.

Install New Flashtube

Make sure the power switch is off and the power cord is disconnected from the source. Locate the two flashtube pin sockets below the modeling lamp socket. Using white cotton gloves or a clean cloth, push the pins of the flashtube into the sockets using firm, even pressure at the base of the flashtube. With needle-nose pliers, fasten the retention spring over the hook above the flashtube. Re-insert the modeling lamp using white cotton gloves or a clean cloth. Re-install the reflector.

Changing the Fuse

A 6A fuse is mounted in the rear panel and protects the circuitry of the flash unit. Turn off the unit and disconnect the power supply before changing the fuse. Never replace with a fuse of a different type or rating. A spare 6A fuse is fitted within the fuse holder. Use a small screwdriver to release the fuse cover. Remove the old fuse, place the new fuse in the slot, then replace the fuse holder.



Best Practices

As with any flash unit, the useful life of the flashtube and the unit as a whole depends on the way it is used. Avoiding excessive heat is the key to long life.

- The fast recycling feature of the VSD Series allows a rapid sequence of high-power flashes. However, this feature should be used sparingly, since continuous rapid flashing can cause overheating and subsequent damage to the flashtube and possibly the internal electronics.
- Rapid sequences of flashes should always be followed by a reasonable cooling period, 10 to 20 minutes without flashing, or at a substantially reduced rate.
- Dimming or turning the modeling lamp off will reduce heat generation.
- Avoid rapid high-power flashing when using restrictive reflectors such as snoots or grid reflectors, particularly if the unit is pointing downward.
- Do not flash over 12 shots per minute for more than 10 minutes.
- Do not flash over 8 shots per minute for more than 30 minutes.
- Take special care when shooting in a high-temperature environment.

Safety and Maintenance Notes

Safety Notes

- Do not use your flash in an environment where moisture may come in contact with the unit.
- A fire hazard exists if flammable materials are placed in close proximity to the flash tube or the modeling lamp. Do not use your flash in an environment where flammable vapors are present.
- Do not restrict the ventilation holes when the flash is in use.
- Always switch off the power and disconnect the power cord before changing the fuse, modeling lamp, or flashtube.
- Avoid placing cables where they can be tripped over. Replace damaged cords immediately.
- Never use a flash unit with damaged covers, moldings, flashtube, or modeling lamp. If the unit is dropped or damaged, have it checked by a professional repair service before using.
- Due to the high-voltage circuitry inside this device, do not attempt to disassemble or repair the unit yourself.
- Keep out of the reach of children.

Maintenance Notes

- Turn the power off and unplug the power cord when the flash is not in use.
- We recommend charging the flash unit for one to two hours prior to its initial use and after an extended period of inactivity (more than two weeks).
- If the unit is left unused for a few months, or the unit has been used predominantly at low power settings, we recommend that the power be increased to the maximum and the unit left switched on (with the modeling lamp OFF) occasionally for at least 30 minutes to help preserve the life of the capacitors.
- Avoid rapid, high-power flashing, especially when using restrictive reflectors such as snoots or grids. Excessive heat will shorten the lifespan of your flash unit, modeling lamp, and flashtube.

Specifications

Model	VSD-160	VSD-300
Flash Output	160 Watt/sec	300 Watt/sec
Flash Variations	1/16 – Full	
Guide Number[1]	GN40	GN55
Power Supply	110V AC / 60 Hz	
Recycle Time	1-2 seconds @ min. power	
Modeling Lamp	60 Watts	100 Watts
Color Temperature	5600 ±200°K	
Flash Triggering	sync cord, slave cell, test button	
Trigger Voltage	4.3V DC	
Sync Range	≥10m	
Dimensions (mm)	11.6″ x 8.4″ x 6.1″ (with reflector) 11.6″ x 8.4″ x 5.2″ (with protective cap)	
Weight	3.5 lb	

[1]Guide Number is calculated at 2m, ISO 100, 1/60, using the included reflector, and is a starting point. You should perform your own evaluations to determine the results you prefer.

One-Year Limited Warranty

This IMPACT product is warranted to the original purchaser to be free from defects in materials and workmanship under normal consumer use for a period of one (1) year from the original purchase date or thirty (30) days after replacement, whichever occurs later. The warranty provider's responsibility with respect to this limited warranty shall be limited solely to repair or replacement, at the provider's discretion, of any product that fails during normal use of this product in its intended manner and in its intended environment. Inoperability of the product or part(s) shall be determined by the warranty provider. 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 damage or defect caused by misuse, neglect, accident, alteration, abuse, improper installation or maintenance. EXCEPT AS PROVIDED HEREIN, THE WARRANTY PROVIDER MAKES NEITHER ANY EXPRESS WARRANTIES NOR ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This warranty provides you with specific legal rights, and you may also have additional rights that vary from state to state.

To obtain warranty coverage, contact the Impact Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Impact along with the RMA number and proof of purchase. Shipment of the defective product is at the purchaser's own risk and expense.

For more information or to arrange service, visit www.impactstudiolighting.com or call Customer Service at 212-594-2353.

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