Warnings

The Lowel Omni-lights are professional lighting fixtures. Read these instructions and lamp manufacturer’s warnings fully before operating.

■ Not for household use, use only for film, video or imaging purposes.
■ Do not leave lit fixture unattended.
■ Unplug lights when unattended or when relamping.
■ Make certain that lamp voltage matches power source voltage.
■ The unit uses lamps of different voltages or when relamping.
■ Avoid mounting lights directly over people unless secured with a safety screen. Never operate light without a protective screen, metal scrim or safety glass accessory.
■ The Protective Screen must be used to protect people and property in the unlikely event of a defective lamp exploding.
■ Open faced lights should not be positioned extremely close to people. 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. Therefore, lights should be kept away from people or flammable materials.
■ Avoid aiming the light at, or placing close to, people, delicate objects or flammable materials.
■ Do not interfere with ventilation by covering the lights in any way.
■ Never touch hot parts.
■ Do not use near standing water.
■ Lights should be operated with lamp filament horizontal.

Yes  No

Avoid mounting lights directly over people unless secured with a safety screen.
Do not focus Omni to spot when using with umbrella accessory.

Technical Data

- Weight less cable: 1.7 lbs (771 g)
- With 16’ cable: 2.6 lbs
- Max. wattage: 500w at 120v and 220/240v
- Max. amperage: 8.3 at 30v & 12v
- Beam control: continuously variable
- Fits on: studs 5/8” (1.59 mm) and smaller
- Materials: primarily aluminum alloy
- Cable: 12, 120, 220, 240v: 16’ #18/3 wire; 30v: 5’ #18/3 wire
- Switch: in-line
- U.S. Patent: 4187531

Lamp/Beam Data

- Flood: 14” (35 cm)
- Spot: 4” (10 cm)
- Focus Range: 8.3 at 30v & 12v
- Super Spot:
- Lamp Volts Watts °K Avg Foot Candles
- EYL 12 100 3200 50 hr 14 (150) 111 (1200) 8.1 242 (2600)
- DYG 30 250 3400 15 hr 37 (400) 311 (3500) 8.1 753 (8100)
- JCD120V/300WC 120 300 3200 70 hr 32 (345) 278 (3000) 9.1 444 (4800)
- EKB 120 420 3200 75 hr 66 (715) 390 (4200) 6.1 753 (8100)
- FTK 120 500 3200 100 hr 75 (810) 475 (5130) 6:1 920 (9936)
- JCD230V-300WC 230 300 3200 75 hr 27 (290) 222 (2400) 8.1 361 (3900)
- JCD240v-500WC 240 500 3200 50 hr 47 (510) 370 (4000) 8.1 833 (9000)

Omni Lamps Replacement

Always unplug unit before relamping. Lamps must be operated at their rated voltage. Avoid touching “glass” with bare fingers. Insert lamp carefully, to avoid breaking. Due to inconsistencies in lamp (bulb) production, an individual lamp may function for more or less than its average rated life. Some lamp manufacturers are of better quality than others and may provide longer life and better performance. Lamps may be changed with reflectors installed or removed.

A Remove safety screen
B Hold focus knob in spot position
C Rock lamp gently from side to side while lifting from socket.

The electrical contacts of the Omni lamp socket are very “stiff” and require considerable lamp insertion pressure to properly seat the lamp. If the lamp is not fully inserted, it can cause arcing and pitting of both the socket and lamp pins reducing both lamp and socket life. Replace safety screen. Never operate light without Protective Screen, metal scrim or safety glass accessory. We suggest that you do not remove the lamp from the fixture when transporting the light, locally.

Omni Operations

To Store Omni

When fixture is cool to the touch, disconnect plug on rear of light, swing handle up, swing gel-brella bracket down, rotate stand fitting up 45°. Swinging in extending flaps on large doors and “square” barn-door with unit. It is not necessary to remove barndoors or flaps.

Performance

With 120v, 500w, 3200°K, FTK lamp

- Flood: 1.7 lbs
- Spot: 2.6 lbs
- Super Spot: 3.5 lbs (4 lbs)

100% 50% 25% 10% 5% 2% 1%

Beam angles points at which intensity drops to 50% of maximum
Lowel Omni-light Instructions

The following components are shared by both the Tota and Omni-lights. Their attachment may differ slightly between Tota and Omni; see Tota instructions for more information.

**Omni Reflectors**

The Omni-light uses two pin prefocus tungsten halogen lamps of different voltages and filament configurations. To solve the optical problems most efficiently, the fixture has two different standard focusing reflectors. In addition two special purpose reflectors are also available. For identification each has a number embossed on the reflector.

- **#1** Standard focusing reflector: for all 120 and 240 volt lamps.
- **#2** Standard focusing reflector: for 12 and 30 volt lamps. May also be used for 120 and 240 volt use providing a slightly smoother pattern but with reduced output and focusing range.
- **#3** High intensity, super spot: long “throw,” non-focusing reflector for all voltages.
- **#4** Gold focusing reflector: creates warm color effects for use with all voltages.

**Changing Omni Reflectors**

When fixture is cool to the touch. Disconnect plug on rear of light. Remove Protective Screen then remove reflector spring by first pulling either end of spring inward. Focus lamp to spot position and tilt Omni-light down slightly. Reflector can be tilted around the lamp. To install reflector, tilt Omni-light up, keep lamp focused to spot, insert reflector around lamp and onto registration pin. Replace reflector spring and Protective Screen. Never operate light without Protective Screen.

**Omni Barndoors**

**Barndoor frame** snaps onto rim of front of light. It can be removed by pushing out on two adjacent sides while pulling that corner forward. The frame holds any two accessories, rotates 360° and joins two snoots.

- **Large door** has two extending wings which stop in open position, this stop may be bypassed.

**The Triangular door** has two extending wings to increase their area or create special shadowing effects.

**Omni Light Controls**

- **Graduated scrim:** same principle as half scrim but effect is more gradual and more extreme.
- **Dichroic filter:** converts 3200K lamps to average daylight; absorbs U.V. light rays. Light loss approximately 65%.
- **Clear glass filter:** absorbs U.V. light rays. Light loss approximately 5%.
- **Diffused glass:** softens highlights and shadows. Absorbs U.V. Light loss approximately 40% in flood setting.
- **Cookaloris:** produces an overall, soft shadow pattern, can be used to “breakup” a plain background.
- **Snoot:** produces a reduced circle of light; two Snoots may be joined with an additional barndoor frame to produce a smaller and sharper circle of light. Barndoors and barndoors accessories may also be added to the end of the Snoot.
- **Narrow Snoot:** produces smaller diameter circular cutoff (2.25” diameter). Accepts Fren-L patterns as well as Pro-light barn doors & swing-in accessories. See www.lowel.com for more information.

**Umbrellas**

Photographic umbrellas convert relatively hard light sources, such as spotlights, into relatively soft sources that provide soft shadows and highlights. Although not appropriate for every subject or mood, the quality of light can be very beautiful. There are two Umbrellas designed for use with the Omni-light, a woven, soft silver Tota-umbrella (T1-25) and a softer white Tota-umbrella (T1-26) that produces a softer light and also may be used as a large diffuser.

**Warning:** When using umbrella with Omni, do not focus light to spot.

**Warning:** When lights with umbrellas are extended very high, or used on undersized stands or in areas of heavy “traffic”, it is advisable to add weight (such as the Lowell weight) to the base of the stand. This reduces the chance of lights falling over which could damage the umbrella, the lamp, and possibly cause personal injury.

**Using Umbrellas**

Remove entire barndoor (or just the four flaps if an accessory such as a dichroic filter is used). Set gel-brella bracket to umbrella position (line up arrow guides on back panel). Insert umbrella through hole until shaft appears through opposite hole.

**Do not** position umbrella further into the fixture than the automatic stop (clip) allows, or scorching may occur. Lock with knob.

For best soft-light effect, focus Omni to full flood position. To prevent damage to umbrella, do not focus to spot or half-spot position. Darkens washed out foregrounds, compensates for talent burning up as they approach a light.

**Tota/Omni Shared Light Control Accessories**

**Tota-frame**

Set Gel-brella bracket in gel frame position (line up guides on back panel). Unfold frame, extending frame bar and insert through front hole of gel-brella holder until shaft appears through opposite hole. Lock with knob.
Lowel Omni-light Instructions

Tota/Omni Shared Light Control Accessories

Tota/Omni Gels
Gels are secured to the frame with corner spring clips. Gels should not be doubled up. Precut, tough, fade resistant Lowel gels are available in daylight blue, frost diffusion, & neutral density. When gels are used, the Omni should not be spotted-down excessively. (See gel instruction sheet.)

Tota-flag & Tota-flector
Tota flags can be used separately, or snapped together end to end or side to side. Flags can be attached to the light with a flexi-shaft. Flexi-shafts block or “feather” light off background, subject, or camera lens. Tota-flectors can be attached in the same way and used to redirect some of the light. It can also provide close-up fill illumination from the sun or other source over a small area. Slight convex bowing of the surface will reduce the intensity and increase the area illumination. Avoid mounting flags or reflectors directly over people unless secured with a safety cord or cable.

Flexi-shaft
A flexible arm position Tota-flags and Tota-flectors. Its fixed end snaps into a female connector on the Tota & Omni-lights, Tota-clamp and other Tota components. The rotating end snaps on to the flag, flector etc. Avoid overstressing connectors while bending and twisting.

Tota-tatch
Spring clamp attaches Tota-flags and Tota-flectors with or without Flexi-shafts, to stands, pipes, and flat surfaces. The snap-in fitting rotates to help position flags, cards etc.

Gel-jaws: attach to barndoor leaves to hold gels.

Omni Power Cords

16’ Tota/Omni Cable
Code: T1-80
Standard #18/3, with switch & standard Edison wall plug.

16’ (5 m) Tota Eurocord
Code: T1-801
#18/3 (.75 mm/3) with double pole switch and male CEE-7 plug.

16’ (5 m) Tota UK Cord
Code: T1-802
#18/3 (.75 mm/3) with double pole switch and male fused BS 1363A plug.

5’ Omni 30v Cable
Code: O1-81
#18/3; with switch and 2 pin “Amphenol type” connector for batteries.

Omni 12v Car Adaptor
Code: O1-82
Connects T1-80 Cable to cigarette lighter connector.

10’ Unswitched Cable
Code: T1-808
For portable stage lighting use. “Hard service” #18/3 cable.

Mounts

Omni-stand
Code: O1-33
Weight: 2.6 lbs (1.2 kg)
Size: (2.74 m), 27” (69 cm) folded
Sturdy and lightweight; extends to 9”. Collar clamping; standard 5/8” (1.59 cm) stud.

Uni TO Stand
Code: UN-55
Weight: 2.6 lbs (1.2 kg)
Size: 21.5” (54.6 cm) folded
Maxoimum height: 7’11” (2.4 m)
Base diameter: 43”
New stand, based on design combination of Uni-stand & Omni-stand. More stable than Uni-stand, more compact than Omni-stand.

Tota-clamp
Code: T1-30
Clamps onto pipes and objects up to 1 7/8” (4.8 cm) thick.
5/8” (1.59 cm) stud locks in two positions and accepts a light. Two Flexi-shafts with Tota-flags can be attached.

Tota-mount
Code: T1-32
Hangs on doortops, Gaffer-tapes to windows and most wall surfaces to support Tota, Omni and other small lights. Folds for storage.

Safety Cable (3)
Code: CM-50
Size: 34” (86.4 cm)
Braided stainless-steel cable adds security to lights and accessories that are attached to overhead pipes, beams, dropped-ceiling grids, etc. (Set of 3).

Lobo Arm
Code: F1-40
22” (55.9 cm) shaft with 5/8” (1.59 cm) stud. Extends, articulates and booms small lights, reflectors, etc.

Omni Lampak
Code: CM-20
(69 cm) folded
Size:
Code: O1-61
Stores 2 Tota & 4 Omni lamps in foam filled plastic case. (lamps not included)

Scissor-mount (2)
Code: F1-30
Attaches Lobo Arm to top or any part of a stand to make a miniature boom. Also mounts large umbrellas, flags, etc.

Lobo
Code: F1-30
22” (55.9 cm) shaft with 5/8” (1.59 cm) stud. Extends, articulates and booms small lights, reflectors, etc.

Omni Adjustments

Omni has four constant-tension (torque) pivot points. All have flat spring washers to maintain proper tension and can be adjusted, if necessary, with a 7/16” wrench.

A Gel-brella bracket tension can be adjusted by the bolt attaching the bracket to the rear of the light.

B Focus “drag” can be adjusted with the nut located just in front of the stand fitting on the opposite side of the fixture.

C Tilt tension can be adjusted with the nut located on the stand fitting.

D Handle tension can be adjusted by the nut located on the handle mounting bracket. Do not over tighten!
Omni-light for the New Pro

The wide focusing range of the Omni-light makes it a flexible key, fill or back-light. Adding accessories will extend its creative possibilities.

Use the focusing knob to move from Spot (narrow beam) to Flood (wide beam). Its 6:1 focus ratio (when used with supplied #1 reflector & an FTK lamp) means that the spot setting will be approximately 6 times as bright as the flood setting.

Omni is an open face (lensless) fixture. It is capable of throwing sharp shadows. Add a diffusion glass accessory, diffusion gel with a Tota-frame, or attach an umbrella to create a softer source. Use one Omni without diffusion and another with diffusion, to create the classic "hard key & soft fill" lighting setup common in many interview & still life settings.

Use the rotating barndoors to trim unwanted output spill, (for example: to reduce risk of shadow in your shot caused by use of overhead boom microphones). Flexi-shafts & Tota-flags can also be attached for increased light control options.

Because the Omni is a tungsten-halogen source, its color temperature will be in the 3000–5000°K range, depending on lamp choice. To use Omni in locations where its output will mix with daylight (5600–6500°K ), its color temperature can be converted by attaching a Dichroic Filter accessory, or adding day blue gels to the Tota-frame. Both will give more realistic daylight white-balancing in video or film.

To simply raise the ambient level of light in a room, point the Omni-light at a white wall or ceiling (from a safe distance of several feet or more), and focus to flood setting. Position the light so it won't be in your shot.

The Omni-light can use different wattage lamps, from 300–500W @ 120V. This increases its versatility, especially when mixing with other fixtures of different max. wattages. See the lamp chart for more information.

For special use applications, Omni can be converted in the following ways (see Accessories for more information):

1. Swap the power cord & lamp, then exchange to the #2 reflector for a battery powered, hand-held light at 12 or 30V.
2. Swap to the #3 reflector for non-focusing higher output Super-Spot. This can be useful when lighting a smaller area from a greater distance when higher output is needed.
3. Or use the #4 reflector for warmer color output to simulate late day sun or when lighting a pale skin complexion.

For more reduced spill, consider adding either the Omni Snoot or the Omni Narrow Snoot which allows front accessories, for further control options.

Other front accessories can help vary the quality of the light output. For example, the rotating half-scrim can allow you to reduce light output on a close subject while still illuminating subjects further away with full output. The full scrim reduces output without the use of a dimmer which can shift the color temperature warmer as the lamp is dimmed.

The oversimplified diagram above shows some of the ramifications of placing different lights for different subject types & lighting effects. This diagram is only useful as a starting point for new pros. All subjects & scenes are different and make different demands upon lighting. The height of the lights & camera, and the subjects angles & reflectivity must be considered.

When finished setting multiple lights, it’s a good idea to check the effect of each light by powering them all down & looking at your set with one light on at a time. This will help you better understand the components of lighting and how each fixture contributes to the final image.

These are just some starting suggestions.

For additional introductory information, see the Resources section of the complete Lowel catalog. For an in-depth understanding of the creative decisions involved in the art of lighting, we suggest Ross Lowell’s acclaimed book, Matters of Light & Depth, available from many of our dealers.

Example Setups using Omni-light

Setup 1

These 3 setups show some ways the Omni can be used; alone, with Tota-brella, or with diffusion, in a small lighting setup. Position of the lights and distance to the subject can be varied for different creative results. Varying the distance of either light from the subject will vary the contrast ratio between Key & Fill lights. Tip: position your subject away from walls to avoid shadows and give more a sense of depth.

Setup #1 shows single fixture use, and can be set on either side of the camera. Varying the position of the light will increase shadow & contrast on the subject.

Setup 2

Setup #2 uses 2 Omni’s, one with only barn doors, as hard key, and the other with a Tota-brella as soft fill. Vary the position of the lights, as shown. Be aware of reflection in eyeglasses or reflective surfaces.

Setup #3 uses 2 Omni’s as hard key/soft fill, with a Tota to evenly light the background. An additional Omni from high up behind the subject as a back hair-light, lighting the back of the head & shoulders, will create a sense of separation from the background. Be careful to keep the light output of the back light from spilling into the camera lens which will cause lens flare.

Setup 3

Setup Keys
A Key light Omni with barn doors
B Fill light Omni with umbrella
C Background Tota
D High back light Omni with Tota-frame & diffusion

Problems, info, repairs, etc.

Lowel equipment and kits are sold through authorized Lowel Dealers and, in some countries, Authorized Lowel Distributors. Repairs, problems, suggestions, and requests for brochures, instructions, parts lists may be handled by your authorized Lowel Dealer (Distributor) or directly with Lowel. Electrical repairs should be made only by Lowel or a qualified electrician.

Lowel Omni-system, Lowel Omni-light, Lowel Tota-system and Tota-light are trademarks of Lowel-Light Manufacturing, Inc. Lowel Patent Nos.: 3852582, 4187531, version: 5.0 © Lowel-Light Mfg., Inc. 2005