

The F8-100 The Flat Fresnel

Zylight F8 LED Fresnel
User Instructions v10.3

F8-D - 5600K

F8-T - 3200K

F8-B - 365nm UV



Z
zylight
USA

Introduction: The multiple award-winning F8 LED Fresnel from Zylight is the next generation of Fresnel lights. The F8 boasts a high CRI* and a quality of light matched only by traditional sunlight and incandescent bulbs, while using a fraction of the energy. The F8 LED Fresnel is part of Zylight's pursuit of high quality, affordable, intelligent fixtures. The unit can be controlled manually, wirelessly or via DMX controller.

Every F8 LED Fresnel has been thoroughly tested and has been shipped in optimal operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. If damage has been found or parts are missing, please contact our customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

Your F8 includes the following items:

- One - Zylight F8 LED light head
- One - F8 4-way barn door
- One - Yoke bar with 5/8" baby pin adapter
- One - Yoke adjustment knob
- One - Slotted thumbscrew
- Two - 1/4" x .69" OD nylon washers (fig 1)
- Three - 1/2" x .75" OD nylon washers (fig 2)
- One - Serrated #10/M5 x .36" OD, .02" Stainless Washer (fig 3)
- One - Worldwide AC Adapter
- One - AC Adapter hanging pouch (for light stand use)
- One - Barn Door Safety cable
- One - F8 User Guide



fig 1

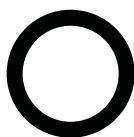


fig 2



fig 3

Optional Accessories:

- | | |
|--|-------------------------------------|
| # 26-02012 - F8 Chimera Kit | # 19-02028 - F8 Egg Crate (50 deg.) |
| # 26-02009 - F8 Gold Mount Battery Kit | # 26-02010 - F8 V-Mount Battery Kit |
| # 26-02019 - DMX Interface Box | # 19-02041 - F8 Handle Kit |
| # 26-02014 - F8 Pole Yoke Mount | # 26-02027 - F8 AC Rear Mount Kit |
| # 19-01012 - F8 Snoot (Black) | # 19-01013 - F8 Snoot (White) |
| # 19-02039 - F8 Single Head Case | # 19-02040 - F8 Dual Head Case |
| # 26-02045 - IP65 AC Supply Kit | |

Customer Support: Zylight provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.zylight.com for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Eastern Standard Time.

Voice: (978) 244-0011
Fax: (978) 244-0011
E-mail: zylightsupport@ushio.com

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself; doing so will void your manufacturer's warranty. In the unlikely event your unit may require service please contact Zylight customer support.

PLEASE recycle the shipping carton whenever possible.

F8 Fresnel

General Instructions

To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

Warranty Registration

The F8 Fresnel carries a two year limited warranty. Please go to www.zylight.com/product-registration and register your product and validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return merchandise authorization (R.A.) number. The R.A. number must be

clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support team through our customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper.

Safety Precautions



Ultraviolet Radiation Warning (F8-B Only):

The F8-B (blacklight) fixture contains a high intensity led ultraviolet emitter which is concentrated with a fresnel lens. When this fixture is used in accordance with the manufacturers operating instructions, no hazards exist to most people standing within the beam of the fixture. However, individuals suffering from a range of sunlight exposure disorders, aphakic and pseudoaphakic, or those individuals receiving photosensitive medication may receive discomfort if exposed to ultraviolet light. For reflective, not direct use. Avoid too frequent or too lengthy exposure. Exposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause chronic sun damage and skin cancer. Do not look directly into the fixture while in operation. Wear protective eyewear. Failure to use protective eyewear may result in severe burns or long-term injury to the eyes.

IP Rating:

The F8 is rated IP54 for weather resistance: Ingress of dust is not entirely prevented, but it will not interfere with satisfactory operation. Splashing water or light rain or snow will also have no harmful effect. While the F8 is protected against light moisture and dust exposure, please protect the instrument when shooting in extreme conditions and note that the instrument is not rated to be submerged in water, or exposed to prolonged periods of moisture. Always use your best judgment and protect the instrument from sustained moisture exposure.

Safety Precautions Cont.

- To reduce the risk of electrical shock or fire, do not submerge this fixture in water.
- Do not spill large amounts of water or other liquids into or on to your fixture.
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the lens under any conditions. There are no user serviceable parts inside.
- Never operate this fixture if the Fresnel lens is removed.
- Never plug this unit in to a dimmer pack.
- Always be sure to mount this fixture in an area that will allow proper ventilation. Allow at least 6" (15cm) between this device and a wall.
- Do not attempt to operate this fixture if it becomes damaged.
- During long periods of non-use, disconnect the fixture's main power.
- Always mount this fixture in safe and stable matter. Always use a safety cable as part of a secure installation. This includes securing the barn doors with a safety cable.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point they exit from the fixture.
- Cleaning: The fixture should be cleaned only as recommended by the manufacturer. See page 10 for cleaning details.
- Heat: The instrument should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the instrument.
 - C. The instrument has been submerged in water
 - D. The instrument does not appear to operate normally or exhibits a marked change in performance.

First Set Up – Assembly Instructions

To optimize the correct performance of your fixture, please follow these simple assembly instructions, and refer to this manual if you ever need to reattach the yoke assembly to your fixture.

In some instances, the yoke assembly will be shipped separated from your fixture. There are several nylon washers that will be used to correctly space the metal parts from one another. This will also allow the F8 to be adjusted and tightened with only one lock point on the left or right side of the yoke. Proper installation of the washers on the pivot points and the lock points are essential to maintain the correct operation of the fixture.

The lock point (yoke knob) can be mounted on the left or right side of the instrument, although it is recommended in most common set ups to keep the lock point on the right side of the fixture (righty tighty). To install the yoke lay the instrument on top of a protected surface. Layout your components to mimic the configuration shown in figure 1. The side with the thumbscrew should have the Serrated # 10/M5 x .36" OD, stainless washer and two of the 1/2" x .75 nylon washers. The side with the knob lock should have one 1/2" x .75 nylon washer and the two 1/4" x .69 nylon washers. First place a 1/2" x .75 nylon washer around each side of the pivot located on each of the yoke ears (fig 2).

Next, set the yoke orientation to "lean forward." You will notice that the base of the yoke has been shaped so when the yoke mount is vertical in a stand or perpendicular to the ground, the yoke will sit at an angle towards the front of the light. This is so the fixture can be pointed further down towards your subject when placed on a stand (fig 3).

Install the center of the yoke and capture each side of the pivot point screws. You may need to gently stretch the yoke to engage the pivot point screws. Slide the small serrated stainless washer onto the slotted thumbscrew (fig 4). Note the slight bend in the washer's profile. The outer edge should touch the thumbscrew (convex side), while the center points towards the pivot point (concave side). Then take the third 1/2" x .75 nylon washer and install on the top of the yoke on the side that will have the thumbscrew. (fig 5). Install the slotted thumbscrew into the pivot point, being sure to properly capturing the nylon washer. Tighten the thumbscrew with a coin or other device only finger tight. (fig 6). Now flip the instrument to the other yoke point. Slide a 1/4" x .69 nylon washer under the yoke at the lock point where the threaded hole will accept the 1/4-20 yoke knob. (fig 7). Place the other 1/4" x .69 nylon washer onto the yoke knob and tighten into the threaded hole, being sure to capture the nylon washer below (fig 8). This completes the proper installation of the yoke assembly to the F8.

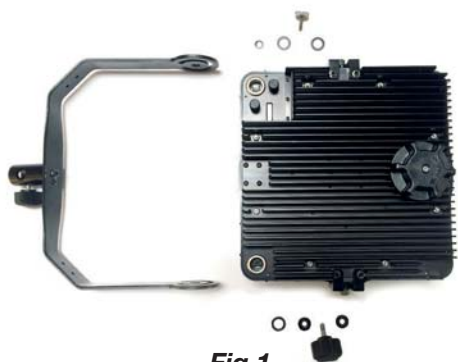


Fig 1



Fig 3



Fig 4



Fig 5



Fig 6



Fig 7

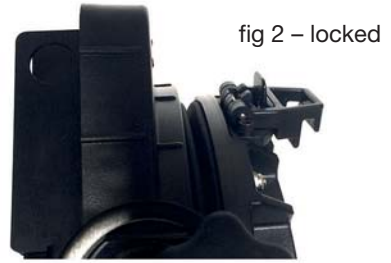


Fig 8



Fig 9

The F8 includes a set of compact 4-way barn doors as part of the kit. The barn doors are installed by way of 4 barn door ears. There are two positions for the barn door ears – open (the packed position) and locked (or the forward position). Please refer to figures 1 and 2 to understand the different positions of the barn door ears.



To lock the barn doors ears in place to securely hold the barn doors or any scrims or gels, push the barn door ears forward (towards the front of the light). Each barn door ear will 'click' into a locked position (fig 3). To release each barn door ear, push center tab of the barn door ear towards the back of the fixture and the barn door ear will release (fig 4). Make sure that each barn door ear is securely locked into position before proceeding to the next one.



To properly install the barn doors, clip and lock the two lower barn door ears (the two closest to the ground). Clip and lock the top barn door ear that is furthest from your reach. This will leave one barn door ear still in its flipped back (packed) position (fig 5). Loop and attach a safety cable to a high secure point within your fixture, grid, or stand (fig 6). Attach the other end to one of the top holes found on the four corners of the face of the center portion of the barn door (fig 7). This tethers the barn door so in case of an accidental release, the barn doors will hang next to the fixture and not fall away from the fixture. Failure to properly tether the barn doors can create a dangerous circumstance for anyone positioned below the fixture.



fig 5



fig 6



fig 7

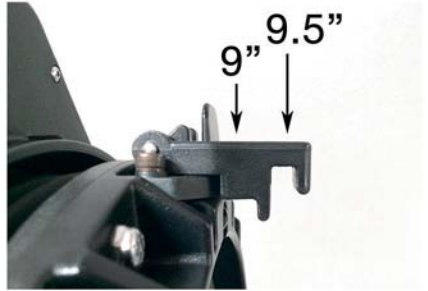


fig 8



fig 9



fig 10

Always tether the barn doors with a safety cable to prevent accidental separation!

There are two holding positions on the barn door ears (fig 8). The smaller clip, closest to the Fresnel lens position has a 9" circumference and is for holding scrims, rigid gels and other accessories. The forward most and slightly wider 9 1/2" circumference position clip, is for securing the barn doors. Slide your barn door, facing forward, into the open ear, being sure to safely guide the edge ring on the circle portion of the barn doors behind each of the 3 locked barn door ears (fig 9). Once the barn doors have been secured behind the 3 locked barn door ear positions, lock the 4th barn door ear securely into place (fig 10).

Power Supply: The Zylight F8 Fresnel contains an automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage; this unit can be plugged into any outlet rated for 100-240v AC. Also, be sure to only use the included power cable supplied with the unit.

Power is supplied through a standard 4-pin XLR connector using either the included Worldwide AC Adapter (P/N 13-17005) or a suitable 14.4V battery. Please observe correct polarity. Batteries that indicate a full charge when idle may quickly drop in capacity when under load. For optimal operation please fully charge batteries before use and be sure they are rated to provide up to 100W of continuous power, with at least 8.3 amps.



On/Off & Dimming

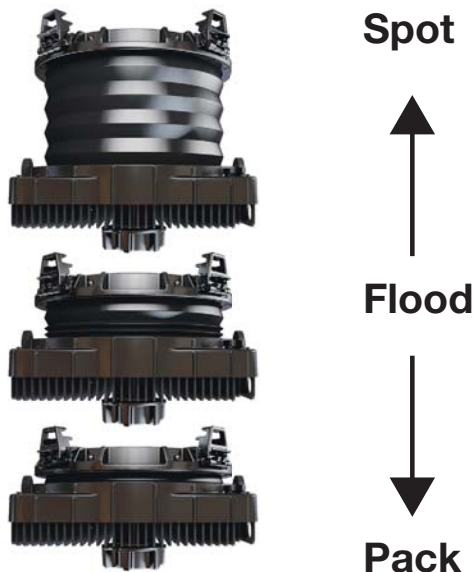
To turn on the F8 press and release the Dimmer knob. Press and release again to turn the light off. Turn the Dimmer knob to the right to increase brightness and to the left to decrease brightness.

LED Display: The LED display will shut off after 5 seconds of inactivity. To make the display reappear press either button.

Focus Adjustment

The focus knob contains a passive braking system that allows the bellows to stay in place when the light is in a downward position. For this system to work properly, there will be a small amount of rotational movement that engages and disengages the brake at the focus knob without moving the bellows. This is normal operation. The center screw that holds the focus knob in place should not be overtightened or the braking system will not work properly.

Turn the focus knob on the back of the unit to change the output between spot and flood. At flood position the lens housing will automatically extend approximately 1" [25mm]. Compress the lens housing below this level by hand for packing & transport only. **CAUTION:** Do not move the lens housing by hand between the flood & spot positions. Do not force the focus knob past its end stops.



The F8 has built-in wireless control for adjustment up to 50' (15m) away using the Zylight Remote or other Zylight instrument (available separately).

ZyLink Operation: To enable ZyLink control, push & quickly release the Mode knob, then turn the knob to select the desired wireless channel (1-10). A wireless symbol will appear in the display when ZyLink is enabled. To disable ZyLink turn the knob until the display shows OFF.

NOTE: DMX control and ZyLink can not be enabled at the same time.

About DMX

DMX is a language allowing all makes and models of different manufactures fixtures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. A DMX controller sends DMX data instructions from the controller to the instrument. DMX is the control data from the DMX controller sent via 5 pin DMX cable to a single fixture, multiple lighting fixtures or instruments utilizing the DMX Data IN and DMX Data OUT jacks located on all DMX enabled instruments.

To ensure proper DMX data transmission, when using several DMX fixtures, try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX channel addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, it will “listen” for any DATA command sent by the DMX controller to channel 1 and respond accordingly no matter where it is located in the DMX chain.



Zylight DMX Interface Box (P/N 26-02019)

Operating the F8 LED Fresnel from a DMX controller gives users the option to create unique lighting looks. The F8 has a single 5-pin DMX Breakout Jack on the rear of the light to link DMX connections between lights when used in a DMX chain. The use of a DMX Interface Box (P/N 26-02019) is necessary to integrate the F8 into DMX chain installations by providing connections for looping through both DMX IN and DMX OUT data.

The F8 DMX Interface Box plugs directly into the 5-pin DMX Breakout jack built in to the rear of the F8. If the F8 will be the last light in your DMX chain, you may plug a 5-pin XLR DMX cable directly into the 5-pin DMX Breakout Jack. The F8 is a self-terminated device and the use of a DMX terminator or Zylight DMX interface box will not be necessary when the F8 is the last light in your DMX chain, or if you are running separate lines to each of your fixtures.

When connecting from fixture to fixture, use of the DMX Interface Box is necessary for correct DMX connections. Not following these steps for DMX connection can result in erratic behavior. The DMX Interface Box mounts to the bottom of either side of the F8 yoke. (see image below)



DMX cables must be acceptable for DMX data transmission (not microphone cable) and should follow the standard pin-out. The maximum DMX data run from any DMX source to the last fixture in a chain is 1000 feet (300m).

DMX-512 pin-out:

- 1 Common (Shield)
- 2 Data –
- 3 Data +
- 4 not connected
- 5 not connected

NOTE: Connecting pin 4 to pin 5 out of the F8 unterminates the instrument.

To enable DMX mode on the F8, press and hold down the “MODE” button for 5 seconds. The instrument will enter DMX mode and display “DMX: ##.” Release the button and turn the “MODE” knob to select a start address number for the fixture. A start address of 1 to 512 can be selected for each light. The Dimmer knob will now be disabled while in DMX mode. All control of the fixture will happen on your DMX console, including turning the instrument on and off as well as all dimming control. Plug in a standard 5-pin XLR cable into the DMX Breakout Jack on the F8 (if it is the last light in your DMX chain) or into the F8 DMX Interface Box to daisy chain multiple fixtures.

PLEASE NOTE: While in DMX mode all other F8 controls are disabled. To restore dimming and on/off control to the light, you must take the unit out of DMX mode. To do this, simply press and hold the “MODE” button for 5 seconds, and the F8 will go back to manual mode, giving the user local control of the instrument.

Notice: Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.

DMX Channel Assignments

Channel	Function	Values
1	Power	OFF = 0 - 49% ON = 50 - 100%
2	Brightness	0 - 100%

Due to fog residue, smoke, and dust, cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth as necessary.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

2-YEAR LIMITED WARRANTY

- A. Zylight LLC warrants to the original end user customer of its products that its products are free from defects in material and workmanship under normal use for (2) years from the date of purchase. Except as provided herein, Zylight LLC makes no express warranties, and any implied warranties, including those of merchantability and fitness for a particular purpose, are limited in duration to the duration of the written limited warranties contained herein. Except as provided herein, Zylight LLC shall have no liability or responsibility to its customer or any other person or entity with respect to any liability, loss or damage caused directly or indirectly by use or performance of the product or arising out of any breach of this warranty, including, but not limited to, any damages resulting from inconvenience, loss of time, data, property, revenue or profit or any indirect, special, incidental or consequential damages, even if Zylight LLC has been advised of the possibility of such damages.
- B. In the event of a product defect during the warranty period, you must contact Zylight LLC at the phone number or address listed in the product's user manual or on the internet at www.zylight.com to obtain a return merchandise authorization (R.M.A.) number. After obtaining an RMA number, send the product fully insured, with proof of purchase, to the address given to you by the Customer Service representative. Zylight LLC will, at its option, repair or replace the defective product.
- C. All replaced parts and products become the property of Zylight LLC. Repaired or replacement parts and products are warranted for the remaining term of the original warranty period. You will be charged for materials and labor or replacement of the product after the expiration of the warranty period.
- D. This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, drops, misuse, improper or abnormal usage, failure to follow instruction, improper installation or maintenance, alteration, lightning or other incidence of excess or reverse voltage or current, exposure to excess dampness or moisture; (b) removal of, or tampering with any attached stickers, decals, knobs, enclosures, protective windows, hardware, or fasteners; (c) use of power supply equipment, power adapters, or cables not supplied by Zylight LLC for specific use with the equipment for which it was specified; (d) any unauthorized disassembly, repair, or modification; (e) cosmetic damage; (f) transportation, shipping, or insurance costs; (g) costs of product removal, installation, set-up, service adjustment, or reinstallation; (h) cracking, abrasion, scratching, coating wear, or breakage of protective windows or lenses; (i) abnormal mechanical or environmental conditions; (j) product that has been sold as second-hand; (k) product that has been transported, shipped, purchased, or resold contrary to US export regulations; (l) product that has been transported, shipped, purchased, or resold outside countries for which it has received electronic product compliance certification.

- E. This is not a service contract, and this warranty does not include maintenance, cleaning, or periodic check-up. During the period specified above, Zylight will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Zylight under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Zylight. All products covered by this warranty were manufactured after April 1, 2014, and bear identifying marks to that effect.
- F. Zylight reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- G. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Zylight in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above.
- H. This warranty is the only written warranty applicable to Zylight Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published. Under no circumstances shall Zylight be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- I. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

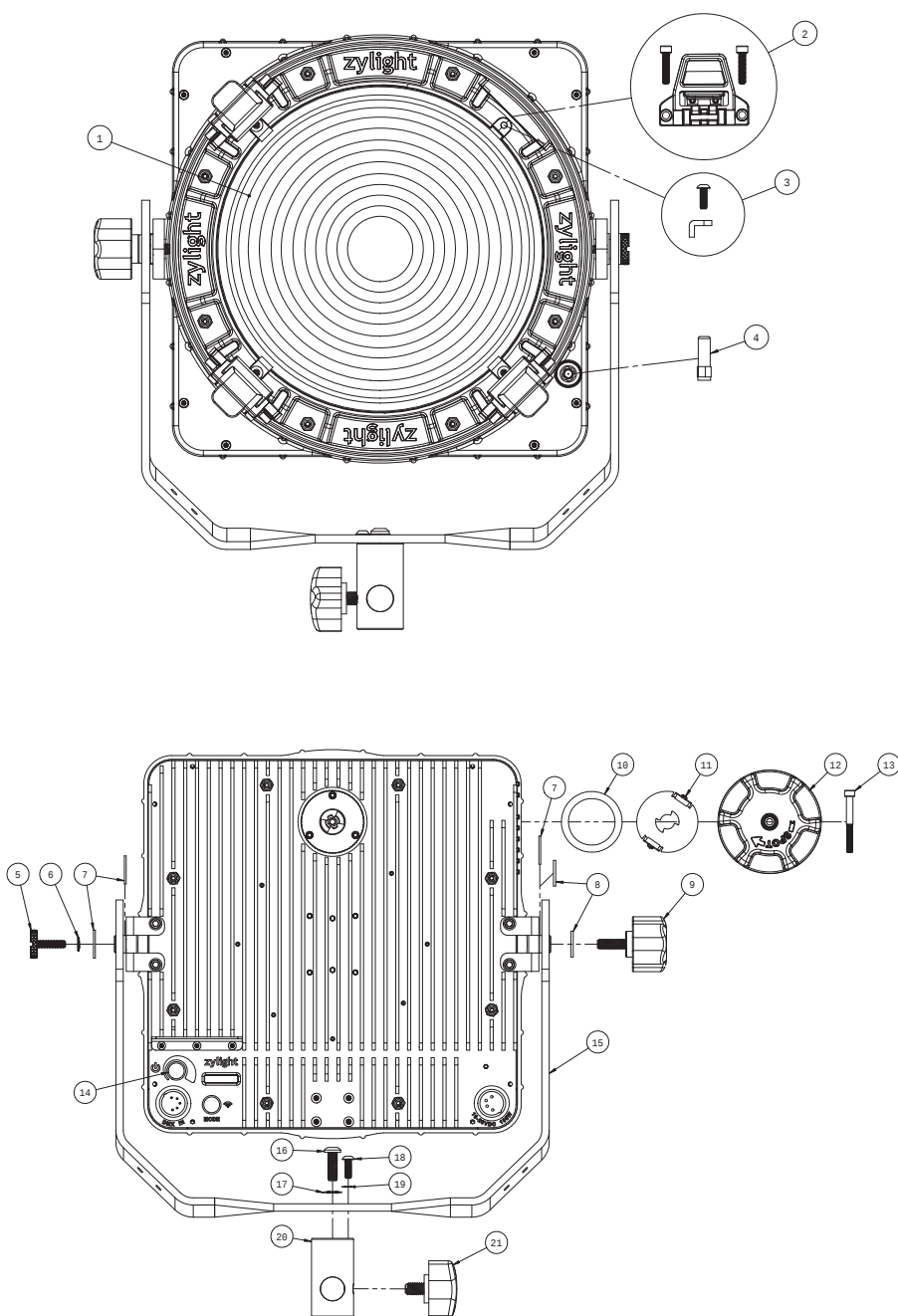
Register your instrument at www.ushio.com/zylight/contact-support/

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.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Replacement Parts Key

1. Fresnel Lens (14-01009)
2. Barn Door Ear Kit (x1) (26-03028)
3. Fresnel Retainer Clip Kit (x4) (26-03026)
4. Antenna (13-14001)
- 5-9. Yoke Washers, Knob and Thumbscrew Kit (26-03022)
- 10-13. Focus Knob and Brake Assembly (26-03023)
14. On/Off or MODE Knob (x1) (20-14015)
15. Yoke Bar (11-03039)
- 16-21. Stand adapter (11-03057)

Specifications

Optical Dimension	8" Round Schott glass Fresnel lens [203mm]
Size	15" x 12.6" x 4.6" [382mm x 319mm x 97mm]
Weight	10.9 lbs [4.3Kg] w/ Yoke
Power Requirement	10-20 VDC
Power Consumption	100W max. [8.0A @ 14VDC]
Power Input Plug AC	XLR 4-Pin
Power Supply Color	120 – 240V AC, 50/60Hz
Temperature	Fixed: F8-T (#26-01019-Blk, #26-01021-White) 3200K, F8-D (#26-01025-Black, #26-01022-White) 5600K, F8-B (#26-01040) 365nm UV
CRI	F8-T (3200K) 94+ CRI, F8 D (5600K) 92+ CRI
Beam Angle	16° - 70°, Variable Spot-Flood
Method of Focus	Rear knob. Continuously variable. No modifying lenses needed
Intensity	0-100%
Cooling	Passive/Silent
Operating Range	-20° – +40° C
Electrical Option	Worldwide AC power supply (included) 14.4VDC (8 AMP) camera battery powering: V-Mount (26-02010) Gold-Mount (26-02009) Manual yoke, 5/8" Female spigot (included)
Mounting	Pole yoke (26-02014) Handle Kit (19-02041)
Wireless Frequency	2.45 GHz
Wireless Channels	10, User Selectable
Assembly Materials	Machined aluminum and high impact plastic
Calibration	Factory
IP Rating	54
DMX	2 Channels
PWM	11.8 KHz
LED Life	50,000 hrs. (30% degradation, F8-T and F8-D) 10,000 hrs. (35% degradation, F8-B)
Radiometric Power (F8-B)	163 W/m ² @ 8" (200mm)
Flicker Free	Up to 5,600 fps tested (full brightness)



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