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.

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 (Voltagens and Wattages)**

Lamp voltage must match power voltage.

<table>
<thead>
<tr>
<th>Ans Code</th>
<th>Lamp Code</th>
<th>Volts</th>
<th>Watts</th>
<th>Avg Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>FKW</td>
<td>CP81</td>
<td>120</td>
<td>300</td>
<td>150 hr</td>
</tr>
<tr>
<td>FRG</td>
<td>CP82</td>
<td>120</td>
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<td>150 hr</td>
</tr>
<tr>
<td>FRK</td>
<td>CP89</td>
<td>120</td>
<td>650</td>
<td>150 hr</td>
</tr>
<tr>
<td>FSL</td>
<td>CP81</td>
<td>220/30</td>
<td>300</td>
<td>150 hr</td>
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<tr>
<td>FSK</td>
<td>CP81</td>
<td>240/50</td>
<td>300</td>
<td>150 hr</td>
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<tr>
<td>FRH</td>
<td>CP82</td>
<td>220</td>
<td>500</td>
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<tr>
<td>FRJ</td>
<td>CP82</td>
<td>240</td>
<td>500</td>
<td>150 hr</td>
</tr>
<tr>
<td>FRL</td>
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</tr>
<tr>
<td>FRM</td>
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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.

**Warning/Basic Operations**

- Nut to adjust Handle tension
- Pan/Tilt Handle up for storage
- Focus Knob
- Half-ring opens to accept Scrims
- Slot for Gel-Brella bracket
- Pivots for Barndoor panels
- Safety catch to open lid for lamp access
- Open for lamp access
- 5/8” bottom and offset holes
- Electrical connector
- Handle in basic operational position
- Slot for safety chain
- Lever to pop up Scrims
- Barndoor Frame Panel
- Triangular Barndoor Lift for Tension Adjustment
- Pan Lock Knob

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**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.

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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 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.

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.

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

Blips

Blip-clip
Light Control Accessories

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, Scrim and Dichroic filter.

Operational Positions

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 reinstalling 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.

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).

Focusing (Spot to Flood)
The spot end of the focus range 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 scrim or changing to a lower wattage lamp.

Basic Operations

Scrim Lifter, push down
Push back

Scrim Lifter, push down

Push back

Triangular Barndoor

Rectangular Barndoor

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).

Scrim Lifter, push down

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

Scrim Lifter: Scrim 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.

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 cannot be used at the same time.
Mounting Accessories & Light Control 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.

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 screwdrivers, 7/16 and 5/8” wrenches.

Trademarks:

U.S. Patent Pending

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