

brnccolcr® flashmctcr
Blitzbelichtungsmcscrr
Le flashmètre
Fotómetro para flash
L'esposimetro

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BRON ELEKTRONIK AG
CH-4123 ALLSCHWIL/SWITZERLAND

**broncolor®
flashmeter**

FM

- broncolor® FM is a flashmeter with an exceptionally large measuring range of more than 14 2/3 stops. Measurement increments of 1/3 stops cover two ranges.
- broncolor® FM has a measuring range from f:1-f:90 2/3 and is therefore well suited for measurements of low capacity flash-units used by amateur photographers, as well as for studio flash equipment with very high capacity.
- A very special feature of broncolor® FM is the inbuilt infrared transmitter, which saves the need for a cable between flash-unit and measuring meter.
- The 1/3 f-stop increments on the broncolor® FM are easily readable on the large digital display.

Operating instructions

1. **Battery**
Put a 9 V-battery with specification IEC 6-F 22 into the battery-box (1).
2. **Switch OFF/ON**
With the lever key (2) you switch on your broncolor® FM.
Positions: LOW/HIGH, MULTI.
3. **Film speed**
Adjust the film speed by using the dial (3) ISO^o/ASA.
If, after a reading is taken, there is a change in the film speed positioning, the display will change according to the new input.

4. **Synchronization**
Connect the sync cable (4) to the flash-unit or use automatic built-in IR-transmitter (5).
5. **Measuring with sync cable or built-in infrared transmitter**
Press down the lever key (6) and trigger the flash by an IR-transmitter-impulse or the sync cable.
In order to repeat the measurement you simply have to press down the lever key (6) again. The new value appears on the display. A return to a zero position is not necessary on the FM.
6. **Measuring** (without sync cable or IRS)
Press the lever up (6), **00** is indicated on the broncolor® FM. Hold the FM in measuring position (7) and trigger the flash. The photocell (9) activates the measuring process, and a reading is given on the display.
To repeat the measurement it is not necessary to again press lever (6) upwards.
7. **Measurement of multiple flashes**
When the unit is put into MULTI any number of flashes of different intensity may be measured. The memory of the FM will record each input of light and indicate the accumulation value on the display. Only after pressing lever (6) upwards, to zero, can the operation be repeated.
8. **Display**
The display shows apertures f:1-f:90 2/3 in 1/3 stop increments. There is a HIGH and a LOW range of measurement which overlap by two f-stops.
The horizontal lines on the display next to the number indicate 1/3 or 2/3 of a stop.
Ex.: **8** = 8 2/3

Other possible displays:

00 too little light to be recorded: switch from HIGH to LOW (2).

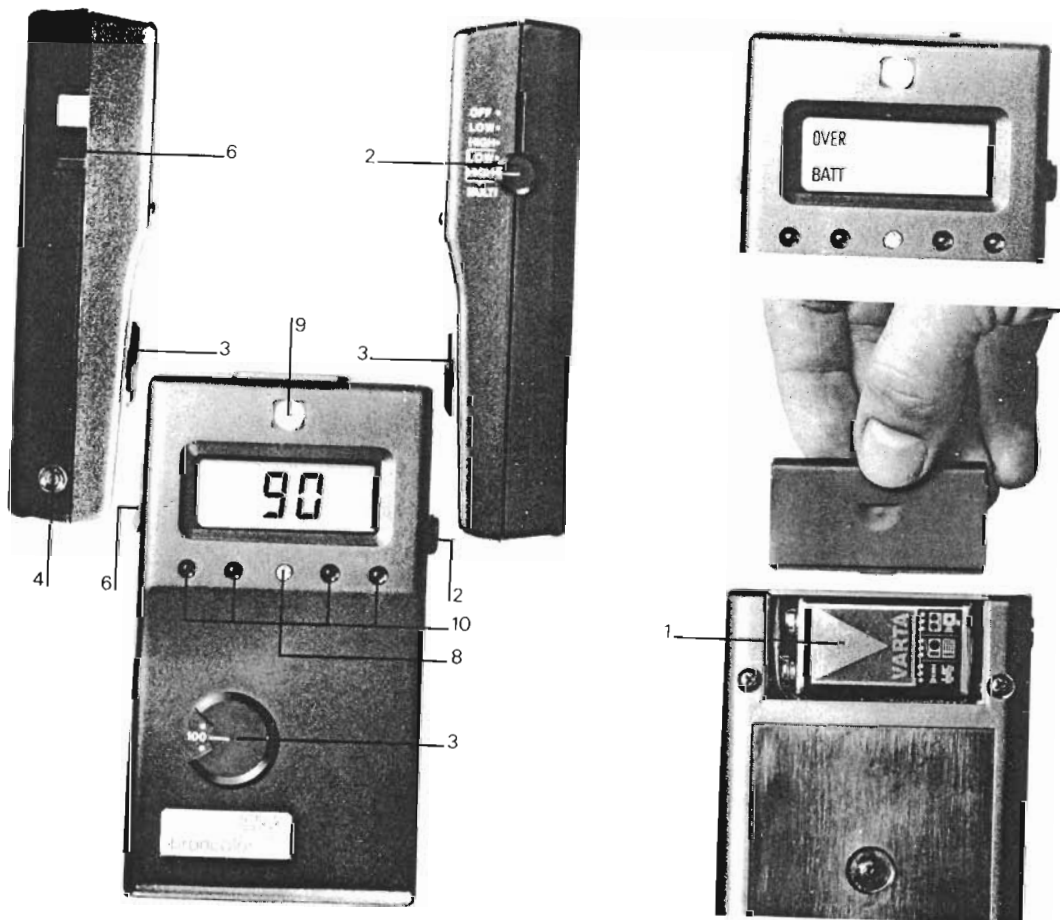
OVER too much light: switch from LOW to HIGH (2).

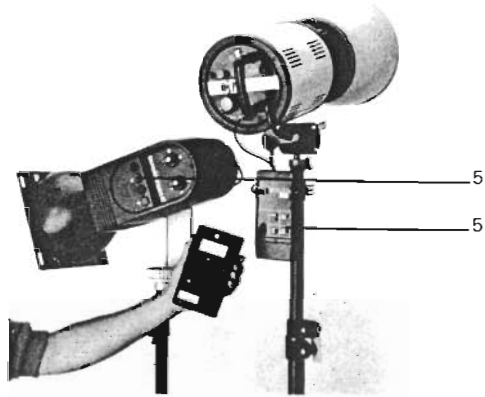
BATT enough charge in cell for 5 hours operation only.

Additional information

- The broncolor® FM is in manufacture adjusted to meet ASA and ISO standards of accuracy. Therefore further adjustment by user is unnecessary. Any alteration made by the user for special conditions can be made by adjusting the film speed setting.
- The measuring speed of the FM is 1/60 sec. Any ambient light present is also included in the measurement.
- Inadequate choice of range is indicated by *OVER* resp. *00*.
- The FM works on an incident light principle – correct measurement can therefore be achieved by placing the meter in front of the subject with the dome facing the camera lens (7).

In circumstances where there is strong cross light, effect light or back light, consideration in positioning the meter (8) must be made in order to allow for these special conditions.





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