Mamiya



645AFD III

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(EN)



A camera designed for and chosen by the professionals

It was back in 1975 when the Mamiya M645, the world's first 6 x 4.5 cm format single-lens reflex camera, made its debut on the global stage.

Offering both impressive mobility and high image quality in the same package, the "645" captured the imagination of professional photographers especially in the fashion and commercial photo businesses, and proved it a misconception that professional cameras had to be large and heavy. Fast forward to today when digital technology is the norm. Despite the whirlwind changes, Mamiya still knows what the market requires.

Mamiya was the company that invented the professional camera, the "645," and has continued to apply its inventive and innovative powers to exciting new products. From the first "645" to the latest version, each model has proven to be not only cameras suited to professional use, but cameras that professionals prefer to use.

Mamiya, with its long history in the photographic industry, is proud to present the modern-day version of the "645," the 645AFDIII, which combines the proven concepts of its predecessors with the newest technological advancements.



DIGITAL Technology

- ○Mamiya ZD Back
- ○Mamiya Digital PhotoStudio
- ○22 Mega Pixel CCD
- ○Dual Card Slots
- ○Low Pass Filter
- ○Capture Control
- ○PHASE ONE Capture ONE 4.1

etc…



Actual Size

645AFDIII

Features that allow you to concentrate only on the subject

This, too, is what makes the 645AFDIII a professional camera.
The 645AFDIII has optimized the digital back communication system with the Mamiya ZD Back to achieve a system that produces an operating experience identical to using a one-piece digital camera. Using post-production development software, lens characteristics can be fine-tuned, a feature advanced by the increased information flow between the digital back and lenses.
Users can also take full advantage of other features including a selection of three light metering modes and 2nd-curtain sync with compatible flash units. All the vital support functions have been well thought out and ergonomically placed, allowing the photographer to concentrate fully on shooting the subject and not worry about fiddling with functions.



Compatible with all leading high-end digital backs, notably the Mamiya ZD back. The benchmark camera of the digital age

The Mamiya ZD Back plus digital camera backs made by Phase One and other high-end digital camera backs can be attached to the Mamiya 645AFDIII.
The fact that this camera can support a wide range of interchangeable lenses, digital backs and other accessories of the extensive Mamiya 645AF system makes it the most flexible choice for photographers all over the world.

Lens characteristics compensation function is made possible by combining the camera with the Mamiya ZD Back.





Lens compensation is possible when Mamiya Digital PhotoStudio software is used in conjunction with RAW files taken with the Mamiya ZD Back. Light fall-off, distortion and other aspects of the lens characteristics produced under certain shooting conditions can be adjusted to create high-quality images. Also supported is the "Capture One 4.1" RAW development software from Phase One.



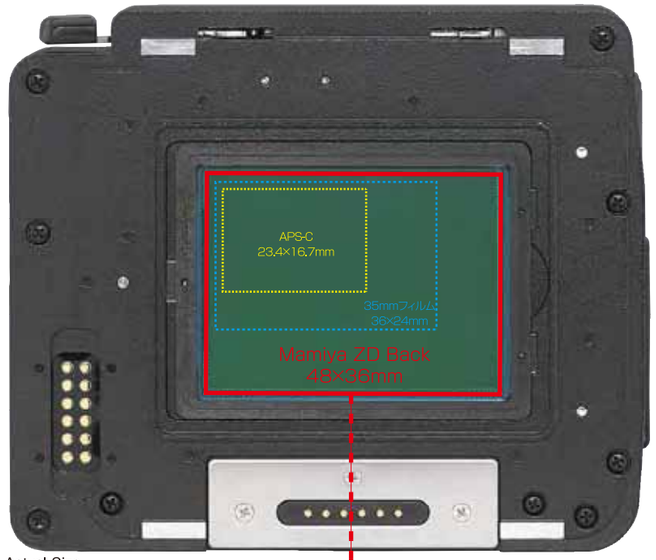
Choose the photography media (digital or film) to best suit the shooting environment.

The Mamiya 645AFDIII is not only designed for digital shooting: It also has an improved film back system with the newly developed, faster HM402 film magazine.
As a hybrid system camera, the 645AFD III supports both photographic methods seamlessly. Accessories for film and digital photography are available to obtain the most from the open platform design.

22 MEGA PIXELS

Digital camera back for a professional camera.

With the Mamiya ZD Back attached to the 645AFDIII, the two parts are transformed into a single integrated digital camera. Drawing on cutting edge technology, a large CCD with 22 mega pixels is used.
With high-quality image capturing capability, this system meets the levels of operability demanded by the professional photographer.



Actual Size

ECA format
(Expanded Capture Area)
Double the image size 35mm Film



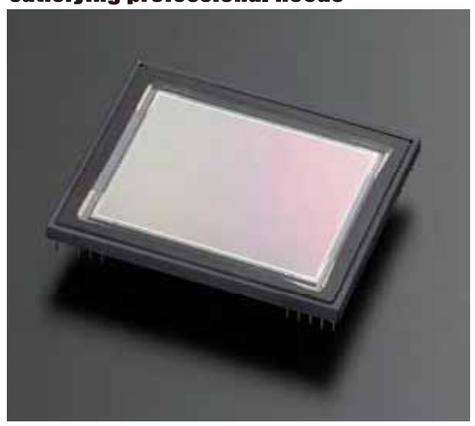
ISO button
Screen quality selector button
Monitor button
Zoom button
Information button
Memory access lamp
Image protection button

Cancel button
OK button
Arrow pad
Menu button
Delete button
White Balance button

Actual Size

Image shown in monitor is a composite sample

High-definition 22M CCD satisfying professional needs



Mamiya's ZD Back utilizes a full-frame transfer CCD from DALSA Corporation, boasting 21.3 effective Megapixels. The superb definition and gradients reproduced by its large 48×36mm CCD and 14-bit A/D RGB converter are ideally suited to the demands of professional photographers.

Dual card slots (SD/CF)



The Mamiya ZD Back is provided with slots to accommodate SD Cards and CF (CompactFlash) Cards, allowing independent shooting without being tethered to a computer.
It can store approximately 200 shots in RAW format on a 8GB CF Card.

Low Pass Filter, designed for easy attachment



Mamiya is the only company in the world that gives the photographer the option of installing a Low Pass Filter. Depending upon the subject or shooting conditions, the optional Low Pass Filter can reduce or eliminate moiré and aliasing effects.
This is especially helpful with patterned clothing.
The photographer can easily swap out the standard IR (Infrared) Cut Filter when needed.

Capture Window for versatility in editing and processing



The IEEE Firewire cable interface enables control ofmultiple camera functions from a computer, such as AF mode, exposure compensation, aperture, shutter speed, ISO, white balance, metering mode and more, all displayed and controlled on screen.

CAMERA Technology

- Faster Auto Focus Technology
- 36 Custom functions
- Three Digital Displays
- The vertical-travel metal focal plane shutter
- Interchangeable digital or film back
- Multi metering modes
- Five exposure modes
- Auto bracketing function
- TTL Flash Control

etc…

New 3-point focus area
High-speed, high-accuracy auto focus

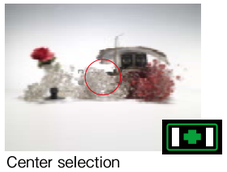
The 645AFDIII uses TTL phase difference detection as its auto focusing system. The camera can focus using 3-point focus areas so many different kinds of subjects can be taken from different viewing angles. Users can choose between automatic selection (where the camera selects the closest subject in the 3-point focus area), or single area selection which calls for the user to specify a particular focus area.



Examples of single area selection
*The focus area is not displayed inside the actual viewfinder.



Left selection



Center selection



Right selection

A choice of focus modes to suit the subject



Focus mode selector lever

Single AF Mode (S)

This mode puts priority on precise focusing at the moment the shutter is released, which is ideal for still subjects.
Focus is locked when the viewfinder LCD focus mark lights. AF lock is activated in this mode.

Continuous AF Mode (C)

This mode continually adjust focus even while the shutter release button is being half-pressed.
It is best for moving subjects; focus is not locked even when the focus mark lights.

Manual Focus Mode (M)

Selecting this mode cancels Auto Focus. The focus symbol ● appears inside the viewfinder on the LCD panel when the image is in focus, and a focus aid feature indicates the rotation direction of the focus ring with and defocus mark.

Auto-Focus Infrared AF Assist Beam



The Mamiya 645AFDIII is a medium format auto-focus camera with a built-in auto-focus assist beam.
It goes into effect automatically under poor light and low subject contrast conditions.
For sensitive situations such as political events, the AF sub-beam is switchable on/off.

AF lock button

By pressing the AF lock button, auto focus can be locked without having to press the shutter release button half-way.

Easily programmable custom functions
FUNCTION keys and SET button.

To set a custom function, simply turn the mode dial to the CF position, select the desired custom function number with the front dial then change the setting with the rear dial.
Up to three user settings--A, B and C--can be registered. The custom function number and its icon are displayed in the shutter speed field with the setting description in the aperture field and the custom function numerical details in the exposure compensation field. It's easy to copy a default value or value of another area: Simply select the value to be copied using the rear dial, and then press the SET button for one second.
A custom function set by the user can also be initialized by turning the rear dial until "do" is displayed, and by pressing the SET button for one second.



Custom functions that create a truly personalized camera

00	Custom function No	For selecting and switching between the user functions.	18	Focus indicator selection	For selecting whether to display the AF defocus mark.
01	Aperture, shutter speed, exposure compensation steps	For selecting the aperture, shutter speed and exposure compensation steps.	19	AFL function lock mode	For selecting the AFL function mode
02	Data imprinting	For selecting the shooting data imprint function and the details to be imprinted.	20	M mode one-push setting	For setting the single-push shift operation in the manual mode.
03	Aperture setting after lens change	For setting the aperture value when the lens has been changed.	21	Bulb exposure time setting	For setting the time (1 to 60 minutes or unlimited) during which bulb shooting is enabled.
04	Metered value display time	For setting the time during which the metering value is to be on hold (power hold).	22	Bulb shutter release setting	For selecting the mode used to operate the shutter button during bulb shooting.
05	Range of exposure compensation	For setting the maximum range for exposure compensation (+/-3EV or 5EV).	23	Shutter speed in X mode	For setting the sync shutter speed in the X mode.
06	External LCD backlight	For selecting the method of lighting the backlight of the external LCD display.	24	Automatic sync speed setting	For selecting the shutter speed when using an SCA-compatible flash.
07	Select battery	For selecting non-rechargeable or rechargeable batteries	25	TTL flash compensation mode	For selecting linkup of flash synchronization compensation and exposure compensation.
08	Auto bracketing order	For selecting the shooting order for 3-shot auto bracketing.	26	AF beam setting	For setting ON or OFF for the AF assist beam operation.
09	Cancel auto bracket	For selecting the method used to cancel auto bracketing.	27	Flash sync timing	For setting the sync timing (rear curtain, front curtain).
10	Manual mode bracketing	For specifying the auto bracketing operation in the M auto mode.	28	Copy custom function	For copying the current user functions.
11	Front/Rear dial function exchange in manual mode	For replacing the front dial with the rear dial (and vice versa) in the manual mode.	29	Custom function reset	For returning the user function settings to their default statuses.
12	Rear function dial enabled/disabled	For enabling or disabling exposure compensation.	30	Shutter release without film	For allowing shutter release when no film is loaded in the camera.
13	Dial function direction	For selecting the direction in which the numerical values are increased or decreased as the electronic dial is turned.	31	Auto film loading setting	For selecting the cue method (finding the first frame) when film is loaded in the camera.
14	Program shift	For selecting the program shift settings (aperture and shutter speed).	32	Multiple exposure mode	For changing the method used to specify the number of exposures for multiple exposure shooting.
15	AEL/AFL function button exchange	For replacing the AEL button function with the AFL button function (and vice versa).	33	Digital back CF configuration	For selecting the custom function No. (A, B or C) when the digital back has been attached.
16	Half-press shutter release function mode	For selecting the AE and AF lock operation when the shutter release button is pressed half-way.	34	Clock/calendar setting	For setting the internal clock and calendar.
17	AEL lock mode	For selecting the AEL lock mode when the AE lock button is pressed.	35	Index setting	For setting the index numbers.

Shooting conditions and settings at a glance

Users can check the status of all functions and operations of the system, thanks to the comprehensive information shown on the LCD display panels of the camera body, viewfinder and film holder. Current shooting information is displayed in the viewfinder while settings, adjustments and other camera functions are displayed on the camera body and film holder. This allows the user to monitor and operate the camera with maximum ease. In low-light situations, the LCD display panel on the body and film holder lights up by simply pressing the button.

■ Viewfinder LCD Panel



1 2 3 4 5 6 7 5 8 9 10

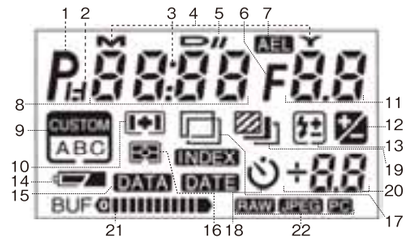
1 : Metering mode (A, S, Auto A-S)
2 : AF indicator (out of focus, focus, low-contrast)
3 : Camera's warning mark (ex: incomplete preparations like incorrect insertion of dark slide)
4 : Exposure mode (program shift mark)
5 : AEL mark (AE lock indicator)
6 : Shutter speed 7 : Aperture value
8 : Exposure compensation value
9 : AEL, multiple exposure mark
10 : Flash sync mark (flash compensation mark)
*"-no-Fb" is displayed when the dark slide is inserted.

■ Film back LCD Panel



1 : Film speed
2 : Film type
3 : Frame counter

■ External LCD Panel



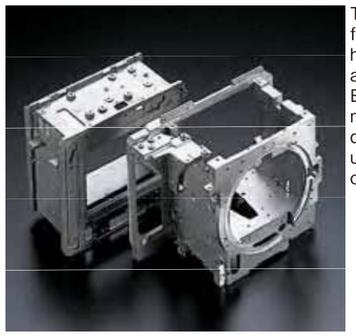
1:Program mode mark 2:Program shift indicator 3:Time mark (for clock setting)
4:M, D, Y mark (for date setting) 5:Seconds mark (for shutter speed)
6:F indicator (for identification of F value) 7:AEL mark (AE lock indicator) 8:Shutter speed
9:Custom function mode mark 10:AF area mark (spot area selection indicator)
11:Aperture value 12:Exposure compensation mode mark 13:Flash compensation mark
14:Battery power indicator 15:Superimposing mode (date, data, index)
16:Exposure metering mode mark 17:Multiple exposure mark 18:Self-timer
19:AEB mark (auto bracketing) 20:Exposure compensation value
21 :Index buffer memory status *2 22:Image quality indicator *2
*"-no-Fb" is displayed when the dark slide is inserted. *2 These displays appear when the Mamiya ZD Back is installed

Magnesium Alloy viewfinder cover



The 645AFDIII incorporates the finest materials borrowed from its predecessor the 645AF. Utilizing a magnesium alloy cover ensures that the prism and digital circuitry of the viewfinder is protected.
In addition to providing secure protection, this magnesium alloy also contributes to the overall compact and lightweight design of the camera.
The result is an innovative configuration with a revolutionary and timeless look for today's medium format SLR.

Die-cast aluminum body and film back



The body shell is die-cast from a lightweight, high-strength aluminum alloy.
Exceptional precision in machining assures reliable, durable performance even under the harshest working conditions.

Switching is easily enabled with the use of buttons and an electronic dial. Switching between 3 metering modes & exposure compensation



(A) Center-Weighted Averaged Metering

This mode meters the average reflected brightness of the entire image, with emphasis on the center of the screen.

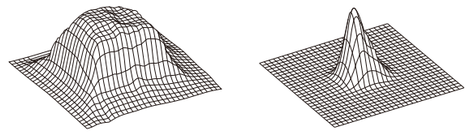
(S) Spot Metering

This mode meters reflected light on the image at a specific point, indicated by the circle at the center of the focusing screen. It is optimal for use with high contrast subjects and for measuring brightness at a specific area of the subject.

(AUTO A-S) Variable Ratio Metering

This mode automatically switches between average and spot modes depending on the relative contrast within the overall image; it provides exposure settings suited to a wide range of subjects and lighting conditions.

<Metering diagram >



Center-Weighted Averaged Metering　　Spot Metering

Super-fast 1/4000-sec shutter speed expands creative potential



The vertical-travel metal focal plane shutter provides a maximum shutter speed of 1/4000 second. This permits the photographer to employ techniques, from soft-focus portraits using a wide aperture lens to razor-sharp images of even the fastest-moving subjects.
The high-speed shutter also allows flash synchronization at a fast 1/125sec. which enables effective application of daylight synchronization and other flash techniques. When the film back is removed, a protective mechanism automatically opens the shutter, and closes it again when the back is replaced, to prevent accidental damages to the shutter.

Interchangeable film back system Tailored to meet the needs of professionals



By enabling different types of film to be used to best suit the photographic situation, the interchangeable film back system gives the professional flexibility of creative expression.
With the 645AFDIII, ever-evolving digital imaging is supported by the MSCE (Mamiya Serial Communication for External) communication system and thus all different medium format digital backs can be installed as well. A single camera body is the link between two worlds.

Designed for safe, trouble-free operation



Full digital controls and self-diagnostic circuitry eliminate problems before they happen.
In the event of incorrect settings or battery trouble, the shutter release locks to protect accidental exposure.

HM402 roll film holder Continuous shooting at 2 frames per second

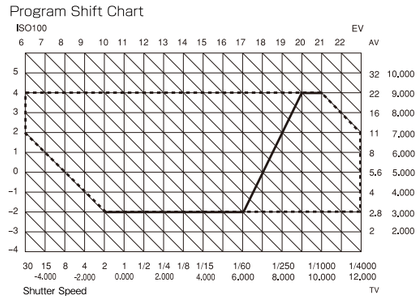


In accordance with the new drive system, the film holder has been designed as a successor to the HM401 film holder, and is optimized for use with the 645AFDIII.
Continuous shooting is possible at a faster rate of 2 frames per second.
Users can choose between displaying the number of shots taken, or the new feature of displaying the number of remaining shots.
Switching between 120 films and 220 films is executed by rotating the pressure plate, and film is wound up automatically after the sixteenth shot. Mid-roll winding is also possible.

(P) Program AE Mode

This mode automatically determines optimal exposure settings, using preprogrammed aperture and shutter values to ensure exposure accuracy under ambient lighting.
This mode is ideal for general photography without the need to make adjustments.

Program Shift Chart



(Tv) Shutter Speed Priority AE Mode

This mode emphasizes the effect of shutter speed on the image.
Set the desired shutter speed via the digital dial and the camera automatically adjusts aperture value to match.
Shutter speed values can be set in 1/3 or 1/2 steps.

(Av) Aperture Priority AE Mode

This mode emphasizes the depth-of-field effect of aperture setting on the image.
Simply adjust the aperture value with the digital dial to the appropriate setting, and the camera automatically adjusts shutter speed to match.
Aperture values can be set in 1/3 or 1/2 steps. Depth-of-field is checked in the viewfinder by pressing the preview button, in each AE mode.

(M) Manual Mode

This mode enables the photographer to have total control over both aperture and shutter speed, and is best used to adjust settings based on readings from a separate exposure meter.
The rear dial adjusts aperture value while shutter speed is set using the front dial. Both values can be set in 1/3 or 1/2 steps.
The difference between the set value and metered value are displayed on the viewfinder LCD panel.
Pressing the AEL button for 1 second will display the shutter speed resulting from the metered value. The adjustment range is +/-6EV, displayed in 1/3 steps (x.3/ x.7/ x.0).
In Manual Bulb mode (electronically controlled) extended time exposure is possible.

(X) X Mode

This mode locks the shutter speed at the maximum sync speed of 1/125sec.
In this position, the dials lock and cannot be rotated. Modifications possible with CF.

Data imprinting function For recording photographic settings and index numbers during shooting



The imprinting function records data outside the film's image area. Lens focal length information has been added to the list of data that can be superimposed on the Mamiya 645AFDIII.
With this addition, imprinting options include exposure mode, aperture value, shutter speed, exposure compensation value, bracketing order, metering mode and focal length, the date (year/month/day) and time (hours/minutes) and index numbers. Consisting of 4 digits (when the HM402 is used), the index number data is stored in the camera body's memory so that even when the film holder is changed, the data remains imprinted, a useful feature when recording and managing large numbers of shots. The initial value of the index number can also be changed at any time. Users have the freedom to choose which, if any, data they wish to imprint.



Sophisticated operating system
Functional design for exposure and other operations



The Mamiya 645AFDIII allows the exposure-related operations to be set using three practically placed buttons. The exposure-related functions are located on the three buttons under the LCD panel on the hand grip. They can be selected using the front and rear dials on the grip.
Since all operations have been placed on the grip, metering mode, auto bracketing or exposure compensation can be set while holding the camera.
Focusing point switching, multiple exposures and other camera operations can also be accessed via the same three buttons. Users can switch between exposure operations and camera operations by pressing and holding the buttons down.

Auto bracketing function
For performing step exposure automatically



The auto bracketing function is useful in situations with complex light conditions where it is hard to judge the correct exposure, or when shooting with reversal film.
There are three exposure modes: Tv, Av and M. Users can choose between shooting 2 shots or 3 shots per sequence, and when 3-shot shooting is selected, normal, underexposure or overexposure sequences can be set as a custom setting.
There are four selectable compensations steps--0.3, 0.5, 0.7 and 1 EV--, and concurrent use with exposure compensation is also possible.

Exposure compensation function
For capturing exactly what the photographer has in mind



As an alternative to the exposure automatically set by the camera, the exposure compensation can be used to create shots according to the photographer's vision.
Exposure compensation is enabled by simply pressing the exposure compensation button.
Users can set the compensation value to 1/3, 1/2, 2/3 or 1 EV using the front and rear dials.
With the custom setting, adjustments up to +/-5 EV are also possible.


±0


−0.7


+0.7

Sophisticated TTL Flash Control



The Mamiya 645AFDIII incorporates automated TTL-OTF (through the lens/off-the-film) flash control, with an X-sync hot shoe and dedicated circuitry.
The flash system is compatible with the Metz SCA3002 System, which provides exceptional flash control. Using a Metz flash with the SCA3952 adapter enables transfer of aperture, film speed and other data for automated synchronization as well as power zoom control link and automatic operation of the Auto Focus measuring beam.
In AE modes "AV " and "P ", the shutter speed is automatically set to 1/125sec. or slower.
All this technology provides versatile flash photography capability.
Furthermore, the SET button allows individual exposure compensation of flash and ambient light.
Recommended flashguns: Metz Mecablitz 70MZ-5, 54MZ-4i

It may not be possible to obtain the correct flash control when the digital back is used.

TTL flash sensor measures flash exposure off the film plane

One-touch multiple exposure activation

Enter Multi Exposure Mode by pressing the dedicated button, then set the desired number of exposures in a range of 2 to 6 with the digital control dial.
Digital cancellation of film winding assures precise registration of multiple images on a single frame.

Eyepiece Shutter

The eyepiece shutter protects against stray back light entering through the eyepiece and affecting exposure values.

Mirror-Up Photography Function

During a slow shutter setting, close-up or archive photography using a tripod, the mirror-up function is effective in preventing vibrations.
This function is activated by setting the drive dial to "M.UP."
During mirror-up shooting, the internal LCD of the viewfinder is on and exposure compensation and auto-bracketing functions can be used.

* Also includes a timer for mirror-up photography

Preview Depth of Field

Hold down the preview button to stop down the lens to the working aperture.
Preview can be used in all exposure modes.

Advanced Flash Features

- Flash ready indicator in camera viewfinder
- Correct exposure confirmation in viewfinder
- Auto flash sync speed control (only in P and Av mode)
- TTL flash control
- Cordless TTL with Metz compatible flash units
- Motor zoom control
- AF assist beam control
- Auto Transfer of ISO
- Auto Transfer of lens aperture
- Flash compensation +/-3EV
- Flash bracketing in flash auto mode with compatible Metz flash unit
- Program auto flash mode
- Exposure compensation transfer
- Wake-up function for camera/flash

Note: Some Metz flash units do not support all features.

Self-timer mode

The self-timer button can be set anywhere between 2 to 60 seconds, with 1-second increments from 2 to 10 seconds, and in 10-second increments from 10 to 60 seconds.

Interchangeable Focusing Screens

Select the viewfinder screen that suits your particular photographic needs.
Each screen comes with a tweezers for safe, quick and easy installation.

Diopter adjusts Viewfinder to Vision

The built-in diopter enables adjustment of the viewfinder image to suit individual vision.
Rotate the dial towards + or – to adjust within a range of –2.5 to +0.5 diopter.
Optionally available diopter lenses extend this range to –5 to –2 or 0 to +3.

Electronic Shutter and Remote Triggering Connection

For long exposures such as bulb or slow shutter speeds, use of the electronic shutter release cable avoids camera vibration.
(Available cord length in 1m (3ft.) or 5m (17ft.). Wireless remote triggering possible with radio triggering system)

Compatible with Ni-Cd and Ni-MH batteries

In addition to compatibility with the existing AA type battery, Ni-Cd and Ni-MH batteries can now be used.
Batteries are housed inside the ergonomically designed hand grip.

Flash status viewfinder display



When the flash unit is connected and achieves full power, the viewfinder LCD displays the flash charge mark.
This symbol flashes after each shot to indicate that the flash made a correct exposure.
*When using the SCA3952 adapter

Names of Parts















LENS & ACC Technology

- Mamiya Sekor AF D Lens
- Mamiya 645 AF Lens
- Magnifier FD402
- Angle Finder FA401
- Magnetic Cable Release RE401/RE402
- SCA3952 Adapter
- Auto Bellows NC401
- Remote Control Set RS402
- Auto Extension Rings
- External Battery Case PE401

"Eyes" that aid the professional

Digital photography requires very high resolving power from the camera's lenses, in order to accurately capture highly detailed images onto high resolution digital sensors. The Mamiya 645 AF lens series - including the newly developed Sekor AF Digital lenses - offer outstanding performance for both film and digital photography, indispensible for meeting the demands of professional photographers.

*When the Mamiya ZD Back is attached, the effective angle of view is the equivalent of 1.16 times the indicated lens focal length

Sekor AF 28mm f/4.5 D Aspherical



With an angle of view of 102 degrees, this aspherical lens is equivalent to the 17mm wide angle lens in the 35mm format.
It has been developed to ensure superior image quality of high contrast from infinity to a 35cm minimum focusing distance.
This long depth of field renders it possible to produce unique optical displays of perspective in a variety of photographic scenes, especially landscapes and architectural images.
With a one-touch action moving the focusing ring back or forward, AF and MF functions are easily selected.

Sekor AF 80mm f/2.8 D



This standard lens has a 47 degrees angle of view, approximately equivalent to a 50mm lens in the 35mm format.
Its design allows this lens to produce natural, distortion-free images and works extremely well in a wide range of situations.
The lens is optimized for use with the Mamiya ZD and 645AFDIII, and features a 16-bit CPU.
The AF/MF focusing mode can now be selected with a single touch of the ring.

AF 35mm f/3.5



With an angle of view of 90 degrees, this wide-angle lens is approximately equivalent to a 22mm lens in 35mm format.
The built-in floating mechanism provides the photographer with the ability to obtain images with high contrast and quality, from infinity to 35cm/13.8" minimum focusing distance.
This lens is perfect for landscapes where maximum depth-of-field is required.
Furthermore the lens itself is equipped with an Auto/Manual focus switching ring, allowing one touch selection of Auto or Manual focus.

AF 45mm f/2.8



With an angle of view of 74 degrees, this lens is approximately equivalent to a 29mm lens in 35mm format.
Its wide angle of view and depth of field makes the lens appropriate for any situation, from snapshots to scenics.
Low-dispersion glass minimizes chromatic aberration.
A floating mechanism lends uniformity to image resolution, from center to periphery.
This lens is also suitable for architectural photography and other subjects dominated by straight lines, and it offers sharp and crisp image rendering.

Sekor AF 150mm f/2.8 IF D



This medium telephoto lens has a 26 degrees angle of view, approximately equivalent to a 93mm lens in the 35mm format.
Use of ultra-low-dispersion glass corrects chromatic aberration and produces tack-sharp images with excellent contrast from infinity to as close as 1 meter. It is perfectly weighted-thanks to Internal Focusing - rendering it suitable for hand-held shooting.
Switching between AF and MF is done by moving the selector ring backward or forward. This easy-to-use lens is especially well suited for portrait shots requiring shallow depth of field.

Sekor Macro MF 120mm f/4 D



With an angle of view of 33 degrees, this macro lens offers the perspective of a 73mm focal length in the 35mm format.
This manual focus lens is capable of photography from infinity to 1:1 magnification.
Its anomalous dispersion glass allows for correction of color aberration and captures images of supreme color balance, high contrast and resolution.
Also, when employed with the Mamiya ZD/ 645AFDIII, use is optimized via a 16 bit CPU.

AF 55mm f/2.8



With an angle of view of 64 degrees, this lens is approximately equivalent to a 34mm lens in 35mm format.
With minimal perspective change, it produces the most natural image of all the wide-angle lenses. A floating mechanism improves resolution at the periphery in close-ups, for image sharpness all the way out to infinity. This lens is suitable for a wide range of situations,from general to scenic photography.
It is designed to provide the feel of a standard lens with a slight wide-angle effect.

AF 150mm f/3.5



This medium telephoto lens has a 26 degree angle of view, approximately equivalent to a 93mm lens in the 35mm format, a focal length perfect for portraits or scenery combined with a compact configuration for general versatilty.
This is the first AF medium telephoto lens, that offers a quick select ring for auto or manual focus.
The ring does not rotate in AF mode, to assure focusing accuracy.

Sekor Zoom AF 75-150mm f/4.5 D



This lens is a standard to medium telephoto zoom lens, equivalent to the 47-93mm lens in the 35mm format.
Its comparatively short minimum focusing distance of 1 meter and 50 to 26 degree angle of view render this zoom lens capable of a variety of common scenarios, ranging from snap shots to portrait photography.
For a high shield effect in the entire zooming range, the lens comes with a floral shaped lens hood.

AF ULD 210mm f/4 IF



With an angle of view of 19 degrees, this lens is approximately equivalent to a 128mm lens in 35mm format.
Its natural focusing effect suppresses the compression typical of telephotos while still isolating the subject.
Excellent for a wide range of situations, and particularly for portraits.
Super low-dispersion glass assures good contrast even for close-ups.
The internal focusing mechanism makes handling easier, with no change in the balance between overall lens length and weight.

AF APO 300mm f/4.5 IF



With an angle of view of 14 degrees, this lens is approximately equivalent to a 182mm lens in 35mm format.
Superb correction of color and spherical aberration enables a clear, high-contrast image from center to periphery.
The APO design lens gives exceptional resolution along with sharp colors and tonal fidelity.
The internal focusing mechanism keeps balance uniform from front to back, making this lens extremely easy to handle.

Specification

	Sekor AF 28mm F4.5D Aspherical	Sekor AF 80mm F2.8D	Sekor AF 150mm F2.8 IF D	Sekor Zoom AF 75-150mm F4.5D	Sekor Macro MF 120mm F4D	AF 35mm F3.5	AF 45mm F2.8	AF 55mm F2.8	AF 150mm F3.5	AF ULD 210mm F4 IF	AF APO 300mm F4.5 IF
Optical Construction	14 elements 10 groups	6 elements 5 groups	8 elements 7 groups	11 elements 10 groups	9 elements 8 groups	9 elements 7 groups	9 elements 7 groups	7 groups 6 groups	5 elements 5 groups	7 elements 5 groups	8 elements 8 groups
Angle of View	102°	47°	26°	50°~26°	32°	90°	74°	64°	26°	19°	14°
Minimum aperture	32	22	22	32	32	22	22	22	32	32	32
Diaphragm	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Focusing System	Auto/Manual	Auto/Manual	Auto/Manual	←	Manual	Auto/Manual	←	←	Auto/Manual	←	←
Minimum Focusing Distance(from CCD)	13.8"	70cm	100cm	100cm	40cm	13.8"	1.47"	1.47"	4.9"	6.5"	9.8"
Maximum Magnification Ratio	0.15	0.15	0.19	0.09 ~0.16	1.00	0.156	0.13	0.18	0.12	0.13	0.11
Area Covered	319×239mm	377×279mm	295×218mm	75mm:636×472mm 150mm:341×253mm	56×42mm	274×375mm	310×418mm	226×305mm	341×461mm	332×448mm	371×500mm
Equivalent Focal Length for 35mm	17mm	50mm	93mm	47~93mm	74mm	22mm	29mm	34mm	93mm	128mm	182mm
Filter Diameter	Gelatine filter frame	67mm	72mm	77mm	67mm	77mm	67mm	58mm	58mm	58mm	77mm
Lens Hood	Bayonet	Bayonet	Bayonet	Bayonet	Bayonet	Bayonet	Bayonet	Bayonet	Bayonet	Built-in	Built-in
Dimensions (length×diameter)	136×90mm	51.5×80.5mm	120×85mm	145×86mm	111×83mm	62×84mm	73.5×77mm	65.5×77mm	80.5×79mm	141×86mm	213×99mm
Weight	886g	330g	780g	1,140g	845g	480g	495g	445g	540g	750g	1,430g
Equivalent focal length for 6×4.5 when mounted on Mamiya ZD Back	32mm	93mm	174mm	87—174mm	139mm	41mm	52mm	64mm	174mm	244mm	349mm
Equivalent focal length for 35mm when mounted on Mamiya ZD Back	20mm	58mm	108mm	54—108mm	87mm	25mm	32mm	40mm	108mm	151mm	216mm



ZOOM AF 55-110mm f/4.5



With an angle of view ranging from 65 to 35 degrees, combined with auto-focus and zoom capability, this lens can serve triple duty over the focal lengths of wide /normal/portrait and is equivalent to 34-68mm in the 35mm format.
Internal focusing eliminates the risk of vignetting when combined with front-element filters, and a unique “flower” design lens hood prevents stray reflections from striking the lens surface.

ZOOM AF ULD 105-210mm f/4.5





With an angle of view ranging from 36 to 19 degrees, equivalent to the 65-130mm focal lengths in the 35mm format, this medium-telephoto zoom lens has the reach to capture distant subjects and the versatility to work in close when needed.
It is an ideal choice for all-purpose photography.
Low dispersion glass lens elements provide excellent resolution of fine detail.
The internal focusing mechanism allows use of front filters with no degradation of image quality.

	Zoom AF 55-110mm F4.5	Zoom AF ULD 105-210mm F4.5
Optical Construction	11 elements 10 groups	13 elements 11 groups
Angle of View	65°～ 35°	36°～ 19°
Minimum aperture	32	32
Diaphragm	Automatic	Automatic
Focusing System	Auto/Manual	←
Minimum Focusing Distance(from CCD)	4.9"	4.9"
Maximum Magnification Ratio	0.04 ～0.08	0.09 ～0.18
Area Covered	55 mm:986×1331mm・110mm:520×702mm	105 mm:441×595mm・210mm:230×312mm
Equivalent Focal Length for 35mm	34 ～68 mm	65 ～130 mm
Filter Diameter	67mm	58mm
Lens Hood	Bayonet	Bayonet
Dimensions (length×diameter)	110 ×86.5mm	158 ×82mm
Weight	870g	990g
Equivalent focal length for 6×4.5 when mounted on Mamiya ZD Back	64 –128 mm	122 –244 mm
Equivalent focal length for 35mm when mounted on Mamiya ZD Back	40 –79 mm	76 –151 mm

Magnifier FD402



This magnifying eyepiece enables precise focusing for macro and telephotography by magnifying the center of the viewfinder image to twice normal size.
After focusing, it can be flipped up without detaching to confirm overall composition.
Weight: 46g (1.6oz.)

Angle Finder FA401

The Angle Finder enables confirmation of image composition from a comfortable posture for low-angle,macro, and other situations.
It can be rotated a full 360 degrees (for easy viewing from any angle.
Weight: 140g (5oz.)



Magnetic Cable Release RE401 (1m)/RE402 (5m)



Connects to the camera's electronic shutter release, and provides vibration free operation.
RE401 comes with a 1-meter (3ft.) spiral cord; the RE402 comes with a 5-meter (17ft.) straight cord.
Weight: RE401=50g (1.8oz.),
RE402=80g (3oz.)

SCA3952 Adapter (Metz Strobe)

This adapter is designed for use in combination with a SCA3002 Flash System strobe. It provides various useful features, including TTL direct flash control and a power zoom function that automatically matches the coverage angle to the focal length of the lens.
Use of the SCA300 System flash requires a separately purchased SCA3000C converter cable.
Weight: 38g (1.3oz.)

Auto Bellows NC401



This high-precision macro accessory enables continuous adjustment of magnification ratio for precision manual focusing.
A data cable transmits diaphragm information to the lens mount, enabling use of aperture priority AE mode or exposure confirmation in manual mode.
The AF 80mm lens reverse ring allows reproduction at magnifications greater than 1:1 with minimal aberration over a range of 0.75 to 2.20 times with the AF 80mm f/2.8 lens.
The camera mount can be rotated 90 degrees(for simple selection of vertical/horizontal composition.
The upper and lower railscan be used in combination at a right angle, enabling the auto bellows to shift horizontally and enable reproduction of vertical images at the same magnification ratio.
Weight: 1,340g (47oz.)

Remote Control Set RS402



The remote control set takes full advantage of the automated functions of the 645AFDⅢ, opening the way to a new world of remote control photography.
The wireless unit operates via near-infrared impulses transmitted to a receiver that attaches to the camera.
Wireless operation is possible from up to 100ft. outdoors; 3-channel switching eliminates signal interference.
Power Requirements:Transmitter: Two AA-size alkaline batteries Receiver: One S-006P 9V zinc-carbon battery
Weight:Transmitter: 130g (4.6oz.) (without batteries)
Receiver: 140g(5oz.) (without batteries)

Auto Extension Rings

NA401 (No.1)/NA402 (No.2)/NA403 (No.3)
This set of macro extension rings supports the automatic diaphragm capabilities of the AF lens series. AF operation using focus marks is possible in manual mode. Rings are available in three lengths (No. 1, No. 2, No. 3), which can be used to achieve the desired magnification ratio.



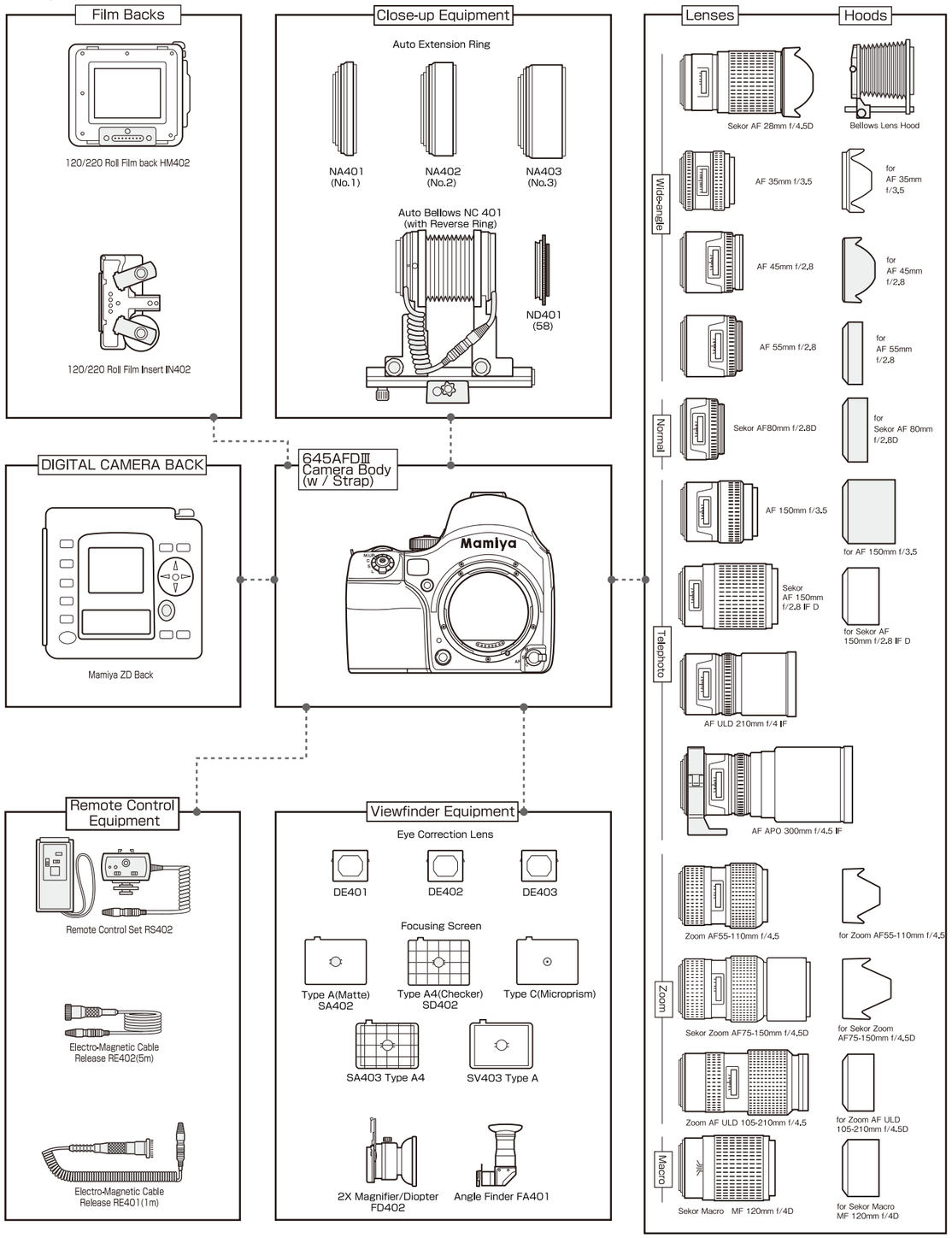
Using all three rings with the 80mm lens provides maximum magnification of 1:1.Optimal Lens: AF 80mm f/2.8
Weight: No.1 = 95g (3.4oz.), No.2 =125g (4.4oz), No.3 = 155g (5.5oz.)

External Battery Case PE401



This case protects against deterioration of battery capacity and performance when shooting in extreme cold.
Insert the battery into the case, which can then be placed inside a pocket; a cord from the case to the camera provides power for camera operations.
Holds six AA-size batteries.
Weight: 115g (4oz.)

Mamiya
645AFDⅢ
System



Interchangeable lens and film back systems expand the systems' capability.
Mamiya 645 NON-AF Series lenses are compatible with Focus Aid, in manual mode.

Specifications

Camera Type	6 x 4.5 cm format, electronically controlled focal-plane shutter, TTL multi mode AE, AF single lens reflex
Image size	56 x 41.5 mm (actual image)
Film Type	120 roll film (16 exposures), 220 roll film (32 exposures)
Lens Mount	Mamiya 645AF Mount (645 non-AF series lenses can be used with a microprism focusing screen and the focus assist mark during manual focusing; AE metering is possible with an optional viewfinder screen and with spot metering and stopped-down exposure
Viewfinder	Fixed prism viewfinder magnification x0.71; built-in diopter adjustment (-2.5 to +0.5, optional diopter lenses provide adjustment ranges of -5 to -2 diopter or 0 to +3 diopter); built-in eye-piece shutter
Focusing Screen	Interchangeable through the lens mount. Specially designed matte screen (standard), grid matte screen and screen for M645 lens.
Field of View	Approx. 94% (percentage of actual image viewed)
Viewfinder Information	Focus mark, out-of-focus indicator marks, camera warning mark, aperture value, shutter speed, metering mode (A, S, A-S), exposure compensation value, multiple exposure mark, auto bracketing mark, fully charged mark, flash compensation mark, AE lock; displayed exposure compensation value indicates the difference in the metering value from the exposure amount set using the Tv, Av or P mode setting, AEL button.
Auto focusing system	TTL phase difference detection device: CCD line sensor (I + I shaped), operating range: EV -1 to 18 (ISO 100)
Focus area	Displayed on viewfinder screen (focus area: center area of 10.8 x 3.6 mm), two AF ranges (normal focus or spot focus) switchable using CF
AF infrared beam	Activates automatically under low light/ low contrast. Range: approx. 9 m (with AF 80 mm F2.8 lens); ON, OFF selectable
AE lock	With AEL button or half-press shutter release button in auto focus, single mode
Exposure Modes	Aperture-priority AE, Shutter-priority AE, Programmed AE, Manual
Shutter speed/Aperture steps	Shutter speed and aperture both can be set in 1/3 or 1/2 steps; electronic dial lock
Metering Mode	TTL full-aperture metering; Center-weighted average (A), Spot (S), Variable ratio (A-S auto)
Metering range	EV 2 to EV 19 (With ISO 100, 80 mm F2.8 lens)
Exposure compensation	+/-3 EV or +/-5 EV, selectable
Film sensitivity setting	ISO 25 to 6400
AE lock	With AEL button; cancelled by re-pressing or switching off power; metering difference (+/-6 EV, 1/3 steps) indicated on exposure compensation display area in viewfinder by holding down AEL button.
Shutter	Electronically controlled vertical metal focal-plane shutter
Shutter speed AE	Shutter speed AE : 30 to 1/4000 sec., Manual : 30 to 1/4000 sec. (1/3 or 1/2 steps); X, B (bulb electronically controlled), automatic shutter curtain protection mechanism (open when holder is removed, automatically closed when attached)
Auto-bracketing	Set using Auto bracketing button/multiple exposure button (2 shots, 3 shots, 3-shot auto bracketing); can be switched to 0.3, 0.5, 0.7 or 1 EV steps
Flash synchronization	X contact 1/125 sec., automatically sets to 1/125 sec. at speeds higher than 1/125 sec. in M or Tv mode; operates at displayed speed at low speeds; set in 1/125 to 1/60 sec. range in P or Av mode (when the Metz flash is used); X contact sync synchronization speed can be customized by CF; sync terminal provided
Flash control	TTL direct flash control, supports Metz SCA3002 system (with SCA3952 Adapter)
Film Advance	Automatic via built-in motor in film holder; switching between single and continuous exposures possible; mid-roll winding possible at any point during shooting; winding speed: approx. 2 frames/sec. with HM-402 film magazine, automatic winding after 16th shot
Film loading	Automatic advance to first frame (Easy loading)
Multiple exposures	Enabled with Auto bracketing button/multiple exposure button (2 to 6 exposures or unlimited); can be canceled or number of exposures can be changed at any time.
Mirror-up shooting	Possible using drive mode dial
External LCD	On camera body: program mode mark, custom function mode mark, user function symbols, AF area mark, remaining battery indicator, manual focus mode, imprinting mode shooting data, index mode, program shift mark, dial lock indicator, shutter speed, AE lock mode mark, aperture value, multiple exposure mode mark, exposure compensation mode mark, flash synchronization compensation mode mark, exposure compensation value, self-timer mode mark, auto bracketing mode mark, imprinting mode calendar, month/day/year mark (when the date has been set), time mark (when the clock has been set), metering mode display; when Mamiya ZD Back is attached: buffer memory status, image quality; with film holder: ISO sensitivity, 120/220 film type, number of shots displayed
Data imprinting	Shooting data imprinted outside film's image area (in 7-segment dot matrix); DATA mode: exposure mode, aperture value, shutter speed, exposure compensation value, metering mode, lens focal length, index number; DATE mode: year/month/day and hours/minutes, index number; imprinting function can be set to OFF (data imprinting possible using ISO 25 to 1600 films)
Sync terminal	X contact (sync speed 1/125 sec.)
Cable release socket	On shutter button
Remote-control terminal	On side of body; electromagnetic cable release
Self-timer	Possible with shutter release selector 2 to 60 sec. (standard operation time: 10 seconds; time can be set in 1-second increments from 2 to 10 seconds and in 10-second increments from 10 to 60 seconds)
Depth-of-field confirmation	Possible with preview button
Tripod Socket	U 1/4 inch and U 3/8 inch included
Power Requirements	Body: 6 AA-size batteries (alkaline, lithium, nickel-metal hydride or nickel-cadmium batteries); holder: 1 battery (3V lithium battery, CR2032) for memory backup
Number of films per battery type	Approx. 150 rolls with alkaline batteries, approx. 350 rolls with lithium batteries (at room temperature, with 80 mm F2.8 lens, AF shooting with 120 film)
External power socket	Insulated external battery case can be connected
Size, weight	With AF 80 mm F2.8 lens, 120/220 roll film holder: 153(W) x 128(H) x 184(D) mm, 1,730 g (w/o battery)

* Specifications are subject to change without notice for quality improvement reasons
* Despite the precision technologies with which it is made, the LCD monitor may exhibit dead or white pixels
* Photographs may have been digitally enhanced using development software