

TS20 TapShare User Manual-English



[Important]

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Chapter 1 Safety Instructions

Please use the product following the safety instructions below:

1 Operation

- 1.1 Please use the product in the recommended operating environment.
- 1.2 Do not place Light Engine in tilted position.
- 1.3 Do not place the product on an unstable trolley, stand or table.
- 1.4 Do not use this product near water or source of heat.
- 1.5 Use attachments only as recommended.
- 1.6 Use the type of power source indicated on this Product. If you are not sure of the type of power available, consult your dealer or local electricity company for advice.
- 1.7 Always take the following precautions when handling the plug. Failure to do so may result in sparks or fire.
 - Ensure the plug is free of dust before inserting it into a socket.
 - Ensure that the plug is inserted into the socket securely.
- 1.8 Do not overload wall sockets, extension cords or multi-way plug boards to avoid potential risks.
- 1.9 Do not block slots and openings in the case of this product as poor ventilation may lead to overheating of this product.
- 1.10 Except as specifically instructed in this User Manual, do not attempt to open or remove covers by yourself. It may expose you to electric shock or other hazards. Refer all servicing to licensed service personnel.
- 1.11 Unplug the HD Camera from the wall outlet and refer servicing to licensed service personnel when the following situations happen:
 - If the power cord or plug becomes damaged or frayed.
 - If liquid is spilled into the Product or the Product has been exposed to rain or water.

2 Installation

- 2.1 Do not install this product in the embedded way unless there is proper ventilation device.

3 Cleaning

- 3.1 Unplug all the cables before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

RF exposure warning

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. & This device and its antenna(s) must not be co-located or conjunction with any other antenna or transmitter.

This Wireless LAN radio device has been evaluated under FCC Bulletin OET 65 and found compliant to the requirements as set forth in CFR 47 Sections 2.1091, 2.1093, and 15.247 (b) (4) addressing RF Exposure from radio frequency devices. The radiated output power of this Wireless LAN device is far below the FCC radio frequency exposure limits. Nevertheless, this device shall be used in such a manner that the potential for human contact during normal operation is minimized. When nearby persons has to be kept to ensure RF exposure compliance, in order to comply with RF exposure limits established in the ANSI C95.1 standards, the distance between the antennas and the user should not be less than 20 cm.

Caution

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

■ **EN55032 (CE Radiation) Warning**

Operation of this equipment in a residential environment could cause radio interference.

Operating Frequency	5180MHz~5240MHz / 5745MHz~5805MHz
Number of Channel	CH36~CH48, CH149~CH161
CHANNEL OF SPACING	10M
RF OUTPUT POWER	13 dBm (max : 802.11a/CCK)
MODULATION TYPE	QAM/QPSK/BPSK/CCK/DSSS
DUTY CYCLE	10%
MODE OF OPERATION	DUPLEX
BIT RATE OF TRANSMISSION	6/9/12/18/24/36/48/54Mbps
ANTENNA TYPE	Dipole antenna
ANTENNA GAIN	4dBi
TEMPERATURE RANGE	0~40°C

Chapter 2 Package Contents

TapShare Box



TapShare Pod

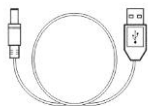


Instruction for
installation



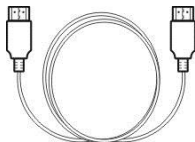
(For download of other language versions, please visit Lumens website)

5V Universal
Adapter

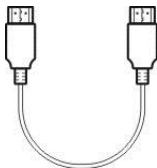


Appearance may vary depending on country/region

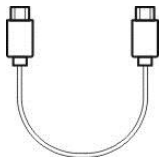
TapShare Box
HDMI Cable
(100cm)



TapShare Pod
HDMI Cable
(30cm)

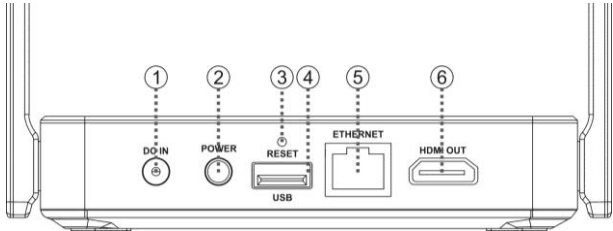
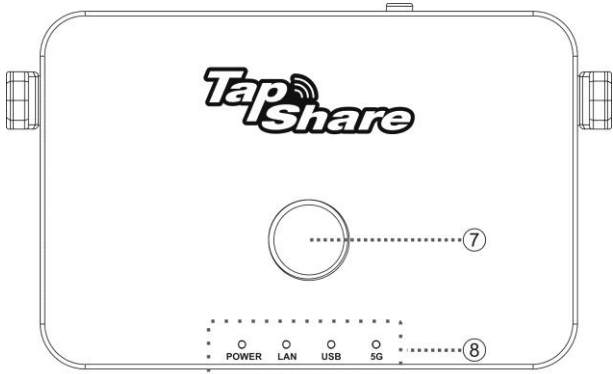


TapShare Pod
DP Cable
(30cm)

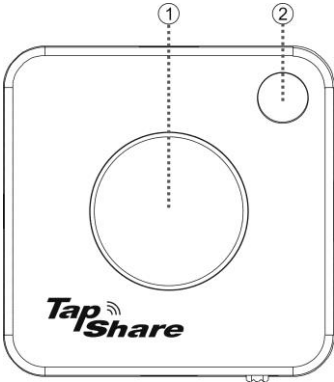


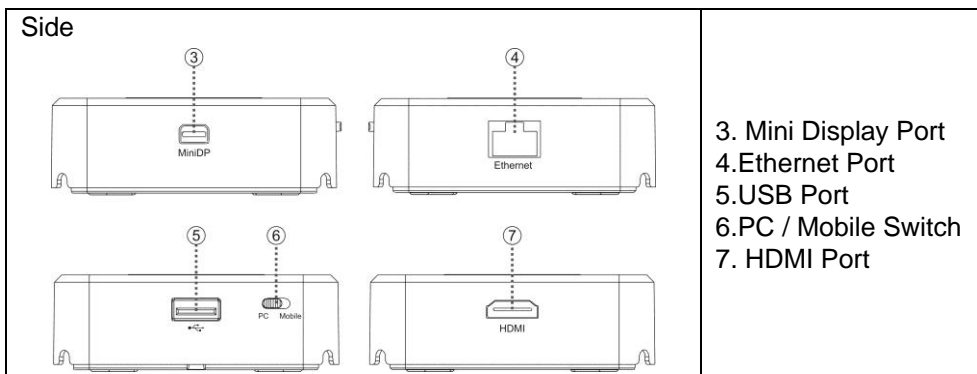
Chapter 3 Product Overview

3.1 TapShare Box Overview

Top	 <p>Diagram showing the top view of the TapShare Box with numbered labels 1 through 6 pointing to the following components:</p> <ul style="list-style-type: none">1. DC IN2. Power3. Reset4. USB Port5. Ethernet Port6. HDMI Out	<ul style="list-style-type: none">1.DC IN2.Power3.Reset4.USB Port5.Ethernet Port6.HDMI Out
Back	 <p>Diagram showing the back view of the TapShare Box with numbered labels 7 and 8 pointing to the following components:</p> <ul style="list-style-type: none">7. Pairing Button/LED8. State LED	<ul style="list-style-type: none">7.Pairing Button/LED8.State LED









3.2 TapShare Pod Overview

Top	 <p>Diagram showing the top view of the TapShare Pod with numbered labels 1 and 2 pointing to the following components:</p> <ul style="list-style-type: none">1. Main Button/LED2. Side Button/LED	<ul style="list-style-type: none">1.Main Button/LED2.Side Button/LED
-----	--	---



3.3 Description of LED indicator

Status	TapShare BOX Pairing LED	TapShare POD Main LED	TapShare POD Side LED
Power off	 No Light	 No Light	 No Light
Startup in progress	NA	 Red Light Blink	 Red Light Blink
Power on / TX no single	 No Light	 No Light	 Green / Red Light on
Pairing	 White Light Blink	 Red Light Blink	 Red Light Blink
Pairing done	 White Light on	 White Light on	 No Light

Status	TapShare BOX Pairing LED	TapShare POD Main LED	TapShare POD Side LED
Host standby without projecting	NA	 Red Light on	 Green Light on
Guest standby without projecting	NA	 Red Light on	 Red Light on
Activate host & in projecting	NA	 White Light on	 Green Light on
Host received request of projection	NA	 White / Red Light on	 Green Light Blink

3.4 TapShare Pod Keypad

Action	TapShare Pod Main Button		TapShare Pod Side Button(Host)
	Host	Guest	
Click	Start / Stop a projection	Request a projection / stop a projection	Allow a projection from Guest
Double Click	Stop all projections	NA	Reject a projection from Guest
Long Press	Full screen projections	Request a projection in full screen	Allow a projection in full screen from Guest

3.5 TapShare Box Splash Screen



1. TapShare Box SSID
2. TapShare Box Wifi Password
3. TapShare Box IP Address
4. TapShare Box Function and Link State

** Outbound link can select only one of Wi-Fi and RJ45 wire line (LAN).*



Airplay activated after web setting. (Default is off)



TapShare Box has been powered on, however, there is neither TapShare Pod nor device linked.



Shift in 3, which means “under pairing” or “building the connection”.



Complete pairing or connection, the number showed total TapShare Pod or Device linked.



RJ45 wire line disconnected.



Shift in 3, which means “building the connection”.



RJ45 wire line connected and IP acquired.



IP conflict or other network error.



Outbound Wi-Fi disconnected.



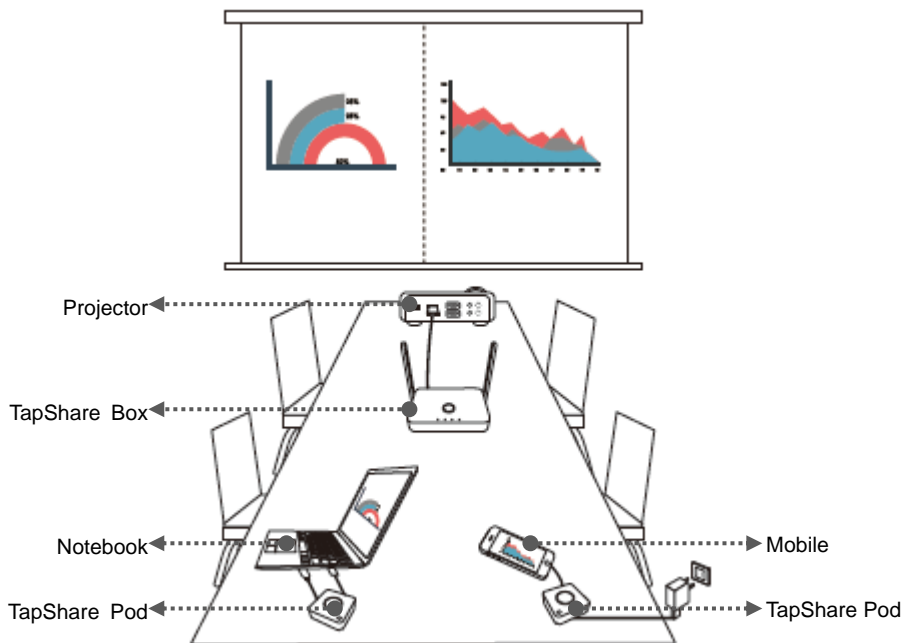
Shift in 3, outbound Wi-Fi is connecting.



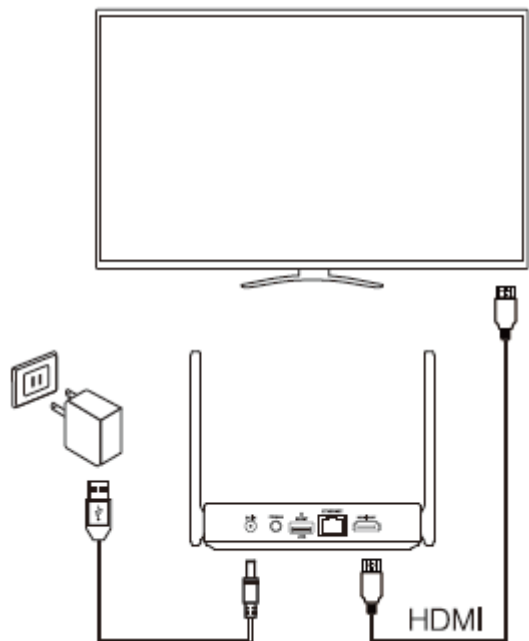
Outbound Wi-Fi connected with the router name shown underline.



Wi-Fi connection Fail, Invalid password or other Errors.

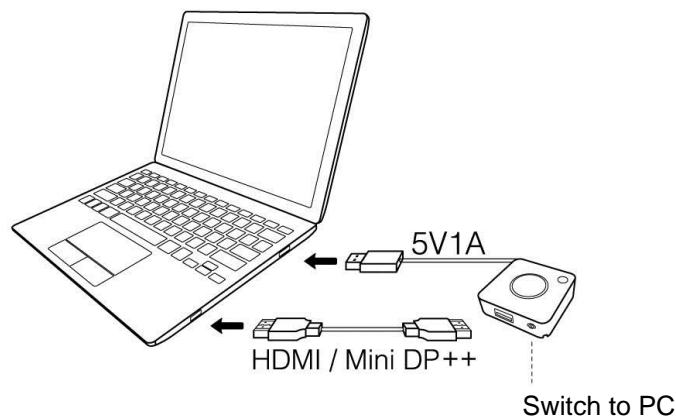


4.1 Connect TapShare Box to a TV

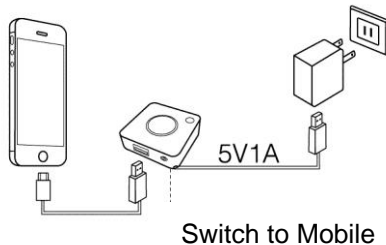


4.2 Connect TapShare Pod to a Laptop or Mobile Device

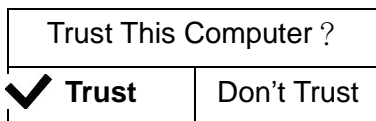
4.2.1 Connect to a laptop



4.2.2 Connect to an iPhone or iPad



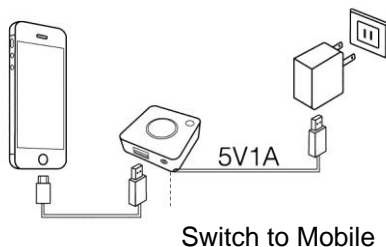
Please press “Trust” on the screen



4.2.3 Connect to an Android mobile device

Please enable USB debugging before using.

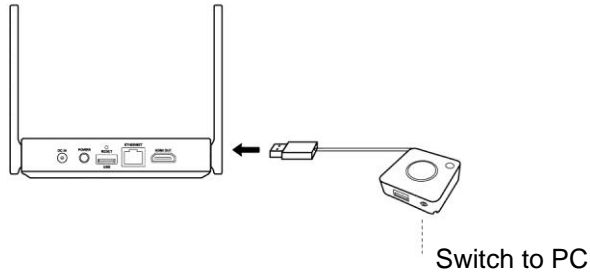
- Go to[Setting]→[System]→[About Phone]
 - Click Build Number for 7 timers to enable
 - Go to Developer Option → USB Debugging →On
 - Plug to TapShare Pod transmitter and Allow USB debug
- [Note] Please select MTP or File Transferring in the notifications when USB is connected.





[Remark] A different version of Android has a different operation; please refer to its user manual for details.

4.3 Pairing

Pairing for any new TapShare Pod or using Ethernet connection.



1. Adjust the switch of the TapShare Pod to PC 
2. Plug TapShare Pod USB cable onto TapShare Box's USB port.
3. TapShare's LED will start blinking while pairing 
4. After the pairing is done, the TapShare's main LED will turn to white.

4.4 Connect TapShare Box to a Local Area Network

Use this connection for software updates or other specific requirements. Confirm local area network (LAN) configurations with your LAN engineer or IT staff before connecting.

4.4.1 Wireless connection

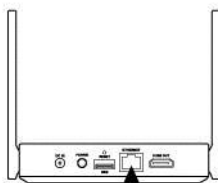


1. Connect TapShare Box via a mobile device
 - Go to **[Settings]** on a mobile device and scan for wireless network devices (e.g. TapShare_DF6EC0E5)
 - Enter the Wi-Fi password (e.g. 96825190)
2. Modify the network configurations on TapShare Box
 - Start the web browser and enter "192.168.168.1" to log in webpage
 - Enter the administrator password (default password is 000000)
 - Follow the on-screen instructions to change the password. Once done, log in with the new password (password change is required only for the first time login)
 - Select **[Network Management]** from the top-left menu
 - Select **[Scan 5G SSID and connect]** and choose a wireless device host and then enter the password
 - Click **[OK]** to connect

[Remark 1] Request the wireless device's name and password from IT staff

[Remark 2] Only 5G network connections provided by wireless network devices can be connected

4.4.2 Wired connection - DHCP

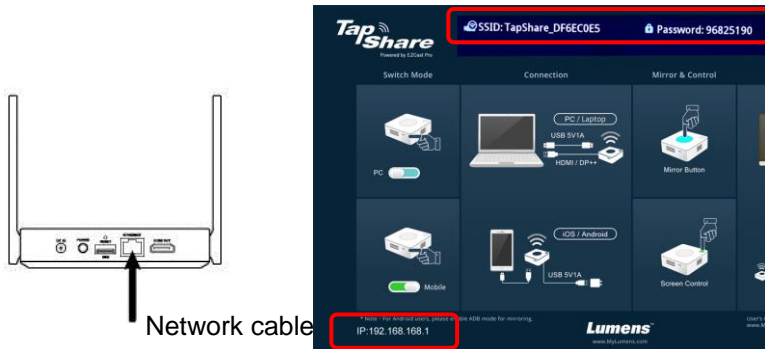


Network cable

Connect the Ethernet cable to TapShare Box. Enter the IP address found on the bottom right corner and enter the IP address to log in the webpage setting of TapShare Box.

Please refer to [6.4. Description of Web Page Setting](#) for the related webpage settings

4.4.3 Wired connection - static IP address



1. Connect TapShare Box via a mobile device
 - Go to [**Settings**] on a mobile device and scan for wireless network devices (e.g. TapShare_DF6EC0E5)
 - Enter the Wi-Fi password (e.g. 96825190)
2. Modify the network configurations on TapShare Box
 - Start the web browser and enter "192.168.168.1" to log in webpage
 - Enter the administrator password (default password is 000000)
 - Follow the on-screen instructions to change the password. Once done, log in with the new password (password change is required only for the first time login)
 - Select [**Admin Setting**] from the top-left menu
 - Select [**LAN IP Setting**]
 - Follow the information provided by IT staff to proceed the setting
 - Click [**OK**]
3. Connect the Ethernet cable to TapShare Box

Chapter 5 Description of Major Functions

5.1 I would like to project


Tap the main button of the TapShare Pod.



5.2 I would like to set up split screens

5.2.1 Modify the webpage settings of TapShare

1. Connect to TapShare Box. Please refer [6.4.1 Network connection](#) and [6.4.2 Webpage login](#) for connecting and webpage login

2. Click the [Menu]  and select [Admin Setting].
3. Go to [Host Control] and change [Share Screen] as [On / Off]
4. Press [OK] and waiting for the reboot of the TapShare Box.

Once done, follow the steps on [5.1 I would like to project](#) or [5.3.2 How to project with Host Control mode](#) to operate


[Remark] There are up to four split screens.

5.3 I would like to enable the host control feature

<Remark> To enable this feature, two or more TapShare Pod are required and the projection from guest devices must be approved by the host device

5.3.1 Modify the webpage settings of TapShare

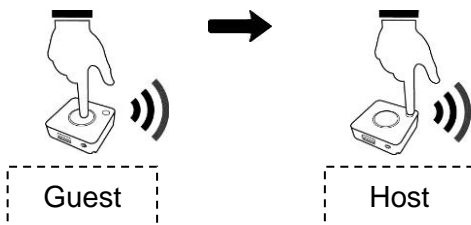
1. Connect to TapShare Box. Please refer [6.4.1 Network connection](#) and [6.4.2 Webpage login](#) for connecting and webpage login

2. Click the [Menu]  and select [Admin Setting].
3. Click [Host Control] and change [Share Screen] to [Off].
4. Press [OK] and waiting for the reboot of the TapShare Box.

5.3.2 How to project with Host Control mode

Press the **main** button (red light) on the guest TapShare Pod,

and then press the **side** button (green light) on the host TapShare Pod to project content.



[Remark]

Host Side: The side LED indicator is in green

Guest Side: The side LED indicator is in red


5.3.3 Host Control mode instructions

- **Approve projection request from guest side:**
Press the side button on host side
- **Approve full-screen projection request from guest side:**
Press and hold the main button on guest side to send out projection request
Press the side button on host side
- **Reject projection request from guest side:**
Double-press the main button on host side
- **Close full-screen projection on guest side:**
Press the main button on host side
- **Close projection on all guests:**
Press and hold the main button on host side

5.4 I would like to stream content via AirPlay

To project content via AirPlay, please close video output from TapShare Box and refer to [6.4.6 I would like to enable AirPlay feature](#) to modify the

configurations on TapShare Box.

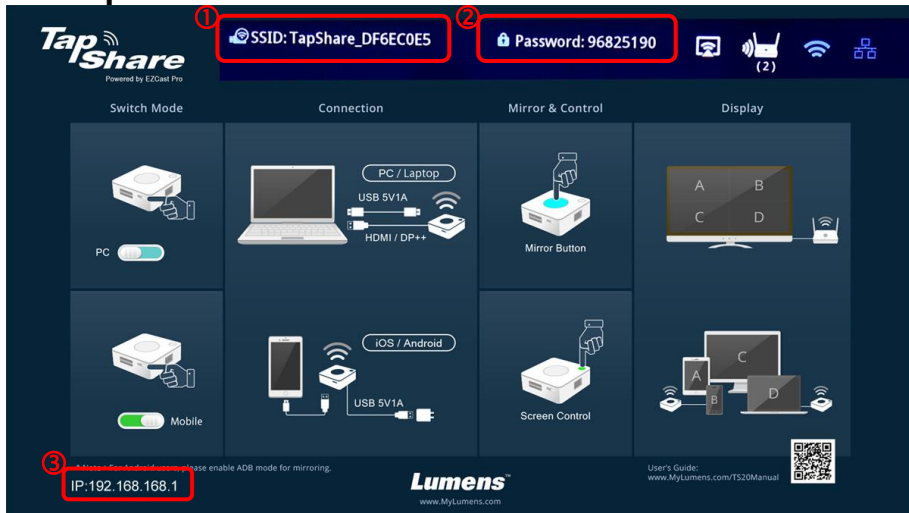
1. Connect to TapShare Box. Please refer [6.4.1 Network connection](#) and [6.4.2 Webpage login](#) for connecting and webpage login
2. Select **[Admin Setting]** from the top-left menu 
3. Select **[Airplay]** to make sure **[Airplay]** is set as **[On]**
[Remark] If **[Airplay]** is on, steps 2 to 3 can be skipped
4. Enable AirPlay on a mobile device and search for available AirPlay devices. Select “TapShare” from the list and the content will be streamed out after connecting

5.5 I would like to load a factory default

Please press the [Reset] button for 10 seconds then the product will reboot after one minute.

Chapter 6 Web page

6.1 Splash Screen Introduction



1. SSID : TapShare_xxxxxxx(Mac Address)
2. Wi-Fi Password
3. Default IP address : 192.168.168.1
4. Default Admin Password : 000000

Wi-Fi :

Search Wi-Fi Device(Ex: TapShare_DF6EC0E5)

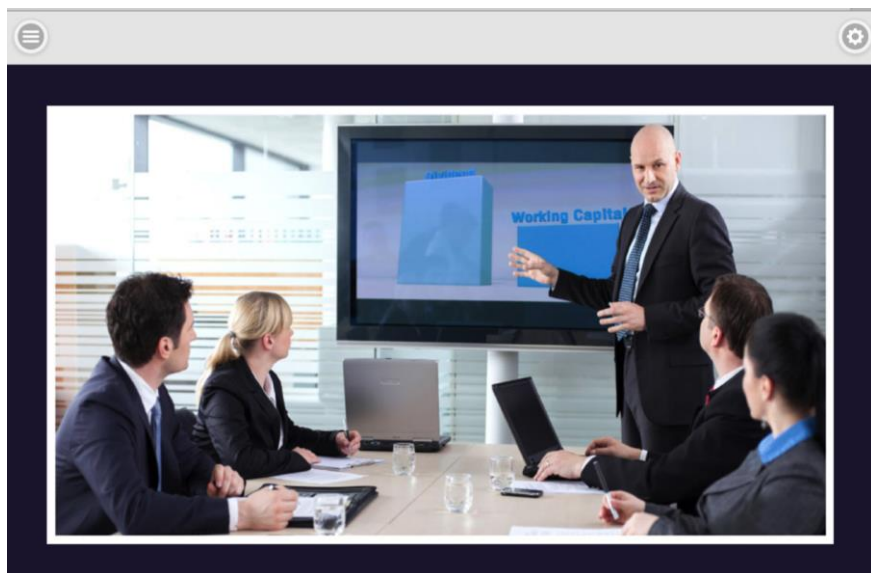
Key in Wi-Fi password (Ex:96825190)

Open browser and key in IP address “192.168.168.1”

Key in Admin password (Default : 000000)

6.2 Web Page Introduction

6.2.1 Homepage



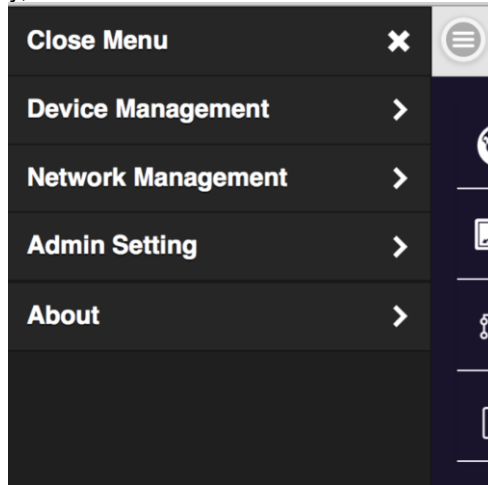
- to indicate menu icon.



- to indicate log-in icon.

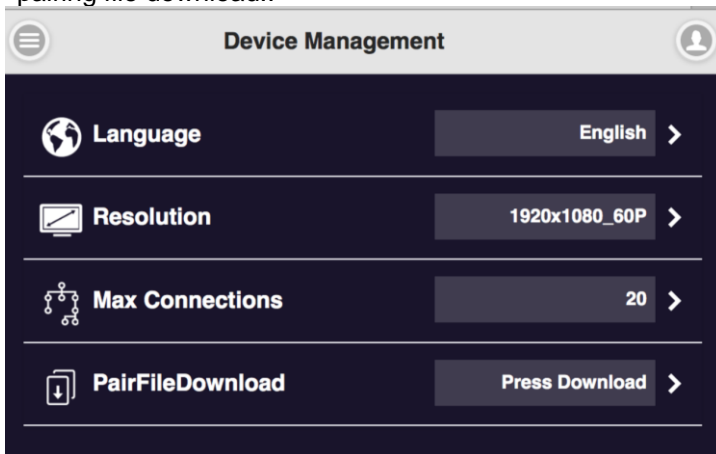
6.2.2 Main Menu

Click the menu button on the upper left corner. A dropdown menu appears. Three setting functions are displayed. They are **Device Management**, **Network Management**, and **Admin Setting**, and **About** which indicates the device version, IP addresses and Wi-Fi frequency, etc.



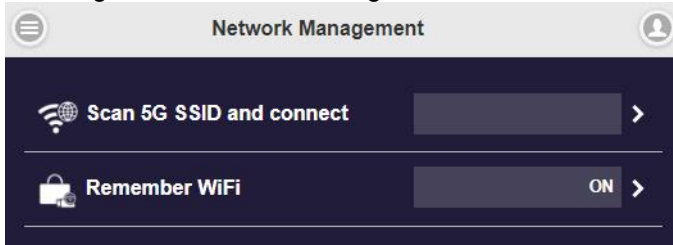
6.2.3 Device Management

This section helps to manage user interface language, output resolutions, Max connection and TapShare Box & TapShare Pod pairing file download..

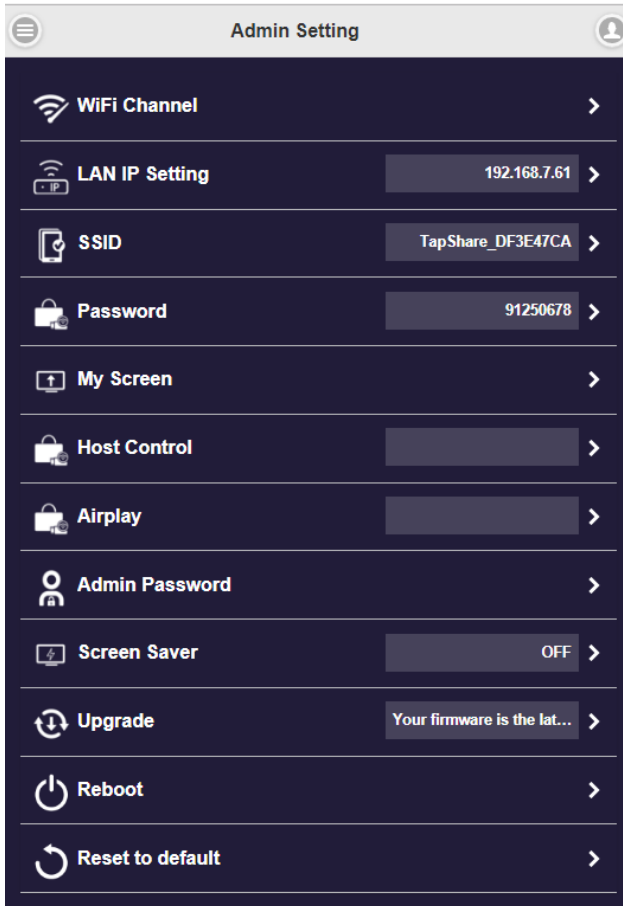


6.2.4 Network Management

Providing outbound Wi-Fi setting.



6.2.5 Admin Setting



6.3 Setting Menu

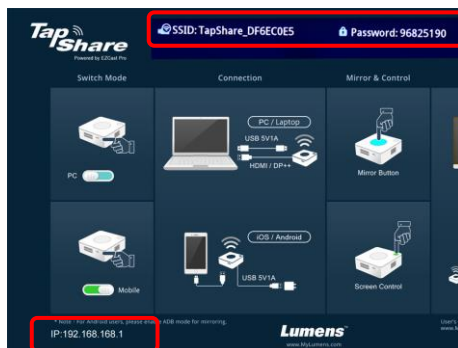
1 st Level Major Items	2 nd Level Minor Items	3 rd Level Adjustment Values	Function Description
Device Management	Language	1. English 2. Français 3. Deutsch 4. Español 5. 简体中文 6. 繁體中文 7. 日本語 8. 한국의 9. Italiano 10. Русский 11. Nederlands 12. Português 13. Türk 14. العربية 15. ไทย 16. فارسی 17. Auto	1. English 2. French 3. German 4. Spanish 5. Simplified Chinese 6. Traditional Chinese 7. Japanese 8. Korean 9. Italian 10. Russian 11. Dutch 12. Portuguese 13. Turkish 14. Arabic 15. Thai 16. Farsi 17. Auto detection
	Resolution	1. 1280x720_60p 2. 1920x1080_60p 3. 3840x2160_30p 4. 4096x2160_24p	Select output resolution
	Max Connections	1. 4 users 2. 8 users 3. 16 users 4. 32 users 5. 64 users	Set the Maximum connections
	Download Pairing File	"File Name"	Download pairing file and manually update the pairing data of TapShare Pod
Network Management	Scan 5G SSID and connect		mainly provide outbound Wi-Fi setting
	Remember WiFi	ON / OFF	
Admin Setting	WiFi Channel		To select the channel between TapShare BOX & TapShare POD to adjust the performance
	LAN IP Setting		To configure the wire line connection through LAN cable

	SSID		To set the SSID indication of the TapShare BOX on the main screen.
	Password		Change password of Wi-Fi
	My Screen		Users can replace the theme of the main page of TapShare BOX by uploading graphics or photos. File Format: 1920x1080, <3MB, JPEG format
	Host Control	Auto Allow Request	Enable projection management feature on host side
		Share Screen	Enable split screen Function
	Airplay	On / Off	Enable airplay
	Admin Password		To change the web setting's log in password.
	Screen Saver	1. OFF 2. 15 Minute 3. 30 Minute 4. 1 Hour	Set the time for Screen Saver
	Upgrade		Firmware Upgrade
	Reboot		To reboot the equipment
	Reset to default		Revert to the default settings

6.4 Description of Web Page Setting

6.4.1 Network connection


1. Go to Wi-Fi settings on a PC or mobile device and connect to TapShare Box. Please refer to the on-screen information for SSID and password

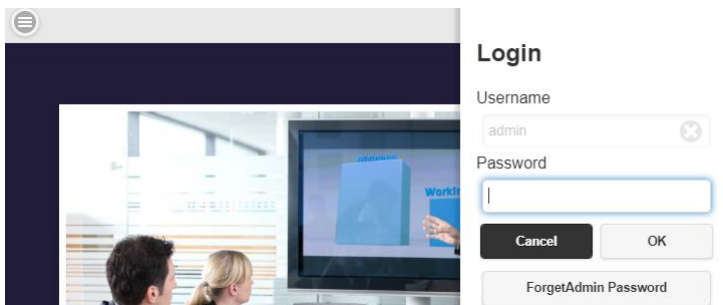


- Go to **[Settings]** on a mobile device and scan for wireless network devices (e.g. TapShare_DF6EC0E5)
- Enter the Wi-Fi password (e.g. 96825190)

6.4.2 Webpage login

1. Open the browser and Login 192.168.168.1(Default IP).
2. Key in Admin passwords (Default [000000]) , Please change the password for the first time login and key-in the password when re-Login.

Press the  circle image on the upper right corner to log in.



6.4.3 I would like to change the output image from TapShare Box

1. Go to [Admin Setting] and select [My Screen]
2. Select a image to upload and click [OK]
[Remark] The image to upload must be at 1920*1080 resolution and in JPG or PNG file format

6.4.4 I would like to hide SSID

1. Go to [Admin Setting] and select [SSID]
2. Change [Hide SSID] to [On]
3. Click [OK] and wait for a reboot of TapShare Box

6.4.5 I would like to change Wi-Fi password

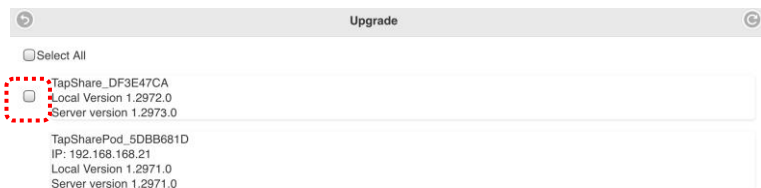
1. Go to [Admin Setting] and select [Password]
2. Enter customized Wi-Fi password
3. Click [OK] to apply new password

6.4.6 I would like to enable AirPlay feature

1. Go to [Admin Setting] and select [Airplay]
2. Change [Airplay] to [On]
3. Click [OK] and wait for a reboot of TapShare Box

6.4.7 I would like to update firmware online (OTA)

1. First, please refer to [4.4 Connect TapShare Box to a Local Area Network](#) to connect to the external network
2. Go to [Admin Setting] and select [Upgrade]
3. Select the TapShare Box or TapShare Pod to be updated
4. Click [Update] and wait for a reboot of the devices



6.4.8 I would like to pair devices with pairing files

1. Prepare a blank USB flash drive and insert it to the USB port on TapShare Box
2. Log in TapShare Box webpage
3. Go to [Device Management] and select [Download Pairing File]
4. Download the pairing files for TapShare Box and save them onto the root directory of the USB flash drive
5. Switch TapShare Pod to Mobile Mode, insert the USB flash drive to the USB port on TapShare Pod and then power on (powered by a USB port on devices other than TapShare Box)
6. When the LED indicators on TapShare Pod are changed from dual flashing red lights to solid white lights, the pairing is completed successfully

Chapter 7 Troubleshooting

This chapter describes problems you may encounter while using TapShare. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurs, please contact your distributor or the service center.

No.	Problems	Solutions
1	The power on failed (no light) of TapShare Pod, or it turns on then off repeatedly when it was connected to a USB 2.0 port.	TapShare Pod requires a USB power delivery specification of 5V 1A. Recommend to connect to USB 3.0 port or other USB power adapter, so that the power supply is sufficient for TapShare Pod to turn on.
2	TapShare Box has no audio output When TapShare Pod USB is connected to an Android tablet	Currently, audio output of Android equipments is not supported.
3	When an Android mobile device is projecting to a 2-split screen or a 4-split screen, the screen of the Android mobile device in a vertical position is smaller than that of an iPhone. Why?	Currently, this is a known limitation and not the problem between a mobile device and TS20. This is normal. It's advised to place the mobile device in a horizontal position.
4	When an iPhone is connected to the TapShare Pod, the time on the iPhone will be changed; the battery charge temporarily becomes 100%. Why?	This is normal for the current design. After the iOS cable is removed from the TapShare Pod, it will return to the previous status.
5	TapShare Pod cannot power on when connecting to a laptop	1. Please make sure if TapShare Pod is connected to a USB 3.0 port. If not, please reconnect to a USB 3.0 port 2. If TapShare Pod is connected to a USB 3.0 port, please also connect your laptop to

		a power cord to have sufficient power
6	Cannot change image	Please make sure filenames meet the following requirements 1. 1920x1080 2. Filenames can be in English 3. Filenames cannot contain spaces