

KD-BYOD4KHUB

BYOD & BYOM 4K Wireless Presentation & Conferencing Gateway for Windows, Mac, iOS, Android, and Chrome



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The Experts in Digital Video Technology and Solutions™

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Default IP Address: 192.168.43.1

Quick Setup Guide

Please visit www.keydigital.com for the latest product documentation, firmware, control drivers and software downloads. Product features and specifications are subject to change without notice

Always follow the instructions provided in this Operating Manual.

About KD-BYOD4KHUB

KD-BYOD4KHUB Bring-Your-Own-Device & Bring-Your-Own-Meeting wireless presentation and conferencing gateway is a wireless solution for conference and presentation spaces that enables users to bring their own device and present to a shared display while the hub receives the USB camera, mic and audio in the room for collaboration with local and remote video conference participants.

KD-BYOD4KHub includes one KD-BYODFD dual-headed (USB-A + USB-C) auto-launching USB stick for plug and play casting. Or users may cast using the *KDPlay+* application, AirPlay, Miracast, and Chromecast from Windows, Mac, iOS, Android, and Chromebook devices.

Content may be displayed at up to 4K resolution with 30fps casting for smooth content casting. Dual-monitor HDMI outputs, output preview window for video conference screenshare, annotation & whiteboarding tools, HDMI Input, and wired USB host option make KD-BYOD4KHub the ideal choice for all presentation, collaboration, and conferencing applications in corporate offices, school, universities and training facilities.

Key Features

- **Wireless Presentation & Conferencing Gateway:** Connect via WiFi to wirelessly present and receive USB camera and audio.
- **Bring Your Own Device:** Cast from Windows and Mac computers using KDPlay™ software. Cast from iOS devices with AirPlay. Cast from Chrome OS using Chrome browser tool for tab or desktop. Native Miracast support for Windows and Android device casting.
- **Bring Your Own Meeting:** Sends connected USB camera, microphone, and speaker devices to host computer for use in any video conferencing software. USB Video Class (UVC) and USB Audio Class (UAC) supported.
- **4K/UHD Source & Display:** Outputs at 4K for optimal clarity of spreadsheets and data content.
- **Smooth Video:** Glitch-free AV experience due to optimizations for video content and 30fps casting.
- **Multi-Presenter Mode:** Up to five presenters may share content at same time with auto adjusting screen layout. User preference layout setup for three or four presenters allows for optimal window placement based on usage.
- **Wired HDMI Input:** For wired and wireless presentation options from laptops or dedicated room computers.
- **KDPlay™ Flash (KD-BYODFD) Included:** Software auto-launcher with USB and USB-C connections allows. Additional KDPlay™ Flash sold separately
- **Dual Monitor Support:** Mirrored or independent viewing on two connected displays / projectors.
- **Output Capture:** Send HDMI output content from Main or Sub display to the connected host computer to completely immerse video conference participants with multi-presenter brainstorming sessions, etc.
- **Annotation and White Board:** Screen overlay tools for real-time collaboration. Screen captures are easily downloaded by QR code on screen or in web browser.
- **Extended Monitor:** Feature enables dual display setups such as video conference and presentation content view on side-by-side panels. Virtual Driver installation required for this feature.
- **Display Control:** CEC or RS232 command sends during unit bootup, power on, and power off.

ADDITIONAL FEATURES

- **WiFi Direct, WiFi Client, LAN Connection Modes:** May act as the Wireless Access Point or may be accessed by devices via the wired or wireless network connection.
- **Content Preview:** Collapsible dock on side of display provides preview thumbnail and name of devices casting via KDPlay app.
- **Touch Screen / Mouse Forwarding:** Connect touchscreen or mouse USB to unit to point and click on casted device
- **Customizable Home Screen:** Load customer's logo or desired image to show signage and branding when not casting.
- **Digital Signage Mode:** May display a desired web page on scheduled start and stop times.
- **Video Resolution:** Selectable 4K 3840x2160 @ 30fps or 60fps [4:2:0] 10.2Gbps, 1920x1080p @ 60fps, 1280x800p @ 60fps, 1280x720p @ 60fps output resolution options based on EDID from connected display
- **Audio De-embedding:** Audio of the casted device is de-embedded at the unit's analog L/R audio connector for ease of integrating with audio amplification and mixing system
- **Easy Connection:** Up to 16 simultaneous devices may connect, with access always provided to new connecting devices and automatic disconnect of oldest non-casting devices in case of maximum being reached
- **Moderator Management:** Administrator may start & stop device casting via web control page
- **Web GUI Administration:** Access unit setup, moderator, and security tools on web browser through LAN
- **Four-Level Security:** Including casting / pairing pin and Device-type permission options, AES-256 + RSA-1024 encryption.
- **Simultaneous Secure Dual Network:** Two network ports enable concurrent connection to Public and Private networks for ease of guest access without compromising security.

Accessories Included in the Box

- 1x KDBYODFD dual-headed auto-launch dongle
- 1x Power supply 12V/3A, 36W with US, EU, UK, and AU adapter head. Model GQ36-120300-AX
- 3x Antennae
- 2x 3-pin green color terminal block plug

Features Table

Device Type	Casting Method	Video	Audio	USB Cam, Audio, HID Forwarding	Max Simultaneous Casting Devices	Moderator Preview
Windows	KDPlay+ app	YES	YES	YES	5	YES
Windows	Chromecast (Chrome browser)	YES	YES		2	
Windows	Miracast	YES	YES	HID Only (Enable in Miracast Settings)	2	
MacOS	KDPlay+ app	YES	YES	YES	5	YES
MacOS	AirPlay	YES	YES		2	
MacOS	Chromecast (Chrome browser)	YES	YES		2	
Android	KDPlay app	YES			5	YES
Android	Miracast	YES	YES		2	
iOS	AirPlay	YES	YES		2	
Chrome OS	Chromecast (Chrome browser)	YES	YES		2	

*Video content from streaming services such as Amazon & HBO & Netflix not supported due to copy protection.

**Device types have additional notes on setup requirements or limitations. See [Casting](#) section for more info.

WiFi Direct vs WiFi Client vs LAN Connection

Which Network Mode Is Best for Your Installation?

WiFi Direct Mode (Default) allows wireless devices direct access to the base unit using KD-BYOD4KHUB's built-in WiFi access point. WiFi Direct Mode is the quickest way to begin casting to your KDPlay™ screen but only provides internet to connected devices if a LAN wire is connected from an internet enabled network.

WiFi Direct Mode with no Internet Connection



WiFi Direct Mode with Internet Connection



WiFi Client Mode allows connection to external WiFi Router without network cable. Wireless devices access the base unit via wireless or wired connection into the LAN. WiFi Direct mode is disabled when WiFi Client Mode is enabled.



LAN Connect Mode requires KD-BYOD4KHUB be wired into your local network. Wireless devices access KD-BYOD4KHUB via your existing external WiFi network therefore allowing users to stay connected to an internet enabled network(s). WiFi Direct mode is disabled when LAN Connect Mode is enabled.



Network Considerations & Security

Bandwidth

- The maximum bandwidth per casted device is 12Mbps per stream. Common usage will be 12 – 48Mbps for one to four presenters.

Security

- KD-BYOD4KHUB’s dual LAN ports enable concurrent connection to two networks. Connected networks are completely isolated from each other, providing ease of access without compromising security. Additional network security settings may be adjusted in the Admin Access page.
- Use security level 3 or the Preference setting to apply encryption to all casting data if you have any security concerns.

Security Settings

Security Level

#	Security Item	Level 1	Level 2	Level 3	Preference
1	Enable login password for Webpage	✓	✓	✓	✓
2	Auto-change password for Wireless	✓	✓	✓	✓
3	Encryption of Data: Proprietary	✓	✓	✓	✓
4	Enable Airplay PIN code		✓	✓	<input type="checkbox"/>
5	Enable Miracast PIN code		✓	✓	<input type="checkbox"/>
6	Enable login password for Telnet		✓	✓	<input type="checkbox"/>
7	Encryption of Data: AES-256 Bit + RSA-1024Bit		✓	✓	<input type="checkbox"/>
8	Disable Android APK,IOS APP ,or Airplay		✓	✓	<input type="checkbox"/>
9	Disable "Firmware downgrade"			✓	<input type="checkbox"/>
10	Disable Miracast			✓	<input type="checkbox"/>
11	Disable KDPlay APK			✓	<input type="checkbox"/>
12	Disable "Chromecast casting"			✓	<input type="checkbox"/>

Current Security Level: Level 1 Level 2 Level 3 Preference

SAVE

Firewall Settings

In most installations, there are no network settings that need to be applied for common functionality.

However, if you are installing KD-BYOD4KHUB on an advanced network, please ensure that the below list of TCP and UDP port numbers remains open on your network in order for devices to cast to KD-BYOD4KHUB.

	TCP Port #	UDP Port #	Casting IP Address
KDPlay App Windows, MacOS	20000, 20002, 20003, 20006, 20007, 20008, 20009, 20010	6667, 8887, 8889 20005	IP Multicast Group Address: 239.1.1.1 Broadcast IP address: 255.255.255.255
KDPlay App Android	8121, 48689 51030, 51040, 52020, 52030 Additional Port #'s Possible	8887, 8889	IP Multicast Group Address: 239.1.1.1 Broadcast IP address: 255.255.255.255
AirPlay iOS	5656, 51010, 51020 17011, 17012, 17100	5353	MDNS: 224.0.0.251
Chromecast	8008	1900, 5353, 8009 16660, 16661, 16662, 16663	SSDP: 239.255.255.250 MDNS: 224.0.0.251 Note: Casting device and KD-BYDO4K must be within in same subnet.
Web Browser	80		

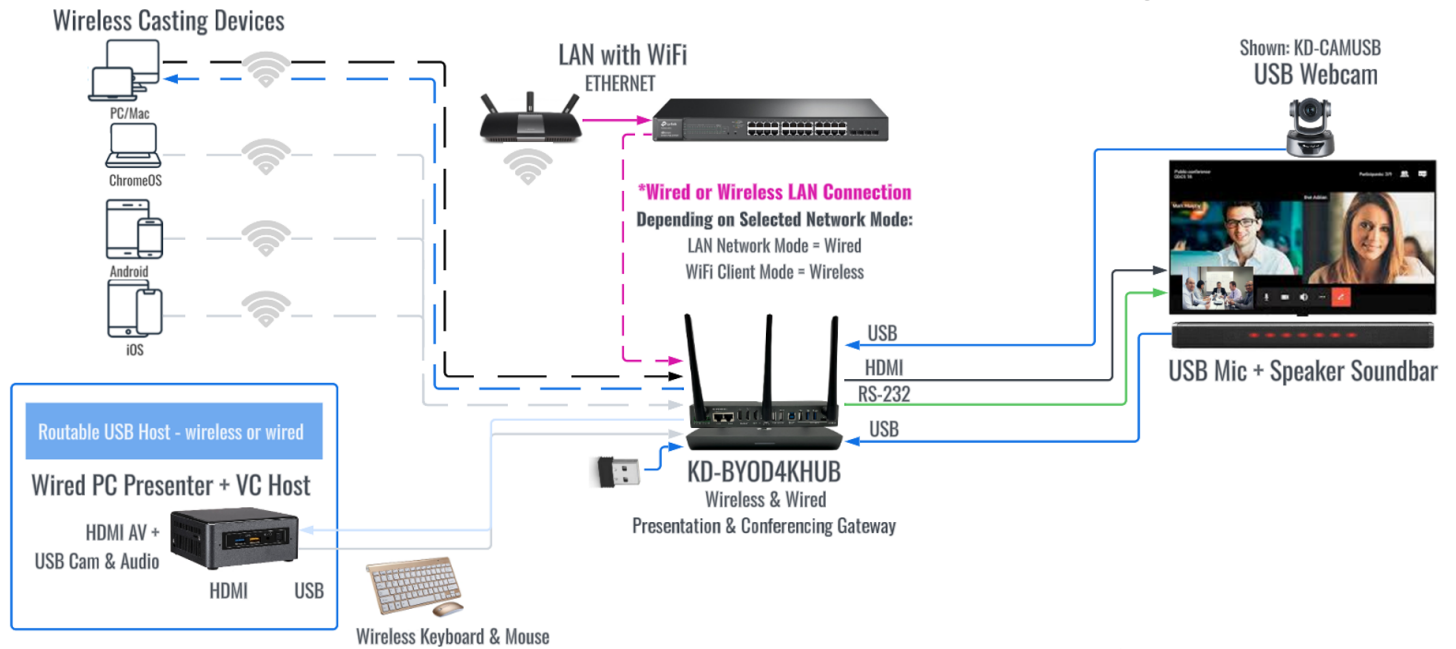
KD-BYOD4KHUB LAN Port Features

In most installations, there are no network settings that need to be applied for common functionality.

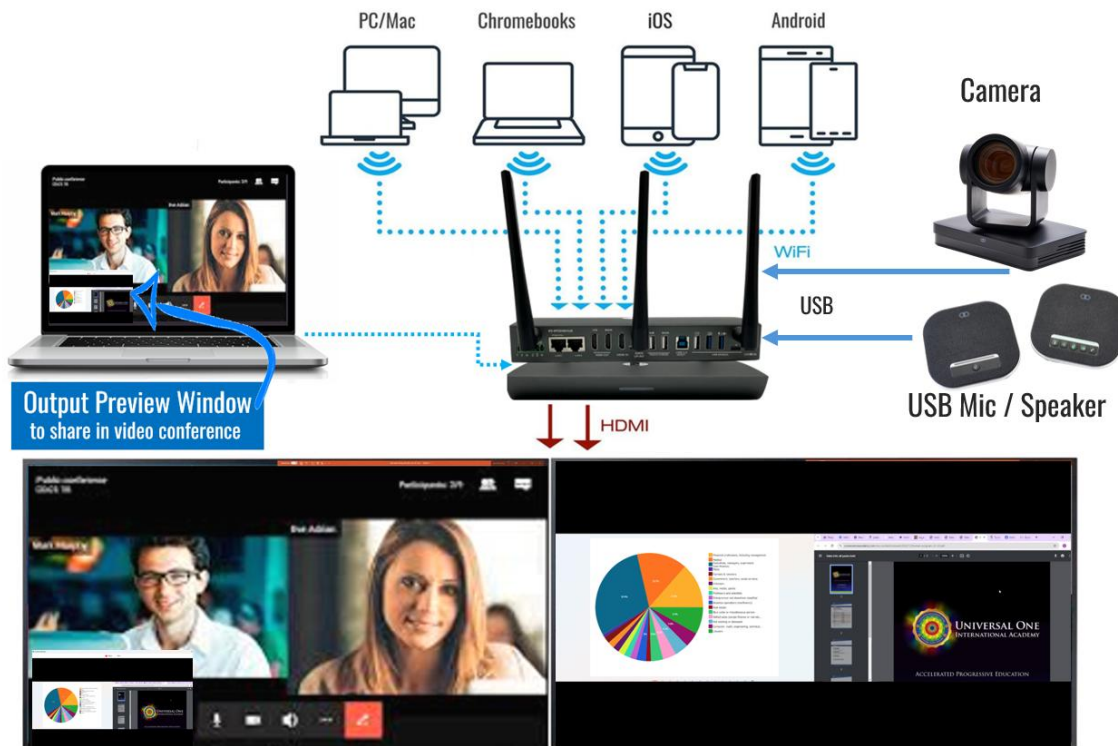
	PoE	Maximum Bandwidth
LAN Port 1	YES	1Gbps
LAN Port 2	NO	100Mbps

Application Examples

Wireless Presentation & USB Device Host for Video Conferencing



Hybrid Collaborative Session with Full-Screen and Multi-View Monitor Layouts



Dual Monitor / Extended Monitor Conferencing

Dual Extended Monitor from 1 PC via Two Methods:

- » **Wired + Wireless**
- » **Wireless (Windows): KDPlay+ & Miracast**
- » **Wireless (Mac): KDPlay+ & AirPlay**



Quick Setup Guide

Begin with KD-BYOD4KHUB, the connected display, and all USB or HDMI devices are turned off with power cables removed. Ensure that all desired functionality is achieved before installing.

Cabling

The following connections are mandatory for getting your KDPlay screen on your network and display. See the [Connections, Buttons, and LEDs](#) section for more information about additional connectivity options.

Cabling for WiFi Direct Mode

1. Connect the Main HDMI OUT port to an HDMI display.
2. Connect power.
3. (Optional) If you'd like KD-BYOD4KHub's Wireless Network to have internet, connect either LAN port to an internet enabled network. If that network switch is PoE, you may omit the power connection from step 2 above.



You may now proceed to the [WiFi Direct Mode Configuration instructions](#).

Cabling for WiFi Client Mode

1. Connect the Main HDMI OUT port to an HDMI display.
2. Connect power.
3. (Temporary – Initial Setup Only) Connect network cable from WiFi Router / Network Switch.



You may now proceed to the [WiFi Client Mode Configuration instructions](#).

Cabling for LAN Connection Mode

1. Connect KD-BYOD4KHUB to an HDMI display.
2. Connect network cable from WiFi Router / Network Switch.
 - a. (Optional) Connect to KD-BYOD4KHUB's LAN 1 port to power the unit from a PoE switch
 - b. (Optional) You may connect KD-BYOD4KHUB to two networks for concurrent access to KD-BYOD4KHUB from devices on each network.
3. (Optional) Connect Power to KD-BYOD4KHUB unit (if not using PoE as described in step 2a).

You may now proceed to the [LAN Connection Mode Configuration instructions](#).





Configure

How to Configure for WiFi Direct Mode with Web UI


1. Connect to network named KD-BYOD4KHUB-XXXX. The password is displayed on the HDMI connected monitor and the default password is **12345678**
2. Open web browser, and enter 192.168.43.1 in the address bar
3. Press the **ADMIN ACCESS** button at top-right of the page
4. Enter default password **admin**
5. Enter **NETWORK** menu and choose **Wireless** sub-menu
6. Enter the desired name (SSID) for KD-BYOD4KHUB's WiFi network. The default network name is KD-BYOD4KHUB-XXXX
7. Enter the desired password for KD-BYOD4KHUB's WiFi network. Letters and numbers are allowed. Special characters are not supported. The default password is **12345678**.
8. **SAVE** changes
9. **Note:** If you change the password but not the SSID (network name), you may have to forget and re-join the network to re-connect.

The screenshot shows a web browser window with the address bar containing '192.168.43.1'. A blue circle with the number '2' is overlaid on the address bar. The page header features the KDPLAY logo on the left and 'ADMIN ACCESS' with a gear icon and a blue circle with the number '3' on the right. The main content area displays 'Welcome to KDPlay™' and 'Please Download KDPlay™ Application for Your System.' Below this are two buttons: 'Windows' (Requires Windows 7 or higher) and 'MacOS' (Requires macOS 10 or higher). At the bottom, there are three numbered steps: 1. Select the download file for your system and download. 2. Run the installer and follow installation steps. 3. Open KDPlay™ on your computer and stream your media.



ADMIN ACCESS 

Welcome to **KD-BYOD4KHub**, Wireless Presentation & Conferencing

Please Enter Device Password: 

4

LOG IN

Windows

Requires Windows 7 or higher

MacOS


Requires macOS 10 or higher


Android

Requires Android 5.0 or higher

Operation Manual

Requires PDF Viewer



LOGOUT 

NETWORK

- > Network Mode
- > **Wireless**
- > Ethernet (LAN)

DISPLAY & AUDIO

SYSTEM

SECURITY

F/W UPDATE

DEVICE INFO

Network Wireless Settings

WiFi Direct Mode

LAN Connection Mode

Network Name (SSID): KD-BYOD4K-0001

Security: WPA/WPA2 - Personal (Recommended)

Frequency: 2.4 Ghz 5 Ghz

Auto Change Password: Never

Password: 12345678

Channel Width: [text]

Channel: 1

SAVE

5

6

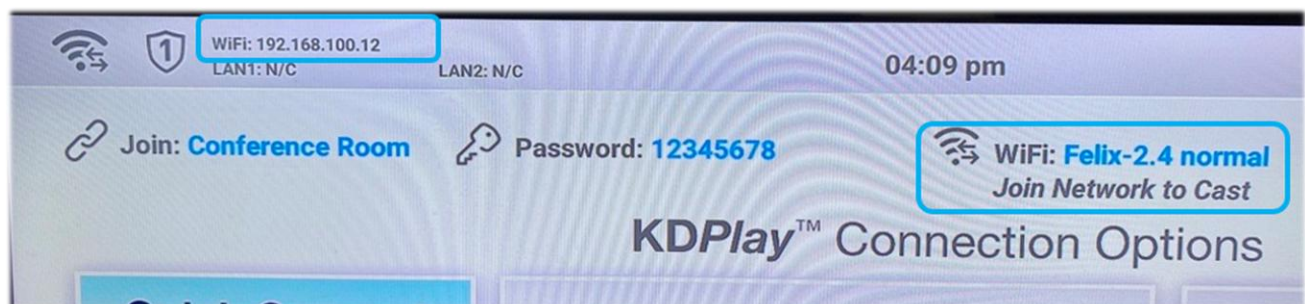
7

8


How To Configure for WiFi Client Mode with Web UI

IMPORTANT: You must first connect a cable from your network to KD-BYOD4KHUB for the unit to collect network information. This is temporary, as WiFi client mode will not require a LAN cable connection for final installation.

1. Confirm that KD-BYOD4KHUB has been provided an IP address from your Local Area Network as shown on the top-left corner of KD-BYOD4KHUB's home screen.
2. Join that same Local Area Network on the laptop / setup device.
3. Open web browser and enter the KD-BYOD4KHUB's IP address in the address bar to access the Web UI.
4. Press the **ADMIN ACCESS** button at top-right of the page. Enter default password **admin** and the Admin Menu loads.
5. With WiFi Direct Mode still chosen, enter the **WIRELESS** sub-menu and enter the desired name for the KD-BYOD4KHUB unit (example "Conference Room") in the **Network Name (SSID)** cell. Press **SAVE**. The default name is KD-BYOD4KHUB-XXXX. The password is displayed on the HDMI connected monitor and the default password is **12345678** for casting .
6. Re-enter the **NETWORK MODE** sub-menu.
7. Choose **WiFi Client Mode** and confirm to apply.
8. Enter the **Wireless** sub-menu and the **WiFi Client / LAN Connection Mode** tab
9. Choose **2.4 Ghz or 5 Ghz** frequency and press **WIRELESS SCANNER** to begin scanning for the WiFi Network that you have connected the KD-BYOD4KHUB unit to.
10. Choose your desired WiFi Network and press **SAVE**.
11. Enter the WiFi Password and press **CONNECT**.
12. After the connection status bar completes, press **SAVE** at the bottom-center of the page.
13. Ensure that the KD-BYOD4KHUB home screen displays its IP address and proper WiFi network's name.



14. You may now disconnect the network cable from the LAN port and install KD-BYOD4KHUB at the desired display / projector location.

LOGOUT

Network Wireless Settings

NETWORK

- > Network Mode
- > **Wireless**
- > Ethernet (LAN)

DISPLAY & AUDIO

SYSTEM

SECURITY

F/W UPDATE

DEVICE INFO

WiFi Direct Mode | WiFi Client / LAN Connection Mode

Network Name(SSID): Conference Room **5**

Security: WPA/WPA2 - Personal (Recomm)

Frequency: 2.4GHz 5GHz


Auto Change Password: Never

Password: 12345678

Channel Width: Auto

Channel: 36

SAVE


LOGOUT

Network Mode Setting

Current Network Mode: **WiFi Client Mode**


Device Name(SSID): **KD-BYOD4KHUB**

WiFi Direct Mode



WiFi Direct Mode allows wireless devices direct access to the base unit. Any additional wireless devices on the local network can access the base unit via LAN if it is connected to a wired local network.

WiFi Client Mode



WiFi Client Mode allows connection to external WiFi Router without network cable. WiFi Direct Mode will be disabled. Wireless devices access the base unit via wireless or wired connection into the LAN.

KOPLAY

Network Wireless Settings

WIFI Direct Mode | **WiFi Client / LAN Connection Mode**

Frequency: 2.4GHz 5GHz

WIRELESS SCANNER **9**

SSID: _____

Password: _____ **CONNECT**

Connection: No Connection

Available WiFi Networks

ID	SSID	Signal
1	INFINITUM1FD7	📶
<input checked="" type="radio"/> 2	Felix-2.4 normal	📶
3	Telcel-6686	📶
4	Sankofa	📶
5	Default	📶
6	INFINITUM1035	📶
7	TP-Link_SCD0	📶

SAVE **10**

KOPLAY LOGOUT

Network Wireless Settings

WIFI Direct Mode | **WiFi Client / LAN Connection Mode**

Frequency: 2.4GHz 5GHz

WIRELESS SCANNER **9**

SSID: Felix-2.4 normal

Password: ***** **CONNECT** **11**

Connection: Connected

SAVE **12**

How to Configure for LAN Connection Mode with Web UI

1. Connect to wireless network named KD-BYOD4KHUB-XXXX. The password is displayed on the HDMI connected monitor and the default password is **12345678**.
2. Open web browser, enter 192.168.43.1 in the address bar
3. Press the **ADMIN ACCESS** button at top-right of the page
4. Enter default password **admin**
5. Enter **NETWORK** menu and choose **Network Mode** sub-menu
6. Choose **LAN Connection Mode** and confirm to apply. Wait a few moments for the new setting to apply.
7. Reconnect to unit, by entering the IP address shown on the HDMI connected monitor in your browser address bar.
8. Enter the **Wireless** sub-menu and the **LAN Connection Mode** tab
9. Enter the desired name (SSID) for the KD-BYOD4KHub screen. The default name is KD-BYOD4KHUB-XXXX
10. Enter the desired password for casting to KD-BYOD4KHUB's screen. The password is displayed on the HDMI connected monitor(s) and the default password is **12345678**
11. Choose **2.4 Ghz or 5 Ghz** frequency and press **WIRELESS SCANNER** to begin scanning for the WiFi Network that you have connected the KD-BYOD4KHUB unit to.
12. Choose your desired WiFi Network and press **SAVE**
13. Enter the WiFi Password and press **CONNECT**. Press **SAVE** and verify **Connection Status**
14. (Optional) To set a desired static IP address to KD-BYOD4KHUB, enter the Ethernet LAN sub-menu. The default IP address setting for LAN Connection Mode is DHCP / Obtain IP Address Automatically. Press SAVE to apply new settings.

Network Mode Setting

Current Network Mode: **WiFi Client Mode** Device Name(SSID): **KD-BYOD4KHUB**

WiFi Direct Mode

WiFi Direct Mode allows wireless devices direct access to the base unit. Any additional wireless devices on the local network can access the base unit via LAN if it is connected to a wired local network.

WiFi Client Mode

WiFi Client Mode allows connection to external WiFi Router without network cable. WiFi Direct Mode will be disabled. Wireless devices access the base unit via wireless or wired connection into the LAN.

6 LAN Connection Mode

LAN Connection Mode allows connection to external WiFi Router without network cable. WiFi Direct Mode will be disabled. Wireless devices access the base unit via wireless or wired connection into the LAN.

Network Wireless Settings

WIFI Direct Mode LAN Connection Mode

KD-BYOD4K Name(SSID): KDPlay Screen **9**

KD-BYOD4K Password: 12345678 **10**

Note: You must connect a network cable to the KD-BYOD4K unit.

Frequency: 2.4GHz 5GHz

WIRELESS SCANNER **11**

SSID: --

Password: **CONNECT**

Connection: No Connection

SAVE

Available WiFi Networks

ID	SSID	Signal
1	KDS-LAB-TEST	Signal strength indicator
2	Lab_Extreme	Signal strength indicator
3	Cisco11943	Signal strength indicator
4	LinksysE900Recording	Signal strength indicator
5	KDQC_Station1	Signal strength indicator
6	Verizon-791L-749A	Signal strength indicator
7	04PX1	Signal strength indicator
8	49MSG	Signal strength indicator
9	Keydigital	Signal strength indicator
10	CompassTrainingRacks	Signal strength indicator

SAVE

Network Wireless Settings

WiFi Direct Mode | LAN Connection Mode

Frequency: 2.4 Ghz 5 Ghz

WIRELESS SCANNER

SSID: KDS-LAB-TEST

Password: 12345678

CONNECT

Connection Status: Connected

SAVE

KDPLAY LOGOUT

NETWORK
 > Network Mode
 > Wireless
 > **Ethernet (LAN)**

DISPLAY & AUDIO

SYSTEM

SECURITY

F/W UPDATE

DEVICE INFO

Network Ethernet (LAN) Settings

LAN 1 LAN 2

Obtain Address Automatically Use the following IP address:

IP Address: **14**

Subnet Mask:

Default Gateway:

DNS 1:

DNS 2:

MAC Address: 60:89:B1:37:10:01

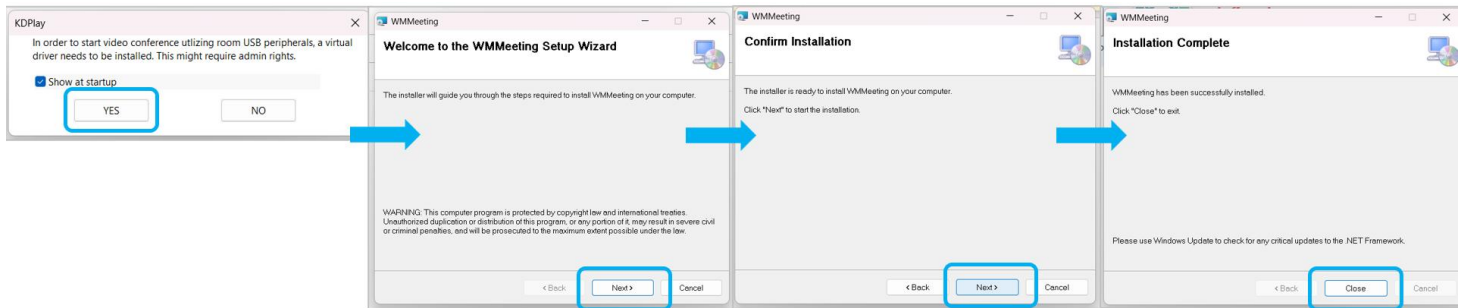
SAVE

Cast

Note: Driver installation required for Windows and Mac PCs to use wireless USB devices

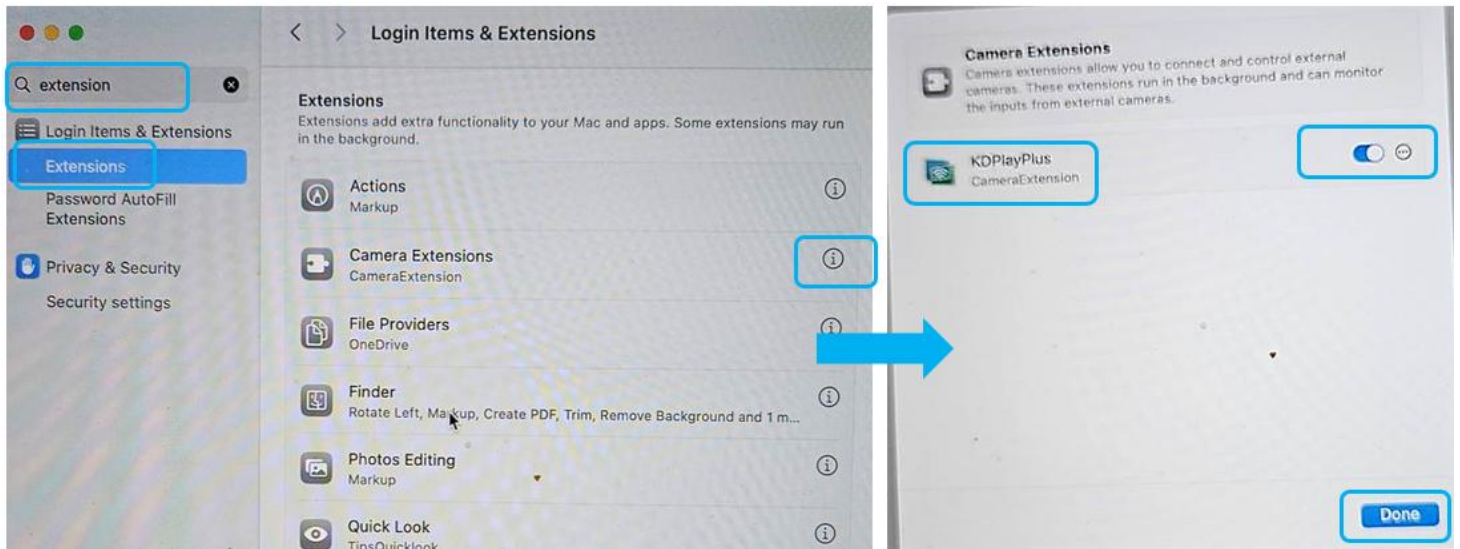
- Upon initial use of *KDPlay+* application, the PC user will be prompted to install WMMeeting on the PC.
- This may require Admin rights.
- You may also download the driver from the [KD-BYOD4KHub product page](#)

Windows: Follow on-screen instructions to install “WMMeeting” driver on to computer for acceptance of wireless USB Camera, Audio, Mouse, and Keyboard devices. **Note:** May require Admin rights.

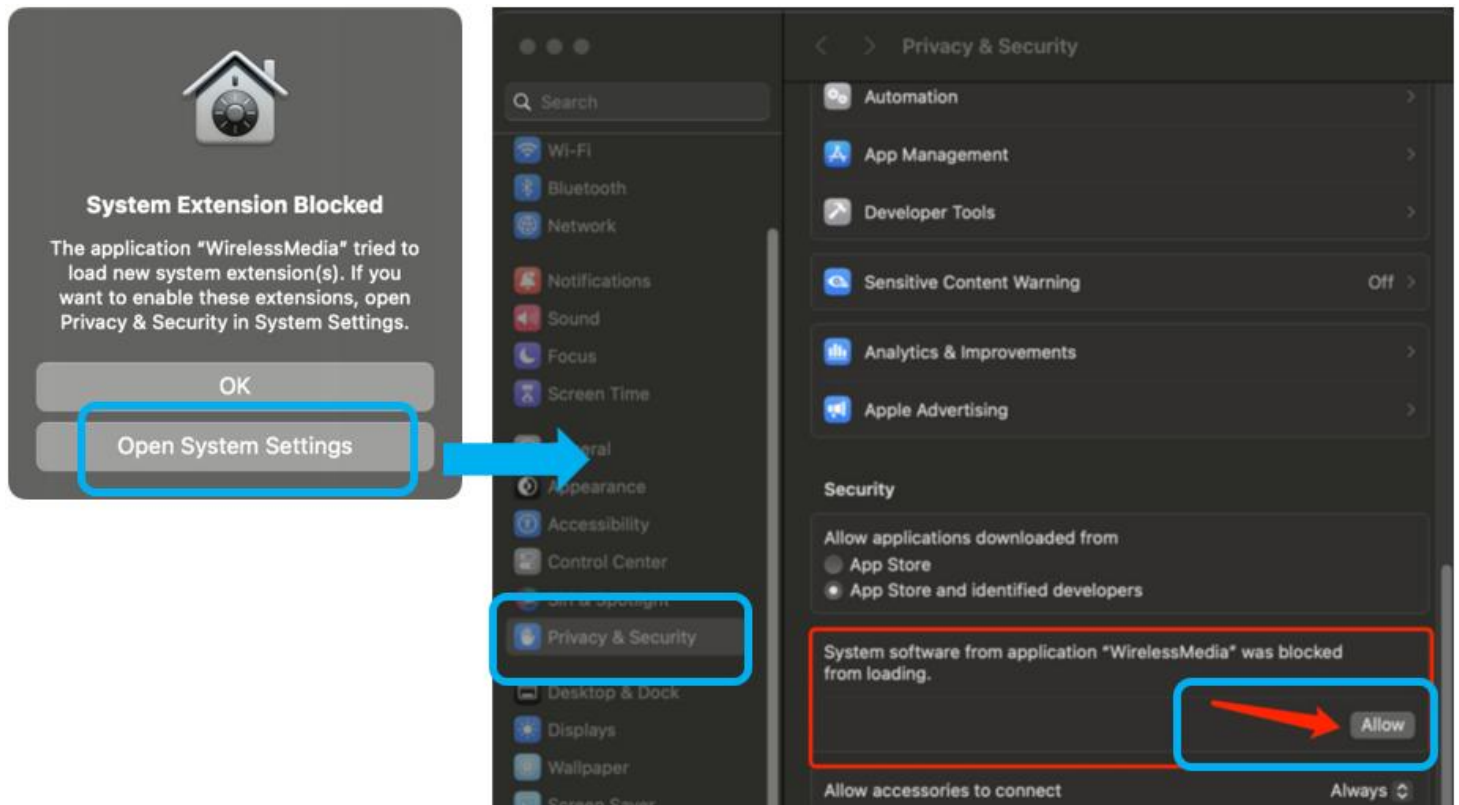


Mac:

Sequoia OS: Navigate to SETTINGS > LOGIN ITEMS & EXTENSION (or search “extension” in settings), click on the (i) for CAMERA EXTENSIONS, KDPlayPlus must be ENABLED



Sonoma OS: When prompted, un-block “Wireless Media” extension by pressing “Open System Settings”, and choosing “Allow” for System Software from Wireless Media application.



Begin Casting

1. Power on connected HDMI display(s) and select the appropriate HDMI input connection. All instructions are displayed on KD-BYOD4KHUB's Home Screen




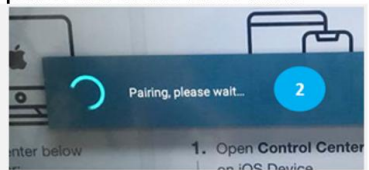
2. (Preferred Method) Casting with KDPlay Flash Auto-Launcher from PC / Mac

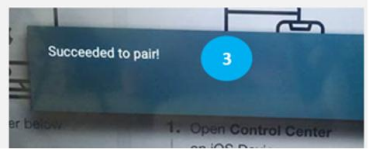
Note: If casting for the first time after changing network settings, please pair KDPlay Flash with KD-BYOD4KHUB as instructed below

- a) Insert KDPlay Flash drive into computer. KDPlay software will auto launch, the computer will automatically join the appropriate WiFi network and connect to the paired KD-BYOD4KHub unit.
- b) Press **START MIRRORING** to begin casting your content.
- c) Press the GEAR ICON to enter the Settings for Volume, Extended Display, and more.



How to Pair KDPlay Flash with KD-BYOD4KHub
Note: The included Flash is **pre-paired** with the KD-BYOD4KHub



- To Pair, plug KDPlay Flash into a USB 2.0 port on the side of KD-BYOD4KHub and wait for the success confirmation on screen.
- When is Pairing Necessary?
 - After changing network mode or network settings
 - After factory default reset of unit
 - After firmware update of unit

Notes for using MacOS with KDPlay Flash

MacOS Monterey & Sequoia users must go to SECURITY & PRIVACY → SCREEN RECORDING / SCREEN & SYSTEM AUDIO RECORDING to ensure that KDPlay is allowed to record the contents of their screen.

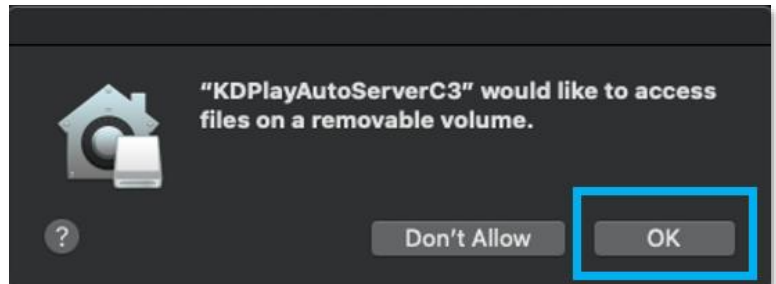
MacOS Catalina is required to support auto-launch feature of KDPlay Flash

Older OS versions like Mojave may require that you re-boot the computer after initially running the KDPlay .exe

Users may manually run KDPlay software or use AirPlay if they do not wish to upgrade to MacOS Catalina.

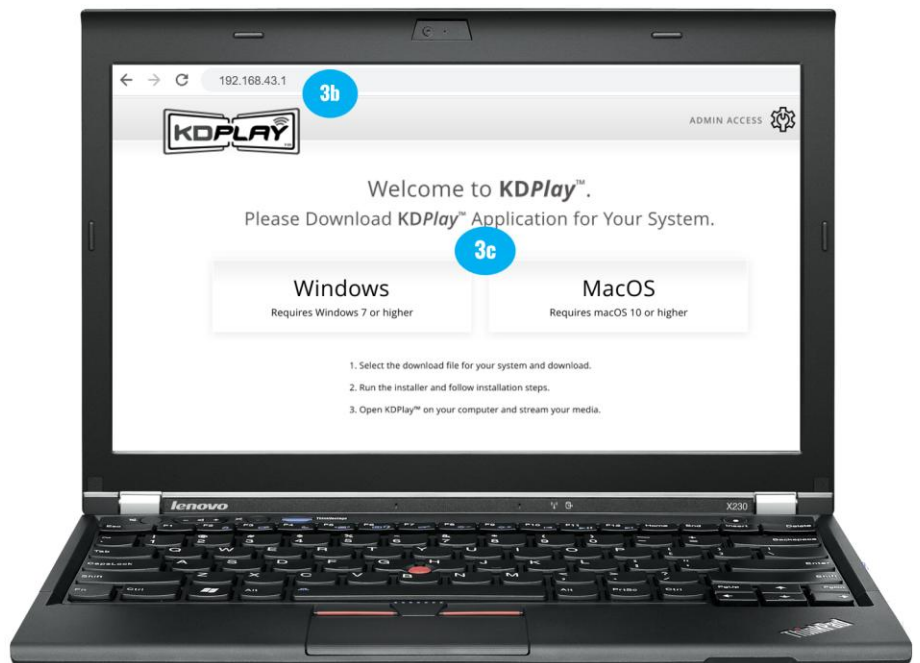
For Extended Monitor from MacOS, use AirPlay and select “Use as Separate Display”.


When inserting KDPlay Flash into Mac computer, the following message is received. Press OK to all access

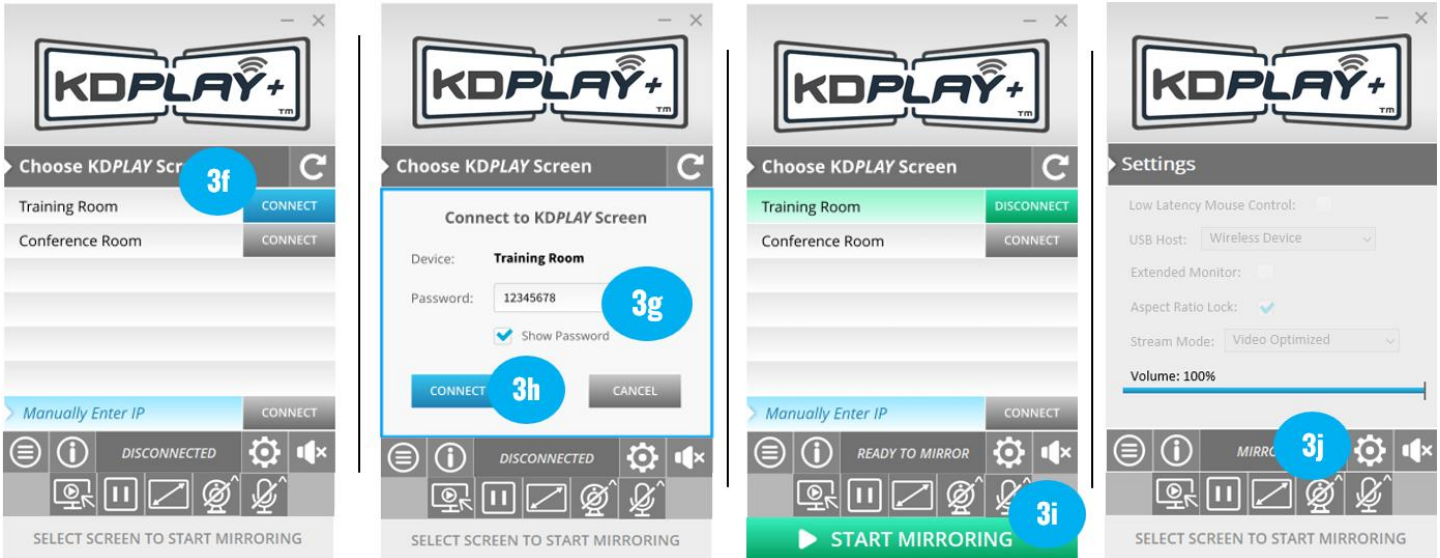


3. Casting from PC / Mac computer without KDPlay Flash:

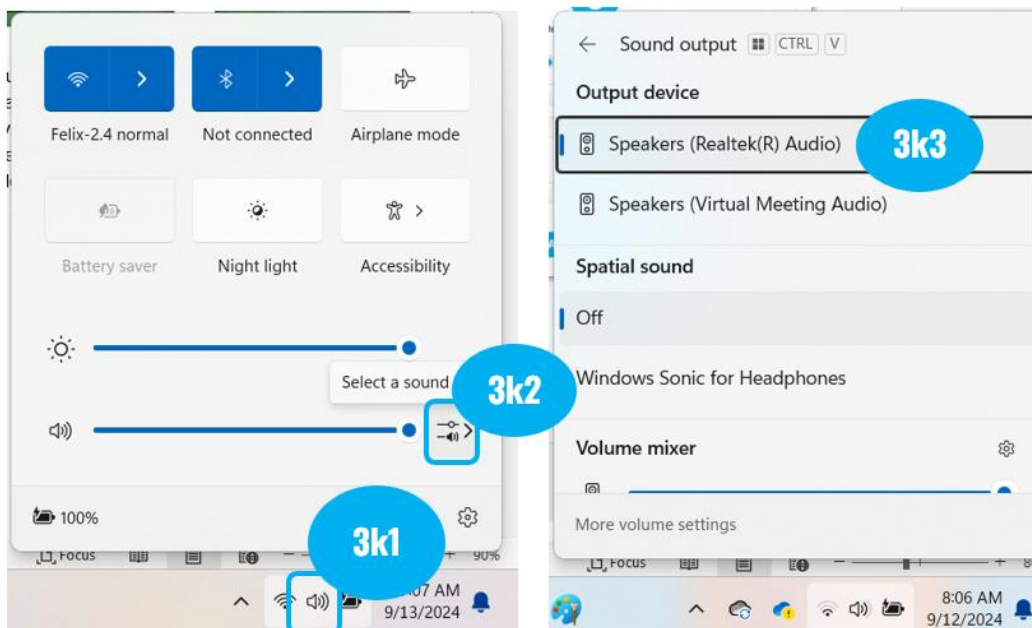
- Ensure that you are connected to appropriate WiFi network, as instructed on Home Screen.
- Open web browser, and enter KD-BYOD4KHUB's IP Address, as displayed on Home Screen on your display/projector.
- On Welcome Page, press button to download *KDPlay*™ software for Windows or macOS X.
- Run the *KDPlay.exe* file to open *KDPlay*™ software.
- Follow on-screen instructions to install WMMeting driver on to computer for acceptance of wireless USB Camera, Audio, Mouse, and Keyboard devices. **Note:** May require Admin rights.
- Choose desired *KDPlay* screen you wish to cast to. Press **CONNECT** button.
- Enter the KD-BYOD4KHUB device's password, as displayed on Home Screen.
- Press **CONNECT** button. You are now paired with the KD-BYOD4KHUB device, but not yet Casting.



- i) Press **START MIRRORING** to begin casting your content.
- j) Press the **GEAR ICON** to enter the Settings for volume, USB host select, extended display, and more.
- k) When done casting, ensure your computer's audio is no longer output through the Virtual Meeting Audio driver by rebooting the PC or by (1) clicking the speaker icon in the taskbar, (2) pressing the **Sound**  **Output** button, and (3) choosing computer's built-in speakers or the new desired audio output.

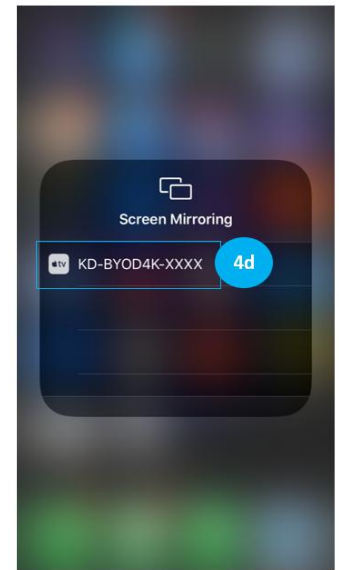
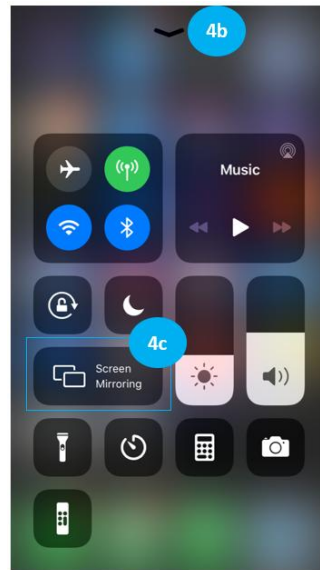


When finished casting, reboot computer or manually de-select Virtual Meeting Audio sound output



4. Casting from iOS Device with AirPlay:

- a. Ensure that you are connected to appropriate WiFi network, as instructed on Home Screen
- b. Open **Control Center** on iOS Device by dragging finger upward from bottom-center of screen.
- c. Choose **Screen Mirroring**
- d. Choose your KD-BYOD4KHUB device you wish to cast to



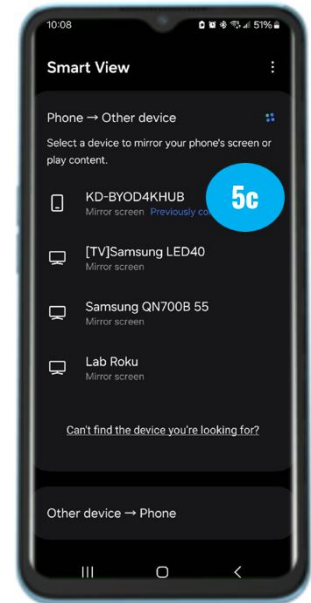
iOS Casting Notes

AV Casting only, no wireless USB device connectivity supported. Streaming YouTube app videos not supported. Stream from web browser if needed. Two maximum iOS devices may simultaneously cast to KD-BYOD4KHUB. Moderator preview not supported for devices casting without KDPlay app. If casting for the first time after changing network settings, it may be necessary to forget the KD-BYOD4KHUB network and re-join, especially if you have updated the WiFi Direct Mode SSID password.

5. Casting from Android device with Miracast (Recommended)

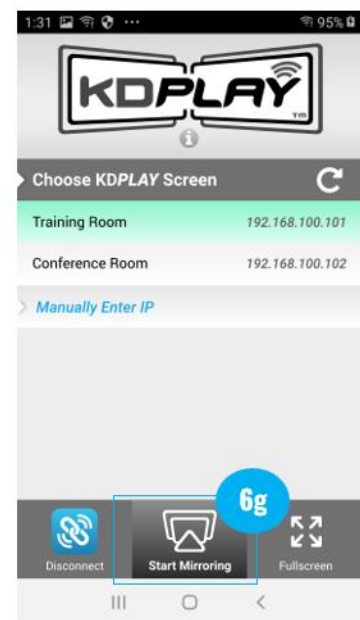
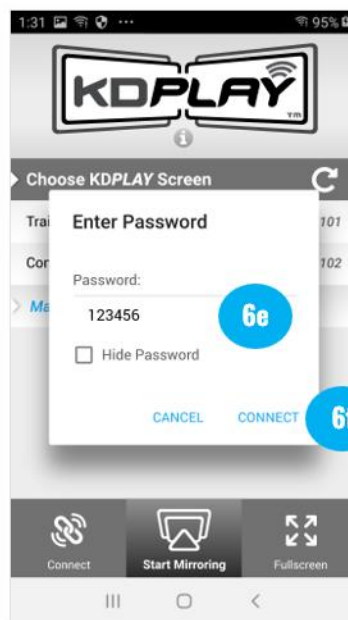
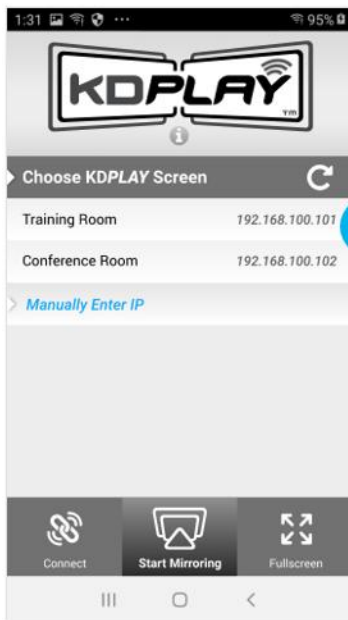
- a. On your Android device, navigate to **Settings → Connected Devices → Smart View**
- b. Allow a moment for the available devices on the network to populate,
- c. Select **KD-BYOD4KHub** from the list.

Note: AV Casting only, no wireless USB device connectivity supported.




6. Casting from Android device with KDPlay App:

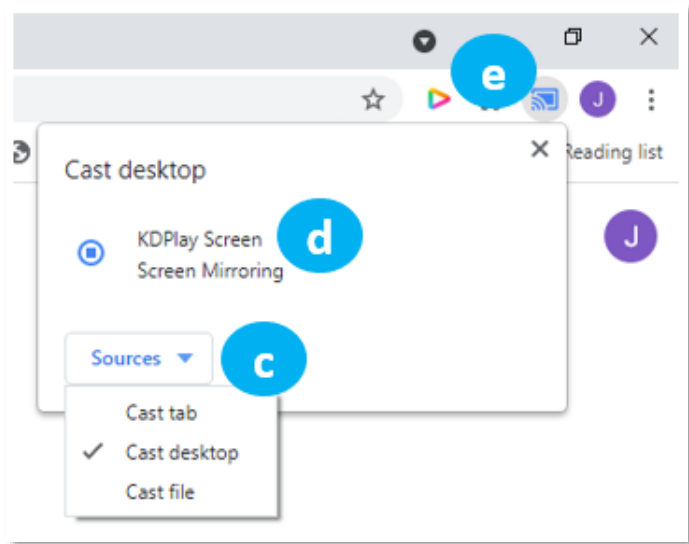
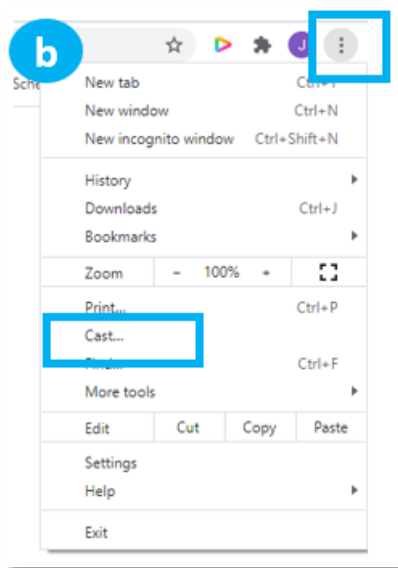
- a. Open **Google Play** and download **KDPlay™** app
- b. Ensure that you are connected to appropriate WiFi network, as instructed on Home Screen.
- c. Run **KDPlay™** app
- d. Choose desired **KDPlay** screen you wish to cast to.
- e. Enter the KD-BYOD4KHUB device’s password, as displayed on Home Screen.
- f. Press **CONNECT** button. You are now paired with the KD-BYOD4KHUB device, but not yet Casting.
- g. Press **START MIRRORING** to begin casting your content.



Android KDPlay App Notes: Android currently supports video streaming only, not audio. For audio support, Miracast is the recommended casting method. To reduce mobile device battery consumption, please disconnect from KD-BYOD4KHUB and completely close the app when done using.

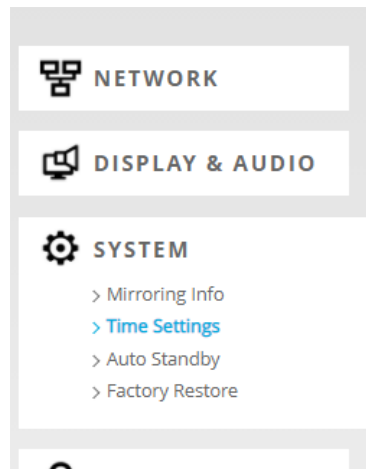
7. Casting from Chrome OS / Chrome Browser:

- a. Open Chrome browser.
- b. In top-right corner, press the vertical ellipsis “⋮” button and choose **Cast...**
- c. Select the desired **Share Source** (browser tab, desktop, or file) in the dropdown menu.
 - i. **Note:** Choose desktop if you wish to cast from YouTube.
- d. Click the KD-BYOD4KHUB device you wish to cast to.
- e. You may now use the  casting icon to enter the Casting menu and toggle casting state.

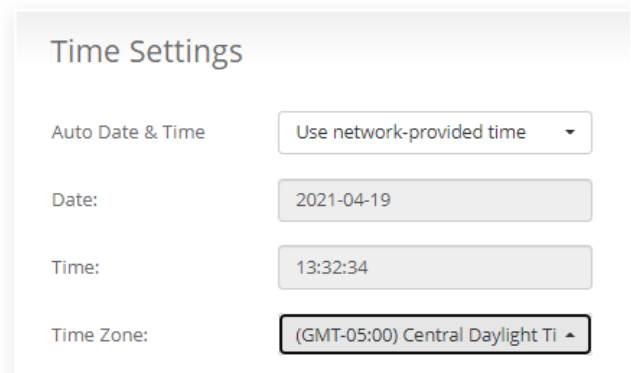


Chrome OS Casting Notes

Two maximum Chrome OS devices may simultaneously cast to KD-BYOD4KHUB. For Chrome OS support, KD-BYOD4KHUB must be on an internet-enabled network and the KD-BYOD4KHUB time setting **Use Network-Provided Time** applied with correct time zone selected. The casting device must be in same subnet for chromecast casting. Power cycle KD-BYOD4KHUB after updating time and/or network settings. If the updated device name is not shown after applying, close all existing Chrome browser sessions, power cycle KD-BYOD4KHUB, and open a new browser window. Moderator preview not supported for devices casting without KDPlay app.




System Settings

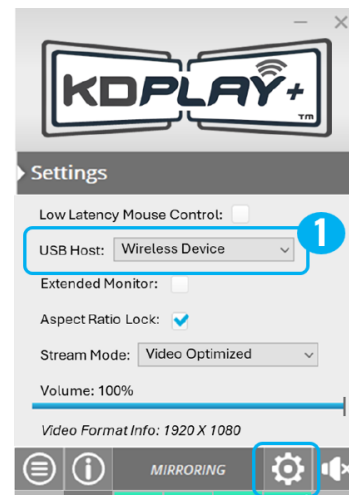


Conference

Use the KDPlay+ application on a Windows or Mac computer to wirelessly receive your USB camera and audio devices connected to KD-BYOD4KHub.

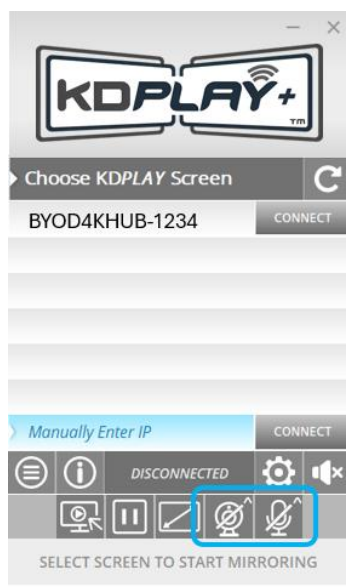
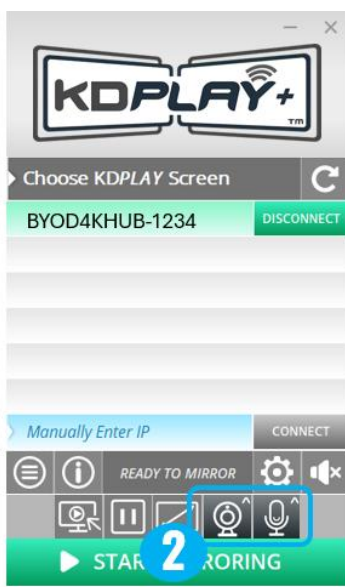
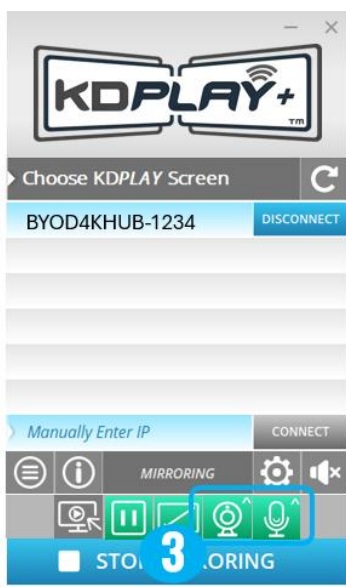

Note: if you wish to receive the connected USB Camera, Audio, or HID devices to a hardwired computer Host, KDPlay+ is not needed.


- In the KDPlay+ app, press the **Settings**  button and ensure **Wireless Device** is the selected USB Host.
- Connected camera and audio device are indicated by dark-grey buttons in the KDPlay+ app.
 - This is also indicated on the Home Screen:

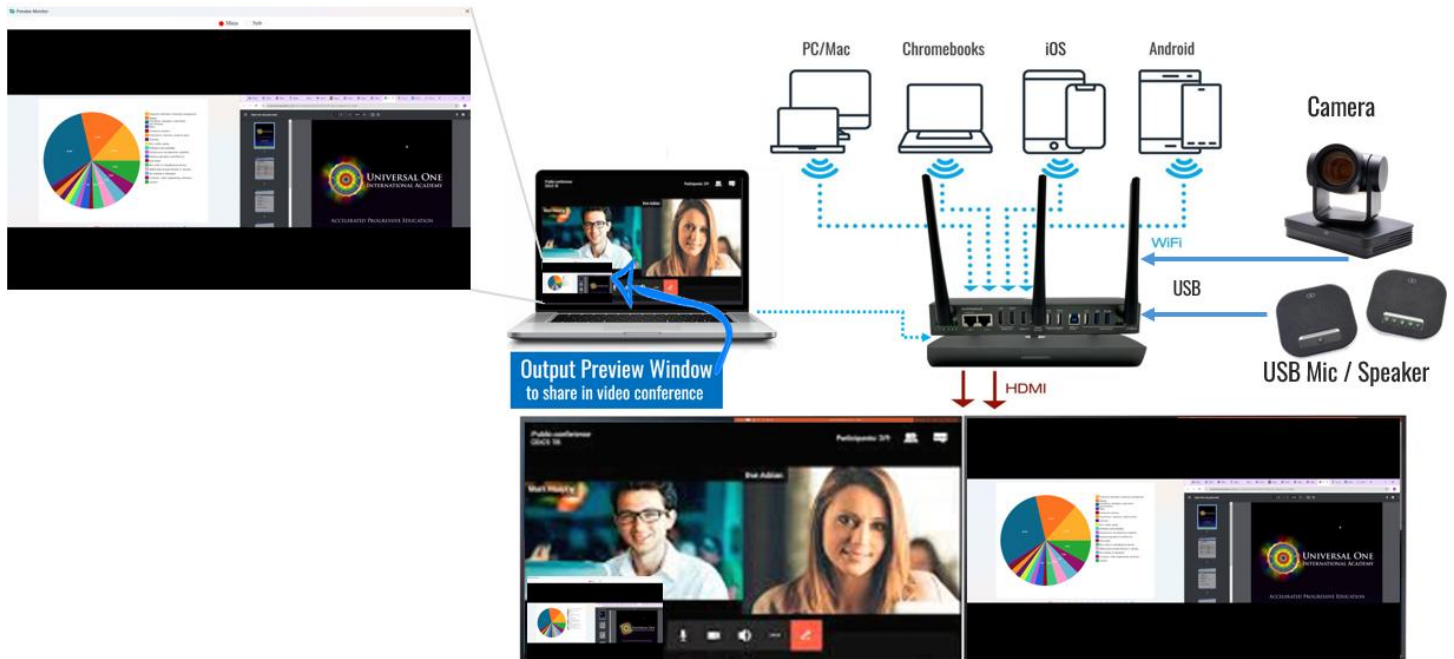


- | | | | |
|---|-------------------------------------|---|--------------------------------|
|  | = Cam Connected, Wireless Host |  | = Cam Disconnected, Wired Host |
|  | = Audio Disconnected, Wireless Host |  | = Audio Connected, Wired Host |

- Open your desired Video Conference or camera software and choose the “Virtual Meeting Camera” and / or “Virtual Meeting Audio” and the buttons turn green indicating the camera / audio device is now in use by the PC.
- If multiple USB camera / audio devices are connected, press the Camera / Audio button to open a drop-down selection menu.

			
No Cam / Audio connected	Cam / Audio connected	Cam / Audio In Use at KDPlay+ PC	Camera / Audio device selection (in Compact viewing mode)

6. Press  the **Preview Monitor** button to open a window in the PC which mirrors the content on your selected display (main or sub) and can be used in your video conference software screenshare for remote conference participants to see the casted content.
 - i. Note: Two maximum contents supported in Preview Monitor screen.
- b. When done casting and conferencing, disconnect from Virtual audio driver as instructed in step [3K](#) above.

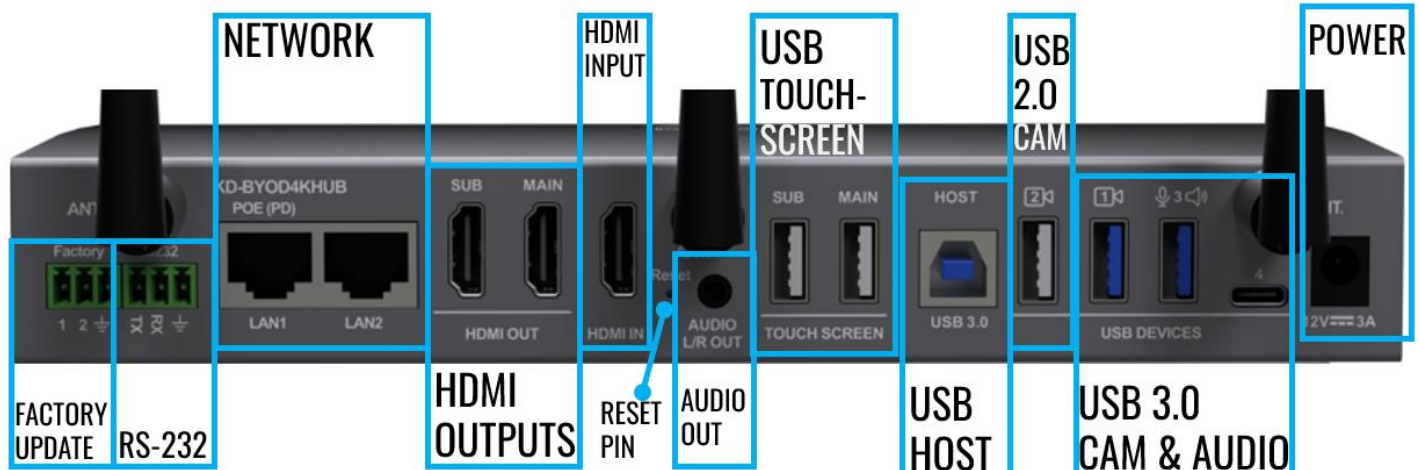


Chrome OS Casting Notes

Two maximum Chrome OS devices

Connections, Buttons, and LEDs

Rear Panel



Factory:

- Used by Key Digital Engineering for in-factory updates only.

RS-232:

- Executes RS-232 commands to control connected monitor(s).

Network:

- Connect to the networks you wish to cast via.
- LAN 1: 1Gbps bandwidth. PoE (PD) for powering KD-BYOD4KHub from PoE network switch.
- LAN 2: 100Mbps bandwidth.

HDMI Outputs:

- Connect up to 2 displays, referred to as Main & Sub.
- Supports following layout options:
 - Mirrored (default) = Up to 4 presenters with Main and Sub display showing identical content.
 - Full-Screen + Multi-View = Primary presenter on Main + up to 4 presenters on Sub display.
 - Multi-View + Full-Screen = Up to 4 presenters on Main + 1 presenter on Sub display.
- To achieved Extended/Dual Monitor from 1 PC, **utilize 2 sharing methods at same time:**
 - Wired HDMI + Wireless
 - Wireless (Windows): KDPlay+ & Miracast
 - Wireless (Mac): KDPlay+ & AirPlay
- Supports up to 4K @ 30/50/60 fps [4:4:4], 18Gbps
- Supports 2h PCM audio maximum.
- Non-HDCP Compliant

HDMI Input:

- Connect a wired computer for presentations or video conference host
- When connected with active signal, acts as a casting device.
- Supports up to 1080p @ 50/60 fps.
- Supports 2h PCM audio maximum.
- Non-HDCP compliant.
- Recommended for PCs and Cameras only. Other HDMI devices not recommended.

Reset Pin:

- Press & hold inner pin for approx. 5 seconds until HDMI output(s) go to bootup screen and LED on top of unit changes to **red** color.
- All settings will reset to factory default

Audio Out:

- 3.5mm stereo jack with de-embedded audio of the presented content(s).

USB Touch Screen (2):

- Connect if Main or Sub displays are touchscreen.
- Connect in accordance with “Main” and “Sub” HDMI output connectivity.
- Also supports mouse and keyboard.
- Do not use with USB hubs or other USB device types.
- Provides 5V 500mA power.
- Supports USB 2.0 and previous.

USB Host:

- Used for connecting wired USB host (ie computer, conferencing appliance) so the Host may receive connected USB devices (ie camera, audio, mouse, etc).
- When connected, USB Host connectivity defaults to USB Host port.
- Use *KDPlay+* app or USB Switch button to toggle between wired or wireless USB Host .
- Supports USB 3.0 and previous.

USB 2.0 Cam:

- The connected camera will be routed to the host PC (wireless or wired).
- If more than one cameras are connected, use *KDPlay+* app or USB Switch button to toggle between cameras.
- Provides 5V 500mA power.
- Supports USB 2.0 and previous. USB Video Class (UVC) and USB Audio Class (UAC) supported.

USB 3.0 Cam & Audio (3):

- The connected devices will be routed to the host PC (wireless or wired).
- Follow port labelling for USB camera and/or audio connectivity.
- For All-In-One devices (ie conferencing soundbar with integrated camera), use the Cam 1 port.

- If more than one cameras are connected, use *KDPlay+* app or USB Switch button to toggle between cameras.
- Provides 5V 900mA power.
- Supports USB 3.0 and previous. USB Video Class (UVC) and USB Audio Class (UAC) supported.

Power:

- Connect if not utilizing PoE power.

Side Panel**Power Button:**

- Used to toggle the unit out of / into standby mode

USB Switch Button:

- Has two modes of functionality, as set in the Admin menu:
 - Camera Toggle (Default): Routes between Camera 1 (USB 3.0) and Camera 2 (USB 2.0).
 - USB Host Toggle: Choose USB Host wired and wireless.

USB 2.0 KD-BYODFD (AKA *KDPlay* Flash) Pairing Ports:

- Connect KD-BYODFD flash into either port to pair.
- Synchronizes network information into *KDPlay* Flash Drive (KDBYODFD), to enable automatic joining of WiFi network and connection to base unit.

KDPlay+ App Walkthrough

Note that KDPlay+ is also compatible with KD-BYOD4K

Firs gen wireless presentation device,
but only KD-BYOD4KHub supports
conferencing widgets.

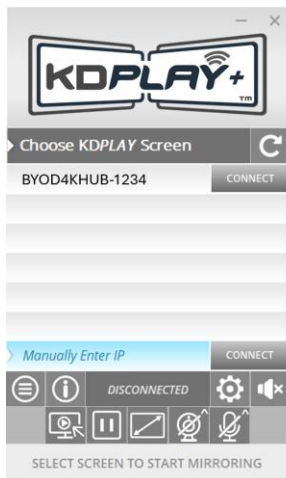
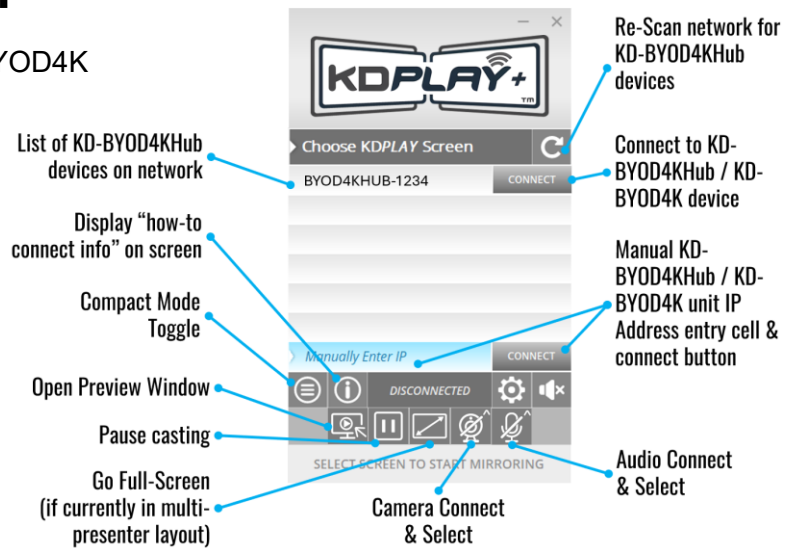
PC Requirements:

Windows: Windows 10 or above

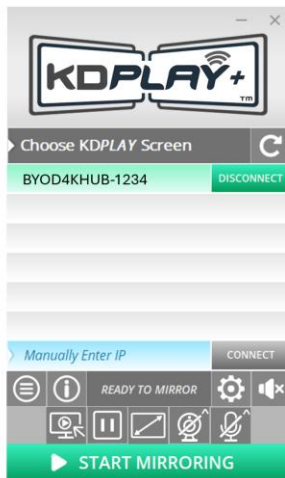
Mac: MacOS 10.15 or above

Minimum Processing Speed: 2GHz / 2.5GHz

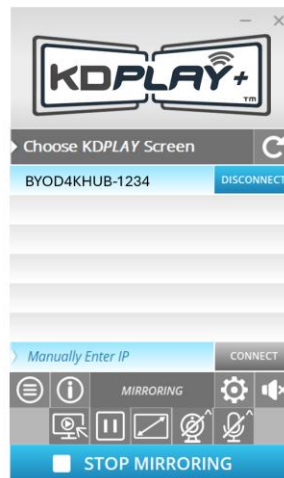
RAM: Minimum 4GB / 8 GB Recommended



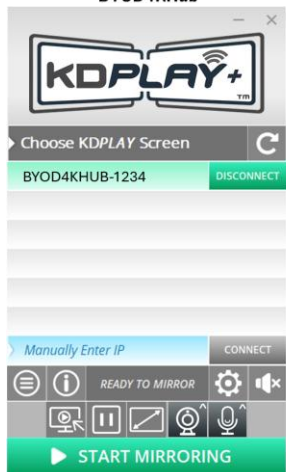
App is not connected to KD-BYOD4KHub



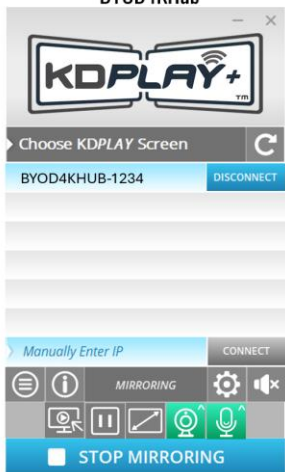
App is connected to KD-BYOD4KHub



App is connected and casting to KD-BYOD4KHub



App is connected to KD-BYOD4KHub and Camera / Audio devices are available



App is connected to KD-BYOD4KHub, Camera / Audio devices are In Use on Wireless Host PC



App is in Compact Mode

Custom Home Screen Image

A custom home screen background image may be loaded and selected

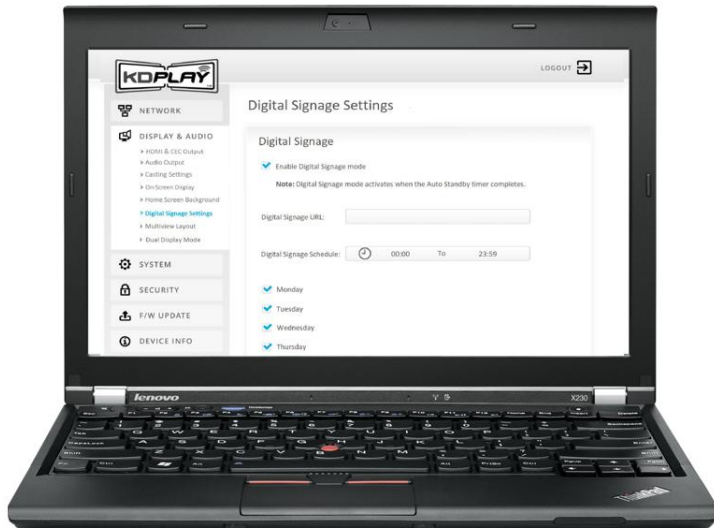
- Enter the **Admin Menu**, choose **Display & Audio**, and **Home Screen** background.
 - Press the "+" thumbnail to browse and choose your image.
 - The custom image must be 1920x1080 resolution with 72 dpi.
- **Lock Instructional Banner** setting is applied by default so KD-BYOD4KHUB's connection information always appears at the top of the home screen.
- The Instructional Banner is 73 pixels tall. It may be necessary to adjust the vertical centering of your custom image to ensure the top part of the image is not covered by the instructional banner.
- White background colors will look cleanest.

The screenshot shows the KDPLAY web interface. On the left is a sidebar menu with categories: NETWORK, DISPLAY & AUDIO (selected), SYSTEM, SECURITY, and F/W UPDATE. Under DISPLAY & AUDIO, the following options are listed: HDMI Output, Audio Output, Airplay Picture Quality, On-Screen Display, Home Screen Background (selected), and Multiview Layout. The main content area is titled 'Display & Audio Settings' and contains a 'Home Screen Background' section. This section shows a 'Quick Connect' panel, a 'KDPLAY Connection Options' panel, and a gallery of images. One image, 'Heart Sauce', is selected and highlighted with a blue border. To its right is a large grey '+' icon for adding a new image. Below the image gallery, there is a checked checkbox labeled 'Lock instructional banner when using custom background image'. A 'Notes' section follows, containing two bullet points: 'Custom image must be 1920X1080 resolution with 72 dpi.' and 'Instructional banner is 73 pixels tall. You may need to adjust the vertical centering of your custom image if instructional banner is locked.'

Digital Signage Mode

When enabled, KD-BYOD4KHub will automatically display the entered URL web page on its HDMI outputs when the auto standby timer completes.

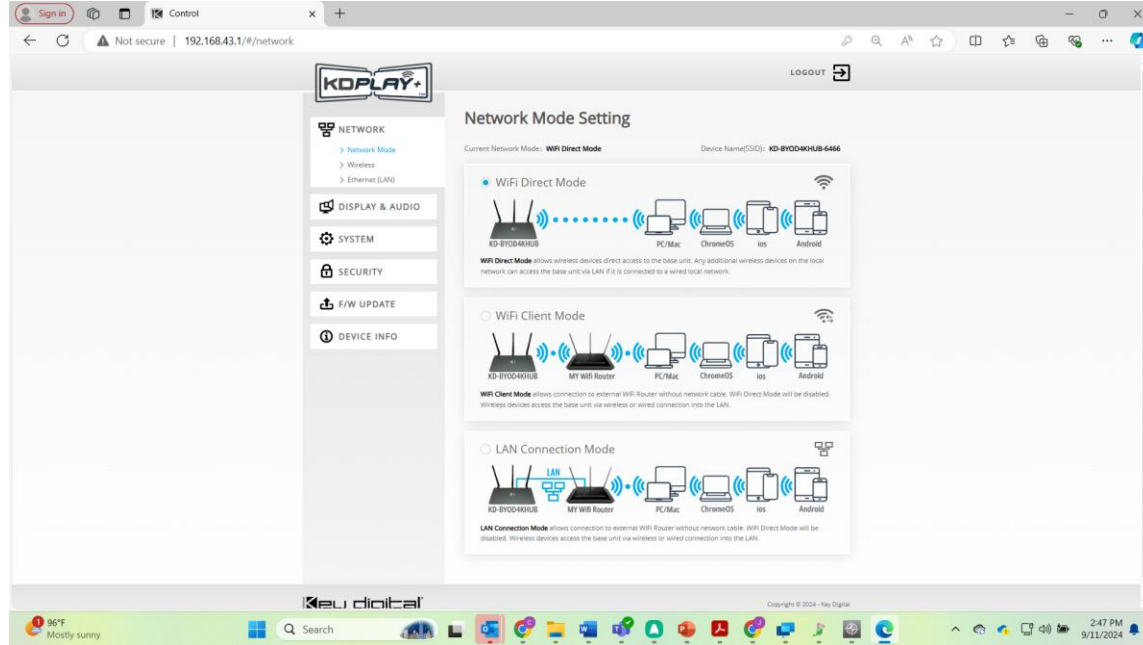
- Use the Admin menu to enter desired start / stop schedule and URL to display.
- Enter entire URL, including http:// or https:// at beginning of web address.
- Video and audio from the web page are supported.
- Video auto-play functions on sites such as YouTube are not supported. Page loads, and play must be pressed.



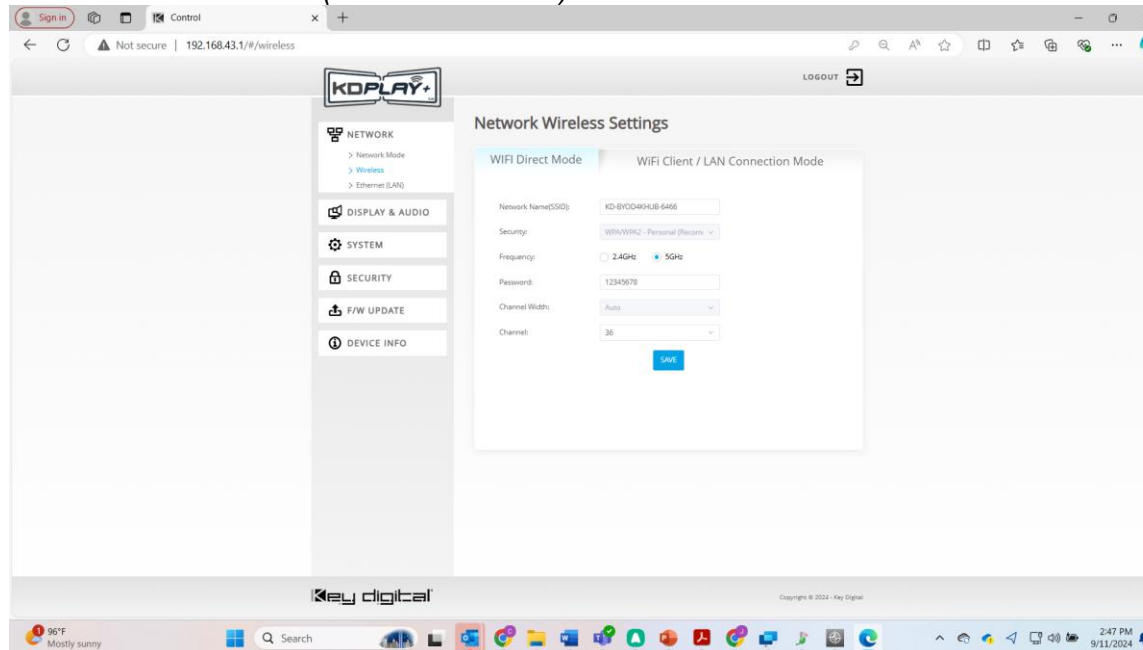
Admin Menu Walkthrough

Log into the web UI by entering the unit's IP address as shown on the HDMI connected monitor into your web browser and selected **ADMIN ACCESS**, then entering the admin password.

1A: Network – Network Mode



1B: Network – Wireless (WIFI Direct Mode)



1C: Network – Wireless (LAN Connection Mode)

Network Wireless Settings

WIFI Direct Mode | **WIFI Client / LAN Connection Mode**

Network Name(SSID): KD-BYOD4KHUB-6466

KD-BYOD4KHUB Password: 12345678

Note: You must connect a network cable to the KD-BYOD4KHUB unit.

Frequency: 2.4GHz 5GHz

WIRELESS SCANNER

SSID: ..

Password: [Field] CONNECT

Connection: No Connection

SAVE

1D: Network – Ethernet (LAN)

Ethernet(LAN) Setting

LAN1 | LAN2

Obtain IP Address Automatically Use the following IP address

IP address: 0.0.0.0

Mask: 0.0.0.0

Gateway: 0.0.0.0

DNS1: 0.0.0.0

DNS2: [Field]

MAC: 60:89:B1:38:10:04

SAVE

2A: Display Audio - HDMI & CEC Output

The screenshot shows a web browser window with the URL `192.168.100.176/#/hdm`. The page features the KDPLAY+ logo and a navigation sidebar with categories: NETWORK, DISPLAY & AUDIO (selected), SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. Under DISPLAY & AUDIO, the sub-menu 'HDMI & CEC Output' is active. The main content area is titled 'HDMI and CEC' and contains two sections: 'HDMI Output' with dropdowns for 'HDMI Output (Main) Resolution' (set to 'Auto') and 'HDMI Output (Sub) Resolution' (set to 'Select'); and 'CEC Options' with two unchecked checkboxes: 'Enable Display Control' and 'Accept From Display'. The footer includes the Key digital logo and 'Copyright © 2024 - Key Digital'. The Windows taskbar at the bottom shows a temperature of 96°F, a search bar, and system icons for time (2:54 PM) and date (9/11/2024).

2B: Display Audio – Audio Output

The screenshot shows a web browser window with the URL `192.168.100.176/#/audio`. The page features the KDPLAY+ logo and a navigation sidebar with categories: NETWORK, DISPLAY & AUDIO (selected), SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. Under DISPLAY & AUDIO, the sub-menu 'Audio Output' is active. The main content area is titled 'Display & Audio Settings' and contains an 'Audio Output' section with a dropdown menu set to 'Audio Line Output & HDMI' and an 'Audio Volume' slider with an 'Audio Mute' checkbox. The footer includes the Key digital logo and 'Copyright © 2024 - Key Digital'. The Windows taskbar at the bottom shows a temperature of 96°F, a search bar, and system icons for time (2:59 PM) and date (9/11/2024).

2C: Display Audio – Casting Settings

The screenshot shows the KDPLAY+ web interface for Casting Settings. The browser address bar shows the URL `192.168.100.176/#/nativeProtocol`. The interface includes a sidebar with navigation options: NETWORK, DISPLAY & AUDIO (with sub-options: HDMI & CEC Output, Audio Output, Casting Setting, On-Screen Display, Home Screen Background, Digital Signage Setting, Multiview Layout, Dual Display Modes), SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. The main content area is titled "Casting Settings" and contains three sections: "Airplay" (Enable Airplay: checked, Video Resolution: High (1920x1080)), "Miracast" (Enable Miracast: checked, Enable MS-MICE: unchecked), and "Chromecast" (Enable Chromecast: checked). Two notes are provided: Note 1 regarding Chrome OS support and Note 2 regarding security level settings. The footer shows the Key digital logo and copyright information for 2024.

2D: Display Audio – On-Screen Display

The screenshot shows the KDPLAY+ web interface for On-Screen Display settings. The browser address bar shows the URL `192.168.100.176/#/screen`. The interface includes a sidebar with navigation options: NETWORK, DISPLAY & AUDIO (with sub-options: HDMI & CEC Output, Audio Output, Casting Setting, On-Screen Display, Home Screen Background, Digital Signage Setting, Multiview Layout, Dual Display Modes), SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. The main content area is titled "Display & Audio Settings" and contains the "On-Screen Display" section with three checkboxes: "Show base unit info when mirroring" (unchecked), "Show mirroring device info when mirroring" (checked), and "Automatically share HDMI input content" (checked). A note states: "Note: HDMI input presenter is added to the queue of casting devices and may be selected from the moderator panel if not immediately viewed on display." The footer shows the Key digital logo, a volume slider set to 100, and copyright information for 2024.

2E: Display Audio – Home Screen Background

The screenshot shows a web browser window with the URL `192.168.100.176/#/background`. The page features the KOPLAY+ logo and a navigation menu on the left with categories: NETWORK, DISPLAY & AUDIO, SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. The 'DISPLAY & AUDIO' section is expanded to show options like HDMI & CEC Output, Audio Output, Casting Setting, On-Screen Display, Home Screen Background (selected), Digital Signage Setting, Multiview Layout, and Dual Display Modes. The main content area is titled 'Display & Audio Settings' and contains a 'Main Home Screen Background' section with a preview image and a '+' button, and a 'Sub Home Screen Background' section with a similar preview and button. Below these are two checked options: 'Lock instructional banner when using custom background image' and 'Auto hide dock arrow when no USB is connected.' A 'Notes' section lists requirements for custom images (4K resolution, 72dpi, 73px tall banner). A 'Moderator Sidebar' dropdown is set to '1'. The footer includes the Key digital logo and copyright information.

2F: Digital Signage Setting

The screenshot shows a web browser window with the URL `192.168.100.176/#/digitalSignage`. The page features the KOPLAY+ logo and a navigation menu on the left with categories: NETWORK, DISPLAY & AUDIO, SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. The 'DISPLAY & AUDIO' section is expanded to show options like HDMI & CEC Output, Audio Output, Casting Setting, On-Screen Display, Home Screen Background, Digital Signage Setting (selected), Multiview Layout, and Dual Display Modes. The main content area is titled 'Digital Signage Settings' and contains a 'Digital signage' section with a checked option 'Enable Digital Signage mode'. A note states: 'Digital signage activates when the Auto Standby timer completes.' Below this is a 'Digital Signage URL' field with a placeholder text: 'You need add prefix "https://" before website like "https://www.google.com/"'. A 'Digital Signage Schedule' section shows a time range from 08:00 to 20:00 and a list of days from Monday to Sunday, all of which are unchecked. A blue 'SAVE' button is located at the bottom of the settings panel. The footer includes the Key digital logo and copyright information.

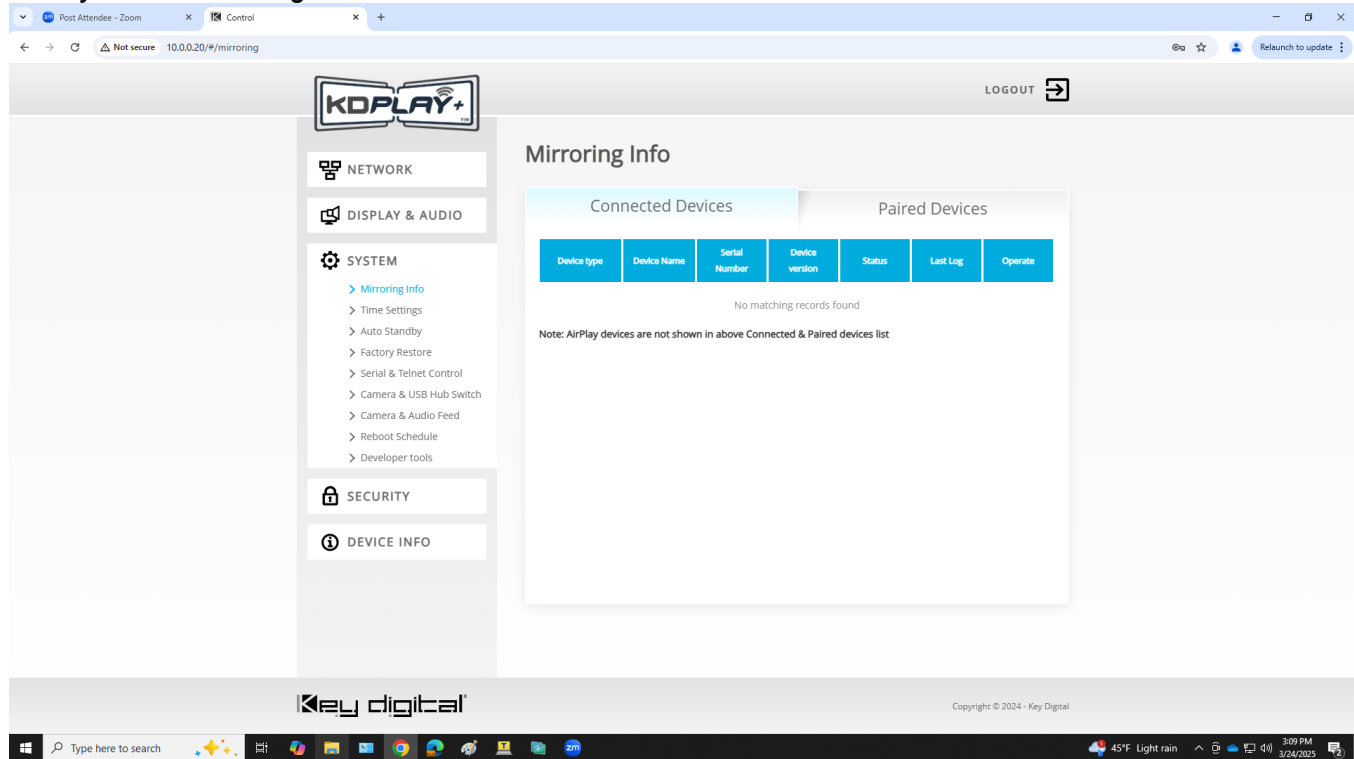
2G: Display Audio – Multiview Layout

The screenshot shows a web browser window displaying the KDPLAY+ control interface. The page title is "Multiview Layout". On the left, a navigation menu includes categories like NETWORK, DISPLAY & AUDIO (with sub-items like HDMI & CEC Output, Audio Output, Casting Setting, On-Screen Display, Home Screen Background, Digital Signage Setting, Multiview Layout, and Dual Display Modes), SYSTEM, SECURITY, F/W UPDATE, and DEVICE INFO. The main content area shows "Multiview Layout" with two sections: "Layout with 3 casting devices" and "Layout with 4 casting devices", each displaying several grid-based layout options. The footer includes the Key digital logo and "Copyright © 2024 - Key Digital". The Windows taskbar at the bottom shows a temperature of 96°F, a search bar, and the date/time as 3:01 PM on 9/11/2024.

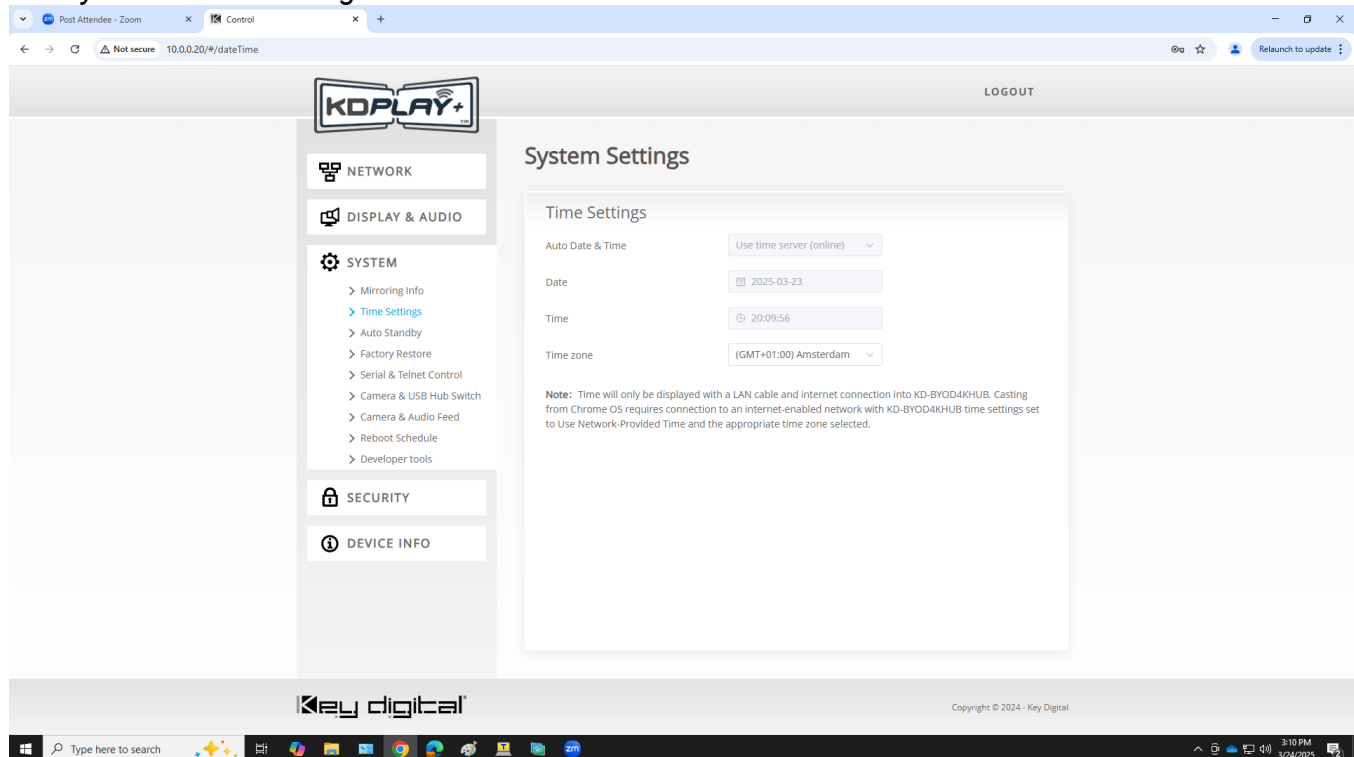
2H: Dual Display Modes

The screenshot shows the KDPLAY+ control interface for "Dual Display Modes". The navigation menu is similar to the previous page, with "Dual Display Modes" selected under the "DISPLAY & AUDIO" category. The main content area is titled "Dual Display Modes" and contains a "Dual-display Output Mode Setting" section. It features three radio button options: "Duplicate Monitors" (which is selected), "Out 1 (Main): Fullscreen, Out 2 (Sub): Multiview", and "Out 1 (Main): Multiview, Out 2 (Sub): Fullscreen". Below these options, a note states: "*Note: To achieve dual extended monitor output from one PC, you must cast using two different methods and select extended monitor mode." Three methods are listed: "Wired + Wireless: Using HDMI connection + casting with KDPlay Hub app", "Wireless (Window): Using KDPlay Hub™ app + MiraCast", and "Wireless (Mac): Using KDPlay Hub™ app + Airplay". The footer and Windows taskbar are consistent with the previous screenshot.

3A: System – Mirroring Info



3B: System – Time Settings



3C: System - Auto Standby

The screenshot shows a web browser window displaying the KDPLAY+ System Settings interface. The browser's address bar shows the URL "10.0.0.20/#/standby". The page features a navigation sidebar on the left with categories: NETWORK, DISPLAY & AUDIO, SYSTEM (with sub-items: Mirroring Info, Time Settings, Auto Standby, Factory Restore, Serial & Telnet Control, Camera & USB Hub Switch, Camera & Audio Feed, Reboot Schedule, Developer tools), SECURITY, and DEVICE INFO. The main content area is titled "System Settings" and contains the "Auto Standby" section, which includes a dropdown menu currently set to "Never". A "LOGOUT" button is located in the top right corner. The footer of the page includes the "Key digital" logo and the text "Copyright © 2024 - Key Digital". The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray information including "45°F Light rain" and the date "3/24/2023".

3D: System – Factory Restore

The screenshot shows the same KDPLAY+ System Settings interface as in the previous image, but with the "Factory Restore" section selected. The browser's address bar now shows "10.0.0.20/#/reset". In the main content area, the "Factory Restore" section displays the text "Revert all settings to factory defaults." and a prominent blue button labeled "FACTORY RESTORE". The "SYSTEM" sidebar item is now highlighted in blue. The rest of the page layout, including the navigation sidebar, "LOGOUT" button, and footer, remains consistent with the previous screenshot. The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray information including "3:11 PM" and the date "3/24/2023".

3E: System – Serial & Telnet Control

The screenshot shows a web browser window displaying the 'Serial RS-232 and Telnet Control' page. The browser tabs include 'Post Attendee - Zoom' and 'Control'. The address bar shows '10.0.0.20/#/serial'. The page features a 'KDPLAY+' logo and a 'LOGOUT' button. A left sidebar contains navigation menus for NETWORK, DISPLAY & AUDIO, SYSTEM (with sub-items like Mirroring Info, Time Settings, Auto Standby, Factory Restore, Serial & Telnet Control, Camera & USB Hub Switch, Camera & Audio Feed, Reboot Schedule, and Developer tools), SECURITY, and DEVICE INFO. The main content area is titled 'Serial RS-232 and Telnet Control' and includes sections for 'Telnet Control' (with 'Enable telnet' checked), 'Serial RS-232 Control' (with 'Enable Serial RS-232' checked and settings for Baud Rate: 115200, Data Bits: 8, Stop Bits: 1, Parity: NONE, and Flow Control: NONE), and 'External Device Control' (with 'Send Data' selected). A table lists trigger events: Power On, Enter Standby, and Exit Standby, each with an 'Enable' checkbox, an 'Event Delay (ms)' input field (all set to 1000), and an 'Event Data' input field. A 'SAVE' button is at the bottom. A note at the bottom states: 'Command Data is 64 characters maximum. To send HEX data, add "\x" before the HEX values. IE: "\x28". "Send Data" must be selected for External Device Control feature.'

3F: Camera & USB Hub Switch

The screenshot shows a web browser window displaying the 'Camera & USB Hub Switch' page. The browser tabs include 'Post Attendee - Zoom' and 'Control'. The address bar shows '10.0.0.20/#/usb'. The page features a 'KDPLAY+' logo and a 'LOGOUT' button. A left sidebar contains navigation menus for NETWORK, DISPLAY & AUDIO, SYSTEM (with sub-items like Mirroring Info, Time Settings, Auto Standby, Factory Restore, Serial & Telnet Control, Camera & USB Hub Switch, Camera & Audio Feed, Reboot Schedule, and Developer tools), SECURITY, and DEVICE INFO. The main content area is titled 'Camera & USB Hub Switch' and includes a section for 'USB Camera & USB Hub Switch' with 'Toggle Camera' (Camera selected: Camera1) and 'Toggle Host PC' (Host PC selected: Wireless). A note at the bottom states: '*Note: "Wired" routes connected USB devices through USB 3.0 Host port. "Wireless" routes connected USB devices to a PC casting wirelessly.'

3G: Camera & Audio Feed > Camera Tab

The screenshot shows a web browser window displaying the KDPLAY+ control interface. The address bar shows '10.0.0.20/#/ucc'. The interface has a sidebar with categories: NETWORK, DISPLAY & AUDIO, SYSTEM (with sub-items like Mirroring Info, Time Settings, Auto Standby, Factory Restore, Serial & Telnet Control, Camera & USB Hub Switch, Camera & Audio Feed, Reboot Schedule, and Developer tools), SECURITY, and DEVICE INFO. The main content area is titled 'Camera and Audio' and has two tabs: 'Camera Live Feed' (selected) and 'Audio Settings'. Under 'Camera Live Feed', there is a blue button labeled 'UCC-Device Scan...', a text instruction about UCC device scanning, and a 'Device list' dropdown menu set to 'Select'. Below this is a large greyed-out video feed area with a camera icon and a diagonal slash. The Windows taskbar at the bottom shows the search bar, various application icons, and system tray information including 45°F, light rain, and the time 3:12 PM on 3/24/2025.

3H: Camera & Audio Feed > Audio Settings Tab

The screenshot shows the same KDPLAY+ control interface, but with the 'Audio Settings' tab selected. The 'UCC-Device Scan...' button is still present. Below the instructions, there are two sections: 'Speaker' and 'Microphone'. Each section has a 'Select' dropdown menu and a 'Detect' button (labeled 'Detect speakers' and 'Detect microphone' respectively). The 'Volume' label is present but the slider is not clearly visible. The sidebar and top navigation remain the same. The Windows taskbar at the bottom shows the search bar, application icons, and system tray information including 96°F, mostly sunny, and the time 3:06 PM on 9/11/2024.

3I: Reboot Schedule

The screenshot shows a web browser window with the URL `10.0.0.20/#/reboot`. The page features the **KDPLAY+** logo and a navigation sidebar with categories: NETWORK, DISPLAY & AUDIO, SYSTEM, SECURITY, and DEVICE INFO. The SYSTEM category is expanded, showing options like Mirroring Info, Time Settings, Auto Standby, Factory Restore, Serial & Telnet Control, Camera & USB Hub Switch, Camera & Audio Feed, **Reboot Schedule**, and Developer tools. The main content area is titled **Reboot Schedule** and includes a **Timing Reboot** section with the following controls:

- Enable Scheduled Reboot
- Scheduled Reboot Time:
- Note: Ensure the system time is properly set, otherwise, the unit may reboot at the wrong time.
- Reboot Days: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday
- Buttons: UPDATE, Reboot now

The Windows taskbar at the bottom shows the system tray with the date `3/24/2025` and time `3:12 PM`.

3J: Developer Tools

The screenshot shows a web browser window with the URL `10.0.0.20/#/developer`. The page features the **KDPLAY+** logo and a navigation sidebar with categories: NETWORK, DISPLAY & AUDIO, SYSTEM, SECURITY, and DEVICE INFO. The SYSTEM category is expanded, showing options like Mirroring Info, Time Settings, Auto Standby, Factory Restore, Serial & Telnet Control, Camera & USB Hub Switch, Camera & Audio Feed, Reboot Schedule, and **Developer tools**. The main content area is titled **Developer tools** and includes a **Log** section with the following controls:

- Enable the maximum storage space for system logs and automatically turn off after 24 hours
- Button: Download system log

The Windows taskbar at the bottom shows the system tray with the date `3/24/2025` and time `3:12 PM`.

4A: Security – Security Level

The screenshot shows the KDPLAY+ web interface for Security Settings. The left sidebar contains navigation options: NETWORK, DISPLAY & AUDIO, SYSTEM, SECURITY (with sub-items Security Level and Login Password), F/W UPDATE, and DEVICE INFO. The main content area is titled 'Security Settings' and features a 'Security Level' table with 12 rows and 5 columns: Security Item, Level 1, Level 2, Level 3, and Preference. Below the table are radio buttons for 'Current Security Level' (Level 1, Level 2, Level 3, Preference) and a 'SAVE' button.

#	Security Item	Level 1	Level 2	Level 3	Preference
1	Enable login password for Webpage	✓		✓	✓
2	Auto-change password for Wireless	✓	✓	✓	✓
3	Encryption of Data: Proprietary	✓		✓	✓
4	Enable Airplay PIN code		✓	✓	<input type="checkbox"/>
5	Enable Miracast PIN code		✓	✓	<input type="checkbox"/>
6	Enable login password for Telnet		✓	✓	<input type="checkbox"/>
7	Encryption of Data: AES-256 Bit + RSA-1024Bit		✓	✓	<input type="checkbox"/>
8	Disable Android APK,IOS APP ,or Airplay		✓	✓	<input type="checkbox"/>
9	Disable "Firmware downgrade"			✓	<input type="checkbox"/>
10	Disable Miracast			✓	<input type="checkbox"/>
11	Disable KDPlay APK			✓	<input type="checkbox"/>
12	Disable "Chromecast casting"			✓	<input type="checkbox"/>

Current Security Level: Level 1 Level 2 Level 3 Preference

[SAVE](#)

4B: Security – Login Password

The screenshot shows the KDPLAY+ web interface for Security Settings, specifically the 'Password Setting' form. The left sidebar is identical to the previous screenshot. The main content area is titled 'Security Settings' and features a 'Password Setting' form with three input fields: 'Current password', 'New password', and 'Confirm new password'. Below the fields is an 'UPDATE PASSWORD' button.

Current password:

New password:

Confirm new password:

[UPDATE PASSWORD](#)

5A: FW Update – Firmware Update

Sign in Control x +

Not secure | 192.168.100.176/#/password

KDPLAY+ LOGOUT

Security Settings

NETWORK
DISPLAY & AUDIO
SYSTEM
SECURITY
 > Security Level
 > Login Password
F/W UPDATE
DEVICE INFO

Password Setting

Current password

New password

Confirm new password

UPDATE PASSWORD

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96°F Mostly sunny Search 3:06 PM 9/11/2024

6A: Device Info

Sign in Control x +

Not secure | 192.168.100.176/#/about

KDPLAY+ LOGOUT

Device Info

NETWORK
DISPLAY & AUDIO
SYSTEM
SECURITY
F/W UPDATE
DEVICE INFO
 > About Device

KDPlay Device Info

Model name	KD-BYOD4KHUB
Device Name(SSID)	KD-BYOD4KHUB-6466
Firmware Version	4.1.1C51.K2005
Web server version	1.21
WiFi MAC	2C:C3:E6:5D:6A:44

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Hot weather Now Search 3:07 PM 9/11/2024

Warranty Information

All Key Digital® products are built to high manufacturing standards and should provide years of trouble-free operation. They are backed by a Key Digital Limited 3 Year Product Warranty Policy.

<http://www.keydigital.com/warranty.htm>

Product Warnings & Safety Instructions



Important Product Warnings:

1. Connect all cables before providing power to the unit.
2. Test for proper operation before securing unit behind walls or in hard to access spaces.
3. If installing the unit into wall or mounting bracket into sheet-rock, provide proper screw support with bolts or sheet-rock anchors.



Safety Instructions:

Please be sure to follow these instructions for safe operation of your unit.

1. Read and follow all instructions.
2. Heed all warnings.
3. Do not use this device near water.
4. Clean only with dry cloth.
5. Install in accordance with the manufacturer's instructions.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
7. Only use attachments/accessories specified by the manufacturer.
8. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way including:
 - Damage to the power supply or power plug
 - Exposure to rain or moisture



Power Supply Use:

You MUST use the Power Supply provided with your unit or you VOID the Key Digital® Warranty and risk damage to your unit and associated equipment.