

Color Video Camera

Operating Instructions

Before operating the unit, please read these instructions thoroughly and retain them for future reference.

Mode d'emploi

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.

Manual de instrucciones

Antes de utilizar la unidad, lea detenidamente este manual, y consérvelo para futuras referencias.

Super HAD CCD®

SSC-DC134

SSC-DC132P/DC134P/DC138P

Sony Corporation © 2000 Printed in Japan

Owner's Record

The model and serial numbers are located on the bottom. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED.



NOTICE FOR THE SSC-DC134

The graphical symbol is on the unit. This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the U.S.A. (SSC-DC134 only)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This device requires shielded interface cable to comply with FCC emission limits.

AVERTISSEMENT

Afin d'éviter tout risque d'incendie ou d'électrocution, ne pas exposer cet appareil à la pluie ou à l'humidité.

Afin d'éviter tout risque d'électrocution, garder le coffret fermé. Ne confier l'entretien de l'appareil qu'à un personnel qualifié.

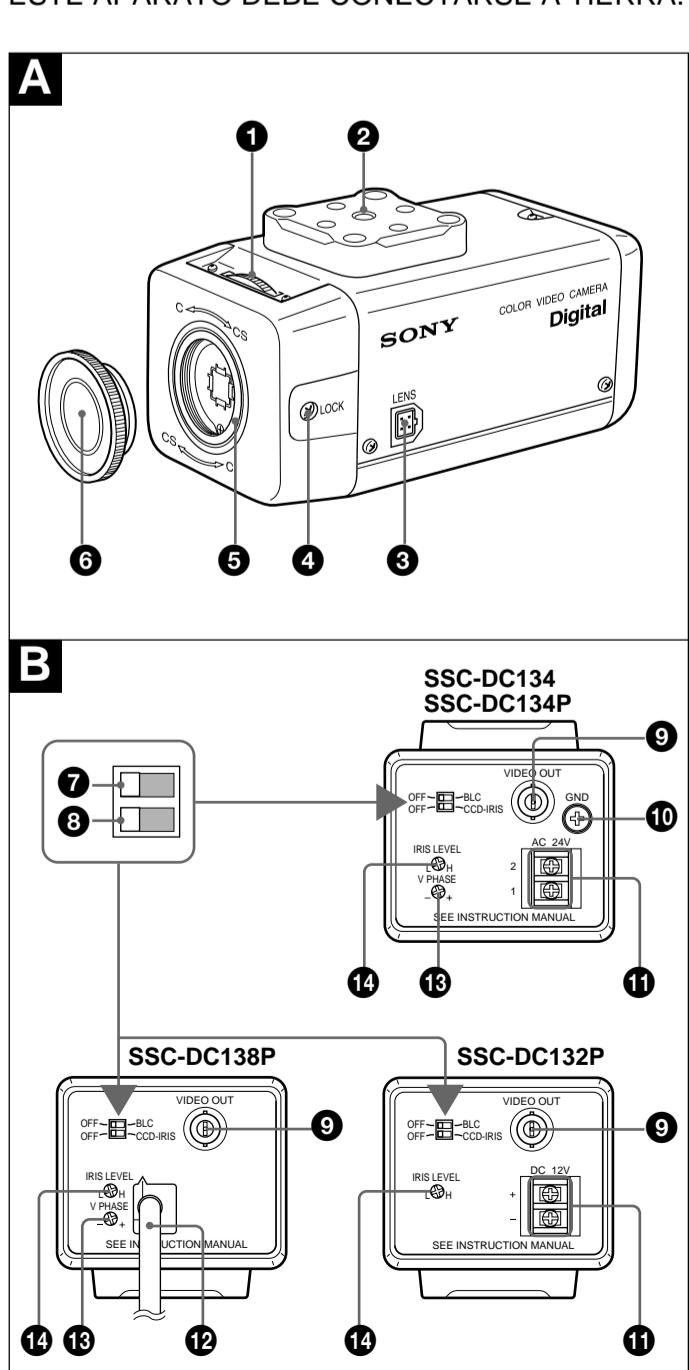
CET APPAREIL DOIT ÊTRE RELIÉ À LA TERRE.

ADVERTENCIA

Para prevenir el riesgo de incendios o de electrocución, no exponga la unidad a la lluvia ni a la humedad.

Para evitar descargas eléctricas, no abra la unidad. En caso de avería, solicite el servicio de personal cualificado únicamente.

ESTE APARATO DEBE CONECTARSE A TIERRA.



English

This manual applies to the SSC-DC134, SSC-DC132P, SSC-DC134P and SSC-DC138P. The operating instructions apply to these cameras, but their signal systems and power requirements are different.

	Signal system	Power requirements
SSC-DC134	NTSC color system	AC 24V, 60 Hz
SSC-DC132P	PAL color system	DC 12V
SSC-DC134P	PAL color system	AC 24V, 50 Hz
SSC-DC138P	PAL color system	AC 220-240V, 50 Hz

Features

- High sensitivity with a 1/3 type Super HAD CCD® (Super Hole-Accumulated-Diode CCD) for the image device
- Backlight compensation
- Turbo AGC
- CCD-IRIS function
- Line lock function (SSC-DC134/DC134P/DC138P)
- C/C/S mount capability
- DC servo Auto-iris lens capability
- Automatic Tracing White Balance

* Super HAD CCD® is registered trademark of Sony Corporation.

Notes on Use

Power supply

- The SSC-DC134 must always be operated with an AC 24V, 60 Hz Class 2 power supply. In the U.S.A., use a power supply which is UL Listed. In Canada, use a power supply which is CSA Certified.
- The SSC-DC134P must always be operated with an AC 24 V (50 Hz) power supply.
- When connecting the transformer, be sure to connect each lead to the appropriate terminal. Wrong connection may cause malfunction and/or damage to the video camera.
- Ground the unit or an irregular voltage may be generated in the AC power cord and may cause malfunction and/or damage to the video camera.
- The SSC-DC132P must always be operated with a DC 12 V power supply.
- The SSC-DC138P must always be operated with an AC 220 to 240V (50 Hz) power supply.

Handling of the unit

Be careful not to spill water or other liquids on the unit, or allow combustible or metallic materials inside the body. If used with foreign matter inside, the camera may fail, or be a cause of fire or electric shock.

Operating and storage locations

Avoid shooting very bright objects (such as light fittings) for an extended period. Avoid operating or storing the unit in the following locations:

- Extremely hot or cold places (operating temperature -10°C to 50°C (14°F to 122°F))
- Damp or dusty places
- Where it is exposed to rain
- Locations subject to strong vibration
- Close to generators of powerful electromagnetic radiation such as radio or TV transmitters.

Care of the unit

- Use a blower to remove dust or dirt on the surface of the lens or optical filter.
- Clean the body with a dry soft cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, then wipe dry. Avoid the use of volatile solvents such as thinners, alcohol, benzene, and insecticides. They may damage the surface finish, or impair the operation of the camera.

ATTENTION

If installing the camera on the ceiling, be sure it is secure. If not securely installed, the camera may fall and injury may occur.

If the camera is installed on the ceiling using equipment such as a bracket, housing and motored swivel base (pan/tilt), do the following:

- Use tripod screws and securely tighten them with a driver. Order the tripod screws (Sony Part No. 3-174-693-01) from your nearest Sony dealer.
- Install the tripod adapter on a flat surface.

In the event of any problems with the operation of the camera, contact your authorized Sony dealer.

Location and Function of Parts

Front and side

Illustration A

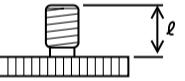
① C/CS adjustment ring

The C/CS ring to adjusts the back focus to suit the type of lens fitted (C-mount or CS-mount). The factory setting is set to CS-mount. After adjusting, be sure to lock the back focus with the ④ LOCK screw.

② Tripod adapter (On SSC-DC134, the tripod adapter is attached on top of the main body. On the SSC-DC132P/SSC-DC134P/DC138P, it is attached underneath the main body.)

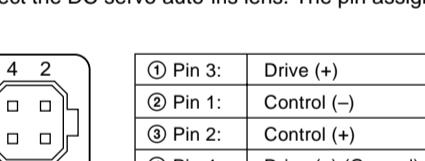
The tripod adapter can be attached to either the top or bottom of the camera using the 4 attached screws. Use the tripod adapter screw hole to fix the camera to a mounting bracket. The mounting screw must be of the following type.

- 1/4" UNC (20 pitch)
- 4.5 mm ± 0.2 mm (ISO standard), or 0.197" (ASA standard)



③ LENSL connector (4-pin)

When using an auto iris lens, plug the lens plug into this socket. You can only connect the DC servo auto-iris lens. The pin assignment is as follows:



④ Back focus LOCK screw

After adjusting the ① C/CS adjustment ring to match the type of lens you are using, turn this screw with a screwdriver to lock the back focus.

⑤ Lens mount (C- or CS-mount)

Used to attach a C- or CS-mount lens.

⑥ Lens mount cap

Keep in place when not attaching a lens to the camera.

Rear

B

⑦ BLC (back lighting compensation) ON/OFF switch

When switched on, this function adjusts exposure to compensate for situations where the subject is lit from behind.

⑧ CCD IRIS ON/OFF switch

When using a manual iris lens, the CCD-IRIS function automatically adjusts the shutter speed to maintain a suitable exposure level.

⑨ VIDEO OUT connector

This coaxial connector (BNC-type) outputs the video signals.

⑩ GND (ground) terminal (SSC-DC134/DC134P)

Connect this terminal to the ground.

⑪ AC 24V screw terminals (SSC-DC134/DC134P)

Connect to an external power supply of AC 24V.

⑫ DC 12V screw terminals (SSC-DC132P)

Connect to an external power supply of DC 12V.

⑬ Power cable (SSC-DC138P)

Connect to an external AC power supply of 220V to 240V.

⑭ V PHASE (vertical phase) +/- screw (SSC-DC134/DC134P/DC138P)

Use this screw to compensate for vertical phase discrepancies which can occur when multiple cameras are connected to a switching device. Each camera's output is synchronized to the frequency of the power supply.

⑮ IRIS LEVEL L/H adjustment screw

Use to adjust the iris level when using a DC servo lens.

⑯ BLC (back lighting compensation) ON/OFF switch

When switched on, this function adjusts exposure to compensate for situations where the subject is lit from behind.

⑰ CCD IRIS ON/OFF switch

When using a manual iris lens, the CCD-IRIS function automatically adjusts the shutter speed to maintain a suitable exposure level.

⑱ VIDEO OUT connector

This coaxial connector (BNC-type) outputs the video signals.

⑲ GND (ground) terminal (SSC-DC134/DC134P)

Connect this terminal to the ground.

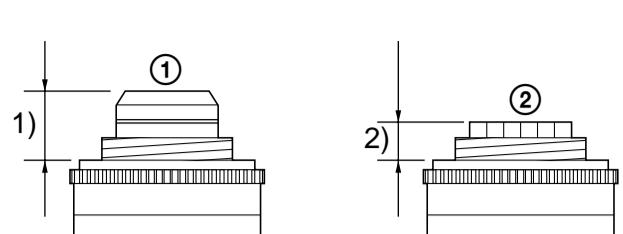
⑳ AC 24V screw terminals (SSC-DC134/DC134P)

Connect to an external power supply of AC 24V.

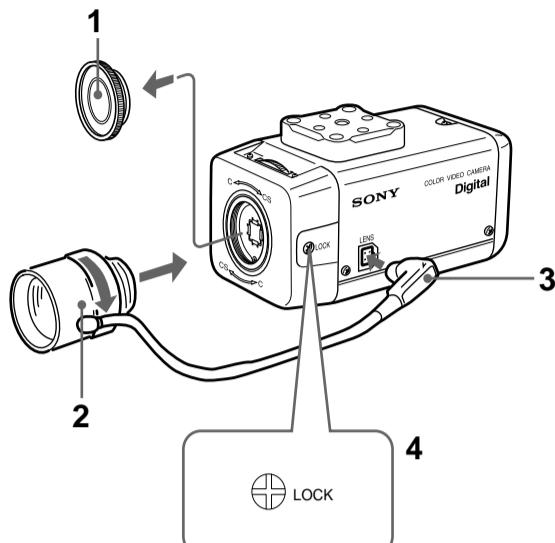
㉑ DC 12V screw terminals (SSC-DC132P)

Connect to an external power supply of DC 12V.

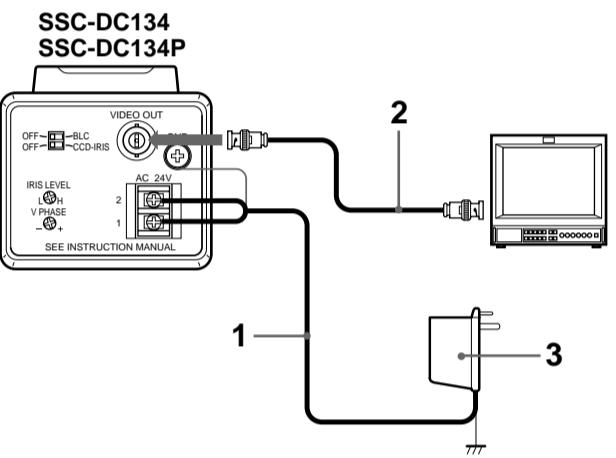
C



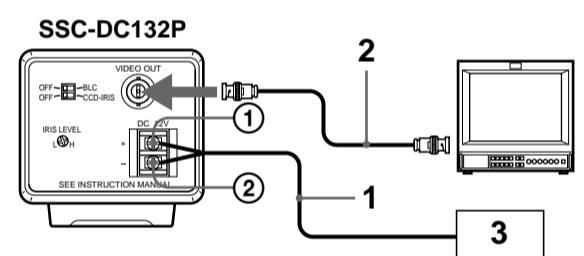
D



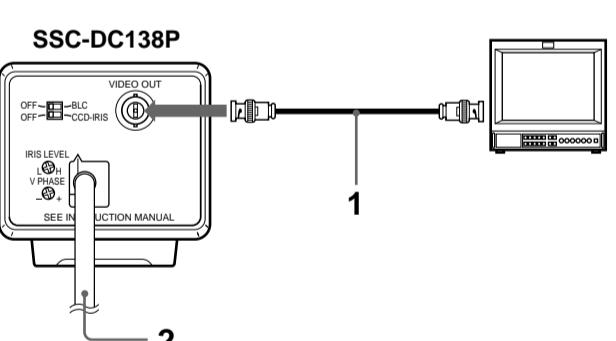
E



F



G



Mounting the Lens

Compatible lenses

① C mount lens	1) 9 mm (3/8 inch) or less
② CS mount lens	2) 4 mm (5/32 inch) or less

Notes

- Be sure to attach the lens mount cap when the lens is not mounted.
- Only lenses that are suitable for a 1/3type CCD should be used with this camera. If lenses for a 2/3type or 1/2type CCD are used, the view angle will be different.

Fitting the lens

When using a DC servo auto-iris lens, fit it as follows. For a manual-iris lens, omit step 3.

- 1 Unscrew lens mount cap.
- 2 Screw in the lens.
- 3 First, replace the plug on the lens cable with the plug which fits to this camera. Then, connect the camera cable plug to the LENS socket.
- 4 Loosen the back focus LOCK screw. Adjust the back focus by turning the C/CS adjustment ring in accordance with the type of lens fitted (C-mount or CS-mount). Once adjusted, tighten the back focus LOCK screw. (The factory setting is CS-mount.)

Caution

When attaching a C-mount type lens, be sure to turn the C/CS adjustment ring fully in the "C" direction. When the C/CS adjustment ring is set to "CS," mounting any lens with a mount projection of more than 4 mm may damage the internal parts of the camera.

Connections

Connecting the SSC-DC134/DC134P

- 1 Connect the power lines to the camera.
- 2 Connect the 75-ohm coaxial cable to the video monitor.
- 3 Connect the wall outlet transformer.

Notes

- When using a transformer without a ground lead (two-lead type), connect the output of the transformer to the AC 24V 1 and 2 terminals of the camera.
- When using a transformer with a ground lead (three-lead type), connect the ground lead to the GND terminal and the other two leads to the AC 24V 1 and 2 terminals.
- To prevent a short circuit, do not let the exposed transformer leads brush against conductive material when connecting to the AC 24V terminals.

Connecting the SSC-DC132P

- 1 Connect the power lines to the camera.
- 2 Connect the 75-ohm coaxial cable to the video monitor.
- 3 Connect to the power supply.

Note

To prevent short circuits, do not let the exposed ends of the mains lead wires touch each other when connecting to the mains lead terminals.

Connecting the SSC-DC138P

- 1 Connect the 75-ohm coaxial cable to the video monitor.
- 2 Connect the main lead.

CCD Characteristics

The following are characteristics that may be observed when viewing an image produced by a CCD camera. These are inherent characteristics of the CCD camera and do not stem from any fault within the camera itself.

Vertical smear

This phenomenon occurs when viewing a very bright object.

Patterned noise

This is a fixed pattern which may appear over the entire monitor screen when the camera is operated at a high temperature.

Jagged picture

When viewing stripes, straight lines, or similar patterns, the image on the screen may appear jagged.

Specifications

Image device	1/3type Interline transfer CCD
Effective picture elements	SSC-DC134: 510(H) × 492(V) SSC-DC132P/DC134P/DC138P: 500(H) × 582(V)
Horizontal resolution	330 TV lines
Minimum illumination	0.85 lux at F1.2
CCD Iris	SSC-DC134: 1/60 to 1/100,000 second SSC-DC132P/DC134P/DC138P: 1/50 to 1/100,000 second
CCD Iris control	ON/OFF switchable
Auto iris lens type	DC servo
Power requirements	SSC-DC134: AC 24 V, 60Hz SSC-DC132P: DC 12 V ±10% SSC-DC134P: AC 24 V, 50Hz SSC-DC132P/DC134P: 220-240V, 50Hz SSC-DC134/DC134P: 4.0W SSC-DC132P: 0.2 A (DC 12 V) SSC-DC138P: 4.5 W
Power consumption	SSC-DC134: AC line lock 60Hz SSC-DC132P: Internal SSC-DC134P/DC138P: AC line lock 50Hz
Sync system	Always ON
AGC	SSC-DC134: NTSC color system SSC-DC132P/DC134P/DC138P: PAL color system
Signal system	ATW only
White Balance	1 Vp-p, 75 Ohm, negative sync
Video Signal S/N ratio	50dB (AGC off)
Phase control	V-phase adjustment (±90°) (SSC-DC134/DC134P/DC138P)
Lens mount	C/CS mount (Adjustable)
Dimensions (w/h/d)	70 × 57 × 130 mm (2 7/8 × 2 1/4 × 5 1/8 inches) (excluding protruding parts)
Mass	SSC-DC134/DC132P/DC134P: Approx. 550g (1 lb 3 oz.) SSC-DC138P: Approx. 780g (1 lb 12 oz.)
Operating temperature	-10°C to +50°C (14°F to 122°F)
Storage temperature	-40°C to +60°C (-40°F to 140°F)
Relative operating humidity	20% to 80% (non condensing)
Relative storage humidity	20% to 95%
Shock resistance	70G
Auto-Iris lens connector	4-pin
Supplied accessories	Lens mount cap (1) Operating Instructions (1)

Design and specifications are subject to change without notice.

Montage de l'objectif

Objectifs compatibles

① Objectif à monture C	1) 9 mm (3/8 pouce) ou moins
② Objectif à monture CS	2) 4 mm (5/32 pouce) ou moins

Remarques

- Assurez-vous de fixer le bouchon du boîtier lorsqu'un objectif n'est pas monté.
- Seuls les objectifs compatibles avec un CCD de 1/3 de pouce peuvent être utilisés avec cette caméra. Si vous utilisez des CCD de 2/3 ou 1/2 de pouce, l'angle de vue sera différent.

Montage de l'objectif

Si vous utilisez un objectif DC servo à diaphragme automatique, montez-le de la façon suivante. Dans le cas d'un objectif à diaphragme manuel, ignorez l'étape 3.

- 1 Dévissez le bouchon d'objectif.
- 2 Vissez l'objectif.
- 3 Remplacez d'abord la fiche du cordon d'objectif par la fiche correspondant à cette caméra. Branchez ensuite la fiche du cordon de caméra sur la prise LENS.
- 4 Desserrez la vis de verrouillage de point focal arrière LOCK. Réglez le point focal arrière en tournant la bague de réglage C/CS en fonction du type d'objectif (monture C ou CS). Une fois le réglage terminé, serrez la vis de verrouillage de point focal arrière LOCK. (Le réglage par défaut est prévu pour une monture CS.)

Attention

Si vous installez un objectif à monture C, veillez à tourner la bague de réglage C/CS à fond vers la position "C". Si la bague de réglage se trouve sur la position "CS", l'installation d'un objectif dont la monture fait une saillie de plus de 4 mm risque d'endommager les composants internes de la caméra.

Raccordement

Raccordement de la caméra SSC-DC134/DC134P

- 1 Raccordez les lignes d'alimentation à la caméra.
- 2 Branchez le câble coaxial de 75 ohms sur le moniteur vidéo.
- 3 Branchez le transformateur de prise murale.

Remarques

- Si vous utilisez un transformateur sans fil de masse (type bifilaire), raccordez la sortie du transformateur aux bornes AC 24V 1 et 2 de la caméra.
- Si vous utilisez un transformateur avec un fil de masse (type trifilaire), raccordez la sortie du transformateur à la borne GND et les deux autres fils aux bornes AC 24V 1 et 2.
- Pour éviter tout court-circuit, veillez à ce que les parties de fil exposées du transformateur n'entrent pas en contact avec un matériau conducteur lors du raccordement aux bornes AC 24V.

Raccordement de la caméra SSC-DC132P

- 1 Raccordez les lignes d'alimentation à la caméra.
- 2 Branchez le câble coaxial de 75 ohms sur le moniteur vidéo.
- 3 Branchez la prise murale.

Remarque

Pour éviter un court-circuit, veillez à ce que les extrémités exposées des fils du câble d'alimentation ne se touchent pas lorsque vous raccordez les bornes du câble d'alimentation.

Raccordement de la caméra SSC-DC138P

- 1 Branchez le câble coaxial de 75 ohms sur le moniteur vidéo.
- 2 Branchez le cordon d'alimentation.

Caractéristiques CCD

Voici des caractéristiques qui peuvent être observées lors de la visualisation d'images réalisées à l'aide d'une caméra CCD. Il s'agit de caractéristiques inhérentes aux caméras CCD et ne sont en aucune façon le signe d'une défaillance de la caméra proprement dite.

Maculature vertical

Ce phénomène se manifeste lors de la visualisation d'objets très lumineux.

Parasites périodiques

Il s'agit d'un motif fixe qui peut apparaître sur toute la surface de l'écran du moniteur lorsque la caméra est utilisée sous des températures élevées.

Image ondulatoire

Lors de la visualisation de rayures, de lignes droites ou de motifs similaires, l'image à l'écran peut sembler irrégulière.

Spécifications

Système d'image	CCD à transfert et interligne de type 1/3
Eléments d'image effectifs	SSC-DC134: 510(H) × 492(V) SSC-DC132P/DC134P/DC138P: 500(H) × 582(V)
Résolution horizontale	330 lignes TV
Éclairage minimum	0.85 lux à F1.2
Diaphragme CCD	SSC-DC134: 1/60 à 1/100,000 seconde SSC-DC132P/DC134P/DC138P: 1/50 à 1/100,000 seconde
Commande diaphragme CCD	Commutable ON/OFF
Type d'objectif à diaphragme automatique	DC servo
Puissance de raccordement	SSC-DC134: 24 V CA, 60Hz SSC-DC132P: 12 V CC ±10% SSC-DC134P: 24 V CA, 50Hz SSC-DC138P: 220-240 V CA, 50Hz
Consommation électrique	SSC-DC134/DC134P: 4.0W SSC-DC132P: 0.2 A (12 V CC) SSC-DC138P: 4.5 W
Système de synchronisation	SSC-DC134: Verrouillage sur la fréquence secteur 60 Hz SSC-DC132P: Interne SSC-DC134P/DC138P: Verrouillage sur la fréquence secteur 50 Hz
AGC	Toujours activé ("ON")
Système de signal	SSC-DC134: système couleur NTSC SSC-DC132P/DC134P/DC138P: système couleur PAL
Balance des blancs	ATW uniquement
Signal vidéo	1 Vp-p, 75 ohms, sync négative
Rapport signal/bruit	50 dB (AGC désactivé)
Contrôle de phase	Réglage de phase V (±90°) (SSC-DC134/DC134P/DC138P)
Monture d'objectif	Monture C/CS (réglable)
Dimensions (l/h/p)	70 × 57 × 130 mm (2 7/8 × 2 1/4 × 5 1/8 pouces)
Masse	SSC-DC134/DC132P/DC134P: Approx. 550 g (1 livre 3 onces) SSC-DC138P: Approx. 780 g (1 livre 12 onces)
Température d'utilisation	-10 à +50 °C (14 à 122 °F)
Température de rangement	-40 à +60 °C (-40 à 140 °F)
Humidité relative d'utilisation	20 à 80 % (sans condensation)
Humidité relative de rangement	20 à 95 %
Résistance aux chocs	70G
Connecteur objectif à diaphragme automatique	4 broches
Accessoires fournis	Bouchon d'objectif (1) Mode d'emploi (1)

La conception et les spécifications sont sujettes à modifications sans préavis.

Montaje de la lente

Lentes compatibles