

Wireless AV Content Sharing & BYOD collaboration System (Quad Viewer)

User Manual_V1.6

Receiver: WMS-10, WMS-20, WMS-40

Transmitter: WMT-Mini, WMT-H35, WMT-C35



Feature List:

WMS-10/WMS-20/WMS-40:

- Support quad viewer on one display.
- Support VESA PC resolution input, auto-detecting.
- Can transmit PC's mirror/extended desktop or Macbook's mirror desktop.
- Can transmit smart devices' mirror, photos, videos, music etc.
- Support the Wireless Media Teleporter "show-me" button.
- Support HDMI/ Type C plug-in auto configuration/pairing for Wireless Media Teleporter "show-me" button.
- Support "Airplay" for apple device.

WMT-Mini/WMT-H35/WMT-C35:

- Support VESA PC resolution, auto-detecting.
- Can wireless transmit PC's mirror or extended desktop to base unit.
- Quick "Show-me" button to selection switcher the active signal of PC, less than 1s.
- "Show-me" button can independently step in/out the source of PC.
- Dual color LED, green indicates active source signal, red indicates power/link. (Hardware support on USB dongle, HDMI dongle and type C dongle)

Version log:

Version	Revise time	Description
1.0	2019, NOV. 21 th	Created
1.5	2020, MAR.13 th	Updated

Catalogue

1. Overview:	6
2. Specification:	8
3. Panel Layout	8
3.1 Hardware Interface	9
3.1.1 WMS-10/WMS-20/WMS-40 Front Panel	9
3.1.2 WMS-10/WMS-20/WMS-40 Rear Panel	11
3.1.3 Factory Reset	12
3.2 Software Interface	17
3.2.1 Home Screen	17
4. Installation	19
4.1 Installation methods for the Base unit	19
4.2 Wiring Diagram	20
4.3 Power Connection	21
4.4 Video Connection	21
4.5 Audio Connection	22
4.6 LAN connection	24
4.7 Usage of USB device	24
5. Quick-to-Start	25
5.1 Mobile device: Wireless Connection	25
5.1.1 Enable portable hotspot:	26
5.1.2 Enable LAN connection:	27
5.2 Pairing transmitter with base unit	28
5.3 Mirroring	29
5.3.1 PC/Lap-top	29
5.3.2 Mobiles Devices	32
5.4 Preview Window	35
5.5 Whiteboard & Annotation	37
5.5.1 Whiteboard	38
5.5.2 Annotation	40
1. Web Setting Management Configuration	42

6.1	Network settings	45
6.1.1	Wireless network	45
6.1.2	Ethernet.....	55
6.1.3	Auto change password	56
6.2	Display & Audio	57
6.2.1	HDMI	57
6.2.2	Audio	59
6.2.3	Airplay screen quality	60
6.2.4	Screen display ID.....	61
6.2.5	Home Screen background image.....	61
6.3	Moderator control.....	62
6.4	System settings.....	64
6.4.1	Buttons:	64
6.4.2	Date & Time	65
6.4.3	Auto standby	67
6.4.4	Language	68
6.4.5	Reset	69
6.4.6	Configuration File	69
6.4.7	Series Port Setting	70
6.5	Security Settings.....	71
6.5.1	Security level.....	71
6.5.2	Login Password	72
6.5.3	Connection password	72
6.6	Firmware upgrade	73
6.6.1	Firmware Update	73
6.6.2	Automatic Upgrading.....	73
6.7	Other settings	74
6.7.1	Auto create launcher	74
6.7.2	Clear history after meeting	74
6.8	About device.....	75
2.	Updating WirelessMedia.....	75
7.1	Check current firmware information	76

7.2	Upgrading firmware of base unit:.....	79
7.3	Upgrading and Pairing of Dongle:.....	80
7.4	Upgrading Launcher:	81
7.5	Clean left files of older versions of Launcher program in Lap-top	83
3.	Operation Guide.....	84
8.1	Mirroring PC desktop	84
8.1.1	Extended Desktop for Windows 10	84
8.1.2	Microsoft Windows PC/Laptop with Dongle.....	84
8.1.3	Microsoft Windows PC/Laptop without Dongle	86
8.1.4	Options for Microsoft Windows PC / Laptop – Extended Screen.....	88
8.1.5	MAC OS PC/Laptop with Dongle	90
8.1.6	MAC OS PC/Laptop without Dongle	92
8.1.7	Options for Apple MacOS, MacBook – Extended Screen	94
8.2	Transmitting IOS mobile device	95
8.2.1	How to use AirPlay?	95
8.3	Transmit Android device wireless	95
8.3.1	“WirelessMedia” Apk for Android	95
4.	WIFI Recommendation Setting	97
9.1	Check the WIFI config on base unit.....	97
9.2	Check the WIFI RSSI on dongle or Mobiles	98
5.	Problem Shooting	98

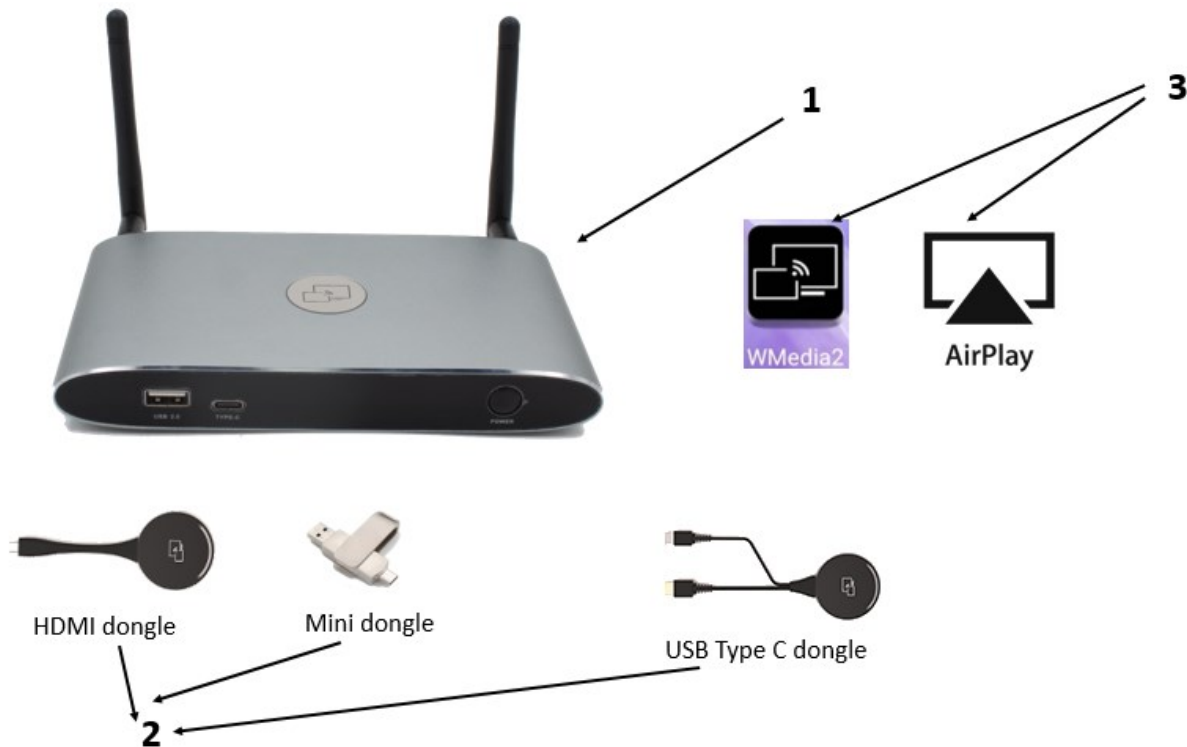
1. Overview:

WirelessMedia Set

WirelessMedia makes connecting or participate in a meeting by a most simple way, touching a button. It also allows the other to join in the meeting more actively. The result is to make the meeting more efficient and productive. A typical WirelessMedia contains one Base Unit WMS and two Transmitters e.g. WMT-H35/WMT-C35/WMT-Mini for choices.

Wirelessmedia Set Components

A typical WirelessMedia Set includes two Buttons, one Base Unit, "WMedia2" for Android" APK and Airplay for IOS". Depending on the application or size of meeting room, user could purchase more kinds of buttons, e.g. USB dongle/ HDMI dongle/ USB Type C dongle if they need.



ID	Name	Description
1	Base Unit	Host unit
2	Transmitters	For PC/Lap-top to share the desktop/extended desktop.
3	"WMedia2" App for Android	For smart android devices to share the screen.

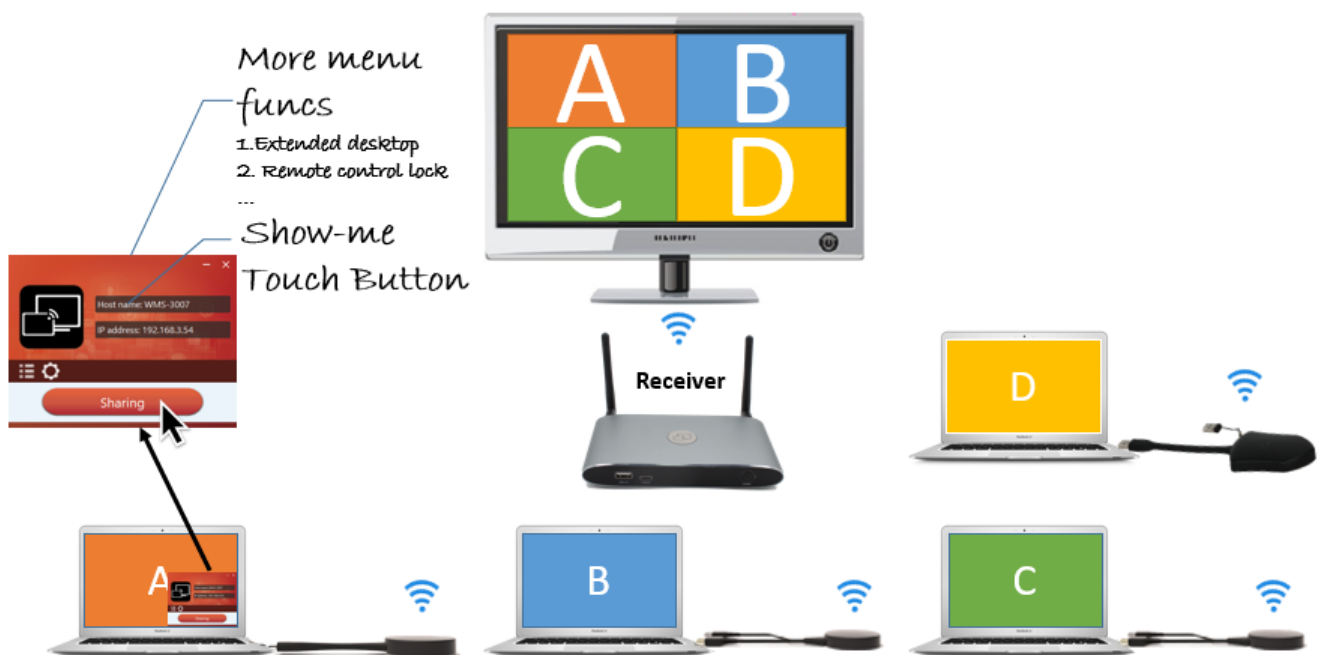
4	Airplay for IOS	For smart IOS devices to share the screen.
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Accessories List

ID	Name	Description
1	Antenna	2 pcs of antenna are included in the box. To avoid damage, they are not pre-mounted. The antenna can rotate for a better wireless connection.
2	Power adapter	International plug inter-changeable power adapter, of which the plugs includes US, Europe, UK, Australia standard.
3	Phoenix terminal	1 piece phoenix terminal for connecting the RS232 port of the rear panel.

The diagram of receiver and transmitter system as below.

System Operation-Normal mode



2. Specification:

WMS-40 Specification	
HDMI output	1x HDMI 19-pin female connector
Video Output Resolution	3840x2160@60Hz, 3840x2160@30Hz, 1920x1080@60Hz
Format Compliance	HDMI1.4/HDMI2.0
Video Capacity:	1080P @ <60Hz Airplay for IOS devices 1080P @ <60Hz "WirelessMedia" app 1080P @ <60Hz for all show-me button
HDCP	HDCP1.4/HDCP2.2
Analog Audio Output	1x 3.5mm PC audio female connectors
LAN port	RJ45 x2: 1000Mbps x1, 100Mbps x1
USB interface	USB3.0 x1, USB 2.0 x1, Type-C x1
Audio Input	AirPlay, Windows/MAC, WMH
Control connectors	3.5mm Phoenix terminal/ RS232 interface
Number of window simultaneous on screen	≥4+14 (4 main windows+14 thumbnail windows)
Number of simultaneous connections	≥16
Data rate in wireless	Up to 1200Mbps
Video Playback Frame Rate	20-60 FPS
Latency	< 100ms, Min 20ms
Wireless transmission protocol	WIFI IEEE 802.11 a/g/n/ac
Frequency band	2.4 GHz & 5 GHz
WIFI Antenna	MIMO 2x2
Dimension (W x D x H)	165mm x 95mm x 24.5mm (including antenna: 165mm x 125mm x 24.5 mm)
Weight	0.4lbs (200g)
Temperature	-4° ~ +140° F (-20° ~ +60° C)
Humidity (Storage / Operating)	20%-90% (non-condensing)
DC Power	12V / POE
POE standard	IEEE802.3af
Power Consumption	10W(MAX)

3. Panel Layout

About this chapter

The installation chapter gives an overview of the interface of WirelessMedia.

Overview

- Hardware Interface
 - WMS-10/WMS-20/WMS-40 Front Panel
 - WMS-10/WMS-20/WMS-40 Rear Panel
 - WMT-Mini /WMT-H35 /WMT-C35 Front panel
- Software Interface
 - Home Screen

3.1 Hardware Interface

3.1.1 WMS-10/WMS-20/WMS-40 Front Panel



ID	Name	Description
1	Front USB connector	USB port, for dongle pairing, mouse control, USB touch screen etc.
2	Front Type-C connector	Type-C port, for dongle pairing.
3	Power Button	Turn on or off the device.
4	Back-lit LED indicator	Initializing indicates RED, power on indicates flashing GREEN, "Ready to share" indicates static GREEN, "Sharing" indicates static cyan.

USB port

- The USB port is used to update the software of the WMS-40.
- The USB port is used for pairing the dongle and base unit, when the transmitter is plugged-in.
- The USB port is used for connecting a mouse to create/upgrade Launcher by clicking **Download** button, hide SSID, PASS, Wifi IP and Lan IP by clicking **Info**, check **Security level button** and control PC source device, when a PC desktop is mirroring to the screen by plugging in the dongle.
- The USB port is used for connecting a USB-based touch screen to create/upgrade Launcher by clicking **Download** button, hide SSID, PASS, Wifi IP and Lan IP by clicking **Info**, check **Security level button** and control PC source device, when a PC desktop is mirroring to the screen by plugging in the dongle.
- The USB port is used for creating or upgrading Launcher by clicking **Download** button, when a USB stick is plugged in.

Type-C port

The Type-C port is used for pairing USB Type C dongle with base unit.

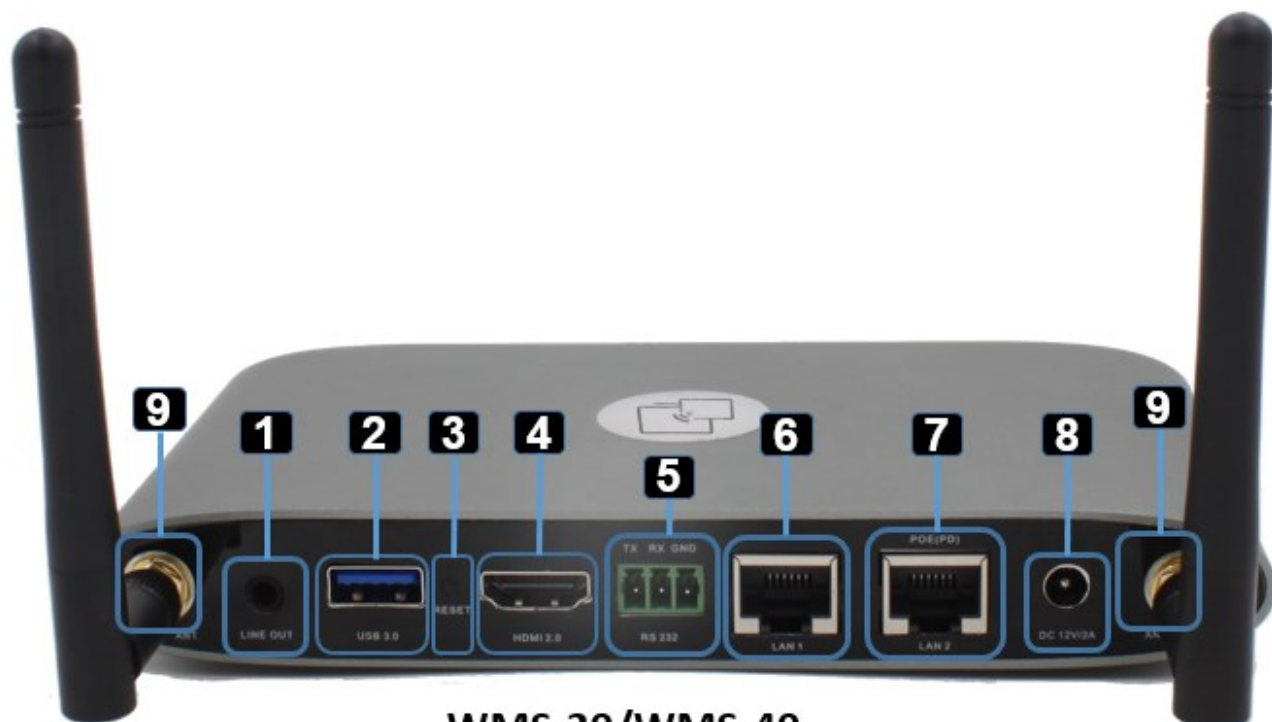
Mechanical fixture points.

The mechanical fixture points are located at the bottom of the base unit.

3.1.2 WMS-10/WMS-20/WMS-40 Rear Panel



WMS-10



WMS-20/WMS-40

ID	Name	Description
1	Line audio output	2 channel analog audio output, Connect a 3.5mm mini-jack PC connector from this jack to the Line in jack of an audio system.
2	Rear USB3.0 connector	USB port, for USB dongle pairing, mouse control, USB touch screen etc.
3	Reset	Reset button to restore to the factory default setting.
4	HDMI output	Connect an HDMI cable from this port to an HD or 4K/HDMI2.0 display.
5	RS-232	Connect an RS-232 cable from this port to an RS-232 device. (Note: No RS-232 port in model WMS-10 hardware.)
6	LAN Ethernet port 1	100Mbps, Connect an Ethernet cable between this jack and a LAN to connect WMS-40 to LAN.
7	LAN Ethernet port 2	1000Mbps, Connect an Ethernet cable between this jack and a LAN to connect WMS-40 to LAN. Support POE. (Note: No LAN Port 2 in model WMS-10 hardware.)
8	DC Power socket	Connect the included power adapter to this socket, and connect the plug to an available electrical outlet.
9	Antenna fixture points	Screw up the included two antennas to these two ports.

Note: LAN port 2 and RS-232 port is only for WMS-20&WMS-40 in hardware.

USB port

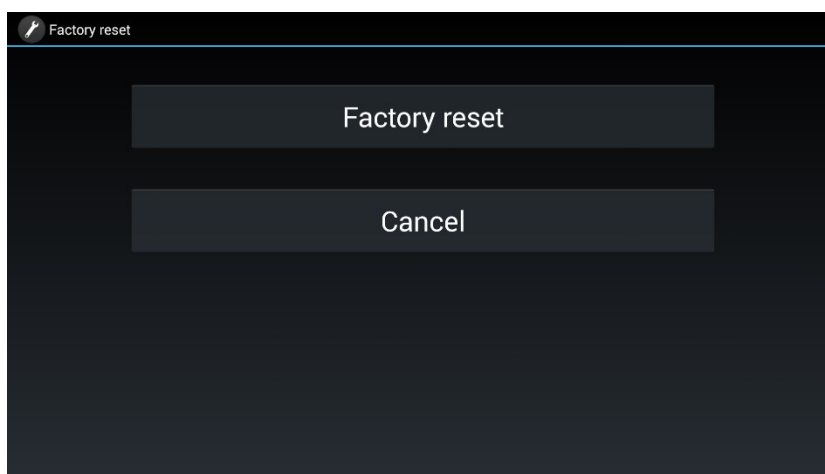
- The USB port is used to update the software of the WMS-40.
- The USB port is used for pairing the dongle and base unit, when the transmitter is plugged-in.
- The USB port is used for connecting a mouse to create/upgrade Launcher by clicking **Download** button, hide SSID, PASS, Wifi IP and Lan IP by clicking **Info**, check **Security level button** and control PC source device, when a PC desktop is mirroring to the screen by plugging in the dongle.
- The USB port is used for connecting a USB-based touch screen to create/upgrade Launcher by clicking **Download** button, hide SSID, PASS, Wifi IP and Lan IP by clicking **Info**, check **Security level button** and control PC source device, when a PC desktop is mirroring to the screen by plugging in the dongle.
- The USB port is used for creating or upgrading Launcher by clicking **Download** button, when a USB stick is plugged in.

3.1.3 Factory Reset

- Start up the Base unit.
- When the *Home Screen* is shown up, press the reset button at the rear panel of base unit. Press this button with a pointed object, e.g. an unbent paper clip until the "*Factory Reset*" page is shown up as below, for at least 2 seconds.
- The Base unit will reboot after 3 seconds to be default configuration.

- If you do not have a picture, press and hold the reset button until the red LED in the top panel will lit, to execute the reset.

All previous settings will be lost and you will need to do the set-up once more.



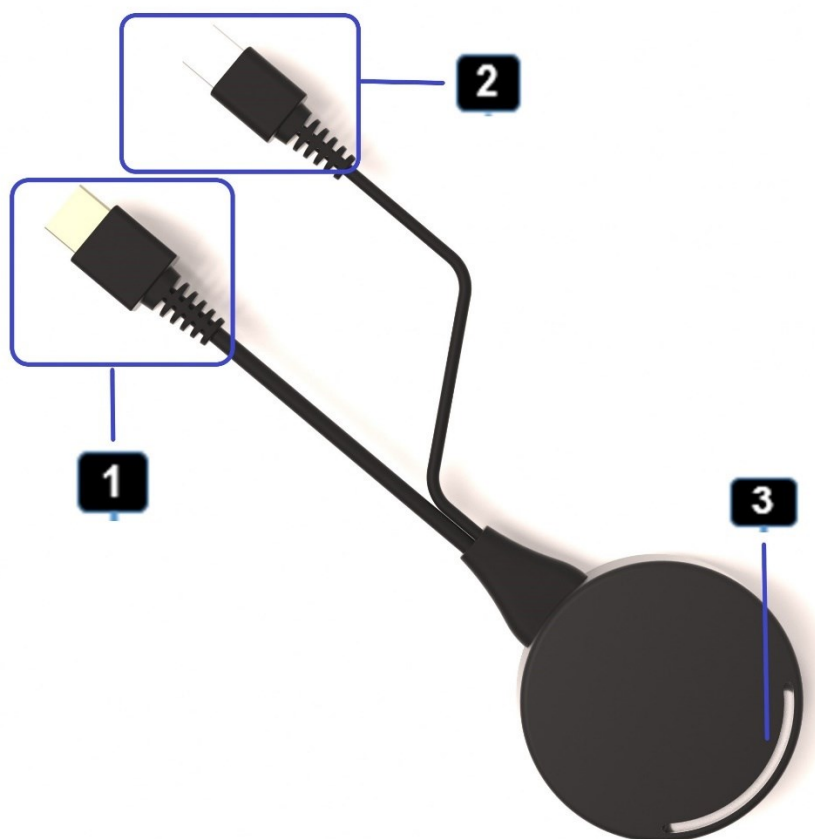
Default Configuration

- Ethernet:
 - Proxy: None
 - DHCP: Enable
- Wireless network:
 - Frequency: 5GHZ
 - Channel: Auto
 - Auto change Wi-Fi hotspot password: 5minute
- Display & Audio
 - HDMI resolution: Auto
 - HDMI CEC:
 - ◆ Device auto power off: ON
 - ◆ Base unit auto power on: OFF
 - Audio output: Jack&HDMI
 - Airplay screen quality: High
 - show device name and password when mirroring: OFF
 - show PCs user name when mirroring: ON
- Moderator Control
 - Add a sub-window bar to enable previewing the connected devices: ON
 - Real time preview: ON
- System settings
 - Date & time: Automatic date & time: use network-provided time
 - Auto Standby: Never
 - Language: English
- Security Settings
 - Security Level: Security level 1

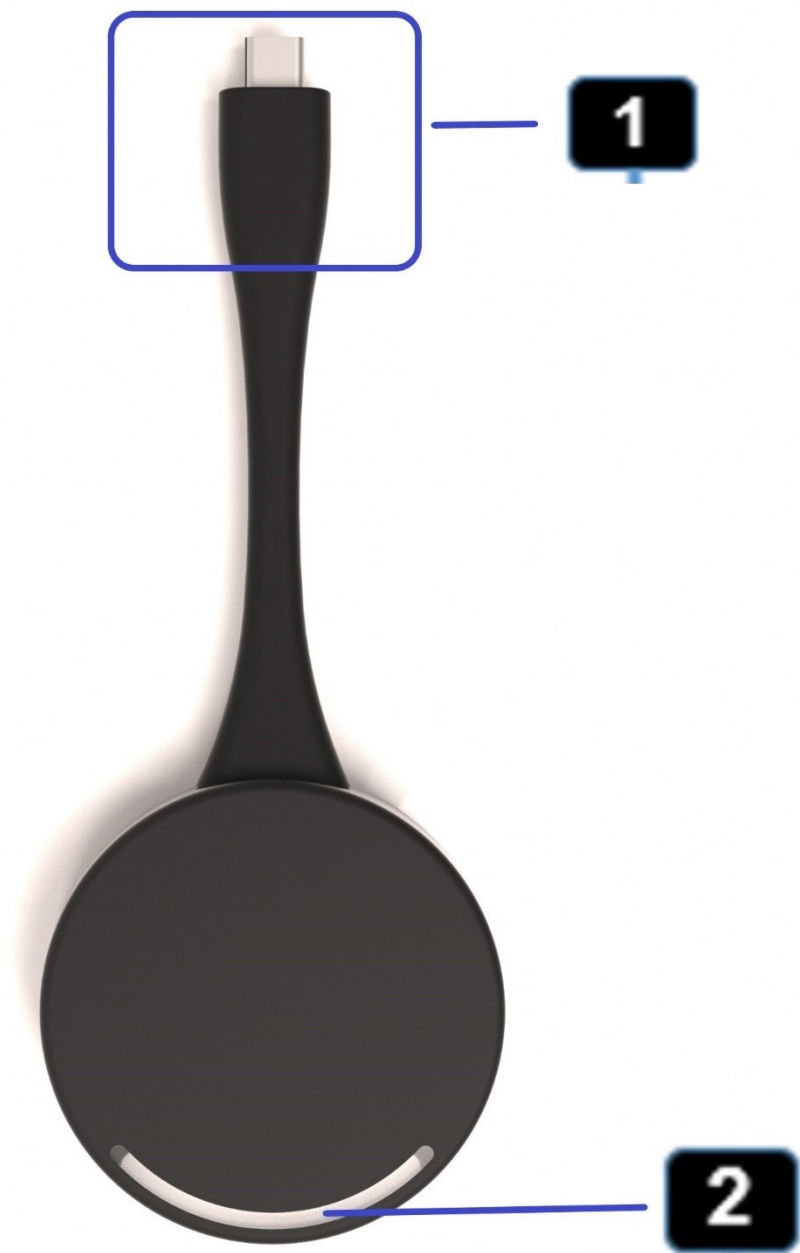
- Connection Password: 4-digits password beginning with 0000
- Change admin password: admin(default)

- Other settings
 - Auto create launcher: Disabled
 - Clear history after meeting: Always

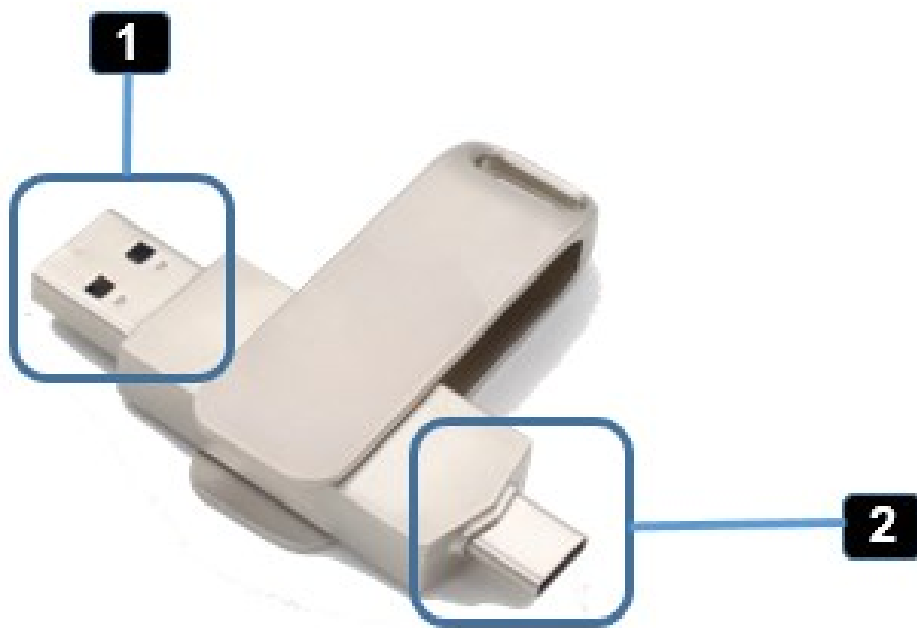
WMT-Mini, WMT-H35, WMT-C35 are dongles, which is used for toggling the mirroring from personal PC or M AC desktop on the main screen.



ID	Name	Description
1	HDMI connector	Using HDMI connector of the button can be plugged into a PC/Laptop for sharing your screen.
2	USB connector	Supply power, or plug into the base unit for pairing the Button to the Base Unit or upgrade the dongle.
3	LED ring indicator	Indicates the status of the button.



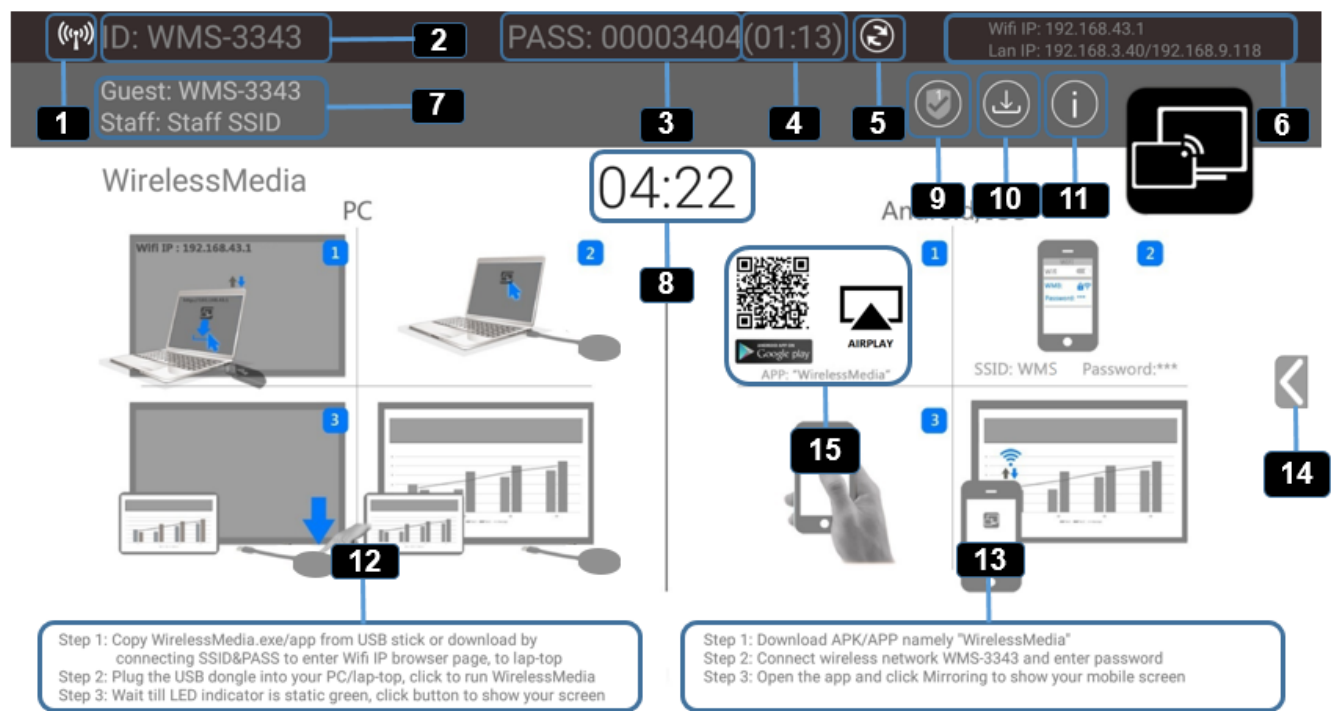
ID	Name	Description
1	HDMI Type C connector	Using HDMI Type C connector of the button can be plugged into a PC/Laptop for sharing your screen.
2	LED ring indicator	Indicates the status of the button.



ID	Name	Description
1	USB connector	Using USB connector of the dongle can be plugged into a PC/Laptop for sharing your screen.
2	Type C connector	Using Type C connector of the dongle can be plugged into a PC/Laptop for sharing your screen.

3.2 Software Interface

3.2.1 Home Screen



ID	Name	Description
1	Wi-Fi Indicator	<p>Wi-Fi Direct mode: internal access point is enabled</p>  <p>Wi-Fi Infrastructure mode: "Client-Mode", </p> <p>Wi-Fi connection to router is established, icon displays the current signal strength.</p> <p>A secure Wi-Fi connection is established, or connection to a router failed: </p> <p>Wi-Fi is not available: </p> <p>LAN Infrastructure mode: access point is disabled</p>
2	ID	Wi-Fi name or device name of the Base-unit access point.

3	PASS	Wi-Fi password of base unit.
4	Password-timer	only displayed, when timer is active; time until the password is changed automatically.
5	Refresh Wi-Fi-password	Generate new password manually for securing your Wi-Fi network.
6	Wi-Fi IP LAN IP	<ul style="list-style-type: none"> ● Wi-Fi IP: address of base unit in wireless LAN ● Assigned IP: address of base unit in LAN; "N/A" = no connection to network
7	SSID: Guest SSID: Staff	<div style="background-color: #cccccc; padding: 5px; margin-bottom: 10px;"> Guest: WMS-3343 Staff: Staff SSID </div> Name of Wi-Fi network for Guest and Staff , which allows mobile devices to connect with the base unit.
8	TIME	Show time, if LAN has access to a time server; even after disconnecting the LAN connection, the time is displayed until the device has been disconnected from power.
9	Security level	Security level 1-3, display ONLY; the security features of the displayed level are displayed in detail by clicking on the icon; the settings can only be changed by administrator in the webserver console setting menu.
10	Download Button	Creating & upgrading Launcher "WirelessMedia.exe" for Windows, MAC to USB stick.
11	Info	Show status-bar (1) – (7) in Home screen showing/hiding
12	Windows / MacOS Quick Start	Steps to instruct how to transmit PC/Lap-top onto the main screen. First-time users must first install the starter program from the web page or from the USB stick one time.
13	Android/IOS Quick Start	Steps to instruct how to transmit smart mobile devices either powered by Android or IOS, onto the main screen.
14	Preview function of the screen contents of the participants with transmitter and mobile devices; White Board& Annotation function icon	Preview function of the screen contents of all connected transmitters and mobile devices; White Board and Annotation function.
15	Load "WirelessMedia2" App from Store	Scan QR-code for Android device and download the App from GooglePlay Store.

4. Installation

The installation chapter gives an overview of the different ways to install and connect WirelessMedia Base Unit.

Overview:

- Installation methods for the Base unit
- Table mounting
- Wall mounting
- Recommendations about antenna placement and orientation
- WMS Power Connection
- WMS Video Connection
- WMS Audio connection
- WMS LAN connection
- About USB device connection
- Wiring Diagram

4.1 Installation methods for the Base unit

Introduction to the installation methods:

The Base unit can be installed in different ways in a meeting room.

- Table mount
- Wall mount

The articulated antennas are removable. They can rotate for better wireless connection.

Attention: For optimal performance, install the Base unit close to the display and avoid obstacles between the Base unit and the Transmitters.

Necessary tools

- A drill (type of drill depends on the type of wall)
- Flat screwdriver
- Additional screwdriver that matches the mounting screws (mounting screws not included in the package)

Necessary parts

- 2 mounting screws
- 2 plugs

How to install

1. Drill two holes in the wall as indicated on the drawing.
Horizontal distance: 177 mm $\pm$ 0.15
2. At the bottom of Base Unit, turn in 2 flat screws into 2 holes to be fasten enough.

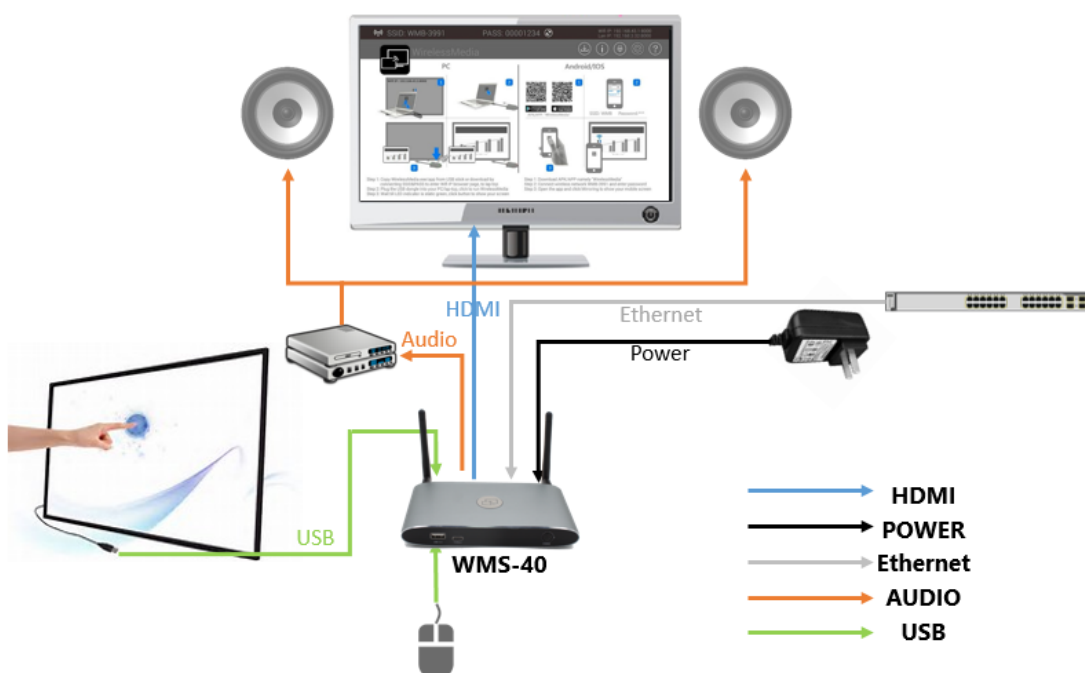
Note: Mounting screws and plugs are not included in the WirelessMedia box . The type of screws depends on the type of wall (stone, wood, plasterboard, ...) you are mounting the Base Unit to. Make sure the head of the screw is not larger than the hole in the bottom of base unit.

3. Place the WMS on the wall and fixate the base unit with the 2 unfixed screws.

Antenna placement rules

- The antennas should be oriented vertically, so perpendicular to the ceiling and parallel to the walls.
- The antennas should be installed far enough (at least 50cm/1.6ft) from metallic surfaces to avoid unwanted reflections and far enough (at least 1m/3.3ft) from other radio equipment that operates in the same frequency range, e.g. other Wi-Fi access points, cordless telephone, microwave ovens,.... It is also best to install antennas at least 15 cm (6 inches) from concrete walls.
- The most favorable situation is a direct line of sight between antennas and Buttons. Any obstruction will cause the signal to follow a longer propagation path, which can result in performance degradation.
- Due to the particular radio pattern of the dipole antennas, the antennas should not be placed just above potential positions of WirelessMedia users. As a result, the advised position for the antennas is at the side of the meeting room.

4.2 Wiring Diagram

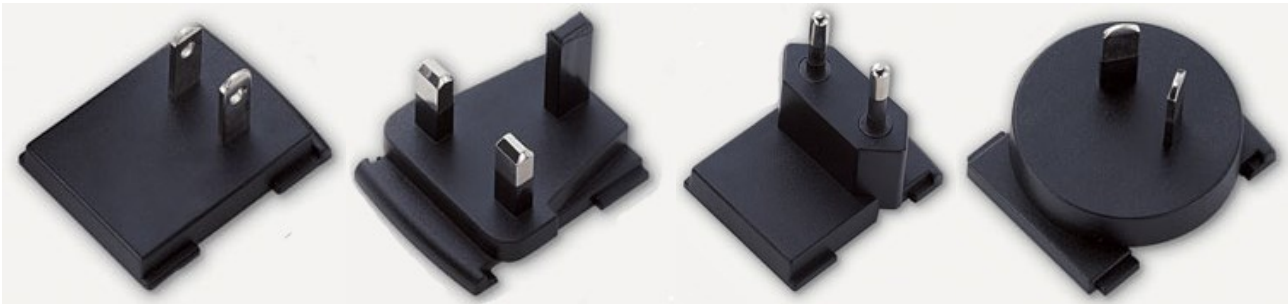


4.3 Power Connection

The Base unit can be powered by the external universal power adapter.

How to connect the external power adapter

1. Plug the power connector to the power adapter to the power input connector of the Base Unit
2. Choose the appropriate power plug (US, UK, EU or AU) to be installed on the power adapter,
3. Connect the power cable plug into the wall outlet.



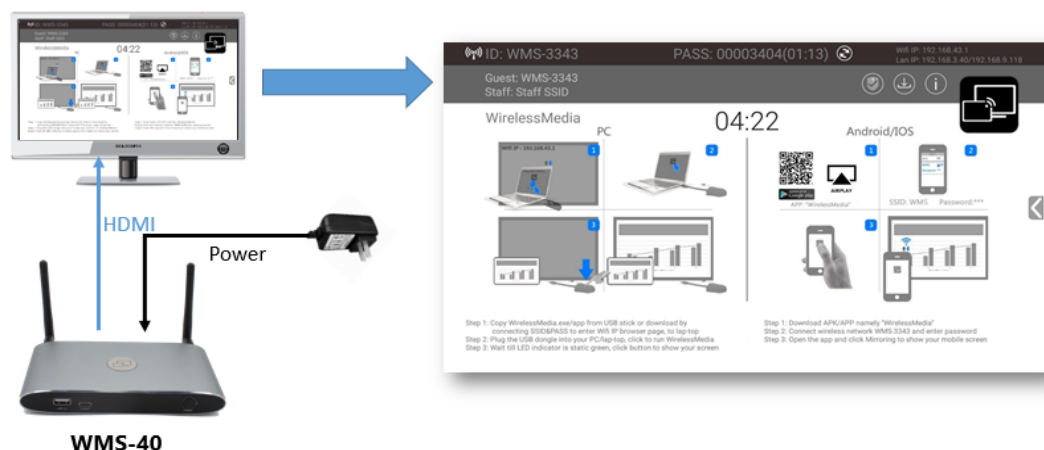
Note: Once the base unit is powered, it starts up. From now on please use the **POWER** button with **Status LED** on front of Base-unit to switch **ON** or **OFF**.

Power over Ethernet

If the LAN Ethernet switcher support POE (Power over Ethernet), it could power up the Base-unit instead of using the external power adapter. (WMS-40 LAN2 Port is support POE.)

4.4 Video Connection

1. Connect the **HDMI Output** of base unit to a 4K or Full-HD display by a HDMI cable.
2. Connect the power adapter to the base unit **DC power socket** and connect the other side plug to an available electrical outlet and switch the base unit on.
3. After started, the system show the **home page**, as shown below.



4.5 Audio Connection

WirelessMedia transmitter can transmit the audio output of the PC/Lap-top, re-direct and send to the Base Unit together with the video signal. The audio will be output at line levels from mini jack socket 3.5mm connector and via the HDMI output connectors simultaneously.

It's up to the user to decide whether or not to send the audio signal together with the video signal.

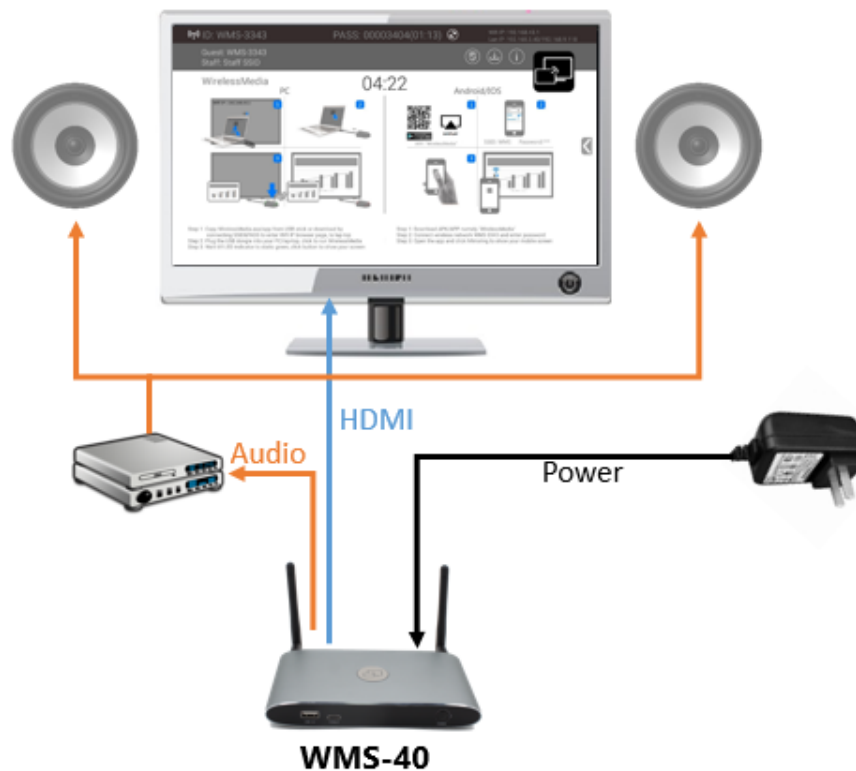
Audio via HDMI output

When your display/projector is connected via HDMI and it support audio together with video, then a separate audio connection is not necessary. The audio signal is sent together with the video signal to the display. The system is shown as below.



How to connect separate audio

1. Connect an audio cable with mini jack socket 3.5mm connector into the audio of the Base Unit
2. Connect the other side to the meeting room's sound system.



Sound is not sent out

WirelessMedia button will keep capturing and send the audio of PC/Lap-top, since PC/Lap is successfully mirroring desktop to the main screen.

1. Please be sure the button is static green and the PC/Lap-top is sharing on the screen
2. Check *Setting* configuration, to adjust the *Volume* set in *WirelessMedia* setting tab.

PC/Lap Sound

As default set, WirelessMedia will mute the internal speaker of PC/Lap and route the audio to the base unit, after PC/Lap is successfully mirroring desktop to the main screen, in order to avoid the repeated audio.

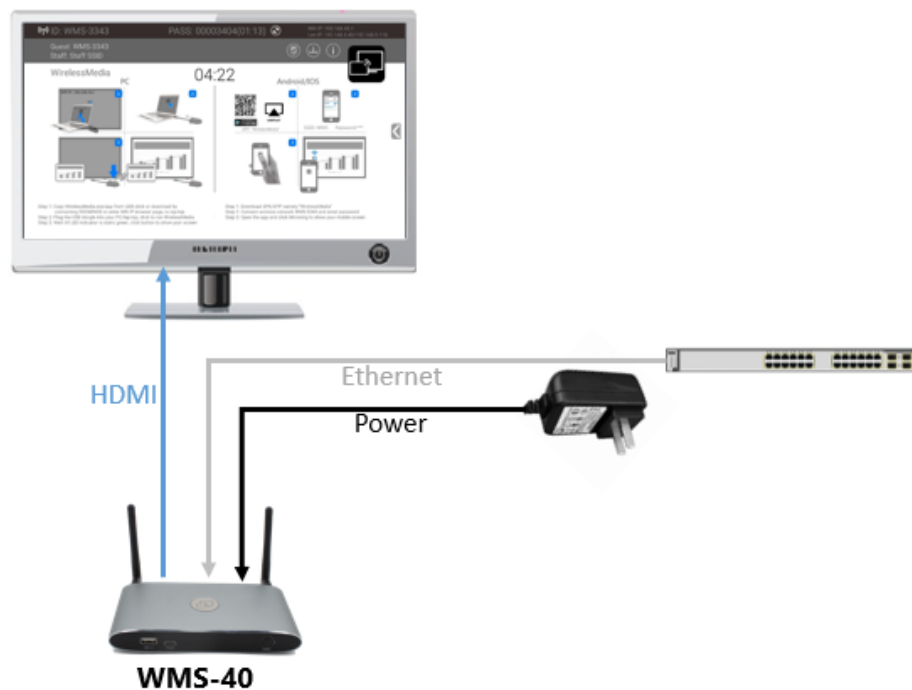
When click the button to stop sharing, local loudspeaker will return to previous status, you could adjust the volume on your PC/Lap.

Note: If you want to keep the internal speaker of PC/Lap still while route the audio to the base unit, please click the audio mute icon in the status bar to turn on the internal speaker.

4.6 LAN connection

The Base Unit can be connected to a local network or directly to a PC/lap-top. For normal operation, a LAN connection is not necessary. When needed, it's suggested to connect the WMS to the Internet.

1. Connect a network cable with RJ-45 connector into the LAN port of Base Unit.
2. Connect the other side to LAN.
3. If the LAN Ethernet switcher support POE (Power over Ethernet), it could power up the WMS than using the external power adapter.

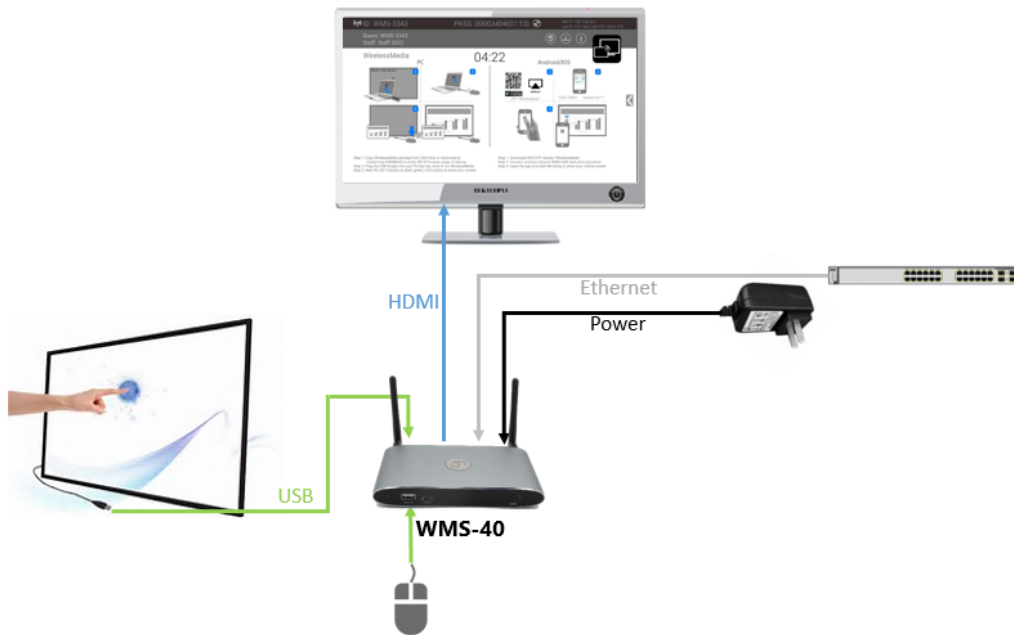


The LAN connection can be used for:

- Network integration of Base Unit in guest or company network.
- Telnet control the Base Unit.
- Maintenance purpose.
- Over-The-Air -Update (OTA) of firmware of Base-unit.

4.7 Usage of USB device

Please use a USB Mouse or Touchscreen:



1. To configure the **Security level check button, DOWNLOAD BUTTON, INFO**.
2. To control the sharing PC/Lap-top.
3. To activate system upgrading
4. For white board or annotation during a presentation, WirelessMedia transmits Video, Audio and the USB-HID function for mouse-control and click-function of a touchscreen. Connect touch-interface of your screen to the USB-port on your laptop or PC.

USB control

USB mouse for configuration menu

- Single click to select.
- Right-click to back to the Home Page.

Touch screen

- Click to select.
- Long press to open the contextual menus, as double-click or click the right button of a USB mouse.

5. Quick-to-Start

5.1 Mobile device: Wireless Connection

1. Download the application namely "WirelessMedia" (for example scan QR-Code in Home screen) in Android Google Play market for Android mobile device.



2. For IOS devices, use Airplay to mirror the desktop.
3. WirelessMedia provides two way to discover the WMS for mobile devices.
 - a) Portable hotspot, to connect the hotspot to connect the WMS.
 - b) LAN connection, to connect the WMS and mobile both in LAN network, to discover and connect to WMS.

After Factory reset, WirelessMedia starts in standard configuration "Wireless Direct Mode" ("Linked Single Network"), where the base unit creates its own wireless access point, to which all the transmitters connect. This is typical for quick setup, temporarily installations or for small business meetings with a small number of meeting rooms.

The Wi-Fi icon  for "WiFi Direct Mode" appears in the top status bar of the Home screen. The SSIDs for these hotspots appear in the Start screen of WirelessMedia:

Guest: WMS-3343
Staff: Staff SSID

Guests and staff have access to the internet when LAN is enabled.

5.1.1 Enable portable hotspot:

Check the SSID and PASS (Password) are shown on the Homepage, as shown below.

ID: WMS-3343
PASS: 00003404(01:13)

Wifi IP: 192.168.43.1
 Lan IP: 192.168.3.40/192.168.9.118

WirelessMedia

04:22

PC

Android/IOS

Step 1: Copy WirelessMedia.exe/app from USB stick or download by connecting SSID&PASS to enter Wifi IP browser page, to lap-top

Step 2: Plug the USB dongle into your PC/lap-top, click to run WirelessMedia

Step 3: Wait till LED indicator is static green, click button to show your screen

5.1.2 Enable LAN connection:

Be sure the WMS is connected to the Network. When *Local IP* shows an active IP address, such like 192.168.3.32, it indicates WMS is successfully connected to the LAN and get an appointed IP address.

ID: WMS-3343
PASS: 00003404(01:13)

Wifi IP: 192.168.43.1
 Lan IP: 192.168.3.40/192.168.9.118

WirelessMedia

04:22

PC

Android/IOS

Step 1: Copy WirelessMedia.exe/app from USB stick or download by connecting SSID&PASS to enter Wifi IP browser page, to lap-top

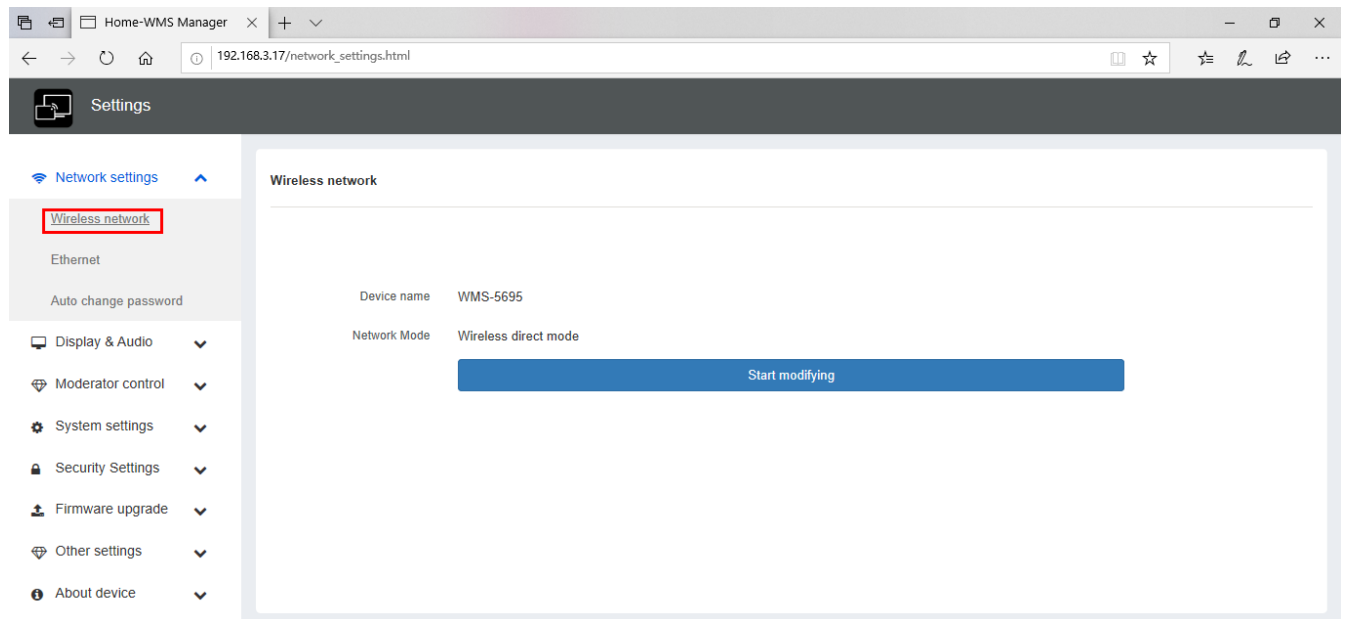
Step 2: Plug the USB dongle into your PC/lap-top, click to run WirelessMedia

Step 3: Wait till LED indicator is static green, click button to show your screen

Note: When it shows "N/A", means the WMS is not connected to the LAN (Local Area Network) by CAT cable or it failed to get an available IP address by the corporation router.

Please refer to the LAN-settings in Ethernet, as below.

Default password for entering the Main menu on webserver console is "admin".

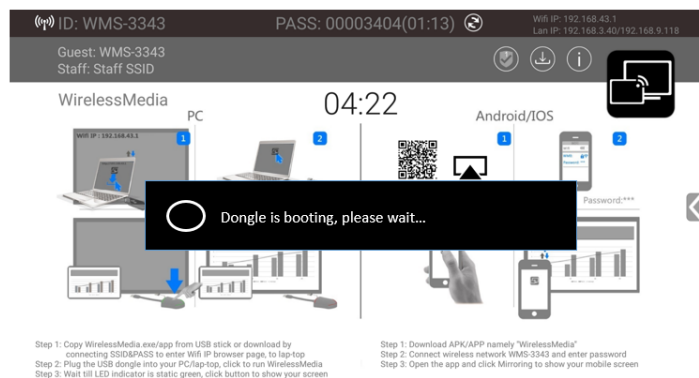


5.2 Pairing transmitter with base unit

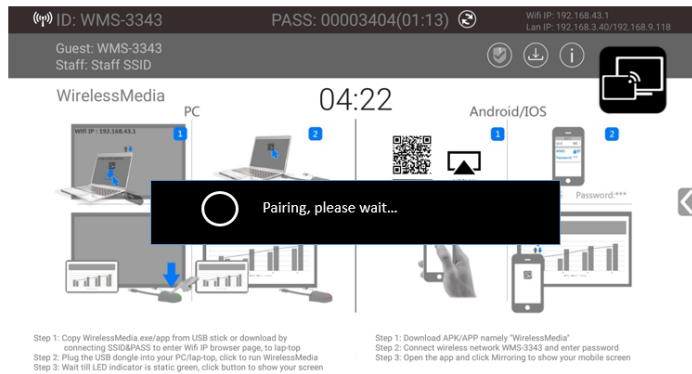
1. Connect the WMT-mini to USB port/type C port, WMT-H35 (HDMI dongle) to USB port, WMT-C35(Type C d ongle) to type C port, to pair all the transmitters with base unit. The home page displays as shown below.



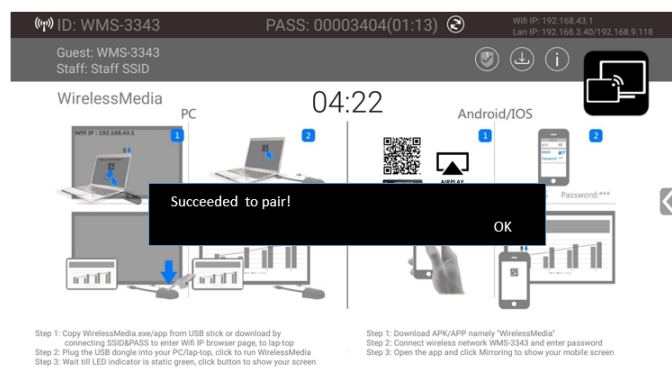
2. When plug in transmitters, the message table shows "Dongle is booting, please wait..." as shown below



3. Then, the message table shows "Pairing, please wait..." as shown below



- After completing the pairing, the message table shows "Succeeded to pair!" on the home page, as shown below. Then, please un-plug the transmitters and use it for the mirroring on your laptop.



If error-message "Configuration fail" is shown, please check the connection of USB/type C to keep stable after plug-in, and try again.

Note: After each changing the SSID/Wi-Fi channel in menu, all the transmitters must be paired again!

When you buy additional transmitters or when a transmitter should be assigned to another Base-unit, the transmitter must be paired again.

A transmitter can only be paired to one Base-unit at a time. The transmitter will always make connection to the Base-unit it was last paired to.

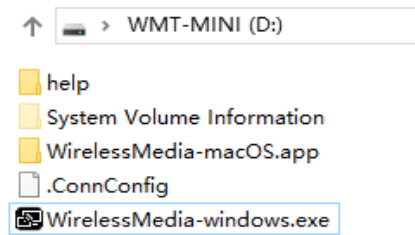
5.3 Mirroring

5.3.1 PC/Lap-top

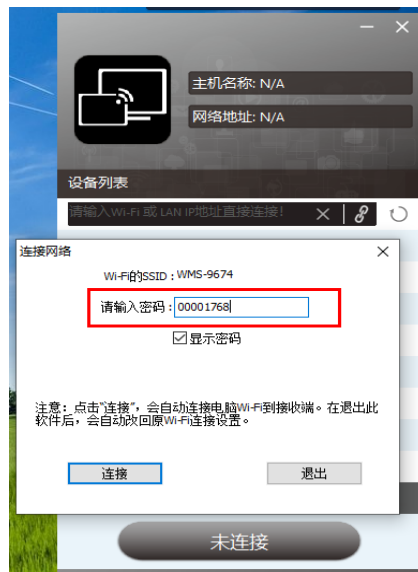
Driver-based Transmitter

WMT-mini:

- Plug WMT-mini into USB/Type C port to pair with base unit. The "WirelessMedia-windows.exe" for windows PC/Lap-top, "WirelessMedia-macOS.app" for Macbook will be auto downloaded into WMT-mini.



2. Plug WMT-mini into PC/Laptop/MACbook and click the "Launcher" to run. WMT-mini will auto change PC's wifi to the target base unit wifi. No need to manually change PC's wifi. It will pop out the message bar to enter the password to connect.



3. It will show "Ready to share", click to share the desktop to screen.



Note: for second time user, WMT-mini will automatically run to share screen, no need to click “Launcher”.

Non-Driver based transmitter

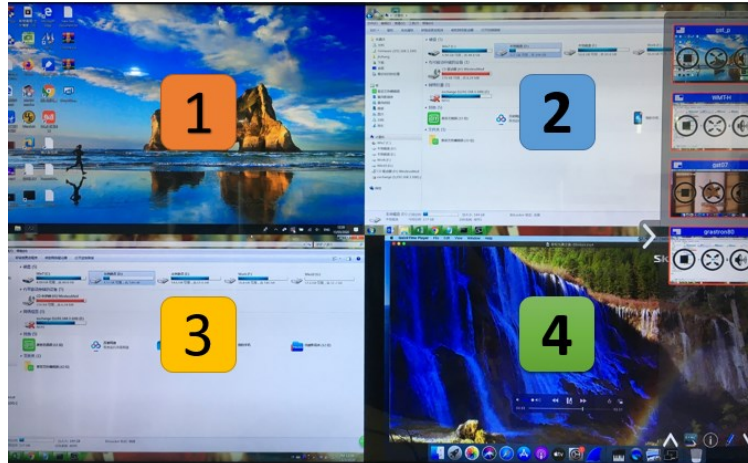
WMT-H35 (HDMI dongle) /WMT-C16C (Type C dongle):

1. Plug USB port of **WMT-H35** / Type C port of **WMT-C35** to base unit to pair.
2. Plug USB port and HDMI port of **WMT-H35** / Type-C port of **WMT-C35** to PC/Laptop/MacBook. (USB port for power)
3. Till the transmitter LED turn static green and touch to share the screen or click the visual button on bottom right corner of PC.



Quad view mirroring:

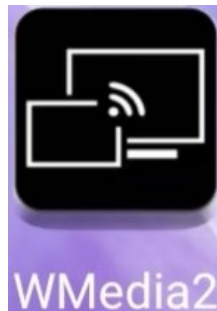
WMS-40 base unit can mirror 4 sources onto main display simultaneously, which supports PC/Laptop and mobile devices.



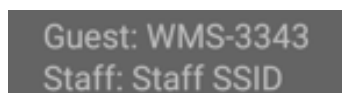
5.3.2 Mobiles Devices

Sharing on Android devices

1. Open the "WirelessMedia" application.



2. Connect your mobile device to one of the displayed Wi-Fi networks.



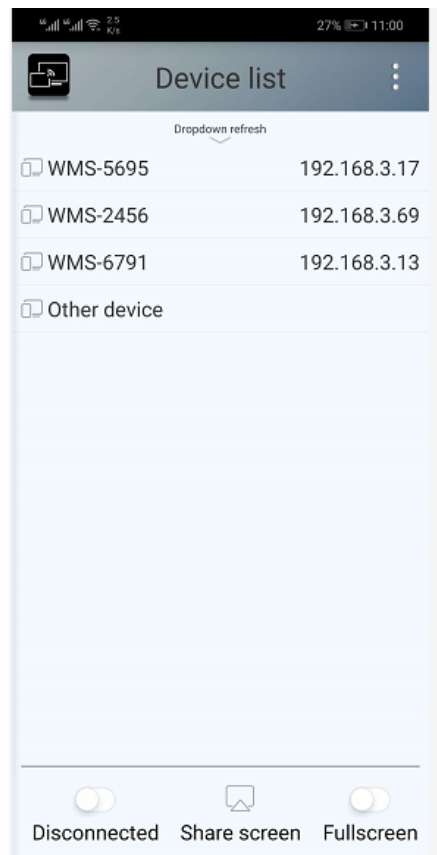
3. Open the "WirelessMedia2" application in your mobile device, and you will see the Home Page of

"WirelessMedia2" as shown below. and click the device list refresh button

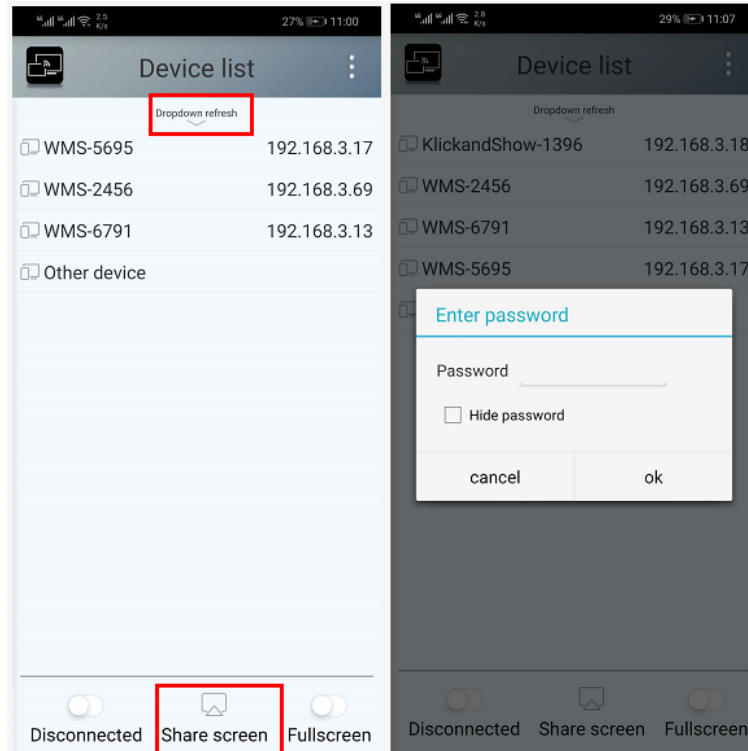


for Android,

which is highlighted in red circles as shown below:



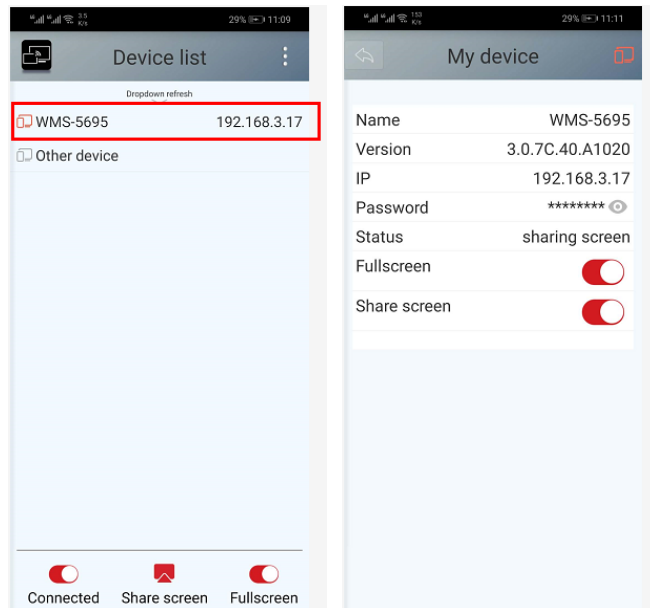
4. Select the base unit you want to connect, enter password and mirror.



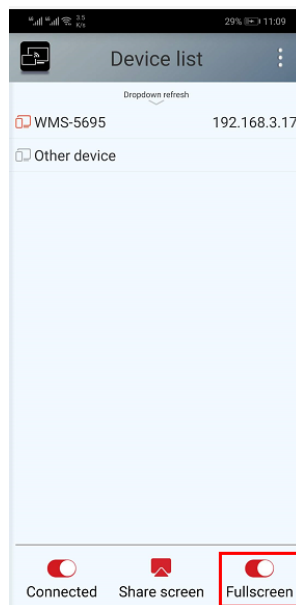
5. After completing the pairing, it shows OSD "Welcome ****" on the home page. For example, if we connect it by a HUAWEI-PLA-AL00, it shows a "Welcome HUAWEI-PLA-AL00" on screen, as shown below.

Welcome PLA-AL00

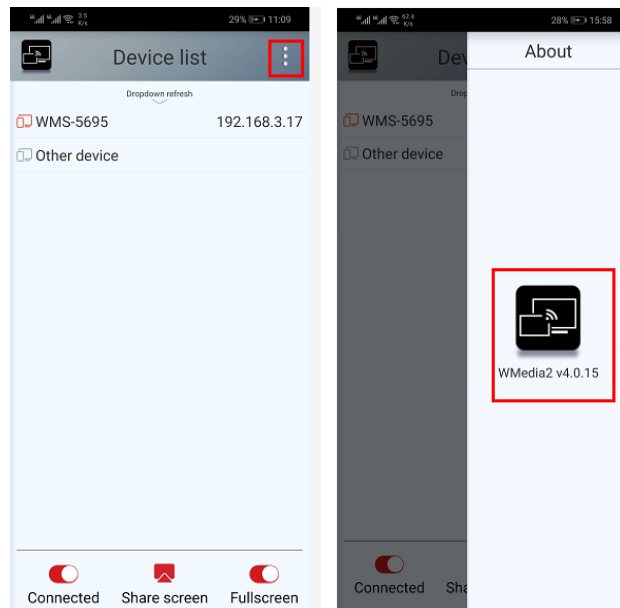
6. Now you can mirror your desktop of your mobile.
 7. Click again the button "Share Screen" to stop mirroring.
- ✧ Click the connected device name to check the base unit status and base unit firmware version.



- ✧ Click "Fullscreen" to be full screen in the main screen when more than one signal is connected and shared.



- ✧ Click the upper right corner icon, check the "WirelessMedia2" application version information.



Sharing on IOS devices

1. With **AirPlay** technology, user can stream his screen or music, (YouTube-) videos, pictures ... wireless to Base-unit. Connect your iOS device with the same Wi-Fi network from WMS.

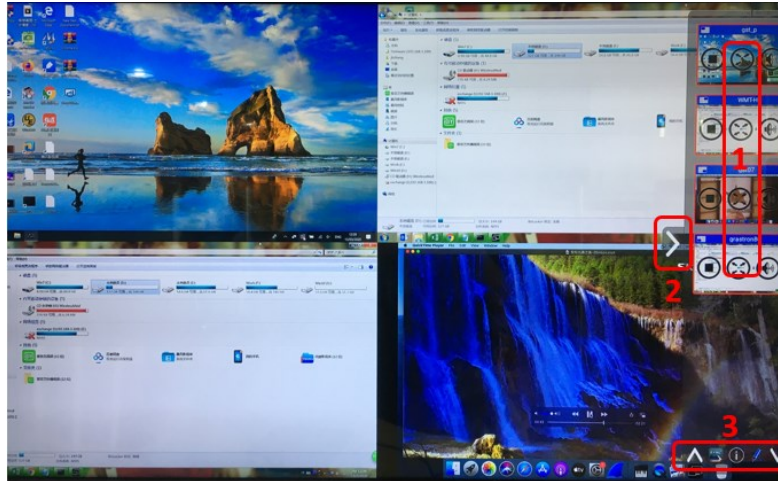
For IOS devices, activate the control center. Click the **Airplay** icon  on your Apple device and select the target WMS to start mirroring through the WMS to the main screen.

It will show OSD on home screen after connecting successfully.

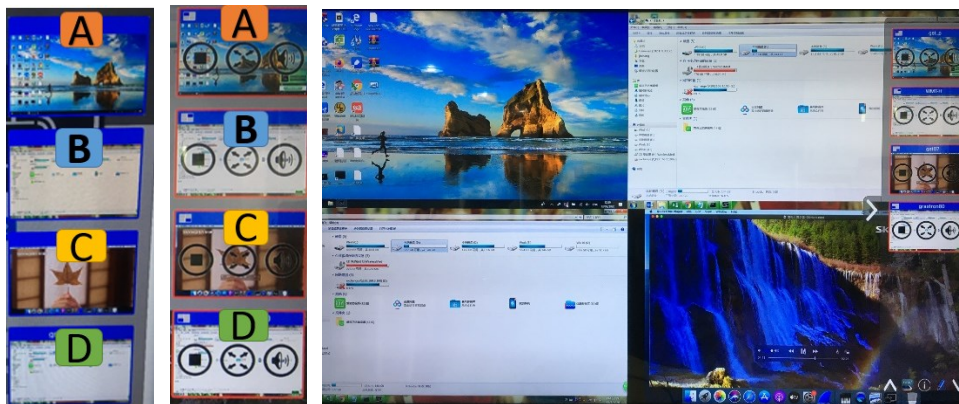


5.4 Preview Window

At touch-screen or with mouse of Base-unit, you can click on LEFT or RIGHT-arrow (2), to show the small preview-windows as a bar on the right edge of the screen, or to hide them, if they are disturbing. Once the preview windows are activated, you see live-pictures (1) of all connected transmitters and android devices via "WirelessMedia2" APK at the right edge of the screen. Just scroll UP or DOWN (3) to see further preview pictures.



As soon as presenter is clicking with mouse of Base-unit, or clicking with finger at touch-screen, the appropriate participants of the meeting is activated, another click at the arrow shows his picture at the main screen in full format. A red frame is shown for the active picture. The button  indicates play button, click to show screen. The button  indicates step out screen, click to stop mirroring the current signal. The button  indicates full screen, click to be full on main screen. The button  indicates volume, click to adjust the volume of connected signal. The button  indicates the location of connected devices on main screen.





5.5 Whiteboard & Annotation

Whiteboard and **Annotation** requires an HID compatible device, such as interactive white board or interactive touch screen. It is easy to use, makes collaboration in your business more productive and effective: documents can be easily written, edited, captured and shared.

Whiteboard: write all your ideas and share the digital notes with anybody. Different colors of pen and background can be selected.

Annotation: draw or write annotations in overlay within your documents, presentations. Save and share everything that was discussed. Different colors of pen can be selected.

How to start Whiteboard or Annotation mode

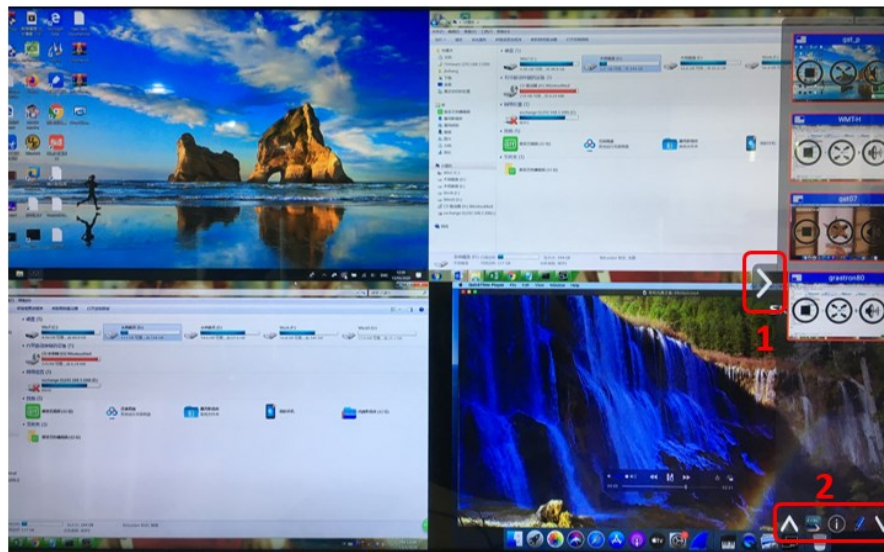
The "Preview window" in Home Screen to start this mode.

Tap (click) the LEFT-arrow (1), located on the right side of the screen, and select

Whiteboard  or Annotation icon  icon in (2).

Icon  in (2) indicates "information", click to check the base unit SSID, password, Wifi IP and Lan IP address when some device are sharing on main screen. This info will show on main screen at least 20s then will disappear

automatically. In order to let other attendees join into meetings as well.



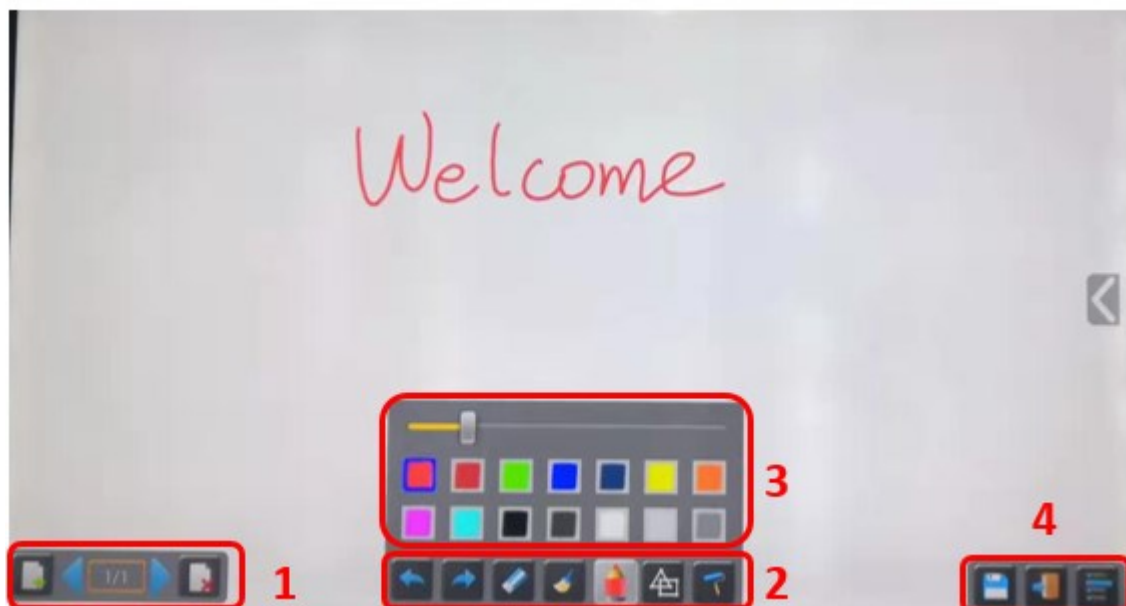
The toolbar for Whiteboard or Annotation appears in the bottom of your screen.

If another user is mirroring, the Whiteboard & Annotation function is closed.

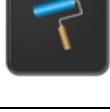
5.5.1 Whiteboard

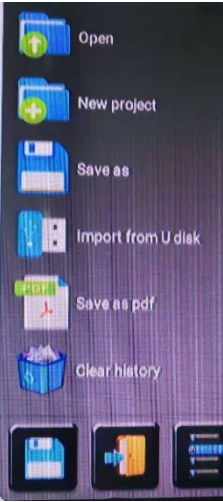


Click on the icon to enter the white Whiteboard page. You can create free drawings with your finger at touch screen, mouse (multitouch capability).



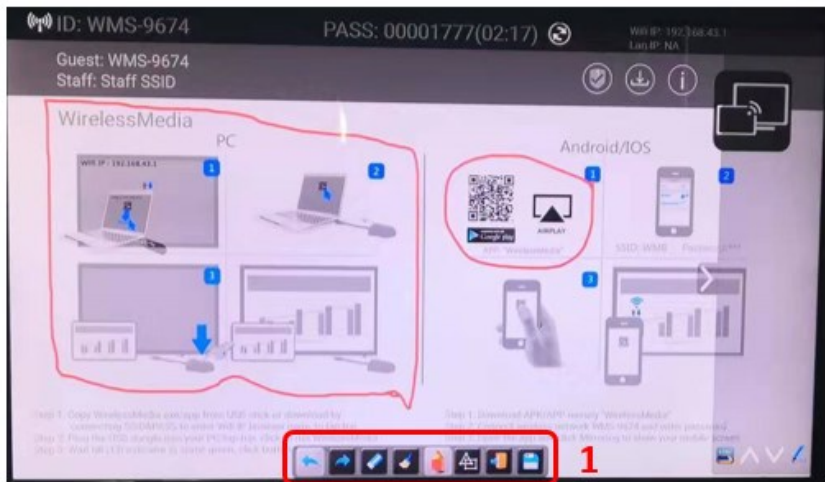
Use the toolbar to select one of the following functions.

ID	Icons	Function
Tool bar 1	  	<p>Add an empty page</p> <p>Delete the actual page</p> <p>Display previous or next page</p>
Tool bar 2	      	<p>Undo: one step backward in changes</p> <p>Redo: one step forward in changes</p> <p>Erase part of drawings or annotation, change diameter by a longer tap</p> <p>Clear the entire drawing/writing on the screen</p> <p>Pen allows writing/drawing in different colors</p> <p>Draw basic geometric shapes</p> <p>Select color of board, the drawing will be kept</p>
Tool bar 3		<p>will pop up, when "Pen" or "Draw shape" or "Select color of board" is selected, for individual change of size of Pen, Shape or color.</p>

<p>Tool bar 4</p> <p>File options</p> 	  	<p>Save the current screenshot on local storage (PNG+WMN)</p> <p>Close Whiteboard to go back to Home screen, actual project can be saved on local storage (WMN)</p> <p>File options:</p> <ul style="list-style-type: none"> ● Open WMN-file from local storage and continue/edit an older project ● New project ● Save as WMN on local storage in unit, it will be erased after POWER-OFF ● Import from U disk stored project (WMN) ● All pages are saved as PDF on local storage ● Clear history – delete all whiteboard & annotation files on local storage
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5.5.2 Annotation

Click on icon  to enter the Annotation function.

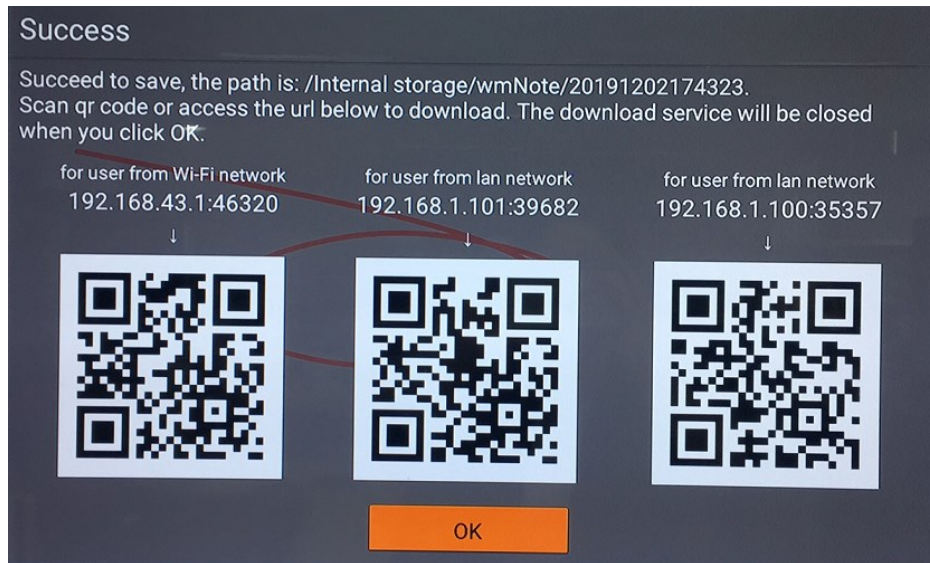


Use the toolbar to select one of the following functions.

ID	Icons	Function
Tool bar 1		Undo: one step backward in changes
		Redo: one step forward in changes
		Erase part of drawings or annotation, change diameter by a longer tap
		Clear the entire drawing/writing on the screen
		Pen allows writing/drawing in different colors
		Draw basic geometric shapes
Tool bar 1		Close Whiteboard to go back to Home screen, actual project can be saved on local storage (WMN) Close Whiteboard to go back to Home screen,
		Save the current screenshot on local storage (PNG)

Download the drawings to connected users

Scan the QR-code with your mobile's camera or enter the given IP-address in a browser. If the network connection is set properly, you will get the saved files on Base unit, which you can download as PNG file. The possibility for download will be closed after you click OK. You can copy data to USB disk and put this USB disk into the Base-unit and import with "Import from U disk" to the Whiteboard-section.



⌚ http://192.168.43.1:38238/

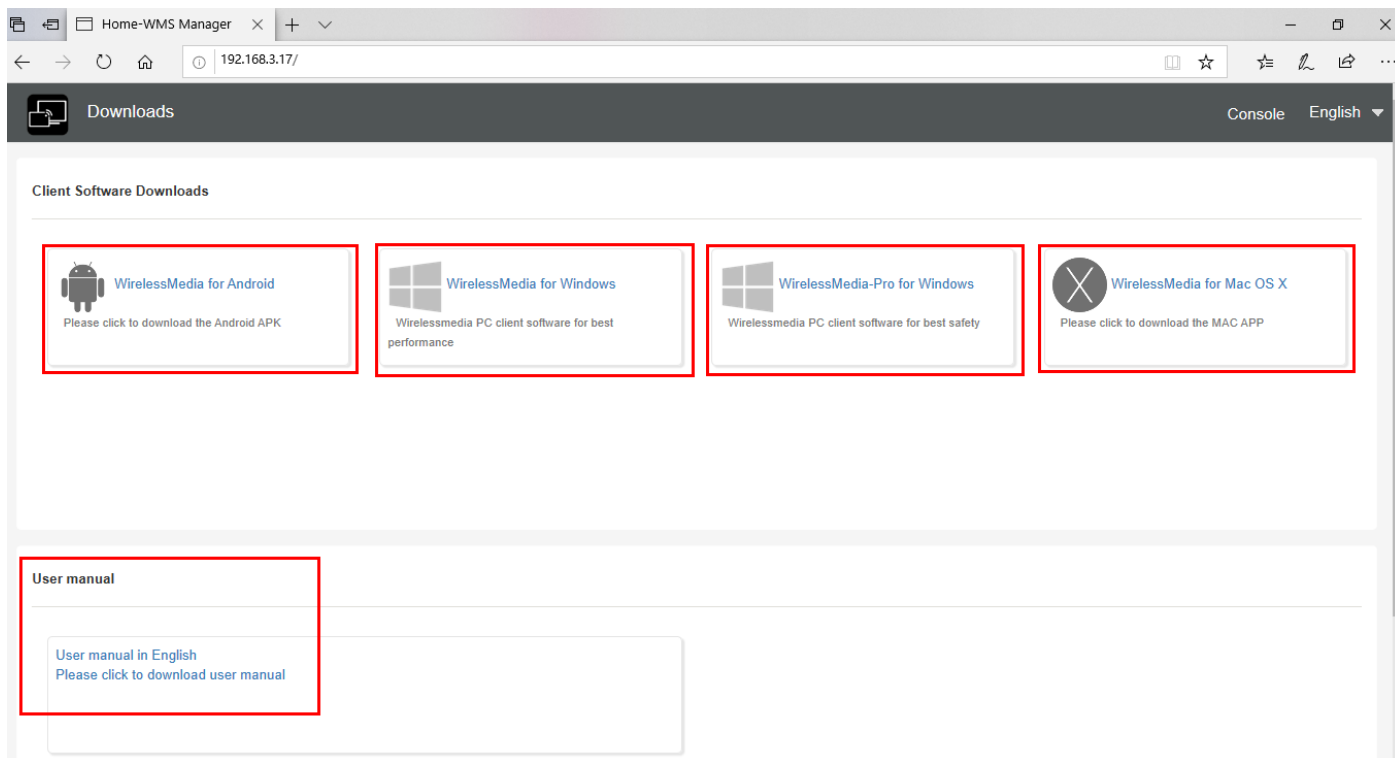


Files on base unit:/111

name	size	modify date	action
0.png	381.5 KB	19-12-02 PM04:57	download

1. Web Setting Management Configuration

Connect base unit ID & Password or LAN IP to laptop, to enter Wi-Fi IP browser page to configure settings of base unit. The "WirelessMedia-windows.exe" and "WirelessMedia-Pro.exe" for windows PC/Lap-top, "WirelessMedia-macOS.app" for Mac OS X, "user manual" and "WirelessMedia" for Android can be downloaded here.

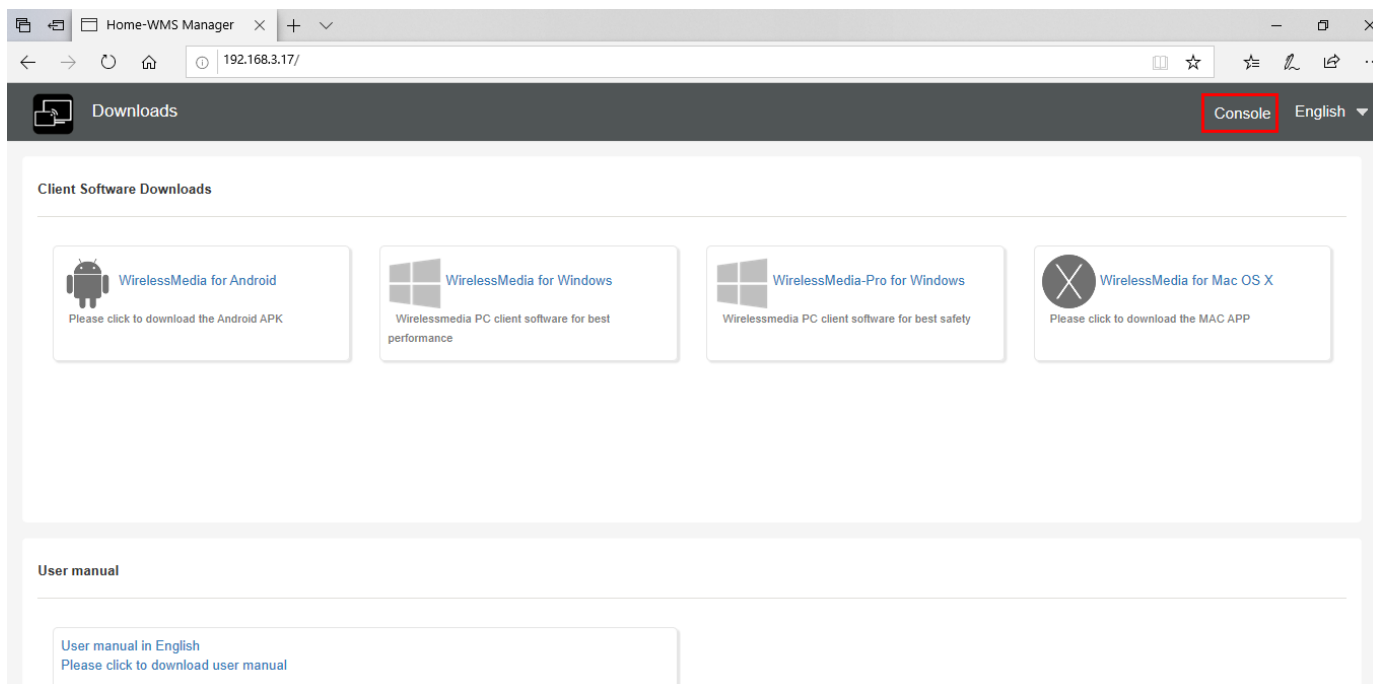


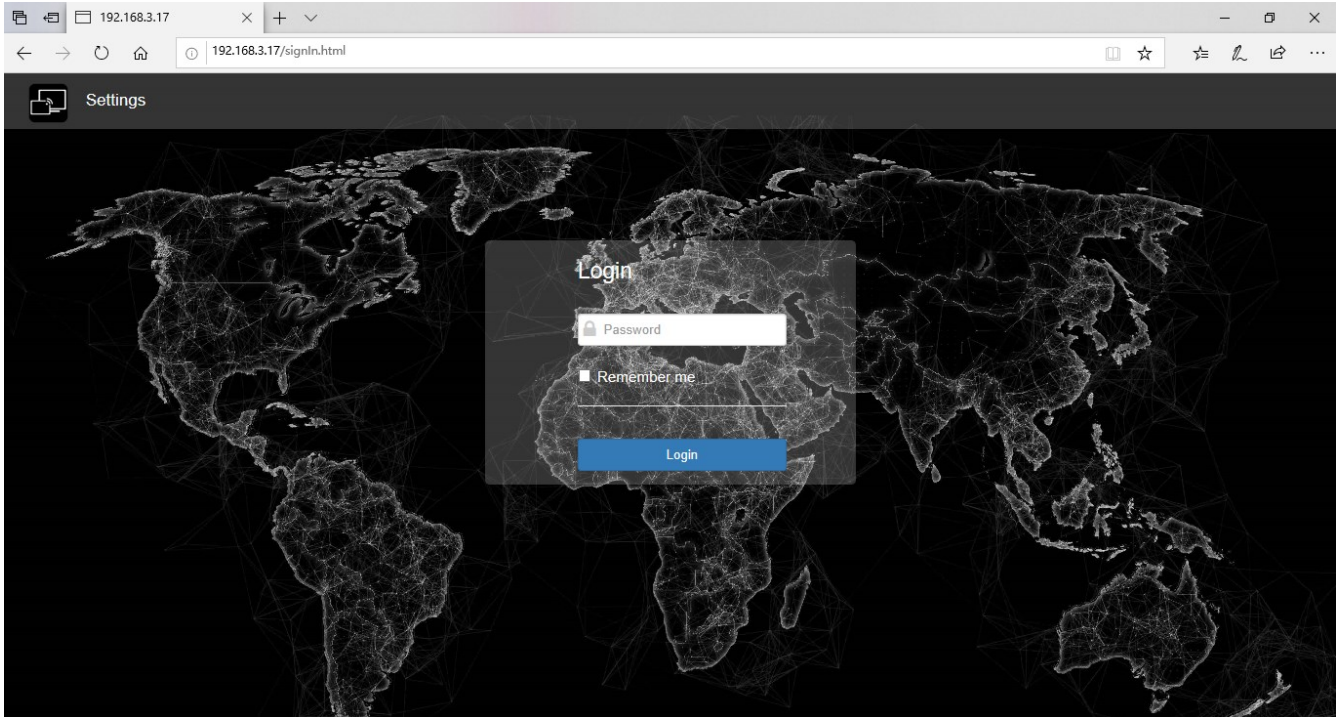
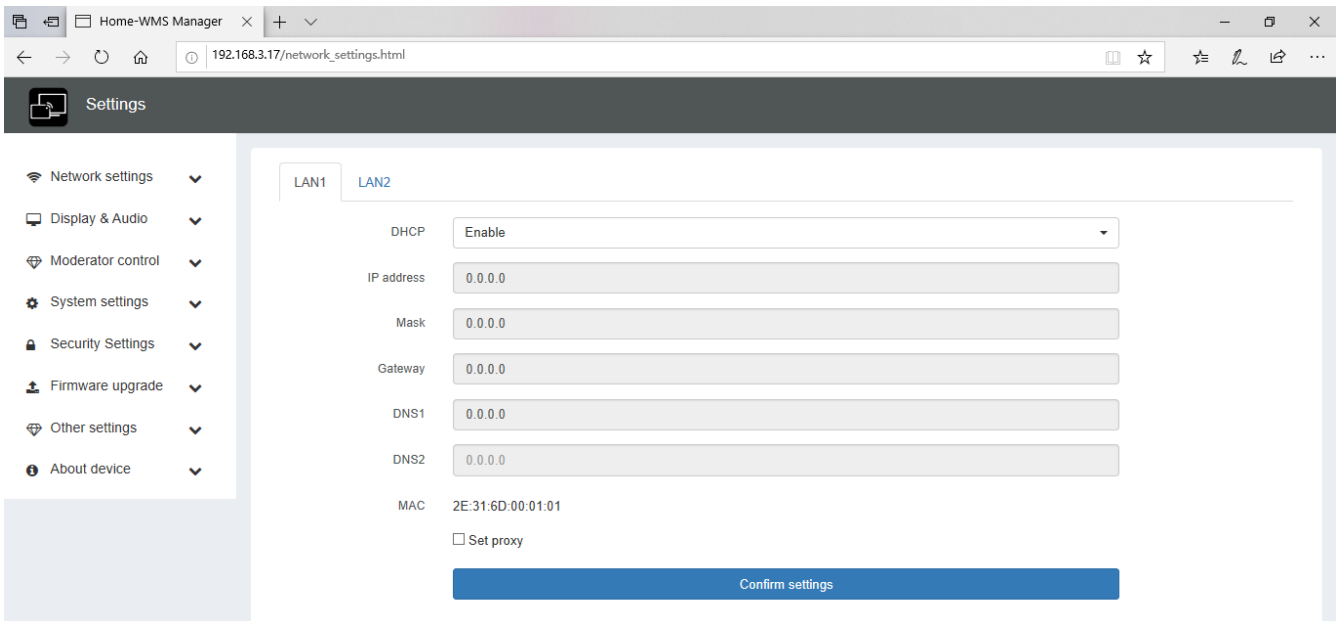
Click “Console” on the top right corner to enter into menu to configure.

A password is required to enter the configuration menu. The default password after Reset is “admin”. You can change the password in menu “Security setting”.

Note:

If user has forgotten his password, you need to make a Factory Reset to restore “admin” as password.





The main interface of Setting is shown as below, including **Network settings, Display & Audio, Moderator control, System settings, Security settings, Firmware upgrade, Other settings, About device.**

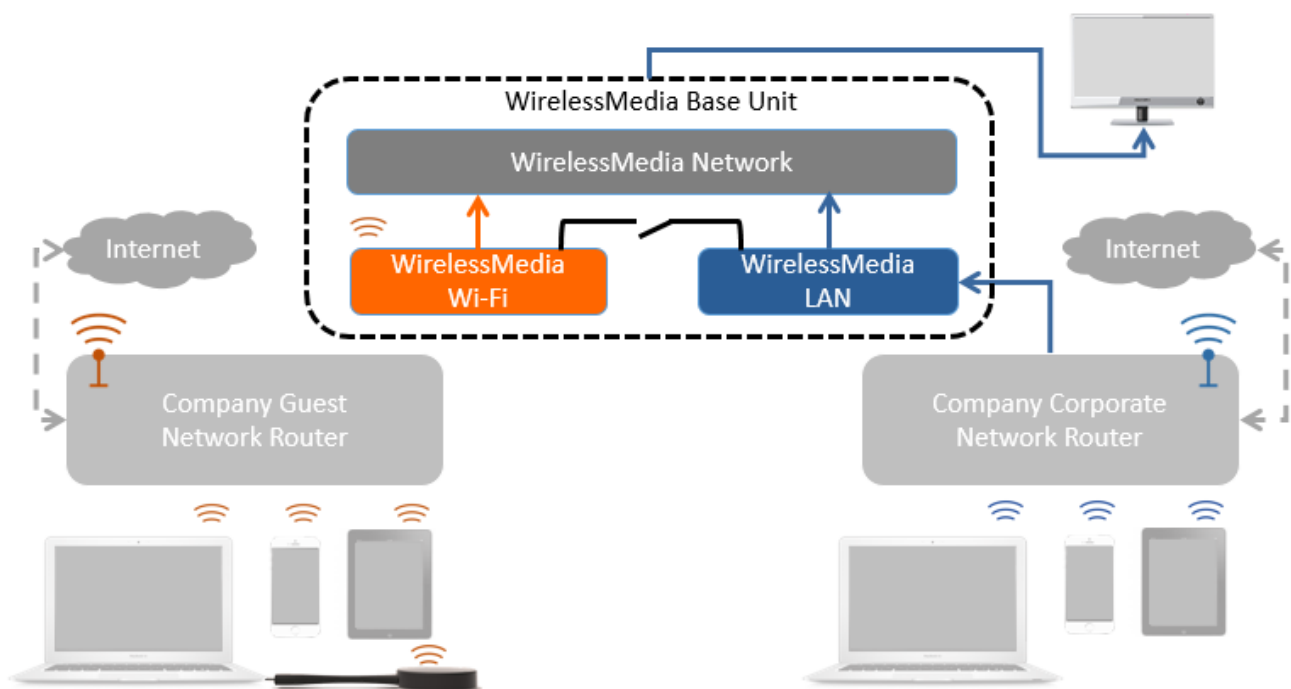
6.1 Network settings

6.1.1 Wireless network

To take the full benefits of the WirelessMedia possibilities, WMS should be properly integrated in the organization's network (company/university/school). This wizard allows user to create a custom configuration for integration of WirelessMedia into the existing wireless infrastructure in larger organizations.

Segmented Dual Network, is to provide two segmented routing ways to connect to the base unit simultaneously and separately, including wireless WI-FI network (normally connected to Guest/untrusted network) and wired LAN network (normally connected to the corporate/trusted network).

A typical Segmented Dual Network topology is shown as below:



6.1.1.1 Wireless network configuration wizard

Enter a device name for the Base-unit. We recommend to take a descriptive name, if you have more than one WirelessMedia installed. The default name is "WMS-XXXX".

wireless network

1.Device name

2.Mode selection

3.Network settings

4.Ssid setting

Device name

WMS-9674

Note

The device name is the host name of the device,which is used as the WIFI name when it is set as Wireless Direct Mode,or host name when it is set as Infrastructure Mode. Please pay attention that the changing of ID may cause the re-pairing of the dongle.

Cancel

Next step

Only "a-z","A-Z","0-9","-" and space are legal character.

Click "Next step". The following three connection methods are available:

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting


Wireless direct mode


Wireless infrastructure mode


LAN infrastructure mode

Previous

Next step

6.1.1.2 Wireless Direct Mode

After Factory Reset, WMS base unit starts up in the **default Stand-Alone “Wireless direct mode”** configuration, where the Base-unit creates its own wireless access point, which all transmitters use to connect. This is typical for a quick setup for small group meetings. The Wi-Fi icon  for the “Wireless direct mode” is displayed in top status-bar of Home screen. **Guest** connect to the access-point of Klick & Show, while **Staff** can also connect to Base-unit via Wi-Fi or via LAN connection to their corporate network.

Stand-Alone Connection

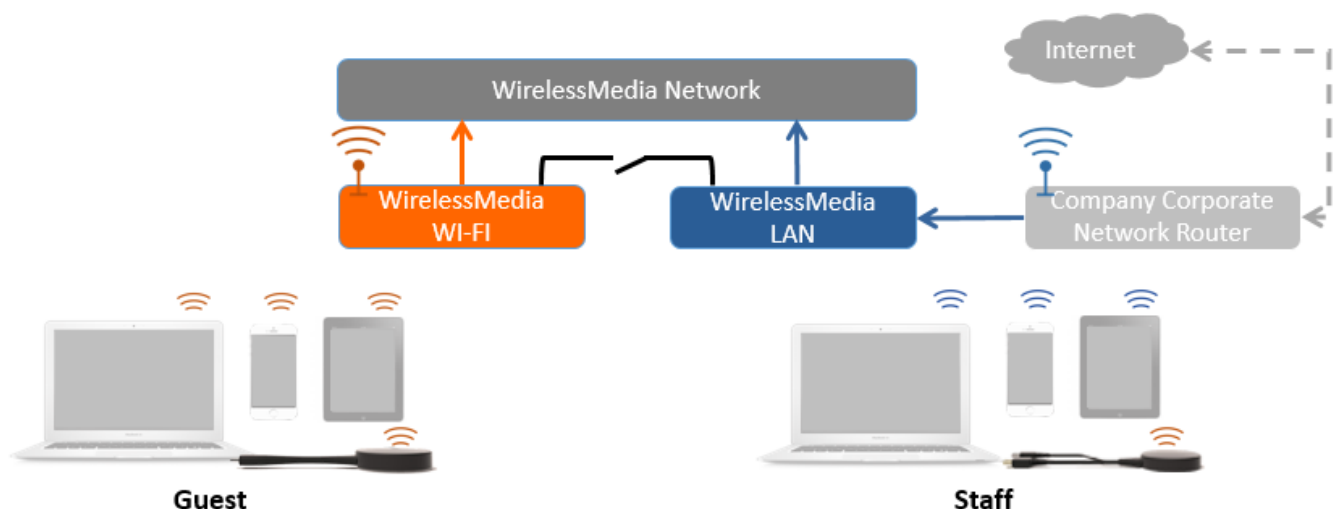
The internal Wi-Fi access Point of WMS is active . The dongle is paired directly to it. Guest and Staff use the internal Wi-Fi access point of Base-unit to present with all their units. **No Internet access is required.**

The LAN-Port of Base-unit is not connected. The PC-users can present with or without dongle by WirelessMedia PC driver (Windows or MacOS). Android users (BYOD) can share their content by installing the free APP on their device and IOS users can use AirPlay (Apple only).

Recommended Environment

This option is best for temporary operation, small installations, and rooms without network access or networks that do not allow network access for Guests, due to strict security concerns, and are completely separate from the corporate network.

Under this mode, dongle will be automatically paired to the base unit Wi-Fi hotspot when plugging dongle to the base unit USB port for pairing.



You can start using WMS in this mode without any other wireless network configuration.

Click "Next step" to

Set up Wi-Fi access point

Set-up Wi-Fi access point includes, Frequency, Channel, Password.

Wireless network

1. Device name 2. Mode selection 3. Network settings 4. SSID setting

Frequency: 5GHz

Channel: Auto

Password: 00005381

Previous Next step

- **Frequency:** Click to select 2.4 GHz or 5 GHz Wi-Fi frequency. Default is 5 GHz.
- **Channel:** Click to select the Wi-Fi channel. Default is 5 GHz, Auto.

If the Wi-Fi channel is changed, no new pairing of the dongle is necessary.

2.4 GHz frequency band: channels 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,

5 GHz frequency band: no need to choose 5G channel, system will choose proper channel automatically.
Default is 5 GHz, channel: Auto.

Default channel (USA area): 36,40,44,48 or 149,153,157, 161. Four channels will be opened at the same time, system will automatically choose proper channel from them.

Default channel (European area): 36,40,44,48.

Default channel (China): 149,153,157,161.

- **Password:** Click in the input field to fill out the appropriate password with length of **8 characters**.

Click "Next step" to edit or change Guest network SSID and STAFF network SSID. This information will be shown at Home Screen of WirelessMedia.

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting

GUEST network SSID

Gastron_Guest_5.0G

STAFF network SSID

Gastron_5.0G

Previous

Submit settings

Click "Submit settings" to finish configuration.
After it please re-pairing dongle with the base unit.

6.1.1.3 Wireless Infrastructure mode

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting

Wireless direct mode

Wireless infrastructure mode

LAN infrastructure mode

Previous

Next step

WirelessMedia can connect to a wired and a wireless network simultaneously. The basic unit is firmly "connected to the company network with LAN. Guest users connect to Wi-Fi "Guest" access. The employees ("Staff") connect to their usual access point of the corporate network, without having to change the Wi-Fi. This is very useful for organizations, which have a wireless "Guest" network for external visitors and a wired "Staff" network for their employees. The segmented Dual Network of WirelessMedia provides two separated routing ways to connect to the Base-unit at same time. Guest-users are not able to access any resource on the Ethernet of the company. WirelessMedia uses the existing wireless network infrastructure. Guest and Staff have internet access.

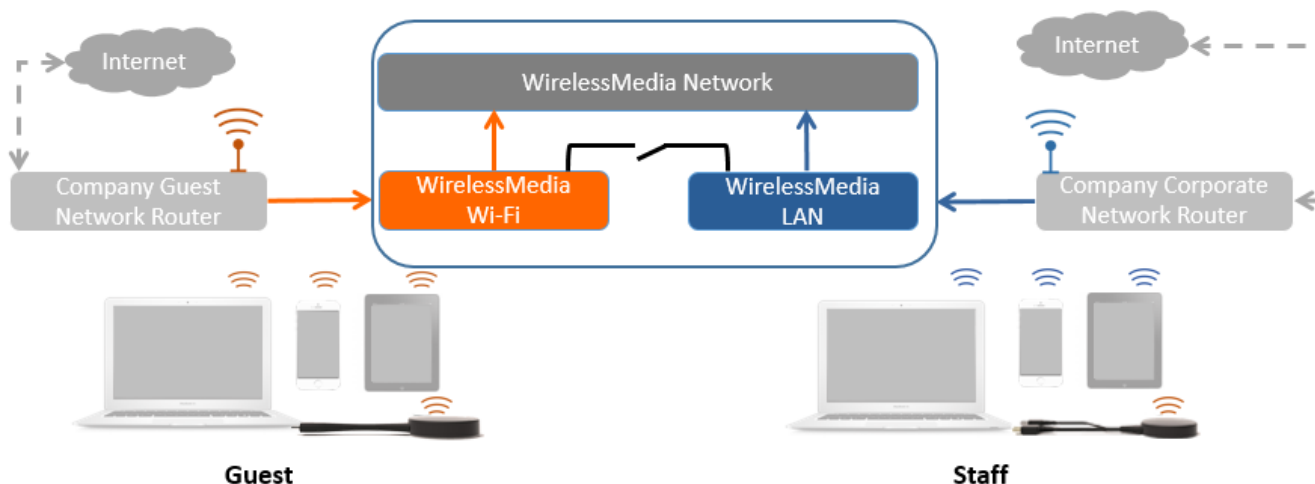
Dual Network Configuration

The internal the Wi-Fi network of WirelessMedia is connected to Guest Wi-Fi network of the organization, (**Client**

Mode: the indicator-icon  shows the actual signal strength). The Base-unit is still wired with LAN-cable to the internal company network

The PC-users can present, with or without dongle TOUCH by WirelessMedia PC driver (Windows or MacOS). Android users can share their content by installing the free APP, IOS users can use AirPlay to share content

(Apple only).



The dongle is connected to the Wi-Fi access Point of Guest network, which in turn is connected to the internal Wi-Fi access Point of WirelessMedia. (The dongle can also be configured to connect to the enterprise's access point.) Mobile users stay connected to their current network, have access to their normal corporate environment, as well as Internet access.

The actual received signal strength from Guest network is shown in Home screen of WirelessMedia:  .

Follow the instructions of the configuration wizard for "Wireless infrastructure mode". When pairing the dongles, by plugging the dongle in the USB port of the Base-unit, it will automatically pair to the associated access point of Guest or Staff Wi-Fi and NOT to WirelessMedia.

Click "**Next step**" to configure the network which dongle needs to be paired to.

"Dongle connects to base unit via wireless network."

Choose a wireless network which is separate from the company LAN network for guest users.

Select SSID: Choose a wireless network to connect to base unit for guest.

Password: enter password to connect the base unit to the guest network.

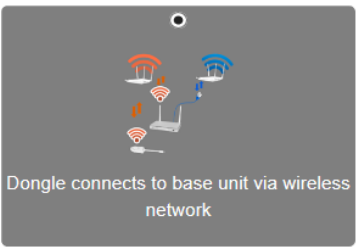
Wireless network

1.Device name

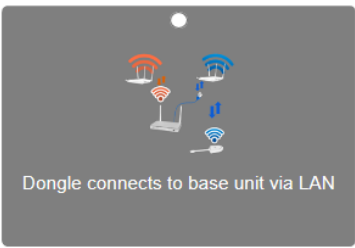
2.Mode selection

3.Network settings

4.SSID setting



Dongle connects to base unit via wireless network



Dongle connects to base unit via LAN

☐ 5GHz ONLY

Select SSID

Gastron_Guest_5.0G (SignalLevel:59%)

Rescan List

✓

Password

••••••••

✓

Previous

Next step

Click "Next step" to edit or change Guest network SSID and Staff network SSID.

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting

GUEST network SSID

Gastron_Guest_5.0G

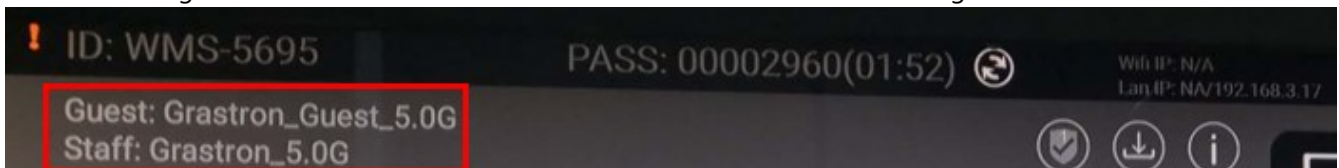
STAFF network SSID

Gastron_5.0G

Previous

Submit settings

Wi-Fi name of guest and staff will be shown on home screen after "Submit settings".



After submitting successfully, please re-pair dongle with base unit.

"Dongle connects to base unit via LAN."

Choose a LAN network which is used for the company staff users.

Note: usually in this mode, dongle paired for internal staff usage.

Select SSID: Choose a wireless network to connect to base unit for guest.

Password: enter password to connect the base unit to the guest network.

Select dongle SSID: choose the same LAN network which base unit connects, to pair the dongle.

Password: enter password of the LAN network.

See picture as below:

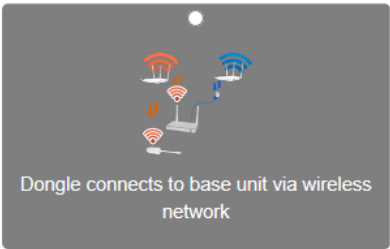
Wireless network

1.Device name

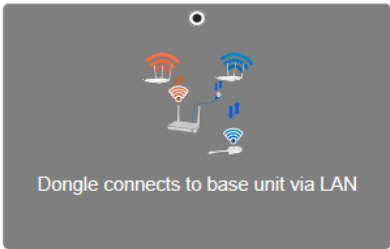
2.Mode selection

3.Network settings

4.SSID setting



Dongle connects to base unit via wireless network



Dongle connects to base unit via LAN

☐ 5GHz ONLY

Select SSID

Gastron_Guest_5.0G (SignalLevel:59%)

Rescan List

✓

Password

••••••••

🔍

✓

Select dongle SSID

Gastron_5.0G (SignalLevel:99%)

Rescan List

✓

密码

••••••

🔍

✓

Previous

Next step

Click "Next step" to edit or change Guest network SSID and Staff network SSID.

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting

GUEST network SSID

Gastron_Guest_5.0G

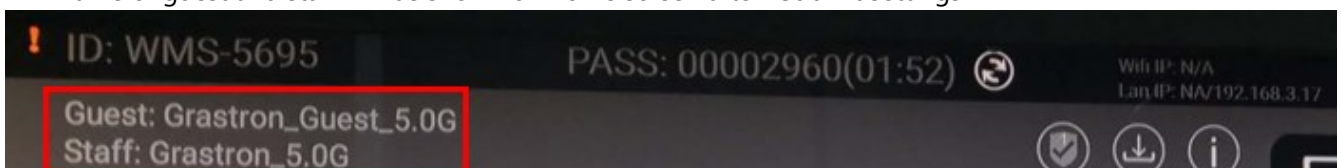
STAFF network SSID

Gastron_5.0G

Previous

Submit settings

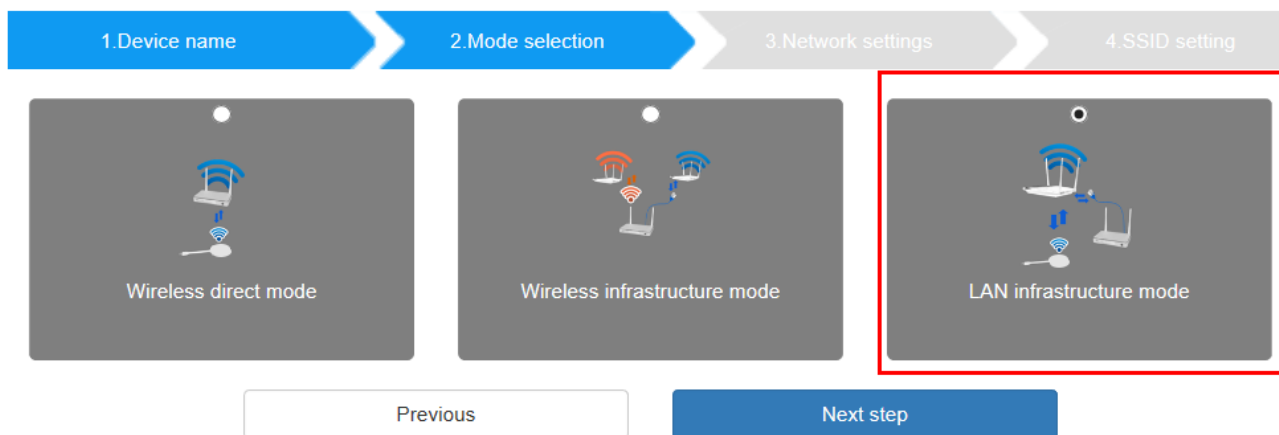
Wifi name of guest and staff will be shown on home screen after "Submit settings"



After submitting successfully, please re-pair dongle with base unit.

6.1.1.4 LAN Infrastructure Mode

Wireless network

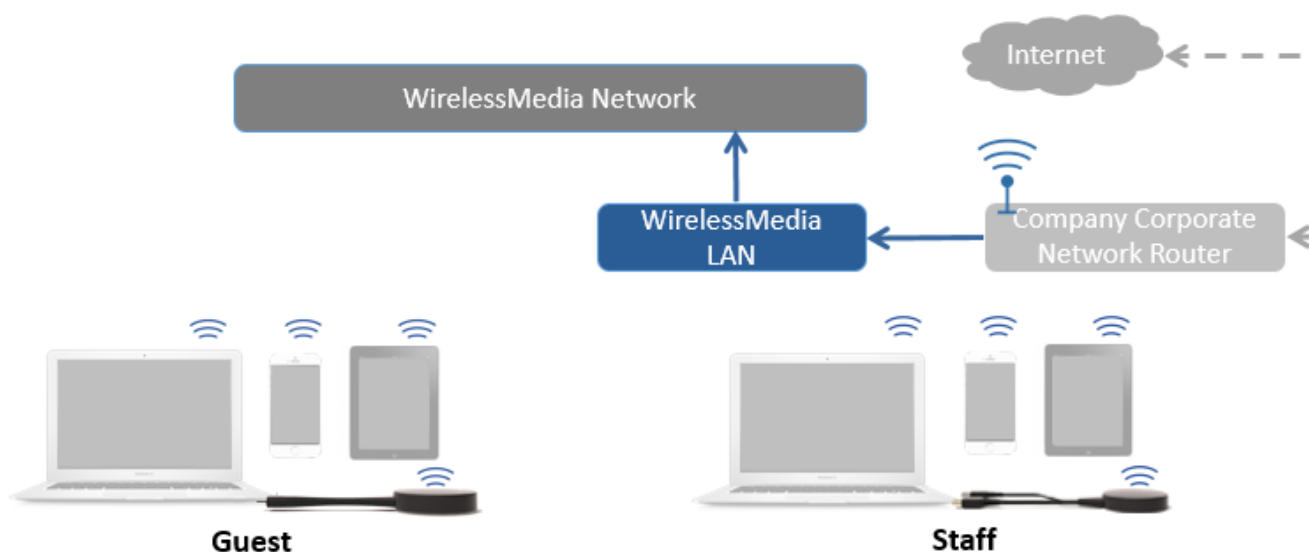


In this configuration the **built-in Wi-Fi** access point of WirelessMedia **is disabled:**  .

The dongle and/or the mobile devices can connect to the secured wireless access point of the company network. The Base-unit of WirelessMedia is hard-wired connected via LAN to the Ethernet of the Company network.

The Staff-users connect to their usual access point of Company network, without the need to change the Wi-Fi. Follow the instructions of the configuration wizard for "LAN infrastructure mode".

When pairing the dongles, by plugging the dongle in the USB /Type C port of the Base-unit, will be automatically paired to the Staff access point, and NOT to "WirelessMedia" Base-unit.



Click "Next step" to choose a LAN network which is used for the company staff users and pair the dongle into this network.

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting

☒ 5GHz ONLY

Select Sid

Gastron_5.0G (SignalLevel:99%)

Rescan List

✓

Password

••••••••

🔒

✓

Previous

Next step

Click "Next step" to edit or change Guest network SSID and Staff network SSID.

Wireless network

1.Device name

2.Mode selection

3.Network settings

4.SSID setting

GUEST network SSID

Gastron_Guest_5.0G

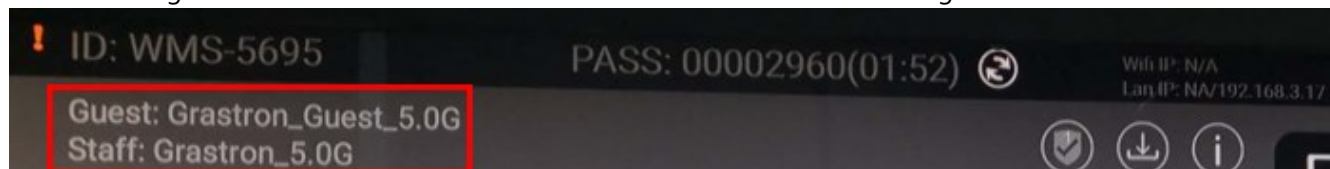
STAFF network SSID

Gastron_5.0G

Previous

Submit settings

Wifi name of guest and staff will be shown on home screen after "Submit settings"



After submitting successfully, please re-pair dongle with base unit.

6.1.2 Ethernet

Configure the Ethernet settings. WMS-40 has 2 Lan port, if the base unit is connected with 2 LAN cable, you can configure from below tab.

Settings

Network settings

Wireless network

Ethernet

Auto change password

Display & Audio

Moderator control

System settings

Security Settings

Firmware upgrade

Other settings

About device

LAN1

LAN2

DHCP

Enable

IP address

0.0.0.0

Mask

0.0.0.0

Gateway

0.0.0.0

DNS1

0.0.0.0

DNS2

0.0.0.0

MAC

2E:31:6D:00:01:01

Set proxy

Confirm settings

Settings

Network settings

Wireless network

Ethernet

Auto change password

Display & Audio

Moderator control

System settings

Security Settings

Firmware upgrade

Other settings

About device

LAN1

LAN2

DHCP

Enable

IP address

192.168.3.17

Mask

255.255.255.0

Gateway

192.168.3.1

DNS1

192.168.3.1

DNS2

0.0.0.0

MAC

3E:31:6D:00:01:01

Set proxy

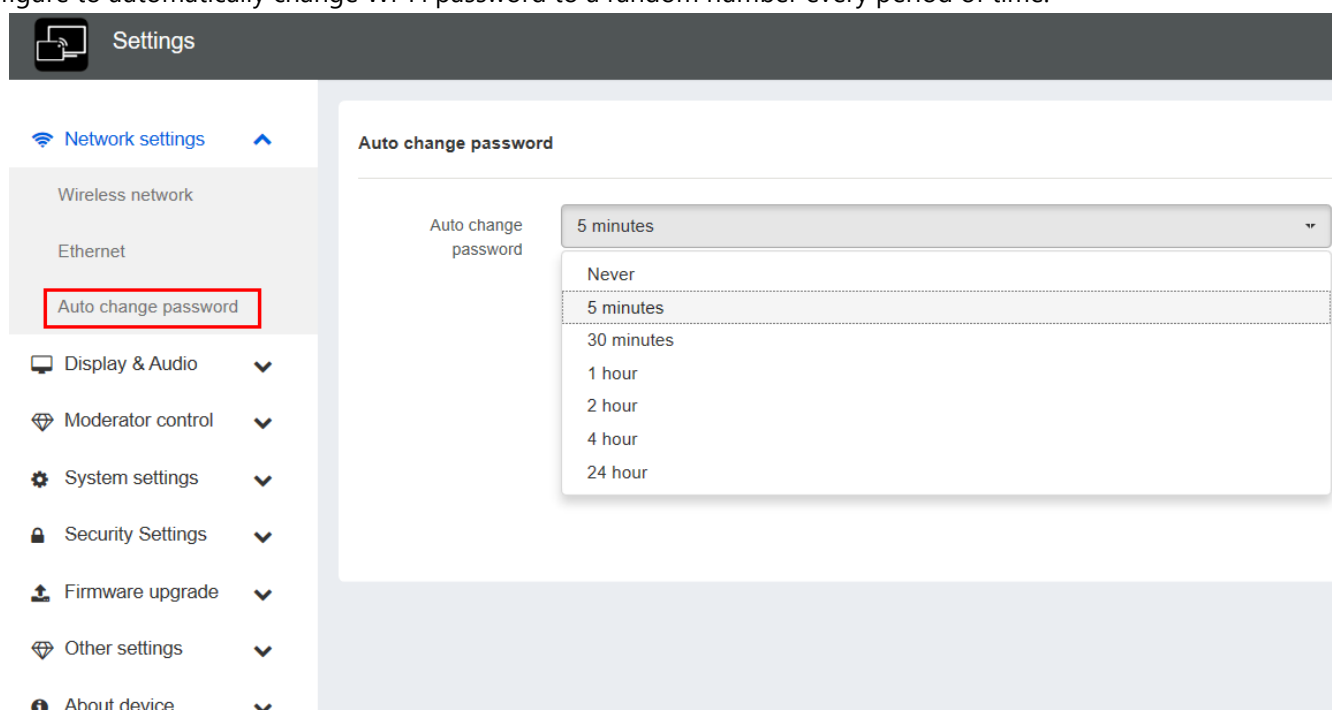
Confirm settings

6.1.3 Auto change password

The password remains unchanged for all participants of the meeting, while at least one dongle **or** a Wi-Fi network of a mobile device are connected with Base-unit. After the user is disconnected, a configurable time runs.

- The changeable password will be fixed by connecting a dongle to PC/Laptop or connect a mobile unit to the Wi-Fi of the Base-unit, and continue to be changeable after 15s after disconnecting the last dongle or disconnect the Wi-Fi of a mobile unit.
- User do not need to re-pair the dongle again, if only the password is changed. A **Smart mobile device** has to enter the correct SSID and password to connect to the Base-unit access point, in order to access all functionality.

Configure to automatically change Wi-Fi password to a random number every period of time.



Click to set the configuration, including

- **Never:** never change Wi-Fi password. (Even after POWER-OFF condition)
- **5 minutes:** change Wi-Fi password every 5 minutes.
- **30 minutes:** change Wi-Fi password every 30 minutes.
- **1 hour:** change Wi-Fi password every 1 hour.
- **2 hours:** change Wi-Fi password every 2 hours.
- **4 hours:** change Wi-Fi password every 4 hours.
- **24 hours:** change Wi-Fi password every 24 hours.

6.2 Display & Audio

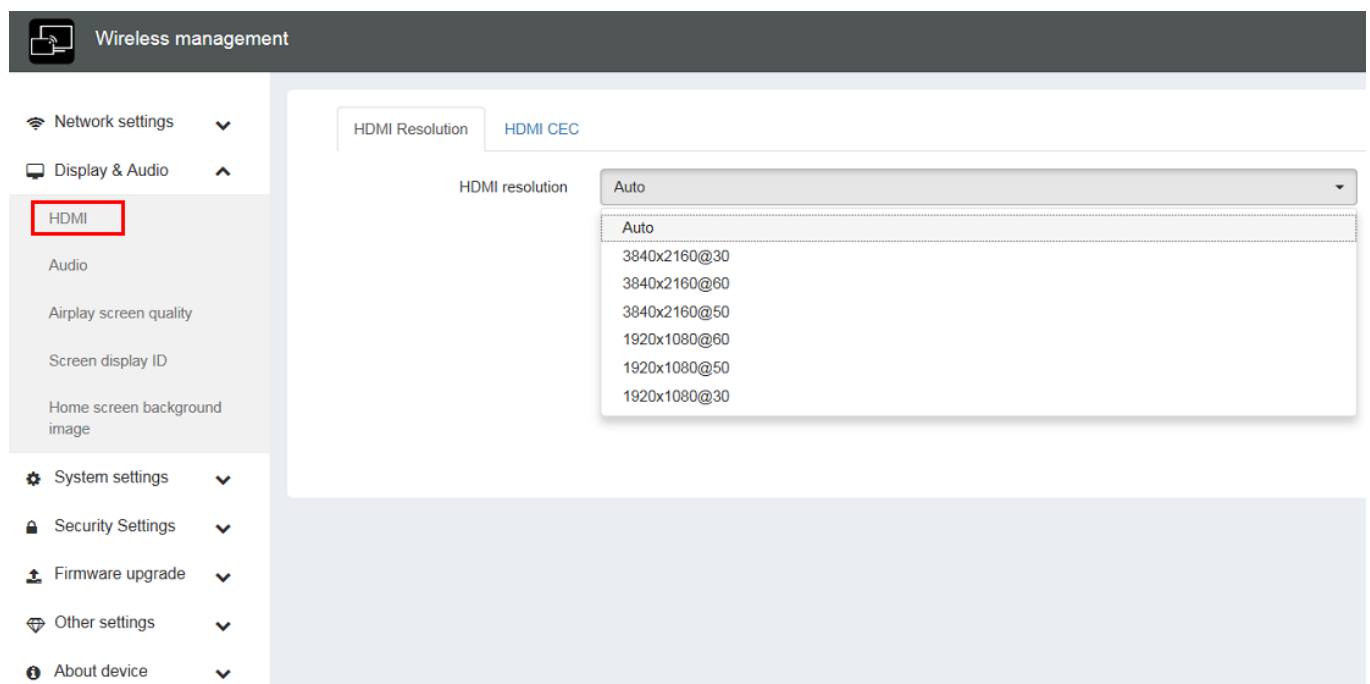
6.2.1 HDMI

HDMI Resolution

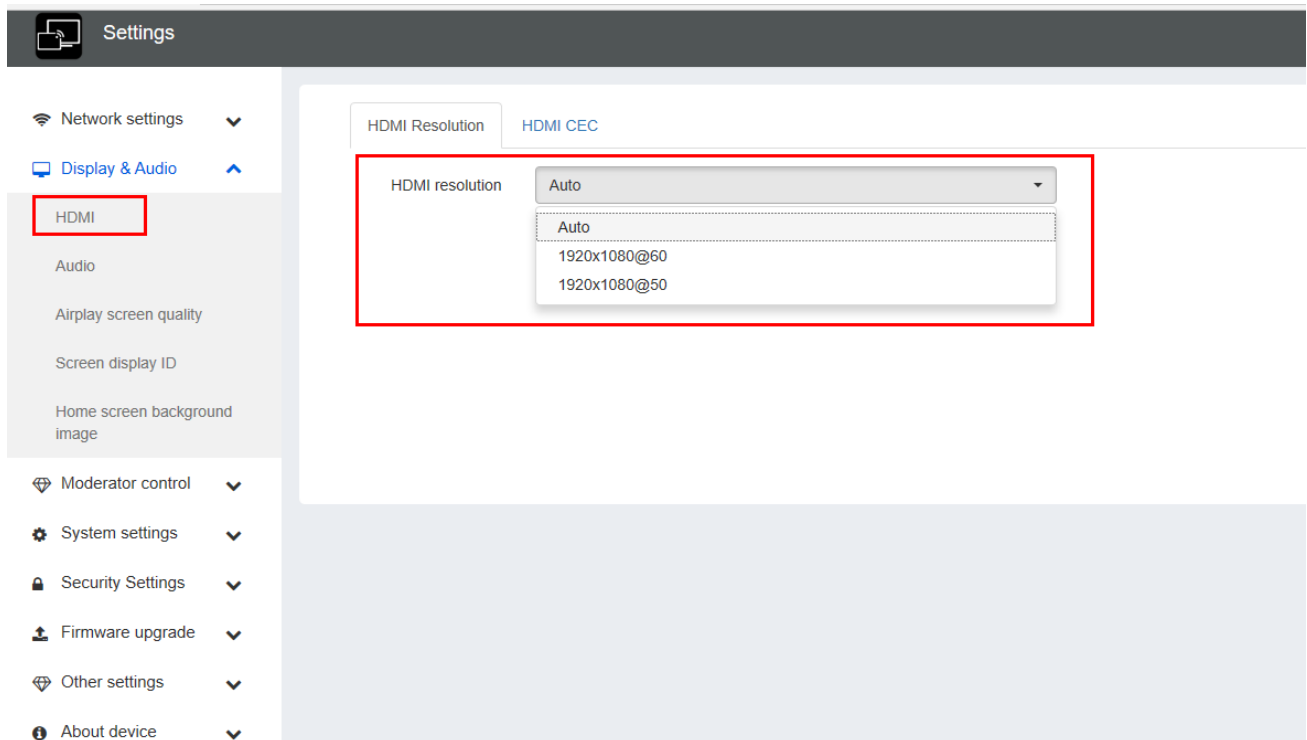
Select the resolution at HDMI output of Base-unit.

Existing HDMI output resolution as below:

- Auto
- 3840x2160 @30Hz
- 3840x2160 @60Hz
- 3840x2160 @50Hz
- 1920x1080 @60Hz
- 1920x1080 @50Hz
- 1920x1080 @30Hz



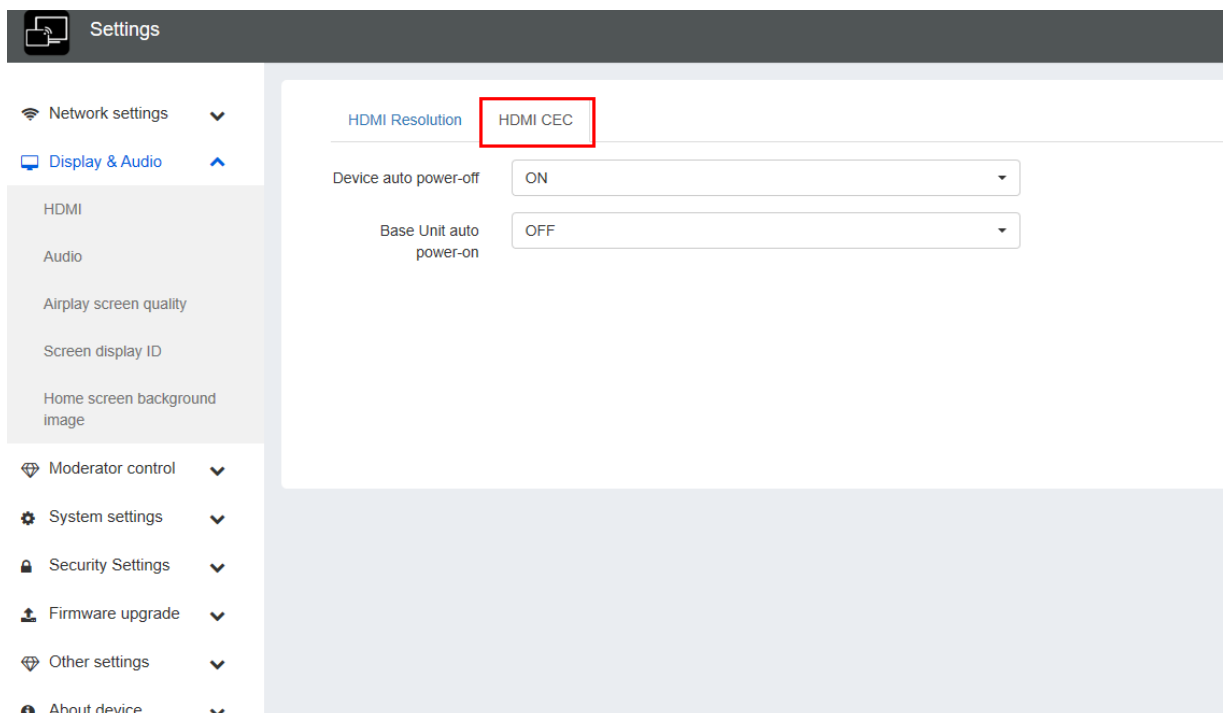
Note: if the display is only support FULL HD, the 4K resolution will not be shown on the list of the below resolution.



HDMI CEC

Base unit support CEC function if the connected display support CEC function.

- **Device auto power off:**
 - ON (Default): Display will automatically turn off when base unit is powered off.
 - OFF: Display will not automatically turn off when base unit is powered off.
- **Base unit auto power on:**
 - On: Base unit will be automatically woke up when display is on.
 - Off (Default): Base unit will not be automatically woke up when display is on.



6.2.2 Audio

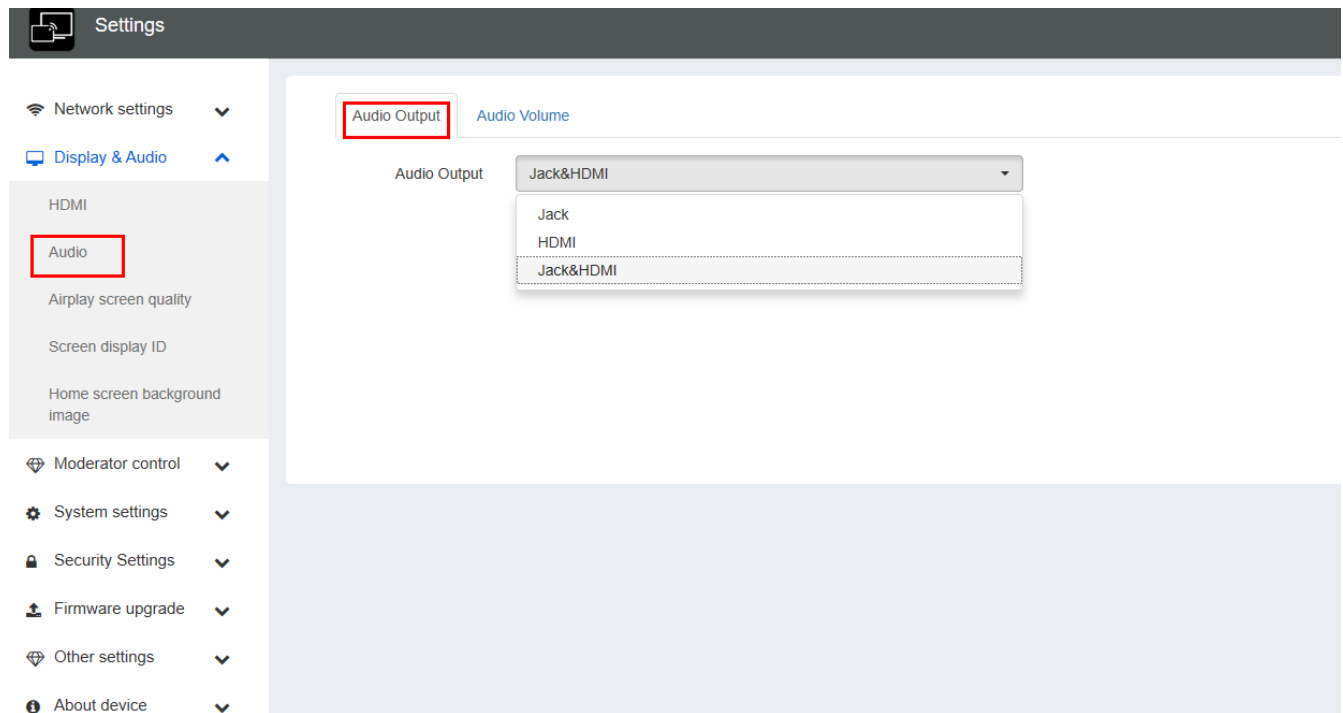
Audio

Choose audio output:

Jack: output only 3.5mm mini-jack audio.

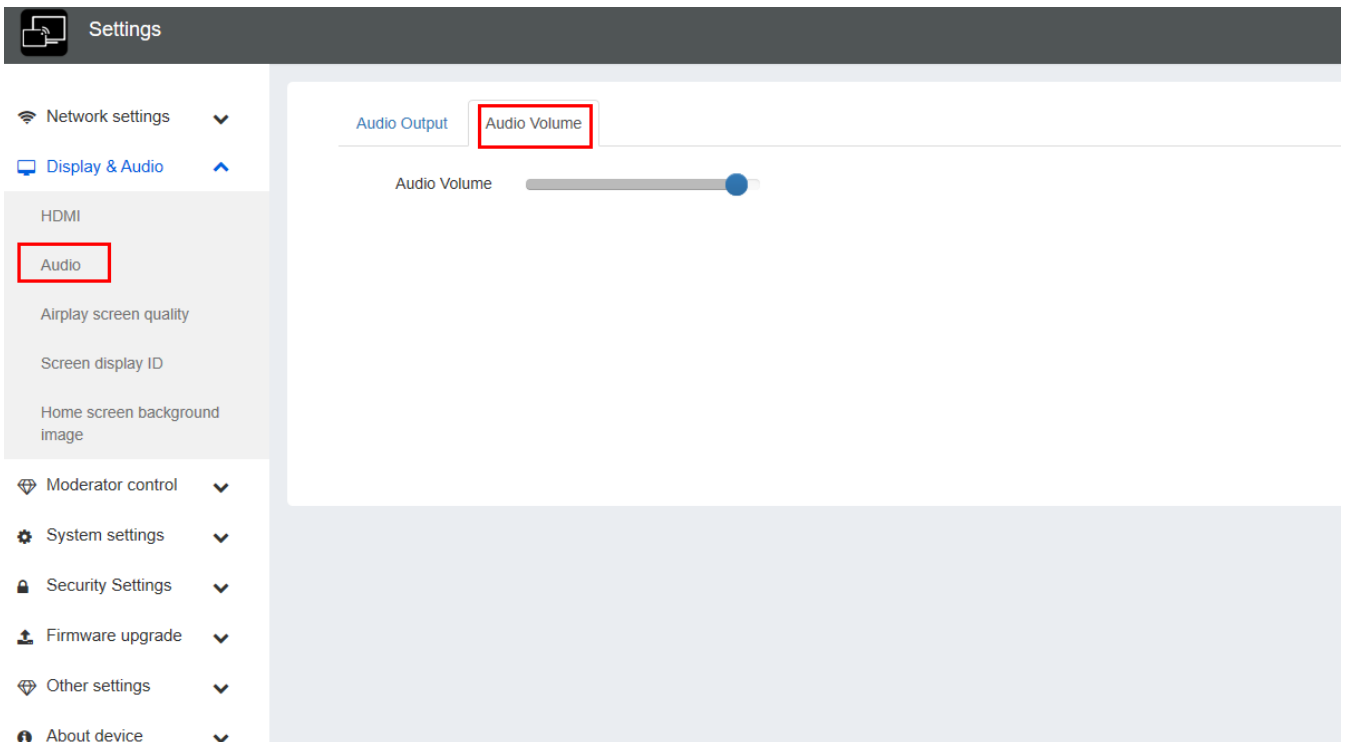
HDMI: output only HDMI audio.

Jack&HDMI (Default): output Jack & HDMI audio



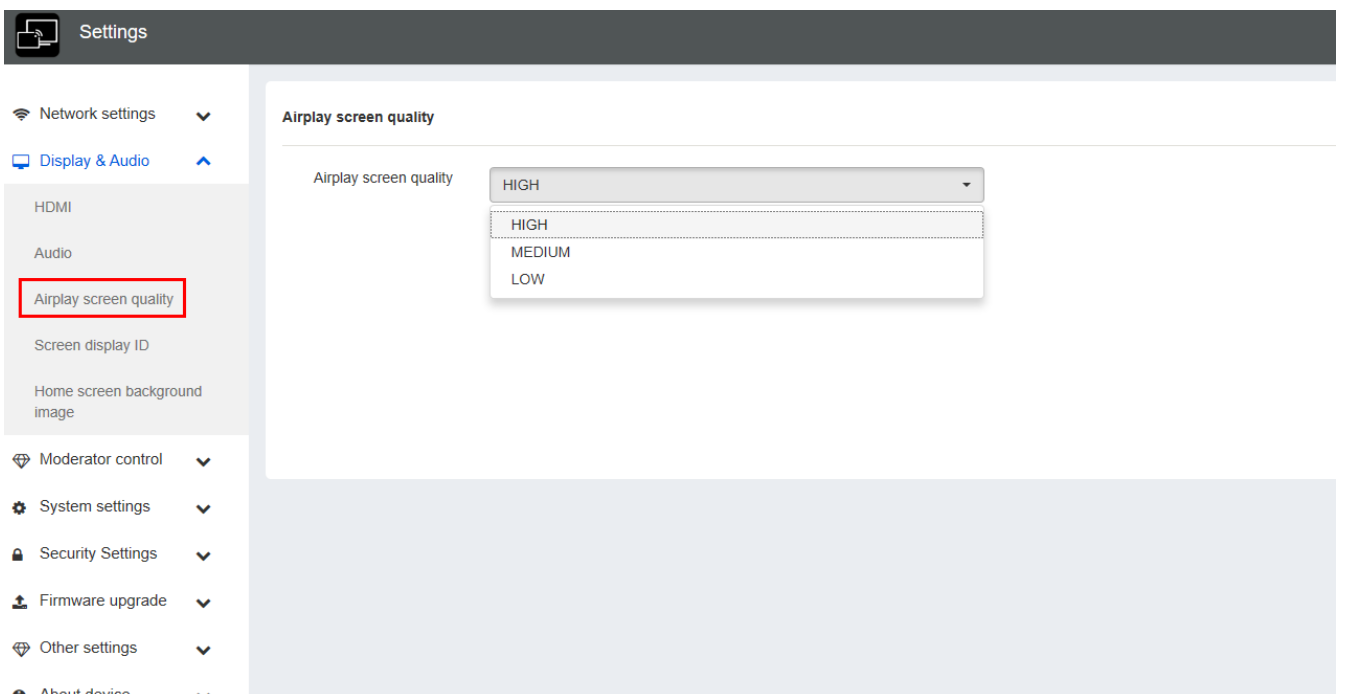
Volume

User can select volume of display from 0 to 100.



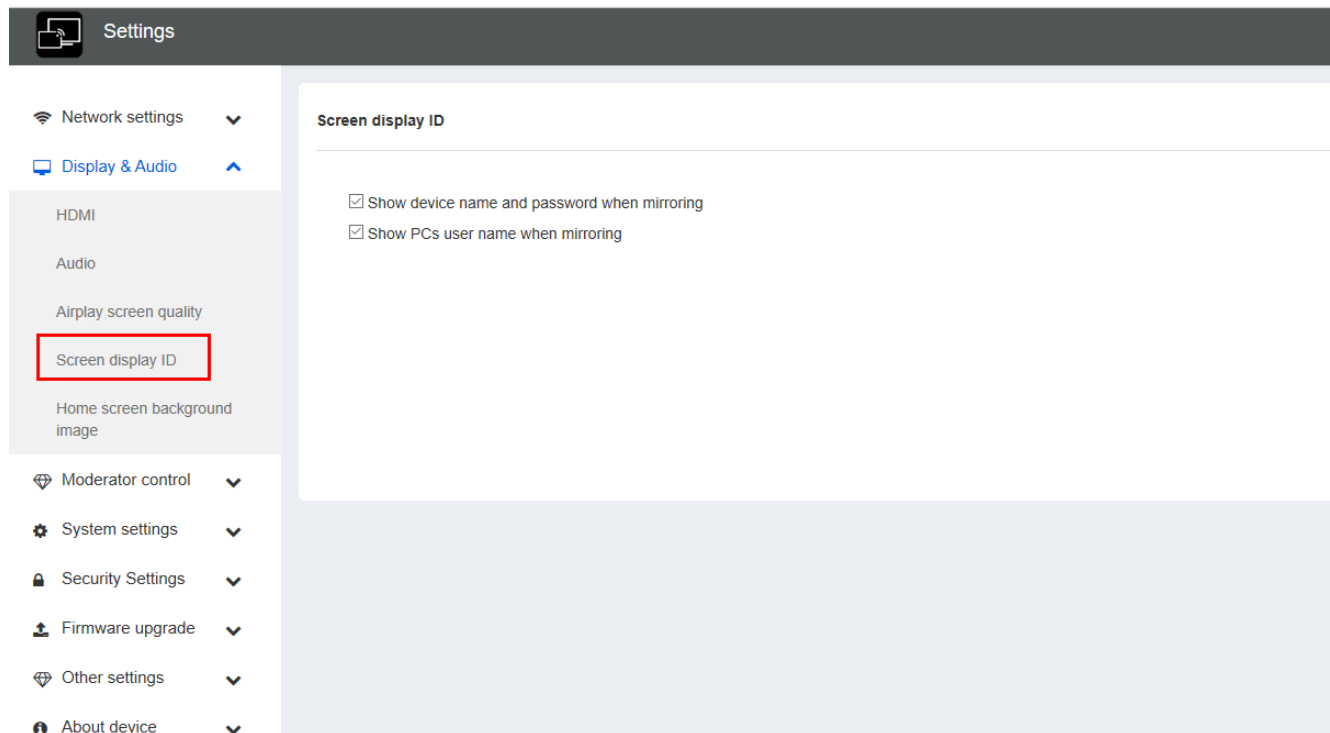
6.2.3 Airplay screen quality

Click to select the image quality when transmit apple device by "AirPlay" mode.



6.2.4 Screen display ID

- **Show device name and password when mirroring:** Name (ID) and Wi-Fi-password can be shown or hided at top status-line of **main screen**.



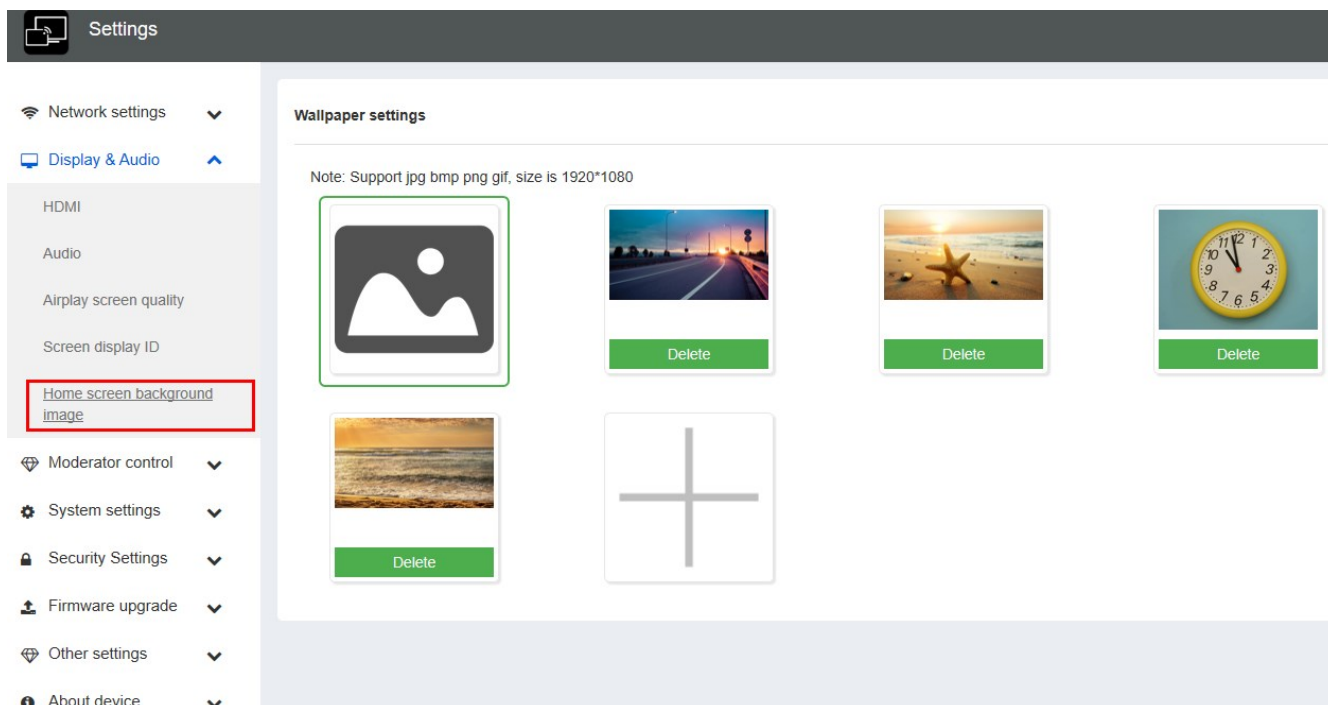
- **Show PCs user name when mirroring.**

Show user name.

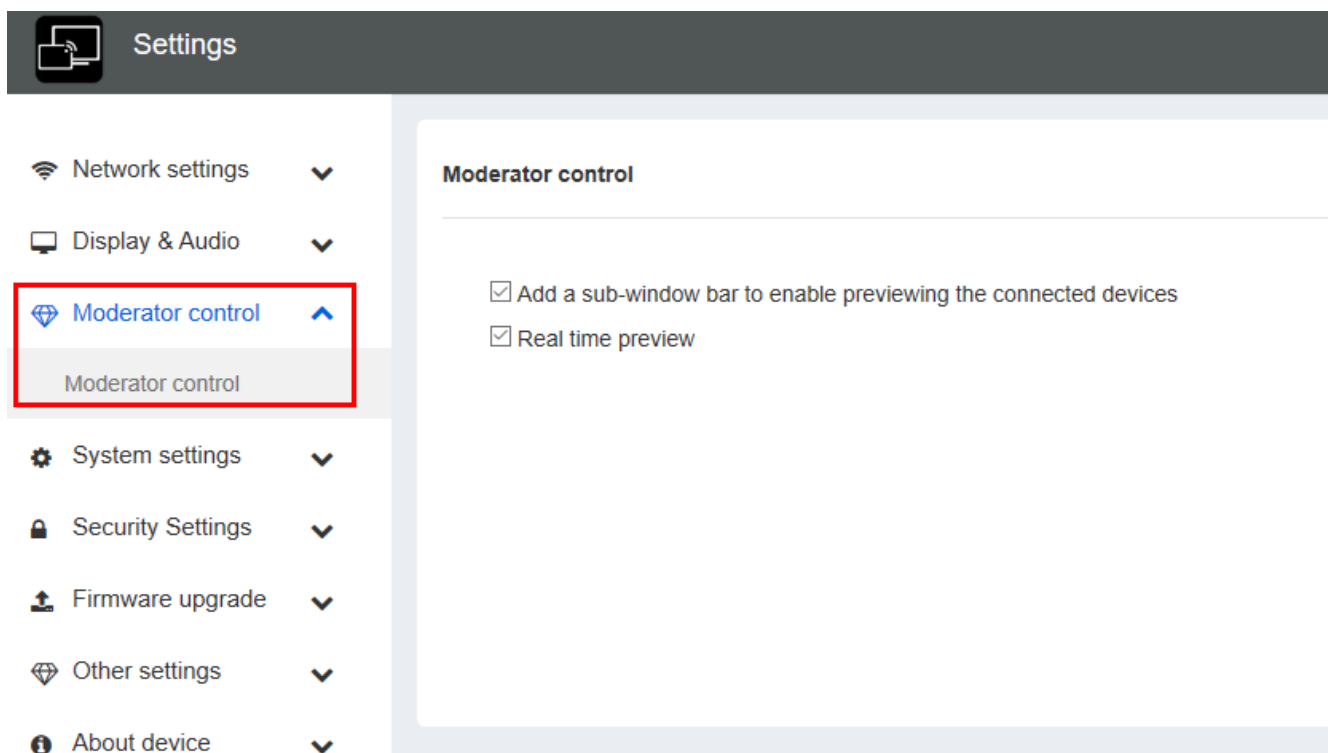


6.2.5 Home Screen background image

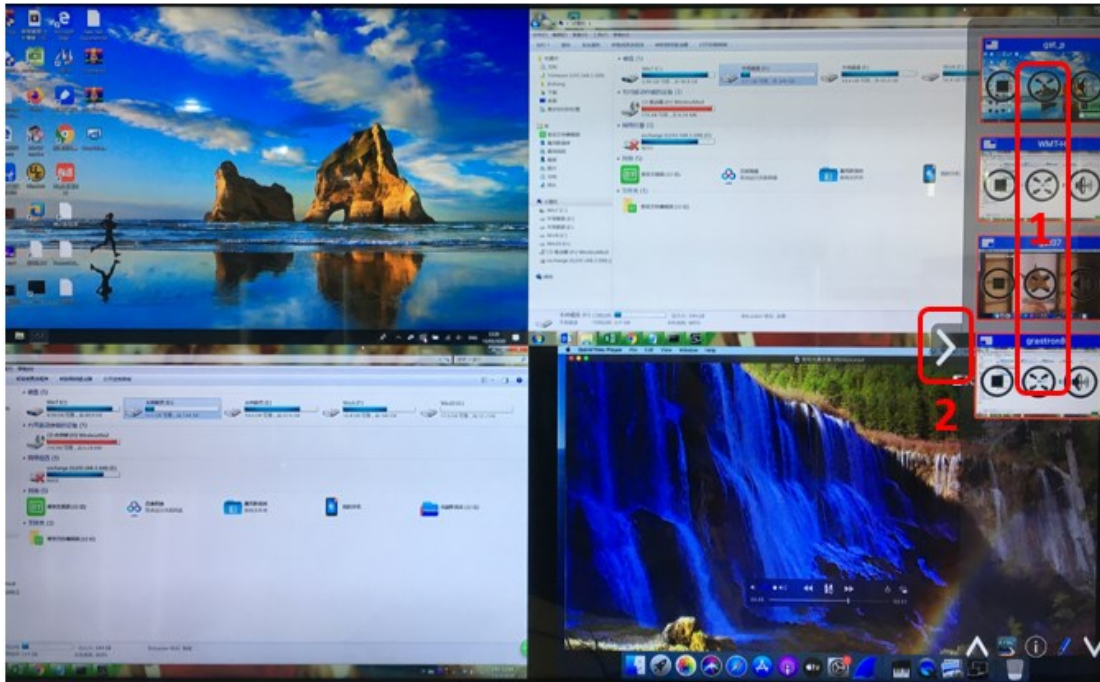
When powering WirelessMedia the start screen will be displayed. User can change background image of Home screen. Select the image (jpg, bmp, png, gif with resolution 1920x1080 p.) from suitable directory and activate box for selection. You can return to Standard Home screen every time.



6.3 Moderator control



- Add a sub-window bar to enable previewing the connected devices. Tick the icon, it will show the sub window as below once devices are connected to base unit.



If do not tick the icon, the preview window bar will be minimized as below.

WiFi ID: WMS-3343
PASS: 00003404(01:13)
Wifi IP: 192.168.43.1
Lan IP: 192.168.3.40/192.168.9.118

WirelessMedia

PC

04:22

Android/iOS

Step 1: Copy WirelessMedia.exe/app from USB stick or download by connecting SSID&PASS to enter Wifi IP browser page, to lap-top

Step 2: Plug the USB dongle into your PC/lap-top, click to run WirelessMedia

Step 3: Wait till LED indicator is static green, click button to show your screen

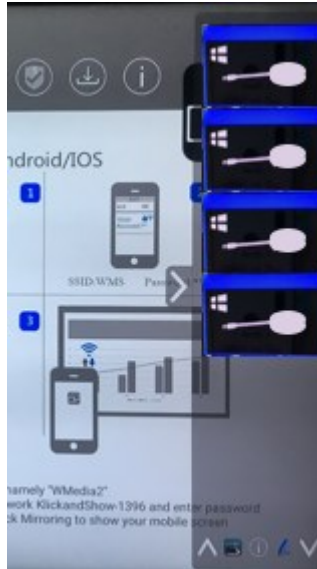
Step 1: Download APK/APP namely "WirelessMedia"

Step 2: Connect wireless network WMS-3343 and enter password

Step 3: Open the app and click Mirroring to show your mobile screen

● Real time preview

If tick the icon, the preview window will show real time preview, if not tick, the preview window will only show a static picture as below.



6.4 System settings

6.4.1 Buttons:

Show Device name, MAC Address, Serial Number, Device Version, Device Status, Last Action, Item Operate.

Settings

- Network settings
- Display & Audio
- Moderator control
- System settings
- Buttons
- Date & Time
- Auto standby
- Language
- Reset
- Configuration file
- Series Port Setting
- Security Settings
- Firmware upgrade
- Other settings
- About device

Connected

Paired

Search

Device Type	Mac Address	Serial Number	Device Version	Device Status	Last Action	Item Operate
USB Dongle	ec:3d:fd:3a:9c:2c	-	V2.3.2C.A1031	Can Share	2020/03/16 11:41:49	

Showing 1 to 1 of 1 rows

Paired: Show properties of connected dongles and can be managed from this page.

Settings

Network settings

Display & Audio

Moderator control

System settings

Buttons

Date & Time

Auto standby

Language

Reset

Configuration file

Series Port Setting

Security Settings

Firmware upgrade

Other settings

About device

Connected

Paired

✖Delete

Search

☐	Item ID	Device Type	Mac Address	Serial Number	Item Operate
☐	1	USB Dongle	ec:3d:fd:3a:9c:2c	-	
☐	2	USB Dongle	e0:b9:4d:55:c5:ba	-	
☐	3	HDMI Dongle	50:13:95:d7:b3:1b	-	
☐	4	USB Dongle	ec:3d:fd:3a:9c:e4	-	
☐	5	MINI Dongle	-	0210000000010075	

Showing 1 to 5 of 5 rows

6.4.2 Date & Time

Includes Automatic date & time, Set date, Set time, Select time zone.

- **Automatic date & time:** Check to use a NTP time server to provide time as system time.
- **Set date:** Click in the input filed to fill out the appropriate date.
- **Set time:** Click in the input filed to fill out the appropriate time manually. The setting is **not** saved, when power is off.
- **Select time zone:** Click in the input filed to fill out the appropriate time zone.

 Settings

Network settings

Display & Audio

Moderator control

System settings

Buttons

Date & Time

Auto standby

Language

Reset

Configuration file

Series Port Setting

Security Settings

Firmware upgrade

Other settings

About device

Date&TimeTime Zone

Automatic date & time

Use network-provided time

Use network-provided time

Off

 Settings

Network settings

Display & Audio

Moderator control

System settings

Buttons

Date & Time

Auto standby

Language

Reset

Configuration file

Series Port Setting

Security Settings

Firmware upgrade

Other settings

About device

Date&TimeTime Zone

Automatic date & time

Off

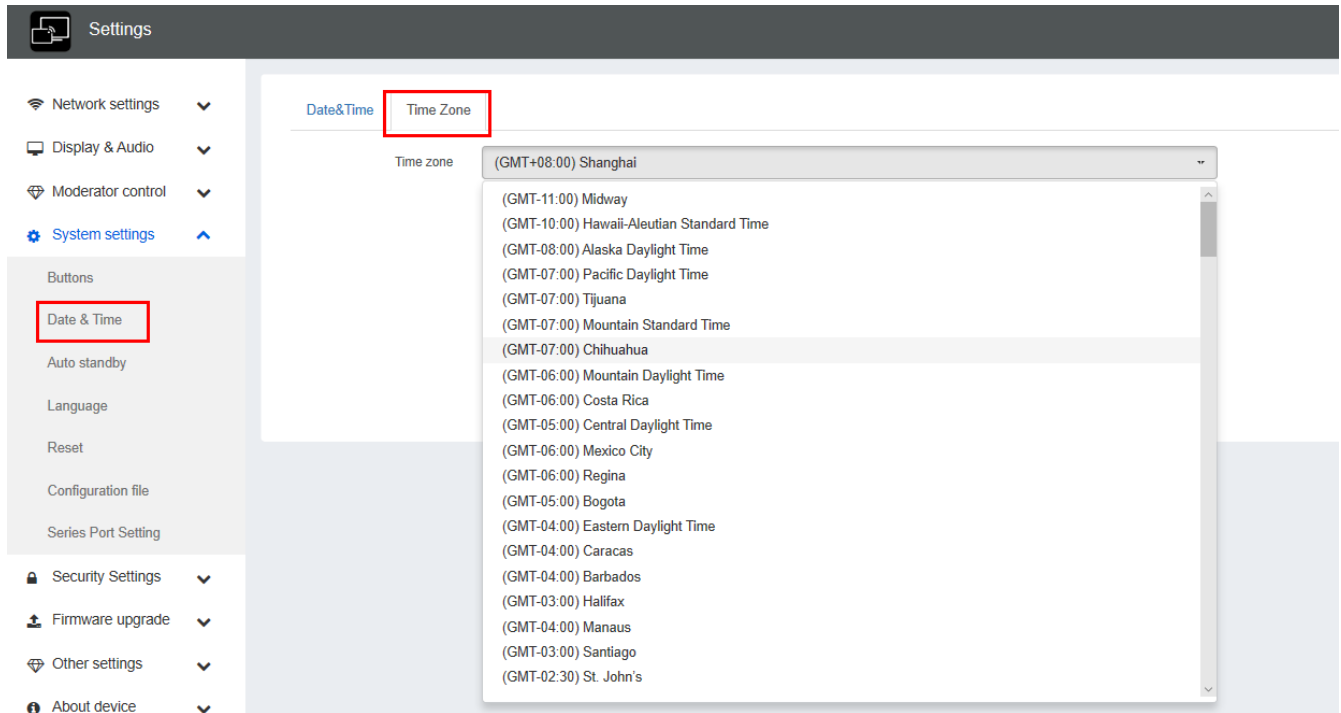
Date

2020-03-16

Time

12:32:18

Confirm settings

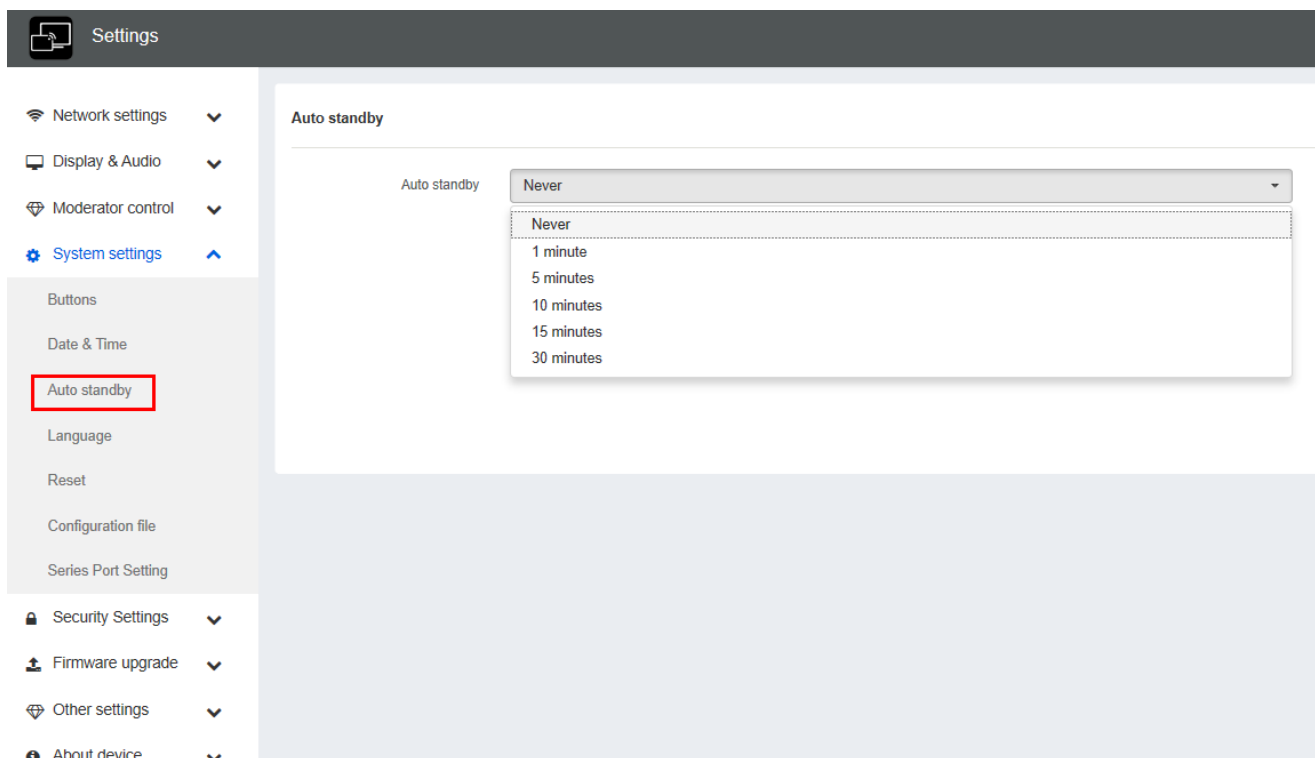


6.4.3 Auto standby

If the Auto Standby mode is activated, WirelessMedia will automatically switch to power saving mode, a selectable time after the last dongle was plugged out, or Wi-Fi of a mobile unit was disconnected, or there is no operation at the system. Time is selectable from **Never** to **30 minutes**. In Standby green LED in top of Base-unit is flashing and **HDMI-output is switched off**.

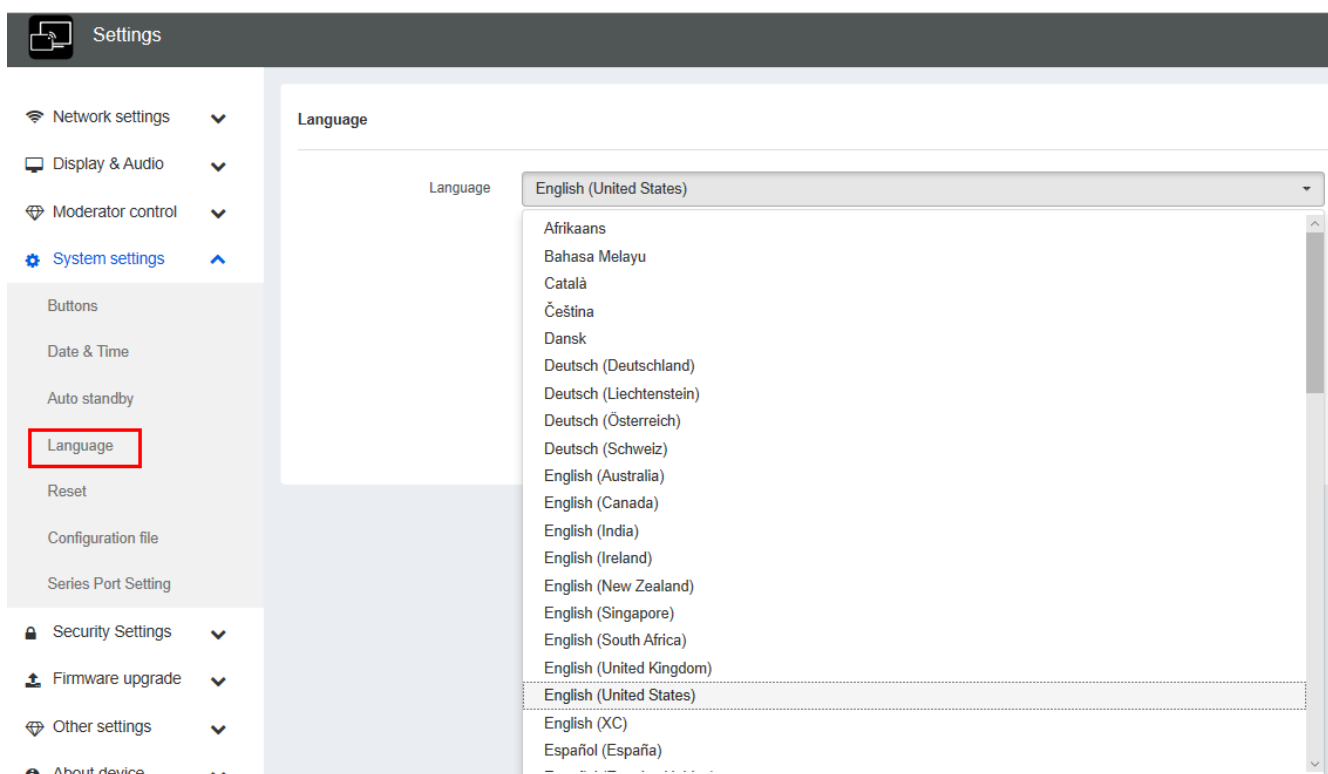
When a **dongle is plugged in and connected**, or a **mobile unit is connected**, Standby is deactivated.

Movement of mouse at USB-input at Base-unit deactivates Standby mode also.



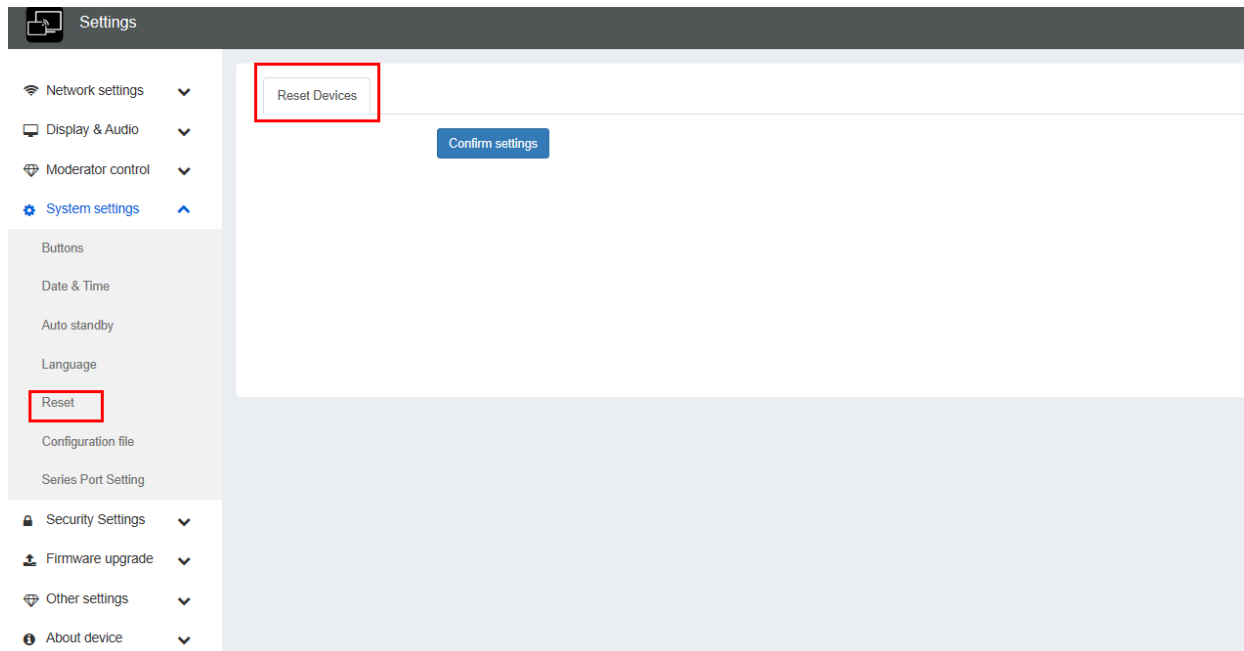
6.4.4 Language

Select an installed display language.



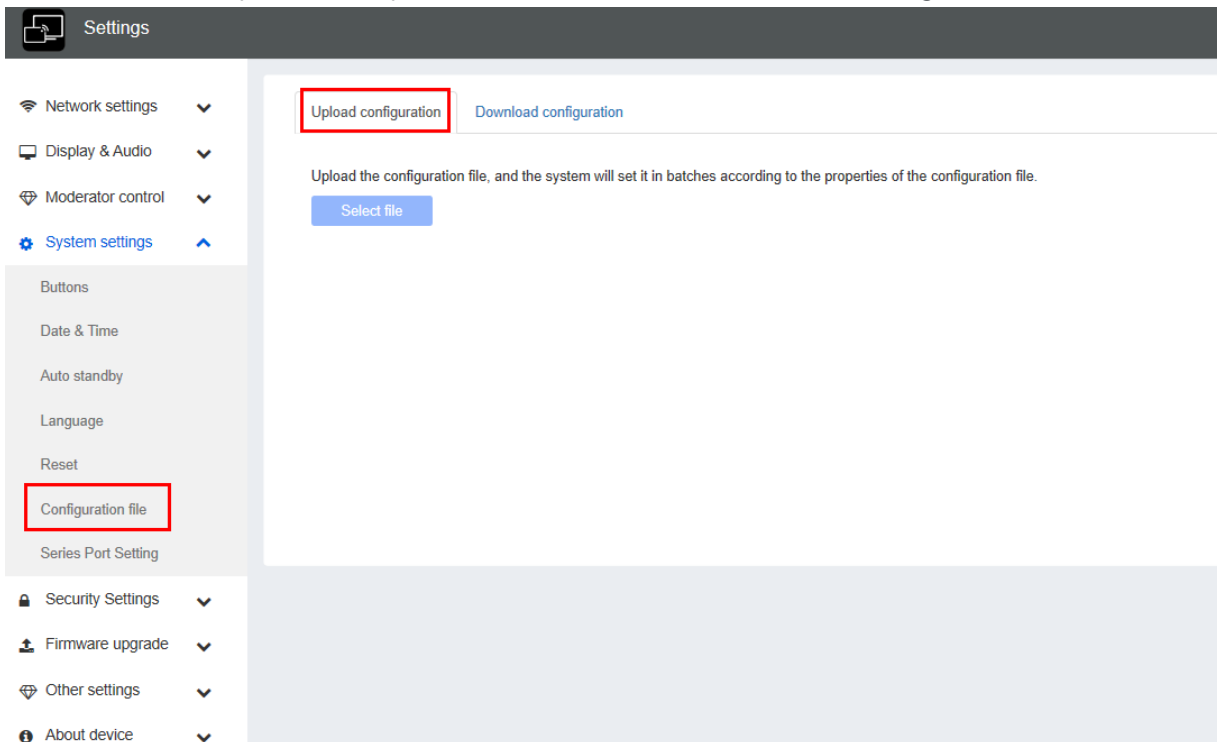
6.4.5 Reset

Doing factory reset to restore unit.



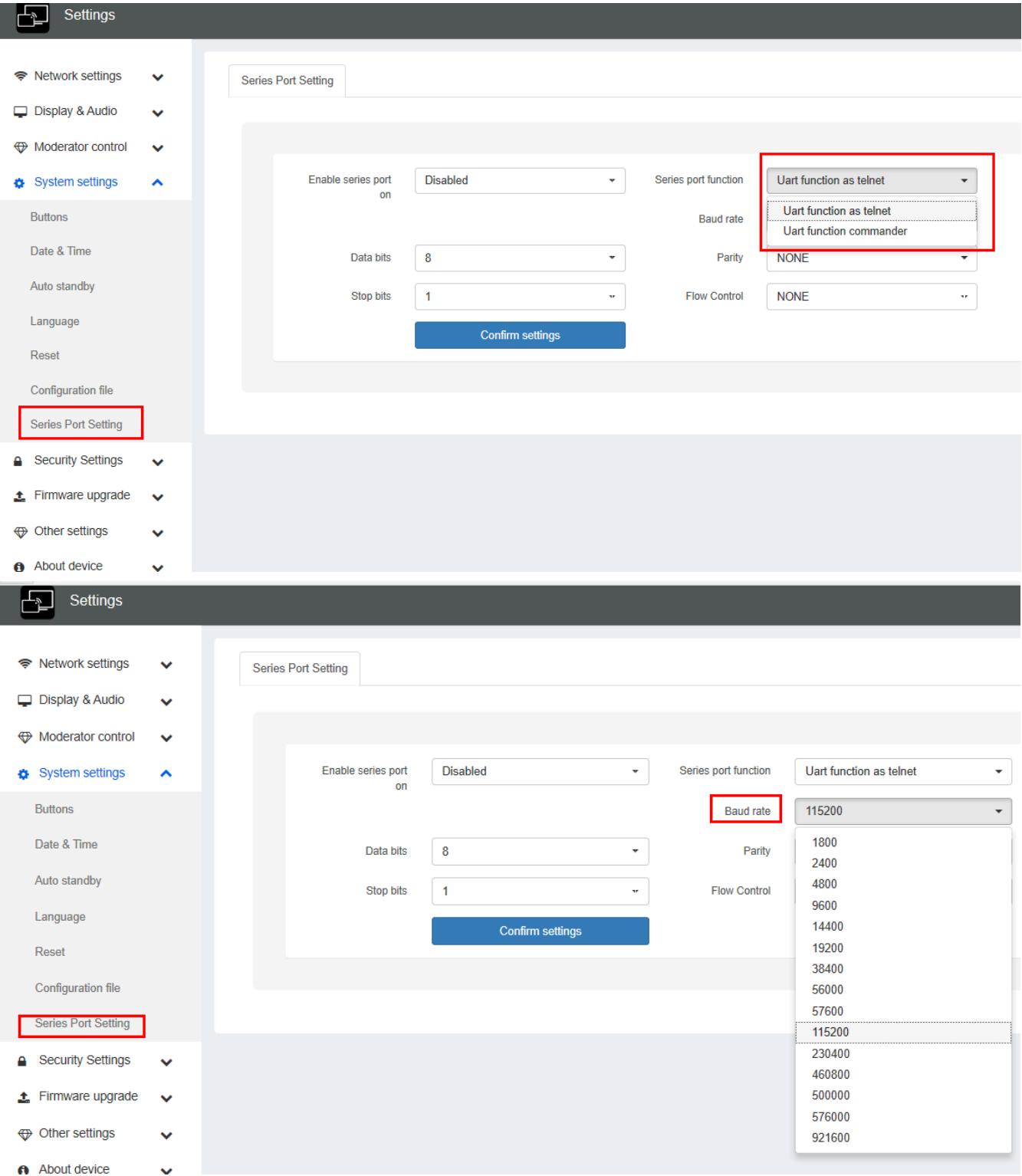
6.4.6 Configuration File

Configuration File is a packaged file which contains all the configuration parameter of the WMS, which could be downloaded and copied to multiple device which needs to use the same configuration.



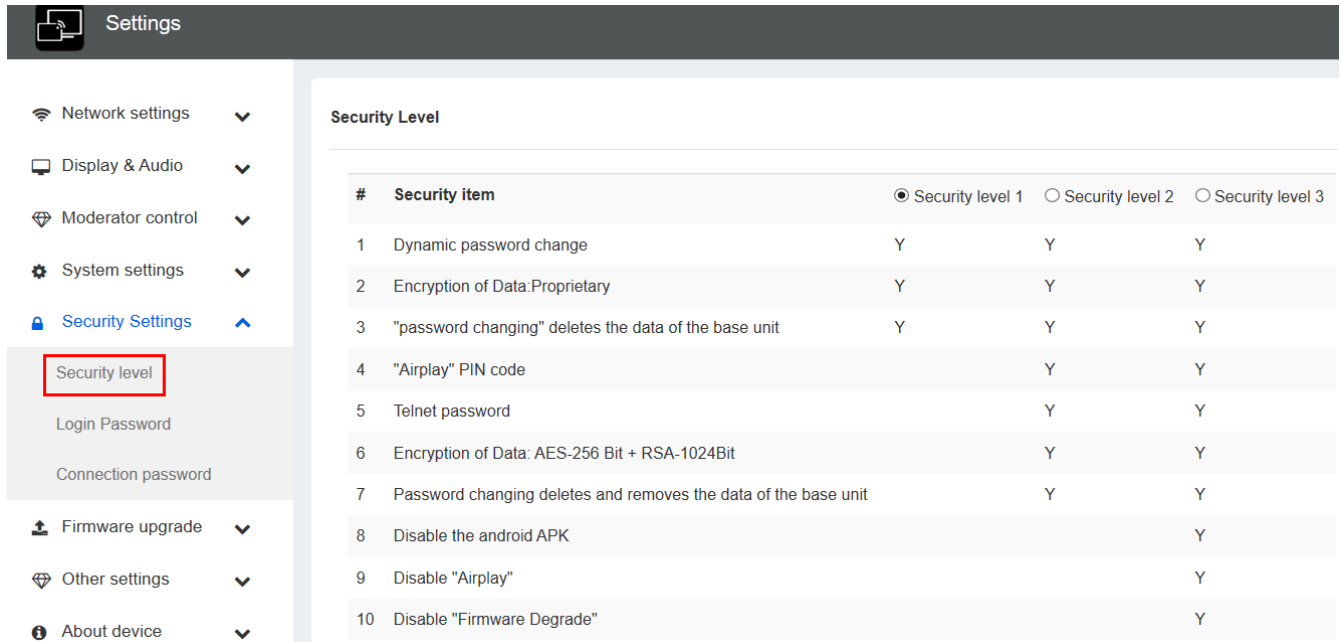
6.4.7 Series Port Setting

To configure telnet command and RS-232 command.



6.5 Security Settings

6.5.1 Security level



The screenshot shows the 'Settings' app interface. On the left, a sidebar lists various settings categories: Network settings, Display & Audio, Moderator control, System settings, Security Settings (highlighted with a blue arrow), Security level (highlighted with a red box), Login Password, Connection password, Firmware upgrade, Other settings, and About device. The main content area is titled 'Security Level' and displays a table of security items. Each item has a checkbox for 'Security level 1' (selected), 'Security level 2', and 'Security level 3'.

#	Security item	☒ Security level 1	☐ Security level 2	☐ Security level 3
1	Dynamic password change	Y	Y	Y
2	Encryption of Data:Proprietary	Y	Y	Y
3	"password changing" deletes the data of the base unit	Y	Y	Y
4	"Airplay" PIN code		Y	Y
5	Telnet password		Y	Y
6	Encryption of Data: AES-256 Bit + RSA-1024Bit		Y	Y
7	Password changing deletes and removes the data of the base unit		Y	Y
8	Disable the android APK			Y
9	Disable "Airplay"			Y
10	Disable "Firmware Degrade"			Y

Based on user requirements, **three different security levels** can be set in the menu of WirelessMedia, to satisfy different security requirements, according to different security sensitive environments or security policies. A security level is a predefined set of settings. Click on the corresponding entry in the menu if you want to adjust the respective security features. The default setting is level 1.

Level 1: normal safety; keeps the security in normal and daily usage for any organization, such like classroom, regular meeting room etc.

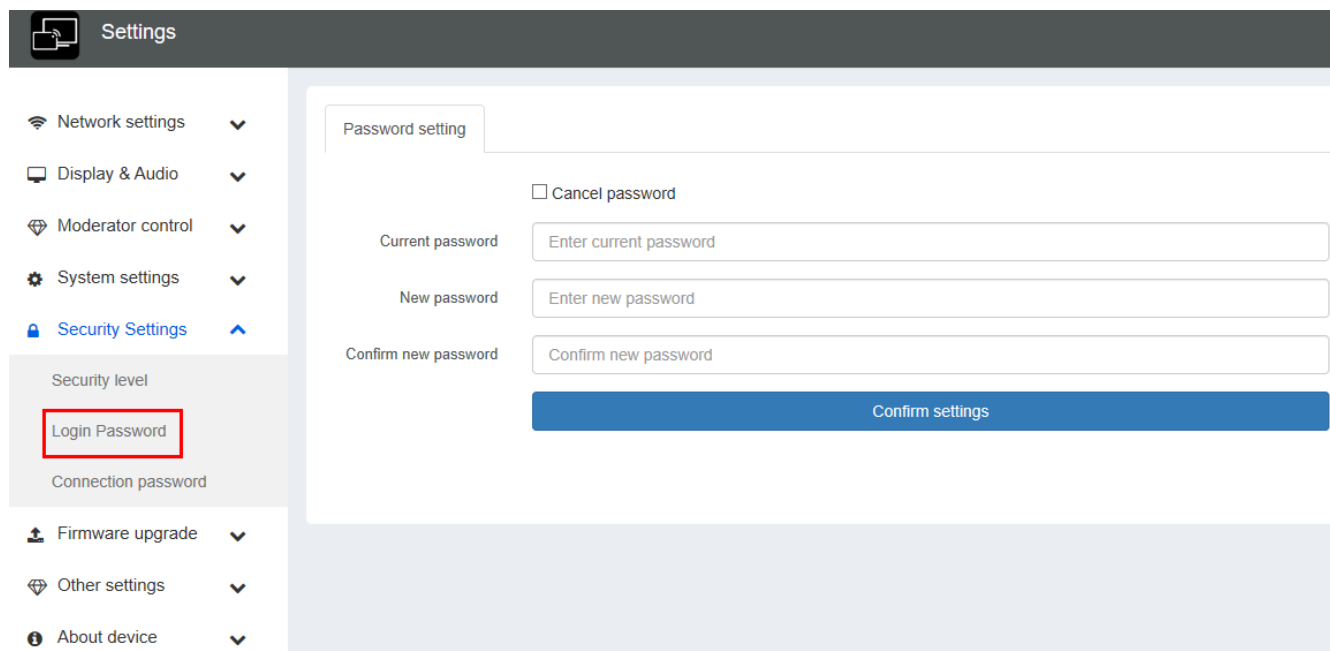
Level 2: higher security; provides increased security for companies, organizations, government agencies, etc., through powerful encryption of audio and video data; other security features include limiting the transmission of "AirPlay" by introducing a password.

Level 3: is used for strict security requirements of companies, organizations, authorities, banks. This level contains all "Level 2" security measures; in addition, all mobile applications, such as the Android APP as well as AirPlay are blocked, the web browser (WebUI) of the Base-unit is blocked. In addition, the downgrade of the firmware is not possible.

The setting of the security level is displayed in the Home screen, click the icon  for more information.

6.5.2 Login Password

Change admin password for entering setting menu on webserver. Default password, or after a RESET, is "admin". You can change the password as you like. You can also deactivate the password entry, set the appropriate checkmark and "Confirm settings".

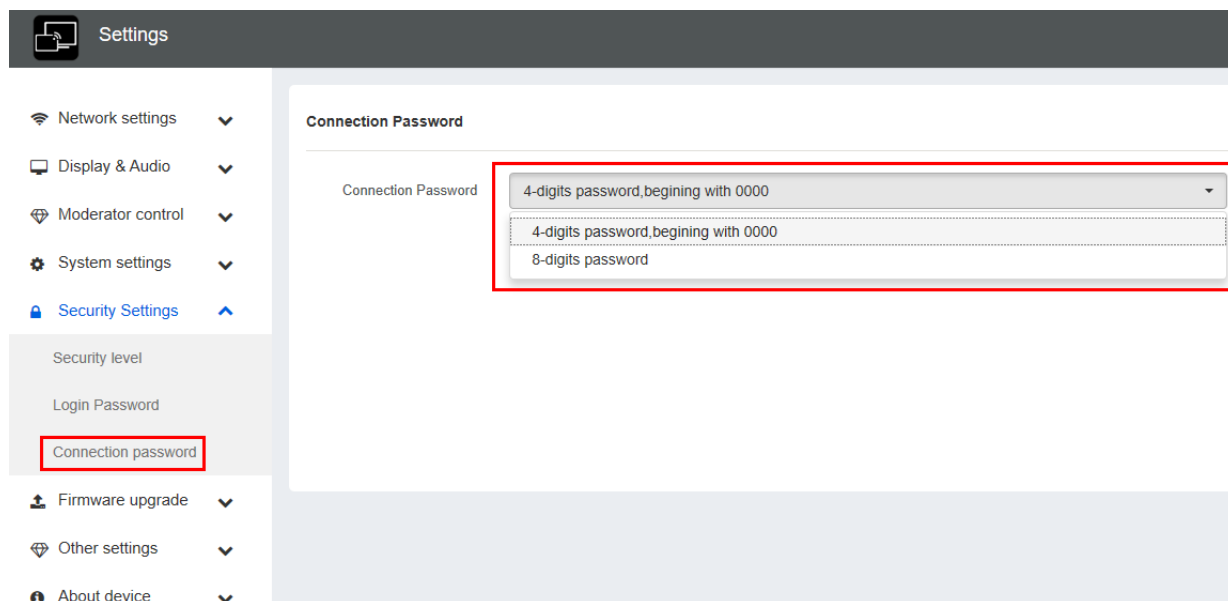


The screenshot shows the 'Settings' application interface. On the left, a sidebar lists various settings categories: Network settings, Display & Audio, Moderator control, System settings, Security Settings (highlighted with a blue arrow), Security level, Login Password (highlighted with a red box), Connection password, Firmware upgrade, Other settings, and About device. The main content area is titled 'Password setting' and contains a checkbox for 'Cancel password'. Below this are three input fields: 'Current password' (placeholder: 'Enter current password'), 'New password' (placeholder: 'Enter new password'), and 'Confirm new password' (placeholder: 'Confirm new password'). A blue button labeled 'Confirm settings' is positioned at the bottom right of the form.

6.5.3 Connection password

Two type of password format can be chosen to show on home screen.

- 4-digits password, beginning with 0000
- 8-digits password

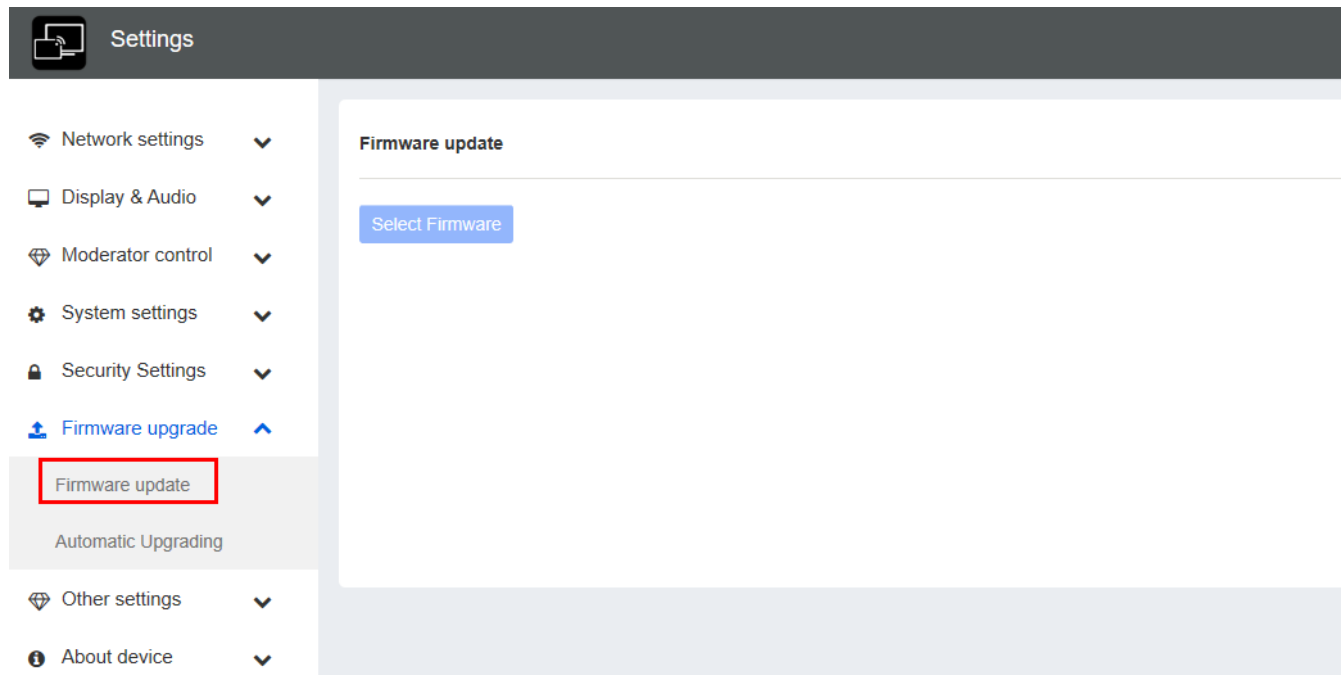


The screenshot shows the 'Settings' application interface. On the left, the sidebar lists various settings categories. Under 'Security Settings', 'Connection password' is highlighted with a red box. The main content area is titled 'Connection Password' and features a dropdown menu for 'Connection Password'. The dropdown is open, showing three options: '4-digits password, beginning with 0000' (selected), '4-digits password, beginning with 0000', and '8-digits password'. The first two options are identical.

6.6 Firmware upgrade

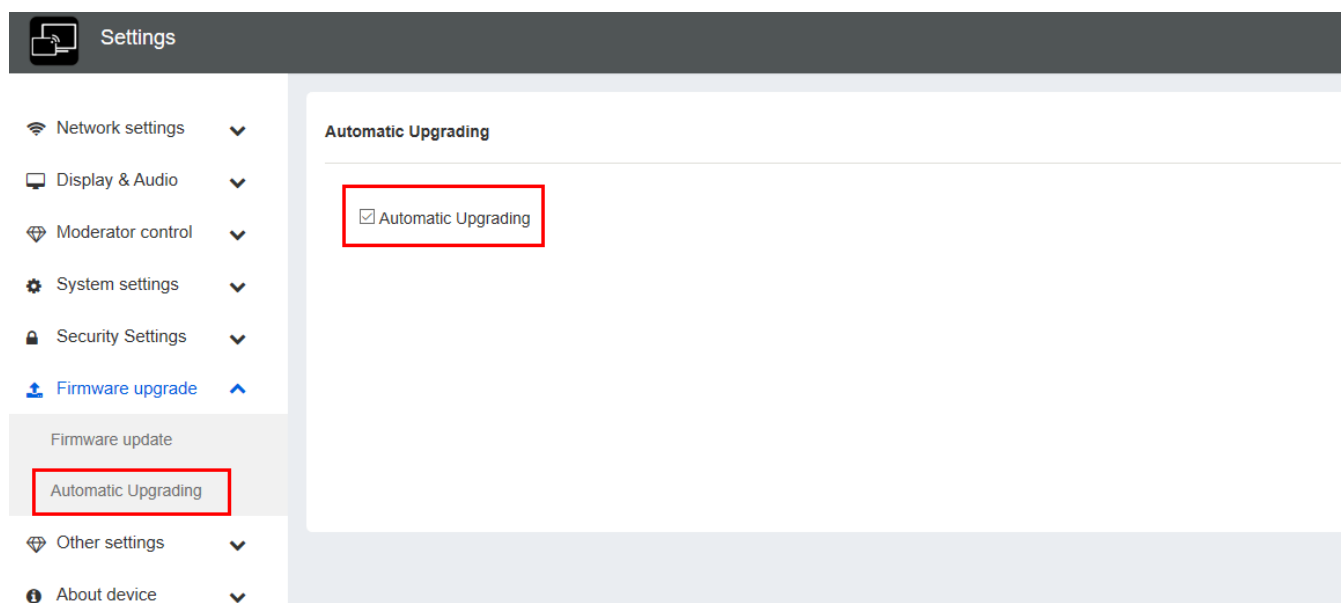
6.6.1 Firmware Update

To upload local updating files to upgrade base unit.



6.6.2 Automatic Upgrading

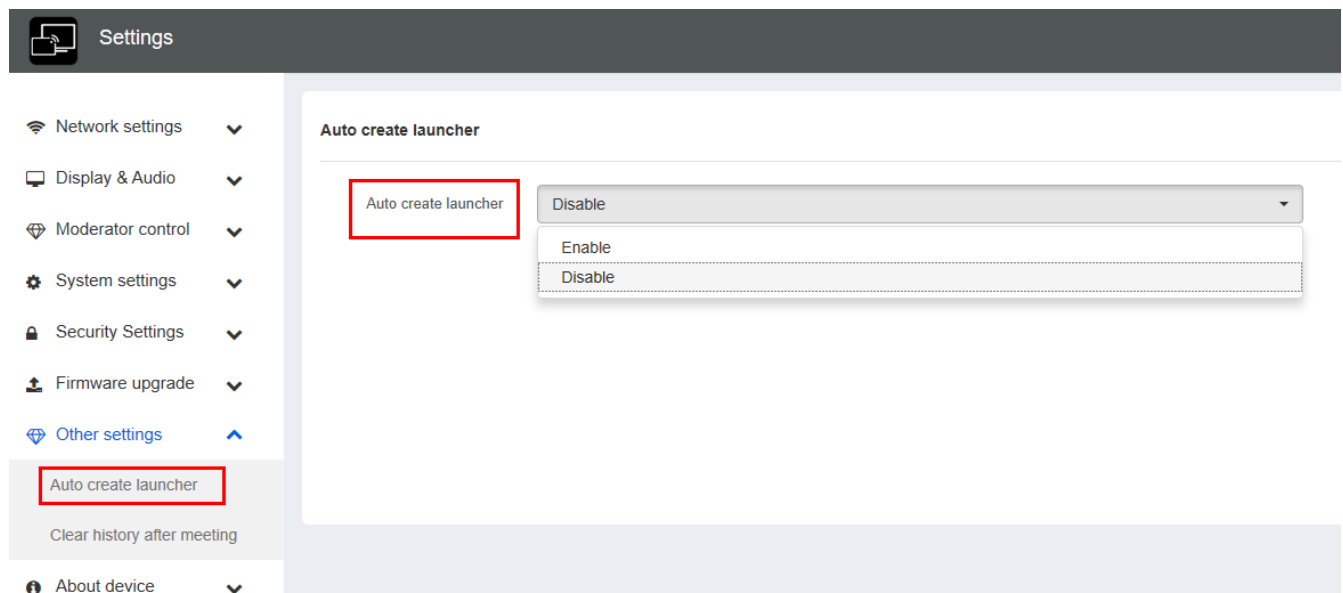
Tick to choose upgrading from OTA via Internet or from local files.



6.7 Other settings

6.7.1 Auto create launcher

Determines, when using a USB memory at one USB-port of Base-unit, the Launcher program "WirelessMedia" will be copied automatically on USB memory. Enable or disable the corresponding box.



6.7.2 Clear history after meeting

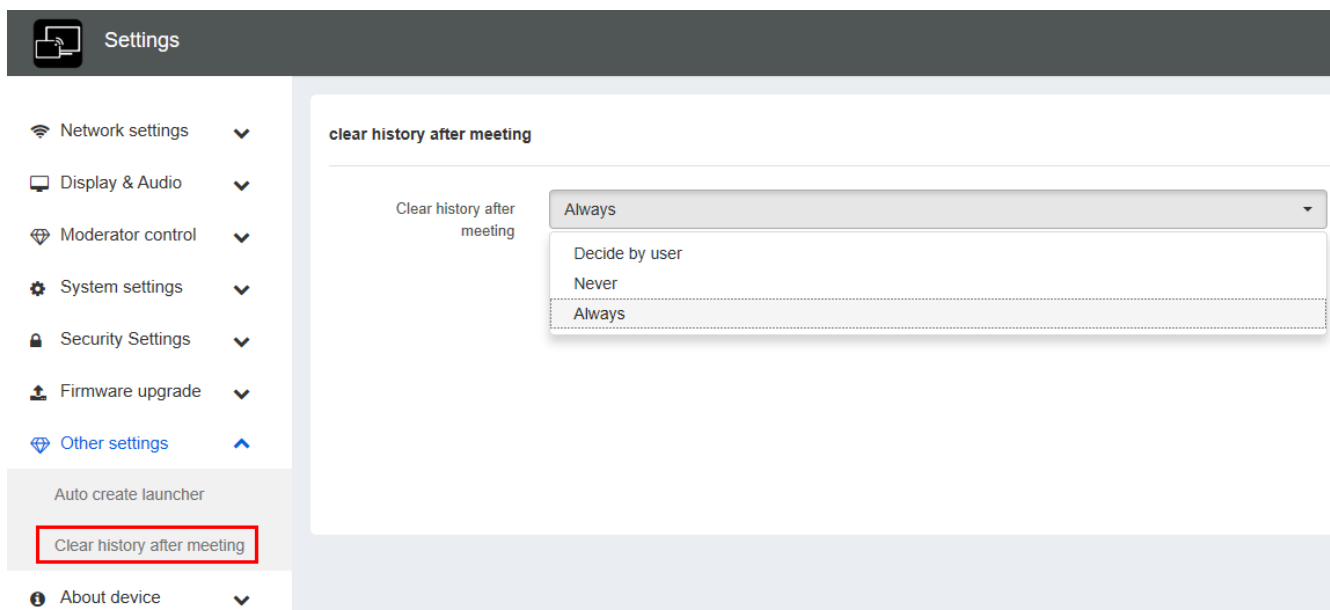
Pictures, videos, music of mobile units will be stored in memory of Base-unit. This memory can optionally be erased, at the end of a meeting, when the dongle is pulled from the Laptop / PC.

Settings are:

Decide by User – a dialog appears, when dongle is pulled.

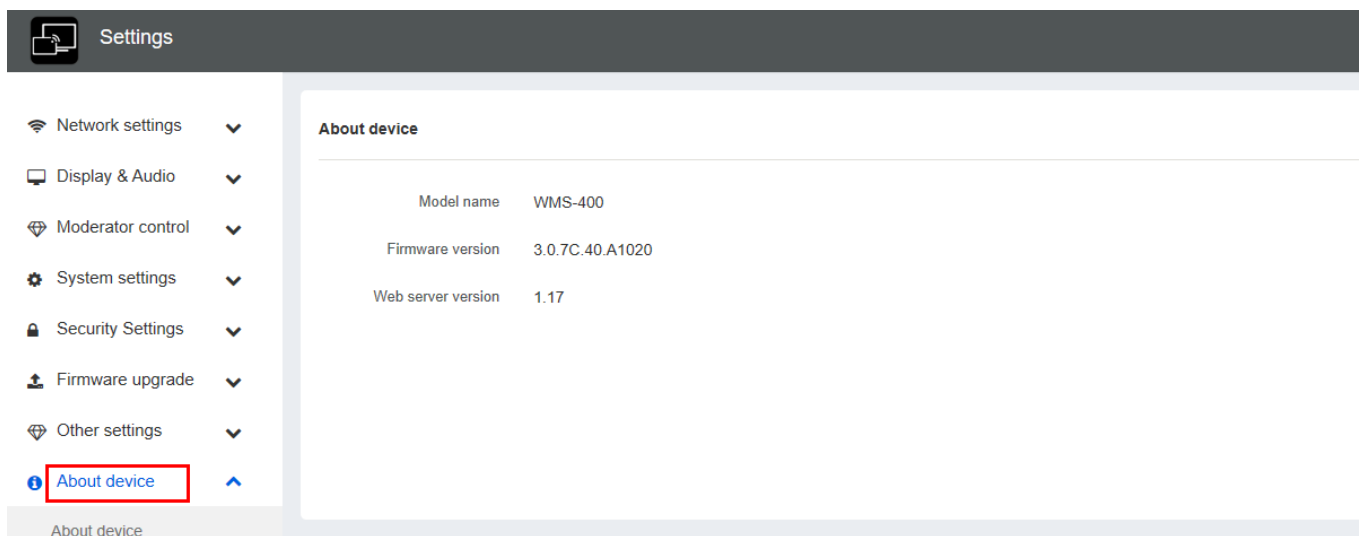
Never – storage space is automatically erased, when memory is filled for 90%

Always – memory is automatically deleted.



6.8 About device

Check the firmware version of base unit and web server version.



2. Updating WirelessMedia

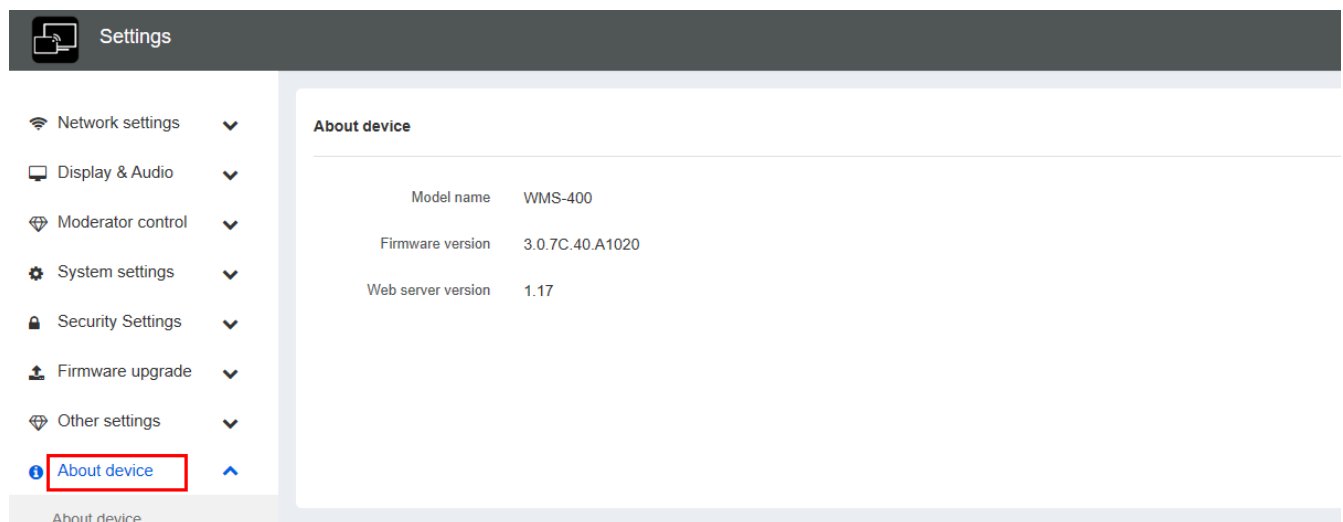
An update of the firmware can be useful to take the advantage of new features of WirelessMedia or to fix known issues and bugs. WirelessMedia includes two methods of updating. Updating by USB stick and webserver.

After updating the Base-unit, always check, whether the other parts still fit together or should be updated also.

There are **up to three different areas** for updating: Firmware **Base-unit**, Firmware **dongle** and **Launcher** for PC/Laptop or MAC "WirelessMedia.exe". All software is stored in Base-unit, to be transferred manually to different devices.

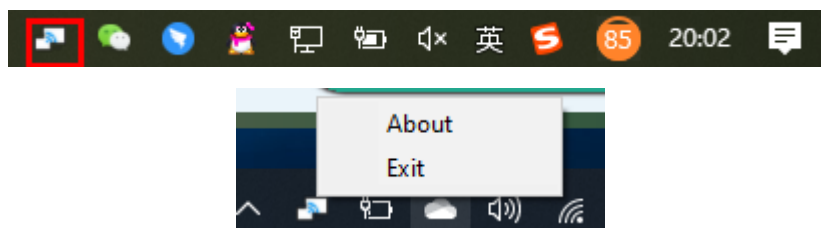
7.1 Check current firmware information

Base-unit: webserver "console" menu / About device.

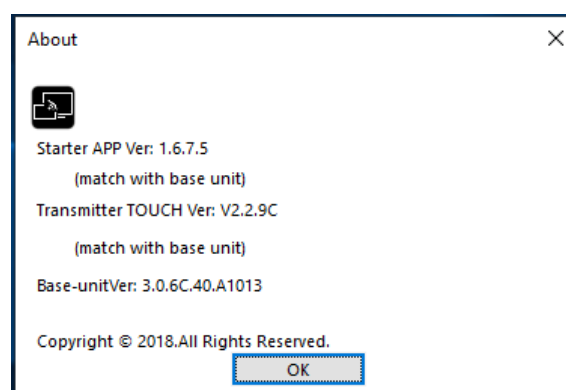


Windows OS:

Dongle/Launcher: firmware version can be visual in the ""WirelessMedia".exe" program icon in windows status bar by right-clicking the ""WirelessMedia"" icon and select "About", as shown below.

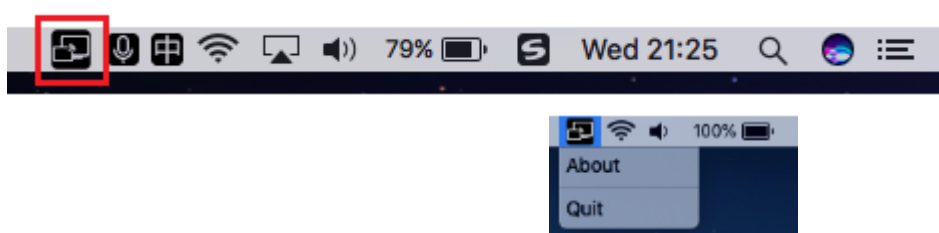


Click "About" to check dongle and launcher program version.

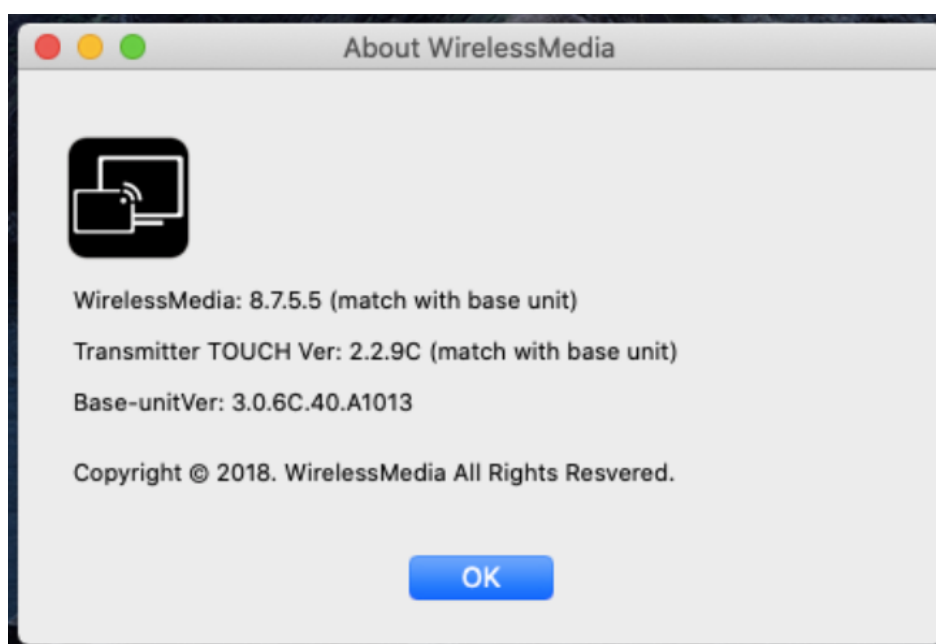


MAC OSX:

Dongle/Launcher: firmware version can be visual in the ""WirelessMedia".app" program icon in MAC OSX status bar, by clicking the ""WirelessMedia"" icon and select "About", as shown below.

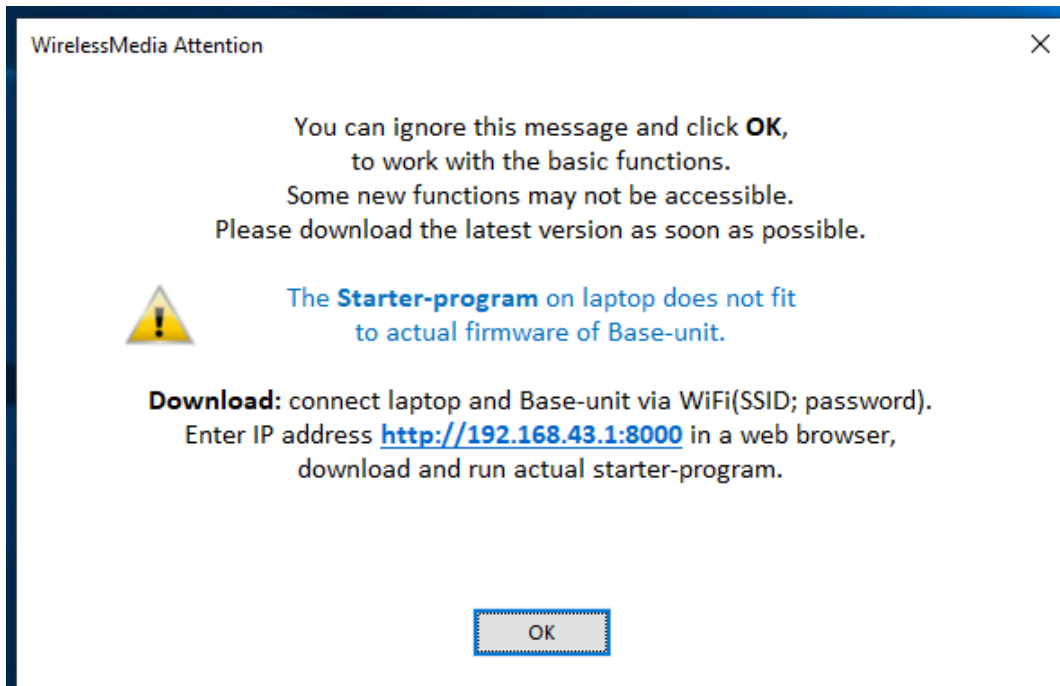
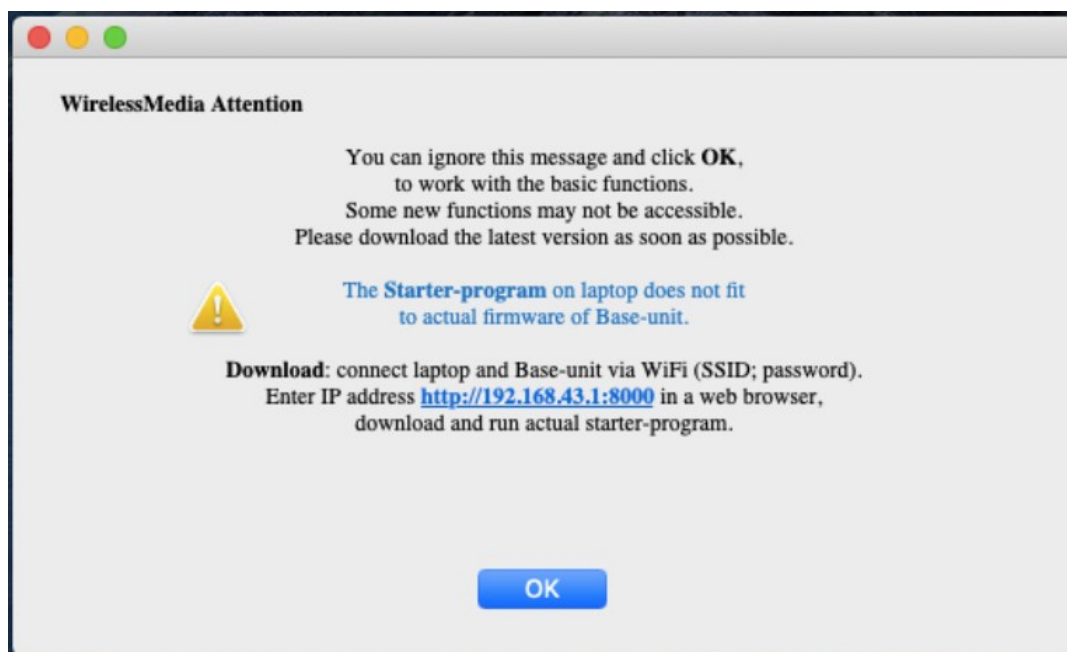


Click "About" to check dongle and launcher program.



Firmwares are NOT matching:

When dongle firmware or "Launcher" firmware are older version, or in other words dongle firmware or "Launcher" firmware doesn't match with the base unit version, it shows up ""WirelessMedia" ATTENTION" alert message box in the window OS or MAC OSX, as below.



When mismatching occurs, please do the following steps to update the firmwares, as indicates in the message box.

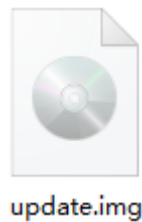
7.2 Upgrading firmware of base unit:

There are two ways to upgrade base unit as below.

First method to upgrade base unit as below:

The base unit device can be updated through a USB drive as below.

1. Copy the updating file "update.img" to the root directory of the USB drive.



2. Connect the USB drive to either USB port of **Base-unit**.

Note: The USB port can only support maximum 500ma. Please use a small power U-disk as upgrading USB drive.

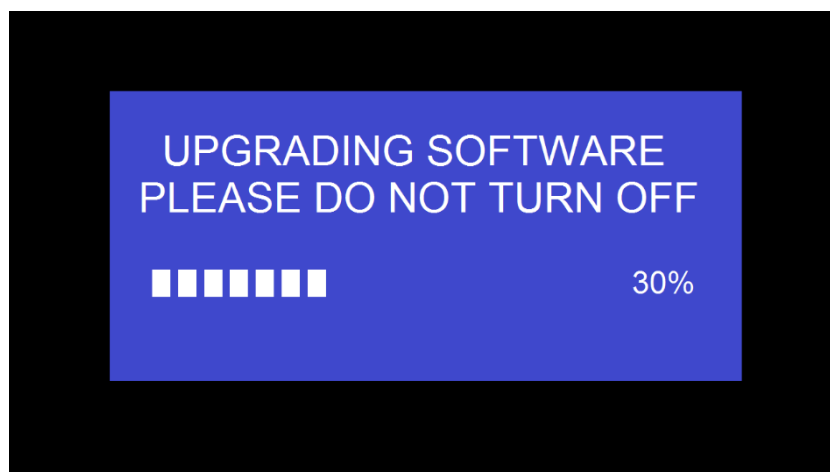
WirelessMedia recognizes the "**update.img**"-file at a plugged-in USB stick automatically and starts the "Full Update" procedure.

You can plug out the USB stick within 10 seconds to stop the update.

Attention !

Do not disconnect power during upgrading progress. Or, the unit firmware will be corrupted.

3. The upgrading progress displays as shown below, and the unit will reboot automatically after complete the updating 100%, as shown below.



Note: During the update, screen can be temporary dark.

If the progress bar stops at 1%, use another USB stick, it may be defective.

The display device shows the Home Screen after normal boot of the device, you can disconnect USB-drive.

4. Perform "Factory Reset" when the firmware update is complete?

Only when the associated "Release notes" are requiring an additional „**Factory Reset**“, perform it via the menu "**System settings**" / "**Reset**" on webserver console menu.

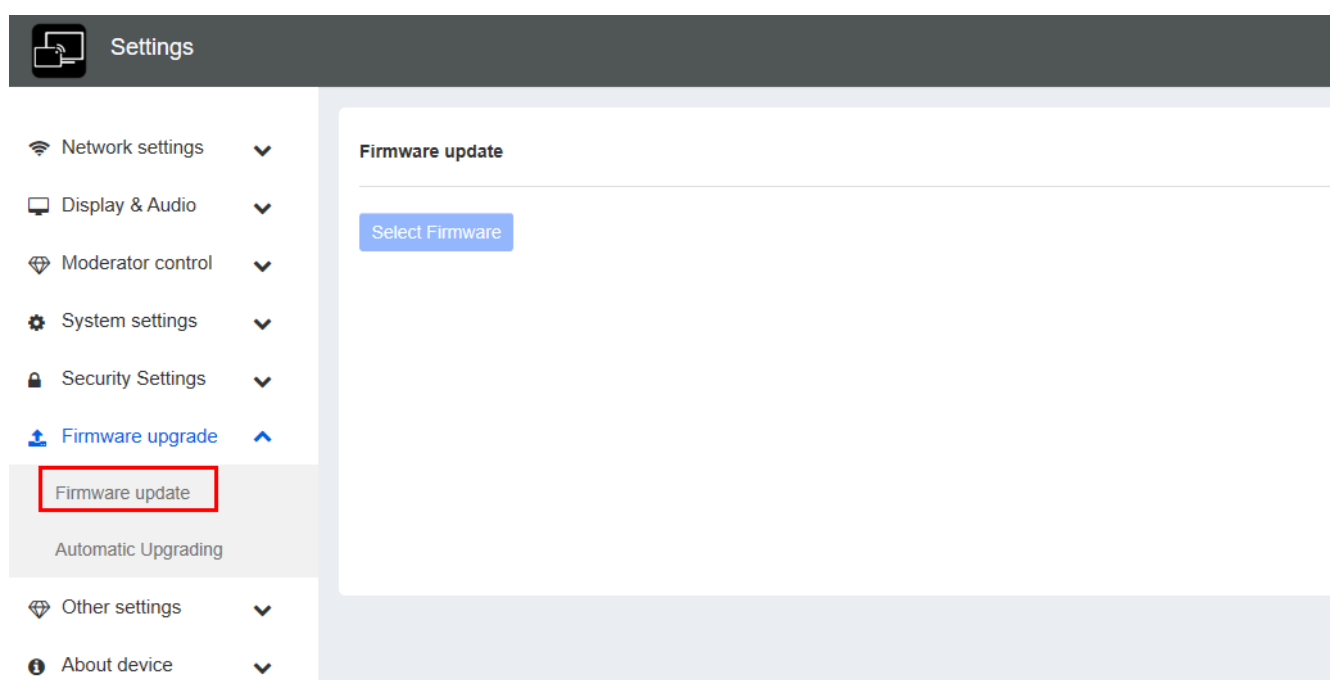
All data of configuration will be lost. So that you do not have to re-configure all data in an elaborate process, therefore note all settings within the Sub-menus before doing Factory Reset.

5. The update of Base-unit is finished.

Second method to upgrade base unit as below:

Base unit can be upgrade via webserver console menu as below:

Select a "update.img" file to upgrade to target version.

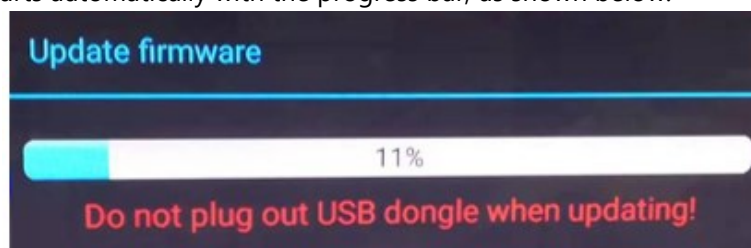


7.3 Upgrading and Pairing of Dongle:

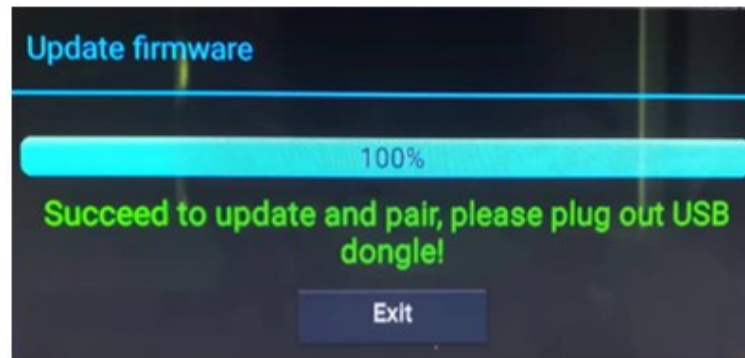
1. Plug the dongle to either of the two USB port of WMS to be updated. It will automatically show up a message to indicate if the installed firmware of dongle is older, and needs to be upgraded.

Note: Type C dongle needs to plug into Type-C port of front base unit to upgrade.

The upgrading progress starts automatically with the progress bar, as shown below.



2. **"Pairing"** to the Base-unit is done automatically afterwards, it shows as below



3. Plug out the dongle. Now, the upgrading progress is finished. Update all other dongles accordingly.

7.4 Upgrading Launcher:

Attention: The USB driver should be FAT 32 format not NTSC format.

After upgrading **Base unit** and **Dongle**, the launcher should be written with the actual launcher program for Windows, MAC and Apps for mobile-units.

There are 2 methods to update the USB stick/launcher, including:

Method 1: Via USB stick

1. Connect the USB drive to either USB port of base unit.

2. Click the "Download" icon  in "Home Page", pls see as below:



Step 1: Copy WirelessMedia.exe/app from USB stick or download by connecting SSID&PASS to enter Wifi IP browser page, to lap-top
 Step 2: Plug the USB dongle into your PC/lap-top, click to run WirelessMedia
 Step 3: Wait till LED indicator is static green, click button to show your screen

Step 1: Download APK/APP namely "WirelessMedia"
 Step 2: Connect wireless network WMS-3343 and enter password
 Step 3: Open the app and click Mirroring to show your mobile screen

3. The Launcher "WirelessMedia" is written to the USB-stick, an OSD-windows shows the progress. When ready, unplug the USB-stick.

Method 2: Via WIFI

1. Connect PC to WMS's SSID and enter password in homepage, see pictures as below:

The screenshot shows the WMS-3343 homepage. At the top, it displays the ID: WMS-3343, PASS: 00003404(01:13), and IP addresses: Wifi IP: 192.168.43.1, Lan IP: 192.168.3.40/192.168.9.118. Below this, it shows 'Guest: WMS-3343' and 'Staff: Staff SSID'. The main content is divided into two sections: 'WirelessMedia PC' and 'Android/iOS'. The PC section shows three steps: 1. Copy WirelessMedia.exe/app from USB stick or download by connecting SSID&PASS to enter Wifi IP browser page, to lap-top; 2. Plug the USB dongle into your PC/lap-top, click to run WirelessMedia; 3. Wait till LED indicator is static green, click button to show your screen. The Android/iOS section shows three steps: 1. Download APK/APP namely "WirelessMedia"; 2. Connect wireless network WMS-3343 and enter password; 3. Open the app and click Mirroring to show your mobile screen. A red box highlights the 'Mirroring' button in the app interface.

Step 1: Copy WirelessMedia.exe/app from USB stick or download by connecting SSID&PASS to enter Wifi IP browser page, to lap-top
Step 2: Plug the USB dongle into your PC/lap-top, click to run WirelessMedia
Step 3: Wait till LED indicator is static green, click button to show your screen

Step 1: Download APK/APP namely "WirelessMedia"
Step 2: Connect wireless network WMS-3343 and enter password
Step 3: Open the app and click Mirroring to show your mobile screen

2. Open Browser and enter WiFi IP: 192.168.43.1:8000.
3. Click to enter "Launcher" download webpage. Shown as below:

The screenshot shows the 'Downloads' page. At the top, it says 'Downloads' and 'Console English'. Below this, it says 'Client Software Downloads'. There are four download options: 'WirelessMedia for Android' (Please click to download the Android APK), 'WirelessMedia for Windows' (Wirelessmedia PC client software for best performance), 'WirelessMedia-Pro for Windows' (Wirelessmedia PC client software for best safety), and 'WirelessMedia for Mac OS X' (Please click to download the MAC APP). Below this, it says 'User manual' and 'User manual in English' (Please click to download user manual).

4. Choose and click Windows or MAC launcher to download.
5. Find the "Launcher" program in PC and copy to PC desktop. (Recommend to copy to desktop for quick run.)
6. Run the program to start sharing.

Two methods to execute the launcher for first time user

- Copy the program to PC, and click to execute it to share PC screen.

- Connect dongle to PC; click to run program from the USB drive and share PC screen.

For both two methods, user don't need repeat the above steps since the second time plug-in.

The Launcher program "**WirelessMedia for Windows**" and "**WirelessMedia Pro for Windows**" includes by default an additional virtual driver "ExtendedDesktop" to optionally install the Windows 10 Extended Desktop functionality, if they are is needed. This may require admin rights.

7.5 Clean left files of older versions of Launcher program in Lap-top

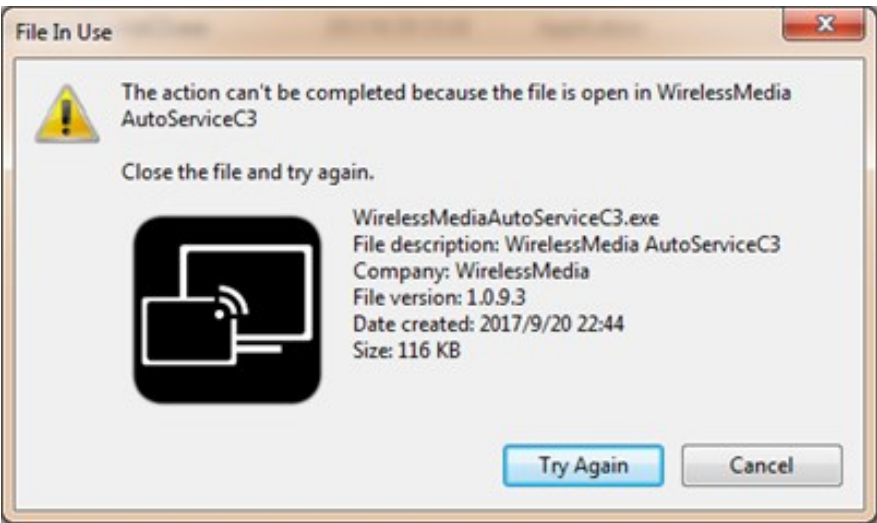
There are some old version "WirelessMedia" files left in the lap-top, which may influence the performance of the newer "WirelessMedia" program. Currently, it needs to manually clear them, before start to use the newly updated "WirelessMedia" firmwares.

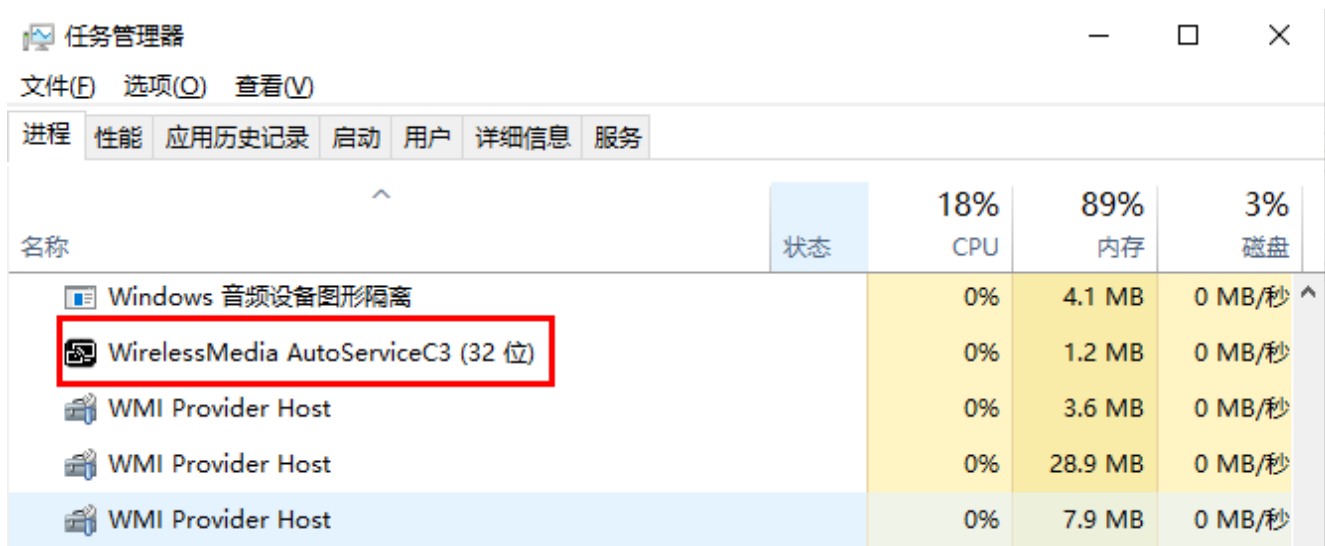
Steps:

1. Find the place where the left "WirelessMedia" programs are stored. Normally, these files are stored in the C:\Users***(user name)\AppData\Local\WirelessMedia, as shown below.

← → ↕ ↑ > 此电脑 > OS (C:) > 用户 > lydia > AppData > Local > WirelessMedia				
> 快速访问	名称	修改日期	类型	大小
	StartLinkC3	2019-12-10 16:12	快捷方式	1 KB
	WirelessMediaAutoServiceC3.exe	2019-12-10 16:12	应用程序	1,600 KB
	WirelessMediaMain.exe	2019-12-10 16:12	应用程序	10,919 KB
> Dropbox				
> OneDrive				
此电脑				

2. If the "*.service" "*.serviceC3" can't be removed and shows up an alert message as below, please use combined hot key to open the task manager by pressing "**Ctrl+Alt+Delete**", as shown below.





3. Right-Click on the "*.service" or "*.serviceC3", for example right-click on "WirelessMediaAutoServiceC3.exe" as shown below, and click to End Process Tree.
4. Check again the task manager, to be sure there is no more any "WirelessMedia" programs still running in the task manager. And check again to be sure there is no more any "WirelessMedia" in the C:\Users***\AppData\Local\WirelessMedia.
5. Execute the actual version of Launcher program.

Upgrading progress is completed.

3. Operation Guide

8.1 Mirroring PC desktop

You can operate WirelessMedia for Windows optionally **with** or **without Dongle**. If there are several participants in a meeting, mixed operation is also possible.

8.1.1 Extended Desktop for Windows 10

The Launcher program "**WirelessMedia for Windows**" and "**WirelessMedia Pro for Windows**" includes by default an additional virtual driver "**ExtendedDesktop**" to optionally install the Windows 10 Extended Desktop functionality, if it is needed.

8.1.2 Microsoft Windows PC/Laptop with Dongle

Operating system requirement: Windows XP/Vista/7/8/8.1/10 32 & 64 bit.

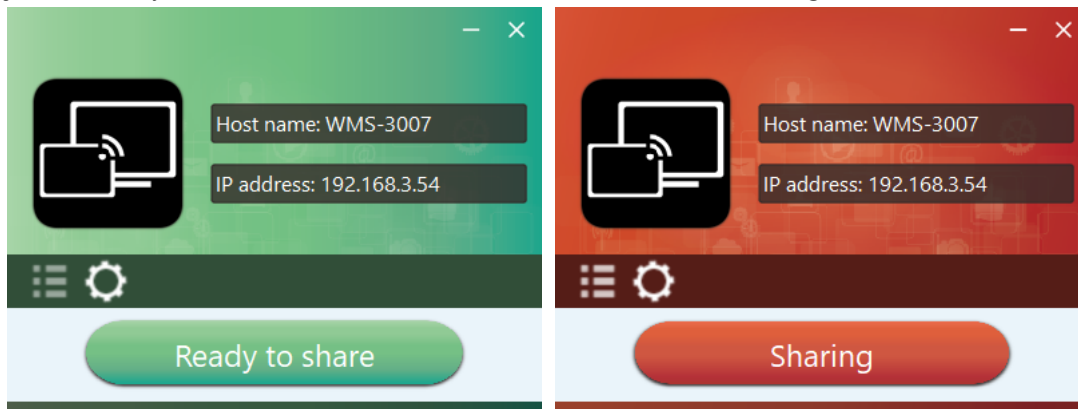
For first time user, you have to **copy the Launcher program "WirelessMedia" first on your Laptop. Run this**

Launcher program.

When the Launcher program is pre-installed one time and already run in the first time, with plug in dongle, continue with step 2.

When Launcher program is not yet installed on PC, refer to chapter 7.4.

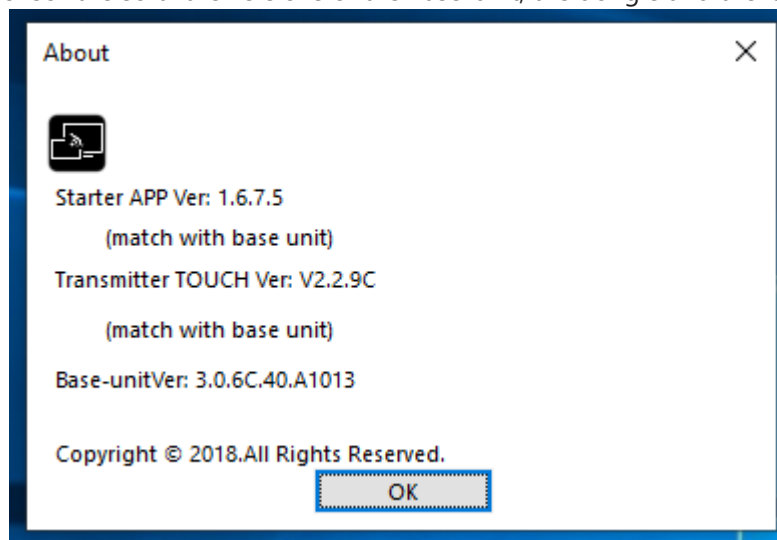
1. Plug a dongle **to the USB port of your PC or Laptop**. The WirelessMedia application is starting automatically and a symbol is displayed in the task bar of the PC/laptop  .
2. Until the transmitter button shows a static **green** LED indicator, or till you see a message table showing up **"Ready to share"**, you could click the transmission button to start mirroring.



3. Click dongle or the visual button again to stop mirroring, LED or window color shows green again.

Right click the WirelessMedia status icon  in Windows taskbar to open up the **context- menu**.

- **"About"**: You can check the software versions of the Base-unit, the dongle and the launcher program.



- **"Exit"**: End APP. Exiting the App completely.
If you click the cross **"X"** in the upper right corner of the app, the app in the task bar is only minimized and can be recalled again from the taskbar at any time.