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User Manual

Long Range Wireless 4K Video Transmitter
& Receiver Kit with Local Pass-through

GWLRSSKIT4K

PART NO. M1673

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Package Contents

- 1 x Transmitter
- 1 x Receiver
- 1 x USB Type-A to Type-A cable
- 2 x HDMI Cables
- 2 x IR Extenders
- 2 x 12V/1A power adapters
- 2 x mounting Kits
- 1 x Quick Start Guide
- 1 x Warranty Card

System Requirements

Video/Audio source

- Device with HDMI output

Display

- Monitor with HDMI input
- TV with HDMI input
- Projector with HDMI input

Cables

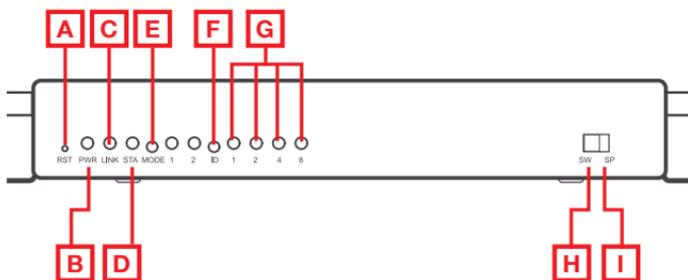
- HDMI 1.4 or better cables

Product Features

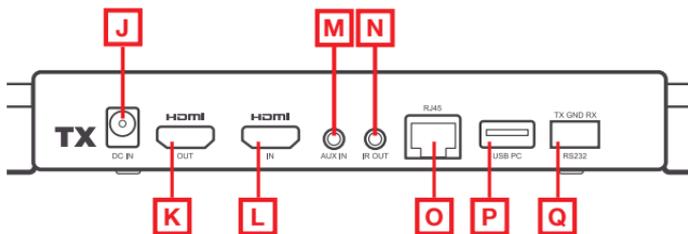
1. Versatile design that can be used as either as a Splitter or a Switch supporting either 1 x 4 or 10 x 1 mode.
2. Extends resolutions 4K 30P, 1080 60P of HDMI signal up to 180m (600ft) wirelessly.
3. Supports IR (20KHz~60KHz) extension or RS-232 extension over wireless.
4. Supports Stereo Audio over wireless, independent to HDMI.
5. Supports USB (Keyboard, Mouse) extension and KVM switch wirelessly.
6. Supports EDID pass-through and Transmitter resolution pass-through, including most popular 16:9, 16:10, 4:3 resolution and timing (for supported list please refer to p.18).
7. Supports Graphic/ Video mode selection and the latency is between 0.06-0.10 seconds.
8. Supports cloud firmware upgrading when connecting to the router with internet access.
9. Supports Web settings through Ethernet cable to the LAN port.

Product Overview

Transmitter Front

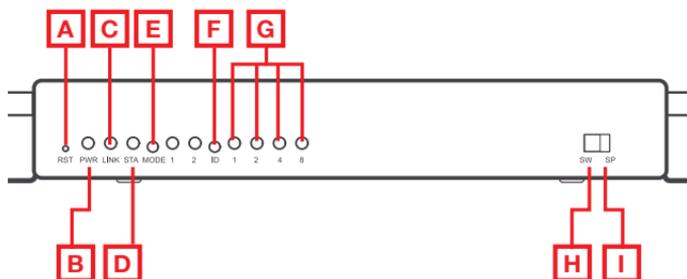


Transmitter Back

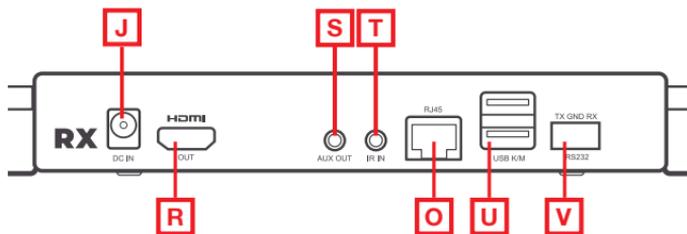


- A. **Reset button** - Long press to reset to factory default settings
- B. **Power LED** - ON when power is supplied
- C. **Link LED** - Flashing when connected
- D. **Status LED** - ON when HDMI cable is connected
- E. **Mode button** - Short press to switch between Graphics Mode for shorter latency and Video Mode (default) for less packet loss
- F. **Channel ID button** - Press to switch channel ID. Please refer to #2 under Hardware Installation on page 10.
- G. **Channel ID LED** - The channel number is the sum of what each LED represents. For example if LED 1 lights up that is Channel 1. If LED 1 and 2 lights up, that means you are on channel 3 (1+2) and if LED 2 and 4 lights up that is channel 6 and so on. Refer to the table on page 12.
- H. **Switch mode** - The Channel ID LED will light up to display what channel the transmitter is on, to connect to the transmitter from the receiver you will need to match the channel ID to be the same.
- I. **Splitter mode (default)** - Direct Connection to receiver(s) for 1 to 1 extending display or 1 to N multicast. No Channel ID will be displayed in this mode.
- J. **Power port** - Requires 12V/1A power supply

Receiver Front



Receiver Back

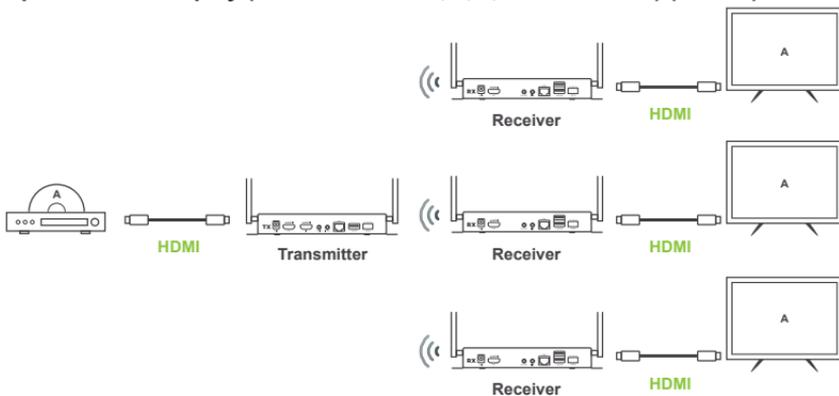


- K. **HDMI Out port** - Connects to local monitor for HDMI loopback
- L. **HDMI In port** - Connects to your device (laptop or computer)
- M. **AUX In port** - Audio input from external audio source to replace the audio from HDMI source
- N. **IR Out port** - Supports IR output for remote control. This is where you plug in the included IR extender cable
- O. **RJ45 port** - Connects to router or switch with LAN cable for bridge. Only for specific settings like firmware upgrade and CMS system control
- P. **USB PC port** - Connects to your PC for control of your keyboard and mouse remotely with the included USB-A to USB-A cable
- Q. **RS232 port** - Extend RS-232 signal to/from PC side
- R. **HDMI Out port** - Connects to monitor or projector with HDMI input port
- S. **AUX Out port** - Audio output to external speakers. Note that HDMI output port sends audio and video simultaneously
- T. **IR In port** - Supports IR input for remote control from the display side
- U. **USB K/M** - Supports external keyboard and mouse connection for remote access to your PC from the display side
- V. **RS232 port** - Extends RS-232 signal to/from the display side

Hardware Installation

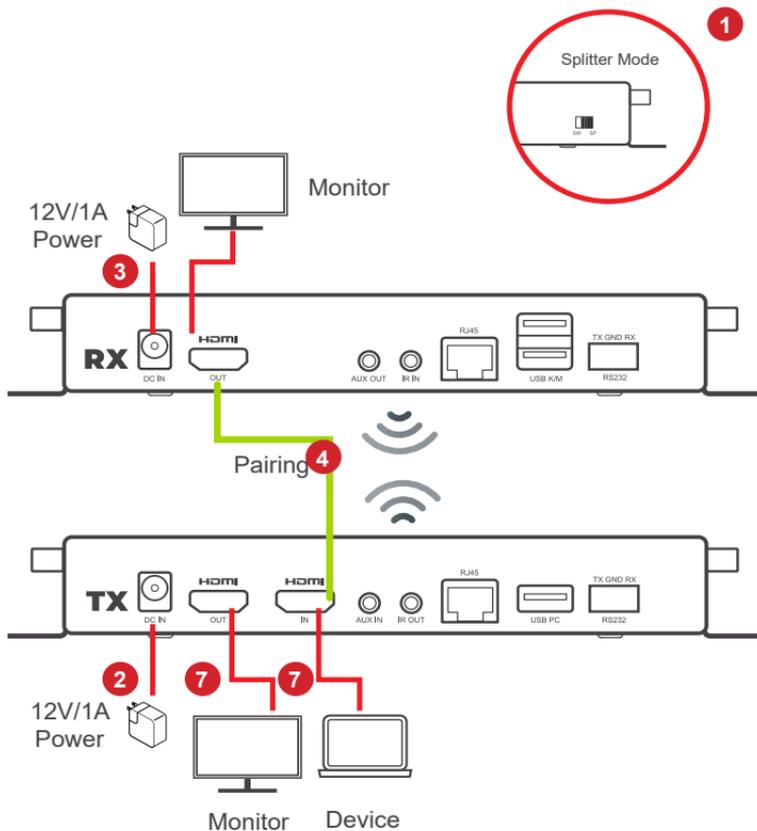
This product's versatility allows it to be used as either a switch where you can have multiple sources that could be your PC, Blu-ray, or satellite box (up to 10) available to stream different contents, one at a time to a single display in switch mode, or you can have 1 source streaming to 4 displays all at once in splitter mode. Splitter mode is ideal for digital signage, office presentations, digital menus at fast food places, flight schedules, etc. All this is done wirelessly so there are no unsightly, or expensive wires to run.

Splitter Mode Display (1 transmitter to 1, 2, 3, or 4 receivers) (default):



Adding Additional Receivers in Splitter Mode

1. Position the toggle switch to Splitter Mode (SP) on both the Receiver and the Transmitter.
2. Connect 12V/1A power adapter to the transmitter. Power on the transmitter and wait till both the power and the link lights are on solid.
3. Connect 12V/1A power adapter to the receiver. Power on the receiver and wait till the power and the link lights are on solid.
4. Plug the HDMI cable from the receiver HDMI Out port to the transmitter HDMI IN port (please refer to the diagram next page).
5. The STA LED on the receiver will flash when pairing and will turn solid at this time the transmitter STA LED will start to flash and then turn solid. The pairing of the transmitter and receiver is now complete.
6. The transmitter Wi-Fi LED will then start to flash indicating the transmitter is now transmitting contents. Please note that this step is necessary for every additional receiver added to the transmitter.
7. After pairing, connect your wired HDMI display (using an HDMI cable) to the Transmitter HDMI Out port (optional), and connect your source device to HDMI In port on the Transmitter.
8. For adding additional receivers, repeat step 3-7.



Troubleshooting guide: If there's no signal on the monitor connected to Receiver, please make sure Receiver and Transmitter:

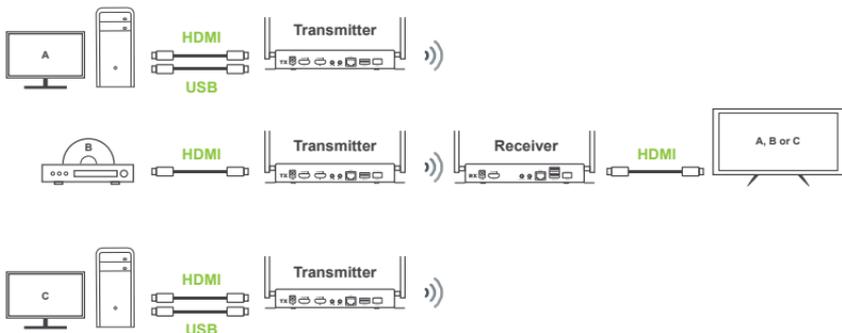
- Are both switched to Splitter mode
- Have been paired together
- Please note that with more receivers there will be a decrease in effective distance (range) between transmitter and receiver(s)

Number of transmitter	Number of receiver*	Wireless Distance**
1	1	600 ft.
1	2	300 ft.
1	3	150 ft.
1	4	75 ft.

*Adding more receivers will decrease the wireless range.

**Wireless range is based on clear line of sight condition. Any obstruction in the environment may affect this range.

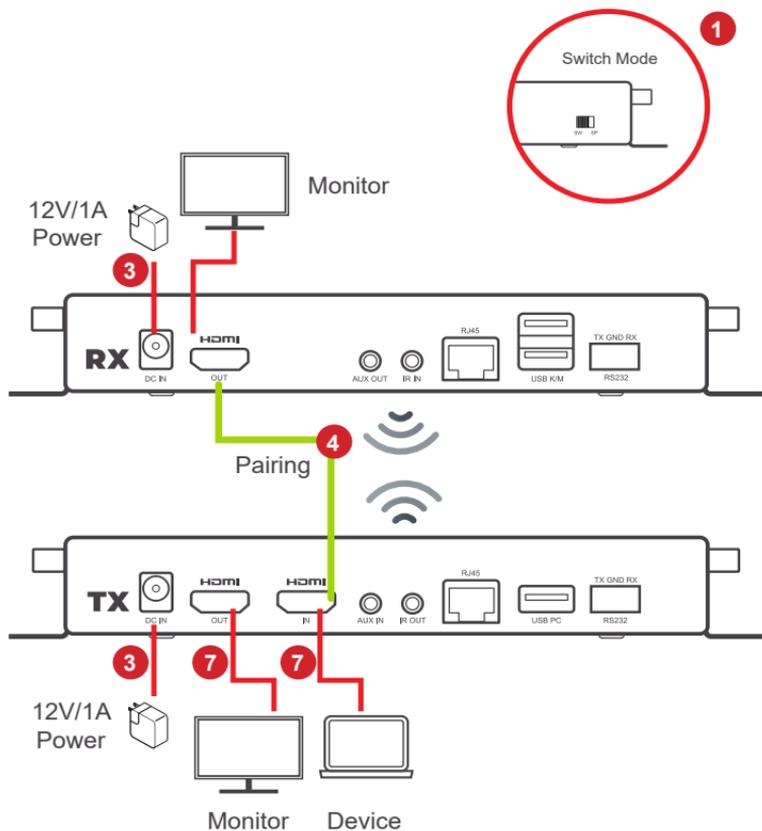
Switch Mode Display (N to 1, up to 10 transmitters to 1 receiver):



Adding Extra Transmitters in Switch Mode

1. Position the toggle switch to Switch Mode (SW) on both the Receiver and the Transmitter.
2. Select the channel by pressing the ID button to the channel you want to use making sure that both the transmitter and receiver channels match.
3. Connect 12V/1A power adapter to both the transmitter and the receiver and wait till both the power LED and Link LED are solid.
4. Plug the HDMI cable from the receiver HDMI Out port to the transmitter HDMI IN port (please refer to the below diagram).
5. The STA LED on the receiver will start to flash and turn solid, the STA LED on the transmitter will then start to flash and turn solid, the pairing is now completed.
6. The transmitter Wi-Fi LED will then start to flash indicating the transmitter is now transmitting contents. Please note that this step is necessary for every additional transmitter added to the receiver.
7. After pairing, connect your HDMI wired display (using an HDMI cable) to the Transmitter HDMI Out port (optional), and connect your source device to HDMI In port on the Transmitter.
8. Make sure the receiver and the transmitter are on the same channel ID.
9. For adding additional transmitter, repeat step 3-8.

*Note: Every transmitter in the same location should be set to a different channel ID.



*Troubleshooting guide: If there's no signal on the monitor connected to the receiver, please make sure that the receiver and the transmitter are:

- A. Both switched to Switch Mode
- B. Have been paired together
- C. Set to the same channel ID

Setting up the GWLRSSKIT4K in Switch mode

Please note that although there are 15 channels, there can only be 10 transmitters to 1 receiver and to go from a higher channel to a lower channel you need to cycle through to channel 15 to get back to channel 1 again.

Channel adjustment: Channel 1-15. Press ID button to switch channel from 1 to 15. See below on how channel selection is implemented, digits under the LED are added together to make all the channels except for channels 1, 2, 4 and 8.

As illustrated below, to get to different channels you need to add all the lighted LEDs together. For example if LEDs 1 and 2 are lit up, that means you are on channel 3 and if 1 and 4 are lit up that means it is on channel 5, and so on.



RS-232: Three pin assignments of the RS-232 ports from left to right are TX, Ground, and RX respectively.



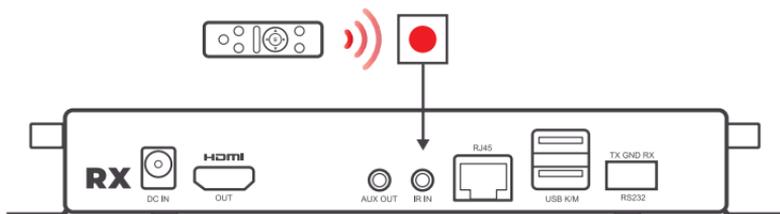
TX GND RX

Installation of Remote Control:

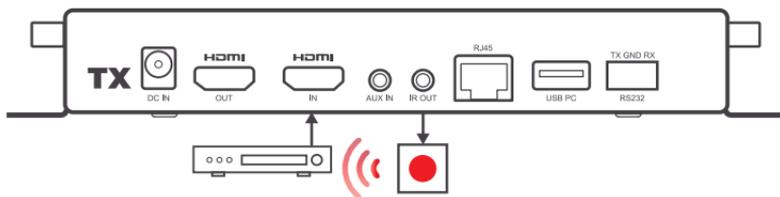
Three methods of remote control are supported: IR passthrough, USB Keyboard/Mouse control, and RS-232 connection. The connection examples are for the remote-control functions:

IR control: Connect the included IR extender to the receiver and the transmitter IR ports to control the source device connected to the transmitter from the receiver (for example: if you want to control your Blu-ray player from your TV). The Receiver has an IR input port and the Transmitter has an IR output port. Plug the IR emitter (in the transmitter accessory pack) into the IR Out port of the transmitter and remove the tape cover from the emitter head. Position the head where the device (in this case the Blu-ray player) IR window is, usually this will be a circular indentation or if not you can shine a flash light to the front of the player and you should be able to see the IR window, this will be where you need to position the IR emitter.

Plug the IR extender into the receiver IR In port and position the head near the display/TV where it is visible to you, this will be where you will be pointing the Blu-ray remote at to control your Blu-ray.



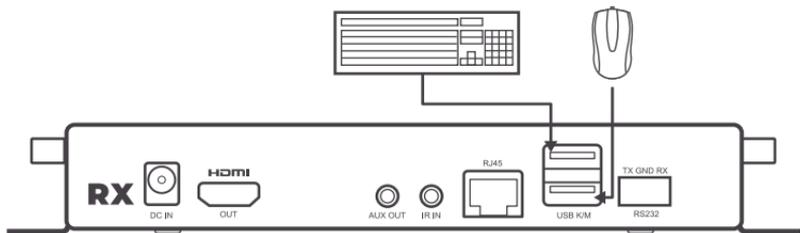
Receiver



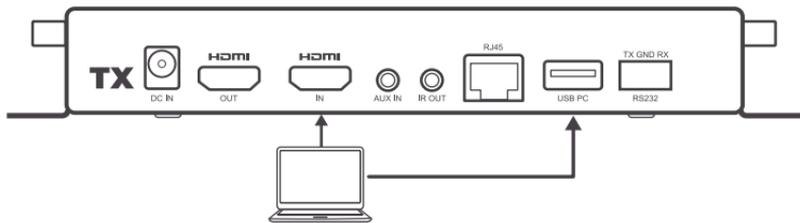
Transmitter

USB Keyboard/ Mouse control:

Connect keyboard/ mouse to the receiver USB-A ports, then connect the included USB-A to USB-A cable from the transmitter to a USB-A port of the computer. Your computer can now be controlled from the receiver (display side) with the connected mouse and keyboard. Any movement from your keyboard or mouse will be reflected on the display screen. Keyboard and mouse connection to the receiver and USB-A to USB-A transmitter to computer connections are shown in the below diagram.



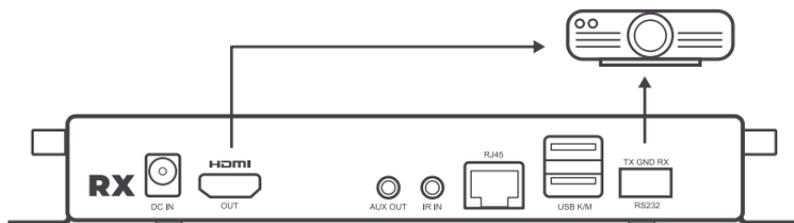
Receiver



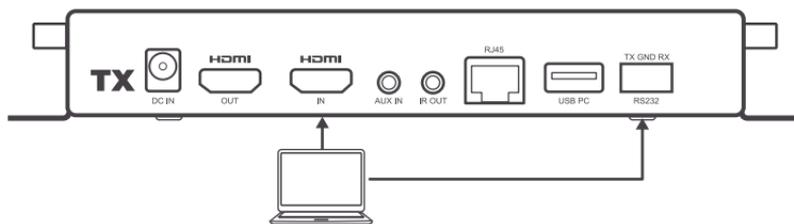
Transmitter

RS-232 connection (Optional):

Connect RS-232 device (such as a projector) to the receiver for a computer or remote control can control or report device status (in this example, a projector) to the computer connected to the transmitter per below diagram. RS-232 allows bi-directional signal, which makes it possible to monitor (signal sent from the projector to the computer) and to remote control the projector that is connected to the receiver from the transmitter (connected to the computer) per below diagram.

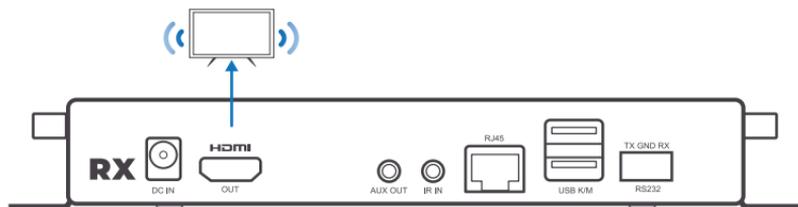


Receiver

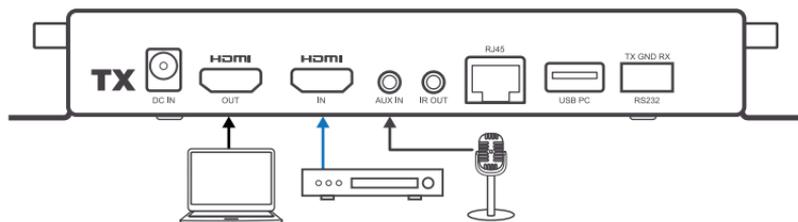


Transmitter

AUX input and HDMI output



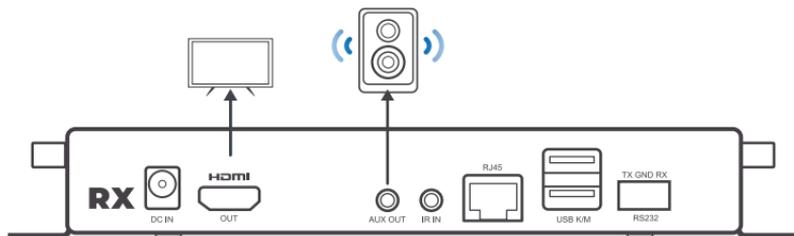
Receiver



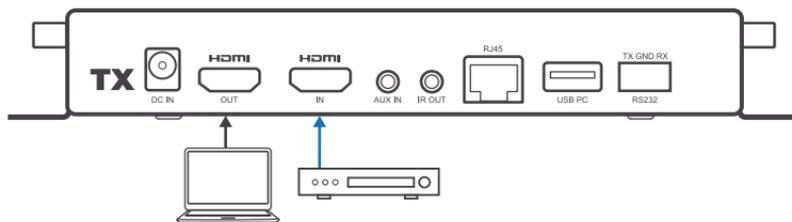
Transmitter

If you need additional audio input for your videostream, you can connect a microphone to the aux in port of the transmitter.

HDMI input and HDMI/ AUX output



Receiver



Transmitter

For additional audio output, connect your speaker to aux out port of your receiver.

Display Resolution Reference

Support list of display input		4K Model
TX HDMI input and RX HDMI output		1.11534.0
TX HDMI input	RX HDMI output	HDMI loopback output
640 x 480 60Hz	800 x 600 60Hz	640 x 480 60 Hz
800 x 600 60Hz	800 x 600 60Hz	800 x 600 60Hz
1024 x 768 60Hz	1024 x 768 60Hz	1024 x 768 60Hz
1208 x 720 60Hz	1208 x 720 60Hz	1208 x 720 60Hz
1208 x 720 50Hz	1208 x 720 60Hz	1208 x 720 50Hz
1208 x 768 60Hz	1208 x 768 60Hz	1208 x 768 60Hz
1208 x 800 60Hz	1208 x 800 60Hz	1208 x 800 60Hz
1208 x 960 60Hz	1208 x 960 60Hz	1208 x 960 60Hz
1208 x 1024 60Hz	1208 x 1024 60Hz	1208 x 1024 60Hz
1360 x 768 60Hz	1920 x 1080 60Hz	1360 x 768 60Hz
1400 x 1050 60Hz	1400 x 1050 60Hz	1400 x 1050 60Hz
1440 x 900 60Hz	1440 x 900 60Hz	1440 x 900 60Hz
1920 x 1200 60Hz	1920 x 1200 60Hz	1920 x 1200 60Hz
1600 x 1200 60Hz	1600 x 1200 60Hz	1600 x 1200 60Hz
1680 x 1050 60Hz	1680 x 1050 60Hz	1680 x 1050 60Hz
1920 x 1080 60Hz	1920 x 1080 60Hz	1920 x 1080 60Hz
1920 x 1080i 60Hz	1920 x 1080 60Hz	1920 x 1080i 60Hz
1920 x 1080 50Hz	1920 x 1080 60Hz	1920 x 1080 50Hz
1920 x 1080i 50Hz	1920 x 1080 60Hz	1920 x 1080i 50Hz
3840 x 2160 60Hz	3840 x 2160 30Hz	3840 x 2160 60Hz
4096 x 2160 60Hz	4096 x 2160 30Hz	4096 x 2160 60Hz

Compliance Information

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential setting. This product generates, uses, and can radiate radio frequency energy and, if not installed and used as directed, it may cause harmful interference to radio communications. Although this product complies with the limits for a Class B digital device, there is no guarantee that interference will not occur in a particular installation.

Limited Warranty

Warranty Information

This product carries a 1 Year Limited Warranty. For the terms and conditions of this warranty, please go to <https://www.iogear.com/support/warranty>

Register online at <https://www.iogear.com/registration>

Important Product Information

Product Model _____

Serial Number _____

Contact

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Make sure you:

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