


## Z50 SPECIFICATIONS

### MECHANICAL

SIZE: 5.4" x 2.0" x 2.0" [137mm x 51mm x 51mm]  
WEIGHT: 11oz. [314g]  
MOUNTING: Two: 1/4"-20 Socket

### ELECTRICAL

INPUT: 9-20V DC  
DC PLUG: OD: 5.5mm, ID: 2.1mm   
AC ADAPTER: 100-240V, 50-60Hz  
POWER: 30W max. [2.5A max. @ 12V]

### OUTPUT

BEAM ANGLE: 163°  
DIMMING: 1% - 100%  
PRESETS: Color Mode - Two: User defined  
White Mode - Two: 3200K, 5600K  
LED LIFE: 10,000 Hours



THE ZYLIGHT Z50 IS PROTECTED BY THE FOLLOWING U.S. AND FOREIGN PATENTS WITH OTHER U.S. AND FOREIGN PATENTS PENDING:

US 6,016,038	US 6,608,453	CA 2,302,227
US 6,150,774	US 6,777,891	EP 1 016 062 B1
US 6,211,626	US 6,788,011	AU 757000 B2
US 6,340,868	US 6,806,659	HK 1025416
		DE 698 07 092 C0

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Per FCC 15.105(a), Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



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# Z50

## Intelligent LED Light



## USER GUIDE



## Thank you for choosing Zylight.

We at **Zylight** are happy that you chose the **Z50**. There are many lighting systems out there to choose from, and we think you will agree that what you hold in your hands is the most versatile production light instrument on the planet.

At **Zylight** our mission is to bring truly intelligent lighting to your shoots. With its small size and weight, the amazing HD-led™ module, and ZyLink™ technology, the **Z50** represents the most advanced lighting instrument for film and video production today.

The people who engineered and built your **Z50** are the same folks who will answer any questions you may have about it. We use our lights everyday, and would love to hear any comments or suggestions you may have about how we can improve our products.

The **Z50** may be small, but what it will do for your shoots is big news!

Enjoy,

- The Zylight Team

[info@zylight.com](mailto:info@zylight.com)  
[www.zylight.com](http://www.zylight.com)

### **Adding a Z50 to an Existing Group**

To add a Z50 to an existing group, the process is the same as in **How To ZyLink™**. Simply push in and hold the **POWER** button on the light you wish to add to the group until the output changes and the target group flashes. If there are multiple groups on your shoot, repeat the process until the light in your hands is linked to the correct group.

### **Removing a Z50 from a group**

To remove a Z50 from a group, simply unplug the Z50 then plug it back in. The light will now operate independently.

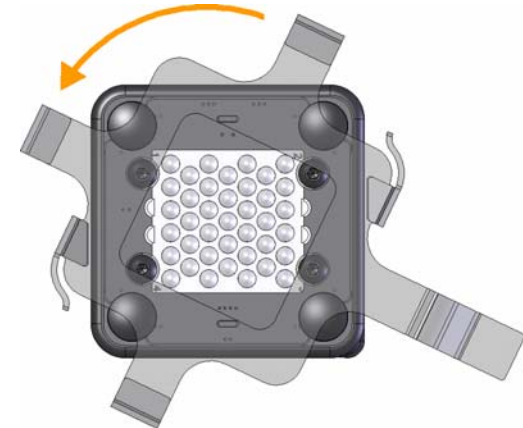
## Using the Accessory Adapter

### **Overview**

The Z50's Accessory Adapter allows you to mount most standard lighting accessories with a 3-inch mounting flange, such as a soft box, snoot, or barndoors. Accessories with a mounting flange up to 0.075" thick can be mounted.

### **Mounting the Accessory Adapter**

1. Remove the lens cap from the Z50.
2. Position the Accessory Adapter over the front of the Z50 as shown below with the two mounting prongs straddling the sides. Make sure the Adapter is resting against the front of the light.
3. Turn the Accessory adapter counter-clockwise until the two spring clips snap over the corners of the light. The Adapter is now mounted.



### **Mounting the Accessory**

To mount the lighting accessory, simply slide the accessory's flange over the locking tab and into the three retention hooks.

### **Removing the Accessory**

To remove the accessory, gently depress the locking tab and slide the accessory's flange out of the three retention hooks.

### Presets

In **COLOR** mode you can save two of your favorite colors as presets. The preset buttons **P1** and **P2** work like those on a car radio: To save a color push and hold the button for ~1 second. The status light will flash to show the color has been saved. To recall a saved color push and release the appropriate preset button.

All aspects of your preset colors (hue, pastel, and intensity) are stored in the preset. Preset colors are retained even after you remove power from the Z50.

In **WHITE** mode the presets buttons are fixed at 3200K and 5600K white output.

## Using ZyLink™ (patent pending)

### Overview

Every Z50 is able to be wirelessly linked to other Z50s, creating a group of lights that will operate in concert as if they were one larger light. The group can contain as many Z50s as you need. Adjusting the controls on one Z50 in the group will change all of the other lights in the group.

You can have Z50s operating independently on the same shoot that you have linked Z50s. Any independent Z50 can be added to the existing group, and any linked Z50 can be removed from the group.

### How to ZyLink™

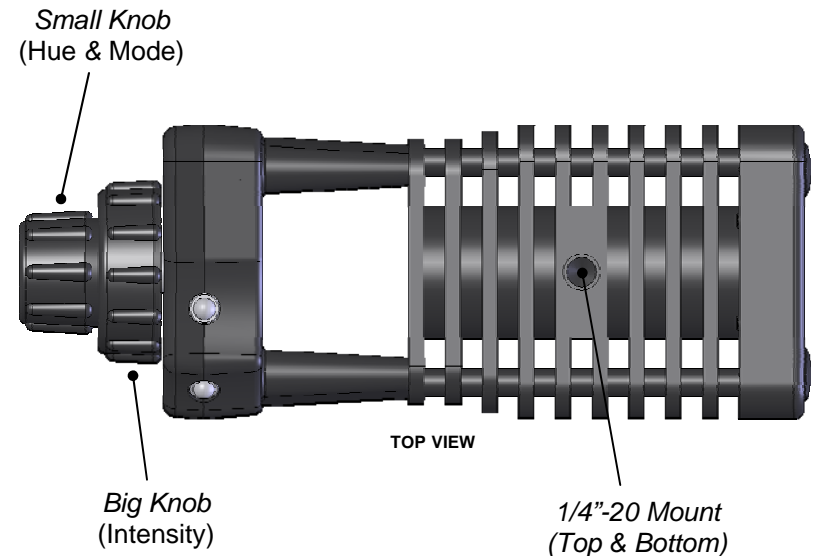
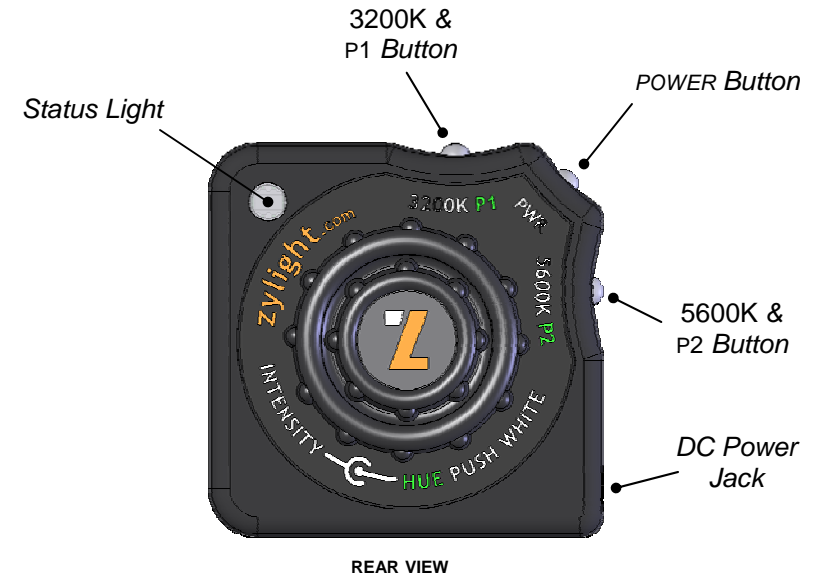
1. Plug in and turn on at least two Z50s.
2. Push in and hold the **POWER** button on one Z50 for ~3 seconds, then release the button. ZyLink™ will then be enabled on that light.
3. Do the same thing to the second light: Push in and hold the **POWER** button for ~3 seconds, then release the button. ZyLink™ will then be enabled on that light as well.

— **Tip:** Removing power from any linked Z50 will also un-link it. Do not remove power from any light or group of lights you wish to remain linked. You will then have to repeat the ZyLink™ process.

### Turning off a Group of Z50s

To turn off a group of Z50s, push and release the **POWER** button on any one of the lights in the group. All lights in the group will turn off. Repeat the process to turn the lights back on again. **DO NOT** unplug or remove power from any Z50 in a group or that particular light will be un-linked.

## Z50 Overview



## Powering the Z50

### Power Cables

The Z50 should be powered only from a battery cable or AC adapter supplied and approved by Zylight for use with the Z50.

### Input Voltage

The Z50's input voltage is **9-20 Volts DC**. Most types of professional batteries used in the video industry fall into this range, including those rated at 12V, 13.2V, and 14.4V nominal output voltage.

**!!! WARNING:** The input voltage to the Z50 must remain below 20 Volts. Application of excessive voltage, or reverse polarity voltage, will void the factory warranty and possibly cause damage to the Z50.

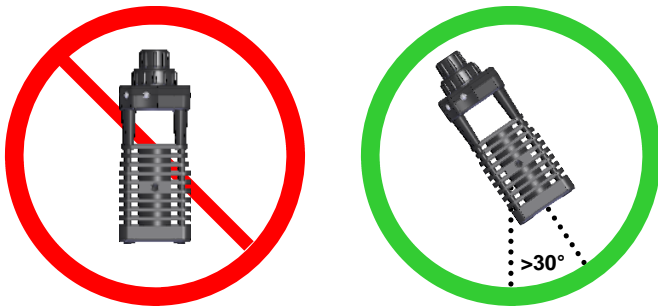
### Power Consumption

The powerful Z50 can draw up to 30 Watts at full power (2.5 Amps @ 12 Volts, or 2.1 Amps @ 14.4 Volts). When powering the Z50 from a battery, be sure your battery is rated to supply up to 30 Watts continuously.

— **Tip:** The Z50 will draw the most power in **WHITE** mode at full brightness. The power draw can be **significantly** reduced by dimming the output.

## Z50 Orientation

Avoid operating the Z50 for extended periods in the lens-down orientation (shown below left). An angle of at least 30-degrees away from the lens-down position is necessary to effectively dissipate heat (shown below right).



## Using the Z50

### Power

The Z50 accepts 9-20 Volts DC from either the supplied battery cable or AC adapter. The status light will glow whenever power is applied.

Before turning on the Z50, be sure to remove the lens cap. Operating the Z50 with the lens cap in place could cause overheating.

### Turning the Z50 On and Off



Push the Z50's **POWER** button to turn the light on and off. If the LEDs do not come on, the light is dimmed down; turn the big knob clockwise to increase the intensity.

### Dimming

Turn the big knob clockwise to increase the Z50's intensity, counter-clockwise to decrease intensity.

### Modes

The Z50 operates in two modes: **WHITE** and **COLOR**. To switch between modes, push in and **hold** the small knob for ~1 second. The status light indicates the mode:

-  White status light = **WHITE** mode
-  Blue status light = **COLOR** mode

### WHITE Mode

In **WHITE** mode the Z50 outputs 3200K or 5600K white light. Push the appropriate preset button to change the output.

**Note:** Turning the small knob in **WHITE** mode does nothing.

### COLOR Mode

In **COLOR** mode the Z50 can output a multitude of colors. Turn the small knob in either direction to change the hue of the output. The hue will gradually cycle continuously through red, green, blue, and every color combination in between.

— **Tip:** When spinning the small knob be careful not to inadvertently turn the big knob with the tips of your fingers. This will cause unwanted changes to the output intensity.

### Adding Pastel (COLOR mode only)

After you have found the color you like, you can add or subtract white (pastel) by pushing in the small knob while turning it. Turn the knob clockwise to add pastel, counter-clockwise to subtract.

— **Tip:** Be careful not to inadvertently push in the small knob while changing hues. This will add unwanted pastel and the output will look white. If your color output looks 'white', first confirm that you are in **COLOR** mode (blue status light), then push in the small knob and turn counter-clockwise to remove the pastel.