

**CONTAX**  
**RTS II**  
**QUARTZ**

*The Quartz Digital Revolution*





## The Contax Real Time System Of Photography An Evolution In Revolutionary Equipment

Simply put, the Contax Real Time System of photographic equipment is the finest collection of creative capabilities any photographer could ever want... or need.

But the most important factor about Contax equipment is that every item integrates fully... the true test of 'system' photography. More than simply attaching lenses or accessories to a camera body, with the Real Time System the photographer 'assembles' parts of a complete, integrated photographic tool. For example, one assembly might be camera body + lens + motor drive + remote control unit, Real Time System equipment is designed and engineered right from the start to assemble into an integrated whole, not merely 'add-on' as an afterthought.

Thus, with the Real Time System, the photographer is always equipped precisely for the job at hand. Every accessory operates with maximum efficiency, no matter what configuration of equipment the photographer chooses.

And now, Contax presents a few new evolutionary changes in the Real Time System, starting with a new, even more advanced SLR camera body... the Contax RTS II Quartz. Incorporating numerous internal design and function changes, the

RTS II Quartz provides even more accuracy, even greater precision, even further integration for the overall Real Time System. Among the advances in the RTS II Quartz are: Quartz Crystal Timing for total accuracy, increased field-of-view, a new viewfinder data display system, an improved shutter, "AE Lock" function for critical exposure adjustments and, finally, integration with the superb Contax TLA Auto Flash System, providing both direct, 'Fail-Safe' X-synchronization and Through-The-Lens metering of flash exposures.

Each of these functions and capabilities helps to make the RTS II Quartz a vital element in the total Real Time System, while at the same time none of the major and minor changes in the camera body detract in the slightest from its ability to fully integrate with other Real Time System components.

Adjunct to the new camera body are several other new Real Time System items. The Professional Motor Drive, for example, remains basically the same unit, but with new, improved electronic circuitry to increase its performance and reliability. The same minor electrical changes have been made in the Real Time Winder. Naturally, both the previous and new camera bodies, motor drives and winders are fully inter-

changeable. (NOTE: Due to circuitry, the previous PMD and RTW operate only in 'Continuous' mode under some conditions when used with the Contax RTS II Quartz.)

Three other evolutionary changes in the Real Time System include a new Data Back matched to the RTS II Quartz (but usable with the RTS body), a new set of Focusing Screens for the RTS II Quartz to accommodate the expanded viewfinder coverage (not usable with RTS due to size differences) and a new External Power Pack (bodies and power packs are fully interchangeable, but the new Power Pack has @5X capacity).

It is just this continued interchangeability of bodies and major accessories, despite remarkable advances in the functions and capabilities of the camera body itself, that distinguishes the Contax Real Time System. No matter how revolutionary the changes may be, they are evolutions of the system itself, a system which affords the photographer not merely the capacity to handle ordinary photographic situations, but the creative capability to adapt to virtually any requirement.

The Contax Real Time System offers equipment for a lifetime of photographic creativity.



# CONTAX RTS II QUARTZ

*There is no such thing as the perfect camera. There never has been; and, most probably, there never will be.*

*Because a 'perfect' camera would be too many things to too many people.*

*Constructing a 'perfect' camera to meet all the varied requirements of photographers, to incorporate all the differing capabilities photographers desire, would result in a camera of astronomically high price — and a camera that still would probably lack some things, for some photographers.*

*Contax has never aimed at a 'perfect' camera.*

*Instead, the Contax ideal is a camera that incorporates every possible advantage, every major capability, while remaining both easy to operate and versatile in performance.*

*The original Contax, built half a century ago, was not a 'perfect' camera.*

*And the latest camera to proudly carry the Contax name, the RTS II Quartz, is still not a 'perfect' camera. It is, simply, the finest camera today available.*



**CONTAX**  
**RTS II**  
**QUARTZ**

[www.panchromatique.ch](http://www.panchromatique.ch)





## Full Synchronization At 3fps (3 frames per second)

Fully compatible with the Auto Exposure mode of the new Contax RTS II Quartz is the high power Real Time Winder W-3. This completely integrated winder provides maximum shooting capability of three frames/second, completely synchronized at any shutter speed. Single or Continuous mode operation is possible via any one of three releases, on the RTW grip or the camera body. Another example of the sophisticated system integration of Contax photography.





## For Professional-Level Applications

*Even the most difficult professional demands are fully met by the unique capabilities of the new Professional Motor Drive W-6 unit for the Contax RTS II Quartz. Built-in intervalometer timing and high-speed performance up to five frames per second guarantee the capability to handle any challenge. Fully synchronized at all shutter speeds, in Auto Exposure or Manual modes, the PMD W-6 also offers its special 250 Film Back to provide bulk film supply for extended shooting or long-term remote operation.*





## Ultimate System Capabilities

Equipping the RTS II Quartz with both the Professional Motor Drive W-6 and the Real Time Flash 540 results in a fully integrated photographic system capable of superb results under virtually any conditions. This system application of Real Time accessories provides not only high-speed motor advance but the superlative capabilities of Contax TLA System electronic flash together with stroboscopic effects at a rate of up to five flashes per second.





## Contax TLA Electronic Flash Sophistication

The Contax TLA Flash System is the most sophisticated dedicated electronic flash capability today available, offering SPD metering of flash exposures at the film plane together with the unique 'Fail-Safe' system of flash/shutter synchronization that guarantees perfect exposures, flash or non-flash, on every frame. TLA System equipment includes the pro-level RTF540 unit (with TLA Adapter), and the TLA30 and TLA20 flashes, with a full system of accessories for multiple-flash and remote use.





## Superb System Of Close-Up/Macro Accessories

*For exquisite renditions of even the tiniest detail, the Contax Real Time System offers accessories for close-up and macrophotography that provide exceptional reproductive capabilities at even the highest ratios of magnification.*

*The Contax Auto Bellows PC combines with the Planar T\* f/4 100mm Bellows lens to offer amazingly precise and versatile capabilities, that can be enhanced still further with other accessories.*





## System Integration To Provide For Every Need

Whatever type of photography, whatever conditions, the Contax RTS II Quartz is fully prepared to perform with optimum results thanks to system accessories that are fully integrated. Items such as the special Data Back Quartz D-4, the most advanced of its type, and the Power Pack P-3 provide the capabilities to meet even the most unusual demands, backed up by a wide range of additional Real Time equipment that includes some of the most advanced remote control units in the world.



# Contax RTS II Quartz :

## Parts, Controls & Features Nomenclature

- ➊ Exposure Counter
- ➋ Film Advance Lever

In AE/Manual modes, even with lens cap on, the shutter will automatically operate at a shutter speed of 1/60 sec. during film wind to Frame 1 after loading film. This feature does not apply to Manual shutter speed "B" mode.

- ➌ Electromagnetic Shutter Release
- ➍ Main Switch

This switch provides a master control over the entire electronic operation of the RTS II Quartz, activating the exposure metering system and electromagnetic release, and preventing accidental exposure or battery drain by the LED Data Display when the camera is not in use.

- ➎ Exposure Compensation Index
- ➏ Exposure Compensation Dial
- ➐ Film Speed Ring
- ➑ Accessory Shoe
- ➒ TLA Auto Flash Contacts

Special hot-shoe circuitry provides the interface for use of the RTS II Quartz with the Contax TLA Flash System, providing direct TTL metering at the film plane and 'Fail-Safe' flash/shutter synchronization.

- ➓ Direct X Contact
- ➔ Shutter Control Dial

This 16-position dial incorporates the "A" setting (for AE Mode) along with Manual Mode settings of 1/2000 sec. to 4 sec., plus "B" and "X" (1/60). The dial locks in the "A" and "X" positions.

- ➕ Shutter Speed Index
- ➖ Film Rewind Crank-Handle
- ➗ Film Rewind Knob
- ➘ Lens Release Button
- ➙ Exposure Check Button

Pressing this button activates the viewfinder LED Data Display for 16 seconds, after which it automatically cuts off to preserve battery power.

- ➚ AE (Auto Exposure) Lock Lever
- This lever can be used to activate the RTS II Quartz AE Lock function, which is based on Exposure Values. This system provides consistent exposure results, even if aperture setting is changed.

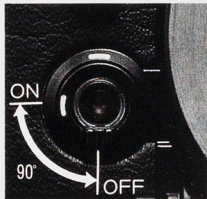
- ➛ Self-Timer Index
- ➜ Self-Timer Button Lock Ring
- ➝ Self-Timer Button/Self-Timer Flasher

Quartz-timed electronic self-timer with 10-sec. delay, cancellable or resettable during operation. LED flashes during operation, accelerating 2sec. before shutter release.

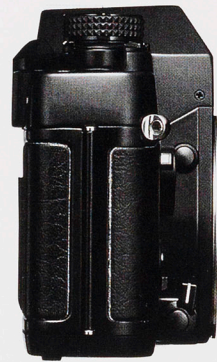
- ➞ Depth-of-Field Preview Button/Mechanical Shutter Release Button of 1/50 sec.



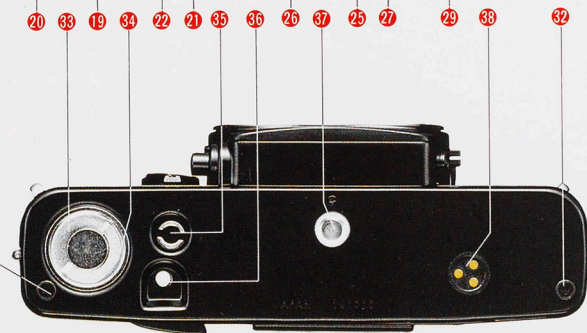
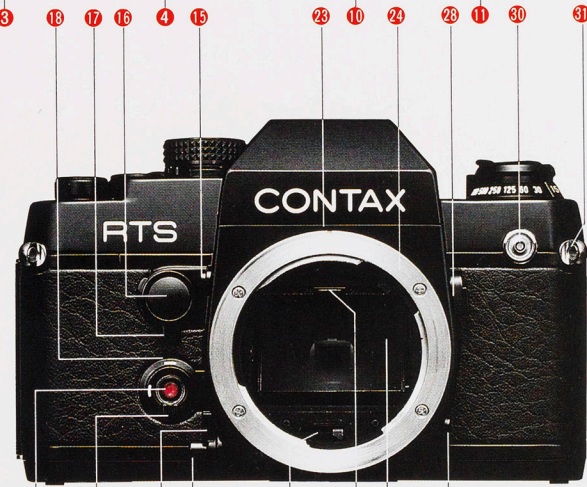
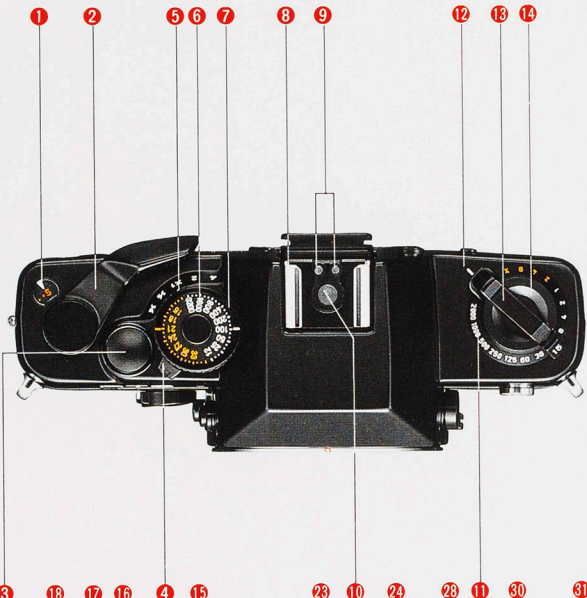
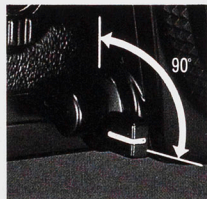
Main Switch



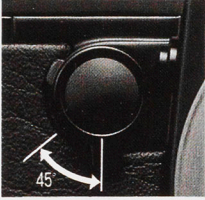
Self-Timer Button Lock Ring



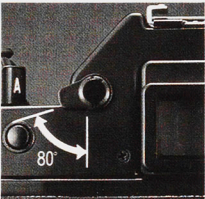
Mechanical Shutter Switch Lever



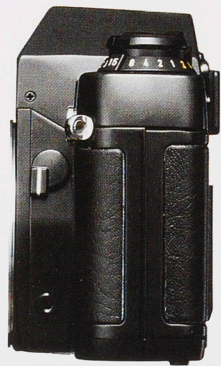




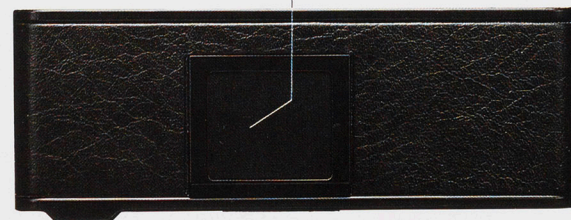
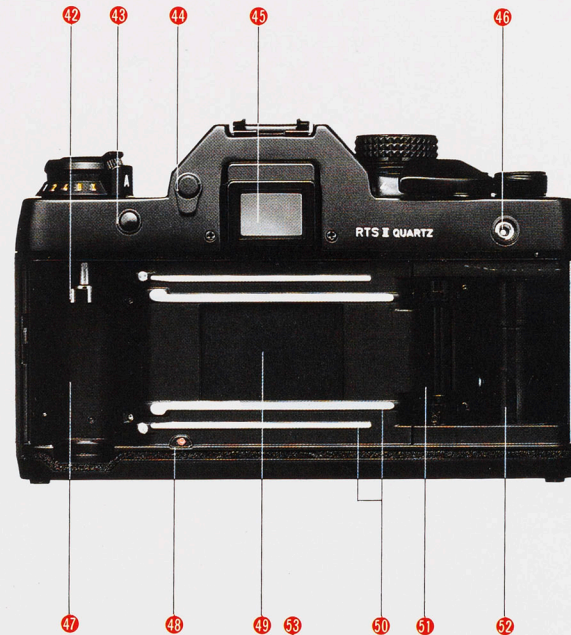
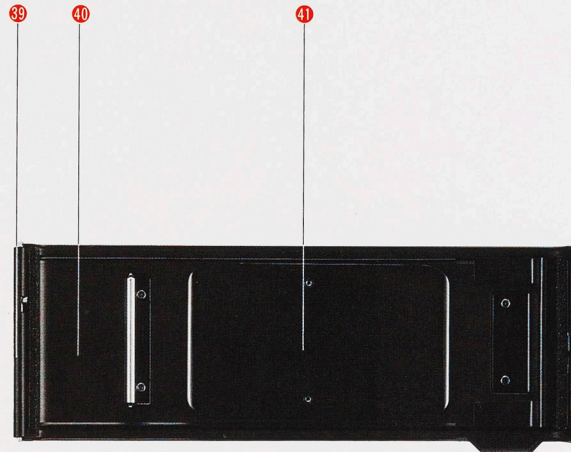
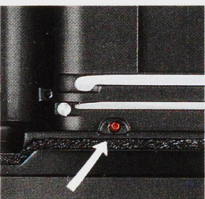
AE (Auto Exposure)  
Lock Lever



Viewfinder Eyepiece-  
Blind Lever



Data Back LED



### 22 Mechanical Shutter Switch Lever

By turning this lever to the horizontal position, the photographer activates the manual, mechanical release 1/50 sec. shutter capability of the RTS II Quartz, requiring no battery power. The shutter is operated by the Mechanical Shutter Release Button (Depth-of-Field Preview Button) in this mode of operation.

### 23 Lens Index

### 24 Contax/Yashica Mount

### 25 Focusing Screen Release Lug

### 26 Automatic Diaphragm Coupling Lever

### 27 Deflection Mirror

### 28 Mirror Lock

### 29 Mechanical Bulb Release Socket

The photographer can employ a manual, mechanical Bulb shutter release by threading a standard cable release into this socket. The camera then operates, without battery power, in a mechanical "B" shutter mode.

### 30 X Synch Terminal

### 31 Carrying Strap Eyelet

### 32 Motor Drive Guide Studs

### 33 Battery Compartment Cover

### 34 Battery Compartment Cover Release Knob

### 35 Film Drive Coupling

### 36 Film Rewind Release Button/ Multiple Exposure Button

### 37 Tripod Socket

### 38 Motor Drive Coupling Terminal

### 39 Back Cover Release Lug

### 40 Camera Back

### 41 Pressure Plate

### 42 Film Rewind Stud

### 43 Shutter Dial Lock-Release Button

### 44 Viewfinder Eyepiece-Blind Lever

This lever closes a special curtain over the camera's eyepiece, in order to prevent extraneous light from interfering with the sensitive exposure metering system, when the camera is being operated by remote control.

### 45 Viewfinder Eyepiece

### 46 Release Socket

### 47 Film Cassette Chamber

### 48 Data Back LED

This is a special LED which signals the Data Back Quartz D-4 to activate its automatic data imprinting capability. This LED allows cordless operation of the data back with the RTS II Quartz.

### 49 Titanium Shutter Curtain

### 50 Film Guide Rails

### 51 Sprocket

### 52 Take-up Spool

### 53 Memo Holder



# Sophisticated Mechanical & Heart Of The RTS II Quartz

Reliability is the most vital element in any camera designed fundamentally for professional use — reliability that can be counted on, anytime, anywhere, under any conditions. The RTS II Quartz is produced under conditions that aim at total reliability and the achievement of optimum performance levels that remain stable and reliable under even the most rugged conditions of long-term professional use.

Every design factor in the RTS II Quartz was subjected to full computer analysis; and in the production stage each component is subjected to the most rigorous possible testing. A good example of this process is the camera's central processing unit, the 'electronic brain' that controls automated exposure. Each CPU receives more than 100 individual tests before the completion of the camera, all conducted by computer to guarantee reliability and durability.

Another example of the strict RTS II Quartz standards is the shutter unit. Each shutter mechanism is tested through some 2,000 repetitive operations, and only those displaying absolute precision and consistency, from the first to the 2,000th operation, are approved for use.

In order to meet such standards, the designers of the RTS II Quartz adopted entirely new production technologies in such fields as materials selection and processing, mechanical and electronic design and assembly and testing. The result is a camera that fully meets the toughest tests of Contax reliability — a reliability the photographer can count on, professional or amateur!

## 'Block System' Production & Assembly:

While most cameras are produced on a standard assembly line, in which the camera body proceeds along, with parts and components added one-by-one, the Contax RTS II Quartz is produced under a completely different concept — the 'Block System' — to assure immensely higher levels of precision and reliability.

In this system, various components and mechanisms are produced and assembled by members of different 'block teams', who are responsible for production, assembly and testing. The camera is gradually built up through collation of these block efforts, with regular, overlapping quality tests at every step. In this way, every component and mechanism is tested not only for its own operation, but for its operation in coordination with other parts. Any failure to pass even one of these tests means rejection of the 'block', so that only those cameras meeting every test of accuracy, stability and durability emerge from the factory to bear the RTS II Quartz name.

The continuous quality control exercised under this block system makes it impossible for a defective camera to be assembled, and guarantees that every camera body will stand up to years of hard use and still deliver Contax reliability.

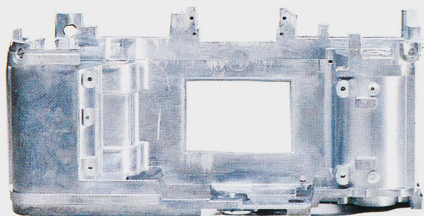
## Smooth Film Transport & Flatness Of Plane:

In the strictest sense, the ultimate task of any camera is the production of an image on film — in the case of the RTS II Quartz, the production of an image reflect-

ing the extraordinary optical performance of the Carl Zeiss T\* lens line. The color contrast and resolution properties of T\* lenses can be displayed to full effect only if perfect flatness is maintained in the film plane.

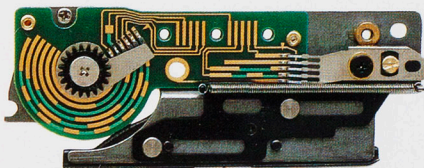
Therefore, no matter how much quality goes into the electronic and mechanical functions of the RTS II Quartz, the camera would be a failure if it could not meet this vital test.

To achieve perfect film plane flatness is exceptionally difficult, since the film backing on which the image-carrying solution is borne tends naturally to warp and curl. The RTS II Quartz employs an extra-wide film pressure plate, supported by a double-construction back cover, to maintain complete flatness over the exposure zone. Then, to help prevent irregular film curling, a large-diameter winding spool is used. A special clutch mechanism within the rewind crank assures smooth film transport, free of external pressure, while a similar clutch acts to free the take-up spool during rewinding to reduce torque.



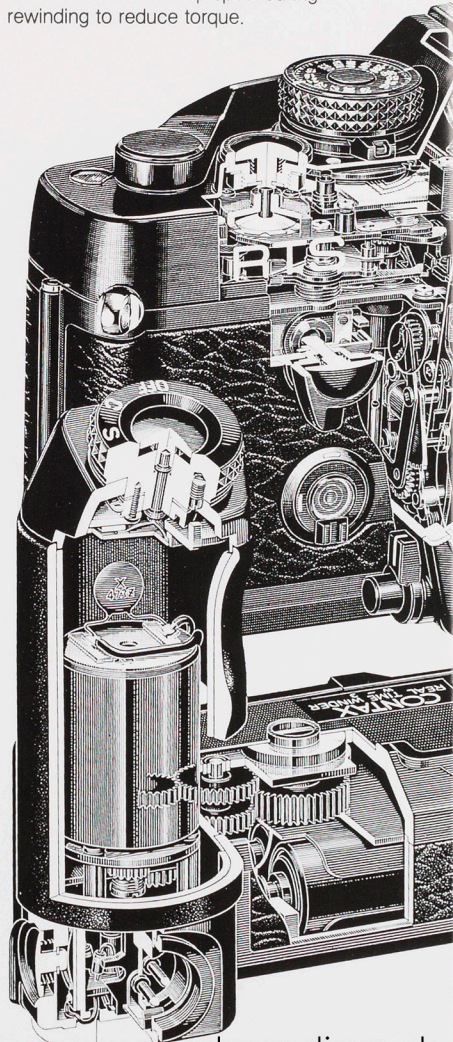
## Aluminum Diecast Body:

Even the body frame of the RTS II Quartz is produced to the most rigid standards, with a copper silumin impregnated aluminum alloy of exceptional durability used for the body diecastings. A high-temperature, high-pressure steam annealing system eliminates distortion completely.



## Reliable Data Transmission:

A precision finish to within one micron (1/1000mm) of perfect flatness eliminates 'chattering' in the transmission of aperture information to the camera's CPU. Gray-coded data is transmitted reliably through a newly developed base plate with laminated contact tracks and pronged brushes.





# Electronic Features.... System Reliability

**Contax RTS II**  
**QUARTZ**

A longer, double-construction rewind shaft provides smoother rotation, aided by rounded film guide edges and ball bearing transport operation.

## Total System Integration Through 'Real Time' Operation

One of the most important innovations of the original Contax RTS was 'Real Time' operation of the camera — control of the photo-taking process at the Speed of Light! — to give the photographer instantaneous response.

And the key to 'Real Time' operation was the use of an electromagnetic shutter release system, through which control of not only the camera body, but all the Real Time System accessories, as well, was accomplished.

This electromagnetic release, which remains at the heart of the RTS II Quartz system capabilities, is faster, smoother and more reliable than any mechanical release

system. Its sensitive micro-switch requires only a 0.7mm stroke to instantly relay commands to the electronic control center of the camera.

Three significant advantages come with this system. First, camera shake is virtually eliminated completely, ending the primary cause of blurred photographs. Second, time lag between decision and execution is ended, as the exposure begins instantaneously with the pressing of the release button. Third, the photographer controls an integrated photo system of body, lens and accessories all through a single release switch (which can be located on an accessory, or remote control unit).

And as a bonus, the electromagnetic release system also increases the performance reliability of such accessories as the Professional Motor Drive, Real Time Winder, TLA Flash units, etc.

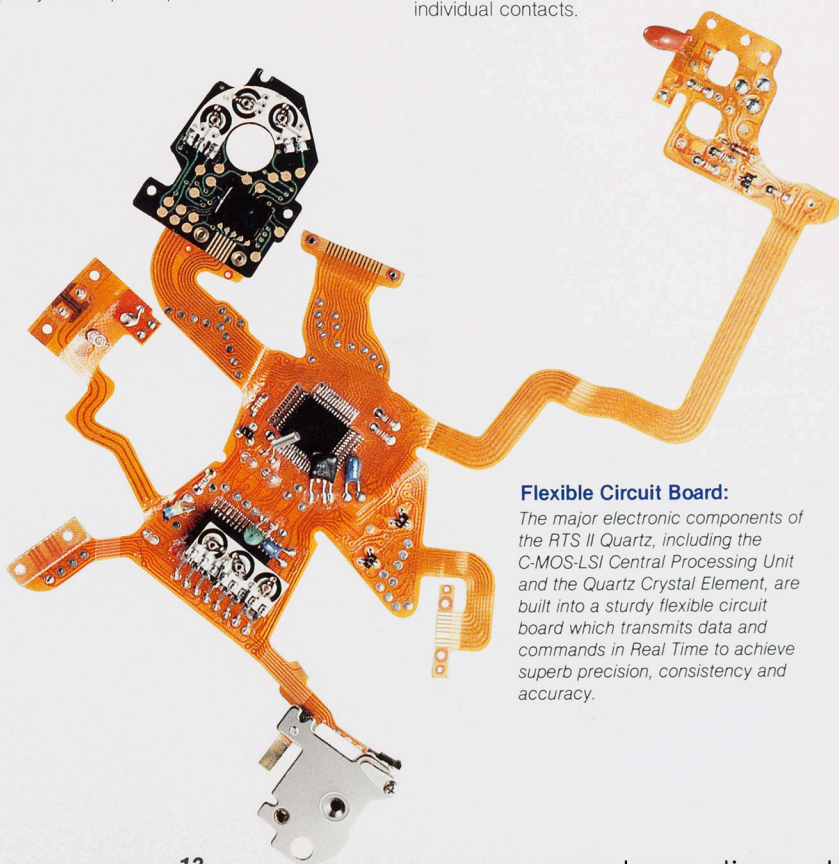
## Total Quality In Electronic & Mechanical Mechanisms:

The modern, electronic 35mm SLR camera is loaded with electronic and mechanical components, each of which must operate with total reliability if the camera is to meet the test of professional use. Each of these components in the RTS II Quartz is finished to achieve remarkable quality and superior performance.

Electronic switches, for example, employ the most advanced and sophisticated electronic-relay capabilities to insure that data flows to and from the Central Processing Unit with total accuracy and consistency. Multi-contact systems and gold-plate finishes are standard with the RTS II Quartz to guarantee reliable performance, exemplified by the 'Palladium' alloy employed for multi-contact switches.

Mechanical movement within the camera body is primarily rotary, involving shafts and levers. All shaft holders receive a special honing, after nitride finishing, to eliminate friction. Levers also receive nitride finishes and special honing, or a surface finish following a carburized hardening process. These steps insure that the performance of each individual mechanism will be at optimal level, with no loss of consistency or accuracy.

The reliability built into the RTS II Quartz is shown to perfection in the transmission to the CPU of aperture information, in gray-code digital values. This is performed through a recently developed base plate with special laminated contact tracks and pronged brushes, precision finished to a flatness within one micron (1/1000mm) that completely eliminates any chance of 'chattering', the intermittent disruption of a signal due to mechanical bouncing of individual contacts.



## Flexible Circuit Board:

The major electronic components of the RTS II Quartz, including the C-MOS-LSI Central Processing Unit and the Quartz Crystal Element, are built into a sturdy flexible circuit board which transmits data and commands in Real Time to achieve superb precision, consistency and accuracy.



*Even the most extreme conditions of back or side-lighting  
can be easily overcome by use of the AE Lock function.*



*Taken with Contax RTS II Quartz body and Sonnar T\* f/2.8 180mm using AE Lock control at 1/500 sec. shutter speed.*



# Total Accuracy With Dual-Mode Exposure

To the photographer the word 'exposure' means the photographic process of exposing a piece of film to light in order to achieve a chemical reaction that will record an image on that film. This is the fundamental purpose of photography, and all of the advances made in camera technology are aimed at performing this operation with increased accuracy and less difficulty.

Three factors are involved in the photographic exposure process: duration of exposure ('shutter speed'), size of the opening through which light is admitted to the film ('aperture') and the sensitivity to light of the film being used (the 'ASA' rating).

Film sensitivity is standardized, expressed in ASA or DIN ratings shown on the box and on the film cassette itself. The photographer, therefore, is concerned primarily with the factors of shutter speed and aperture. The combination of these two factors determines the precise exposure on developed film. For the professional, exposure must be perfect; for the serious hobbyist, exposure should be as perfect as possible.

## SPD Exposure Metering

An exposure meter is a tool for determining combinations of aperture and shutter speed that will provide optimum exposure for a particular scene. In the RTS II Quartz, as in most modern 35mm SLRs, a built-in exposure meter measures light through-the-lens and provides the photographer with the information needed to set proper aperture and shutter speed. In addition, the RTS II Quartz allows the exposure meter to actually 'set' exposure automatically, according to the determination of optimum exposure made by the camera's Central Processing Unit.

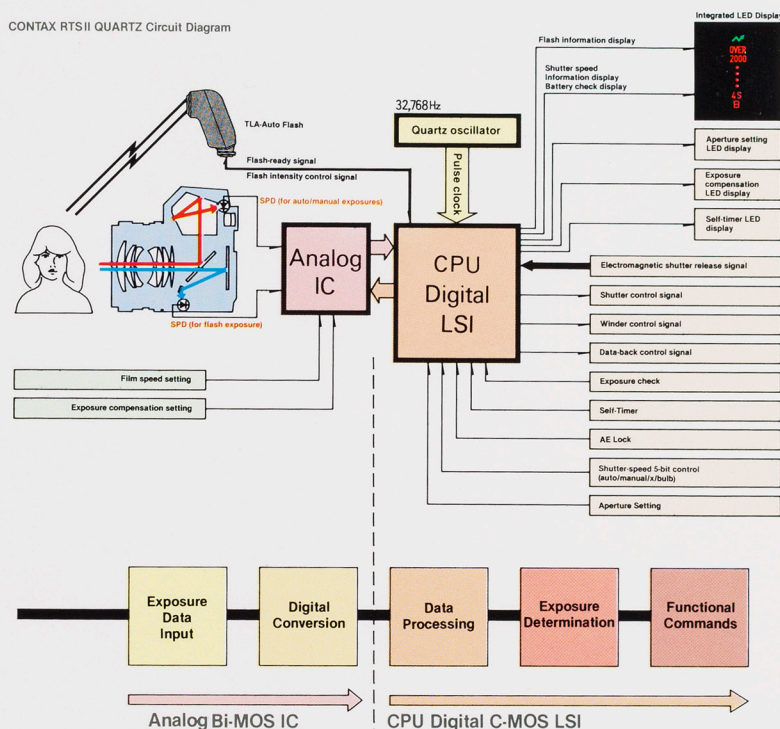
The Silicon Photo Diode (SPD) cells used to measure light by the RTS II Quartz are the most sensitive devices ever produced for this purpose. They react to even the slightest change in ambient light levels instantly. Within the RTS II Quartz, one SPD provides 'center-weighted' metering for ambient light exposures; another SPD meters electronic flash lighting with the Contax TLA System (See P. 24).

According to the precise level of light determined by the SPD and processed by the CPU, the RTS II Quartz provides the photographer with an indication of optimal exposure factors. This is done through a special Viewfinder Data Display (See P. 18). The photographer decides to employ either the AE (Automated Exposure) or Manual

Mode. [TLA Mode for electronic flash metering is selected automatically when applicable.]

Light metering is constant with the RTS II Quartz, whenever the camera's Main Switch is On. In the AE Mode, this means that the final shutter speed command comes virtually at the instant of exposure, protecting the photographer against sudden changes in light value just as the shutter release is pressed.

CONTAX RTSII QUARTZ Circuit Diagram



## Digital Data Processing

The electronic process of exposure determination is of the highest precision and consistency in the RTS II Quartz. First, all relevant factors are relayed in 'analog' form to a Bi-MOS Integrated Circuit, where they are converted into digital codes. Then, these codes are processed in the C-MOS-LSI, which relays commands to all 'concerned' camera functions. The use of digitally coded information greatly increases the consistency and accuracy of this data, to make exposure measurements of a much higher degree of reliability than is possible with analog information only.



*Perfect exposure results and 'Fail-Safe' automated flash/shutter synch are provided by the unique Contax TLA Auto Flash System.*



*Taken with Contax RTS II Quartz body, TLA30 and Distagon T\* f/2.8 25mm with automated flash exposure.*



# AE/Manual Exposure Operation

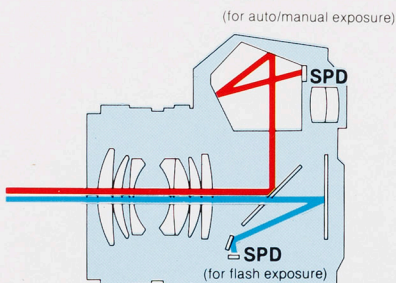


## Auto Exposure (AE) Mode

When the Shutter Speed Dial is locked into the "A" setting, the Contax RTS II Quartz is set in the AE Mode for completely automatic exposure. The photographer merely chooses an aperture setting, and the camera will automatically set the proper shutter speed for an optimum exposure.

If the photographer wishes an indication of the approximate shutter speed the camera has selected, this is provided by the Viewfinder Data Display at a single touch of the *Exposure Check Button*, which turns the display on for 16 seconds. The *auto-selected shutter speed* will be displayed by a digital LED steadily lit, to the right of the finder frame. If two adjacent LEDs are lit, this indicates that the camera has selected a shutter speed which is in between the standard settings. (Both "500" and "250" lit would perhaps indicate a speed of 1/350 sec.) In case the ambient light is too intense to provide a correct exposure at the working aperture, the display will signal the need for selection of a smaller aperture by lighting the "OVER" LED indicator. If the "B" indicator lights, the exposure will fall between 4 and 16 seconds, or the scene is in danger of under exposure.

## Pathway of light to metering system



## Manual Exposure Mode

If the photographer wishes to use the RTS II Quartz in Manual mode, setting shutter speed himself, the Shutter Speed Dial should first be unlocked from the "A" setting and set to any desired shutter speed.

After pressing the Exposure Check Button to activate the Viewfinder Display, the photographer will see *two of the shutter speed LEDs lit up*. One of these will be lit steadily, indicated the proper shutter speed as determined by the camera's own SPD metering; the other will flash at regular intervals to indicate the actual speed at which the shutter dial is set.

To achieve a correct exposure, the photographer should adjust shutter and/or aperture settings until only one shutter speed LED is flashing steadily. At this point, the photographer may release the shutter, or may make fine adjustments of the aperture ring to achieve slight over or under exposure.

## EV-based AE Lock Function

One of the revolutionary changes introduced in the new Contax RTS II Quartz is a completely new AE Lock function. Its operation requires a brief explanation of the term Exposure Value (EV). Exposure Value is actually a range of light intensity which depends on various factors. EV capabilities indicate the range of ambient light within which the exposure system is designed to

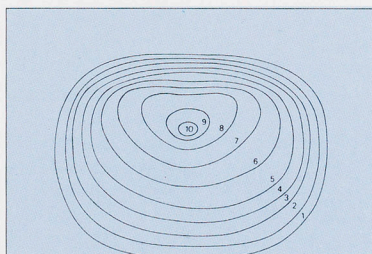
work, and are usually provided according to standards which include ASA 100 film and a 50mm lens with a maximum aperture of f/1.4. Under these conditions, for example, the RTS II Quartz is capable of metering accurately the range from -1 to +19 EV — one of the widest sensitivity ranges of any 35mm SLR camera.

The major advance in the AE Lock function of the RTS II Quartz is that it locks the camera's exposure system according to an EV setting, rather than merely freezing a shutter speed as other similar functions do. Thus, if the aperture setting is changed after the AE Lock function is activated, the camera will automatically change shutter speed to maintain proper exposure at that EV level. This allows the photographer to expose a series of photographs at a consistent EV, for example, even while varying aperture settings in order to obtain different depth-of-field effects.

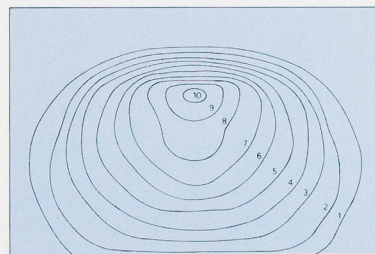
This combination of ultra-sensitive light measurement, sophisticated processing of the measurement data with Real Time relay of exposure commands and an advanced new AE Lock system of superb consistency makes the RTS II Quartz the world's most advanced camera in terms of exposure capabilities.

## Exposure Compensation Function

In order to overcome backlighting, or to enhance mood or highlight details in a photograph, the Contax RTS II Quartz provides a  $\pm 2$ -stop Exposure Compensation adjustment. This is used to increase or decrease the overall exposure of the photo, and operation is indicated in the viewfinder. For cases of extreme backlighting, where a factor of greater than two aperture settings is involved, the AE Lock function can be used to lock in the proper exposure setting for the main subject.



Center-weighted metering pattern for auto/manual exposure.



Center-weighted metering pattern for flash photography.



# The most consistently bright viewfinder available makes RTS II Quartz focusing fast, sure and easy.



1.4

Digital Aperture Display



Exposure Compensation Warning

## 97% Field-of-View

A major improvement in the RTS II Quartz is its expanded field-of-view to fully 97% of the actual film frame. This is a distinct advantage in providing the photographer with a view that incorporates enough of the frame to insure that composition will be precise, and that unwanted or distracting elements will not be included in the actual scene.

## LED Data Display

In addition to this expanded coverage, the RTS II Quartz viewfinder offers one of the world's most sophisticated Viewfinder Data Display systems for 35mm photography.

A quick outline of the data available to the photographer in the viewfinder includes: Shutter Speed, Aperture Setting, Exposure Compensation Indication, AE/Manual Mode

Indication, AE Lock Use, Over-Exposure Warning, TLA Flash Data and Battery Check.

## 16-Second Auto Cut-Off

The LED Data Display is activated for 16 seconds by pressing the Exposure Check Button (located on the front of the camera body). After 16 seconds, the display will automatically cut off, in order to prevent unnecessary battery power drainage. The photographer can activate the display again simply by pressing the button once more. Even with the display off, the LEDs will briefly light to provide exposure data to the photographer when the shutter is released in the AE Mode.

## Auto Brightness Control

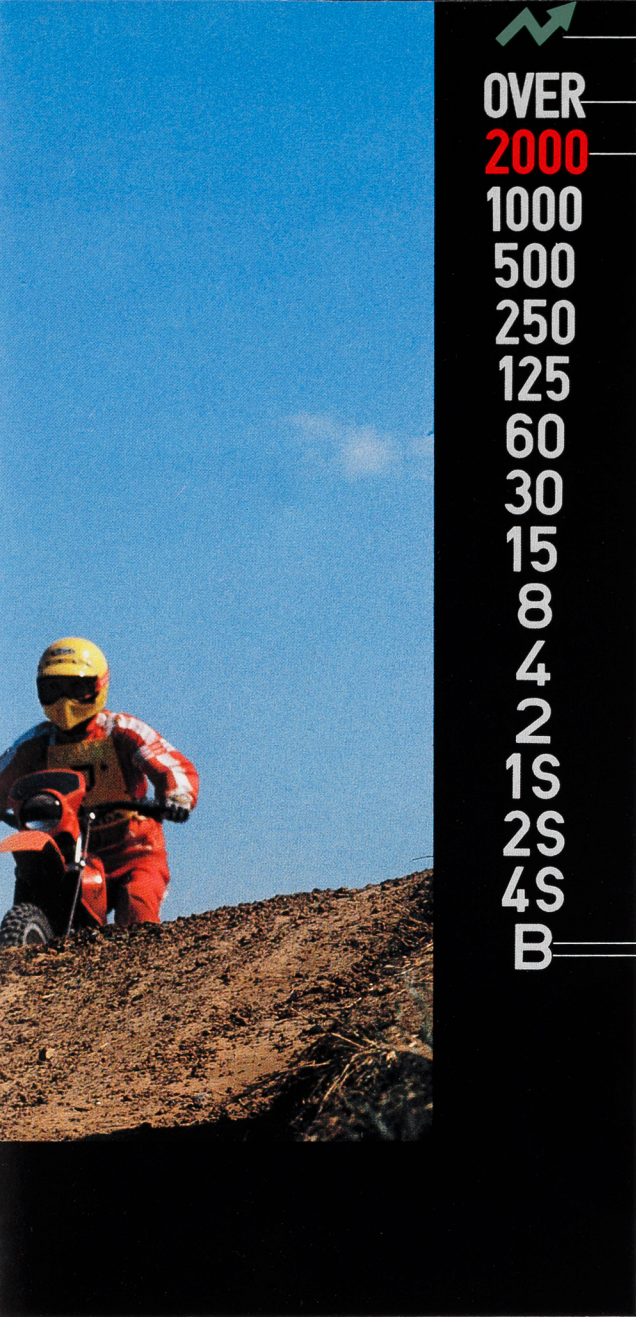
In addition, the LED Data Display has an automatic two-stage brightness control, which brightens or dims the intensity of the

LEDs depending on ambient light conditions. This makes the display particularly easy to read under extremely dim ambient lighting.

## Brightest SLR Viewfinder

The Contax RTS II Quartz features the consistently brightest viewfinder available on any 35mm SLR camera. Viewfinder brightness is an extremely difficult factor to quantify, depending greatly on what section(s) of the viewfinder are measured, and at what aperture values. However, no other 35mm SLR can match the consistent brightness, corner-to-corner and at all aperture values, of the RTS II Quartz. This means faster, easier, more accurate focusing under any conditions, with any lens or optical-path accessory.





OVER  
2000  
1000  
500  
250  
125  
60  
30  
15  
8  
4  
2  
1S  
2S  
4S  
B

TLA Flash  
Ready/After-Flash  
Signal Mark

Over-Exposure  
Warning

Shutter Speed Display

Steadily-lit  
(Correct exposure  
for long time-exposure  
up to 16 seconds)  
Flickering  
(Under-exposure  
or bulb setting)

**Battery Check:** The LED display in the viewfinder will light steadily when the battery has sufficient power. When the battery is weak, the LED display will flicker at a slow pulse rate.

**Over Exposure Warning:** Should the "OVER" LED light when the camera is in AE mode, a smaller aperture must be selected in order to properly expose the film. (This indication also operates with TLA Flash equipment.)

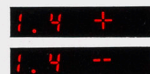
**AE Lock Use:** When the camera is in the AE mode, the indicated shutter speed LED will flash at regular intervals when the AE Lock function is activated.

**AE/Manual Mode Indication:** Indication as to whether the RTS II Quartz is operating in AE or Manual exposure mode is provided by the Shutter Speed LED Display.



#### Exposure Compensation Indication:

Use of the camera's exposure compensation function is indicated by the lighting of a (+) or (-) LED at the bottom of the frame.

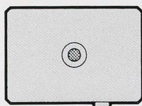


**Aperture Setting:** The aperture setting of the lens is displayed by a seven-segment digital LED at the bottom of the finder frame.

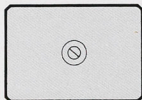
**TLA Auto Flash System:** A detailed explanation of the viewfinder display during TLA Auto Flash use is provided in the section on the TLA System. (P.24)

**Shutter Speed Setting:** Shutter speeds are displayed by digital LEDs situated to the right of the finder frame. There are 16 digital LEDs to indicate the operating speed, from 1/2,000 sec. to 4 seconds and "B". In addition, the "OVER" LED indicator and the TLA Flash "↗" indicator are located just above the shutter speeds.

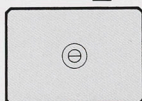
#### Focusing Screens (FS Type)



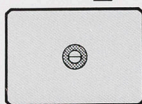
**FS-1** Microprism Screen: This is the standard screen provided with the RTS II Quartz body. When the subject is in sharp focus, the image appears crisp and sharp within the center microprism area.



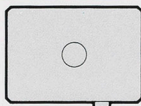
**FS-2** 45° Split-Image Screen: This is an extremely handy screen useful for most photo applications. The diagonal split-image focusing aid indicates sharp focus by the aligning of the two halves of the image.



**FS-3** Horizontal Split-Image Screen: Especially convenient for subjects having sharp vertical lines (Horizontal format) or horizontal lines (Vertical format). This screen is widely used, for example, in architectural photography.



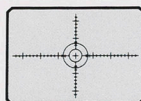
**FS-4** Split-Image/Microprism Collar Screen: Combining the advantages of both types of screens, this allows the photographer to employ the split-image focusing aid for subjects with sharp lines, or the microprism collar for general-area focusing sharpness.



**FS-5** Matte Screen: This screen has an overall, uniform matte field that allows critical focusing over wide areas. It is especially useful with certain focal-length lenses.



**FS-6** Sectioned Matte Screen: This screen too has an overall matte field, but also features cross-section horizontal and vertical lines that can be exceptionally useful in checking perspective or proportions, or insuring proper alignment of horizons.



**FS-7** Cross-Scale Screen: An overall matte field featuring vertical and horizontal cross-scale aids that allow the photographer to make size comparisons, proportional checks, etc.



**FS-41** Horizontal Split-Image/Microprism Collar w/Data Position: This is a new screen specially adapted for use with the RTS II Quartz Data Back. The horizontal split-image and microprism collar focusing aids insure sharpness, while a special section of the screen indicates where data will be imprinted in the frame.



*AE Mode exposures all the way to 16-seconds  
with the RTS II Quartz are consistently accurate.*



*Taken with Contax RTS II Quartz body and Planar T\* f/1.4 50mm using automated exposure control at shutter speed of approximately 16 sec.*



# Quartz Accuracy & Consistency In The Most Advanced Shutter Mechanism Ever Produced

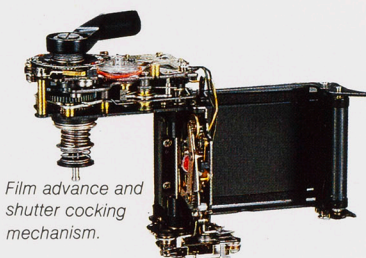
## Shutter Operation & Quartz Crystal Control

In a very real sense, "time" itself is the very essence of photography. Not only is the accuracy and consistency of shutter speeds a vital factor in the production of a photograph, but time also takes a hand in the actual operation of the camera, and in the speed with which the photographer can react to constantly changing factors and expose the film at precisely the right instant.

Thus, perhaps the single most important fact about the shutter operation of the Contax RTS II Quartz is that Quartz Crystal Control has been incorporated into the camera body. Quartz Crystal clock pulses, at the constant rate of 32,768 per second, represent the ultimate in timing accuracy and consistency. Thanks to Quartz control, the RTS II Quartz is able to offer shutter speeds that are more accurate than ever before in the history of photography, and that are absolutely consistent. This is a particularly important point, as the photographer can easily adjust to a minute error of shutter speed, provided that that error remains consistent. In fact, the margin of error of the RTS II Quartz shutter is so small that even the most sensitive films will not react at all to it. However, even so, these errors (which are in the range of hundreds of thousandths of a second) remain absolutely consistent. If your RTS II Quartz has, for example, an error margin of  $+0.013\%$  at a speed of  $1/250$  sec., that error will remain precisely  $+0.013\%$ . Mechanical shutters not only have far larger margins of error, but have inconsistent margins, so that a photographer may have to accept exposure variations as great as one-half of an aperture setting at a particular speed.

The Contax RTS II Quartz shutter actually operates in two independent modes. In the Manual mode, the shutter offers click-stop settings of B and 4 to  $1/2000$  sec.; in the AE (automatic exposure) mode, the shutter operates at continuously variable speeds between a maximum of 16 seconds (at LT indication in viewfinder display) and  $1/2000$  sec. In addition, the shutter offers two manually-operated, mechanical speeds, of  $1/50$  sec. and B, in the event of total battery failure inactivating the electronic operation.

The shutter itself is a Titanium-curtain, horizontal format focal plane design, operated by an electromagnetic release system that provides optimum accuracy. Not only the shutter speeds, but also all time-related functions of shutter operation (and camera operation in general) are controlled by the amazingly precise Quartz Crystal Element, meaning that camera operation has been made far more precise and responsive to the photographer. In combination with the electromagnetic release system, this Quartz control provides the photographer with instantaneous operation at a highly precise rate, an important factor in obtaining peak performance.



Film advance and shutter cocking mechanism.

## Electromagnetic Release Function & The Real Time Concept

Contax places a great deal of emphasis on its Electromagnetic Shutter Release... and for a very good reason. It is this release system that allows Contax to provide total integration of all equipment, both camera body and accessories, because only the electromagnetic release has the capability to operate the entire range of equipment at a single touch.

The release itself is feather-touch soft and

smooth in operation, requiring only a 0.7mm stroke to activate shutter movement. Once contact is made, the camera's operating sequence goes into effect in Real Time... the speed of light... meaning there is absolutely no time lag between the pressing of the release button and the operation of the photo-taking process. Of course, it takes a few milliseconds to move the instant-return mirror out of the light path, but all mechanical time lag in the operating sequence itself (which is where most delays occur with mechanical shutters) has been eliminated.

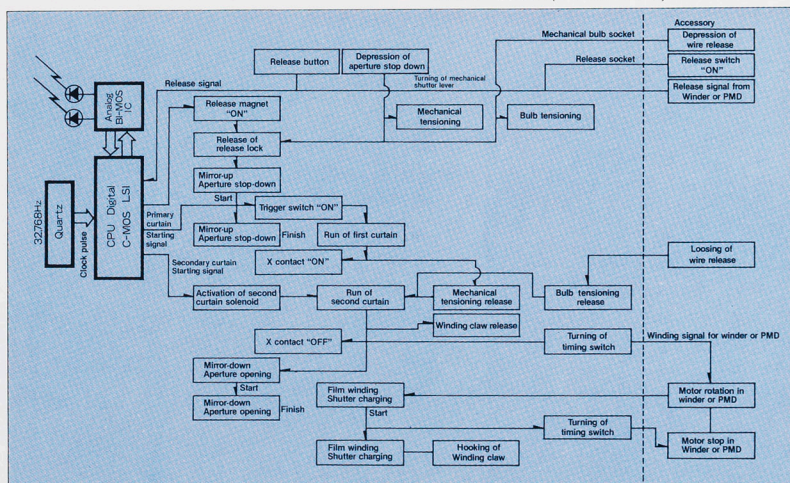
Another benefit of this instantaneous operation is to virtually eliminate camera shake, even at the lower range of hand-holdable shutter speeds. Since there are fewer mechanical elements moving, shutting and generally banging their ways around inside the camera, the entire sequence is far smoother and almost vibration-free (again, there is mirror movement, but this is damped most effectively).

Finally, the Contax Electromagnetic Release operates not merely the camera, but all accessory equipment as well. And this operation, too, is performed in Real Time, to eliminate those delays that can turn an exquisite photograph into a humdrum picture.



Electromagnetic shutter release button (0.7mm stroke).

## CONTAX RTS II QUARTZ SEQUENTIAL CHART



Manual, mechanical shutter release options are provided at  $1/50$  sec. (using depth-of-field/mechanical release) or "B" (cable release socket).



# Contax Professional Motor Drive W-6

## For The Ultimate In Photo Automation

With the exception of some improvements in its internal electronic circuitry, the new Professional Motor Drive W-6 is identical to the original Contax PMD unit. The new PMD W-6 incorporates every feature required for even the hardest-working professional photographer, with a maximum operating rate of five frames per second, intermediate settings for rates of three or two frames per second and its own built-in intervalometer. Power for the unit is supplied by the PMD Power Pack, which requires 12 1.5V AA-size batteries (fitted into two PMD Battery Cases). This Power Pack incorporates a separate release button. In addition, an AC Control Box is available, providing not only full power requirements but also multi-mode interval control up to 24 hours. A special release socket accepts all Contax Off-Camera Control accessories, and other PMD accessories include the Power Pack Jacket with PMD Control Cord (for keeping power source warm in extreme cold climates), the 250 Film Back with magazines and the Film Loader.

Contax Professional Motor Drive W-6 Specifications	
Type	Grip-type motor drive with built-in intervalometer.
Mounting	Direct to camera body via tripod socket.
Operating Speeds	Five frames/second at (Intervalometer's) "H" setting; 3f/s at "1/3", 2f/s at "1/2"; additional settings for 1, 2, 5, 10, 30 & 60 second intervals; single-frame release at "S" (60-second) setting.
Shutter Release	Sequential via built-in release buttons on PMD or Power Pack; single-frame via camera body release. All Contax remote control accessories usable.
Sequential Flash Capability	Maximum of five flashes/second when used with Real Time Flash 540 unit.
Film Capacity	36 exposures (250 exposures with special 250 Film Back accessory).
Frame Counter	36-frame subtractive-type with lock; manually reset.
Power Sources	[1] PMD Power Pack utilizing two PMD Battery Cases (each holding six AA-size cells) [2] AC Control Box (120V & 220V models available).
Remote Control Accessories	Contax Cable Switches, Contax Infrared Controller S Set, Contax Radio Controller Set, AC Control Box.
Size	149 × 98.5 × 65.5 mm. (5-7/8 × 3-7/8 × 2-9/16 in)
Weight	430 grams (15.2 oz)

Contax PMD Power Pack Specifications	
Power Source	12 AA-size batteries (18V) installed in two PMD Battery Cases.
Battery Check	Built-in meter-type battery check
Other Features	3P terminals for connecting the PMD Control Cord and tripod socket.
Size	149 × 72 × 36 mm. (5-7/8 × 2-13/16 × 1-7/16 in)
Weight	250 grams (w/o batt.) (8.8 oz)

*Specifications and design are subject to change without notice.*



This 5-frame sequence was shot over a duration of one second using the Professional Motor Drive W-6.

### Professional Motor Drive (PMD) W-6 System

- 1 AC Control Box
- 2 PMD Power Pack Set
- 3 PMD Control Cord 100, 300
- 4 PMD W-6
- 5 Film Loader
- 6 250 Film Back
- 7 PMD W-6 + PMD Power Pack
- 8 250 Film Magazine





# Contax Real Time Winder W-3

## For Versatile Sequential Photography

A brand new version of the high performance Real Time Winder, the W-3 model, has been created to match the capabilities of the new Contax RTS II Quartz. There have been several internal improvements in the electronic circuitry of the Real Time Winder W-3, however the basic unit has the same performance standards, and is virtually interchangeable with, the original RTW. It can be used with both the RTS and RTS II Quartz to provide single-frame or continuous automated operation. (Note: the original RTW can be used with the RTS II Quartz, but only in continuous mode.) The new model is a grip-type unit, with its own separate electromagnetic release button (with mode selector switch) atop the grip. And another electromagnetic release on the winder body adds extra convenience to vertical format shots. RTW W-3 connects quickly and simply to the camera, via a threaded tripod socket, and shares all the same accessories as the

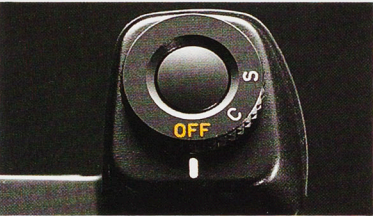
original RTW. Maximum operating rate is three frames per second, with auto shut-off at the end of a roll of film, indicated by an LED light. Battery check and operation indication is also provided. One added convenience of the RTW W-3 is a slide-out battery pack, which is easier and faster for changing battery cases or replacing batteries. The new W-3 model has the same power requirements as the original RTW, using six 1.5V AA-size batteries in the Winder Battery Case, the RTW NiCd Pack or the RTW Power Pack Set. A special release socket is provided for connection of Real Time System Off-Camera Control equipment.

### TWO SHUTTER RELEASE BUTTONS



Contax Real Time Winder W-3 Specifications	
Film Drive Modes	Single-Frame or Continuous (at three frames/second). Usable at all shutter speeds, in AE or Manual modes.
Maximum Operating Speed	Three frames/second (Continuous).
Auto Stop System	Power is automatically cut off when end of film is reached, indicated by LED.
Shutter Release	Operation by two built-in Shutter Release buttons (for vertical and horizontal formats) or by the camera body Shutter Release button.
Operation Checks	Battery/Operation check button.
Power Sources	[1] Six 1.5V AA-size batteries (Ni-Cd batteries usable), side-loading [2] External Power with RTW Power Pack utilizing either AA-size batteries or RTW Ni-Cd Pack.
Remote Control Accessories	Contax Cable Switches, Contax Infrared Controller S Set, Contax Radio Controller Set
Size	152.5 x 79 x 64 mm. (6 x 3-1/8 x 2-1/2 in)
Weight	360 grams (w/o batt.) (12.7 oz)

Specifications and design are subject to change without notice.



Integral shutter release button and control switch.



### Real Time Winder (RTW) W-3

- 1 RTW W-3
- 2 RTW Power Pack
- 3 Ni-Cd Battery Charger
- 4 RTW Charging Adapter
- 5 RTW Ni-Cd Pack
- 6 RTW Battery Case
- 7 RTW Power Cord 100, 300



# Contax TLA Auto Electronic Flash System

## For Completely Automatic, Totally Accurate Results

One of the greatest advances in photographic technology to be incorporated into the new Contax RTS II Quartz camera body is the capability to take full advantage of the unique advantages of the Contax TLA Auto Flash System. This highly advanced system offers a number of unique benefits for flash photography, including Through-The-Lens metering of flash exposures at the film plane, automated control of flash/shutter synchronization, full viewfinder information on flash system status and off-camera/remote flash use. Equipment in the TLA System includes: the Real Time Flash 540 (with TLA adapter), the TLA 30 and TLA 20 flash units and the TLA Multi-Flash/Extension System accessories.

**Through-The-Lens Metering:** All TLA flash exposures are metered directly at the film plane by a special SPD cell in the camera body. When just the proper exposure has been reached, the camera automatically cuts off output from the flash unit. This means that no compensation is required for such factors as filtering, since exposure measurement takes place at the film plane itself.

**'Fail-Safe' Flash/Shutter Synchronization**  
Dedicated electronic circuitry in the flash unit and camera body insures that the camera will always be set at a proper

X-synch shutter speed when the flash is used, and will revert to the accurate ambient light shutter speed when the flash unit is turned off, or is recycling. At the same time, the photographer is completely free to employ Manual or AE Lock modes to obtain shutter speeds slower than the maximum X-synch speed (1/60 sec. for RTS II Quartz).

**Viewfinder Flash Data Display:** Whenever a TLA Flash unit is attached to the RTS II Quartz camera, the viewfinder data display provides full information on flash system status. If the flash unit is "On" and ready to fire, a special green "M" LED lights to indicate this, while the display shows an automatic shift to the proper X-synch shutter speed. The "M" LED will not light while the flash unit is recycling, or if it is turned off, indicating that the flash will not discharge if the shutter is released. Also, whenever the flash unit is not ready to fire, the camera will automatically revert to the proper ambient light shutter speed, which will be displayed by the viewfinder LEDs. If Manual or AE Lock modes are activated to employ a shutter speed slower than the maximum (1/60) X-synch speed, these will also be indicated by the display. After each shot, the green "M" LED will flicker as a 'Confidence Light', to show that exposure was accurate. In case a smaller aperture setting is required to prevent over exposure

during flash use, the "OVER" LED will light.

**Off-Camera/Remote Flash Operation:**  
Employing accessories in the Contax TLA Multi-Flash/Extension System allows the photographer to set up a wide variety of lighting situations, using multiple TLA units — on or off the camera body — while retaining all of the fantastic automated features of the TLA System. This equipment is particularly useful in studio flash, close-up/macro and slide copying applications, along with a wide range of other creative photographic work. A good example of studio photography with this system might be a portrait. The photographer would employ the RTF540 (attached to the tripod-mounted camera) in TLA mode as the main light. Fill lighting, from left or right of the camera position, would be provided by a TLA20 unit. And a TLA30 unit, positioned above and behind the subject, would provide the highlights that mark a truly professional portrait. All equipment, of course, would be linked by Multi-Flash/Extension equipment. Using a TLA30 or TLA20 unit, off-camera, can greatly enhance close-up/macro shots by providing the improved sharpness and clarity of detail that are characteristic of electronic flash.

### TLA Flash System

- 1 RTF Battery Pack Set
- 2 RTF Power Pack Set
- 3 RTF 540 Unit
- 4 RTF 540 TLA Adapter
- 5 RTF AC Power Unit
- 6 TLA-30 Auto Flash (w/Wide Panel)
- 7 TLA-20 Auto Flash (w/Wide Panel)
- 8 RTF 540 Sensor
- 9 RTF Slave Unit
- 10 RTF Color Panels
- 11 TLA Extension Cord 100 SS
- 12 TLA Multi Connector S
- 13 TLA Attachment Adapter (for Tripod)
- 14 TLA Extension Connector S (for TLA-20)
- 15 TLA Extension Cord 100 S
- 16 TLA Extension Cord 100





## Contax Off-Camera Control Systems For Versatile Remote Photography

A number of versatile off-camera control options are open to the new Contax RTS II Quartz, ranging from short-range to genuinely remote operation.

**Contax Radio Controller Set:** This is the most sophisticated of the off-camera units for use with the RTS II Quartz, and the most advanced remote control unit for photography today available. It provides completely remote control at distances up to 300 meters, with two-channel, three-mode operation for control of one or two cameras, independently or simultaneously. Additional camera bodies can be controlled through the use of extra Receiver units or connecting cords. Outstanding for use in wildlife photography or physically dangerous locations, the Radio Controller Set consists of two components, the Receiver which attaches to the camera's accessory shoe, and the Transmitter with its built-in release button. By pre-setting, the Radio Controller can be employed for single-frame or continuous use, as it integrates fully with either the Real Time Winder or Professional Motor Drive units. For extended durations, the Receiver can be fitted with an accessory power pack.

**Contax Infrared Controller S Set:** This remote control unit is optimum for medium-distance operation, up to 20 meters. It consists of hand-held Transmitter and accessory shoe-mounted Receiver components, with the Receiver linked by cord to the auxiliary release socket of the camera body. Every time the release button on the Transmitter is pressed, a beam of infrared light signals the Receiver unit to activate the camera's electromagnetic shutter release. Naturally, the Transmitter unit must be 'aimed' at the Receiver, but operation is possible under many conditions by 'bouncing' the infrared beam off floor or ceiling, around corners, etc. The Infrared Controller S Set incorporates two-channel operation, for use with multiple camera bodies. It operates at optimum performance when the camera body is equipped with either the Real Time Winder or Professional Motor Drive for automatic film advance.

**Contax Cable Switches:** Contax Cable Switches for use with the RTS II Quartz body are a convenient way of allowing freedom of movement to the photographer while the camera remains positioned on a tripod or other support. Unlike conventional cable releases, the Contax Cable Switches integrate with the electromagnetic release system to provide Real Time operation. They come in four convenient lengths of 30, 100, 300 and 1,000cm for varied applications.



*Taken with Contax RTSII Quartz body, RTW W-3, Contax Radio Controller and Tele-Tessar T\* f/3.5 200mm*



### Remote Control System

- ① Infrared Controller S Set-Receiver
- ② Infrared Controller S Set-Transmitter
- ③ Cable Switch L
- ④ Radio Controller Set-Receiver
- ⑤ Radio Controller Set-Transmitter



# Contax Close-up/Macro Systems

## For A Whole New World Of Photo-Creativity

The Contax RTS II Quartz, as part of the overall Contax Real Time System, enjoys the major advantage of being fully integrated with the entire wide range of close-up and macro photo accessories available from Contax. This outstanding equipment provides a range of reproduction capability from the bare minimum needed to enhance detail all the way to eight times lifesize; and on to even further magnifications, of subjects invisible to the naked eye, with photomicrographic equipment such as the Microscope Adapter or Zeiss Luminar Lenses.

### Contax Auto Extension Bellows PC

The Auto Extension Bellows PC is one of the most advanced of its type available today. Besides the ability to take extreme close-ups at large magnification ratios, this unit also features slide and swing adjustments of the front standard for perspective and depth-of-field control. Essential for sharp photographs at large magnification ratios where the depth-of-field is extremely small. The front standard can also be detached from the bellows section and rotated 360° for reverse-mounting of lenses.

### Slide Copier

Mounted on the front of the Auto Extension Bellows PC, the Contax Slide Copier is used for copying both slides and roll films. Horizontal and vertical adjustment is possible for extra freedom in cropping.

### Macro Stand

The Contax Macro Stand is used in combination with the Auto Extension Bellows PC for photographing small objects such as insects, stamps, coins and many others.

### Auto Extension Tube Set

This set consists of three tubes with full linkage for full-aperture metering and automatic diaphragm action. Tube lengths are 13mm, 20mm and 27mm (Nos. 1, 2 and 3).

### Right Angle Finder

The Contax Right Angle Finder provides an erect image at a magnification ratio of 1:1 at a right angle to the axis of the camera lens. This finder rotates a full 360° for use in any possible position.

### Magnifier

This device clips onto the eyepiece of the camera viewfinder to provide a 2X view of the center picture area. Useful for critical focusing in close-up, copying and other similar fields.

### Microscope Adapter

This adapter enables any Contax camera to be mounted on any standard microscope. Can be used with or without the microscope eyepiece.

### Eyepiece Diopter Lenses

Fits on the eyepiece of the camera viewfinder to prevent the entry of extraneous light. Eight different diopter lenses are available to adjust for individual eyesight.

### S-Planar T\* 60mm f/2.8 Macro Lens

Designed especially for close-up work, the S-Planar T\* 60mm f/2.8 Macro Lens focuses down to 0.24m for a magnification ratio of 1:1.

### S-Planar T\* 100mm f/4 Bellows Lens

Used only with the Auto Extension Bellows PC, the S-Planar T\* 100mm f/4 Bellows Lens has no focusing helicoid since focusing is performed with the bellows action. Provides magnification ratios of up to 1.4:1 with the bellows. The minimum aperture is f/32 to ensure the greatest possible depth-of-focus.

### Medical 100 DX Macrophoto System

While the Medical 100 Macrophoto System was designed primarily to provide high-quality photographs in medical, dental and other scientific applications, it is also extremely useful a wide range of other close-up applications. Any magnification ratio between 1:15 and 1:1 can be selected using the markings on the lens barrel. A built-in modeling light allows the effect to be previewed. Included in the set are the Medical 100 lens with built-in ringflash, DC Power Pack, 70cm Power Cord, Sync Cord, spare modeling lamp and carrying case.

### Macro/Close-up System

- 1 Slide Copier
- 2 Right Angle Finder
- 3 Auto Extension Bellows PC Set
- 4 Focusing Rail
- 5 S-Planar T\* f/4 100mm (Bellows)
- 6 Macro Stand
- 7 Stage Glasses
- 8 Auto Extension Tube Set
- 9 S-Planar T\* f/2.8 60mm
- 10 Extension Ring 7.5mm
- 11 Luminar Adapter
- 12 Adapter Ring 67mm
- 13 Reverse Ring
- 14 Medical 100DX Macrophoto System
- 15 2X Lens for Medical 100
- 16 DC Pack for Medical 100

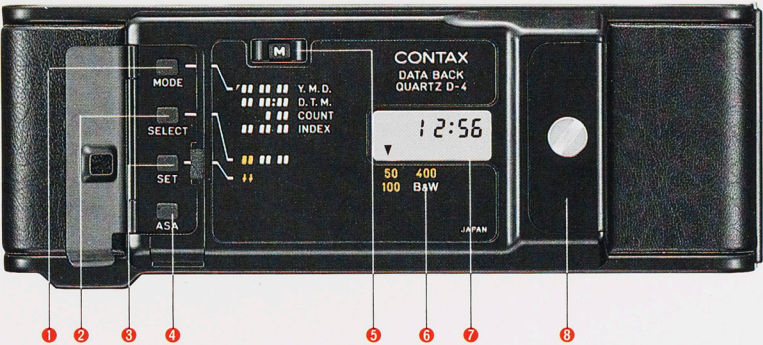




# Contax Data Back Quartz D-4

## For Improved Data Recording Directly On Film

The new Data Back Quartz D-4 is a special accessory for dedicated use with the Contax RTS II Quartz camera. It incorporates a number of improvements over previous Contax data backs, as well as offering several unique new features, the most exciting of which is its built-in Quartz Timing Device. This clock unit is accurate to within  $\pm 15''$  is maximum error margin; actual operating errors will be far smaller.) In addition to the normal Year/Month/Date capability, the Quartz Timer provides a precise Date/Hour/Minute recording mode. Other operating modes include Serial Counting (3-digit, 000-399) and Numerical Code Indication (6-digit, 00-00-00 — 99-99-99). In addition, at any time the Data Back can be set to Non-Record mode. Data is directly projected onto the film, in the lower right corner of the frame, via Liquid Crystal Diode. A second Monitor LCD provides operating/ battery check and data display for the photographer. A two-step ASA selector switch adjusts the brightness of the LCD projection. The Data Back Quartz D-4 can be used together with the Contax RTS camera body, however, in this case the Data Imprint Button must be pressed manually to record data on the film since the D-4 model operates cordlessly.



- 1 Mode Button 2 Select Button 3 Set/Time-Check Button 4 Film Speed Button
- 5 Manual Imprinting Button 6 Film Speed Indication 7 Display Window
- 8 Battery Compartment Cover

Contax Data Back Quartz D-4 Specifications	
Type	Seven-segment LCD (liquid crystal diode) projection data back with built-in Quartz timing device.
Operating Modes	Year/Month/Date; Date/Hour/Minute; Serial Counting; Six-Digit Coding. (Non-record mode also settable)
Recordable Data	Year/Month/Date; Date/Hour/Minute; Serial Counting (000-399); Six-Digit Coding (00-00-00 — 99-99-99)
Data Location	Lower right corner of frame.
Recording Method	Direct LCD projection onto film (Monitor & Photo LCDs operate in parallel). [Data Imprint Button can be used for manual operation.]
ASA Selection	Two-step adjustment.
Operating Checks	Time check and auto battery/operating check.
Power Source	Two batteries, type SR44 (3.1V) or LR44 (3V).
Size	142 × 55 × 23.5 mm. (5-9/16 × 2-3/16 × 15/16 in)
Weight	100 grams (w/o batt.) (3.6 oz)

Specifications and design are subject to change without notice.



# Contax RTS II Quartz Power Pack System

## For Battery Protection Against Extreme Cold

Batteries are very susceptible to cold weather, and can quickly lose power is subjected to extreme cold. To guard against such power loss in cold climates, the Contax RTS II Quartz Power Pack System is available to photographers. This system consists of a Power Pack accepting six 1.5V AA-size batteries, which connects to the camera's battery chamber via a special cold-proof silicon cord. With this system, the photographer can keep batteries warm in a jacket pocket to preserve their power while still shooting. The RTS II Quartz Power Pack is

fully interchangeable with the Contax RTS External Battery Holder Set; however, the new unit provides approximately five times the power capacity.

Contax External Power Pack P-3 Specifications	
Usable Camera	Contax RTS II Quartz, Contax RTS
Camera Connection	Connects to the camera body's battery chamber.
Power Source	Four 1.5V AA-size batteries. *Ni-Cd battery can not be used.
Cord	Length: 1.5m Silicon-coated, cold-proof cord.





# New "CONTAX PREVIEW" System For Professional/Studio Applications

The CONTAX PREVIEW Camera with Built-in Polaroid Back is a special "accessory camera" designed for the professional Contax user. Accepting Polaroid film packs, the CONTAX PREVIEW allows the photographer to "pre-view" the photograph by taking an identical, 35mm-size Polaroid shot. This supplementary camera is a vital convenience for pre-checking such factors as exposure compensation or lighting. The camera body is extremely simple in construction, corresponding to the Polaroid Back CB102. Attached to this back is a shutter-equipped lens mount for all Contax/Yashica bayonet mount lenses. The shutter operates at Bulb (B) and 1 to 1/1000 sec. speeds, with X-synchronization at 1/25 sec. A single-lens reflex design, the camera has a waist-level type viewfinder showing 95% coverage of the actual film area. An optional CONTAX PREVIEW right-angle finder is available for correct image eye-level use. Image size is identical to the standard 35mm frame (24 x 36mm format) on the instant-developing Polaroid film. This allows the photographer a clear, precise image which will be identical to the final shot. The finished Polaroid prints can be

used simply for checking the photo situation, or for design/layout work or as teaching aids. In determining such factors as ambient light, or electronic flash exposure, shadow effects, perspective, etc., the CONTAX PREVIEW is invaluable since all Contax/Yashica bayonet mount lenses can be attached.

Light, compact and portable, the CONTAX PREVIEW Camera is ideal for both studio and location use, and is capable of responding to virtually any shooting conditions.

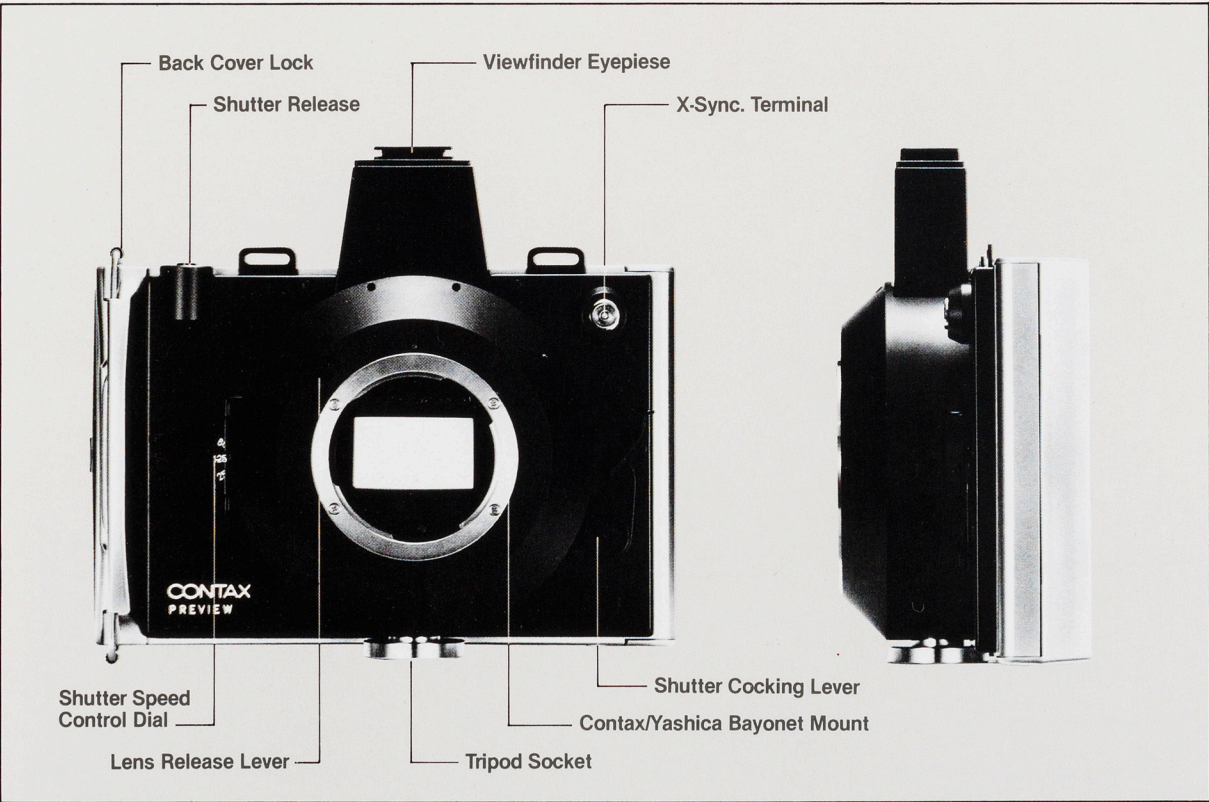


Contax Preview camera body with Planar T\* f/1.4 85mm Lens and Correct Image Eye-Level Finder

CONTAX PREVIEW Specifications	
Type	Single-lens reflex camera
Film	Polaroid (Type 107, Type 108 Polacolor 2, Type 665, Type 667, Type 668 Polacolor 2)
Image Size	24 x 36mm
Lens Mount	Contax/Yashica three-claw bayonet
Shutter	Vertical-run, metal focal plane shutter with speeds from 1 to 1/1000 sec. plus B. Mechanical operation with x-synch at 1/125 sec.
Finder	Waist-level type showing 95% of viewing area at 0.91X magnification (with 50mm lens)
Shutter Cocking	Manual, via shutter cocking lever next to lens mount
Film Back	Corresponds to Polaroid Back CB-102
Synchronization	X-synch socket for electronic flash
Optional Accessories	Right Angle Finder for CONTAX PREVIEW (correct image, eye-level)
Size	168 x 145 x 67mm (6-5/8 x 5-11/16 x 2-5/8 in.)
Weight	705 grams (24.9 oz.) (body only)

\*Specifications and design are subject to change without notice.

\*\*"Polaroid" and "Polacolor" are registered trademarks of Polaroid Corporation, Cambridge, Mass. U.S.A.





A vital part of any camera system is the linkage between camera body and lens. Sloppy, imprecise alignment of the lens almost guarantees that photographs will suffer. That is why the RTS II Quartz incorporates the same strong, durable three-claw bayonet Contax/Yashica mount that was first introduced on the original Contax RTS. With a 48mm diameter, the mount allows the use of ultra-fast lenses designed by Carl Zeiss, without being so large as to interfere with design of the overall system. Mounting the lens requires a 1/5 turn equivalent to 72°. This is not coincidental, but an optimum choice to allow wide spacing of slide resistor settings for aperture readings and quick-change capability for the active photographer, the mount itself is machined from stainless steel of exceptional tensile strength, highly resistant to wear in order to provide a lasting secure link between camera and lens. And since every optical-path accessory in the Real Time System employs this same lens mount (along with all Yashica brand accessories), the photographer has an enormous range of creative equipment and capabilities to select from in preparing for any situation.

## Carl Zeiss Quality & The Contax/Yashica Lens Mount



The lenses that connect to that mount for the Contax RTS II Quartz are, simply, the finest ever developed for 35mm photography... the Carl Zeiss T\* line. Superlatives become commonplace in discussing the Zeiss T\* lenses. They offer one of the most extensive line-ups of lenses for both ordinary and special-purpose applications, including such unusual items as the N-Mirotar for night surveillance photography, in a range from 16mm fisheye all the way to 1,000mm reflex. Color balance and rendition are superior to any other lenses in the world, thanks to the unequalled Zeiss T\* color coating process, and all lenses are perfectly matched, so as to provide precisely the same color tones. Optical resolution and contrast, even illumination of the entire field, high light transmission and complete freedom from distortion are just a few of the many other qualities that distinguish the Zeiss T\* line. The very latest in optical technology has been employed to design and build each T\* lens, and every lens undergoes a rigid quality control check before being approved for release to the market. A perfect match for the superior performance of the Contax RTS II, the Carl Zeiss T\* lens series is a continuation of the proud Zeiss tradition of quality and excellence.



# Carl Zeiss T\* Lenses Provide Superb Optical Precision For The Ultimate In Creative Capability



Interchangeable Carl Zeiss T\* (T-Star) Lenses

Lens:	Elements-Groups	Angular Field	Minimum Focus	Aperture Range	Lens Pouch	Diameter × Length	Weight
F-Distagon T* f/2.8 16 mm <Fisheye>	8 — 7	180°	0.3 m (1 ft)	f/2.8 — f/22	No.2	70.0 × 61.5 mm	460 g
Distagon T* f/3.5 15 mm	13 — 12(F)	110°	0.16 m (6")	f/3.5 — f/22	No.4	83.5 × 94.0 mm	815 g
Distagon T* f/4 18 mm	10 — 9(F)	100°	0.3 m (1 ft)	f/4 — f/22	No.2	70.0 × 51.5 mm	350 g
Distagon T* f/2.8 25 mm	8 — 7	80°	0.25 m (10")	f/2.8 — f/22	No.1	62.5 × 56.0 mm	360 g
Distagon T* f/2 28 mm	9 — 8(F)	74°	0.24 m (10")	f/2 — f/22	No.3	62.5 × 76.0 mm	530 g
Distagon T* f/2.8 28 mm	7 — 7	74°	0.25 m (10")	f/2.8 — f/22	No.1	62.5 × 50.0 mm	280 g
Distagon T* f/1.4 35 mm	9 — 8(F)(A)	62°30'	0.3 m (1 ft)	f/1.4 — f/16	No.2	70.0 × 76.0 mm	600 g
Distagon T* f/2.8 35 mm	6 — 6	62°	0.4 m (1.5 ft)	f/2.8 — f/22	No.1	62.5 × 46.0 mm	245 g
Tessar T* f/2.8 45 mm	4 — 3	50°	0.6 m (2.1 ft)	f/2.8 — f/22	No.7	60.0 × 18.0 mm	90 g
Planar T* f/1.4 50 mm	7 — 6	45°	0.45 m (1.5 ft)	f/1.4 — f/16	No.1	62.5 × 41.0 mm	275 g
Planar T* f/1.7 50 mm	7 — 6	45°	0.6 m (2 ft)	f/1.7 — f/16	No.1	61.0 × 36.5 mm	190 g
Planar T* f/1.4 85 mm	6 — 5	28°30'	1.0 m (3.5 ft)	f/1.4 — f/16	No.2	70.0 × 64.0 mm	595 g
Sonnar T* f/2.8 85 mm	5 — 4	27°30'	1.0 m (3.5 ft)	f/2.8 — f/22	No.1	61.0 × 46.5 mm	230 g
Planar T* f/2 100 mm	6 — 5	24°30'	1.0 m (3.5 ft)	f/2 — f/22	No.2	70.0 × 84.0 mm	670 g
Sonnar T* f/3.5 100 mm	5 — 4	24°	1.0 m (3.5 ft)	f/3.5 — f/22	No.1	61.0 × 61.0 mm	285 g
Planar T* f/2 135 mm	5 — 5	18°30'	1.5 m (5 ft)	f/2 — f/22	No.5	75.0 × 101 mm	830 g
Sonnar T* f/2.8 135 mm	5 — 4	18°30'	1.6 m (5.5 ft)	f/2.8 — f/22	No.3	68.5 × 93.0 mm	585 g
Sonnar T* f/2.8 180 mm	6 — 5(F)	14°	1.4 m (5 ft)	f/2.8 — f/22	No.5	78.0 × 131 mm	815 g
Tele-Tessar T* f/3.5 200 mm	6 — 5	12°40'	1.8 m (6 ft)	f/3.5 — f/22	No.5	77.5 × 121.5 mm	750 g
Tele-Tessar T* f/4 200 mm	6 — 5	12°40'	1.5 m (5ft)	f/4 — f/32	No.5	66.5 × 122 mm	550 g
Tele-Tessar T* f/4 300 mm	5 — 5	8°15'	3.5 m (11.5 ft)	f/4 — f/32	No.6	88.0 × 205 mm	1.2 kg
Vario-Sonnar T* f/3.5 40 ~ 80 mm	13 — 9	55° ~ 31°	1.2 m (4 ft)	f/3.5 — f/22	No.3	67.0 × 87.0 mm	605 g
Vario-Sonnar T* f/3.5 70 ~ 210 mm	15 — 12	33° ~ 12°	1.8 m (6 ft) Macro <0.3m/M1:2>	f/3.5 — f/22	No.6	77.0 × 186 mm	1.145 kg
S-Planar T* f/2.8 60 mm <Macro>	6 — 4	39°	M1:1 <0.24 m>	f/2.8 — f/22	No.2	75.5 × 74.0 mm	570 g
S-Planar T* f/4 100 mm <Bellows>	6 — 4	24°30'/33°	<M1.4:1>	f/4 — f/32	No.1	62.5 × 48.5 mm	285 g
PC-Distagon T* f/2.8 35 mm <Shift>	9 — 9(F)	63°/83°	0.3 m (1 ft)	f/2.8 — f/22 (M)	No.1	70.0 × 85.5 mm	725 g
Mirotar f/4.5 500 mm	5 — 5	5°	3.5 m (11.5 ft)	—	—	151 × 225 mm	4.5 kg
Mirotar f/5.6 1000 mm	5 — 5	2°30'	12.0 m (35.0 ft)	—	—	250 × 470 mm	16.5 kg

(F) With Aberration Correction at close range

(A) Aspherical Lens Element

(M) Manual aperture setting

[www.panchromatic.ch](http://www.panchromatic.ch)





[www.panchromatique.ch](http://www.panchromatique.ch)

#### ZEISS LENS — Filter Size and Lens Hood System

Lens	Filter	Metal Hood + Filter		Gelatine Filter Holder + Metal Hood		Rubber Hood
		Adapter ring	Metal hood	Adapter ring	Metal hood	
F-Distagon T* f/2.8 16 mm <Fisheye>	Built-in	—	Built-in	—	—	—
Distagon T* f/3.5 15 mm	Built-in	—	Built-in	—	—	—
Distagon T* f/4 18 mm	86 mm (with 70/86 ring)	—	—	—	—	—
Distagon T* f/2.8 25 mm	55 mm	—	—	55 mm	No.1	55 mm G-12*
Distagon T* f/2 28 mm	55 mm	55/86	No.1	55 mm	No.1	55 mm G-12
Distagon T* f/2.8 28 mm	55 mm	55/86	No.1	55 mm	No.1	55 mm G-12
Distagon T* f/1.4 35 mm	67 mm	67/86	No.2	●	No.2	67 mm G-14
Distagon T* f/2.8 35 mm	55 mm	55/86	No.3	55 mm	No.3	55 mm G-11
Tessar T* f/2.8 45 mm	49 mm, 55 mm (with 49/55 ring)	—	—	—	—	▲*
Planar T* f/1.4 50 mm	55 mm	55/86	No.4	55 mm	No.4	55 mm G-11
Planar T* f/1.7 50 mm	55 mm	55/86	No.4	55 mm	No.4	55 mm G-11
Planar T* f/1.4 85 mm	67 mm	67/86	No.4	●	No.4	67 mm G-13
Sonnar T* f/2.8 85 mm	55 mm	55/86	No.5	55 mm	No.5	55 mm G-11
Planar T* f/2 100 mm	67 mm	67/86	No.4	●	No.4	67 mm G-13
Sonnar T* f/3.5 100 mm	55 mm	55/86	No. 5	55 mm	No. 5	55 mm G-11
Planar T* f/2 135 mm	72 mm	72/86	No.4	—	—	—
Sonnar T* f/2.8 135 mm	55 mm	—	Built-in	55 mm	No.5	—
Sonnar T* f/2.8 180 mm	72 mm	—	Built-in	—	—	—
Tele-Tessar T* f/3.5 200 mm	67 mm	—	Built-in	●	No.5	—
Tele-Tessar T* f/4 200 mm	55 mm	—	Built-in	—	—	—
Tele-Tessar T* f/4 300 mm	82 mm	—	Built-in	—	—	—
Vario-Sonnar T* f/3.5 40 ~ 80 mm	55 mm	55/86	No.2	55 mm	No.2	55 mm G-11
Vario-Sonnar T* f/3.5 70 ~ 210 mm	67 mm	67/86	No.3	●	No.3	—
S-Planar T* f/2.8 60 mm <Macro>	67 mm	67/86	No.3	●	No.3	67 mm G-13
S-Planar T* f/4 100 mm <Bellows>	55 mm	55/86	No.5	55 mm	No.5	55 mm G-11
PC-Distagon T* f/2.8 35 mm <Shift>	86 mm (with 70/86 ring)	—	—	—	—	—
Mirotar f/4.5 500 mm	Slide-in type	—	—	—	—	—
Mirotar f/5.6 1000 mm	Slide-in type	—	—	—	—	—

● Denotes adapter ring is not needed for linkage with lens.

\*Rubber Hood should be used without filter. ▲55 mm G-11 (with 49/55 ring)

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



## CONTAX RTS II QUARTZ Specifications

<b>Type:</b>	35 mm single-lens reflex featuring Auto/Manual exposure modes and Quartz-timed operation.
<b>Image Size:</b>	24 × 36 mm
<b>Lens Mount:</b>	Contax/Yashica 3-claw bayonet mount.
<b>Standard Lens:</b>	Carl Zeiss Planar T* f/1.4 50mm (f/1.7 50 mm)
<b>Shutter:</b>	Quartz-timed, electronically operated horizontal travel Titanium focal plane shutter.
<b>Shutter Speeds:</b>	1/2000 sec. to 16 sec. in AE mode; 1/2000 sec. to 4 sec. in Manual mode, plus "B" and "X" (1/60 sec.). [Note: Mechanical shutter operation possible at 1/50sec. and "B" without battery power.]
<b>Flash Synchronization:</b>	X-synch at 1/60sec. (or slower) via direct hot-shoe or X-synch terminal.
<b>Self-Timer:</b>	Quartz-timed electronic self-timer with 10-sec. delay, cancellable or resettable during operation. LED flashes during operation, accelerating 2sec. before shutter release.
<b>Shutter Release:</b>	Real Time Electromagnetic Release System (with off-camera control options via Release Socket).
<b>Exposure Control:</b>	Through-the-lens (TTL) center-weighted metering at full aperture via Silicon Photo Diode (SPD) cell. Aperture-priority AE mode in EV range -1 (f/1.4 at 4 sec.) to 19 (f/16 at 1/2000 sec.) at ASA 100, f/1.4 lens. Manual override and control.
<b>ASA Range:</b>	12-3200
<b>TLA Auto Flash Control:</b>	With Contax TLA system, separate SPD cell reads flash exposure directly at film plane; 'Fail-Safe' control of flash/shutter synchronization. X-synch terminal for all non-TLA electronic flash units.
<b>Exposure Compensation:</b>	+2EV—2EV with click-stops every. 0.5EV.
<b>AE Lock:</b>	Activated by lever, locks in EV setting.
<b>Viewfinder:</b>	Eye-level, pentaprism type showing 97 % of picture area at 0.87X magnification. Eyepiece shutter to block out extraneous light during remote control.
<b>Focusing Screens:</b>	Microprism standard, seven optional screens available.
<b>Viewfinder Display:</b>	Numerical LED array indicating shutter speed, aperture, exposure compensation use (+, -), over/under warning, TLA flash status. 16 sec. Auto cut-off conserves battery power.
<b>Film Advance:</b>	Single 120° stroke (20° stand-off) or several short ratchet actions.
<b>Film Rewind:</b>	By clutch-action rewind crank after rewind film release button is pressed.
<b>Exposure Counter:</b>	Auto resetting type, accumulative. [Camera will automatically set 1/60 sec. shutter speed until counter advances to '1' except at manual "B" shutter speed.]
<b>Multiple Exposures:</b>	Possible by depressing film rewind button.
<b>Accessory Shoe:</b>	Direct X-synch hot-shoe with Contax TLA capability.
<b>Camera Back:</b>	Interchangeable type, film memo holder.
<b>Depth-of-Field Preview:</b>	Button operated (button doubles as mechanical 1/50 sec. shutter release).
<b>Mirror Lock:</b>	Lever operated.
<b>Main Switch:</b>	Two-position (On/Off) switch controlling all electronic circuitry including shutter release and LED data display.
<b>Power Source:</b>	6.2 V silver-oxide battery (4SR44) (Eveready 544, Ucar 544, Mallory PX28 or equivalent) or 6 V alkaline-manganese battery (4LR44).
<b>Battery Check:</b>	Low power level indicated by slow flickering of viewfinder LED data display.
<b>Other Features:</b>	Provided with couplings for motor drive and winder, and with LED for Data Back application.
<b>Size:</b>	142 × 89.5 × 50 mm (5-9/16 × 3-1/2 × 2 in)
<b>Weight:</b>	735 grams (w/o battery) (25.93 oz)

\*All specifications and designs are subject to change without notice.



Reproduction by  
www.panchromatique.ch  
For private use only

### KYOCERA CORPORATION

**YASHICA DIVISION, TOKYO OFFICE**  
27-8, 6-chome, Jingumae, Shibuya-ku, Tokyo 150, Japan  
Tel: (03) 400-1430  
**YASHICA INC., USA Main Office**  
411 Sette Drive, Paramus, New Jersey 07652, U.S.A.  
Tel: (201) 262-7300  
**YASHICA INC., Midwestern Regional Office**  
945B North Edgewood Ave., Wood Dale, Illinois 60191, U.S.A.  
Tel: (312) 250-0591  
**YASHICA INC., Western Regional Office**  
344 Mira Loma Avenue, Glendale, California 91204, U.S.A.  
Tel: (213) 247-2140  
**YASHICA CANADA INC.**  
7470 Bath Road, Mississauga, Ontario, L4T 1L2, Canada  
Tel: (416) 671-4300  
**YASHICA Kyocera GmbH**  
Eiffelstraße 76, D-2000 Hamburg 26, West Germany  
Tel: (040) 251507-0

**YASHICA Handelsges. mbH**  
Rustenschacherallee 38, A-1020 Wien, Austria  
Tel: (0222) 72-34-72, 73-81-27  
**YASHICA AG.**  
Zürcherstrasse 73, CH-8800 Thalwil, Switzerland  
Tel: (011) 720 34 34  
**YASHICA A/S**  
Industrivej 2, DK-2600, Glostrup, Denmark  
Tel: 2-630806  
**YASHICA SVENSKA AB.**  
Box 715, Kostervägen 3, S-181 07, Lidingö, Sweden  
Tel: 08-767-9045  
**YASHICA DO BRASIL LTDA.**  
Rua Cruz e Souza 59, Aclimacao, São Paulo, Brasil  
Tel: 283-4244  
**UNIVERSAL OPTICAL INDUSTRIES LTD.**  
Piazza Industrial Building, 133 Hoi Bun Road,  
Kwun Tong, Kowloon, Hong Kong  
Tel: 3-435151



[www.panchromatique.ch](http://www.panchromatique.ch)

LAB 10

LAB 25

LAB 50

LAB 75

LAB 90