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## User Guide

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4K

The latest version of the Wirecast Gear User Guide is available at:  
<http://www.telestream.net/pdfs/user-guides/Wirecast-Gear-4K-User-Guide.pdf>

## Contacting Telestream

Support options for your Wirecast Gear 4K are listed and briefly described below. Provide the name of the organization, contact information, and the serial number of the affected unit. If the problem cannot be resolved remotely, request an RMA (Return Material Authorization).

**Table 1.** Support

Resource	Contact Information
Wirecast Gear 4K Technical Support	<p>Customers who purchased Wirecast Gear 4K directly from Telestream may request support as outlined below.</p> <p>Support Website: <a href="http://www.telestream.net/telestream-support/Wirecast-Gear/support.htm">http://www.telestream.net/telestream-support/Wirecast-Gear/support.htm</a></p> <p>Support Email: <a href="mailto:desktopsupport@telestream.net">desktopsupport@telestream.net</a></p> <p>Enterprise Telephone Support:</p> <p>U. S. Toll Free: (877) 257-6245</p> <p>U. S. from outside U.S.: (530) 470-2036</p> <p>Europe   Middle East   Africa   Asia   Pacific: +49 228 280 9141</p> <p>Terms and times of support services vary, per the terms of your current service contract with Telestream.</p>
GearCare Premium Support	<p>GearCare premium support customers may request support as outlined below. GearCare includes a three-year extended warranty from the date of purchase as well as overnight replacement.</p> <ul style="list-style-type: none"> <li>• US Support Phone: 1-844-550-5208</li> <li>• International Support Phone: 1-530-470-2029</li> <li>• Support Email: <a href="mailto:desktopsupport@telestream.net">desktopsupport@telestream.net</a></li> </ul> <p>See also the websites above and below.</p>
Wirecast Gear 4K Resources	<ul style="list-style-type: none"> <li>• Wirecast Gear 4K Resources Website: <a href="https://www.telestream.net/wirecastgear/overview.htm#resources">https://www.telestream.net/wirecastgear/overview.htm#resources</a></li> </ul>
Telestream, LLC	<p>Website: <a href="http://www.telestream.net">www.telestream.net</a></p> <p>Marketing Email: <a href="mailto:info@telestream.net">info@telestream.net</a></p> <p>Telestream, LLC 848 Gold Flat Road, Suite 1 Nevada City, CA USA 95959</p>



Resource	Contact Information
International Distributor Support	Website: <a href="http://www.telestream.net">www.telestream.net</a> See the Telestream Web site for your regional authorized Telestream distributor.
Reseller Support	If Wirecast Gear 4K was purchased from a reseller, without GearCare Premium Support, please contact the reseller for product support.
Telestream Technical Writers	Email: <a href="mailto:techwriter@telestream.net">techwriter@telestream.net</a> Comments, corrections, or suggestions about this guide and other Telestream guides are encouraged.

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Telestream, LLC  
848 Gold Flat Road  
Nevada City, CA 95959 USA

You can call Telestream during U. S. business hours via telephone at (530) 470-1300.

## Regulatory Compliance

**Electromagnetic Emissions:** FCC Class A, EN 55022 Class A, EN 61000-3-2/-3-3, CISPR 22 Class A

**Electromagnetic Immunity:** EN 55024/CISPR 24, (EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11)

**Safety:** CSA/EN/IEC/UL 60950-1 Compliant, UL or CSA Listed (USA and Canada), CE Marking (Europe)

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## Return Merchandise Authorization (RMA) Procedure

If Wirecast Gear 4K needs service of any kind, see [Contacting Telestream](#) on the previous page for contact information.

If Telestream Support requests return of the Wirecast Gear 4K unit, follow the procedure below. Telestream does not accept hardware returns without issuing an RMA number first.

Prior to returning the Wirecast Gear 4K unit, and at regular intervals during its use, Telestream recommends backing up the contents of all mass storage drives on Wirecast Gear 4K to a suitable external mass storage unit. Unless otherwise instructed in writing by Telestream, all attached hardware and peripherals not shipped with the unit must be removed prior to shipment to Telestream. Although every effort will be made to preserve data, Telestream will not be held responsible for data loss or loss of third-party hardware shipped back to Telestream with the Gear unit.

## Support and RMA Process

1. Contact the reseller where the hardware was purchased for service. If the unit was purchased directly from Telestream or the unit is covered by Premium Support, contact Telestream directly using the information provided.
2. Telestream Support opens a support case for the affected Gear unit.
3. Telestream Support performs an established drill-down to categorize the problem and to determine a resolution path.
4. If the problem requires more than the initial level of support, Telestream customer service diagnoses the Gear unit remotely. You must grant the Gear unit access to the Internet to allow Support to access the unit.
5. If Telestream support determines the unit has a hardware failure, a customer service representative escalates the case to RMA and gives instructions for shipping the unit to the appropriate location for repair.
6. The customer service representative gathers shipping and contact information for overnight replacement of the unit for GearCare premium support customers, and instructions for self-return of the unit to the appropriate service location.
  - a. If the unit is covered by GearCare premium support, Telestream customer support gathers your shipping and contact information and sends an overnight replacement. Customer service also sends further instructions and an RMA number for returning the failed unit.
  - b. If standard support applies, Telestream support sends instructions and an RMA for returning the failed unit and collects the return shipping information. You then ship the Gear unit must to the repair location. Telestream returns the unit upon completion of service.
7. Upon resolution of the customer service case, Telestream customer support reviews the case, closes it if resolved, and sends a satisfaction questionnaire.
8. Telestream appreciates its customers' choice of Wirecast Gear 4K and kindly requests the prompt return of the satisfaction questionnaire to assist in improving Gear products and customer service.

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# Introduction

This section introduces Wirecast Gear 4K, its features, and the contact information for Telestream.

## Topics

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## Introducing Wirecast Gear 4K

Wirecast Gear 4K is a family of turnkey live-streaming video switchers. Wirecast Gear 4K provides plug-in-and-go streaming production for 4K sources. A compact, rack-mountable unit contains all you need for producing sports, news, worship, or other live events.

Every Wirecast Gear 4K comes with an ultra-fast AMD six-core processor, an NVIDIA graphics card for acceleration and encoding, Wirecast Pro software, a stock media library, and Telestream Switch Player.

Wirecast Gear 4K is based on Windows 10 IoT Enterprise LTSC 2021 for superior stability, security, and long-term OS vendor support. The Windows 10 operating system offers native support for common applications such as Teams® or Zoom.® Wirecast Gear 4K units are the only fully-integrated streaming video switcher appliances on the market.

Optional GearCare premium support complements the all-in-one offering for live production success. GearCare premium includes industry-leading phone support and a three-year overnight replacement warranty.

## Wirecast Gear 4K Models and Features

Features for each of the Wirecast Gear 4K models are shown in the table below:

**Table 2.** Wirecast Gear 4K Models and Features

Product Features	Wirecast Gear 4K HDMI	Wirecast Gear 4K SDI
AMD 6-core/12-thread processor	✓	✓
NVIDIA Quadro GPU for Wirecast and output encode acceleration	✓	✓
System Memory	16 GB	16 GB
2 RU form factor with 12"/30cm depth	✓	✓
HDMI RGB 4:4:4 or YUV 4:2:2 inputs	4x4Kp 60	
SDI YUV 4:2:2 inputs	1x1080p 60	4x4Kp 60 + 1x1080p 60

**Table 2.** Wirecast Gear 4K Models and Features

Product Features	Wirecast Gear 4K HDMI	Wirecast Gear 4K SDI
SDI YUV 4:2:2 monitor output	1x1080p 60	1x1080p 60 + opt. 1x4Kp 60
NDI input/output	✓	✓
Mini Display Port 1.4 outputs with latching connectors	4	4
Telestream Wirecast Pro live production software with Stock Media Library**	✓	✓
Telestream Switch Player media player	✓	✓
Microsoft Windows 10 LTSC 2H21 Operating System	✓	✓
One-year Telestream Warranty	✓	✓

## Technical Specifications

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**Caution:** Wirecast Gear 4K is a sealed device, with no user-serviceable parts or user-accessible expansion slots. Do not open, attempt to upgrade, or alter the computer. Doing so exposes you to electrical hazard, may damage the unit, and may invalidate your warranty. If you have hardware or software problems with your Wirecast Gear 4K, follow the steps in the [Return Merchandise Authorization \(RMA\) Procedure](#).

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### Internal Configuration (All models)

- Motherboard Chipset: AMD X570
- Memory: 16GB DDR4-3200
- System Drive: 250GB NVMe M.2
- Storage Drive: 1TB SATA 6 Gbit/s
- USB: USB 3.2 Gen 2 (1xUSB-C rear + 5xUSB-A rear), USB 3.2 Gen 1 (2xUSB-A front, 2xUSB-A rear)
- Network: 2xRJ-45 IEEE 802.3ab Gigabit Ethernet

- CPU: AMD Ryzen 5 5600X 6-core/12-thread 4.6GHz
- Audio: 2-ch Line In/Out, Mic In/Out + Front Line Out / Mic In + Ls/Rs/Lb/Rb/C/S
- User Input: Microsoft Wireless Keyboard/Mouse
- Accessories: 6'/183cm IEC C-14 3-pin cable (grounded plug determined by area of sale), Mini DisplayPort to DisplayPort adapter

## Physical Specifications

- **Dimensions** 16.7" x 12" x 3.5" (42.4 cm x 30.5 cm x 8.9 cm), 2RU x 19" w/handles
- **Weight** 14.5 - 15.5 lb. (unit only)
- **Operating Temperature and Humidity** 32° - 104° F (0° - 40° C) @ 20% - 80% (operating), 32° - 104° F (-20° - +85° C) @ 10% - 90% (storage)

## Power Specifications

- **Input Voltage** 100 - 240 VAC RMS, 50 - 60Hz
- **Input Current** 8A @ 115 VAC 60Hz RMS, 4A @ 230 VAC 50Hz RMS, Single Phase
- **Input Connection** IEC 60320 C14 3-pin receptacle

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**Note:** Wirecast Gear 4K contains no user-serviceable parts. Any repair or modification must be performed by Telestream or an authorized Telestream service technician.

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## Video Inputs and Outputs

**Table 3.** Video Inputs and Outputs

Inputs/Outputs	Wirecast Gear 4K HDMI	Wirecast Gear 4K SDI
Display Output	4x Mini DisplayPort 1.4, 4096x2160 @ 60Hz max.	4x Mini DisplayPort 1.4, 4096x2160 @ 60Hz max.
Capture Input	4x HDMI 2.0b (non-HDCP), 4096x2160 @ 60Hz RGB 4:4:4 max + 1x 3G-SDI SMPTE 424M, 1920x1080 @ 60Hz YUV 4:2:2 max.	4x 12G-SDI SMPTE ST 2082, 4096x2160 @ 60Hz YUV 4:2:2 max. (Can assign one input instead to 12G-SDI SMPTE ST2082, 4096x2160 @ 60Hz max) + 1x 3G-SDI SMPTE 424M 1920x1080 @ 60Hz YUV 4:2:2 max.



# Installation

This section outlines how to physically mount, install, and connect Wirecast Gear 4K units.

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**Note:** Before installing Wirecast Gear 4K, read through the section on [Wirecast Gear 4K Panels](#).

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## Topics

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- [Registering Wirecast Gear 4K 18](#)
- [Table-top Mounting of Wirecast Gear 4K 19](#)
- [Rack Mounting of Wirecast Gear 4K 19](#)
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- [Getting Started 20](#)

## Unpacking Wirecast Gear 4K

Unpack the contents of the shipping container; identify each component and determine that it has arrived in satisfactory condition.

If there is shipping damage to the box, note it on the shipping documents and contact the carrier immediately. If the Gear unit or box contents are damaged in any way, file a claim with the carrier and notify Telestream immediately.

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**Note:** Save the shipping container and packaging materials and store them in a safe place. Original packaging and foam end caps are required for service or when relocating an unmounted Gear unit.

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## Shipping Container Contents

Each Wirecast Gear 4K shipment includes the following:

- Wirecast Gear 4K computer
- Wireless keyboard
- Wireless mouse
- Two batteries for keyboard and mouse
- USB wireless dongle for keyboard and mouse
- Mini DisplayPort to DisplayPort adapters (3 for HD models, 4 for 4K models)
- 3-pin IEC power cable

## Registering Wirecast Gear 4K

Registering the Wirecast Gear 4K system is a requirement to gain access to the licensed copies of Telestream-bundled software. It also ensures the following:

*Safety*—for improvements and product feature updates

*Service*—to receive the industry-leading Telestream warranty service and technical support

*Security*—to protect from loss, theft or catastrophic events where registration may serve as proof of purchase for insurance purposes

Registration is quick, easy, and important—follow these steps:

1. Double-click the *REQUIRED-Register Your Gear* icon on the desktop. Alternatively, go to the Wirecast Gear 4K registration web page:  
<https://www.telestream.net/telestream-support/Wirecast-Gear/register.htm>
2. When Wirecast Gear 4K displays the registration form from the Telestream website in your browser, enter the required information. Check the *I'm not a robot* box (and respond accordingly). Then, click *Register*.



3. If GearCare was purchased, please enter the serial number on the registration page.
4. Click *Submit* to complete registration.

After you successfully register Wirecast Gear 4K, Telestream provides license keys for Wirecast Pro and Switch Player. Use these keys to license these products provided with Wirecast Gear 4K. Telestream also sends an email with all license keys to the registrant.

## Table-top Mounting of Wirecast Gear 4K

Wirecast Gear 4K comes configured with pre-attached feet for table-top use. The unique size and shape of Wirecast Gear 4K is designed to occupy a minimum of space while making connectors and cables easily accessible.

## Rack Mounting of Wirecast Gear 4K

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**Note:** To rack-mount Wirecast Gear 4K, first remove the rubber feet to avoid obstructing the rack space below. Failure to remove the feet may prevent the unit from fitting in the bottom-most position of a rack, or above another device in the rack.

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Two pre-mounted rack-mount “ears” and screws are provided. These allow the unit to fit into a standard 19-inch rack, taking up 2 Rack Units (RU). This configuration is useful for in-place racks and mobile flypacks, where safe transport of your live production system is required.

## Establishing Wirecast Gear 4K Connections

To make connections to your Wirecast Gear 4K system, refer to [Wirecast Gear 4K Panels](#) for connector functions and locations, and then follow these steps.

1. If available, plug a network cable into one of the available RJ45 Ethernet jacks.

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**Note:** After it is powered on, Wirecast Gear 4K will try to connect to your installed network configuration via DHCP over the LAN. If your network requires authentication or specific configuration, please check with your network administrator to determine computer and network setting requirements.

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2. Plug HDMI or SDI source cables into the video input connectors on the right rear panel.

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**Note:** Use cables rated for the input display and certified by either SimplayHD (for HDMI) or high-quality cables rated for the distance and speed of the transmitter (3G-SDI or 12G-SDI cables). Failure to use such cables might cause incorrect operation or damage to the Gear unit and attached equipment.

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3. Plug a standard computer monitor into either a Display Port (DP) monitor output port on the back of the unit, or into a mini DisplayPort jack on one of the Mini DisplayPort to DisplayPort adapters (included).

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**Note:** Use VESA DisplayPort-certified cables to ensure correct operation and to prevent potential damage to the Gear unit or to the attached display.

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**Note:** Every Wirecast Gear 4K unit has three or four display outputs. These are standard display outputs that are used for connecting computer monitors. If you have more than one monitor installed, Wirecast allows you to send a full-screen output of your program to the second display as a program monitor. These are also the ports to be used for in-venue, presentation displays (also known as IMAG) as they provide for low latency output.

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4. Connect stereo audio inputs or outputs via 1/8" (3.5mm) TRS cables on the front (for headsets) or rear (for all other audio) of the unit. Alternatively, connect audio inputs and outputs via USB.
5. Insert the USB dongle into a USB port on the front or back of the Wirecast Gear 4K box.

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**Note:** The dongle communicates with both the mouse and the keyboard.

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6. Turn the keyboard and mouse on, using the power switch on each.
7. After all connections have been made, plug in the attached power cord to provide power to the unit. For input power requirements, see [Technical Specifications](#).
8. Turn on the Wirecast Gear 4K unit by pushing the power button on the front. The button will light, and the unit will begin to boot up.

## Getting Started

To start using Wirecast Gear 4K, follow these steps:

1. Personalize Windows as explained in [Wirecast Gear 4K is ready to stream your live presentations](#).
2. Create individual Windows user accounts on the Wirecast Gear 4K computer, if desired.

Wirecast Gear 4K is ready to stream your live presentations.

# Broadcasting with Wirecast Gear 4K

This section outlines how to get started with Wirecast Gear 4K and how to boot the unit for the first time.

## Topics

- [Launching Wirecast Gear 4K 21](#)

## Launching Wirecast Gear 4K

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**Note:** Every Wirecast Gear 4K unit includes a pre-activated copy of Windows 10 Enterprise IoT LTSC 64-bit. There is no need to enter a serial number or product key as Windows automatically recognizes the unique Gear hardware.

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When you first power up Wirecast Gear 4K, configure Windows for the desired locale and personal preferences. To configure Windows, do the following:

1. (Optional) If you do not have a Microsoft account and do not want to create one, click *Domain Join*, or unplug the network cable until the first boot into Windows,
2. Choose the current version of Windows as your operating system.
3. Select your region.
4. Select the keyboard layout for your locale.
5. Configure a second keyboard (if desired). Otherwise select *Skip*.
6. Accept the Windows license agreement.
7. Sign in using a Microsoft account.
8. Enter a user name.
9. Enter (and re-enter) a password.
10. Provide answers to three security questions, as prompted.
11. Respond to the *Do more across devices* prompt.

**12.** Select *Accept* to choose privacy.

After a brief period of configuration, your Wirecast Gear 4K will boot for the first time into Windows.

# Wirecast Gear 4K Panels

The following topics describe the Wirecast Gear 4K front and rear panels.

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**Note:** Please *do not make any connections* just yet. First, read the panel and connector descriptions and then proceed to the [Installation](#) topic for steps to install and connect to the unit.

---

Wirecast Gear 4K is available in HDMI and SDI configurations. Both configurations share the same front panel features, but each configuration has a unique rear panel.

## Topics

- [Front Panel 24](#)
- [Rear Panel, Left 25](#)
- [Rear Panel, Right 26](#)

## Front Panel

Wirecast Gear 4K has the following connectors on the front panel:

**Figure 1.** The Wirecast Gear 4K Front Panel



**USB 3.0 Ports** Two USB ports support the USB 3.1 Gen 1 (5 Gbit/s) specification.

**Line Out** One 1/8" (3.5mm) stereo line out port is available for use with headphones or a headset.

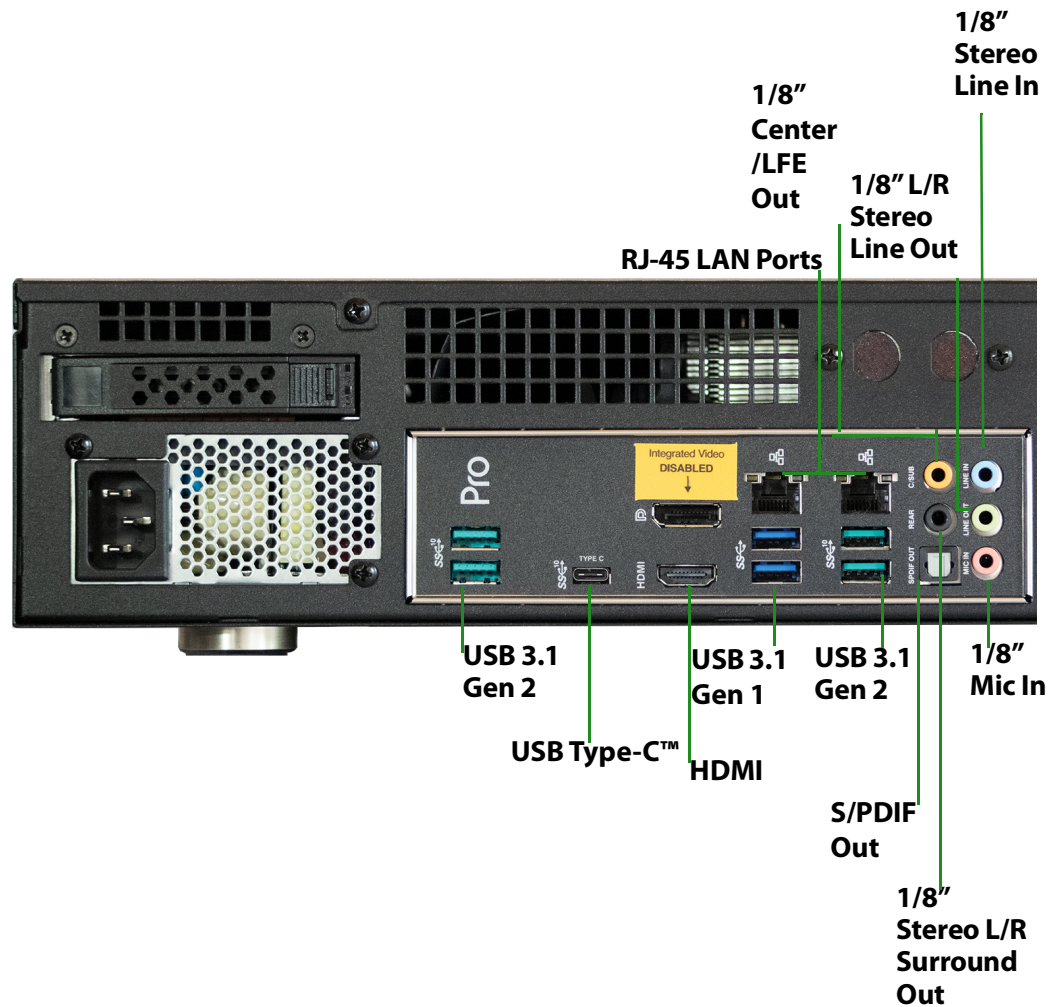
**Mic In** One 1/8" (3.5mm) stereo mic in port is available for use with a microphone or headset.

**Power Switch** This button turns the power on and off. When the Gear unit has been powered on, the button displays a white light.

## Rear Panel, Left

The ports on the left side of the rear panel are defined below.

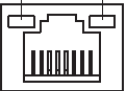
**Figure 2.** The Wirecast Gear 4K Left Rear Panel



**USB 3.1 Ports** Four USB ports support the USB 3.1 Gen 2 (10 Gbit/s) specification, and two ports support the USB 3.1 Gen 1 (5 Gb/s) specification. There are also two additional USB 3.1 Gen 1 (5 Gbit/s) ports on the front panel.

**USB Type-C™ Port** The USB Type-C port supports the USB 3.1 Gen 2 (10 Gbit/s) specification and is compatible to the USB 3.0/2.0/1.1 specification.

**RJ45 LAN Ports** Two Gigabit Ethernet LAN ports provide network connections at up to 1 Gbit/s data rate. The following describes the states of the LAN port LEDs.

Connection/ Speed LED	Activity LED	Connection/Speed LED:		Activity LED:	
	LAN Port	State	Description	State	Description
		Orange	1 Gbps data rate	Blinking	Data transmission or receiving is occurring
		Green	100 Mbps data rate	On	No data transmission or receiving is occurring
		Off	10 Mbps data rate		

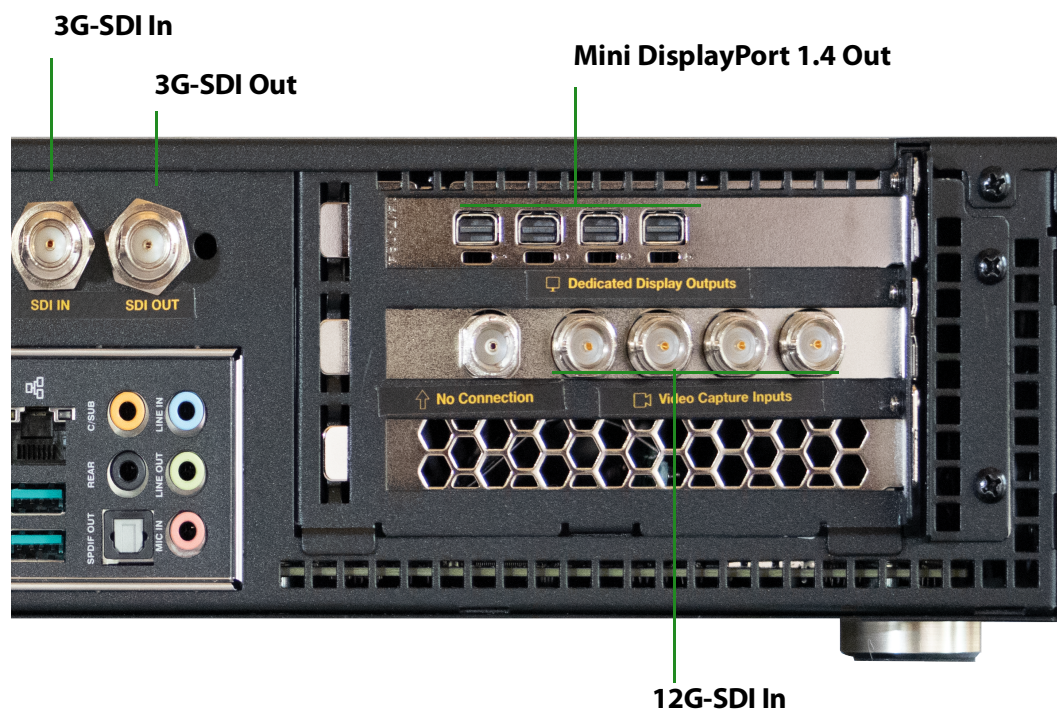
**DisplayPort and HDMI** The DisplayPort and HDMI connectors on this part of the rear panel are disabled and can't be used. Do not connect displays to these ports.

## Rear Panel, Right

Depending on the Wirecast Gear 4K model, different inputs are provided on the right side of the rear panel, as defined below.

**Figure 3.** The Wirecast Gear 4K SDI Right Rear Panel

### Gear 3 4K SDI





**Mini DisplayPort 1.4 Out** Four Mini DisplayPort 1.4 output ports provide up to 4Kp60 output to a display.

**12G-SDI In** Four 12G-SDI input ports provide up to 4Kp60 YUV 4:2:2 inputs. One input is convertible to output using the pre-installed *Desktop Video Setup* application. One 3G-SDI in provides up to 1080p60 YUV 4:2:2 input.

**3G-SDI Out** One 3G-SDI output port provides up to 1080p60 4:2:2 output.

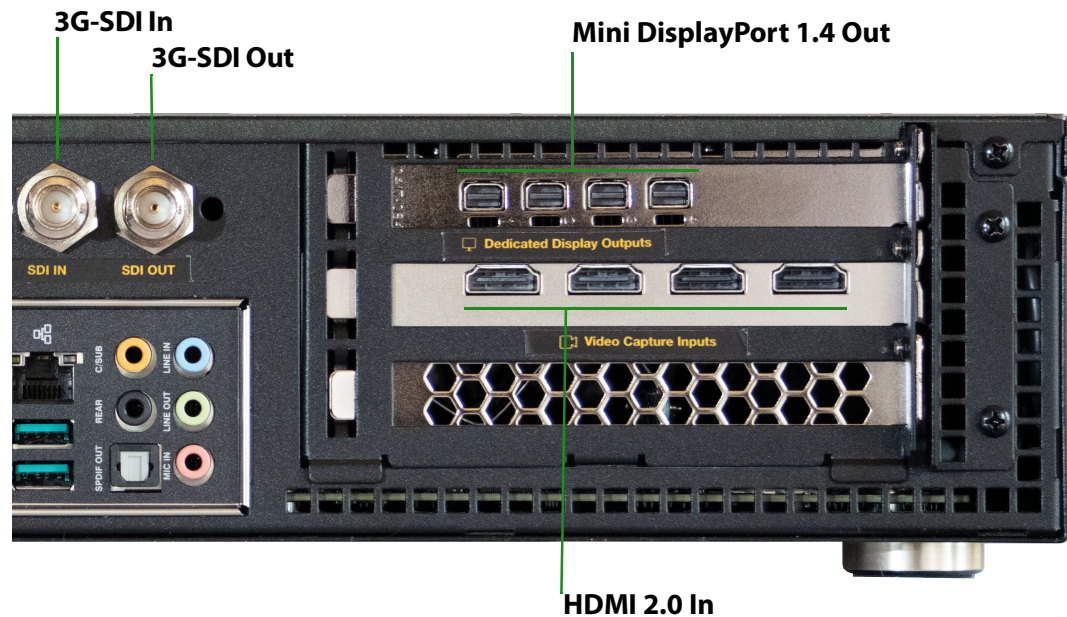
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**Note:** The fifth connector is for hardware genlock. This is not supported in Wirecast software and this connector is therefore not used.

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**Figure 4.** The Wirecast Gear 4K HDMI Right Rear Panel

### Gear 3 4K HDMI



**Mini DisplayPort 1.4 Out** Four Mini DisplayPort 1.4 output ports provide up to 4Kp60 output to a display.

**HDMI 2.0 In** Four HDMI 2.0a input ports provide up to 4Kp60 YUV 4:2:2 or RGB 4:4:4 inputs.

**3G-SDI In** One 3G-SDI input port provides up to 1080p60 YUV 4:2:2 input.

**3G-SDI Out** One 3G-SDI output port provides up to 1080p60 YUV 4:2:2 output.

# Troubleshooting and Updating Wirecast Gear 4K

This section provides information on troubleshooting Wirecast Gear 4K and on obtaining updates.

## Topics

- [General 30](#)
- [Drive Initialization 30](#)
- [Finding Windows Update Driver Issues 31](#)

## General

If the Wirecast Gear 4K unit is not functioning correctly, the following information may assist in resolving any issues.

---

**Caution: Wirecast Gear 4K is a sealed device, with no user serviceable parts and no free internal peripheral bays. Do not open the chassis to try to diagnose a hardware failure, perform service, or make any modification unless given written permission to do so by Telestream. In addition, no chipset/BIOS settings changes are permitted without written authorization from Telestream, including but not limited to changes to the Gear unit's voltages, timings, operating frequencies, I/O enablements or fan speeds/profiles. Opening the chassis, making any unauthorized hardware modifications, performing service on the unit hardware or changing BIOS settings may void any remaining unit warranty, induce random functional and system instability, cause erratic or incorrect operation, damage the unit or other property in the unit's vicinity or cause personal injury.**

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- Close any non-essential applications that may be taking up memory, CPU, or GPU resources.
- Save any work in progress. Then close and reopen Wirecast.
- Restart the computer. Be sure to save any work before you shut the computer down.

If an issue cannot be resolved, see [Contacting Telestream](#).

## Drive Initialization

If external secondary mass storage devices cannot be seen, verify that the devices are physically connected. For any mass storage device in or attached to the Gear unit that continues not to appear, the following procedure may assist in making the device visible again:

1. Open *Disk Management*.
2. Confirm that the secondary hard drive exists. In *Disk Management* this is listed as New Volume (D:).
3. Right-click the secondary hard drive (partition D) and select *Format*.
4. In the pop-up window, set *NTFS* as the *File system* and keep *Default* as the *Allocation unit size*.
5. Click *OK*.

The mass storage device should now be visible in Windows and its applications.

## Finding Windows Update Driver Issues

Windows updates may occasionally cause disruption to drivers on Wirecast Gear 4K, causing incorrect operation of the unit. To determine if driver issues exist, do the following:

1. Click the Windows icon, and type "Computer Management."
2. To open the Windows *Computer Management* control panel, click the *Computer Management* icon.
3. If Windows displays a yellow question mark (?) next to *System Devices*, *Other Devices*, or any capture devices listed, the unit may have an issue related to a Windows update.

This article explains the Microsoft Windows update issue:

<http://www.howtogeek.com/243581/windows-10-may-delete-your-programs-without-asking/>.



# Regulatory Compliance Statements

This section presents the Regulatory Compliance Statements for Wirecast Gear 4K. It also includes European Union and European Fair Trade Association Regulatory Compliance along with Warning and Caution Messages.

## Motherboard Battery Safety

The Wirecast Gear 4K motherboard holds a coin cell battery. Please note the following safety concerns for the motherboard battery:

- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, can result in an explosion.
- Leaving a battery in an extremely high temperature environment can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

## Appendix – Safety & Compliance

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### Federal Communications Commission (FCC) Compliance Notices

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#### Class A Interference Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

#### FCC Caution

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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.

### Canadian ICES Statement

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#### Canadian Department of Communications Radio Interference Regulations

This digital apparatus does not exceed the Class A limits for radio-noise emissions from a digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications. This Class A digital apparatus complies with Canadian ICES-003.

#### Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada. Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

### European Union and European Free Trade Association (EFTA) Regulatory Compliance

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This equipment may be operated in the countries that comprise the member countries of the European Union and the European Free Trade Association. These countries, listed in the following paragraph, are referred to as The European Community throughout this document:

AUSTRIA, BELGIUM, BULGARIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, LATVIA, LITHUANIA, LUXEMBOURG, MALTA, NETHERLANDS, POLAND, PORTUGAL, ROMANIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, UNITED KINGDOM, ICELAND, LICHTEINSTEIN, NORWAY, SWITZERLAND



## Declaration of Conformity

Marking by this symbol indicates compliance with the Essential Requirements of the EMC Directive of the European Union 2014/30/EU.



This equipment meets the following conformance standards:

### Safety

EN 60950-1: 2006 + A11 + A1 + A12 + A2 (T-Mark License),

IEC 60950-1: 2005 + A1 + A2 (CB Scheme Report/Certificate)

Additional licenses issued for specific countries available on request.

### Emissions

EN 55032: 2012 + AC: 2013, CISPR 32: 2015,

EN 61000-3-2: 2014, EN 61000-3-3: 2013

### Immunity

EN 55024: 2010, CISPR 24: 2010, EN 61000-4-2: 2009,

EN 61000-4-3: 2006 + A1: 2008 + A2: 2010, EN 61000-4-4: 2012,

EN 61000-4-5: 2006, EN 61000-4-6: 2009, EN 61000-4-11: 2004

Environments: E2, E3 and E4

### Environmental

Low Voltage Directive 2014/35/EU, RoHS Directive 2011/65/EU + Annex II Amendment 2015/860,

REACH 2006/1907/EC, WEEE 2012/19/EU, Packaging Directive 94/62/EC, Battery Directive 2006/66/EC



**Warning!** This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take appropriate measures.

**Achtung!** Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in welchen Fällen der Benutzer für entsprechende Gegenmaßnahmen verantwortlich ist.

**Attention!** Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées..

## Recycling Notice



This symbol on the product or its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste for recycling, please contact your local authority, or where you purchased your product.

## Translated Warning and Caution Messages

The following caution statements, warning conventions, and warning messages apply to this product and manual.



Warning Symbol



Hazard Symbol



Caution Symbol

## Before Operation Please Read These Instructions



**Warning!** Read and follow all warning notices and instructions marked on the product or included in the documentation.

**Avertissement!** Lisez et conformez-vous à tous les avis et instructions d'avertissement indiqués sur le produit ou dans la documentation.

**Warnung!** Lesen und befolgen Sie die Warnhinweise und Anweisungen, die auf dem Produkt angebracht oder in der Dokumentation enthalten sind.

**¡Advertencia!** Lea y siga todas las instrucciones y advertencias marcadas en el producto o incluidas en la documentación.

**Aviso!** Leia e siga todos os avisos e instruções assinalados no produto ou incluídos na documentação.

**Avviso!** Leggere e seguire tutti gli avvisi e le istruzioni presenti sul prodotto o inclusi nella documentazione.



**Warning!** Do not use this device near water and clean only with a dry cloth.

**Avertissement!** N'utilisez pas cet appareil près de l'eau et nettoyez-le seulement avec un tissu sec.

**Warnung!** Das Gerät nicht in der Nähe von Wasser verwenden und nur mit einem trockenen Tuch säubern.

**¡Advertencia!** No utilice este dispositivo cerca del agua y límpielo solamente con un paño seco.

**Aviso!** Não utilize este dispositivo perto da água e limpe-o somente com um pano seco.

**Avviso!** Non utilizzare questo dispositivo vicino all'acqua e pulirlo soltanto con un panno asciutto.



**Warning!** Do not open the chassis. There are no user-serviceable parts inside.

Opening the chassis will void the warranty unless performed by a Telestream service center or licensed facility.

**Avertissement!** Ne pas ouvrir le châssis. Aucun élément à l'intérieur du châssis ne peut être réparé par l'utilisateur. La garantie sera annulée si le châssis est ouvert par toute autre personne qu'un technicien d'un centre de service ou d'un établissement agréé Telestream.

**Warnung!** Öffnen Sie das Gehäuse nicht. Keine der Geräteteile können vom Benutzer gewartet werden. Durch das Öffnen des Gehäuses wird die Garantie hinfällig, es sei denn, solche Wartungsarbeiten werden in einem Telestream-Service-Center oder einem lizenzierten Betrieb vorgenommen.

**¡Advertencia!** No abra el chasis. El interior no contiene piezas reparables por el usuario. El abrir el chasis anulará la garantía a menos que se lo haga en un centro de servicio Telestream o en un local autorizado.

**Advertência!** Não abra o chassi. Não há internamente nenhuma peça que permita manutenção pelo usuário. Abrir o chassi anula a garantia, a menos que a abertura seja realizada por uma central de serviços da Telestream ou por um local autorizado.

**Avvertenza!** Non aprire lo chassis. All'interno non ci sono parti riparabili dall'utente. L'apertura dello chassis invaliderà la garanzia se non viene effettuata da un centro ufficiale o autorizzato Telestream.



**Warning!** Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

**Avertissement!** Ne bloquez aucune ouverture de ventilation. Suivez les instructions du fabricant lors de l'installation.

**Warnung!** Die Lüftungsöffnungen dürfen nicht blockiert werden. Nur gemäß den Anweisungen des Herstellers installieren.

**¡Advertencia!** No bloquee ninguna de las aberturas de la ventilación. Instale de acuerdo con las instrucciones del fabricante.

**Aviso!** Não obstrua nenhuma das aberturas de ventilação. Instale de acordo com as instruções do fabricante.

**Avviso!** Non ostruire le aperture di ventilazione. Installare in conformità con le istruzioni del fornitore.



**Warning!** Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

**Avertissement!** N'installez pas l'appareil près d'une source de chaleur telle que des radiateurs, des bouches d'air de chauffage, des fourneaux ou d'autres appareils (amplificateurs compris) qui produisent de la chaleur.

**Warnung!** Nicht in der Nähe von Wärmequellen wie Heizkörpern, Heizregistern, Öfen oder anderen Wärme erzeugenden Geräten (einschließlich Verstärkern) aufstellen.

**¡Advertencia!** No instale cerca de fuentes de calor tales como radiadores, registros de calor, estufas u otros aparatos (incluidos amplificadores) que generan calor.

**Aviso!** Não instale perto de nenhuma fonte de calor tal como radiadores, saídas de calor, fogões ou outros aparelhos (incluindo amplificadores) que produzam calor.

**Avviso!** Non installare vicino a fonti di calore come termosifoni, diffusori di aria calda, stufe o altri apparecchi (amplificatori compresi) che emettono calore



**Warning!** Refer all servicing to qualified service personnel. Servicing is required when the device 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 device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.

**Avertissement!** Référez-vous au personnel de service qualifié pour tout entretien. L'entretien est exigé quand l'appareil a été endommagé de quelque manière que ce soit, par exemple lorsque le cordon d'alimentation ou la prise sont endommagés, que du liquide a été versé ou des objets sont tombés dans l'appareil, que l'appareil a été exposé à la pluie ou à l'humidité, ne fonctionne pas normalement ou est tombé.

**Warnung!** Das Gerät sollte nur von qualifizierten Fachkräften gewartet werden. Eine Wartung ist fällig, wenn das Gerät in irgendeiner Weise beschädigt wurde, wie bei beschädigtem Netzkabel oder Netzstecker, falls Flüssigkeiten oder Objekte in das Gerät gelangen, das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, nicht ordnungsgemäß funktioniert oder fallen gelassen wurde.

**¡Advertencia!** Consulte al personal calificado por cuestiones de reparación. El servicio de reparación se requiere cuando el dispositivo ha recibido cualquier tipo de daño, por ejemplo cable o espigas dañadas, se ha derramado líquido o se han caído objetos dentro del dispositivo, el dispositivo ha sido expuesto a la lluvia o humedad, o no funciona de modo normal, o se ha caído.

**Aviso!** Remeta todos os serviços de manutenção para o pessoal de assistência qualificado. A prestação de serviços de manutenção é exigida quando o dispositivo foi danificado mediante qualquer forma, como um cabo de alimentação ou ficha que se encontra danificado/a, quando foi derramado líquido ou caíram objectos sobre o dispositivo, quando o dispositivo foi exposto à chuva ou à humidade, quando não funciona normalmente ou quando foi deixado cair.

**Avviso!** Fare riferimento al personale qualificato per tutti gli interventi di assistenza. L'assistenza è necessaria quando il dispositivo è stato danneggiato in qualche modo, ad esempio se il cavo di alimentazione o la spina sono danneggiati, è stato rovesciato del liquido è stato rovesciato o qualche oggetto è caduto nel dispositivo, il dispositivo è stato esposto a pioggia o umidità, non funziona correttamente o è caduto



**Warning!** Disconnect the external AC power supply line cord(s) from the mains power before moving the unit.  
**Avertissement!** Retirez le ou les cordons d'alimentation en CA de la source d'alimentation principale lorsque vous déplacez l'appareil.  
**Warnung!** Trennen Sie die Wechselstrom-Versorgungskabel vom Netzstrom, bevor Sie das Gerät verschieben.  
**¡Advertencia!** Cuando mueva la unidad desenchufe de la red eléctrica el/los cable(s) de la fuente de alimentación CA tipo brick.  
**Advertência!** Remova os cabos CA de alimentação brick da rede elétrica ao mover a unidade.  
**Avvertenza!** Scollegare il cavo dell'alimentatore quando si sposta l'unità.



**Hazard!** High Voltage. This situation or condition can cause injury due to electric shock.  
**Avertissement!** Tension élevée. Cette situation ou condition peut causer des blessures dues à un choc électrique.  
**Warnung!** Hochspannung. Diese Situation oder Bedingung kann zu Verletzungen durch Stromschlag führen.  
**¡Advertencia!** Alto voltaje. Esta situación o condición puede causar lesiones debidas a una descarga eléctrica.  
**Aviso!** Alta Tensão. Esta situação ou condição pode causar danos devido a choques elétricos.  
**Avviso!** Alta tensione. Questa situazione o condizione può causare lesioni a causa di scosse elettriche.



**Warning!** Only use attachments and accessories specified and/or sold by the manufacturer.  
**Avertissement!** Utilisez seulement les attaches et accessoires spécifiés et/ou vendus par le fabricant.  
**Warnung!** Verwenden Sie nur Zusatzgeräte und Zubehör angegeben und / oder verkauft wurde durch den Hersteller.  
**¡Advertencia!** Utilice solamente los accesorios y conexiones especificados y/o vendidos por el fabricante.  
**Aviso!** Utilize apenas equipamentos/acessórios especificados e/ou vendidos pelo fabricante.  
**Avviso!** Utilizzare soltanto i collegamenti e gli accessori specificati e/o venduti dal produttore.



**Warning!** Unplug this device during lightning storms or when unused for long periods of time.  
**Avertissement!** Débranchez cet appareil pendant les orages avec éclaircies s'il est inutilisé pendant de longues périodes.  
**Warnung!** Das Gerät ist bei Gewitterstürmen oder wenn es über lange Zeiträume ungenutzt bleibt vom Netz zu trennen.  
**¡Advertencia!** Desenchufe este dispositivo durante tormentas eléctricas o cuando no se lo utilice por largos periodos del tiempo.  
**Aviso!** Desconecte este dispositivo da tomada durante trovoadas ou quando não é utilizado durante longos periodos de tempo.  
**Avviso!** Utilizzare soltanto i collegamenti e gli accessori specificati e/o venduti dal produttore, quali il treppiedi e l'esoscheletro.

## Korea KCC Compliance Statement

사용자안내문
이 기기는 업무용 환경에서 사용할 목적으로 적합성 평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

**Warning!** 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.

**Avvertimento!** La sécurité de la prise polarisée ou de la prise de type mise à la terre ne doit en aucun cas être empêchée de fonctionner. Une prise polarisée a deux broches, l'une étant plus large que l'autre. Une prise de type mise à la terre a deux broches et une troisième broche pour la mise à la terre. La broche large ou la troisième broche sont fournies pour votre sécurité. Si la prise fournie ne s'insère pas dans votre prise femelle, consultez un électricien pour le remplacement de la prise femelle obsolète.

**Warnung!** Der Sicherheitszweck des gepolten bzw. Schukosteckers ist zu berücksichtigen. Ein gepolter Stecker verfügt über zwei Pole, von denen einer breiter als der andere ist. Ein Schukostecker verfügt neben den zwei Polen noch über einen dritten Pol zur Erdung. Der breite Pol bzw. der Erdungspol dienen der Sicherheit. Wenn der zur Verfügung gestellte Stecker nicht in Ihren Anschluss passt, konsultieren Sie einen Elektriker, um den veralteten Anschluss zu ersetzen.

**¡Advertencia!** No eche por tierra la finalidad del tipo de enchufe polarizado con conexión a tierra. Un enchufe polarizado tiene dos espigas, una más ancha que la otra. Un enchufe con conexión a tierra tiene dos espigas iguales y una tercera espiga que sirve para la conexión a tierra. La espiga ancha, o la tercera espiga, sirven para su seguridad. Si el enchufe suministrado no encaja en el tomacorriente, consulte con un electricista para reemplazar el tomacorriente obsoleto.

**Aviso!** Não anule a finalidade da segurança da ficha polarizada ou do tipo ligação terra. Uma ficha polarizada tem duas lâminas sendo uma mais larga do que a outra. Uma ficha do tipo de ligação à terra tem duas lâminas e um terceiro terminal de ligação à terra. A lâmina larga ou o terceiro terminal são fornecidos para sua segurança. Se a ficha fornecida não couber na sua tomada, consulte um electricista para a substituição da tomada obsoleta.

**Avviso!** Non compromettere la sicurezza della spina polarizzata o con messa a terra. Una spina polarizzata ha due spinotti, di cui uno più largo. Una spina con messa a terra ha due spinotti e un terzo polo per la messa a terra. Lo spinotto largo o il terzo polo sono forniti per motivi di sicurezza. Se la spina fornita non si inserisce nella presa di corrente, contattare un elettricista per la sostituzione della presa obsoleta.



**Warning!** Since the Mains plug is used as the disconnection for the device, it must remain readily accessible and operable.

**Avvertimento!** Puisque la prise principale est utilisée pour débrancher l'appareil, elle doit rester aisément accessible et fonctionnelle.

**Warnung!** Da der Netzstecker als Trennvorrichtung dient, muss er stets zugänglich und funktionsfähig sein.

**¡Advertencia!** Puesto que el enchufe de la red eléctrica se utiliza como dispositivo de desconexión, debe seguir siendo fácilmente accesible y operable.

**Aviso!** Dado que a ficha principal é utilizada como a desconexão para o dispositivo, esta deve manter-se prontamente acessível e funcional.

**Avviso!** Poiché il cavo di alimentazione viene usato come dispositivo di sconnessione, deve rimanere prontamente accessibile e operabile.

**Warning!** Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the device.

**Avertissement!** Protégez le cordon d'alimentation pour que l'on ne marche pas dessus ou qu'on le pince, en particulier au niveau des prises mâles, des réceptacles de convenance, et à l'endroit où il sort de l'appareil.

**Warnung!** Vermeiden Sie, dass auf das Netzkabel getreten oder das Kabel geknickt wird, insbesondere an den Steckern, den Steckdosen und am Kabelausgang am Gerät.

**¡Advertencia!** Proteja el cable de energía para que no se le pise ni apriete, en especial cerca del enchufe, los receptáculos de conveniencia y el punto del que salen del equipo.

**Aviso!** Proteja o cabo de alimentação de ser pisado ou de ser comprimido particularmente nas fichas, em tomadas de parede de conveniência e no ponto de onde sai do dispositivo.

**Avviso!** Proteggere il cavo di alimentazione in modo che nessuno ci cammini sopra e che non venga schiacciato soprattutto in corrispondenza delle spine e del punto in cui esce dal dispositivo.