bogen

Gossen Meters

The standard of performance in
light measuring instruments

Gossen
hand-held meters
give you the
creative edge.

Why hand-held meters?
Your creativity demands the right light reading.

In a world where so many cameras have built-in, through-the-lens metering systems, who needs a separate hand-held meter? The answer is, "If you're serious about photography, you do."

The difference between a built-in meter and a Gossen is, quite frankly, the difference between a snapshooter and a serious photographer. The snapshooter accepts the approximations of an averaging meter and simply throws the exceptions in the wastebasket. But a professional photographer can't afford to work that way, and the serious amateur won't.

Why Gossen hand-held light meters?
Built-in meters give you average exposures for average scenes. For a Gossen meter, that's just the beginning.

Modern photographic films have remarkable latitude, especially color negative material and can produce acceptable results over a range of exposures. But the experienced photographer knows the difference between acceptable and optimum exposure because there's no substitute for the best.

Ease and versatility.

Reflected Light
Measuring from the camera towards the subject.

Incident Light
Measuring from the subject towards the camera.

Ergonomically designed system.

As you expand your photographic expertise you'll realize the need to know what the optimum exposure is – not depending solely on bracketing and the film's exposure latitude.

All photographic metering systems are based on the principle of the gray card; that all light and colors of a scene can, for measurement purposes, be represented by a card; neutral gray with no color cast and reflecting 18% of the light cast on it. When the light distribution in a scene is not "average" you have to either measure all anomalous areas (those that are very bright or very dark) individually, or use a device that measures incident light (how much is falling on the subject).

All Gossen exposure meters measure both reflected and incident light, so even the simplest models provide better exposure information than the metering system of a camera.

Gossen gives you all the information.

In order to get the correct exposure, you not only have to know the average reading, but the total range of brightness in the scene.

Gossen's Ultra-Pro, Multi-Pro and Luna Star F digital exposure meters do it all for you. They provide accurate digital readouts of continuous light and flash for both the incident and reflected light. And they deliver those readouts in either exposure value or aperture/shutter combinations. The flash and ambient light are measured simultaneously and the readouts give you the appropriate exposure settings in addition to the difference in f stops between the two readings.

Other Gossen meters operate on the zero metering principle (The Null System). You simply take one reading, center the indicating needle pointer with the outer ring of the scale and see not only an exposure reading, but all of the other lens and shutter settings possible at that light level. No more reading a numerical value, setting it on a dial and then reading out the exposure.

This "Null" metering method is obviously quicker and easier. Indeed, it's the method used with many of the world's most precise laboratory instruments.

Other meters may give you midtone readings, but unless you know the full range of brightness in the scene you may lose critical highlight and shadow detail.

A ± 0.1 EV 3 EV scale makes it easy to compare other areas with the key area on which you've "nulled." It's ideal for scene-brightness measurements and zone-system applications. And it works the same regardless of light level no calculations. Select your key area, null for that area, and then read the intensity of other areas of the scene in ratio to the key area directly off the meter face.

In addition, null metering can be used to adjust your lighting to match your mood or the tonal range of your film. At the "zero" position, you get a midtone reading (other meters settle for just this one tonal value) . With the unique scale calibrations of Gossen's null meters, you can place the tonal value exactly where you want it.
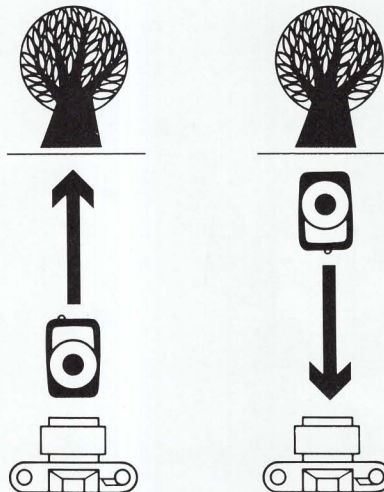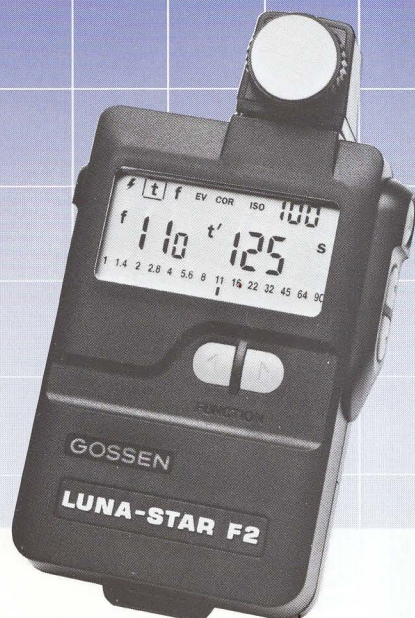
Gossen Luna-Star F2

One of the easiest handling meters you'll ever use.

The Gossen Luna-Star F2 is the result of nearly 60 years' experience in the development of precision light meters. Manufactured to the legendary Gossen standards for accuracy, quality, and durability, the microprocessor-controlled Luna-Star F2 automatically measures and analyzes both flash and continuous light in a single metering operation and displays the reading clearly, in large, easy-to-read numerals.

Incident and reflected light metering.

It also measures both incident and reflected light for particularly accurate exposures, especially with subjects that are either very bright or very dark.

Rotating head.

It features a rotating head so the light sensor can be pointed in any direction. A series of flash synchronizing speeds from 1 sec. to 1/1000 sec. allow you to control the exposure of flash shots that utilize several different sources of light.

- Large numerals for easy reading at a glance
- Incident and reflected light metering
- Flash and continuous light metering
- Cord or cordless flash operation
- Calculation for multiple flash exposures
- Simple contrast analysis on the analog aperture scale
- Correction mode for Filter Factors and Bellows Extension
- Full cine scale plus TV PAL standard of 25 f.p.s. and NTSC standard of 30 f.p.s.
- EV Scale
- Auto off
- Uses 9V Alkaline or rechargeable batteries

Luna-Star F2

Technical Specifications

Measuring Ranges:
Ambient light ....EV -2.5 to EV 18 at ISO 100
Flash ....f 1 to f 90 at 1SO/100
Indicating/Display Ranges:
Film speed ....3 to 8000 ISO
Apertures ....f 1 to f 90.9
Shutter speeds ....1/8000 sec. to 60 minutes
Other Data:
Flash sync speeds ....1 to 1/1000 sec. incl. 1/90 sec.
EV corrections ....-7.9 to +7.9
Extension Factors ....1:0 to 240
Cine speeds ....8.0 to 64 f.p.s. incl. 25 f.p.s. (TV)
Repeatability ....± 0.1 EV
Measuring Angle:
Continuous light ....30° reflected light mode
Dimensions: ....5" x 2⁵/₈" x 1"
Weight: ....4.4 oz. (without battery)

ORDER CODE 4032

5° Spot Attachment

If you've ever had a problem with getting the correct, exact exposure for a certain important part of a subject or object, the Gossen 5° Spot Attachment is what you need. Made especially for the Luna-Star F and the Luna-Star F2, it's not only easy to handle, but simple to operate. It has a camera-style view finder with a precisely defined 5° measuring circle so you can measure that critical small area from the camera position in both continuous light and flash. And you can also determine the overall brightness range of the scene.

ORDER CODE 4112

Protect your valuable Gossen Meter with a padded case made to hold either the Luna-Star F or the Luna-Star F2 with the 5° Spot Attachment in place.
ORDER CODE 4113

Multi-Pro

State-of-the-art technology for all of today's demanding requirements.

The Multi-Pro light meter represents the latest advances in Gossen precision technology. Featuring digital readout of flash and continuous light. The versatility of the Multi-Pro is further enhanced by the meter's capability with all of the standard Luna-Pro system accessories.

Analysis of flash readings.

Both flash and ambient light are simultaneously measured and readouts indicate the appropriate exposure settings as well as the difference in f-stops between the two readings. This is extremely useful when using fill-flash and when measuring flash to daylight ratios. And you have full flash capability and analysis whether you work with or without a sync cord.

Quick and convenient multiple flash.

There's no need to fire the flash numerous times to measure multiple flash exposures. Based on one flash, the desired working aperture is selected and the meter automatically calculates the necessary number of flashes.

It's highly adaptable.

For ambient light measurements, the Multi-Pro supplies readouts in either exposure value (EV) or aperture/shutter speed combinations enabling the pre-selection of a working aperture or shutter speed priority mode. Once a reading is taken, the digital readout gives all valid combinations. In addition, a moving bar graph extending from -4 to +4 stops of the primary measurement is provided.

The ultimate in versatility.

The Multi-Pro's programmable memory allows for compensation for filters, bellows extension or additional accessories. It can average 15 separate incident and reflected readings without accessories, and supply direct photometric readouts in lux.

For all its sophistication, it's simple.

Operation couldn't be easier - all Multi-Pro measurements can be taken one-handedly. And its powered by a standard 9 volt battery, with automatic battery check built in.

Technical Specifications

Measuring Ranges:

Ambient light	EV -2 to + 18 at ISO 100
Flash	f 2.8 to f 45 at ISO 100
Lux range	0 680 to 710,000 lx

Indicating/Display Ranges:

Film speed	1 to 800,000 ISO
Apertures	f 0.7 to f 90.9
Shutter speeds	1/8000 sec. to 8 hours
Exposure values	EV -9.9 to 99.9

Other Data:

Flash sync times	1/60, 1/90, 1/125, 1/250
EV corrections	-7.9 to +7.9
Extension Factors	1.0 to 239
Duration of readout	2 minutes
Readiness for flash measuring	45 seconds
Contrast reading range	±4 stops (in 1/2 stops)

Measuring Angle:

Continuous light	30° reflected light mode
Flash	20° reflected light mode
Continuous light and flash	180° incident light mode
Power source	9 volt (type MN 1604)
Dimensions:	2⁵/₈" x 3³/₈" x 1"
Weight:	7oz. (with battery)

Ultra-Pro

The most complete photographic and photometric meter ever made.

Now there is a single meter which does the work of most other meters and more ...and does it more quickly, simply and reliably as well. The Ultra-Pro is indeed a new definition of meter technology.
• Reads flash as well as continuous light
• Full range of photographic and photometric readouts/functions- Direct readout of brightness range and contrast lighting and flash-to-daylight ratios • Fast, easy to use • Simple, one-handed operation • Microprocessor-controlled • Solid state design • LCD digital readout • Reads in tenths of a stop • Built-in 5-stop flash range extender with automatic correction for high-intensity lighting • Built-in timer • Silicon blue photo sensor • Uses standard 9 volt battery • Full range of accessories that automatically adjust.

So many functions, so easy to use.

Even though the Ultra-Pro is many meters in one, it is actually faster and simpler to use than most ordinary meters. How can so many functions be controlled so simply? Solid-state microprocessor technology and user-oriented design. A single function switch can be set for any of 16 modes of operation. All controls are conveniently located for quick, easy one-handed operation.
The Ultra-Pro also features automatic shutoff for battery conservation but all

Technical Specifications

Measuring Ranges:

Ambient light	EV -4 to + 18/23 at 21 DIN. 100 ASA
Flash	28.8 lxs to 7,360/236,000 lxs*
Color	2,600°K to 20,000°K
Density	D=0.00 to 3.00
Lux range	0.75 to 350,000 lx
Footcandles	0.016 to 32,000 fc
Candelas per square meter	0.007 to 14,000 cd/m2
Lux-seconds	28.8 to 7,360/236,000 lxs*
Footcandle-seconds	2.7 to 684/21,900 fcs

Indicating/Display Ranges:

Film speed	1 to 800,000 ISO
DIN	1-60 DIN
Apertures	f 0.7 to f 90.9
Shutter speeds	1/4,000 sec. to 8 hours
Timer	1 sec. to 126 min.
Exposure corrections	EV -9.9 to 99.9

Other Data:

Flash sync times	1 to 1000 sec.
EV corrections	EV -7.9 to +7.9
Extension Factors	1.0 to 239
Photo cell	Silicon blue cell
Angle of coverage	30° reflected (ambient)
	20° reflected (flash)
	180° incident (ambient/flash)
Power source	9 volt (type MN 1604)
Dimensions:	5¹/₂" x 2³/₄" x 1³/₈"
Weight:	8.2 oz. (with battery)

* In high-intensity mode

pre-selected values such as ISO, f stop and shutter speed are retained in memory until you wish to change them.

Reflected or incident readings without scale-switching or accessories.

No accessories to worry about, no switching from one scale to another the Ultra Pro measures reflected or incident light with your choice of "aperture preferred" or "shutter-preferred" operation. Simply program either f-stop or shutter speed it will be retained in the memory until you change it press the measuring switch and the Ultra-Pro instantly displays the reading within 0.1 stop.

The Ultra-Pro has the greatest measuring range of any hand-held light meter. And with an ISO range of 1 800,000. fstops from f 0.7 f 90 and exposure times from 1/4000th sec. to 8 hours, the Ultra-Pro is ready for any extreme.

Microprocessor self-diagnostics.

Whenever the meter battery is replaced the meter performs an automatic self-check. All meter functions are displayed simultaneously, indicating proper operation of the microprocessor.
An indicator on the LCD display signals when batteries are low and in need of replacement.

Flash metering, cord or cordless, single or multiple.

Whether you prefer cord or cordless operation, the Ultra-Pro will display the proper f stop when measuring electronic flash. You can pre-select shutter speeds or measuring times from 1 second to 1/1,000 second. For multiple flash, simply fire the flash once and the meter will compute the number of multiple flashes necessary to achieve the f-stop you want. No need to repetitively fire the flash-the Ultra-Pro does the work for you.

Time long exposures from 1 second to 126 minutes.

When the meter indicates an exposure time of one second or more, that time is automatically transferred to the timer. Switching to the timer function will now allow you to time that exposure. During the last five seconds of the "countdown there is an audible signal each second. You can also program the timer manually and a hold" capability allows you to pause during timer "countdown.

Direct readouts for complete control of lighting.

Where an ordinary meter gives you only a single measurement, the Ultra-Pro gives you a choice.

You can take a single, simple measurement or you can utilize fully the meters capability to provide you with all the critical information you need for perfect exposures.

Direct readouts of the scene-brightness range, contrast ratio, lighting ratio, and even the flash-to-daylight ratio! You can. for example, measure two extremes of contrast (highlight/shadow) and get a mean value or the meter can calculate an average for up to 15 separate readings.

With flash, the contrast scale will display by how many f-stops the flash increased the ambient light level.

Programmable exposure corrections.

With a flash, the contrast/EV scale can be used to indicate by how much the ambient light level has been increased, thus showing how much overall scene contrast has changed. This feature is also valuable for balancing flash indoors when the scene includes an exterior view, for example, through a window.

Photometric readings for special applications.

There are many situations where actual light values are more important than photographic exposure values. By simply sliding a switch you can measure:
• Density values - used for transmitted or reflected measurements of density when evaluating negatives and transparencies in printing.
• Lux (lx)/footcandles (fc) - measurements of illuminance used in motion pictures, TV, lighting design and engineering.
• Candelas per square meter (cd/m²) - a measure of luminance for reading screen brightness in theaters and CRT displays.
• Lux seconds (lxs)/footcandle seconds (fcs) - illuminance values used in measuring strength of light from a flash.

The Ultra-Pro handles them all. And in many cases, the Ultra-Pro will automatically make conversions when you switch from one photometric value to another.

Complete range of accessories.

The Ultra-Pro accepts all existing Gossen accessories. Two of these accessories, the Luna-Color and Profi-Select TTL, have specifically designated functions on the Ultra-Pro for optimum ease of use.

With the addition of the Luna-Color, the Ultra-Pro becomes a digital color-temperature meter.

The readout is in degrees Kelvin and indicates which correction filters are needed for color balance for the type of film you are using.

Using the Profi-Select TTL, ambient light and flash measurements can be taken at the film plane of a view camera, automatically taking bellows factors and filters into account! An optional 4" x 5" cassette helps position the probe accurately.
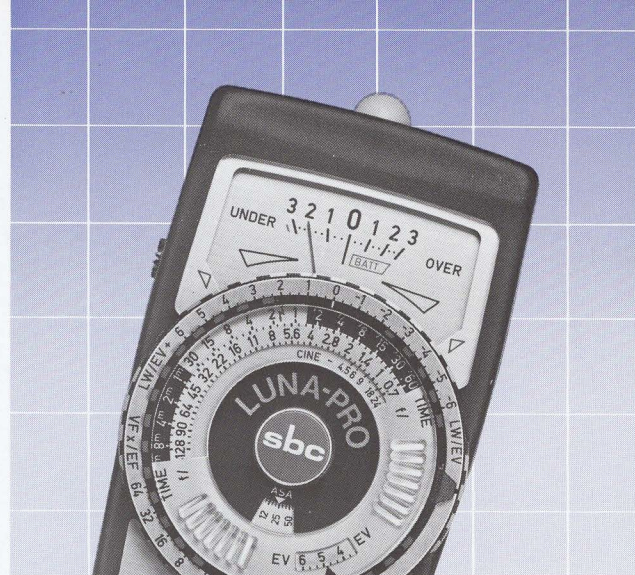
Luna-Pro sbc

Featuring the latest generation silicon blue cell, the Luna Pro sbc reads accurately down to - 4 EV for extremely low light capability. It features the accurate null metering system, take one reading, center the indicating needle pointer with the outer ring of the scale and see not only an exposure reading, but all of the other lens and shutter settings possible at that light level. The Luna-Pro sbc also provides a + 3 f-stop scale for direct read-out of brightness range, Zone System values and lighting ratios.

Dial settings are adjustable so that exposure factor corrections for bellows, filters, etc., can be automatically compensated for. An Indicator reminds you when this feature is being used.

The Luna-Pro sbc accepts all existing Gossen accessories. Two of these, the Luna-Color and Profi-Select TTL, have specifically designated functions on the Luna-Pro sbc for optimum ease of use. With the addition of the Luna-Color, the Luna Pro sbc becomes a color temperature meter. The readout is in degrees Kelvin and indicates which correction filters are needed for color balance for the type of film you are using.

Using the Profi-Select TTL, ambient light and flash measurements can be taken at the film plane of a view camera, automatically taking bellows factors and filters into account. An optional 4" x 5" cassette helps position the probe accurately.

The Luna-Flash attachment converts the Luna-Pro sbc instantly into a flash meter.

A standard 9V battery powers the system. The range of f-stops and ISO values is even greater than the standard Luna-Pro: apertures from 0.7 to f/128 and ISO values up to 100,000. Of course, you can take both incident and reflected readings with the built-in sliding hemispheric diffuser.

Technical Specifications

Photo Cell	Silicon blue cell
Angle of Coverage	30° reflected, 180° incident
Sensitivity	0.016 to 32,000 footcandles, 0.002 to 4,000 footamberts -4 to +17 EV at ISO 100
Power source	9 volt (type MN 1604)
Dimensions:	4³/₄" X 1³/₄" X 2³/₄"
Weight:	8.25 oz. (with battery)
Scale Ranges:	
Cine	4.5 to 144 fps
Exposure values	-8 to 24 EV
Apertures	f 0.7 to f 128
Shutter speeds	1/4,000 sec. to 8 hours
Film speeds	ISO 0.8 to 100,000/0 to 51 DIN
Exposure corrections	EV -9.9 to 99.9

ORDER CODE 4025

Luna-Pro F
The Luna-Pro F is very flexible, versatile and adaptable photographic light-metering system while at the same time being very simple to use.

Measure continuous light and flash.

One unique meter for measuring both continuous light and flash. A silicon blue sensor for instantaneous reading of high and low light levels. Incorporating a null meter readout, the Luna-Pro F is ideally suited for determining scene brightness range and lighting ratios, which can be read directly from the meter at any light level.

The Luna-Pro F delivers both incident and reflected light measurements without scale switching or accessories, and enables cordless readings of single or multiple flash.

Other capabilities include direct measurement of zone system values; an electronic sample and hold circuit, which stores light measurement for reading in remote areas; readout of all applicable aperture/shutter speed combinations; programmable exposure-factor corrections for working with bellows, filters, etc.; and automatic shutoff to extend battery life.

A full system of interchangeable accessories expand the measuring capabilities of this fine instrument into all areas of photography, exceeding even the most demanding requirements of professionals working on location, studio, dark-room and laboratory assignments.

Technical Specifications

Photo Cell	. . Silicon blue cell
Angle of Coverage	30° reflected, 180° incident
Sensitivity	0.125 to 32,000 footcandles, 0.016 to 4,000 footlamberts -1 to +17 EV at ISO 100, 28.8 lxs. to 7360 lxs. (flash)
Power source	9 volt (type MN 1604)
Dimensions:	$4^3/4$" x $1^3/4$" x $2^3/4$"
Weight:	8.5 oz. (with battery)
Scale Ranges:	
Cine	4.5 to 144 fps
Exposure values	-8 to 24 EV
Apertures	f 0.7 to f 128
Shutter speeds	1/4,000 sec. to 8 hours
Film speeds	ISO 0.8 to 100,000/0 to 51 DIN

ORDER CODE 4030

Luna-Pro S
Since its introduction in 1963, acknowledged as the world standard for accuracy, reliability and range. And, with its five optional accessories, the most versatile Cds system meter ever made.

The world standard.

The Luna-Pro S is the choice of professional photographers, as well as discerning amateurs, all over the world. Experience-proven-it provides accurate reflected or incident light readings in all kinds of light, from a flickering candle to a bright summer's sun. As a system meter, you can be sure it will provide correct exposures in any situation. More than just a superb hand-held meter, the Luna-Pro S has a wide range of optional accessories to further increase its versatility.

The Luna-Pro S can be adapted to calculate the correct exposure for photomicrography with the Microscope accessory. It can be turned into a dual angle "spot meter" with the Variable Angle accessory. It can be used to take through-the-lens readings from a large format camera's ground glass with the Flexible Fiber Optics Probe accessory, or you can use it for copy work with the Copy accessory. And it comes in handy in the darkroom as well; the enlarging accessory helps to find the right paper grade for your black & white prints.

Proven accuracy. Proven reliability. Proven versatility. That's why pros have chosen the Luna-Pro S since its introduction.

Technical Specifications

Photo Cell	. . Cds (Cadmium sulfide)
Angle of Coverage	30° reflected, 180° incident
Sensitivity	0.016 to 32,000 footcandles, 0.002 to 4,000 footamberts -4 to +17 EV at ISO 100
Power source	two 1.35 volt mercury batteries
Dimensions:	$2^5/8$" x $1^1/4$" x 4"
Weight:	7 oz. (with batteries)
Scale Ranges:	
Exposure values	-8 to 24 EV
Apertures	f 1 to f 90
Shutter speeds	1/4,000 sec. to 8 hours
Film speeds	ISO 0.8 to 25,000/0 to 45 DIN

ORDER CODE 4020
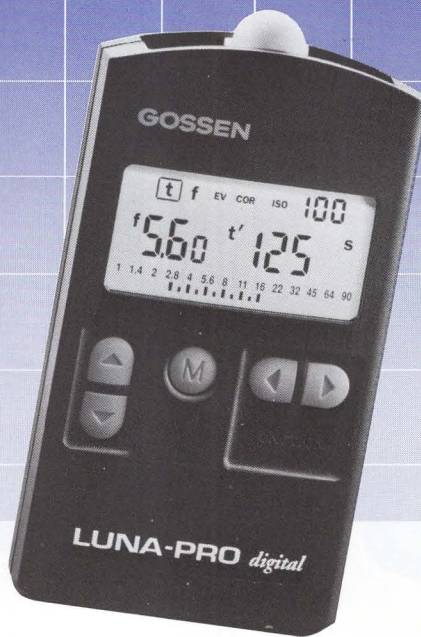
Luna-Pro Digital

The Gossen Luna-Pro Digital is thin, lightweight meter that's easy to operate. The front panel features control buttons that are recognizable at a glance and a display with easy-to-read numerals. The narrow measuring angle allows you to meter important details of the subject with the greatest accuracy. The contrast range is precisely analyzed and clearly displayed. To conserve batteries, the Luna-Pro Digital has an automatic power off, but settings and measurements are stored in memory and can be recalled even after the unit has shut down.

This new exposure meter incorporates a built-in professional incident light diffuser dome that slides out of the way for reflected light measurement.

Night photography and low lighting conditions are where the Luna-Pro Digital really excels. The wide measuring range assures accurate measurements even at extremely low light levels.

The Gossen Luna-Pro Digital is so compact it will easily fit into a pocket so it's always handy when you need it.

- Professional incident/reflected light metering
- Adjusted functions are indicated on the display
- Large, easy-to-read display
- Comprehensive measuring range, high sensitivity for night scenes
- Simple contrast analysis in the analog aperture scale
- Settings and measured values are stored
- Full cine scale, plus 25 fps for TV PAL standard, and 30 fps for NTSC
- Extremely low power consumption
- Auto power off
- Simple operation
- Super-thin and lightweight
- Ergonomically designed

Technical Specifications

Measuring methods .... Incident light
Reflected Light
Contrast measurement
Metering cell .... sbc silicon photodiode
Measuring range at ISO 100/21° .... equivalent to
EV -2.5 to +18
Repeating accuracy .... ±0.1 EV
Exposure times .... 1/8000 sec to 60 minutes
Aperture range .... f1 to f90 in 1/10 stops
Cine speed range .... 8 to 64 fps, including
25 fps and 30 fps for TV

Adjustable and measurable
correction values and
extension factors .... -7.9 to +7.9
1.0 to 239
Film speeds .... ISO 3/6° to 8000/40°
Acceptance angle for
reflected light measurement .... 25°
Auto power off .... after approx. 2 minutes
Battery .... 1.5 V AA-type battery, condition indication
Dimensions .... 2 1/2" x 4 1/2" x 3/4"
Weight (without battery) .... 3.35 oz.
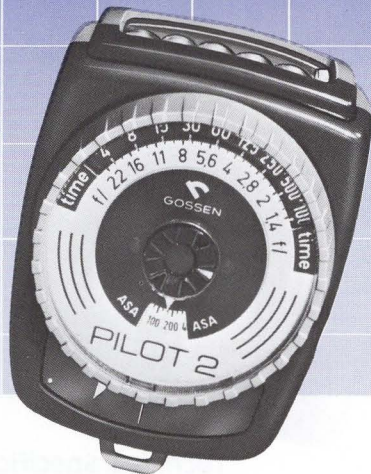
Pilot 2

You're starting right with the tiny Gossen Pilot 2. The most compact meter made for accurate reflected and incident light measurement. There's even an optional accessory available to enable you to mount the Pilot 2 on the hot shoe of your camera. It weighs under 1 1/2 ozs., yet it's got everything you need for movie or still photography. Quick and convenient operation with its large computer dial and large, clear scales. Perfect exposures, crisp, sparkling Black & white, and better color shots are simple with the Pilot 2.

Technical Specifications

Photo Cell	. Selenium
Angle of Coverage	52° horizontal, 48° vertical
	reflected, 180° incident
Sensitivity	32 to 32,000 footcandles
	4 to 4,000 footamberts
	+5 to +17 EV at ISO 100
Power source	No battery needed
Dimensions:	1³/₄" X 2¹/₂" X 1¹/₈"
Weight:	Less than 1¹/₂ oz.
Scale Ranges:	
Apertures	f 1.4 to f 22
Shutter speeds	1/1,000 sec. to 4 min.
Film speeds	ISO 6 to 3,200

ORDER CODE 4005

Scout 3

This compact and lightweight meter is really simple and easy to use. The Selenium metering cell never needs a battery. Large computer dial with easy-to-read scales; fast convenient operation. High performance with the match needle system covering a wide measuring range. Complete with convenient carrying case and neck strap.

Technical Specifications

Photo Cell	Selenium
Angle of Coverage	50°, reflected
Sensitivity	+6 to +16 EV at ISO 100
Power source	No battery needed
Dimensions:	2 1/8" x 3 1/3" x 1¹/₈"
Weight:	1 3/4 oz.
Scale Ranges:	
Exposure Values	0 to 20 EV
Apertures	f 1 to f 32
Shutter speeds	1/2,000 sec. to 8 sec.
Film speeds	ISO 6 to 6,400

ORDER CODE 4002

ULTRA-SPOT 2
GOSSEN

Ultra Spot 2

Technical Specifications

Light sensor	Silicon blue cell
Reading processor	Microprocessor
Measuring Ranges:	
Ambient light	EV 1 to 22 at ISO 100/21°
Flash	f 2.8 to f 90.9 at ISO 100/21°
Display Ranges:	
Film speed	ISO 1° to 80,000/50°
DIN	1-60 DIN
Apertures	f 1.0 to f 90.9
digital	in 1/10 stops
analog	in half stops
Shutter speeds	1/8,000 sec. to 60 min.
	1/90 sec. also provided
Other Data:	
Zone system	0 to X; specially adapted
	to film development
Measuring angle	1°
Field of view	approx. 15°
Flash measuring times	1/1000, 1/500, 1/250, 1/125
	1/90, 1/60, 1/30, 1/15 and 1/8 sec.
Averaging	Up to 10 discrete readings
	in ambient light mode
Exposure value correction	-9.9 to +9.9 stops
Extension Factor	1 to 955
Duration of exposure reading	
display and illumination	15 sec.
Retains last exposure	
reading	Until deliberately cancelled
Retains all programmed	
settings	Until deliberately cancelled
Measuring	distance 1m to infinity
(shorter when using	optional accessory lenses)
Battery/rechargeable battery unit	9 volt
Tripod socket	1/4
Dimensions:	Approx. 90mm long with lens,
	57mm wide, 190mm high with grip
Weight:	Approx. 400g (with battery)
Socket for attachment lenses or filters	M 43 x 0.75
Ocular adapter	HAMA (Order No. 339/04*)
Standard accessories	Case, carrying strap, battery,
	self-tack gray chart

* Available from reputable trade outlets.

ORDER CODE 4050

The only spotmeter with total information in the viewfinder.

With the Gossen Ultra Spot 2, evaluation of subject detail is faster and easier than ever. That's because the Ultra Spot presents all the information you need at a single glance. When you look through its viewfinder you can see the subject, a 1° measuring circle and a complete display of exposure information.

You never have to take your eyes off your subject and all controls are operated with a simple set of four buttons and a slide switch that sit right under your thumb.

The combination of electronic accuracy and a high-quality optical lens means the Ultra-Spot provides a vivid 15° view with a 1° circle in the middle to indicate the meter's measuring angle. The exposure information is displayed around the viewing field and includes: ambient light readings, f-stop, shutter speed, exposure value, zone or cine. In addition, you can average up to ten discrete readings.

For ambient light, flash and zone system photography.

The Gossen Ultra Spot 2 is truly an all purpose spotmeter that's equally adaptable to color or black & white film. It's engineered for both ambient and flash lighting-plus it's a natural for zone system photography. With its comfortable design, wealth of technically advanced features and fingertip operating ease, the Ultra Spot is a most comfortable and precise way to take all of your spot readings.

See the difference Ultra Spot makes.

Ultra Spot 2 puts everything you need to control an exposure right in your hand. In color photography, you can reach new levels of creativity by controlling exposure and contrast like never before. And, in black & white photography, you'll find that Ultra Spot lets you use the complete spectrum between light and shade by allowing you to master even the most extreme light/dark contrasts.

The zone system simplified.

Developed by Ansel Adams as a synthesis of technology and intuition, zone system photography is a technique for ensuring that different tonal values of a subject can be reproduced as the desired value gradation. With the Ultra Spot's zone function, you can put this precise technique to work for you. In fact. Ultra Spot was specifically designed to help you easily explore the exciting possibilities in the zone system.

Ergonomic design plus operating ease.

Smart as it is, the Ultra Spot is remarkably easy to handle and operate. Its molded grip is comfortable for either right or left-handed users. The conveniently placed control panel can be operated with your thumb and you never have to take your eyes off the subject to use any of the controls. For added ease, Ultra Spot's memory stores all programmed settings as well as the latest readings, so they're available for instant retrieval even after Auto Off.

Color Pro 2F and Color Pro 3F

The Color Pro 2F and Color Pro 3F are designed for color temperature light balancing-in both mired and Kodak conversion filters, CC filter values, lux and lux seconds.

The state-of-the-art technology of these new Gossen color temperature meters analyze the prevailing lighting situation with flash and continuous light, at the push of a single button. The color temperature is measured and the corresponding filters in Light Balancing and CC values are displayed. The settings and readings automatically appear on the display.

The different sources of light, be it daylight or artificial light (incandescent lamp, halogen. fluorescent tubes, etc.), are measured with great accuracy to analyze the finest differences in shade and color temperature.

These meters are also ideally suited for studio flashes. Thus, color temperature of the different flashguns and reflectors are measured perfectly and corrected for with proper filtration.

Flash synch speeds between 1/500 sec. and 1/2 sec. can be pre selected. Gossen Color Temperature Meters will give direct readings of Light Balancing filters in mired values and Kodak color compensating and color conversion filter values.

• Permanently and variably adjustable film types (film sensitization) .

• Display of luminous intensity of flash and continuous light in lux and lux seconds readings.

• Adjusted functions are permanently indicated on the display

• New integrated triple sensor in the most advanced technology.

• Flash sync triggering button

• Rotating head for easy, convenient operation. A second diffuser, included with the meter, is used to measure powerful flashes and continuous light (e.g. with close-ups and special exposures).

• Meter readings and setting remain in memory

• Battery check display

Note: The CC filter, lux and lux seconds display are provided in the Color Pro 3F only.

Note: The CC filter, lux and lux seconds display are provided in the Color Pro 3F only.

Technical Specifications

Measuring Mode .... Triple range measurement of flash and continuous light
Light sensor .... Modern integrated triple silicon photodiode, micro-processor controlled.

Measuring Ranges:
Color Temperature .... 2,000 to 40,000K
LB Filter Value .... -399 to +475 mired, or change over to corresponding Kodak color compensating and color conversion filter values.
Additionally in the Color Pro 3F: .... 0 to 95 magenta
CC Filter Value .... 0 to 95 green
Luminous Intensity .... (continuous)
Flash Intensity .... 5 to 1,500 lxs

Display Ranges:
Pre-setting film color Temperature .... 2,000 to 9,900K
Flash Sync Times .... 1/500 sec. to 1/2 sec., Additionally 1/90 sec.
Display Duration .... 2 min. followed by auto off, readings remain in memory
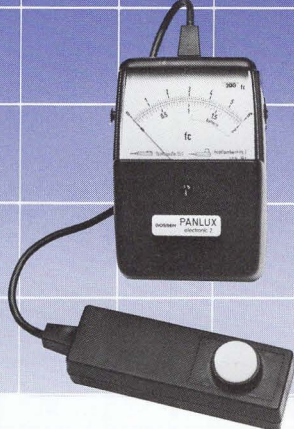Battery ..... 9V Battery or corresponding rechargeable battery. Battery check display
Accessories .... One special diffuser for additional measuring range
Case, carrying strap and battery
Dimensions .... Approx. 5" x 2 5/8" x 1"
Weight .... Approx. 4.5 oz. (Without battery)

ORDER CODE 4062 Color Pro 2F
ORDER CODE 4063 Color Pro 3F

Panlux Electronic 2 Footcandle Meter

Provides critical readings for the most extreme intensities from blazing light to almost total darkness. With 9 measuring ranges, the Panlux can measure from .05 to 20,000 fc. Indispensable for applications as diverse as cinematography, highway lighting, work-area illumination and greenhouses, this ultra sophisticated instrument is balanced to read daylight and any commonly used artificial light except pulsed light. "Cosine factor" problems common to footcandle meters have been eliminated by the unique design of the probe. Controls include a nine-range selector and battery test switch. An accessory luminance attachment can be purchased separately

Technical Specifications

Measuring Ranges:

Footcandles 0/2/6/20/60/200/
600/2,000/6,000/20,000
Probe cable .... 5 feet
Instrument weight .... 12.3 oz. incl. battery and cord
Probe dimensions ... Length 4.2", diffuser diameter .8"
Instrument dimensions .... 4.4" x 3.2 x 1.4"
Power source .... 9 volt battery

ORDER CODE 4055

GKL 315 and 500F Cold Light Sources.

The ultimate lighting devices for micro and macro photography. Three flexible lighting arms direct light to any point of the subject to allow overall lighting or spotlighting for special effects. The GKL 315's 150W halogen lamp can be continuously varied within a four stop range while maintaining a constant 3200°K color temperature.

The GKL 500F features flash output via a gold tone flash tube in addition to the continuous light source, to simplify micro and macro-photography with daylight films and isolate small moving objects.

Both units contain an automatic variable speed fan for cool operation and long life of the low-voltage quartz halogen lamp. Optional accessories include lighting control kits and a six-point ring light is also available for the 500F.

Technical Specifications

ORDER CODE	4065 GKL 315	4066 GKL 500F
Lamp	15 volt, 150 watt halogen reflector lamp.	12 volt, 100 watt halogen reflector lamp for continueous light. Gold tone tube for flash.
Color Temperature	3,200°K	3,200°K for continuous light. 5,600°K flash.
Dimensions	6.5" x 3.4" x 7"	6.5" x 3.4" x 10.2"
Weight	7.5 lbs.	8.75 lbs.
Length of fiber optics		
Bundles		Approx. 24"
Outer diameter		0.4"
Active diameter		0.18
Power		120 VAC
Fuse		2.5 AMP

How did Gossen get so good?

Manufacturers of precision instruments since 1919, and one of the outstanding pioneers in exposure-meter design since 1932, Gossen continues to be the pre eminent name in precision exposure meters.

But they've applied their broad-based knowledge of electrical and electronic measuring instruments in a variety of ways. In addition to photographic light meters, Gossen also produces metering instruments for industry and for servicing automobiles as well as power supplies, temperature controllers and electronic voltage regulators.

In today's mass-production-oriented society, there are still a few names that stand for craftsmanship and integrity. Gossen is one of them - and will continue to be in the years ahead.

Gossen Accessories

Multi-Pro, Ultra-Pro, Luna Pro sbc, Luna-Pro F, Luna-Lux, Luna-Pro and Luna-Pro S system accessories.

This complete range of accessories expands the capabilities of your Gossen meters to meet every demanding application. They incorporate a spring-loaded latch that firmly locks the attachment to the meter. The accessories listed below are compatible with the Multi-Pro, Ultra-Pro, Luna-Pro sbc, Luna-Pro F, Luna-Pro S and Luna-Lux.

Variable angle attachment.

For reflected light readings, the measuring angle of Gossen meters corresponds to a light acceptance angle of 30°. When using the Variable Angle Attachment this angle can be reduced to either 15° or 7.5°. The small 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.

When using the Variable Angle Attachment, the 7.5° and 15° areas being measured are visible through a marked reflex viewer with bright aerial imaging.
ORDER CODE 4106

Microscope attachment.

The Microscope Attachment utilizes the meter's measuring sensitivity for convenience and reliable exposure measurement when taking photomicrographs. The Microscope Attachment fits the ocular tube of most microscopes for exact exposures determination and it's quite useful in measuring light intensity for fluorescent microscopy.
ORDER CODE 4102

Repro (copying) attachment.

With the Repro Attachment on the meter, it is possible to obtain exposure value of flat copy such as paintings, documents and photographic prints.

The illumination on the copy board can be measured for evenness across various points of the material to be copied. This attachment can also be reversed for measurements of light transmitted through slides or other translucent material being copied.
ORDER CODE 4108

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.
ORDER CODE 4100

Fiber optics probe attachment.

With the flexible Fiber Optics Probe Attachment on the meter, measurements can be made in many areas which are usually inaccessible with an exposure meter. It is especially suitable for macrophotography, ground-glass measurements and for density measurements of negatives or transparencies.
ORDER CODE 4101

Designed for use with the Ultra-Pro and Luna-Pro sbc. these electronic accessories will automatically program the meter response for easy, convenient direct reading.

Luna-Color.

The Ultra-Pro and Luna-Pro sbc become color-temperature meters with the addition of this accessory. The readout is in ° Kelvin and indicates which correction filters are needed for the color balance of the type of film you are using.
ORDER CODE 4128

Profi-Select TTL.

Ambient light or flash measurements can be taken at the film plane of a view camera, automatically taking bellows factors and filters into account. An optional 4" x 5" cassette helps position the probe accurately.
ORDER CODE 4130

Luna-Probe.

Extends the measuring application into hard-to-reach places. Ideal for macrophotography, view camera ground-glass measurements and even density measurements of negatives and transparencies using the meter's density function.
**ORDER CODE 4126**

Multibeam.

A reflex-viewing spotmeter attachment with 1°, 5°, and 10° angles of acceptance. Single-lens reflex design permits measuring and viewing through the same lens-eliminating parallax problems. A built-in diopter correction allows you to adapt the unit to your own eyes.
ORDER CODE 4122

Luna-Sphere.

Enjoy the convenience of a hemispheric light collector that swivels 360° for photographic readings. Or use the interchangeable flat collector disc for precise photometric readings the Ultra-Pro and Luna-Pro sbc become direct readout illuminance meters for lux, footcandles, lux seconds and footcandle seconds.
ORDER CODE 4120
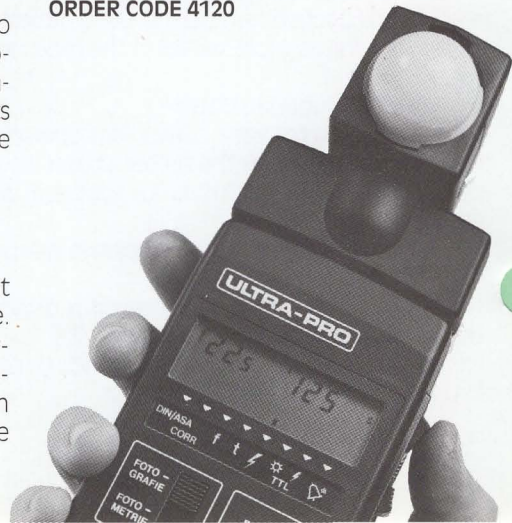
ACCESSORY CHART

	ULTRA-PRO	LUNA-PRO SBC	LUNA-PRO F	LUNA-PRO LUNA-PRO S	MULTI-PRO
Variable Angle Attachment	X	X	X	X	X
Enlarging Attachment	X	X	X	X	X
Repro/Copy Attachment	X	X	X	X	X
Microscope Attachment	X	X	X	X	X
Fiber Optics Probe	X	X	X	X	X
Luna-Color	X	X			
Profi-Select TTL	X	X			
Luna-Probe	X	X			
Multibeam	X	X			
Luna-Micro	X	X			
Luna-Sphere	X	X			
Luna Flash 2		X			

Luna-Flash for Luna-Pro sbc.

This easy-to-use attachment instantly converts the Luna-Pro sbc into a flash meter. For use only with the Luna-Pro sbc.

Order Code 4136

Luna-Micro.

Adapts the meter to the ocular tubes of most microscopes for fast, precise, direct exposure determination.

Order Code 4124

Order Code	Gossen Exposure Meters	Price
4002	Gossen Scout 3	$ 62.00
4005	Gossen Pilot 2	110.00
4020	Gossen Luna-Pro S	299.00
4022	Gossen Luna-Pro Digital	243.00
4025	Gossen Luna-Pro sbc	374.00
4030	Gossen Luna-Pro F	426.00
4032	Gossen Luna-Star F2	462.00
4035	Gossen Multi-Pro	570.00
4040	Gossen Ultra-Pro	999.00
4050	Gossen Ultra-Spot 2	830.00
4055	Gossen Panlux	690.00
4062	Gossen Color-Pro 2F	830.00
4063	Gossen Color-Pro 3F	1220.00
4065	GKL 315 Halogen Light Source	1260.00
4066	GKL 500F Electronic Flash/Halogen Light Source (includes Sync Cord)	2400.00

Note: The following accessories can be used with the Ultra-Pro, Multi-Pro, Luna-Pro F, Luna-Pro sbc, and Luna-Pro S .

Order Code	Gossen Accessories	Price
4100	Enlarging Attachment	$ 72.00
4102	Microscope Attachment	66.00
4104	Fiber Optics Probe	344.00
4106	Variable Angle Attachment	98.00
4108	Repro/Copy Attachment	73.00

Note: The following accessories can be used only with the Luna-Star F and Luna-Star F2

Order Code	Gossen Accessories	Price
4112	5° Spot Attachment	$ 124.00
4113	Case for Luna-Star F & F2 w/ 5° Spot Attach.	28.00
4114	+5 f/Stop Range Extender (Luna-Star F only)	18.00

Note: The following accessories can be used with the Ultra-Pro and Luna-Pro sbc.

Order Code	Gossen Accessories	Price
4122	Multibeam/Spot Attachment	$ 612.00
4124	Luna-Micro Attachment	80.00
4126	Luna-Probe Attachment	396.00
4128	Luna-Color Attachment	450.00
4130	Profi-Select TTL	1260.00
4132	4 x 5 Cassette f/Profi-Select TTL	450.00

Note: The following accessories can be used with the Panlux 2 and GKL 315 and GKL 500F.

Order Code	Gossen Accessories	Price
4140	Calculator for Panlux 2	$ 42.00
4141	Luminance Attachment for Panlux 2	182.00
4142	Set of Focusing and Color Filters for GKL 315/500F	102.00
4143	Polarizing Filter Set for GKL 315/500F	50.00
4144	6 Point Ring Light for GKL 3156/500F	680.00

Note: The following accessory can be used only with the Pilot 2

Order Code	Gossen Accessory	Price
4099	Camera Adapter Clip	$ 7.00

Note: The following accessory can be used only with the Luna-Pro and the Luna-Pro S

Order Code	Gossen Accessory	Price
4145	Adapter Kit and Batteries to convert meters with Mercury batteries to Silver Oxide	$ 18.00

Prices and specifications subject to change without notice.

bogen