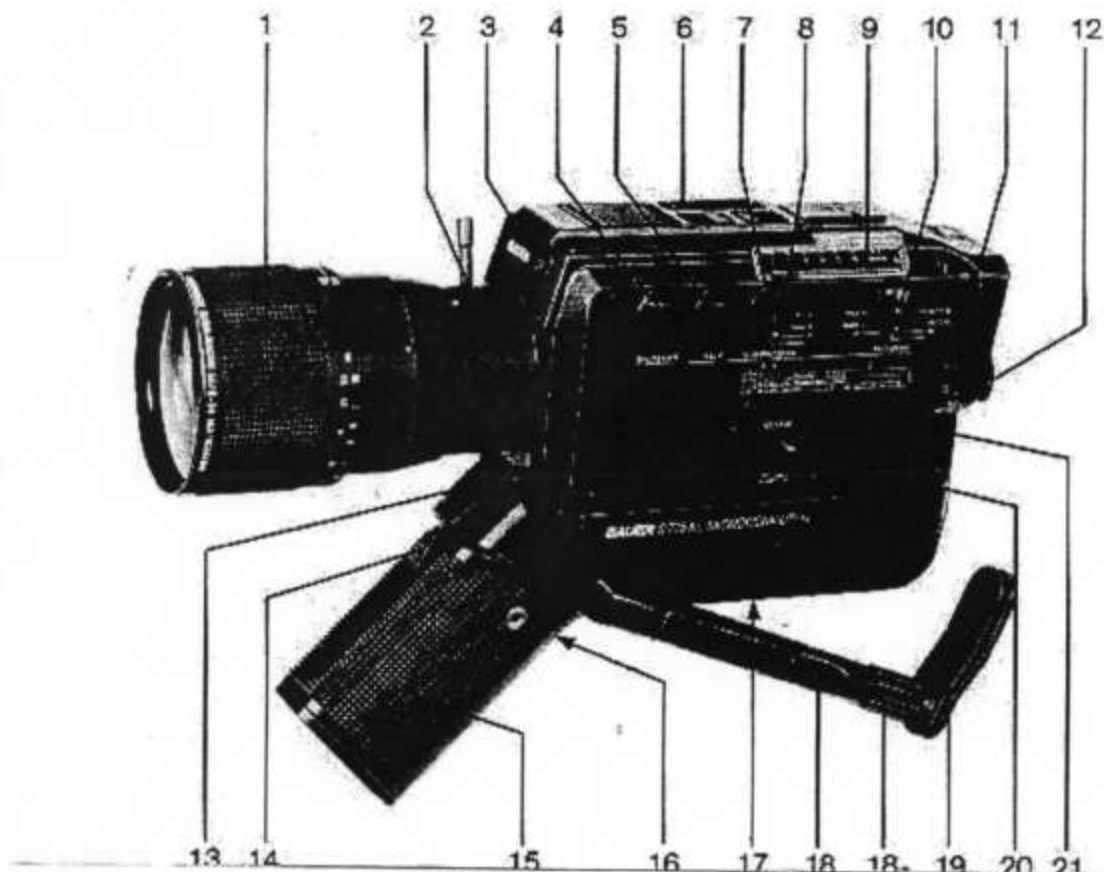


BAUER

S 715 XL microcomputer
S 709 XL microcomputer

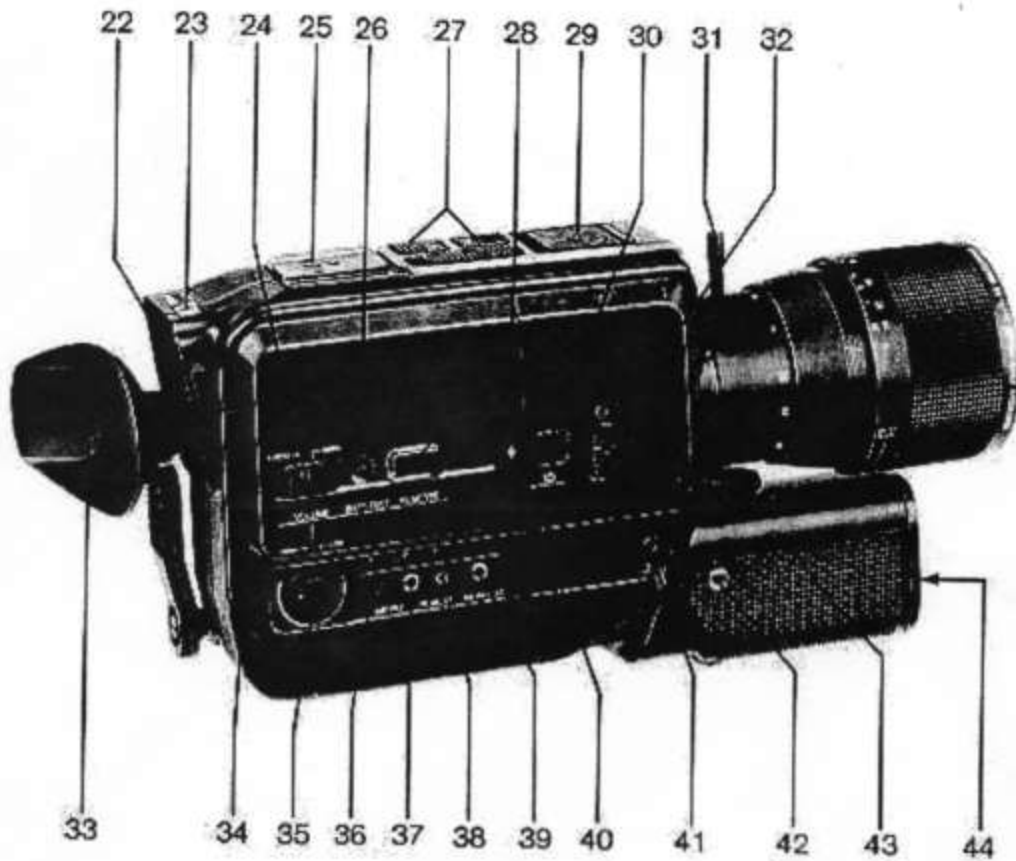
Instructions for Use





Operating elements

- | | | | |
|-----|---------------------------------------|----|-------------------------------------|
| 1 | Focusing ring | 22 | Head rest |
| 2 | Focal length setting ring | 23 | Recording control instrument |
| 3 | Action light | 24 | "AUTO/MANU" switch |
| 4 | "BACKLIGHT" button | 25 | Microphone socket |
| 5 | "FADE" button | 26 | Battery test button |
| 6 | Power zoom speed switch | 27 | Power zoom control buttons |
| 7 | "SUB PROGRAM" switch | 28 | Film-type indicator window |
| 8 | Memo slide | 29 | Cover flap |
| 9 | Film counter | 30 | Cartridge chamber latch |
| 10 | Program switch | 31 | Zoom lever |
| 11 | Knurled wheel for eyepiece adjustment | 32 | Filter slide |
| 12 | Eyepiece | 33 | Eyecup |
| 13 | Camera release | 34 | Cartridge chamber door |
| 14 | Release lock | 35 | "VOLUME" control |
| 15 | Hand grip (battery housing) | 36 | Microphone jack |
| 16 | Hand grip lock | 37 | Microphone jack |
| 17 | Tripod socket | 38 | "REMOTE" control jack |
| 18 | Shoulder support | 39 | "MONITOR" jack |
| 18a | Knurled nut | 40 | Film level |
| 19 | Folding shoulder rest | 41 | Flash-synch contact |
| 20 | Lap dissolve switch | 42 | Jack for bridging plug |
| 21 | Eyepiece mask | 43 | Hand grip, folded (battery housing) |
| | | 44 | Battery compartment cover |



Foreword

The Bauer S 715 XL/S 709 XL in your hands is a camera which is certainly one of today's best equipped and most advanced universal direct-sound movie cameras.

It incorporates the latest in optical and electronic engineering know-how.

A micro-computer controls all vital functions, particularly the various programs which open to you a vast field of filming opportunities. This micro-computer also checks all functions and thus prevents false operation of the camera.

The extremely fast lens allows shooting indoors without special movielights.

To make the most out of your camera we highly recommend to read these instructions very carefully before you start filming. This manual contains a lot of good filming hints.

For the beginning we recommend to go through all the operational elements and steps without film or - even better - load the camera and consider the first roll as a mere test film.

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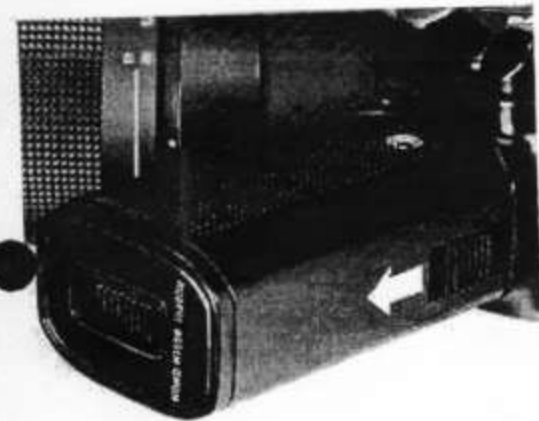
1. How to prepare the camera



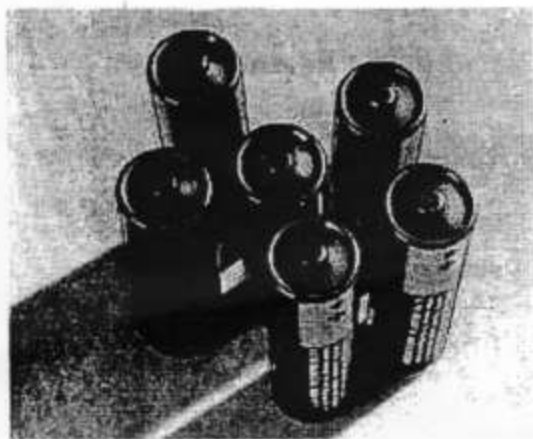
Swinging out and folding the hand grip 43

Swing out the hand grip 43; the illustration shows you which way to swing.

Folding of the hand grip is possible **only** after unlocking the hand grip lock 16!



8



Power supply

Six type-AA 1.5 v batteries supply the power for all electrical and electronic elements.

Use only high-efficiency batteries, preferably the alkaline-manganese type.

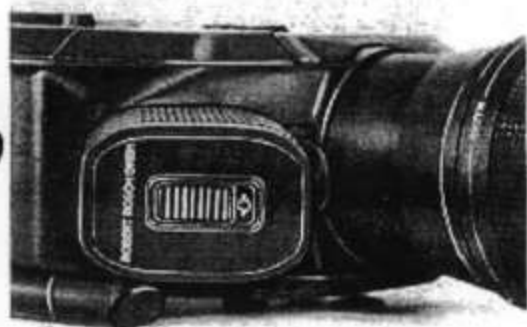
One set of batteries is normally good for exposing about 10 rolls of sound film.

You may also use rechargeable nickel-cadmium batteries, provided they comply with DIN standards and are of adequate size and efficiency.

We recommend the Akkuset Bauer NC 700 battery set (special accessories, see page 82).

9

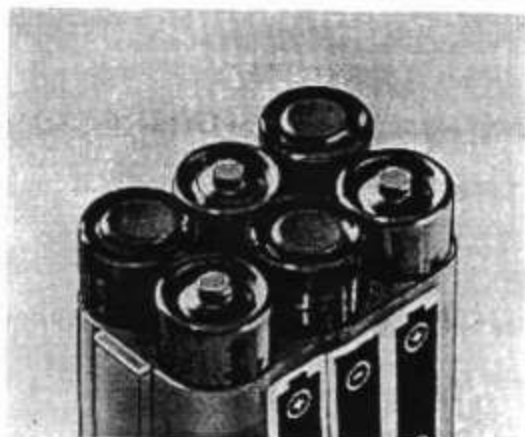
Inserting the batteries



The hand grip 43 serves as a battery housing.

Loosen the battery compartment cover 44 on the hand grip 43 by pushing the latch in the direction of the arrow.

Remove the cover 44 and pull out the battery magazine.



The battery magazine consists of two parts which can be easily separated for insertion of the batteries.

Watch the pole marks when inserting the batteries:

The positive and the negative pole marks of the batteries must match the respective sign ("+" and "-") on the magazine.

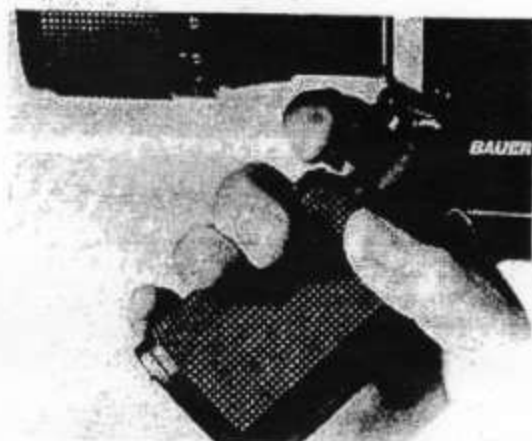
10



When the magazine has been filled you insert it into the battery compartment.

Lock the battery housing with the cover 44.

Re-fold the hand grip 15.



Switching the power supply on and off

Your Bauer camera has a central power supply which is switched on and off via the camera release 13.

The release is a two-step trigger:

- On its first step (first pull-off point) the release switches on the power supply. As a result the light meter and the recording amplifier (only when a sound film cartridge is loaded) start operating.
- On the second step (release fully depressed) the release touches off the camera run.

The camera release 13 can be locked on both steps with the lock 14. This may be necessary for remote control or for extended single frame series.

11



Battery test

First depress the camera release **13** to its first step. It can also be locked in this position.

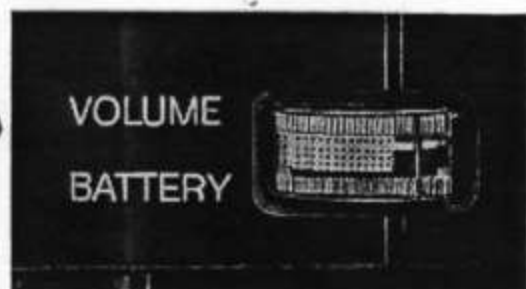
This switches on the central power supply.



Depress the battery test button **26**.

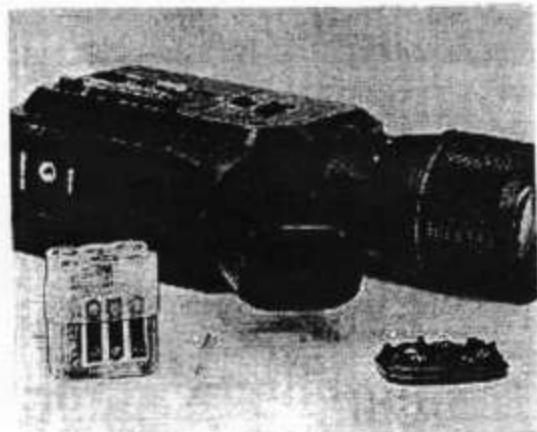
The deflection of the needle in the control instrument **23** indicates the condition of the batteries: the needle must reach the green zone.

Batteries which make the needle deflect only up to the green/white margin should not be used for sound filming because their energy is too low to ensure good sound quality.



When the battery voltage drops below a certain minimum level, the micro-computer automatically prevents the camera from starting.

12



Hint:

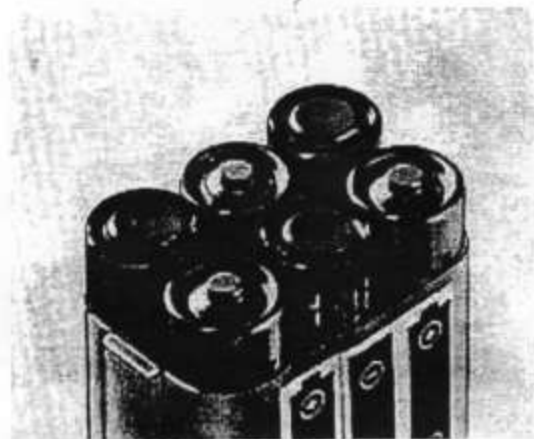
Particularly in winter it is recommended to check the battery condition frequently. The battery capacity is greatly reduced at low temperatures. Your dealer will be glad to supply an additional battery magazine (part no. 8 690 560 206).

If you lay the camera aside for a longer period of time you should make sure to remove non-rechargeable batteries.

How to exchange the batteries

Never exchange only one battery. Always replace the whole set of batteries.

Use only high-efficiency batteries, preferably the alkaline-manganese type.



13



Positioning the shoulder support

The shoulder support 18 of the camera ensures a steady hold of the camera for free-hand filming.

The shoulder support can be adjusted to suit your personal requirements.

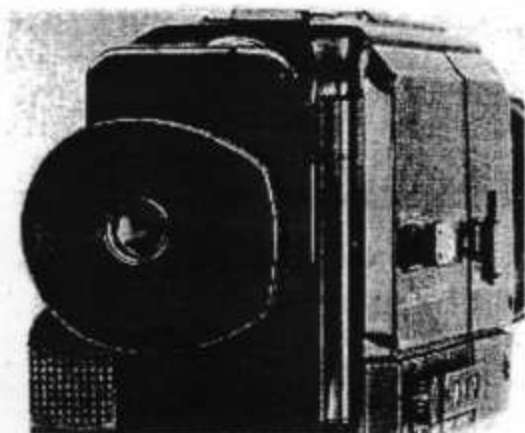
First swing out the shoulder support to a position in which you can hold the camera conveniently.

The extension can be steplessly adjusted after loosening the knurled nut 18a (rotate to the left). Then tighten the nut.

The folding shoulder rest 19 can also be adjusted to suit your requirements; both wings can be rotated against each other.



14

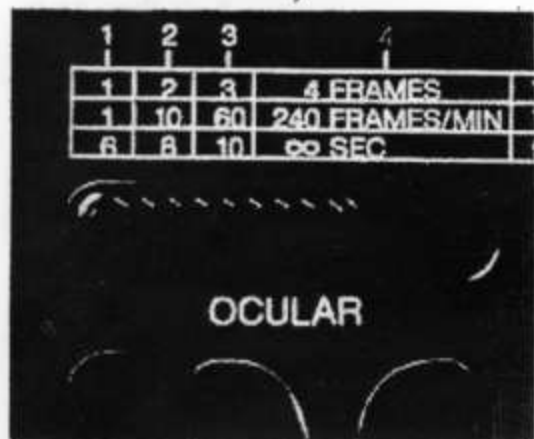


Eyecup 33

The eyecup 33 on the eyepiece prevents stray light from disturbing your viewing and focusing. This eyecup can be swung to the left or to the right to suit your individual way of viewing.

The camera comes with a choice of three different eyecups.

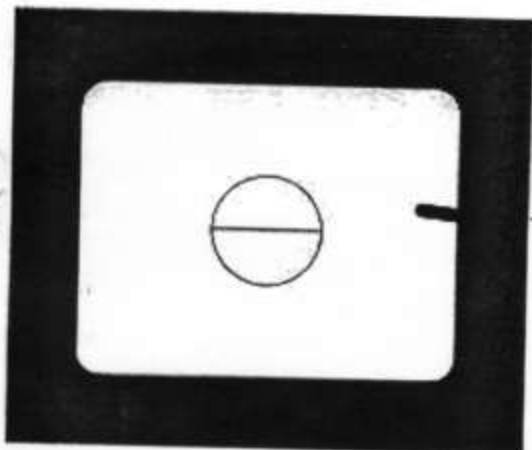
If you want to put on another eyecup you must first set the knurled wheel 11 to its "+" end stop.



Viewfinder mask 21

If you shouldn't see anything through your viewfinder you may have left on the lens cap and or you may have closed the viewfinder with the eyepiece mask 21.

15



Adjusting the viewfinder eyepiece 12

The viewfinder eyepiece 12 must be adjusted to suit the individual eyesight of the camera operator:
Set the zoom lever 31 to the longest focal length (S 715 XL = 90 mm and S 709 XL = 51 mm)

Hold the eyepiece 12 to your eye and view a plain bright surface (such as the sky or a white wall).

Rotate the ring 1 until the subject viewed is utterly out of focus.

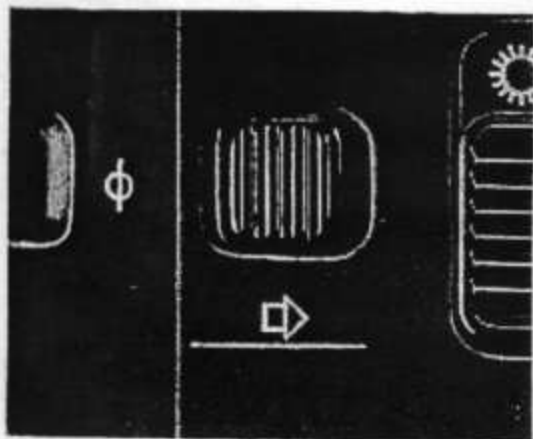


To adjust the eyepiece 12 to the relaxed eye rotate the knurled wheel 11 so that the eyepiece 12 comes out all the way (+ end stop). Then rotate the wheel 11 slowly in the other (-) direction until the horizontal line of the split-image rangefinder reaches maximum sharpness.

The eyepiece 12 can be adjusted within a range of ± 5 diopters.

It is expedient to read your personal eyepiece setting value on the scale and to take a note of it so that you can quickly restore this setting whenever someone else has used the camera in between.

16



Inserting the film cartridge

Your camera uses all types of super 8 direct-sound and silent films 15/17 DIN (ASA 25/40) and 21/23 DIN (ASA 100/160).

A notch in the cartridge automatically adjusts the light meter to the speed of the film loaded.

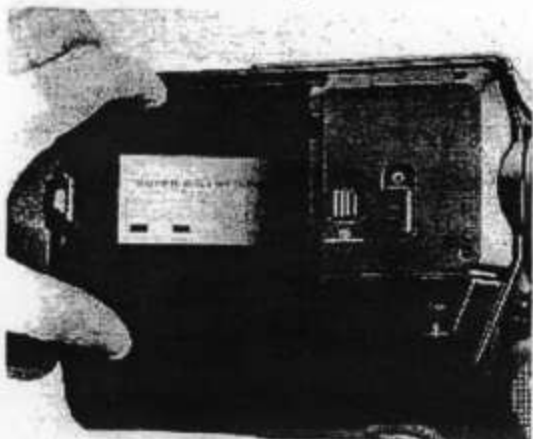
Insertion of a direct-sound film cartridge automatically switches on the camera amplifier which remains switched off when a silent film is loaded.

Pushing the latch 30 (in the direction of the arrow) opens the cartridge chamber door 34.

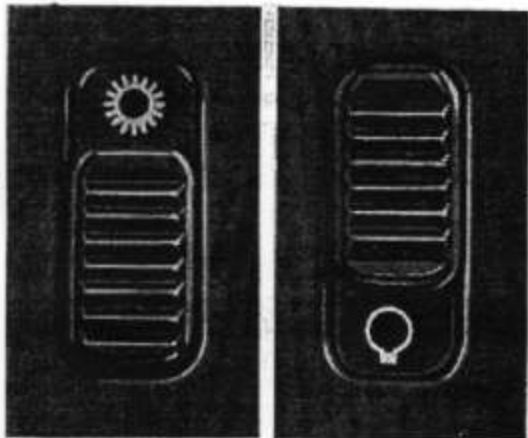
First insert the cartridge on the lens side of the chamber. Then press the rear end of the cartridge into the chamber.

Close the cartridge chamber by pressing the cartridge chamber door 34.

In the film-type indicator window 28 you can check with which type of film the camera is loaded or whether the camera is loaded at all.



17



Adjusting the filter slide 32

Before you start shooting make sure to check the position of the filter slide 32.

The symbol ☉ must be visible for daylight scenes; the symbol ⚪ must be visible for artificial light scenes, provided you use colour film.

Neon lights correspond largely to daylight; for this reason the daylight symbol ☉ has to be visible for shooting in neon light.

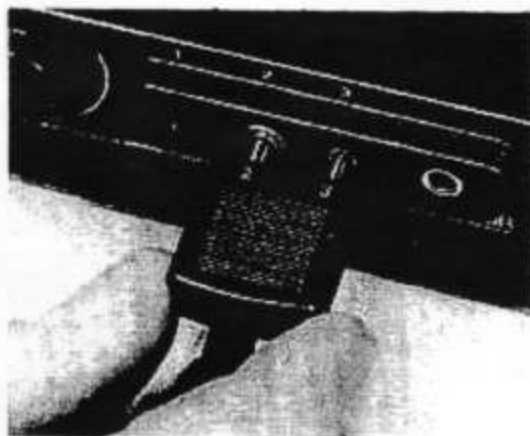
The symbol ⚪ must also be visible when filming single frame with electronic flash (see page 60).

The symbol ⚪ must be visible for shooting black and white films.

Hint:

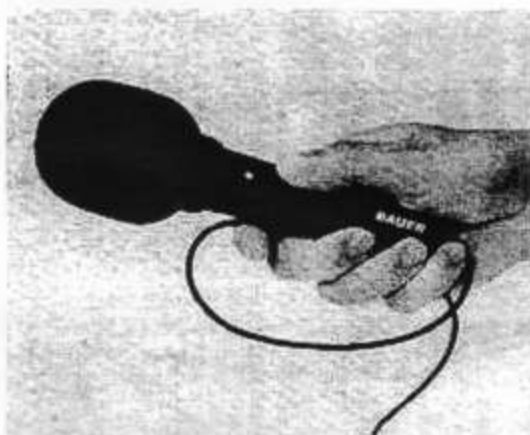
The position of the filter slide 32 is indicated in the viewfinder:

When the slide is in the position ⚪ a red warning light appears in the lower left corner of the viewfinder.



Connecting the microphone

For sound filming connect the Bauer standard microphone supplied to the jacks 37 and 38 in such a way that the identifying figures "2" and "3" match the microphone plug.

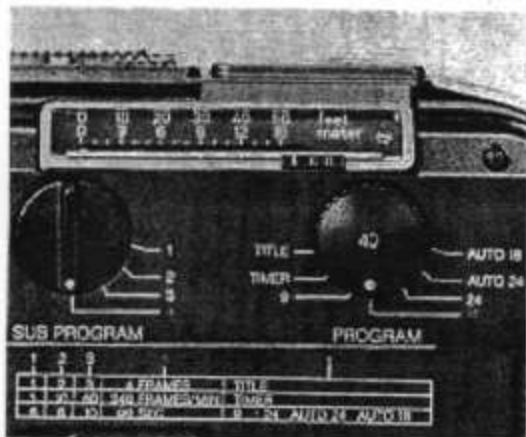


The Bauer standard microphone supplied has, what is called a ball-type, omni-directional characteristic which means that sound is picked up equally from all directions.

The directional microphone Bauer RM 700 (part no. 7 695 340 192) is particularly recommended for use with the camera.

It is available as a special accessory.

It particularly selects the noise coming from the subject while the noise from other directions is clearly suppressed. (see page 82).



2. Filming with the "green wave" snapshot setting

The green settings of the camera are so-called snapshot settings with which filming is made very easy.

Set the "PROGRAM" switch 10 on "18" (f.p.s.).

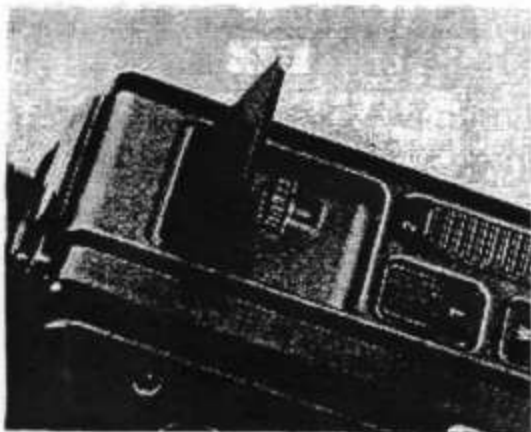
Set the "SUB PROGRAM" switch 7 on "4".



The lens also features a green snapshot setting which does not necessarily require any exact focusing:

With the focal length set on 15 mm and the distance setting on 7 m you will have a depth of field extending from 3.10 m to infinity (∞), even at an aperture of only f/2.

20



Automatic exposure control

The Bauer light meter ensures an even and perfect exposure no matter what running speed, taking angle, and filter is used.

The automatic operates only if the manual override wheel under the flap 29 has been engaged; the notch of the manual f/stop setting wheel must be up. This flap cannot be closed when the manual f/stop setting is used.



Checking the exposure

Watch the f/stop indicator below the viewfinder image:

The red warning lines at f/1.4 (S 715 XL) or f/1.2 (S 709 XL), indicate that there is danger of underexposure because lighting conditions are too adverse. In such a case you should use a movielight or a high-speed film (23 DIN/ASA 160).

If the light is too bright red warning lights beyond f/32 indicate that there is the danger of overexposure. In such a case we recommend to use a neutral density filter.

21



Automatic recording control

Automatic recording is expedient wherever the sound doesn't fluctuate too much and is not interrupted by extended pauses.

Set the switch 24 on "AUTO"; in this position the amplifier automatically maintains a constant recording level.

With a sound cartridge loaded and the release 13 depressed to step 1 you can check the sound level and volume before you start filming.

Moreover, with the aid of the control 35 you can continuously adjust the input sensitivity.

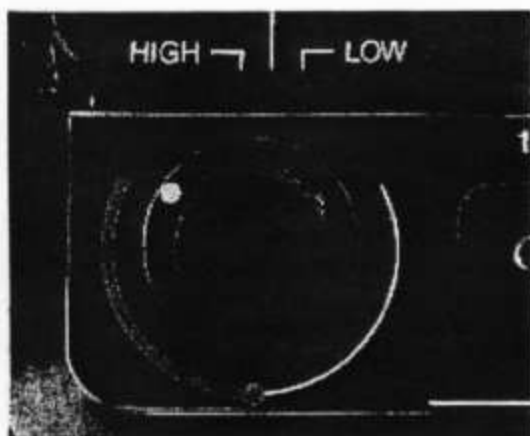
The flickering of the green LED control light high in the viewfinder indicates the proper position of the control 35. (operates only when the camera is loaded with a direct-sound film)

When this lamp flickers or does not light at all, rotate the control 35 clockwise up to its left end stop at "HIGH". If this control lamp lights continuously you have to turn down the input sensitivity with the aid of control 35.



22

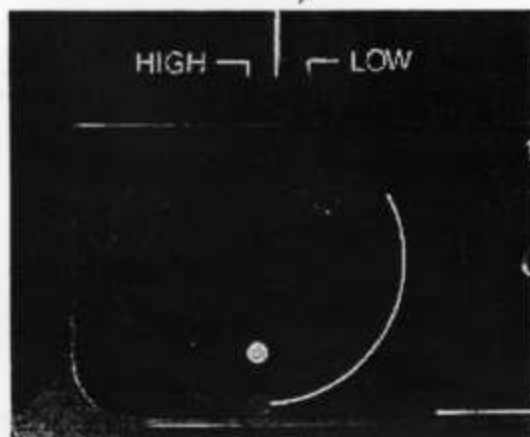
Release the camera - which is mounted on a tripod -



During automatic recording control please watch that the control 35 is in the green zone otherwise your sound may be too low in playback.

The adjustment range of control 35 is about -10 dB within the left end stop ("HIGH") and the green dot.

In speech pauses, for example, the background noise may become dominant through the automatic - because it orients itself toward the loudest sound on the scene - you may reduce the input sensitivity with the control 35.



Rotating the control 35 anti-clockwise beyond the green dot toward the right end stop "LOW" reduces the input sensitivity down to "O".

As regards manual recording control and the "VOLUME" control instrument, please refer to chapter 3, starting on page 42.

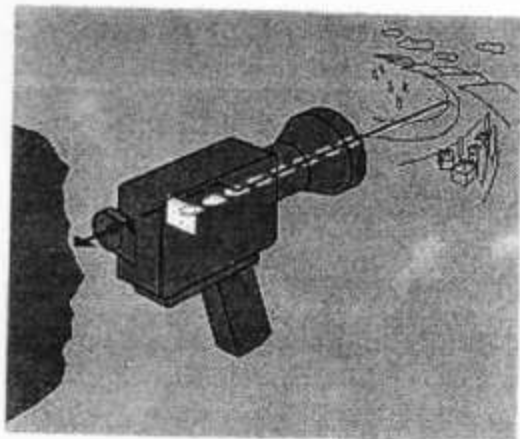
23



How to begin filming

Before you press the camera release, please check once more whether the filter slide 32 is in the proper position. The red signal in the lower left corner of the viewfinder indicates that the filter slide 32 is set on artificial light.

The illustration shows the most convenient and practical position to hold the camera and to operate the most vital functions.



The giant-image reflex viewfinder is absolutely free from parallax. It shows exactly the picture you will later have on your film and on the screen.

24



Releasing the camera

Now depress the camera release 13:
Filming begins.

Hint:

The camera release has a two-step function:

- On its first step (first pull-off point) the release switches on the power supply. As a result the light meter and the recording amplifier (only when a sound film cartridge is loaded) start operating.
- On step 2 (release fully depressed) the release touches off the camera run.

If you depress the release too fast an automatic electronic delay makes the camera start running after only about one second.

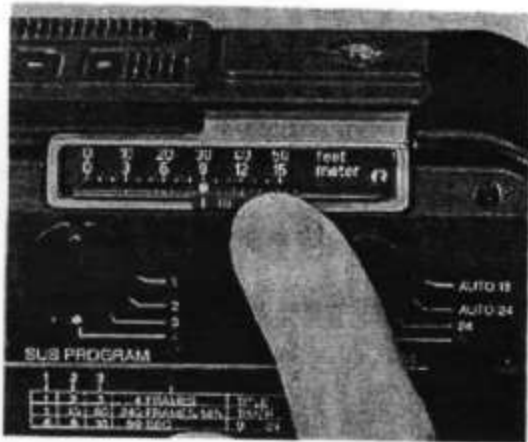
With a sound film cartridge loaded a servo-motor presses the film against the capstan (short hum). Fractions of a second later the capstan motor drives the capstan and the flywheel at the required speed.

At this point the micro-computer gives the film transport motor the impulse to advance the film. This arrangement ensures a smooth, undistorted sound start.



The red control light 3, "Action light", at the front of the camera indicates to the "actors" that the camera is running.

25



Film counter

The film counter 9 indicates (in meters or feet) how much of the roll has already been exposed.

Before starting a new scene always check how many feet of the roll are yet to be exposed. Sound film scenes are, in most cases, much longer than silent film scenes and therefore you may quickly run short of film.

One meter (three feet) of film runs through in about 13 seconds.



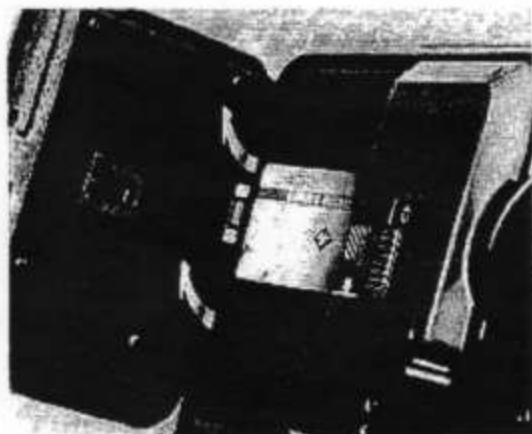
Film run control

At the right edge of the viewfinder you see a black indicator moving. This is the film run control which indicates that the film is being advanced properly.

If the indicator should stop in the middle of a scene and the counter 9 shows that there is no more film to be exposed, this means the roll is finished.

However, if the counter 9 should indicate that there is film yet to be exposed there is the chance that the film is jamming in the cartridge.

26

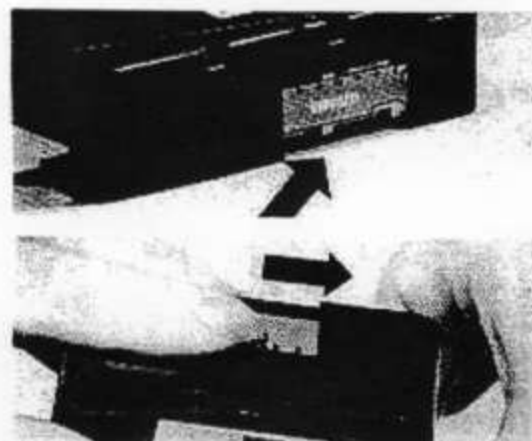


Removing the film cartridge

Open the film cassette compartment by pressing the latch 30 in the direction of the arrow.

Opening of the cartridge chamber door 34 automatically lifts the cassette so that you can easily remove it from the camera.

Remember that the film counter resets to "0" if you remove a cartridge before it has been finished. In such cases - before you remove the film - set the memo slide according to the footage indicated by the film counter.



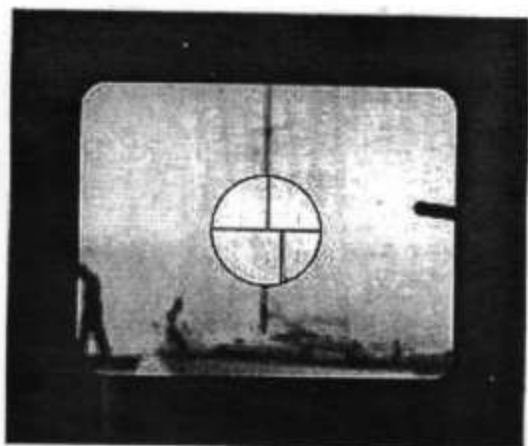
Upon re-insertion of the cartridge simply deduct the footage already exposed from 15m/50ft and set this footage on the memoslides 8.

Later the film supply will be finished at this point of the film counter.

A completely exposed cassette shows the word "EXPOSED" in a cut-out.

Cartridge trouble can in most cases be remedied by hitting the table with the flat sides of the cassette. Subsequently push the film ahead manually by a few perforations and in the direction of the arrow.

27

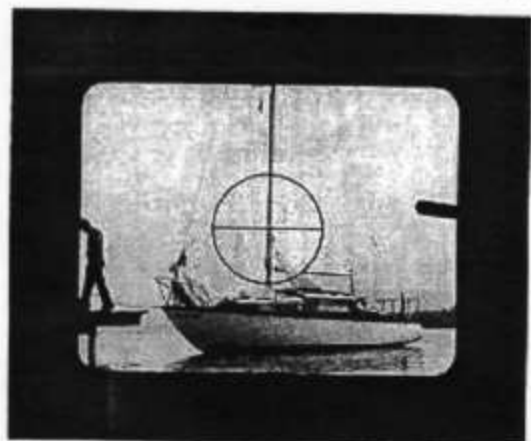


Focusing

For exact focusing view your subject and proceed as follows:

Set the zoom lever 31 to the longest focal length (S 715 XL = 90 mm; S 709 XL = 51 mm).

The split-image rangefinder splits all vertical lines of the subject as long as the lens is not focused.

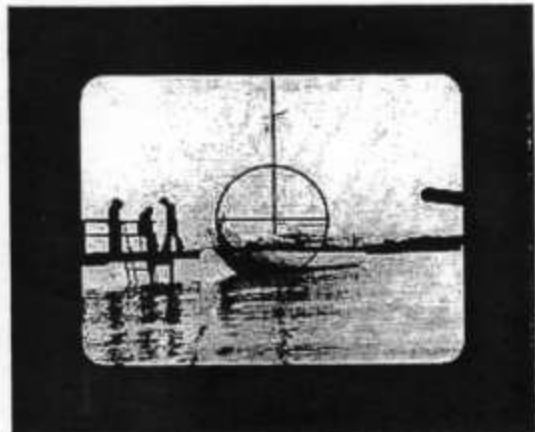


Rotate the distance setting ring 1 of the lens until the respective vertical line of the subject is joined in the split-image rangefinder. This means that the lens is properly focused on the subject.

Important:

The lens can be properly focused only after having adjusted the eyepiece 12 to your individual eyesight. (see page 14).

28



Zooming and framing

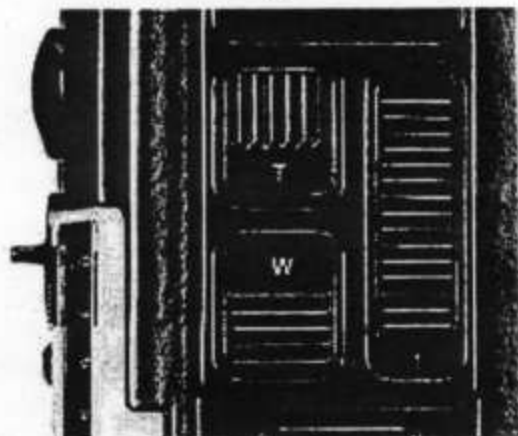
If you now change the focal length with the zoom lever 31 you will see that the framing of your subject changes while the lens remains in focus.

This means:

You positively focus the lens with the longest focal length setting and subsequently you frame your subject as you desire.

To ensure a steady picture

- particularly when using the telephoto range - we recommend to use a tripod and to release the camera via the remote control.



With the aid of the power zoom buttons 27 you can do your framing electrically:

"T" means telephoto - you zoom in on a subject;

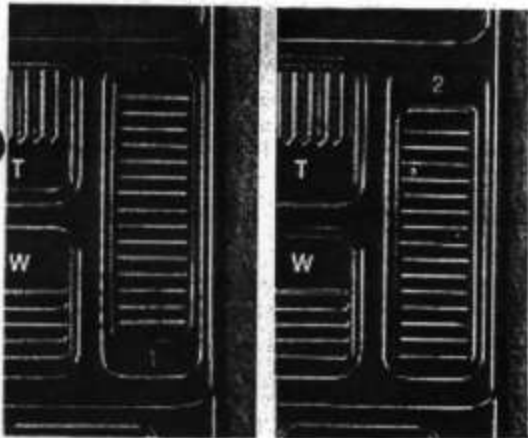
"W" means wideangle - you zoom away from a subject.

The power zoom buttons have different surfaces.

This allows you to verify which button you are actuating without moving your eye away from the eyepiece.

The power zoom allows an absolutely smooth zooming and framing of the subject.

29



The power zoom has two speeds. Switch 6 provides slow zooming at "1" and fast zooming at "2".

Hint:

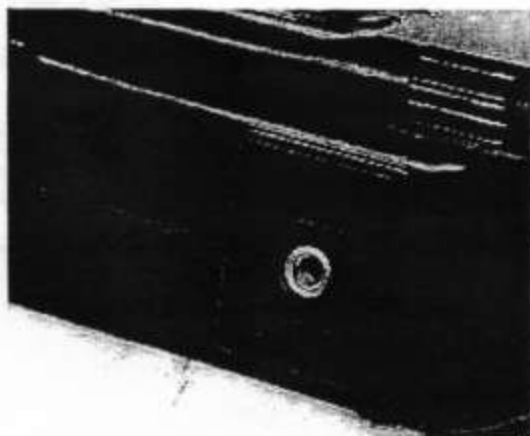
If you want to do some trial zooming, just depress the release to its first step (or even lock it in this position) so that the zoom motor is supplied with power without the camera running.



For special film effects, i.e. for rapid and dramatic zooming, you change the focal length manually with the zoom lever 31.

As you zoom, make sure that the distance has been set correctly. This is particularly important for telephoto shots.

Filming experts will never overdo the zooming effect, that is to say, they will not zoom back and forth in quick succession.



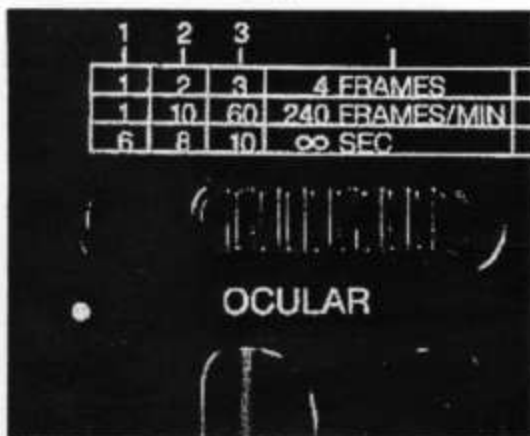
3. Applying the full camera technique

Shooting from a tripod

Make it a hard and fast rule to use a tripod whenever you shoot at focal lengths beyond 35mm.

The tripod socket 17 of the camera fits any modern tripod. It is 5.5 mm deep (according to DIN 4503). Make sure not to use a tripod fitted with a screw longer than 5.5 mm.

When filming from a tripod it will, in most cases, be expedient to release the camera via the respective switch on the microphone, or to use a separate cable release. (see chapter "Remote control", page 38).



If you want to trigger your camera via the cable release of your tripod head, please insert an adapter (such as ROWI No. 38, or Schiansky No. 057) into the socket 38.

When shooting from a tripod without the eye behind the eyepiece, it is advisable to close the eyepiece with the eyepiece mask 21.

If you don't do that you run the risk of straylight or unwanted reflexes falling upon the film.



Close-ups and macro-filming

Your Bauer camera is fitted with a macro focusing lens which allows settings from infinity down to extreme close-ups.

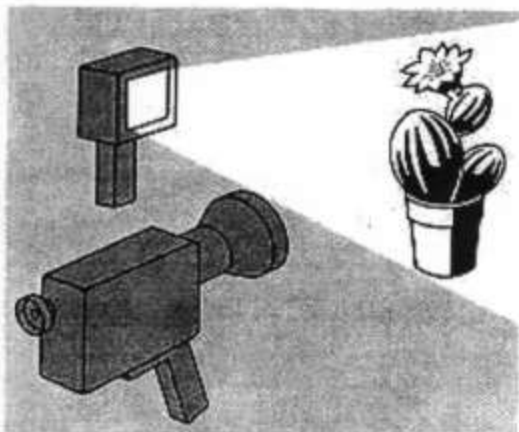
Without close-up lenses you can shoot extremely small subjects at a large scale: butterflies, flowers, drops of water, titles, etc.

Also for close-ups the giant-image reflex viewfinder shows exactly the picture which you will later see on the film and on the screen. You focus with the split-image rangefinder.

Attention: the depth of field is extremely small in the macro range.

It is advisable to use a tripod for all macro shots.

Whenever you use a movielight for macro shots make sure that the hot lamp doesn't get too close to the subject and to the camera.



The Bauer S 715 XL and the Bauer S 709 XL feature different macro-focusing systems.

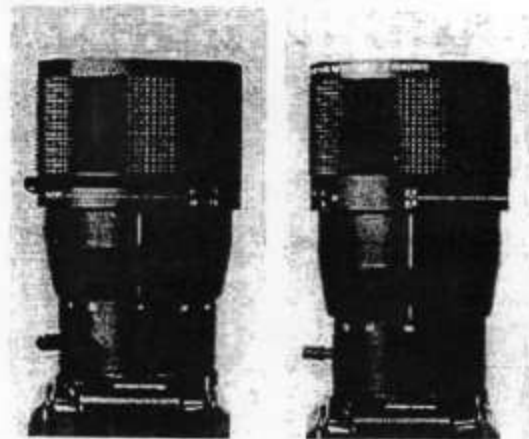
32



Macro shots with the Bauer S 715 XL

Owing to the extremely long focal length (90 mm) of the S 715 XL, extending from 6 to 90 mm, you can take a picture frame as small as 32 x 24 mm at a distance setting of 0,80 m.

- The lens of the Bauer S 715 XL need not be specially switched on "MACRO".
- For focusing the lens in the macro range at distances closer than 1.50 m just rotate the distance setting ring 1 into the yellow focusing range.
- We recommend to make macro shots only within the focal range from 25 to 90 mm. The longer the focal length the shorter the lens-to-subject distance, the more impressive the macro effect. At focal lengths of less than 25 mm the corners of the picture may show some light fall-off which depends on the lens-to-subject distance and the lens opening.
- With the Bauer S 715 XL you can also zoom in the macro range (within the focal length range from 25 to 90 mm).



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Macro shots with the Bauer S 709 XL

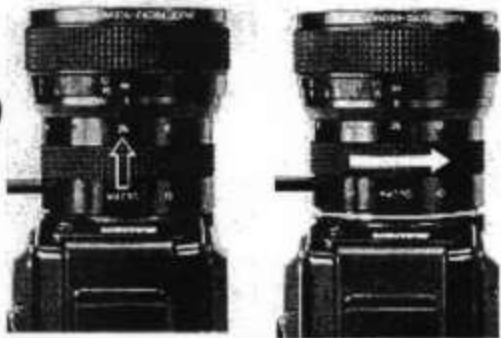
You can switch the lens of your Bauer S 709 XL camera into the macro range from any focal length setting. This means you can determine the reproduction scale yourself.

At the longest focal length setting of 51 mm you can fill the picture area completely with a subject of 19 x 14 mm. In this case the lens-to-subject distance is 0.00 m!

- To switch the lens on MACRO just push the focal length setting ring 2 forward in the direction of the arrow. A yellow ring becomes visible. This is to warn you against accidentally shooting in the normal focusing range with the lens still on MACRO.

- After switching on MACRO you focus the image by rotating the focal length setting ring 2 in the direction of the shorter focal lengths.

- Now you can film in the macro range.



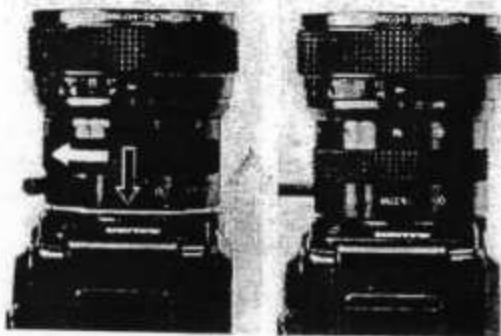
Attention:

You can't do any manual or power zooming while on macro.

34

When you have finished your macro shooting switch the lens back to its normal focusing range:

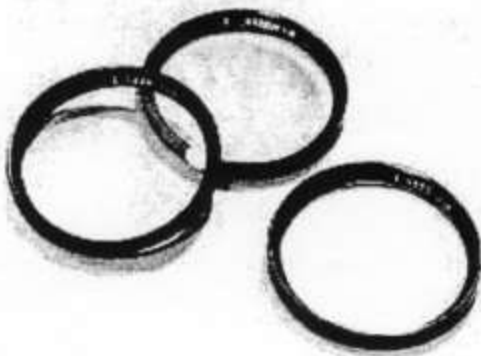
- Pull the focal length setting ring 2 back so that the yellow ring disappears.
- Rotate the focal length setting ring 2 in the direction of the long focal lengths until an engaging click indicates that the lens is back in the normal focusing range.



In case you want to do some zooming also in the close-up range with the Bauer S 709 XL you should put on conventional close-up lenses.

You also focus these lenses with the split-image rangefinder.

When using close-up lenses you enjoy the advantage of zooming but you have to use various close-up lenses for different camera-to-subject distances.



35



Optical dissolves

The sharp foreground of a macro-scene gradually gets out of focus while the background emerges and moves into focus.

The effectiveness of such an optical dissolve depends on the f/stop. The smaller the f/stop the more effective is such a dissolve.

This dissolve technique can also be applied for titling.

With the aid of the slide attachment supplied with the S 709 XL you can arrange optical dissolves "via-slide", so to speak.



Optical dissolves with the Bauer S 715 XL:

Such optical dissolves are all the more effective the closer the foreground (best distance 0.80 m) and the more remote the background (at least 10 m).

- Adjust the lens to the longest focal length (90 mm).
- Focus the lens on the foreground with the aid of the distance setting ring 1.
- Start the camera for the sharp foreground scene and at the desired point rotate the distance setting ring 1 toward infinity (∞) until the background is in focus.
- Finish the scene

36



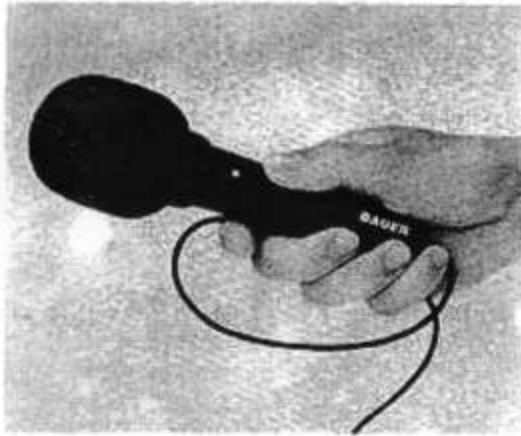
Optical dissolves with the Bauer S 709 XL:

- Set the lens on its longest focal length (51 mm) and focus the lens on the desired background for a normal shot.
- Push the focal length setting ring 2 forward (yellow ring visible).
- Now rotate the focal length setting ring 2 to focus on the foreground (macro subject).
- Start filming (the foreground is in focus)



- At the desired point of the scene rotate the focal length setting ring 2 slowly in the direction of the long focal lengths and all the way up to its 51 mm end stop. The focus shifts in such a way that the initially blurred background gradually comes into focus while the foreground almost disappears. The closer the macro picture the greater the dissolve effect. But you can also make optical dissolves in other focal ranges, but this always depends on the f/stop. Mostly optical dissolves at focal lengths of less than 25 mm are not very effective.
- Finish the scene.

37



Remote control

You may remote-start or remote-stop your camera in two ways.

- with the remote release of the standard microphone
- with the remote release switch of a separate electric cable release.

Remote release via microphone switch (possible with silent and sound films)

- Connect the microphone supplied to the two jacks 37 and 38 in such a way that the figures 2 and 3 match the respective microphone plugs.
- Set the switch of the microphone to the red dot. (The remote release is switched off).
- Now depress the camera release to step 1 and lock it in this position with the release lock 14.
- You can now remote-release the camera with the microphone switch:
Switch at the green dot - the camera runs.
Switch at the red dot - the camera stops.

With this arrangement you can, for instance, conduct an interview, be in the scene, as well as start and stop the camera.



Remote control via separate electric cable release

This is the way to release the camera
- when you shoot with the directional microphone Bauer RM 700
- when shooting silent films.

- Connect the directional microphone Bauer RM 700 to the jacks 36 and 37.
- Connect the electric cable release to the free jack 38 "REMOTE" (Switch is set to the red dot).
- Depress the camera release to step 1 and lock it in this position with the release lock 14.
- Now you can release the camera with the switch of the electric cable release:
- green dot visible - camera runs
- red dot visible - camera stops.

Hint:

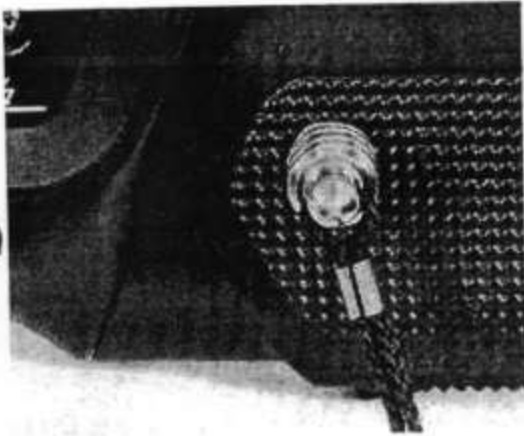
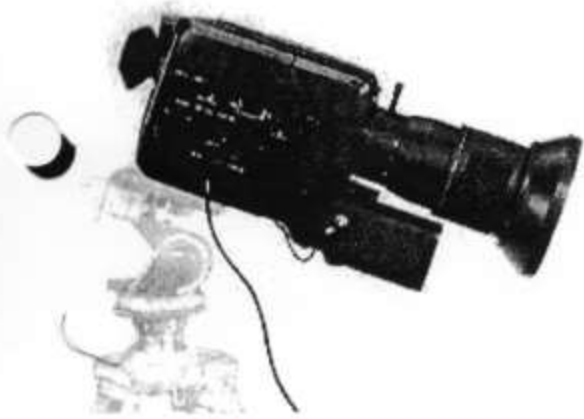
Unlock the camera release 13 to switch off the power supply.

Remote control with the hand grip folded

When shooting from a tripod it may happen that the hand grip is a hindrance when it is swung out.

You can also release the camera when the hand grip is folded:

- Insert the bridging plug into jack 42. This switches on the central power supply of the camera.
- You can now start and stop the camera via the cable release or via the standard microphone.
- Don't forget to remove the bridging plug when you have finished shooting. If the power supply remains switched on accidentally the batteries will be empty within a few hours.



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Monitoring while shooting live - sound pictures

Without any additional manipulation you may monitor the film sound via earphone. This is particularly recommendable if you use the directional microphone Bauer RM 700.



Recording check/monitoring before shooting

Already before you begin sound-film shooting you may check the sound via earphone and/or watch the sound control instrument:

- Insert a sound film cartridge.
- Set the "PROGRAM" switch 10 to one of the continuous run speeds (9, 18, 24, AUTO 18, AUTO 24).
- Connect the earphone to jack 39 "MONITOR"
- Switch on the power supply of the camera by depressing the release 13 to step 1.

In this way you can check whether the microphone is properly positioned and whether the right input sensitivity has been chosen with the control 35.

41



Manual recording control

As a rule you will use the automatic recording control (see pages 22 and 23).

If you shoot sound films under adverse acoustical conditions you may take advantage of the manual input sensitivity setting.

If you film an interview in a street with thick traffic the conversation is disturbed by the fluctuating traffic noise. In this case the manual recording control will help you select the input sensitivity required to make the conversation understandable.



Also sound filming in small rooms in which the sound bounces from the walls should be done with the manual recording control, because under such acoustical conditions the automatic control orients itself toward the camera running noise in speech pauses.

Further examples:
small mortar shots, fireworks, animal voices, and any sound event with extended pauses.

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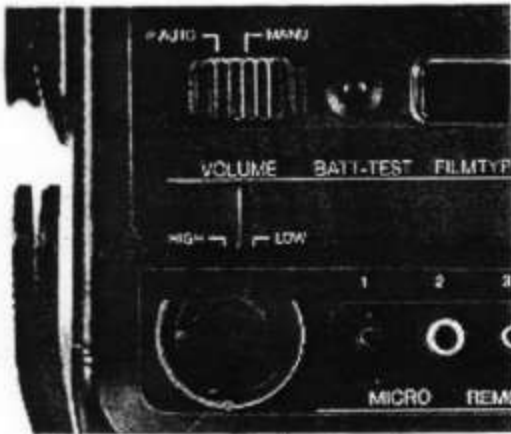
Fading out a scene

For manual control push the switch 24 to the right on "MANU".

You can then control the recording manually with the aid of control 35:

The highest recording level is ensured with the knob of the control 35 in its end stop position "HIGH".

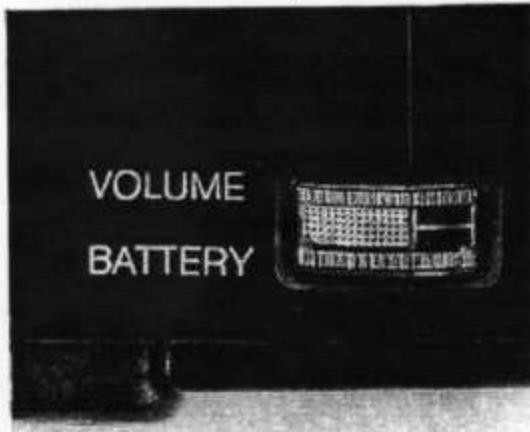
Rotate the control 35 anti-clockwise toward the right position "LOW" and the recording level will drop.



The recording control instrument 23 shows the recording level:

At peak level recordings the needle of this instrument may only briefly reach the red zone.

We recommend to check the sound via earphone.



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Playback

Special recording tricks can be accomplished with the aid of the playback with which you can apply a sound technique practised only in TV and film studios.

- Connect a record player or a tape recorder to jack 37 "MICRO" using the phono sound transfer cable.
 - While you shoot your scene transfer the "canned sound" - let's say your favourite song - directly to the sound track of the film.
 - Simultaneously you act in front of the camera as a (mute) singer.
- In playback you will be celebrated as a real star.

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Backlight correction

If you shoot against the light, let's say against the deep sun, your picture will usually come out too dark.

In such cases merely depress the "BACKLIGHT" button 4 while you shoot the backlighted scene.

As a result the automatic exposure control will open the aperture by one f/stop.



The camera now provides a brighter picture.

If the lighting conditions change in such a backlighted scene the light meter will continue to compensate for such variations.

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Fade-ins and fade-outs (picture and sound)

This is another impressive film effect which you can easily accomplish with your camera:

The end of the scene fades out gradually; the beginning of the ensuing scene fades in out of darkness up to normal scene brightness.

But scene transitions can be made even more effective.

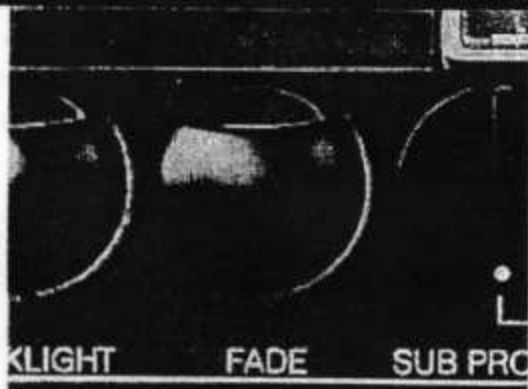


Parallel to the fade of the picture the camera also fades the sound in and out automatically.

This recording technique allows elegant transitions from extended sound film runs without abruptly cutting off the music or the speech.

Remember:

Fade-ins and fade-outs with the button 5 "FADE" can be made only while the exposure is controlled automatically (cover 29 closed).



- While filming depress the "FADE" button 5. The f /stop indicator in the viewfinder gradually moves up $f/22..32$.
- Stop the camera only when the red warning stripes beyond $f/32$ appear in the viewfinder. Then the scene has been faded out completely.



Fading in a scene

- Switch on the power supply of the camera by depressing the camera release 13 to step 1.
- Depress the "FADE" button 5 until you see the red warning stripes in the f /stop indicator.
- With button 5 still depressed start the camera and release the button 5. You will see the aperture open. The scene is faded in.
- Finish the scene.



Lap dissolves

In the course of a scene transition the old subject fades out while the new subject gradually fades into the scene.

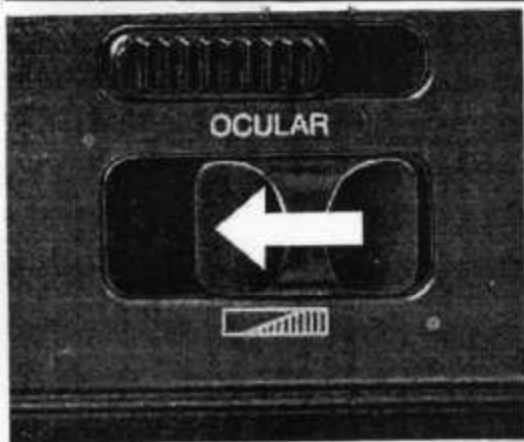
Parallel to the picture fade the sound is faded in the same way. This method produces smooth scene transitions. Later in projection the eyes and ears of the spectators are smoothly guided from one event to the other.

The automatic lap dissolve in your camera makes it very easy for you to produce such a pleasing effect.

Remember:

Lap dissolves with the aid of the lap dissolve switch 20 can be made only while the exposure control works on automatic (cover 29 closed).

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Lap dissolves: Part 1 – “fade out”

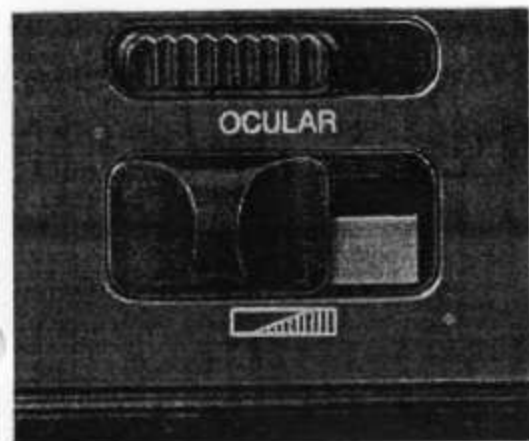
- Before the desired scene end push the lap dissolve switch 20 forward in the direction of the camera lens.
 - Now the automatic takes care of an exact fade-out and - after a brief stop - also of the backwinding of the film through the cassette.
 - Only then does the camera stop finally.
- Leave the lap dissolve switch 20 in this position.

Hint:

The red warning at the side of the lap dissolve switch 20 indicates that the camera is set on lap dissolve.

In the course of the fade-out you can make the following observations in the viewfinder:

- The film-run indicator stands still.
- The f /stop indicator moves beyond $f/32$ into the red warning stripes which become fully visible. The aperture is then fully closed and the scene has faded out. The camera stops briefly. The camera then automatically transports the film backward.
- When the film has come to a standstill the aperture opens again.



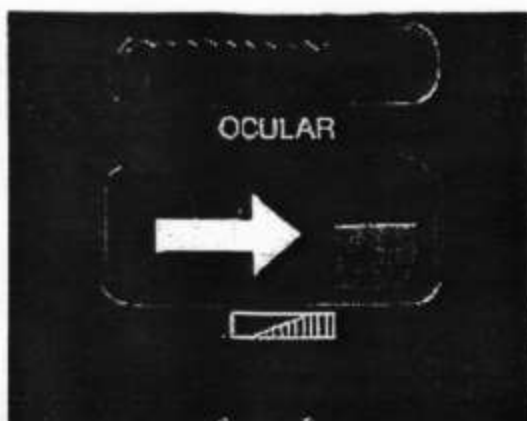
49



Lap dissolves: Part 2 = "fade-in"

Remember that the power supply of the camera has to be switched on **before** you push back the lap dissolve switch 20. Otherwise the new scene would be normally exposed and would not be a fade-in. The beginning of the lap dissolve would be completely overexposed.

- To start a new scene first release the camera. (the camera will not start yet!).
- Then push the lap dissolve switch 20 backward to its original position. Keep depressing the release. The camera will start to make the fade-in phase of the lap dissolve.
- Finish the scene.



In the course of the fade-in phase of the lap dissolve – that is to say after pushing the lap dissolve switch 20 back to its original position – you will make the following observations in the viewfinder:

- the aperture closes briefly.
- The camera starts,
- the film run indicator starts moving again –
- the aperture opens to the *f/stop* value determined by the automatic exposure control.

The fade-in phase of a lap dissolve can be taken much later, let's say the next day. But to start the fade-in phase don't push back the lap dissolve switch 20 before you have switched on the power supply and have released the camera.

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Manual *f/stop* control

If the important part of the subject is in sharp contrast to the surroundings or the background, you may switch off the automatic exposure control and set the *f/stop* manually.

Example: a tower standing out against the sky, people in the stage light

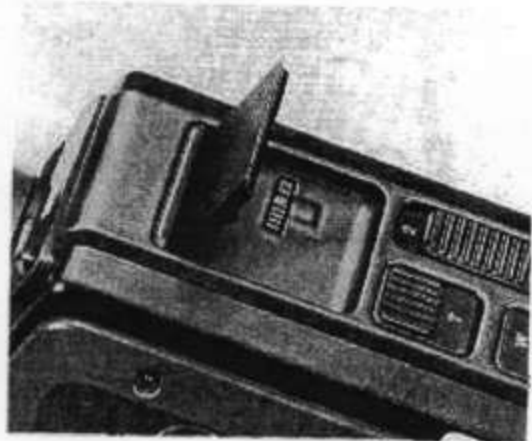
Proceed as follows:

- First zoom in on the important detail of the subject until it covers the whole frame.
- Take your reading of the proper exposure for this part of the subject and memorize the *f/stop* indicated in the viewfinder.
- Open the cover 29 and rotate the manual override wheel until the determined *f/stop* appears in the viewfinder.
- Do the final framing of the subject with the aid of the zoom lens.
- Shoot the scene.

This means that the background will be brighter or darker than the important detail of your subject.

Hint:

Make sure to switch the light meter back to automatic control immediately after using the manual override (close the cover 29).



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Existent light filming (XL technique)

The XL feature of your camera allows you to film even under adverse lighting conditions. With the highspeed lens and the 200° shutter you gain two f/stops as compared to conventional cameras.



If this light gain should still not be sufficient you may use a highspeed film, such as Kodak Ektasound 160, instead of the normal direct-sound film. This adds another two f/stops, that is to say, almost a total of 4 f/stops. Please use such highspeed films only under the most adverse lighting conditions. In bright sunlight you would be disappointed about the poor picture quality. The grain of highspeed films is rather coarse. This means you loose sharpness. Another f/stop can be gained by switching the camera on a running speed of 9 f.p.s. This can be used, however, only for stationary subjects otherwise you will get the impression of a fast-motion effect.

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Optical dissolves with the Beyer S 700 VL



Slow motion

Slow motion scenes are taken at a running speed which is higher than the projection speed. Slow motion is very effective in filming sports events.

The automatic slow motion of your camera allows you to use both silent and sound films.

Slow motion scenes are taken as follows:

- Set the "PROGRAM" switch 10 to 9, 18, or 24 f.p.s.
- Depress the "PROGRAM" switch 10 and release the camera. The camera will then run at 40 f.p.s.
- At the end of the scene stop the camera and release the "PROGRAM" switch 10.

(In such scenes the sound will, of course, also be slowed down. You get the funny effect which you notice when your record player runs too slow).



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It's only the climax of a scene that you take in slow motion:

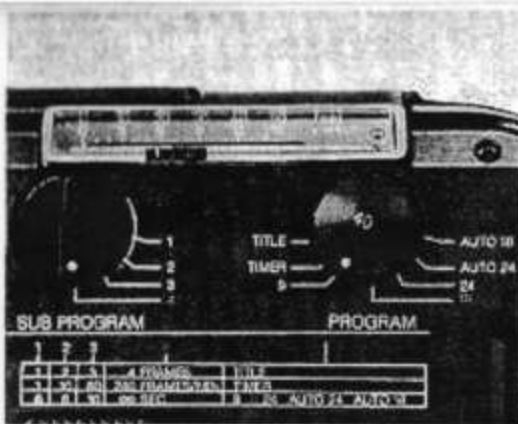
- While filming depress the program switch 10 at the desired point (let's say, when a horse takes a hurdle) This provides instant slow motion at 40 f.p.s.
- The camera returns to its normal speed the moment you release the "PROGRAM" switch 10.

Under poor lighting conditions you should check whether the f/stop indicator shows at least an aperture of f/4 before you depress the "PROGRAM" switch 10.

A slight slow motion effect can be achieved by filming at 24 f.p.s.. For this purpose set the "PROGRAM" switch 10 on "24".

This running speed can of course, also be used for taking normal sound film scenes. In this case you have to set your projector also on 24 f.p.s.. This running speed ensures an improved sound quality.

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FAST-MOTION

Fast-motion effects are achieved at a filming speed lower than the projection speed. In projection the motions are accelerated. This produces a highly humorous effect.

- For this purpose set the "PROGRAM" switch 10 to "9". (9 f.p.s.).

You gain about one f/stop in your exposure as compared to the standard filming speed of 18 f.p.s. Under poor lighting conditions you may take advantage of this f/stop gain for stationary subjects.

If you take direct-sound films at a speed of 9 f.p.s. the sound will in projection have a "Mickey-Mouse effect".

An extreme fast-motion effect can be achieved by using the "TIMER". This provides a running speed of 4 f.p.s. (= 240 f.p.m.); (see chapter "Single frame", starting on page 57).

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In the "manual single frame" mode each actuating of the camera release provides a single frame:

- Connect the electric cable release (red dot visible) to jack 38.
- Set the "PROGRAM" switch 10 on position "TITLE".
- Set the switch 7 to position "1".
- Depress the camera release 13 fully and lock it with the latch 14.
- Each ON and OFF operation of the electric cable release provides a single frame shot.

In the "automatic single frame" mode - at certain intervals ("TIMER") - the camera exposes each single frame automatically.

- Set the "PROGRAM" switch 10 on position "TIMER".
- With the aid of switch 7 you can select four different single frame picture sequences:

Position "1" = 1 frame per minute
 Position "2" = 10 frames per minute
 Position "3" = 60 frames per minute (equivalent to 1 frame p. sec.)
 Position "4" = 240 frames per minute (equivalent to 4 frames p. sec.)



- Connect the cable release (red dot visible) to jack 38.
- Close the eyepiece mask with the aid of switch 21 if you should not have your eye behind the eyepiece.
- Depress the camera release 13 to step 1 and lock it in this position with the aid of the release lock 14.
- Pushing the cable release switch to position „on“ (green dot visible) starts the camera for the exposure of the pre-selected picture sequence. The camera automatically advances the film picture by picture and exposes with the automatic.

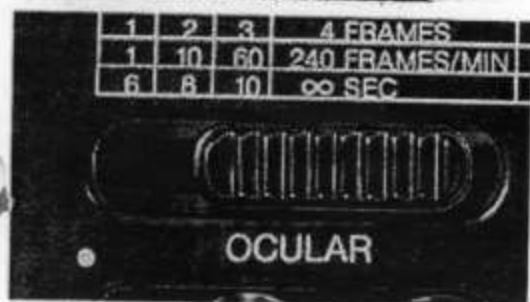


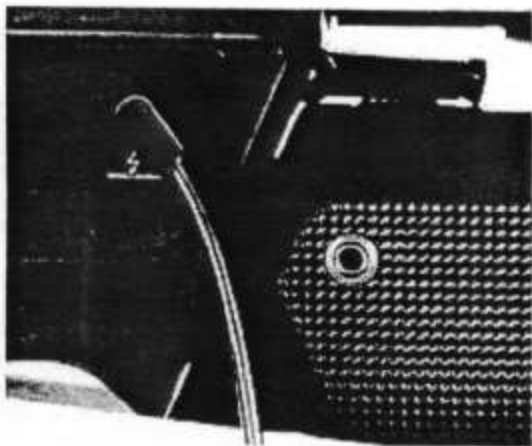
You need not count the individual frames. Just follow this table:

| Screen time | Shooting time with switch 7 in position: | | | |
|-------------|--|--------------------|--------------------|---------------------|
| | "1" = 1 f.p.m. | "2" = 10 f.p.m. | "3" = 60 f.p.m. | "4" = 240 f.p.m. |
| 1 sec. | 18 min | 2 min | 18 secs | 5 secs |
| 5 secs. | 90 min | 9 min | 90 secs | 30 secs |
| 10 secs. | 3 hrs. | 18 min | 3 min | 60 secs |

- At the end of the picture sequence switch off the electric cable (red dot visible). The camera stops.

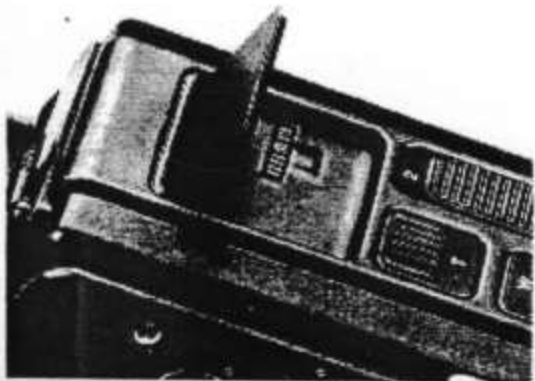
Also switch off the central power supply.





Single frame with flash

You can also take single frame with flash, let's say for heat-sensitive blossoms. Connect the electronic flash to jack 41. Please watch that in single frame with flash the picture sequence must match the recycling time of the electronic flash, that is to say the recycling time must be longer than single frame intervals. The ready-light of the flash must come on before the next single frame is taken. For this reason you should use an efficient computerized flash unit, such as the Bauer E 336 ABS (see page 82).



For such flash pictures set the *f*/stop manually with the wheel 29. In this case the symbol \odot (for daylight) must be visible beside the filter slide 32. The proper *f*/stop is determined with the *f*/stop calculator of the electronic flash.

Experience has shown that you should open the *f*/stop of the camera by 1-2 steps as compared to the *f*/stop calculator reading.

It is expedient to make test pictures.

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"TITLE" program

With part of this program you have been made familiarized already in the chapter on manual single frame. There are applications in which the simple single-frame technique has to be modified a little.

For „written“ titles in which the words appear letter by letter you have to take several single frame shots for each letter or figure, otherwise the sequence of the letters would be much too fast in projection.



At a projector speed of 18 f.p.s. three single frames are equivalent to a screen time of 1/6 sec, this is just enough to catch the image with the eye.

Example:

You want to have "BERLIN" in a title letter by letter: Take the "B" three times, the "E" three times, and so on.

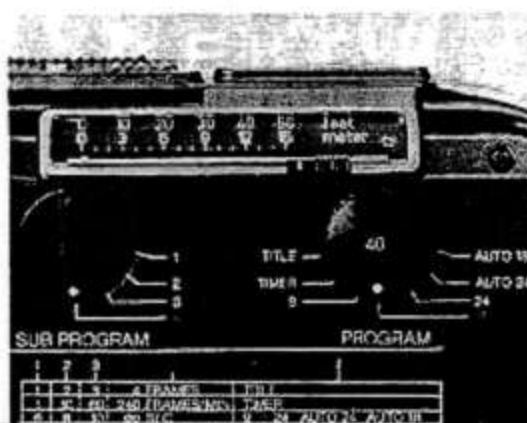
In projection the name "BERLIN" will be written out in one second.

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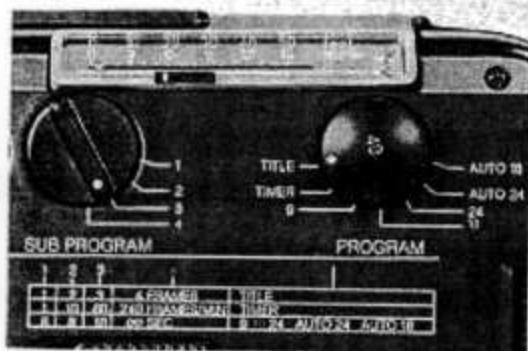
How to film with the "TITLE" automatic

- Mount the camera on a tripod and connect the electric cable release (red dot visible).
- Direct the camera toward the title and frame the title. Take into consideration the "final" width and height of the "written" complete title.
- Focus the title.

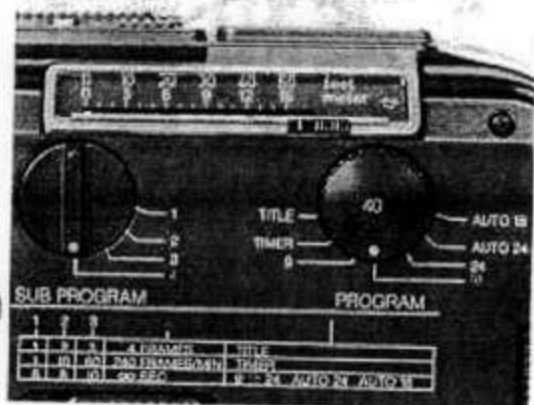


- Set the "PROGRAM" switch 10 on "18", and the "SUB PROGRAM" switch 7 on "4".
- Switch on the power supply of the camera.
- Set the f/stop manually to the pre-determined aperture. If need be, correct this value. (In the case of white letters on a dark background put a white sheet of paper on the title for determining the proper f/stop).
- If need be, close the eyepiece mask (switch 21).
- Take the empty title scene for a few seconds.

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- Then set the "PROGRAM" switch 10 on "TITLE" and the "SUB PROGRAM" switch 7 on position "3".
- Put the first letter on the title scene.
- If you release the camera now it will automatically expose three single frames - and then it stops automatically.
- Then insert the next letter and again release the camera, and so on.

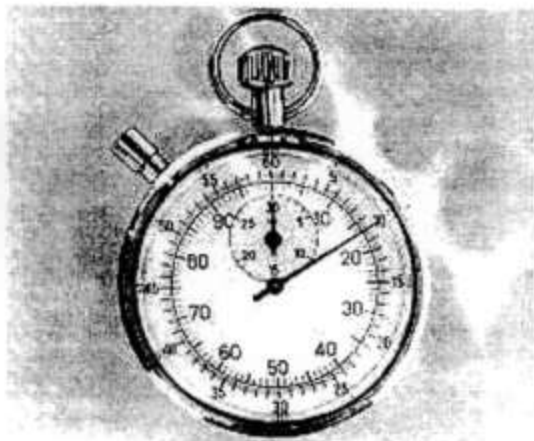


- After the last letter taken with the "TITLE" automatic continue filming the whole title scene for a few seconds. Set the "PROGRAM" switch 10 to "18" again and the "SUB PROGRAM" switch 7 to position "4".

When the "PROGRAM" switch 10 is on "TITLE" you can use the "SUB PROGRAM" switch 7 for the following programs:

- Position "1" = 1 single frame per camera release.
- Position "2" = 2 single frames per camera release
- Position "3" = 3 single frames per camera release.
- Position "4" = 4 single frames per camera release.

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Automatic scene length limitation

At the film running speeds of 9, 18 and 24 f.p.s. you can pre-determine the scene length with the aid of "SUB PROGRAM" switch 7.

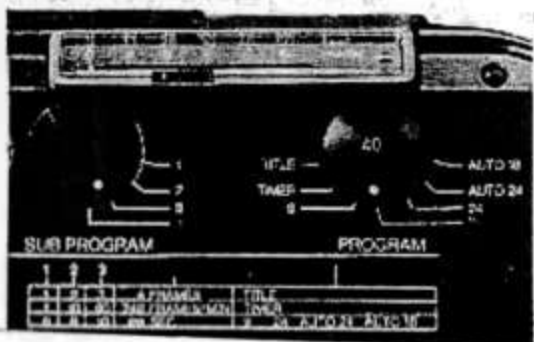
This means that you can already do some editing while you shoot. That's the way to make the best use of your film material.

Just release the camera and you can instantly take care of direction. The camera will stop automatically after 6, 8, or 10 seconds.

That's the way to proceed:

- Set the desired film running speed with the aid of the "PROGRAM" switch 10.
- Set the "SUB PROGRAM" switch 7 to position "3", "2", or "1" according to the desired scene length.

Position "4" = no limitation of the scene length;
 Position "3" = scene length 10 seconds,
 Position "2" = scene length 8 seconds,
 Position "1" = scene length 6 seconds.



- Arrange the subject, give some directions and determine picture frame and focus.
- If you should not have your eye behind the eyepiece during the scene, please close the viewfinder with the eyepiece mask 21.
- Start the camera and keep depressing the release until the camera stops automatically. If you do not keep pressing the release the camera will stop immediately as you let go.

You can make fades and lap dissolves also in combination with the automatic scene length limitation. These two functions may, however, not match in their timing, that is to say, the scene will in any case fade out completely.



Automatic scene length limitation with delayed camera start (selftimer)

Owing to the advanced program automatic you can go one step further with Bauer S 715 XL/S 709 XL:

In addition to the scene length limitation you can delay the camera start (selftimer).

This additional automatic is ideally suited for scenes in which you want to act yourself. You can avoid entering or leaving the scene.

That's the way to program the delayed action:

- Set the "PROGRAM" switch 10 to position "AUTO 18" or "AUTO 24", depending on which running speed you choose.
- Determine the scene length with the "SUB PROGRAM" switch 7; again position "3" corresponds to a camera run of 10 seconds.
- Frame the subject and focus it.
- Close the eyepiece with the eyepiece mask 21 if you should not have your eye behind the viewfinder during the shooting.

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- Release the camera - which is mounted on a tripod - via the microphone switch (or cable release).
- After about 10 seconds the camera starts filming. The "Action light" 3 indicates the moment when the camera starts.
- Leave the scene only after the camera has stopped automatically (the action light dims out).

Before you release again you first have to switch off the microphone switch or the cable release.

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5. Tips and hints for filming

Your camera uses both silent films and sound films. The sound system is automatically switched off when the camera is not loaded or when it is loaded with a silent film cartridge.

When to shoot direct sound - when to shoot silent film?

Live sound shooting is good only if really something is going on: parish fair, children's birthday party, family festivals, marriages, New Year's Eve parties with fireworks, carnival activities, open concerts, processions; these are only a few examples.



Such live sound films are unique documents which will be pleasant memories even after many years.

If there is no attractive sound on the scene, let's say on a mountain climbing tour, you had better shoot silent films: the rustle of a forest should be added by way of post-synchronization.

It is expedient, however, to shoot such silent scenes with a sound film cartridge. This saves you the trouble of constantly changing the cartridge. Moreover, your film is already striped for subsequent adding of sound. Bauer sound projectors ensure excellent live sound reproduction and allow convenient post-synchronization.

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Sound filming is different from silent filming

Good silent films usually have short scenes, show frequent changes in the shooting position and in framing.

The sound event determines the scene length of live sound films.

A good joke, a fascinating interview, the gay chattering of a child, call for extended scenes.

Certain creative variations are possible by panning, let's say, from a speaker to the applauding audience, or by zooming (but not too often).

Changing the scene in live sound films

You should bring in changes in the scene only when there is a natural pause in the sound on the scene.

Watch that your scenes are not too short.

When filming an interview or a speaker you should stop the camera only when sentences are really finished.

Your camera can make specially elegant scene transitions by means of the micro-computer-controlled fades and lap dissolves.



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Good microphone recording

The quality of your microphone recording depends largely on the handling of the mike.

Hold the mike still.

Don't rub or scratch on the mike.

This will be registered as a very disturbing noise.

The windscreen supplied with the mike should be used indoors as well as outdoors, that is to say, whenever somebody speaks directly into the mike. This effectively suppresses disturbing noises.



You yourself may concentrate on a certain sound source, yet the mike always orients itself toward the loudest sound on the scene. This ambient noise may be traffic noise, general room noise, or an airplane flying over the scene.

For this reason move the mike as closely as possible up to the sound source (e.g. you may hide it in a bunch of flowers or suspend it from a lamp).

This is particularly important for speech recordings.

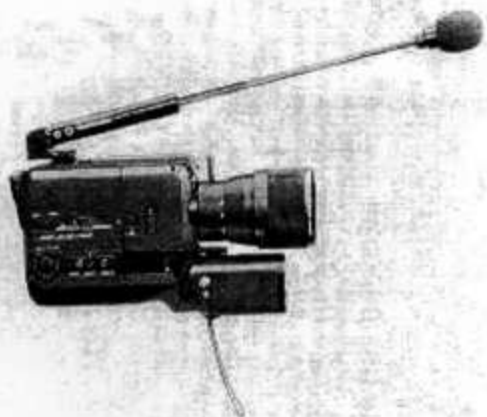
70



Which mike for which purpose?

The standard microphone has what is called a ball-type, omni-directional characteristic, that is to say it picks up the sound from all directions with the same intensity.

This microphone can be used as a hand mike or, with the support supplied, as a table mike.



For a "one-man operation" of the camera we recommend the directional microphone Bauer RM 700. It is mounted right onto the camera. Owing to its directional characteristic it picks up sound primarily from the scene while noises from behind the cameraman are suppressed.

Special microphones which you may acquire for special sound recordings should have an impedance ranging from 200 to 600 ohms. If such a special mike should not have a plug which fits into the jack of the camera you should use an adapter as shown in the drawing on page 83.

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Simply start filming

For the beginning you need not prepare a script. Always think of your spectators, they want to be pleased by the film.

Move up to the subject as closely as possible (also with the microphone).

Movies call for close shots.

Make full use of the close-up feature of your camera.

Avoid landscapes without foreground.

Shoot motion.



Try to get a steady stand when you film; make use of the shoulder support.

When filming with long focal length settings of more than 35 mm it is advisable to use a tripod.

"Jerky" scenes are highly disappointing.

A suitable title enhances the effect of your sound movie. Your dealer can offer you a large number of different titling letters, title slides, and other titling aids.

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Panning

Before you start panning you should have an idea what effect it has on your film.

Slow panning tends to give a general idea of the scene. It lends itself for slow action and for idyllic landscapes. You will remember: in the case of fairly stationary subjects such panning is done best at a film running speed of 24 f.p.s.

Guided pannings pursue the action in the film, for instance, a ship entering an harbour. The camera seems to be an observer or a reporter. Such scenes are very lively.

Rapid panning dramatizes the action and provides surprise effects, for sudden changes to contrasting subjects, for instance.

If you pursue a subject moving quickly across your filming direction, the background will be blurred while the subject appears sharp.



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Lighting conditions

You are already familiar with the setting of the filter slide 32. You will, however, encounter lighting conditions which have to be dealt with individually:

- The light of neon lamps corresponds largely to ordinary daylight. For this reason set the filter slide on daylight (visible symbol \odot). A slight off-colour effect is, however, inevitable.
- Under mixed light, let's say you are using a movielight because the available daylight is rather faint, you have to decide which type of light really dominates. The daylight setting \odot provides warmer tones while the artificial light setting \ominus seems to be colder.
- Use highspeed films only under very adverse lighting conditions. If you use such films outside in the bright sunlight you will be disappointed about the picture quality. Highspeed films lack sharpness due to their coarse grain.



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Editing

Editing is an important creative means.

Don't hesitate to cut out scenes which are not quite satisfactory. This can only improve the quality of your movies.

Editing live sound films

It is expedient to edit your live-sound films in an editor just the way you did so far with your silent films.

For technical reasons the sound is 18 frames ahead of the respective picture. Due to this picture-to-sound separation you hear the sound of the preceding scene for one second after a splice. But normally this is not registered by your spectators.

If, however, the original sound is very important (e.g. in speeches) you should extend your shooting for 1-2 seconds at the beginning and at the end of your scenes.

Then you cut the preceding scene 18 frames ahead of the scene-end picture and the ensuing scene is cut at the beginning of the picture scene.



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6. Miscellaneous

Trouble diagnosis

Camera does not run:

- If you depress the release too fast an automatic electronic delay makes the camera start running after only about one second.
 - Have the batteries been inserted the right way? (page 10)
 - Has the battery energy been used up? (page 12)
 - Has the "PROGRAM" switch 10 been set to "18"? (or "9", or "24"?)
 - Has the "SUB PROGRAM" switch 7 been set to position "4"?
 - Has the switch of the microphone/cable release been set to the green dot?
 - Is the lap dissolve switch 20 on its right end stop position (otherwise the red warning zone is visible)? (page 49)
- When the hand grip is folded:
- Has the bridging plug been inserted into jack 42? (page 40)

Film run indicator in viewfinder doesn't move:

- The film is finished when the film counter 9 is on "15"
- If the film counter is not on "15" mark the counter position with the memo slide 8 and remove the cassette. If the film shows the word "EXPOSED" then it is finished. If the word "EXPOSED" is not visible there might be some cassette trouble which you can easily remedy. (page 27)

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No sound, or sound is too low:

- Has the camera been loaded with a sound film cassette?
- Has the mike been properly connected?
- Has the control 35 "VOLUME" been set on its left end stop "HIGH"?
- Is the battery energy still sufficient? (page 12)
- Has the "PROGRAM" switch 10 been set to 9, 18, 24, AUTO 18, oder AUTO 24?
- Has the switch 24 been set to "AUTO"?
- Is the sound source too low?
- Is the mike close enough to the sound source?

No picture in viewfinder:

- Is the eyepiece mask 21 open?
- Has the lens cap been removed?

The viewfinder image is out of focus when you zoom:

- Has the eyepiece 12 been properly adjusted? (page 16).
- Has the lens been properly focused in its extreme telephoto setting? (page 28)
- Is the lens still set on "MACRO"? (page 34 ctd.)

No f/stop indication in viewfinder (automatic exposure control)

- Has the power supply of the camera been switched on? (camera release 13 on step 1?)
- Has the cover 29 been closed? (page 21)

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Camera care and how to stow away the camera.

Always make sure to put the camera into the case with the lens down. This is the best protection against shocks.

Whenever you don't use the camera, stow it away in the case.

If you shouldn't use the camera for a long time it is safe to remove the batteries altogether.

Protect your valuable camera from water, moisture, heat (such as strong sunlight), shock, sand and dust.

Use special lens tissue for cleaning the front lens. Your dealer will have it for you.

If need be, clean the cartridge chamber and the picture aperture with a soft hair brush fitted to a small bellows. Fuzzes and hard emulsion deposits in the aperture area should be removed with an alcohol-soaked cotton cleaning tip.

After some 10 or 20 films clean the capstan and the sound head with sound head spray (which you can get from your dealer).

In case the sound head, the capstan, and the pressure roller are very dirty (tough brown deposits scraped off the magnetic sound track) first use an alcohol-soaked cotton tip and than finish the cleaning with sound head spray.

Any fuzzes from the cotton tip must be removed with a fine hair brush fitted to a bellows.

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Warranty

Your camera comes with an original Bauer guarantee card,

"International Guarantee".

It contains a list of all authorized Bauer service agencies which ensure quick and dependable repair service.

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Technical Specifications

Lens Bauer S 715 XL:

Angénieux ZOOM-MACRO
f/1.4/6-90 mm, MULTICOATING
Filter thread: M 72 x 0.75 mm
Focusing range:
Normal range 1.5 m to infinity
Macro range: 0.8 - 1.5 m
Smallest picture area: 32 x 24 mm

Lens Bauer S 709 XL:

BAUER MACRO NEOVARON f/1.2/6-51mm
Filter thread: M 62 x 0.75 mm
Focusing range:
Normal range: 1.5 to infinity
Macro range: 0 m to 1.5 m
Macro-focusing possible in any focal length setting.
Smallest picture area: 19 x 14 mm

Giant-image reflex viewfinder:

With split-image rangefinder.
Eyepiece continuously adjustable within
a range of ± 5 diopters.

Controls in viewfinder:

f/stop indicator with overexposure and under-
exposure warning. Sound recording control. Film
run and end-of-film indicator. Type A conversion
filter position.

Exposure control:

Bauer light meter with booster amplifier.
Fully automatic, independent from battery
voltage. TTL. f/stops indicated in viewfinder.
Automatic and manual f/stop setting.
Button for backlight correction (BACKLIGHT).
For 15/17 - 21/23 DIN (ASA 25/40 - 100/160) film.

Power supply:

Central power supply for electronics, drive,
light meter, and power zoom;
six type AA 1.5 high-efficiency batteries
or NC Akkuset (battery set, special accessory).
Battery test via indicator instrument.

The power supply is switched on via a two-step
release.

Camera release:

Soft, electro-magnetic release,
optional via camera release, microphone switch,
or separate cable release.

Drive:

Motor 1 = power zoom
Motor 2 = film advance motor
Motor 3 = capstan motor for driving
the capstan and the flywheel
Motor 4 = servo-motor for pressing the
film against the capstan.

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Running speeds

9, 18, 24 and 40 f.p.s. (picture and sound);
single frame.

Automatic slow motion:

40 f.p.s. can be switched on and off while
filming (button).

Automatic single frame:

Picture sequences adjustable:
4 f.p.s.; 1 f.p.s.; 10 f.p.m.; and about 1 f.p.m.

Automatic titling:

Adjustable for 1,2,3, and 4 single frames
per camera release.

Programm automatic:

Scene length limitation to 6, 8, and 10 seconds.
Delayed action (selftimer) about 10 seconds,
for running speed 18 f.p.s. and 24 f.p.s.,
with or without scene length limitation.

Automatic fades and lap dissolves:

for picture and sound.

Camera functions:

All camera functions operate with silent and
sound film cartridges.
The built-in sound amplifier remains switched
off when a silent film is inserted or during
single frame.

Frequency response of sound amplifier:

80 Hz - 20 kHz ± 3 dB

Recording frequency response:

At 18 f.p.s.: 80 Hz - 8 kHz
at 24 f.p.s.: 80 Hz - 10 kHz acc. to DIN 15868

Wow and flutter: $\pm 0.4\%$ (acc. to DIN 45 507)

Recording control: Automatic or manual,
stepless adjustment of input sensitivity
(from 0 to HIGH).

Recording control via green LED in viewfinder
and with indicator instrument.

Monitoring: Before and during sound recording
via earphone.

Other features:

Action light (LED)
Two-speed power zoom
Folding hand grip, can be locked
Individually adjustable shoulder support.
Film counter with automatic zero re-setting
and memo slide. Film-type indicator window.
3 eyecups, head rest.
XL technique with 200° rotary shutter.
Built-in conversion filter.
Flash synch contact.
Phono cord for playback.
Tripod socket. Socket for directional
microphone.

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Special accessories

Your dealer can offer you special accessories designed for the Bauer S 715 XL S 709 XL micro-computer.

Directional microphone Bauer RM 700

This electret directional microphone primarily picks up the sound coming from the scene and not sound coming from behind the cameraman (nor the camera running noise itself). It amplifies the sound signal. The power needed for such amplification is supplied from the camera.

This means you need no extra battery for the mike. The directional microphone Bauer RM 700 can be mounted right into the microphone socket 25 on the camera. It is particularly suitable for one-man operation.

Part No. 7 695 340 192

Battery magazine

To facilitate quick battery change - also with dry cell batteries - we supply a battery magazine. This is particularly recommendable in wintertime so that you have a set of batteries on hand which are protected against low temperatures.

Part no. 7 695 340 206

Akkuset Bauer NC 700

This is a rechargeable set of batteries which consists of two parts: an NC battery, which fits exactly into your camera, and a recharger. With this you can recharge the batteries inside the camera or outside. The NC battery is also available singly so that you do not have to bother about recharging during extended filming.

Part No.: Akkuset NC 700, complete 7 695 340 201
NC battery, single 8 697 352 023

Electronic flash Bauer E 336 ABS

For the technique described in the chapter on "Single frame with flash" we recommend the Bauer E 336 ABS electronic flash. This is fitted with an integrated holder for mounting it to the tripod socket of your movie camera. It is also equipped with a synch cord. The thyristorized control of this electronic flash ensures that only that amount of energy is used which is absolutely necessary for a given subject while the remaining energy is held back for the sake of quick readiness for the next flash.

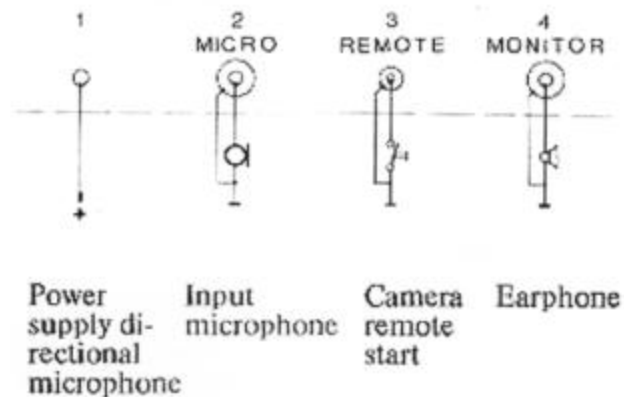
Part No. 7 695 111 171

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Contact connections of the input and output jacks:



Contact connections of the phono sound transfer cable:



Contact connections for the microphone adapter:



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Your direct wire to the
Bauer-Customer-Service-Adviser,
Heinz Wächtler, Stuttgart

Whenever you have questions regarding the use of your Bauer equipment - or whenever you have any service problems, even if you should have a specific question while you are on your way, you will get expert advice from your Bauer-Customer-Service - just call Stuttgart.

Mr. Wächtler is at your disposal Monday through Friday. He speaks German and English, but you may write to him in any other language.
He will answer in German or English.

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S 715 XL microcomputer
S 709 XL microcomputer

Instructions for Use

BAUER

