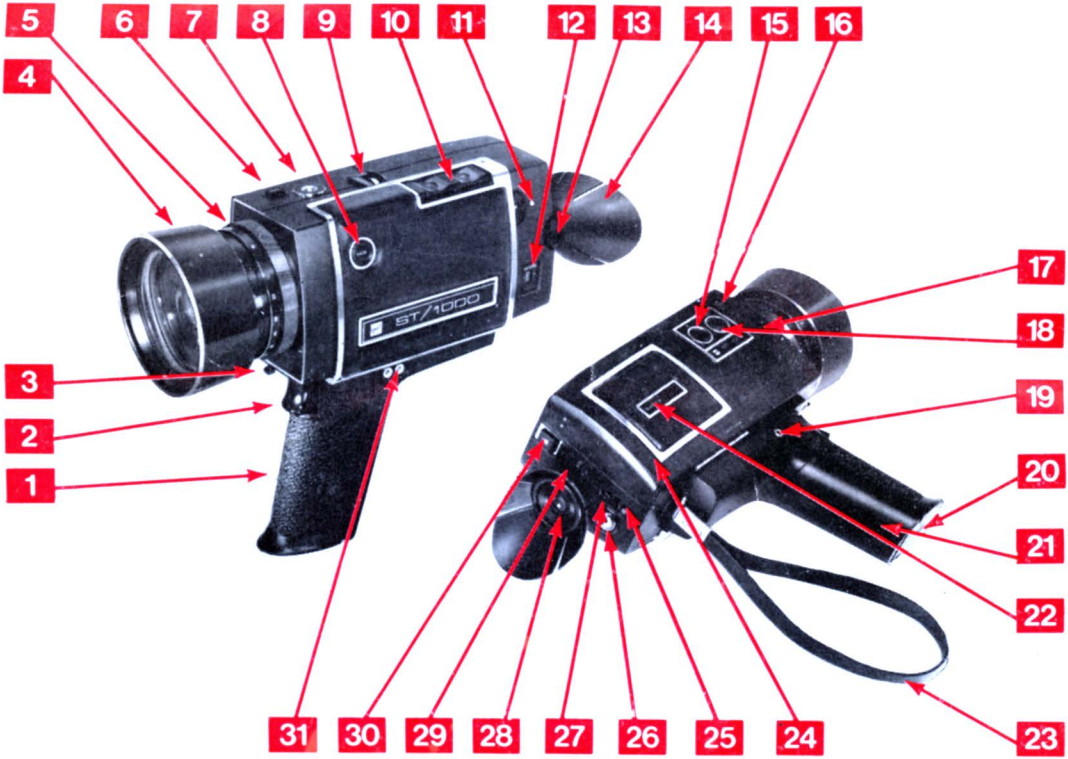
gaf

ST/1000 SUPER 8 MOVIE CAMERA

INSTRUCTIONS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ST/1000

GAF Corporation
140 West 51 Street,
New York, N.Y. 10020

The numbered arrows on the opposite page indicate the features listed below. Corresponding numbers appear in the text where the features are described.

FEATURES

1. Pistol grip
2. Trigger release
3. Trigger release locking lever
4. Focusing ring
5. Zoom ring with focal length scale
6. Filter button
7. Movie light socket
8. Fade-in/fade-out control
9. Automatic/Manual exposure selector wheel
10. Power-zoom switch
11. Speed control
12. Footage indicator
13. Viewfinder eyepiece adjustment wheel
14. Viewfinder eyecup
15. Slow motion button
16. Exposure control switch for ASA 500 films
17. Socket for securing lens shade
18. Backlight button
19. Remote control and battery charger socket
20. Tripod socket
21. Battery compartment cover
22. Film-type window
23. Wrist strap
24. Film cartridge compartment cover
25. Motor battery tester button
26. Battery tester
27. Electric eye battery tester button
28. Viewfinder
29. Viewfinder light stop
30. Latch for film cartridge compartment cover
31. Cable release sockets

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Fig. 1

Fig. 2

Fig. 3

Fig. 4

INSTALLING BATTERIES

Swing open battery compartment cover (Fig. 1). The motor battery holder* will emerge when its top edge is pressed upward (Fig. 2). The electric-eye battery holder is in the pistol grip, behind the motor battery holder.

To remove the electric-eye battery holder, depress top of release above holder, as far as it will go (Fig. 3). The battery holder will pop out, if loaded; when not loaded, it will drop out as pistol-grip opening is turned downward.

Load electric-eye battery holder with two PX625 mercury batteries*.

The metal contact in the electric-eye battery holder has a plus (+) sign in one compartment and a minus (—) sign in the other (Fig. 4). Load one battery with embossed + sign *down,* toward the + sign on metal contact in holder. Load the other battery into — compartment with *unmarked* side downward. Press batteries into holder until they snap into place. Loaded holder is shown in Fig. 5.

Replace loaded battery holder into camera handle by inserting tab, marked "This Side Down," into slot under coil springs near bottom of pistol grip, then pushing top of holder against catch until it snaps into place.

Electric-eye battery current is drained only when light enters the lens of the *loaded* camera. To prolong life of batteries, keep lens cap on when loaded camera is not in use.

Load motor-battery holder with four AA-size 1.5 volt alkaline batteries. Press the flat (—) end of a battery against the spring in each compartment, then push in opposite (+) end. Labels indicate the correct orientation of the plus and minus ends.

Push the loaded holder into the pistol grip with the two terminals contacting the metal springs inside the handle (Fig. 6). Close battery compartment cover.

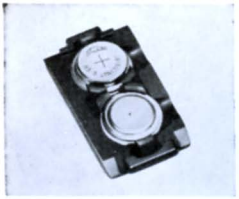

Fig. 5

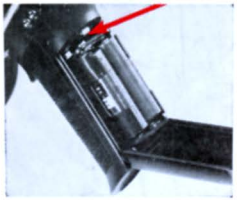

Fig. 6

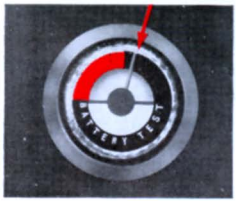

Fig. 7

Fig. 8

Standard (non-rechargeable) alkaline batteries will drive up to 25 cartridges through the camera; zinc-carbon flashlight batteries may also be used but will only be good for about 8 cartridges.

IMPORTANT: Clean all battery contacts at regular intervals. To remove deposits, wipe both ends of electric eye and motor batteries with fine sandpaper or other abrasive material. Since batteries may leak in time, remove them when camera is to be stored for a prolonged period.

*Supplied with the camera, either installed, or packed separately in the camera box.

TESTING THE BATTERIES

Depress *black* tester button (marked "EXP") [27] to test the electric-eye batteries.

Depress the *red* tester button (marked "MOT") [25] to test motor batteries.

When a button is depressed, the needle in the battery tester [26] should swing into the black portion of the scale (Fig. 7). If the needle stays in the red portion, the batteries must be replaced. Rechargeable motor batteries may be recharged.

CAUTION: Battery testing should take only a second or two. Holding either tester button depressed longer will cause excessive battery drain.

RECHARGING THE MOTOR BATTERIES

The GAF Super 8 Recharger unit is designed for use with alkaline batteries marked "Rechargeable" (Mallory SA 15AA or equivalent).

When the tester indicates that the rechargeable motor batteries are weak, push battery charger plug *all the way* into the remote control and battery charger socket [19]. Insert line plug into 120 volt AC electric outlet. Charge batteries overnight (from about 6 to 12 hours). Test battery condition again after recharging.

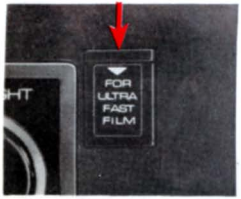

Fig. 9

Fig. 10

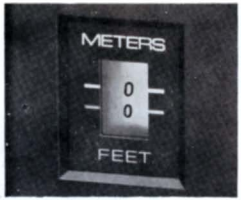

Fig. 11

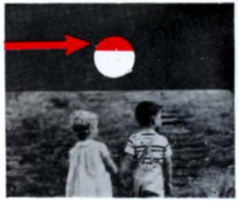
Fig. 12

LOADING THE CAMERA

Push up latch [30] and swing open film-compartment cover [24]. Insert a Super 8 film cartridge, label side up, with the film toward the lens. The notch in the cartridge must be *under* the cartridge-locking pin (Fig. 8). Press down the rear corners of the cartridge until it clicks into place. Close cover firmly.

As the camera is loaded, the cartridge automatically sets the correct film speed for exposure control. Films with the following daylight/tungsten ASA speed combinations may be used: 16/25, 25/40, 40/64, 64/100, 100/160, 160/250.

The camera will also accommodate GAF® 500 Black & White Film, as well as other films having a speed of ASA 500. To set the automatic exposure mechanism for ASA 500 speed films, pull down the exposure control switch marked "For Ultra Fast Film" (Fig. 9). "GAF 500" is now visible above the switch (Fig. 10) and the filter button [6] is depressed automatically. BE SURE TO RESET SWITCH WHEN SHOOTING WITH ASA 500 FILM HAS BEEN COMPLETED.

FOOTAGE INDICATOR

The footage indicator [12] shows how many feet (red figures) or meters (black figures) of UNEXPOSED film is in the cartridge. All the film in the cartridge has been exposed when the zeros appear opposite the lines (Fig. 11).

FILM-END SIGNAL

When almost all the film in the cartridge has been used, a red signal appears at the top of the film-movement indicator in the viewfinder (Fig. 12). The red area extends gradually; the entire circle is covered when all the film has been exposed.

UNLOADING EXPOSED FILM

When all the film has been exposed, run the camera for an additional 10 seconds, then open the film compartment cover. Remove the cartridge by lifting its rear edge up and out; the word "EXPOSED" now appears on the film.

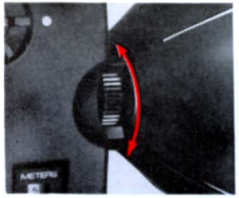

Fig. 13

Fig. 14

Fig. 15

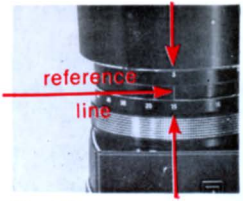

Fig. 16

If a partially-exposed cartridge is removed from the camera, some film is lost and the footage indicator returns to 50 (feet) and 15 (meters).

Have the film processed without delay.

USING THE VIEWFINDER

The bright, through-the-lens reflex viewfinder shows each scene as it will appear projected on the screen*. The rubber shield on the viewfinder eyepiece [14] may be turned to fit either eye.

*If the view is blocked, turn the light-stop knob [29] to the right.

To adjust the viewfinder to your eye:

1. Zoom lens to the 65mm telephoto position by depressing front end of power-zoom switch [10].
2. Align the ∞ (infinity) symbol on the focusing ring [4] with the reference line, then look at a distant object through the viewfinder.
3. Turn the milled adjustment wheel [13] (Fig. 13) first clockwise, then counterclockwise, until the image is sharpest.

FOCUSING

Zoom lens to telephoto position (align figure 65 on the zoom ring with the reference line). Turn focusing ring until subject's image appears sharp on microprism focusing disk in viewfinder (Fig. 14). If the microprism area is blurred (as in Fig. 15), the image on the film will be blurred, also.

The distance scale may also be used for focusing. Line up with the reference line the figure on the focusing ring that corresponds with the camera-to-subject distance in feet.

For example, if the camera-to-subject distance is 5 feet, then the figure 5 is lined up with the reference line (Fig. 16).

USING THE ZOOM LENS

The zoom lens does the work of several separate lenses. It has a 10 to 1 focal length range and is continuously adjustable from the 6.5mm wide-angle setting to the 65mm telephoto setting.

IMPORTANT! When the zoom lens is in the long telephoto position (40 to 65mm), the *slightest* camera motion will result in a jumpy screen image. *Use a tripod* to keep the camera steady when the lens is used in the 40 to 65mm focal length range.

When lined up with the reference line, the figures 6.5, 10, 15, 20, 30, 40, 50, and 65 on the focal length scale around the lens [5] indicate in millimeters the focal length of the lens at that setting. For example, when 15 is lined up with the reference line (as in Fig. 16), the effective focal length of the lens is 15 millimeters.

The zoom feature is used to control the subject's image size and the area included in the scene.

At the 6.5mm wide-angle setting the subject's image is the smallest and the surrounding area included is the greatest. From the same camera position the 65mm telephoto setting will make the subject larger and it will reduce the amount of surrounding area. At in-between settings, the subject's size and the area covered will vary between the two extremes.

When the front part of the power-zoom switch (marked 'T") is depressed, the lens zooms toward the telephoto (65mm) position. As it does, the subject becomes increasingly larger in the image.

When the rear section of the power-zoom switch (marked "W") is depressed, the lens zooms toward the wide-angle (6.5mm) position, gradually decreasing the size of the subject in the image.

Fig. 17

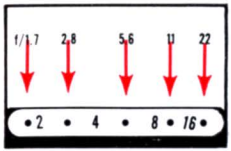

Fig. 18

The zoom feature may be utilized in two ways:

1. To control the subject's size in the image, operate the zoom switch while the subject is observed in the viewfinder. When the size is right, stop zooming and start the camera.

2. The subject's size may be changed while the camera is running. To get a moving-toward-the-subject effect, depress the front end of the power-zoom switch. Depressing the rear portion of the switch will result in a moving-away-from-the-subject effect.

The focal length of the lens may also be adjusted manually by turning the zoom ring [5].

EXPOSURE

The through-the-lens CdS exposure meter provides completely automatic exposure control

Fig. 19

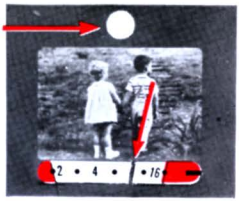

Fig. 20

when the exposure selector wheel [9] is turned to the click stop in the "AUTO" position (Fig. 17). The needle in the viewfinder shows the f/stop set by the electric eye.

Some lens openings on the f/stop scale are indicated by dots. The lens openings represented by the dots are shown in Fig. 18.

When the light is too low to produce properly-exposed movies, the needle remains in the red area at the left side of the f/stop scale (Fig. 19). When the light is too bright, the needle moves into the red area on the right side.

NOTE: The automatic exposure control operates only when the camera is loaded, or the small white button in the film compartment is depressed manually.

To set the lens opening manually, turn selector wheel clockwise, toward "MANUAL," until needle in viewfinder is over the desired f/stop. Fig. 20, for example, shows the lens opening set at f/8.

BACKLIGHT BUTTON

When the sun is behind the subject, the area facing the camera is usually too dark. To lighten the dark areas in the image, keep the backlight button [18] depressed while the camera is running.

FILM MOVEMENT INDICATOR

A fast or slow flickering in the film movement indicator above the viewfinder image (shown in Fig. 20) indicates that the film is advancing properly. If the flickering does not start, or stops before the end of the film is reached, the cartridge may be defective and should be replaced.

MAKING MOVIES

IMPORTANT: Turn Automatic/Manual selector wheel [9] to "AUTO," set speed control [11] at 18*, and make sure that switch for ASA 500 speed films [16] is set for normal filming ("GAF 500" must *not* show above switch unless an ASA 500 speed film is used).

When the camera is loaded, the lens focused, and the viewfinder adjusted to your eye, just press the trigger to make movies automatically.

Keep camera level and steady. Camera movement and inaccurate focusing are especially noticeable when the lens is used in the telephoto position. Use a tripod whenever feasible; the tripod socket is on the bottom of the pistol grip.

*Camera also features a 24 frames-per-second "sound" speed, usually required for synchronized-sound movie making. To shoot at 24 fps, turn speed control to 24.

Fig. 21

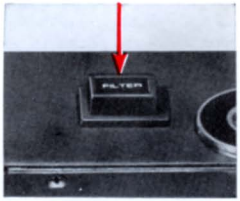

Fig. 22

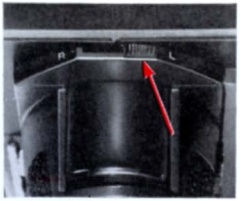

Fig. 23

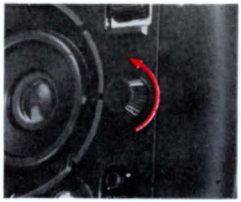

Fig. 24

OUTDOOR MOVIES

A built-in orange filter, positioned behind the lens, adjusts the camera to outdoor work with indoor film.

Clear or hazy sunlight coming from behind or from either side of the camera is best for outdoor movies.

For backlighted scenes remember to keep the backlight button depressed while the camera is running.

INDOOR MOVIES

"Indoor" means movies made under artificial lighting. Movies made indoors by daylight are to be handled as "outdoor" movies.

All GAF movie light models, available as accessories, fit into the socket [7] on top of the camera (Fig. 21). Attaching the movie light automatically adjusts the camera to indoor filming by removing the daylight filter from the optical system.

If a movie light of a type that does not fit into the socket, a floodlight, or existing artificial light is used, the filter button [6] must be *held* depressed while the camera is running (Fig. 22).

LOCKING THE TRIGGER RELEASE

The trigger can be locked in two positions:

1. To prevent accidental operation of the camera, lock the trigger by moving lever on the bottom of the camera [3] to the "L" (lock) position, as shown in Fig. 23.
2. To get into the scene, place the camera on a tripod, aim it at the scene, focus, turn the viewfinder light-stop knob to the left* (Fig. 24), then press the trigger and move the lever to the "L" position. The camera will keep running until the trigger is unlocked by moving the lever to the "R" (run) position.

*The light-stop knob closes the viewfinder to prevent light from entering the optical system from the rear. To open the viewfinder, turn the light-stop knob to the right.

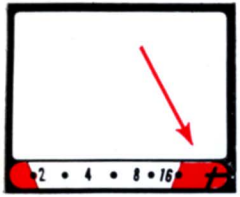

Fig. 25

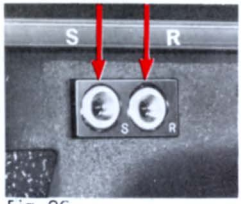

Fig. 26

SLOW MOTION

To make "slow-motion" movies at 36 frames-per-second, depress the slow motion button [15], then press the trigger release. In the projected movie everything will move slowly; each scene will stay on the screen for twice the time it took to photograph it. Release button when slow-motion movies are no longer desired.

The 24 frames-per-second "sound" speed (speed control [11] set at 24) may also be used to achieve a slow-motion effect. Projected at the standard 18 fps, action in movies taken at 24 fps will appear to be slowed down slightly.

FADE-IN/FADE-OUT CONTROL

The automatic electro-fade feature may be used to add a "professional" touch to movie presentations.

When the fade-in control is used, the image in the projected scene will emerge gradually from complete darkness.

To fade-in a scene, hold the fade switch [8] depressed while you watch the movement of the needle in the viewfinder. As the needle comes to a stop at the extreme right end (Fig. 25), start the camera and release the switch.

When the control is used for a fade-out, the image in the projected scene will fade out gradually.

To fade-out at the end of a scene, depress the "fade" switch while the camera is running and hold it depressed. Keep the camera running until the needle in the viewfinder reaches the horizontal line in the red segment (as in Fig. 25).

The fade-in/fade-out control may be used only with the exposure selector [9] set at "AUTO."

REMOTE CONTROL

The accessory 8-foot remote control cord has a plug at one end and a switch at the other.

Place the camera on a tripod or other solid support, aim it at the scene and turn the viewfinder light-stop knob to the left. Insert the plug into the remote control socket [19] on the right side of the camera handle; slide the remote switch to "off," then press the trigger and lock it. Locking the trigger in the "running" position will not operate the camera when the remote control cord is plugged in.

Operate the camera from a distance with the remote control switch.

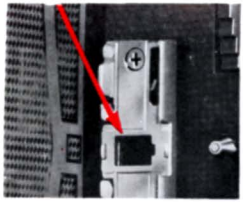

Fig. 27

A long cable release (available at photo dealers) may also be used for remote operation, utilizing the cable-release socket [31] marked "R" (Fig. 26).

SINGLE-FRAME EXPOSURES

Screw a standard cable release into the cable-release socket marked "S" (shown in Fig. 26). A single frame is exposed when the plunger of the cable release is depressed.

LENS SHADE

Use lens shade (accessory) outdoors and indoors, to prevent glare caused by stray light falling on lens. Do *not* use lens shade when the movie light is attached to the camera.
Follow instructions packed with lens shade for attaching it to camera.

CAMERA CARE

Protect camera from dirt, rain, dampness, and excess heat. Avoid touching the lens. To clean lens, breathe on it first, then wipe it gently with a soft, lintless cloth or tissue. Do not use chemically treated eyeglass tissues as they might damage the lens coating.

Clean out the interior of the camera occasionally with a camel-hair brush, paying special attention to the film gate (Fig. 27).

Do not attempt to remove or oil any part of the camera. If anything goes wrong, don't try to repair it. Take it to a dealer, or send it to the nearest GAF Consumer Photo Service Center shown in the following list:

GAF Corporation
Consumer Photo
Service Center

Emma Street
Binghamton, N.Y. 13902

3500 North Kostner Ave.,
Chicago, Ill. 60641

16217 Kittridge Street
Van Nuys, California 91406

39-22 30th Street,
Long Island City, N.Y. 11101

P.O. Box 490
Portland, Ore. 97207

IN CANADA

GAF (Canada) Ltd.
Consumer Photo
Service Center

2403 Stanfield Road
Mississauga, Ont.

9411 Cote De Liesse
Montreal 760, Quebec

1195 West 8 Ave.
Vancouver 9, Brit. Col.

ACCESSORIES

Special lens shade. Prevents glare by protecting camera lens from stray light.

GAF® Movie-Lite II. A compact, powerful light source; fits socket on the top of the camera.

FILM

Use GAF® Color Movie Film Super 8 for thrilling home movies in sparkling color. Available at photo dealers.

PROJECTORS

Simple-to-operate, fully automatic, reel-to-reel or cartridge-loading GAF® movie projectors provide "theater quality" projection for home movies; they accommodate both Super 8 and regular (double) 8mm films.

TIPS FOR BETTER HOME MOVIES

■ Make films more entertaining by telling a story with the camera, instead of just showing a series of disconnected scenes. When filming a child's birthday party, for example, include the following scenes to create a simple story: getting up in the morning, the beginning of the "great day"—wrapping presents—baking or buying the birthday cake—getting dressed for the party—arrival of guests—party games—cutting the cake—guests leaving—cleaning up after the party, etc.

Another example: To turn a travel movie into a story, include (in addition to the usual "tourist attractions") scenes showing personal aspects of the trip: the family getting ready—leaving home—overnight stops—roadside restaurants—shopping for gifts—local people—heading for home, etc.

■ Utilize the zoom lens: shoot several scenes of each subject, some at the wide angle, others at the normal and telephoto settings. Vary overall views with close-ups in each scene.

■ Do not make movies in sunny weather only. Scenes made on cloudy days, even in rain, add

variety, make the movie more interesting. Mixing indoor and outdoor scenes also helps.

■ It is more fun to watch edited movies. As returned from the processor, the film often contains too much material. Use an inexpensive editor splicer (available at photo dealers) to assemble the best parts into an effective sequence.

■ Titles connect scenes into a smooth-flowing presentation. Camera stores sell a variety of titling outfits. Follow the instructions supplied with the titler.

Good titles can also be made without a titler, by including close-ups of signs. Practically every place has a sign that can be used as a title. In addition, road and street signs, billboards, and mailboxes can be utilized to identify and describe subjects.

* * *

The audience will enjoy the movies more if the projector and the screen are set up in advance. When the spectators are seated, only a flick of the switch is needed then to start the show.

WARRANTY

GAF Corporation warrants the GAF ST/1000 movie camera to be free from defects in material and workmanship for a period of twelve (12) months from the date of original purchase. The camera will be repaired or replaced, if necessary, without additional charge to the purchaser, if returned prepaid to the nearest GAF Consumer Photo Service Center shown in the list on page 13, specifying the difficulty encountered, the name and address of the selling dealer, and the exact date of purchase. GAF DOES NOT MAKE, AND SHALL NOT BE LIABLE FOR ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY OR ANY OTHER WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT TO THE GAF ST/1000 MOVIE CAMERA EXCEPT AS HEREINABOVE SPECIFIED.

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