

Declaration of Conformity

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Hitachi Kokusai Electric U.K. Ltd.
 Windsor House, Britannia Road, Waltham Cross,
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declares, that the product:

Product Name:	Remote Controller
Model Number(s):	RU-1200JY RU-1200VR

conforms to the following Standards:

EMC: EN 55103-1:1997 class E3
 EN 55103-2:1997 class E3

Supplementary Information:

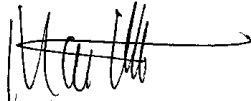
"The product complies with the requirements of the Low Voltage Directive 2006/95/EC and the EMC Directive 2004/108/EC."

Signature:


 Y. Yamada

Senior Manager
 Quality Assurance Department II
 Quality Assurance Center
 Hitachi Kokusai Electric Inc.

Date: 14 January 2009


 M. Katou

Managing Director
 Hitachi Kokusai Electric Europe GmbH
 Hitachi Kokusai Electric U.K. Ltd.

Note: The model and serial numbers of your product are important for you to keep for your convenience and protection. These numbers appear on the nameplate located on bottom of the product. Please record these numbers in the spaces provided below, and retain this manual for future reference.

Model No. _____

Serial No. _____

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SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and safety Instructions on your equipment. Follow recommended precautions and safe operating practices.

SAFETY ALERT SYMBOL



This is the "Safety Alert Symbol." This symbol is used to call your attention to items or operations that could be dangerous to you or other persons using this equipment. Read these messages and follow these instructions carefully.

It is essential that you read the instructions and safety regulations before you attempt to assemble or use this equipment.

The definitions of signal words are as follows:



WARNING: Personal danger

Warning notes indicate any condition or practice, which if not strictly observed, could result in personal injury or possible death.



CAUTION: Possible damage to equipment

Caution notes indicate any condition or practice, which if not strictly observed or remedied, could result in damage or destruction of the equipment.



NOTE: Notes indicate an area or subject of special merit, emphasizing either the product's capabilities or common errors in operation or maintenance.



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS COLOR CAMERA TO RAIN OR MOISTURE.

AVERTISSEMENT

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

Afin d'écarter tout risque d'électrocution, garder le coffret fermé.

Ne confier l'entretien de l'appareil qu'à un personnel qualifié.

VORSICHT

Um Feuergefahr und die Gefahr eines elektrischen Schlags zu vermeiden, darf das Gerät weder Regen noch Feuchtigkeit ausgesetzt werden.

Um einen elektrischen Schlag zu vermeiden, darf das Gehäuse nicht geöffnet werden.

Überlassen Sie Wartungsarbeiten stets nur einem Fachmann.

IMPORTANT SAFETY INSTRUCTIONS

1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Heed Warnings

All warnings on the product and the operating instructions should be adhered to.

4. Follow Instructions

All operating and use instructions should be followed.

5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

7. Water and Moisture

Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

8. Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

9. Moving

A product and cart combination should be moved with care.

Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

10. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered.

The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.

This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

12. Grounding or Polarization

This product is equipped with a three-wire grounding-type plug a plug having a third (grounding) pin.

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

13. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plug, convenience receptacles, and the point where they exit from the product.

14. Lightning

For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.

15. Overloading

Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.

16. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

17. Inflammable and Explosive Substance

Avoid using this product where there are gases, and also where there are inflammable and explosive substances in the immediate vicinity.

18. Heavy Shock or Vibration

When carrying this product around, do not subject the product to heavy shock or vibration.

19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power-supply cord or plug is damaged.
- b. if liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e. If the product has been dropped or damaged in any way.
- f. When the product exhibits a distinct change in performance-this indicates a need for service.

21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part.

Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

24. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

WICHTIGE SICHERHEITSANWEISUNGEN

1. Alle Anweisungen lesen.

Vor Betrieb des Erzeugnisses sollten alle Sicherheits- und Bedienungsanleitungen gelesen werden.

2. Die Anweisungen aufbewahren.

Die Sicherheits- und Bedienungsanleitungen sollten fünftig Bezug aufbewahrt werden.

3. Warnungen beachten.

Die Warnungen auf dem Erzeugnis und in den Bedienungsanleitungen sollten beachtet werden.

4. Anweisungen befolgen.

Alle Bedienungsanleitung- und Verwendungsanweisungen sollten befolgt werden.

5. Reinigung

Den Stecker des Geräts vor Reinigung aus der Steckdose ziehen. Keine flüssigen Reinigungsmittel oder Aerosolreiniger verwenden. Zum Reinigen einen feuchten Lappen verwenden.

6. Zubehör

Nur vom Hersteller des Erzeugnisses empfohlenes Zubehör verwenden, da es sonst zu Störungen kommen kann.

7. Wasser und Feuchtigkeit

Dieses Erzeugnis nicht in der Nähe von Wasser verwenden - z.B. in der Nähe einer Badewanne, eines Waschbeckens, einer Küchenspüle, eines Waschzubers, in einem nassen Keller, in der Nähe eines Schwimmbeckens usw.

8. Aufstellung

Das Erzeugnis nicht auf einen unstabilen Wagen, Stand, Dreifuß, Träger oder Tisch stellen. Das Erzeugnis kann sonst herunterfallen und ein Kind oder einen Erwachsenen schwer verletzen. Außerdem kann das Gerät schwer beschädigt werden. Nur mit einem Wagen, Stand, Dreifuß, Träger oder Tisch verwenden, der vom Hersteller empfohlen oder mit dem Erzeugnis verkauft worden ist. Für jegliche Anbringung sollten die Anweisungen des Herstellers befolgt werden, und das vom Hersteller empfohlene Anbringungszubehör sollte verwendet werden.

9. Eine Kombination von Erzeugnis und Wagen sollte vorsichtig bewegt werden.

Schneller Halt, übermäßige Krafteinwirkung und unebene Oberflächen können Umkippen der Kombination von Erzeugnis und Wagen verursachen.

10. Ventilation

Schlitze und Öffnungen im Gehäuse dienen der Ventilation. Sie sind für zuverlässigen Betrieb des Gerätes und Schutz vor Überhitzung erforderlich und dürfen nicht blockiert oder abgedeckt werden. Die Öffnungen sollten niemals dadurch blockiert werden, daß, das Gerät auf ein Bett, ein Sofa, einen Teppich oder eine ähnliche Oberfläche gestellt wird. Das Gerät sollte nur dann in Einbauinstallation wie in einem Bücherschrank oder einem Gestell verwendet werden, wenn angemessene Ventilation vorgesehen ist bzw. Die Anweisungen des Herstellers befolgt worden sind.

11. Stromversorgung

Dieses Erzeugnis sollte nur an der auf dem Typenschild angegebenen Stromversorgungsart betrieben werden. Wenn Sie nicht sicher sind, was für eine Stromversorgung Sie haben, so wenden Sie sich bitte an Ihren Erzeugnishändler oder an das lokale Elektrizitätswerk. Beziehen Sie sich für Batteriebetrieb oder andere Stromquellen vorgesehene Erzeugnisse bitte auf die Bedienungsanleitungen.

12. Erdung oder Polarisierung

Dieses Erzeugnis ist mit einem Schutzkontaktstecker mit drei Leitern ausgerüstet, mit einem Erdungskontakt. Dieser Stecker paßt nur in eine schuko-Steckdose. Dies ist eine Sicherheitsmaßnahme. Wenn Sie den Stecker nicht in die Steckdose stecken können, so wenden Sie sich bitte an Ihren Elektriker, damit er die veraltete Schutz des Schutzkontaktsteckers unwirksam macht.

13. Netzkabelschutz

Netzkabel sollten so verlegt werden, daß möglichst nicht darauf getreten wird und daß sie nicht eingeklemmt werden, mit besonderer Beachtung der Kabel an Stackern, Verlängerungskabeln und dem Austritt des Kabels aus dem Erzeugnis.

14. Blitzschlag

Für zusätzlichen Schutz des Erzeugnisses während eines Gewitters oder bei Nichtverwendung für lange Zeit den Stecker aus der Steckdose ziehen. Dies verhindert Beschädigung durch Blitzschlag und Netzspannungsschläge.

15. Überlastung

Wandsteckdosen, Verlängerungskabel und eingebaute Bequemlichkeitssteckdosen nicht überlasten, da dies Feuer oder elektrischen Schlag verursachen kann.

16. Eindringen von Fremdkörpern und Flüssigkeit

Niemals Objekte irgendwelcher Art durch die Öffnungen in das Gerät schieben, da diese unter hoher Spannung stehende Teile berühren oder kurzschließen können, wodurch es zu Feuer oder elektrischem Schlag kommen kann. Niemals Flüssigkeiten irgendwelcher Art auf das Erzeugnis verschütten.

17. Entflammbare und explosive Substanzen

Vermeiden Sie Verwendung dieses Erzeugnisses an Orten mit Gasen bzw. entflammbaren oder explosiven Substanzen in der direkten Umgebung.

18. Starke Stöße oder Vibrationen

Setzen Sie das Erzeugnis beim Transport nicht starken Stößen oder Vibrationen aus.

19. Wartung

Versuchen Sie nicht, dieses Erzeugnis selbst zu warten, da Sie sich durch Öffnen bzw. Entfernen von Abdeckungen hohen Spannungen und sonstigen Gefährdungen aussetzen können.

Beziehen Sie sich für jegliche Wartung auf qualifiziertes Wartungspersonal.

20. Beschädigung, die Wartung erfordert

Ziehen Sie den Stecker dieses Erzeugnisses aus der Steckdose und wenden Sie sich an qualifiziertes Wartungspersonal, wenn eine der folgenden Bedingungen vorliegt:

- a. Wenn das Netzkabel oder der Stecker beschädigt ist.
- b. Bei Eindringen von Flüssigkeit oder Fremdkörpern in das Gerät.
- c. Wenn das Erzeugnis Regen oder Wasser ausgesetzt worden ist.
- d. Wenn das Erzeugnis bei Befolgen der Bedienungsanleitungen nicht normal funktioniert.

Nur die Regelelemente verstellen, die in den Bedienungsanleitungen behandelt werden, da unangemessene Einstellung anderer Regelelemente Beschädigung verursachen kann und oft beträchtliche Arbeit durch einen qualifizierten Techniker erfordert, um das Erzeugnis wieder, zu normalem Betrieb zurückzubringen.

- e. Wenn das Erzeugnis fallen gelassen oder beschädigt worden ist.

f. Wenn das Erzeugnis eine klare Änderung in der Leistung zeigt-dies weist darauf hin, daß Wartung erforderlich ist.

21. Ersatzteile

Wenn Ersatzteile erforderlich sind, darauf achten, daß der Wartungstechniker nur die vom Hersteller festgelegten Ersatzteile oder Teile mit den gleichen Charakteristiken wie die ursprünglichen Teile verwendet. Unautorisierte Ersatzteile können Feuer, elektrischen Schlag oder sonstige Gefährdungen verursachen.

22. Sicherheitsprüfung

Bitten Sie den Wartungstechniker nach der Vervollendung von Wartung oder Reparaturarbeiten an diesem Erzeugnis um die Durchführung von Sicherheitsprüfungen, um zu bestimmen, daß das Erzeugnis im angemessenen Betriebszustand ist.

23. Anbringung an der Wand oder an der Decke

Das Erzeugnis sollte nur entsprechend den Empfehlungen des Herstellers an einer Wand oder an der Decke angebracht werden.

24. Wärme

Das Erzeugnis sollte fern von Wärmequellen wie Radiatoren, Heizwiderständen, Öfen und anderen Wärme erzeugenden Erzeugnissen (einschließlich Verstärkern) aufgestellt werden.

MISES EN GARDE IMPORTANTES

1. Lire les instructions

Lire toutes les instructions de sécurité et de fonctionnement avant de faire fonctionner l'appareil.

2. Conserver ces instructions

Conserver les instructions de sécurité et de fonctionnement à des fins de référence ultérieure.

3. Tenir compte des avertissements

Tous les avertissements qui figurent sur l'appareil et dans le mode d'emploi devront être respectés.

4. Observer les instructions

Observer toutes les instructions de fonctionnement et d'utilisation.

5. Nettoyage

Avant de procéder au nettoyage, débrancher l'appareil de la prise secteur. Ne pas utiliser de produits de nettoyage liquides ou en aérosol.

Nettoyer l'appareil avec un chiffon humide.

6. Fixations

Ne pas utiliser de fixations non recommandées par le fabricant de l'appareil car elles pourraient être source de danger.

7. Eau et humidité

Ne pas utiliser l'appareil à proximité d'eau-par exemple près d'une baignoire, d'un lavabo, d'un évier ou d'un bac à lessive, dans un sous-sol humide, ou près d'une piscine, etc.

8. Accessoires

Ne pas placer l'appareil sur un chariot, un socle, un pied, un support ou une table instables. L'appareil pourrait tomber, blessant grièvement des enfants ou des adultes, et étant sérieusement endommagé.

Utiliser exclusivement le chariot, le socle, le pied, le support ou la table recommandés par le fabricant, ou vendus avec l'appareil. Pour tout montage de l'appareil, respecter les instructions du fabricant, et utiliser à cette fin l'accessoire de montage recommandé par le fabricant.

9. L'appareil monté sur son chariot devra être déplacé avec précaution.

Des arrêts brusques, une force excessive et des surfaces irrégulières pourraient provoquer le renversement de l'ensemble appareil-chariot.

10. Ventilation

Les fentes et les ouvertures du coffret sont prévues pour la ventilation ainsi que pour garantir un fonctionnement en toute sécurité de l'appareil et le protéger de toute surchauffe, et ces ouvertures ne devront donc être ni obstruées ni recouvertes. Ne jamais obstruer les ouvertures en plaçant l'appareil sur un lit, un sofa, un tapis ou toute surface similaire. Ne jamais placer l'appareil dans un support confiné, par exemple une bibliothèque ou une étagère, sans ventilation suffisante ou sans respecter les instructions du fabricant.

11. Sources d'alimentation

L'appareil devra être alimenté exclusivement sur le type d'alimentation indiqué sur l'étiquette signalétique. Si l'on n'est pas sûr du type d'alimentation du local, consulter le revendeur de l'appareil ou la compagnie d'électricité locale. Pour les appareils qui fonctionnent sur batterie ou sur d'autres sources, voir le mode d'emploi.

12. Mise à la terre ou polarisation

L'appareil est doté d'une fiche trifilaire avec mise à la terre, dont la troisième broche assure la mise à la terre. Cette fiche ne rentrera que dans les prises trifilaires de mise à la terre. Ceci est une mesure de sécurité. Si la fiche ne rentre pas dans la prise, faire remplacer la prise défectueuse par un électricien.

Ne pas rendre vaine la mesure de sécurité assurée par cette prise avec mise à la terre.

13. Protection du cordon d'alimentation

Acheminer les cordons d'alimentation de façon qu'on ne risque pas de marcher dessus ou de les coincer sous un objet placé dessus ou contre eux.

Faire particulièrement attention aux fiches des cordons, à la proximité des prises, et à l'endroit où ils ressortent de l'appareil.

14. Foudre

Pour renforcer la protection de l'appareil pendant un orage, ou si l'on s'en éloigne ou qu'on reste longtemps sans l'utiliser, le débrancher de la source d'alimentation. Ceci permettra d'éviter tout dommage de l'appareil dû à la foudre et aux surtensions de ligne.

15. Surcharge

Ne pas surcharger les prises, rallonges et prises multiples car cela pourrait entraîner un risque de feu ou de choc électrique.

16. Pénétration d'objets et de liquides

Ne jamais enfoncer d'objets d'aucune sorte dans les ouvertures de l'appareil car ils pourraient toucher des points de tension dangereuse ou court-circuiter des pièces, ce qui pourrait provoquer un feu ou un choc électrique. Ne jamais renverser de liquide d'aucune sorte sur l'appareil.

17. Substances inflammables et explosives

Eviter d'utiliser l'appareil en présence de gaz, ainsi qu'à proximité immédiate de substances inflammables et explosives.

18. Chocs ou vibrations violents

Lorsqu'on transporte l'appareil, ne pas le soumettre à des chocs ou des vibrations violents.

19. Réparations

Ne pas tenter de réparer l'appareil soi-même car le fait d'ouvrir ou de retirer les caches risque d'exposer l'utilisateur à des tensions dangereuses notamment. Confier toute réparation à un personnel qualifié.

20. Dommages nécessitant réparations

Débrancher l'appareil de la source d'alimentation et confier les réparations à un personnel qualifié dans les cas suivants:

- a. Lorsque le cordon d'alimentation ou sa fiche sont endommagés
- b. Si du liquide s'est renversé sur l'appareil ou que des objets sont tombés dedans
- c. Si l'appareil a été exposé à la pluie ou à l'eau.
- d. Si l'appareil ne fonctionne pas normalement lorsqu'on observe les instructions d'utilisation.

Ne régler que les commandes couvertes par le mode d'emploi ; en effet, un réglage incorrect des autres commandes pourrait entraîner des dommages et nécessiteront souvent des travaux de réparation coûteux par un technicien qualifié pour remettre l'appareil en état de marche.

- e. Si l'appareil est tombé ou qu'il a été endommagé.
- f. Si l'appareil affiche une nette modification de ses performances, cela signifie qu'il a besoin d'être réparé.

21. Pièces de rechange

Si l'on a besoin de pièces de rechange, veiller à ce que le technicien de réparation utilise exclusivement les pièces de rechange spécifiées par le fabricant ou des pièces ayant les mêmes caractéristiques que les pièces d'origine. Les pièces de rechange non autorisées risquent de provoquer un feu, un choc électrique et autres dangers.

22. Vérification de sécurité

Après tout travail d'entretien ou de réparation de l'appareil, demander au technicien de réparation d'effectuer les vérifications de sécurité pour s'assurer que l'appareil est en bon état de marche.

23. Montage au mur ou au plafond

L'appareil ne pourra être monté au mur ou au plafond que de la manière recommandée par le fabricant.

24. Chaleur

Eloigner l'appareil des sources de chaleur, telles que radiateurs, appareils de chauffage, cuisinières, et de tout produit engendrant de la chaleur (y compris les amplificateurs).

IMPORTANT NOTICE

For USA

These products have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING

Changes or modifications not expressly approved by Hitachi Kokusai Electric responsible for compliance could void the user's authority to operate the equipment.

For Canada

This product does not exceed the class A/class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations.

Le présent appareil n'émet pas de bruits radioélectriques dépassant les limites applicable aux appareils numériques de classe A prescrites dans le rVglement sur le brouillage radioélectrique édicté par le ministère des communications du canada.

Outline and features

1 . General

The remote control unit RU-1200JY/VR is connected to the camera control unit (CCU) for remote operation of the camera.

The RCU and CCU can be up to 10 meters apart. With the one touch color temperature control function, the RU-1200JY/VR is ideal not only Studio but also OB van use.

RU-1200JY: Lens iris control, pedestal control and preview switch are assembled with an axis joystick control knob.

RU-1200VR: Lens iris and pedestal controls are variable register type and located independently. There is no preview function.

2 Features

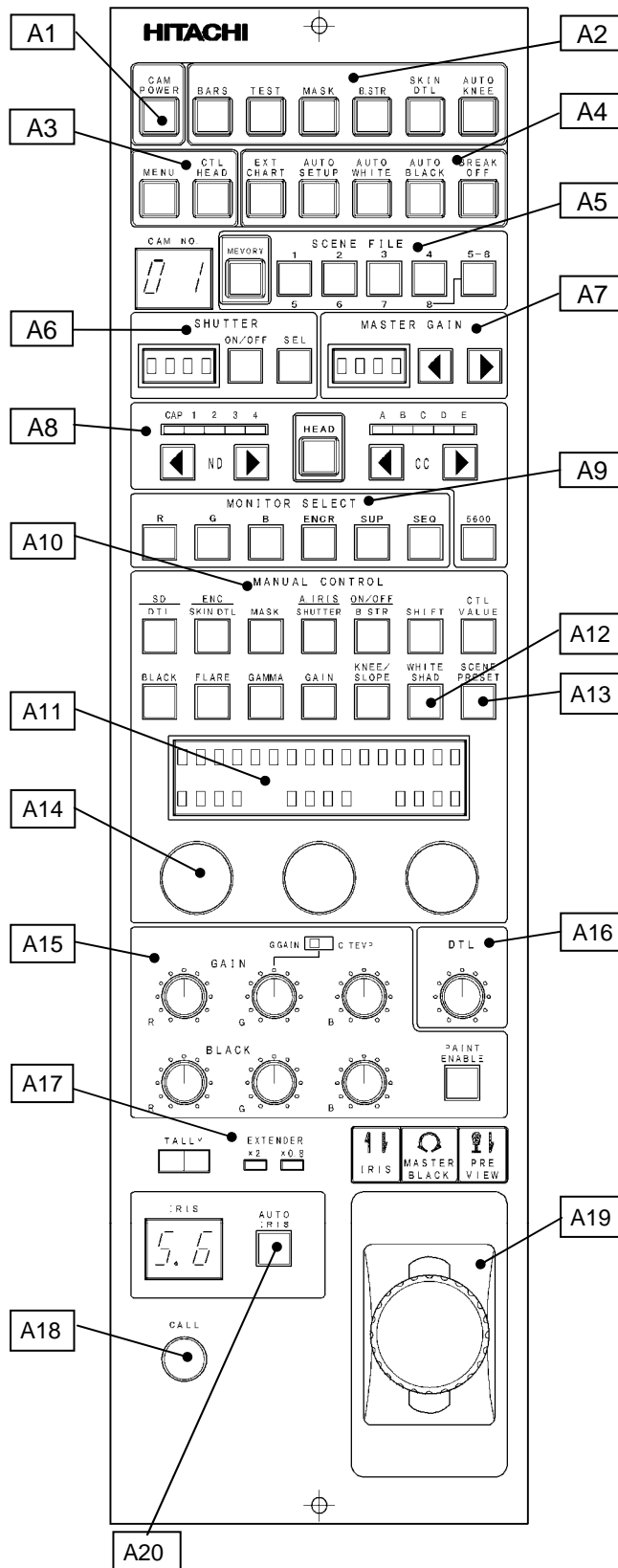
The camera can be easily adjusted using the LED optical switch and rotary encoder.

The main control items are:

- Camera power supply on/off
- Auto setup execution
- Data file (SCENE FILE 0 to 8) selection, save
- Manual adjustment using the rotary encoder and knobs
- Various on/off controls
- PIX and WF video output select

Facility names and functions (Front)

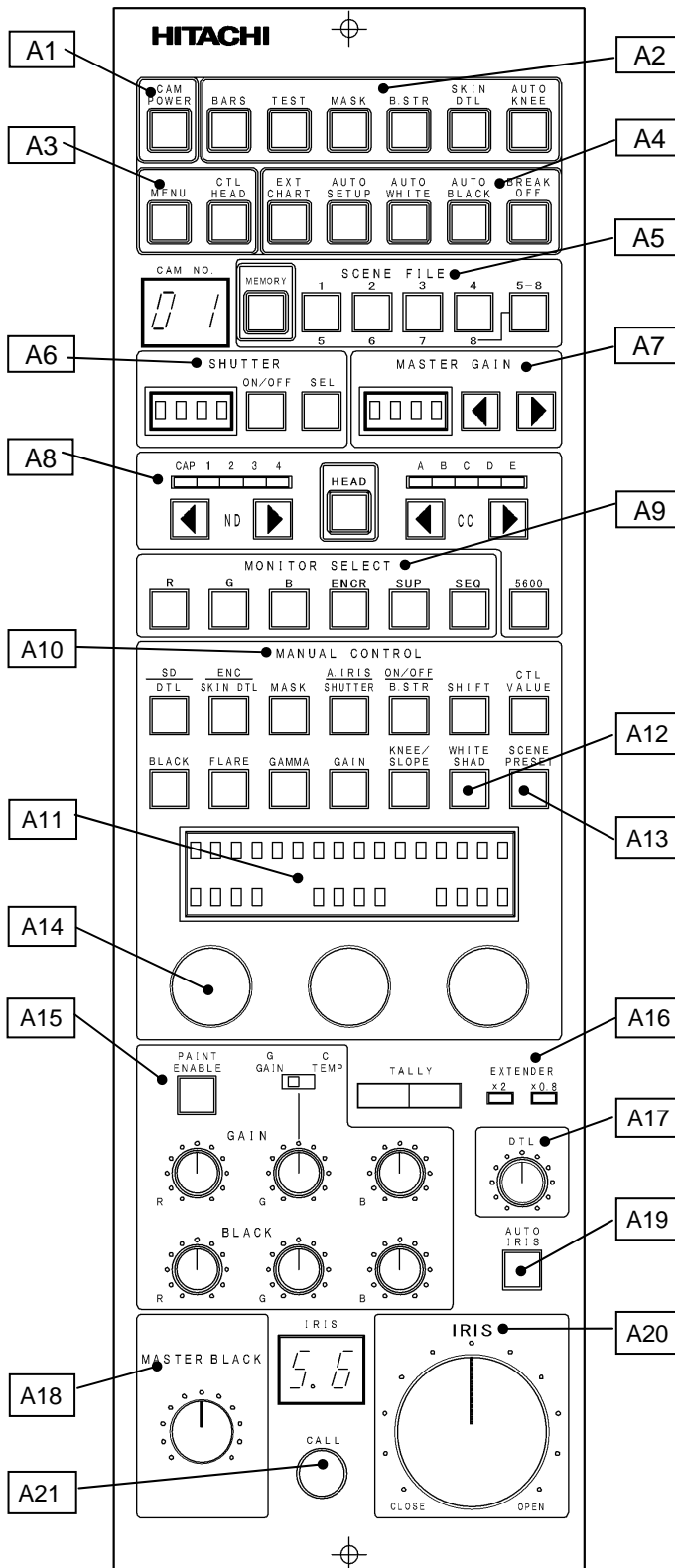
FRONT VIEW (JY type)



- A1 Camera power on/off
- A2 Each type on/off control
- A3 Menu switch: Menu is displayed on the pix monitor with Color bar ON.
- A4 Auto setup selection switch: External chart, Auto white & black and Break OFF for stop the auto set up process
- A5 Scene file select and memory
- A6 Shutter control: In Sequence and Variable mode
- A7 Master gain switch & LED display: -3dB to +24dBUP
- A8 ND/CC filter selection switch
- A9 Monitor select
- A10 Manual adjust
- A11 Display section: Manual control item and each value displayed in this LED.
- A12 White Shad switch:
- A13 Scene preset switch: Preset to factory adjustment data and condition.
- A14 Rotary encoder: Refer to operation procedure
- A15 Paint adjustment
- A16 Detail adjustment
- A17 Extender and tally indication LED
- A18 Call button: Call Camera man and CCU. The control right is acquired.
- A19 Iris adjust
Master black adjust
Preview switch
- A20 Auto iris on off switch

Facility names and functions (Front)

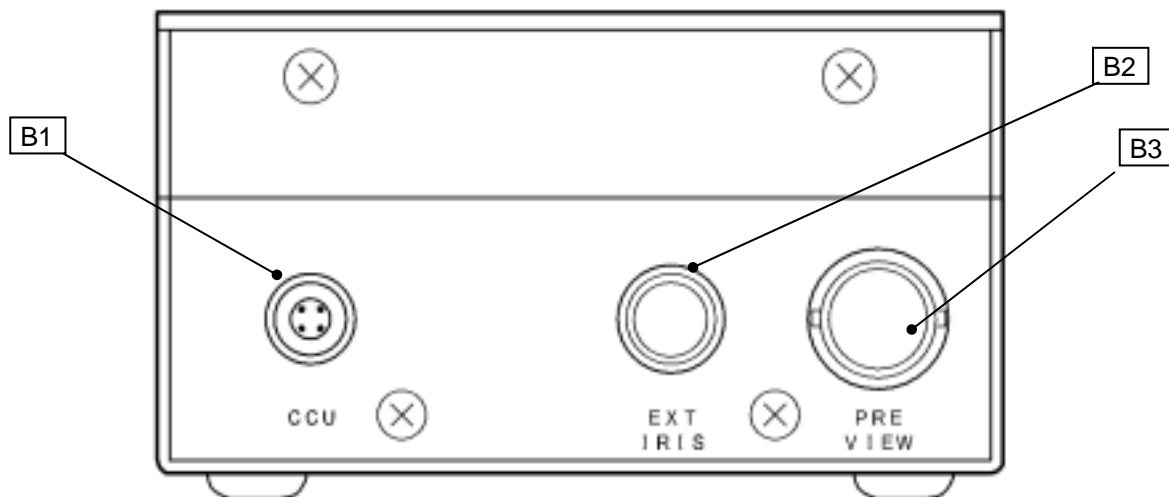
FRONT VIEW (VR type)



- A1 Camera power on/off
- A2 Each type on/off control
- A3 Menu switch: Menu is displayed on the pix monitor with Color bar ON.
- A4 Auto setup selection switch: External chart, Auto white & black and Break OFF for stop the auto set up process
- A5 Scene file select and memory
- A6 Shutter control: In Sequence and Variable mode
- A7 Master gain switch & LED display: -3dB to +24dBU
- A8 ND/CC filter selection switch
- A9 Monitor select
- A10 Manual adjust
- A11 Display section: Manual control item and each value displayed in this LED.
- A12 White Shad switch:
- A13 Scene preset switch: Preset to factory adjustment data and condition.
- A14 Rotary encoder: Refer to operation procedure
- A15 Paint adjustment for Gain and Black.
- A16 Extender and tally indication LED
- A17 Detail adjustment
- A18 Master black adjust: This has center click VR.
- A19 Auto Iris on off
- A20 Iris adjustment knob
- A21 Call button: Call Camera man and CCU. The control right is acquired.

Facility names and functions (Rear)

REAR VIEW



B1 Remote-Input connector

Input and output remote control data between the camera control unit .

B2 EXT IRIS connector

Connect to the external iris control module (optional)

B3 PRE VIEW Connector (JY type only)

Connect to preview switcher to switch the preview monitor input.

Function menu

The camera head is connected with the CCU and the RU/SU as an operational camera system, The CCU output display TOP MENU on the PIX out monitor as follows. This is for Video operator at the CCU.

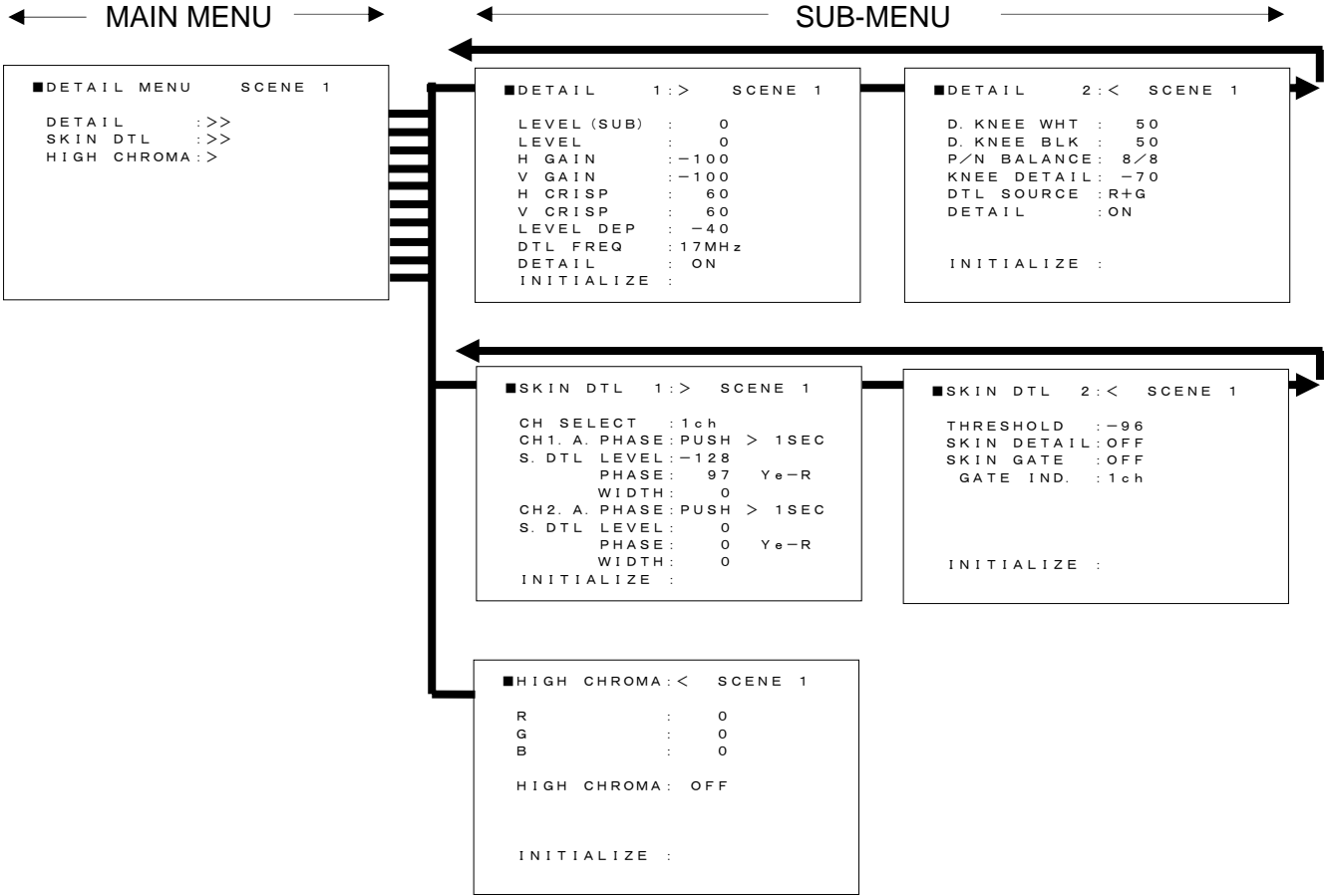
```
TOP MENU
■ COLOR      :>
  DETAIL     :>
  MAINTENANCE :>
  FILE       :>
  SETUP CARD :>
```

PIX MENU: open this menu by pushing the MENU SW in the RCU.

Item	Main Menu	Description
1	COLOR	Change screen to COLOR main menu items display.
2	DETAIL	Change screen to DETAIL main menu items display.
3	MAINTENANCE	Change screen to MAINTENANCE main menu items display.
4	FILE	Change screen to FILE main menu items display.
5	SETUP CARD	Change screen to FILE main menu items display.

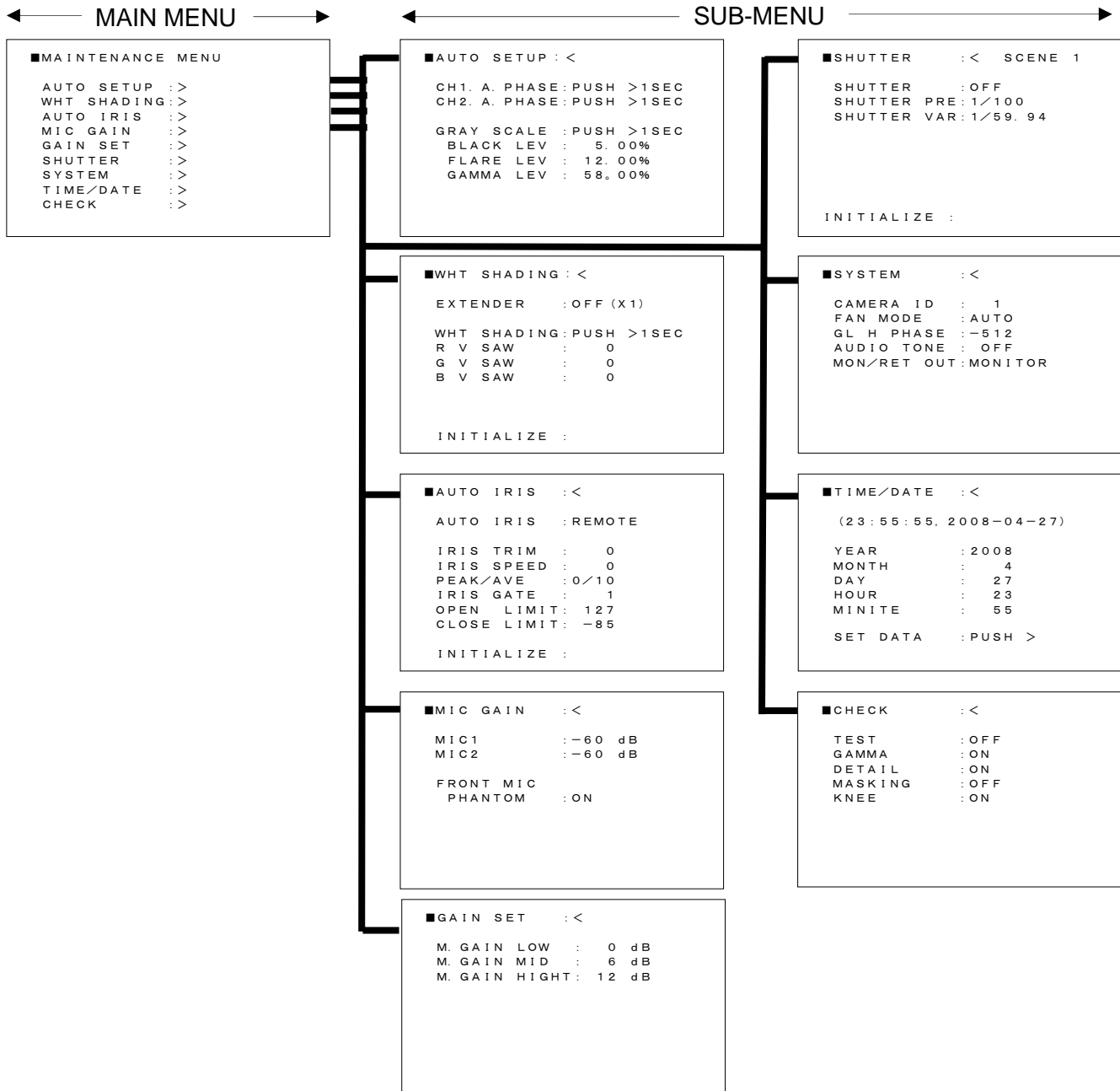
Function menu

2. DETAIL menu structure which are displayed in the Pix monitor or are displayed in the viewfinder with at control head mode.



Function menu

3. MAINTENANCE menu structure which are displayed in the Pix monitor or are displayed in the viewfinder with at control head mode.



Function menu

4. FILE menu is displayed in the Pix monitor or are displayed in the viewfinder with at control head mode.

```

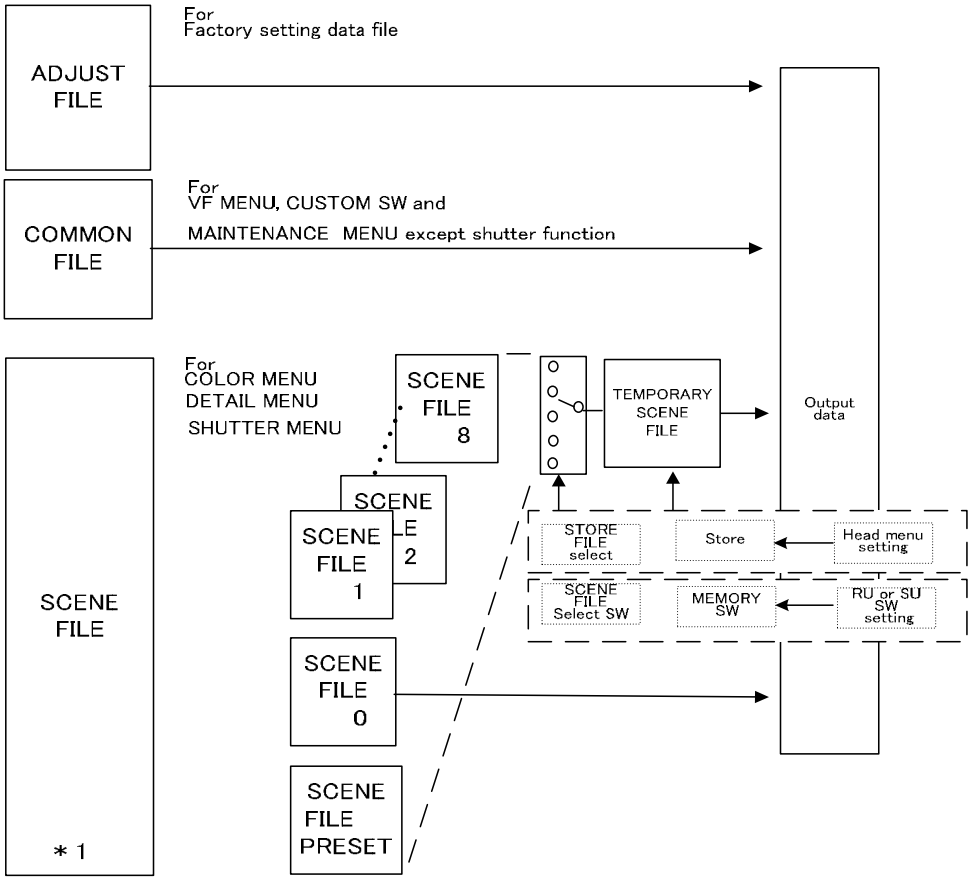
■ FILE MENU

FILE SELECT : SCENE 0
STORE FILE : SCENE 0
STORE

ALL INITIALIZE
    
```

SK-HD1000 FILE STRUCTURE

There are Adjust, Common and Scene three major data files in the camera head memory.







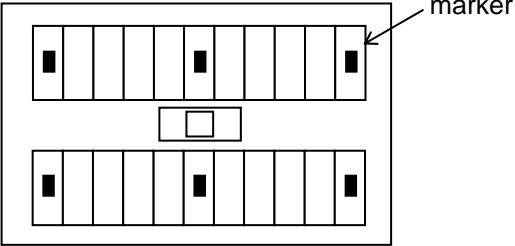
* 1: This scene file is indicated at top right corner in the each menu box in the OP manual

1. COMMON FILE and TEMPORARY SCENE FILE data values are stored to the memory automatically.
2. SCENE FILE 0: When SCENE FILE 0 is selected, adjusted value data is stored to memory automatically.
3. SCENE FILE 1~8: After selected scene file, adjusted value data is kept in TEMPORARY SCENE file but required to push the memory switch for storing data to scene file.
4. SCENE FILE PRESET: This PRESET data is factory adjustment value & condition. Push memory switch and store the PRESET data to SCENE 1 to 8 for restore new scene file setting.
5. When power OFF to ON, the data hold previous condition.


5. SETUP C

Operation procedure

Item no.	Function	Switch	Operating procedure
1	Camera head Power supply on	CAM POWER	<ul style="list-style-type: none"> • CAM POWER switch on <p>The camera head power on by this switch pressing.</p> <ul style="list-style-type: none"> • The camera head power off by this switch pressing more than 2 seconds continuously.
2	On/off control	BARS TEST MASK B. STR SKIN DTL AUTO KNEE	<ul style="list-style-type: none"> • Color bar on/off selection • Test signal on/off selection • HD masking on/off selection • Black stretch on/off selection. • Skintone detail on/off selection. • Auto knee on/off selection.
3	Menu start	MENU	<ul style="list-style-type: none"> • Press this MENU button with Color bar on, and display CCU menu screen on the pix monitor. • Press this MENU button with Color bar off, and displays Camera Head menu screen on the pix monitor. <p>(*)Please refer to the manual of CCU and Camera Head for details.</p> <p>Use the  ND  (cursor up/down) buttons and  CC  (cursor left/right) buttons to shift the cursor on the menu screen</p>
4	Shift control priority to the camera head	CTL HEAD	<ul style="list-style-type: none"> • Press the CTL HEAD to shift control priority (except the monitor select function) to the camera head. • Press the switch again and control priority return to the RCU.

Item no.	Function	Switch	Operating procedure
5	AUTO SETUP	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">AUTO SETUP</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">EXT CHART</div>	<p>• Switch settings can be combined with the following auto setup modes.</p> <p>(1) Grayscale auto setup</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin: 0 5px;">EXT CHART</div> <div style="border: 1px solid black; padding: 2px; margin: 0 5px;">AUTO SETUP</div> </div> <p>(2) Auto skin tone</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin: 0 5px;">EXT CHART</div> <div style="margin: 0 5px;">(2 times)</div> <div style="border: 1px solid black; padding: 2px; margin: 0 5px;">AUTO SETUP</div> </div> <p>(3) Auto Shading</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin: 0 5px;">EXT CHART</div> <div style="margin: 0 5px;">(3 times)</div> <div style="border: 1px solid black; padding: 2px; margin: 0 5px;">AUTO SETUP</div> </div> <p>1. Conduct grayscale auto setup by the following procedure.</p> <p>(1) Set the <div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 0 5px;">EXT CHART</div> switch to on to show the grayscale chart positioning markers on the CCU pix monitor and viewfinder.</p> <p>(2) Pickup the grayscale chart with the markers positioned as shown in the figure.</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>(3) Press the <div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 0 5px;">AUTO SETUP</div> to start grayscale auto setup.</p> <p>(4) At error, the <div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 0 5px;">AUTO SETUP</div> LED flashes for several seconds and the buzzer sounds.</p>

Item no.	Function	Switch	Operating procedure
(5)	AUTO SETUP		<p>2. Auto skin tone</p> <ol style="list-style-type: none"> (1) Press the EXT CHART 2 times to show the center marker on the viewfinder and PIX monitor screen. (2) Align the marker with the image for color phase detection. (3) Press the AUTO SETUP to detect the color phase at the marker position and revise the skin DTL phase data. <p>3. Auto shading</p> <ol style="list-style-type: none"> (1) Press the EXT CHART 3 times to show the marker for auto shading on the viewfinder and PIX monitor screen. (2) Pickup the white scene with the markers positioned as shown in the figure. <div data-bbox="738 1099 1257 1346" style="text-align: center;"> <p>The diagram shows a rectangular frame containing two solid black squares, one above the other. An arrow originates from the word 'marker' to the right of the frame and points to the top square.</p> </div> <ol style="list-style-type: none"> (3) Press the AUTO SETUP for automatic white shading (vs) adjustment. (4) At error, the AUTO SETUP LED flashes for several seconds and the buzzer sounds.

Item no.	Function	Switch	Operating procedure
6	AUTO WHITE	<input type="checkbox"/> AUTO WHITE	<ul style="list-style-type: none"> • Pickup a white scene and press the <input type="checkbox"/> AUTO WHITE for automatic white balance adjustment. • At error, the <input type="checkbox"/> AUTO WHITE LED flashes for several seconds and the buzzer sounds.
7	AUTO BLACK	<input type="checkbox"/> AUTO BLACK	<ul style="list-style-type: none"> • Press the <input type="checkbox"/> AUTO BLACK to cut off the light and automatically adjust the black balance. • At error, the <input type="checkbox"/> AUTO BLACK LED flashes for several seconds and the buzzer sounds.
8	Curtail auto setup	<input type="checkbox"/> BREAK OFF	<ul style="list-style-type: none"> • Press the <input type="checkbox"/> BREAK OFF during auto setup to break off the auto setup process and the buzzer sounds.
9	CAM NO.	CAM NO. 	<ul style="list-style-type: none"> • Camera number is shown. • Start the camera menu to set the camera number.
10	Scene file selection	- SCENE FILE - <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5-8 <input type="checkbox"/> SCENE PRESET	<ul style="list-style-type: none"> • There are 9 scene files to 0-8 including 0 file. • Press scene file to access a scene file. The LED lights. • Press the switch while the LED is lit. The LED extinguishes when the scene file is deselected. • When the all LED light turns off , scene file 0 is chosen. • To select scene files 5 – 8 , set switches <input type="checkbox"/> 5-8 to on, then press switches <input type="checkbox"/> 1 – <input type="checkbox"/> 4 • Press the <input type="checkbox"/> SCENE PRESET until blink stops, pre-set data is loaded. Press the <input type="checkbox"/> SCENE PRESET again until blink stop the scene file data is loaded again.

Item no.	Function	Switch	Operating procedure																					
1 1	Scene file memory	- SCENE FILE - <div style="text-align: center;"> <input type="button" value="1"/> <input type="button" value="2"/> <input type="button" value="3"/> <input type="button" value="4"/> <input type="button" value="5-8"/> <input type="button" value="MEMORY"/> </div>	<ul style="list-style-type: none"> • Scene file adjustment values can be stored in memory by the following procedure. (1) Press the <input type="button" value="MEMORY"/> switch. (2) The <input type="button" value="MEMORY"/> LED begins blinking. (3) Press the scene file (<input type="button" value="1"/> - <input type="button" value="4"/> or <input type="button" value="5-8"/>) for storing data in the memory. (4) The selected scene file LED flashes and the <input type="button" value="MEMORY"/> LED lights for about 3 seconds. This completes storing memory. (*1) The adjustment data of paint gain and black can not be stored in memory, (*2) To stop memory operation, while the <input type="button" value="MEMORY"/> LED is blinking, press again the <input type="button" value="MEMORY"/> switch. 																					
1 2	Shutter control	-SHUTTER- <input type="button" value="ON/OFF"/> <input type="button" value="SEL"/>	<ul style="list-style-type: none"> • Press <input type="button" value="SEL"/> to toggle the shutter display on/off and select the shutter speed and mode. <p>Insequence, 1/100(*1), 1/250, 1/500, 1/1000, 1/2000 seconds, variable, AES, CCFR</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="CCFR(*2)"/></td> <td style="padding: 0 5px;">→</td> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="100(*1)"/></td> <td style="padding: 0 5px;">→</td> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="250"/></td> <td style="padding: 0 5px;">→</td> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="500"/></td> </tr> <tr> <td style="text-align: center;">↑</td> <td></td> <td></td> <td></td> <td style="text-align: center;">↓</td> <td></td> <td></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="AES(*3)"/></td> <td style="padding: 0 5px;">←</td> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="59"/></td> <td style="padding: 0 5px;">←</td> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="2000"/></td> <td style="padding: 0 5px;">←</td> <td style="border: 1px solid black; padding: 2px;"><input type="button" value="1000"/></td> </tr> </table> <p style="text-align: center;">Variable mode 1/59 to 1/1983 (1080i/60) 1/50 to 1/2008 (1080i/50)</p> <ul style="list-style-type: none"> (*1) 1/60 ,when 1080i/50 CCD is used. (*2) CCFR: cc frame mode (*3) AES:auto electric shutter mode <ul style="list-style-type: none"> • For variable mode, after selecting the manual control section <input type="button" value="SHUTTER"/> switch, 	<input type="button" value="CCFR(*2)"/>	→	<input type="button" value="100(*1)"/>	→	<input type="button" value="250"/>	→	<input type="button" value="500"/>	↑				↓			<input type="button" value="AES(*3)"/>	←	<input type="button" value="59"/>	←	<input type="button" value="2000"/>	←	<input type="button" value="1000"/>
<input type="button" value="CCFR(*2)"/>	→	<input type="button" value="100(*1)"/>	→	<input type="button" value="250"/>	→	<input type="button" value="500"/>																		
↑				↓																				
<input type="button" value="AES(*3)"/>	←	<input type="button" value="59"/>	←	<input type="button" value="2000"/>	←	<input type="button" value="1000"/>																		
1 3	Master gain selection	-MASTER GAIN- <div style="text-align: center;"> <input type="button" value="◀"/> <input type="button" value="▶"/> </div>	<ul style="list-style-type: none"> • Master gain can be selected in 3 dB steps. (-3dB~24dB) • Selected master gain position is indicated by the LED on left of this switch. 																					

Item no.	Function	Switch	Operating procedure												
1 4	ND/CC filter selection	<div style="text-align: center;"> <input type="checkbox"/> ND <input type="checkbox"/> </div> <div style="text-align: center; margin-top: 10px;"> <input type="checkbox"/> CC <input type="checkbox"/> </div> <div style="text-align: center; margin-top: 10px;"> <input type="checkbox"/> HEAD </div> <div style="text-align: center; margin-top: 5px;"> <input type="checkbox"/> 5600 </div>	<ul style="list-style-type: none"> • ND/CC selects ND filters or CC(ECC) filters. Each filters status are shown by the upper section ND/CC LEDs of these switches. LEDs and filters relationship are as shown below. <table style="margin-left: 40px; border: none;"> <tr> <td style="padding-right: 40px;">ND</td> <td>CC(ECC)</td> </tr> <tr> <td>CAP:CAP</td> <td>A:3200K</td> </tr> <tr> <td>1: CLEAR</td> <td>B:4300K</td> </tr> <tr> <td>2: CROSS</td> <td>C:5600K</td> </tr> <tr> <td>3:1/16ND</td> <td>D:6300K</td> </tr> <tr> <td>4:1/64ND</td> <td>E:8000K</td> </tr> </table> • When the <input type="checkbox"/> HEAD switch is set to on, the ND/CC filter control from the camera head and the RCU. Again press the <input type="checkbox"/> HEAD switch to return control priority to the RCU. • Press the <input type="checkbox"/> 5600 for electrical 5600 K filter status. <p>(*) When the <input type="checkbox"/> MENU switch is on (menu mode), the ND/CC filter cannot be changed.</p>	ND	CC(ECC)	CAP:CAP	A:3200K	1: CLEAR	B:4300K	2: CROSS	C:5600K	3:1/16ND	D:6300K	4:1/64ND	E:8000K
ND	CC(ECC)														
CAP:CAP	A:3200K														
1: CLEAR	B:4300K														
2: CROSS	C:5600K														
3:1/16ND	D:6300K														
4:1/64ND	E:8000K														
1 5	Monitor select	<div style="text-align: center;"> <input type="checkbox"/> R <input type="checkbox"/> G <input type="checkbox"/> B </div> <div style="text-align: center; margin-top: 5px;"> <input type="checkbox"/> ENC </div> <div style="text-align: center; margin-top: 15px;"> <input type="checkbox"/> SUP </div> <div style="text-align: center; margin-top: 5px;"> <input type="checkbox"/> SEQ </div>	<ul style="list-style-type: none"> • Selects analog pix monitor display signal. • Selects analog WFM monitor display signal. <ul style="list-style-type: none"> <input type="checkbox"/> SUP / <input type="checkbox"/> SEQ : Display superimposes 3 RGB waveforms. • SDI WFM monitor display signal <ul style="list-style-type: none"> <input type="checkbox"/> SUP : superimposes mode. <input type="checkbox"/> SEQ : sequence mode. <p>When both the <input type="checkbox"/> SUP and the <input type="checkbox"/> SEQ are off, signal display is the same as pix monitor.</p>												

Item no.	Function	Switch	Operating procedure														
1 6	Manual adjustment * Adjustment value display	<div style="border: 1px solid black; padding: 2px; display: inline-block;">CTL VALUE</div>	<ul style="list-style-type: none"> • Select adjustment items with the manual control section switches. The display section shows the adjustment item and value. • Use the rotary encoder to adjust the items for optimum values. • When the <div style="border: 1px solid black; padding: 2px; display: inline-block;">CTL VALUE</div> switch is on, the adjustment value is displayed from -100 to +100. <p>【Display example】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <table style="border-collapse: collapse; text-align: center;"> <tr><td colspan="3">GAIN</td></tr> <tr><td>-20</td><td>0</td><td>+10</td></tr> </table> </div>	GAIN			-20	0	+10								
GAIN																	
-20	0	+10															
1	Detail Adjustment (1)DTL LEVEL (2)LEVEL DEP / BOOST FREQ (3)CRISP / DTL SOURCE	<div style="border: 1px solid black; padding: 2px; display: inline-block;">DTL</div> 1 <div style="border: 1px solid black; padding: 2px; display: inline-block;">DTL</div> 2 <div style="border: 1px solid black; padding: 2px; display: inline-block;">DTL</div> 3	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <table style="border-collapse: collapse; text-align: center;"> <tr><td colspan="3">DETAIL LEVEL</td></tr> <tr><td>TOTL</td><td>H</td><td>V</td></tr> </table> </div> <p>TOTL: Total detail level adjustment H: H detail level adjustment V: V detail level adjustment</p> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <table style="border-collapse: collapse; text-align: center;"> <tr><td>LEVEL-DEP / FREQ</td></tr> <tr><td>LDPP FREQ</td></tr> </table> </div> <p>LDPP: Dark component noise due to detail reduce. FREQ: Adjusts detail boost frequency (13 M to 19 M).</p> <ul style="list-style-type: none"> • Press Again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <table style="border-collapse: collapse; text-align: center;"> <tr><td colspan="3">CRISP / SOURCE</td></tr> <tr><td>H-CR</td><td>V-CR</td><td>SRC</td></tr> </table> </div> <p>H-CR: Noise component reduction due to H. detail. V-CR: Noise component reduction due to V. detail. SRC: Detail signal source (R, RG, RGB) selection.</p>	DETAIL LEVEL			TOTL	H	V	LEVEL-DEP / FREQ	LDPP FREQ	CRISP / SOURCE			H-CR	V-CR	SRC
DETAIL LEVEL																	
TOTL	H	V															
LEVEL-DEP / FREQ																	
LDPP FREQ																	
CRISP / SOURCE																	
H-CR	V-CR	SRC															

Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment (4)DETAIL KNEE (5)BALANCE (6)WHITE DTL	[DTL] 4 [DTL] 5 [DTL] 6	<ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 5px 0; text-align: center;"> DETAIL KNEE WHT BLK </div> WHT: Additional white component glare reduction. BLK: Additional black component glare reduction. • Press the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 5px 0; text-align: center;"> BALANCE P/N </div> P/N: Detail positive (white) side adjustment (4/8~8/4) • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 5px 0; text-align: center;"> KNEE DTL SLOP </div> SLOP: White detail knee apeature adjustment.
2	NTSC(PAL) detail adjustment (1)NTSC(PAL) DTL LEVEL (2)NTSC(PAL) LEVEL DEP / BOOST FREQ	[SHIFT] [DTL] 1 [DTL] 2	(*)In the following figure "NTSC" is displayed as "PAL" in PAL mode. 【Display】 <div style="border: 1px solid black; padding: 5px; margin: 5px 0; text-align: center;"> NTSC DTL LEVEL TOTL H V </div> <ul style="list-style-type: none"> • Press Again the [DTL] switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 5px 0; text-align: center;"> NTSC L-DP / FREQ LDPP LDPS FREQ </div> FREQ: Boost frequency (4 M to 8 M)

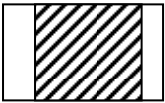
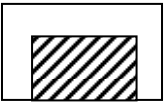
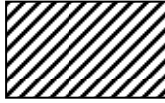



Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment (3)NTSC(PAL) CRISP (4)NTSC(PAL) DTL KNEE (5)NTSC(PAL) BALANCE	[DTL] 3 [DTL] 4 [DTL] 5	<ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> NTSC CRISP H-CR V-CR </div> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> NTSC DTL KNEE WHT BLK </div> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> NTSC BALANCE P/L </div>
3	Skin detail adjustment (1)SKIN DTL LEVEL (Ch1) (2)PHASE/WIDTH (Ch1) (3)SKIN DTL LEVEL (Ch2)	[SKIN DTL] 1 [SKIN DTL] 2 [SKIN DTL] 3	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> SKIN DETAIL-1 LEVL </div> <p>LEVL: Skin color detail level adjustment</p> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> SKIN DETAIL-1 PH-C PHAS WIDH </div> <p>PH-C: Skin color phase select (coarse adjustment) (R-MG, MG-B, B-CY, CY-G, G-YE, YE-R) PHAS: Skin color phase select (fine adjustment) WIDH: Skin color phase range select</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> SKIN DETAIL-2 LEVL </div> <p>LEVL: Skin color detail level adjustment</p>

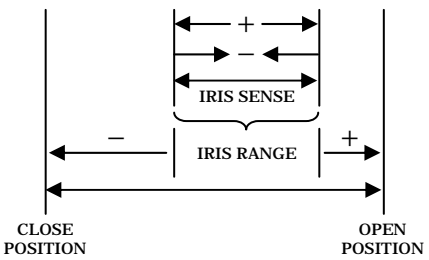
Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment (4)PHASE/WIDTH (Ch2)	SKIN DTL 4	<ul style="list-style-type: none"> Press again the switch for the following display. <div data-bbox="927 409 1197 504" style="border: 1px solid black; padding: 5px; text-align: center;"> SKIN DETAIL-2 PH-C PHAS WIDH </div> <p>PH-C: Skin color phase select (coarse adjustment) (R-MG, MG-B, B-CY, CY-G, G-YE, YE-R) PHAS: Skin color phase select (fine adjustment) WIDH: Skin color phase range select</p>
	(5)CHROMA LEVEL-DEP	SKIN DTL 5	<ul style="list-style-type: none"> Press again the switch for the following display. <div data-bbox="935 831 1204 925" style="border: 1px solid black; padding: 5px; text-align: center;"> CHROMA LEVEL-DEP THRH </div> <p>THRH: Skin detail reduction by color phase adjustment</p>
	(6)CHROMA LEVEL-DEP	SKIN DTL 6	<ul style="list-style-type: none"> Press again the switch for the following display. <div data-bbox="935 1189 1204 1283" style="border: 1px solid black; padding: 5px; text-align: center;"> CHROMA LEVEL-DEP THRH </div> <p>THRH: Skin detail reduction by color phase adjustment</p>
	(7)HIGH CHROMA	SKIN DTL 7	<ul style="list-style-type: none"> Press again the switch for the following display. <div data-bbox="935 1554 1204 1648" style="border: 1px solid black; padding: 5px; text-align: center;"> HIGH CHROMA R G B </div> <p>High chroma detail adjustment (R,G,B)</p>

Item no.	Function	Switch	Operating procedure
(16)	Manual Adjustment		
	4 ENC timing adjust (1)ENC TIMING	<div style="border: 1px solid black; display: inline-block; padding: 2px;">SHIFT</div> <div style="border: 1px solid black; display: inline-block; padding: 2px;">SKIN DTL</div> 1	<p>【Display】</p> <div style="border: 1px solid black; display: inline-block; padding: 5px; text-align: center;"> ENC TIMING SC-C SC-P H-P </div> <p>SC-C: Subcarrier phase adjustment (coarse) SC-P: Subcarrier phase adjustment (fine) H-P: H phase adjustment</p>
	(2)Y/C LEVEL	<div style="border: 1px solid black; display: inline-block; padding: 2px;">SKIN DTL</div> 2	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; display: inline-block; padding: 5px; text-align: center;"> Y/C LEVEL Y C </div> <p>Y: Encoder Y level adjust C: Encoder C level adjust</p>
(3)ENC TIMING 2	<div style="border: 1px solid black; display: inline-block; padding: 2px;">SKIN DTL</div> 4	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; display: inline-block; padding: 5px; text-align: center;"> ENC TIMING 2 H-C </div> <p>H-C: H phase adjust (coarse)</p>	

Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment		
5	Masking adjustment		
	(1) Skintone	<input type="checkbox"/> MASK 1	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> SKINTONE MASK SAT HUE </div> <p>SAT: Skintone saturation adjustment HUE: Skintone hue adjustment</p>
	(2) R (Red)	<input type="checkbox"/> MASK 2	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK R SAT HUE </div> <p>SAT: R (red) saturation adjustment (following the same for each color). HUE: R (red) hue adjustment (following the same for each color).</p>
	(3) Y-R (Yellow-Red)	<input type="checkbox"/> MASK 3	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK Y-R SAT HUE </div>
	(4) Y (Yellow)	<input type="checkbox"/> MASK 4	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK Y SAT HUE </div>
	(5) G-Y (Green-Yellow)	<input type="checkbox"/> MASK 5	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK G-Y SAT HUE </div>
	(6) G (Green)	<input type="checkbox"/> MASK 6	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK G SAT HUE </div>
	(7) C-G (Cyan-Green)	<input type="checkbox"/> MASK 7	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK C-G SAT HUE </div>
	(8) C (Cyan)	<input type="checkbox"/> MASK 8	<p>• Again press the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> MASK C SAT HUE </div>

	Function	Switch	Operating procedure
(16)	Manual adjustment		
	(9) B-C (Blue-Cyan)	<input type="checkbox"/> MASK 9	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK B-C SAT HUE </div>
	(10) B (Blue)	<input type="checkbox"/> MASK 10	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK B SAT HUE </div>
	(11) M-B (Magenta-Blue)	<input type="checkbox"/> MASK 11	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK M-B SAT HUE </div>
	(12) M (Magenta)	<input type="checkbox"/> MASK 12	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK M SAT HUE </div>
	(13) R-M (Red-Magenta)	<input type="checkbox"/> MASK 13	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK R-M SAT HUE </div>
	(14) CHROMA SAT	<input type="checkbox"/> MASK 14	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> CHROMA SAT LEVL </div> <p>LEVL: Master Chroma saturation adjustment</p>
	(15) Linear matrix 1	<input type="checkbox"/> MASK 15	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK LIN 1 R-G R-B G-R </div> <p>Linear matrix R-G, R-B and G-R adjustment</p>
	(16) Linear matrix 2	<input type="checkbox"/> MASK 16	<ul style="list-style-type: none"> Again press the switch for the following display. <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 10px auto; width: fit-content;"> MASK LIN 2 G-B B-R B-G </div> <p>Linear matrix G-B, B-R and B-G adjustment</p>

Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment		
6	Shutter adjustment	<div style="border: 1px solid black; padding: 2px; display: inline-block;">SHUTTER</div>	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;">SHUTTER VAR</div> <p>VAR: Variable adjust 1/59~1/1983 (1080i/60) 1/50~1/2008 (1080i/50)</p> <p>(*) Set the upper shutter <div style="border: 1px solid black; padding: 2px; display: inline-block;">SEL</div> switches to variable mode when Variable adjustment.</p>
7	Auto iris adjust (1)IRIS GATE	<div style="border: 1px solid black; padding: 2px; display: inline-block; margin-bottom: 5px;">SHIFT</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">SHUTTER</div> 1	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;">AUTO IRIS GATE</div> <p>Gate: Auto iris gate selection (1 – 6, see figure)</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; align-items: center;"> <div style="text-align: center; margin: 5px;">  1 </div> <div style="text-align: center; margin: 5px;">  2 </div> <div style="text-align: center; margin: 5px;">  3 </div> <div style="text-align: center; margin: 5px;">  4 </div> <div style="text-align: center; margin: 5px;">  5 </div> <div style="text-align: center; margin: 5px;">  6 </div> </div> <p>The above gate signal is displayed also on CCU pix monitor.</p>

Item no.	Function	Switch	Operating procedure
(16)	(2) IRIS TRIM	SHUTTER 2	<p>• Press again the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> AUTO IRIS SPED P/AV </div> <p>SPED: Adjusts the auto iris response speed. If response speed becomes fast then adjustment value will be big and adjustment value become small then response speed will be slow.</p> <p>P/AV: Adjusts the ratio between peak and average. (0/10~5/5)</p>
	(3) IRIS RANGE	SHUTTER 3	<p>• Press again the switch for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> IRIS RANGE RANG SENS </div> <p>Adjust the range and sense for manual iris control.</p> <p>Press the CTL VALUE for the following display.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <div style="display: flex; justify-content: space-between; align-items: center;"> □□□□□□■ □□□□□□□ </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 5px;"> + 2 0 - 2 0 </div> </div>  <p>The diagram illustrates the relationship between IRIS RANGE and IRIS SENSE. It shows a horizontal scale from 'CLOSE POSITION' on the left to 'OPEN POSITION' on the right. A bracket labeled 'IRIS RANGE' spans from a '-' sign to a '+' sign. A narrower bracket labeled 'IRIS SENSE' is centered within the IRIS RANGE, also spanning from '-' to '+'. Above the diagram, a row of 14 squares is shown, with the first 10 squares being white and the last 4 squares being black, representing a visual indicator of the current setting.</p>







Item no.	Function	Switch	Operating procedure
(16) 8	Manual adjustment Black stretch adjustment	B. STR	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> BLACK STRETCH LEVEL </div> <p>LEVL: Black stretch level adjustment</p>
9	On/off control (1) DTL DTL KNEE SKIN GATE (2) KNEE W.CLIP GAMMA (3) PAINT GAMMA SKINTONE- MASKING (4) KNEE SAT CHROMA SAT HIGH CHROMA	<p>SHIFT B. STR 1</p> <p>B. STR 2</p> <p>B. STR 3</p> <p>B. STR 4</p>	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> DTL DTLKNE GATE ON ON OFF </div> <p>DTL: Detail on/off DTLKNE: Detail knee on/off GATE: Skintone gate on/off</p> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> KNEE WCLIP GAMMA ON ON ON </div> <p>KNEE: Knee on/off WCLIP: White clip on/off GAMMA: Gamma on/off</p> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> P-GAMMA S-MASK ON ON </div> <p>P-GAMMA: Paint gamma on/off S-MASK: Skintone masking on/off</p> <ul style="list-style-type: none"> • Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> KNSAT CSAT HICRM ON ON ON </div> <p>KNSAT: Knee saturation on/off CSAT: Chroma saturation on/off HICRM: High chroma detail on/off</p>

Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment		
	(5) SKINDTL-CH,IND	B. STR 5	<ul style="list-style-type: none"> Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> CH - SKINDTL- IND 1 1 </div> <p>CH: Select skintone detail channel (1,2,1+2) IND: Select skintone gate channel I (1,2)</p>
	(6) ASPECT COMB FILTER MONO	B. STR 6	<ul style="list-style-type: none"> Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> ASPCT COMB MONO 4:3 ON OFF </div> <p>ASPCT: Selects aspect ratio (16:9 or 4:3) COMB: NTSC(PAL) output comb filter on/off MONO: Mono color on/off</p>
	(7) N-DTL(P-DTL) W/N	B. STR 7	<ul style="list-style-type: none"> Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> N-DTL W/N ON LOCL </div> <p>N-DTL: NTSC(PAL) detail on/off W/N: Aspect change control (REM: System side, LOCL: SCU/RCU side)</p> <p>(*) In PAL mode, "N-DTL" is displayed as "P-DTL".</p>
(8) RATE CONV ON/OFF	B. STR 8	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> HD-MODE 720P </div> <p>HD-MODE: Rate change control (1080i/720P)</p>	

Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment 10 BLACK adjustment (1) BLACK (2) BLACK SETUP LEVEL	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">BLACK</div> 1 <div style="border: 1px solid black; padding: 2px; display: inline-block;">MENU</div> + <div style="border: 1px solid black; padding: 2px; display: inline-block;">SHIFT</div> + <div style="border: 1px solid black; padding: 2px; display: inline-block;">BLACK</div>	 【Display】 <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 5px 0;"> BLACK R G B </div> Pedestal (RGB) adjustment <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 5px 0;"> SETUP LEVEL 5.0 </div> Black setup level adjustment (0~12.3%)
11	Flare adjustment (1)FLARE (2) FLARE SETUP LEVEL	 <div style="border: 1px solid black; padding: 2px; display: inline-block;">FLARE</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">MENU</div> + <div style="border: 1px solid black; padding: 2px; display: inline-block;">SHIFT</div> + <div style="border: 1px solid black; padding: 2px; display: inline-block;">FLARE</div>	 【Display】 <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 5px 0;"> FLARE R G B </div> Flare (RGB) adjustment <div style="border: 1px solid black; padding: 5px; text-align: center; margin: 5px 0;"> SETUP LEVEL 12.0 </div> Flare setup level adjustment (0~24.7%)

Item no.	Function	Switch	Operating procedure
(16) 12	Manual adjustment		
	(1) GAMMA	<div style="border: 1px solid black; padding: 2px; display: inline-block;">GAMMA</div> 1	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> GAMMA R G B </div> <p>Gamma (R, G, B) adjustment</p>
	(2) PAINT - GAMMA	<div style="border: 1px solid black; padding: 2px; display: inline-block;">GAMMA</div> 2	<ul style="list-style-type: none"> Press again the switch for the following display. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> PAINT GAMMA R TOTL B </div> <p>Paint gamma (R, TOTL, B) adjustment</p>
	(3) GAMMA TABLE	<div style="border: 1px solid black; padding: 2px; display: inline-block;">GAMMA</div> 3	<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> GAMMA TABLE TOTL </div> <p>Special gamma (rising component) adjustment (3.0~8.0(0.5step))</p>
13	Gain adjustment	<div style="border: 1px solid black; padding: 2px; display: inline-block;">GAIN</div>	<p>【Display】</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> GAIN R G B </div> <p>Gain (RGB) adjustment</p>
	(4) GAMMA SETUP LEVEL	<div style="border: 1px solid black; padding: 2px; display: inline-block;">MENU</div> + <div style="border: 1px solid black; padding: 2px; display: inline-block;">SHIFT</div> + <div style="border: 1px solid black; padding: 2px; display: inline-block;">GAMMA</div>	<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> SETUP LEVEL 58.0 </div> <p>Gamma setup level adjustment (42.2~67.7%)</p>

Item no.	Function	Switch	Operating procedure
(16)	Manual adjustment		
	14 Knee/slope adjustment (1) KNEE	KNEE/SLOPE 1	<p>【Display】</p> <div data-bbox="932 465 1203 566" style="border: 1px solid black; padding: 5px; text-align: center;"> KNEE R TOTL B </div> <p>Knee point (R, total. B) adjustment</p>
	(2) SLOPE	KNEE/SLOPE 2	<p>• Press again the switch for the following display.</p> <div data-bbox="938 757 1209 857" style="border: 1px solid black; padding: 5px; text-align: center;"> SLOPE R TOTL B </div> <p>Slope (R, total, B) adjustment</p>
	(3)WHITE CLIP	KNEE/SLOPE 3	<p>• Press again the switch for the following display.</p> <div data-bbox="944 1014 1216 1115" style="border: 1px solid black; padding: 5px; text-align: center;"> WHITE CLIP TOTL </div> <p>White clip (total) adjustment</p>
(4)KNEE SAT	KNEE/SLOPE 4	<div data-bbox="944 1238 1216 1339" style="border: 1px solid black; padding: 5px; text-align: center;"> KNEE SAT LEVL </div> <p>Knee saturation level adjustment</p>	
15	White shading adjustment	WHITE SHAD	<p>• Press again the switch for the following display.</p> <div data-bbox="938 1619 1209 1720" style="border: 1px solid black; padding: 5px; text-align: center;"> WHITE SHAD VS R G B </div> <p>White shading v saw (R,G,B) adjustment</p>

Item no.	Function	Switch	Operating procedure
1 7	Gain and black adjust G.gain/C.temp adjust	<div style="border: 1px solid black; padding: 2px; display: inline-block;">PAINT ENABLE</div> -GAIN-  -BLACK-  <div style="border: 1px solid black; padding: 2px; display: inline-block;">G. GAIN/C. TEMP</div>	<ul style="list-style-type: none"> Gain and black adjustment with <div style="border: 1px solid black; padding: 2px; display: inline-block;">PAINT ENABLE</div> switch on Adjustable by control Setting <div style="border: 1px solid black; padding: 2px; display: inline-block;">PAINT ENABLE</div> to off returns black control to center detent position. <p>Set to C.Temp to operate the G.Gain control as follows. Turn clockwise to raise blue and lower red gain. Turn counter-clockwise raise red and lower blue gain. When switch is set to G.Gain: Turn clockwise to simultaneously lower red and blue gain. Turn counter-clockwise to simultaneously raise red and blue gain.</p>
1 8	Detail adjustment	-DTL- 	<ul style="list-style-type: none"> Detail level can be adjusted by turning the control.
1 9	Iris adjustment Auto iris on/off	-IRIS-  <div style="border: 1px solid black; padding: 2px; display: inline-block;">AUTO IRIS</div>	<ul style="list-style-type: none"> Iris adjustment. When using joystick ,operate by up and down movement. During auto iris, joystick up&down or manual iris trimmer control can be used for fine adjustment. Auto iris on/off is selected.
2 0	Iris F value indication	IRIS 	<p>Set as below according to camera usage mode.</p> <p>(1) Normal use Lens F value is indicated. <div style="border: 1px solid black; padding: 2px; display: inline-block;">1.4</div> - <div style="border: 1px solid black; padding: 2px; display: inline-block;">22</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">CL</div></p> <p>(2) Camera power supply off <div style="border: 1px solid black; padding: 2px; display: inline-block;">00</div></p> <p>(3) The lens cable is open <div style="border: 1px solid black; padding: 2px; display: inline-block;">00</div></p>
2 1	Master black adjust	-MASTER BLACK- 	<ul style="list-style-type: none"> Master black can be adjusted by the mounted master control knob for JY type. Master black can be adjusted by variable Register for VR type.

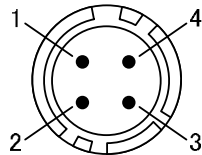
Item no.	Function	Switch	Operating procedure
2 2	Lens extender Indication	X2 X0.8	<ul style="list-style-type: none"> • Lights when lens extender X2 is on. • Lights when lens extender X0.8 is on.
2 3	TALLY CALL	CALL	<ul style="list-style-type: none"> • R tally LED lights when CALL switch is pressed. • Tally call from camera head and CCU: The R tally LED lights and the buzzer sounds.
2 4	Preview switch (JY type only)		<ul style="list-style-type: none"> • Press the joystick inward to short the Preview connector pins #2 and #3 in the rear panel. Connect the Preview connector to a video switcher via the accessory RM12BPE-3S plug and use to view the camera video signal on the master monitor.
2 5	Message display		<ul style="list-style-type: none"> • "CAM POWER OFF" Camera head power supply is off. • "SK-HD1000" Camera head type is indicated when camera head power is on. • "AUTO SETUP" Auto setup in progress. • "CONTROL HEAD" Control priority is camera head.
2 6	TALLY LED (Red/Green)		<ul style="list-style-type: none"> • Red or Green tally can be lighted.
2 7	EXTENDER LED		<ul style="list-style-type: none"> • Extender LED lights when Lens extender is selected.

Service information

1. CONNECTION

Connector pin diagram

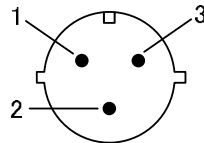
1-1. Remote connector



Remote
HR10A-7R-4P(74)

Pin	Signal
1	+12V
2	SD(TX)
3	SD(RX)
4	GND

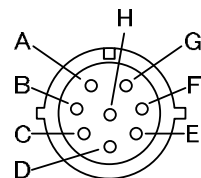
1-2. Preview connector



PREVIEW
RM12BRD-3PH(71)

Pin	Signal
1	NC
2	PREVIEW+
3	PREVIEW-

1-3. Ext IRIS /UTILITY OUT (OPTION)



EXT IRIS /UTILITY OUT (OPTION)
R05-R8F

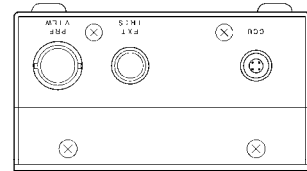
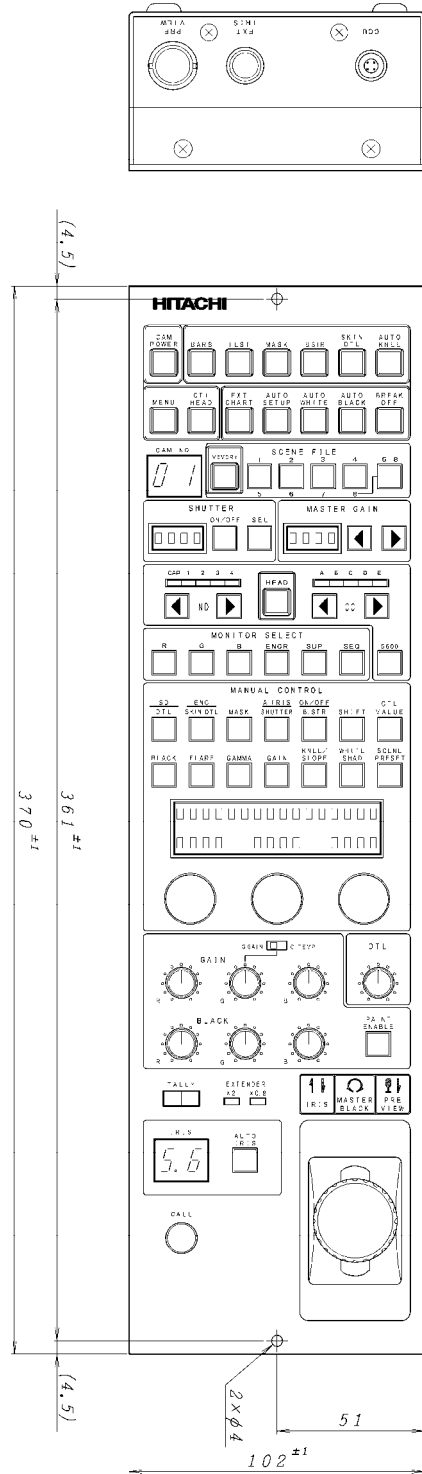
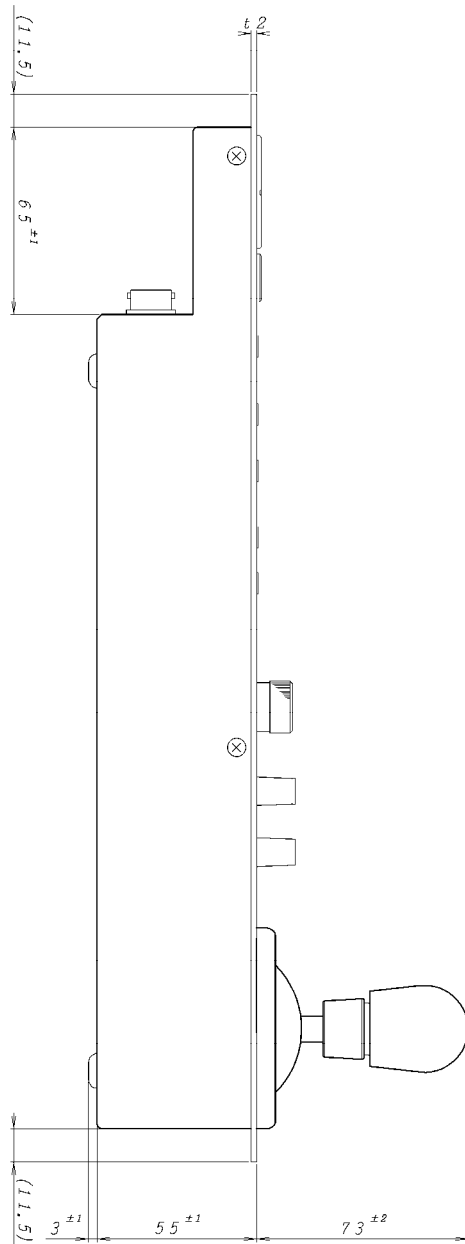
Pin	Signal
A	EXT_MBLK / UTILITY OUT 1A
B	NC / UTILITY OUT 1B
C	EXT_IRIS / UTILITY OUT 2A
D	NC / UTILITY OUT 2B
E	NC / UTILITY OUT 3A
F	NC / UTILITY OUT 3B
G	A+5V / UTILITY OUT 4A
H	A.GND / UTILITY OUT 4B

Specifications

. Rating

- (1) Dimensions: 102 (W) x 370 (D) x 55 (H) mm
- (2) MASS: 1.5 kg
- (3) Power input: DC+12V
- (4) Ambient temperature: 0 to +40 °C

Dimensions RU-1200JY



Specifications

Rating

- (1) Dimensions: 102 (W) x 340 (D) x 55 (H) mm
- (2) MASS: 1.5 kg
- (3) Power input: DC+12V
- (4) Ambient temperature: 0 to +40 °C

Dimensions

RU-1200VR

