

6" Theater and Television Fresnels

Cat. No. FR1TH, FR1TV

User Guide

Leviton Fresnels utilize the latest advances in lighting technology to provide the best quality fixture in the market. This operating guide will help you to become more familiar with your spotlight.

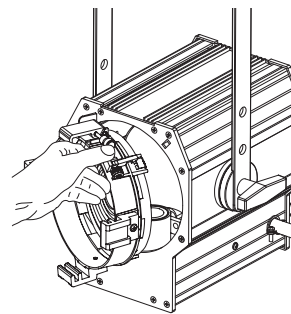
The major components of the fresnel are:

- **The Door Assembly** - Includes the lens door, accessory clips, latch mechanism, safety latch and the fresnel lens.
- **The Lamp Carriage** - Includes the lampholder, wiring, reflector and the lampholder platform and associated parts.
- **The Focus System** - Includes the focus handle, pinion gear and associated hardware.
- **The Housing** - Includes the extruded housing, cool focusing handles, and simple, rugged design.

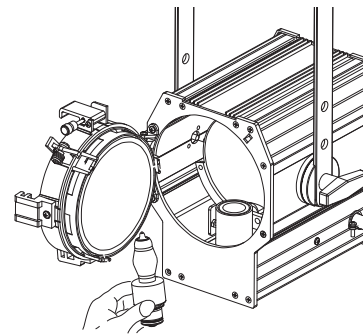
Functions

Lamp Installation

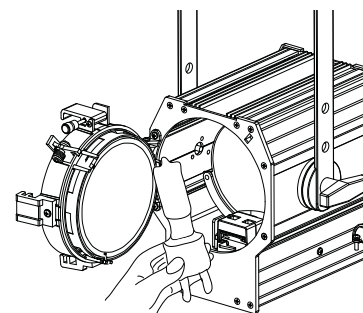
Disconnect the unit from power. Open the lens door by pulling the top of the door pivot latch towards you. This will allow the door to swing open, revealing a lamp carriage assembly with a lampholder and reflector mounted to the platform.



To lamp the theatre fixture, Cat. No. FR1TH, align the flanges of the pre focus lamp with the respective indentations of the pre focus lampholder. Please note the lamp flanges are asymmetrical, and the large lamp flange must align with large socket indentation. After alignment, press lamp down by the ceramic base and twist clockwise 90° until lamp locks in position.



To lamp the television fixture, Cat. No. FR1TV, release the locking lever of the bipost socket so the lever is parallel to the extruded housing. Insert the bipost lamp into the socket until the lamp stops, then lock the lever to the original position. The socket should firmly hold the lamp in position. Be sure that the lever is completely closed.



Close the lens door until latch engages.

NOTE:

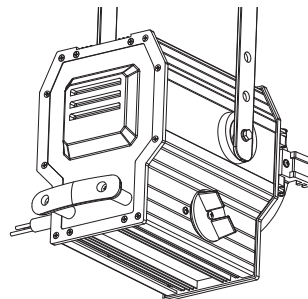
Please do not touch the quartz lamp envelope during installation. If this occurs, clean the lamp with isopropyl (rubbing) alcohol and lint free, clean cloth.

These Leviton fresnels are UL listed to 1000 watts. Any usage of higher wattage lamps is improper usage of the fixture and voids any manufacturing warranties. Please use only the lamps listed in the charts shown here.

Focusing

The Leviton fresnels have an extremely wide focusing range, with spot focus applications to 85' and ten foot projected diameters at only 8' in full flood focus. The focus system is simple to operate and maintain.

The focusing is controlled on the right side of the fixture, simply turn the handle clockwise for flood focus and counter clockwise for spot focus.



Beam Control

The fresnel spotlight is a soft focusing projector that may be framed to reduce flare or direct the light through Leviton barn doors and top hats. The beam may be further softened through wire scrims or filters. Color temperature may be shifted with Leviton dichroic glass filters, or normal color medium.

The Leviton fresnels accept industry standard 10" x 10" accessories, allowing the fixtures to accept automated color changers, liquid crystal strobe effects and many other items.

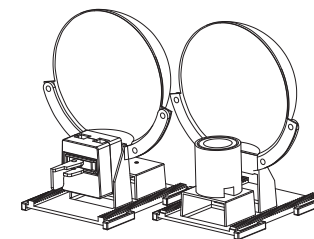
Color

Lee Color Effect Filters are recommended for all filter applications. These filters are available in over 175 colors, color corrections, and diffusion selections. Lee Filters are available in both 21" x 4" sheets and 25' x 4' rolls.

Maintenance

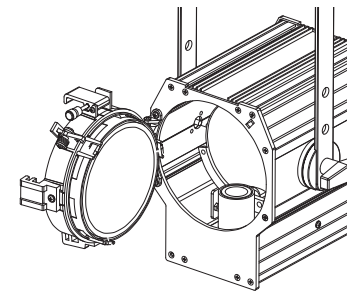
Reflector

The reflector may be accessed by opening the lens door. Remove lamp to access reflector surface for cleaning. The Alzak® finish requires little maintenance, occasionally wipe with isopropyl (rubbing) alcohol, and a lint free cloth. Strong alcohol or acidic cleaners **MUST NOT** be used.



Lens

The lens will become dirty due to environmental conditions. To clean, use a lint-free cloth and rubbing alcohol. Do not use commercial lens cleaners. If significant dirt and grime exist, remove the lens from the fixture and place lens in clean water **WITHOUT SOAP**. Rinse grime away, clean the reflector with alcohol.



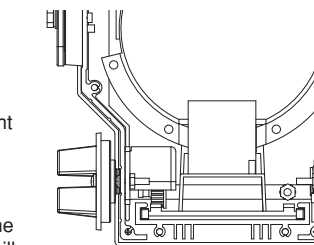
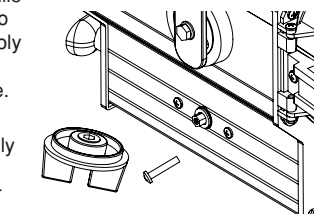
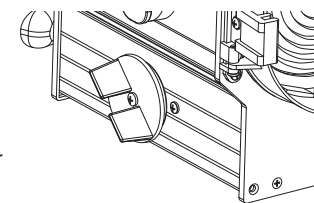
Focus System

The rack and pinion focus system can lose tension over long periods of time by expansion and contraction of the fixture housing and components, or the gear itself could move causing improper fitting against the cast rack. Both items are easily resolved.

The tension is adjusted by turning the center screw within the focus handle while the fixture is aimed 90 degrees down, so the full weight of the lampholder assembly bears on the focus gear. Tighten the screw until the assembly does not move. Do not over tighten.

The focus gear should interface smoothly with the rack on the focus platform. To adjust, aim fixture to a horizontal axis or place unit on a table. Remove the focus handle. Loosen but do not remove the screws on each side of the focus gear. Reach inside the fixture and move the socket assembly manually. Adjust the focus gear so the assembly is halfway between maximum possible engagement into the rack and the point where gears will slip. Tighten the two screws when focus gear reaches that point.

The focus assembly will grind against the rack if engaged too deeply, and gears will slip if adjustment is too high.



Recommended Lamps for 6" Theater Fresnel

Watts	Part No.	ANSI	Color Temp.	Life (Hrs.)
1000	176-171	BTR	1000W, 200 hr., 3200°K, 120V	
750	176-170	BTP	750W, 200 hr., 3200°K, 120V	
750	176-169	BTN	750W, 750 hr., 3050°K, 120V	
500	176-168	BTM	500W, 100 hr., 3200°K, 120V	
1000	T-14 6996C	CP52	1000W, 220/240V	
650	T-16 6996C 6998C	CP51	650W, 220/240V	
500	T-17		500W, 220/240V	

Recommended Lamps for 6" Television Fresnel

Watts	Part No.	ANSI	Color Temp.	Life (Hrs.)
1000	176-097	EGT	1000W, 200 hr., 3200°K, 120V	
750	176-147	EGR	750W, 200 hr., 3200°K, 120V	
750	176-102	EGN	750W, 750 hr., 3050°K, 120V	
1000	476-060/061	CP40	1000W, 200 hr., 3200°K, 220V	
650	T13, CP51 6696C 6698C		650W, 220/240V	
500	T-17		500W, 220/240V	

Accessories

Part No.	Description
000-A1KBD-000	Eight leaf barn door
000-AELCF-000	Diffusion frame
000-A1KSS-000	Set, single, half/single scrim
000-A00CS-000	Combo stud for flat yoke
000-A1KTH-000	6" Top hat

Photometric Performance

6" Theater Fresnel, Cat. No. FR1TH, with lamp No. 176-171, 1000W ANSI Code BTR

For field diameter at any distance, multiply that distance by 0.219 for spot and 1.52 for flood.

Beam Candlepower

Spot	175,000
Flood	11,200

6" Television Fresnel, Cat. No. FR1TV, with lamp No. 176-097, 1000W ANSI Code EGT

For field diameter at any distance, multiply that distance by 0.242 for spot and 1.369 for flood.

Beam Candlepower

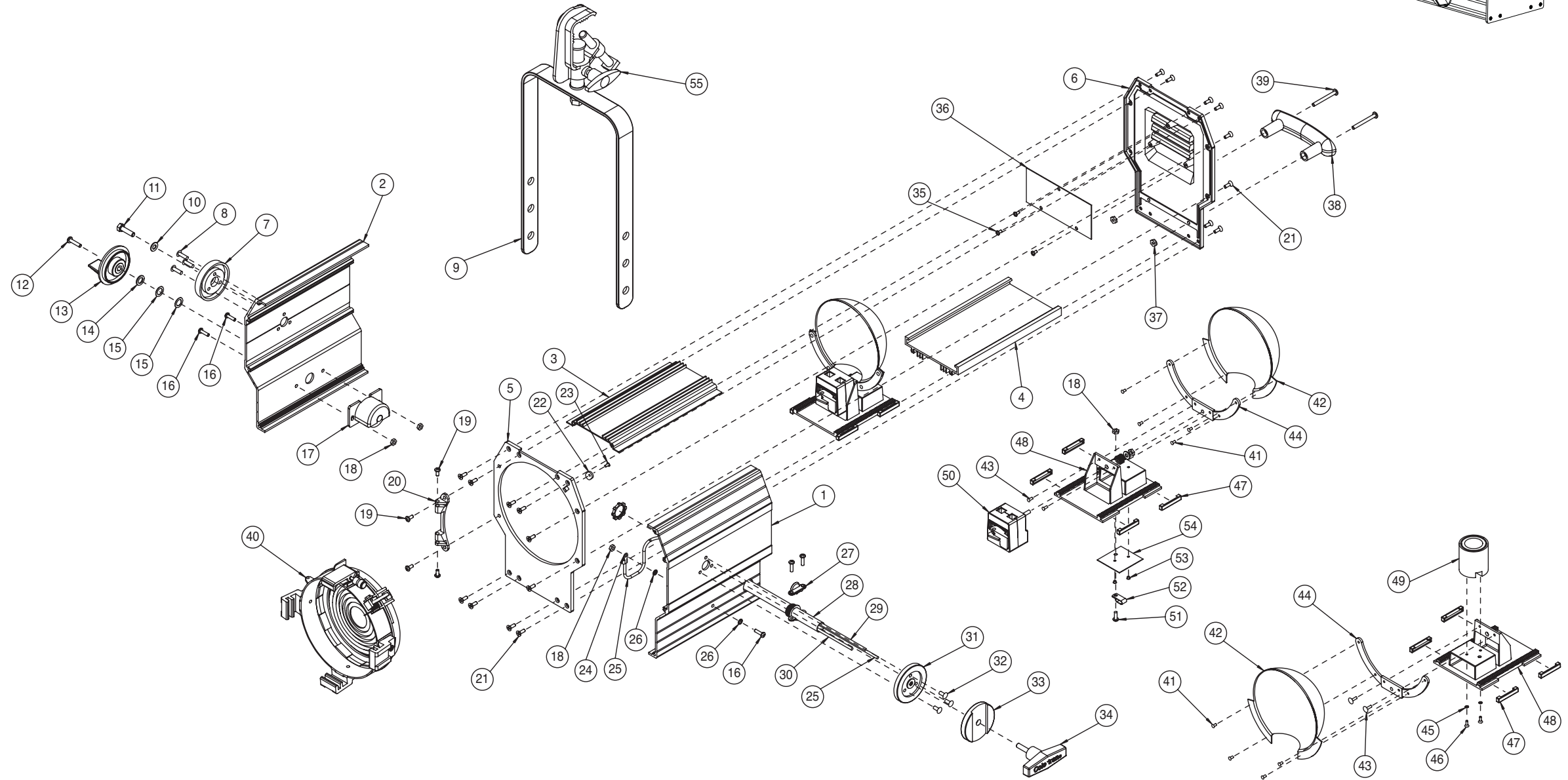
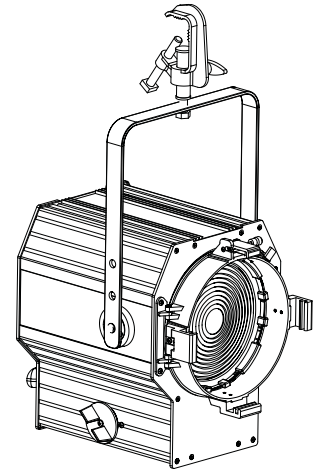
Spot	184,000
Flood	16,200

WEB VERSION

LAMP HOUSING ASSEMBLY			
Ref.	Qty.	Description	Item Number
1	1	Right housing	
2	1	Left housing	
3	1	Top housing	
4	1	Focus track	
5	1	Front cover	
6	1	Rear cover	
7	1	Standoff disk	N00-HD237-690
8	3	Rivet, 3/16" x 11/16"	N00-HD913-400
9	1	Yoke	
10	1	Washer, flat	
11	1	Bolt, hex head, 1/4-20 x 1"	
12	1	Screw, pan head, 10-24 x 1"	
13	1	Focus handle	N00-KN280-950
14	1	Washer, fibre	
15	2	Wave washer	N00-HD223-440
16	3	Screw, pan head, 8-32 x 3/4"	
17	1	Focus gear assembly	N01-SM280-570
18	4	K-lock nut, 8-32	
19	4	Screw, pan head, 8-32 x 1/2"	
20	1	Hinge	N02-SM280-920
21	22	Screw, flat head, 8-32 x 1/2"	
22	1	Net, welded	
23	1	Rivet, pop	
24	1	Ring terminal	
25	1	Green wire	
26	2	Washer, internal tooth, #8	
27	1	Strain relief	
28	1	Sleeving, 32" long	
29	1	Black wire	
30	1	White wire	
31	1	Standoff disk	N00-SM237-550
32	3	Rivet, 3/16" x 7/16"	
33	1	Pressure disk	N00-SM243-380
34	1	T-bolt	N00-HD062-000
35	4	Screw, pan head, 6-32 x 3/8"	N00-HD020-800
36	1	Light shield	
37	2	K-lock nut, 10-24	
38	1	Tilt handle	N00-HD707-000
39	2	Screw, pan head, 10-24 x 2"	
40	1	Door assembly	N00-AS281-490
55	1	C-clamp	000-A00CC-000

PLATFORM ASSEMBLY — THEATER FRESNEL			
Ref.	Qty.	Description	Item Number
41	4	Rivet, 1/8" x 7/32"	
42	1	Reflector	
43	2	Rivet, 1/8" x 5/16"	
44	1	Reflector mount	
45	2	Washer, internal tooth, #4	
46	2	Screw, pan head, 4-40 x 3/8"	
47	4	Carriage assembly guide	N00-SM275-250
48	1	Lampholder platform	N03-SM280-640
49	1	Lampholder, prefocus	N01-SK021-230

PLATFORM ASSEMBLY — TELEVISION FRESNEL			
Ref.	Qty.	Description	Item Number
50	1	Lampholder	N00-AS313-360
51	1	Screw, pan head, 6-32 x 1/2"	
52	1	Cable clamp	
53	2	Rivet, pop	
54	1	Nomex insulator	



FOR CANADA ONLY
 For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320**.

LIMITED 2 YEAR WARRANTY AND EXCLUSIONS
 Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. **For details visit www.leviton.com or call 1-800-824-3005.** This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. **There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose,** but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. **Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation.** The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.