Firmware User Manual

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1. Introduction

This document describes the basic operation of the player and frequently asked questions.

1.1. Features

- Support for HTML5 widgets for dynamic content (W3C Widgets standard)
- Industry leading W3C SMIL support for developers
- Full HD 1080p or UHD 4K video (XMP-7300) hardware decoding of MPEG1/2/4, H.264, and VC-1 media formats
- Multiple 3rd party software solution compatibility

2. Configuring the Player

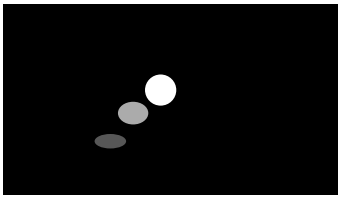
2.1. System connections

If it is a media player, connect it to a monitor via an HDMI cable or VGA cable(if applicable).

If it is a signboard (with built-in screen), no monitor is required. However, a signboard player can still be connected to a monitor via HDMI for larger display area.

When using an **HDMI connection**, audio is sent along with video over the HDMI cable, so no additional cables are required.

1 Attach the AC power adapter to power on the unit. After approximately 15 ***seconds***, the booting animation will be displayed on screen as shown below :

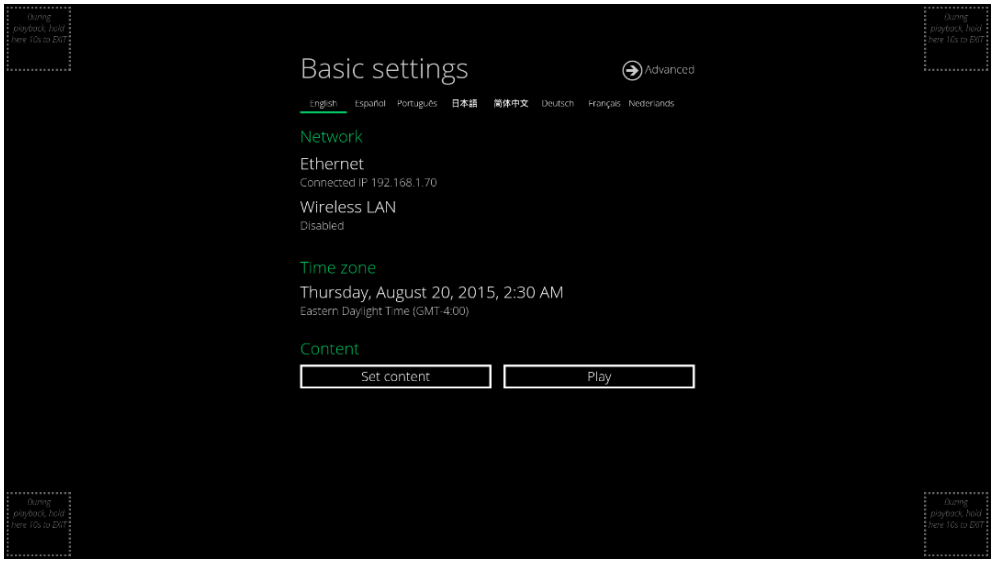


2 The boot-up process takes approximately 40 ***seconds*** to complete.

Troubleshooting Tips for media players

The operation indicators light up, but no video is displayed on screen

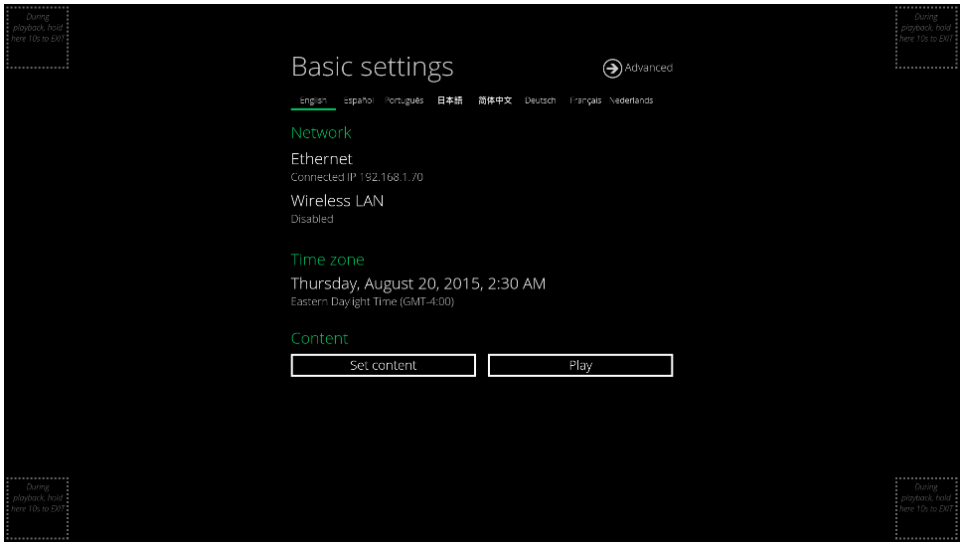
- Ensure that your video cable (HDMI/VGA) is securely connected. When using an HDMI connection, choose high quality, certified HDMI cables or try using shorter length cables
- Check if your monitor is turned on and the correct video input source is selected



After boot-up completes, player will stay in Basic settings menu if no content service has been configured (i.e. first boot-up for brand new unit or after a factory reset).If you have already set content into the player, contents will play back automatically after 15 seconds after boot-up.

2.2. Basic settings

You must attach a USB mouse to the player to configure settings. If the player has **touch screen**, then the USB mouse is not required, and all the click action can be replaced by tap action.



Basic settings:

– Network, Time zone and Content.

Each time the Basic settings menu is entered, playback will automatically begin after 15 seconds if content services have been previously set. Auto playback can be canceled by clicking on the button before the countdown ends.

User is able to enter Advanced Settings by clicking the Advanced button.

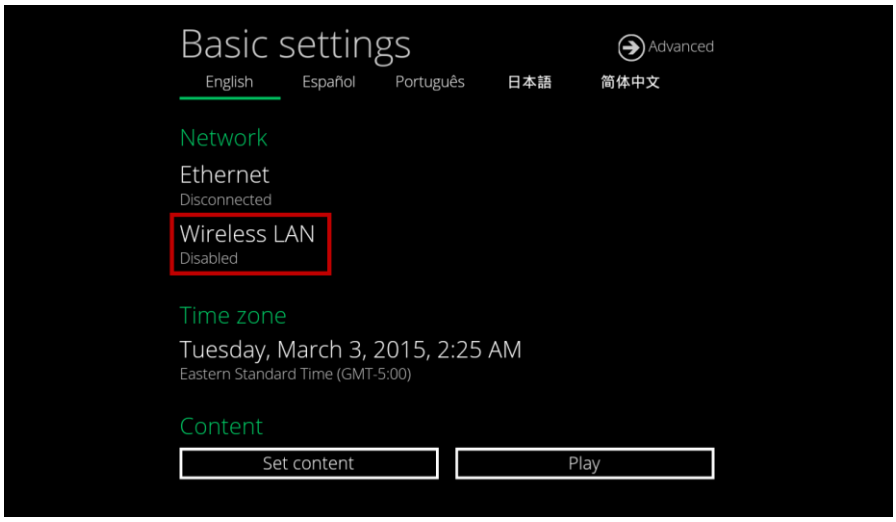
To enter the menu system at any time **during playback**, plug in a USB mouse and hold the left mouse key in the corner area as shown below for 10 seconds. If the player has touch screen, then tapping and holding in the corner areas for 10 seconds would also bring you to the menu.

*Player will ask for password if password has been configured.

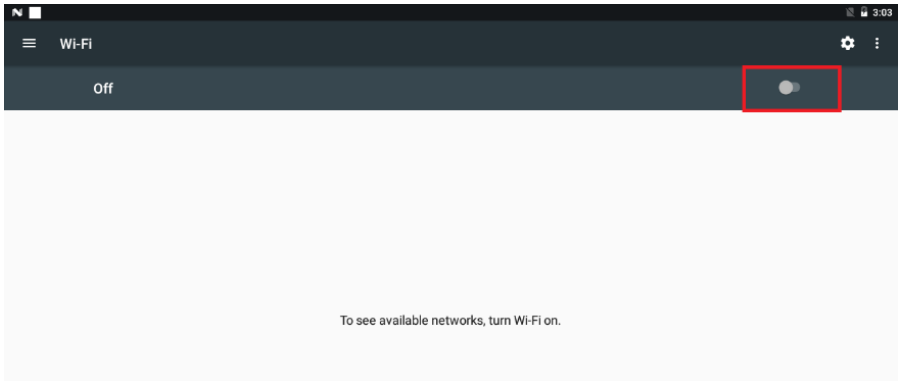
2.3. Connect the player to your network

Wireless connection

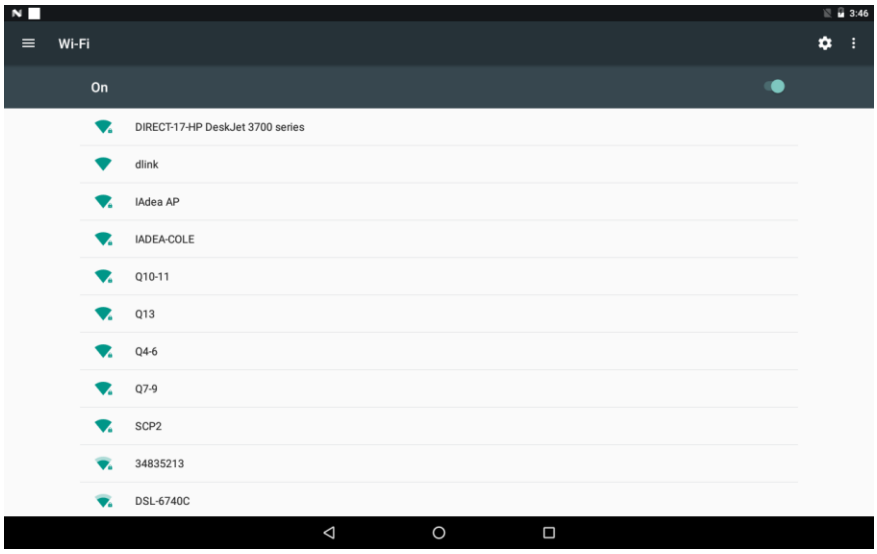
1 Click the **Wireless LAN** setting to launch the wireless configuration UI.



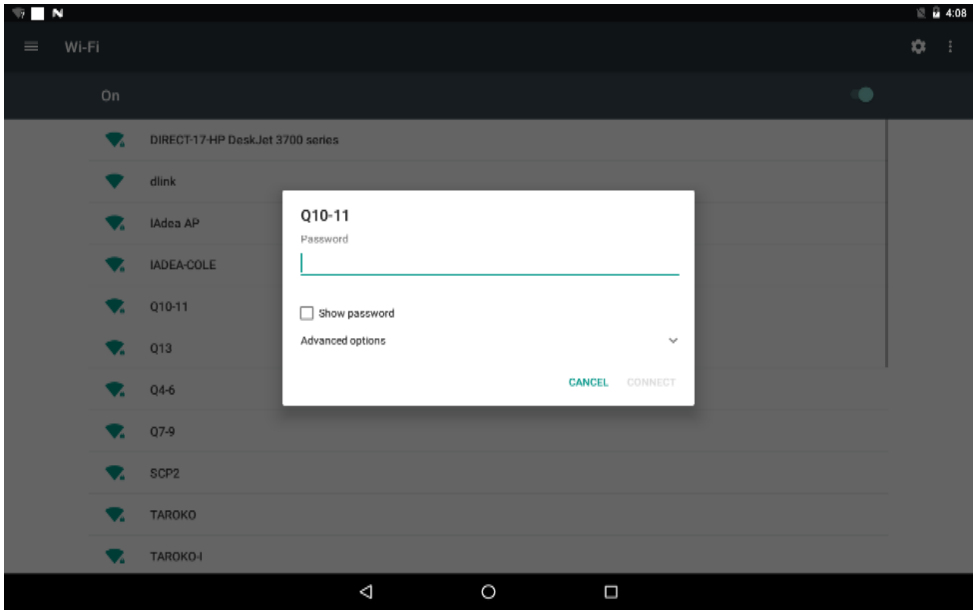
2 Click the **ON/OFF** button as indicated below to turn ON Wireless interface (network).



3 The player will scan for wireless signals nearby and available access points will be listed.

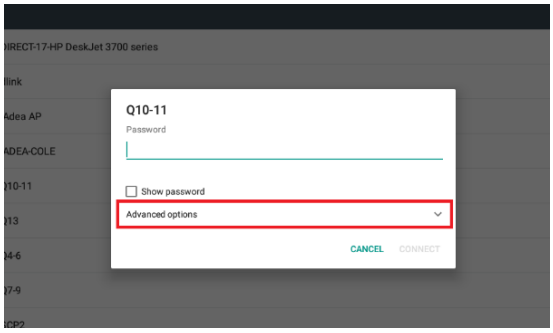


4 Click on the network ID to connect. If the network requires authentication, you will be asked to provide a password.

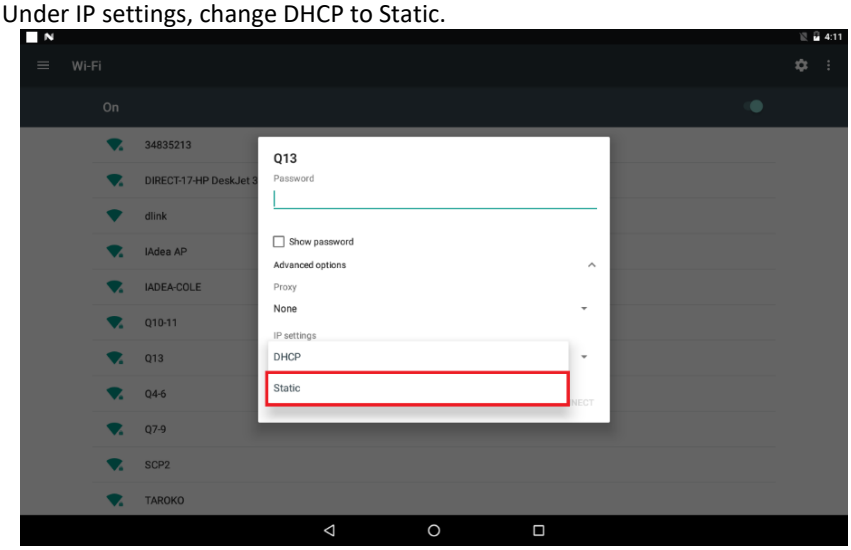


Static IP – manually assign network IP address

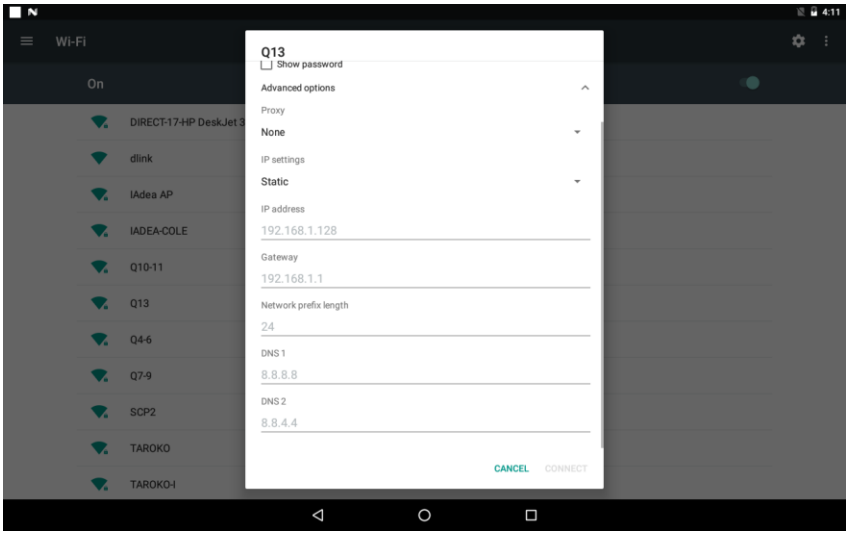
1 Click down arrow to hide keyboard if needed.
You can also scroll down/ swipe to see the rest of the menu.



2 Under IP settings, change DHCP to Static.



3 Fill the form and click Connect to complete the setting.
(Scroll down/ swipe to see the rest of the menu if needed)

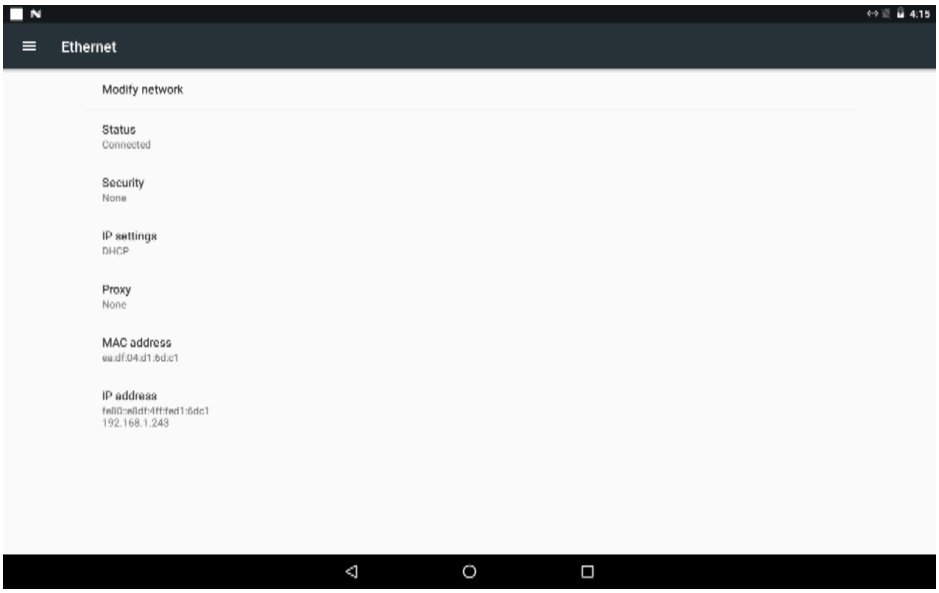


Wired connection

To use the wired Ethernet connection, connect an Ethernet cable. Ethernet connection takes higher priority.

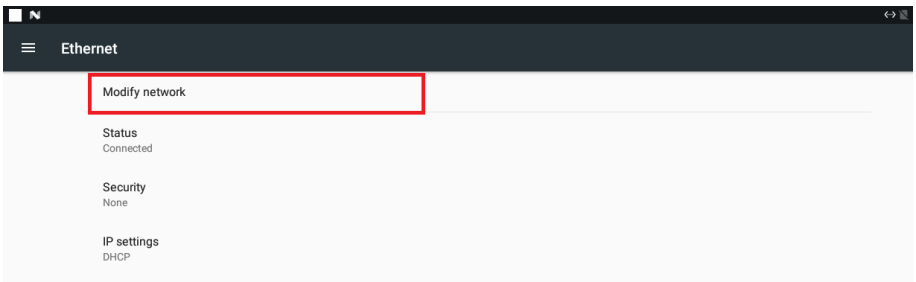
DHCP – automatically assign network IP address

1 If using DHCP, no further action is required.

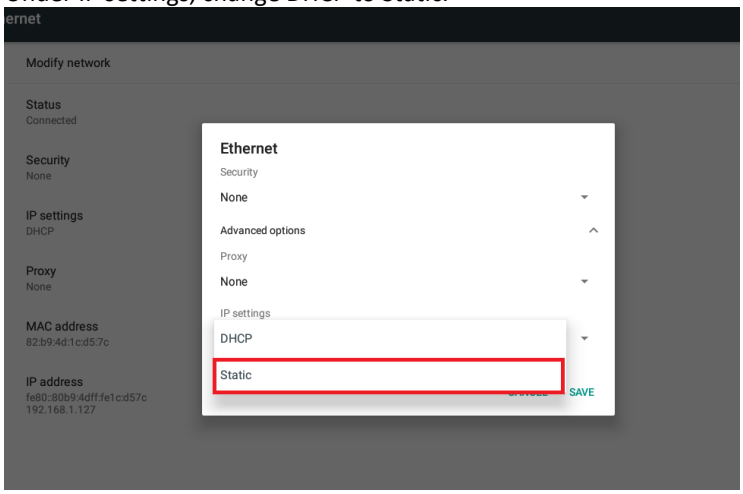


Static IP – manually assign network IP address

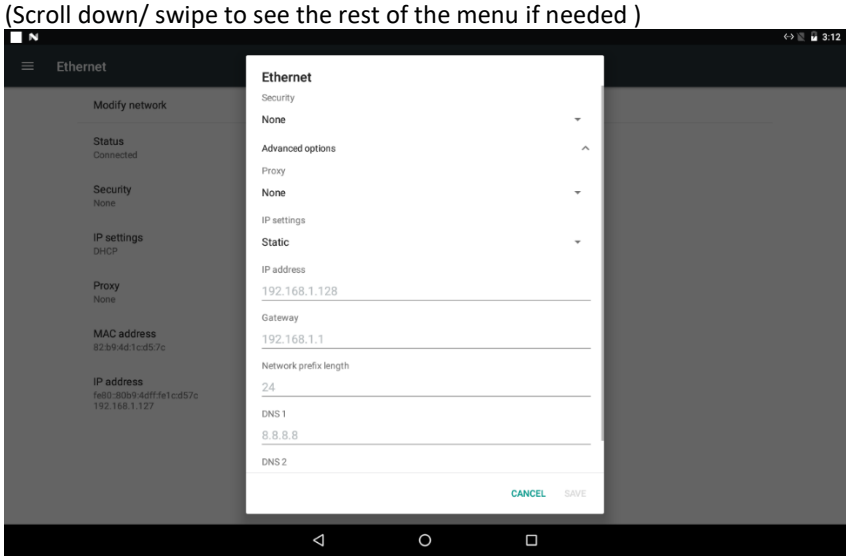
1 Click **Modify network** to configure static IP address.



2 Under IP settings, change DHCP to Static.



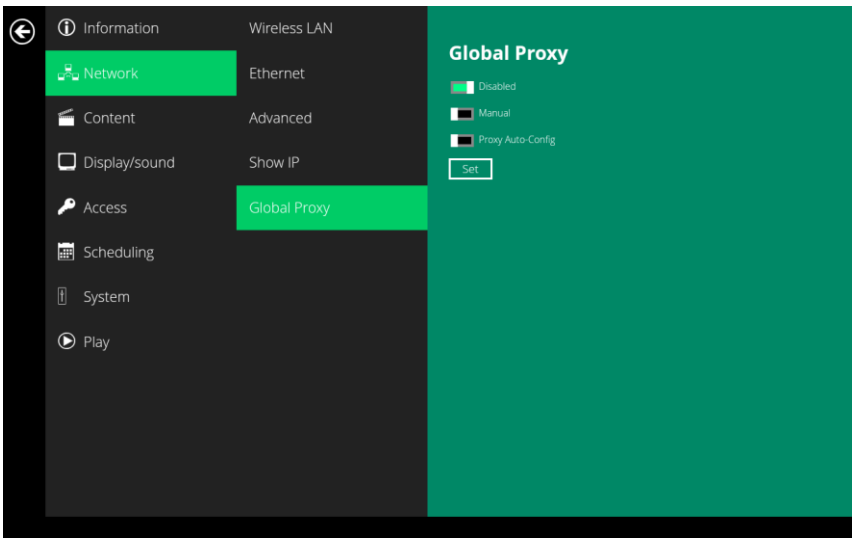
3 Fill the form and click Connect to complete the setting.
(Scroll down/ swipe to see the rest of the menu if needed)



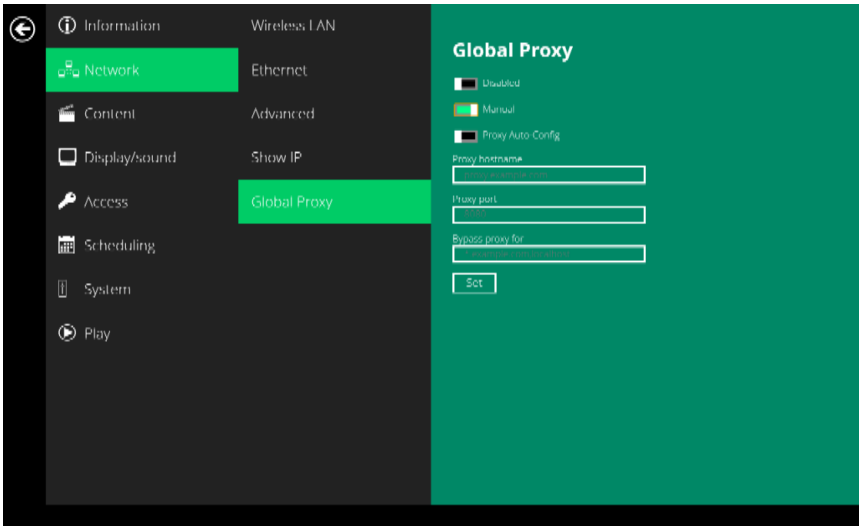
Global Proxy

1 In Basic settings, click the **Advanced** button, advanced configuration menu will be launched.

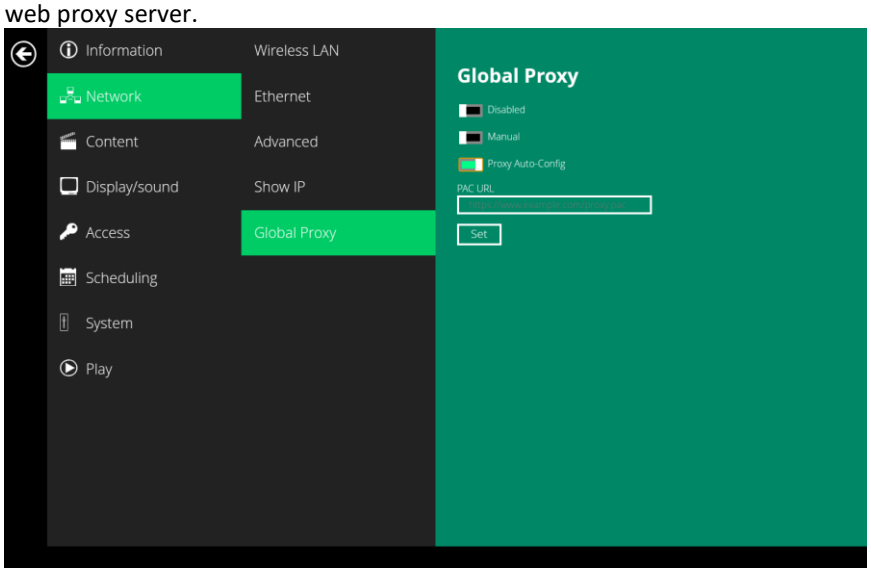
2 Click **Network**, and then click **Global Proxy.**



3 Click **Manual**, proxy setting menu will be launched, For “**Proxy hostname**” box, you can enter both hostnames like “proxy.example.com” and IP addresses like “192.168.1.100” here. Enter the port the proxy requires in the “**Proxy port**” box.
If you want to have bypass the proxy for any addresses, enter them in the “**Bypass proxy for**” box, separated by commas. For example, if you want to access proxy.com and 192.168.1.80 directly without using the proxy, you’d enter the following text in the box: "proxy.com ,192.168.1.80", then click **Done** to finish.

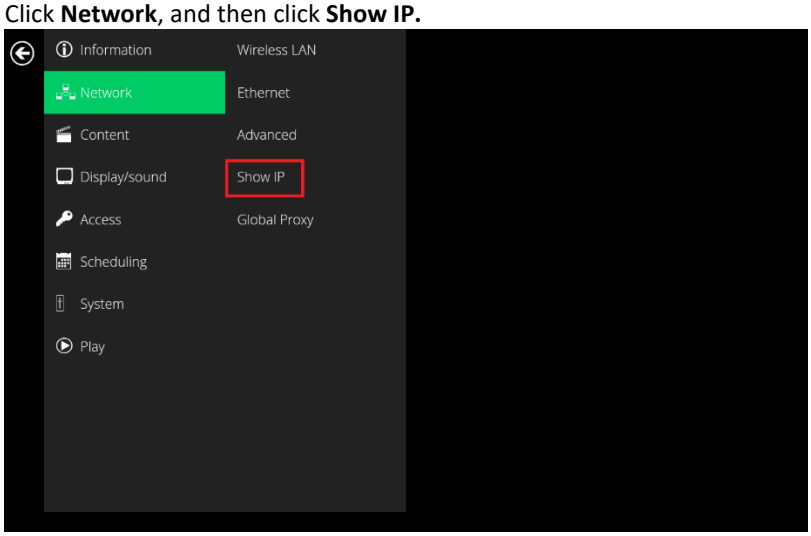


4 Click **Proxy Auto-Config**, input the URL of PAC and it will go directly to the destination or are forwarded to a web proxy server.

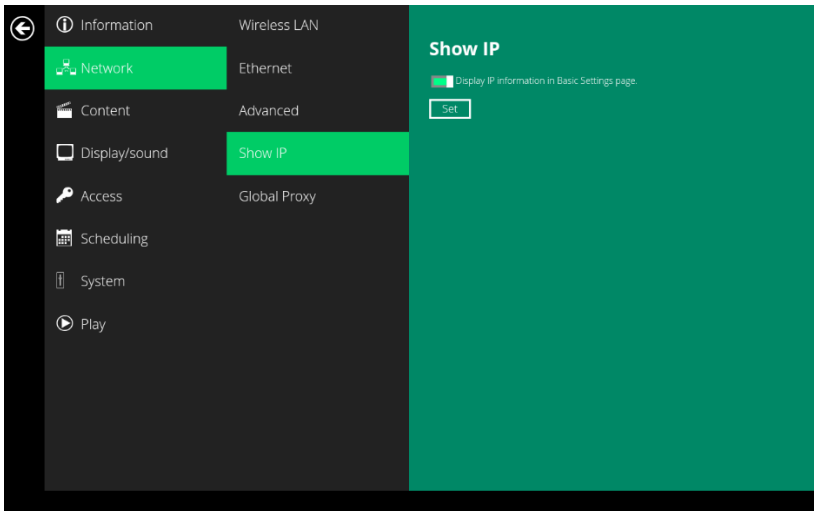


Show IP settings

1. In Basic settings, click the Advanced button, advanced configuration menu will be launched.
2. Click **Network**, and then click **Show IP.**



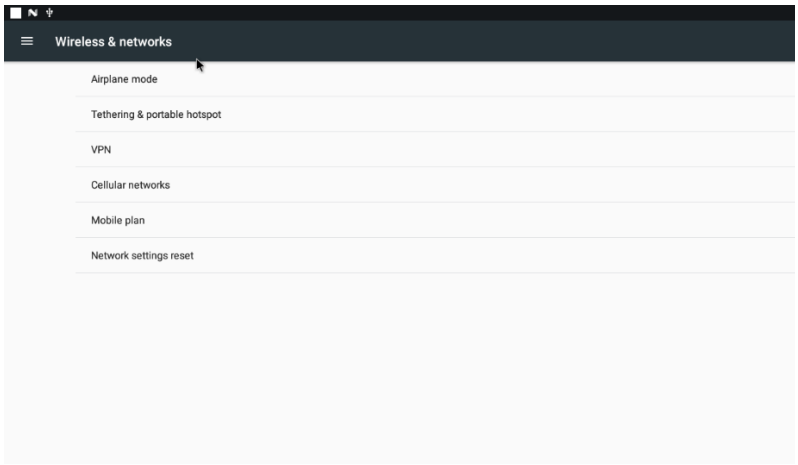
3. This feature is to control whether the IP address being displayed in Basic settings menu. This is default enabled. When disabled, Basic settings will display “connected” instead of IP address.



Reserved Features

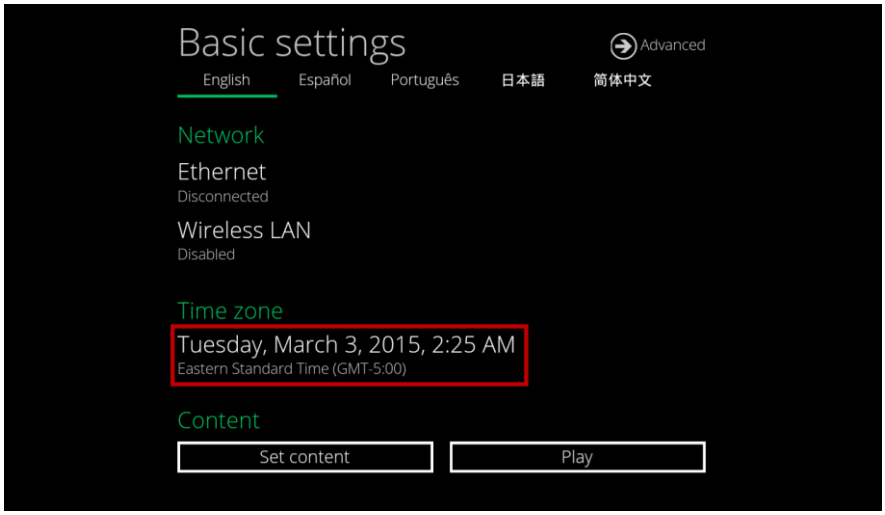
The features listed under **Network > Advanced** are defined as reserved functions and currently not working.

Please contact support@iadea.com if you have any questions.

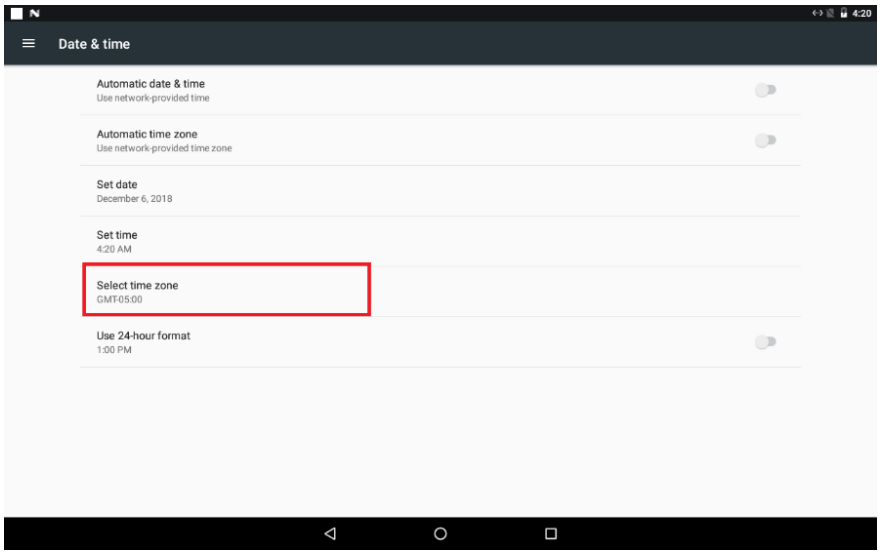


2.4. Time zone settings

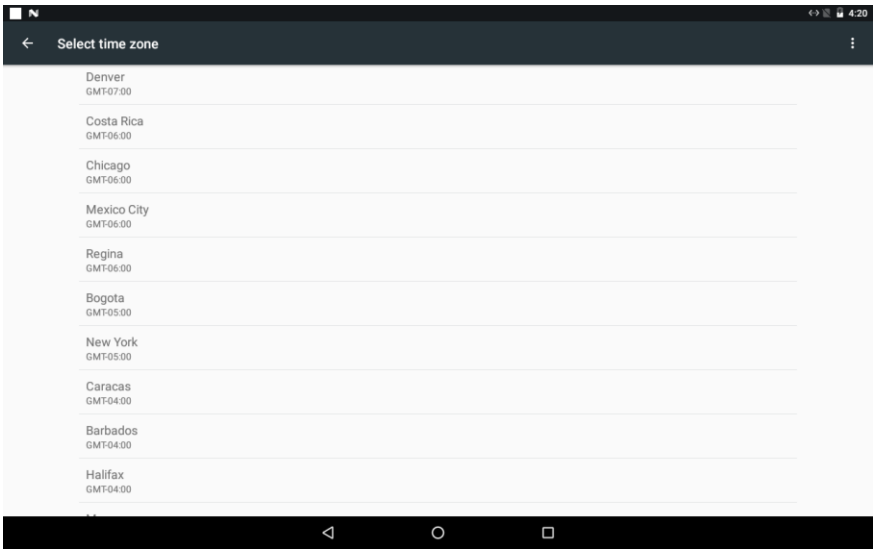
1 Click **Time zone**.



2 Click **Select time zone**

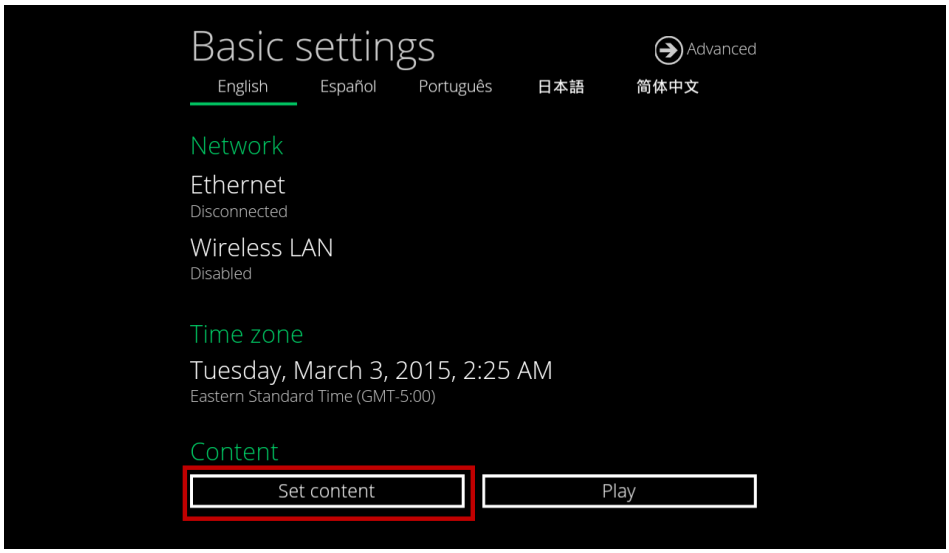


3 Choose the correct time zone from the available options.

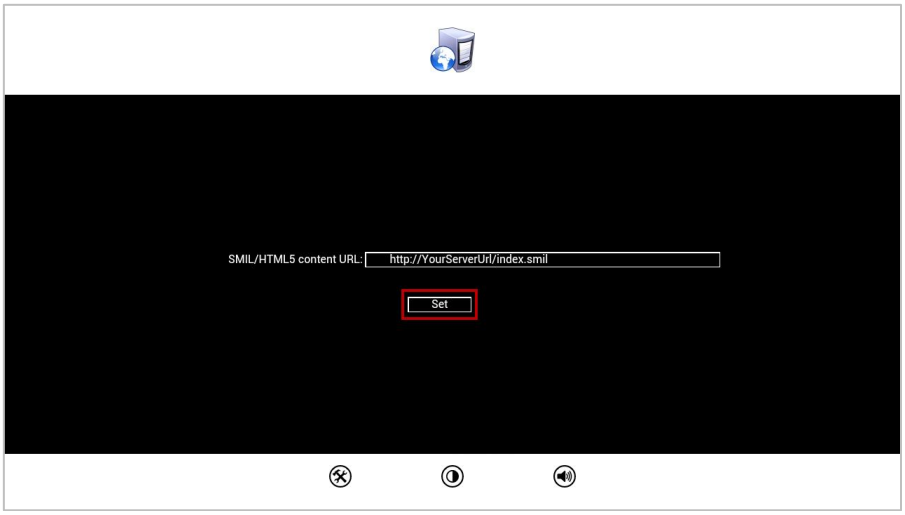


2.5. Content settings

1 Click the **Set content** button.



2 Input the **SMIL/HTML5 content URL** and click **Set**. It will return to **Basic Settings** automatically.

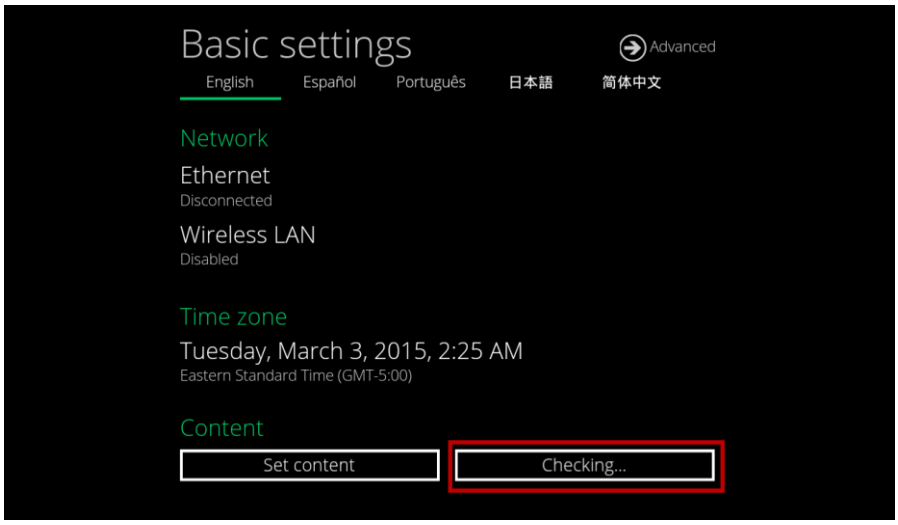


3 The player will check the availability of **SMIL/HTML5 content URL**, with the **Play** button showing **Checking…** The checking action can be canceled by clicking **Checking…** button, it will change back to **Play**.

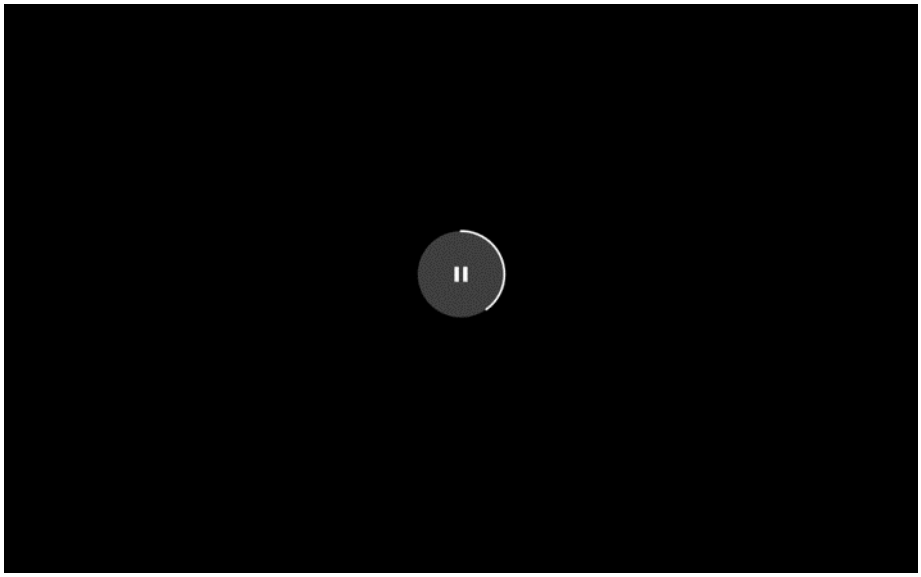
If the **SMIL/HTML5 content URL** is available, the playback will start after checking the contents.

If it keeps showing **Checking…** for a long time, please go back to **Set content** to check the correctness of the URL.

NOTE:
It is highly recommended to let the player check the availability of the content URL. Clicking **Play** button with a bad/invalid URL set would cause the player to reboot, if the **FailSafe** function is not configured.



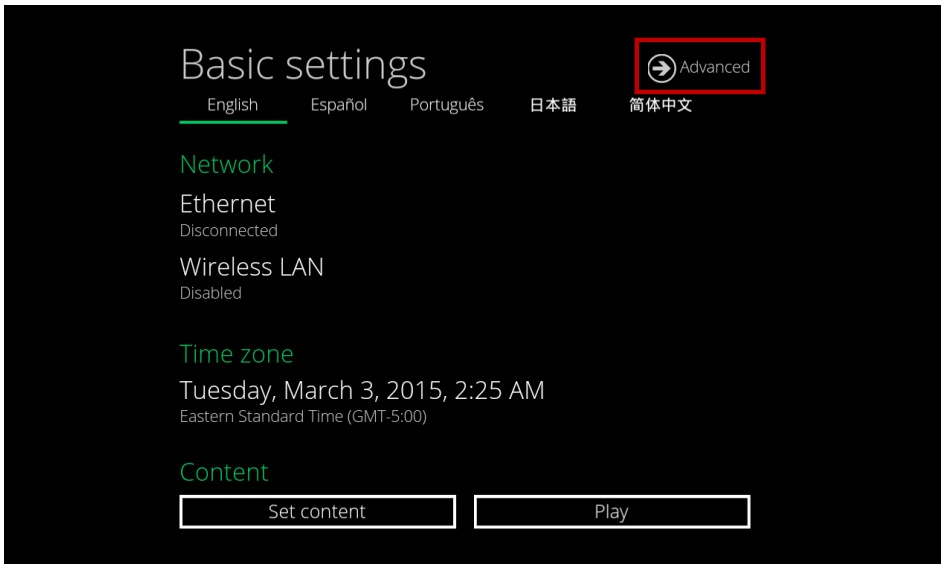
4 Every time device reboot, the playback will start automatically.
The playback action can be canceled by clicking the **pause icon**, it will go **Basic Settings** automatically.



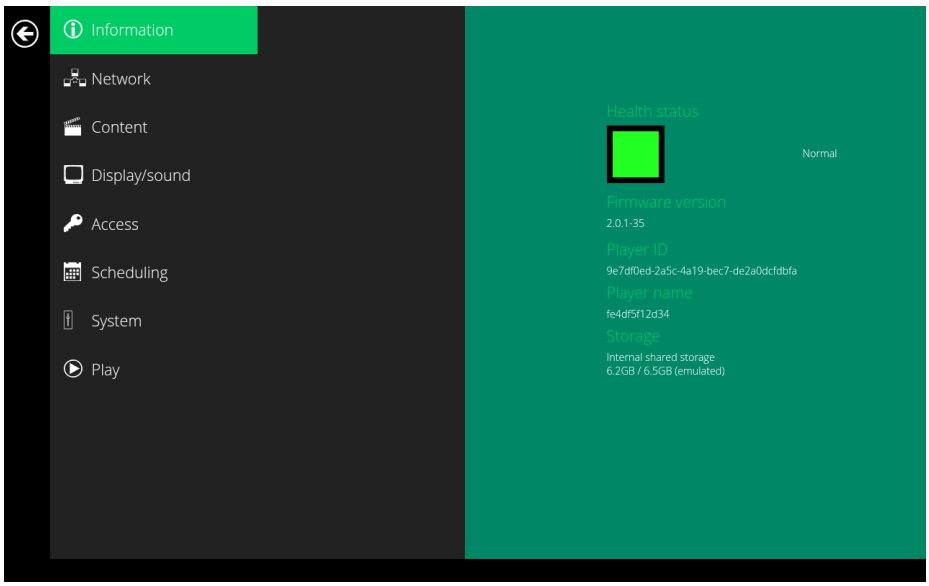
2.6. Player Information

User can check the player's basic information including the Health status, Firmware version, Player ID and storage capacity.

1 Click the **Advanced** button, advanced configuration menu will be launched.



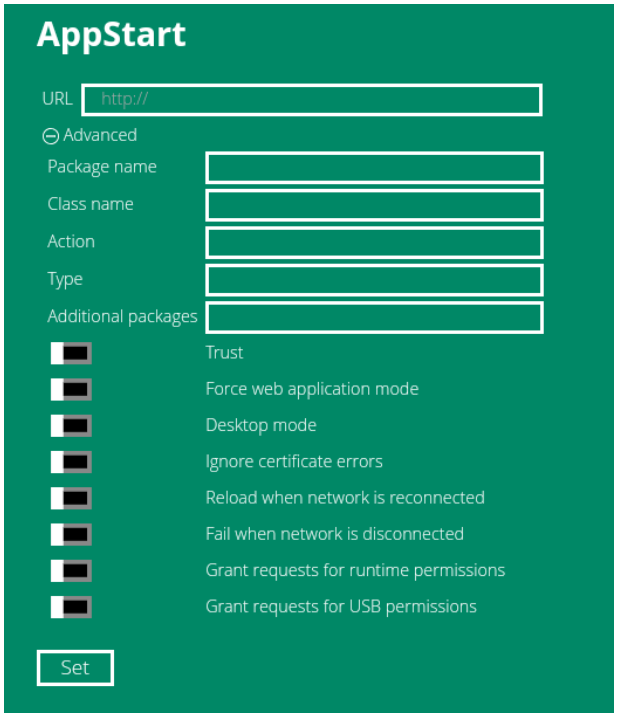
2 Click on **Information**. The definitions of the Health Status:
Green – Normal. The device is connected to the URL server.
Blue – Local. The device is playing content from the USB drive or SD card.
Gray – Disconnected. The device is disconnected.



2.7. Content configuration – AppStart

User can assign the URL and APP for execution right after the system starts up.

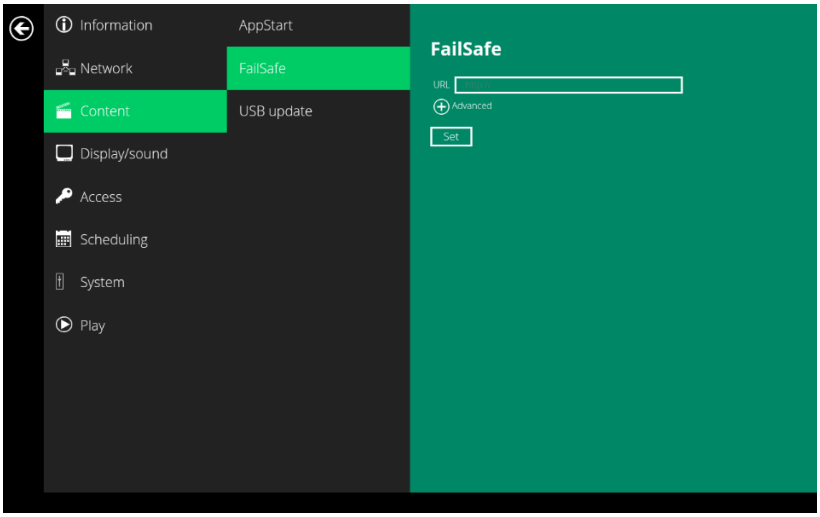
1. Click the **Advanced** button.
2. Click on **Content**, and then click on **AppStart**.
3. Enter the valid URL of HTML/SMIL in **AppStart**. If you already configured SMIL/HTML5 content URL via "**Set content**", the URL would be showed here.
4. The Advanced option is used for 3rd-party App configuration only.
   Trust: Switch to **Enabled** to set by-pass authentication verification for REST API calls in HTML application which must launched by AppStart.
   Force web application mode: Switch to **Enabled** to disable HTTP status code verification to bypass some cookie related issues. It will ignore "HTTP ERROR STATUS".
   Desktop mode: Switch to **Enabled** to force player to load content in Desktop mode instead of Tablet mode.
   Please note: not all the contents is created for Desktop mode, please ask your content provider for details.
   Ignore certificate errors: Switch to **Enabled** to ignore certificate errors to allow visiting Web Pages that do not have valid certificate. It will ignore "UNTRUSTED ERROR". When **Disabled**; if there is a certificate on HTML5 content, it will cause a playback error.
   Reload when network is reconnected: Switch to **Enabled** to reload web page as soon as network connection becomes available.
   Trigger failover when network is disconnected: Switch to **Enabled** to load failover content when network is disconnected.



2.8. Content configuration – FailSafe

User can assign the URL and APP for execution while the system has failed to play the assigned content.

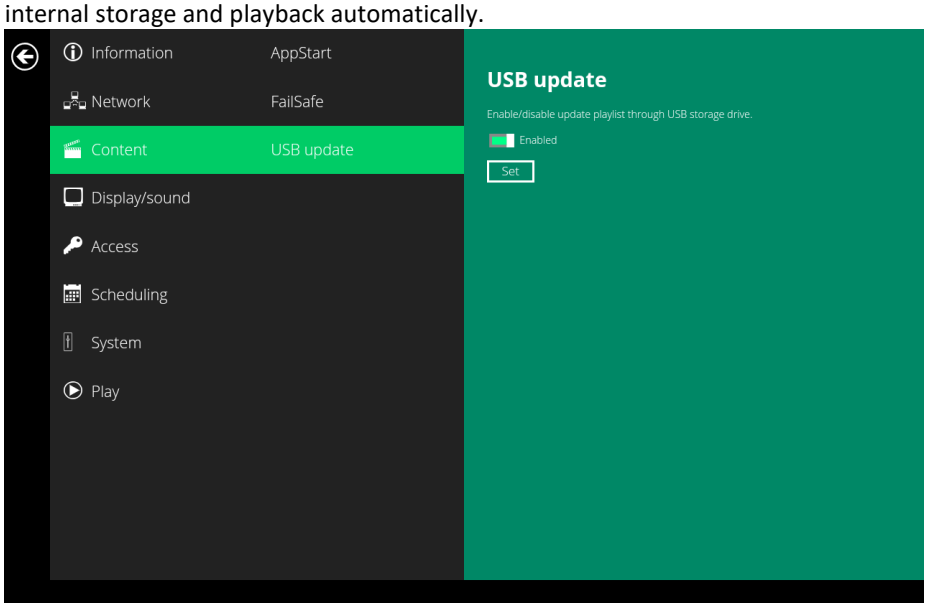
1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **Content**, and then click on FailSafe.
3. Enter the URL of HTML/SMIL in FailSafe.
4. The Advanced option is used for 3rd-party App configuration only.



2.9. Content configuration – USB update

User can enable/disable update playlist through USB storage drive.

1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **Content**, and then click on **USB update**.
3. **Enabled**: If there is a SMIL folder in the USB drive inserted to player, player will download the content to internal storage and playback automatically.



2.10. Display settings

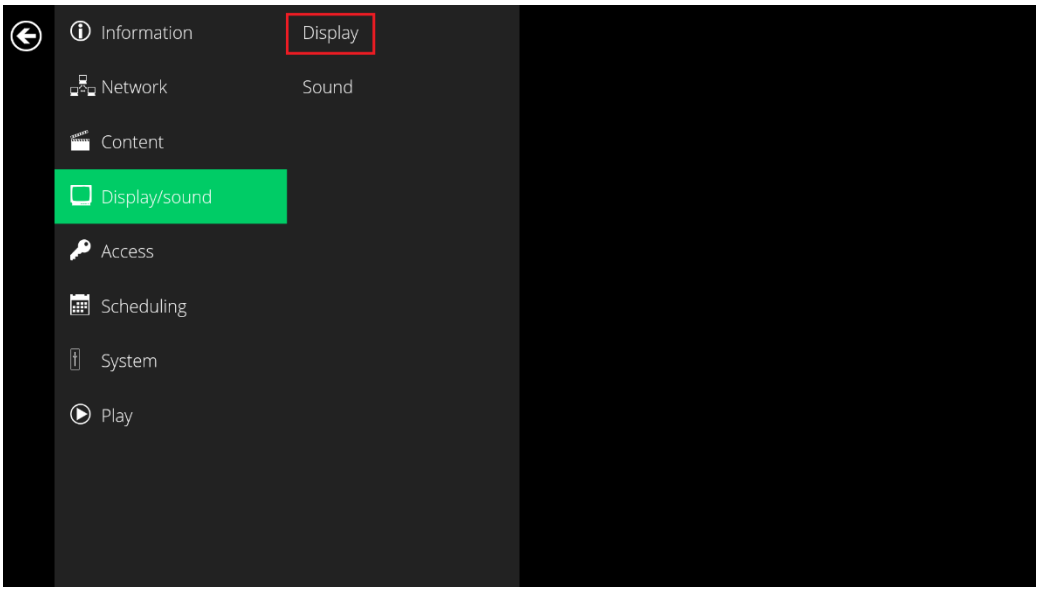
Resolution settings (for media players)

For best quality, set the output resolution to match your display's native resolution to avoid image scaling and blur.

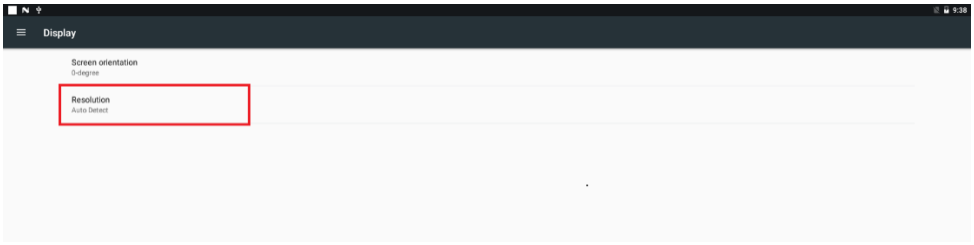
If you are connecting an LCD computer monitor, projector, or plasma display, refer to the device specifications for optimal settings.

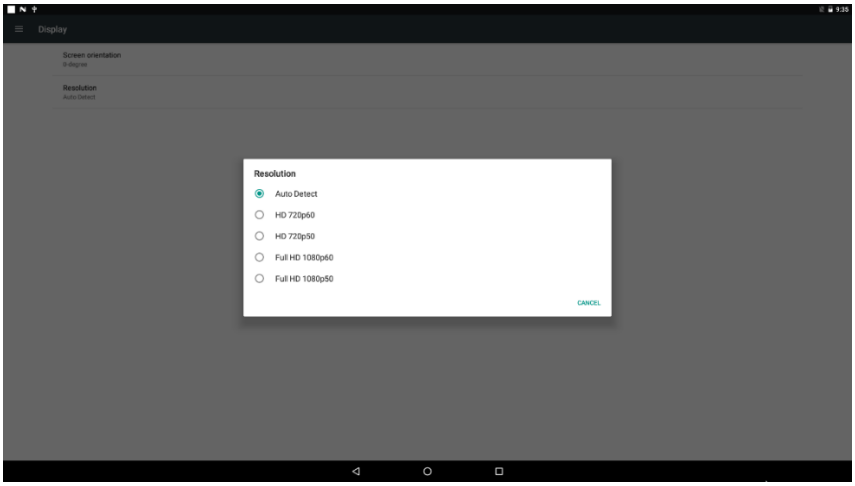
1 Click the **Advanced** button, advanced configuration menu will be launched.

2 Click the **Display/sound** button, and then click on **Display**. The Display Settings page will be launched.



3 Click on **Resolution**, and select suitable resolution from the popup menu. Default configuration is Auto Detect, player will auto detect and use the best optimized resolution that your display supports.





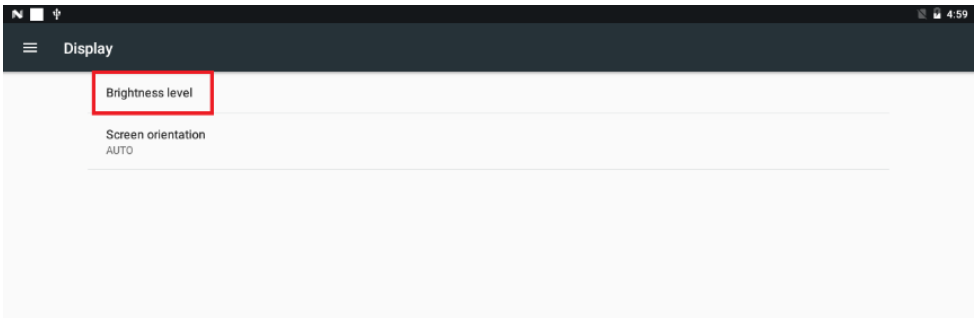
Panel Brightness level (for signboards)

The default panel brightness is set to maximum, and it can be adjusted in the Display settings.

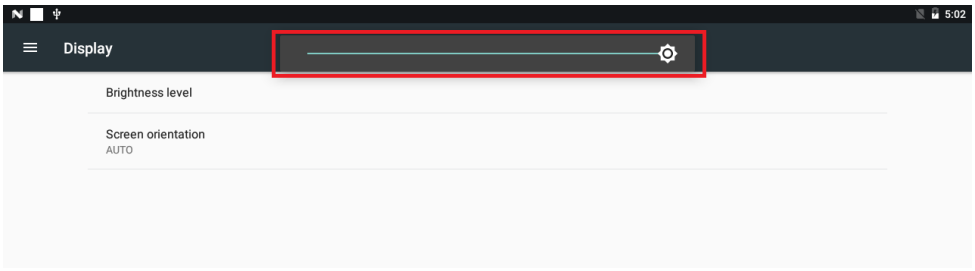
1 Click the **Advanced** button, advanced configuration menu will be launched.

2 Click the **Display/sound** button, and then click on **Display**. The Display Settings page will be launched.

3 Click on **Brightness level**.



4 Drag the white icon marked in red below to adjust the brightness. Click on OK to save the configuration.



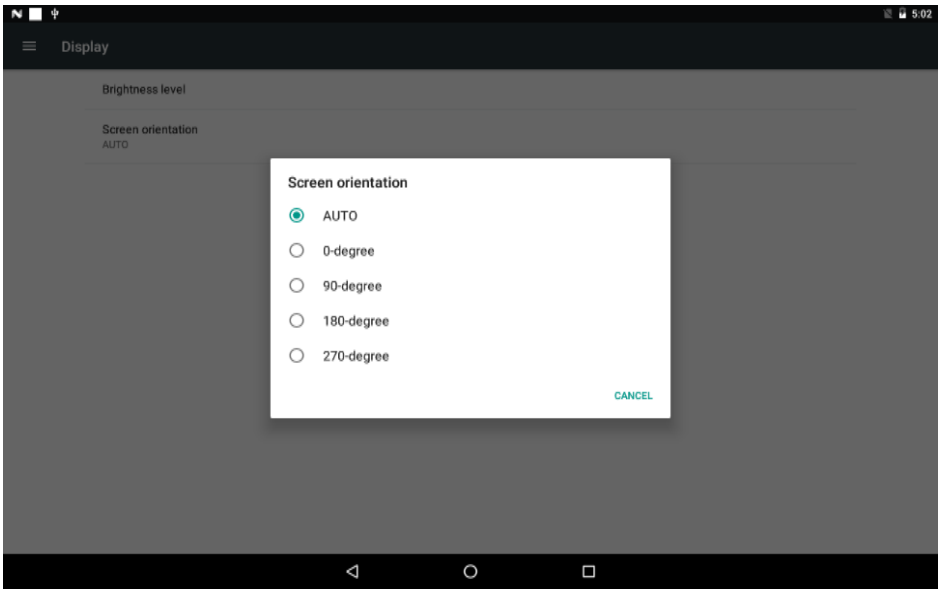
Screen orientation

Screen orientation is to set the display to rotate 90/180/270 degrees.

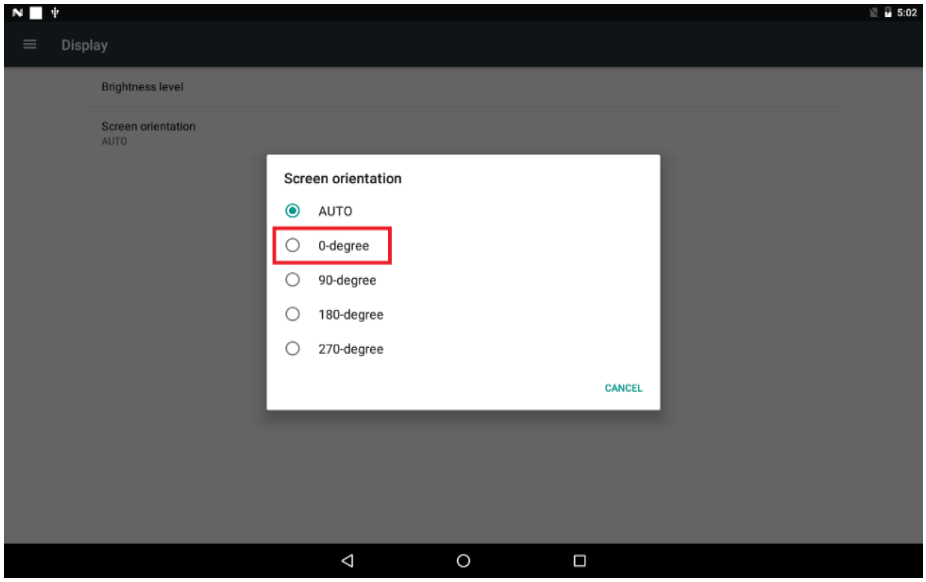
1 Click the **Advanced** button, advanced configuration menu will be launched.

2 Click the **Display/sound** button, and then click on **Display**. The Display Settings page will be launched.

3 Click on the **Screen orientation** below.



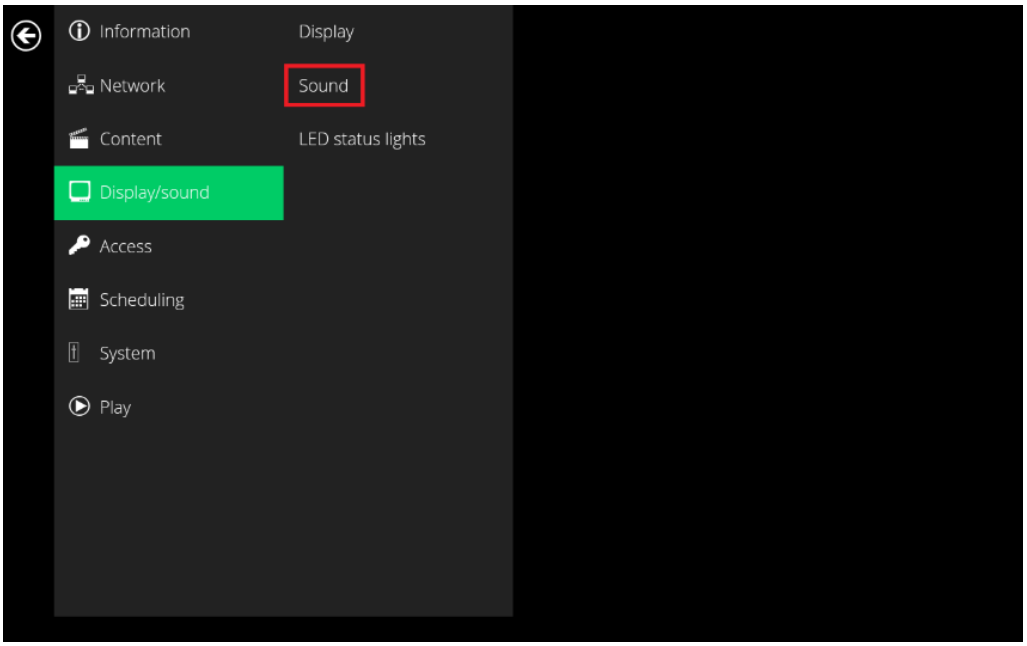
4 Click on the preferred angle from the menu.



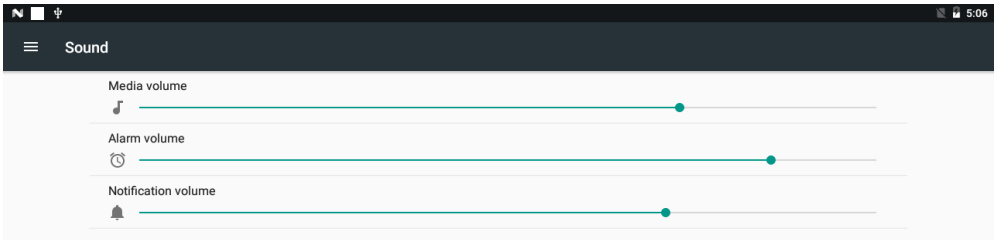
2.11. Sound settings

To control the output sound volumes and touch sounds:

1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click the **Display/sound** button, and then click on **Sound**. The Sound Settings page will be launched.



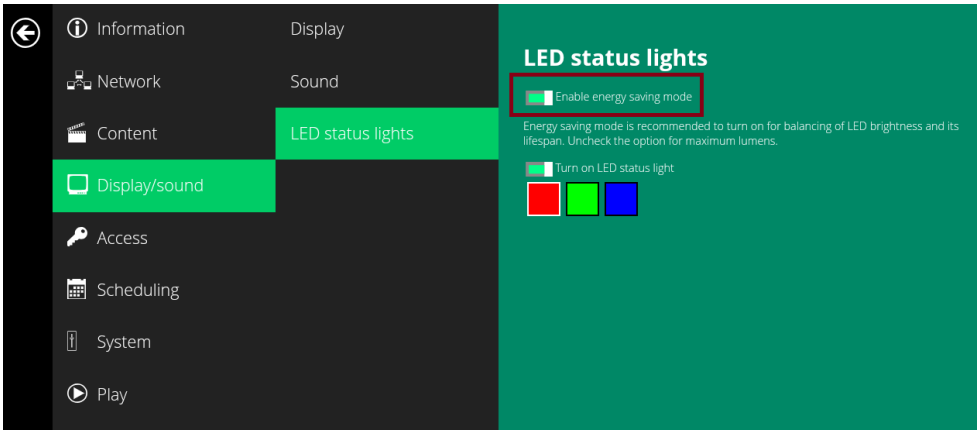
3 Click on **Volumes,** the Volumes settings page will be launched. Drag the blue sliders to adjust the volumes for the selected options, and then click on OK to save the new settings.



2.12. LED Status Lights [for signboards]

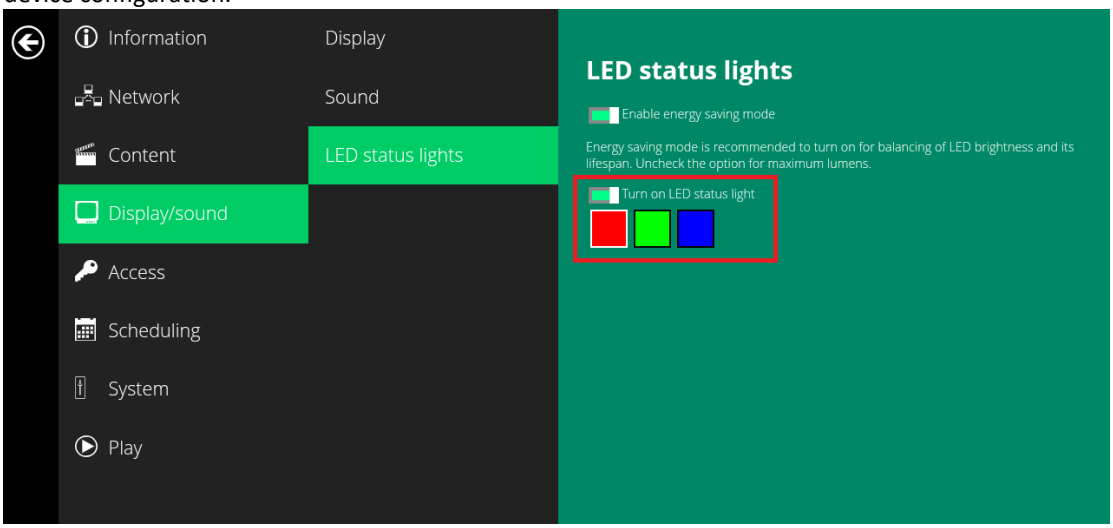
Enable energy saving mode

The brightness of LED lights can be adjusted by enable/disable energy saving mode.



Turn On LED Status Light

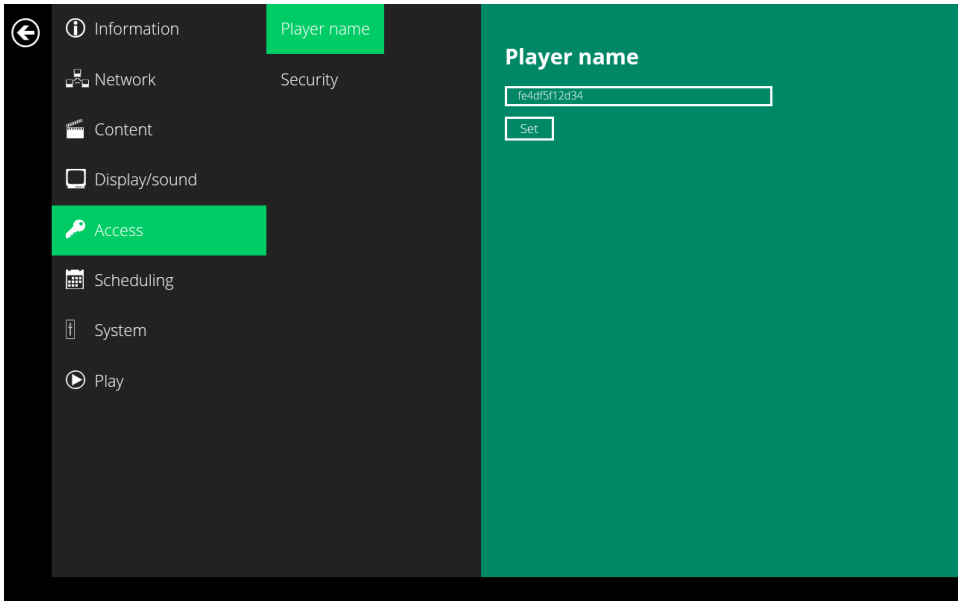
Set up the default LED color. The LED light bar color changed by APP or REST-API will not change color setting in device configuration.



2.13. Access configuration – Player name

The player's name can be specified so the player can be easily recognized in the management software. (Management software support is required)

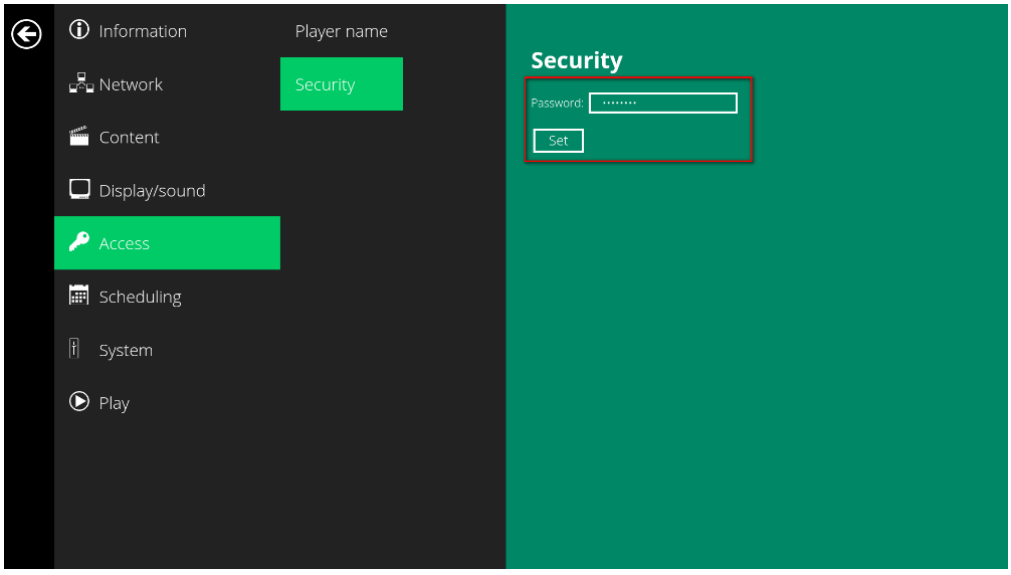
1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **Access**, and click on **Player name**.
3. Input a name for the field and click **Set.**



2.14. Access configuration – Security

A password can be set to provide authentication for player access. If the password is set, a password prompt will appear if a user is trying to enter the Basic settings menu from playback.

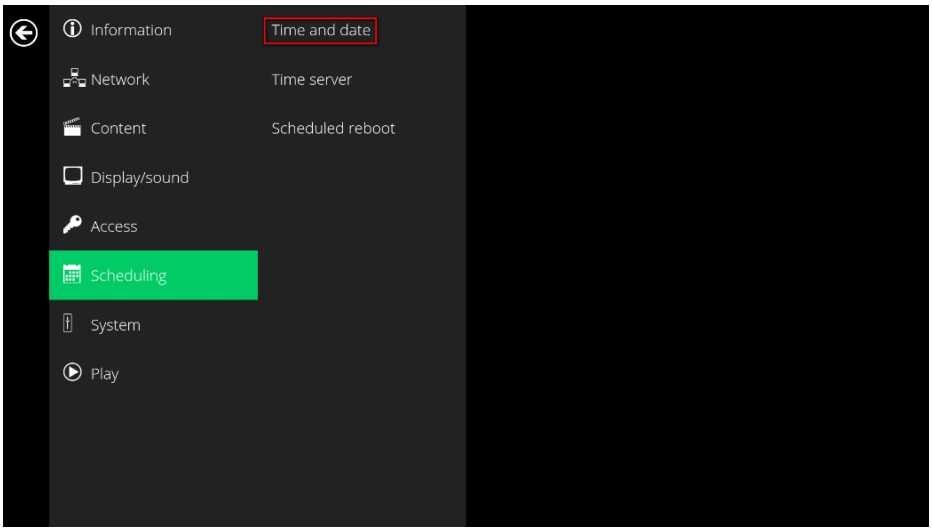
1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **Access**, and click on **Security**.
3. Input a password in the field and click **Set.**

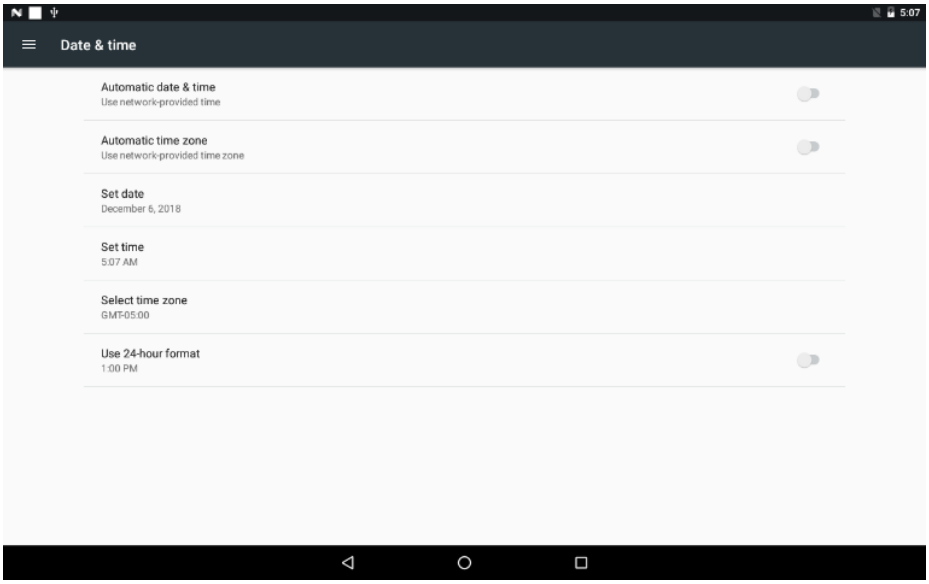


**When setting a password lock on your Android 7.1 device, please utilize the password feature located in the IAdea OS menu. If the password lock is set using a PIN code through the Android native menu, SignApps will not enable password lock when exporting content. **

2.15. Scheduling configuration – Time and date

The will bring up Date and time configuration panel as shown below, user can set time as auto or manual, set time zone and time format from here.

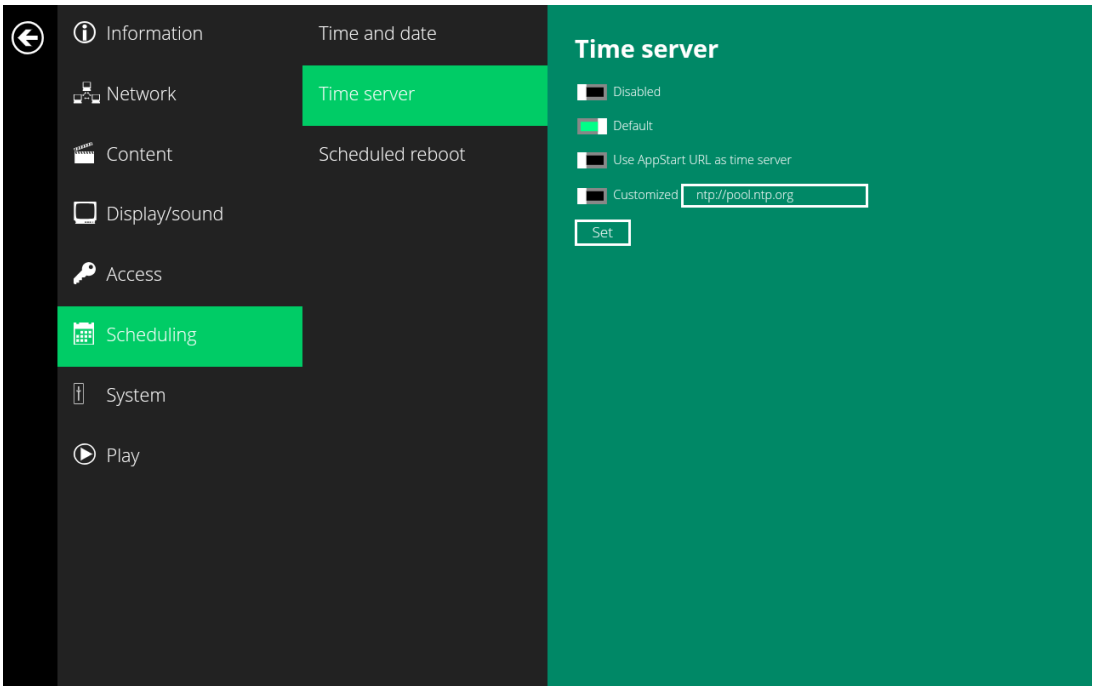




2.16. Scheduling configuration – Time Server

The feature allows user to synchronize player's time with the web server where the appStart URL hosted, disabled by default.

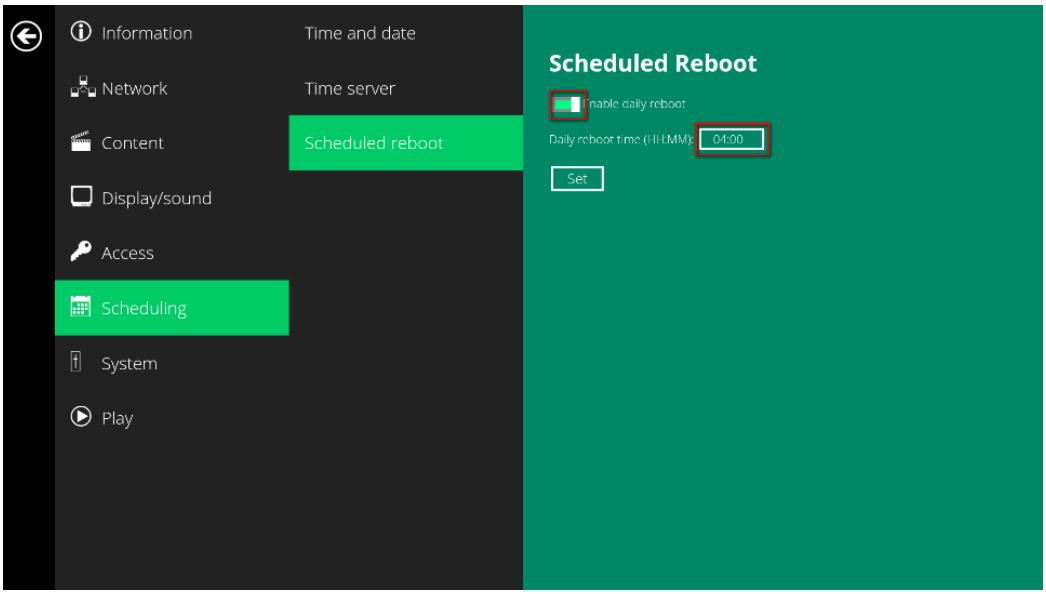
1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **Scheduling**, and click on **Time server**.
3. **Disabled:** Player don't synchronize with any server.
   Default: Player synchronize it's time with Android default time server (pool.ntp.org).
   Use AppStart URL as time server: Player synchronize it's time with the web server where the appStart URL hosted (based on http response header's time)
   Customized: Player synchronize it's time with customized time server
4. Click on **Set** to save the setting.



2.17. Scheduling configuration – Scheduled reboot

The feature Scheduled reboot allows the player to reboot on the assigned time automatically every day.

1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **Scheduling**, and click on **Scheduled Reboot**.
3. Click the **Enable daily reboot** button as marked in red below to enable/disable the daily reboot function. Click on the dialogue box to set the time. The value can be inputted with the pop-up keyboard or the USB keyboard.
4. Click on **Set** to save the setting.



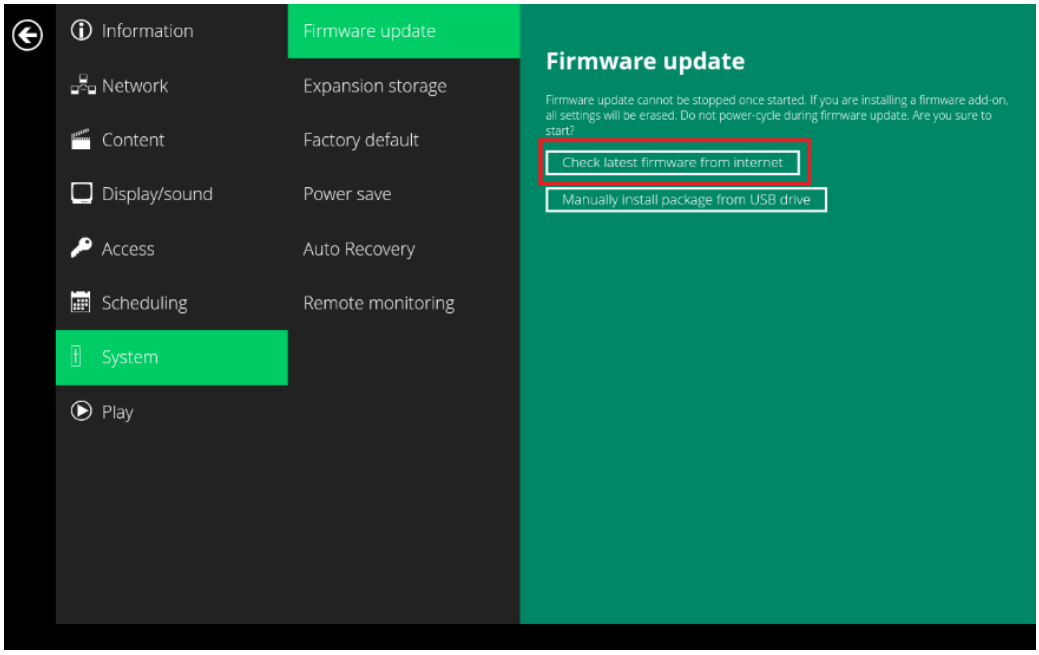
2.18. System configuration - Firmware update

Firmware updates can be performed by using a USB flash drive or downloading from Internet. Please read the release notes regarding the changes that will be made to your player before applying the upgrade.

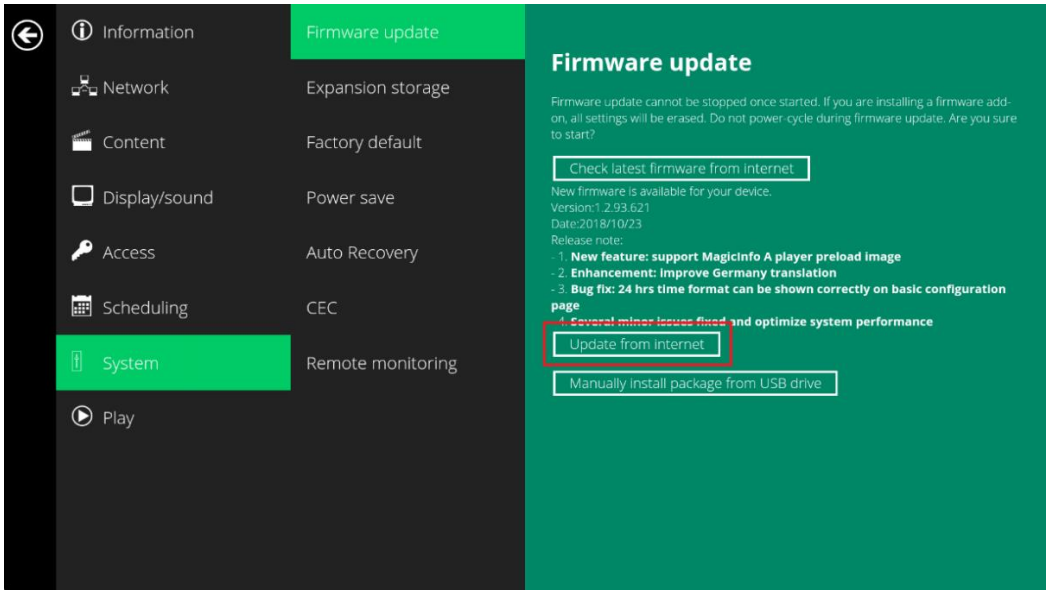
IMPORTANT: DO NOT unplug the USB drive or power down the player while the system is performing the firmware update.

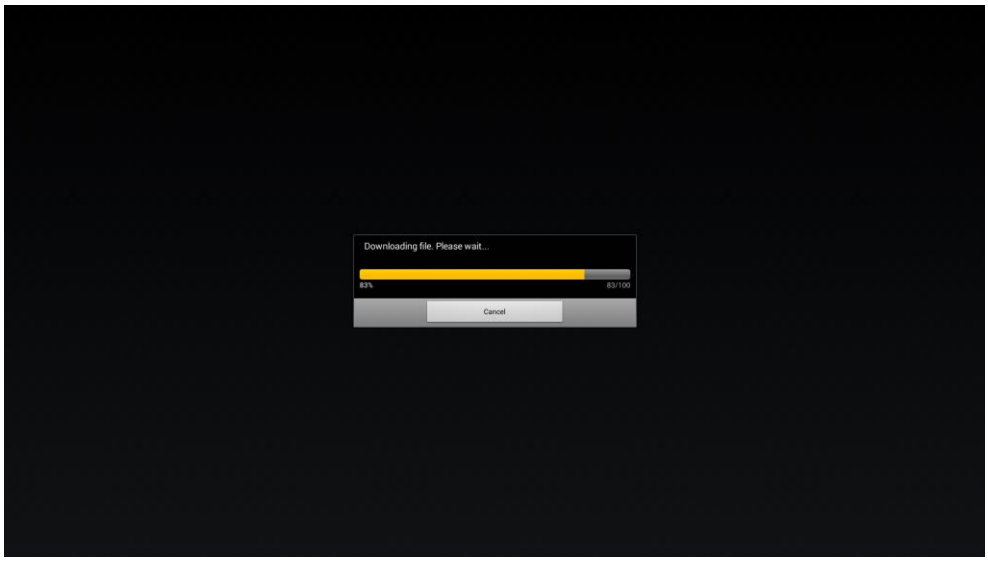
Check latest firmware from internet

1 Click **Check latest firmware from internet.**



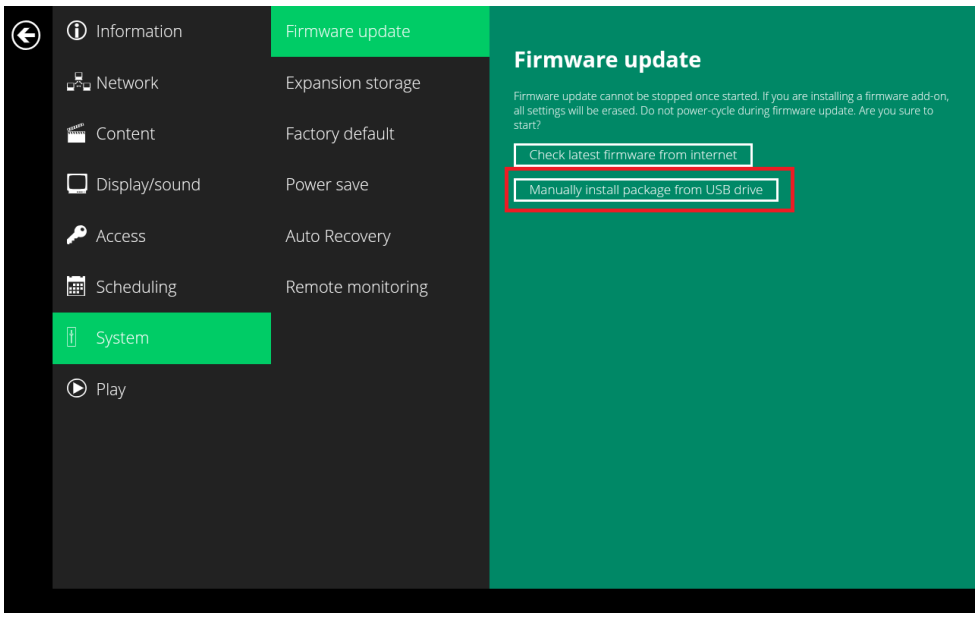
2 Click **Update from internet** to begin the firmware update.



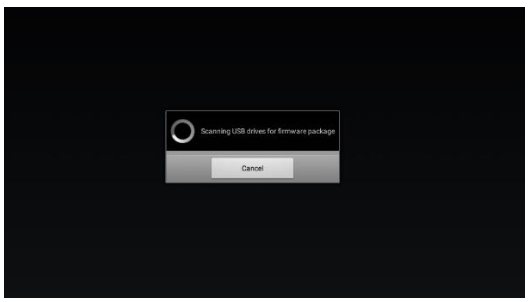


Manually install package from USB drive

1. Download the latest firmware from http://www.digisignage.com and copy it to the root directory of a USB drive
2. Plug in the power cord into the device.
3. After the boot-up completes, click the **Advanced** button on the Basic settings menu.
4. Click on **System**, then click **Firmware update.**
5. Click on **Manually install package from USB drive** to begin the firmware update.



6. Plug in the USB drive while the screen shows “Scanning USB drives for firmware package”.

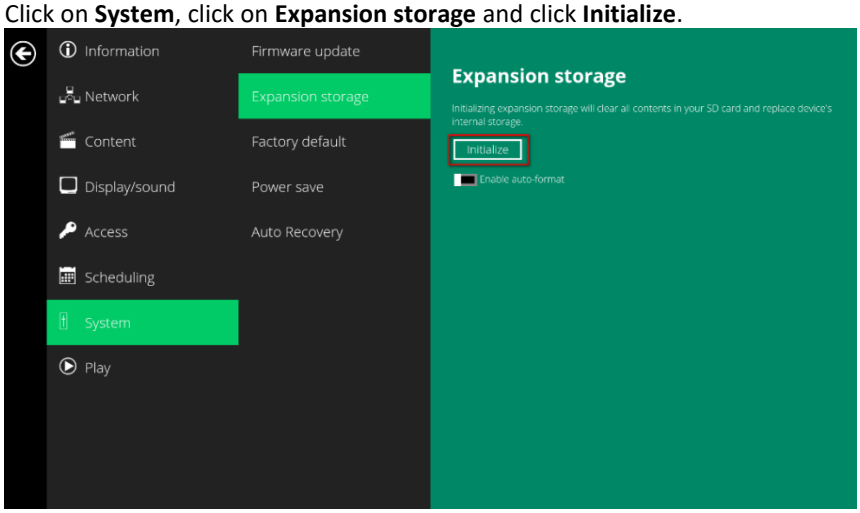


2.19. System configuration – Expansion storage

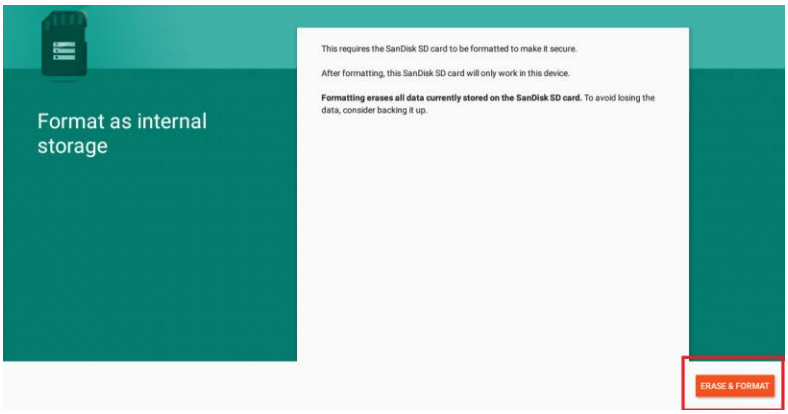
User can add extra Micro SD card to replace its internal storage, please note when internal storage being replaced, player use only the extra Micro SD card as main storage, internal storage will not be used.

Manual Expansion

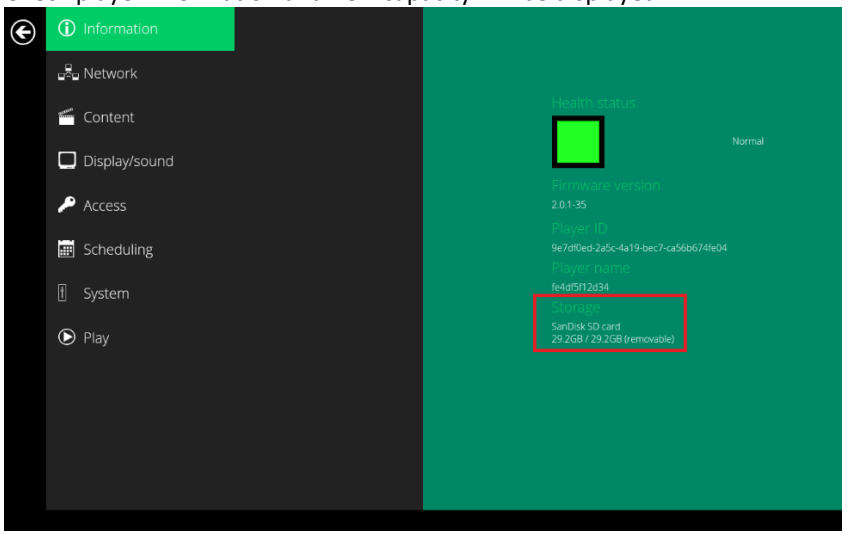
1. Power off device.
2. Insert Micro SD card and then plug in power cord to power on.
3. In the Basic settings menu, click the **Advanced** button, advanced configuration menu will be launched.
4. Click on **System**, click on **Expansion storage** and click **Initialize**.



5. Click **ERASE & FORMAT**, player will format Micro SD card.

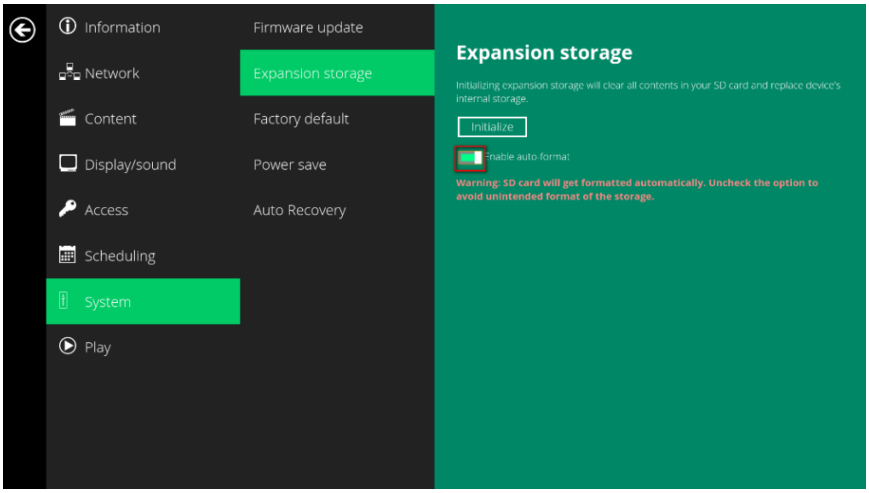


6. Check player information and new capacity will be displayed.



Auto Expansion

1. In the Basic settings menu, click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **System**, click on **Expansion storage** and enable **auto-format**.



3. Insert Micro SD card and then check player information and new capacity will be displayed.

2.20. System configuration - Factory reset

If you forget the system password you have set, you must reset the system to regain access to the player.

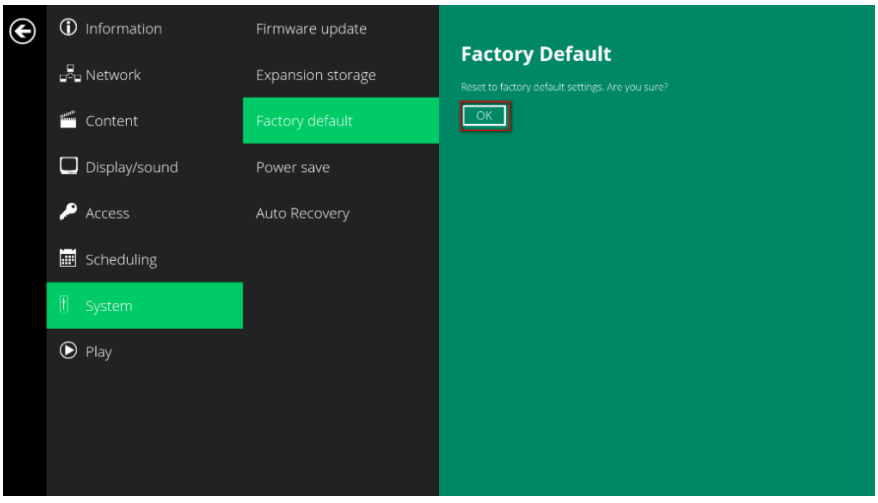
Using the reset button

1. **PRESS** and **HOLD** the reset button with a pin.
2. **RE-CONNECT** the power cord.
3. **WAIT** until the status LED flashes.
4. **RELEASE** reset button and wait for system to initialize.

Using a USB mouse

System reset will re-initialize the system, clear passwords, and return settings to their default values. Perform the following:

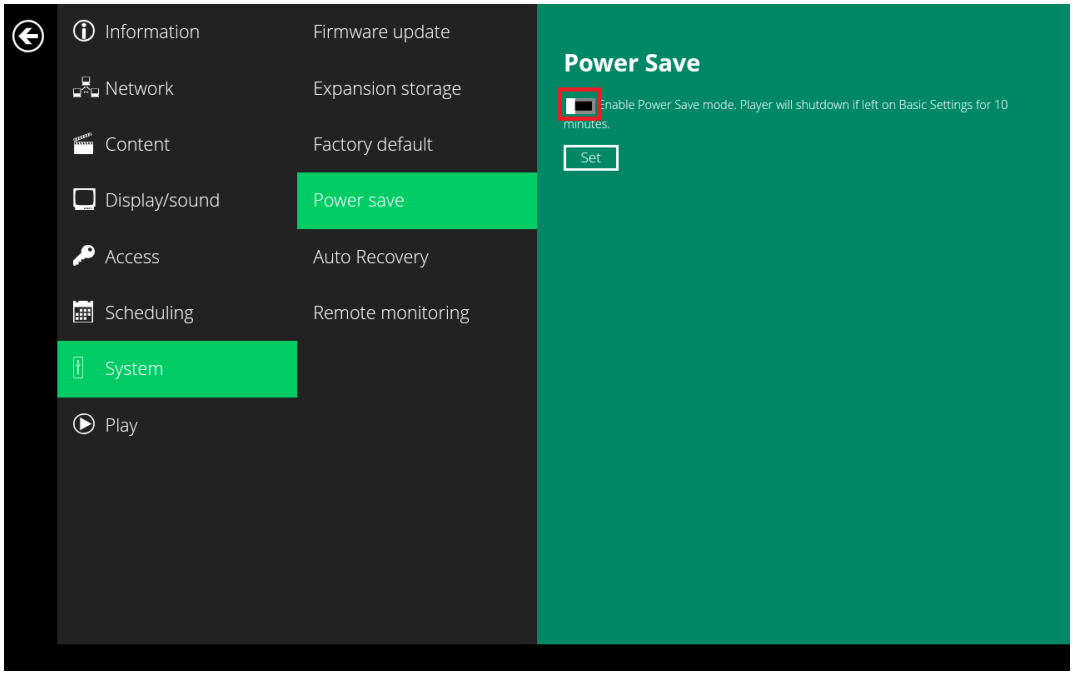
1. **CONNECT** a USB mouse or using touch screen for input.
2. Click the **Advanced** button, advanced configuration menu will be launched.
3. Click on **System** configuration, and choose **Factory default.**
4. Click on **OK** button to perform the system reset.



2.21. System configuration – Power save

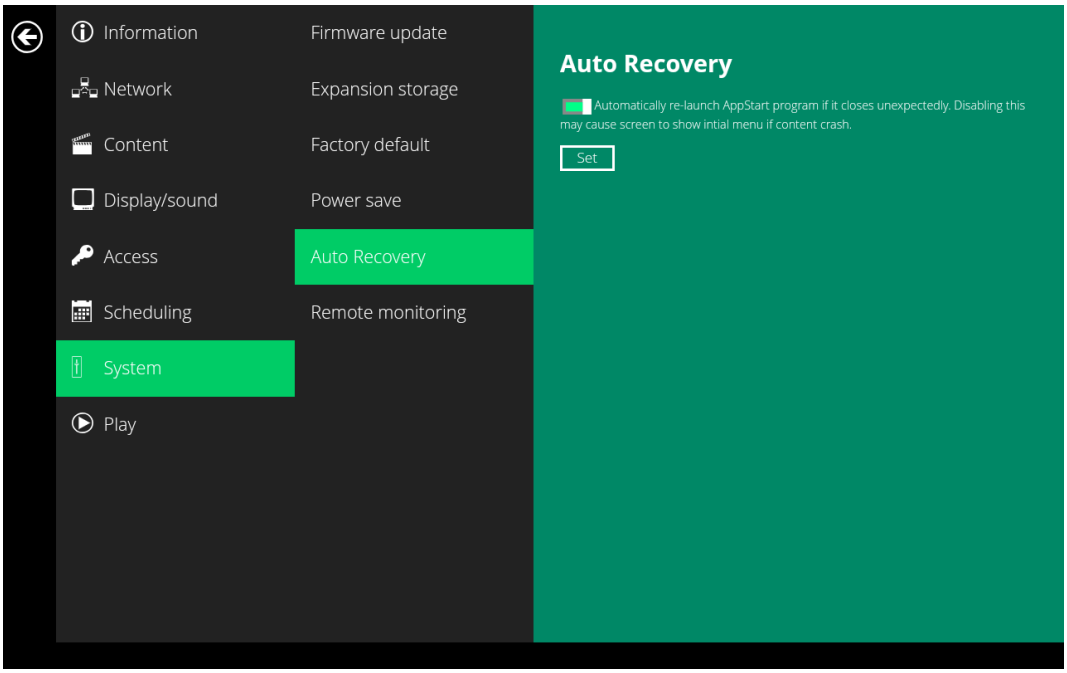
The Power save feature allows the player to power off automatically while staying at the Basic settings menu without any action taken for 10 minutes.

1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **System**, and click on **Power save**.
3. Click the **Enable Power Save mode** button as marked in red below to enable/disable the power save function.
4. Click on **Set** to save the setting.



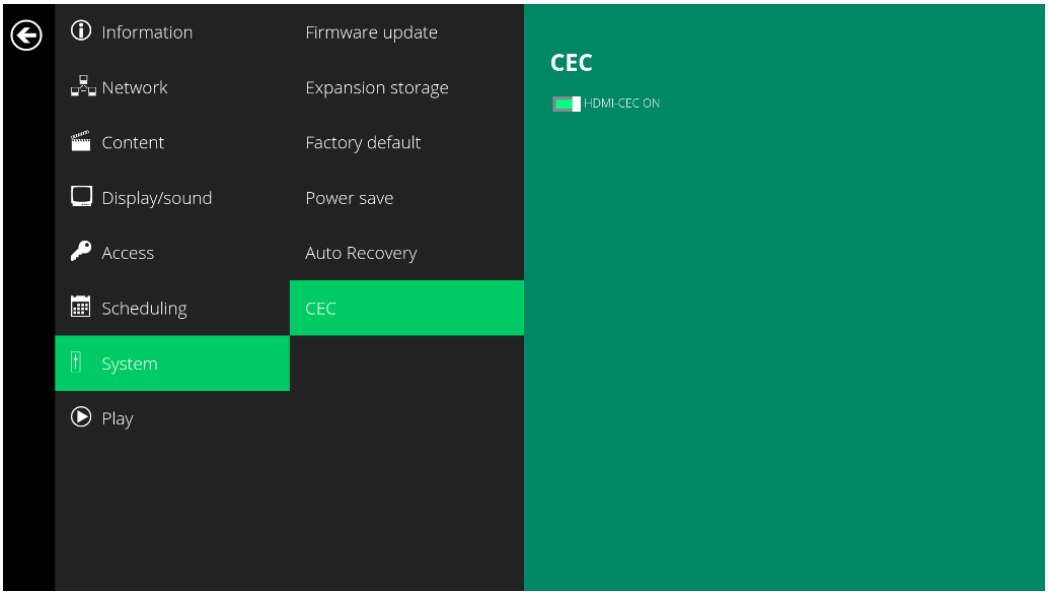
2.22. System configuration – Auto Recovery

The Auto Recovery feature is designed to automatically re-launch appStart program if it closes unexpectedly, disabling this feature may cause screen to show initial menu if content crash.



2.23. System configuration – CEC

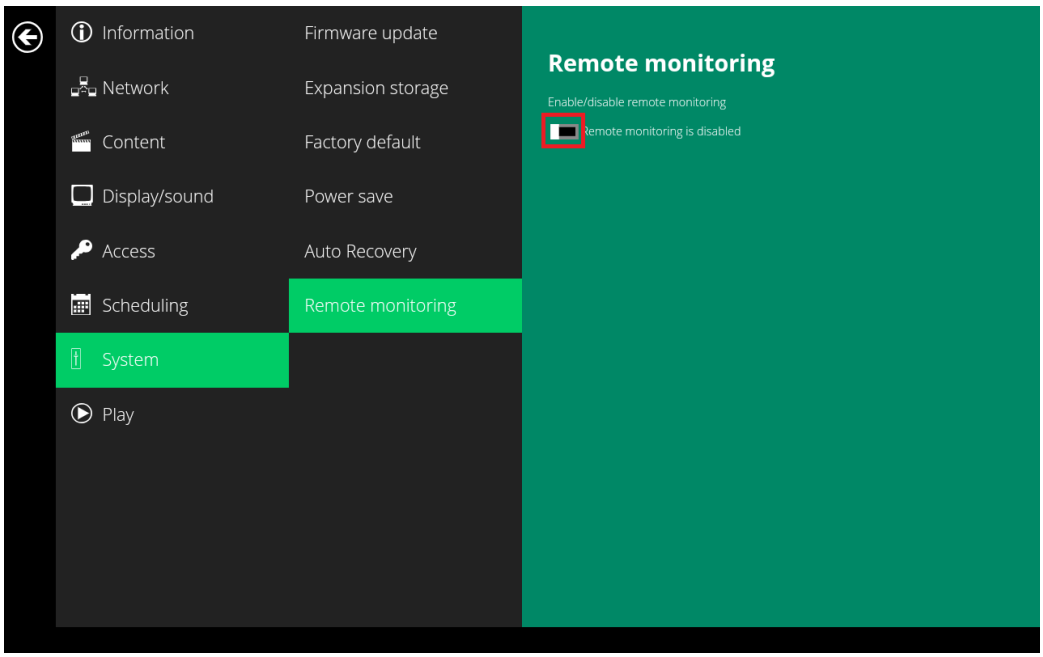
IAdea media appliance comes with HDMI CEC enabled as default setting, this option can disable HDMI CEC support.



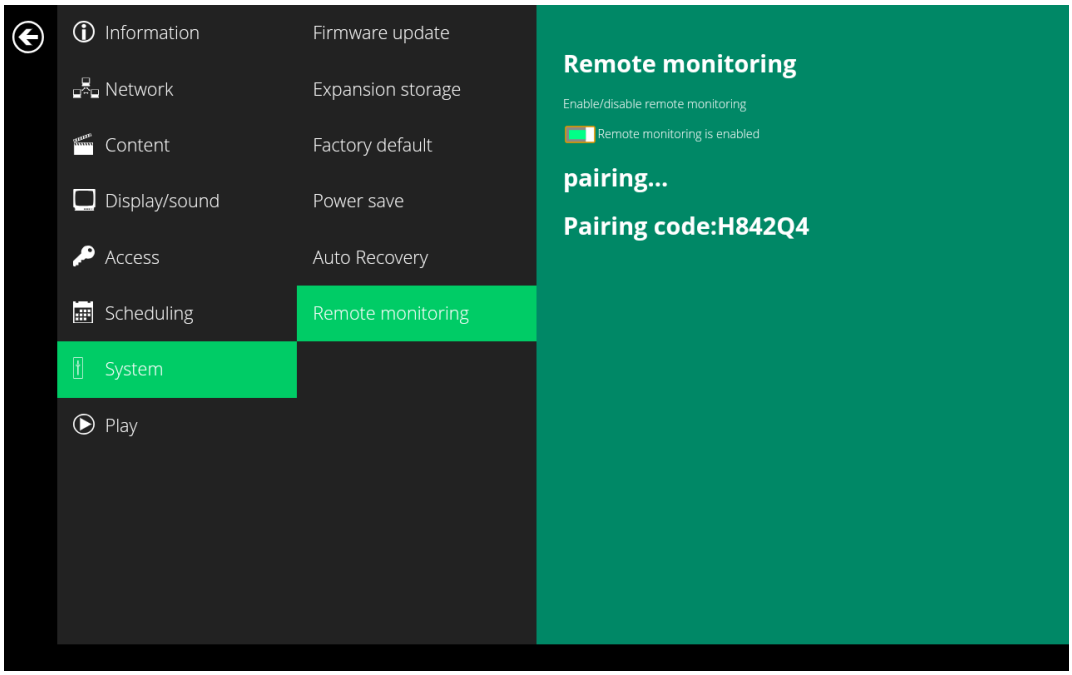
2.24. System configuration – Remote monitoring

Remote monitoring feature is designed for IAdea Care service.

1. Click the **Advanced** button, advanced configuration menu will be launched.
2. Click on **System**, and click on **Remote monitoring**.
3. Click the **Enable** button as marked in red below to enable/disable **Remote monitoring** function.



4. The Pairing Code will be showing up in few seconds. This code will be used to pair the player to your IAdea Care account.



3. Content Management

The player is designed to work with 3rd party management solutions. Please refer to the printed guide for related set up instructions.

4. Authoring in HTML5

A major advancement in the player is the ability to playback HTML5 content which can contain dynamic information.

To find out more about using HTML5 for digital signage, visit http://www.digisignage.com/

5. Working with SMIL

The player uses open communications protocols for content presentation and playback control. SMIL-compliance means predictable results across multiple devices, and SMIL's non-proprietary nature means that your investments are never obsolete.

5.1. Introduction

Using SMIL (pronounced "smile"), the language created by W3C for multimedia communications, the media player understands the language "spoken" by professional tools from companies such as Adobe, Apple, Microsoft, and Real Networks. What this means is quicker, easier, and better integration of your players into your

digital signage networks, opening up avenues of software controls and realizing the full potential of your player hardware down the road.

5.2. www.a-smil.org for developers

The media player operating system utilizes W3C SMIL as the underlying scripting language, which lends well to customization to your project management needs. For resources, downloads, and community support, please visit www.a-smil.org.

6. Appendix: FAQ

What video format can I play?

Video files encoded in MPEG-4 AVC up to 1920x1080 resolutions and 10Mb bitrates should play perfectly. If a certain video is not played as scheduled, or if it plays poorly, please search the support site for "encode" instructions.

The player is placed near my Wi-Fi access point, yet the connection is unreliable.

Wi-Fi appliances in general should be placed 10 feet (3 meters) from the Wi-Fi access point for reliable operation. Try relocating the access point further away from the player to improve connection.

If both Ethernet & Wi-Fi are connected, which one will take precedence?

If both connections are available, Ethernet will be used.

What should I do if I forgot my password?

Please perform a factory reset.

Use the S/W RESET button located at the back of the media player to restore factory settings. This will also clear the player's password.

How do I manage the playback of contents?

The media appliance is designed to be interoperable with leading 3rd party management software solutions or via SMIL open standard commands.

Could the player display Flash or Microsoft PowerPoint presentations?

The player features limited PowerPoint support, but not Flash support.

While PCs can play many formats with varying degrees of success, RISC-based media players are designed to reliably play specific video formats (see spec for details). While Microsoft PowerPoint native files cannot play directly on a RISC-based player, the file can be converted into an image format to be played as an image slideshow.

Why won't some media files play properly?

The video data bit-rate used may have exceeded the recommended bit rate.

The video data bit-rate is the amount of video or audio data used per second to store or play the contents, usually expressed in Mbps (mega-bits per second). Video encoded with excessive bit-rates will not playback smoothly in the media player, likely due to storage I/O bottleneck.

Visit http://www.digisignage.com for compatible media format presets.

The media playback looks different on a PC compared to the media player's screen. (Wrong aspect ratio)

There are 2 major aspect ratios (width-to-height ratios) for video content, but many kinds of displays. If you play 4:3 video on a 16:9 display (or vice versa), a circle becomes oval, and the picture takes on a squeezed or stretched look. To avoid this distorted look, adding black bars are a common technique.

The Network Media Player can be configured to automatically add black bars for certain types of displays. You can set the output resolution in the player's configuration menu to match the **native resolution** of your display.

Some JPEG images cannot be played in the media player.

Progressive JPEG files are not supported. Please convert to baseline JPEG for maximum compatibility.

JPEG images can be either of 2 types: baseline or progressive compression. Baseline JPEG offers greatest compatibility, while progressive JPEGs are suitable for web site images. Progressive images are downloaded and displayed "progressively," being rendered more clearly as more data is received over the internet. Progressive

images are primarily supported on PCs. For media appliances, make sure to save images as baseline JPEG in your photo editor, or resave them as baseline JPEGs using free tools such as IrfanView (http://www.irfanview.com/).

The video is playing but I can't hear any sound, what should I do?

Check volume (mute) settings on monitor.