MULTI-FORMAT VIDEO SWITCHER
V-1200HD

Owner's Manual **Ver. 1.2 and After**

Owner's Manual (this document)

Read this first. It explains the basic things you need to know in order to use the V-1200HD.

PDF Manual (download from the Web)

- **V-1200HDR/V-1200HD RCS Remote Control Guide**
  This explains the procedures and settings when using the V-1200HDR or V-1200HD RCS remote-control software to operate the unit.

To obtain the PDF manual

1. Enter the following URL in your computer.
http://proav.roland.com

▼

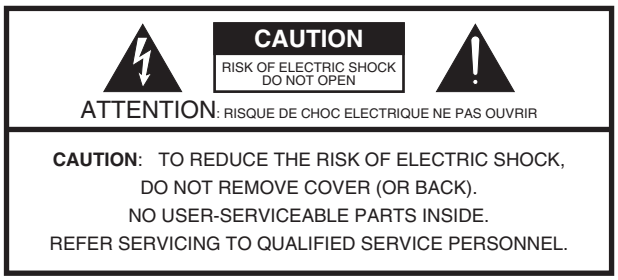
2. Go to the V-1200HD product page and click the "Support" tab.

Copyright © 2016 ROLAND CORPORATION

Before using the V-1200HD, ensure that its system program is at the most recent version. For information on available upgrades for the system program, see the Roland website (http://www.proav.roland.com).

For information on how to check the system program version, refer to "Checking the Version Information" (p. 30).

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For the U.K.

WARNING: THIS APPARATUS MUST BE EARTHED
IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
GREEN-AND-YELLOW: EARTH, BLUE: NEUTRAL, BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

French language
for Canadian Safety Standard

AVERTISSEMENT: Pour éviter les risques d'incendie ou de choc électrique, ne pas exposer cet appareil à la pluie ou à l'humidité.

L'éclair fléché dans un triangle équilatéral est destiné à avertir l'utilisateur de la présence, dans l'appareil, d'une zone non-isolée soumise à une « haute-tension » dont l'intensité est suffisante pour constituer un risque d'électrocution.

Le point d'exclamation dans un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence d'informations de fonctionnement et maintenance (entretien) importantes dans la brochure accompagnant l'appareil.

INSTRUCTIONS RELATIVES AUX RISQUES D'INCENDIE, DE CHOC ÉLECTRIQUE OU DE BLESSURES.

INSTRUCTIONS IMPORTANTES DE SÉCURITÉ CONSERVER CES INSTRUCTIONS

AVERTISSEMENT - Lors de l'utilisation d'appareils électriques, des précautions de base doivent toujours être respectées, y compris ce qui suit :

1. Bien lire ces instructions.
2. Conserver ces instructions.
3. Tenir compte de tous les avertissements.
4. Suivre toutes ces instructions.
5. Ne pas utiliser pas l'appareil près de l'eau.
6. Nettoyer uniquement avec un chiffon sec.
7. Ne pas obstruer les ouïes de ventilation. Installer conformément aux instructions du fabricant.
8. Ne pas installer à proximité d'une source de chaleur telle qu'un radiateur, une bouche de chaleur, un poêle ou d'autres appareils (dont les amplificateurs) produisant de la chaleur.
9. Ne pas détériorer la sécurité de la fiche polarisée ou de la fiche de terre. Une fiche polarisée comporte deux lames dont l'une est plus large que l'autre. Une fiche de terre comporte deux lames et une troisième broche de mise à la terre. La lame la plus large ou la troisième broche assure la sécurité de l'utilisateur. Si la fiche fournie ne s'adapte pas à la prise électrique, demander à un électricien de remplacer la prise hors normes.
10. Protéger le cordon d'alimentation afin que personne ne marche dessus et que rien ne le pince, en particulier au niveau des fiches, des prises de courant et du point de sortie de l'appareil.
11. Utiliser uniquement les pièces / accessoires spécifiés par le fabricant.
12. Débrancher l'appareil pendant les orages ou quand il ne sera pas utilisé pendant longtemps.
13. Confier toute réparation à du personnel qualifié. Des réparations sont nécessaires si l'appareil est endommagé d'une façon quelconque, par exemple : cordon ou prise d'alimentation endommagé, liquide renversé ou objet tombé à l'intérieur de l'appareil, exposition de l'appareil à la pluie ou à l'humidité, appareil qui ne marche pas normalement ou que l'on a fait tomber.

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⃠symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ●symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠ WARNING

Make sure that the power cord is grounded

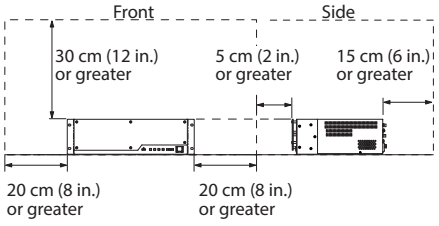
Connect mains plug of this model to a mains socket outlet with a protective earthing connection.

To completely turn off power to the unit, pull out the plug from the outlet

Even with the power switch turned off, this unit is not completely separated from its main source of power. When the power needs to be completely turned off, turn off the power switch on the unit, then pull out the plug from the outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible.

Secure a sufficient amount of space at the setup location

This unit has internal fans for cooling. To ensure proper cooling, install the unit with enough surrounding space to ensure that the unit's ventilation ports are not obstructed.



Do not disassemble or modify by yourself

Do not carry out anything unless you are instructed to do so in the owner's manual. Otherwise, you risk causing malfunction.

Do not repair or replace parts by yourself

Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information."

⚠ WARNING

Do not use or store in the following types of locations

- Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
- Damp (e.g., baths, washrooms, on wet floors); or are
- Exposed to steam or smoke; or are
- Subject to salt exposure; or are
- Exposed to rain; or are
- Dusty or sandy; or are
- Subject to high levels of vibration and shakiness.

Do not place in an unstable location

Otherwise, you risk injury as the result of the unit toppling over or dropping down.

Use only the supplied power cord

Use only the attached power cord. Also, the supplied power cord must not be used with any other device.

Connect the power cord to an outlet of the correct voltage

The unit should be connected to a power supply only of the type described in the operating instructions, or as marked on the side of unit.

Do not bend the power cord or place heavy objects on it

Otherwise, fire or electric shock may result.

Avoid extended use at high volume

Use of the unit at high volume for extended periods of time may cause hearing loss. If you ever experience any hearing loss or ringing in the ears, you should immediately stop using the unit and consult a specialized physician.

⚠ WARNING

Do not allow foreign objects or liquids to enter unit; never place containers with liquid on unit

Do not place containers containing liquid (e.g., flower vases) on this product. Never allow foreign objects (e.g., flammable objects, coins, wires) or liquids (e.g., water or juice) to enter this product. Doing so may cause short circuits, faulty operation, or other malfunctions.

Turn off the unit if an abnormality or malfunction occurs

Immediately turn the unit off, remove the power cord from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" when:

- The power cord has been damaged; or
- If smoke or unusual odor occurs; or
- Objects have fallen into, or liquid has been spilled onto the unit; or
- The unit has been exposed to rain (or otherwise has become wet); or
- The unit does not appear to operate normally or exhibits a marked change in performance.

Do not drop or subject to strong impact

Otherwise, you risk causing damage or malfunction.

Do not share an outlet with an unreasonable number of other devices

Otherwise, you risk overheating or fire.

Do not use overseas

Before using the unit in overseas, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information."

Turn the unit off before installing expansion interface

Before installing the expansion interface , you must first always turn off the unit and unplug its power cord.

⚠ CAUTION

Place in a well ventilated location

The unit should be located so that its location or position does not interfere with its proper ventilation.

When disconnecting the power cord, grasp it by the plug

To prevent conductor damage, always grasp the power cord by its plug when disconnecting it from this unit or from a power outlet.

Periodically clean the power plug

An accumulation of dust or foreign objects between the power plug and the power outlet can lead to fire or electric shock.

At regular intervals, be sure to pull out the power plug, and using a dry cloth, wipe away any dust or foreign objects that may have accumulated.

Disconnect the power plug whenever the unit will not be used for an extended period of time

Fire may result in the unlikely event that a breakdown occurs.

Route all power cords and cables in such a way as to prevent them from getting entangled

Injury could result if someone were to trip on a cable and cause the unit to fall or topple.

Avoid climbing on top of the unit, or placing heavy objects on it

Otherwise, you risk injury as the result of the unit toppling over or dropping down.

Never connect/disconnect a power plug if your hands are wet

Otherwise, you could receive an electric shock.

Disconnect all cords/cables before moving the unit

Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices.

⚠ CAUTION

Before cleaning the unit, disconnect the power plug from the outlet

If the power plug is not removed from the outlet, you risk receiving an electric shock.

Whenever there is a threat of lightning, disconnect the power plug from the outlet

If the power plug is not removed from the outlet, you risk receiving an electric shock.

Install only specified circuit expansion interface

Install only the specified expansion interface XI series. Remove only the specified screws (p.14).

Keep small items out of the reach of children

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.

- Included Parts
  - Rubber feet (p.14)
- Removable Parts
  - Power-cord hook
  - Screw for Power-cord hook (p.12)
  - Screws for face panel (p.10)

Handle the ground terminal carefully

If you remove the screw from the ground terminal, be sure to replace it; don't leave it lying around where it could accidently be swallowed by small children. When refastening the screw, make that it is firmly fastened, so it won't come loose.

Take care not to get burned

The unit may become hot, so take care to avoid burns.

CONSIGNES DE SÉCURITÉ

French language
for Canadian Safety Standard

INSTRUCTIONS POUR LA PRÉVENTION DES INCENDIES, CHOCS ÉLECTRIQUES OU BLESSURES

À propos des mentions ⚠ AVERTISSEMENT et ⚠ ATTENTION

⚠ AVERTISSEMENT	Utilisé pour avertir l'utilisateur d'un risque de décès ou de blessure grave en cas de mauvaise utilisation de l'appareil.
⚠ ATTENTION	Utilisé pour avertir l'utilisateur d'un risque de blessure ou de dommage matériel en cas de mauvaise utilisation de l'appareil. * Par dommage matériel, il est entendu les dommages ou tout autre effet indésirable sur la maison et tous ses meubles ainsi que les animaux domestiques ou familiers.

À propos des symboles

⚠	TLe symbole △ alerte l'utilisateur d'instructions importantes ou de mise en garde. La signification du symbole est déterminée par ce que contient le triangle. Dans le cas du symbole de gauche, il sert pour des précautions générales, des mises en garde ou alertes vis-à-vis d'un danger.
	Le symbole ⃠ prévient l'utilisateur des choses à ne pas faire (des interdits). Ce qui ne doit spécifiquement pas être fait est indiqué dans le cercle. Dans le cas du symbole de gauche, cela signifie que l'appareil ne doit jamais être démonté.
	Le symbole ● alerte l'utilisateur des choses à faire. Ce qui doit être fait est indiqué par l'icône contenue dans le cercle. Dans le cas du symbole de gauche, cela signifie que le cordon d'alimentation doit être débranché de la prise murale.

PROCÉDEZ TOUJOURS COMME SUIT

⚠ AVERTISSEMENT

S'assurer que le cordon d'alimentation est bien mis à la terre

Connectez la fiche secteur de ce modèle à une prise secteur dotée d'une protection par mise à la terre.

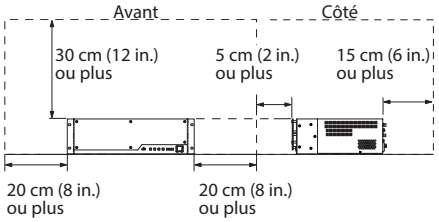
Pour éteindre complètement l'alimentation de l'appareil, retirer la fiche de la prise

Même avec son interrupteur d'alimentation hors tension, l'appareil n'est pas complètement isolé de sa source principale d'alimentation. Lorsque l'alimentation doit être complètement coupée, éteignez l'interrupteur d'alimentation de l'appareil puis retirez la fiche de la prise. Pour cette raison, la prise dans laquelle vous choisissez de brancher la fiche du cordon d'alimentation doit être proche et facilement accessible.

Ménager un espace suffisant à l'emplacement d'installation

Cet appareil est équipé de ventilateurs internes pour son refroidissement.

Pour assurer un refroidissement adéquat, installez l'appareil avec suffisamment d'espace environnant en vous assurant que les orifices de ventilation de l'appareil ne sont pas obstrués.



Ne jamais démonter ou modifier vous-même

N'effectuez jamais une quelconque opération, sauf si vous êtes invité à le faire dans le mode d'emploi. Sinon, vous risquez de provoquer des dysfonctionnements.

Ne pas réparer ou remplacer de pièces par vous-même

Confiez toute réparation à votre revendeur, le centre Roland le plus proche ou un distributeur Roland agréé dont vous trouverez la liste dans les « Informations ».

⚠ AVERTISSEMENT

Ne jamais ranger ou utiliser dans des endroits

- Soumis à des températures extrêmes (ex : en plein soleil dans un véhicule fermé, à proximité d'une conduite de chauffage, au-dessus de matériel générateur de chaleur), ou
- humides (ex : salles de bain, toilettes, sur des sols mouillés), ou
- exposés à de la vapeur ou de la fumée, ou
- exposés au sel, ou
- exposés aux précipitations, ou
- poussiéreux ou sableux, ou
- soumis à de fortes vibrations et secousses.

Ne pas placer à un endroit instable

Sinon, vous risquez des blessures si l'appareil se renverse ou tombe.

Utiliser uniquement le cordon d'alimentation fourni

Utilisez uniquement le cordon d'alimentation fourni. En outre, le cordon d'alimentation fourni ne doit pas être utilisé avec un tout autre appareil.

Brancher le cordon d'alimentation à une prise d'une tension correcte

L'appareil doit être connecté à une source d'alimentation du type décrit dans les instructions d'utilisation, ou comme indiqué sur le côté de l'appareil.

Ne pas plier le cordon d'alimentation ou déposer d'objets lourds sur celui-ci

Sinon, cela risque de provoquer un incendie ou un choc électrique.

Éviter l'utilisation prolongée à un volume élevé

L'utilisation de l'appareil à un volume élevé pendant des périodes prolongées peut entraîner une perte auditive. Si jamais vous ressentez une perte auditive ou des bourdonnements dans les oreilles, veuillez immédiatement cesser d'utiliser l'appareil et consultez un médecin spécialisé.

⚠ AVERTISSEMENT

Ne jamais laisser de corps étrangers ou de liquides pénétrer dans l'appareil et ne jamais placer de récipients contenant un liquide sur l'appareil

Ne jamais placer de récipients contenant du liquide (ex : vases de fleurs) sur ce produit. Ne jamais laisser des corps étrangers (ex : objets inflammables, pièces, fils) ou des liquides (ex : eau, jus de fruit) pénétrer à l'intérieur du produit. Vous risqueriez de provoquer des courts-circuits, pannes ou autres dysfonctionnements.

Eteindre l'appareil en cas d'anomalie ou de dysfonctionnement

Mettez immédiatement l'appareil hors tension, débranchez le cordon d'alimentation de la prise et contactez votre revendeur, le centre Roland le plus proche ou un distributeur Roland agréé dont vous trouverez la liste dans les « Informations » lorsque :

- Le cordon d'alimentation a été endommagé, ou
- en présence de fumée ou odeur inhabituelle, ou
- des objets sont tombés dans ou du liquide a été renversé dans l'appareil, ou
- l'appareil a été exposé à la pluie (ou a été mouillé), ou
- l'appareil ne semble pas fonctionner normalement ou présente un changement notable de ses performances.

Ne pas faire tomber ou soumettre à des chocs violents

Sinon, vous risquez de provoquer des dommages ou des dysfonctionnements.

Ne pas partager une prise murale avec un nombre excessif d'autres appareils

Sinon, vous risquez une surchauffe ou un incendie.

Ne pas utiliser à l'étranger

Avant d'utiliser l'appareil à l'étranger, consultez votre revendeur, un centre Roland ou un distributeur Roland agréé dont vous trouverez la liste dans les « Informations ».

⚠ ATTENTION

Eteindre l'appareil avant d'installer l'interface d'extension

Avant d'installer l'interface d'extension, vous devez d'abord toujours éteindre l'appareil et débrancher le cordon d'alimentation.

Placer dans un endroit bien ventilé

L'appareil doit être placé en veillant à ce que son emplacement ou sa position ne gêne pas sa bonne ventilation.

Lorsque vous débranchez le cordon d'alimentation, saisissez-le par la fiche

Pour éviter d'endommager le conducteur, toujours saisir le cordon d'alimentation par sa fiche lorsque vous le débranchez de l'appareil ou d'une prise de courant.

Nettoyer régulièrement le cordon d'alimentation

Une accumulation de poussière ou de corps étrangers entre la fiche d'alimentation et la prise de courant peut provoquer un incendie ou un choc électrique.

À intervalles réguliers, assurez-vous de débrancher la fiche d'alimentation, et à l'aide d'un chiffon sec, essuyez la poussière ou les corps étrangers qui ont pu s'y accumuler.

Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant une longue période

Un incendie peut se produire dans le cas fortuit où une panne survient.

Acheminer tous les cordons d'alimentation et câbles de façon à ce qu'ils ne puissent pas s'emmêler

Des blessures peuvent survenir si quelqu'un vient à trébucher sur un câble et provoque la chute ou le basculement de l'appareil.

Ne pas grimper sur l'appareil ou y poser des objets lourds

Sinon, vous risquez des blessures suite à la chute ou au basculement de l'appareil.

Ne jamais brancher/débrancher un cordon d'alimentation lorsque vous avez les mains mouillées

Sinon, vous pourriez subir un choc électrique.

⚠ ATTENTION

Débrancher tous les cordons / câbles avant de déplacer l'appareil

Avant de déplacer l'appareil, débranchez le cordon d'alimentation de la prise et retirez tous les cordons des appareils externes.

Avant de nettoyer l'appareil, débrancher le cordon d'alimentation de la prise

Si la fiche d'alimentation n'est pas débranchée de la prise, vous risquez de subir un choc électrique.

Chaque fois qu'il y a un risque de foudre, débrancher le cordon d'alimentation de la prise

Si la fiche d'alimentation n'est pas débranchée de la prise, vous risquez de subir un choc électrique.

Installer uniquement l'interface d'extension de circuit indiquée

Installez uniquement l'interface d'extension indiquée de la série XI. Retirez uniquement les vis indiquées (p.15).

Tenir les pièces de petite taille hors de portée des enfants en bas âge

Pour éviter toute ingestion accidentelle des pièces indiquées ci-dessous, tenez-les toujours hors de portée des enfants en bas âge.

- Composants inclus
  - Pieds en caoutchouc (p.15)
- Pièces amovibles
  - Crochet du cordon d'alimentation
  - Vis pour le crochet du cordon d'alimentation (p.13)
  - Vis pour le panneau frontal (p.11)

Manipuler avec précaution la prise de terre

Si vous retirez la vis de la prise de terre, assurez-vous de la remettre en place. Ne laissez traîner aucune pièce pour éviter qu'un jeune enfant ne l'ingère par accident. Lorsque vous remontez la vis, veillez à la resserrer fermement pour éviter qu'elle ne se détache.

Veiller à ne pas se brûler

L'appareil pouvant devenir chaud, veillez à éviter les brûlures.

IMPORTANT NOTES

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter or a motor (such as a refrigerator, washing machine, microwave oven, or air conditioner). Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- If the unit has been used with a power supply that has not been specified as suitable for the unit, the subsequent performance and operation of the unit can no longer be guaranteed. Also note that we may not be able to accept the unit for servicing and repairs.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.
  You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.
- Do not place containers or anything else containing liquid on top of this unit. Also, whenever any liquid has been spilled on the surface of this unit, be sure to promptly wipe it away using a soft, dry cloth.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Before sending the unit away for repairs, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information. Although we will do our utmost to preserve the data stored in your unit when we carry out repairs, in some cases, such as when the memory section is physically damaged, restoration of the stored content may be impossible. Roland assumes no liability concerning the restoration of any stored content that has been lost.

Additional Precautions

- Any data stored within the unit can be lost as the result of equipment failure, incorrect operation, etc. To protect yourself against the irretrievable loss of data, try to make a habit of creating regular backups of the data you've stored in the unit.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing others nearby, try to keep the unit's volume at reasonable levels.
- When you need to transport the unit, pack it in shock-absorbent material. Transporting the unit without doing so can cause it to become scratched or damaged, and could lead to malfunction.
- This unit allows you to switch images at high speed. For some people, viewing such images can cause headache, nausea, or other discomfort. Do not use this unit to create video that might cause these types of health problems. Roland Corporation will accept no responsibility for any such health problems that may occur in yourself or in viewers.

Using External Memories

- Please observe the following precautions when handling external memory devices. Also, make sure to carefully observe all the precautions that were supplied with the external memory device.
  - Do not remove the device while reading/writing is in progress.
  - To prevent damage from static electricity, discharge all static electricity from your person before handling the device.

Intellectual Property Right

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform, or broadcast it without the permission of the copyright owner.
- Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product.
- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.
- This product is using the open source license (GPL/LGPL) software. You have the right to acquire, modify and distribute the source code for this open source license software. You can obtain the open source license source code used in this product by downloading it from the following website:
  URL:http://www.roland.com/support/gpl/
- This product contains eCROS integrated software platform of eSOL Co.,Ltd. eCROS is a trademark of eSOL Co., Ltd. in Japan.
- Roland, V-Mixer are either registered trademarks or trademarks of Roland Corporation in the United States and/or other countries.
- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.
- VISCA is a protocol developed by Sony for controlling a consumer's camcorder. "VISCA" is a trademark of Sony Corporation.

Contents

USING THE UNIT SAFELY 4

CONSIGNES DE SÉCURITÉ French language for Canadian Safety Standard 6

IMPORTANT NOTES 8

Placement and Setup 10
- Important Notes on Installation 10
- Important Notes on Rack Mounting 10
- Connecting the Power Cord 10
- Using the Power Cord Hook 12
- Using an External Power Source 12
- Turning the Power On and Off 12
- Installing an Expansion Interface (Option) 14
- Attaching the Rubber Feet 14

Installation et Configuration French language for Canadian Safety Standard 11
- Remarques importantes concernant l'installation 11
- Remarques importantes sur le montage en rack 11
- Connexion du cordon d'alimentation 11
- Utilisation du Crochet du cordon d'alimentation 13
- Utilisation d'une source d'alimentation externe 13
- Mise sous tension et hors tension de l'appareil 13
- Installation d'une Interface d'extension (Option) 15
- Fixation des pieds en caoutchouc 15

Part Names and Functions 16
- Front Panel 16
- Rear Panel 17

Internal Structure of the V-1200HD 19
- About Processing Formats 19
- About HDMI IN 3 and 4 20
- About Copyright Protection (HDCP) 20

Connecting External Equipment 21
- Connecting Source Equipment 23
  - Connecting Video Source Equipment 23
  - Connecting Audio Source Equipment 24
  - Connecting a Reference 24
- Connecting Output Equipment 25
  - Connecting Video Output Equipment 25
  - Connecting Audio Output Equipment 25

Setup Menu 26
- Using the Menus 26
- Menu Organization 26

Remote Control from an External Device 27
- Using a V-1200HDR Dedicated Controller 27
- Using V-1200HD RCS Dedicated Software 27
- RS-232 Connector Specifications 28
- Using the TALLY/GPIO Connector 28

Other Features 29
- Operating a VISCA-Compatible Video Camera by Remote Control 29
- About the TALLY/GPIO Connector 29
- Saving/Recalling Settings 30
- Checking the Version Information 30
- Formatting a USB Flash Drive 30
- Returning Settings to the Factory-Default State (Factory Reset) 30

Appendix 31
- Troubleshooting 31
- Main Specifications 32
- Dimensions 33
- Block Diagram 34

Before using this unit, carefully read the sections entitled "IMPORTANT SAFETY INSTRUCTIONS" (p. 2), "USING THE UNIT SAFELY" (p. 4), and "IMPORTANT NOTES" (p. 8). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature of your new unit, read this Owner's Manual in its entirety. This manual should be saved and kept on hand as a convenient reference.

Checking the Included Items

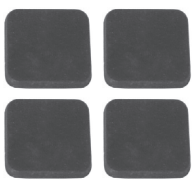
The following items are included with this unit. Check to make sure that all items are present. If anything is missing, contact your dealer.

☐ **The unit**

☐ **Power cord**

* The shape of the power cord's plug varies depending on the country.

☐ **Rubber feet (4)**



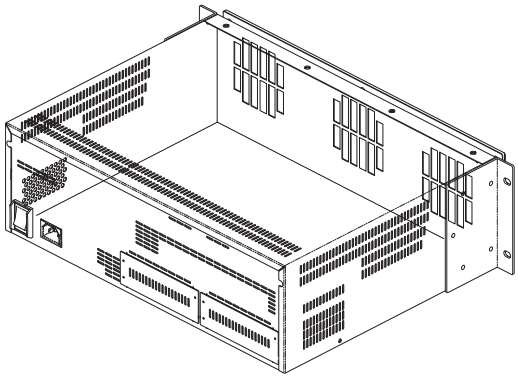
☐ **Owner's Manual**

Placement and Setup

Important Notes on Installation

- Never insert your fingers or other objects into the space between the unit's front face panel and the body of the unit. Doing so might lead to injury.
- When detaching the face panel, to ensure safety, turn off the power and disconnect the power plug from the electrical outlet.
- Use with the face panel detached is dangerous and must never be attempted.

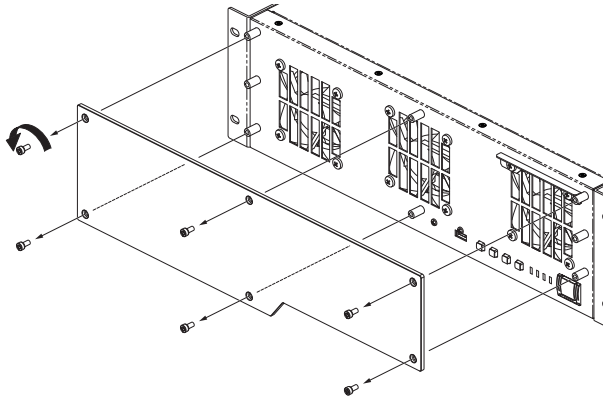
When installing the V-1200HD, never block or place objects next to the ventilation ports, and avoid obstructing the space between the face panel and the unit. Otherwise, the temperature inside the V-1200HD could rise and create the risk of malfunction due to heat.
Refer to the figure below for the locations of the ventilation ports.



* The openings are ventilation ports.

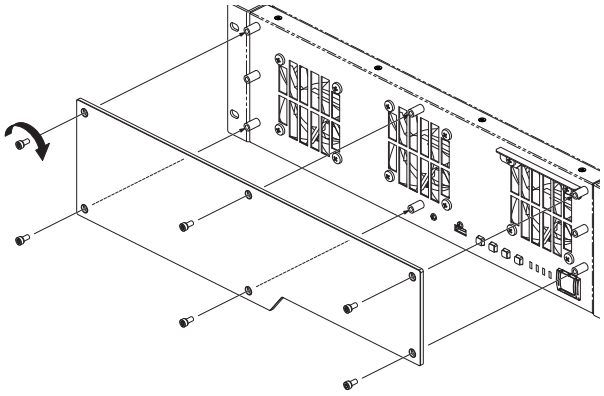
Dust buildup in the ventilation ports can impede heat radiation and cooling of the V-1200HD, resulting in malfunction. Regularly check the ports and clear away any buildup of dust or other material.
For the ventilation ports on the front of the V-1200HD, use the procedure shown below to remove the face panel and clear away any dust.

1. Use a hex wrench (3 mm across flats) to loosen the mounting screws (6) specified in the figure and detach the face panel.



2. Clear away any dust buildup from the ventilation ports.

3. Use the mounting screws (6) as shown to secure the face panel in place again.



Important Notes on Rack Mounting

* When mounting the V-1200HD in a rack enclosure, pay attention to the following points to ensure efficient cooling.
- Install in a well-ventilated location.
- Avoid blocking the cooling-fan exhaust ports in the top, rear, and side panels of the V-1200HD.
- Avoid mounting the unit in a sealed-type rack. In this situation, warm air within the rack cannot escape and is drawn into the unit, making efficient cooling impossible.
- If the back of the rack cannot be opened, install an exhaust port or ventilation fan at the top back surface of the rack where warm air collects.

* The V-1200HD is heavy. Give careful attention to the following points.
- When mounting the unit on a rack, make sure the procedure is carried out by two or more persons.
- Never use only the included rack-mount angle brackets to support the V-1200HD. Concentrating the load on only a portion of the rack can damage to the rack.

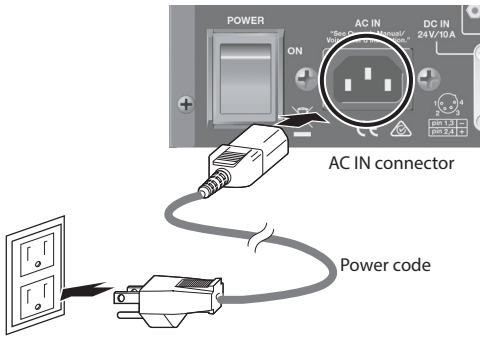
* Also read the "Placement" (p. 8) under "IMPORTANT NOTES."

Connecting the Power Cord

NOTE

Be sure to use the included power cord for connecting the power supply.

1. Connect the included power cord to the AC IN connector on the rear panel.



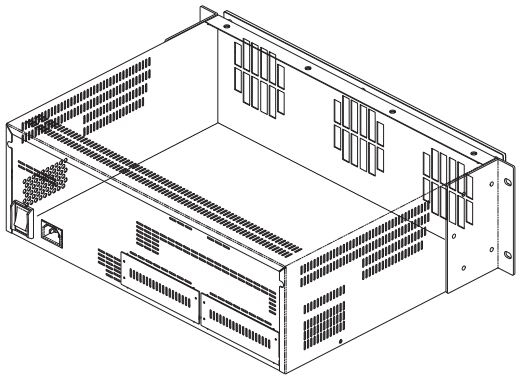
* The shape of the power cord's plug varies depending on the country.

Remarques importantes concernant l'installation

- Ne jamais glisser les doigts ou d'autres objets dans l'espace entre le couvercle frontal et l'unité. Cela risquerait de provoquer des blessures.
- Lors du retrait du couvercle frontal, pour garantir la sécurité, coupez l'alimentation et débranchez le cordon d'alimentation de la prise électrique.
- Une utilisation avec le couvercle frontal ôté est dangereuse et ne doit jamais être tentée.

Lors de l'installation du V-1200HD, ne jamais bloquer ou placer des objets à côté des ports de ventilation et éviter d'obstruer l'espace entre le couvercle frontal et l'appareil. Sinon, la température à l'intérieur du V-1200HD risque de s'élever et de provoquer des dysfonctionnements dus à la chaleur.

Reportez-vous à l'illustration ci-dessous pour les emplacements des ports de ventilation.

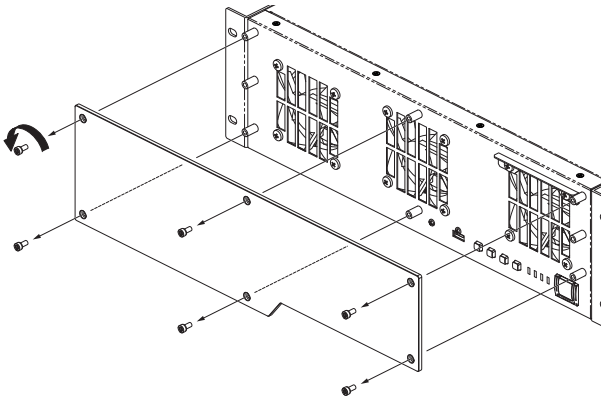


* Les ouvertures sont les ports de ventilation.

L'accumulation de poussière dans les orifices de ventilation peut empêcher le rayonnement de chaleur et le refroidissement du V-1200HD, résultant en des dysfonctionnements. Vérifiez régulièrement les ports et essuyez toute accumulation de poussière ou autres corps étrangers.

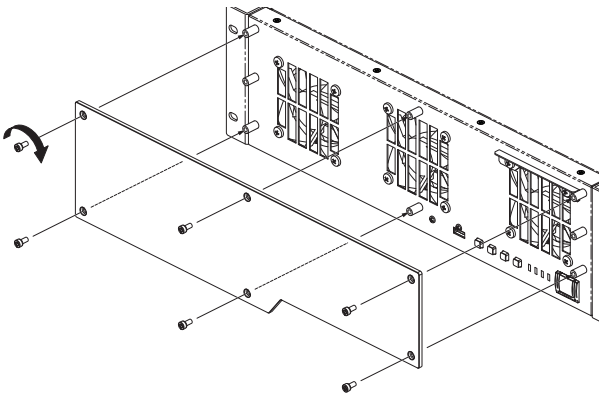
Pour les ports d'aération à l'avant du V-1200HD, suivre la procédure ci-dessous pour retirer le couvercle frontal et effacer toute trace de poussière.

1. Utilisez une clé hexagonale (cote sur plat 3 mm) pour desserrer les vis de montage (6) indiquées sur l'illustration et retirez le couvercle frontal.



2. Essuyez toute trace de poussière accumulée sur les ports de ventilation.

3. Utilisez les vis de montage (6) comme indiqué pour remettre le panneau frontal en place.



Remarques importantes sur le montage en rack

* Lors du montage du V-1200HD dans un rack, faites attention aux points suivants pour assurer un refroidissement efficace.

- Installez dans un endroit bien ventilé.
- Évitez de bloquer les orifices d'échappement du ventilateur de refroidissement dans les panneaux supérieur, arrière et latéraux du V-1200HD.
- Évitez d'installer l'appareil dans un rack de type étanche. Dans cette configuration, l'air chaud dans le rack ne peut pas s'échapper et est aspiré dans l'appareil, ce qui rend impossible un refroidissement efficace.
- Si l'arrière du rack ne peut être ouvert, installer un port d'échappement ou un ventilateur d'aération au sommet de la surface arrière du rack où l'air chaud s'accumule.

* Le V-1200HD est lourd. Accordez une attention particulière aux points suivants.

- Lors du montage de l'appareil sur un rack, assurez-vous que l'opération est effectuée par au moins deux personnes.
- Ne jamais utiliser uniquement les équerres de montage en rack incluses pour soutenir le V-1200HD. La concentration de la charge sur une partie seulement du rack peut endommager ce dernier.

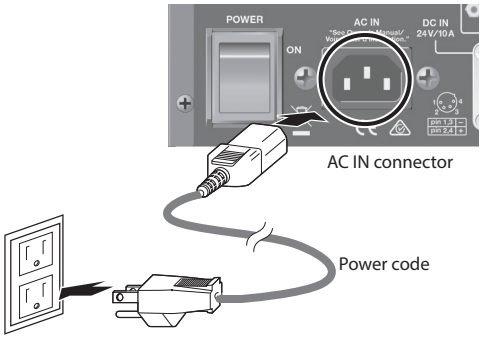
* Lire aussi « Placement » (p. 8) sous la rubrique « IMPORTANT NOTES »

Connexion du cordon d'alimentation

NOTE

Veillez à utiliser le cordon d'alimentation fourni pour brancher l'alimentation.

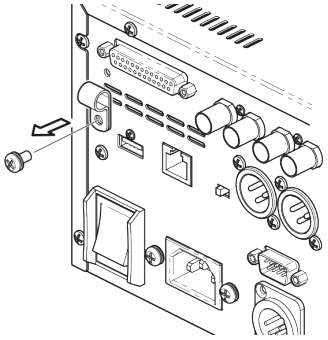
1. Branchez le cordon d'alimentation fourni à la prise AC IN sur le panneau arrière.



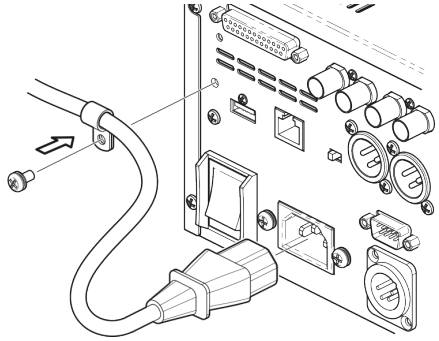
* La forme de la fiche du cordon d'alimentation varie selon les pays.

Using the Power Cord Hook

1. Remove the mounting screw indicated in the figure to detach the power cord hook.

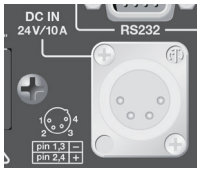


2. Install the hook onto the power cord as shown in the figure, and secure in place using the screw removed in step 1.



Using an External Power Source

You can use an external DC source to power the V-1200HD.



NOTE

- To ensure the safe use of this product, use an external power source designed exclusively for use with data-processing equipment. Use an external power source that displays one of the following cautions, or a caution of like meaning.
  - "FOR USE WITH IT EQUIPMENT ONLY"
  - "FOR USE WITH INFORMATION TECHNOLOGYEQUIPMENT ONLY"
- Use an external power source that can supply at least 240W of current.
- Make sure that the wiring of the external power source you want to connect matches the external power connector on the V-1200HD. Connecting an external power source that has different wiring might cause malfunction.
- Be sure to supply DC power within the range of 22V to 26V. Using a voltage that is out of range might cause malfunction in the external power source or the V-1200HD.

Using an AC power outlet and an external power source at the same time is also possible. If either power source fails to supply sufficient current, operation automatically switches to the other.

When using an external power source, be sure to refer to the owner's manual for the power source.

Turning the Power On and Off

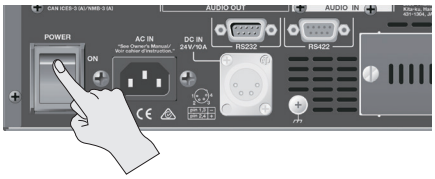
* Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Turning the Power On

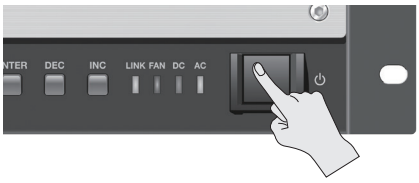
* Once everything is properly connected (p. 21), be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.

1. Make sure all devices are turned off.

2. Turn on the [POWER] (main power) switch on the rear panel of the V-1200HD.



3. Press the power button on the V-1200HD's front panel to turn on the power.



* This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.

4. Turn on the power to the source devices.

Turn on the power to the source devices (such as video cameras) connected to the V-1200HD.

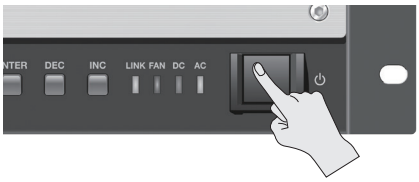
5. Turn on the power to the output devices.

Turn on the power to the output devices (such as monitors and projectors) connected to the V-1200HD.

Turning the Power Off

1. Power off the output devices first, and then power off the source devices.

2. Press the power button on the V-1200HD's front panel to turn off the power.

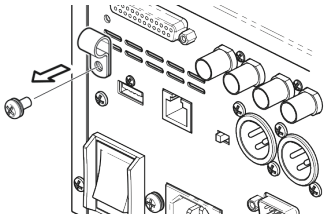


* If you need to turn off the power completely, first turn off the unit, then unplug the power cord from the power outlet. Refer to "To completely turn off power to the unit, pull out the plug from the outlet" (p. 4).

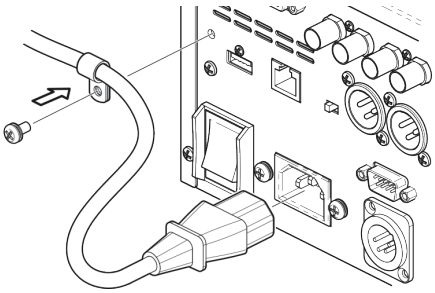
* When turning off the power to the V-1200HD, first remove the USB flash drive from the USB port before you turn off the power. If the power is turned off while a flash drive remains connected to the V-1200HD, the V-1200HD might fail to start correctly at the next powerup.

Utilisation du Crochet du cordon d'alimentation

1. Retirez la vis de montage indiquée sur l'illustration pour détacher le crochet du cordon d'alimentation.

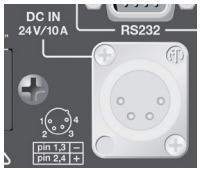


2. Installez le crochet sur le cordon d'alimentation comme indiqué sur l'illustration, et fixez à l'aide de la vis retirée à l'étape 1.



Utilisation d'une source d'alimentation externe

Vous pouvez utiliser une source DC externe pour alimenter le V-1200HD.



NOTE

- Pour garantir une utilisation en toute sécurité de ce produit, utilisez une source d'alimentation externe conçue exclusivement pour une utilisation avec des équipements de traitement de données. Utilisez une source d'alimentation externe affichant l'une des mises en garde suivantes, ou une mise en garde d'un sens similaire.
  - "FOR USE WITH IT EQUIPMENT ONLY"
  - "FOR USE WITH INFORMATION TECHNOLOGYEQUIPMENT ONLY"
- Utilisez une source d'alimentation externe pouvant fournir au moins 240W de courant.
- Assurez-vous que le câblage de la source d'alimentation externe que vous souhaitez connecter correspond au connecteur d'alimentation externe sur le V-1200HD. La connexion d'une source d'alimentation externe d'un câblage différent risque de provoquer un dysfonctionnement.
- Assurez-vous de fournir une alimentation DC dans une plage de 22V à 26V. L'utilisation d'une tension hors de cette plage risque de provoquer un dysfonctionnement de la source d'alimentation externe ou duV-1200HD.

L'utilisation simultanée d'une prise secteur CA et d'une source d'alimentation externe est également possible. Dans ce cas, la prise secteur devient l'alimentation électrique principale et la source d'alimentation externe devient l'alimentation de secours. Si l'une des sources d'alimentation ne parvient pas à fournir suffisamment de courant, le fonctionnement bascule automatiquement sur l'autre source.

Lors de l'utilisation d'une source d'alimentation externe, consultez attentivement le mode d'emploi pour la source d'alimentation.

Mise sous tension et hors tension de l'appareil

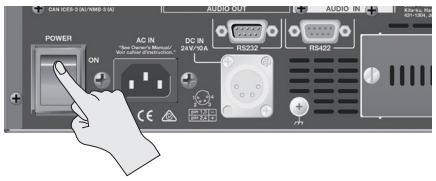
* Avant d'allumer/éteindre l'appareil, veuillez toujours baisser le volume. Même avec le volume au minimum, un son peut se faire entendre lorsque vous allumez/éteignez l'appareil. Cependant, c'est tout à fait normal et n'indique pas un dysfonctionnement.

Mise sous tension

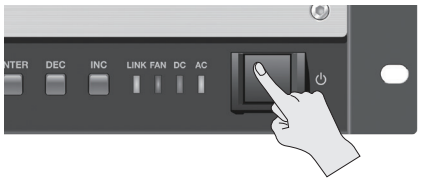
* Une fois que tout est correctement connecté (p. 21), veillez à bien suivre la procédure ci-dessous pour la mise sous tension des appareils. Si vous allumez l'équipement dans le mauvais ordre, vous risquez de provoquer un dysfonctionnement ou une panne de l'équipement.

1. Assurez-vous que tous les appareils sont éteints.

2. Allumez l'interrupteur [POWER] (alimentation principale) situé sur le panneau arrière du V-1200HD.



3. Appuyez sur le bouton d'alimentation situé sur le panneau avant du V-1200HD pour allumer l'alimentation.



* Cet appareil est équipé d'un circuit de protection. Un bref intervalle (quelques secondes) après avoir mis l'appareil en marche est nécessaire avant qu'il ne fonctionne normalement.

4. Allumez les appareils sources.

Allumez les appareils sources (tels que les caméras vidéo) connectés au V-1200HD.

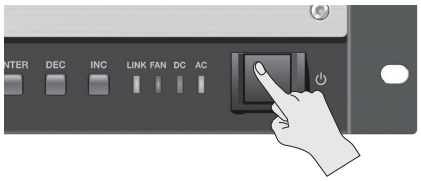
5. Allumez les périphériques de sortie.

Allumez les périphériques de sortie (tels que les moniteurs et projecteurs) connectés au V-1200HD.

Mise hors tension

1. Éteignez d'abord les périphériques de sortie puis éteignez ensuite les appareils sources.

2. Appuyez sur le bouton d'alimentation situé sur le panneau avant du V-1200HD pour couper l'alimentation.



* Si vous devez éteindre complètement l'alimentation, éteignez d'abord l'appareil avant de débrancher le cordon d'alimentation de la prise secteur. Consultez «Pour éteindre complètement l'alimentation de l'appareil, retirer la fiche de la prise» (p. 6)).

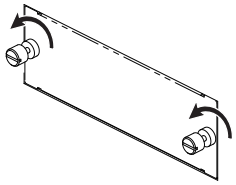
* Lors de la mise hors tension du V-1200HD, retirez d'abord la clé USB du port USB avant la mise hors tension. Si l'alimentation est coupée alors qu'une clé USB est toujours connectée au V-1200HD, le V-1200HD risque de ne pas démarrer correctement lors de la prochaine mise sous tension.

Installing an Expansion Interface (Option)

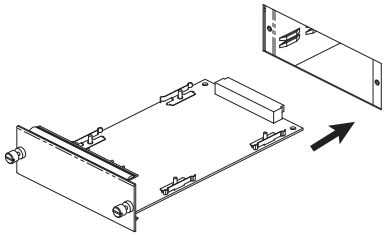
Optional XI-series expansion interfaces can be installed in the V-1200HD's expansion slots, enabling you to increase the available inputs and outputs.

1. Turn off the power to the V-1200HD and unplug the power cord from the power outlet.

2. Loosen the mounting screws (2) indicated in the figure and detach the expansion slot panel.



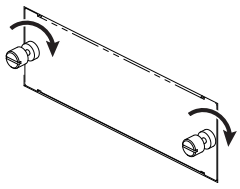
3. Insert the expansion interface.



* To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the expansion interface.

- Before you touch the the expansion interface, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you might have been carrying has been discharged
- When handling the the expansion interface, grasp it only by the panel or the expansion interface's edges. Avoid touching any of the electronic components or connectors.
- Save the bag in which the expansion interface was originally shipped, and put the board back into it whenever you need to store or transport it.

4. Secure the expansion interface using the screws (2) specified in the figure.



- Before installing the expansion interface , you must first always turn off the unit and unplug its power cord.
- Install only the specified expansion interface. Remove only the specified screws.
- Do not touch any of the printed circuit pathways or connection terminals.
- Never use excessive force when installing an expansion interface. If it doesn't fit properly on the first attempt, remove the expansion interface and try again.
- When the expansion interface installation is complete, doublecheck your work.
- Always turn the unit off and unplug the power cord before attempting installation of the expansion interface.
- Install only the specified expansion interface. Remove only the specified screws.
- When restarting the V-1200HD with an expansion interface installed, wait several seconds before you turn on the power.

Memo

- For information on the various settings for using expansion interfaces, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download from the Roland website.
- For detailed information about expansion interfaces, refer to the Roland website.

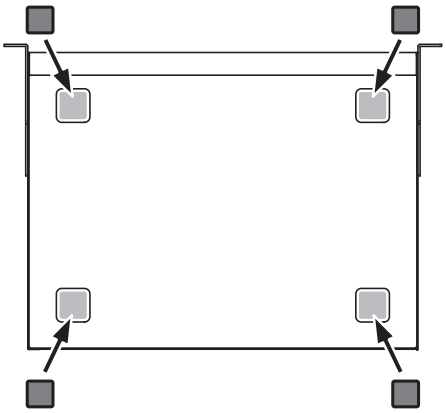
Roland website
http://proav.roland.com

Attaching the Rubber Feet

Attach the included rubber feet as required, such as using the V-1200HD without mounting it in a rack.

Peel off the double-sided tape from the rubber feet and affix them at the locations shown in the figure.

* When turning the unit upside down, handle it carefully and do not drop it.

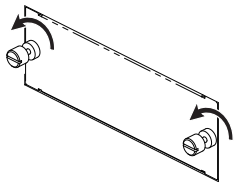


Installation d'une Interface d'extension (Option)

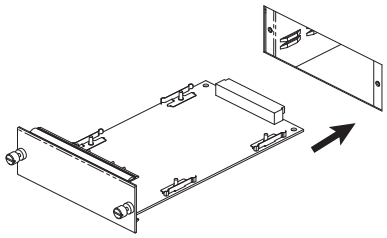
Les interfaces d'extension de la série Xi optionnelles peuvent être installées dans les connecteurs d'extension du V-1200HD pour vous permettre d'augmenter les entrées et sorties disponibles.

1. Éteignez le V-1200HD et débranchez le cordon d'alimentation de la prise de courant.

2. Desserrez les vis de montage (2) indiquées sur l'illustration et détachez le panneau du connecteur d'extension.



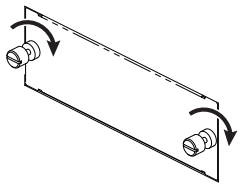
3. Insérez l'interface d'extension.



* Pour éviter tout risque d'endommager les composants internes à cause de l'électricité statique, veuillez respecter attentivement les instructions suivantes lorsque vous manipulez l'interface d'extension.

- Avant de toucher l'interface d'extension, toujours serrer préalablement un objet métallique (comme un tuyau d'eau), afin de s'assurer que l'électricité statique dont vous pourriez être porteur a été déchargée.
- Lorsque vous manipulez l'interface d'extension, veuillez ne la tenir que par le panneau ou les bords de l'interface d'extension. Évitez de toucher les composants électroniques ou les connecteurs.
- Conservez l'emballage dans lequel l'interface d'extension a été expédiée pour y mettre l'interface d'extension lorsque vous avez besoin de la stocker ou de la transporter.

4. Fixez l'interface d'extension à l'aide des vis (2) indiquées sur l'illustration.



- Avant d'installer l'interface d'extension, vous devez d'abord toujours éteindre l'appareil et débrancher son cordon d'alimentation.
- Installez uniquement l'interface d'extension indiquée. Retirez uniquement les vis indiquées.
- Ne pas toucher aux circuits imprimés ou aux bornes de connexion.
- Ne jamais forcer lors de l'installation d'une interface d'extension. Si elle ne s'insère pas correctement lors de la première tentative, retirez l'interface d'extension et essayez à nouveau.
- Lorsque l'installation de l'interface d'extension est terminée, revérifiez votre travail.
- Toujours éteindre l'appareil et débrancher son cordon d'alimentation avant de procéder à l'installation d'une interface d'extension.
- Installez uniquement l'interface d'extension indiquée. Retirez uniquement les vis indiquées.
- Lors du redémarrage du V-1200HD avec une interface d'extension installée, attendez plusieurs secondes avant la mise sous tension.

Note

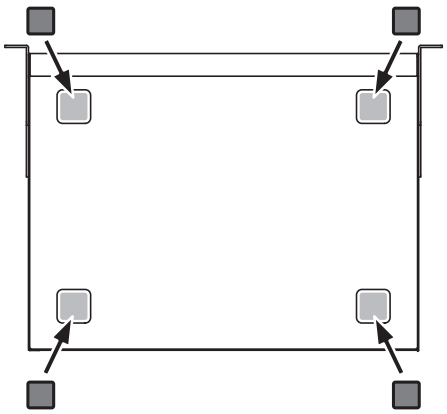
- Pour plus d'informations sur les différents paramètres d'utilisation des interfaces d'extension, consultez le « Guide de télécommande pour V-1200HDR / V-1200HD RCS » (PDF) disponible en téléchargement sur le site Roland.
- Pour plus d'informations sur les interfaces d'extension, consultez le site Web Roland.

Site Web Roland
http://proav.roland.com

Fixation des pieds en caoutchouc

Fixez les pieds en caoutchouc fournis au besoin, comme lors de l'utilisation du V-1200HD sans le monter dans un rack.
Décollez le ruban adhésif double-face des pieds en caoutchouc avant de les fixer aux endroits indiqués sur l'illustration.

* Lorsque l'appareil est mis à l'envers, le manipuler avec soin et ne pas le laisser tomber.

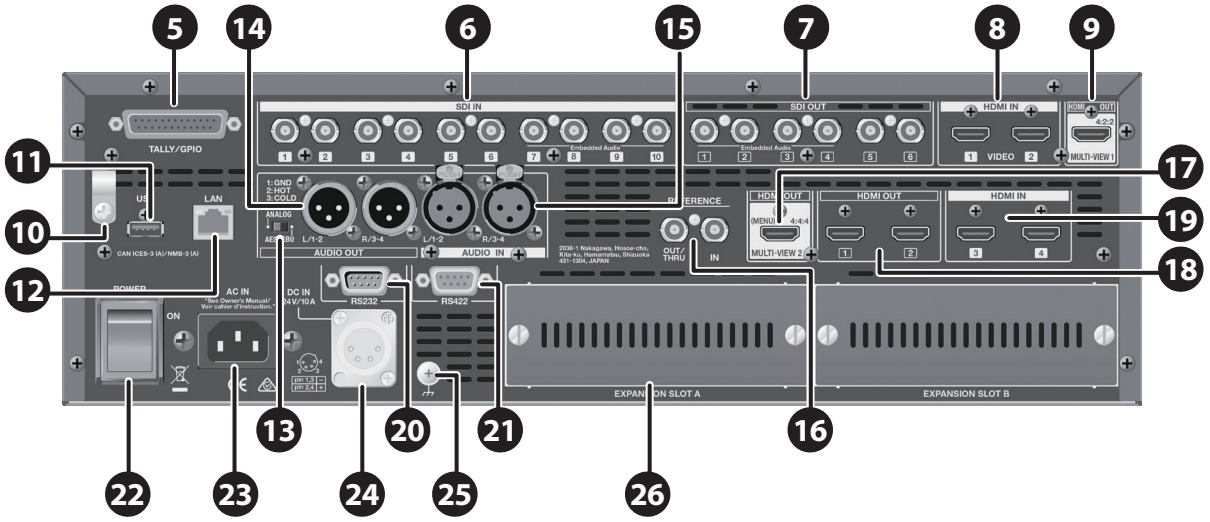


Part Names and Functions

Front Panel

Number	Name	Description	Page
1	**USB port**	This is a USB port exclusively for connecting a USB flash drive. Connect a USB flash drive to save/recall V-1200HD settings and import still images. * For information on importing still images, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.	p. 30
2	**[MENU] button**	This displays the menu screen. The menu screen is shown on the monitor connected to the HDMI OUT MULTI-VIEW 2 connector.	p. 26
	[ENTER] button	This confirms menu items and applies changes made to parameter values.	p. 26
	[DEC] button	Use this to move between items and change parametera values on the menu screen. Pressing this makes the parametera value smaller.	p. 26
	[INC] button	Use this to move between items and change parametera values on the menu screen. Pressing this makes the parametera value larger.	p. 26
3	**LINK indicator**	This lights up when a connection is established with the V-1200HDR dedicated controller (optional) or V-1200HD RCS remote-control software.	—
	FAN indicator	This flashes when the cooling fan experiences a problem and stops turning.	—
	DC indicator	This lights up when DC power is supplied from an external power unit connected to the rear panel.	—
	AC indicator	This lights up when AC power is supplied to the V-1200HD's internal power supply circuit.	—
4	**Power button**	This turns the power to the V-1200HD on and off. * This is enabled only when the rear-panel [POWER] (main power) switch is set to "ON."	p. 12

Rear Panel



Number	Name	Description	Page
5	**TALLY/GPIO connector**	Connect devices provided with a tally-light feature and devices equipped with control-signal input/output functions here.	p. 28
6	**SDI IN connectors**	These are connectors for inputting SDI signals. Use them with source devices equipped with SDI output connectors, such as 3G-SDI, HD-SDI, and SD-SDI devices.	p. 23
7	**SDI OUT connectors**	These are connectors for outputting SDI signals. Use them with video devices equipped with SDI input connectors.	p. 25
8	**HDMI IN 1, 2 connectors**	These are connectors for inputting HDMI signals. Use them with video cameras and other source devices equipped with HDMI output connectors. Input video formats that are compatible with the specified processing formats. * Copyright-protected (HDCP) video cannot be input.	p. 23
9	**HDMI OUT MULTI-VIEW 1 connector**	Here you connect an HDMI monitor for multi-view display of the input/output list. Video selected from among the following is displayed on up to a 16-way split screen. (*1) • SDI IN 1–10 • HDMI IN 1, 2 • EXP IN 1, 2 (input video from an optional expansion interface) • SDI OUT1–6 • STIILL1, 2 (still images imported from a USB flash drive) • EXP OUT 1, 2 (output video sent to optional expansion interfaces) * Connect a monitor that supports 1080/60p HDMI input.	p. 25
10	**Power Cord Hook**	You can use this power cord hook to prevent the power cord from being accidentally disconnected.	p. 12
11	**USB port**	This is a USB connector for future feature expansion. * This port is not active in the initial release of the V-1200HD.	—
12	**LAN port**	Use this port to connect an optional V-1200HDR dedicated controller, or a computer on which the V-1200HD RCS remote-control software is installed.	p. 27
13	**Audio selector switch**	This switches the input/output mode of the AUDIO IN and AUDIO OUT connectors.	p. 22
14	**AUDIO OUT connectors**	These are connectors for outputting audio signals. Connect them to recording equipment, amplifiers, powered speakers, and other devices that receive audio.	p. 25
15	**AUDIO IN connectors**	These are connectors for inputting audio signals. Use them with CD players and other audio source devices.	p. 24
16	**REFERENCE IN connector OUT/THRU connector**	These are connectors for input and output of sync signals.	p. 24
17	**HDMI OUT MULTI-VIEW 2 connector**	Here you can connect a monitor to display input/output lists and menu screens. The selected video is displayed on a four-way split screen. (*1) * Connect a monitor that supports copyright protection (HDCP). * Connect a monitor that supports 1080/60p HDMI input.	p. 25 p. 26

Number	Name	Description	Page
18	**HDMI OUT 1, 2 connectors**	These HDMI connectors output the video mixed on the V-1200HD. Use them with displays and other devices equipped with HDMI input connectors. Video from the 4:4:4 processing section is output.	p. 25
19	**HDMI IN 3, 4 connectors**	These are connectors for inputting HDMI signals. Use them with computers and other source devices equipped with HDMI output connectors. Using the V-1200HD's built-in scalers, you can input a large number of video formats. These support HDCP signal input. (*2)	p. 23
20	**RS-232 connector**	This is for connecting a remote-control device (such as an RS-232-compatible computer) for operating the V-1200HD remotely.	p. 28
21	**RS-422 connector**	This connector allows you to connect to a VISCA-compatible camera and operate it remotely from the V-1200HD.	p. 29
22	**[POWER] (main power) switch**	This turns the main power on and off. After the main power is turned on here, use the power button on the front panel to turn the V-1200HD on and off for everyday operation.	p. 12
23	**AC IN connector**	This is for connecting the included power cord.	p. 10
24	**DC IN connector**	This is for connecting an external power supply.	p. 12
25	**Ground terminal**	This terminal is used to connect the V-1200HD to an electrical ground.	p. 22
26	**Expansion slots A, B**	These are slots for installing optionally available Xi-series expansion interfaces.	p. 14

(*1) For details about the multi-view screen, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download from the Roland website.

(*2) Settings must be made on the V-1200HD when inputting copyright-protected (HDCP) video. For details, refer to "About Copyright Protection (HDCP)" (p. 20).

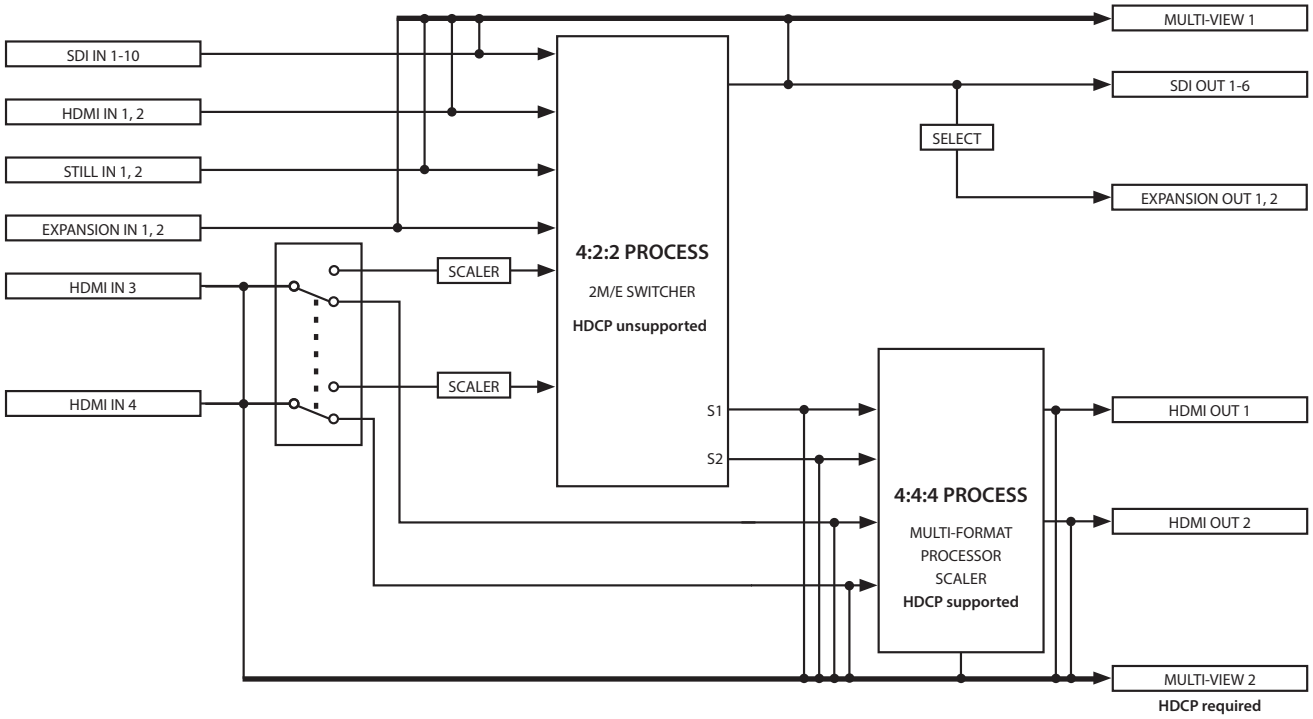
Internal Structure of the V-1200HD

The V-1200HD comprises a 4:2:2 processing section that supports video formats such as 1080i, and a 4:4:4 processing section that supports XGA and other computer formats.

With the 4:2:2 section, you can select 2M/E, 1M/E, and other switcher configurations, and use keyers, picture-in-picture, and other forms of composition.

The 4:4:4 section lets you perform processing of high-quality computer video with no loss in image quality, and provides multi-format support using scalers. You can also input HDCP-protected video and produce screen-spanning and two-screen video.

The V-1200HD is configured so that output from the 4:2:2 processing section is input to the 4:4:4 processing section, enabling productions of greater complexity.



* The number of usable layers and AUXes varies according to the M/E settings and selections. You use a V-1200HDR or V-1200HD RCS remote-control software to make the settings. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

* EXPANSION IN 1 and 2 and EXPANSION OUT 1 and 2 become usable when an optional expansion interface is installed (p. 14).

* For HDMI IN 3 and HDMI IN 4, you can select whether the connection destination is the 4:2:2 process section or the 4:4:4 process section. You use the V-1200HDR or V-1200HD RCS remote-control software to make the setting for the connection destination. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

About Processing Formats

For both the 4:2:2 process and the 4:4:4 process, you first select the processing format.

Choose the desired format from the options available for each section.

Memo

You use the V-1200HDR or V-1200HD RCS remote-control software to set the processing format. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

4:2:2 Process

With the 4:2:2 process, you can input video that is compatible with the selected process format.

Video processed by the 4:2:2 section is output in the same format as the selected format. For example, if the format is set to 1080/59.94i, the format of video you can input is 1080/59.94i, and the output video format is also 1080/59.94i.

Video processed by the 4:2:2 section is output externally to SDI OUT 1 through 6 and EXPANSION OUT 1 and 2, and also internally to the 4:4:4 processing section.

Selectable 4:2:2 processing formats	1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p * compliant with SMPTE 274M * The 4:2:2 process format is set to "1080/59.94i" by default.

* When HDMI IN 3 or 4 is connected to the 4:2:2 process section, video in formats other than the specified 4:2:2 processing format can be input via HDMI IN 3 or 4. For details, refer to "About Processing Formats" (p. 19).

* The possible number of compositions such as chroma key and picture-in-picture differs according to the selected format and the mode setting. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

4:4:4 Process

The 4:4:4 process receives the signal from the output of the 4:2:2 process section, as well as external video arriving at HDMI IN 3 and 4.
Video passes through an internal scaler before input, which means that you can input video in a format other than the selected 4:4:4 processing format. (*1)
After processing, video from the 4:4:4 section is output via HDMI OUT 1 and 2 in the specified format.

Selectable 4:4:4 processing formats	480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, 1024x768/60Hz (*2) , 1280x720/60Hz (*2) , 1280x800/60Hz (*2) , 1366x768/60Hz (*2) , 1280x1024/60Hz (*2) , 1400x1050/60Hz (*2), 1600x1200/60Hz, 1920x1080/60Hz, 1920x1200/60Hz * The 4:4:4 process format is set to "1920x1080/60Hz" by default.

(*1) You can input video in all formats listed above.
(*2) When the frame rate is set to 50 Hz, the output refresh rate is 75 Hz.

About HDMI IN 3 and 4

You can select whether the connection destination for HDMI IN 3 and 4 is the 4:2:2 process section or the 4:4:4 process section.
By passing video through the internal scaler, you can input video in a format other than the processing format specified for the respective section. For instance, even when the 4:2:2 section is set to a processing format of 1080/59.94i, you can input video at 1920x1200/60 Hz to HDMI IN 3 and 4.
The formats you can input via HDMI IN 3 and 4 are as shown below.

Formats supported by HDMI IN 3 and 4	480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, 1024x768/60Hz (*3), 1280x720/60Hz (*3), 1280x800/60Hz (*3), 1366x768/60Hz (*3), 1280x1024/60Hz (*3), 1400x1050/60Hz (*3), 1600x1200/60Hz, 1920x1080/60Hz, 1920x1200/60Hz (*3) When the frame rate is set to 50 Hz, the output refresh rate is 75 Hz.

Memo

You use the V-1200HDR or remote-control software to make the connection-destination setting for HDMI 3 and 4. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.
http://proav.roland.com

About Copyright Protection (HDCP)

The V-1200HD's 4:4:4 section supports copyright protection (HDCP).
When all of the following conditions are satisfied, you can input an HDCP signal into the V-1200HD and output HDCP-applied video to the monitor.

- The HDCP signal is input via either HDMI IN 3 or HDMI IN 4.
- HDMI IN 3 or 4 is connected to the 4:4:4 section. (*4)
- HDCP for the 4:4:4 section is turned on. (*4)
- An HDCP-compatible HDMI monitor is connected to either HDMI OUT 1 or HDMI OUT 2.

(*4) To make the settings, use either the V-1200HDR or remote-control software. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

Memo

By default, HDCP for the 4:4:4 section is set to "off."

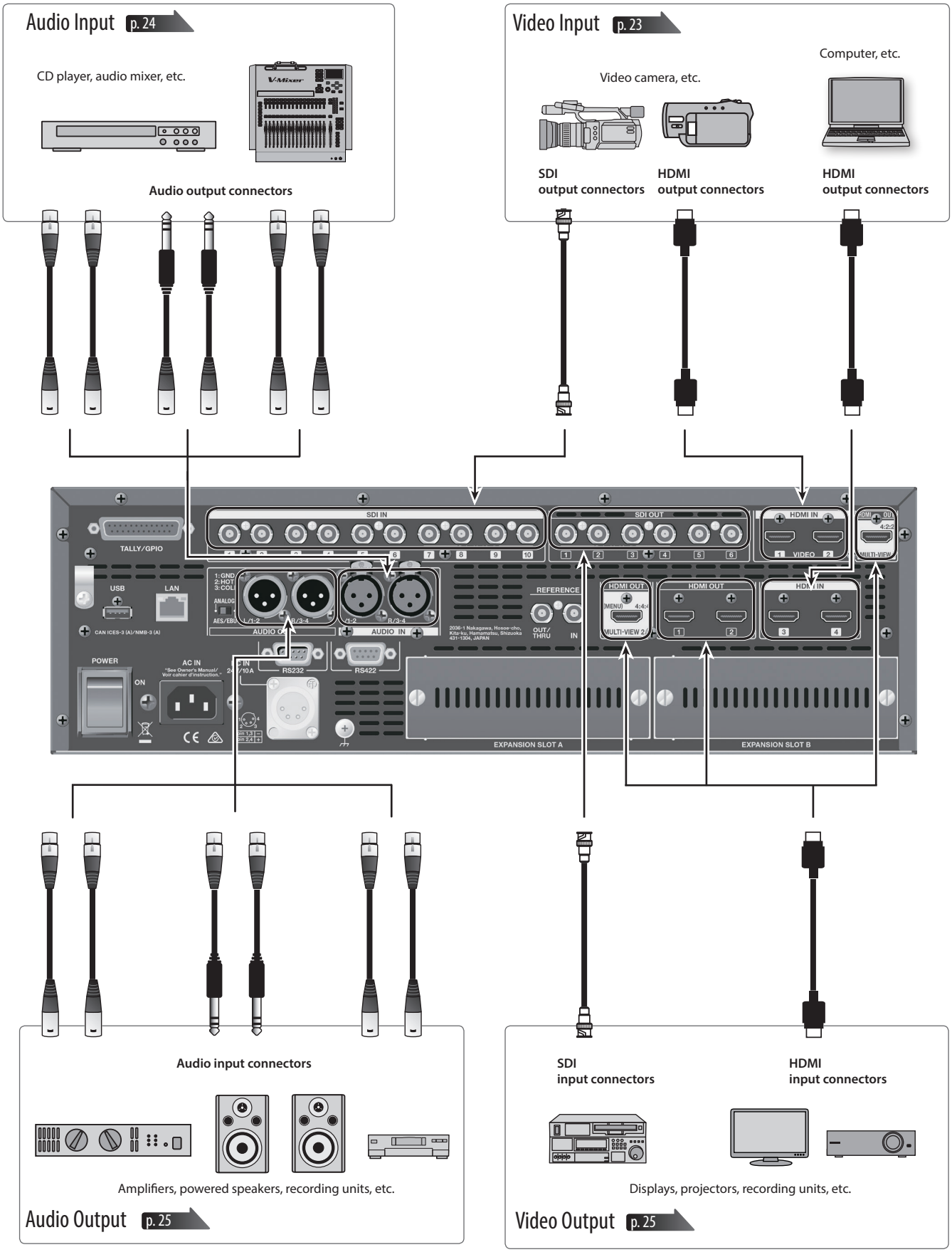
NOTE

- The 4:2:2 section does not support HDCP. HDCP signals cannot be input via HDMI IN 1 or 2.
  Also, HDCP signals cannot be input via HDMI IN 3 or 4 when they are connected to the 4:2:2 section.
- When HDCP for the 4:4:4 process is turned on, video sent from HDMI OUT 1 and 2 is output with HDCP applied. When HDCP is turned on, connect HDCP-compatible monitors to HDMI OUT 1 and 2.
- Connect an HDCP-compatible monitor to HDMI OUT MULTI-VIEW 2.

Roland website
http://proav.roland.com

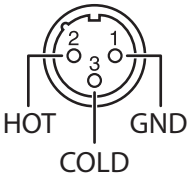
Connecting External Equipment

You connect external equipment as shown in this chapter. For information on specific connection methods, refer to page 23 and after.

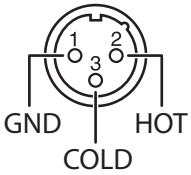


* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
* Provide cable and adapter plugs to match the connector configuration on the equipment you're using.
* This instrument is equipped with balanced (XLR) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.

AUDIO IN connector

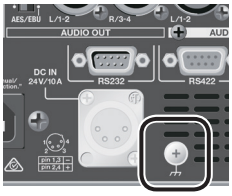


AUDIO OUT connector



About the Ground Terminal

Depending on the circumstances of a particular setup, you may experience a discomforting sensation, or perceive that the surface feels gritty to the touch when you touch this device, microphones connected to it, or the metal portions of other objects. This is due to an infinitesimal electrical charge, which is absolutely harmless. However, if you are concerned about this, connect the ground terminal (see figure) with an external ground. When the unit is grounded, a slight hum may occur, depending on the particulars of your installation. If you are unsure of the connection method, contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
Unsuitable places for connection



Unsuitable places for connection

- Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)

About the Audio Selector Switch

The V-1200HD's audio input/output connectors support either analog or digital (AES/EBU) signals. Use the audio selector switch to choose the signal type for your connected equipment.

* The audio selector switch setting affects both input and output signals. For example, selecting "ANALOG" sets both the AUDIO IN and AUDIO OUT connectors to function as analog connectors.

Connecting Source Equipment

Connect your external devices to the respective input connectors for video and audio.

Connecting Video Source Equipment

Connect video source devices to the SDI IN and HDMI IN connectors.

Memo

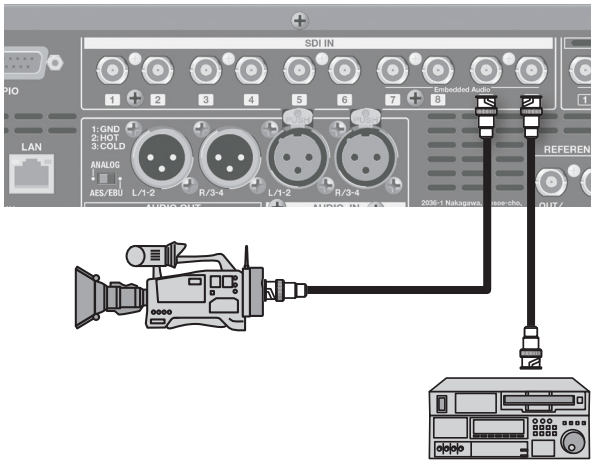
The formats that can be input to the respective connectors vary according to the specified processing format. For details, refer to "About Processing Formats" (p. 19).

Making SDI Connections

Connect video cameras, video decks, and other SDI devices to SDI IN connectors 1 through 10.

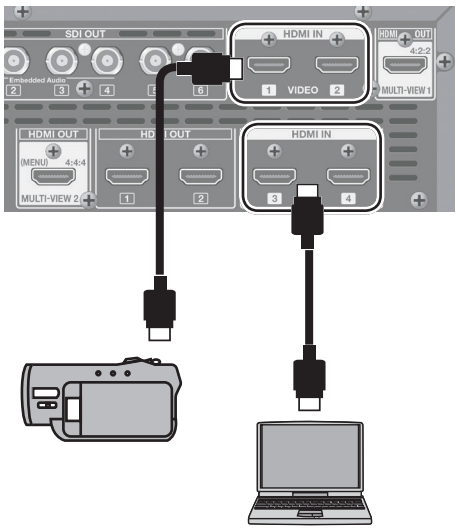
Memo

- Input video in formats that are compatible with the specified process formats. For details, refer to "About Processing Formats" (p. 19).
- SDI IN 7–10 each support embedded 16 channels of audio input.



Making HDMI Connections

Connect video cameras, computers, and other devices equipped with HDMI outputs to the HDMI IN connectors.



HDMI IN 1, 2	• Input video in formats that are compatible with the specified process formats. For details, refer to "About Processing Formats" (p. 19). • Copyright-protected (HDCP) video cannot be input.
HDMI IN 3, 4	• Using the built-in scalers, you can input a large number of video formats. For information on the formats you can input, refer to "About HDMI IN 3 and 4" (p. 20). • These support HDCP signal input.

NOTE

Settings must be made on the V-1200HD when inputting copyright-protected (HDCP) video. For details, refer to "About Copyright Protection (HDCP)" (p. 20).

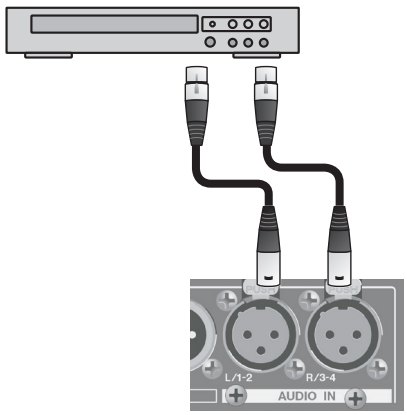
Memo

When connecting a device equipped with a DVI output, use a DVI-to-HDMI conversion cable and make the connection to an HDMI IN connector.

Connecting Audio Source Equipment

Making an Analog Connection

Connect the analog output of the audio source device to an AUDIO IN connector.



Set the audio selector switch to [ANALOG].

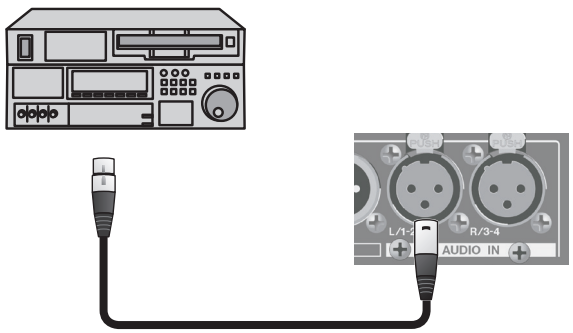
NOTE

The audio selector switch affects both input and output. For details, refer to "About the Audio Selector Switch" (p. 22).

Making a Digital Connection

Connect the digital (AES/EBU) output of the audio source device to an AUDIO IN connector.

* Use an AES/EBU-compliant cable.
The V-1200HD supports the AES3 standard (24 bits, 48 kHz, two channels).



Set the audio selector switch to [AES/EBU].

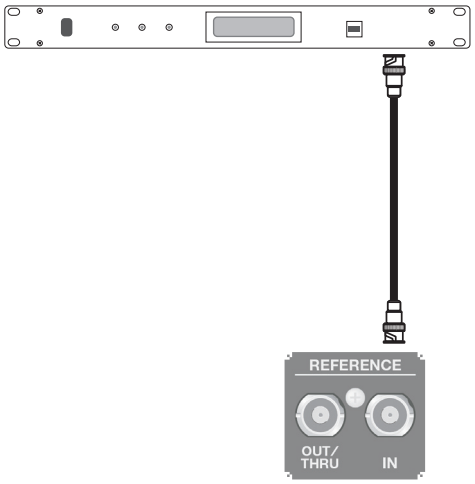
NOTE

The audio selector switch affects both input and output. For details, refer to "About the Audio Selector Switch" (p. 22).

Connecting a Reference

You can connect a source device for synchronizing.

* You can also output a reference signal via the OUT/THRU connector. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.



The V-1200HD supports the following external clocks.

- Black burst (frame synchronization)
- Bi-level synchronization, tri-level synchronization

Memo

The clock source is set to "INTERNAL" by default. To use an external clock, this setting must be changed using a V-1200HDR unit or V-1200HD RCS. For details, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide " (PDF) available for download at the Roland website.

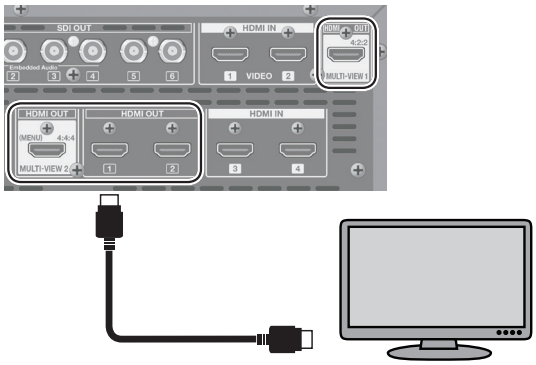
http://proav.roland.com

Connecting Output Equipment

Connecting Video Output Equipment

Making HDMI Connections

Connect television monitors and other equipment provided with HDMI input to the respective HDMI OUT connectors.

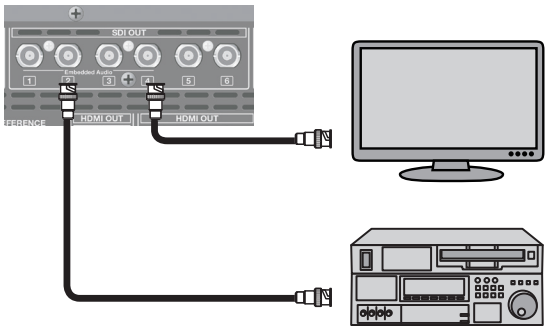


MULTI-VIEW 1	Video selected from among the following is displayed on up to a 16-way split screen. (*1) • SDI IN 1–10 • HDMI IN 1, 2 • EXP IN 1, 2 (input video from an optional expansion interface) • SDI OUT1–6 • STILL1, 2 (still images imported from a USB flash drive) * Connect a monitor that supports 1080/60p HDMI input.
MULTI-VIEW 2	Here you connect a monitor for displaying input/output lists and menu screens. The selected video is displayed on a four-way split screen. (*1) * Connect an HDCP-compatible monitor. * Connect a monitor that supports 1080/60p HDMI input.
HDMI OUT 1, 2	These output video from the V-1200HD's 4:4:4 process. The output video is output in the specified 4:4:4 processing format. For information on 4:4:4 formats, refer to "4:4:4 Process" (p. 20).

(*1)For details about the multi-view screen, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download from the Roland website.
http://proav.roland.com

Making SDI Connections

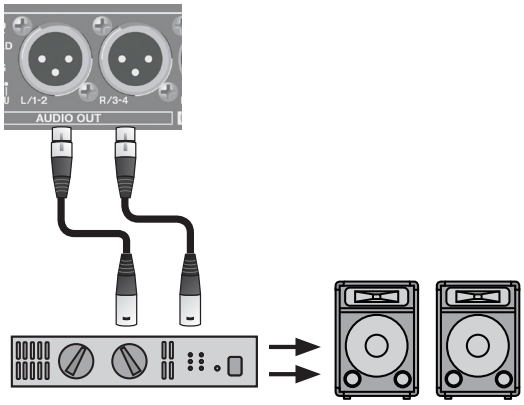
Connect monitors, video decks (for recording), and other devices equipped with SDI inputs to the SDI OUT connectors. Video is output in the specified 4:2:2 processing format.
For information on 4:2:2 formats, refer to "4:2:2 Process" (p. 19).



Connecting Audio Output Equipment

Making an Analog Connection

Connect the analog inputs of amplifiers, powered speakers, and recording equipment to the AUDIO OUT connectors.



Set the audio selector switch to [ANALOG].

* The nominal output level of the V-1200HD is +4 dBu. Connect equipment that accommodates this nominal output level.

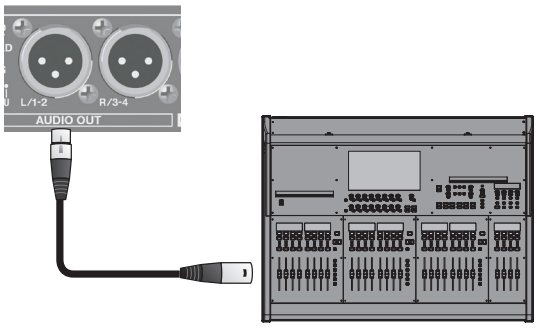
NOTE

The audio selector switch affects both input and output. For details, refer to "About the Audio Selector Switch" (p. 22).

Making a Digital Connection

Connect audio output equipment that has digital (AES/EBU) input to the AUDIO OUT connectors.

* Use an AES/EBU-compliant cable.
The V-1200HD supports the AES3 standard (24 bits, 48 kHz, two channels).



Set the audio selector switch to [AES/EBU].

NOTE

The audio selector switch affects both input and output. For details, refer to "About the Audio Selector Switch" (p. 22).

Setup Menu

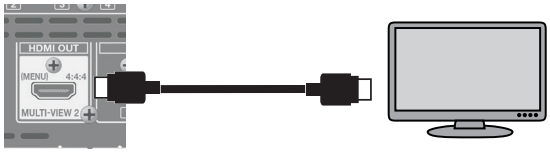
You can display menus on a multi-view monitor connected to the V-1200HD and use them to make various settings.

Using the Menus

Menu operations follow the procedure described below.

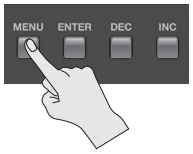
1. Connect a monitor to the HDMI OUT MULTI-VIEW 2 connector.

The setup menu appears on the monitor connected to HDMI OUT MULTI-VIEW 2.



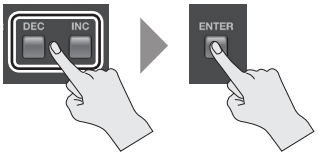
2. Display the menu.

Press the [MENU] button to display the menu.



3. Select the target menu.

Use the [DEC] and [INC] buttons to select the desired menu item, then press the [ENTER] button.



The items belonging to the selected menu are displayed.

* For information on where to look for explanations of the items and to find out about operation procedures, refer to "Menu Organization" below.

4. Exit the menu.

When the item operations end, press the [MENU] button several times to quit the menu.

Menu Organization

The V-1200HD's menus are organized as shown below.

Menu item	Description	Section to see
System	Displays the program version information.	"Checking the Version Information" (p. 30)
Backup	This saves a settings file on a USB flash drive or deletes a settings file saved on a USB flash drive.	"Saving a New Settings File (Save As)" (p. 30) "Saving Settings by Overwriting" (p. 30) "Deleting Settings" (p. 30)
Restore	Loads a settings file saved on a USB flash drive.	"Recalling Settings" (p. 30)
Format	Formats a USB flash drive.	"Formatting a USB Flash Drive" (p. 30)
Factory Reset	Returns the unit's settings to their factory defaults.	"Returning Settings to the Factory-Default State (Factory Reset)" (p. 30)

Remote Control from an External Device

You can connect a remote-control device and use it to operate the V-1200HD.

Using a V-1200HDR Dedicated Controller

You can connect a V-1200HDR dedicated controller (optional) to the LAN port and use it to operate the V-1200HD remotely.

Memo

For more information on how to use the V-1200HDR, refer to the "V-1200HDR Owner's Manual" and "V-1200HDR/V-1200HD RCS Reference Manual" (PDF) available for download at the Roland website.

1. Connect the V-1200HDR to the LAN port on the V-1200HD.

2. Turn on the power to the V-1200HD.

3. Turn on the power to the V-1200HDR.

4. The LINK indicator on the V-1200HD lights up when communication with the V-1200HDR is established.

* Communication is not established if the V-1200HD and the V-1200HDR are connected after the power has been turned on. If the connection has been made while in this state, communication can be established by resetting the power on just the V-1200HDR.
* Using an Ethernet switching hub, you can connect V-1200HDR units and computers installed with V-1200HD RCS (up to two devices in total) to the V-1200HD.
  When connecting multiple V-1200HDR units or computers, each controller must be assigned a different "CONTROL SURFACE ID" setting. For information on how to make this setting, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.
* Use a Category 5e or higher shielded Ethernet cable for connection. Crossover cables and straight cables are both supported.
* Connect no devices other than the V-1200HD, V-1200HDR units, and computers installed with V-1200HD RCS to the same network.

Using V-1200HD RCS Dedicated Software

You can connect a computer on which the V-1200HD RCS dedicated control software is installed up and use it to operate the V-1200HD remotely.

Memo

For more information on how to use the V-1200HD RCS, refer to the "V-1200HD Owner's Manual" and "V-1200HDR/V-1200HD RCS Reference Manual" (PDF) available for download at the Roland website.

1. Start the computer on which the V-1200HD RCS is installed.

2. Make the network settings on the computer.

* For information on how to make the network settings, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

3. Connect the computer to the LAN port on the V-1200HD.

4. Turn on the power to the V-1200HD.

5. Start V-1200HD RCS.

6. The LINK indicator on the V-1200HD lights up when communication with the computer is established.

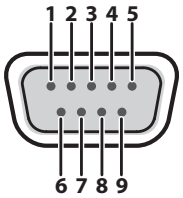
* If you're using a computer running Windows, then if the Ethernet cable is disconnected and reconnected after communication between the V-1200HD and V-1200HD RCS has been established, communication might fail to be reestablished. If this happens, you can establish communication while the devices are connected by going to the computer's network settings and setting Local Area Connection to "Disable" and then again to "Enable."
* Using an Ethernet switching hub, you can connect V-1200HDR units and computers installed with V-1200HD RCS (up to two devices in total) to the V-1200HD.
  When connecting multiple V-1200HDR units or computers, each controller must be assigned a different "CONTROL SURFACE ID" setting. For information on how to make this setting, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.
* Use a Category 5e or higher shielded Ethernet cable for connection. Crossover cables and straight cables are both supported.
* Connect no devices other than the V-1200HD, V-1200HDR units, and computers installed with V-1200HD RCS to the same network.

Using the RS-232 Connector

You can use the RS-232 connector to operate the V-1200HD from a computer, touch panel, or other external control device.

Memo

For more information on how to operate the V-1200HD via the RS-232 connector, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.



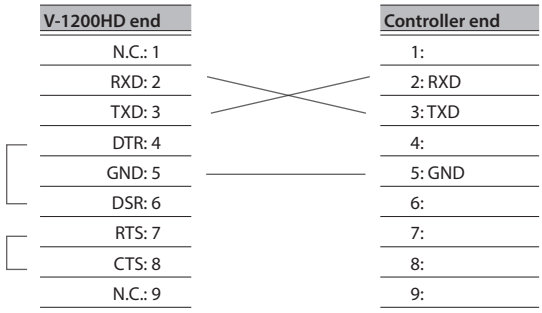
D-Sub 9-pin (male)

Pin number	Signal name
1	N.C.
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	N.C.

Transmission method	Start-stop synchronization (asynchronous mode), full-duplex
Communication speed (baud rate)	9600 bps/38400 bps
Parity	None
Data length	8 bit
Stop-bit length	1 bit
Code set	ASCII
Flow control	XON/XOFF

Cable Wiring Diagram

Wire the three lines of RXD, TXD, and GND as shown in the figure below.



* The connections between 4 and 6 and between 7 and 8 are inside the V-1200HD.

* When connecting to a controlling device (such as an RS-232-compatible computer), use a crossover cable.

Using the TALLY/GPIO Connector

You can use the TALLY/GPIO connector to control the V-1200HD from an external device.

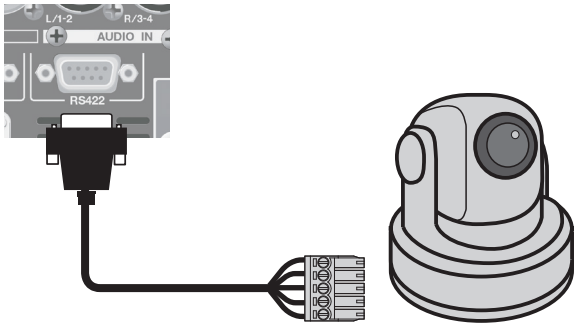
The TALLY/GPIO connector accommodates input and output of control signals, and also tally-signal output.

* For detailed information on the TALLY/GPIO connector, refer to "About the TALLY/GPIO Connector" (p. 29).

Roland website
http://proav.roland.com

Operating a VISCA-Compatible Video Camera by Remote Control

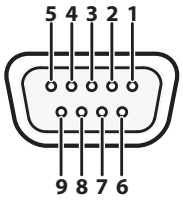
You can connect a VISCA-compatible video camera to the RS-422 connector and operate the camera remotely from the V-1200HD.



For more information on how to do this, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

Roland website
http://proav.roland.com

RS-422 Connector Specifications



D-Sub 9-pin (female)

Pin No.	Signal name
1	GND
2	TxD-
3	RxD+
4	GND
5	NC
6	GND
7	TxD+
8	RxD-
9	GND

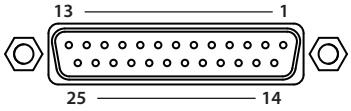
Transmission method	Start-stop synchronization (asynchronous mode), full-duplex
Communication speed (baud rate)	9600 bps/38400 bps
Parity	None
Data length	8 bits
Stop-bit length	1 bit
Flow control	None

About the TALLY/GPIO Connector

The V-1200HD is equipped with a D-Sub 25-pin TALLY/GPIO connector. In addition to tally input/output functions, this provides functionality for control signal input and output, and you can use it to transmit and receive control signals between the unit and an external device.

TALLY/GPIO Connector Specifications

- Tally/control output connector specifications
  Maximum input: 12 V/200 mA
  Open-collector type
- Control input connector specifications
  Trigger method: No-voltage contact (make-contact)
  triggeringContact capacity: DC 24 V 0.1 A or higher
  Input method: Photocoupler



D-Sub 25-pin (female)

* By default, the following functions are assigned to the V-1200HD's TALLY/GPIO connector.

Pin number	Connector name	Function	Default
1	OUTPUT 1/GPO 1	Tally output/ control output	SDI 1 PGM
2	OUTPUT 2/GPO 2		SDI 1 PST
3	OUTPUT 3/GPO 3		SDI 2 PGM
4	OUTPUT 4/GPO 4		SDI 2 PST
5	OUTPUT 5/GPO 5		SDI 3 PGM
6	OUTPUT 6/GPO 6		SDI 3 PST
7	OUTPUT 7/GPO 7		SDI 4 PGM
8	OUTPUT 8/GPO 8		SDI 4 PST
9	OUTPUT 9/GPO 9		SDI 5 PGM
10	OUTPUT 10/GPO 10		SDI 5 PST
11	OUTPUT 11/GPO 11		SDI 6 PGM
12	OUTPUT 12/GPO 12		SDI 6 PST
13	OUTPUT 13/GPO 13		SDI 7 PGM
14	OUTPUT 14/GPO 14		SDI 7 PST
15	OUTPUT 15/GPO 15		SDI 8 PGM
16	OUTPUT 16/GPO 16		SDI 8 PST
17	—	GND	COM(GND)
18	INPUT 1	Control input	N/A
19	INPUT 2		N/A
20	INPUT 3		N/A
21	INPUT 4		N/A
22	INPUT 5		N/A
23	INPUT 6		N/A
24	INPUT 7		N/A
25	INPUT 8		N/A

Memo

You can use the V-1200HDR or V-1200HD RCS to change the function assignments. For information on how to make the settings, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

Roland website
http://proav.roland.com

Saving/Recalling Settings

This saves the following settings together in a single file to a USB flash drive connected to the USB port. You can then recall the saved file from the USB flash drive to the V-1200HD for use when needed.

● Settings Saved on the USB Flash Drive

The settings saved in MEMORY 1 through 8 in V-1200HD RCS or on the V-1200HDR are saved to the USB flash drive.

* The current settings are not saved.

Saving a New Settings File (Save As)

1. **Press the [MENU] button → select "Backup" → "Save As," then press the [ENTER] button.**
2. **Specify the file name, select "SAVE," then press the [ENTER] button.**

   The extension of the file name is [V12].
3. **The message "Push ENTER to execute." appears. To execute the operation, press the [ENTER] button.**
   (If you want to cancel the operation, press the [MENU] button.)

   The new settings file is saved on the USB flash drive.

Saving Settings by Overwriting

1. **Press the [MENU] button → select "Backup" → "Save" then press the [ENTER] button.**
2. **Select the file to overwrite, then press the [ENTER] button.**
3. **The message "Push ENTER to execute." appears. To execute the operation, press the [ENTER] button.**
   (If you want to cancel the operation, press the [MENU] button.)

   The settings are saved on the USB flash drive, overwriting the older file.

Deleting Settings

1. **Press the [MENU] button → select "Backup" → "Delete" then press the [ENTER] button.**
2. **Select the file to delete, then press the [ENTER] button.**
3. **The message "Push ENTER to execute." appears. To execute the operation, press the [ENTER] button.**
   (If you want to cancel the operation, press the [MENU] button.)

   The settings are deleted from the USB flash drive.

Recalling Settings

This recalls the settings for MEMORY 1 through 8 saved on a USB flash drive. Recalling the settings overwrites any values currently in MEMORY 1 through 8.

* The current settings remain when the settings for MEMORY 1 through 8 are recalled.

1. **Press the [MENU] button → "Restore" then press the [ENTER] button.**
2. **Select the file to load, then press the [ENTER] button.**
3. **The message "Push ENTER to execute." appears. To execute the operation, press the [ENTER] button.**
   (If you want to cancel the operation, press the [MENU] button.)

   The settings are recalled.

Checking the Version Information

This displays the program version information for the V-1200HD itself (MAIN) and for expansion interfaces (EXP A and EXP B) connected at expansion slots A and B.

1. **Press the [MENU] button and select "System," then press the [ENTER] button.**

   The program version information is displayed.

   * When no expansion interfaces are inserted into expansion slots A and B, no version information is displayed at "EXP A" and "EXP B."

Formatting a USB Flash Drive

To use a USB flash drive with the V-1200HD, it must first be formatted with the unit.

NOTE

- The V-1200HD does not recognize unformatted USB flash drives.
- Performing formatting causes all data already saved on the USB flash drive to be deleted. If the flash drive contains necessary data, back it up onto a computer or elsewhere before formatting the drive.

1. **Connect the USB flash drive to the USB port on the front panel.**
2. **Press the [MENU] button and select "Format," then press the [ENTER] button.**
3. **The message "Push ENTER to execute." appears. To execute the operation, press the [ENTER] button.**
   (If you want to cancel the operation, press the [MENU] button.)

   Formatting of the USB flash drive is carried out.

NOTE

- When turning off the power to the V-1200HD, first remove the USB flash drive from the USB port before you turn off the power. If the power is turned off while a flash drive remains connected to the V-1200HD, the V-1200HD might fail to start correctly at the next powerup.
- Connect the flash drive to the USB port located on the front panel. (No operation takes place if the drive is connected to the USB port on the rear panel.)
- Carefully insert the USB flash drive all the way in–until it is firmly in place.
- Never turn off the power or disconnect the USB flash drives when the access lamp of USB flash drives are lit or blinking
- After connecting the USB flash drive, a short wait may be required until reading and writing data is possible.

Returning Settings to the Factory-Default State (Factory Reset)

This returns values that have been set to their factory defaults.

If operation that differs from what is described in the owner's manual occurs even when the steps are followed correctly, try performing a factory reset.

NOTE

Executing a factory reset causes all settings made up to then to be lost.

1. **Press the [MENU] button and select "Factory Reset," then press the [ENTER] button.**
2. **The message "Push ENTER to execute." appears. To execute the operation, press the [ENTER] button.**
   (If you want to cancel the operation, press the [MENU] button.)

   A factory reset is executed.

Appendix

Troubleshooting

Symptom	Cause	Corrective action	Page
Problems with Video			
No picture is input.	Is copyright-protected (HDCP) video being input?	Copyright-protected (HDCP) video signals can be input when they meet all of the following conditions. • Input is via the HDMI IN 3 or 4 connector. • The HDCP setting is set to ON. • The 4:4:4 process is specified as the connection destination for HDMI IN 3 or 4.	p. 20
	Do the settings match the video format of the input?	Set the process format of the V-1200HD to match the video format of the input to the 4:2:2 process. For example, if the 4:2:2 process format on the V-1200HD is set to 1080/59.94i, the only video format that can be input to the 4:2:2 process is 1080/59.94i. You can input video formats other than the set process format to HDMI IN 3 and 4. For details, refer to "About HDMI IN 3 and 4" (p. 20).	p. 19
No picture is output.	Is copyright-protected (HDCP) video being output?	Check whether an HDCP-compatible monitor is being used.	—
	Does the output-destination device (HDMI monitor, etc.) support the output setting specified on the V-1200HD?	On the V-1200HD, video in the same format as the process format set for the respective process is output. For instance, if the process format for the 4:4:4 process is set to 1080/59.94p and video is output from the HDMI OUT 1 connector, video output is possible if the output-destination device (HDMI monitor, etc.) supports a 1080/59.94p signal.	p. 19
	Are the patchbay settings correct?	Use an optional V-1200HDR unit or remote-control software to change the patchbay settings. (*1)	—
Colors are incorrect.	Does the color space of the video being input or output match the color space for the processing being done by the unit?	Use an optional V-1200HDR unit or remote-control software to change the settings for the color space. (*1)	—
		Depending on the device, the color space might be interlinked with the selection of DVI or HDMI or the selected format. In such cases, changing the color space on the input or output device might bring about improvement for the problem.	—
HDMI output shown on a display has its periphery cut off.	Are the display settings compatible?	In the case of an HDMI signal, overscanning might be performed automatically, depending on the display. Change the display's settings.	—
Other Problems			
Remote control from a V-1200HDR unit or V-1200HD RCS is not possible.	Is the LINK indicator on the front panel dark?	Connect the V-1200HDR or V-1200HD RCS to the V-1200HD correctly.	p. 27
The body of the V-1200HD is extremely hot.	Is an external power source whose voltage is outside the range of DC 22 V to 26 V being used?	Stop using the external power source and use the included AC power cord to supply from a power outlet.	p. 12
	Has the cooling fan stopped?	Immediately stop use and contact a Roland Service Center.	—
	Is the FAN indicator on the front panel flashing?		
A USB flash drive cannot be read.	Was the USB flash drive formatted on the unit?	When you're using a USB flash drive for the first time, be sure to format it on the unit.	p. 30
	Was a non-Roland USB flash drive used?	Operation of non-Roland USB flash drives cannot be assured. Operation has been tested for commonly available USB flash drives, but operation with all USB flash drives is not assured. Depending on the manufacturer and type of the USB flash drive, correct operation may not be possible.	—

(*1) For detailed information on operation, refer to the "V-1200HDR/V-1200HD RCS Remote Control Guide" (PDF) available for download at the Roland website.

Main Specifications

Roland V-1200HD: Multi-format Video Switcher

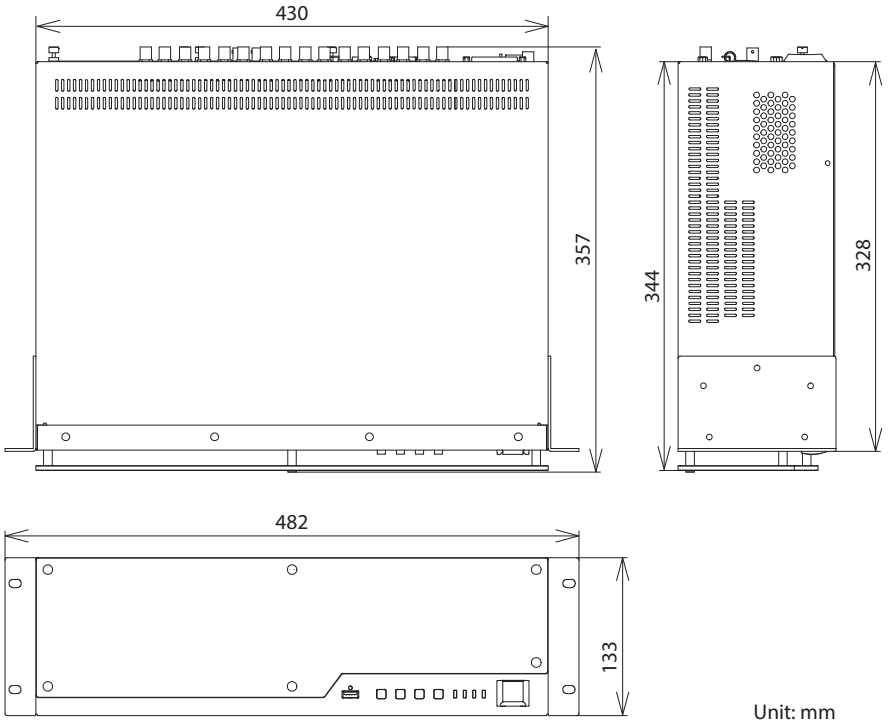
Video				
Processing	4:4:4 (Y/Pb/Pr, RGB), 10 bits/4:2:2 (Y/Pb/Pr), 10 bits			
Input Connectors	3G/HD-SDI	BNC type x 10 * Conforms to SMPTE 424M (SMPTE 425M-AB), 292M		
	HDMI	type A x 2 (HDMI INPUT 1–2) * HDCP Not supported		
	HDMI	type A x 2 (HDMI INPUT 3–4) * HDCP Supported, Multi-format Supported		
Output Connectors	3G/HD-SDI	BNC type x 6 * Conforms to SMPTE 424M (SMPTE 425M-AB), 292M		
	HDMI	type A x 2 (HDMI OUTPUT 1–2) * HDCP Supported		
	HDMI	type A x 2 (HDMI OUTPUT MULTI-VIEW 1) * HDCP Not required, 1080/60p (HDMI OUTPUT MULTI-VIEW 2) * HDCP Required, 1080/60p		
Formats	SDI	1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p * Conforms to SMPTE 274M		
	HDMI	480/59.94i, 576/50i, 480/59.94p, 576/50p, 720/59.94p, 720/50p, 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, 1024x768/60 (*1), 1280x720/60 (*1), 1280x800/60 (*1), 1366x768/60 (*1), 1280x1024/60 (*1), 1400x1050/60 (*1), 1600x1200/60, 1920x1080/60, 1920x1200/60 RB * Conforms to CEA-861-E,VESA DMT Version 1.0 Revision 11 * The output format of HDMI1–2 is always the same. * Frame rate is 59.94 Hz (NTSC) or 50 Hz (PAL). * MULTI-VIEW 1–2 output is 1080/60p always. (*1) Output refresh rate is 75 Hz when frame rate is set to 50 Hz.		
Effects (4:2:2 Processing) * These effects depends on M/E type.	M/E	1M/E, 1.5M/E, 2M/E (9 types)	AUX	2
	Transition	Mix, NAM (*2), FAM (*2), Cut, Wipe (*2) PGM/PST only	Others	Output Fade, Output Freeze, Output Capture, Composition Edit, SDI Output Patchbay
	Composition (Keyer)	4 (PinP, Luminance Key, Chroma Key, External Key supported)		
Effects (4:4:4 Processing) * These effects depends on M/E type.	M/E	1M/E, Matrix, Scaler	Composition (Keyer)	1 (PinP, Luminance Key)
	Input	4 (4:2:2 Processing outputs x 2, HDMI INPUT 3, HDMI INPUT 4)	Others	HDCP Supported, Output Fade, Output Cropping, Signal Generator.
	Transition	Mix, Cut		
Still Image	Inputs	2		
	Internal Memory	16		
	Maximum Size	1920 x 1080 pixels		
	Format	Windows Bitmap File (.bmp) 24 bit per pixel, uncompressed, Portable Network Graphic File (.png) * Alpha channel supported.		
Multiviewer	MULTI-VIEW 1 (4:2:2 Processing): 16/10 screens, Label, Tally * HDCP Not supported			
	MULTI-VIEW 2 (4:4:4 Processing): 4/10 screens, Label, Tally, OSD Setup Menu * HDCP Required			
Audio				
Processing	Sampling Rate	24 bits/48 kHz		
Input Connectors	3G/HD-SDI: BNC type x 4 (Ch7–10), HDMI: type A x 4, AUDIO IN (XLR/TRS) L (1/2)/R (3/4) * Analog Audio or AES/EBU			
Output Connectors	3G/HD-SDI: BNC type x 4 (Ch1–4), HDMI: type A x 4, AUDIO OUT (XLR/TRS) L (1/2)/R (3/4) * Analog Audio or AES/EBU			
Input Level and Impedance	AUDIO IN	+4 dBu (Maximum: +22 dBu, 15 k ohms)		
Output Level and Impedance	AUDIO OUT	+4 dBu (Maximum: +22 dBu, 600 ohms)		
Formats	SDI	Linear PCM, 24 bits, 48 kHz, 16ch * Conforms to SMPTE 299M		
	HDMI	Linear PCM, 24 bits, 48 kHz, 2ch		
	AES/EBU	Linear PCM, 24 bits, 48 kHz, 4ch		
Effects	Patchbay	92 inputs x 92 outputs		
	Delay	16 ch		
	Mixer	16 ch (Channel Effects: 3-Band EQ, Delay/Master Effects: Mastering, 3-Band EQ, Reverb)		
Others				
Expansion Slot	Slot	2 * The video a maximum of 2 inputs 2 outputs and the audio a maximum of 16 inputs 16 outputs can treat in 2 slots sum total.		
Reference	Input	BNC type x 1 * Black Burst (Sync to frames), Bi-Level, Tri-Level		
	Output/Through	BNC type x 1 * Black Burst (Sync to frames)		
External Connectors	RS-232	DB-9 type (Male) x 1 * for Remote Control		
	RS-422	DB-9 type (Female) x 1 * for VISCA Control		
	TALLY/GPIO	DB-25 type (Female) x 1 (Input: 8, Output/Tally: 16)		
	LAN	RJ45 100BASE-TX (Connect to V-1200HDR or Computer (V-1200HD RCS))		
	USB	A type x 2 (USB Memory/Use for future expansion)		
Preset Memory	8 * Last Memory Function			
User Function	32 * 16 buttons x 2 banks			
Remote Camera Control	Connector	RS-422: DB-9 type (Female) x 1	**Operation Temperature**	+0 to +40 degrees Celsius +32 to +104 degrees Fahrenheit
	Protocol	VISCA		
Remore Controler	V-1200HDR Control Surface * Sold separately V-1200HD RCS * Windows7 SP1 or later, Mac OS X		**Dimensions**	482 (W) x 357 (D) x 133 (H) mm 19 (W) x 14-1/16 (D) x 5-1/4 (H) inches * EIA-3U rack mount size
Power Supply	AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz) DC 24 V (XLR-4-32 type) * Redundant Power Supply.		**Weight**	9.0 kg 19 lbs 14 oz
Power Consumption	90 W/0.8 A (117V), 90 W/0.5 A (220V, 230V, 240V), 90 W/3.75 A (DC 24V) * When expansion slot is void.		**Accessories**	Power Cord, Rubber Feet, Owner's Manual

* 0 dBu = 0.775 Vrms

* This product is a Class A digital device under FCC part 15.

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

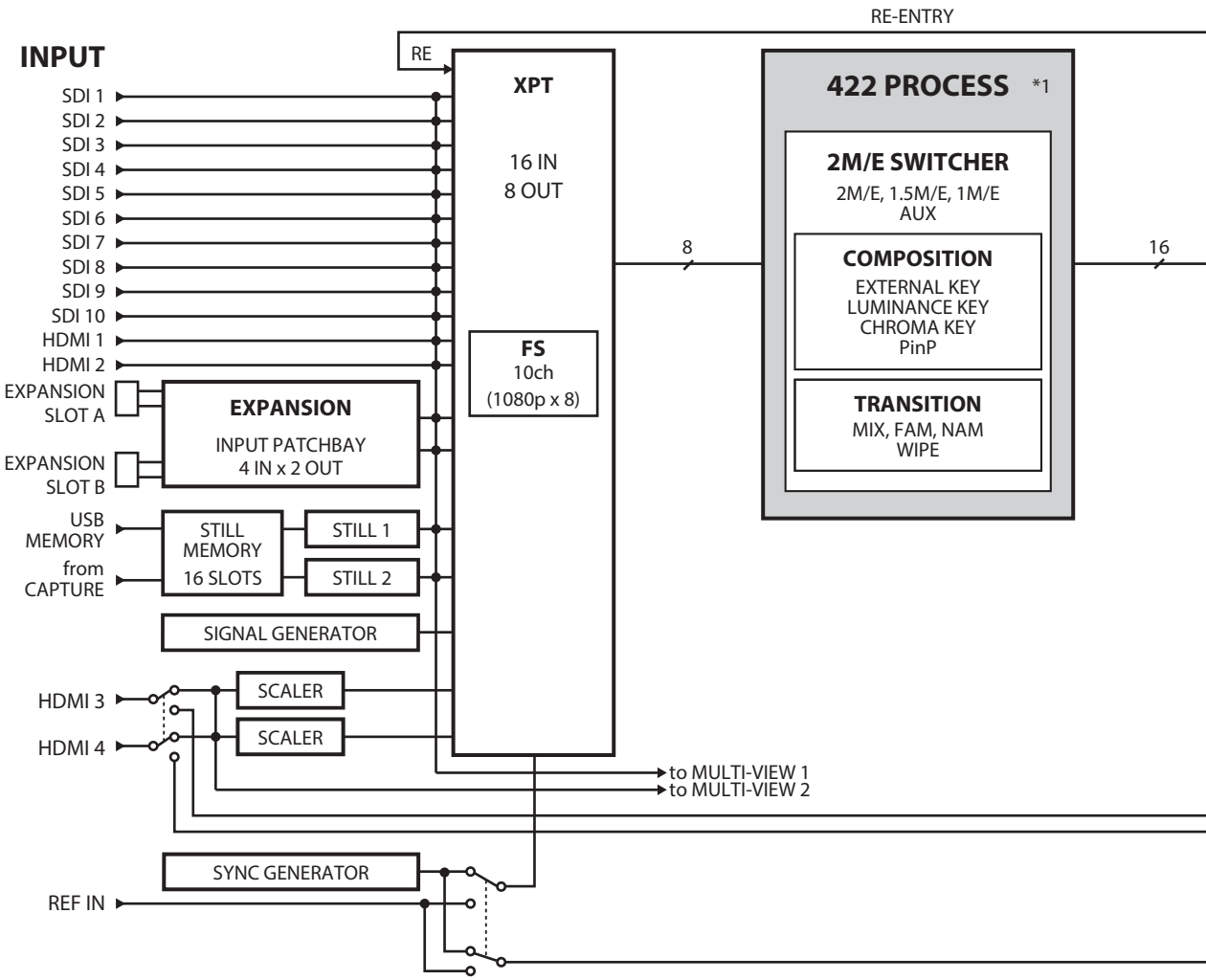
Dimensions



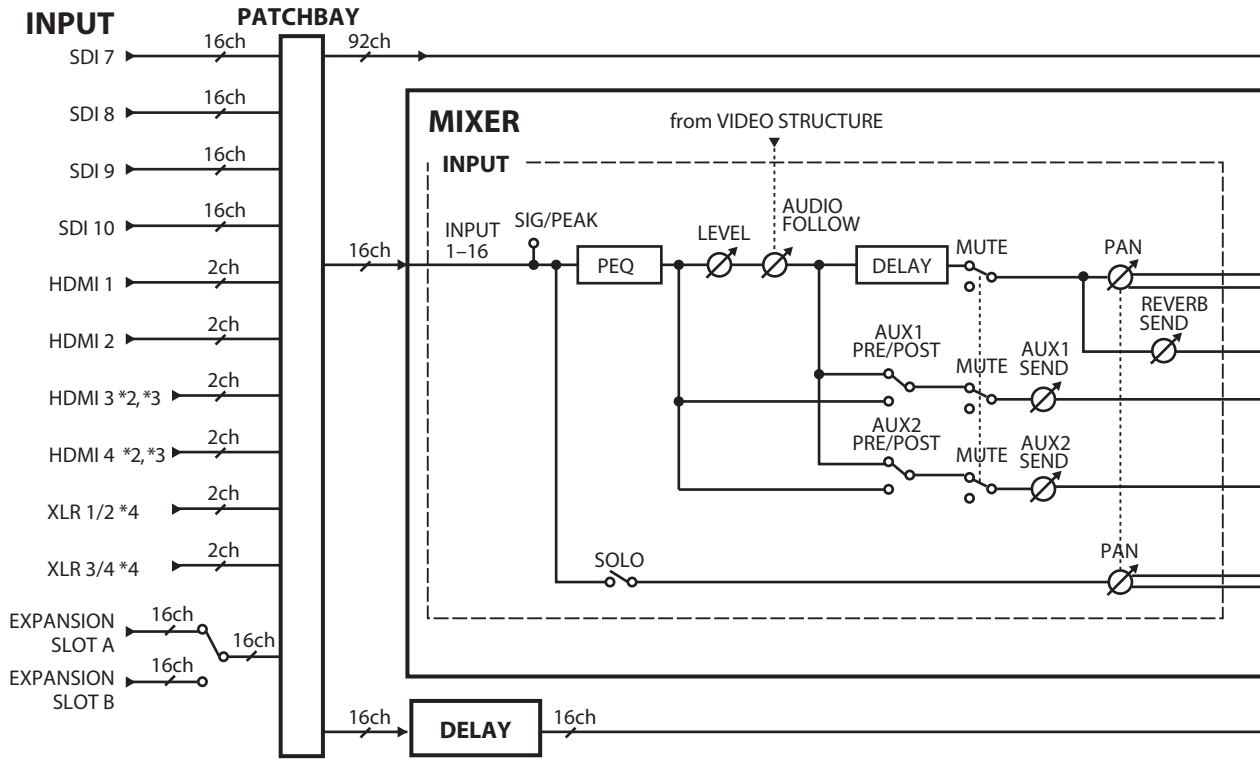
Unit: mm

Block Diagram

Video Block



Audio Block

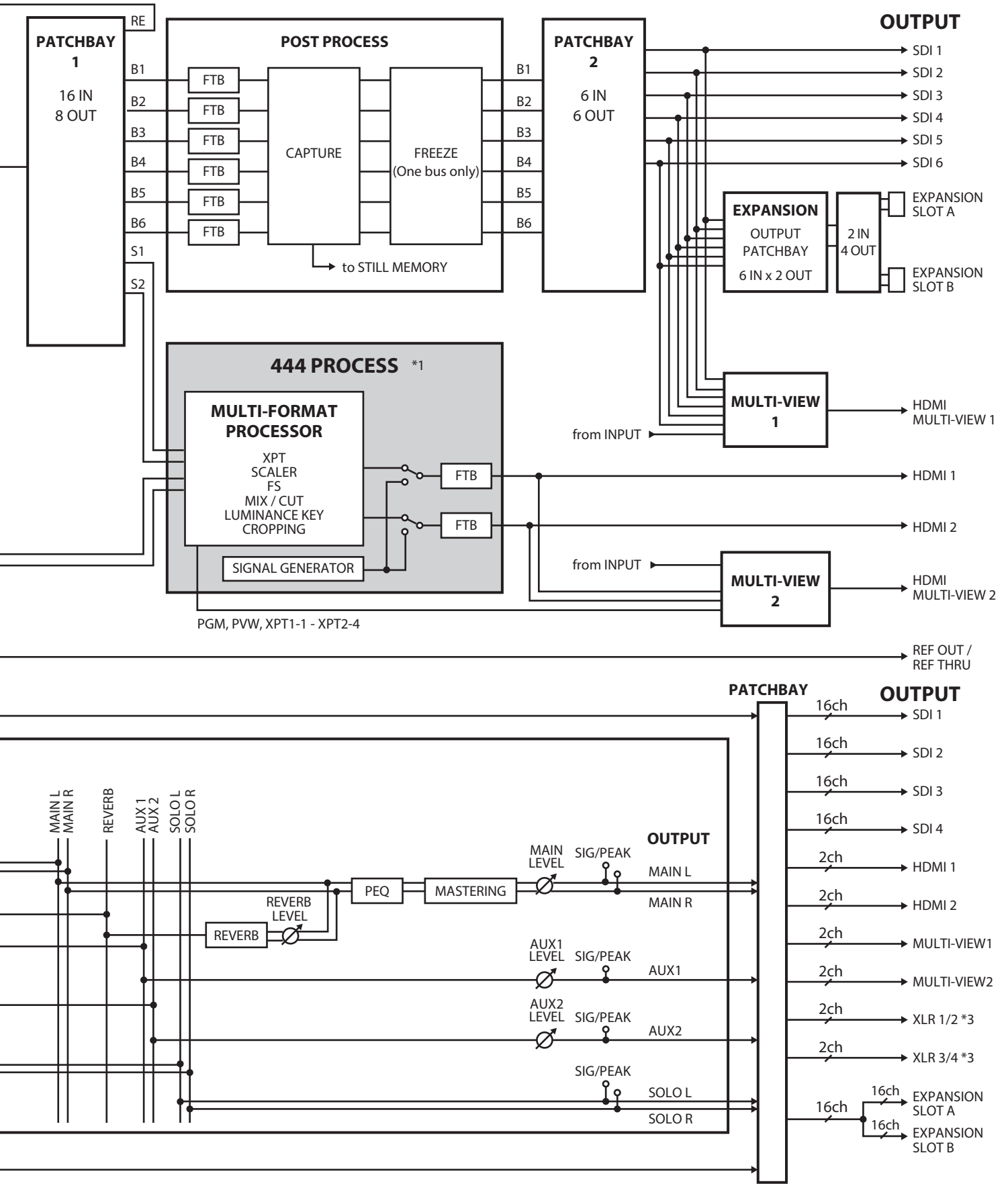


*1: Varies according to M/E configuration.

*2: HDCP-applied audio is outputtable to equipment supporting XLR output (only when ANALOG is selected) and HDCP from HDMI connectors.

*3: Audio in an HDCP-applied HDMI signal cannot be input even when HDCP is turned on in the 4:4:4 process.

*4: When the audio selector switch is set to AES/EBU, 2 channels each of AES/EBU input and output are possible. When the switch is set to ANALOG, 1 channel each of input and output are possible.


PATCHBAY 1
16 IN
8 OUT
RE
B1
B2
B3
B4
B5
B6
S1
S2
POST PROCESS
FTB
CAPTURE
FREEZE
(One bus only)
to STILL MEMORY
PATCHBAY 2
6 IN
6 OUT
OUTPUT
SDI 1
SDI 2
SDI 3
SDI 4
SDI 5
SDI 6
EXPANSION
OUTPUT
PATCHBAY
6 IN x 2 OUT
2 IN
4 OUT
EXPANSION SLOT A
EXPANSION SLOT B
444 PROCESS *1
MULTI-FORMAT PROCESSOR
XPT
SCALER
FS
MIX / CUT
LUMINANCE KEY
CROPPING
SIGNAL GENERATOR
MULTI-VIEW 1
from INPUT
HDMI MULTI-VIEW 1
HDMI 1
HDMI 2
MULTI-VIEW 2
HDMI MULTI-VIEW 2
PGM, PVW, XPT1-1 - XPT2-4
REF OUT / REF THRU
PATCHBAY
OUTPUT
16ch
2ch
MAIN L
MAIN R
REVERB
AUX 1
AUX 2
SOLO L
SOLO R
MAIN LEVEL
SIG/PEAK
REVERB LEVEL
PEQ
MASTERING
AUX1 LEVEL
AUX2 LEVEL
MULTI-VIEW1
MULTI-VIEW2
XLR 1/2 *3
XLR 3/4 *3

Memo

Memo

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has 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 equipment 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

To assure continued FCC emission limit compliance, use only shielded interface cables when connecting to other device.
Any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For Canada

CAN ICES-3 (A)/NMB-3 (A)

For Korea

사용자 안내문

기종별	사용자 안내문
A급 기기 (업무용 방송통신기자재)	이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다.

For C.A. US (Proposition 65)

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

For EU Countries

This product is intended for use in the following Electromagnetic environments:
E4: controlled EMC environment,
ex. broadcasting studio which are specified in EN55103-1 and EN55103-2.

For EU Countries

UK This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.

DE Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.

FR Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.

IT Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.

ES Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.

PT Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.

NL Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.

DK Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.

NO Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

SE Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.

FI Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.

HU Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.

PL Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.

CZ Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.

SK Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhadzovať spolu s domovým odpadom.

EE See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.

LT Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinti produktai neturi būti išmetami kartu su buitinėmis atliekomis.

LV Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.

SI Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinjskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinjskimi odpadki.

GR Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

For China

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限

此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。

环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。

不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳（壳体）	×	○	○	○	○	○
电子部件（印刷电路板等）	×	○	×	○	○	○
附件（电源线、交流适配器等）	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。
因根据现有的技术水平，还没有什么物质能够代替它。

Roland

51000527 32-01