

DIRECT STREAMING VIDEO SWITCHER V-80HD



English

日本語

Deutsch

Français

Italiano

Español

Português

Checking the included items

Check that all of the included items are present. If any of the included items are missing, contact your dealer.

- V-80HD unit
- Startup Guide (this document)
- AC adaptor
- Leaflet "USING THE UNIT SAFELY"
- Power cord

PDF manual (download from the Web)

- **Reference Manual**
Contains more detailed explanations on operating this unit, a list of menus and more.

Downloading

1. Enter the following URL in your computer.
https://roland.cm/v-80hd_om



Before using the unit, ensure that its system program is at the most recent version.

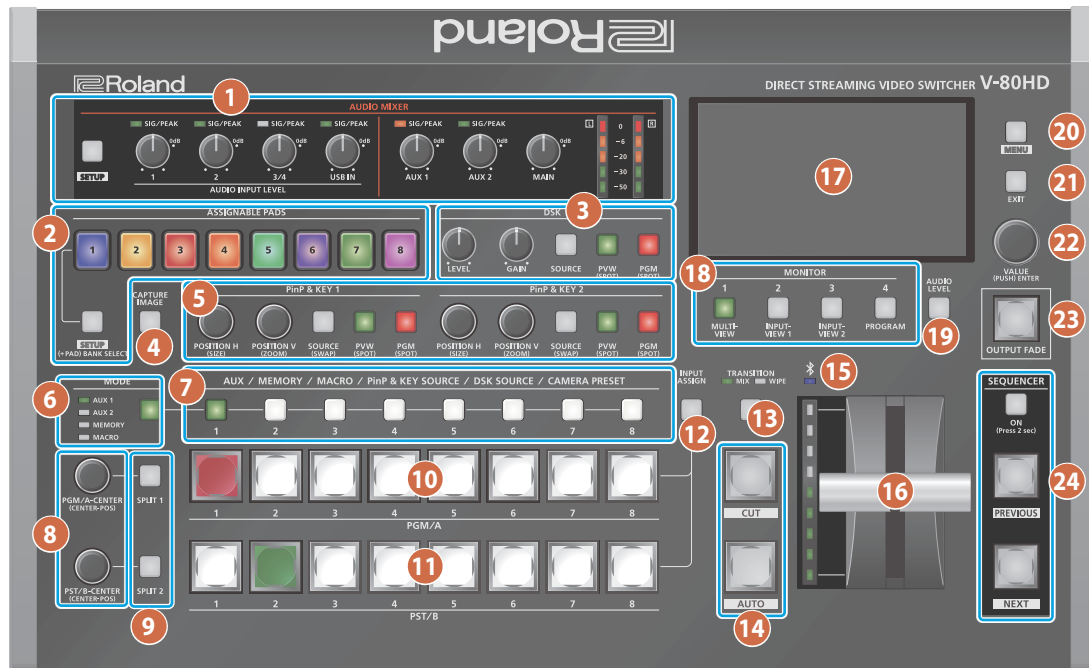
For information on available upgrades for the system program, see the Roland website (<https://proav.roland.com/>).

You can check the system program version by Pressing the [MENU] button → "System" → "Version".

Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the leaflet "USING THE UNIT SAFELY" and the Startup Guide (p. 8)). After reading, keep the document(s) where it will be available for immediate reference.

Panel descriptions

Top panel



1 AUDIO MIXER

[SETUP] button

Shows the setup screen in the display.

SIG/PEAK indicators (1, 2, 3/4, USB IN)

These are lit green when audio input is detected. If the input is excessive, the indicator is lit red.

AUDIO INPUT LEVEL [1] [2] [3/4] [USB IN] knobs

Adjust the volume of the AUDIO IN 1, 2, 3/4, or USB IN.

SIG/PEAK indicators (AUX 1, AUX 2)

Indicates the volume levels for the AUX 1 and AUX 2 buses. When the output level exceeds -50 dB, this lights up green. This lights up red when the output is excessive (0 dB or higher).

[AUX 1] [AUX 2] knobs

Adjusts the output volumes for the AUX 1 and AUX 2 buses.

[MAIN] knob

Adjusts the overall volume.

Level meter

Indicates the volume level of the overall output.

MEMO

You can change the audio bus that's adjusted by each of the AUDIO MIXER knobs, as well as the audio bus shown by the indicators and level meters.

2 ASSIGNABLE PADS

Pads [1]–[8]

Press these pads to execute their assigned functions.

You can assign functions such as the audio player, audio effects and so on to the pads.

[SETUP] button

Shows the function assignment screen in the display.

MEMO

You can assign functions to the ASSIGNABLE PADS (8 pads × 8 banks from A to H).

Press the pads [1]–[8] while holding down the [SETUP] button to switch between Banks A–H.

With the factory settings, the audio player is assigned to pads [1]–[8] of Bank A.

3 DSK

This uses DSK layer to composite video using a downstream keyer.

[LEVEL] knob

Adjusts the degree of extraction (transparency) for the key.

[GAIN] knob

Adjusts the degree of edge blur (semi-transmissive region) for the key.

[SOURCE] button

When this is on (lit), you can select the DSK video source using the 7 DSK SOURCE [1]–[8] buttons.

[PVW] button

Turns the preview output of the DSK compositing result on/off.

[PGM] button

This switches DSK composition on or off.

4 [CAPTURE IMAGE] button

Turns the still image capture mode on/off.

5 PinP & KEY 1, 2

This uses PinP & KEY 1, 2 layers to composite video using PinP, or picture-in-picture.

[POSITION H] knob

Adjusts the horizontal position of the inset screen.

By turning the knob while pressing it, you can adjust the size of the inset screen.

[POSITION V] knob

Adjusts the vertical position of the inset screen.

By turning the knob while pressing it, you can adjust the zoom of the video shown in the inset screen.

[SOURCE] button

When this is on (lit), you can select the video source for the inset screens using the **7** PinP & KEY SOURCE [1]–[8] buttons.

[PVW] button

Turns the inset screen preview output on/off.

[PGM] button

Turns PinP composition on/off.

6 [MODE] button

Switches the functioning of the **7** AUX / MEMORY / MACRO [1]–[8] buttons. An indicator located at the left of the [MODE] button is lit to indicate the current function.

7 AUX / MEMORY / MACRO / PinP & KEY SOURCE / DSK SOURCE / CAMERA PRESET [1]–[8] buttons

The functions of these buttons change as shown in the table below.

When button is lit	Functions of buttons [1]–[8]
[MODE]	AUX Selects the video that's sent to the AUX 1 and AUX 2 buses.
	MEMORY Recalls the preset memory (the video/audio and other data that is saved). Long-press a button to save the current settings in a preset memory.
	MACRO Executes a macro (a series of recorded operations).
PinP & KEY 1, 2 [SOURCE]	PinP & KEY SOURCE Select the video source for the inset screen.
DSK [SOURCE]	DSK SOURCE Selects the DSK video source.
CAMERA CONTROL	CAMERA PRESET Recalls the registered preset (camera position, focus settings, etc.) from the connected camera. You can turn Camera Control Mode on/off by using the ASSIGNABLE PADS, a footswitch (CTL) or control signal input (GPI).

8 [PGM/A-CENTER] [PST/B-CENTER] knobs

Adjust the split compositing settings.

Knob	Explanation
[PGM/A-CENTER]	Adjusts the horizontal/vertical position of the video that's shown in the left or upper area. Turn while pressing: Adjusts the position of the boundary.
[PST/B-CENTER]	Adjusts the horizontal/vertical position of the video that's shown in the right or lower area. Turn while pressing: Adjusts the position of the boundary.

9 [SPLIT 1] [SPLIT 2] buttons

Turns on/off video compositing using split.

10 PGM/A cross-point [1]–[8] buttons

Selects the video to input to bus PGM/A. The selected button lights up.

11 PST/B cross-point [1]–[8] buttons

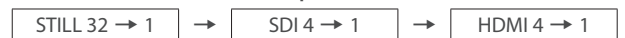
Selects the video to input to bus PST/B. The selected button lights up.

12 [INPUT ASSIGN] button

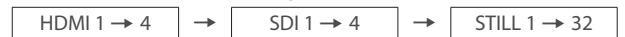
Press a cross-point button while holding down the [INPUT ASSIGN] button to change the video source for the buttons you pressed.

The video source changes in the following order each time you press the button.

- [INPUT ASSIGN] + PGM/A cross-point buttons



- [INPUT ASSIGN] + PST/B cross-point buttons



13 [TRANSITION] button

Selects the video transition effects (MIX, WIPE).

The MIX or WIPE indicator lights to show that it is selected.

14 [CUT] [AUTO] buttons

Automatically switch between the videos being input to bus PGM/A and PST/B, and send them to the final output.

Button	Explanation
[CUT]	The picture switches instantly.
[AUTO]	A transition effect is applied and the video is switched automatically.

15 (Bluetooth®) indicator

Shows the Bluetooth connection status.

Lit	Connected	Rapid blinking	Now pairing
Unlit	Bluetooth off	Blinking	Waiting for connection

You can input audio from an audio device that uses Bluetooth, or use dedicated software on your computer or iPad to remotely control the V-80HD.

16 Video fader

Manually switch between the videos being input to bus PGM/A and PST/B, and send them to the final output.

Transition indicator

The indicators light up to show the video fader position.

When the video fader is pushed all the way down, only the topmost or bottommost transition indicator lights.

17 Monitor

Shows the input/output video, a loaded still image, or a menu.

18 MONITOR [1]–[4] buttons

Switches between video signals to monitor on the built-in display (monitor).

Button	Explanation
	MULTI-VIEW
MONITOR [1]	The final output video, preview output video and the videos allocated to the cross-point [1]–[8] buttons are shown in sections of the display.
MONITOR [2]	INPUT-VIEW 1 Shows the input videos or still images in 16 sections of the screen.
MONITOR [3]	INPUT-VIEW 2 Shows the input videos or still images in 16 sections of the screen.
MONITOR [4]	PROGRAM Shows the final output video.

* The settings described above are the factory defaults. You can also assign different video to each button.

19 [AUDIO LEVEL] button

Shows the audio level screen in the display.

20 [MENU] button

Switches the menu between visible and hidden.

21 [EXIT] button

Returns you to the menu one level higher.

22 [VALUE] knob

Selects a menu item, or edits the value of a setting. Press this knob to confirm the menu item you selected or the value that you edited.

23 [OUTPUT FADE] button

The final output video and audio fade in/out.

Lit	Fade-out completed
Blinking	Now fading-in/out
Unlit	Normal output

* The settings described above are the factory defaults. You can customize the function of the [OUTPUT FADE] button.

24 SEQUENCER

Use this to execute operations such as macros or recalling preset memories (sequencer function) in the order that you have specified beforehand.

[ON] button

Long-press to turn sequencer mode on/off.

[PREVIOUS] button

Returns to the previous operation.

[NEXT] button

Advances to the next operation. The button blinks while the operation is executing.

Front panel



1 PHONES jack

Connect your headphones here.

2 [PHONES] knob

Adjusts the headphone volume.

3 USB HOST connector

Connect USB storage such as a USB flash drive or an external SSD here, for backing up this unit's settings or importing materials from the storage device into this unit.

You can also connect a smartphone for tethering.

4 SDXC card slot

Insert an SD card here.

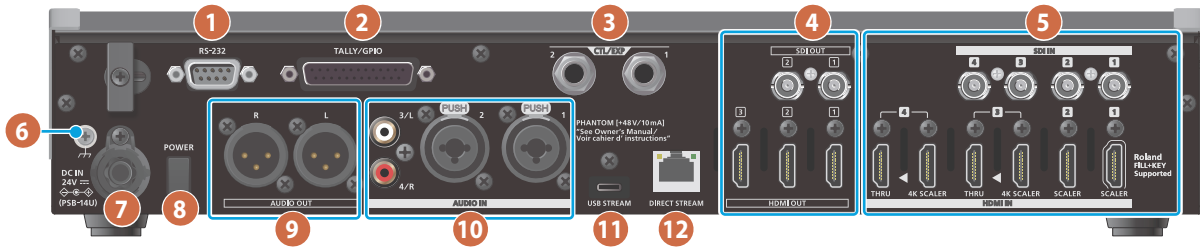
This lets you record video and audio, back up this unit's settings and import material that's saved on the storage media.

NOTE

- Never turn off the power or remove the USB flash drive or SD card while the USB flash drive or SD card is being accessed.
- Before disconnecting an SD card or a USB flash drive while the power is on, be sure to perform the eject operation (p. 7).

Rear panel

- * To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- * Do not block the cooling-fan intake and exhaust ports on the side panels. If the cooling-fan intake and exhaust ports are blocked, the internal temperatures may rise, causing malfunctions due to excessive heat.



Pin assignment of AUDIO OUT jacks (XLR)



Pin assignment of AUDIO IN 1 and 2 jacks (XLR/TRS)



1 RS-232 connector

You can connect this to a computer equipped with an RS-232 connector, and remotely control the V-80HD.

2 TALLY/GPIO connector

Use this to connect to devices that have a tally indicator feature, or to connect to devices that have a control signal input/output function.

3 CTL/EXP 1, 2 jacks

Connect footswitches (sold separately: BOSS FS-6, etc.) or expression pedals (sold separately: EV-5, etc.). This is used when using your foot to control operations such as video switching.

- * Use only the specified expression pedal (sold separately: EV-5, BOSS FV-500L, or FV-500H). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

4 HDMI OUT 1–3 connectors, SDI OUT 1, 2 connectors

These connectors output video. Choose the connectors that are appropriate for the connected devices. For each connector, you can change the video bus that is assigned for output from that connector. With the factory settings, the bus assignments are as follows.

Connector	Bus
SDI/HDMI OUT 1	PROGRAM (final output video)
SDI/HDMI OUT 2	PREVIEW (preview output video)
HDMI OUT 3	MULTI-VIEW

5 HDMI IN 1–4 connectors, SDI IN 1–4 connectors

These connectors input video. Choose the connectors that are appropriate for the connected devices.

Connector	Explanation
SDI 1–4	Used for inputting SDI video.
HDMI IN 1 (SCALER)	Used for inputting HDMI video. This connector is compatible with connections from the "Roland Graphics Presenter" app. For details, refer to the "Reference Manual" (Roland website).
HDMI IN 2 (SCALER)	Used for inputting HDMI video.
HDMI IN 3, 4 (4K SCALER, THRU)	Used for inputting HDMI video. These connectors support up to 4K/60p video input. Video input signals are output as-is to the THRU connector. Connect an external display, recorder or similar device to the THRU connector. When inputting a video signal with a resolution greater than 1080p, the signal is downscaled to 1080p and used as the input video.

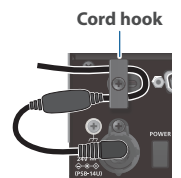
6 Ground terminal

Connect this to an external earth or ground if necessary.

7 DC IN jack

Connect the included AC adaptor to this jack.

- * Use the cord hook to secure the cord of the AC adaptor as shown in the illustration. If you have trouble running the cord through, loosen the screw a little on the cord hook.



8 [POWER] button

Turns the power on/off.

9 AUDIO OUT jacks (XLR)

These jacks output audio. Choose the jacks that are appropriate for the connected devices.

For each jack, you can change the audio bus (MAIN bus, AUX 1 bus, AUX 2 bus) that is assigned for output from that jack.

10 AUDIO IN 1, 2, 3/L, 4/R jacks

These jacks input audio. Choose the jacks that are appropriate for the connected devices.

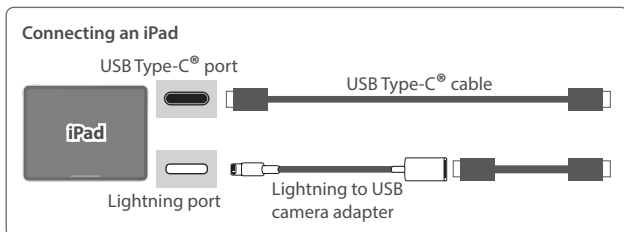
* About phantom power

You can supply phantom power (+48 V) from the AUDIO IN 1 and 2 jacks (XLR). Turn on phantom power when you're using a condenser microphone that requires phantom power.

Use the [MENU] button → "Audio Input" → "Audio In 1" or "Audio In 2" → set "Phantom +48V" to "On".

11 USB STREAM port (USB Type-C®)

- Outputs the audio and video to your computer. This is also used to input audio played on your computer to the V-80HD.
- Use the dedicated software to remotely control the V-80HD from a computer or iPad that is connected.



- * When outputting an HD video signal via USB, use a commercially available cable that supports USB 3.0, and connect the cable to the USB 3.0 port on your computer.
- * If you connect via an extension cable or a USB hub, the computer might not recognize this unit.
- * Do not use a USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.

12 DIRECT STREAM port

- Connect this port to a network device for livestreaming.
- This port is used for inputting and outputting video/audio to and from an SRT-compatible device that's connected to a network.
- Lets you remotely control the V-80HD by using terminal software, etc.
- Use the dedicated software to remotely control the V-80HD from a computer or iPad that is connected.
- Use the V-80HD to remotely control a camera that is connected.
- Displays a tally on your iOS or Android device (this is the "smart tally" function).

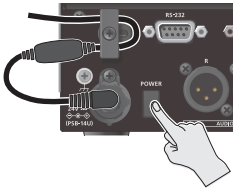
Basic operation

Turning the power on/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.
- * When turning the power off, you must perform the shutdown operation.
- * This unit is not designed for continuous operation over long periods of time (one month or longer). If you want to use this unit over long periods of time, cycle the power periodically.

Turning the power on

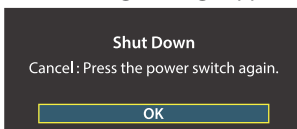
1. Make sure that all devices are powered off.
2. Turn on the [POWER] switch of the V-80HD.



3. Turn on the power of the source devices.
Turn on the power of the source devices that are connected to the V-80HD's input connectors, such as video cameras.
4. Turn on the power of the output devices.
Turn on the power of the devices that are connected to the V-80HD's output connectors, such as projectors.

Turning the power off

1. Turn off the power of the output devices first, and then the source devices.
2. Turn off the [POWER] switch of the V-80HD.
The following message appears.



3. Press the [VALUE] knob to finish shutting down.
If you wish to cancel, press the [POWER] switch again.

About SD card

An SD card is required for recording audio/video or for using still images on the V-80HD.

SD cards that can be used on the V-80HD



SDXC card can be used on the V-80HD.

Some SD card types or SD cards from some manufacturers may not properly record audio/video with the unit.

Refer to the support page on the Roland website for the latest information on compatibility.

https://roland.cm/v-80hd_om



NOTE

Before you can use a commercially available SD card with the V-80HD, you must format it as described in "Formatting an SD Card".

Inserting the SD card

1. Push the SD card all the way into the SDXC card slot until you hear a click.

NOTE

Ensure that the SD card is oriented correctly, and insert it all the way into the port. Do not forcibly push the card into place.



Formatting an SD card

1. Press the [MENU] button → "SD Card/USB Flash Drive" → "SD Card" → select "Format" and press the [VALUE] knob.
A confirmation message appears.
2. Turn the [VALUE] knob to select "OK" and press the [VALUE] knob.
The SD card is now formatted.

NOTE

Formatting the SD card erases all data on the media (video and audio data).

Removing an SD card

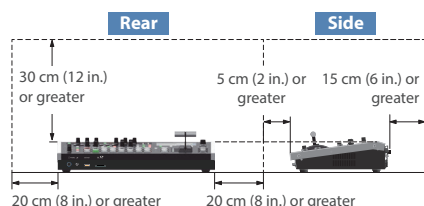
1. Press the [MENU] button → "SD Card/USB Flash Drive" → "SD Card" → select "Eject" and press the [VALUE] knob.
2. Turn the [VALUE] knob to select "OK" and press the [VALUE] knob.
Once the message "The SD Card is safe to remove." is displayed on the screen, you can safely remove the card.
3. Push the SD card further into the slot.
4. Hold the SD card and pull it out towards you.

USING THE UNIT SAFELY

WARNING

Secure a sufficient amount of space at the setup location

Since this unit normally emits a slight amount of heat, make sure to secure sufficient space around it, as shown below.



Use only the supplied AC adaptor and the correct voltage

Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



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.



WARNING

Handle lithium batteries carefully

- Lithium batteries must never be recharged, heated, taken apart, or thrown into a fire or water.
- When replacing lithium batteries, make sure that you put them in a place where children cannot reach or touch them.
- Keep lithium batteries out of reach of small children.
- In the event that someone accidentally swallows a lithium battery, this could cause serious or life-threatening problems within a matter of two hours. Contact a doctor at once.
- Never expose lithium batteries to excessive heat such as sunshine, fire or the like.



CAUTION

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.



- Removable Parts
- Screw (p. 5)

CAUTION

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 accidentally 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 bottom of this unit may become hot, so take care to avoid burns.



Precautions concerning use of phantom power supply

Always turn the phantom power off when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.



(This instrument's phantom power: 48 V DC, 10 mA Max)

IMPORTANT NOTES

Power Supply

- Place the AC adaptor so the side with the indicator faces upwards. The indicator will light when you plug the AC adaptor into an AC outlet.

Placement

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.

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, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- Never strike or apply strong pressure to the display.
- 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.
- Do not use connection cables that contain a built-in resistor.
- Please be aware that in some countries or regions, it might not be possible to use Roland Cloud at this time.

- The battery-powered internal clock keeps operating even after the power is turned off. If the battery runs out, the message "BATTERY ERROR!" is displayed. If you see this message, contact the nearest Roland Service Center.

- This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

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.

Caution Regarding Radio Frequency Emissions

- The following actions may subject you to penalty of law.
 - Disassembling or modifying this device.
 - Removing the certification label affixed to the back of this device.
 - Using this device in a country other than where it was purchased
- This unit cannot be used to directly connect to a network operated by a telecommunications provider (such as a mobile or landline-based telecommunications company, an Internet provider or the likes), including a public wireless LAN. You must use a router or similar equipment when connecting this unit to the Internet.

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.

- This product can be used to record or duplicate audio or visual material without being limited by certain technological copy-protection measures. This is due to the fact that this product is intended to be used for the purpose of producing original music or video material, and is therefore designed so that material that does not infringe copyrights belonging to others (for example, your own original works) can be recorded or duplicated freely.

- The SD logo , SDHC logo  and SDXC logo  are trademarks of SD-3C, LLC.

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