

GVI VARI-STROBE

OPERATING INSTRUCTIONS

Congratulations! You have just purchased the finest automatic strobe in the world. Special Patent Pending electronic circuits and ideas make this all possible. It is part of the innovations of General Varionics, Inc. such as the Master Slave.

UNPACKING

- 1) Remove all pieces from box. It should include the:
 - A) Vari-Strobe head
 - B) Sensor (plugged into the head)
 - C) 6 inch post handle
 - D) Reflector and flashtube. Different flashtubes are used for the Lumedyne and Norman units. DO NOT intermix. They are marked with an L for Lumedyne or N for Norman tube. ONLY use a General Varionics exact replacement tube. (Both reflector and flashtube are not supplied with R models)
 - E) Literature of other manufacturers of accessories and devices that complement the GVI Vari-Strobe. Please contact your dealer or the company directly about their purchase.
- 2) Examine carefully for breakage, etc. If so, report to your dealer.

BEFORE PLUGGING THIS PRODUCT INTO A POWER PACK, READ AND UNDERSTAND ALL THE FOLLOWING INSTRUCTIONS FULLY.

The Vari-Strobe-L is strictly to be used for all Lumedyne power packs except Model L-10, 300 and certain older model 210. If in question, consult us FIRST. It will work with all other models WITHOUT any modification to the pack. It will handle the FULL 400 W/S.

The Vari-Strobe-N is strictly for the Norman 200B power pack without any modification. It cannot be used with ANY OTHER Norman power unit.

A Vari-Strobe-L cannot be made to work on a Norman 200B and a Vari-Strobe-N cannot be made to work on a Lumedyne system. To do so will both void the warranty and cause a shock hazard.

All instructions apply to both models unless otherwise stated.

The Vari-Strobe is not to be used with any other power pack other than specified. To do so will void the warranty. The Vari-Strobe comes complete, ready to go.

Turning It On

- 1) Turn off the power pack. NEVER plug or unplug the head from the pack with the power switch on. This can cause a shock hazard.
 - 2) Plug the Vari-Strobe into the power pack. On the Lumedyne models, the ON light will light and then slowly go out (will take about 45 seconds).
 - 3) Turn on your power pack. This should cause the ON light to light and when the pack is ready, the Ready light on the head to light. Depressing the Open Flash button should cause the system to flash.
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UNDERSTANDING ALL THE CONTROLS

f Stop/ASA Control

Rotate the ASA selector around the f Stop switch to the ASA of your film. To do this, rotate the bottom black disc until your ASA is shown in the ASA window.

Rotate the center black knob to move the f stop pointer to the f Stop you wish to use. For example; when set to ASA 100 and the black knob FULLY COUNTERCLOCKWISE, you will be on f4. Moving it clockwise will give you f5.6, f8, f11, f16, and f22. No matter what ASA is first selected, the first six positions will only be the available AUTOMATIC settings.

The next position is MANUAL (M). In this setting the Vari-Strobe will act just like your manual head being replaced. As you change the power settings on the pack, so will the light output change.

The final position is WINK(WK). This is a NON automatic mode which allows you to vary the light output from almost zero to 50 W/S by turning the shaft just below the Ready light. This is used for fill or just a touch of light.

FDC

The green FLASH DISTANCE CHECK or confidence light tells you that you are within automatic range of the system. Any time the strobe is flashed, it will light for a few seconds to indicate this.

OV EX

The red OVER EXPOSURE light lights up when there is too much ambient light present in the Compensate Mode, to be explained later. Important- Both the FDC and OV EX lights only work in the six automatic modes. They may light up in either Manual or Wink. This means nothing and should be ignored.

RDY

Ready light lights up telling that the Vari-Strobe AND power pack are ready for the next picture.

Please note: When used with Lumedyne packs it DOES NOT change flicker rate with change in power pack settings.

ON

The ON light simply says that battery power is being supplied to the Vari-Strobe. When the power pack is turned ON or OFF, the Vari-Strobe will automatically turn itself ON or OFF. For this reason no ON or OFF switch is present on the Vari-Strobe. On Lumedyne models, when turned off, the ON light will slowly go out (about 45 seconds). On Norman models it will be immediate.

OPEN FLASH BUTTON

Self explanatory-located just above and to the left of the ON light.

SYNC SOCKET

Household Female socket. Plug the proper sync cord into it, connecting it to your camera. Plug right angle plugs in so that the cord hangs down. It also accepts other trigger devices.

COMPENSATION MODE SWITCH

Located on the bottom right. In the up NON-COMPENSATE (NC) position, the Vari-Strobe does not take into account ambient light present in determining proper exposure. In the COMPENSATE (either C60 or C125) position, the Vari-Strobe measures the ambient light present and adds just enough strobe light to give proper exposure. More on this later.

MOUNTING

The bottom side has a 1/4-20 tripod threaded socket. The handle supplied or any other suitable method can be used to mount it to your particular camera bracket.

REMOVAL OF REFLECTOR

Loosen, DO NOT remove the knurled knob on the Vari-Strobe top side. This will unlock the reflector allowing its removal. BE SURE when replacing, it is fully and firmly seated before SNUGGING up the knurled knob. DO NOT OVER TIGHTEN.

REMOVAL OF FLASHTUBE

The flashtube easily comes out for replacement simply by gently pulling straight out. DO NOT TWIST. A slight side to side rocking motion may help. To replace, notice that two of the pins are thicker. These pins go on either side of a raised bump in between 2 pins on the tube socket. The tube can go in ONLY one way. DO NOT FORCE IT. If it doesn't go in easily, it is not positioned correctly. Be sure it is fully seated.

REMOVAL OF THE SENSOR

Gently pull straight out. DO NOT TWIST. The plug is keyed and will go in only one way. DO NOT FORCE. Remove and insert sensor with system OFF. An optional sensor extension cord is available.

LET'S TAKE SOME PICTURES

- 1) Mount the Vari-Strobe as required.
- 2) Connect up the sync cord.
- 3) Connect to the OFF power pack.
- 4) Rotate the ASA dial to ASA of your film.
- 5) Rotate the black f Stop selector to the f Stop of your choice.
- 6) Set the f Stop selector on your camera to the f Stop selected in step 5. They must always match.
- 7) Set the power pack to FULL Power. The system acts like a thyristor system and will ONLY take what energy is needed for a proper exposure.
- 8) Turn on power pack. On Lumedyne units, fast recycle is only needed if the faster recycle is needed as with its standard head. The ON light and RDY light should come on when the pack is ready.
- 9) Set the Compensation switch to NC.
- 10) Flash the system either by open flash or by camera.
- 11) If you are within proper range and exposure, the FDC light will come on for a few seconds AFTER flashing, indicating a properly exposed picture.
- 12) The system is now set up to take pictures.

PROPER USE OF COMPENSATION MODE SWITCH (Patent Pending)

Most low light level (darkness) pictures should be taken in the NC mode.

In high ambient light levels, the following should be considered:

The NC mode does not taken into account ambient light in determining proper exposure. The C60 and C125 mode DOES take into account the ambient light present in determining proper exposure. In situations where there is substantial ambient light present and the Vari-Strobe is to ignore it, use NC mode. Otherwise, use C mode. In the C mode, since ambient light is now a component of the overall exposure, the shutter speed of your camera comes into play. C60 is for a shutter speed of 1/60 second. C125 is for a shutter speed of 1/125 second. Select the position that your camera uses. If it uses neither, select the closest. The film will provide enough latitude for any minor differences.

In the C mode, the Vari-Strobe will add just enough light to bring up the illumination of the subject from the ambient light level f Stop, to the f Stop selected. IF THE AMBIENT LIGHT LEVEL f STOP BEFORE TAKING THE PICTURE IS GREATER THAN THE SELECTED f STOP, THE OV EX LIGHT WILL LIGHT. This acts as a light meter and tells you that the picture will be overexposed. While this light is lit, the Vari-Strobe WILL NOT produce any substantial light output. NOW, to correct, increase the selected f Stop until the OV EX goes OUT. The system will now properly compensate. BE SURE TO RE-ADJUST YOUR CAMERA'S f STOP TO THE NEW VALUE BEFORE TAKING A PICTURE.

For example, if the proper ambient light exposure is f5.6 at 1/60 sec., and the f stop selector is set to f5.6 and the comp. SW to C60, OV EX light will glow. Switching the Vari-Strobe f stop selector to f8 will cause the light to go

out. The Vari-Strobe will now add just enough strobe light to bring the overall exposure to f8. Any higher f stop can be used within the range of the system to give proper flash fill.

EXAMPLES OF COMPENSATION MODE USAGE

In a situation with very little or no ambient light, use NC mode.

In a situation where the ambient light is coming from over the photographer's shoulder illuminating the subject, and it is desired to fill in shadows, use the C mode.

In a situation where the ambient light is coming from over the SUBJECT'S shoulder, use the NC mode

The Vari-Strobe will now illuminate the subject properly ignoring the ambient light which is not adding to the proper frontal exposure of the subject. If the C mode is used, the Vari-Strobe would "see" lots of light and think the subject is properly exposed even though the subject's face is in a shadow.

MINIMUM AND MAXIMUM RANGE

The first two counterclockwise f Stop positions have a minimum automatic range of 5 ft. The remaining 4 automatic positions, 3 ft. There is NO indication that the exposure is not correct, if you are TOO close in range. The tendency will be to overexpose if the subject is too close.

Maximum range on MANUAL is calculated using the formula below.

Maximum range in AUTOMATIC will be less and depends on the scene color.

Maximum range is calculated by the formula (MANUAL POSITION ONLY)

$$\frac{\text{Guide number}}{\text{f stop}} = \text{feet}$$

Guide numbers are (ASA 100 film):

$$50 \text{ W/S} = 80$$

$$100 \text{ W/S} = 110$$

$$200 \text{ W/S} = 160$$

$$400 \text{ W/S} = 220$$

For example, at 200 W/S and f8 divide 8 into 160 gives a maximum range of 20 feet.

REFLECTORS

This Vari-strobe is equipped with our new dual position reflector.

In its normal position (reflector out), its light pattern of 60° covers a normal lens. In the wide angle position (reflector in), the light pattern widens and will cover a 24mm lens on a 35mm camera.

To adjust to wide angle, simply loosen the reflector clamp knob, rotate and gently push the reflector in until it slides further into the Vari-Strobe. Re-tighten the reflector clamp knob.

To re-adjust to normal, loosen the reflector clamp knob, pull the reflector gently out a little, rotate 90° and then push in seating it in the normal position. Tighten the reflector clamp knob.

CAUTION

The Vari-Strobe dual position reflector and the Lumedyne two position reflectors ARE NOT THE SAME AND ARE NOT INTERCHANGEABLE. DO NOT INTERCHANGE THESE REFLECTORS. To do so will give improper light coverage.

Norman reflectors CAN NOT be used in this head as is. Notches, as in the original reflector must be cut into the Norman. It then is not a dual position reflector. Norman reflectors must be seated all the way back for proper light coverage and must be used in that position only.

PROBLEMS, PRECAUTIONS, AND NOTES

- 1) Treat your Vari-Strobe kindly. A little care goes a long way.
 - 2) If the FDC does not light you are too far from the subject for the set pack power/f Stop combination. Use a larger aperture (smaller f number). Make sure you are on Full power.
 - 3) it is normal for the OV EX light to quickly flicker as a picture is taken in any mode.
 - 4) When working close in, set the power pack to a minimum power. This will reduce possible reciprocity failure due to short light pulses.
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VARI-STROBE MODELS LM AND LCM INSTRUCTIONS

Models LM and LCM incorporate a built-in battery-operated modeling lamp. It is controlled by the toggle switch below the FDC lamp. In the up position, the modeling light will be lit. Upon flashing your head, the modeling light will go out while your pack is recycling.

Replacement flashtube is part #211 and replacement modeling lamp is part #212.

Using the modeling lamp feature on your Vari-Strobe places an additional load on your pack's battery. This will reduce the number of flashes available per charge in relation to the total time the lamp is used. As an example, with a new Lumedyne regular battery (025), leaving the modeling lamp on continuously for a half hour will typically cut the number of flashes from your battery in half.

When your recycle time becomes excessive, discontinue use of the modeling lamp. If the battery is allowed to become excessively drained, erratic strobe operation may occur. Your strobe may begin to self-fire or modeling lamp operation may not properly follow the ready light.

IF ANY OF THESE BEHAVIORS OCCUR, DISCONTINUE USE OF THE MODELING LAMP IMMEDIATELY AND PLACE YOUR PACK ON CHARGE.