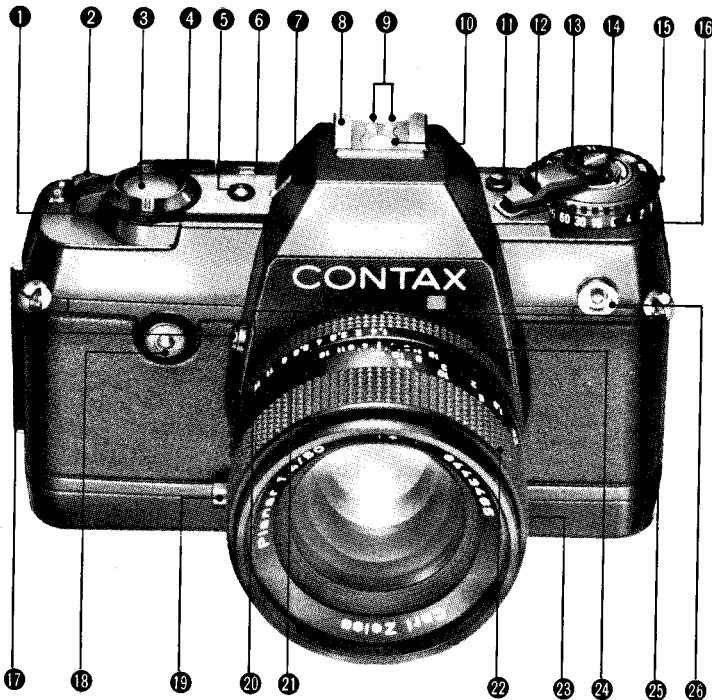
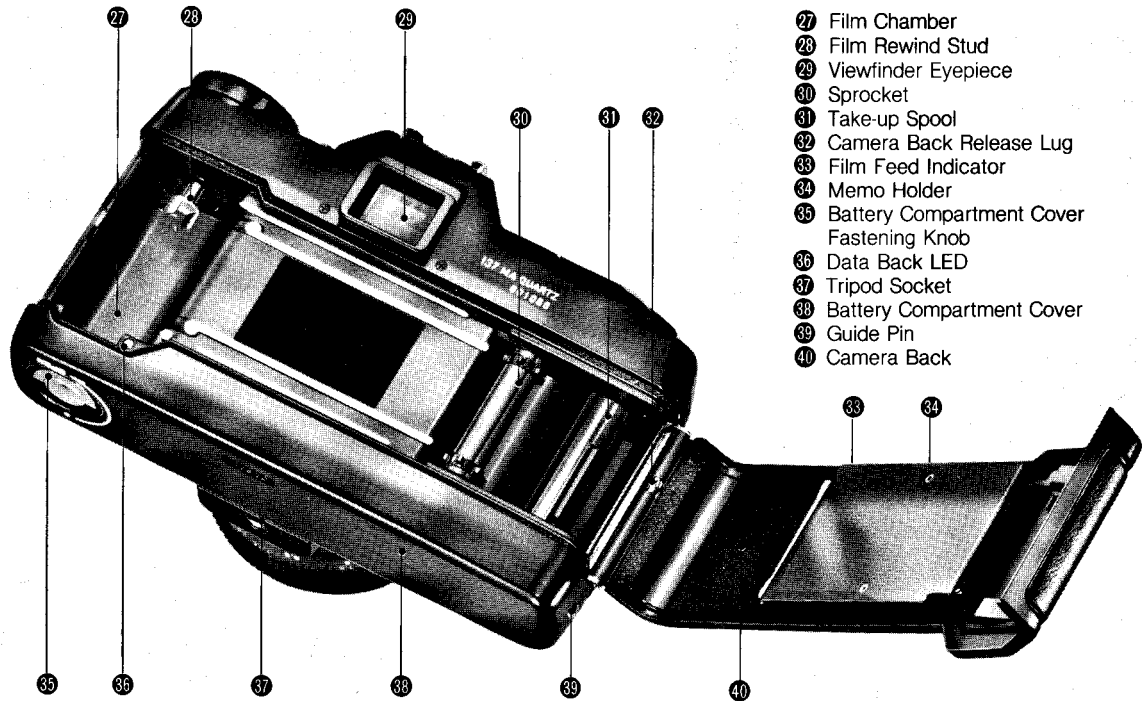


Description of Parts



- 1 Main Switch
- 2 Exposure Mode Selector
- 3 Electromagnetic Shutter Release
- 4 Film Rewind Button Cover
- 5 Main Lamp (Monitor LED)
- 6 Exposure Counter
- 7 Exposure Counter Illuminator
- 8 Accessory Shoe
- 9 Auto Flash Contacts
- 10 Direct X Contact
- 11 Exposure Compensation Release Button
- 12 Film Rewind Crank-Handle
- 13 Exposure Compensation Dial
- 14 Film Feed Indicator
- 15 Film Speed Ring
- 16 Shutter Control Dial
- 17 Lens Release Button
- 18 Self-timer LED
- 19 Depth-of-Field Preview Button
- 20 Lens Mount Index
- 21 Aperture Ring
- 22 Focusing Ring
- 23 Release Socket
- 24 Aperture/Distance Scale Index
- 25 Aperture Indicator Illuminator
- 26 Synchro Terminal



- 27 Film Chamber
- 28 Film Rewind Stud
- 29 Viewfinder Eyepiece
- 30 Sprocket
- 31 Take-up Spool
- 32 Camera Back Release Lug
- 33 Film Feed Indicator
- 34 Memo Holder
- 35 Battery Compartment Cover Fastening Knob
- 36 Data Back LED
- 37 Tripod Socket
- 38 Battery Compartment Cover
- 39 Guide Pin
- 40 Camera Back

The Shutter

The shutter is used to regulate the length of time the light exposes the film surface. The 137 MA Quartz features an electronic circuit incorporating an ultra, high precision quartz oscillator that provides precise shutter speeds in both AUTO and manual exposure modes.

<Shutter Control Dial Settings>

"A" (AUTO) ... In the "A" mode, the camera will provide correct exposures by automatically controlling the shutter speeds over a wide range, covering 1/1000 to 11 seconds, for the aperture setting, image brightness and film speed in effect at the time. And when used with the TLA electronic flash system, it will provide TTL electronic flash coupled to all aperture settings of the lens in use.

"1000" ~ "1" ... The figures in this range indicate the shutter speeds available in the Manual mode. "1000" represents a shutter speed of 1/1000 second; likewise the "125", "2", and "1" represent shutter speeds of 1/125, 1/2 and 1 second respectively. When the shutter speed number is shifted to the next larger number, it halves the amount of light falling on the film (for example, when it is moved from 125 to 250); conversely, the amount of light is doubled when the shutter speed is changed to the next lower number.

"B" (Bulb) ... The shutter stays open as long as the shutter release is pressed, causing the light to be transmitted to the film.



"X" (Synchro Contact) ... This setting is used for taking flash shots. The synchro contact on the 137 MA Quartz is an X contact that operates at 1/60 second. However, when using the TLA Flash Unit system, you can use the "A" setting, there being no need to use the "X" setting.

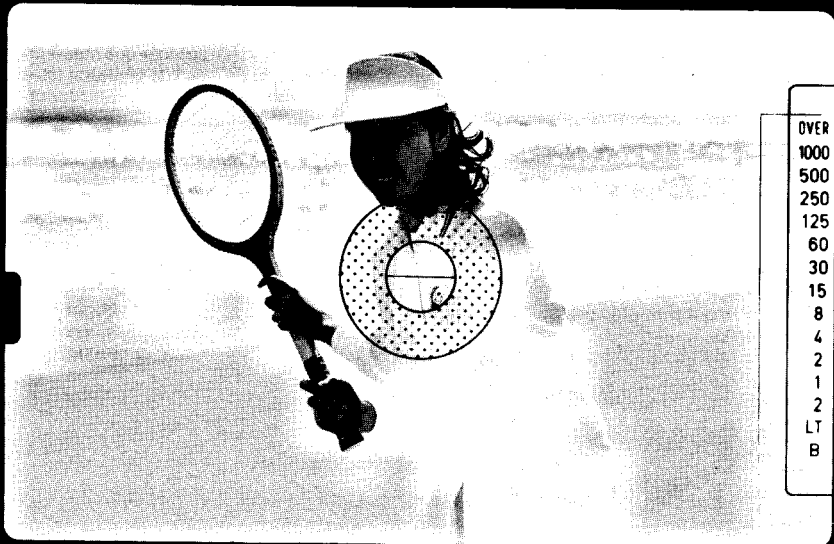
<Setting the Shutter Control Dial>

To set the shutter speed dial, grip the stubs on both sides of the "A" mark on the dial and rotate the dial until the desired shutter speed number or letter (all with click stops) aligns with the index. The dial cannot be rotated directly from "A" to "X".

- Do not set the shutter control dial on in-between positions as it is not designed for intermediate shutter speed control.

1

5.6



2

3

3

OVER
 1000
 500
 250
 125
 60
 30
 15
 8
 4
 2
 1
 2
 LT
 B

6

The LEDs in the viewfinder are of the energy conservation type designed to automatically switch off after staying on for 10 seconds whenever the main switch is turned ON or the shutter release is activated. Once off, they can be turned on again by partially pressing the shutter release button with a slight pressure.

① Aperture Indication

The aperture setting of the lens (also called f-number) is displayed at the top of the viewfinder. In some cases, such as when lenses slower than f/5.6, auto bellows, or a microscope adapter are used, the aperture setting does not automatically couple to the camera, and the indication in the viewfinder remains fixed at f/1.4. This does not indicate malfunctioning of the metering system. The aperture indication is given as •, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22 or 32. The • indicates f/1.2.

② Exposure Counter

The counter advances when the winding mechanism operates, and resets to "S" when the camera back is opened. All integers from 1 through 36 appear; S is followed by two arrows to indicate blank exposures during loading. The numbers 12, 20, 24 and 36, which indicate the end of standard length rolls of film, and 32 through 35, which indicate that the end of the roll is near, are in red.

③ Exposure Compensation Warning LED

If the exposure compensation dial is set on any setting other than "X1", with the camera's power source activated, this LED lights up, indicating that exposure compensation is in effect and reminding you to reset the dial to "X1" when exposure compensation is no longer needed. The warning LED switches off when the power source deactivates.

④ TLA Flash Ready/After-Flash Signal Mark

When the camera is used with a TLA flash unit, a green mark in the viewfinder display lights up to indicate that the flash unit has been fully charged, and pulsates after each flash exposure whenever the exposure has been correct. This mark is not displayed when the camera's power source is deactivated.

⑤ LED Indicators

When the camera's power source is activated, one or more of the red LEDs to the right of the shutter speed scale will either be steadily lit or pulsating, indicating the shutter speed in use.

⑥ Shutter Speed Scale

The black numbers from 1 through 1000 are the reciprocals of exposure times in fractions of a second; 1 indicates an exposure of 1 second, 2 an exposure of 1/2 second, and so on through 1000 which indicates an exposure of 1/1000 second. The red number 2 indicates an exposure of 2 seconds. The red "LT" (Long Time) is used to indicate exposures up to 11 seconds; "B" indicates "Bulb" or underexposure; and "OVER" indicates overexposure.

Auto Exposure

In the AUTO mode, you merely select the desired lens aperture and the camera's exposure system varies the shutter speed from 1/1000 to 11 seconds to assure correct exposure under varying lighting conditions. When operating the camera in the AUTO mode, the shutter speed in effect can be checked by turning on the LED's in the viewfinder.

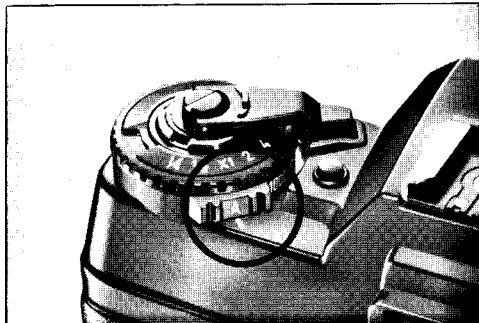
1 Set the shutter control dial on "A".

When the shutter control dial is on "A", the exposure will be set automatically.

Also check to see that the exposure compensation dial is set at "X1". For normal photography, if the dial is on any setting other than "X1", your camera will not give you correct exposure.

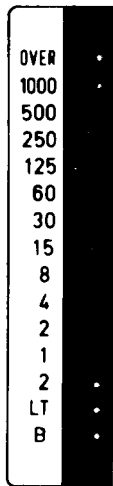
2 Turn the main switch on, and set the exposure mode selector.

When the main switch is turned on, both the main lamp and viewfinder LEDs will light up red. Next, set the exposure mode selector to "C" or "S", selecting the mode corresponding to your picture taking intent of the moment.



<Exposure Check>

When the main switch is turned on, the LED's on the right side within the viewfinder will indicate the necessary exposure information. The LED's will go off after staying on for 10 seconds, but you will then be able to make an exposure check by lightly pressing the shutter release to activate the diodes again.



Pulsating display (Over-exposure)
Pulsierende Anzeige (Überbelichtung)
Clignotement (sur-exposition)
Indicación intermitente (sobreexposición)

Steadily lit display (Correct exposure)
Ständig leuchtende Anzeige (richtige Belichtung)
Eclairage continu (exposition convenable)
Indicación iluminada permanentemente (exposición correcta)

Steadily lit display (Correct exposure for long time-exposure up to 11 seconds).
Ständig leuchtende Anzeige (richtige Belichtung für Langzeitbelichtung von bis zu 11 Sekunden)
Eclairage continu (exposition longue convenable jusqu'à 11 secondes)
Indicación iluminada permanentemente (exposición correcta para exposiciones de larga duración de hasta 11 segundos)

Pulsating display (Under-exposure)
Pulsierende Anzeige (Unterbelichtung)
Clignotement (sous-exposition)
Indicación intermitente (subexposición)



■ When an LED from "1000" through "LT" lights up, the exposure will be correct, and you may shoot immediately. If one LED lights up, the shutter will operate at the speed indicated opposite it on the scale. When 2 LED's light up simultaneously, an intermediate shutter speed between the two indicated speeds will be used. If "30" or a smaller number is indicated, there is a danger that camera movement during hand-held exposure will cause the image to be blurred. In such a case, change the aperture so that a number above "30" is indicated, or use a tripod or other means of holding the camera steady during exposure.

<Using the Exposure Compensation Dial>

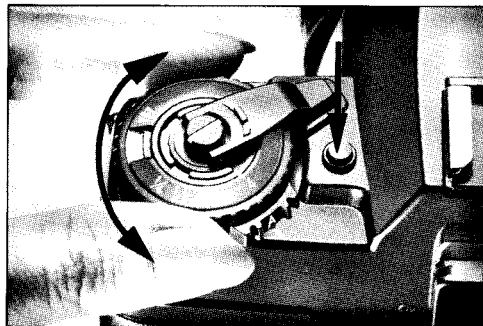
The exposure compensation dial is normally used at "X1" and locked there to prevent accidental shifting. To effect exposure compensation, set the dial to the desired position while depressing the exposure compensation release button. When the dial is set to a position other than "X1" with the main switch turned on, the exposure compensation warning LED in left side of the viewfinder lights up red, indicating that exposure compensation is in effect.

The dial click stops on the scale markings of "4", "2", "1/2" and "1/4" and on midpoint settings which can also be used.

The "4" and "1/4" settings are equivalent to aperture changes of two f-stops, the "2" and "1/2" settings correspond to one f-stops changes.

The integral values "4" and "2" indicate that additional exposure is being given; the fractional values "1/2" and "1/4" are used to decrease the amount of exposure.

Always set the compensation dial back to "X1" when compensation is no longer required.



Usable Exposure Compensation Settings
Nutzbare Belichtungskorrektureinstellungen
Réglages de compensation d'exposition possibles
Ajustes utilizables de la compensación de la exposición

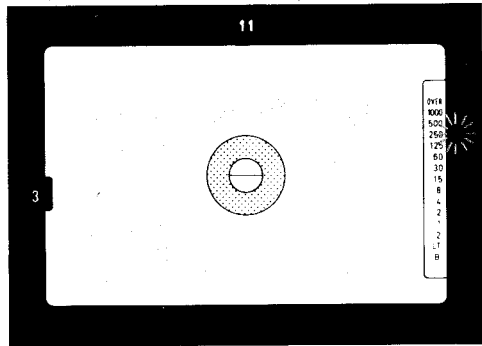
Film Speed Filmempfindlichkeit Sensibilité de pellicule Sensibilidad de la película	Compensation Range Korrekturbereich Plage de compensation Margen de compensación			
ASA/ISO 12	1/4	1/2	x1	• •
ASA/ISO 25	1/4	1/2	x1	2 •
ASA/ISO 50—800	1/4	1/2	x1	2 4
ASA/ISO 1600	•	1/2	x1	2 4
ASA/ISO 3200	•	•	x1	2 4

Manual Exposure Operation

The 137 MA Quartz can also be used in the manual mode for shooting at a desired shutter speed, exposures at the B setting, and flash photography at X synch with flash units other than those of the TLA flash system. For manual exposure, turn the shutter control dial from the "A" setting to the desired manual shutter speed number. In the manual exposure mode, the selected shutter speed will be indicated by a flashing LED inside the viewfinder.

1 Turn the shutter control dial to the desired manual shutter speed setting.

2 An LED will flash to indicate the selected shutter speed, while a second LED will steadily light, just as in the case of the AUTO mode, to indicate the correct shutter speed for the aperture setting in effect. For correct exposure, turn the aperture ring until the steadily lit LED merges with the flashing LED.

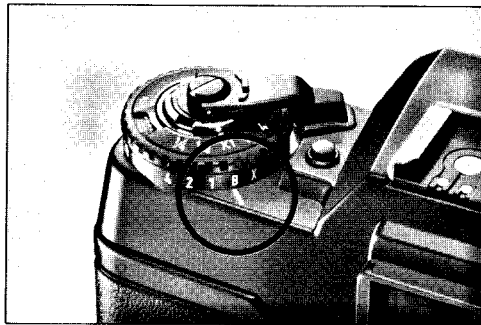
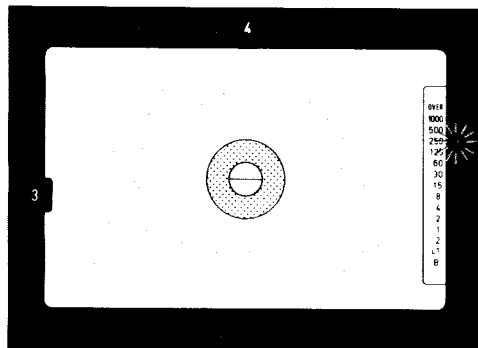


3 Correct exposure is indicated when the steadily lit LED merges with the flashing LED, leaving only the flashing LED in view. Press the shutter release button to photograph your subject.

- When resetting the shutter speed after having selected the aperture setting, adjust the shutter control dial until the flashing LED display merges with the steadily lit LED before releasing the shutter. However, when two steadily lit LEDs come on simultaneously, since the shutter control dial may not be used in the intermediate settings, you will not be able to merge the two LEDs completely at an intermediate position. In this case, you need to merge the two LEDs at one of the marked shutter speed settings by making a fine adjustment of the aperture setting.

<“B” (Bulb) Photography>

When the shutter is activated with the shutter control dial set on “B”, the shutter will remain open as long as the shutter release is held pressed down. Thus, it will be necessary to use a tripod or other support to prevent camera movement. Use of the exclusive Cable Switch S (optional accessory) is highly recommended.



Specifications

Type: 35 mm direct drive SLR featuring electronically controlled AUTO/manual exposure, focal-plane shutter.

Image size: 24 x 36 mm

Lens mount: Contax/Yashica large-diameter bayonet mount.

Standard lenses: Carl Zeiss Planar T* 50 mm f/1.7,

Carl Zeiss Planar T* 50 mm f/1.4.

Shutter: Quartz-timed electronically controlled horizontal travel type cloth focal-plane shutter.

Shutter speeds: AUTO mode.... 1/1000 to 11 sec. Manual mode.... 13 settings of 1/1000 to 1 sec., "B", and "X" (1/60 sec.).

Synch Terminals: X Contact (synch speed 1/60 sec.), and direct X contact.

Self-Timer: Quartz-timed electronic self-timer with 10 sec. delay. LED flashes during operation, accelerating 2 sec. before shutter release. Can be cancelled during countdown.

Shutter Release: Real Time Electromagnetic Release System; auxiliary remote release via "Release Socket" (electronic accessory connection).

Exposure Control: Through-the-lens (TTL) center-weighted metering at full aperture using SPD (Silicon Photo Diode) cell.

• EV range from EV 0 (f/1.4 at 2 sec.) to 18 (f/16 at 1/1000 sec.) at ASA/ISO 100 with f/1.4 lens. • ASA/ISO range from 12 to 3200.

• Exposure metering system: Coupled to main switch circuit in switching on and off (lights up and then automatically switches off in ten seconds when the release button is slightly pressed or when the shutter is released).

Exposure Compensation: +2 EV ~ -2 EV via exposure compensation dial (click stops at every 1/2 EV; can be set for in-between-click stops).

AE Lock: Operated via main switch (locks in memory-oriented shutter speed).

Auto Flash Control: Direct TTL metering automatically coupling with Contax TLA Auto Flash system via an SPD sensor. • Synch speed: Shutter speed automatically set to 1/60 sec. upon completion of recycling.

Viewfinder: Silver-coated, fixed eye-level pentaprism type with horizontal split-image/microprism focusing screen; field shows 95% of the picture area; 0.86 X magnification (with 50 mm lens).

Viewfinder display: Shutter speeds indicated by 15 indicator LED's; over- and under-exposure indications; Green LED flash ready/after-flash signal mark; aperture scale; exposure counter; exposure compensation warning LED. Shutter speed LED's flash to indicate AE Lock operation.

Film advance: Fully automatic with Real Time Direct Drive using the camera's micro-motor.

Exposure modes: Single or continuous exposure selected by exposure mode selector; continuous exposures up to 3 frames per second.

Exposure counter: One on the camera body and one in the viewfinder, count increasing order, automatic resetting type.

Accessory Shoe: Direct X contact, and accepts TLA Auto Flash system units.

Camera back: Opens by lifting film rewind knob; with film-feed indicator and memo holder. (Camera back removable)

Main lamp: Indicates normal camera operation when power is turned on. Lights green for battery checking. Flashes red when self-timer is used.

Power source: Four 1.5 V size AA dry batteries or four 1.2 V size AA nickel-cadmium batteries.

Technische Daten

Number of rolls on one set of batteries: About 50 rolls with alkaline dry batteries; about 20 rolls with manganese dry batteries; about 30 rolls with nickel-cadmium batteries (assuming all 36-exposure rolls, room temperature, continuous exposure mode).

Power supply check: Combined with the main lamp. The main lamp lights up green when the batteries are in good condition.

Miscellaneous: With depth of field preview button and data back LED.

Dimensions and weight: 143 (width) x 92.5 (height) x 51 (depth) mm; 665 g (with batteries).

** The above specifications and design are subject to change without notice.*

Typ: 35-mm-Spiegelreflexkamera mit Direktantrieb, elektronisch gesteuerter automatischen/manuellen Belichtung, Schützverschluss.

Bildformat: 24 x 36 mm

Objektivfassung: Contax/Yashica-Bajonettfassung mit großem Durchmesser.

Normalobjektive: Carl Zeiss Planar T* 1:1,7/50 mm
Carl Zeiss Planar T* 1:1,4/50 mm

Verschluss: Elektronisch gesteuerter, vertikal ablaufender Tuch-Schlitzverschluss mit Quarz-Zeitsteuerung.

Verschlusszeiten: Automatischer Betrieb 1/1000 bis 11 s
Manueller Betrieb 13 Einstellungen von 1/1000 bis 1 s, "B" und "X" (1/60 s).

Synchro-Anschlüsse: X-Kontakt (Synchronisationszeit 1/60 s) und Direkt-X-Kontakt.

Selbstausröser: Quarz-gesteuerter elektronischer Selbstausröser mit 10 Sek. Vorlaufzeit. LED blinkt bei Aktivierung und beschleunigt 2 Sek. vor Auslösung. Kann während des Vorlaufs abgestellt werden.

Verschlussauslöser: Elektromagnetisches "Real Time"-Auslösesystem; zusätzliches Fernauslösesystem über "Auslöserbuchse" (Anschluß für elektronisches Zubehör).

Belichtungsregelung: Mittenbetonte Lichtmessung durch das Objektiv bei offener Blende mit einem SFD-(Silizium-Fotodiode)-Sensor. Belichtungsautomatik mit Blendenpriorität. • EV-Bereich von EV 0 (f/1,4 bei 2 Sek.) bis 18 (f/16 bei 1/1000 Sek.) mit ASA/ISO 100 und F1.4-Objektiv. ASA/ISO-Bereich von 12 bis 3200.

• Lichtmeßsystem: Beim Ein- und Ausschalten mit Hauptschaltung gekoppelt (leuchtet auf und geht dann nach 10 Sekunden automatisch aus, wenn der Auslöser leicht gedrückt oder der Verschluss ausgelöst wird).