

GENERAL PRECAUTIONS

- ⚠ Care must be taken as burns can occur from touching hot parts.
- ⚠ Do not operate flash if it has been dropped or damaged until it has been examined by a Media Loan assistant.
- ⚠ Let flash cool before storing.
- ⚠ Do not get the flash wet.
- ⚠ **Do not use with digital cameras.**

POWERING ON

The power switch on the back of the flash should show red for the power to be ON. The flash will emit a high pitch as it is charging, and when it is ready, the Open Flash control lights. If the Open Flash push-button blinks, this is indicating a battery-saving circuit is in operation. If the button does not light within 30 seconds, your batteries should be replaced.

POWER

The flash uses four (4) AA batteries which fit into a holder in the battery compartment, next to the swivel head hinge, or with an optional AC power adapter the flash can be plugged into a standard wall outlet for power (this adapter is available through Media Loan). To insert the batteries, rotate the head to the 0 degree position, and slide the battery compartment door toward the rear of the body. Do not try to completely remove the compartment door. It stays attached to the flash unit. The holder may now be removed. Align the +/- ends as indicated on the holder body. Use alkaline batteries, others may be cheaper, but they will not last as long and may not function properly. Insert so the bare ends of the cells enter first. Press the holder into the cavity, and hold it down against the spring pressure as shut the cover.

MODES OF OPERATION

There are multiple methods for taking pictures with these flashes: Using the automatic exposure control, using partial power or determining the flash manually.

SETTING FOCAL LENGTH ON THE 285

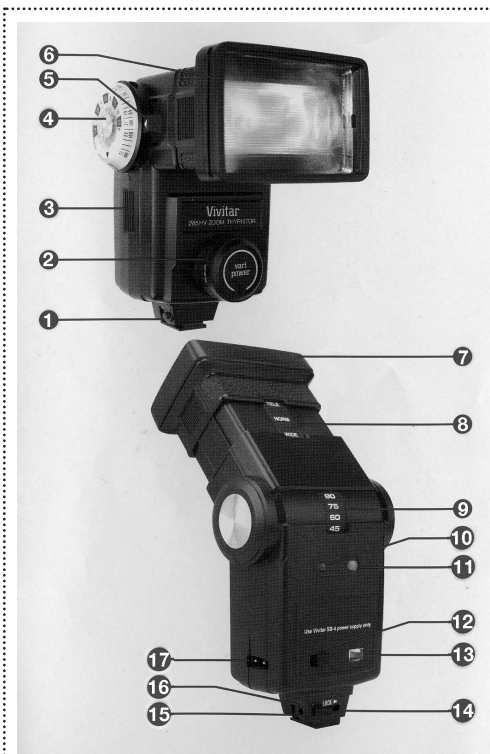
When using different focal lengths with the 285 you can adjust between wide (35), norm (50/55) and tele (105). 28mm wide inserts and diffusers are also available.

CALCULATOR DIAL

On the end of the flash hinge is the calculator (calc.) dial with three concentric inner rings, and one outside. The calculator dial is not connected to the flash and does not control functions. It is a tool to help you find the correct aperture setting for your camera based on distance from your subject, ASA of your film, or flash power setting (285 only). You will want the camera's shutter speed set to recommended settings. Media Loan's cameras should be set to 1/60 of a second, or "x".

USING THE DIAL ON THE 283

Select your film speed (ASA) by turning the dial until the black arrow lines up with your desired setting. Either estimate or measure the distance from the flash to the subject being illuminated. In the colored section go to the distance in either feet (ft) or meters (m). Set the thyristor (sensor unit on the front of the flash) to the color shown and your camera to the number given in f-stops above that color.



- | | |
|--------------------------------|----------------------------------|
| 1. Open Flash Button | 10. Sufficient Light Indicator |
| 2. Thyristor (Sensor Socket) | 11. Calculator Dial Light Button |
| 3. Battery Compartment Cover | 12. On-Off Switch |
| 4. Illuminated Calculator Dial | 13. Ready Light |
| 5. ASA/DIN Indicator Arrow | 14. Mounting Foot Lock Lever |
| 6. Lens/Filter Slot | 15. Mounting Foot |
| 7. Zoom/Bounce Flash Head | 16. Shutter Cord Socket |
| 8. Zoom Setting Indicator | 17. AC Adapter Receptacle |
| 9. Bounce Angle Scale | |

USING THE DIAL ON THE 285

If using an automatic mode:
Select your film speed (ASA) by rotating the outside ring. Make sure the next ring has the black arrow pointing at FULL. Now using the distance from flash to subject find the distance on the inner most ring, again in either feet (ft) or meters (m). Using the color that covers your distance range, set the thyristor, and your camera using the f-stops given just above the distance and color indicators.

THYRISTOR (SENSOR SOCKET) SETTINGS

- M** - Manual, the maximum amount of light will be output in this setting at all times. When in manual mode you can determine F-stop using the calculator dial, but disregard the color bands.
- Yellow** - The widest lens opening for shallowest depth of field. This will allow the greatest depth of flash illumination while in an automatic mode, from 5 to 43 feet.
- Red** - A medium lens opening for greater depth of field, but shorter operating distance, from 4 to 30 feet.
- Blue** - Greater still depth of field, shorter depth of illumination, 2 to 15 feet.
- Purple** - Maximum depth of field, smallest aperture and minimum range of illumination, 2 to 11 feet.

- ① If using partial power settings: Select how much power you wish to use by adjusting the dial on the thyristor (1/16, 1/4, or 1/2). Select your film speed (ASA) with the outermost ring, and what power you wish to use with the next ring in. As with the auto modes, find your distance and set your f-stops accordingly.

AUTO EXPOSURE CONTROL

On the front of the flash is the Auto Thyristor Sensor. This small device detects the amount of light present when the flash is triggered, metering the level of illumination on the subject. The outer collar of the sensor is the mode selector. This rotates to set for different aperture ranges while in the automatic mode, or to set for manual operation. Holding the unit upright and pointed to the right, the small window on the side of the sensor shows the ranges in different colors, flash power or M for manual.

BOUNCE LIGHTING

In situations where reflective surfaces are above your subject, you can "bounce" the light from the flash unit off the ceiling to diffuse the illumination. This will reduce shadows and soften the glare normally associated with flash photos. When using bounce techniques, be sure to calculate the flash to reflective surface to subject distance when setting the f-stop. The reflective surface's light absorption characteristics will affect the amount of illumination that gets to the subject. The color will also be transmitted to the subject, so choose neutral colored surfaces. When bouncing off absorbent surfaces, open the calculated f-stop one additional stop.

GUIDE NUMBERS:

ASA	25	64	80	100	125	160	200	400	800
Guide #	60	96	108	120	135	150	170	240	340

SUFFICIENT LIGHT INDICATOR

The SLI will slow for 2-3 seconds after a flash if the sensor reads the correct light level during the illumination. You can check your exposure before taking a shot by manually triggering the flash unit and watching the SLI. If it doesn't light, you can do a number of things to correct the illumination. Set the Mode Selector to a value which will allow a wider f-stop and reduce the subject and flash distance; bounce the light from a more reflective surface.

- ① The SLI will not work in manual mode.

FLASH GUIDE NUMBERS

Flash guide numbers will help you calculate f-stops for exposures using the manual position or when you bounce your illumination.

Measure the flash-reflector-subject distance, and divide the total into the Flash Guide number listed for the ASA film you are using. Round off the result to the nearest f-stop and open one stop wider.

Example: using ASA 25 film with a camera-reflector subject-distance of 20 feet -- Guide #20 divided by 20 equals 1 (f2.8 approximate) open an additional stop to f2.

You can estimate flash bounce settings in other ways. In average rooms, a general rule is to open two stops from where you would set a direct shot. OR, using the Calculator Dial, estimate the camera-reflector-subject distance and open one more stop from what is indicated on the dial.