

The White Lightning ZAP 1000 Flash Unit Operating Instructions

WARNINGS:

To avoid potentially lethal conditions, this unit must be connected to a three-wire grounded outlet. Do not operate with two-wire extension cords or use an adapter to connect to ungrounded outlets.

This unit contains high voltages and internal components that can store dangerous voltages even when unit is unplugged. The unit contains no user-serviceable parts and should not be disassembled, except by a qualified technician.

The flashtube and modeling lamp can get extremely hot. To change lamps, turn the unit off, then unplug power cord from the outlet. Allow the unit to cool, and use insulating gloves to remove or replace lamps. Do not allow finger oils to contact the lamps as this can cause excess heating and premature lamp failure.

Before attempting to operate the unit, ensure that it is securely mounted to a light stand or other suitable mechanism. Do not allow unattended children around studio flash equipment as potentially dangerous conditions may result. These dangers may include burns and electrical shock hazards as well as the possibility of falling equipment if cords are tripped over.

PRODUCT DESCRIPTION:

The White Lightning ZAP 1000 is an extremely precise, high power electronic photoflash. It is designed for professional studio use, and is well-suited for demanding location usage due to its very compact, yet highly durable construction.

The ZAP 1000 delivers 500 true wattseconds of energy per flash to a critically matched circular flashtube. This yields a fast 1/1800 second flash duration while maintaining an energy conversion efficacy within 1/4 f-stop of the maximum attainable from Xenon light sources of this type.

A quick-release mechanism attaches the entire White Lightning range of reflectors and accessories to the ZAP 1000, while dual holders allow the simultaneous use of umbrellas and counterweight shafts.

A large-envelope modeling lamp is employed (100 watt household lamp or 250 watt photoflood lamp). This lamp is beneficial in the elimination of hotspots and pattern errors common to quartz lamp designs, and in the diffusion and reduction of flashtube UV emissions. The lamp is also advantageous due to the availability and economy of replacement lamps, and the extremely high light output of photoflood compared to halogens.

As with other White Lightning units, the ZAP 1000 offers exceptionally accurate modeling such that what you see under model lighting is a fully reliable preview of the lighting effect you will get on film. This is a result of careful engineering of the flash and model components with respect to polar patterns, secular content and accurate tracking of light ratios from both sources.

THE ZAP 1000 CONTROLS:

Power Switch: This switch turns the unit on.

Power/Fault Indicator: Normally, the Power/Fault Indicator will light red when the unit is turned on. If not, a fault has been detected, and the unit has been internally shut down.

Model Lamp Off/On: Pressing this button turns the modeling lamp on or off (if the unit is on).

Model Lamp Control: This slide fader adjusts the modeling lamp brightness independent of flashpower, from full down to 1/32 power.

Flashpower Control: This slide fader adjusts the flashpower from full (500 wattseconds) down to 1/32 power (15 wattseconds).

Overcharge Indicator: This indicates that the unit is charged to a higher flashpower than what is selected. This occurs when you change flashpower from a higher value to a lower value. To avoid overexposing the next frame, "dump" the excess charge by pressing the test flash button.

Ready Light: This light indicates that the unit is recycled and ready to fire.

Test Flash: Pressing this button fires the flash for testing/metering.

Model = Ready: When this switch is pressed in, the modeling lamp visually indicates the recycle status by going dark when the unit is flashed, and coming back on when the unit is recycled. With this switch out, the modeling lamp remains on during recycle.

Camera Sync Jack: Use the supplied sync cord to attach the unit to your camera sync jack for hardwired sync.

Slave Tripper: The ZAP 1000 contains a sensitive built-in slave tripper that fires the unit whenever it "sees" the light from another flash unit. The slave tripper is automatically disconnected whenever a sync cord is plugged into the sync jack.

SPECIFICATIONS:

Maximum Power: 500 wattseconds – 21,500 lumenseconds

Effective Wattseconds Rating: 1000ws (as compared to some systems)

Modeling Lamp: 100w household supplied (1500 lumens), 250w max

Recycle Time: 1.5 seconds (@120VAC)

Flash Durations (@100% Power): 1/1800 second

Flashtube Life: approx. 100,000 flashes in typical usage

Size: 3.9" x 4.5" x 10.5" (excluding bracket, but including lamps)

Weight: 3.9 pounds with lamps and 7" reflector

Stand Mount: swivel bracket fits stands up to 5/8"

Umbrella Mounting: dual .400" mounts, 2.5" from center

Reflector/Accessory Attachment: Quick-release lever system attaches all White Lightning reflectors and accessories, as well as Balcar style mounts; softbox adapters for all manufactures are available

Reflector Supplied: 7" 80° flat-field reflector

Cords/Lamps Supplied: 100w household modeling lamp, plug-in flashtube, 15' detachable power cord, sync cords

Construction: extruded aircraft grade aluminum construction (gold anodized) with modular interior design for ease of servicing

For any comments, questions, or repair needs, please contact Paul C. Buff Inc. by phone or e-mail.

This product was made in the USA by:

Paul C. Buff, Inc.
2725 Bransford Ave.
Nashville, TN 37204

Toll Free Customer Service Line: 1-800-443-5542

e-mail: info@paulcuff.com