

match-matic

C-3



by

Argus

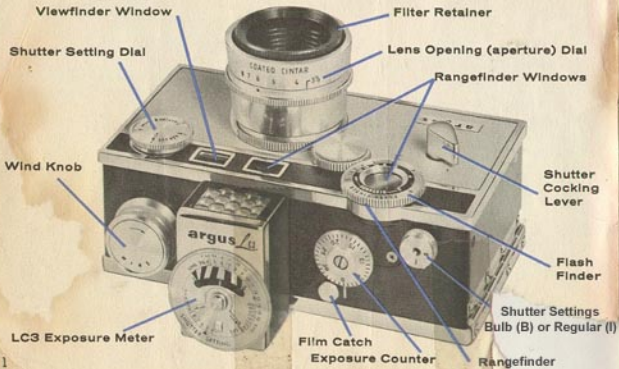
Introduction

Your new Match-Matic C3 brings you an unequalled ease of operation in a simplified system of photography. If you can match one number with another, you can take fine pictures, every time.

The opposite page shows the important parts of the camera and their location. For best results, read this book carefully and try out the different adjustments. Try to know your Match-Matic C3 before you load your first roll of film. This may prevent your missing an important picture through lack of familiarity with its operation.

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THE LENS OPENING (aperture) dial is turned to control the amount of light passing through the lens. Small-numbered openings are used for dim light and "slow" films; large-numbered openings for bright light and "fast" films.

THE SHUTTER DIAL controls the length of time the shutter is open to pass light through the lens. Try different settings to see the change in shutter action. High-numbered settings "stop" action; low-numbered settings are for scenes and dim-light pictures.

What makes a Picture?

THE LENS gathers the light and focuses a clear, sharp image on the film. The rangefinder will change the lens focus for you as you line up the rangefinder image. Try focusing on different subjects to see how the lens moves in and out from the camera.

THE RANGEFINDER focuses the lens automatically when the rangefinder image is lined up. This simple method of focusing insures sharp, clear pictures. Even the accessory lenses for your camera are focused in this easy manner.



(For quick reference, cut this page out and keep with your camera.)

match-matic

Picture Taking

Just follow these easy steps for perfect pictures, every time. Of course, you will first load your camera (pages 9-10) and set the film's exposure index on the meter (page 8). Then all you do is—

- 1** SET SHUTTER FOR TYPE OF PICTURE AND MATCH TO METER
- 2** AIM CAMERA AT SUBJECT AND MATCH METER READING TO LENS
- 3** FOCUS WITH RANGEFINDER, COCK SHUTTER AND PRESS RELEASE

See the following pages for detailed information on the operation of the Match-Matic C3.



Using the rangefinder



The right eyepiece on the back of the camera is the rangefinder window. Hold the camera as shown, look through the rangefinder window, and turn the rangefinder dial with the finger.

Your Match-Matic C3 lens is automatically focused when the rangefinder image is lined up as shown on the bottom of this page. No guesswork—no distance scales to set.

After focusing, *shift your eye to the viewfinder* (the left eyepiece) to compose your picture. Hold the camera in either a vertical or horizontal position to best suit the framing of your subject.



Subject out of focus



Subject in focus

shutter settings



Set the shutter release on "I" for regular shutter speeds.

For time exposures, turn to "B" and hold the release down for the time desired. Be sure to support the camera and use a cable release when taking time exposures.

The first setting to decide on when taking a picture is the shutter number. The shutter dial controls the length of time the shutter is open to admit light to the film. The low-numbered settings hold the shutter open longer than the high-numbered settings. Always set the dial directly on the shutter number, not in-between.

Shutter Setting 6 is for NORMAL picture-taking, such as scenes and people. If you are taking pictures of moving subjects, use 7 or 8 whenever possible.

Shutter Settings 7 and 8 are for action pictures with 8 being for the fastest action. When using a telephoto lens, use these settings whenever possible to prevent any camera movement from showing in the picture.



Shutter Setting 5 must be used for all flashbulb exposures, and can also be used for normal scenes when lighting is too dim to use the normal setting of 6.

Shutter Setting 4 is the slowest setting, and should be used only when the camera is on a tripod or supported in a similar manner to prevent movement. Use this setting when the lighting is too dim for higher settings.

When using electronic flash units, use shutter setting 5 or higher.

Using the LC-3 Meter

(1) Turn the inner dial on the meter so that one of the index marks points directly at the exposure index of the film you are using. The numbers alternate between the two scales on either side. Exposure indexes (also called ASA film speeds) for different films will be found on page 8 and on the film instruction sheet.

(2) Turn the outer dial so that the pointer lines up with the shutter number you have selected. Always set the shutter dial and the meter dial directly on a shutter number, not in-between.

(3) Aim the camera and attached meter toward your picture subject.

The meter needle will point to either a black or white channel, leading up to the lens opening number to use. If the meter needle indicates a setting between two numbers, set the lens in the same way.

There are three groups of lens opening numbers on the lens mount so that one will always be convenient to see from the top.

1 Set pointer to exposure index of your film. Setting of 10 is shown.

2 Turn outer dial to set pointer at shutter number. Setting of 5 is shown.



3 Follow needle up the channel to lens opening. Lens number 6 is shown.



For average scenes, aim the meter directly at the subject and slightly downward to minimize the "reading" from skylight. If your subject is in surroundings that are lighter or darker than the subject itself, aim your meter at close range so that the surroundings do not influence the reading. Try to "read" average tones such as a person's face, or if this is not possible, take a reading from the back of your hand held about 4 inches from the meter. Be careful not to read your own or the meter's shadow.

The f/stop numbers on the meter dial (directly above the lens numbers) are for use with the C3 accessory lenses.

Set the meter's shutter number pointer (on outer dial) on EVS if you wish to read directly in EVS numbers instead of lens opening numbers. (See page 12.)

Check the "zero adjustment" of your meter occasionally by completely covering the light cell window. If the needle does not read zero, adjust the screw on the back of the meter until it does.

EXPOSURE INDEXES

COLOR	daylight tungsten	
Ansochrome Daylight	32	8*
Super Ansochrome Daylight	100	25*
Kodachrome Daylight	10	5*
Kodachrome Type F	10*	10*
High Speed Ektachrome Day.	160	64*
Ektachrome Daylight	32	10*
Ektachrome Type F	20*	16*
Kodacolor	32	20

*See filter instructions packed with these films.

BLACK AND WHITE

Adox KB14	16	12
Adox KB17	32	24
Adox KB21	80	64
Anso Super Hypan	500	400
Kodak Panatomic-X	25	20
Kodak Plus-X Pan	80	64
Kodak Tri-X Pan	200	160

Use daylight exposure index when taking pictures in daylight. Use tungsten index when using artificial light such as photofloods.

Now that you have tried the camera adjustments without film, you are ready to load the camera and start taking pictures.

1 Loading the Camera

Your Match-Matic C1 uses 35mm film cartridges, 20 or 36 exposures, either color or black-and-white film.



1 Open the back by depressing the catch at the end of the camera. Pull out the rewind knob on the bottom of the camera (the knob with the arrow) and insert a 35mm cartridge with the small end facing up. Push in the rewind knob, turning if necessary, to engage the cartridge spool.

2 Hold the cartridge in the camera and thread the end of the film (the leader) completely through the slot in the take-up spindle. Turn

the wind knob about one-half a turn to make sure the film folds under itself and is secure on the shaft.

3 Take up the slack in the film leader with the wind knob and turn a little more to engage the perforations on both sides of the film on the sprocket teeth. If the sprockets stop turning before the teeth are engaged in the film holes, release the film catch and continue turning. Close the camera back.



4 With the back closed, turn the wind knob as far as it will go without forcing. Hold down the film catch and turn the wind knob about a quarter of a turn, release the catch and turn knob until it stops. Repeat this operation. The film is now in the correct position for the first picture. Set exposure counter dial by turning counterclockwise to "0". Dial will indicate number of pictures taken.

Press shutter cocking lever down and operate shutter release smoothly for each picture. Care should be taken so that the finger does not interfere with the up-stroke of the cocking lever when the shutter is released.

Always wind film immediately after taking a picture by holding down the film catch for a quarter of a turn, then releasing catch and winding until the knob stops.

Unloading

When the exposure counter dial reads 20 or 36, and you have taken that last picture, you have taken all of the exposures on the film. **THE FILM MUST BE REWOUND BACK INTO THE FILM CARTRIDGE BEFORE OPENING THE CAMERA BACK.** To rewind the film, turn the rewind knob (on the bottom of the camera) in the direction of the arrow. Continue winding until the counter dial stops turning. Turn a few more times to make certain all of the film is rewound, then open the camera back and remove the film cartridge.

Have film processed as soon as possible after exposing. All types of film may be taken to your Argus dealer.



Although your camera's LC3 exposure meter gives lens openings directly without any calculations, you may wish to know the basis for Match-Matic operation.

Your Match-Matic C3 uses an adaptation of the exposure-value system (EVS). You will find exposure-value numbers listed under the daylight exposure table on the data sheet packed with the film.

The outdoor exposure guide on this page also lists exposure-value recommendations for different films under different lighting conditions. To use these numbers with your camera, all you have to do is to decide which shutter setting you want and subtract it from the exposure value to find the correct lens opening.

These values are for average subjects. For dark subjects, subtract 1 from the exposure value; for light subjects, add 1.

outdoor exposure guide IN EXPOSURE VALUES

COLOR FILM	Bright Sun	Hazy Sun	Cloudy Bright	Cloudy Dull
Anscochrome Daylight Ektachrome Daylight	13	12	11	10
Kodachrome Daylight (or indoor type*)	11½	10½	9½	8½
Ektachrome Type F*	12½	11½	10½	9½
Super Anscochrome Daylight	14½	13½	12½	11½
Kodacolor	13	12	11	10
BLACK AND WHITE				
Kodak Panatomic-X	13	12	11	10
Kodak Plus-X Pan	14	13	12	11
Ansco Super Hypan	16½	15½	14½	13½
Kodak Tri-X Pan	16	15	14	13

*Filters must be used with indoor-type color films exposed in daylight. Consult manufacturer's instructions.

Using the flash finder

The blue numbers on the rangefinder dial are the Flash Finder numbers. *The numbers as they appear on the dial apply to Kodachrome Daylight film with Sylvania Press 25B flashbulbs.* To find the correct lens opening to take a picture using this film and flashbulb, focus on the subject with the rangefinder and set the lens to the Flash Finder number indicated by the index mark.

For correct lens openings with other films and flashbulbs, consult the decal on the back of your flashgun reflector or the flash exposure guide on page 14 for additions to the Flash Finder number.

Unscrew bottom cap of flashgun and insert two size C PHOTOFLASH batteries or a BC unit. Press red button on top of flashgun to eject used flashbulbs.



LENS SETTING WITH FLASH		
FILM	EXPOSURE RANGE (mm)	LENS OPENING
KODACHROME SAFETY	PHOTO 25 B	f/11 to f/16
	PHOTO 25	f/11 to f/16
KODACHROME SAFETY	PHOTO 25 B	f/11 to f/16
	PHOTO 25	f/11 to f/16
KODACHROME SAFETY	PHOTO 25 B	f/11 to f/16
	PHOTO 25	f/11 to f/16
KODAK SAFETY & BROWN SAFETY		

EXAMPLES: Using Kodachrome Daylight film and Sylvania Press 25B flashbulbs, you focus on your subject and find the Flash Finder reads 5. Set the lens opening at 5 for correct exposure.

Using Ansco Supreme film and Sylvania Bantam 8 flashbulbs, you focus on the subject and find the Flash Finder reads 4. The table on this page says to add 2 for this film and flashbulb, therefore you add 2 to the Flash Finder reading of 4 and arrive at 6. Set the lens opening at 6.

USE A SHUTTER SETTING OF 5 (Q) WITH ALL TYPES OF FLASHBULBS. Use shutter settings 5 through 8 with electronic flash units.

Flashbulbs occasionally shatter, and to avoid any possible damage, a shield of translucent material may be used over the face of the reflector. Never use flash in an explosive atmosphere.

flash exposure guide

FILM ▼	BULB ►	Sylvania Bantam 8	Sylvania Press 25	Sylvania Press 25B
Ektachrome Type F		add 1	add 2½	—
Kodachrome Type F		add ½	add 2	—
Kodachrome Type A		add ½*	add 1*	—
Kodacolor		add 1	add 2½	—
Ektachrome Daylight		Use blue flashbulbs with Daylight color film.		add 2
Ansochrome Daylight				0
Kodachrome Daylight				add 3½
Super Ansochrome Daylight				
Kodak Tri-X		add 4	add 5	—
Kodak Plus-X		add 2½	add 4	—
Ansco Supreme		add 2	add 3	—
Kodak Panatomic-X		add 1	add 2½	—

*81C-type filter required



Hints on Flash

Always set the lens opening to the exact value the Flash Finder indicates. For example, you may find that the index mark, after focusing, will fall between two numbers. Set the lens opening in the same manner.

If it is found that a lens number larger than 8 is necessary for some close-up flash pictures, use one or more thicknesses of white handkerchief over the flash reflector to reduce the amount of light from the flashbulb. One thickness will reduce the light by approximately one number, two thicknesses by two numbers, and so on. For example, if the Flash Finder number is 8, and the required addition to that number is 2, the lens opening necessary would be 10. Use two thicknesses of handkerchief over the reflector and set the lens opening at 8.

For other film and flash-bulb combinations and for electronic flash units, change the recommended guide numbers to Flash Finder numbers.

GUIDE NUMBERS	USE FLASH FINDER NUMBER and
23 — 26	— subtract 2
27 — 32	— subtract $1\frac{1}{2}$
33 — 40	— subtract 1
41 — 48	— subtract $\frac{1}{2}$
49 — 58	..... 0
59 — 68	..... add $\frac{1}{2}$
69 — 80	..... add 1
81 — 94	..... add $1\frac{1}{2}$
95 — 115	..... add 2
116 — 138	..... add $2\frac{1}{2}$
139 — 165	..... add 3
166 — 195	..... add $3\frac{1}{2}$
196 — 232	..... add 4
233 — 277	..... add $4\frac{1}{2}$
278 — 330	..... add 5

Care and servicing of camera

Your Match-Matic C3 is a fine camera and worth caring for. To keep your C3 and LC3 Exposure Meter in perfect working order, protect them from dust, moisture, and heat. Do not store the camera in your car's glove compartment or any other place where temperature tends to rise. The fine lens of your C3 is ground, polished, and coated with extreme precision. If it needs cleaning, blow off the dust first, then use a soft brush with a light touch or clean it with lens tissue. Use lens cleaning fluid only if it becomes absolutely necessary. Working parts of your C3 contain fine threads, tiny screws, and sensitive adjustments. Never force any parts of the camera to work if they resist.

For service or replacement parts, contact your local Argus dealer or write to:

CUSTOMER SERVICE DEPARTMENT,
ARGUS CAMERAS, ANN ARBOR, MICHIGAN
or ARGUS CAMERAS OF CANADA, LTD.,
TORONTO, ONTARIO

Putting Depth in your Pictures

Did you know that if you focus your camera lens on a person at a certain distance, the picture will also be sharp in front of and behind the person? This "range of sharpness" (depth of field) depends on the lens opening used and the distance on which the lens is focused.

The larger the lens number, and the greater the lens focusing distance, the greater is the lens' range of sharpness. The lens will have its shallowest range of sharpness when it is used at the smallest number ($f/2\frac{1}{2}$) and the shortest focusing distance.

When your pictures require that subjects at more than one distance be in focus, use the largest number possible (such as 6, 7, or 8) under the lighting conditions that you have. To do this, it may be necessary to go to a lower shutter setting, especially when you are using a slow film such as Kodachrome.



When the lens is focused on the center subject and the lens opening of $f/2\frac{1}{2}$ is used, only the center subject will be in focus as the range of sharpness is not very great. Example: Kodachrome Daylight film, shutter setting 8, lens opening $f/2\frac{1}{2}$, bright sunlight.

To show all three subjects sharply, use a larger lens number such as $f/8$. Set the lens opening dial between 7 and 8. The range of sharpness is increased and all the subjects are sharp. Example: Kodachrome Daylight film, shutter setting 8 (camera on tripod), lens opening $f/8$, bright sunlight.



With a large lens opening, range of sharpness is very shallow. Notice only the boy is in focus.



With a small lens opening, the sharpness range extends from near the camera to infinity, and everything is in focus.

lens and shutter

Comparisons

Your Match-Matic C3 uses "additive" numbers for the lens openings and shutter settings.

The lens openings and their equivalent f/stops are:

3½	4	5	6	7	8
1/3.5	1/4	1/5.6	1/8	1/11	1/16

The shutter settings and their equivalent speeds in fractions of a second are:

4	5	6	7	8
1/10	1/30	1/60	1/125	1/300

filters



Your camera lens has a built-in retaining ring for Series V (1 3/8") filters and supplementary lenses. To insert filter, unscrew retaining ring, drop filter in front of lens, and replace ring. The filter can be held in by a standard Series V lens shade if desired.

When using filters with your camera, divide the film's exposure index by the filter factor. Set the result on the meter's exposure index scale.

S P E C I F I C A T I O N S

PICTURE SIZE: 1" x 1 $\frac{3}{16}$ " transparencies in 2" x 2" mounts, or 3 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " standard photo-finishers' black-and-white prints.

FILM SIZE: 35mm cartridge (size 135), 20 or 36 exposure, color or black-and-white film.

LENS: 50mm f/3.5 Argus Cintar, color-corrected, coated anastigmat; lens openings from 3 $\frac{1}{2}$ to 8 (f/3.5 to f/16); rangefinder-coupled automatic focusing; screw-type interchangeable lens mount; lens' hyperfocal distance: 46' 2" at opening 3 $\frac{1}{2}$; field covered: 27° x 40° angular at infinity.

SHUTTER: Behind-the-lens type; shutter settings from 4 to 8 (1/10 to 1/300 second) plus Bulb (B) for time exposures; ASA cable release socket; manual cocking lever; synchronized for bayonet-base flashbulbs and X (zero) delay electronic flash units.

FLASH: Plug-in type, synchronized through mounting prongs, accepts two size "C" PHOTOFLASH batteries or a B-C power unit; five inch polished reflector with bayonet-base type socket; push-button lamp ejection.

LENS ACCESSORIES: Built-in retaining ring accepts Series V (1- $\frac{3}{16}$ ") filters and supplementary lenses. Standard Series V lens shade can be used in place of the filter retaining ring.

OTHER FEATURES: Rugged, molded body with bright metal and two-tone leather-grain trim, weight 30 oz.; hinged, die-cast metal back; automatic exposure counter; LC3 Exposure Meter for accurate exposures; tripod socket; genuine top grain leather carrying case with shoulder strap.

Record your camera's serial number and keep it in a safe place for future reference.

accessory lenses for the C3

The screw-type interchangeable lens mount on your Match-Matic C3 permits the easy removal of your regular lens and the installation of the Argus Telephoto and Wide Angle Lenses. Both lenses couple to the rangefinder.



100mm TELEPHOTO

Precision made, four-element f/4.5 lens cuts distance in half and lets you take candid close-ups from far away.

35mm WIDE ANGLE

Provides 87% more picture area than the normal C3 lens. Wonderful for group and scenic pictures. f/4.5, four-element construction.

Argus 500

electromatic projector



Lets your color-slide show run itself.

Sit back, relax, and watch your slides change at pre-set intervals. If you like, you can change the slides yourself with the remote control. Brilliant, 500 watt blower-cooled illumination combines with the 4" Argus f/3.3 projection lens for big, life-like pictures, even in a small room.

Other outstanding features include completely electric operation, pre-heating of slides, remote control, and vinyl-covered metal carrying case.

Lifetime guarantee

Your Argus Match-Matic C3 Camera and LC3 Meter were manufactured, inspected and tested by skilled craftsmen. They are guaranteed to be free of defects in workmanship or material during their lifetime. If any servicing is necessary because of imperfections in materials or workmanship, your camera and meter will be factory serviced without charge.

Argus equipment which has been damaged, mishandled, or worn from extensive use will be factory serviced at established rates. Equipment purchased as used or rebuilt is not covered by this guarantee.

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