



Warnings/Basic Operations

General Warnings

The Lowel Fren-L 650™ is a professional lighting system. Read these instructions and lamp manufacturers' warnings before operating.

- **Make certain that lamp voltage** matches power voltage (example: both must be 120v or both 220v).
- **Units such as these emit** considerable light and heat. Touch only relatively cool parts such as handle and knobs or use thermal gloves.
- **Avoid placing unit too close** to people or to delicate objects, materials or art, especially in spot setting.
- **Do not use closer than 3 feet** from subject.
- **The lens will absorb** much of the ultraviolet (UV) emission. Ultraviolet light ray emissions can cause damage to the eyes and reddening of the skin. The likelihood of either occurring is increased with length of exposure, focus intensity and proximity. Caution must be used if the fixture is operated for long periods of time or excessively close to people's faces. Bounce illumination also eliminates this problem.

General Warnings continued

- **Do not interfere with the unit's** ventilation by covering it in any way.
- **Avoid aiming the light at,** or placing it close to flammable materials. Do not use near standing water or in damp locations.
- **Not for household use,** use only for photographic lighting (film; video; imaging) purposes.

Lamp Insertion & Removal

Caution: Always unplug the fixture before relamping.

Move the lamp carriage to the back of the Fren-L (spot setting) using the Focus Knob. It is helpful if the fixture is in a horizontal position and the Yoke is not above the fixture. Press the small button on the left front of the top panel and swing the panel up.

INSERTION: Grasp the edges of the lamp's porcelain base with a soft, clean material (to prevent oil from your hands damaging the lamp "glass"). Make sure the two polarized (different sized) lamp pins match the socket holes and that the porcelain base is centered in the socket springs. Press down firmly on the base until the lamp is *fully* seated.

CAUTION: Partially seated lamps can operate but the socket will eventually be damaged and the beam will not be optimum. It can cause arcing and pitting of both the socket and lamp pins. Removal: Wait for lamp to cool or use a suitable, thermal glove. Grasp the edges of the lamp's porcelain base with a soft, clean material and wiggle it slightly while pulling straight out. Never pull on the lamp envelope.

Lamps (Voltages and Wattages)

Lamp voltage must match power voltage.

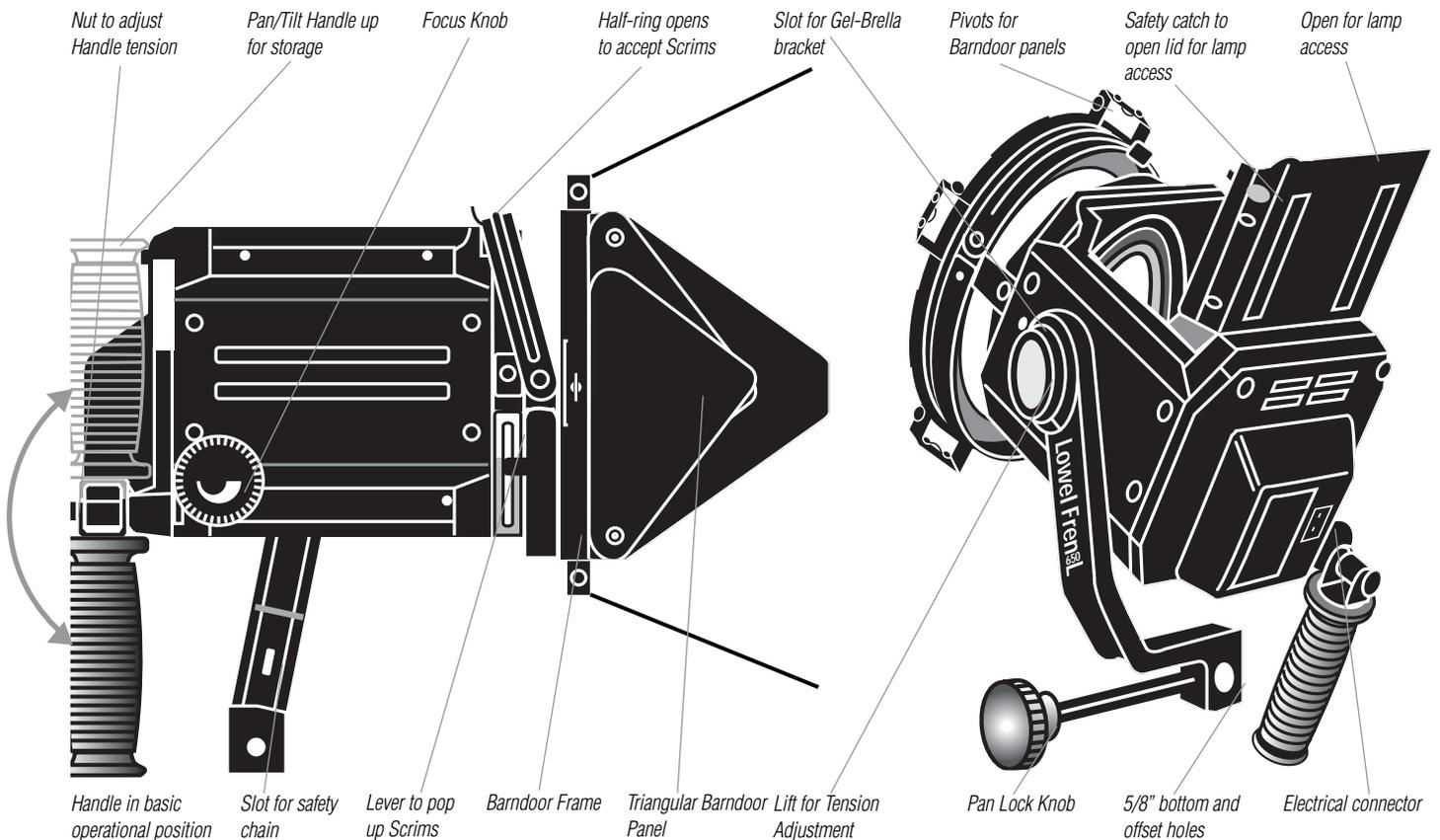
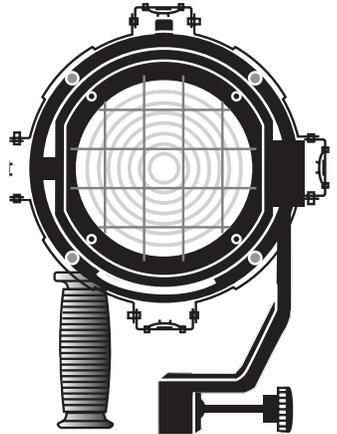
Ansi Code	Lamp Code	Volts	Watts	Avg Life
FKW	CP81	120	300	150 hr
FRG	CP82	120	500	150 hr
FRK	CP89	120	650	150 hr
FSL	CP81	220/30	300	150 hr
FSK	CP81	240/50	300	150 hr
FRH	CP82	220	500	150 hr
FRJ	CP82	240	500	150 hr
FRL	CP89	220	650	150 hr
FRM	CP89	240	650	150 hr

All lamps above are 3200 K

Protective Screen

The Fren-L is supplied with a Protective Screen. In the event of lens breakage it will restrain most of the glass.

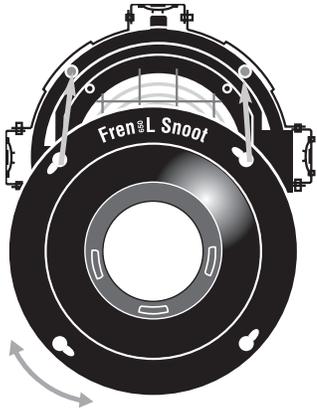
Cause of breakage: It is possible for the lens to break if chipped, or if the lamp is powered when the lens is *exceptionally* cold. **Do not use with cracked lens.**



Light Control Accessories

Snoot & Cut-outs

To attach snoot: Orient the up arrow straight up; slip the keyholes over all 4 Barndoor Frame pins and turn clockwise.

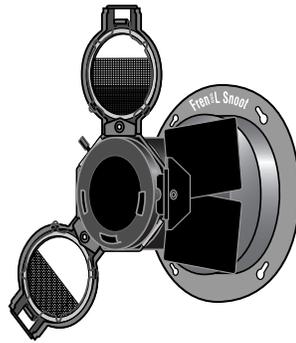
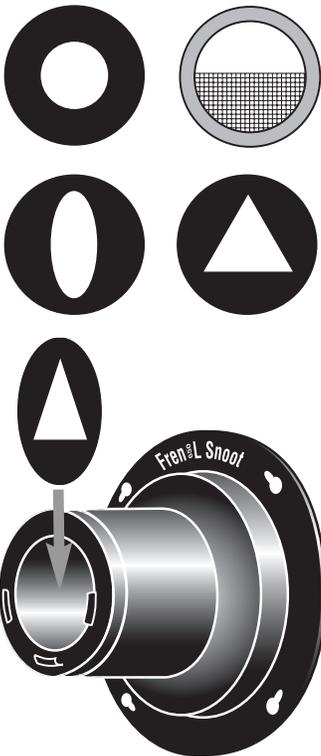


Warning: Do not touch the snoot with bare hands until it has cooled.

Cut-out shapes: Accessory Cut-outs slip into the front of the snoot and cast soft edged, geometric patterns (not sharp optical projections) on the background or subject. The Snoot also accepts a Pro & i Scrim. The Half and Graduated Scrims can be rotated.

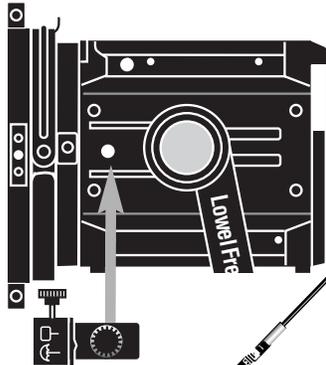
For sharpest shadow edges: Set the focus on full flood and place the Fren-L close to the surface being illuminated.

For softer edged shadows and larger pattern: Move the fixture farther away.



Pro & i-light System Snoot Barndoors, Dichroic Filter, Diffuser, Scrims

The Lowel Pro and i-light Barndoor Frame can be attached to the Snoot groove and rotated. One or more doors can be clipped onto the Frame to modify the beam shape. A Pro and i-light Swing-in Accessory Holder can be mounted on the Frame, and a Diffused Glass, Dichroic Filter or Scrim can be inserted. Gel-Jawz added to the edges of the door will hold Gels.



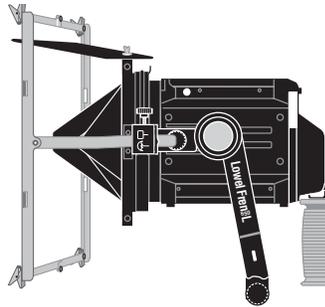
Gel-brella Bracket

The Fren-L Gel-brella Bracket accessory enables you to attach a Gel-frame or an Umbrella and one **Flexi-shaft**. Slide the bracket into the slot in the Yoke pivot ring until it stops, then screw the spring-loaded knob in with fingers, a coin or screwdriver.

Gel, Dichroic, Diffusion Choices

Daylight correction, diffusion and color exaggeration or distortion can be achieved with appropriate gel material attached in various ways: A) mounted on a Lowel Tota Gel Frame; B) attached to the extended Barndoor Panels with Lowel Gel-jawz; or a similar device. Daylight correction, Dichroic and Diffusion Glass Filters from the Lowel DP System can be used with the DP Barndoor Frame (see above) and similar accessories from the Lowel Pro and i-

light System can be used with the Barndoors from those Systems when attached to the Fren-L Snoot.



Gel Frame (to hold Gels)

(From Tota/Omni-Light System)

Open the Gel-Frame and swing out the mounting bar which is then locked into the Gel-Brella Bracket (above). Pivot the 4 corner clips in and use them to attach a single 10x12" gel. The Barndoor Panels can be set to avoid spill. Some deep color gels, especially blue ones, may fade in time (they'll fade faster if the light is often operated in near-spot setting). Also see Gel-Jawz (earlier) for alternate method.

DP Barndoor flaps can also be used, however gel frame can not be used at the same time.

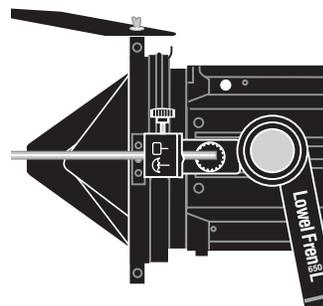


Umbrellas

(From Tota & DP-Light Systems)

The Gel-brella Bracket (above) will support either the Tota-brella or the larger DP-brella; both are available in Standard Silver and Special White. The larger the reflecting surface, the softer the reflected light (with some loss of intensity).

Caution: Use a stand with a sufficiently wide base or a weight; centering the Brella over a stand leg also increases stability. **Tips:** Removing the four Barndoor Panels will result in more reflected light reaching the subject. **Open faced units, such as the Tota or DP-lights, are more efficient in such umbrella/bounce situations.**



Fin-S (with Piv-it)

Lowel's Fin-S and Piv-it can be attached to the front edge of a Barndoor Panel to increase the effectiveness of subject or background shadowing and camera lens flare control.



Other Light Controls:

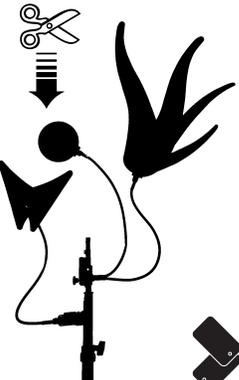
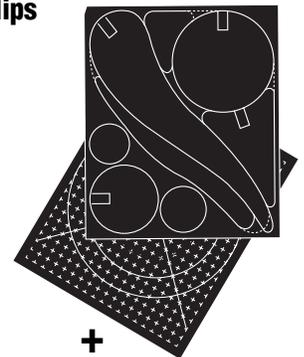


Flexi-shaft



Blip-clip

Blips



Piv-it



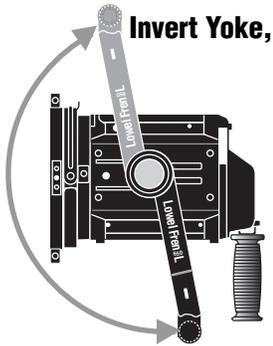
Hollywood-strip



Basic Operations

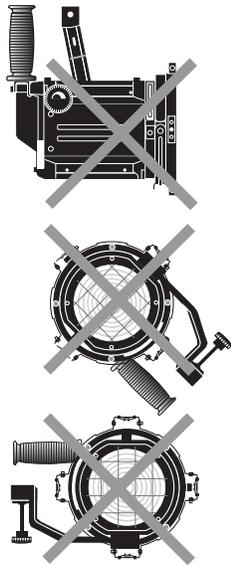
Operational Positions

CAUTION: Fixtures of this type should not be operated on their sides or used upside down. To do so will shorten the life of the lamp and possibly the socket and may damage the fixture.



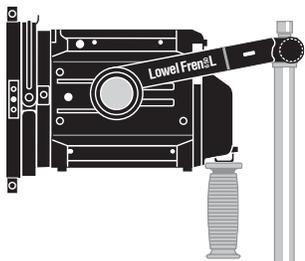
Invert Yoke,

NOT fixture



Hanging: To safely operate from overhead (such as when clamped to a grid, pipe or beam) mount the unit with the YOKE ABOVE THE TOP OF THE FIXTURE. (Also see *Safety Cable* further).

Cantilevered: If the front hole near the bottom of the Yoke is used (to increase the tilt-down angle) be sure the stand or clamp is adequate for the off-center balance (position light over a stand leg).

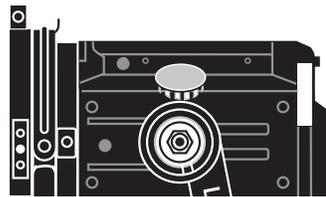


Yoke

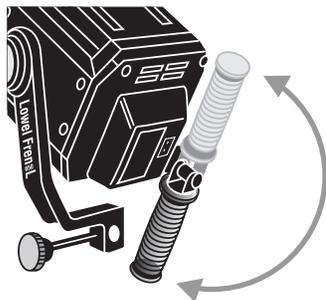
In addition to the yoke positions mentioned above, swing it straight up when you need a carry handle and back (slightly elevated) for storage.



Tension: The constant tension (torque) factory setting will provide fast, reliable tilting in virtually all situations. If you need to

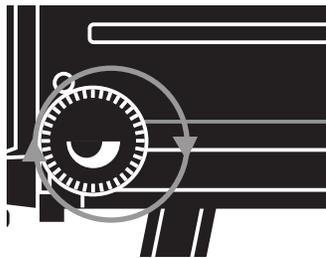


change the tension, unplug the light, remove the circular cap at the top of the yoke and tighten the nut with a socket wrench or offset wrench. Test before re-installing cap.



Pan & Tilt Handle Positions

Simple: up for storage, down most of the time (easy to reach and maximum leverage), straight out if you need to adjust the angle and the focus simultaneously with one hand.



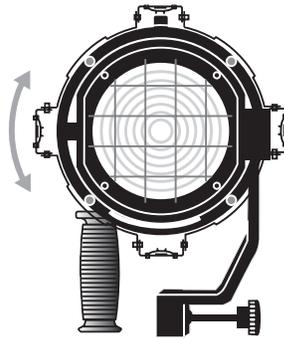
Focusing (Spot to Flood)

The spot end of the focus ring is for long throws, intense limited-area illumination and dramatic accents. The full-flood setting provides the widest beam spread, sharpest shadow quality and reduces brightness faster than with scrims or changing to a lower wattage lamp.

Light Control Accessories

Barndoor Frame

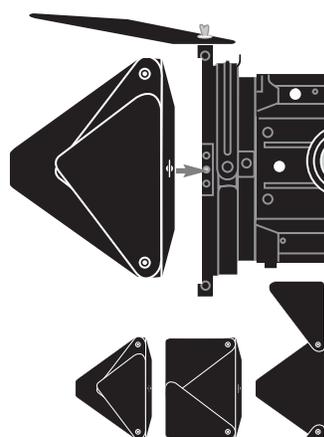
The circular, rotating Frame on the front of the Fren-L (supplied with the unit) accepts several Scrims (see *Scrims*); 1,2,3 or 4 Fren-L barndoor panels; or the DP Barndoor Frame (see right); and the Fren-L Snoot (see further).



Barndoor Panels

There are two types of panels that can be attached and removed with their 1/4 turn fasteners: large-rectangular and small-triangular. Both have expanding wings to provide shaping of the beam plus spill and lens flare control. They can be left on for storage (just pivot in the wings on large panels) but can be removed or switched as needed (example: off when an umbrella is inserted). The outer edges of the large doors have grooves to lock on four Gel-Jawz (see further) for holding gels.

DP Barndoor flaps can also be used, however gel frame can not be used at the same time.

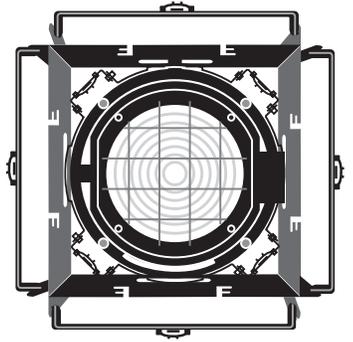


Triangular Barndoor



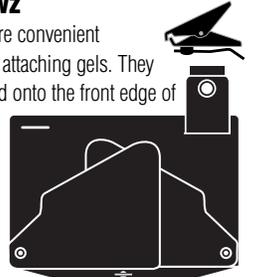
DP Barndoor (Alternative)

The Lowel DP Barndoor and its light control accessories can be mounted on and rotated with the Fren-L Barndoor Frame. DP Barndoor accepts DP Snoot, Scrims and Dichroic filter.



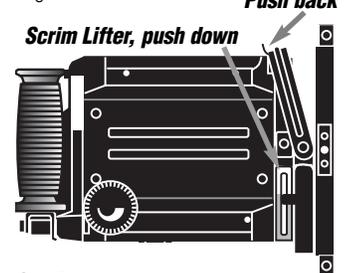
Gel-Jawz

Gel-Jawz are convenient devices for attaching gels. They are snapped onto the front edge of the Large Barndoor Panels using the panel indents to secure them. To avoid shadowing keep the spring clip part on the outside away from the lens. (For an alternative, see *Gel-brella Bracket* and *Gel Frame*)



Scrims, Insertion & Removal

Pivot the top half ring of the Barndoor Frame back, drop in Scrims and close half ring.



Caution: Wait for ring to cool, or use a suitable, thermal glove. Different Scrims are available: Full, Half and Graduated. The Half and Graduated Scrims can be rotated in the holder in order to control the angle of shading.

Scrim Lifter: Scrims and Filters will pop up like toast when you open the half ring and depress the lever on the lower right side of the Barndoor Frame.

Caution: Use a thermal glove or other suitable insulating material or tool to grasp hot scrims and to push back ring.

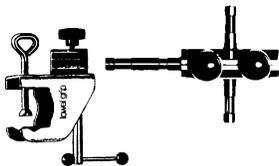
Mounting Accessories &



Stands

Lowel's KS and KSA (air-cushioned, black anodized) Stands are optimum for both studio and location use. The KS Junior Stand is a better choice for location kits (more compact storage size).

Lowel-weights attach to the horizontal struts on the base of our KS and KSA stands to provide added stability and should be used when appropriate. See *Lowel Catalog* for details.



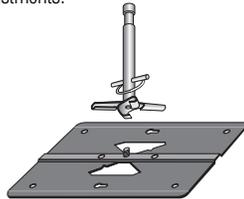
Grip, Interlink

These mounting, connecting and adapting tools are one more way to tame "impossible" setups.



Safety Cable

Lights mounted to pipes and grids with clamps should be secured with a Safety Cable such as the one Lowel offers. One end can be slipped through the long slot near the bottom of the Yoke, passed over the pipe or grid then connected to itself with its latch. Leave slack for adjustments.



Big-foot, Screw-in Stud

Big-foot with Scissor-mount supports the Fren-L on floors or other flat surfaces and on walls if properly secured.

Light Control Accessories

Tota-clamp, Space-clamp

These versatile devices solve many location and studio mounting problems. See *Lowel Catalog* for details.



Repairs & Parts

Warning: Electrical repairs should be performed by a qualified electrician or by Lowel technicians. **Parts:** Replacement parts can be ordered through your Lowel Dealer or directly from Lowel.

Adjustments: Most adjustments of the fixture can be done with Phillips screw-drivers, 7/16 and 5/8" wrenches.

Trademarks:

The following is a partial list of trademarks owned by Lowel-Light Manufacturing, Inc.: Lowel Fren-L 650, Gel-jawz, Fin-S, Grip, Interlink, Piv-it, Big-foot, Lowel Omni System, Lowel Omni-light, Lowel Tota System®, Tota-light®, Lowel DP Light, Lowel Softlight 2, Lightflector, Variflector 2, Frame-up and Lobo, Lowel Light-Array, Lowel ViP System, Lowel Pro-light, Lowel i-light, Lowel V-light.

U.S. Patent Pending