# Using flash

The simplest way to take top-quality flash pictures is to use either Maxxum Flash D-314i or Maxxum Flash D-316i. Designed for use with the Maxxum 3000i, either flash will slip easily into the camera's accessory shoe and then be controlled by the Maxxum 3000i's flash control system. Both flashes are powered by the camera's lithium battery and have built-in focus-assist illuminations for low light autofocusing. The flash is fired automatically and can remain attached to the camera at all times.

When the Maxxum 3000i is operated under low-light or back-light conditions, the viewfinder's use-flash signal (-) will blink and the camera will beep; this indicates that a flash should be used to ensure correct exposure. With a Maxxum Flash attached and switched to ON, the flash will begin to charge; during flash charge, you cannot release the shutter. When the flash reaches full charge, the blinking use-flash signal (>) will be replaced by a blinking flash-ready signal (\$) and the camera will beep rapidly. At this stage, it is necessary to momentarily remove your finger from the shutter before pressing down again to take the picture. Following exposure, the viewfinder's flash-ready signal (\$) will blink rapidly to indicate that exposure was sufficient. For more information about Minolta Maxxum Flashes, refer to page 32, 33.

# FOCUS Autofocus





Autofocus mode is selected by moving the focus mode switch to AF position. With the camera in autofocus mode, autofocus is activated by pressing the shutter-release button partway down.

## Focus Hold

The focus remains locked on the subject as long as you keep the shutter-release button pressed partway down.

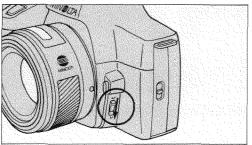
To take a picture with the subject not in the center of the frame, first press the shutterrelease button partway down and focus with your subject centered in the focus frame; then, while keeping the button pressed, recompose the picture. Press the shutter-release button all the way down to release the shutter.

# **Autofocus Signals**

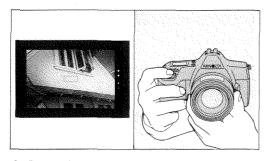
**Green signal glows:** Subject is in focus and shutter can be released.

Red signal blinks: Focus cannot be confirmed by camera and shutter cannot be released. Set camera to manual focus mode and turn lens' focusing ring until subject appears sharp in viewfinder.

# Manual focus



- 1. With focus-mode switch at M position, center focus frame on subject.
- 2. Press shutter-release button partway down to activate focus signals.
- 3. Turn lens' focusing ring until green focus signal glows. If you maintain slight pressure on the shutter-release button, the camera beeps as the subject comes into focus.



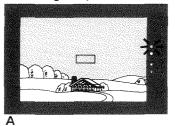
- **4.** Press shutter-release button all the way down to take the picture.
- When using manual focus, the shutter can be released at any time, even if subject is not in focus.

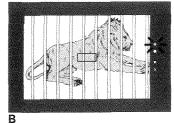
# Manual Focus Signals

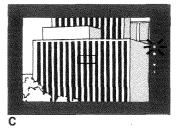
Green signal glows: Subject in focus.

Red signal blinks: Subject out of focus. Turn focusing ring until subject appears sharp in viewfinder.

# Focusing in special situations







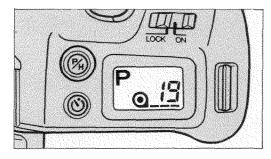
The camera's autofocus system will produce sharply focused pictures in nearly any situation. In some cases, additional steps should be taken to obtain sharp focus.

- If the subject is low in contrast, particularly horizontal contrast, focus manually (A).
- If an object is placed between you and your subject, focus manually (B).
- If a subject composed of alternating light and dark lines fills the focus frame, focus manually (C).
- When the light level is too low for the autofocus system to respond, attach a flash unit or focus the lens manually.
- For extremely bright subjects, attach a neutral-density filter to the lens.

# EXPOSURE MODES Program mode



Program mode is the Maxxum 3000i's normal exposure mode. Whenever the main switch is moved from LOCK to ON, Program mode is set automatically and a large letter P appears in the data panel.

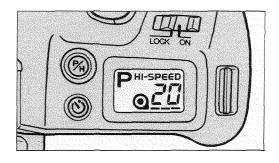


In Program mode, you just aim the camera and press the shutter-release button to take the picture. The camera automatically sets the correct exposure; no manual settings are required.

# High-speed program mode



If you are taking pictures of a fast-moving subject, you may wish to select the High-speed program. This program maintains the fastest available shutter speed, so there is less chance of image blur caused by camera shake or subject movement.



To select High-speed program mode, press the P/H button. P and HI-SPEED are displayed in the data panel. To reset the camera to its normal program, press the P/H button again. The camera automatically resets the normal program whenever the main switch is moved from LOCK to ON.

 The use-flash signal (→) blinks in the viewfinder when flash is required for low-light or backlit subjects.

## ADDITIONAL INFORMATION

#### Main switch

When the main switch is at ON position, all functions will operate and you can take pictures. At LOCK position, all camera functions are switched off. When you are not using the camera, set the main switch to LOCK to prevent accidental exposures and ensure optimum battery life.

When you switch your Maxxumx 3000i to ON, with a Minolta AF lens attached and the camera in AF mode, the camera's autofocus system adjusts the lens extension in preparation for autofocus operation. Similarly, when the camera is switched to LOCK, with a Minolta AF lens attached and the camera set to AF mode, the autofocus system will retract the lens to its shortest extension for ease of carrying or storage.

The top-mounted data display remains visible for about one hour after the camera was last operated or after the main switch is moved to LOCK. The display returns when the shutter-release button is pressed or the main switch is moved to ON; in either case, the camera is set to Program Mode.

• If desired, the slow shutter-speed signal may be switched off. Set the main switch to ON. Then, while holding down both the mode selector (P/H) and self-timer (⑤) buttons, move the main switch from ON to LOCK and back to ON. To switch the signal on again, repeat this procedure.

# Audible signals

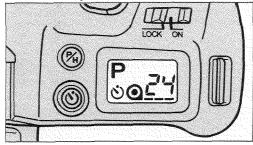
The camera emits short beeps in the following situations:

- When film is loaded incorrectly;
- When the subject comes into focus;
- When using the self-timer;
- If the film cartridge is left in the camera after rewinding is complete and the shutterrelease button is pressed; and
- When the shutter speed is too slow for blur-free, hand-held pictures.

In this case, the use-flash signal ( $\checkmark$ ) in the viewfinder will blink as an additional warning.

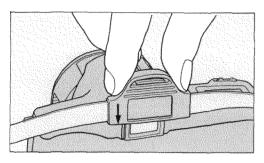
With a Maxxum Flash attached and set to ON, the camera will beep rapidly once full charge is reached; in this case, the flash-ready signal (\$) blinks as well.

Self-timer operation

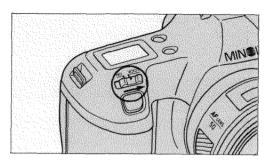


The Minolta Maxxum 3000i's electronic self-timer lets you delay shutter release for ten seconds. To use the self-timer:

- 1. Press the self-timer ( $\odot$ ) button. The self-timer symbol ( $\odot$ ) will appear in the data panel.
- At this point, pressing the button again will switch off the self-timer.



- 2. Focus the lens, check for the green focus signal in the viewfinder, and attach the eyepiece. Once self-timer countdown is started, autofocus will not operate.
- **3.** Press the shutter-release button all the way down to start the self-timer.
- The camera will beep twice a second and the self-timer indicator (  $\odot$  ) will blink until the shutter is released.
- The self-timer is automatically switched off after the exposure. Repeat steps 1 through 3 to make another exposure using the self-timer.



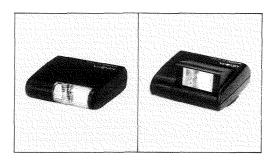
# To stop the self-timer:

If you have started the self-timer and want to stop it before the picture is taken, slide the main switch to LOCK.

### **ACCESSORIES**

## Minolta Maxxum Flash

Besides the Maxxum Flash D-314i and D-316i models which are designed exclusively for the Maxxum 3000i, you can also use the more powerful Maxxum Flash 3200i with your camera. These flash units attach to the camera's accessory shoe.



# Maxxum Flash D-314i

Guide Number: 46 in feet at ISO 100 Maximum flash range: 16 ft. AF illuminator range: 1.6 to 16 ft. Flash coverage: 35mm or longer lenses

Power: Supplied by camera

Maxxum Flash D-316i

Guide Number: 52 in feet at ISO 100

Maximum flash range: 19 ft. AF illuminator range: 1.6 to 16 ft.

Flash coverage: 35mm or longer lenses

Power: Supplied by camera



#### Maxxum Flash 3200i

Guide Number: 105 in feet at ISO 100 with

85mm lens

Maximum flash range: 32.8 ft.

AF illuminator range: 1.6 to 29.5 ft.

Flash coverage: Internal zoom adjusts coverage automatically for 28mm through 85mm

lenses

Power: 4 AA-size alkaline or nickel-cadmium

batteries

Note: Flash ranges based on Minolta standard test method with an aperture of f/2.8 or larger

### Use of other Minolta Maxxum Flash Units

Other Minolta Maxxum Flash units, 4000AF, 2800AF, 1800AF, and Macro Flash 1200AF can also be used. The AF illuminators on the 4000AF, 2800AF and 1800AF will not operate, so autofocusing in low light may not be possible.

Note: These flash units cannot be attached directly to the camera; the Flash Adapter Shoe FS-1100 must be used between the flash and camera.

When using Maxxum Flash 4000AF, the flash range displayed on its flash data panel may be larger than the actual maximum flash distance. If your subject is close to the maximum distance, it could be underexposed. Correct exposure is confirmed by the glowing "OK Exp" signal; confirmation of exposure is also given by rapid blinkings of the flash-ready signal in the camera's viewfinder.

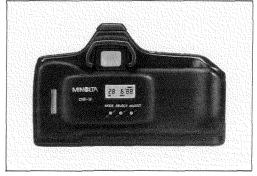
#### Maxxum AF Lenses

The entire system of Maxxum AF lenses are usable with the Maxxum 3000i camera. Besides the ergonomically designed, compact AF 35-80mm and AF 80-200mm zoom lenses, a growing range of wideangle, standard, telephoto, zoom, and macro lenses is available. Visit your Minolta dealer for more information about Maxxum AF lenses and accessories.

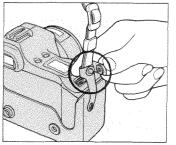


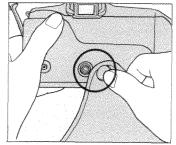
#### Data Back DB-3

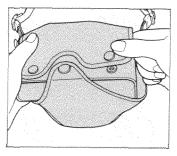
The Data Back DB-3 permits imprinting of the date, day with 24-hour time, or the hour and minute of exposure. A single 3-volt lithium battery is installed at the factory and supplies power for data imprinting, automatic calendar, and clock.

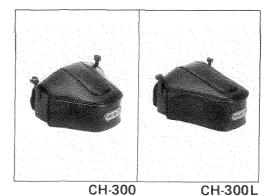


#### Camera case









Various camera cases are available as optional accessories for the Minolta Maxxum 3000i.

## To put the camera in its case:

- 1. Attach lens cap. (If using the AF 35-80mm or AF 80-200mm lens, close its lens cover.)
- 2. If using a zoom lens, turn zoom ring until lens barrel is at its shortest position.
- 3. Follow the diagrams to put camera into case.

# TROUBLE SHOOTING GUIDE

Problem	Cause	Solution
No display appear on LCD panel.	Battery is exhausted.	Install fresh battery.
	Battery is not installed correctly.	Install battery correctly.
Frame counter does not advance from "0".	Film is not loaded correctly	Open back cover and reload film.
Focus is not adjusted when taking flash pictures.	Distance to the subject is too far or too short.	Check that the subject is within the focus illuminator's range.
	Subject's reflectivity is too low for autofocusing.	Focus on a subject that is same distance away as the main subject.
	Focus length of lens is greater than 100mm.	Change to manual focusing.
Autofocus does not work or lens does not	Lens is not attached correctly.	Attach the lens so it locks in place with a click.
focus when shutter- release button is pressed.	Focus mode switch is at M position	Slide the focus mode switch to AF position
	Subject is difficult to focus.	Use focus lock or manual focus.
	Zooming grip is positioned macro range.	Slide and hold macro release, then turn zooming grip back into zoom range.

Problem	Cause	Solution
Flash-ready signal ( \$ ) in the viewfinder does not appear.	Flash's power switch is at OFF position.	Switch flash unit on and check that flash signal in viewfinder blinks.
	Flash is not attached to camera correctly.	Attach the flash to the camera's accessory shoe so that it locks in place with a click.
When shutter-release button is pressed, LCD disappears and camera does not operate.	Battery is exhausted.	Install fresh battery.
Shutter cannot be released	Main switch is at LOCK.	Slide the main switch to ON.
	Film cartridge remains in camera after film is completely rewound.	Remove the film cartridge from the camera.
	Flash is not fully charged.	Wait until the flash-ready signal(\$) blinks, lift your finger from the shutter-release button, then press down fully to take the picture.
	Film loaded incorrectly	Reload film.
	In AF mode, focus cannot be confirmed	Switch to M mode and focus manually.

### TECHNICAL DETAILS

Type: 35mm SLR with intelligent control of autofocus (AF), autoexposure (AE), and auto film transport systems

Lens mount: Minolta A-type bayonet; accepts all Minolta AF lenses

Autofocus system: Minolta's through-thelens (TTL) phase-detection type with wide charge-coupled device (CCD) sensor; sensitivity range: EV 0 to 18 at ISO 100 in ambient light

Manual focusing: By referring to focus signals in viewfinder, or visually on Acute-Matte viewfinder screen

Metering: TTL dual-area contrast-detection metering coupled to autofocus system; exposure locked when focus is locked in autofocus mode; center-weighted metering when using manual focus mode; two-segment silicon photocell (SPC) for ambient light; second SPC at bottom of mirror box for TTL flash metering with dedicated flash units

Auto-exposure (AE) range: EV 1 to 20 with ISO 100 film and 50mm f/1.4 lens

# Exposure modes:

Program AE: Advanced automatic multiprogram selection of shutter speed and aperture based on focal length of lens in use High-speed Program AE: Shutter speed set to approx. 1/1000 sec. until slower shutter speed is required for correct exposure; aperture set automatically based on ambient light level

TTL flash metering: Operates with dedicated units; automatic charge activation when flash is required; shutter X-sync speed set automatically from 1/60 to 1/20 sec. according on focal length of lens in use; aperture setting based on ambient light level

Shutter: Electronically controlled verticaltraverse focal-plane type; range: 1/1000 to 4 seconds

**Controls:** Buttons to choose between standard or high-speed program, set self-timer operation, and manually start film rewind

Shutter-release button: In autofocus mode, pressing button partway down activates autofocus and metering systems and locks focus and exposure on subject; pressing button all the way down releases shutter; shutter can be released only when subject is in focus (focus-priority shutter release)

**Film-speed settings:** Automatic setting for DX-coded films; range: ISO 32 to 3200 in ambient light, ISO 32 to 1000 for TTL flash metering; film speed set to ISO 100 for film without DX coding

Film transport: Auto threading, auto advance to first frame, single-frame advance, advancing frame counter in data panel; auto rewind or manual start of rewind

Viewfinder: Eye-level fixed roof mirror shows 90% of field of view; magnification 0.75X with 50mm lens at infinity

# Data displays:

Data panel: Liquid-crystal display (LCD) shows exposure mode, frame number, self-timer operation, and battery condition

Viewfinder: Light-emitting diodes (LED) signal focus status, use-flash, flash ready, and sufficient flash exposure

Power: 6-volt 2CR5 lithium battery powers camera (and Maxxum Flash D-314i or D-316i, if attached); battery condition indicated by four-stage indicatior in data panel; shutter locks when battery is exhausted; sliding main switch has LOCK and ON positions

**Battery performance:** Approximately 55 rolls of 24-exposure film without flash and 25 rolls of 24-exposure film using flash D-314i on 50% of the exposures.

Audible signals: With main switch at ON position, camera beeps if film is loaded incorrectly, when subject comes into focus, during self-timer operation, as a slow shutter speed warning, when flash reaches full charge, and when film is left in camera after rewinding is complete.

**Self-timer:** Electronic with 10-second delay; cancelable; operation indicated by audible signal

Other: Eyepiece Cup EC-3, eyepiece cap, carrying strap, film window

Size and weight:  $5-9/16 \times 3-1/2 \times 2-3/8$  in. (142  $\times$  88.5  $\times$  60.5mm), 14-13/16 oz. (420g) without lens and battery

Optional accessories: Accepts all Minolta AF lenses, Maxxum Flashes D-314i, D-316i and 3200i, Data Back DB-3, Eyepiece Correctors, and flash accessories including off camera cables and connectors

### CARE AND STORAGE

- Always keep your camera in its case with the lens capped when not in use, or with a body cap on when a lens is not attached.
- No part of the camera should be forced at any time.
- Never subject your camera to shock, high heat, high humidity, water, or harmful chemicals. Be particularly careful not to leave it in the glove compartment or other places in motor vehicles where it may be subjected to high temperatures.
- Entry of sand, salt, or other grit may cause costly or irreparable damage to the camera.
   Use extra care when taking pictures at the beach.
- Never lubricate any part of the camera body or lens.
- Never touch the shutter curtains, mirror, or the front inside parts of the body or clean them with compressed air. Doing so may impair their alignment and movement.

- External camera surfaces and lens barrel but not glass surfaces—can be cleaned by wiping with a dry or silicone-treated cloth.
- Never touch lens or eyepiece surfaces with your fingers. Whisk away loose matter with a blower brush. To remove stubborn spots, use a sheet of photographic lens tissue. If necessary, tissue may be moistened with one drop of lens-cleaning fluid. Never place fluid directly on glass surfaces.
- We recommend that you have your camera cleaned once a year at an authorized Minolta service facility.
- If you plan to store your camera for an extended period of time, rewind and remove the film, then remove the battery. Place the camera in a cool, dry place away from dust or chemicals, preferably in an airtight container with a drying agent such as silica gel.

- After prolonged storage, and especially before taking pictures at an important event, carefully check the operation of the camera and lens
- The operating range for the LCD (liquid crystal display) data panel is from 14° to 122°F (-10° to 50°C). At temperatures outside this range, response time and contrast will change, making displays difficult to read. At very high temperatures, a display may temporarily darken. If this occurs, the display should return to normal after the camera is restored to operating range conditions.
- The Maxxum 3000i contains no userserviceable parts. Do not attempt to disassemble or repair the camera yourself.
- The Maxxum 3000i's circuitry may switch off, even when a battery with sufficient power is installed. To resume operation, remove the battery and install it again.

Save camera box and packing material. When shipping your camera, carefully repack it in the box, insure adequately, and use a reliable delivery service.

Before shipping your camera for repairs, contact your nearest authorized Minolta service facility.



#### STATEMENT OF FCC COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2)this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Regrient or relocate the receiving antenna.

Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced ratio/TV technician for help.

#### STATEMENT OF DOC COMPLIANCE

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Minoita Camera Co., Ltd.

Minolta Corporation Head Office

Los Angeles Branch Chicago Branch

Atlanta Branch Minolta Canada Inc

Head Office

Montreal Branch
Vancouver Branch

Minolta GmbH Minolta France S.A.

Minolta (UK) Limited

Minolta Austria Gesellschaft m.b.H. Minolta Camera Benelux B.V.

Belgium Branch Minolta (Schweiz) AG Minolta Svenska AB Minolta Portugal S.A. Minolta Hong Kong Limited Minolta Singapore (Pte) Ltd. 3-13, 2-Chome, Azuchi-Machi, Chuo-Ku, Osaka 541, Japan

101 Williams Drive, Ramsey, New Jersey 07446, U.S.A.

11150 Hope Street Cypress, CA 90630, U.S.A. 3000 Tollview Drive, Rolling Meadows, IL 60008, U.S.A.

5904 Peachtree Corners East, Norcross, GA 30071, U.S.A.

369 Britannia Road East, Mississauga, Ontario L4Z 2H5, Canada

3405 Thimens Blvd., St. Laurent, Quebec H4R 1V5, Canada 105-3830 Jacombs Road, Richmond, B.C. V6V 1Y6, Canada

Kurt-Fischer-Strasse 50, D-2070 Ahrensburg, Germany

365-367 Route de Saint-Germain, 78420 Carrieres-Sur-Seine, France 1-3 Tanners Drive, Blakelands North, Milton Keynes, MK14 5BU, England

Amalienstrasse 59-61, 1131 Wien, Austria

Zonnebaan 39, 3606 CH Maarssenbroek, P.B. 264, 3600 AG Maarssen, The Netherlands

Kontichsesteenweg 38, B-2630 Aartselaar, Belgium Riedhof V, Riedstrasse 6 8953 Dietikon-Zürich, Switzerland

Brännkyrkagatan 64, Box 17074, S-10462 Stockholm 17, Sweden

Av. do Brasil 33 a, 1700 Lisbon, Portugal

Room 208, 2/F, Eastern Center, 1065 King's Road, Quarry Bay, Hong Kong

10, Teban Gardens Crescent, Singapore 2260

