

\$3.50



COOL-LUX PROFESSIONAL LIGHTING GUIDE



MINI-COOL
THE ASTRONAUTS'
CAMERA LIGHT
MADE ON EARTH BY
COOL-LUX

A MESSAGE FROM THE PRESIDENT AND FOUNDER

"Lighting, the only accessory that can improve your picture."

After years of working with professional lighting people, and designing and manufacturing lighting equipment for motion picture and television production, I became convinced that amateurs too need a professional-quality lighting fixture. After considerable time and effort, we developed the best photo light in the world — the MINI-COOL.

What exactly do we mean by, "BEST PHOTO LIGHT IN THE WORLD"? Well, that question is answered within this booklet. (Actually, the fact that it's also the first light adopted by NASA for their Space Shuttle Program makes it the best light in the Universe.)

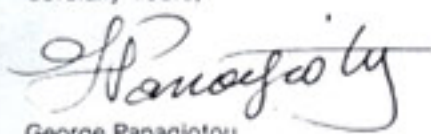
Our customers enjoyed the MINI-COOL for years before NASA discovered that it had "The Right Stuff". To my knowledge, ours is the first consumer product in space which was not designed specifically for the aerospace program. That speaks volumes for the quality of our product!

But Cool-Lux is not a company that thrives only on making products of excellence. Although we are the youngest company in our industry, and our technology is light years ahead, our policies and ethics are from the "old school".

After thousands of lights sold, there have been no defects and no accidents involving the MINI-COOL. It takes pride in your work and your company to be that good, and we are!

What makes us best is not only our lighting system, but also the hard working individuals. Thank you for sharing my thoughts.

Cordially Yours,



George Panagiotou



INDEX	PAGE	INDEX	PAGE
A Message From The President of COOL-LUX	2	Catalogue—MINI-COOL Packs and Kits	10
Development of the MINI-COOL	3	Catalogue—Mounting Devices	11
Operating Instructions	4	Catalogue—Connecting Cards	12
Power Sources, and How To Connect Them	4	How To Determine Battery Running Time	13
How To Exchange The Lamp	5	Catalogue—Olympic Batteries	13
Mounting The MINI-COOL	6	Catalogue—Interchangeable Lamps	14
How To Select Best Lamp For Lighting Job	7	Catalogue—AC Adapter	14
Professional Lighting Arrangements	8	Catalogue—Photo Dimmer	15
Camcorder Lights and Kits	9	Catalogue—Light Framer	15

IMPORTANT SAFETY PRECAUTIONS

1. Be especially careful if children are present, and do not leave your equipment unattended.
2. Do not immerse your MINI-COOL in water or any other liquid.
3. The housing of the MINI-COOL becomes very hot during use, especially when used with the FOS001 Lamp (250Watts). Do not touch the housing and do not put it down on any inflammable surface or any surface which will be damaged by heat (finished wood, plastic, etc.).
4. If an extension cord is used, make sure it is 18-gauge or larger for AC use or 16-gauge or larger for DC use. Smaller cords can overheat and cause a fire hazard. Arrange the cord so that it will not be tripped over or otherwise interfere with people or objects in the area of use.
5. Do not allow an extension cord to drape over the MINI-COOL or any other hot surface. The short power cord permanently attached to your MINI-COOL is made of special high-temperature-resistant materials. Extension cords are not made of these materials and should be kept clear of the MINI-COOL housing.
6. Always let the MINI-COOL cool completely before putting it away or exchanging the lamp.
7. Always unplug the MINI-COOL from its power source when not using it. NEVER PULL ON THE CORD. Grasp and pull the PLUG to disconnect the MINI-COOL.
8. Use only the lamps recommended in these instructions. DO NOT USE PROJECTOR LAMPS IN THE MINI-COOL.
9. Do not disassemble your MINI-COOL. Incorrect reassembly can create a shock hazard (and also will void the warranty).

PRODUCT WARRANTY

Each new MINI-COOL is covered by a limited warranty, as described below:

Period of Warranty: One year, beginning with date of purchase.

Defects covered: Any malfunction caused by defective materials or workmanship will be repaired at no charge for parts or labor or, at the option of COOL-LUX, the entire unit will be replaced.

Defects not covered: This warranty does not cover malfunctions caused by misuse, tampering, unauthorized repairs, modifications, accidents, or the use of higher voltage than recommended for the lamp being used. It also does not cover consequential or incidental damages (except in those states which do not allow exclusion or limitation of them) such as ruined film or video tape or losses arising from delay or loss of equipment availability.

SERVICE PROCEDURE

Package the MINI-COOL (and accessories, where appropriate) carefully, using ample packing material to prevent damage in transit, and ship prepaid to COOL-LUX at the address below. Include a detailed description of the problem, along with sample film or other evidence which will help illustrate the problem.

If sending your unit for warranty service, include evidence of date and place of purchase.

When serviced, your MINI-COOL will be returned to you prepaid.

DEVELOPMENT OF THE MINI-COOL

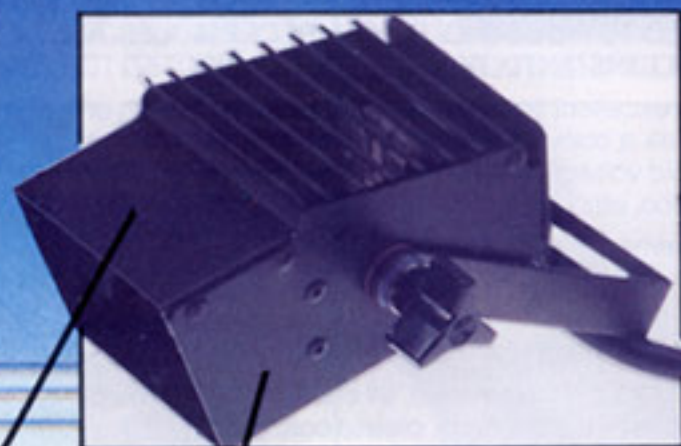
To produce the MINI-COOL, we've combined state-of-the-art technology with design principles and construction features long used and proven in our larger studio lights.

As in all our lights, the MINI-COOL's quartz-halogen lamps are mounted in specially-coated (dichroic) reflectors, which project visible light forward onto the subject while passing heat, Infrared and Ultraviolet radiation backwards, away from the subject. We pioneered this concept in stage and studio lighting. Professionals, in front of and behind the camera, were quick to appreciate the advantage of working with bright, heat-free illumination. Actors work directly in front of our largest light (6,000 Watts) with no discomfort, which is not possible with any conventional light. (And ours provides more illumination per Watt as well!)

Apart from providing heat-free light, our products are universally recognized for their advanced technology, solid construction and excellent safety and convenience features.

The MINI-COOL is truly the world's best photo light. Significant recognition of this is the fact that it was selected by NASA for use aboard the Space Shuttle (and first used on Challenger flight STS-8). NASA tested every video light on the market—and chose MINI-COOL hands down!

Here's the "inside story" of this remarkable light:



9-POWER CORD. Special high-temperature-resistant construction. Leads between socket and switch are completely contained in a special silicone jacket, which cannot be damaged by contact with hot housing. Wiring is 16-gauge, three-conductor (with safety ground).

10-IN-LINE ON-OFF SWITCH. Heavy-duty switch for AC or DC use.

1-HOUSING. Aircraft-grade aluminum alloy. Light and strong.
2-FINISH. Housing parts are coated inside and out with Dupont Teflon, much more durable than paint and electrically non-conductive.

12-FORWARD LID. Hinged to allow instant access to filter slots. In down position, firmly retains accessories inserted in slots, even when MINI-COOL is mounted upside down.

7-SAFETY SHIELD. Tempered glass shield protects lamp from contact with fingers or other objects, and from splashed water or other liquids. Protects user from possible burned fingers or from glass fragments, in event lamp explodes or is broken.

6-LAMP ASSEMBLY. Quartz-halogen lamp, mounted permanently in multi-faceted, glass, dichroic reflector. Provides greater illumination per Watt than any other type of incandescent lamp. Ten different lamps (described further on) are available, all designed to provide even illumination over the entire illuminated area.

8-DUAL FILTER SLOTS. Safety shield is installed in rear slot, leaving forward slot available for daylight filter, color filter, diffusion lens or other accessory. (Safety shield is easily removed, to allow installation of two other optical accessories.)

3-HEAT DISSIPATOR. Scientifically designed for efficient cooling to extend lamp life. Machined from solid aluminum alloy. Hinged at rear for access to lamp compartment.

4-MOUNTING BRACKET. Strong aluminum alloy, black anodized. Includes mounting knob with 1/4"-20 threaded stud. May be reversed for offset mounting of MINI-COOL.

11-ACCESSORY BUSHING. Pressed-in bushing with internal 6-32 thread, for mounting Precision Light Framer or other accessories.

5-BALL BEARING TILT PIVOT. A deluxe construction, inherited from our larger lights. Allows operator to set any amount of drag on the tilt movement, and then to make tilt adjustments which will hold, without loosening the clamp knob. A very smooth, professional feature.

OPERATING INSTRUCTIONS

APPLICATIONS

The MINI-COOL is designed especially for photography. All its interchangeable lamps provide light which is essentially free of heat, Infrared and Ultraviolet radiation. Ultraviolet light has the unwelcome effect on film or videotape of decreasing image contrast (and is harmful to people as well). And many subjects, such as delicate life forms, can be damaged or destroyed by heat.

The MINI-COOL's unique operating features simplify conventional applications and invite new creative uses. It is small and light enough to attach to any video, motion picture or still camera, using the CAMERA ADAPTER supplied. Or it may be hand-held, using the HANDLE included with each unit. (The Handle has a hollow underside which can be fitted over a 5/8" diameter light stand column or post, but this is recommended only as an occasional practice. A far more secure mounting is provided by the Cool-Lux STAND ADAPTER.)

The following pages describe a number of mounting devices for attaching the MINI-COOL to shelves, furniture, doors and windows, ceiling and many other places.

The MINI-COOL is operable from a variety of AC and DC power sources, simply by installing a lamp of corresponding voltage and an appropriate adapter cord. The lamp socket, switch and wiring are all heavy-duty construction, easily capable of handling DC currents (which are heavier than AC) as well as AC.

A 120-Volt, 250-Watt lamp is included with every MINI-COOL, for use with household wall receptacles. Other lamps (whose power requirements and other characteristics are described herein) allow using the MINI-COOL with a variety of batteries or with a transformer.

BE SURE THAT ONLY THE FOS001 LAMP IS CONNECTED TO HOUSEHOLD WALL RECEPTACLES. ALL OTHER LAMPS ARE DESIGNED FOR USE WITH LOWER VOLTAGES, AND WILL INSTANTLY BE RUINED IF CONNECTED TO 120 VOLTS.

Aside from its photographic uses, the MINI-COOL is an excellent light source for desk, workbench or reading. With a 12-Volt, 50-Watt lamp, the MINI-COOL provides as much light as a conventional 200-Watt lamp, but without the heat! The Cool-Lux TRANSFORMER is convenient for reducing the household voltage to 12 Volts, for powering 12-Volt lamps in the fixed locations just mentioned or for studio lighting, copy board illumination, etc.

Some owner use the MINI-COOL to illuminate outdoor patios, for campsite illumination, or to light the interiors of vans or boats. Cool-Lux ADAPTER CORDS are available with cigarette-lighter plugs or battery post clamps, for easily connecting the MINI-COOL to electrical systems in vehicles.

You may find still other uses. Please let us know about them and we'll share them with other users.

Please read the following pages carefully. We've included a lot of information, all chosen to help you obtain maximum use and satisfaction from your MINI-COOL. If you have any questions or suggestions, please contact us.

OPTIONAL POWER SOURCES FOR THE MINI-COOL, AND HOW TO CONNECT THEM

Depending upon which lamp is installed, the MINI-COOL will require a power source of 120, 30, 14.4 or 12 Volts. Standard household voltage in the United States and Canada is 120 Volts. The lower voltages are provided either by batteries or by step-down power transformers.

Cool-Lux 12-Volt battery packs and belts, available in several capacities (running times), provide portable 12-Volt power, completely independent of wall outlets.

When a wall outlet may conveniently be used, the Cool-Lux 120/12-Volt Power Transformer (BC3300) will provide adequate power (up to 100 Watts) for any of the Cool-Lux 12-Volt lamps. Or more than one lamp may be powered from the transformer, so long as their combined wattages do not exceed 100 Watts.

Following are specific voltage requirements for each of the Cool-Lux lamps:

FOS001 (the standard lamp supplied with the MINI-COOL) This lamp requires 100 to 120 Volts AC, which is the standard voltage provided by wall outlets in the United States and Canada.

FOS002 This lamp requires 30 Volts DC, provided by some battery packs and belts, most of which have a 2-pin receptacle. An adapter cord for connecting this receptacle to the MINI-COOL is available (CC8000)

FOS003—FOS009 These lamps all require 12 Volts, provided by a transformer or battery pack. Commercially available battery packs and belts use several styles of connector, including 3-pin, 4-pin, 5-pin and cigarette-lighter types. Adapter cords for all these are available from Cool-Lux, as well as cords with clamps to fit posts of automotive-type batteries (See Catalogue).

FOS010 This lamp requires 14.4 Volts, which is the voltage used by many video cameras and recorders. Using this lamp in the MINI-COOL allows using a common power source for all items.

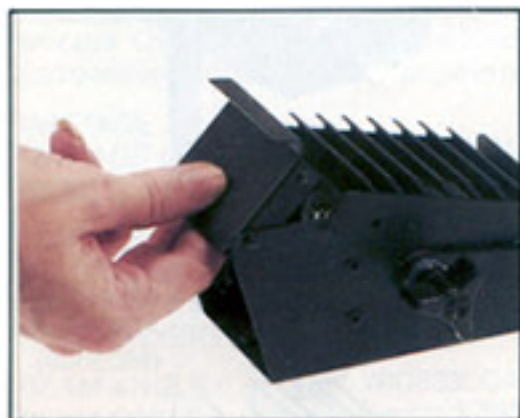
The MINI-COOL is supplied with a one-foot power cord, which includes an in-line switch and terminates in a standard (household) 3-prong plug. This plug is connected to battery packs through an appropriate adapter cord, or to a wall outlet or transformer through an extension cord. It is advisable to use 16-gauge extension cords, especially with 12-Volt lamps. The Cool-Lux Extension Cord (CC8650) is ten feet long, 16-gauge, with three-wire safety construction (provides a safety ground when used with household voltage).

HOW TO EXCHANGE THE LAMP

To exchange the lamp for one of a different type (or to replace a burned out lamp), proceed as follows:

1. Be certain the lamp you are installing is matched to the power source you will use with it. IN PARTICULAR, MAKE SURE THAT ONLY THE FOS001 LAMP IS USED WITH 120-VOLT HOUSEHOLD POWER. IF ANY OF THE OTHER COOL-LUX LAMPS IS USED WITH 120 VOLTS, ITS FILAMENT WILL INSTANTLY BE DESTROYED. If the FOS001 Lamp is connected to a 12-Volt source, no harm will be done—but the lamp will not produce much light!

2. Allow the MINI-COOL to cool completely before exchanging the lamp.



3. Lift the FORWARD LID.



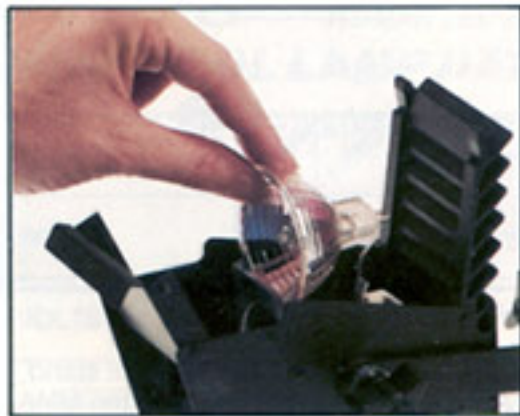
4. Lift the HEAT DISSIPATOR.



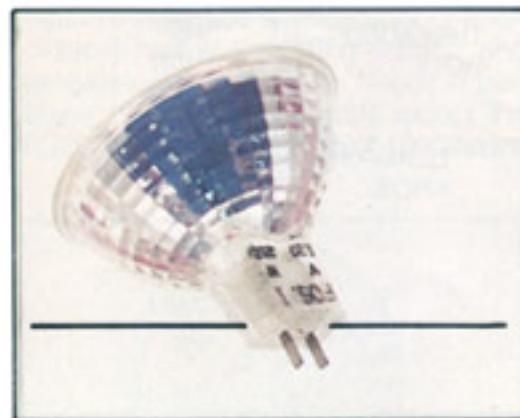
5. Push the LAMP EXTRACTOR LEVER to the rear of the housing. This will raise the lamp part way from the socket, allowing you to grip the front rim of the reflector on the top side.



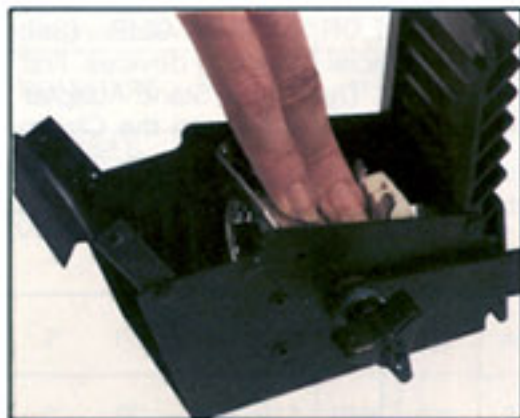
6. Grasp the top edge of the reflector and lift the lamp straight up and out of the housing.



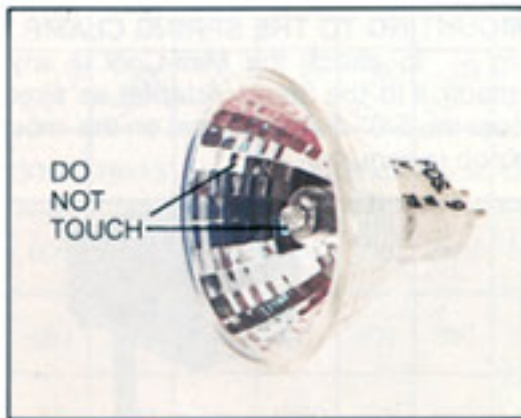
Follow these steps in reverse order to install the new lamp. (The LAMP EXTRACTOR LEVER will automatically reposition itself as the new lamp is installed.)



7. As the new lamp is lowered into the socket, keep the pins on the lamp aligned horizontally.



8. Make sure the lamp is pushed fully down in the socket. If not, the pins of the lamp will not engage the socket contacts and the lamp will not come on.



9. Do not touch the inner surface of the reflector or the quartz envelope surrounding the lamp filament. Oil from your skin will harm these surfaces.

NOTE:

There is a very easy way to distinguish the FOS001 lamp from all the other types, without reference to the printed label on the neck of the lamp. The FOS001 has "flat" pins (rectangular section). All the others have pins of circular section.



FOS001 pins



FOS002 through FOS010

MOUNTING THE MINI-COOL

MOUNTING TO A CAMERA (see fig. 1). Slide the base of the CAMERA ADAPTER into the accessory shoe of the camera, and turn down the CLAMP RING to secure it. Then screw the MOUNTING KNOB of the Mini-Cool mounting bracket into the threaded hole on the camera adapter.

REVERSING THE MOUNTING BRACKET (See figs. 2 and 3). On some cameras, it is necessary or convenient to reverse the mounting bracket of the Mini-Cool, to clear a viewfinder or for other reasons. This is easily done: Unscrew the TILT CLAMP KNOB and remove the ball bearing assembly. Then remove and reverse the MOUNTING BRACKET, and replace the bearing parts and TILT CLAMP KNOB.

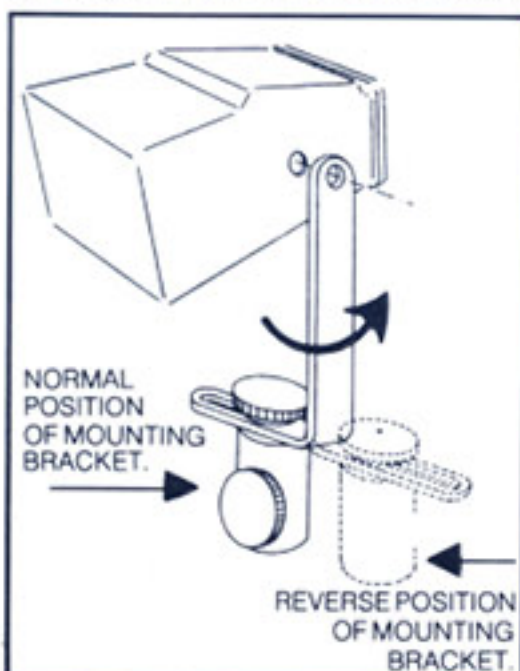


FIG.2



FIG.3



FIG.1

MOUNTING TO A LIGHT STAND (See fig. 4). To attach the Mini-Cool to a light stand, use the Cool-Lux STAND ADAPTER. First screw the MOUNTING KNOB of the Mini-Cool into the 1/4"-20 threaded hole on top of the Stand Adapter (passing the pin on the Stand Adapter through the slot in the Mini-Cool Mounting Bracket). Then fit the hole in the underside of the Stand Adapter over the post of the light stand, and turn down the CLAMP KNOB on the Stand Adapter to secure it in place.

MOUNTING TO THE SPRING CLAMP, PUTTY KNIFE OR SCISSOR CLIP (See fig. 5). To attach the Mini-Cool to any of these special mounting devices, first attach it to the Stand Adapter as already described. Then fit the Stand Adapter over the 5/8" diameter post on the mounting device, and turn down the Clamp Knob to secure it.



FIG.4



FIG.5

OR



OR



Pro's 1,000 - 2,000 LUX on T.V. Show.

HOW TO SELECT THE BEST COOL-LUX LAMP FOR ANY LIGHTING JOB

COOL-LUX lamps available for the MINI-COOL differ in these characteristics: ILLUMINATION, WATTAGE, VOLTAGE, BEAM ANGLE and AVERAGE LIFE.

ILLUMINATION

ILLUMINATION is measured in Footcandles or LUX (European system) at a given distance from the lamp. Illumination figures for each COOL-LUX lamp are shown in the chart below. In general, brighter lamps use more power and have shorter lives, so it is good practice to use no brighter lamp than necessary.

If you know the required illumination in terms of Footcandles, use the chart to determine which lamp or lamps will provide that amount. Otherwise you can determine by actual test which lamp has sufficient illumination. Start with the lowest-Wattage lamp you believe adequate, and change to higher only if necessary.

WATTAGE

WATTAGE (power consumption) is shown on the chart for each lamp. When using two or more lamps in combination, make certain the total Wattage does not exceed the power rating of any transformer or dimmer being used with the light.

VOLTAGE

VOLTAGE required for each lamp also is shown on the chart. BE VERY CAREFUL NOT TO CONNECT ANY LAMP EXCEPT THE FOS001 TO A 120-VOLT WALL OUTLET. IF ANY OF THE OTHER LAMPS IS CONNECTED TO A 120-VOLT SOURCE, ITS FILAMENT WILL BE DESTROYED INSTANTLY!

BEAM ANGLE

BEAM ANGLE is shown two ways on the chart. For each lamp, coverage is shown generally as "flood" or "spot" and specifically in degrees coverage horizontally and vertically.

When two lamps have equal Wattages but different beam angles, the "spot" version will provide more illumination at a given distance than will the "flood" version. For example, the FOS004 (50 Watts, "flood" beam) provides 72 Footcandles at five feet. The FOS006 (also 50 Watts, but "spot" beam) provides 298 Footcandles at the same distance. The increased brightness of the FOS006 is obtained at the expense of a smaller illuminated area. (At five feet, the FOS004 illuminates a 2.7 X 2.7 foot area and the FOS006 a 1.6 X 1.1 foot area.)

LAMP LIFE IS stated in terms of average hours. How long a lamp actually will last depends upon a number of factors: Whether it is used continuously or intermittently, actual operating voltage and temperature, vibration etc. Notice in particular that all 12-Volt lamps except the FOS003 have average lives of 4,000 hours.

MINI-COOL LAMP DATA

LAMP TYPE	FOS001	FOS002	FOS003	FOS004	FOS005	FOS006	FOS007	FOS008	FOS009	FOS010	FOS011
WATTS	250	200	100	50	25	50	25	75	75	95	150
VOLTS	120	30	12	12	12	12	12	12	12	14.4	120
AMPERES	2.08	6.67	8.33	4.17	2.08	4.17	2.08	6.25	6.25	6.94	1.25
AVERAGE LIFE (hrs)	50	50	50	4000	4000	4000	4000	4000	4000	500	250
COLOR TEMPERATURE (Degrees Kelvin)	3300	3300	3350	3100	3100	3100	3100	3000	3150	3200	3300
BEAM TYPE	FLOOD	FLOOD	FLOOD	FLOOD	FLOOD	SPOT	SPOT	SPOT	FLOOD	FLOOD	FLOOD
DEGREES COVERAGE (Horiz. x Vert.)	46x47	40x40	43x42	30x30	30x30	19x13	14x11	14x11	36x38	36x38	42x44
*Distance 1' Foot Candles	8250	4660	3950	1800	600	7200	6670	19142	3003	3600	6200
2' FC	2062	2915	988	450	150	1800	1669	4201	801	960	1550
3' FC	917	1296	439	200	67	800	741	1980	375	450	710
5' FC	330	446	158	72	24	298	267	1050	125	150	180
7' FC	168	238	81	37	12	147	136	465	67	80	63
10' FC	83	117	40	18	6	72	67	171	32	38	42
15' FC	37	52	18	8	2.7	32	30	85	14	17	14

*Illumination figures above are read as LUX, if distance figures are read as meters.



V-500 Recommends 9.3 footcandles on More up to 9,294
100 LUX

PROFESSIONAL LIGHTING ARRANGEMENTS

In many situations, it is not possible to prearrange your lighting set-up. For instance, when following fast moving action over a range of distances, when the camera must be moved quickly from place to place, it is convenient to use a single MINI-COOL attached directly to the camera.

In many indoor shooting situations, shadows can be minimized by "bouncing" the light from your camera-mounted MINI-COOL onto the subject. This is advisable only when a light colored (preferably white) ceiling or wall is available and is situated close to your light.

Where it is possible to use a fixed lighting set-up, you can obtain better results using the two-light or three-light set-ups described below.

TWO-LIGHT SET-UPS

When photographing large subject areas (such as parties), it is convenient to use two Mini-Cools as shown in Figure 1.

Place one light on each side of the camera, and aim both lights at the center of the subject area. A line from either light to the subject should form an angle of about 45 degrees to the line from the subject to camera. This arrangement will provide even illumination across the subject area, and the shadows from either light will be partially illuminated by the other light.

Also, each light should be well elevated from the floor, so that shadows are cast onto the floor instead of the background.

Now check your subject illumination with an exposure meter. If more illumination is required, move both lights closer to the subject, maintaining the 45-degree angles. If less illumination is required, move both lights farther away.

Floor lamps or other existing room lights should normally be left on, as this will make your scene appear more natural.

THREE-LIGHT SET-UPS

For shooting portraits, or in any situation where lighting must be carefully controlled, it is convenient to use three Mini-Cools as shown in Figure 2. In this arrangement the lights are referred to as the "Key Light," "Fill Light" and "Back Light."

As far as the film or video tape is concerned the Key Light is replacing the sun. The Key Light is the Main Source of illumination in your picture and so should provide most of the illumination on the subject (about twice as much as either of the other two lights). This is accomplished by placing the Key Light closer to the subject, as described below.

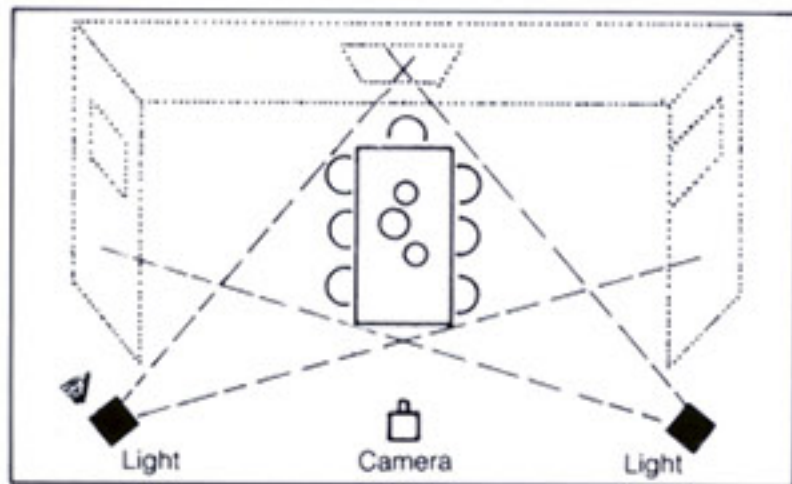


FIG. 1

Exact spacing of the lights is determined by measuring subject illumination with an exposure meter, in terms of "F/stops." Full f/stops are marked 1.4, 2, 2.8, 4, 5, 6, 8, 11, 16, 22, 32 or 45. Some lenses are marked in "half-stops" (3.5, 4.5, 6.3 etc.) or include these markings in addition to the full-stop markings. Be sure to make the adjustments described below in terms of full stops only.

Place the Key light at the desired angle to the subject, and then adjust its distance to obtain the correct illumination (measured with the meter) for the F/stop you have chosen to use. Most lenses produce their sharpest pictures using the middle settings from the available range of F/stops. And, in most cases, these middle settings will provide sufficient depth of field.

When the Key Light has been correctly positioned, turn it off and place the Fill Light. The purpose of the Fill Light is to partially illuminate ("soften") the shadows produced by the Key Light. The Key and Fill Lights are thus situated on opposite sides of the camera, as in the two-light set-up already described. Adjust the distance from Fill Light to subject until the required exposure (measured by meter) is one full F/stop more (i.e. the next smaller F/number) than that required by the Key Light. For example: If the Key Light is positioned to require an exposure of F/5.6, then the Fill Light should be adjusted to require an exposure of F/4 with the Key Light turned off.

Now turn off both the Key and Fill Lights, and place the Back Light. As its name implies, the Back Light is situated behind the subject. Its purpose is to create a rim of light around the subject, thus separating the subject from the background. Locate the Back Light on a line with the subject and camera, or as nearly so as possible. Adjust distance from Back Light to subject so that the required exposure (reading illumination on the back side of the subject with your meter) is one F/stop more than that required by the Key Light (same procedure as used for spacing the Fill Light).

Now turn on all three lights and check the appearance of the subject. Does it look "natural"? If not, reposition any or all of the lights to achieve the desired balance of light and shadow.

Set the camera's lens to the F/stop you determined correct for the Key Light, and you are ready to begin shooting.

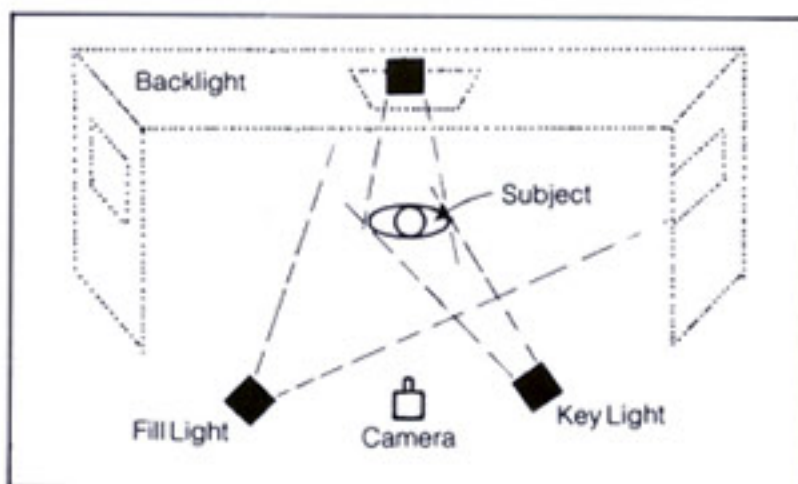


FIG. 2

CAMCORDER LIGHTS & KITS



**Guaranteed
For Life**

LK2100 MICRO-LUX® I "The Coolest Camcorder Light In The World"

Either you are shooting video, film, stills or instant camera, the MICRO-LUX will provide PROFESSIONAL photographic quality light. To enhance the electronic capabilities of the camera through a variety of optical systems, accommodating the needs of any lens angle.



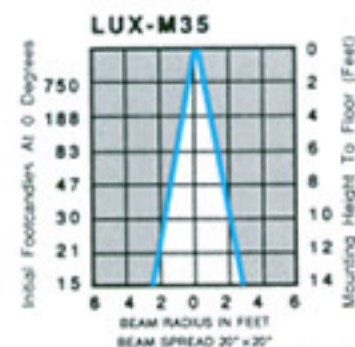
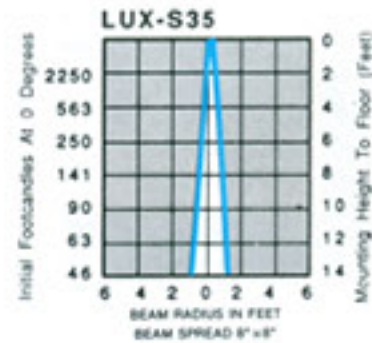
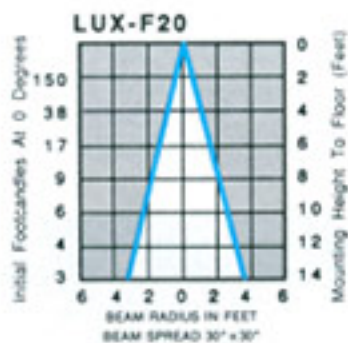
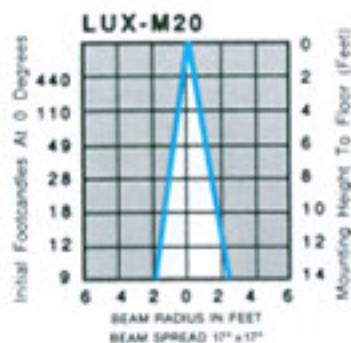
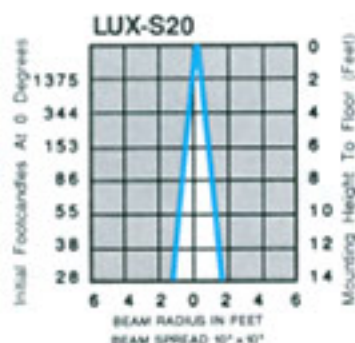
LK2150 MICRO-LUX® II "The Coolest Twin Light Available"

Two 35w., 12v. quartz halogen Tungsten lamps. Use one or both depending on your filming needs.

MICRO-LUX® LAMPS & PERFORMANCE DATA

These charts represent the varying beamspreads and approximate light levels of the unique COOL-LUX halogen lamps. This is a cleaner, whiter light than most

other sources, and so provides excellent color rendition. These lamps are just 1 3/8" in diameter and are multifaceted for very precise beam control.



**Lamp
Identifications**
S = Spot
M = Medium
F = Flood
FC = Foot candles

MICRO-LUX® LAMPS

MODEL	LAMP TYPE	VOLT	WATT	BEAM ANGLE (DEGREE)	AVG. LIFE (HOURS)	FEET/DISTANCE			KALVIN TEMP.
						4'	6'	10'	
LUX-F35	FLOOD	12	35	30°	2500	65/650	30/300	10/100	3200
LUX-M35	MEDIUM	12	35	20°	2500	180/1880	83/830	30/300	3200
LUX-S35	SPOT	12	35	10°	2500	563/5630	250/2500	90/900	3200
LUX-F20	FLOOD	12	20	30°	2500	38/380	17/170	6/60	3200
LUX-M20	MEDIUM	23	20	17°	2500	110/1100	50/500	18/180	3200
LUX-S20	SPOT	12	20	10°	2500	344/3440	153/1530	55/550	3200
LUX-2		12	35		2000				3200



LK2400 PERFECT PACK

- MICRO-LUX® I Light
- OLYMPIC 12V Power Pack
 - Battery Charger
 - AC Adapter
 - Velcro Attachment
 - Shoulder Strap
 - FREE Lighting Guide

LK2500 CAM PAK

- MICRO-LUX®
- OLYMPIC L-19 Power Pack
- Battery Charger
- Velcro

CATALOGUE **MINI-COOL PACKS AND KITS**



LK2000 MINI-COOL STANDARD PACK (AC)
Includes one each MINI-COOL LIGHT, FOS001 Lamp, CAMERA ADAPTER (MD5000) and HANDLE (MD5450). Supplied in foam carton.



LK2050 MINI-COOL AC/DC PACK
Includes all items listed in Standard Pack plus FOS009 Lamp and 12V DC ADAPTER CORD (CC8200). Supplied in foam carton.

LK2200 COOL KIT I 14" L x 10½" W x 4½" D 10½ lb.
Includes one each of these items: MINI-COOL LIGHT, OLYMPIC 6.5 BATTERY PACK (12V, 6.5 AH with charger, 12V DC ADAPTER CORD (CC8200), EXTENSION CORD (CC8650), FOS001 Lamp, FOS009 Lamp, STAND ADAPTER (MD5050), CAMERA ADAPTER (MD5000), HANDLE (MD5450), SPRING-CLAMP MOUNT (MD5250), and DIFFUSION LENS (LC7050). Supplied in foam-fitted carrying case.



LK2250 COOL KIT II 18" L x 16" W x 5½" D 10½ lb.
Includes two MINI-COOL LIGHTS, two LIGHT STANDS (MD5500), three FOS001 Lamps, one FOS004 Lamp, two STAND ADAPTERS (MD5050), two CAMERA ADAPTERS (MD5000), two SPRING-CLAMP MOUNTS (MD5250), two SCISSOR-CLIP MOUNTS (MD5150), one PUTTY-KNIFE MOUNT (MD5100), one 12V DC ADAPTER CORD (CC8200), three EXTENSION CORDS (CC8650), one DAYLIGHT FILTER (LC7000) and one DIFFUSION LENS (LC7050). Supplied in foam-fitted carrying case.



LK2300 COOL KIT III 18" L x 16" W x 5½" D 10 lb.
Includes three MINI-COOL LIGHTS, five FOS001 Lamps, one FOS003 Lamp, three STAND ADAPTERS (MD5050), one CAMERA ADAPTER (MD5000), three SPRING-CLAMP MOUNTS (MD5250), two SCISSOR-CLIP MOUNTS (MD5150), one PUTTY-KNIFE MOUNT (MD5100), one 12V DC ADAPTER CORD (CC8200), three EXTENSION CORDS (CC8650), one CUBE TAP (CC8700), one DAYLIGHT FILTER (LC7000) and one DIFFUSION LENS (LC7050). Supplied in foam-fitted carrying case.



CATALOGUE MOUNTING DEVICES



MD5050 STAND ADAPTER

This adapter is required for attaching the MINI-COOL to any of the four next-listed items, all of which have 5/8" diameter posts. Upper surface of adapter has a threaded hole (1/4"-20) to receive the mounting knob of the MINI-COOL mounting bracket. Under surface has a 5/8" hole to fit over a light stand or other 5/8" diameter post. A clamp screw in the side of the adapter serves to clamp it to the post over which it is fitted.

MD5100 PUTTY-KNIFE MOUNT

Solves many different mounting problems. Blade will fit into cracks, between door and frame, between window and frame, between books or beneath any heavy object. Or blade may be taped to a wall or other surface with duct tape. Has 5/8" post for Stand Adapter.



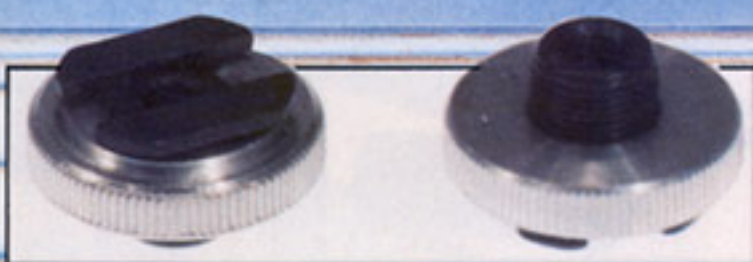
MD5150 SCISSOR-CLIP MOUNT

Designed specifically for clamping the "T" bar of a suspended ceiling, so that the MINI-COOL may be suspended. 5/8" mounting post accepts MINI-COOL Stand Adapter.



MD5500 COLLAPSIBLE LIGHT STAND

Durably constructed of aluminum. Weighs only 1 lb. 13 oz. Collapsed length is 19", extended height is 7'. Has 5/8" diameter mounting post (which accepts MINI-COOL Stand Adapter).

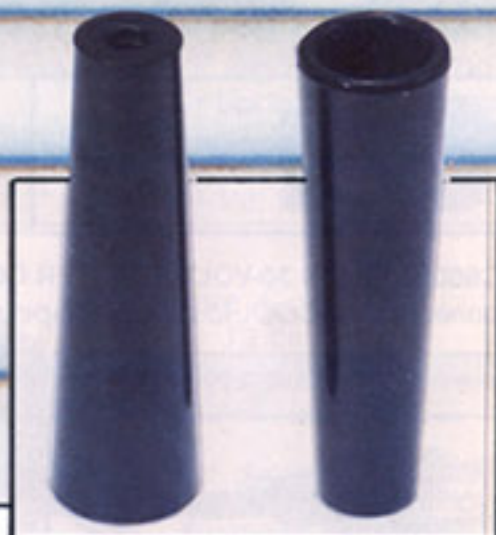


MD5000 CAMERA ADAPTER

(Supplied with each MINI-COOL.) Used to mount the MINI-COOL directly to any camera having a standard accessory shoe. (See illustration and explanation on page 6.)

MD5250 SPRING-CLAMP MOUNT

For attaching the MINI-COOL to pipes, shelves, doors, etc. Clamps objects up to 2" thick. Soft vinyl tips protect surface being clamped. Has 5/8" post, which mates with Stand Adapter listed above.



MD5450 HANDLE

(Supplied with each MINI-COOL.) Intended for hand-holding the MINI-COOL. Top surface has a threaded hole (1/4"-20) which accepts the MINI-COOL mounting knob. Under surface has a tapered hole which will fit over a 5/8" post.

CATALOGUE **CONNECTING CORDS**

ALL MINI-COOL cords are made of 16 gauge wire (heavier than average), except the Auto Battery Adapter Cord (which is 10 gauge, even heavier). Length of each cord is shown in its illustration, along with photographs of the terminals on each end.

All the cords having two-blade receptacles will accept the three-prong plugs on the MINI-COOL power cord and the Extension Cord. (The grounding pin on the plug, superfluous when connected to DC, passes over the outside of the receptacle.)

Barrel diameter is 5/8" inside, 3/4" outside.



CC8050 3-PIN 12-VOLT ADAPTER CORD
Connects MINI-COOL to standard 3-pin receptacles.

CC8100 4-PIN 12-VOLT ADAPTER CORD
Connects MINI-COOL to standard 4-pin receptacles.

CC8150 5-PIN 12-VOLT ADAPTER CORD
Connects MINI-COOL to standard 5-pin receptacles.



3-PIN 4-PIN 5-PIN

4 and 5-pin cords have plugs identical to that of the 3-pin cord, except for the numbers of pins. Pin pattern for each plug type is shown actual size above.



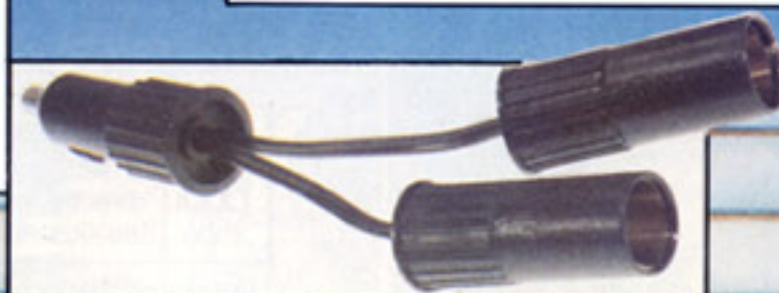
CC8250 AUTO BATTERY ADAPTER CORD
Connects MINI-COOL to posts of automotive or other type batteries.



CC8200 CIGARETTE-LIGHTER 12-VOLT ADAPTER CORD
Connects MINI-COOL to cigarette-lighter type receptacles on battery packs and belts (or on vehicles).

CC8750 DUAL RECEPTACLE CIGARETTE-LIGHTER ADAPTER CORD

Connects two cords having cigarette-lighter plugs to a single receptacle.



CC8000 2-PIN 30-VOLT ADAPTER CORD
Connects MINI-COOL to standard 2-pin receptacles.



CC8650 EXTENSION CORD
For connecting MINI-COOL to wall outlets or transformers. Also good general-purpose extension cord.



CC8700 THREE-WAY CUBE TAP
For operating several MINI-COOLS (or other devices) from a single power source.

HOW TO DETERMINE RUNNING TIME FOR ANY LAMP/BATTERY COMBINATION

A battery's energy capacity is stated in Ampere-Hours (AH). This figure often appears on a label on the battery or battery pack and, if not, can usually be found in the manufacturer's instructions. A battery with a 12 AH rating will supply a current of 12 Amperes for 1 hour, 1 Ampere for 12 hours, 2 Amperes for 6 hours, 4 Amperes for 3 hours, etc.

To determine how long any lamp will operate from any battery, divide the battery's AH figure by the number of Amperes drawn by the lamp. For example, suppose you are using an FOS004 lamp with a 12 AH battery belt. The chart shows that the FOS004 draws 4.17 Amperes.

$$\frac{12 \text{ Ampere-Hours}}{4.17 \text{ Amperes}} = 2.88 \text{ hours (or } 2.88 \times 60 = 173 \text{ minutes)}$$

It is not good practice to run any battery to total depletion, so the lamp/battery combination in the above example should not be used in practice for 173 minutes. Half that time would be a better choice. Most batteries last longer (survive more charge/discharge cycles) if they never are fully exhausted. Also, battery voltage drops as the battery is depleted, which in turn lowers the "color temperature" of the light produced by the lamp. (The light becomes more reddish.) If you operate the lamp for 50 to 75 percent of the time computed above (87 to 130 minutes), color temperature will remain acceptable and battery life will not be seriously diminished.

OLYMPIC-L

- "ABSORBED ELECTROLYTE" technology.
- Up to 1500 recharges.
- No "MEMORY" effect.
- Exceptional deep discharge recovery
- **BELTS** have built-in charger and voltage monitor circuit with L.E.D. indicators.

These batteries are compact and light weight, while providing full and reliable power, all have been designed for rapid recharge, or for high power output.

L-1.9 PACK (1.9 AH)

- Power Camcorder light for 40 minutes.
 - Velcro Attachable to Camcorder or your belt.
- 7" X 2 1/2" X 1 1/2"

L-6.5 PACK (6.5 AH) 5 1/4 lbs. 8 Colors

N-2.5 PACK (2.5 AH) • "NICKEL CADMIUM" technology.

- Up to 2000 recharges.
 - Powers Camcorder light for 1 hour.
 - Velcro attachable to Camcorder or your belt.
- 6 1/2" X 3 1/4" X 1 1/2" 2 lbs.

Olympic L-13 (13 AH) 12 lbs.

Olympic L-20 (20 AH) 16 3/4 lbs.

For detail informations,
request for OLYMPIC
operating instruction

Made in USA

CATALOGUE INTERCHANGEABLE LAMPS & OPTICAL ACCESSORIES

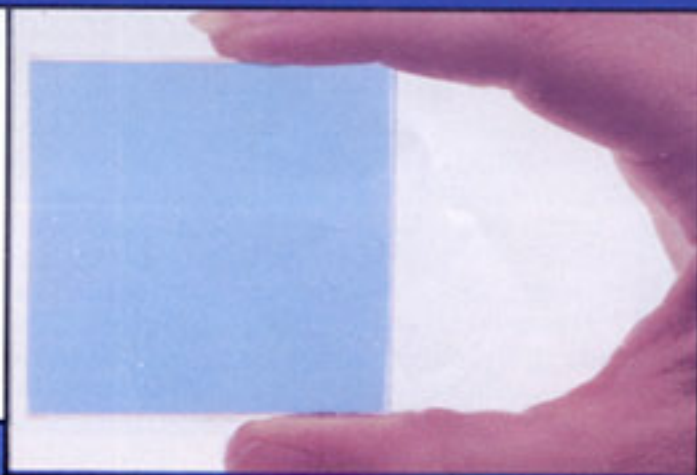
All Cool-Lux lamps are quartz-halogen type, permanently mounted in dichroic reflectors. A special coating on the reflector passes Ultraviolet and Infrared radiations, along with most of the heat generated by the lamp's filament, backwards through the reflector. Pure visible light is reflected forward onto the subject. As shown in the chart on page 7, color temperatures among the different lamps available are all within 5 percent of 3200 degrees Kelvin. Thus their colors are precisely matched to the requirements of video tape and tungsten-type color film. THESE ARE UNQUESTIONABLY THE FINEST AND MOST EFFICIENT LAMPS AVAILABLE FOR VIDEO AND FILM LIGHTING.

OPTICAL ACCESSORIES

CAT. NO.	VOLTS	WATTS	BEAM TYPE	AV. LIFE (Hrs)
FOS001	120	250	FLOOD	50
FOS002	30	200	FLOOD	50
FOS003	12	100	FLOOD	50
FOS004	12	50	FLOOD	4000
FOS005	12	25	FLOOD	4000
FOS006	12	50	SPOT	4000
FOS007	12	25	SPOT	4000
FOS008	12	75	SPOT	4000
FOS009	12	75	FLOOD	4000
FOS010	14.4	95	FLOOD	500

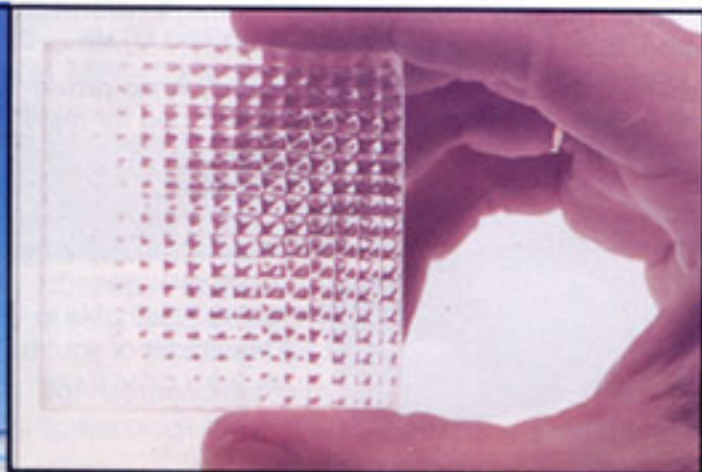
LC7000 DAYLIGHT FILTER

Whenever the MINI-COOL is to be used outdoors, to supplement daylight, this filter should be installed. It selectively absorbs red light but freely passes light at the blue end of the spectrum, so that light provided by the MINI-COOL is color matched to that of the sun. Using state-of-the-art technology, a high-vacuum deposited coating is applied to a Pyrex substrate, producing a virtually indestructible filter. It will withstand temperatures of 800 degrees F, is highly abrasion-resistant, and is guaranteed not to change color balance through a lifetime of use. Further, it provides at least 20 percent better transmission than any other daylight filter available.



LC7050 DIFFUSION LENS

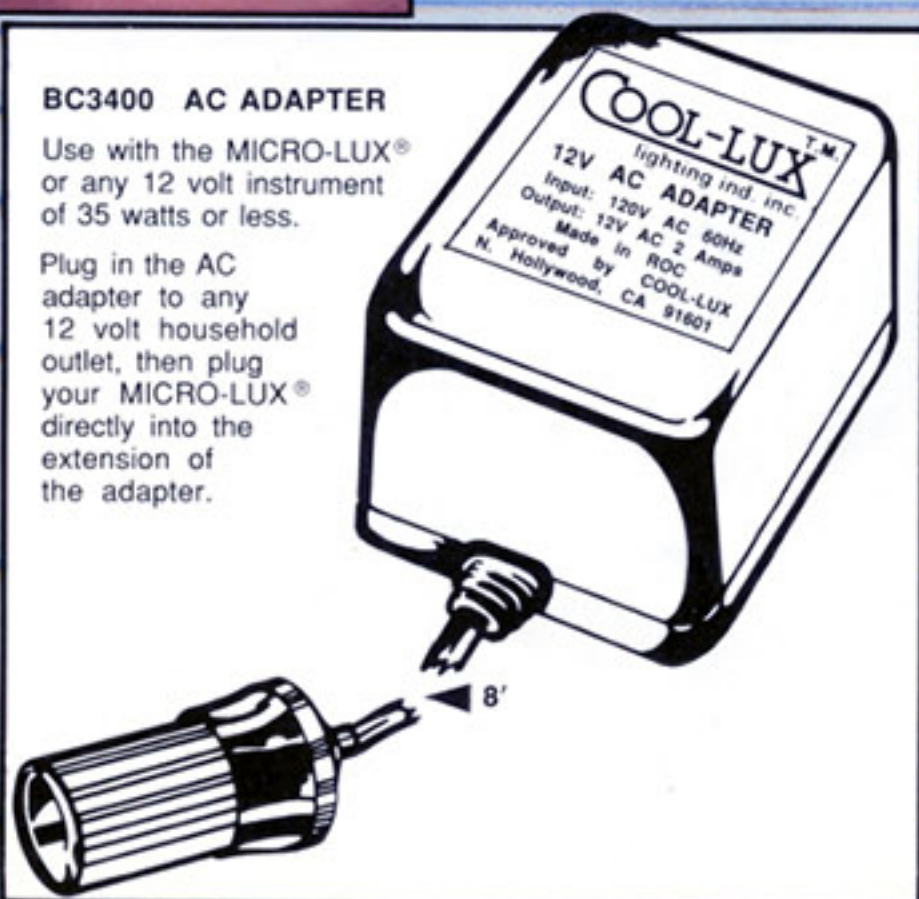
Used to diffuse the MINI-COOL's light beam, to provide a very soft and very even illumination on the subject. Also increases the beam angle (enlarges the illuminated area) slightly.



BC3400 AC ADAPTER

Use with the MICRO-LUX® or any 12 volt instrument of 35 watts or less.

Plug in the AC adapter to any 12 volt household outlet, then plug your MICRO-LUX® directly into the extension of the adapter.



CATALOGUE PHOTO DIMMER



Actual size

LC7150 PHOTO DIMMER

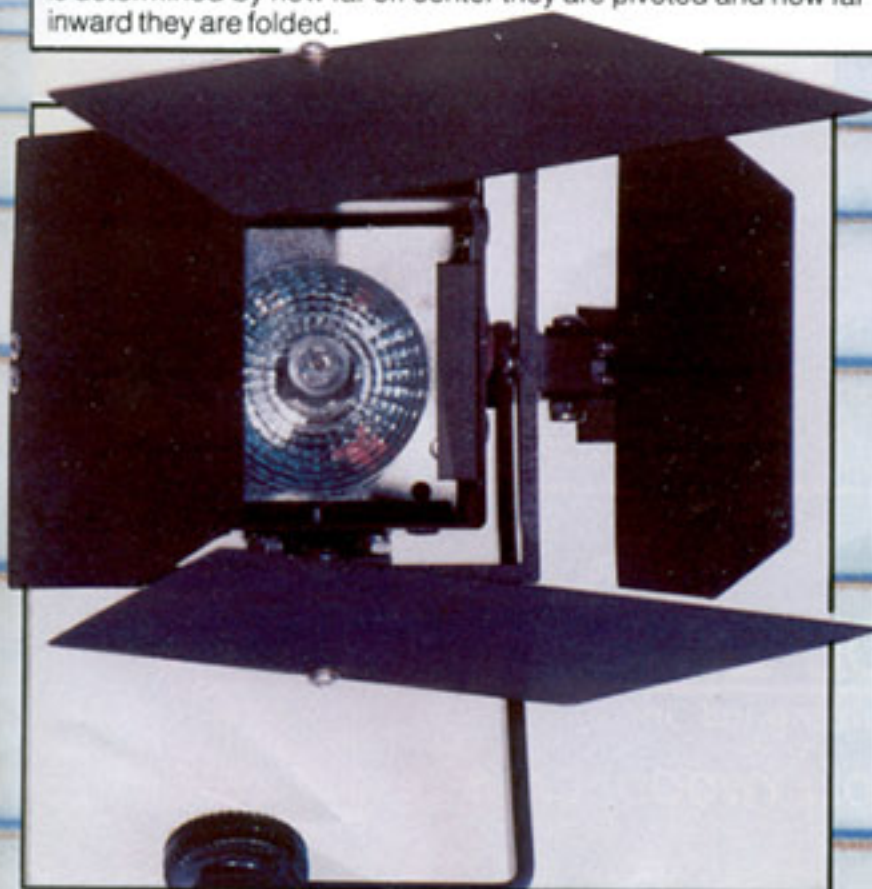
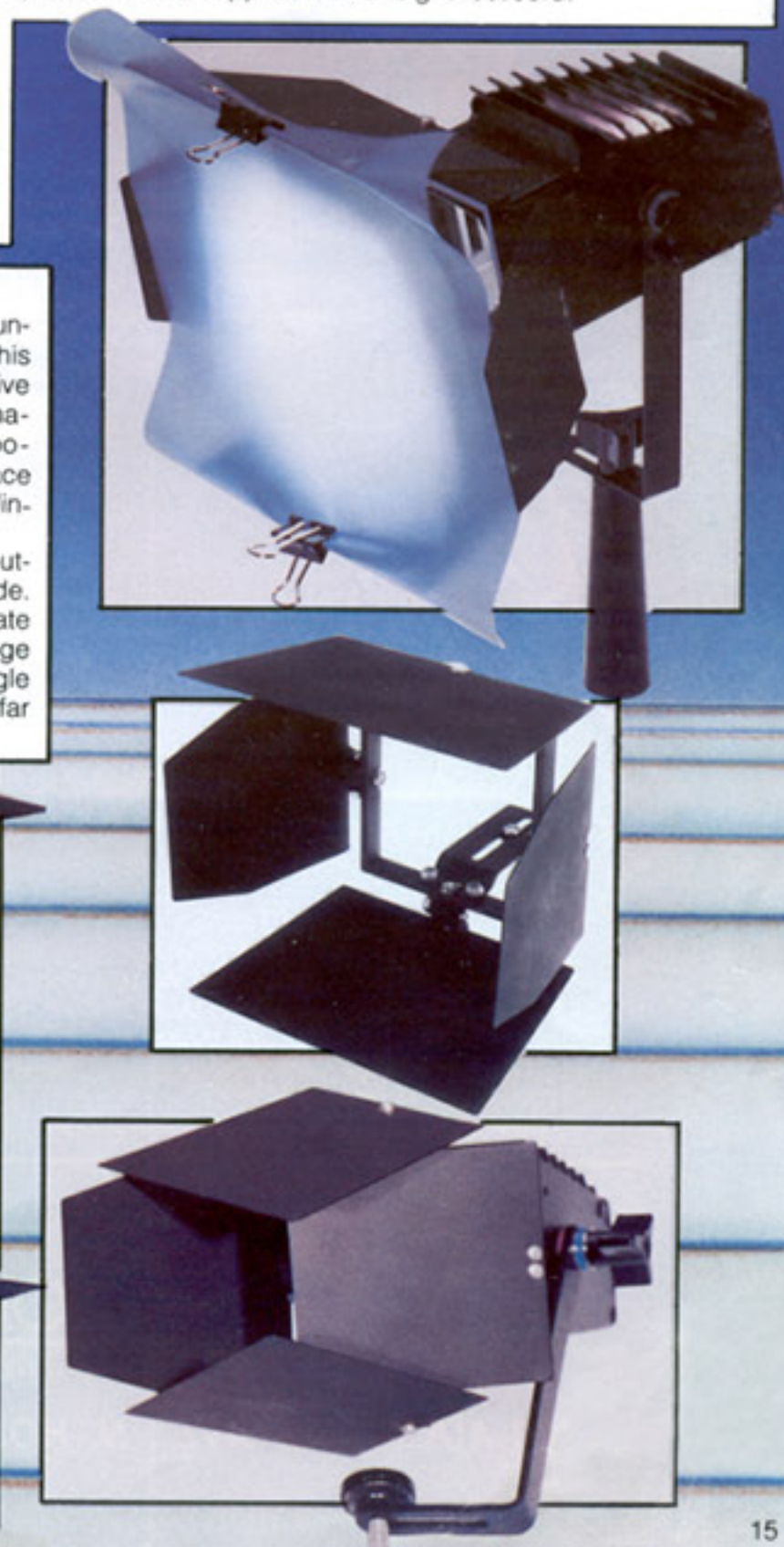
Provides complete brightness control for the MINI-COOL with FOS001 lamp. (The Dimmer operates only on AC, and therefore can be used only with the FOS001.) The greatest asset of the FOS001, its almost incredible brightness, can sometimes be a disadvantage. With the PHOTO DIMMER, brightness can be decreased to any desired level. Operating the lamp at decreased brightness also greatly extends its life. For example, when illumination is reduced to 32 percent of maximum, color temperature is still a usable 2800 degrees Kelvin and lamp life increases to 750 hours! A scale on the cover directly reads out lamp life for various positions of the slider, and a chart shows

corresponding reductions in illumination and color temperature. While intended for use with the MINI-COOL, the PHOTO DIMMER works equally well with any other incandescent lamp up to 300 Watts. Supplied with an eight-foot cord.

LC7100 PRECISION LIGHT FRAMER

These "Barn Doors" (as Hollywood refers to them) are mounted to the floor plate of the MINI-COOL with a single screw. This invaluable accessory provides unlimited scope for creative artistic expression. Use it to precisely define the area illuminated by the MINI-COOL or to create shadows for artistic purposes. The upper and lower doors are a very convenient place to mount gels or diffusion materials, attaching them with ordinary "bulldog" clips.

All four doors swing 180 degrees, from flat closed to flat outward-projecting. Upper and lower doors also pivot side-to-side. When pivoted off-center and folded inward, these doors create a wedge-shaped opening, as shown below. Direction of wedge depends upon which way doors are pivoted, and wedge angle is determined by how far off center they are pivoted and how far inward they are folded.



Staripak

**A CASE FOR
ANY ASSIGNMENT**



20 13/16" L x 12 7/16" W x 6 1/2" D 16 lb. 3 oz.

- | | |
|--|--|
| 1 CASE WITH FOAM & KEYS | 1 CAMERA ADAPTER |
| 4 MINI-COOL™ LIGHTS | 2 THREE WAY CUBE TAP |
| 4 STAND ADAPTER | 2 SCISSOR-CLIP MOUNT |
| 2 COLLAPSIBLE LIGHT STAND | 1 PUTTY-KNIFE MOUNT |
| 2 LIGHT FRAMERS (Barn Doors) | ~~2 LARGE SLIDING CLAMP MOUNT~~ |
| 6 FOS-1 LAMP [120-Volt, 250-Watt, Flood] | 2 SPRING-CLAMP MOUNT |
| 1 FOS-3 LAMP [12-Volt, 100-Watt, Flood] | 3 EXTENSION CORD |
| 1 FOS-9 LAMP [12-Volt, 75-Watt, Flood] | 1 CIGARETTE-LIGHTER ADAPTER CORD |
| 2 DIFFUSION LENS | 1 PHOTO DIMMER™ |
| 2 DAYLIGHT FILTER | 2 SPARE NYLON STRAIN RELIEFS |
| 1 HANDLE | 1 AUTO BATTERY ADAPTER CORD |

COOL-LUX
lighting ind. inc.

5723 AUCKLAND AVE., N. HOLLYWOOD, CALIF. 91601-2207