Hagner

MEASURES LIGHT

Digital luxmeter

The Hagner Digital Luxmeter EC1

The Hagner Digital Luxmeter, model EC1, is a small, handy and extremely easy-to-use instrument for accurate measurement of illuminance over a range of 0.1-200,000 lux. With both automatic zeroing and on/off switch, the only controls needed are a four-position range selection switch and a hold button for retaining the display value.

Operation

To open the lid, press the forward part lightly downward with your thumb and at the same time pull the latch upwards with the first two fingers of the same hand. The luxmeter comes on when the cover is opened and turns off when it is closed. Move the range switch to the range which will give the greatest accuracy and read the display. The hold function keeps the reading on the display until the hold button is released. Full instructions can be found on the inside of the cover.

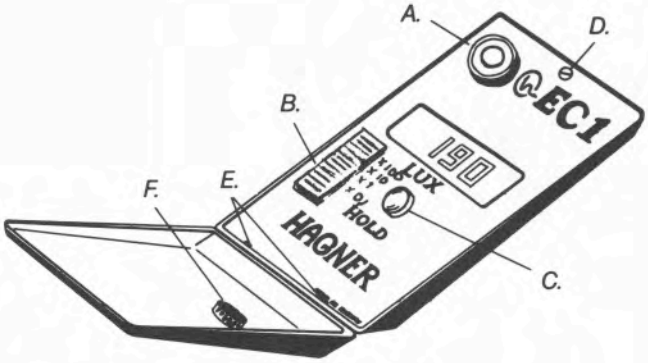
Maintenance

The power source is a standard 9 volt battery. To avoid battery leakage only alkaline batteries should be used. When LO8ATappears on the display, it is time to replace the battery. However the luxmeter can be used for approximately 20 hours longer before replacing is necessary.

Change the battery by removing the screw at the front edge of the cover plate, which permits the plate to be lifted up and removed. When replacing it the lower edge of the plate must fit under the two bosses at the lower edge of the case before it can be closed again. The white plastic disc over the detector may be cleaned when necessary with a light damp cloth.

Calibration

The luxmeter is carefully calibrated when it is delivered. No recalibration should be necessary under normal use. If for any reason you believe the luxmeter is out of calibration, return it to your stockist or the manufacturer for examination.



The controls and other parts of the luxmeter

A. Detector
B. Range switch
C. Holdbutton
D. Screw for coverplate
E. Locking bosses for the coverplate
F. Magnet that switches the instrument on and off

The Hagner Digital Luxmeter EC1-X

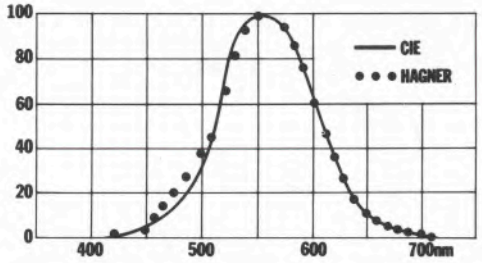
The EC1-X has been designed for measurement of illuminance levels in places where it is important that the operator does not shade the detector. The EC1-X has the detector connected with a 2 meter long cable. An extension cable can also be connected.

Operation

The EC1-X is used exactly as the EC1. The detector can be connected or disconnected without causing any damage to the instrument. Care should be taken to ensure that the cable is not twisted when replacing the cable. It is recommended that the detector is rotated rather than winding the cable around the detector.

Please note

The detector is individually calibrated to the respective instrument and can not be interchanged with other detectors. Check carefully that the instrument number in the cover correspondence with the number of the detector.

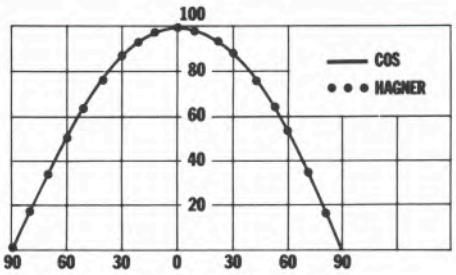


The spectral sensitivity of the Hagner luxmeter closely relates to the visibility curve of the CIE standard observer.

Instrument data for EC1 and EC1-X

Detector	Silicon photodiode, V_λ-filtered and cosine corrected.
Measuring range	0.1-200,000 lux
Accuracy	Better then ±3% (± 1 in last digit)
Temperature drift	<10℃ +0.35% / ℃ >30℃ -0.35% / ℃
Power supply	9 volt battery type PP3 alkaline (lifetime = 350 HRS)
Dimension	135 x 75 X 35 mm
Weight	0.19 Kg (EC1-X 0.36 Kg with carrying case)

The Hagner Photometer, model EC1, EC1-X, can be made in several variants in the respct of sensitivity and spectral response. For instance: EC1 UV-A ultra violet 315 - 380 NM. EC1 IR infra-red 700-1150 NM.



The cosine correction compensates for measuring errors owing to oblique incident light.

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