

User Manual and Installation Guide

HD FLOWTM3

Super mini

Wireless Full HD Sender Receiver



HDM-W300R



www.hdfLOW.co.kr

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SAFETY PRECAUTIONS



Keep the product out of reach of children.



Keep the product away from external heat sources such as heaters or stoves.



If there is any unusual sound, smoke or odor coming from the product, immediately unplug the product.



Keep the battery of remote control out of reach of children.



Do not attempt to open the outer case of the Transmitter or Receiver. Doing so will void the product warranty.



Keep the remote control away from humidity and/or liquids.



Do not insert foreign objects into the unit.



Do not place the unit on an unstable surface or in a poorly ventilated area.



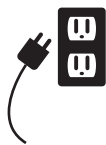
Make sure to plug the AC power adaptors firmly into wall outlets.



Do not use the unit near any flammable substances or combustible sprays.



If any part of the AC power adaptor looks damaged, do not use the product immediately.



Keep the product unplugged if unused for an extended period of time.

Read Before Operating Equipment

Thank you for purchasing our product. Before using it, please read this user manual carefully and follow the instructions correctly for safe operation. Please keep this manual handy for future reference.

Unit Care Recommendations



- Unit can be placed vertically (preferred) or horizontally.
- To clean, use a soft, dry cloth only. Do not use water or other cleaning products as they may cause electrical failure or damage the surface of the product.

INTRODUCTION

HD FLOW3 Super mini Wireless AV Multi Display System provides Full HD 1080p signal transfer, including 3D signal*, without the hassle of running cables. Create brilliant HD quality multimedia for signage, presentations, or entertainment in any location, completely un-tethered to your source device!

By simply connecting the Transmitter to a multimedia device such as a computer, set-top box, or Blu-ray™ player and connecting the Receiver to a display device, instant high definition digital audio and video can be placed into in any commercial or residential setting. HD FLOW3 Super mini Wireless AV Multi Display System transmits through walls and floors to allow the components to be neatly tucked away in an AV rack or media cabinet, and is the ideal solution for quick and easy installation where running cable is cost prohibitive or simply not an option.

* Works with passive 3D signals

Features

- Low latency: $\leq 21\text{ms}$.
- Supports 3 HDMI video/audio.
- Supports Wireless connection - IEEE 802.11n 5 GHz WiFi.
- Two internal antennas (supporting MIMO).
- HDCP v1.3 compliant.
- Supports both DTV & VESA standards:
DTV: 1920x1080i60/p60, 1280x720p50/60, 720x576i50/p50, 720x480i60/p60,
VESA : SXGA(1280x1024), WXGA(1280x800), XGA+(1152x864), XGA(1024x768),
SVGA(800x600), VGA(640x480), 1280x960, 1360x768.
- Supports passive 3D content.
- Plug and play setup requires no software programming.

Package Contents

Ensure that the following items are present in the package.



Transmitter



Receiver



Stand (2)



Remote Control



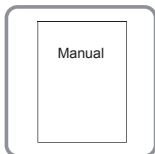
Battery



AC Adaptor (2)



IR-Flasher



Manual



Quick Start Guide

PRODUCT SPECIFICATIONS

HDM-W300R	
Video Input (Transmitter)	3x HDMI up to 1080p60 1x HDMI pass-thru output (pass-thru port mirrors HDMI 1)
Video Output (Receiver)	1x HDMI up to 1080p60
Encoding	H.264 Baseline Profile
Decoding	H.264 Baseline, Main, High Profile
Wireless Connection	IEEE 802.11n
Audio	2 CH PCM, 48kHz, 16 Bit
Video Resolution	480i/p, 720p, 1080i/p (24/30 fps)
Video Latency	21mS
Frequency	5.15~5.25GHz / 5.725~5.825GHz (Limited band may be preset based on the regional regulations.)
Range	210 ft (64M)
Multicast	Up to 6 receivers (Requires additional receiver units)
Security	WPA2 Personal and AES
HDCP Version	1.3
Antenna Type	MIMO, 2x Internal
IR Emitter	3 IR Emitters on a single wire
Control Remote	17 button IR remote
Power	12 VDC at 2 Amps (both transmitter and receiver)

1. Video Format Supported

- Digital Video
 - HDMI : Up to 1080p @ 24Hz, 25Hz, 30Hz, 50Hz, 60Hz

2. Audio Format Supported

- Analog
- Digital
- Receiver outputs stereo audio

3. Wireless Connection

- Unicast (Peer-to-Peer) Wireless Mode
- Multicast Wireless Mode

4. WiFi Channel Frequencies

- 5.15~5.25GHz / 5.725~5.825GHz
(Limited band may be preset based on the regional regulations.)

Transmitter Front

1. Power/Link Indicator Light

- Blinking indicator light - Establishing link between the Transmitter and the Receiver.
- Solid indicator light - Link between the Transmitter and Receiver has been established and is ready for signal transmission.

2. HDMI 1

- The HDMI 1 indicator light will be illuminated when the HDMI 1 port is selected for video input.
- If there is no signal, and/or the cable is not connected, the indicator light will blink.

3. HDMI 2

- The HDMI 2 indicator light will be illuminated when the HDMI 2 port is selected for video input.
- If there is no signal, and/or the cable is not connected, the indicator light will blink.

4. HDMI 3

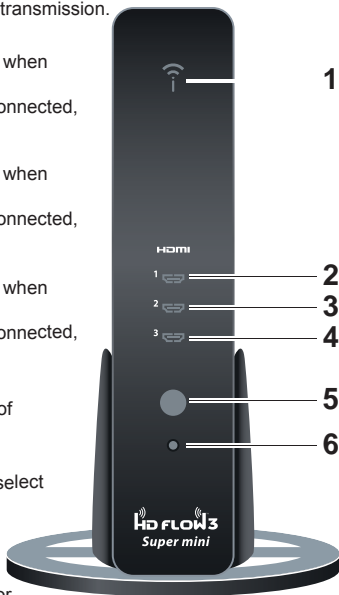
- The HDMI 3 indicator light will be illuminated when the HDMI 3 port is selected for video input.
- If there is no signal, and/or the cable is not connected, the indicator light will blink.

5. IR Window

- IR receiving window enables remote control of the transmitter and the receivers.

6. Link/Source Selection Button

- When powered on: Press for one second to select the video input source.
- Each press of the button will cycle through the available video input "HDMI1→HDMI2 → HDMI3 → HDMI1" in sequence.
- Press and hold for 8 seconds until all indicator lights blink synchronously, you are now in Scan/Pairing Mode.



Transmitter Back

1. HDMI 1 IN

- HDMI1 input port.

2. HDMI Pass-Thru

- Outputs a duplicate of the source that is plugged into.

3. HDMI 2 IN

- HDMI2 input port.

4. HDMI 3 IN

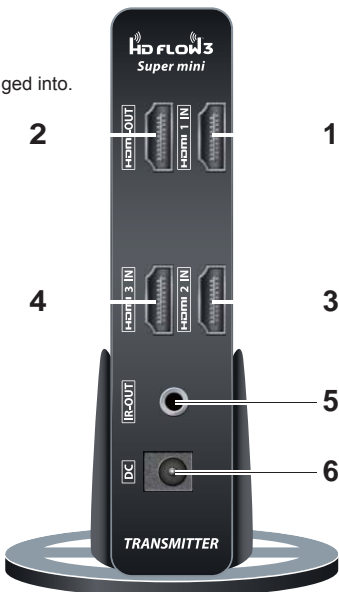
- HDMI3 input port.

5. IR-OUT

- Connects IR Flasher to the Transmitter for remote control of external devices which are connected to the Transmitter (i.e. Blu-Ray player, DVD, STB, etc).

6. DC

- 12V DC power input.



Receiver Front

1. Power/Link Indicator Light

- Blinking indicator light - Establishing link between the Transmitter and the Receiver.
- Solid indicator light - Link between the Transmitter and Receiver has been established and is ready for signal transmission.

2. HDMI

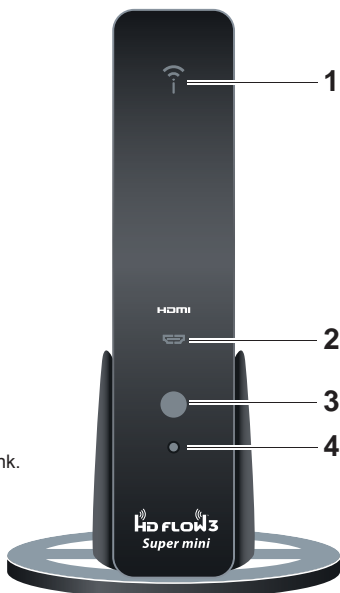
- The HDMI indicator light will be illuminated when the HDMI port is selected for video output.
- If there is no signal, and/or the cable is not connected, the indicator light will blink.

3. IR Window

- IR receiving window enables remote control of the transmitter and/or source components.

4. Link/Output Selection Button

- When powered on: HDMI indicator lights blink.
- Press and hold for 8 seconds until all indicator lights blink synchronously, you are now in Scan/Pairing Mode.



Receiver Back

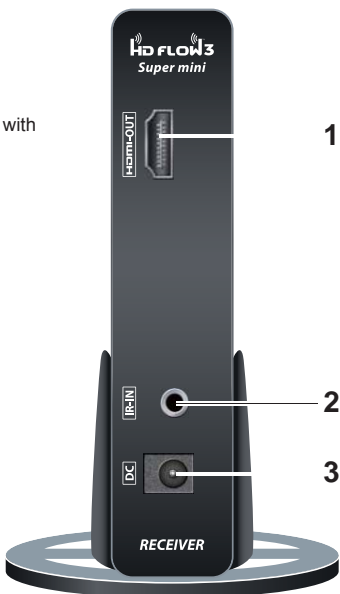
1. HDMI-OUT

- HDMI output port

8. DC

- 12V DC Power Input

* For better IR reception range, use the IR input port with IR extender (not included).



Remote Control

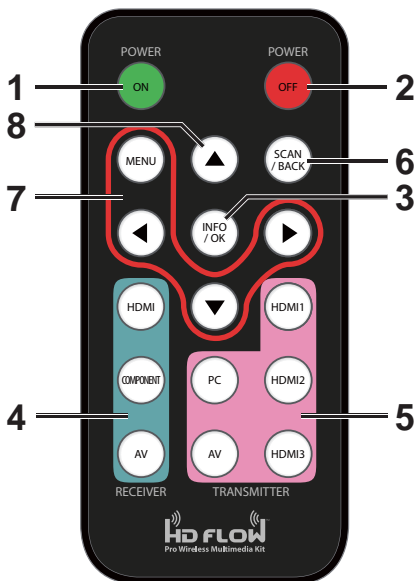
1. **POWER ON Button**- Turns the Transmitter and Receiver power ON
2. **POWER OFF Button**- Turns the Transmitter and Receiver power OFF

3. **INFO/OK***- Displays the following information on the screen:
 - Transmitter - WiFi IP and Source Resolution.

Note: The Transmitter unit's information will only be displayed if the connection between the Transmitter unit and Receiver has been established.

- Receiver - WiFi IP, WiFi Channel, SSID, Display Resolution, WiFi Reception Strength. Displayed information will disappear automatically after 30 seconds.

4. **VIDEO OUT(Receiver)** - Selects the Audio/Video output port of the Receiver.
 - HDMI - Selects HDMI as the Audio/Video output.



Note: Remote must be pointing directly at the Receiver to control its output settings. This may also be accomplished without the use of the remote control by toggling between outputs via the Link/Output Selection Button.

5. **VIDEO IN(Transmitter)** - Selects the Video input port of the Transmitter.
 - HDMI1 - Selects HDMI1 as the Audio/Video input.
 - HDMI2 - Selects HDMI2 as the Audio/Video input.
 - HDMI3 - Selects HDMI3 as the Audio/Video input.
6. **Scan**- Selects Scan/Pairing mode. System will re-scan among 10 possible WiFi frequencies and select the Optimum available channel. The channel selected will be displayed when "Info" is pressed.
7. **MENU and DOWN, RIGHT, LEFT Buttons** Disabled - for future use.
8. **UP Button**- This will scroll through the possible IR frequencies. This device accommodates most IR protocols in use today. To do so it will require selecting the one of four possible carrier frequencies available for IR control. Press the UP arrow to scroll between 31 KHz, 38 KHz, 47 KHz and 57 KHz frequencies. Select a frequency and try your source remote. If the control responds, then you have selected the correct one. If the device does not respond, try another frequency. If no frequencies seem to work, ensure the IR emitter is located in the correct location on the source component.

Remote Control Battery Installation And Replacement

The battery clip is located on the bottom of the remote control.



1. Push the tab, located on the left of the battery clip, to the right and pull out the clip.
2. Place the battery into the clip, positive (+) end facing up as shown.
3. Place the clip back into the remote to complete the installation.

INSTALLATION AND OPERATION

Before starting the installation, please ensure that all source components (Blu-ray player, cable box, etc.) and the display equipment (TV, display, projector, etc.) are turned off. For initial setup of your HD FLOW3 Super mini system complete steps A, B, C, D, E and F in order.

A) Connecting Source Components To The Transmitter

a. HDMI Media Source

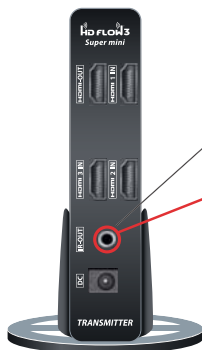
- Note :** It is recommended that HDMI1 input port be used if only one HDMI source component is present.
- Connect HDMI cable from the source components output to the Transmitter's HDMI1 or HDMI2 or HDMI3 input port.
- Connect HDMI cable from the Transmitter's pass-thru output port to the input of the display device to enjoy the video coming through HDMI1 only.



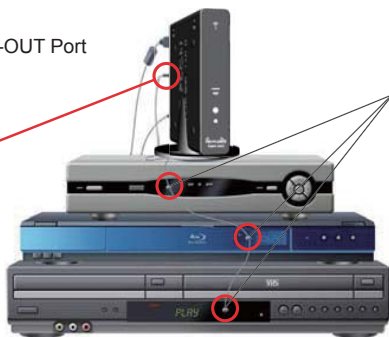
B) IR Flasher Installation (Setting Up IR Remote Control Capabilities for Source Devices)

IR Flashers are provided to allow for control of up to three source devices using the device's original remote control at the Receiver location.

- Connect the provided IR Flasher to the IR-OUT port of the Transmitter.
 - Find the location of the IR window on your component and adhere the IR Flasher Eye directly over the IR window of your component.
- Note:** One IR Flasher Eye is to be used for one component device.
 - Tips:** Most often the IR window on the source device is easier to locate with direct light shining on sections of the front panel of the device (a small flashlight or a camera phone flashlight works well).



IR-OUT Port



IR Flasher Eye

C) IR Extender Installation (Optional)

Install the IR Extender by plugging in the IR Extender (not included) into the IR-IN port on the Receiver. (IR Extender use is optional. Use the IR Extender when the Receiver is out of sight or to extend the range of the Receiver's IR reception range.)

D) Connecting The Receiver To The Display Device

Note : Connect the Receiver to the display device using the port with the highest capable resolution.

The HD FLOW3 Super mini is a video switch, and as such will upconvert all inputs with resolutions of 480p, 720p, and 1080i/p through the HDMI Output.

HDMI Output to Display

- Connect the HDMI cable from the Receiver's HDMI output to the display device's HDMI input.



E) Powering-up HD FLOW3 Super mini Wireless AV Multi Display System

1. Plug in the power adaptors for the Transmitter and the Receiver to available power outlets.
2. Plug in the other end of the power cables to the Transmitter and then to the Receiver. The units will automatically turn on.
3. Turn on your display device (TV, monitor, projector, etc.).
4. While turning on the display device, the HD FLOW3 Super mini System will be going through the start up process. The process takes approximately 45 seconds to complete. The Power/Link Indicator Light on the Transmitter and Receiver should be flashing at first. Flashing indicates that the units are establishing a secure connection. Wait until the connection is successfully established, indicated by a solid Power/Link light on the Receiver.



F) Input And Output Selection

1. Select the output used to connect the Receiver to the display. There are two ways to choose output sources on the HD FLOW3 Super mini Receiver:
 - a. Using the provided remote - Press the desired output while pointing the remote at the Receiver.
 - b. Using the Link/Output Selection Button on the Receiver - To toggle between outputs press the Link/Output Selection Button for one second on the unit and release.At this time the output Indicator Light will become solid and the HD FLOW3 Super mini logo will appear on the display device if there is no source providing content. The HD FLOW3 Super mini logo is only displayed when the receiver is working with the display, but no content is coming from the transmitter.
2. Turn on the desired media source device that is connected to the Transmitter.
3. Select the desired media source input on the Transmitter. There are two ways to select the source input on the HD FLOW3 Super mini Transmitter:
 - a. Using the provided remote - Press the desired input while pointing the remote at the Transmitter.
 - b. Using the Link/Source Selection Button on the Transmitter - To toggle between Inputs press the Link/Source Selection Button for one second on the unit and release.
4. Play the source device media content and enjoy up to a Full HD 1080p wireless entertainment experience.

Note :

1. Audio and video sources will switch simultaneously whether using the remote or Selection Buttons.
2. Inputs on the Transmitter and Receiver can be switched by pointing the remote at the Transmitter or Receiver ONLY if the connection between Transmitter and Receiver has been established, indicated by a solid link light. If the connection between Transmitter and Receiver has not been established, the inputs need to be selected at the location of each unit using either of the above input and output selection methods.

Multicast Mode - Pairing Additional Receiver(s) With The Transmitter (Optional)

Multicast Wireless Mode enables the Transmitter to stream AV media from one Transmitter to up to six Receivers.

Note: Your HD FLOW3 Super mini Wireless AV Multi-Display System comes pre paired. This section is only needed if you have separately purchased additional Receiver(s).

If you have purchased additional Receiver(s) use the following instructions to add the Receiver(s) to the current system, or follow the steps in the HD FLOW3 Super mini Receiver manual. The system can have receivers added at any time.

Each receiver will have to be paired with the transmitter one at a time. Do not begin pairing another receiver until the previous receiver has rebooted after pairing as described in the steps below. A maximum of 6 receivers may be paired to one transmitter.

1. Press and hold the "Link/Source" button on the transmitter for 8 seconds. The lights will blink sequentially from top to bottom. The transmitter will remain in pairing mode for 2 minutes or until it senses a receiver trying to link.
2. Press and hold the "Link/Output" button on the desired receiver for 8 seconds. The lights will first blink sequentially from top to bottom; then in various patterns. After about 30 seconds the receiver will successfully link with the transmitter and then shut off and reboot itself. The entire process will take under 1 ½ minutes and video will not appear on the display until the process is complete. Video on the additional paired receivers will be lost during this process.
3. Repeat steps 1 and 2 for each additional receiver, if any.

Tips

If the Transmitter and Receiver are not establishing a connection:

1. It is recommended to unplug the power to both units for 30 seconds and then plug them back in.
2. If the above tip does not assist, please reference the Factory Reset section of this manual.

If the connection has been established and the HD FLOW3 Super mini logo can be seen on the display device, but content is not playing when initiated:

1. Ensure that source cables are properly connected.
2. Ensure the Transmitter is set to the proper input port and that the Receiver is set to the proper output port.
3. Ensure the source is operating.
4. The display device needs to be able to support the resolution of the media source that is being streamed. Utilizing the INFO button, while connected via HDMI, will allow you to see the EDID resolution data that the display device accepts.

(Example - If the display device supports the highest resolution of 720p but the source device is outputting 1080p content, the content needs to be downscaled to the maximum resolution of the display device, in this case 720p).

If the HD FLOW3 Super mini logo nor the video content are being displayed, verify that the output selection on the Receiver and input selection of the display are correct. Also, make sure cables are completely pressed into place and secure, and that the selected source content is playing.

Indicator Lights Decoded

Factory Reset

CAUTION:
systems (systems with two or more receivers) as the pairing will be forgot. One will have to re-pair the additional receivers if a factory reset is completed.

To complete a factory reset, complete each of the steps below for both the transmitter and receiver. These do not need to be done at the same time.

1. Unplug the device from its power source.
2. Press and hold the Link/Source (Tx) or Link/Output (Rx) Selection button on the front panel.
3. Plug the DC power back into the unit being reset.
Continue holding the Link/Source (Tx) or Link/Output (Rx) Select button for about 6 seconds until all lights blink at the same time then release.
4. Allow the system to re-start and show content.

How To Check Firmware Version

1. Make sure the HD FLOW3 Super mini System is up and running.
2. Using the HD FLOW3 Super mini remote supplied, point it at the Receiver IR window. Press the Info/OK button. In the list of information there will be stated "Firmware Version:"

Supported Video Formats

Video Standard	Resolution	HD FLOW3 Super mini Transmitter	HD FLOW3 Super mini Receiver
"VESA Format (PC standard)"	640 x 480p60	O	O
	640 x 480p70	O	O
	640 x 480p85	O	O
	800 x 600p60	O	O
	800 x 600p70	O	O
	800 x 600p85	O	O
	1024 x 768p60	O	O
	1024 x 768p70	O	O
	1024 x 768p85	O	O
	1152 x 864p60	O	O
	1152 x 864p70	O	O
	1152 x 864p85	O	O
	1280 x 800p60	O	O
	1280 x 960p60	O	O
	1280 x 960p70	O	O
	1280 x 960p85	O	O
	1280 x 1024p60	O	O
	1360 x 768p60	O	O
	1440 x 900p60	O	O
	1600 x 1200Rp601	O	O
"DTV Format (TV standard)"	1600 x 900p60	O	O
	1680 x 1050p60	O	O
	720 x 480i60(NTSC)	O	O
	720 x 576i50(PAL)	O	O
	720 x 480p60	O	O
	720 x 576p50	O	O
	1280 x 720p50	O	O
	1280 x 720p60	O	O
	1920 x 1080i50	O	O
	1920 x 1080i60	O	O
	1920 x 1080p24	O	O
	1920 x 1080p25	O	O
	1920 x 1080p30	O	O
	1920 x 1080p50	O	O
	1920 x 1080p60	O	O

Notes:

1. 1600 x 1200p60 is a reduced format.
2. HD FLOW3 Super mini simply relays the input format of the video from the Transmitter to the Receiver.
HD FLOW3 Super mini does not change the video format. If you want to change the output resolution, you should change the format on the external device which is connected to the Transmitter.

COMPLIANCE STATEMENTS

FCC Compliance

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 installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. 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:

1. Relocate the receiving antenna.
2. Increase the separation between equipment and Receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the Receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

CE Compliance

This device has been tested and found to comply with the following European Union directives: Electromagnetic Capability (89/336/EMC), Low Voltage (73/23/EEC) and R&TTED (1999/5/EC).

IC Compliance

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems. Any changes or modifications (including the antenna) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

To comply with RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons. This device must not be co-located or operation in conjunction with any other antenna or transmitter.

This class B digital apparatus complies with Canadian ICES-003.

WARRANTY

1 YEAR LIMITED WARRANTY

The HD FLOW3 offers the highest quality components and technology available. The product is warranted to be free from defects in material and workmanship, given normal use and care, for 1 Year from the original purchase date with proof of purchase.

Please retain a copy of your receipt as you will need this to obtain warranty work.

We will repair or replace the product which fails as a result of such a defect during the warranty period. The accessories are not covered by this warranty.

This warranty is the customers' exclusive remedy for product defect and does not apply to:

- Any modifications made to the product in any way by the customer.
- Attachments to the product by the customer that causes product damage.
- Any product in which the sales and/or serial numbers and/or logos have been broken, removed, or tampered with, defaced, or altered in any manner.
- Damage caused by abuse, misuse, accident, water, or theft.
- Physical damage.
- Loss of the Accessories.

Except as stated above, I DO IT CO., LTD. makes no express or implied warranties as to any product, in particular, makes no warranty of merchantability or fitness for any particular purpose. I DO IT CO., LTD.

shall not be liable for consequential or incidental damages arising from any product defect. Our liability is limited to replacement of any defective product as stipulated under the warranty conditions. I DO IT CO., LTD. expressly disclaims all warranties not satisfied in this limited warranty. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty.

NOTE:THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.



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