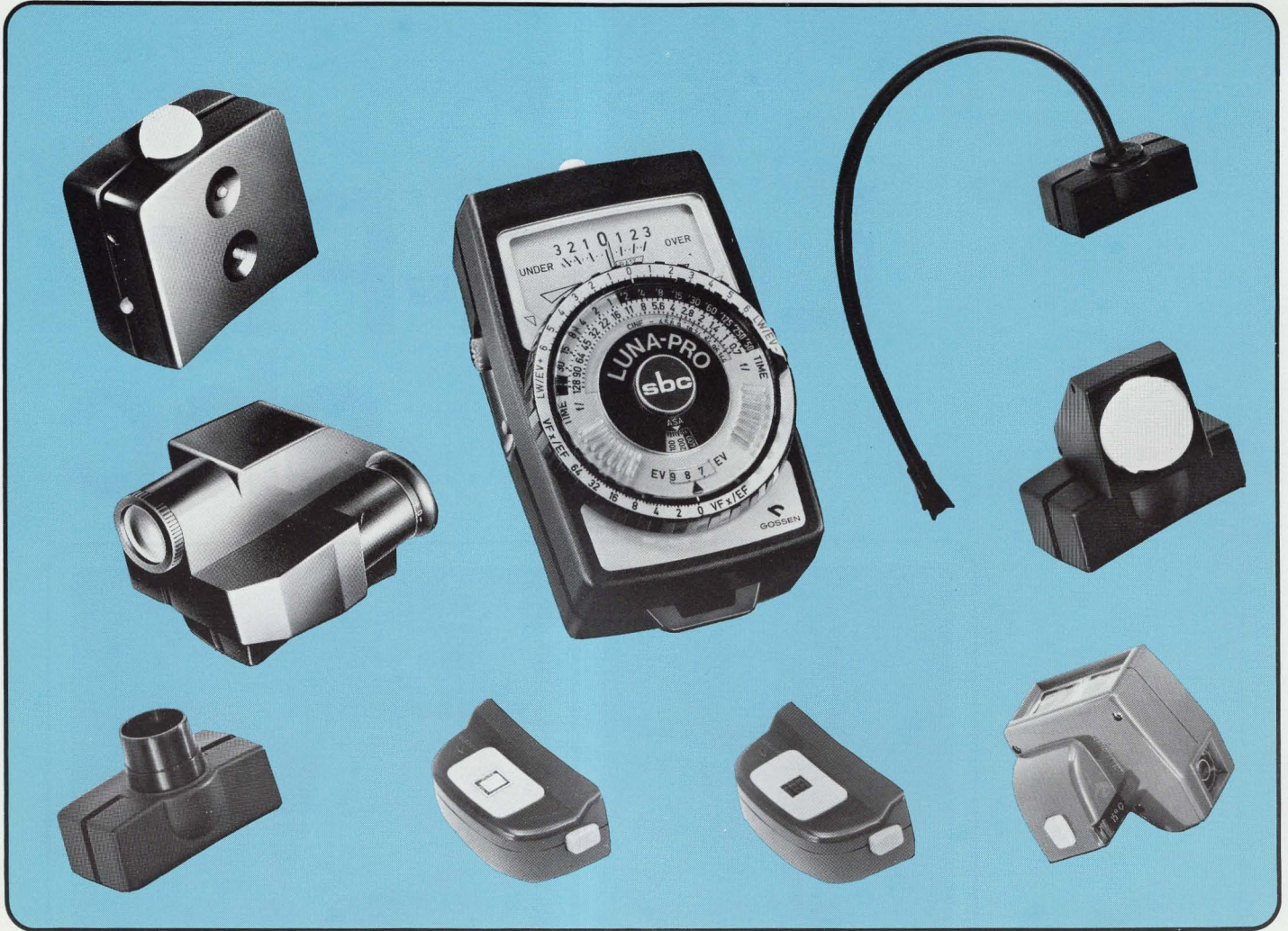



GOSSEN

Luna-Pro[®] sbc



Gossen Luna-Pro sbc System Exposure Meter

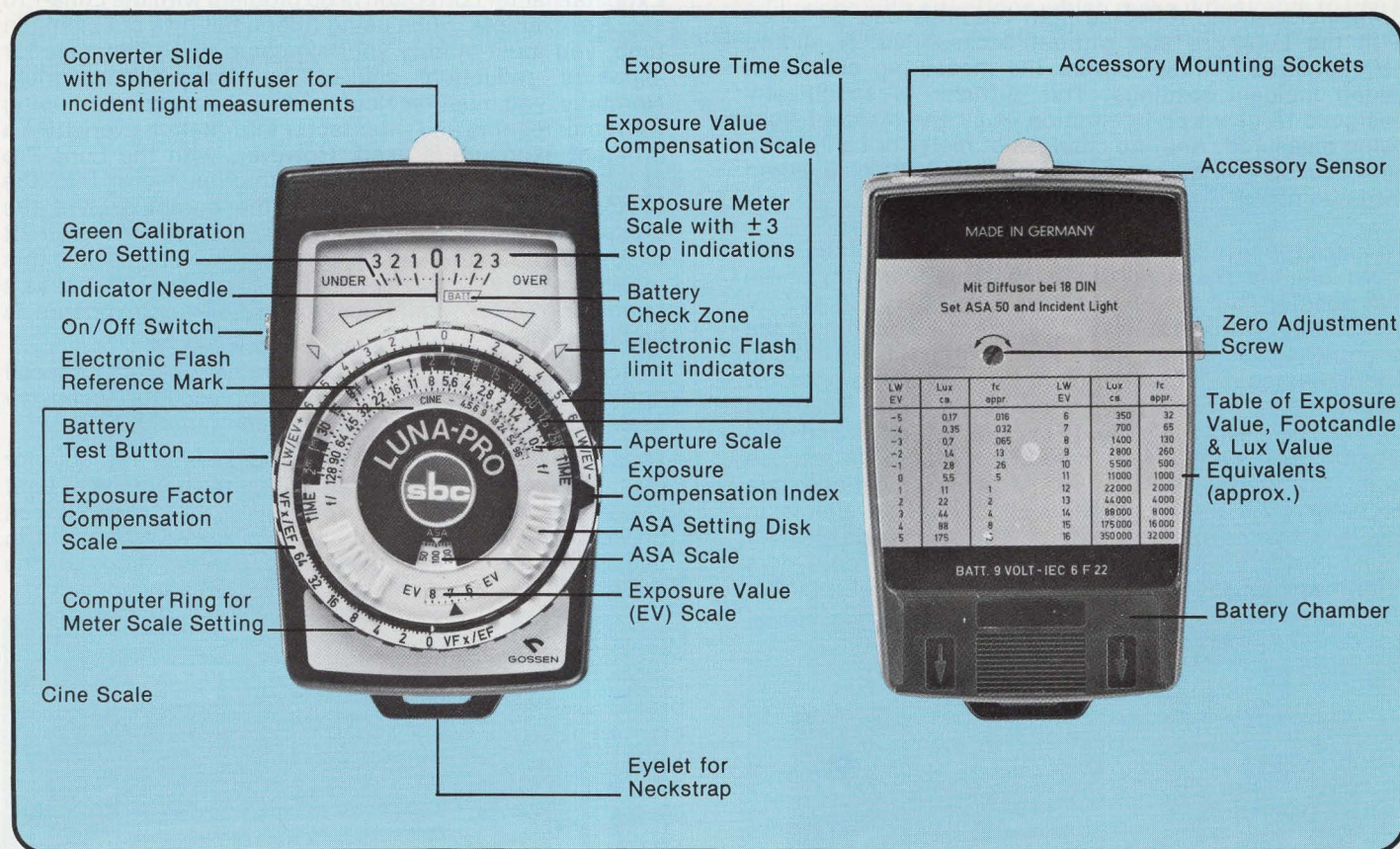


The most versatile and complete modular light measuring system ever devised for the professional and serious amateur photographer — the Gossen Luna-Pro sbc — utilizes silicon blue cells and state-of-the-art electronic technology to provide unexcelled speed of response, freedom from “memory” plus a remarkably-wide measuring range. A unique system of interchangeable calibrated accessories extends the meter’s capabilities into areas normally requiring the use of several separate specialty meters. Thus, the Luna-Pro sbc System provides every measuring facility for location, studio, darkroom, electronic flash, and laboratory assignments, including footcandle, lux and footlambert measurements.

Features

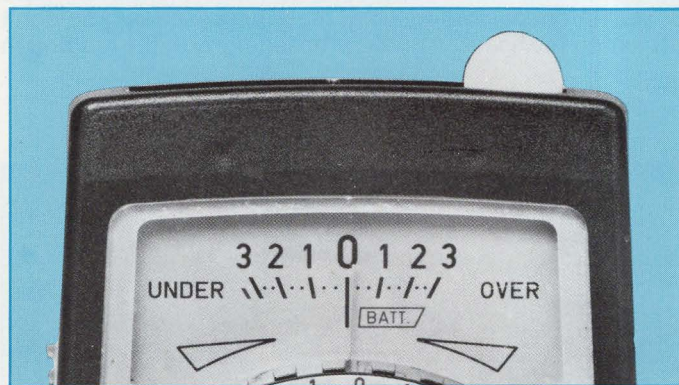
- Complete range of accessories including all existing Luna-Pro accessories plus:
 - Multibeam® Spot Meter Attachment for 1°, 7.5°, and 15° angular measurements with single lens reflex Viewing.
 - Studio attachment for incident light, footcandle, and lux measurements.
 - Flash Meter Attachment for measuring light from electronic flash units.
 - Microscope Attachment.
 - Fibre Optics Probe Attachment.
- Silicon blue cell sensor for fast response with no “memory.”
- Incident and reflected light measurements.
- Null meter system for maximum accuracy and ease of use.
- $\pm 3\text{EV}$ indications for measuring scene brightness range and working with zone systems.
- Direct read-out of all applicable f/stop/shutter speed combinations shown. No need to re-adjust dials.
- Exposure correction for working with bellows extension factors, filter factors, etc.
- Automatic calibration adjustment of meter sensitivity when using specific accessories.
- Snap-on accessory scales for direct photometric measurement in footcandles, footlamberts, Lux, etc.
- All solid-state electronic circuitry for utmost reliability.
- Uses standard, readily available 9 Volt transistor batteries.
- Electronic “sample and hold” circuit stores light measurements for reading in remote areas.
- Automatic shut off to conserve battery power.

The Basic Meter



The original Gossen Luna-Pro CdS exposure meters set the world standard for range, accuracy, versatility and dependability with professional photographers. Now, Gossen has taken all the experience gained from the Luna-Pro and produced the new Luna-Pro sbc. It extends all of the time-proven features of the Luna-Pro with advanced design concepts and sophisticated solid state circuits to open whole new areas of light measurement not previously possible with any single meter. It is the true modular "system" meter, designed to handle a wide range of light measuring assignments.

Null Measurements

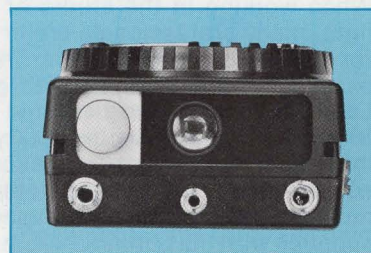


To simplify measurements and assure greatest accuracy, the Luna-Pro sbc operates on a null or zeroing meter principle. Light values are measured and stored in the meter, producing a needle deflection on the calibrated meter face. Rotating the computer ring on the meter to bring the needle to the zero or null position automatically provides correct and complete exposure information, including all applicable combinations of exposure times and apertures. Unlike digital meters, there is no need to transfer readings or to reprogram additional information

into the meter to choose which aperture/exposure time combination is best for you. And, because of the null meter concept, the needle deflection is much greater for a given change in light intensity at any part of the measuring range, making precision exposure determination fast, and easy.

Silicon Blue Cells

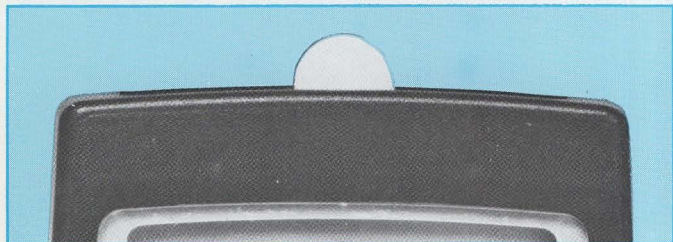
To complement this excellent measuring system, the Luna-Pro sbc uses the latest type of silicon blue cell photo detector. These cells have the advantage of retaining no "memory" of a previous measurement when subjected to greatly varying levels of light intensity. Accurate readings can be taken alternately of high and low level light sources without inconsistencies common to other types of photo detectors. In addition, response time at low light levels is virtually instantaneous and helps to eliminate long waiting and errors caused by too short a measurement time.



Versatility

Both incident and reflected light readings can be taken with the Luna-Pro sbc without accessories. A sliding hemispherical diffuser covers the measuring cell when taking incident readings. This diffuser is specifically designed to give true integration of all the incident light being measured. And, no changes of meter or calibration are necessary when changing from incident to reflected measurements.

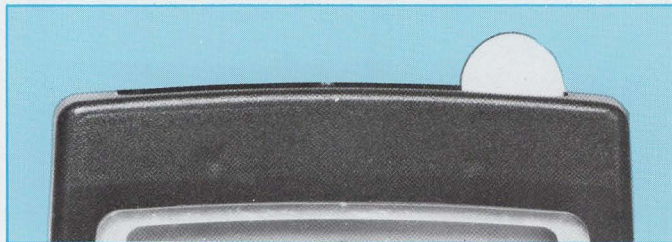
To make the measuring system of the Luna-Pro sbc even more versatile, the meter face is calibrated not only at the null position, but also over a range of ± 3 EVs in 1/3 EV increments. This is especially useful when determining the brightness range of the scene or subject being photographed. The null point is used as a reference for measuring the most important part of the scene. Readings can then be taken of highlights and shadow areas and read directly off the meter face in terms of f/stop differences from the main subject. No extra calculations are necessary. All the information is instantly available in readily applied photographic terms. This feature is ideal for "zone system" photography which also considers brightness range compared to a main subject of interest.



Exposure factor correction is no problem with the Luna-Pro sbc. For example, when using filters, bellows or extension tube, you must modify your exposure to compensate for exposure reduction caused by these accessories. Normally, you must recalculate the proper exposure using the meter reading and filter factor information every time a different exposure is used. However, with the Luna-Pro sbc, you simply program the correction factor into the special exposure factor dial on the computer and the Luna-Pro sbc will automatically provide the correct exposure information. When the meter is being used in this manner, a red indicator appears on the computer dial as a reminder that an adjustment of the normal exposure is being made.

To further simplify exposure determination under special lighting situations, the Luna-Pro sbc accepts accessory scales that quickly snap onto the computer dial.

These scales, in addition to the accessories available for the Luna-Pro sbc allow direct photometric readings of light values such as footcandles, foot lamberts, lux, etc. which normally require the use of a special meter. When not in use, or when a different measuring result is required, the scales can easily be removed and interchanged.

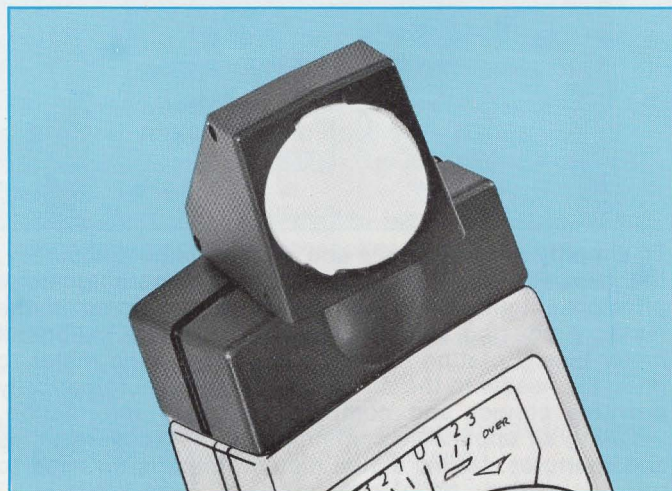


Accessories

All of these excellent features are only the beginning of the Luna-Pro sbc story. The wide range of instantly interchangeable accessories set the Luna-Pro sbc distinctly above any other light measuring instrument. And, to make them even more practical, several of them automatically reprogram the meter response for direct reading. With these accessories, you don't have to match special marks or lines to get the right reading. Just attaching the accessory and proceeding with the reading in a normal manner is all that's necessary!

Luna-Sphere Studio Accessory

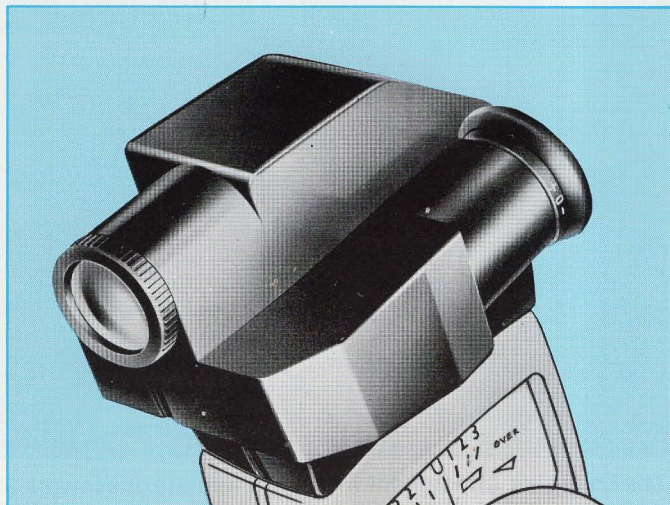
When working in the studio or with multiple sources of light, many professionals prefer to measure incident light for exposure determination. This can be done with the basic Luna-Pro sbc, but for greater convenience, the Luna-Sphere combines its large integrating sphere with a 360° swivel head plus capability for a flat plane diffuser into one convenient accessory. For photometrically accurate measurements of footcandles or Lux, readings must be taken on a flat diffused plane. The flat diffuser supplied with the Luna-Sphere makes these measurements possible, and without affecting calibration of the instrument. Footcandle measurements are preferred by many cinematographers and lighting engineers. Others prefer to use the flat diffuser simply because it is more directional for incident light than diffusing sphere. The Luna-Sphere automatically adjusts the meter sensitivity when in use.



Spot Measuring Attachments

Because of its unique versatility, the Luna-Pro sbc System can readily cope with situations which make it desirable to use reflected light measuring angles of less than the meter's standard 30°. There are two accessories which will decrease the measuring angle for "spot" readings.

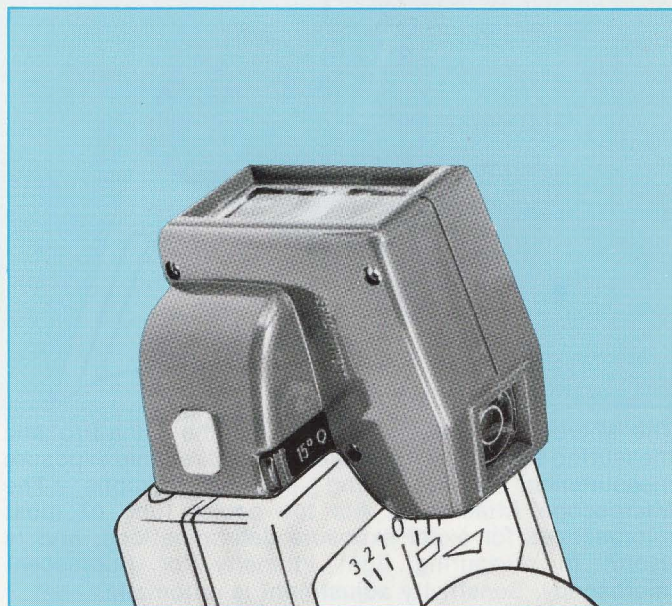
Multibeam Spot Attachment



For even greater selectivity, the Multibeam® Spot Attachment for the Luna-Pro sbc provides not only 15° and 7.5° measuring angles but, in addition, a 1° angle for ultra precise exposure measurement. The single lens reflex design permits measuring and viewing through the same lens, eliminating parallax problems which can cause measuring errors with twin-lens 1° spot meters.

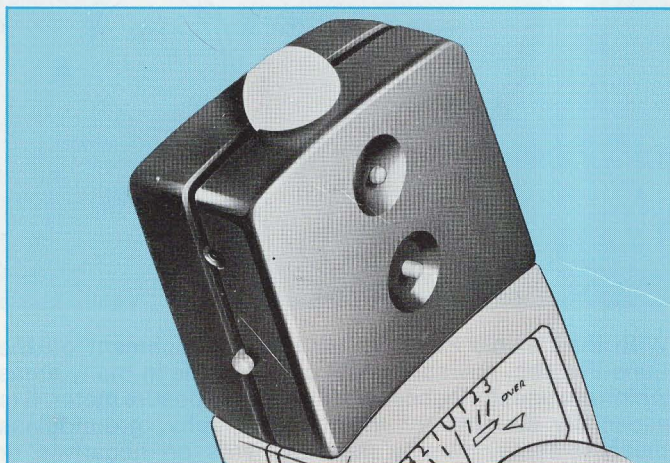
The Multibeam® Attachment focuses from infinity to 1.5 feet for maximum measuring accuracy, and provision is made for eyepiece correction. With this attachment, you have the advantages of a separate 1° spot meter for your Luna-Pro sbc, and it automatically adjusts the meter sensitivity when attached.

Variable Angle Attachment



The modestly priced Vari-Angle Attachment locks instantly onto the Luna-Pro sbc (or regular Luna-Pro) and provides convenient selection of either 15° or 7.5° measuring angles. For reflected light readings, the normal measuring area corresponds to a light acceptance angle of 30°. A built-in reflex viewfinder showing the 15° and 7.5° measuring area permits accurate measurements for exposures with telephoto lenses and selective readings of various parts of the scene or subject when normal lenses are used.

Flash Attachment



Electronic flash has become an extremely important source of controlled lighting in the studio as well as on location. Previously, standard meters designed to measure continuous light could not measure the short, extremely bright bursts of light from such flash units. Now, however, the flash attachment converts your Luna-Pro sbc into a high quality electronic flash meter! Employing many of the

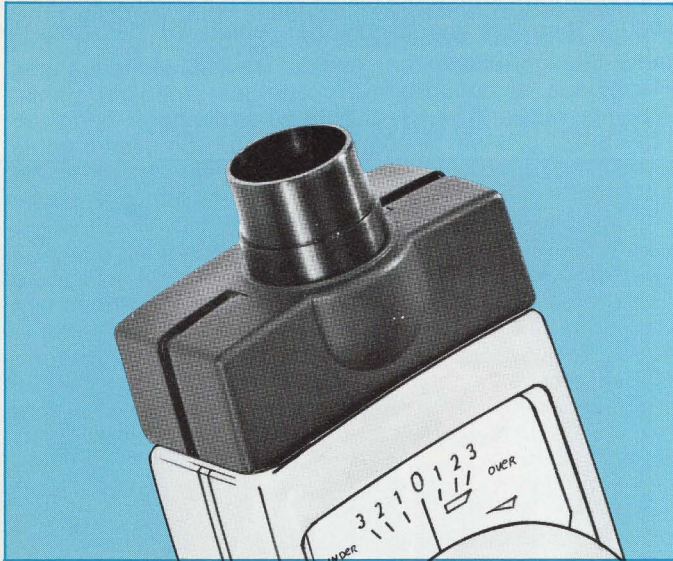
engineering concepts of the precision Gossen Mark II electronic flash meter, this accessory can operate either as a cord-connected or cordless meter to measure single or multiple flashes.

After the meter is turned on, any flashes within a two minute period can be measured and stored. Light emitting diodes indicate readiness and activation. The two minute operating cycle can be terminated for individual single flash readings.

When multiple flashes are required to achieve correct exposure at a desired f/stop (e.g. for greatest depth of field in interiors or other still subjects), the readings of successive flashes are automatically accumulated within the two minute cycle to indicate to you how many flashes are necessary for the desired result.

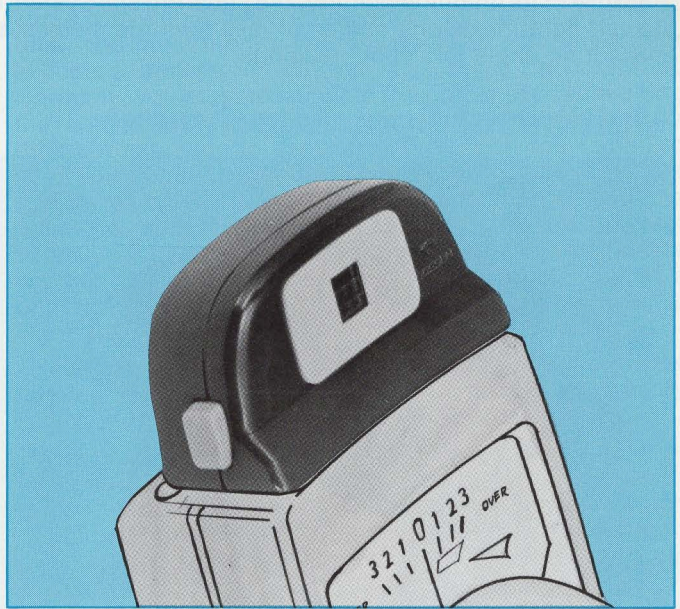
Because, with this attachment, the Luna-Pro sbc integrates and measures the total flash — not just the peak intensity — it is accurate with flash units having varying flash durations. Measurements can be made with durations as short as 1/100,000 sec., making the meter suitable for all commercial and amateur flash units, including those with automatic circuits. The attachment automatically adjusts the meter sensitivity.

Microscope Attachment



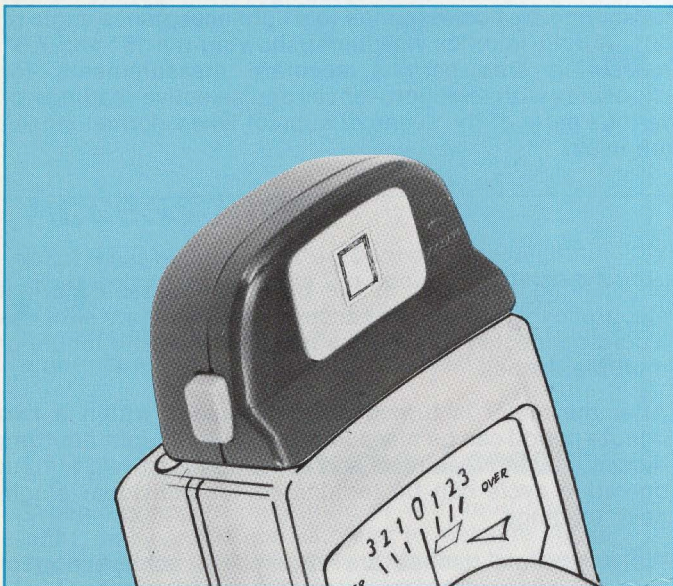
The Microscope Attachment utilizes the Luna-Pro sbc measuring sensitivity for convenient and reliable exposure measurement when taking photomicrographs. The Microscope Attachment fits the ocular tube of most microscopes for exact exposure determinations, and is useful in measuring light intensity for fluorescent microscopy. Sensitivity adjustment is automatic.

Enlarging Attachment



The Enlarging Attachment will help eliminate guesswork in darkroom printing. It determines contrast range and correct exposure time by measuring the projected image on your enlarger easel. After calibrations for paper speed, direct readings of aperture and exposure time are possible, resulting in savings of time and material.

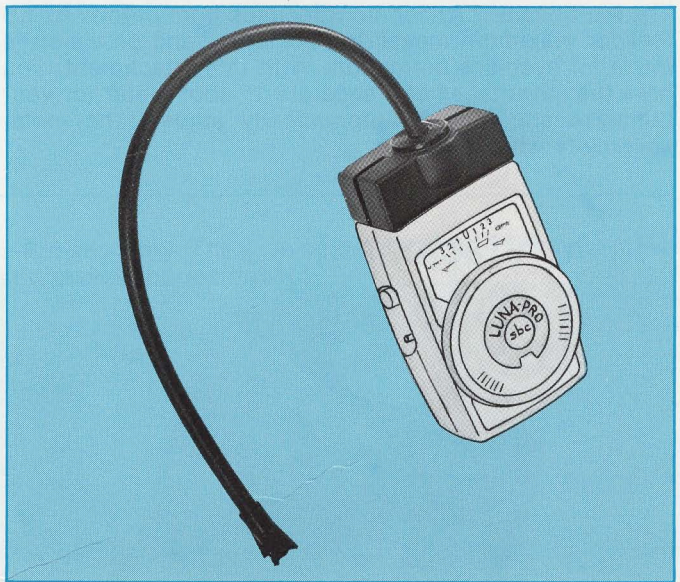
Repro [Copying] Attachment



With the Repro Attachment on the Luna-Pro sbc, it is possible to obtain exposure values of flat copy such as paintings, documents, and photographic prints.

The illumination on the copy board can be measured for evenness of various points of the material to be copied. It can also be reversed for measurements of light transmitted through slides or other translucent material being copied.

Fiber Optics Probe Attachment



With the flexible Fiber Optics Probe Attachment on the Luna-Pro sbc, measurements can be made in many areas which are usually inaccessible with an exposure meter. It is especially suitable for macrophotography, groundglass measurements, density measurements on negatives or transparencies, and for luminous density measurements. Sensitivity adjustment is automatic.

These accessories make the Luna-Pro sbc the most versatile and complete systems meter available today. And, because it is a true system meter where the accessories interface with the meter electronics, future advances in light measurement techniques can be accommodated.

Specifications

EV Range ASA 25 —6 to +15
Response Time 1/1000 Sec.
Photo Cell Silicon Blue Cell
Angle of Coverage 30° Reflected 180° Incident
Sensitivity016 to 32,000 footcandles in two ranges
Power Source . . . 9 volt Eveready Battery — or 9 volt Mallory Duracell® Alkaline Battery or equivalent. Battery Type #MN1604
Dimensions 4¾ x 1¾ x 2¾
Weight8¼ oz. w/battery

Scale Ranges:

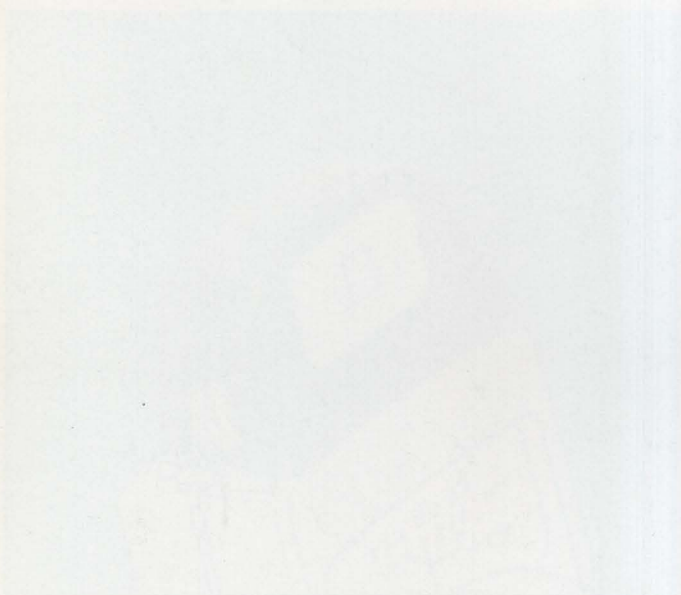
Cine Range 4.5 to 144 fps.
Exposure Value Range -8 to +24
Shutter Speeds 1/4,000 Sec. to 8 hours
Lens Aperture f/0.7 to f/128
Exposure Factor Scale Plus/Minus exposure indicated in EV; Plus exposure indicated in Exposure Factor

Microscope Attachment



The Microscope Attachment is designed for use with the Berkey Microscope. It features a high magnification lens and a mirror that reflects light from the specimen back through the lens to the eyepiece. This attachment is ideal for examining small, detailed specimens.

Repro (Copying) Attachment



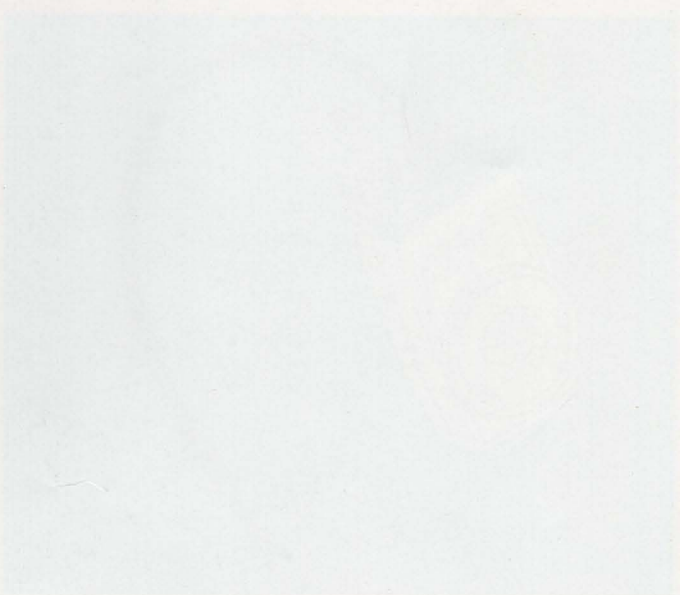
The Repro (Copying) Attachment is designed for use with the Berkey Microscope. It features a high magnification lens and a mirror that reflects light from the specimen back through the lens to the eyepiece. This attachment is ideal for copying and reproducing images of specimens.

Enlarging Attachment



The Enlarging Attachment is designed for use with the Berkey Microscope. It features a high magnification lens and a mirror that reflects light from the specimen back through the lens to the eyepiece. This attachment is ideal for enlarging and magnifying images of specimens.

Fiber Optic Probe Attachment



The Fiber Optic Probe Attachment is designed for use with the Berkey Microscope. It features a high magnification lens and a fiber optic cable that reflects light from the specimen back through the cable to the eyepiece. This attachment is ideal for examining specimens in a non-invasive manner.

Prices and Specifications subject to change without notice.

**GOSSEN DIVISION
BERKEY MARKETING COMPANIES**

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