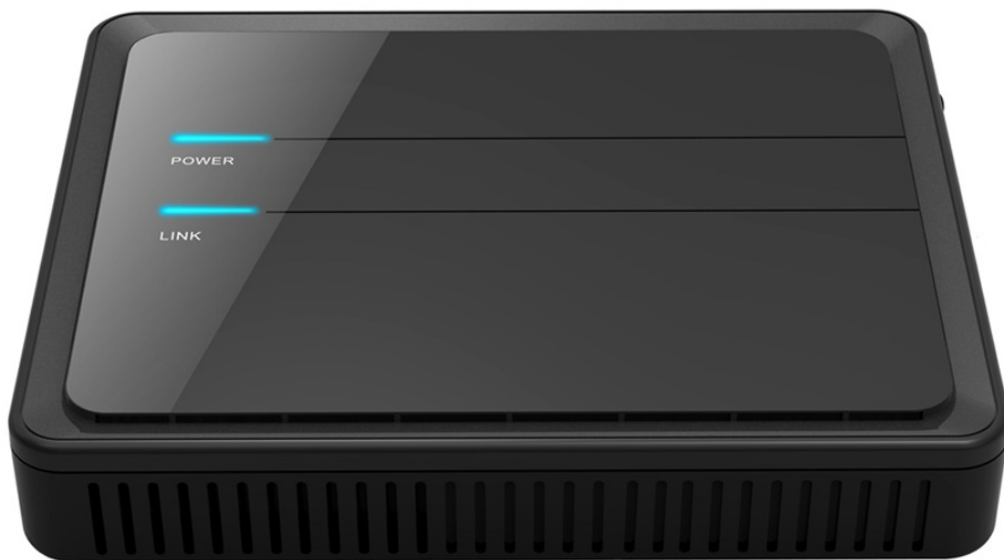


WMAD-612AN

Wireless HDMI Dongle

Quick Installation
Guide/ User Manual



About this product

Purpose

The purpose of this document is to provide installation information for Wireless HDMI dongle products.

Intended audience

This document is for individuals who install Wireless HDMI dongle.

How to use this document

Use this guide to install Wireless HDMI dongle.

Safety information



WARNING: The following information lists the safety reminders for installation and maintenance personnel.

Read all instructions before attempting to unpack, install, operate, or connect power to this product. Please remember the following when you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water. Never spill any form of liquid on or into this product.
- Do not insert any sharp object into the products module openings or empty slots. Doing so may accidentally damage its parts.
- Do not attach the power supply cable on building surfaces or floorings. Rest the power cable freely without any obstacle or heavy items piled on top of it. Refrain from abusing, stepping or walking on the cable.
- To protect the equipment from overheating, do not block the slots and openings in the module housing that provide ventilation.
- Electrostatic discharge (ESD) can permanently damage semiconductor devices. Always follow ESD-prevention guidelines for equipment handling and storage.

Eco-environmental statements

The statements that follow are the eco-environmental statements that apply to WMDA-612AN Wireless HDMI dongle.

Packaging collection and recovery requirements

Countries, states, localities, or other jurisdictions may require that systems be established for the return and/or collection of packaging waste from the consumer, or other end user, or from the waste stream. Additionally, reuse, recovery, and/or recycling targets for the return and/or collection of the packaging waste may be established. For more information regarding collection and recovery of packaging and packaging waste within specific jurisdictions, please contact the Sonic Devices Technologies Field Services / Installation - Environmental Health and Safety organization.

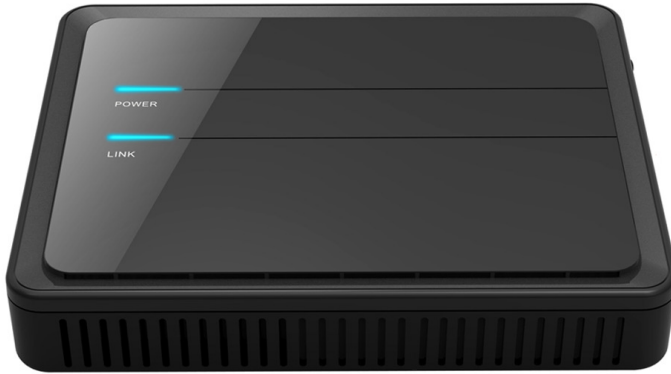
1. Safety Guidelines

In order to reduce the risk of fire, electric shock and injury, please adhere to the following safety guidelines.

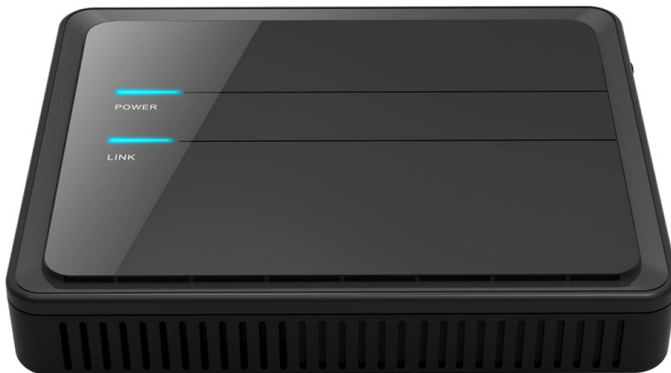
- ✓ Carefully follow the instructions in this manual; also follow all instruction labels on this device.
- ✓ Only use the power adapter supplied with the device.
- ✓ Do not spill liquid of any kind on this device.
- ✓ Do not place the unit on an unstable stand or table; the unit may drop and become damaged.
- ✓ Do not expose this unit to direct sunlight.
- ✓ Do not place any hot devices close to this unit, as it may degrade or cause damage to it.
- ✓ Do not place any heavy objects on top of this unit.
- ✓ Do not use liquid cleaners or aerosol cleaners. Use a soft dry cloth for cleaning.

2. Packaging

This package consists of the following items:



WDMA-612AN_RX



WMDA-612AN_TX



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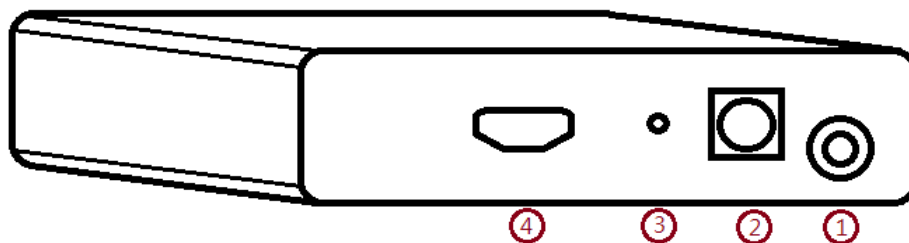
AC Adapter
Vin =230V 50Hz
Vout =12V; 1A



HDMI cables *2

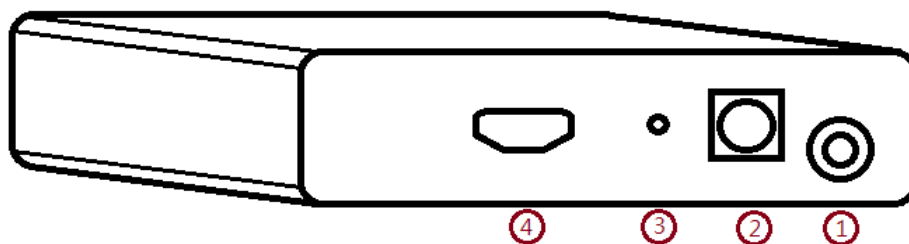
3. Structure

WMDA-612AN_RX



- 1.Power Switch On/Off
- 2.Power Input
- 3.Reset Button
- 4.HDMI Output Port

WMDA-612AN_TX

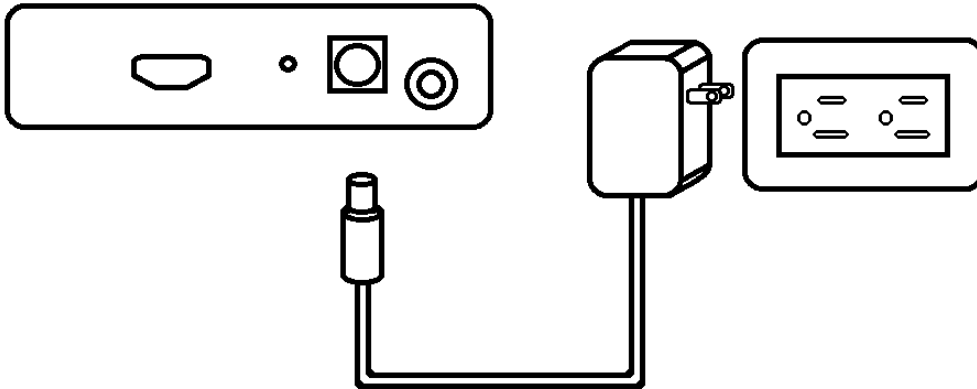


- 1.Power Switch On/Off
- 2.Power Input
- 3.Reset Button
- 4.HDMI Input Port

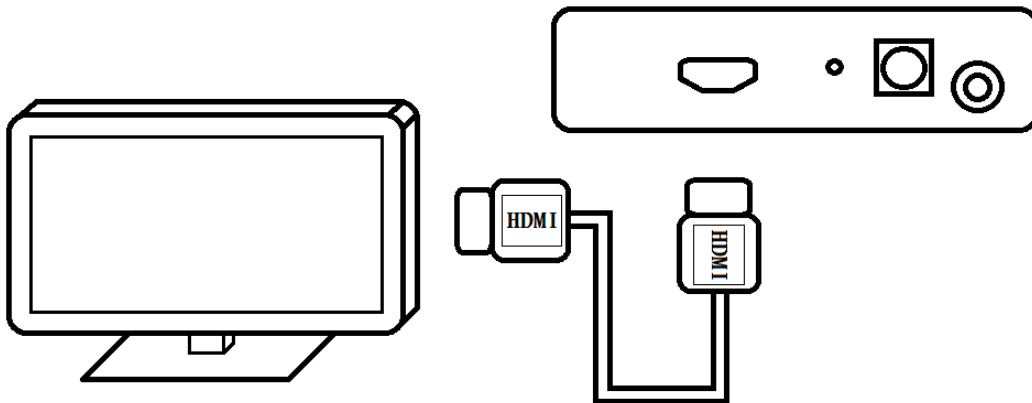
4. Installation and Use

WMDA-612AN_RX

Step.1 Plug in power.

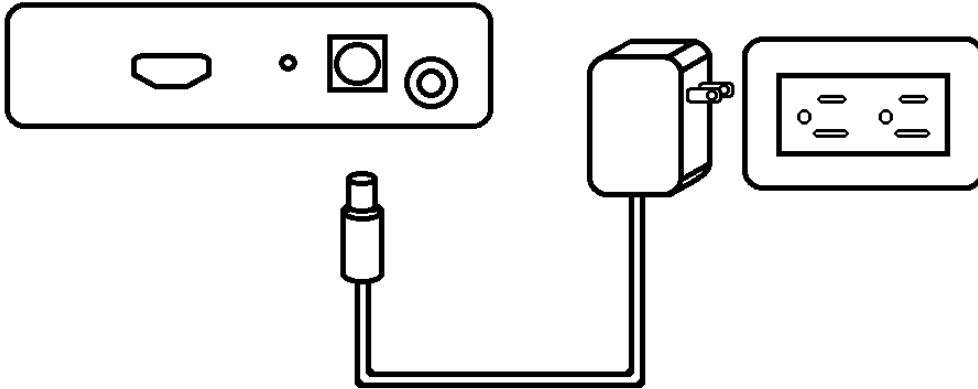


Step.2 Plug into Television HDMI input.

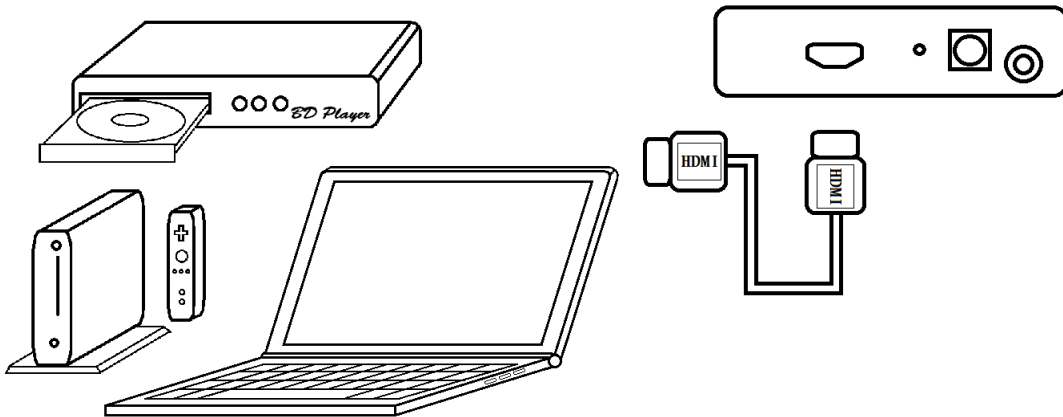


WMDA-612AN_TX

Step.3 Plug in power.



Step.4 Plug in Video source.(ex. DVD/BD player, Game console, Set-Top Box or any source with HDMI output.)



5. Specifications

WMDA-612AN_RX

Product Name	Wireless Home Digital Interface Receiver Dongle		
Model Number	WMDA-612_RX		
Host Interface	HDMI type A socket x1 for output to TV/Display		
Chipset solution	MCU- ST/ STM32F103 HDMI- SiI9134 BBP- Amimon/AMN2220 RF- Amimon/AMN3210 DFS- AIROHA/ AL7230 (Option)		
Memory	4Mbit Flash 512Mb DDRII		
Switch	Reset Button x 1, Power ON/OFF Button x 1,		
LED	Power	Red	Power off
		Blue	Power on
	Wireless	Red	Wireless unconnected
		Blue	Wireless connected
		Red&Blue blink	Search signal
Dimensions	PCBA 160.0L x 80.0W x 15.0H (mm)		
Operating Voltage	12V +/- 5%		
Power Consumption	6.6 Watt		
Antenna	Total 6 PCB printed antenna ; Peak Gain:3.5 dBi 1 antenna for Transmitter & Receiver 4 antennas for Receiver 1 antenna for DFS Only (Option)		
Transmit Power (E.I.R.P.)	17.5 dBm (max.)		
Channel Bandwidth	20MHz / 40MHz		
Modulation	Downlink: OFDM 16-QAM Uplink: OOK		
Uplink Data Rate	<ul style="list-style-type: none"> ● User-defined downlink channel with up to 1 Mbps for data and control ● User-defined uplink channel with up to 100 Kbps for data and control 		

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	<ul style="list-style-type: none"> ● Less than 1mSec latency between video source and video sink
Network mode	Uni-cast / Broad cast (Option)
DFS Support	Low-end DFS without additional RF Chain High-end DFS with additional RF Chain allowing to monitor additional DFS channel and immediate switch in case of radar detection
Video resolutions	HD: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p PC: VGA (640x480), SVGA (800x600), XGA (1024x768), Panel: 854x800, 1280x768, 1366x768, 1920x1080 3D video: 1280x720 @ 48Hz / 60Hz, 1920x1080 @ 48Hz / 60Hz) 3D gaming: 1280x720 @ 100Hz / 120Hz
Audio	Up to 18 Mbps audio stream: I2S: Up to eight PCM channels (sampled up to 192 KHz x 24 bit). SPDIF: Including AC-3, DTS, Dolby 5.1, Digital
Operating Range	33~50 feet Indoor. The transmission quality varies in the system board and surrounding environment.
Temperature Range	0 ~ 40°C (Operating), -20~60°C (Storage)

WMDA-612AN_TX

Product Name	Wireless Home Digital Interface Transmitter Dongle		
Model Number	WMDA-612AN_TX		
Host Interface	HDMI type A socket x1 for input from HDMI/DVI source		
Chipset solution	MCU- ST/STM32F105 HDMI- SiI9233 BBP- Amimon/AMN2120 RF- Amimon/AMN3110		
Memory	4Mbit Flash		
Switch	Reset Button x 1, Power ON/OFF Button x 1		
LED	Power	Red	Power off
		Blue	Power on
	Wireless	Red	Wireless unconnected
		Blue	Wireless connected
		Red&Blue blink	Search signal
Dimensions	PCBA 160.0L x 105.0W x 15.0H (mm)		
Operating Voltage	12V +/- 5%		
Power Consumption	7.92 Watt		
Antenna	Total 5 PCB printed antenna; Peak Gain: 3.5 dBi		

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	4 antenna for Transmitter 1 antenna for Receiver
Transmit Power (E.I.R.P.)	19.5 dBm (max.)
Channel Bandwidth	20MHz / 40MHz
Modulation	Downlink: OFDM 16-QAM Uplink: OOK
Downlink Data Rate	<ul style="list-style-type: none"> ● User-defined downlink channel with up to 1 Mbps for data and control ● User-defined uplink channel with up to 100 Kbps for data and control ● Less than 1mSec latency between video source and video sink
Network mode	Uni-cast / Broad cast (Option)
Video resolutions	HD: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p PC: VGA (640x480), SVGA (800x600), XGA (1024x768) Panel: 854x800, 1280x768, 1366x768, 1920x1080 3D video: 1280x720 @ 48Hz / 60Hz, 1920x1080 @ 48Hz / 60Hz) 3D gaming: 1280x720 @ 100Hz / 120Hz'
Audio	-- I2S: Up to 8 PCM channels (sampled up to 192 KHz x 24 bit) -- Optional audio down-sampling for efficient modem bandwidth control SPDIF: Including AC-3, DTS
Operating Range	33~50 feet Indoor. The transmission quality varies in the system board and surrounding environment.
Temperature Range	0 ~ 40°C (Operating), -20~60°C (Storage)

7. Troubleshooting

<p>No Image Displayed on screen:</p>	<ul style="list-style-type: none"> ● Are the TX and RX units plugged in and on? ● Is the correct INP being used (press the button and test it) ● Is the TV on the correct input for the RX unit? (cycle between TV inputs) ● Is the "Link" light illuminated (carefully reset if not)
<p>Unit will not Link:</p>	<ul style="list-style-type: none"> ● There is a finite range for the device, and it varies depending on interference. Move the TX and RX units closer together, turn the units off, wait 25 sec, then power them back on. This should get the link.
<p>No Power light:</p>	<ul style="list-style-type: none"> ● Make certain the TX and RX units are plugged in as shown in the diagram. Check your power strip or wall socket to make sure there is power, do other devices power in that socket or on that power strip? Turn off and turn on the power. Make sure the switch is fully depressed.

8. FCC Statement

Federal Communication 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 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

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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.

IMPORTANT NOTE:

Radiation Exposure Statement:

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.