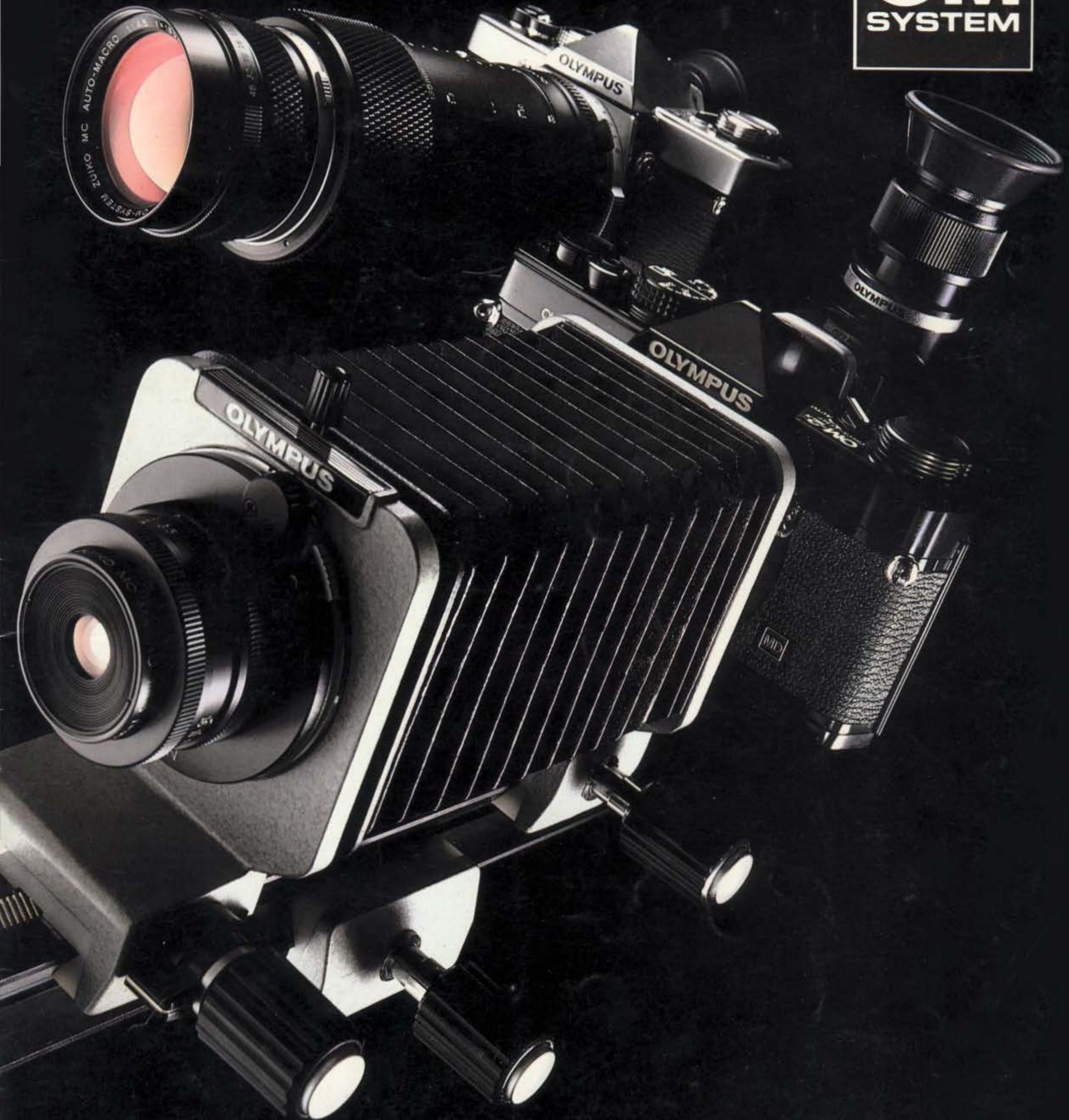
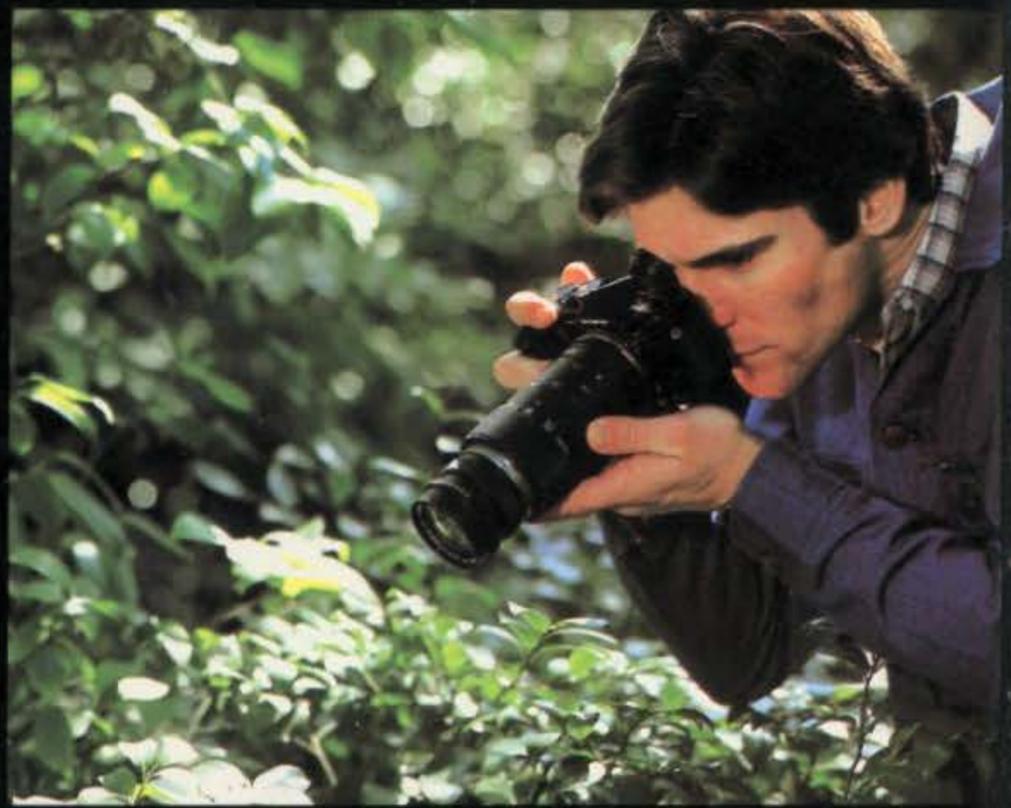


# OLYMPUS<sup>®</sup>

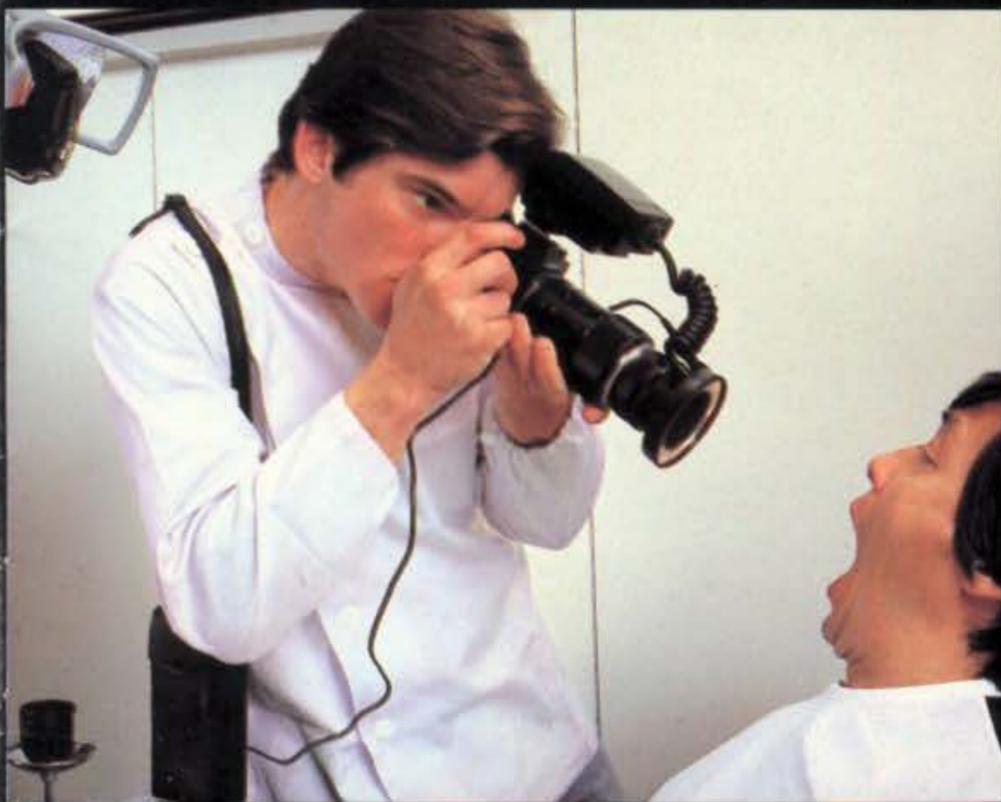
Macrophoto Group

**OM**  
SYSTEM





**Sensationally  
superior in  
performance,  
range and  
responsiveness.**



Macro photography with the OM System is truly unique — in the limitless variety of subjects you can tackle, the unerring precision and range of equipment at your command, and the astonishing mastery you get over even the most difficult situations.

For a start, the Macrophoto Group is without rival in comprehensiveness. It provides no less than five special lenses — three of them fully automatic — to assure superb optical rendition throughout a magnification range from infinity to over twelve times life size. It also includes a magnificent selection of units from auto bellows, to trans- and epi-illuminators, Lieberkühn reflectors, macrophoto and copy stands, filters, adapters, mechanical stage and stage plates, slide copier, auto extension tubes and much more.

Also specially conceived for macro work are the extremely convenient ring flash and related units of the Flashphoto Group. One reason for the fabulous performance of the Macrophoto Group is the way the whole OM System, with its motor drive, flash, finder, data recording and other units, can be smoothly and effortlessly coordinated to respond to any photographic need.

Technical performance is essential for fine photos, but functionality in handling and use is hardly less important. The OM-1 and OM-2 proved the point beyond question. Their breakthrough in compactness and ease of handling changed the course of the whole SLR industry. The OM System breakthrough in macro photography is just as sensational.

## Action Macro Becomes Superbly Simple.

Macro equipment is traditionally ungainly. It is designed basically for use in studio conditions, where portability and speed of handling are secondary considerations. The bellows — the heart of any macro system — is usually large, heavy, awkward and time-consuming to adjust and focus\*. Yet many of the most fascinating macro subjects, like insects, are found out of doors, and show no inclination to wait patiently while the photographer prepares his shot. The OM solution? A unique, extremely light and compact Telescopic Auto Tube, featuring instant and precise adjustment of magnification and focus without disturbing the subject.

Fast, light, compact — the OM System pioneers a whole new concept of action macro photography. And it backs it all up with the world-acclaimed Multi Automation of the OM-2. The exposure system of the camera controls all functions directly at the film plane, so the traditional macro problems of magnification factors are completely eliminated. The OM Macrophoto Group. Add it all together and you get immeasurable superiority on every count.

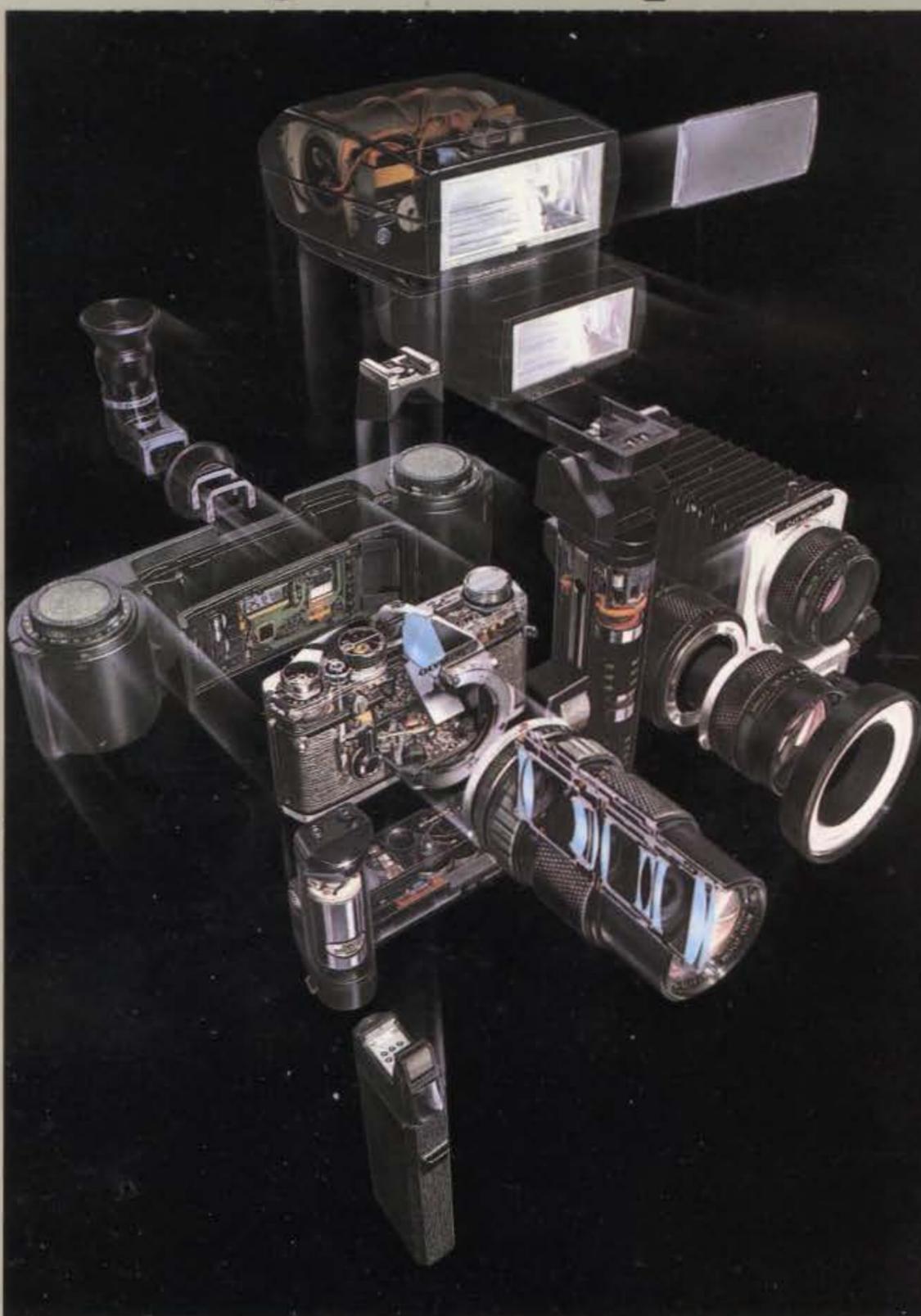
\*The OLYMPUS Auto Bellows is rigid yet smaller and easier to use than most other bellows.

# How multi automation makes impossible subjects easy.

Nothing in all photography can be so demanding as carefully calculating magnifications, exposure factors, auxiliary lighting and depth of field, then approaching your subject to make last minute adjustments. Nothing is so frustrating as finding the subject has flown away at the last second. And, conversely, nothing could make the dedicated action macro-photographer so happy as knowing everything is taken care of.

That's how it is with Multi Automation and OM System macro. You know the exposure will be perfect, so all you need do is compose, fine-focus and shoot.

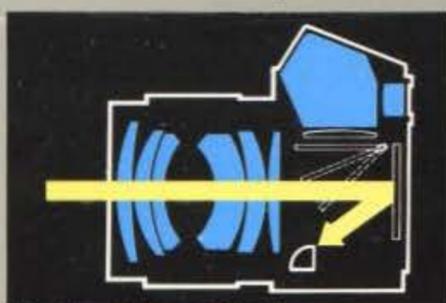
What's the secret? The OM-2 doesn't measure light like a conventional automatic SLR. Instead of memorizing the light that passes through the lens before the exposure, it exposes the picture for the light that passes through the lens and directly hits the film plane, **AFTER YOU PRESS THE SHUTTER AND DURING THE EXPOSURE.** Two special SBC sensors located in the front of the camera are aimed at the film. They go into action the instant the mirror is raised and light starts reaching the film. As soon as the proper exposure is made, never before or after, the shutter closes and the shot is completed. With flash, it works precisely the same way. Whether you use a camera mounted flash, ring flash or various off-camera techniques including bounce or



lag, you can shoot five-frame-per-second motor drive sequences and get every shot individually perfect. Because flash is completely controlled by the camera you can use any lens aperture, stopping down to F32 or F45 for maximum depth of field and minimum flash-subject distance. You can use filters on the lens or the flash unit and the camera will compensate automatically, just as it does for magnification factors with the bellows, telescopic or fixed extension tubes. Interchangeable focusing screens have no effect on the results, so you can change them freely. For available light shots of up to 120 seconds sensitivity is much greater. And there's no fear of stray light from the eyepiece distorting the reading in remote

control photography, because the eyepiece is closed off automatically by the upraised mirror. However you take your picture, TTL Direct "OTF" Light Measuring is impossible to fool — so you never need give a thought to the exposure. It saves an enormous amount of trouble. But, more important still, it saves time — and time is the one thing you can't control, especially with macrophotography of live subjects. The result is that the OM-2's Multi Automation makes it easy to take macro pictures you could never take any other way.

It's called TTL Direct "Off-the-Film" Light Measuring, and it has many other advantages too. For example, because there's no time



TTL Direct "OTF" Light Path



The OM-2's unique twin light sensors

# A superb selection of equipment.



Many 35mm SLR systems seem to consider macro as just another sales point. So they provide a bellows, a macro lens or two, and not much more. It looks good in the catalog, but it permits only a very limited grasp over the field of macrophotography. In fact, although the single lens reflex type camera is intrinsically ideal for macro work, this field also requires a large selection of top quality equipment to fully utilize camera performance.

For a start, a single macro lens is totally incapable of providing uniformly fine results through a magnification range from infinity to over 10x life size. Every lens has an optimum focusing distance, and performance begins to fall off sharply outside a limited focusing range. That is why the OM System offers a choice of no less than five special macro lenses, the only photo system approaching this degree of comprehensiveness. All of these lenses can be used with either the Auto Bellows or the Telescopic Auto Tube, and the 50mm F3.5 can also be attached directly to the camera as a standard lens. In this case its

unique close focus correction system (floating elements) assures outstanding image quality from infinity all the way to 0.5x life-size magnifications.

The new Auto Macro 135mm F4.5 more or less duplicates the magnification range of the 50mm F3.5 when used with the bellows or telescopic auto tube. It permits extra long working distances that are ideal for outdoor action macrophotography or medical photography, especially in conjunction with the ring flash.

In contrast, the Auto-1:1 Macro 80mm F4 is intended mainly for copy work, and is designed to function specifically within a 0.5x to 2x magnification range. For still higher magnifications, the 38mm F3.5 gives superb resolution at subject magnifications between 2x and 6x, and the 20mm F3.5, between 4.3x and 12x. The Macrophoto Group actually provides for magnifications up to more than 16x, but this is close to the effective limit of the macro mode. Use of the OM System Photomicro Group is recommended if you need still higher magnifications.

OLYMPUS has a long and rich experience as one of the world's leading microscope manufacturers. That goes a long way to explain why a vast choice of precision macro units figures so large in the integral OM System approach. More than most camera makers, OLYMPUS appreciates the extremely fine tolerances involved in macro work — with regard to lighting, depth of field, the image damaging effects of vibration or other factors. For this reason, the Macrophoto Group also supplies an astonishing quantity of special lighting units, mirrors and filters, as well as an equally comprehensive variety of stands. And for the professional, there is the remarkable Macrophotographic Equipment PMT-35 — a set of 46 units that guarantees total mastery of studio subjects at any magnification from 0.45x to 16.5x.

Because every unit of the group was designed to be compatible with the whole OM System, 100 percent functionality is assured whatever the situation or the combination of units used.



## The action macro breakthrough-

At long last, macrophotography has moved out of the studio and into the field. In a development that calls to mind the way the first 35mm type cameras brought photography itself into the open with fully portable performance, OLYMPUS has pioneered a fantastically compact, incredibly fast and easy-to-use answer to the bellows.

Designed for fully automatic lens operation, the Telescopic Auto Tube 65-116 weighs no more than a medium sized lens, offers quick bayonet attachment to lens and camera mount, and telescopes straight out for any extension from 65 to 116mm. In addition to speed,

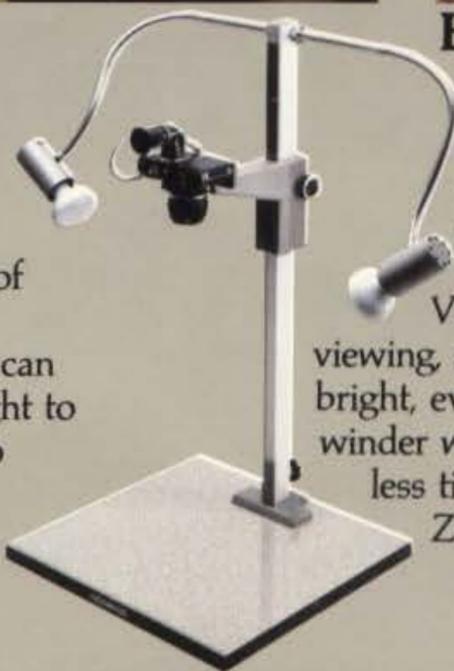
this sliding type adjustment has the further advantage of minimizing distraction to the subject. Any magnification, marked clearly on the barrel, can be locked instantly by a slight twist.

Together with any of the compact, lightweight OM System macro lenses (or a number of others too) the Telescopic Auto Tube makes macro as accessible as general purpose photography. But with some subjects, there is still the problem of lighting to freeze movement and allow suitable depth of field. This is solved by the T10 Ring Flash 1 plus T Power Control 1, a combination that is also unprecedentedly portable.



## Extra Positive Focusing with the Varimagni FINDER

Freely rotated through 360° for viewing from any angle, the Varimagni FINDER offers a choice of 1.2x magnifications of the whole viewfield, or a 2.5x image of the central portion. It can be adjusted for individual eyesight to ensure pinpoint focusing of macro subjects. A complete range of quickly interchangeable focusing screens\* helps make the image even clearer. \*Not available with the OM-10.



## Effortless Copying Work

The best way to copy large numbers of documents is to secure the camera to the Handy Copy Stand, Copy Stand or a tripod. Then attach the Varimagni FINDER for accurate but relaxed viewing, and use the gooseneck Lighting Set for bright, even illumination. A motor drive or winder will make the work quicker and much less tiring. In most cases the ideal lens is the Zuiko MC Macro 50mm F3.5.



## Slide Copying

Slide copying is extremely easy with the Auto Bellows, Slide Copier and the Zuiko MC Auto-1:1 Macro 80mm F4, specially designed for life-size magnifications. You can trim the slides any way you like by adjusting the bellows extension and slide holder position. Use a Roll Film Stage to hold roll films. Flash is an excellent way to make sure the color temperature is accurate.

The 50mm F3.5 macro or standard lenses can also be used.



# ...es unlimited. The OM System puts every



## Off-Camera Flash

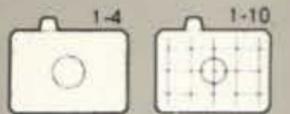
At close working distances with either the Auto Bellows or the Telescopic Auto Tube, off-camera use of a T32 or T20 flash unit in TTL "OTF" Auto mode (with the OM-2) allows you to illuminate the subject from any angle, even from behind, and select the most suitable flash-to-subject distance for the lens aperture and desired flash exposure duration. You can also aim for special effect with a diffusing screen or filters in front of the flash. Of course, the correct exposure is fully automatic.



## Pinpoint Focusing Made Easy

Nowhere is accurate focusing more essential than in macrophotography, with its extremely small depths of field. Normal focusing screens are not satisfactory for this specialized area, so the OM System provides four different interchangeable screens that give ideal results with macro subjects.

The 1-4 has an all-matte surface ground coarse for easy focusing. The 1-10 features a checker pattern on an all-matte ground for accurate alignment and composition. The 1-11 provides a cross-hairs spot on a matte ground for critical focusing. The 1-12 also has a cross-hairs center spot, but on a clear-field ground for maximum image brightness.



## The Ring Flash for More Even Illumination

Especially in scientific and recording work, the combination of T10 Ring Flash 1 and Auto Bellows gives outstanding versatility and convenience. Details are portrayed clearly and accurately by even, shadowless illumination. And at the same time, everything is self-contained in a single assembly for remarkably easy operation. The flash is effective for distances up to about a meter (3.3 ft.), and can be screwed into the front of any lens with a 49mm or 55mm filter size (of course, for ideal results one of the three macro lenses: 135mm F4.5, 80mm F4 or 50mm F3.5 is recommended). It functions in either TTL "OTF" Auto or Manual modes with the OM-2, and in Manual with other cameras. To sharply reduce direct reflections from the subject, the unique Ring Cross Filter POL is available.

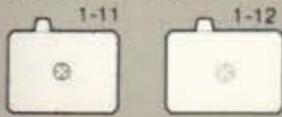


# kind of macrophotography at your finger

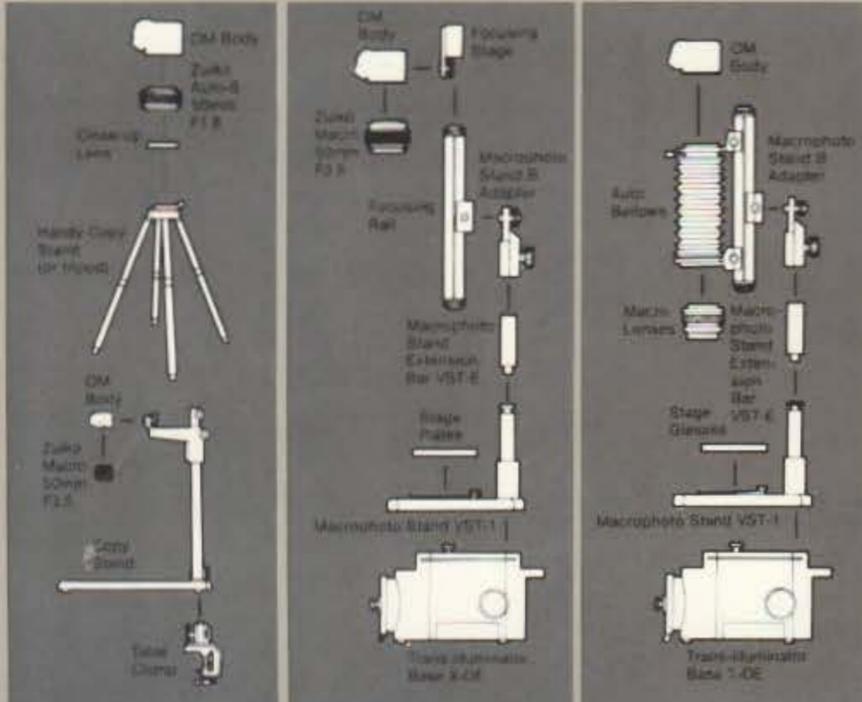


## Medical and Outdoor Work

This is the realm of action macro par excellence. Incomparable speed and ease of handling are combined with impeccable performance when the ring flash and power control unit are put together with the Telescopic Auto Tube and a macro or standard lens. It makes a single, highly compact, functional and responsive assembly. The range of magnifications is continuous within the limits of the taking lens. And if you use an OM-2, perfect exposures are obtained automatically at any lens aperture.



### Selection of Stands



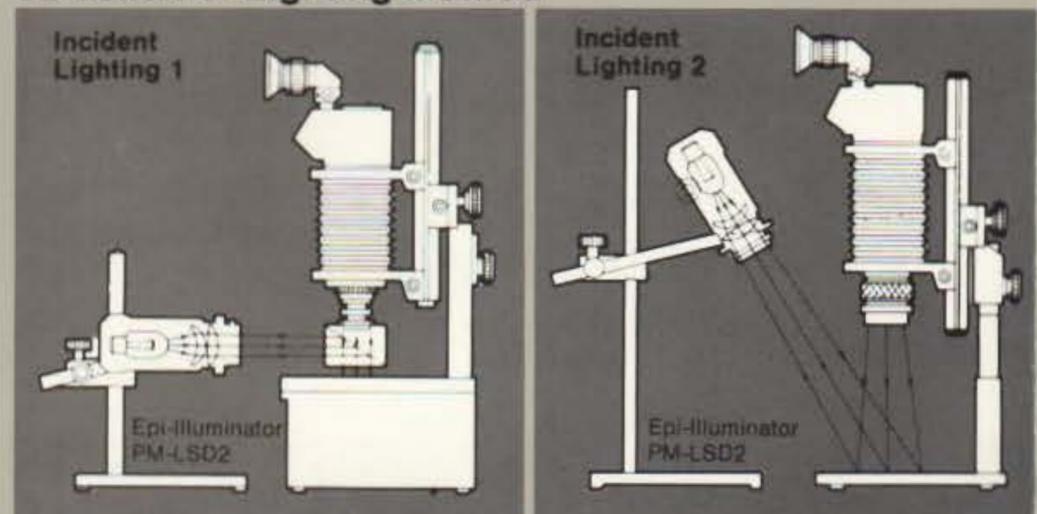
## Life-Size Slides that Are Larger than Life

Normally with life-size reproductions, lens performance, lighting and vibration all become critical problems. These are all eliminated by the OM System.

The special Zuiko MC Auto 1:1 Macro 80mm F4 lens delivers optimum resolution at precisely this point. And the Macrophoto Stand VST-1 virtually does away with vibration completely. The quality of incident lighting can be regulated precisely by the \*Epi-Illuminator PM-LSD2.

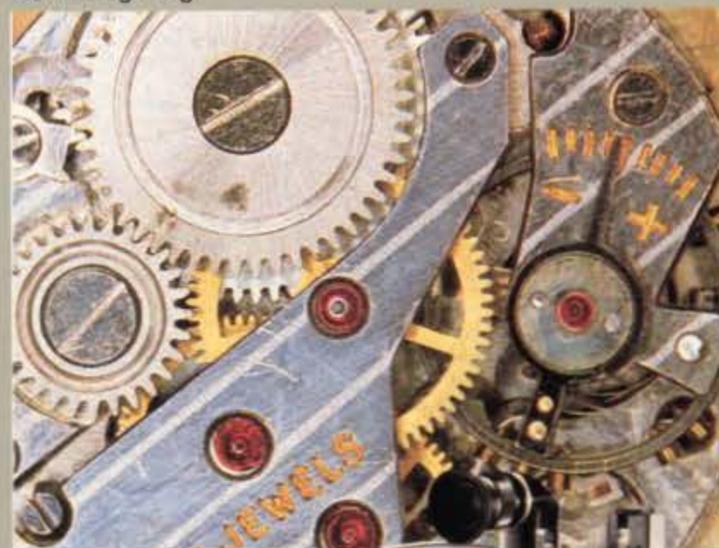


### Selection of Lighting Method





Normal lighting



Shadowless



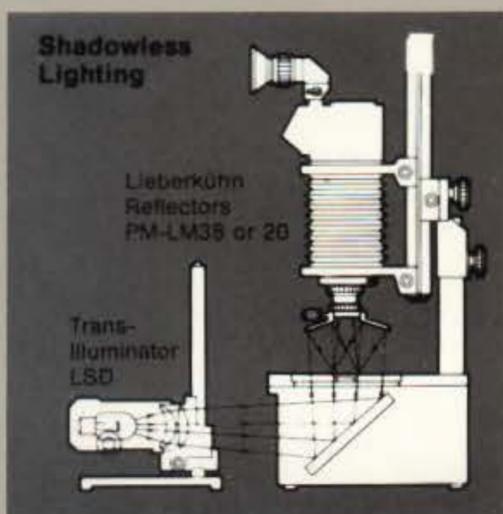
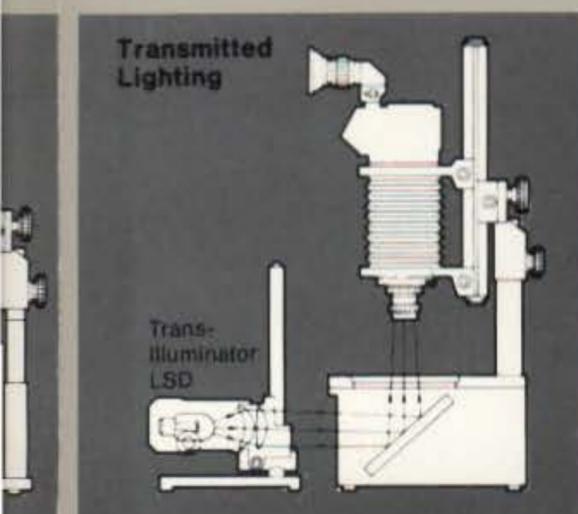
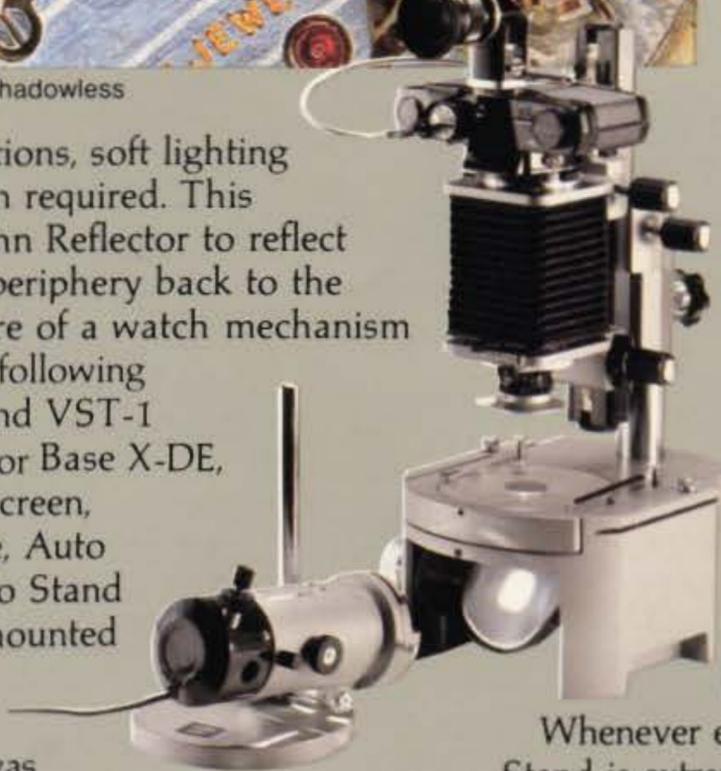
## Shadowless Lighting

Especially in scientific applications, soft lighting with a minimum of glare is often required. This is achieved by using a Lieberkühn Reflector to reflect transmitted light from the lens periphery back to the subject. The 4x actual size picture of a watch mechanism shown above was taken with the following equipment: the Macrophoto Stand VST-1 mounted on the \*Trans-Illuminator Base X-DE, the OM-2 with 1-11 Focusing Screen, Varimagni Finder, Cable Release, Auto Bellows fitted to the Macrophoto Stand B Adapter, 38mm Macro F3.5 mounted on the Objective Lens Mount PM-MTob and Lieberkühn Reflector PM-LM38. The watch was placed on a Stage Insert Plate, which fits into the center hole of the Shade Stage Plate.

## An Unrestricted Choice of Lighting Methods

In addition to flash, the Group provides for every conceivable kind of macrophotographic lighting. From the simple but effective gooseneck lighting set, to special lighting and control units that conform to strict scientific standards. For normal subjects, incident lighting is the easiest and generally most effective. But in the case of transparent or translucent subjects, transmitted lighting is often desirable. At times a combination of both methods, or shadowless lighting gets the best results.

Whenever exact control is required, the Macrophoto Stand is extremely useful — either set directly on the working surface for simple incident lighting, or mounted on the \*Trans-Illuminator Base X-DE for transmitted lighting or a combination of both types. Stage plates, stage glasses and various filters are available. Lieberkühn reflectors can be attached to the taking lens when shadowless lighting effects are desirable. Total accuracy is made possible by the Photomicrographic \*Exposure Meter EMM-7, which contains exposure and color temperature probes and color-compensating filters. It takes the \*Adapter PM-EA for use with the Auto Bellows.



\* These units can be ordered from distributors of Olympus Microscopes



## another brilliant advance by OLYMPUS.

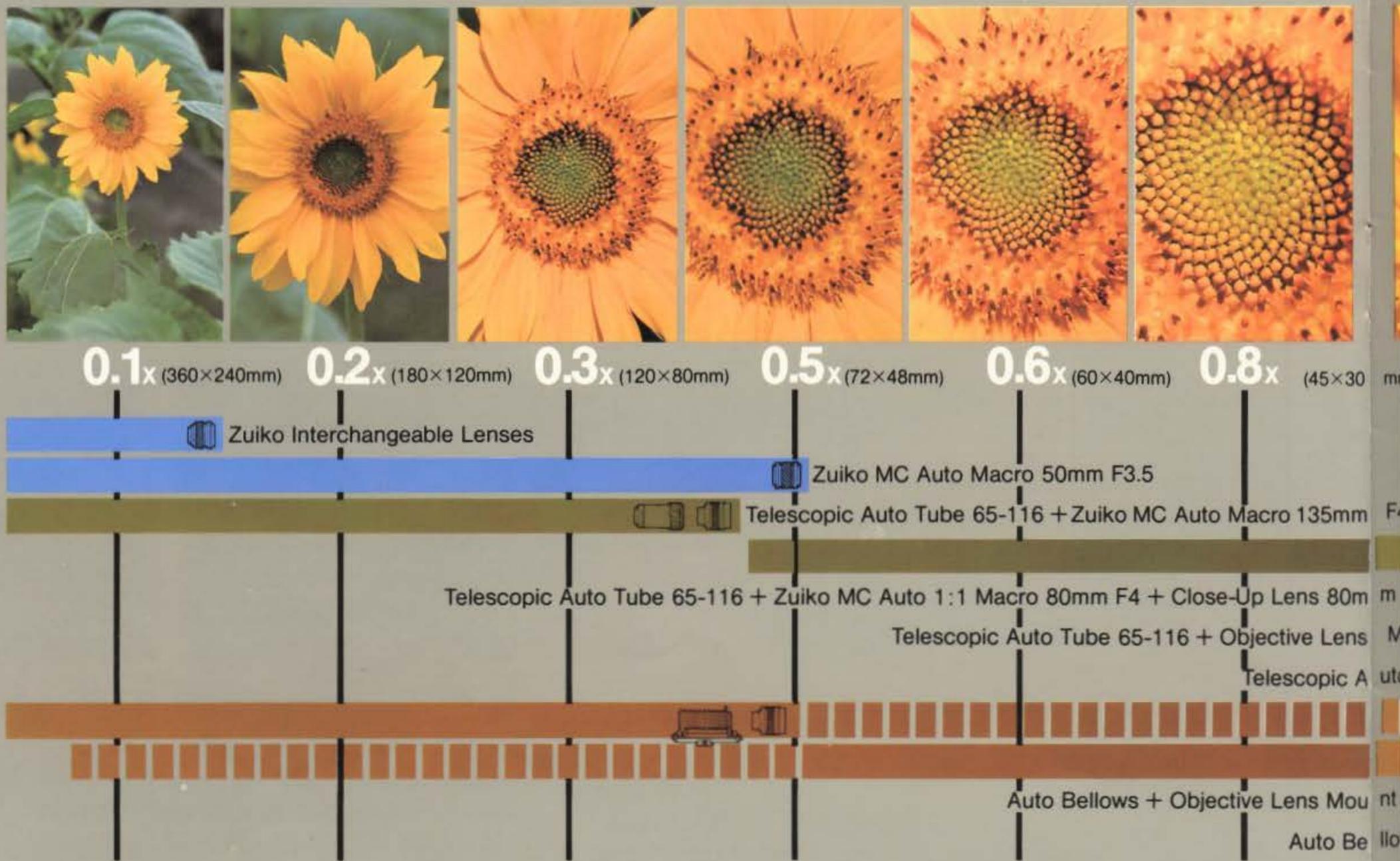
Fitted to the front of the taking lens, the ring flash is powered by the power control unit which attaches to the camera hot shoe. With the OM-2, absolutely no flash setting is required, and flash mode is switched automatically by the camera selector lever between TTL "OTF" Auto and Manual. In TTL "OTF" Auto, perfect exposures are guaranteed, and any desired lens aperture can be selected with complete freedom. The ring flash also provides eight built-in illuminator lamps for composition and focusing.

In a great many action macro and medical applications, the ideal lens to use with these units is the

Zuiko MC Auto Macro 135mm F4.5, which will focus on any subject from infinity to 0.43x life size. The relatively long focal length assures adequate working distances. The completely unrestricted choice of magnifications and lens apertures makes the assembly infinitely more versatile than conventional systems for medical photography.

The compact, well-balanced design makes this sophisticated assembly highly suitable for hand-held operation. Alternatively, the detachable ring of the Telescopic Auto Tube can be used for tripod mounting.

# Impeccable image quality at all



In line with its goal of assured mastery over the whole photographic spectrum, the OM System puts stress on unimpaired optical performance at every subject magnification — from normal subjects all the way to photomicrographic pictures hundreds of times larger than life. The wide selection of special macrophoto lenses guarantees a smooth progression from general purpose photographic use of the 50mm F3.5 macro, right up to the borderlines of photomicrography with the 20mm F3.5 macro. And the comprehensive range of photomicro units, linking the OM System directly with a huge diversity of OLYMPUS microscopes, extends this performance without a break to such exciting spheres as crystallography, biological and medical micrography. For all these applications, the lens units are fully complemented by supporting units for lighting, exposure determination and control, and other requirements.

## Zuiko MC Auto-Macro 50mm F3.5

This lens features the world's first automatic correction lens system to maintain superb resolution all the way from infinity to 0.5x life-size images. Normally attached directly to the camera, the 50mm F3.5 can also be used with the 25mm Auto Extension Tube for life-size images, or at still higher magnifications with the Telescopic Auto Tube or Auto Bellows. In the higher magnification ranges, however, other OM System macro lenses give even better results.



## Zuiko MC Auto-Macro 135mm F4.5

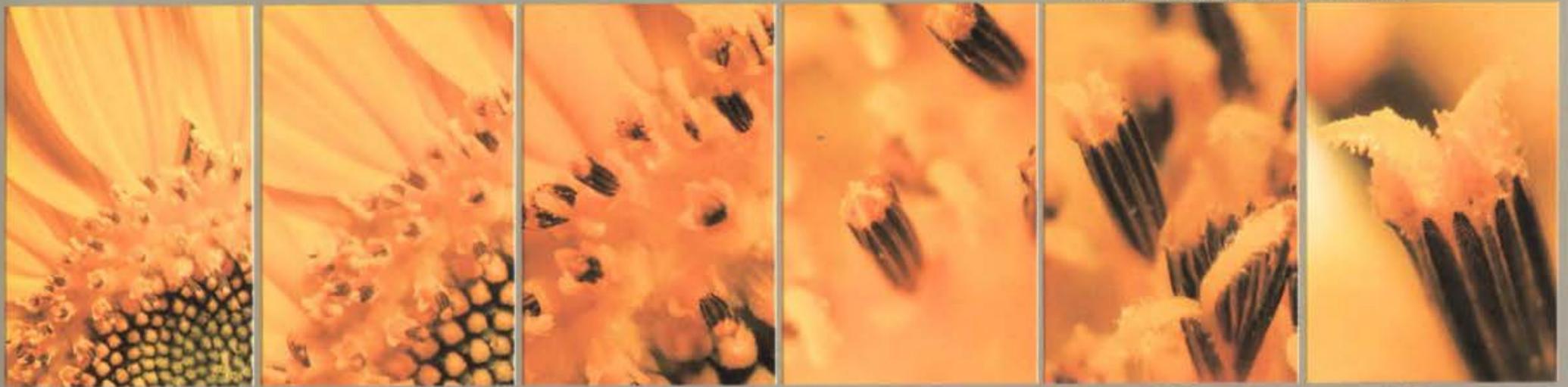
This fully automatic lens provides long working distances and minimizes perspective distortion with subjects from infinity to 0.43x life-size with the Telescopic Auto Tube or life-size with the Auto Bellows. A helicoid ring is provided for fine focusing. Open-aperture viewing is at F4 to make composition and focusing still easier. This lens is ideal for medical macro use.



# magnifications.



Figures in brackets show the picture area.



## Zuiko MC Auto- 1:1 Macro 80mm F4

### Close-Up Lens 80mm Macro f=170mm

Designed specifically for reproductions around 1:1, with a range extending from half to twice life-size, the 80mm F4 features full automatic operation and helicoid fine focusing. Auto Bellows extensions cover the full magnification range. When used with the Telescopic Auto Tube the Close-Up Lens 80mm Macro f=170mm must be

screwed to the front to provide magnification from life to twice life-size.



## Zuiko MC Macro 38mm F3.5

Brilliantly overcomes close focusing aberrations and physical limitations in bellows length for fantastic resolution between 2x and 6x life-size. The 38mm F3.5, like the 20mm F3.5, must be mounted on the objective Lens Mount PM-MTob for attachment to the Auto Bellows or Telescopic Auto Tube.

### Objective Lens Mount PM-MTob

38mm F3.5 or 20mm F3.5 macro lenses are screwed into this adapter for mounting to the Auto Bellows or Telescopic Auto Tube.



## Zuiko MC Macro 20mm F3.5

Assures excellent sharpness to the very limits of macro-photography, with a range from 4.3x to 12x life-size when used with the Auto Bellows. Highly convenient in use, it allows close working distances and minimal bellows extensions.



# Matchless coverage of the world of

## Auto Bellows

An extremely practical and convenient unit for high performance macrophotography, especially in studio and laboratory conditions. It accepts all OM macro lenses and also works well with standard focal length lenses and telephotos from 85mm to 200mm.

With the Double Cable Release, focusing can be done at the full lens aperture, and the lens stopped down automatically to taking aperture at the moment of release. The rail of the Auto Bellows is calibrated for subject magnification or picture area. Specific magnifications can be set, and the whole photographic assembly focused by adjusting lens-to-subject distance along with Focusing Tripod Block. For use of lenses in the reverse position, the lens mount board can be reversed with the lens attached.



## Macrophotographic Equipment PMT-35



A comprehensive, fully professional set of 46 macrophoto units, including 26 standard units, gives full command over indoor macrophotography at any magnification from 0.45x to 16.5x.

## Incident Illuminator Mirror Housings PM-EL (80mm, 38mm, 20mm)

Specially designed for use with the OM System macro lenses together with the Auto Bellows or \*PMT-35, these housings are most effective with flat, highly reflective subjects such as polished metal specimens. The light is provided by the Epi-Illuminator PM-LSD2, and accurately angled by means of the Centering Mirror PM-ELCS, which is mounted on the stage plate of the Macrophoto Stand. Each mirror housing is used with the macro lens of the same focal length.



## \*Epi-Illuminator PM-LSD2

A high intensity power source for use with variable transformer.

Bulb can be moved for focusing, and light bunching

adjusted by diaphragm. Filters can also be housed in the unit.



## \*Trans-Illuminator LSD

Has built-in 6V, 30W bulb with centering and focus adjustment, rack and pinion control for adjustment of condenser lens, calibrated field iris diaphragm, 6V - 8V variable transformer and square cobalt filter. For use with substage mirror or for incident illumination of opaque subjects. Other filters are available.

## Eyecup 1

Prevents glare and loss of contrast from stray light hitting the camera eyepiece. Slotted to accommodate

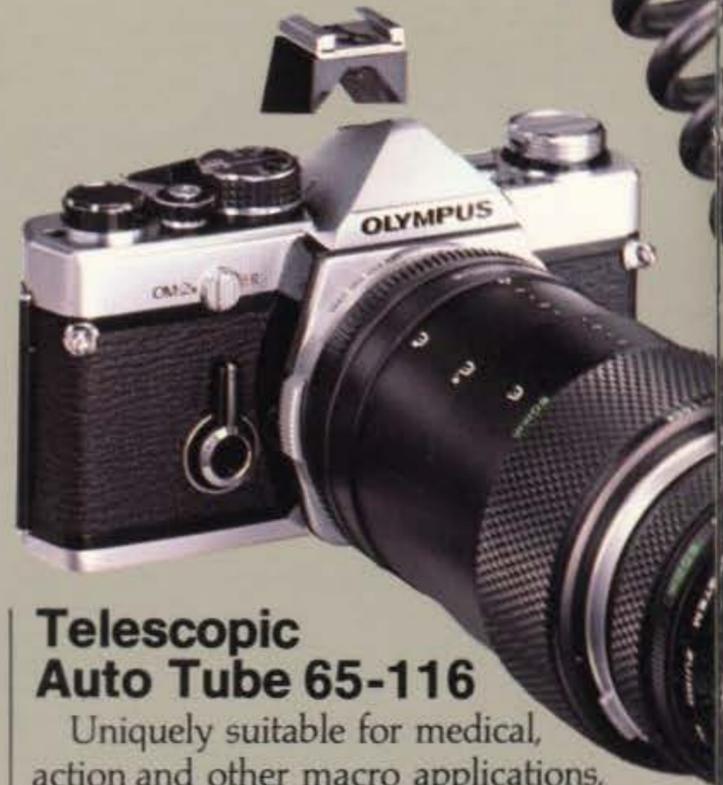


Dioptric Correction Lenses.

## Dioptric Correction Lenses

A series of eight different lenses corrects for nearsighted or farsighted photographers and ensures pinpoint focusing accuracy. They are available in -1, -2, -3, -4, -5, +2, +1 and 0.

\*These units can be ordered from distributors of Olympus Microscopes.



## Telescopic Auto Tube 65-116

Uniquely suitable for medical, action and other macro applications, this extremely lightweight, compact but versatile unit is, in effect, the world's first truly portable bellows. It telescopes out directly to provide any extension from



65mm to 116mm, and can be locked in any position by a slight turn of the outer section. Magnifications for special macro lenses are

clearly calibrated. Elimination of the need for angular motion in making adjustments not only gets faster results, it also minimizes distraction to insects and other living subjects, which are especially sensitive to angular movements. The Telescopic Auto Tube permits fully automatic lens operation. It fits all OM cameras. The detachable tripod mount allows for precise



composition of the subject, and fine focusing can be performed by the helicoid ring on the macro lens.

## T10 Ring Flash 1/T Power Control 1

For maximum subject distances of around one meter (3.3 feet) the ring flash provides even illumination with macro or other lenses. The flash screws onto the front of the taking lens (filter size 49mm or 55mm\*). It has eight lamps built in for illumination of dark subjects during focusing and composition. With the OM-2 it operates in TTL "OTF" Auto or Manual mode. With other cameras it provides two Manual position: GN10 (full) and GN4. (GN33 full and GN13, ft.)

The power-control is remarka-

bly compact, and sits in the camera hot shoe like a normal flash unit for exceptional convenience. It accepts a bayonet type plug from the built-in cord of the ring flash. Flash charge and correct flash exposure are indicated on the back of the unit and in the OM camera viewfinder. Four "AA" batteries fit in the T Power Control 1 to power the T10. The standard reversible calculator panel of the power-control unit provides data for exposure calculation with the 50mm F3.5 Macro lens. Panels for calculation with the 135mm & 80mm

Macro lenses are available optionally.

\*When the 55mm F1.2 is used at full aperture, slight edge darkening will occur.



TTL "OTF" Auto Mode



OM-1N OM-2N OM-10  
OM Camera Viewfinder Flash Indications.

## AC Adapter 3

Used with the T10 Ring Flash 1 to provide power for both flash and illumination. It can also be used with any OM camera to simultaneously power both Winder and T20 or T32 flash units. (Availability date to be announced.)



## Ring Cross Filter POL

Has two sections to cover the ring flash and the taking lens, polarized at right angles to each other in order to minimize direct reflections from your subject.

## Auto Extension Tubes 7, 14 and 25

Respectively 7mm, 14mm and 25mm long, these units fit between the camera and the lens mount to decrease minimum focusing distances. Used separately or in combination they afford a choice of seven different extensions for one set. Lens operation is automatic, as



when mounted directly to the camera.

## 6V Power Pack 2

Complete with carrying case, this unit contains four "D" batteries to power the illuminator lamps of the ring flash. Can also be used to power the Winder unit.



## Close-up Lenses

A simple and economical, though far more limited, alternative to full-fledged macro equipment. Available in



49mm and 55mm diameters.

## Beyond Macro to the Photomicro Group

For magnifications above 12x life-size, the OM System Photomicro Group provides all the answers. In this photographic mode, the camera is linked via a Photomicro Adapter to the microscope. The microscope lens then becomes the taking lens for the picture. As one of the world's leading microscope makers, with enormous experience and a huge range of products from the general to the highly specialized, OLYMPUS is able to offer a range of units unsurpassed in performance and practicality in this field, too.



## Automatic Data Camera Capability

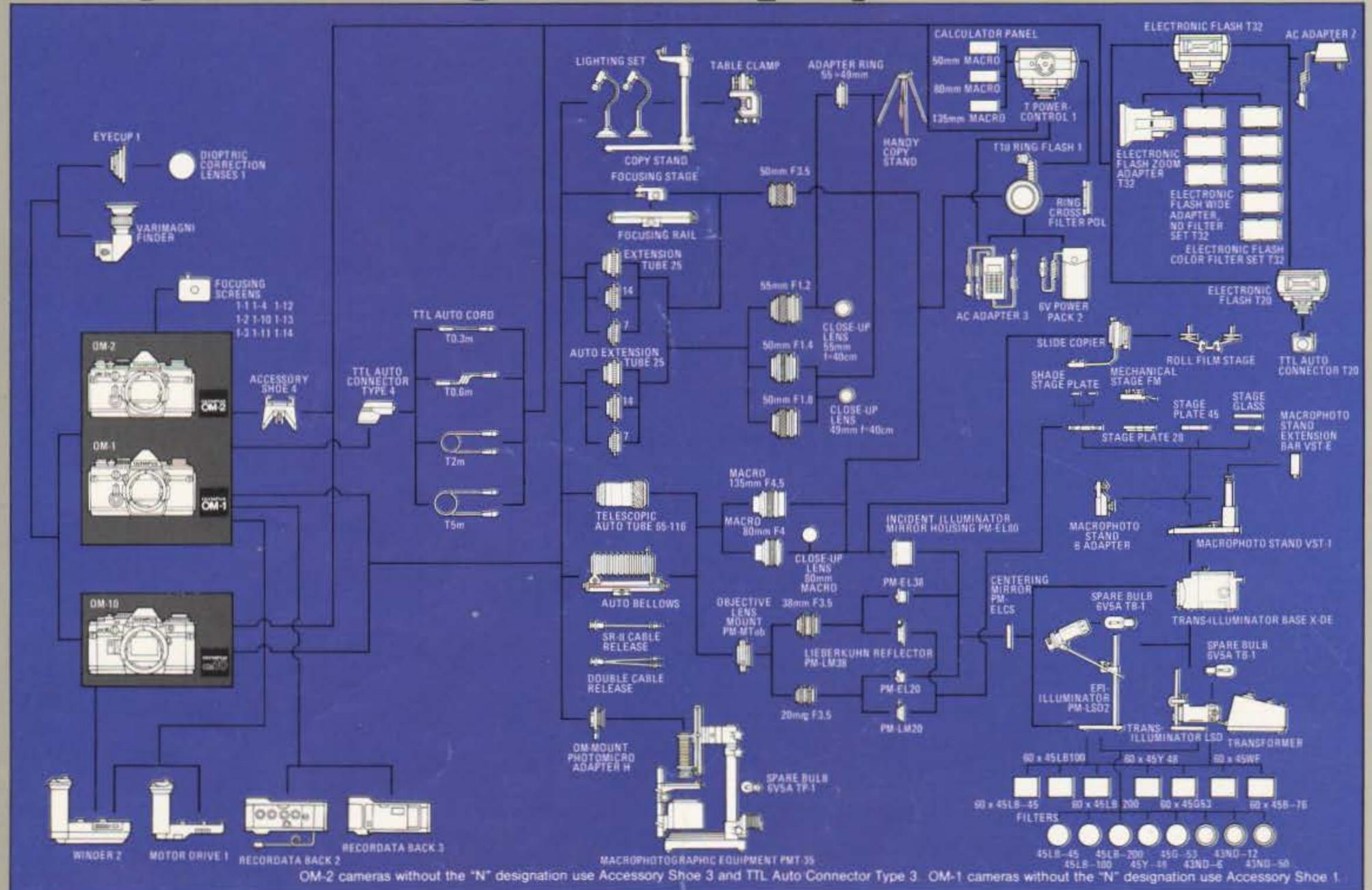
The OM-1 or OM-2 can be converted instantly into a data camera by replacing the rear cover with the Recordata Back 2 or Recordata Back 3 — a particularly attractive feature for scientific and copying work. The Recordata Back 2 has four dials, set manually, to imprint dates, alphabetical or numerical codes directly onto the film. The Recordata Back 3 incorporates a quartz timepiece with liquid crystal display. Set only once to automatically imprint year, month and day, or day, hour and minute on the film. It is so compact it can be left on the camera permanently.

## The Phototechnical Group

In addition to the Recordata Backs, this group includes special adapters for telescoping and other special applications.



# OM System Macrophoto Group: System Chart



## Main Specifications

Auto Bellows	
<b>Camera</b>	OM System Camera Bodies
<b>Lens Mount</b>	OM Mount bayonet type; rotation angle 70°.
<b>Lenses</b>	OM System Zuiko lenses 1:1 Macro 80mm F4, Macro 38mm F3.5, Macro 20mm F3.5 (Macro 50mm F3.5; Standard 50mm F1.8, 50mm F1.4, 55mm F1.2).
<b>Bellows Extension Range</b>	36mm - 198mm (1.4" - 7.8") (lens in normal position), 56mm - 218mm (2.2" - 8.6") (lens in reversed position). Graduated focusing rail is 180mm (7.1") long.
<b>Focusing</b>	By focusing knob with locking device on the focusing stage.
<b>Automatic Stop-Down Exposure</b>	Diaphragm linked with shutter by double cable release.
<b>Pre-set Lever</b>	Stops down diaphragm to pre-set aperture for previewing depth of field.
<b>Reverse Lens Mounting</b>	Lens and camera mount boards are detachable for quick reversing of lens.
<b>Tripod Mounting</b>	Provision for mounting on a tripod or on the Macrophoto Stand B Adapter.
<b>Dimensions and Weight</b>	74 x 132 x 240mm, 930g (2.9" x 5.2" x 9.4", 32.8 oz.)

Telescopic Auto Tube 65-116	
<b>Camera</b>	OM System Camera Bodies.
<b>Lens Mount</b>	OM Mount bayonet type; rotation angle 70°.

Lenses	
<b>Extension Range</b>	65mm to 116mm (2.6" to 4.6").
<b>Focusing</b>	Directly outward telescoping motion with lock at any position (locking rotation angle 15°).
<b>Automatic Aperture Control</b>	Bayonet mount for interlocking with lens diaphragm and meter coupling lever for automatic stop down control and exposure metering.
<b>Tripod Mount</b>	Accepts any tripod, allowing photography at any angle.
<b>Magnification Indication</b>	For automatic aperturing with Zuiko MC Auto Macro 135mm and MC Auto-1:1 Macro 80mm lenses; with scale from 65mm to 115mm in 5mm increments.
<b>Photographic Range</b>	∞ to 0.43X . . . Zuiko MC Macro 135mm F4.5 0.5X to 1.2X . . . Zuiko MC 1:1 Macro 80mm F4 1X to 2X . . . Zuiko MC 1:1 Macro 80mm F4 + Close-up 80mm Macro.
<b>Dimensions and Weight</b>	70φ x 65mm, 325g (2.8"φ x 2.6", 11.5 oz.) Tripod mount: 100g (3.5 oz.)

T10 Ring Flash 1 + T Power Control 1	
<b>Type</b>	Energy-saving series-circuit type TTL Centralized Control (TTL "OTF" AUTO) (with manual capability).
<b>Guide Number</b>	10 (ASA 100, meters) or 33 (ASA 100, feet) at 1m flash-to-subject distance and full power flash, Low-GN 4 (ASA 100, meters) or 13 (ASA 100, feet).

<b>Coverage Angle</b>	80°
<b>Recycling Time</b>	0.2-10 sec.*
<b>Number of Flashes</b>	100-500.*
<b>Color</b>	5,800°K.
<b>Temperature</b>	
<b>Mounting on Lens</b>	49mm/55mm filter thread mount provided on T10.
<b>Exposure Calculator</b>	Blank for OM-2 for TTL Auto/Manual flash; calculator for OM-1, OM-10 and non-OM cameras for Manual flash.
<b>TTL "OTF" AUTO (with OM-2N or OM-2)</b>	TTL AUTO Check: Neon-flicker indication. Viewfinder indication contact provided. Ready Light Check: Charge lamp and viewfinder indication contact.
<b>MANUAL</b>	Aperture Setting: In reference to calculator plate on which F numbers and magnification factors are graduated in accordance with ASA film speed.
<b>Power Source</b>	① 1.5V "AA" battery x 4 (incl. Ni-Cd) inside T Power Control 1. ② 1.5V "C" battery x 4 (incl. Ni-Cd) inside Power Bounce Grip 2. ③ AC house current via Electronic Flash AC Adapter 3. ④ and ⑤ are activated by on/off switch of power control unit.
<b>Illuminators</b>	Eight electric bulbs are built into the front of ring flash unit. (Power source: 6V Power Pack 2 or AC Adapter 3).
<b>Dimensions and Weight</b>	T Power Control 1 - 81 x 70 x 104mm, 320g (less batteries) (3.2" x 2.8" x 4.1", 11.3 oz.) T10 Ring Flash 1 - 86φ x 18mm, 95g (3.1"φ x 0.7", 3.4 oz.)

\*With AA Alkaline batteries on TTL AUTO (Varies depending on flash-to-subject distance).  
Specifications subject to change without notice.

Progress through Precision

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