

# DV-AS-21 AirShare USER MANUAL



244 Bergen Blvd Woodland Park NJ 07424 973-785-4347 <u>www.fsrinc.com</u>

43367 LIT1765

# 1 Limited Warranty

The DV-AS-21 is warranted against failures due to defective parts or faulty workmanship for a period of three years after delivery to the original owner. During this period, FSR will make any necessary repairs or replace the unit without charge for parts or labor. Shipping charges to the factory or repair station must be prepaid by the owner, return-shipping charges (via UPS Ground) will be paid by FSR.

This warranty applies only to the original owner and is not transferable. In addition, it does not apply to repairs done by other than the FSR factory or Authorized Repair Stations.

This warranty shall be cancelable by FSR at its sole discretion if the unit has been subjected to physical abuse or has been modified in any way without written authorization from FSR. FSR's liability under this warranty is limited to repair or replacement of the defective unit.

FSR will not be responsible for incidental or consequential damages resulting from the use or misuse of its products. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Warranty claims should be accompanied by a copy of the original purchase invoice showing the purchase date (if a Warranty Registration Card was mailed in at the time of purchase, this is not necessary). Before returning any equipment for repair, please read the important information on service below.

#### **SERVICE**

Before returning any equipment for repair, please be sure that it is adequately packed and cushioned against damage in shipment, and that it is insured. We suggest that you save the original packaging and use it to ship the product for servicing. Also, please enclose a note giving your name, address, phone number and a description of the problem.

NOTE: all equipment being returned for repair must have a Return authorization (RMA) Number. To get a RMA Number, please call the FSR Service Department (1-800-332-FSR1). Please display your RMA Number prominently on the front of all packages.

#### **CONTACT INFORMATION**

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### 2 Features:

Supports 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.

Supports remote viewing of the active display using the WirelessMedia Lite app on smart devices.

Supports remote control of the active source devices from other smart devices.

Supports "Airplay" for apple device.

#### 3 Overview

# 3.1 AirShare System

AirShare allows connecting or participating in a meeting simply by clicking a visual button. It also allows others to join making the meeting more efficient and productive. A typical AirShare system contains:

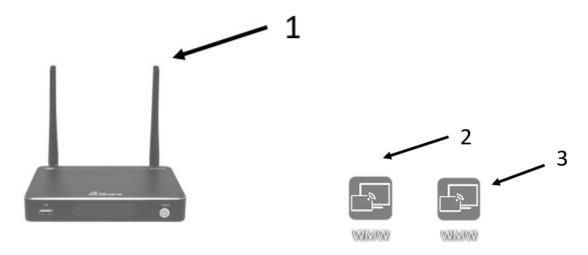


Fig 1.1

ID	Name	Description		
1	Base Unit	Host unit		
2	WirelessMedia Lite for Android APK	For smart android devices to share the screen, transmit photos/music/video/files, exchange files, remote view and review mouse.		
3	WirelessMedia Lite APP for IOS	For smart IOS devices to share the screen, transmit photos/music/video/files, exchange files, remote view and review mouse.		

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.		

# 3.2 AirShare system diagram

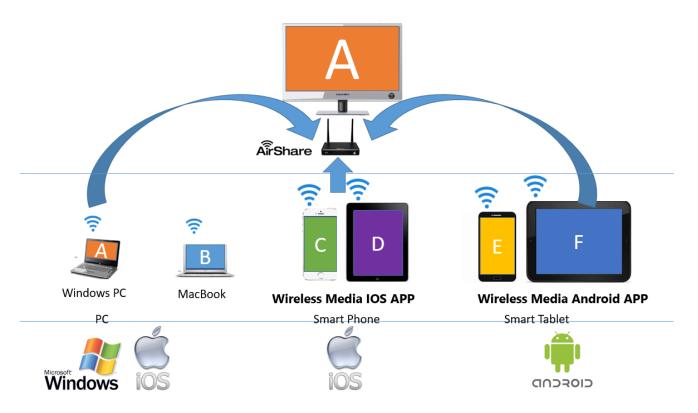


Fig 1.2

# 4 Specification:

Specifications	Specifications				
Features					
SW format	WirelessMedia Lite.exe for Windows				
Security	WPA/WPA2				
Required Windows OS	Windows XP/Vista/7/8/8.1/10 and above, 32 & 64 bit				
Video Capacity	Wireless Transmission 1080P@ ≤ 60Hz				
Distance	35m without obstacles between laptop WIFI module and AirShare				
Control					
Button	Visual button on Laptop				
Indicator	Green/Red visual indicator on visual button				
Specifications of AirShare					
Supported Formats					
Video Input Formats	1x Wireless, 1x HDMI				
Format Compliance	WIFI 11n/ac				
Video Output Formats	1x HDMI				
Video Output Resolution	1920x1080@60Hz,1920x1200@60Hz				
Format Compliance	HDMI1.4				
Audio Input Formats	1x DVI Audio in				
Audio Output Formata	HDMI: embedded digital audio				
Audio Output Formats	De-embedded analog stereo audio: 20 kΩ impedance				
Inputs Connectors					
Wireless Input	WIFI 11n/ac				
Outputs Connectors					
HDMI Output	1x HDMI 19-pin female connector				
Analog Audio Output	1x 3.5mm PC audio female connectors				
Features					
Number of window	1				
simultaneous on screen					
Number of simultaneous	≤ 14				
connections	2 14				
Data rate wireless	Up to 300Mbps, depending on the WIFI module of the laptop				
Video Playback Frame	20-30 FPS				
Rate	20 00 1 1 0				
Wireless transmission	IEEE 802.11 a/g/n/ac				
protocol	TEEE 002.11 arg/11/a0				
Frequency band	2.4 GHZ and 5 GHz				
Video Capacity:	1080P @ ≤ 60Hz Airplay for IOS devices				
That Supusity.	1080P @ ≤ 60Hz "WirelessMedia Lite" app				

Specifications	Specifications			
Remote Viewing	Mirroring remote view on mobile by app installed			
Mobile Capability	Free IOS app, Free Andriod app			
Encryption	AES WPA PSK, WPA2 PSK			
Remote Mouse	Remote control moderator's PC			
Control				
On-Screen Setting	Configuration Visual Button, by HID mouse, or remote control on APP			
Ethernet	Telnet			
Mechanical				
Dimensions (W x D x H)	5.5" x 3.74" x 0.63" (140mm x 95mm x 16mm)			
Weight	0.4 lbs (200g)			
Construction	1~2mm plastic with matte black finish			
Environmental				
Operating Temperature	+32° to +104° F (0° to +40° C)			
Storage Temperature	-4° to +140° F (-20° to +60° C)			
Humidity (Storage /	20% to 90% (non-condensing)			
Operating)				
Power				
DC Power	5V			
Power Consumption	10W (max.)			
Accessories Included				
1x DC adapter with four plug-in, US, Europe, UK, Australia				

# 5 Panel Layout

# **5.1 AirShare Front Panel**



ID	Name	Description		
	Front USB connector	Used to update the software of the AirShare.		
1		Used for connecting a mouse or USB-based touch screen to select local <b>HDMI Input</b> , control the <b>SETTING</b> configuration and open the <b>Help</b> Page.		
2	POWER button / back-lit LED indicator	Powers the unit on and off and indicates power status of the AirShare Base Unit.  NOTE: Applying power by connecting the Power adapter to the AirShare Base Unit will power the unit on without having to press the Power button. The Power button can turn the unit off or back on without removing the Power adapter once it is connected.		

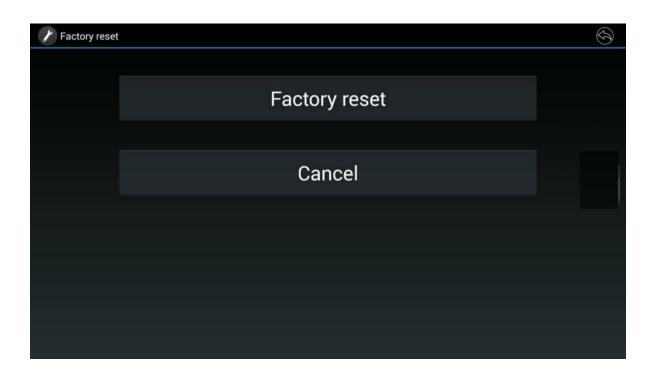
# 5.2 AirShare Rear Panel



ID	Name	Description			
1	DC Power	Connect the included power adapter to this jack, and			
	Input	connect the AC plug to an available electrical outlet			
2	LAN Ethernet	Connect an Ethernet cable between			
2	port	this jack and a LAN to connect AirShare to LAN			
3	Front / Rear	Connect mouse, touch screen, USB stick, etc			
	USB connector	Common modes, todan corcen, cob click, cie			
4	Reset	Reset button to restore to the factory default setting			
5	HDMI output	Connect an HDMI cable from this port to an			
3		HD display.			
	Line audio output	2 channel analog audio output, Connect a 3.5mm mini-			
6		jack PC connector from this jack to the Line In jack of			
	output	an audio system.			
7	HDMI input	Connect a local HDMl input, up to 4K_60Hz, HDCP2.2			
		from source device			
	Line audio	2 channel analog audio output, Connect a 3.5mm mini-			
8		jack PC connector from this jack to the Line In jack of			
	прис	an external audio source devices			
	Antenna				
9	connection	Screw the two included antennas into these two ports			
	points				

#### Restore default configuration via Reset button:

- Power up the Base unit.
- When the Home Page appears, press the reset button at the rear panel of AirShare using a pen tip or small screwdriver for at least 2 seconds until the factory reset page is shown.
- Connect a mouse to the AirShare Base unit and click *Factory Reset*. The Base unit will reboot after 3 seconds to the default configuration. Or click *Cancel* to return.



#### **Default Configuration Settings:**

The Default Configuration Settings are as follows:

#### Ethernet:

Proxy: None
IP setting: DHCP
Wireless network:

Portable Wi-Fi hotspot: ON

SSID: AirShare

Security: WPA2 PSK Frequency: 2.4GHZ

Channel: 6Hz

AirShare setting:

Airplay screen quality: High

Output resolution: 1920x1080 60Hz,

Home screen background image: Supports customized changeable background

Volume: 50

#### **Security setting**

LAN connection: Disabled

Presenter Lock: Disabled (Remote view the main screen from mobile device application)

**Language**: English

Date & time:

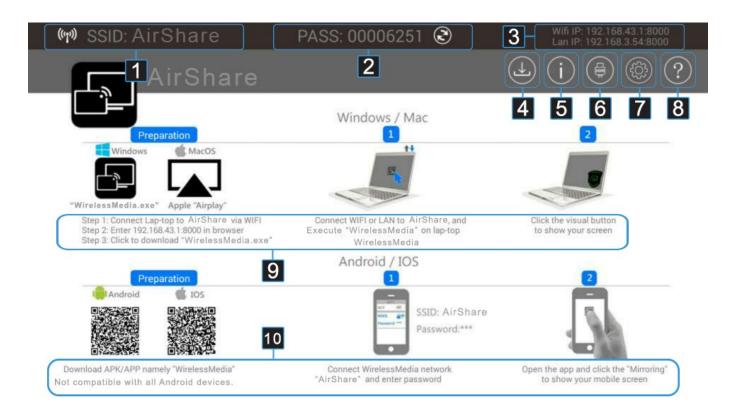
Automatic date & time: (uses network-provided time)



**Attention:** LAN connection default is set to "disable" when unit settings are restored. For a corporate LAN connection, you will need to manually turn it on. Refer to Page [Security setting:] on how to turn it on.

#### 5.3 Software Interface

#### 5.3.1 Home Page



ID	Name	Description			
1	SSID: (Service Set Identifier) Name	Displays the AirShare SSID name			
2	PASS: (Password)	Displays the password when connecting to the WIFI SSID of the AirShare. Generates new password if desired.			
3	WIFI IP address LAN IP address	Displays the Corporate WIFI IP address and LAN IP address of the AirShare.			
4	Download	Downloads launcher (PC software) to a USB Stick			
5	Information	Toggles the visibility of the SSID/PASS/IP information.			
6	HDMI input	Switches to the local HDMI input.			
7	Settings	Connect a mouse to either USB port and click to open the "Settings" menu.			

ID	Name	Description		
8	Help	Access documents for installation, operation or after sales support		
Quick start for PC operating system		Steps for how to transmit PC/Laptop desktop onto the main screen.		
10	Quick start for Android/IOS operating system	Steps for how to transmit smart mobile devices either powered by Android or IOS desktop onto the main screen.		

#### Changeable PASS (password)

- For AirShare FW version 1.1.5 or above, PASS (password) is changeable randomly every 5 minutes. For AirShare FW version above 1.2.6, PWD (password) is configurable is the Setting page. Setting choices are: Never Change, 5m, 30m, 1h, 2h, 4h 24h.
- If only the PWD (password) is changed, smart mobile device has to enter the correct SSID and PASS (password) to connect the AirShare hotspot, in order to access all "WirelessMedia Lite" functionality.
- When AirShare is disconnected with the launcher (PC software) for 15s, it'll open up a dialog box for user to confirm whether to clear the meeting history, including all data/files to be temporarily memorized in the AirShare.

#### WIFI IP address & LAN IP address:

WIFI IP address shows the hotspot's IP and LAN IP address shows the corporate LAN (Local Area Network).

Attention: When it shows "N/A", it means that the AirShare is not connected to WIFI or the

LAN (Local Area Network) by CAT cable or it failed to get an available IP address by the corporation router.

#### Download

Click this button to download the launcher (PC software) for PC to a USB Stick.

#### Information

Click this button to set the information of SSID/PASS/IP address invisible, re-click to set the information of SSID/PASS/IP address visible.

#### **HDMI** Input

Click this button to switch to the local HDMI source on the AirShare.

#### **Settings Sub Menus**

It gives a way to control all the configuration of AirShare over a LAN (local Area Network). User shall use the USB connected mouse or the Remote Mouse function in the "WMB for Android" Apk or "WMB for IOS" application.

It includes the sub-menu as below

- Ethernet
- Wireless network
- Moderator Control
- General setting
- Security setting
- Language
- System Update
- Date & Time
- About Device

#### Help

- User Manual
- FAQ
- Readme

## 5.4 Quick Start for Screen Sharing

#### PC/Lap quick start steps

- Step 1: Connect PC/Laptop to AirShare via WIFI
- Step 2: Enter WIFI IP or plug USB Stick to AirShare to download "WMW" exe
- Step 3: Run "WMW" on PC/Laptop open the "WMW" GUI and view the list of available AirShare Devices
- Step 4: Select your AirShare from the list and select "Ready to share" to show your screen

#### Smart mobile devices quick start steps

- Step 1: Download "WMW"APK/APP"
- Step 2: Connect to wireless network "\*\*\*" and enter password
- Step 3: Open the "WMW" application and click "Mirror" to share your mobile screen or "TV Mirror" to view the Moderator screen on your mobile device.

#### 6 Installation

#### Overview

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

## 6.1 Mounting methods for the Base unit

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

Actual mounting hardware depends on the specific mounting surface and are not provided.

- Table mount (simply place on the table surface or secure with included mounting brackets)
- Wall mount (Secure to wall using included mounting brackets)

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

#### How to mount the AirShare Base Unit:

**Note:** Mounting screws and anchors are not included in the AirShare box. The type of screws depend on the mounting surface (stone, wood, plasterboard ...) you are mounting the Base Unit to. Make sure the head of the screw is not larger than the keyhole in the bracket.

- 1. Drill two holes in the wall as indicated on the drawing. Horizontal distance: 177 mm ± 0.15
- 2. Attach the two offset brackets with the four Phillips flathead screws to the tapped holes at the bottom of the AirShare Base. The brackets should be installed properly to create an offset between the base unit and the wall.

- Insert an appropriate wall anchor in each hole depending on the wall type and drive in two screws.
   Leave the screws at least 0.15mm space to place the bracket between the screw head and the wall. (See note above)
- 4. Place the AirShare on the wall, so that the holes on the bracket match the two screws that were left loose on the wall and slide the Base Unit downwards until it bottoms on the keyholes.
- 5. Tighten the two screws while holding the Base Unit down to secure.

#### 6.2 Antennas

Screw the two Antennas into the antenna terminals on the rear of the AirShare Base Unit. The articulated antennas can be rotated for a better wireless connection.

#### Antenna placement rules:

- The antennas should be oriented vertically, 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 telephones, microwave ovens, etc.
- It is best to install antennas at least 15 cm (6 inches) from concrete walls.
- The ideal situation would be a direct line of sight between the Base Unit antennas and any shared devices. Any obstruction will cause the signal to follow a longer propagation path, which can result in performance degradation.
- Due to the radio pattern of the dipole antennas, they should not be placed in the walking path of AirShare users.

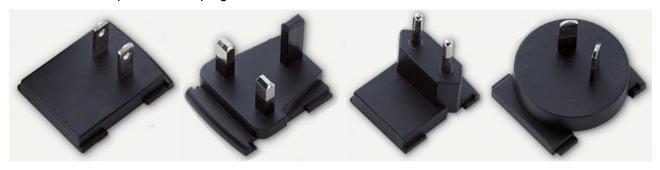
#### 6.3 AirShare Power Connection

The AirShare Base unit can be powered by the external universal power adapter included. The unit powers up and boots when the power adapter is connected and it is not necessary to push the power button.

#### How to connect the external power adapter:

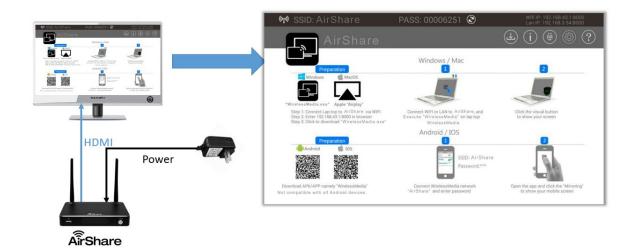
Connect the power adapter plug to the AirShare Base Unit DC Input jack.

Push and slide the appropriate AC power plug (US, UK, EU or AU shown below) to the power adapter. Press the locking tab and slide to remove the AC power plug if a different style is required at any time. Connect the AC power cable plug into the wall outlet.



#### 6.4 AirShare Video Connection.

Connect an HDMI cable from the AirShare HDMI Output to the HDMI input of an HD display. Connect the power adapter to the AirShare Base Unit After a moment, the Home Page is displayed:



#### 6.5 AirShare Audio Connection

AirShare can transmit the audio output of the shared PC/Laptop to the Base Unit together with the video signal. The audio will output at line levels from the AirShare Base Unit Line Out 3.5mm mini jack connector and via the HDMI output connectors simultaneously.

#### **Embedded Audio via HDMI**

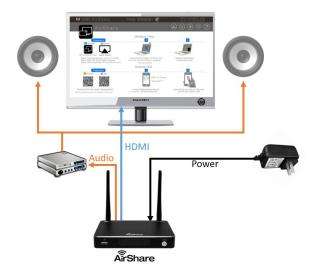
When connected via HDMI to a display that supports embedded audio via internal speakers or a line output to an external sound system, a separate audio connection is not necessary. The audio signal is sent together with the video signal from the AirPlay Base Unit to the main display as shown below.



#### Separate Audio via AirShare Base Unit Line Output Audio Jack

When connected via HDMI to a display that does not support embedded audio via internal speakers or does not have a line output to an external sound system, a separate audio connection will be necessary.

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



Be sure the source PC/Laptop is sharing on the main screen Check *Setting* configuration, to adjust the *Volume* set in *General setting* tab.

#### **Source PC/Laptop Sound notes:**

- By default, AirShare will mute the internal speaker of the source PC/Lap and transmit the audio
  to the AirShare Base Unit, once the source PC/Laptop is successfully shared to the main
  display, in order to avoid audio delay issues.
- When the source PC/Laptop sharing session ends, the local speakers will become un-muted.
- To keep the internal speaker of the source PC/Laptop un-muted while sharing the audio to the AirShare Base Unit, click the audio mute icon in the source PC/Laptop status bar to turn on the internal speaker.

#### 6.6 AirShare LAN connection

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

#### The LAN connection can be used for:

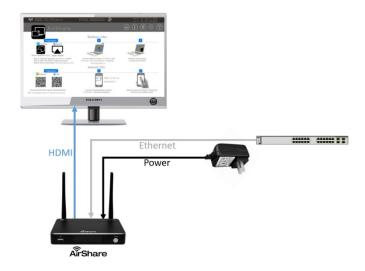
Network integration of the AirShare Base Unit Telnet control the Base Unit. Maintenance purposes

#### How to connect

Connect a network cable with RJ-45 connector into the LAN port of Base Unit.

Connect the other side to LAN

If the LAN Ethernet switcher support POE (Power over Ethernet), it could power up the AirShare than using the external power adapter.



#### 6.7 LAN Indicator

When connected to LAN, an OSD "Ethernet Connected" is shown on the *home page*, as shown below When disconnected to LAN, an OSD "Ethernet Unconnected" is shown on the *home page*, as shown below.





#### 6.8 USB device connection

AirShare can be controlled by USB-based mouse/touch screen.

To configure the SETTING, HELP and HDMI INPUT.

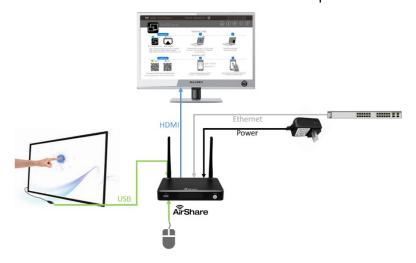
To control the shared PC/Laptop

To activate system upgrading

For white board or annotation

#### How to connect a mouse or touch screen:

Plug the USB connector of a mouse or touch screen to either USB input of the AirShare Base Unit



#### How to use USB control:

#### For USB mouse

Single click to select

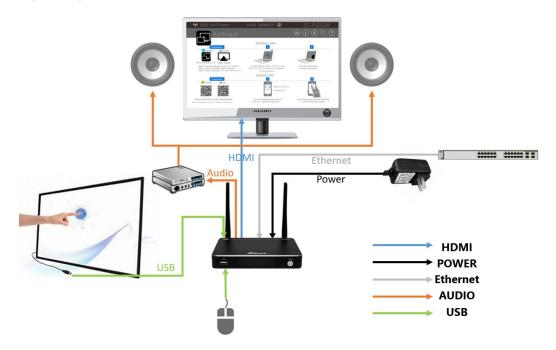
Right-click to back till the Home Page.

#### For touch screen

Click to select

Press to open the contextual menus, as double-click or click the right button of a USB mouse.

# 6.9 Wiring Diagram



# 6.10 AirShare Client Software and Client Connection setup

"WMW" PC client software will utilize the PC's WLAN. There are two methods to mirror a Windows PC via Lan IP or Wi-Fi IP of the Base unit.

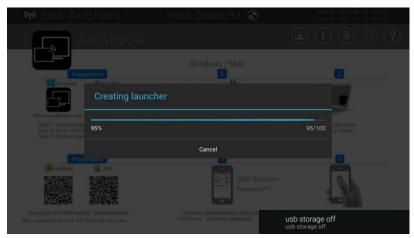
1. Connect the USB Stick to either USB port of base unit.



2. Click the "Download" button in "Home Page" as shown below to create a Launcher for the Client on the USB Stick.



3. The download bar is shown below. When download progress is completed, it will show the message "Succeed to create launcher and the files can be found in directory / UDISK / Launcher".



- 4. Unplug the USB stick from the USB port.
- 5. You will find "WMW" PC client software in the USB stick

#### 6.10.1 Enable Portable Hotspot (WIFI)

Be sure the AirShare Base Unit is connected to the Hotspot. When *WiFi IP* shows an active IP address, such as 192.168.43.1 it indicates AirShare is successfully connected to the WLAN.



#### 6.10.2 Enable LAN connection

Be sure the AirShare Base Unit is connected to the Network. When *Local IP* shows an active IP address, such like 192.168.3.54, it indicates AirShare is successfully connected to the LAN and get an appointed IP address. When it shows "N/A", it means, the AirShare is not connected to the LAN (Local Area Network) by CAT cable or it failed to get an available IP address by the corporate router.



Refer to the "Security Setting" page, check the "LAN discovery & connection" box as shown below



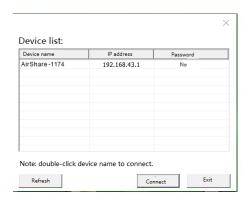
# 6.11 Client Sharing

#### 6.11.1 For a shared PC/Laptop

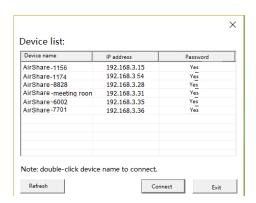
- 1. Copy the "WMW" PC client software into the Windows PC/laptop from USB Stick.
- 2. Execute "WMW" PC client software.
- 3. It will show a search bar as shown below, which means that the PC is searching for the AirShare Base Unit.



4. For hotspot (Wi-Fi IP), it will open a device list. Choose the proper AirShare Base Unit after searching,.



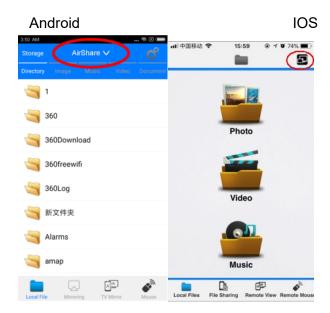
5. For LAN IP, it will open a device list. Choose the proper base unit after searching.



6. Connect to the desired base unit by entering the PASS shown in the AirShare Base Unit Home screen, then click "Connect" to share.

#### 6.11.2 For a Shared Mobile Device

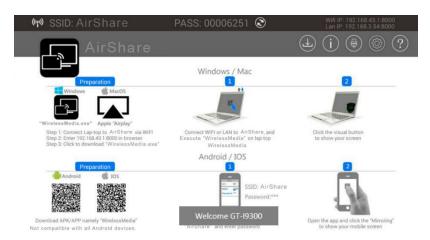
- 1. Download the WirelessMedia Lite APP or APK
- 2. Connect your mobile devices to AirShare via Wi-Fi IP (hotspot) or LAN IP.
- 3. Open the "WirelessMedia Lite" application in your mobile device, and you will see the Home Page of "WirelessMedia Lite" as shown below. and click the device list button "✓" for Android, or click the device list button "✓" for IOS devices, which is highlighted in red circles as shown below:



4. Click the found device to connect the AirShare.



5. After complete the pairing, it shows OSD "Welcome \*\*\*" on the main display home page. For example, if we connect it by a Samsung Galax I9300, it shows a "Welcome GT-I9300", as shown below.



- 6. Now the pairing between "WirelessMedia Lite" application built-in mobile device and AirShare is set up.
- 7. **For IOS devices,** Swipe from bottom on desktop, to activate the control center. Click the screen mirroring icon on your Apply device and select the target AirShare to start mirroring through the AirShare to the main screen.
- 8. **For above Android 5.0 devices**, click the devices list to select the target AirShare, and click the Mirroring icon on main interface of WirelessMedia Lite Apk for Android.

For lower than Android 5.0 devices, click the Local Files icon to select the sharing picture, music and video.

# 7 "Setting" Menu

Connect a mouse to either USB2.0 port of the AirShare Base Unit, and click the setting button on the top right corner to open the setting menu of AirShare, which is shown as below:



The main interface of the Setting menu is shown below. It includes Ethernet, Wireless network, Moderator Control, General setting, Security setting, Language, System Update, Date & time and About device.

#### 7.1 Ethernet:

Includes IP address, Ethernet MAC address, Proxy & IP settings, PPPoE & Settings.

#### 7.1.1 IP Address

The local IP address of AirShare.

#### 7.1.2 Ethernet MAC address

The unique MAC address of AirShare

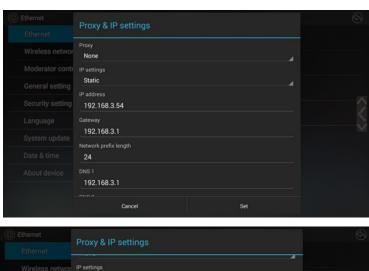
#### 7.1.3 Proxy & IP settings

Proxy: Click in the check box, to select the check box of "None" or "Manual"



- **IP setting**: Click to select the check box, which includes "Static" or "DHCP". When set to Static IP address an advance setting page will open-up with the sub menu items below. Click in the input field to add a value.
  - IP address: Click in the input field to fill out the 4 fields.
  - **Gateway**: Click in the input field to fill out the 4 fields. Set the default Getway to the IP-address of the router (Must be on the local subnet. it can't be 0.0.0.0). If no router on the local subnet, then just set it to any IP address on the subnet.)
  - Network prefix length: Click in the input field to fill out the number. Default is 24.
  - **DNS1**, Click in the input field to fill out the appropriate for the local.
  - **DNS2**. Click in the input field to fill out the appropriate for the local.

When finished, click the "Set" to save and return. Or click "Cancel".





#### 7.1.4 PPPoE settings

Click to configure the PPPoE setting.



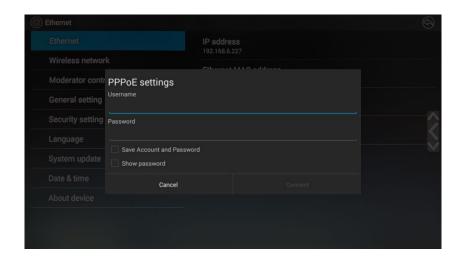
The interface of Proxy & IP settings can be configured, including Proxy on/off, and IP setting, as shown below



#### **PPPoE settings**:

- **User name**: Click in the input field to fill out the appropriate user name.
- Password: Click in the input field to fill out the appropriate password.
- Check box to choose "Save Account and Password" and "Show Password".

When finished, click the "Connect" to connect and return. Or, click "Cancel".



#### 7.2 Wireless network

Includes Portable Wi-Fi hotspot On/Off, Show SSID and PASS when mirroring, Set up Wi-Fi Hotspot, Auto change Wi-Fi hotspot password and Wi-Fi analyzer.

#### 7.2.1 Wireless network configuration wizard

**Device Name** 

**Network Config** 

Wireless Direct mode

Wireless Wireless infrastruction mode

LAN infrastructure mode

Setup WiFi access point

Frequency

Channel

Password

Show Password Check box

**Dual Networks config** 

Connected dual network

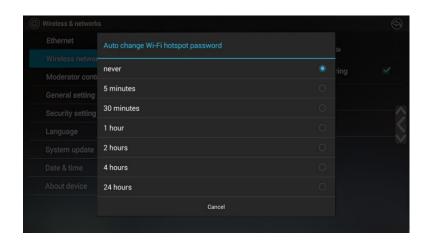
Segmented dual network

GUEST& STAFF SSID, which will be shown on the Homepage

#### 7.2.2 Show SSID and PASS when mirroring

It will show the WiFi SSID and Password on the client's screen when mirroring. Turn it on so that other participants can join and mirror.

#### 7.2.3 Auto change Wi-Fi hotspot password



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

Click to set the configuration, including

- Never: never change Wi-Fi password.
- 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

#### 7.2.4 Wifi analyzer

Wifi analyzer is an embedded application tool, to provide helpful information for the deployment and Wifi configuration.

The IEEE802.11 a/g/n/ac standard makes use of a part of the 2.4GHz ISM band of the 5GHz U-NII bands.

The 2.4GHz ISM band (industrial, scientific and medical) goes from 2.400 GHz to 2.500GHz and can be used freely by any radio device for industrial, scientific and medical application. This band is also used by several common telecommunications protocols or standards such as Wi-Fi, Bluetooth, ZigBee, RFID devices ... A more comprehensive list of systems authorized on this band can be found at http://www.efis.dk/sitecontent.jsp?sitecontent=ecatable for the European Union and at http://transition.fcc.gov/oet/spectrum/table/fcctable.pdf for the United States.

The 802.11 standard divides the 2.4GHz ISM band into thirteen 22MHz wide channels, spaced 5MHz from each other (cf. as table 1 below). These channels strongly overlap with each other. The availability of these channels varies from country to country.

Table 1 below depicts the channels enabled for the different regional versions

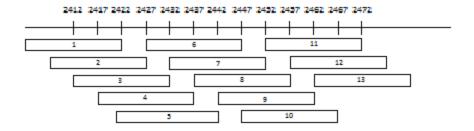


Table 1 Wi-Fi channels in the 2.4GHz band

Channel number	Frequency range (MHz)	regional version			
		NA EU		JP	CN

1	2401 – 2423	X	X	X	X
2	2406 – 2428	X	X	X	X
3	2411 – 2433	X	X	X	X
4	2416 – 2438	X	X	X	X
5	2421 – 2443	X	X	X	X
6	2426 – 2448	X	X	X	X
7	2431 – 2453	X	X	X	X
8	2436 – 2458	X	X	X	X
9	2441 – 2463	X	X	X	X
10	2446 – 2468	X	X	X	X
11	2451 – 2473	X	X	X	X
12	2456 – 2478				
13	2461 - 2483				

Table 2: Wifi channels in the 2.4 GHz frequency band

The 5 GHz U-NII band covers discontinued parts of the RF spectrum between 5.15GHz and 5.825GHz and allows the use of unlicensed wireless systems. The U-NII band is divided into 4 different subbands subjected to specific restriction (cf. Table 3).

Band	Frequency range	Number of	Restriction
	(MHz)	Wi-Fi	
		channels	
U-NII 1	5150 - 5250	4	Until recently <sub>1</sub> , limited to indoor
			use only
U-NII 2	5250 – 5350	4	Requires use of radar detection
U-NII 2 extended	5470 – 5725	11	Requires use of radar detection
U-NII 3	5725 - 5825		4

Table 3 U-NII organization

Contrary to the channels defined on the 2.4 GHz band, the channels defined on the 5 GHz band do not overlap each other.

As stated in Table 3, the U-NII 2 and U-NII2 extended sub-bands are also used by several radar systems and can only be used by Wi-Fi access points using the Dynamic Frequency Selection (DFS) and Transmit Power Control (TPC) algorithms. These two algorithms have been defined by the IEEE802.11h standard and specify a set of procedures to detect and avoid interference with radar systems operating in the U-NII 2 and U-NII 2 extended sub-bands.

Currently, the AirShare access points do not support DFS and TPC as specified in the IEEE 802.11h standard and the list of the 5 GHz channels enabled for the different regional variants is displayed at Table 4.

The 5 GHz band is much less used by non Wi-Fi devices than the 2.4 GHz band. Besides, many of the older Wi-Fi devices only support the 2.4 GHz channels, meaning that the 5 GHz band is less crowded.

Moreover, 5 GHz channels do not overlap with each other. **As a result, the use of the 5 GHz** channels is most often the preferred choice when installing.

Channel number	Frequency range (MHz)	regional variant			
		NA	JP	EU	CN
36	5150 – 5170	Х	Х	Х	
40	5170 – 5190	Х	Х	Х	
44	5190 – 5210	Χ	Х	Χ	
48	5210 – 5230	Х	Х	Х	
149	5735 – 5755	Χ			Х
153	5755 – 5775	Χ			Х
157	5775 – 5795	Χ			Χ
161	5795 – 5815	Х			Х
165	5815 – 5835	Х			Х

#### Wi-Fi channel selection considerations

Wireless communication signals travel over the air. Therefore, two devices transmitting at the same time, on the same frequency, and within range of one another, will interfere with each other. When the interference is too strong, the packets transmitted by the Wi-Fi transmitter get so distorted that they are no longer correctly understood by the receiver, and as a result these packets must be retransmitted. This causes a decrease in the actual data rate achieved between the transmitting and the receiving Wi-Fi devices.

To limit the effect of interference between Wi-Fi devices, the 802.11 standard makes use of the CSMA/CA and Clear-Channel Assessment (CCA) algorithms. Before sending a packet, the device checks whether any other transmission is currently going on. If this is not case, the device can use the channel and sends some packets. Otherwise, the device will do a random back-off and retry to access the channel after a short period of time.

Even with the use of the CSMA/CA and CCA algorithms, the presence of too many Wi-Fi devices on the same channel will have a negative impact on the maximum achievable data rate. Moreover, these algorithms are inefficient against interferences coming from non-Wi-Fi devices or from Wi-Fi devices operating on overlapping channels. Therefore, it is strongly recommended to select a Wi-Fi channel with little to no congestion.

#### Site survey

Ideally, the selection of the Wi-Fi channel should be made after conducting a wireless site survey. This site survey maps out the different sources of interference and the active RF systems.

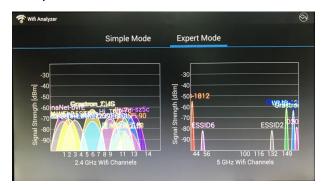
Based on the results from the site survey, the least occupied channel can be found and selected for each meeting room.

Wi-Fi Analyzer includes two modes, Simple Mode to deeply check one Wi-Fi hotspot and Expert Mode to check the entire Wi-Fi spectrum signal strength. A screen capture of Simple Mode and Expert Mode is shown as below

#### Simple Mode



**Expert Mode** 



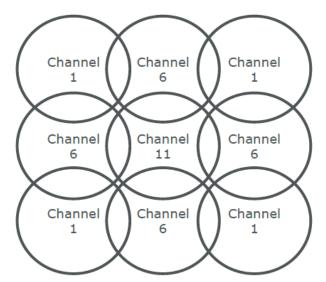
**Simple Mode** analyzes a WIFI-FI hotspot, by selecting nearby WI-FI hotspot devices to analyze their channels and suggests a channel.

**Expert Mode** gives a real-time map for the installer to overview the currently active WI-FI hotspot devices, channel and RSSI, to manually select a Wi-Fi channel with the least congestion.

#### Generic configuration rules

In the event a site survey is not possible, the following guidelines should allow for a correct configuration:

- The AirShare access point in a particular meeting room should not use a Wi-Fi channel that overlaps with one of the channels used in the corporate WLAN infrastructure. Ideally, at least two channels in the corporate WLAN should be reserved exclusively for AirShare. If many AirShare systems are located close to one another, more channels may be required.
- When installing AirShare base units, we recommend checking with the local IT department which channels are not used by the corporate WLAN infrastructure.
- In an ideal setup, overlapping channels should not be used for two AirShare base units within range of each other. As the channels in the 2.4 GHz band overlap with each other, best practice is to use channels 1, 6 and 11 on a single floor. On floors above and below, the channel pattern will be shifted to avoid overlap between floors (e.g. by placing channel 6 at the center of the illustrated pattern).



- In case there are not enough channels available, two or more AirShares can be placed on the same channel. This will of course have an impact on the quality of the link when several clients are sharing simultaneously. In a worst case scenario, three base units placed on top of one another can result in performance issues, as illustrated in Table 4 and Table 5. Table 4 shows a scenario in which all clients are streaming video content, and Table 5 shows a standard office situation where clients share typical office documents or presentations.
- As stated above, the 5 GHz channels do not overlap with each other and are less used by non-Wi-Fi devices than the 2.4 GHz channels. Moreover, 5 GHz signals are more rapidly damped than 2.4 GHz signals. Therefore the use of a 5 GHz channel is recommended. This will limit the impact of an AirShare system on other installed AirShares and on other WLAN users.

clients sharing video	1	2	3
1	Ok	Ok	Ok
2	Ok	Ok	Moderate risk of
			reduced quality
3	Ok	Moderate risk of	Strong risk of
		reduced quality	reduced quality
4	Ok	Strong risk of	Strong risk of
		reduced quality	reduced quality

Table 4: Connection quality matrix when multiple co-located base units use the same channel at the same time for video streaming **Number of co-located Base Units sharing the same channel** 

Number of clients	1	2	3
sharing typical office			
documents			
1	Ok	Ok	Ok
2	Ok	Ok	Ok
3	Ok	Ok	OK

4	Ok	Ok	Moderate risk of
			reduced quality

Table 5: Connection quality matrix when multiple co-located base units use the same channel at the same time for daily office work (Power point presentation, Excel sheets ...)

#### Important remarks about the AirShare system installation:

A correct installation of the AIRSHARE base unit is of critical importance to ensure good performance and a robust communication between the clients and the base unit. When installing the AIRSHARE, Please follow the rules below:

- The most favorable setup is a direct line of sight between base unit and clients. Any obstruction will cause the signal to follow a longer propagation path, which can degrade performance.
- Due to the particular radio pattern of the dipole antennas used with the AirShare Base Unit, the
  antennas should not be placed above AirShare users. In case of ceiling-mounted setup, the
  advised position for the AirShare base unit antennas is at the side of the meeting room.
- Do not use the AirShare base unit without the shipped antennas. Removing the antenna will cause severe degradation of the signal quality and may result in connection issues between the AirShare base unit and clients.
- Place the base unit in an open emplacement and avoid installing in a metallic shell. A metallic shell (or even shelf) could act as a Faraday cage and block the RF signal. In case this is unavoidable, please use a AirShare rack-mounting kit or external antennas.

Once the AIRSHARE base unit is installed, it is best to monitor the signal strength at the potential AIRSHARE client location. For correct performance, signal strength of -70dBm is needed.

### Wi-Fi Troubleshooting

Check the RSSi from the connected clients

Even if the selected channel is free of any interference, a too weak signal coming from the AIRSHARE client can result in an unstable link. In such cases, we recommend:

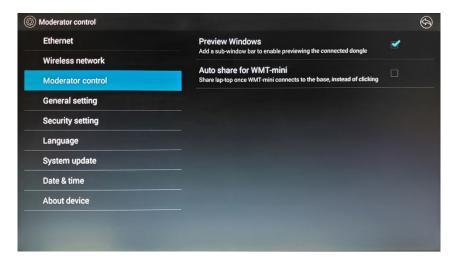
- Measuring the RSSi from the AirShare base unit at different client locations. This can be done by means of a free Wi-Fi survey tool like the Android Application "Wifi analyzer" or another base unit's embedded Wifi analyzer. As explained above, the RSSi should be at least -70dBm.
- Check the signal state reported on the AirShare base unit web interface on the tab "Maintenance" > "Buttons"

If the measured RSSi is too low, check above paragraph "Important remarks about the AIRSHARE system installation".

### 7.3 Moderator Control

### 7.3.1 Preview Windows

1. Turning on this feature allows the moderator to preview up to six the shared clients desktops on the right bar as shown below.





2. The moderator can select any of the previewed shares by clicking on any of the preview windows using the AirShare Base Unit mouse. The selected preview window will highlight and the shared desktop will be shown on the moderator screen.



# 7.3.2 Auto share for WMT-mini

Shares the laptop once the WMT-mini device connects to the AirShare Base Unit instead of clicking

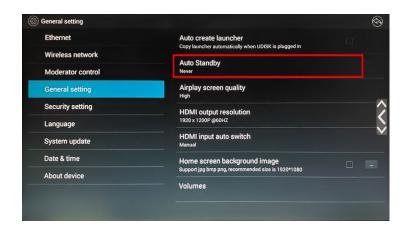
# 7.4 General setting

Includes: Auto create launcher, Auto standby, Airplay screen quality, HDMI output resolution, HDMI input auto switch, Home screen background image and Volumes.

#### 7.4.1 Auto create launcher

When this box is checked, the launcher files will be saved to a USB Stick when it is plugged into the AirShare USB port.

### 7.4.2 Auto Standby



Change the time delay before AirShare enters Standby mode (blank moderator screen)

#### Select standby:

Never: never standby.

• 1 minute: standby after 1 minute.

• 5 minutes: standby after 5 minutes.

• 10 minutes: standby after 10 minutes.

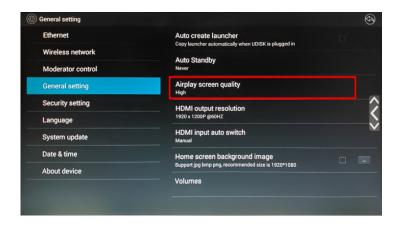
15 minutes: standby after 15 minutes.

• 30 minutes: standby after 30 minutes.

## 7.4.3 Airplay screen quality

Click to select the image quality when transmitting apple devices by "Airplay" mode.

High: 1920x1080Medium: 1280x720Low: 1136x640



#### Note:

- Different airplay quality will use a different data rate.
- At lower data rates, lower resolution selection will yield better results.

## 7.4.4 HDMI output resolution

Click to select the output resolution for AirShare HDMI output port.

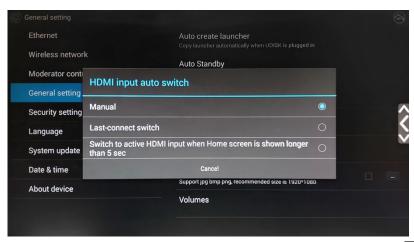
HDMI output resolution:

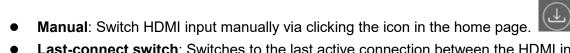
- 1920x1200P @60Hz: Set the HDMI output resolution of AirShare at 1920x1200 60Hz.
- 1920x1080P @60Hz: Set the HDMI output resolution of AirShare at 1920x1080 60Hz.



### 7.4.5 HDMI input auto switch

Click to select the method used for HDMI input switching.







- Last-connect switch: Switches to the last active connection between the HDMI input or the AirShare Base Unit home screen.
- Switch to active HDMI input when an HDMI source is active for longer than 5 sec.

### 7.4.6 Home screen background image

Check to change the background image of home screen with jpg, bmp, png (recommended size is 1920\*1080) via an image saved to a USB stick. Uncheck to return to the default instructional screen.

# 7.5 Security setting:

Includes LAN discovery & connection, Remote view lock, Clear history after meeting and Change admin password.



### 7.5.1 LAN discovery & Connection

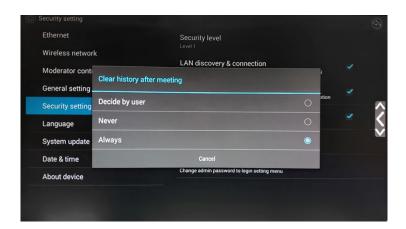
Allows the client PC/Mobile/tablet to discover the AirShare in LAN and connect to it.

#### 7.5.2 Remote view lock

Check / Uncheck to enable/disable the "Remote View" to the "WirelessMedia Lite" APK/APP in order to remotely watch the main screen on the client device. (TV Mirror select button on the client device APP / APK where available)

# 7.5.3 Clear history after meeting

Set how to deal with the history of meeting: Decide by user, Never and Always.

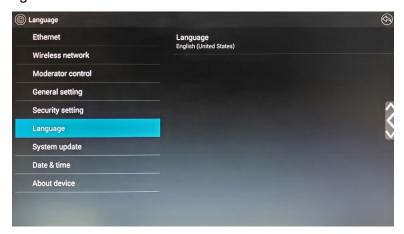


### 7.5.4 Change admin password

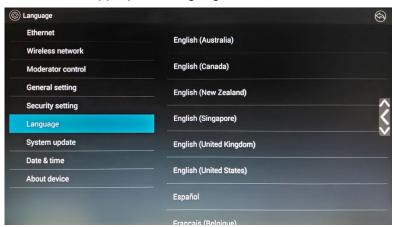
The default password to login setting menu is "admin", click it to change the password.

# 7.6 Language

Select Language setting.



• Language: Click to select the appropriate language.

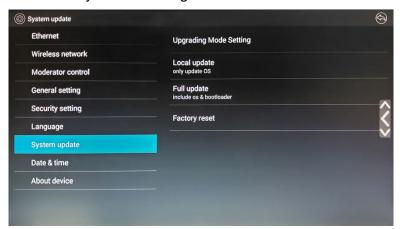


## 7.7 System Update

#### NOTE: See chapter 8 for complete details

Select update option and follow on screen instructions. Current files from a USB stick are required and can be downloaded from the FSR website.

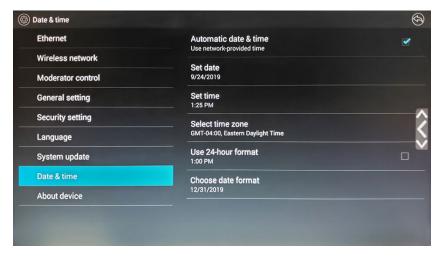
- Local update: Includes application software.
- Full update: Includes application software and firmware.
- Factory reset: Click to factory default setting.



### 7.8 Date & Time

Includes Automatic date & time, Set date, Set time, Select time zone, Use 24-hour format and Choose date format.

- Automatic date & time: Check to use the network provided time as system time of AirShare.
- Set date: Click in the input field to fill out the appropriate date.
- Set time: Click in the input field to fill out the appropriate time.
- **Select time zone**: Click in the input field to fill out the appropriate time zone.
- Use 24-hour format: Click to select use 24-hour format or not.
- Choose date format: Click to select the data format.



### 7.9 About Device

Includes Model number and Software Version

#### 7.9.1 Model number:

DV-AS-21

#### 7.9.2 Software version:

Includes version number# x.x.xx.xxxxx



# 8 Updating AirShare

Current files from a USB stick are required and can be downloaded from the FSR website.

AirShare includes two methods of updating: "Local Update" and "Full Update".

"Local Update" will only update the current OS.

"Full Update" will update the OS and boot loader

Launcher (PC client software) could be upgraded to the latest FW, while it's connected to the USB port.

1

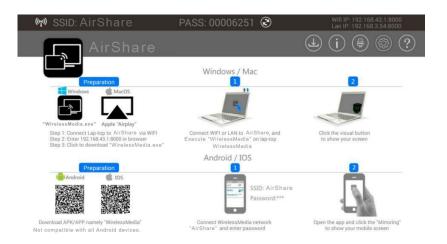
# 8.1 Upgrading the AirShare Base Unit:

The AirShare Base Unit can be "Full-Updated" through a USB Stick as follows.

1. Download and copy the updating file "update.bin" to the root directory of the USB Stick.



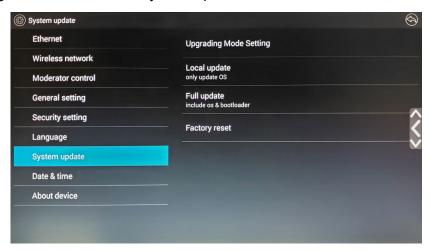
- 2. Connect the USB Stick to either USB port of AirShare Base Unit.
  - NOTE: The USB port can only support maximum 500ma. Use a low power USB Stick for upgrading.
- 3. Connect an HDMI display to AirShare Base Unit HDMI output port.
- 4. Connect the power adapter to the power socket of AirShare and turn on.
- 5. The display device displays the home page after normal boot of the device, as shown below:



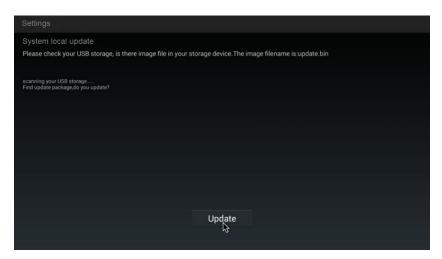
6. Connect a mouse to either one of USB 2.0 port on AirShare, and click the Setting Button", as shown below



7. On the Setting menu screen, click "System Update" as shown below



8. Click the button "Full update" include os & bootloader as as shown below

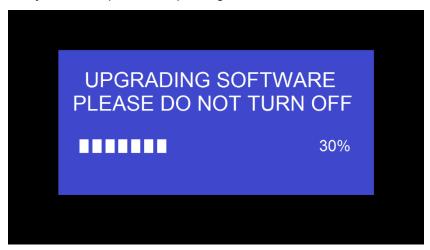


9. After clicking the "Update" button, "Reboot to continue update?" is displayed in the display device, as shown below. Click the "OK".



Attention: Do not remove power to the AirShare Base Unit until the upgrading progress is finished or, the firmware will be corrupted.

10. The upgrading progress will be displayed on the progress bar as shown below, and the unit will reboot automatically after complete the updating 100%.



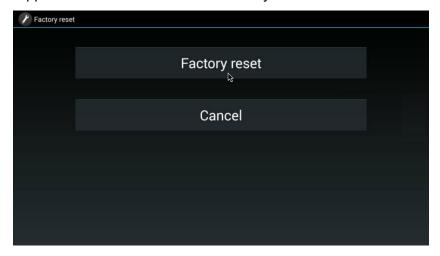
- 11. If your FW is older than 3.1.3.F1005, perform the FW upgrade twice. The first time upgrading may appear failed. Actually, it upgrades a half only. Power the unit off and on again by plug-out/in the power cord, then upgrade a second time. The second time upgrading probably takes 1-2 minutes while showing a black background. Wait until it shows "100%". When completed the unit will reboot automatically.
- 12. At that point, the unit will display the home page as shown below.



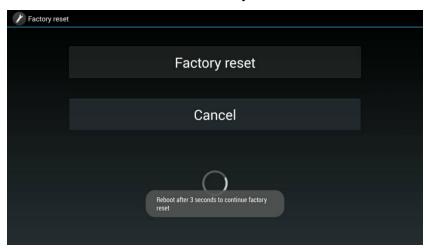
13. Use a pin to push the "Reset" button on the real panel of AirShare to restore to factory default.



14. The screen will appear as shown below. Click "Factory Reset".



15. It shows "Reboot after 3 seconds to continue factory reset", as below



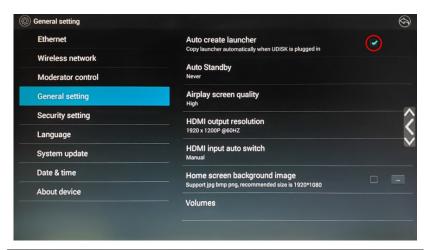
16. After reboot, the home page will appear again as shown below

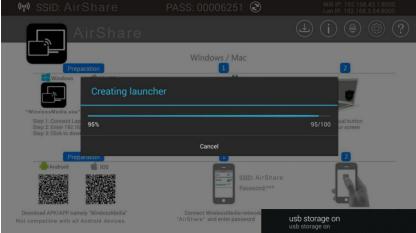


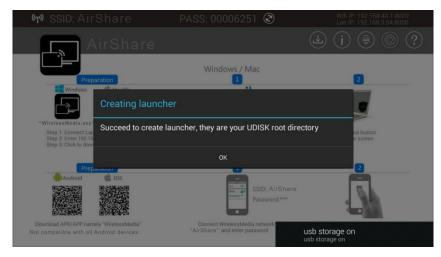
- 17. At this point, the update process is completed.
- 18. Click the Setting button to open the menu and confirm that the correct FW version has been installed. E.g. the software version is x.x.x.xxxxx.

# 8.2 Upgrading Launcher (PC client software):

1. Plug the USB STICK into either of the two USB ports of the AirShare Base Unit. AirShare will automatically copy the launcher to the USB STICK, as shown below if the general setting "Auto create launcher" is turned on

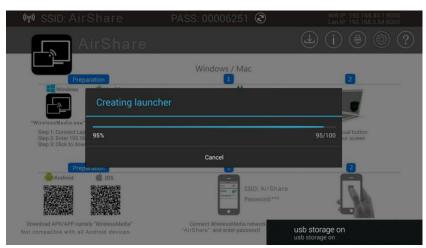


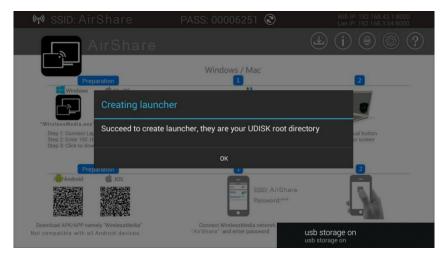




Click the download icon on the home screen as below when the Auto create launcher setting is not turned on.







# 9 Operation

# 9.1 Transmitting PC desktop

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

### 9.1.1 For Microsoft Windows PC/Laptop

- 1) Execute "WMW" exe.
- 2) For Windows 7, a dialog box may ask for user permission to run the WirelessMedia Lite software. Click to run it.
- 3) For Windows 10, or MAC PC/Laptop, you need to open up the added WirelessMedia Lite disk and click the exe file to run it.
- 4) You see a message box showing up at the right bottom corner of desktop "Ready to share". Click it to start mirroring the client desktop on the Moderator screen.
- 5) Click again to remove the client desktop from the Moderator screen.
- 6) Setting icon of UI, including:
  - a) Extended Desktop: check to transmit the extended desktop of PC/Laptop, or as default set, to mirror the desktop of PC/laptop.
  - b) Preserve Aspect Ratio: check to keep the original aspect ratio to display on the main screen
  - c) HDMI input
  - d) Remote view lock
  - e) Super low latency of mouse
- 7) A WirelessMedia Lite status icon is added to the status bar at the right bottom corner.

Right click it to open up the setting of WirelessMedia Lite, including

- a) About WirelessMedia Lite: click to check the software version of AirShare.
- **b)** Exit

# 9.2 Transmitting MAC OS PC/Laptop and IOS mobile device

**Airplay/Screen Mirroring:** AirShare Base Unit supports "Airplay"/"Screen Mirroring" receiver, which enable mirroring the desktop of your Apple device to the screen mirroring receiver, like Mac OS PC, iPhone, IPad etc.

Swipe from bottom on desktop, to activate the control center. Click the airplay/screen mirroring icon

on your Apply device and select the receiver device AirShare and connect it. Then you could mirror your screen content wireless through the AirShare to the main screen.

# 9.2.1 How to use airplay/screen mirroring?



# 9.2.2 "WirelessMedia Lite" App for IOS

Operating system requirement: iOS 7.0 and later

1) Open the "WirelessMedia Lite" application.



2) The main interface of WirelessMedia Lite is shown below.

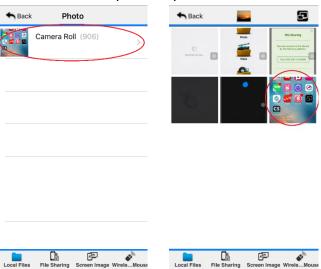


#### Functional Zone:

- Local Files: Can transmit the local file, including Photos, Video, Music to the receiver to playback.
- File Sharing/File Exchange: Can setup a storage for the PC/Laptop to access/transmit files to the mobile device.
- Screen Image/Remote View: Can remote video the active signal on main screen, and control the PC/Laptop device like a mouse.
- Wireless Mouse/Remote Mouse: Can control the DV-AS-21 or the sharing device, like an airmouse.

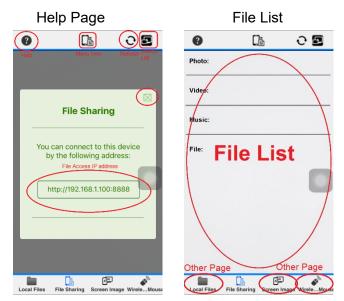
**Menu Icon:** show the directory menu icon, like photo, video, music, file sharing **Device list:** Click to discover the available DV-AS-21 AirShare Base Units to connect them. **File & Operation Zone:** Select the file to transmit and do the control operation when available.

3) Local Files: select the file stored in local Iphone / Ipad, as shown below



4) File Sharing/File Exchange: Click the File sharing/File exchange to check the IP address. Close the File Sharing dialog box as shown below, to enter into the File List, which is a new generated File List stored under WirelessMedia Lite APP in IOS mobile.

To access the files, you can enter the IP address on the PC/laptop's web browser while your PC/Laptop has connected to the AirShare by hotspot connection or LAN connection.

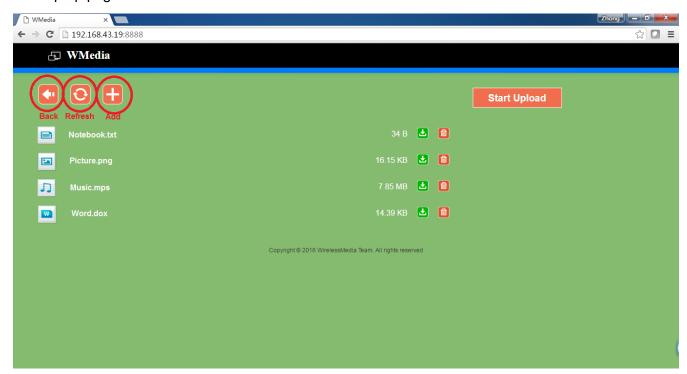


**Help**: to open up the IP address page.

File List: to select the photo, video, music, file to transmit to the main screen.

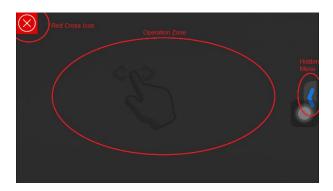
Other page: Click the other functional icon to return File Sharing/File Exchange.

# PC/Laptop page



5) Screen Image/Remote View: Click the Screen Image/Remote View to remotely view/watch what's showing on the main screen.

When there is no connected AirShare, it shows





Red Cross Icon: return to the main interface of WirelessMedia Lite.

Operation Zone: Zone to remote view the active signal and control it as a mouse.

**Hidden Menu:** Click to open the hidden function features, including Back and Keyboard when available.

Back: It sends a "Return" command to the DV-AS-21 to go back to the previous directory menu.

**Keyboard:** Open the keyboard to enter character/number.

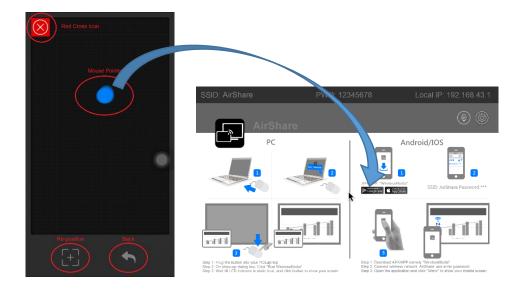
When there is an active signal showing on the main screen, you'll see it, and click the screen to control it as a mouse, as shown below





Click the Red Cross icon to return.

6) Wireless Mouse: Click the Wireless Mouse to generate a mouse pointer to control the AirShare.



**Mouse Pointer:** represent the relative position of the mouse on the main screen.

**Re-position:** reset the positon to be the center of the screen.

Back: It sends a "Return" command to the AirShare to go back to the previous directory menu.

Red Cross Icon: return to the main interface of "WirelessMedia Lite".

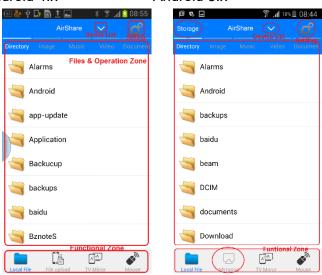
## 9.3 Transmit Android device wireless

### 9.3.1 "WirelessMedia Lite" App for Android

1) Open the "WirelessMedia Lite" application.



2) The main interface of WirelessMedia Lite is shown as below. It includes the features including Android 4.x Android 5.x



#### Functional Zone:

- Local Files: Can transmit the local file, including Photos, Video, and Music to the receiver to playback.
- File upload/File Exchange/Storage (for Android 5.x): Can setup a storage for the PC/Laptop to access/transmit files to the mobile device.
- **TV Mirror /Remote View**: Can remote video the active signal on main screen, and control the PC/Laptop device like a mouse.
- Mouse/Remote Mouse: Can control the AirShare or the sharing device, like an air-mouse.

Menu Icon: show the directory menu icon, like photo, video, music, file sharing

**Device list:** Click to discovery the available DV-AS-21 to connect them.

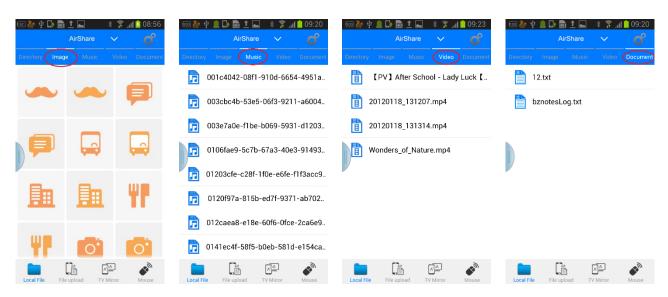
**File & Operation Zone:** Select the file to transmit and do the control operation when available.

#### Attention:

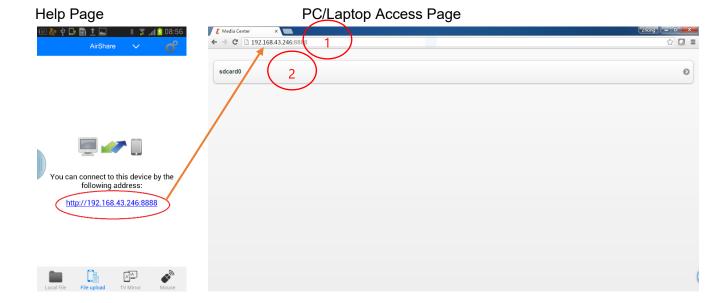
Android Mirroring feature could only be achieved on the Android 5.0 and above OS device.

3) Local Files: select the file stored in local Iphone / Ipad, as shown below





- 4) File Sharing/File Exchange: Click the File sharing/File exchange to check the IP address. Then enter the IP address by our PC/laptop's web browser.
  - 1) Enter the IP address on the web browser
  - 2) Click the root directory "sdcard0"
  - 3) On the open-up directory, click the "upload" to select the file from local PC/Laptop to be uploaded.





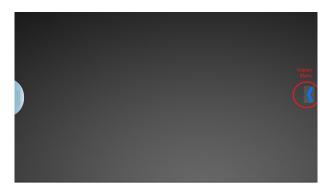
Help: to open up the IP address page.

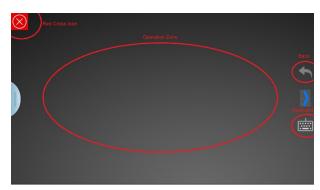
File List: to select the photo, video, music, file to transmit to the main screen.

Other page: Click the other functional icon to return File Sharing/File Exchange.

5) Screen Image/Remote View: Click the Screen Image/Remote View to remotely view/watch what's showing on the main screen.

When there is no connected AirShare, it shows:





Red Cross Icon: return to the main interface of WirelessMedia Lite.

**Operation Zone:** Zone to remote view the active signal and control it as a mouse.

**Hidden Menu:** Click to open the hidden function features, including Back and Keyboard when available.

Back: It sends a "Return" command to the DV-AS-21 to go back to the previous directory menu.

**Keyboard:** Open the keyboard to enter character/number.

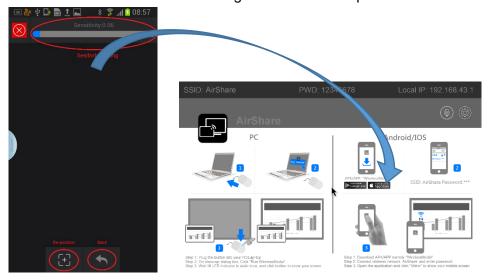
When there is an active signal showing on the main screen, you'll see it, and click the screen to control it as a mouse, as shown below





Click the Red Cross icon to return.

6) Wireless Mouse: Click the Wireless Mouse to generate a mouse pointer to control the AirShare.



**Mouse Pointer:** represents the relative position of the mouse on the main screen.

**Re-position:** reset the positon to be the center of the screen.

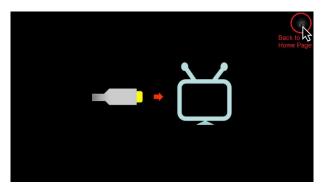
Back: It sends a "Return" command to the WMB1 to go back to the previous directory menu.

Red Cross Icon: return to the main interface of "WirelessMedia Lite".

# 9.4 HDMI Input Select

When on the Home Page, it's used as AirShare receiver for receiving PC or Mobile devices. Connect a mouse to either USB 2.0 of DV-AS-21 or use the WirelessMedia Lite Wireless Mouse/Remote Mouse to click the local HDMI input icon, as shown below.

When on local HDMI input, it's used as HDMI switcher. Connect a mouse to either USB 2.0 of DV-AS-21or use the WirelessMedia Lite Wireless Mouse/Remote Mouse to click the Back to Home Page icon, as shown below.





# 10 WIFI Recommendation Setting

# 10.1 Check the WIFI config on AirShare (See WiFi Analyzer section)

The WIFI analyzer software in the AirShare Base Unit can be used to check the WIFI environment, in order to select an unused WIFI frequency between 2.4GHz and 5Hz, and the WIFI channel as shown below.

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

5GHz: 36, 40, 44, 47, 149, 153, 157, 161, 165

### 10.2 Check the WIFI RSSI on PC or Mobiles

Use the WIFI analyzer software by placing the AirShare Base Unit it at the same place as the PC or mobile client. Measure the WIFI RSSI (Received Signal Strength Indicator). The RSSI should be above -70dB for a stable signal transmission. If not, see trouble shooting---*Bad wireless connection* congestion.

# 11 Troubleshooting

Trouble	Cause	Solution
See "SSID: N/A and Password:	Hotspot of AirShare is not	Use a mouse, or the
N/A" on the HomePage, and	turned on.	"Remote Mouse" feature of
can't find the AirShare's WIFI		the "WirelessMedia Lite for
by mobile device		IOS" or "WirelessMedia Lite
		for Android" to click the
		" <u>Setting</u> " button on the
		home page.
Use "WirelessMedia Lite for	WIFI hotspot password	Pair a launcher (PC client
Android" application in Android	changed, when android or IOS	software) to the DV-AS-21
device or "WirelessMedia Lite	device is connected to the WIFI	by connecting USB STICK
for IOS" application in IOS	hotspot of AirShare	to either USB port of
device, and it can't find		AirShare to download
AirShare device		proper launcher.
		Run the "WirelessMedia
		Lite for PC" software, until
		the visual button shows
		"ready to share".
"WirelessMedia Lite for	WIFI hotspot password	Find out the changed
Android" or "WirelessMedia Lite	changed, when android is	password and enter on the
for IOS" can't work	connected to the WIFI hotspot	mobile devices.
	of AirShare	

	Mobile devices doesn't connect	Connect the mobile
	to the Hotspot of AirShare	devices' WIFI to the
	to the Hotopet of America	AirShare again
		Be sure of entering the
		correct password
	Doesn't connect AirShare to the	Be sure the AirShare is
	same LAN as the mobile	connected in the same LAN
	devices	as "WirelessMedia Lite for
		Android" or "WirelessMedia Lite for IOS"
	Doesn't connect to the correct	On Android or IOS devices
	AirShare	application, click the
		<b>DEVICE LIST,</b> and click the
		searched devices, such like "AirShare-***"
The image quality on the main	The quality or length of the	Replace the cable
display screen is not good.	cable between the Base Unit	Use another cable.
	and the display or the	Check the cable to be
	connection between these two.	fasten properly.
	Improper resolution for the	Change the resolution on
	main screen.	the Setting configuration.
	AirShare can output	And match it to the native
	1920X1200_60Hz	resolution of the main
	1920x1080_60Hz.	screen. See " <u>Setting</u> " page.
Bad wireless connection. The	Wireless congestion	Use a Wi-FI scanner to find
connection between the		a free wireless frequency
transmitter launcher (PC client		and channel and select it
software) to the base unit is not		via the setting configuration.
stable, always fall away.	Low signal strength	Put the base unit closer to
		the main screen.
		Change the orientation of
		the antennas at the real
		panel of AirShare to the PC
		direction.
		Remove or limit as much as
		possible all obstructions
		between the PC and base
		unit.
Can't get the WirelessMedia	Bad connection at USB port on	Reconnect to the USB port
Lite app to run when inserted	the laptop	Try another USB port
into laptop		Reboot the laptop

	Some types of USB devices might be blocked as the company policy. USB port setting on the laptop might limit the usage of high power USB device when on battery power.	If possible, change the USB port policy on the laptop
Low video performance	Laptop performance	Lower the screen resolution of the laptop Disable the hardware acceleration for video
	Wireless Connectivity	See "Bad wireless connection"
Video is not shown on screen	The content use HDCP	AirShare input can't support showing HDCP source. If possible, connect the source device to local HDMI input
When using window 7 the following message about the Window Aero color scheme appears "Windows has detected your computer's performance is slow. This could because these are not enough resources to run the windows Aero color scheme. To improve"	AirShare uses resource from the GPU. In combination with other programs which do so, Window 7 sometimes shows this message suggesting to disable Aero to improve the performance of laptop.	It's safe to ignore this message and choose "Keep the current color scheme."
Your content is removed from the display and the visible button on PC is blinking	Connection to the Base Unit is lost.	AirShare tries to restore the connection automatically. If it fails, the visible button change to grey. Unplug the button from your laptop and try a new button.
Nothing is shown on the displays at all	The displays are switched off	Switch on the display
a.spiajo at an	The display cable is not correctly connected  The display doesn't recognize or is not able to display the Base Unit resolution	Insert the display cable to the display and the Base Unit Change the corresponding setting via the Setting Configuration. See "Setting" page.

	The Base Unit is in standby mode	Briefly push the standby mouse on the Base Unit or power off and on again the Base Unit.
Bad Wi-FI connection	Congestion of the wireless channel	Use wireless network scan tool to look for free or the least congested channels.
	Metal cabinets, walls, construction elements,can cause reflections deteriorating the wireless signal	Move the Base Unit to another place Avoid placing it inside cabinets, false ceiling, below the table, behind the wall, in another room in the room. Re-
	Obstructions between Buttons and Base Unit cause lowering of the wireless strength and quality.	orient the Base Unit Antennas
No LAN connection with the Base Unit	Wrong IP address	IP address is not within LAN range DHCP is not enabled.
No Wi-Fi connection with Base Unit	SSID not correct	Enter the correct SSID
No Wi-Fi connection between mobile device with Base Unit	Wrong Wi-Fi frequency	Check mobile device to select the correct 2.4GHz or 5GHz
	Wrong password	Enter the correct SSID
No audio when transmit local file to Base Unit	Unsupportive audio format, including Dolby MS11, DDCO DTSLBR, DTSE, DTSNeoUltra, SRS-THEATERSOUND, DTS_StudioSound3D, DTS_HD	If possible, reformat it to the other audio format, like DD, DD+, HE-AAC, DTS DMP, WMA, DRA, COOK
Can't enter the File Sharing/File Exchange when use WirelessMedia Lite for IOS on mobile devices	WirelessMedia Lite APP is set to run in the background. Due to Apple policy, any program which set to background can't	Put WirelessMedia Lite application back to front stage
THOMIC GEVICES	run anymore.	
Can't update the AirShare	Flash disk format is NTFS	Re-format the flash disk to be FAT format to update it.

Can't work Screen Mirroring	Operation System Requirement	Updated to the later OS
with MacBook/IPhone?	Mac OSX	
	10.6/10.7/10.8/10.9/10.10	
	IOS 8.0 and later	
	(WirelessMedia Lite app)	
Can't work with Android	Operation System Requirement	Updated to the later OS
device?	Android 2.3 and later	
	(WirelessMedia Lite app)	
Can't work with windows	Didn't run the proper launcher	Try to download launcher from
PC/Laptop	(PC client software)	the AirShare's USB port.
	corresponding to the AirShare.	
	Operation System Requirement	Updated to the later OS
	Windows XP/Vista/7/8/8.1/10	
	32 & 64 bit	