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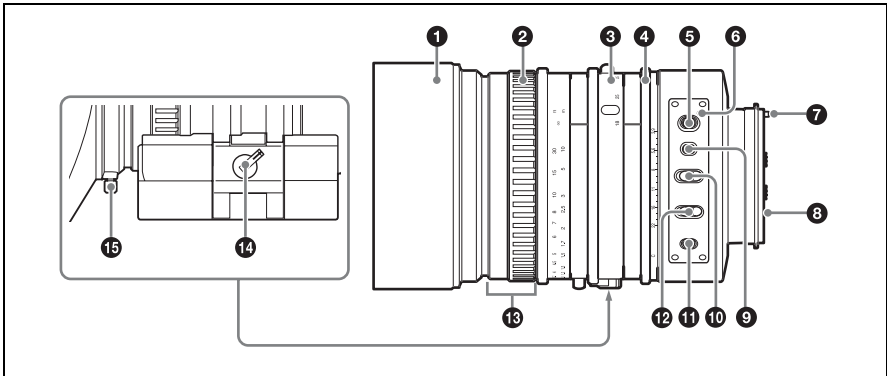
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Features

The SCL-Z18X140 is a collapsible 14x zoom lens that can be mounted via the existing FZ mount of a super 35 mm or equivalent camcorder.

The lens features manual/auto zoom, manual/auto focus, manual/auto iris, and elimination of picture blurring (Steady Shot).

Location and Function of Parts



1 Lens hood (page 30)

2 Focus ring (pages 27, 28)

When you focus manually, set the FOCUS switch to MANUAL and turn this ring to focus in the subject.

3 Zoom ring (page 29)

When you zoom manually, set the ZOOM switch to MANUAL and turn this ring to zoom in or out.

4 Iris ring (page 26)

When you adjust iris manually, set IRIS switch to MANUAL and turn this ring to obtain a proper iris.

5 F.f. adjustment button (page 25)

Use this button when adjusting the flange focal length (distance between the lens attachment plane and the imaging plane). Press and hold the E.f. adjustment button and STEADY SHOT button for 2 seconds or longer.

6 Flange focal length adjustment indicator (page 25)

The indicator flashes while the flange focal length is being adjusted.

7 Lens mount pin (page 23)

8 Lens mount

9 STEADY SHOT button (page 30)

10 IRIS switch (page 26)

11 PUSH AF (momentary auto focus) button (page 28)

12 FOCUS switch (pages 27, 28)

13 Focus ring slide switch (pages 27, 28)

Slide the position of the focus ring forward or rearward to suit the focus mode.

14 ZOOM switch (page 29)

15 Lens hood fixing screw (page 30)

To remove the lens hood, loosen the set screw and pull the lens hood away.

Attaching a lens to the camcorder

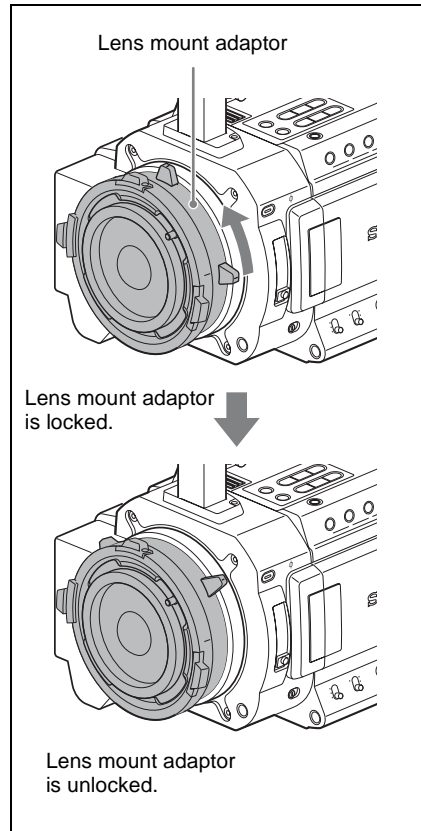
If the camcorder has a lens mount adaptor attached, remove the adaptor from the camcorder and attach the lens.

Note

Before attaching a lens to the camcorder, check if the lens interface setting of the camcorder according to the procedure in steps 1 and 2 is correctly selected.

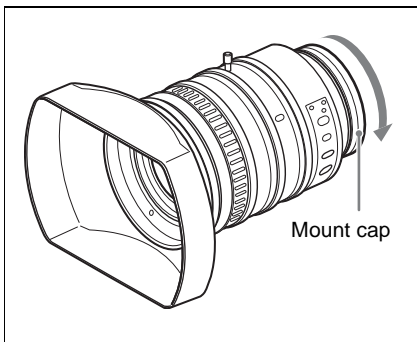
- 1 Set the power switch to the ON position.
- 2 Set “Lens IF” on the CAMERA SET menu to “Type C.”

- 3 Turn a lens mount adaptor of the camcorder in the direction of the arrow, then remove it.

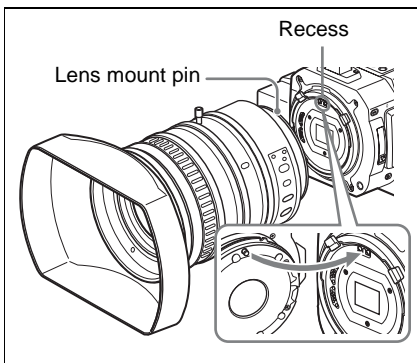


- 4** Remove the mount cap from the mount section.

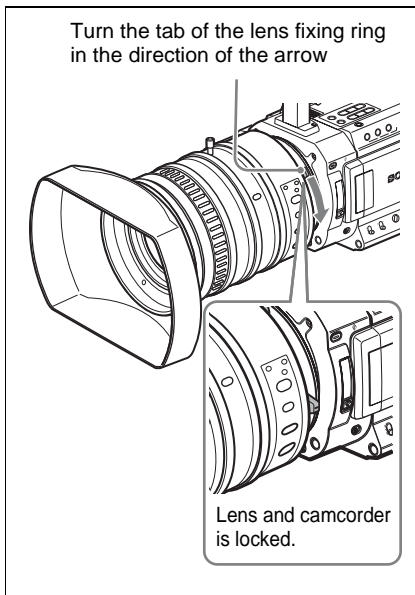
Turn the mount cap in the direction of the arrow and remove.



- 5** While holding the lens, align the lens mount pin of the lens with the recess at the top of the mount section of the camcorder and set the lens in place.



- 6** Turn the lens fixing ring in the direction of the arrow to secure the lens.



To detach the lens, reverse the above procedure.

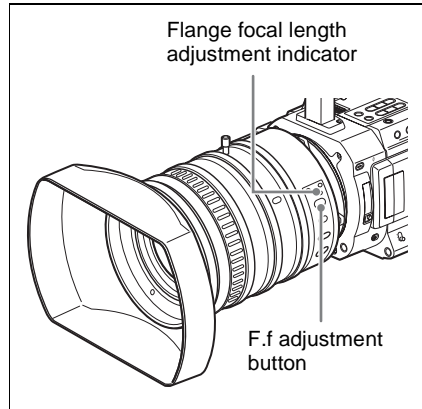
Adjusting the Flange Focal Length

After attaching the lens to the camcorder, adjust the flange focal length (distance between the lens mount attachment plane and the imaging plane). The flange focal length can be automatically adjusted by pressing the F.f adjustment button of the lens or by menu operation of the camcorder.

When automatic adjustment of flange focal length is activated, focusing is performed both at the wide-angle and telephoto ends of the zoom for flange focal length adjustment and the result is stored so that the in-focus condition is maintained even if you change the zoom position after focusing.

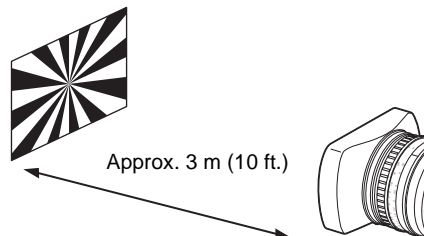
Notes

- If a subject of insufficient contrast is used, or if the camcorder or subject moves during the adjustment, adjustment cannot be made properly. Once the adjustment begins, do not touch the camcorder body or lens until it ends.
- When “Setting” of the “Slow Shutter” of the CAMERA SET menu is “On,” be sure to set it to “On” before starting the adjustment.
- Be careful that no light source, such as a lamp, the sun, or a bright window, is in field of view during flange focal length adjustment.
- If the adjustment screw of the camcorder for flange focal length is rotated after automatic adjustment of flange focal length, the adjusted flange focal length is shifted. Be careful not to rotate the adjustment screw after automatic adjustment.



- 1** Set the power switch of the camcorder to ON.
- 2** Set the IRIS switch of the lens to AUTO.
- 3** Place a high-contrast subject, such as a flange focal length adjustment chart, about 3 m (10 ft.) away from the camcorder, and light it well enough to provide a sufficient video output level.

Frame the subject so that it is located in the center at the telephoto end of the zoom. Make sure that any object located closer to the lens than the subject is out of frame at the wide-angle end.



- 4** Set the ZOOM switch to SERVO (Power Zoom mode).


- 5** Press and hold the E.f. adjustment button and STEADY SHOT button for 2 seconds or longer.

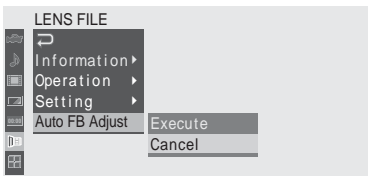
The adjustment begins.

During adjustment, the flange focal length adjustment indicator of the lens flashes and the in-progress message is displayed.

When the adjustment is finished, the completion message is displayed and the flange focal length adjustment indicator goes dark.

To activate automatic adjustment of the flange focal length from the menu of the camcorder

- ① Press the MENU button of the camcorder to set the camcorder to Menu mode.
- ② Select  (the LENS FILE menu) then “Auto FB Adjust” from the menu.
- ③ Select “Execute.”



For details on menu operations, refer to the instructions supplied with your camcorder.

If you press the CANCEL button of the camcorder during adjustment

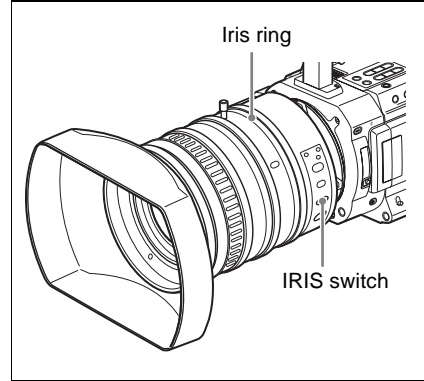
Automatic adjustment of the flange focal length is aborted and the condition before starting the adjustment is resumed.

If the adjustment fails

An error message is displayed. Check the conditions of the subject and lighting then perform the adjustment again.

Adjusting the Iris

Adjust the iris opening according to the brightness of the subject.



Adjusting the Iris Manually

- 1** Set the IRIS switch to MANUAL.
- 2** Rotate the iris ring for the desired iris opening.

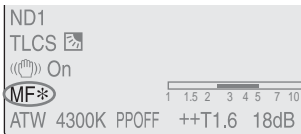
For details on adjusting the iris, refer to the instructions supplied with your camcorder.

Using the Auto Iris

When the IRIS switch is set to AUTO, the lens adjusts the iris automatically according to the brightness of the subject.

Adjusting the Focus

You can select any of three modes for focus adjustments on the lens. The current focus mode is displayed on the viewfinder of the camcorder when you set the focus mode.



FULL MF (Full Manual Focus) mode

Only adjustment with the focus ring is effective in this mode.

You can adjust the focus from the minimum length by rotating the ring. The ring rotates endlessly in the both directions.

MF (Manual Focus) mode

Adjustment with the focus ring is effective in this mode.

Auto focus can be temporarily activated by pushing the PUSH AF button.

AF (Aut Focus) mode

Auto focus functions continuously in this mode. The focus ring operation temporarily and the PUSH AF button can also be used..

Note

The infinity position has some margin to compensate for focus change caused by variation in ambient temperature. When shooting an image at infinity in MF or FULL MF mode, adjust the focus while observing the image in the viewfinder.

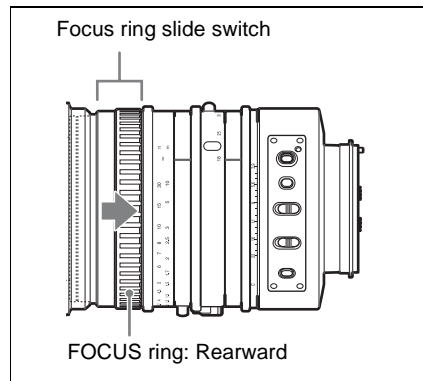
FULL MF mode

Set FULL MF mode.

Slide the focus ring rearward (toward the camcorder body) and rotate the focus ring until the subject comes into focus.

Notes

- The focus instantly moves to the range index position when you slide the focus ring rearward.
- The range index of the focus ring is effective in FULL MF mode. The distances correspond to the focus ring positions.

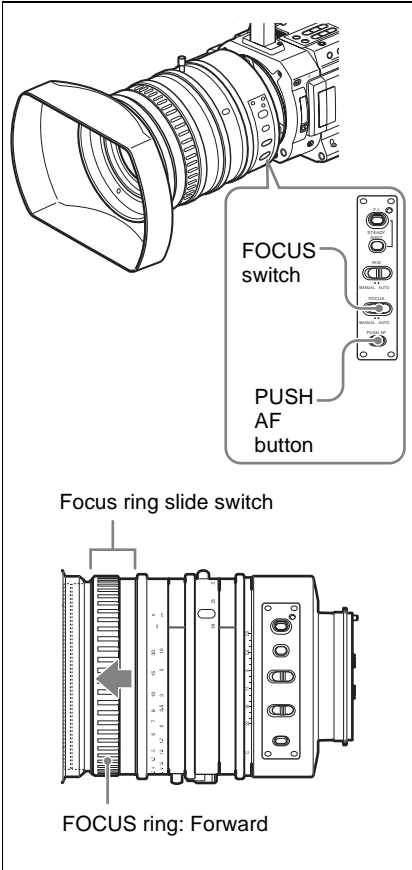


MF mode

Set MF mode. The focus ring can be used. When you slide the focus ring forward (toward the lens) then set the FOCUS switch to MANUAL, auto focus will be activated by pushing the PUSH AF button.

Note

The range index of the ring is invalid in MF mode.



To momentarily activate auto focus

Push the PUSH AF button. Auto focusing momentarily activates (One-Push Auto Focusing).

One-Push Auto Focusing is terminated when the subject comes in focus.

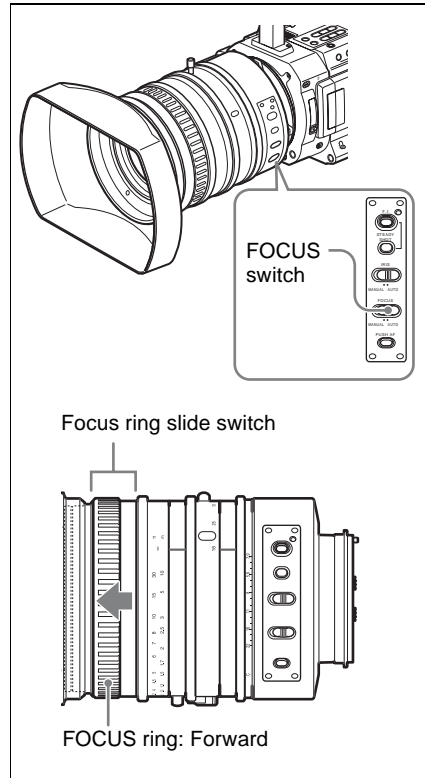
AF mode

Set AF mode.

Slide the focus ring forward (toward the lens) then set the FOCUS switch to AUTO.

Note

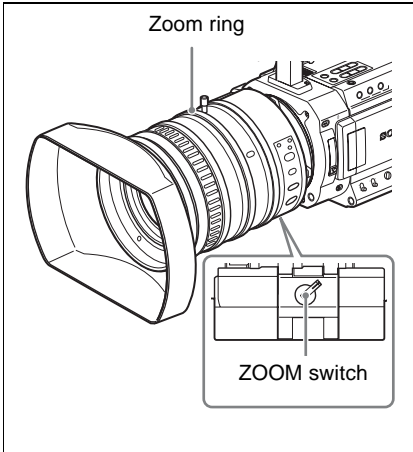
The range index of the ring is invalid in AF mode.



In AF mode the camcorder continuously checks changes of images and activates auto focusing each time it detects a change. The auto focus adjustment is terminated when the subject comes into focus, and the camcorder stands by until the next change is detected.

Adjusting the Zoom

You can adjust the zoom manually or using power zoom (servo mode).



Notes

- When zooming quickly in power zoom mode, the camcorder may record operating noise.
- When zooming slowly, change in zooming effect may be uneven.
- If you direct the lens upward or downward while zooming manually, weight of the lens will contribute slightly to how far it extends.

Adjusting the Zoom Manually

- 1** Set the ZOOM switch to MANUAL.
- 2** Rotate the zoom ring to adjust the zoom.

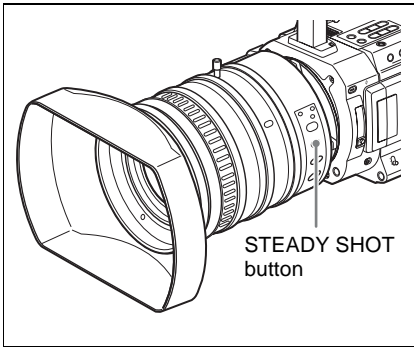
Using Power Zoom (SERVO)

Setting the ZOOM switch to SERVO Servo mode activates power zoom.

For details on power zoom operations, refer to the instructions supplied with your camcorder.

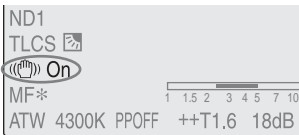
Eliminating Picture Blurring (Steady Shot)

By activating the Steady Shot function, blurring of images due to camera shaking can be reduced.



1 Press the STEADY SHOT button.

The Steady Shot function is set to On. The Steady Shot function is displayed on the viewfinder of the camcorder. To deactivate the Steady Shot function, press the button again.



- Steady Shot is a registered trademark of Sony corporation.

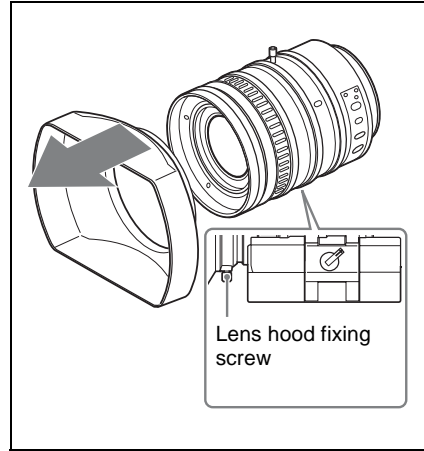
Note

If the camcorder is fixed to a tripod for stable condition, deactivate the Steady Shot function.

Appendixes

Removing the Lens hood

Loosen the lens hood set screw and pull the lens hood away from the lens, as shown below.



Precautions

Use and Storage

Do not subject the unit to severe shock

The internal mechanism may be damaged or the body warped.

Do not cover the unit while operating

Putting a cloth, for example, over the unit can cause excessive internal heat build-up.

Do not leave the lenses facing the sun

Direct sunlight can enter through the lenses, be focused in the camcorder, and cause fire.

Do not hold moving parts of the lens when zooming

If you hold moving parts of the lens when zooming, the lens may be damaged.

Carrying

Attach the lens hood, hood cap, and the mount cap to the lens to protect the lens and lens mount.

Hold the lens body in both hands to carry.

Note on attaching the lens

Be careful not to pinch a finger when attaching the lens to the camcorder

Care of the unit

Remove dust and dirt from the surfaces of the lens using a blower.

If the body of the unit is dirty, clean it with a soft, dry cloth. In extreme cases, use a cloth steeped in a little neutral detergent, then wipe dry. Do not use organic solvents such as alcohol or thinner, as these may cause discoloration or other damage to the finish of the unit.

On lens

- Clean the lens with a blower or lens tissue. Avoid excessive cleaning.
- Remove oil stains with a piece of the lens cleaning tissue moistened with a cleaning solution. Wipe the lens lightly from the center outward in a circular motion.

In the event of operating problems

If you should experience problems with the unit, contact your Sony dealer.

Use and storage locations

Store in a level, ventilated place. Avoid using or storing the unit in the following places:

- In excessive heat or cold (operating temperature range: 0°C to 40°C or 32°F to 104°F)
- Remember that in summer in warm climates the temperature inside a car with

the windows closed can easily exceed 50°C (122°F).

- In damp or dusty locations
- Locations where the unit may be exposed to rain
- Locations subject to violent vibration
- Near strong magnetic fields
- Close to radio or TV transmitters producing strong electromagnetic fields.
- In direct sunlight or close to heaters for extended periods

On the circumstances

- When the lens is used in a humid location for any length of time, wipe its various parts with a dry cloth, and put it in a plastic bag together with a desiccating agent. Take extra cautions when using the lens in the rain.
- When using the lens outdoors in adverse weather conditions, attach and remove the lens as quickly as possible to prevent the intrusion of foreign objects.

To prevent electromagnetic interference from portable communications devices

The use of portable telephones and other communications devices near this unit can result in malfunctions and interference with audio and video signals.

It is recommended that the portable communications devices near this unit be powered off.

Specifications

Mass Approx. 2,250 g (not included the lens hood)

Operating temperature
0 °C to + 40 °C (32 °F to 104 °F)

Storage temperature
–20 °C to + 60 °C (–4 °F to 140 °F)

Dimensions
See page 00

Supplied accessories

Operating Instructions (1)
Flange focal length adjustment
chart (1)
Lens hood (1)
Hood cap (1)
Mount cap (1)
Focal length
18 mm to 252 mm
Zoom ratio
14 ×
Servo/Manual selectable
Maximum relative aperture
T3.9 (WIDE end) to
T6.8 (TELE end)
Iris T3.9/T6.8 to T22 and Close
Auto/Manual selectable
Focus Ranges: 1.05 m to ∞
(from the imaging plane)
Auto/Manual selectable
Picture stabilizing function
Steady Shot ON/OFF possible,
shift-lens system
Filter mounting screw
M 82 mm, pitch 0.75 mm
Mount system
Sony FZ mount

Design and specifications are subject to
change without notice.

Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.

Dimensions

