

KRAMER



USER MANUAL

MODEL:

KDS-MP2

Digital Media Player



KDS-MP2 Quick Start Guide

This guide helps you install and use your **KDS-MP2** for the first time. Go to

<http://www.kramerav.com/downloads/KDS-MP2> to download the latest user manual (or scan the QR code) and check if firmware upgrades are available.

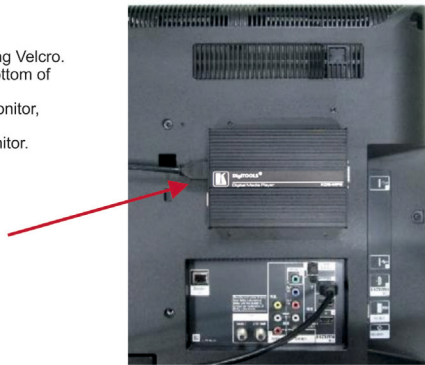
Step 1: Check what's in the box

- | | |
|---|------------------------------------|
| ✓ KDS-MP2 Digital Signage Media Player | ✓ 1 HDMI cable |
| ✓ 1 Power supply (12V DC) | ✓ 2 Sets of Velcro pads |
| ✓ 1 Quick start guide | ✓ Power and micro SD card brackets |

Step 2: Install the KDS-MP2

Mounting option: attach to the back of the monitor using Velcro.

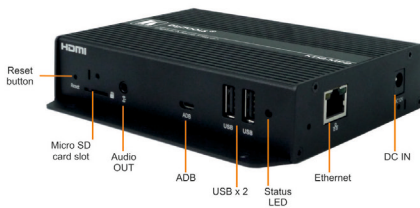
- Separate the Velcro pads, and stick them to the bottom of the player.
- Stick the other Velcro pads onto the back of the monitor, and then attach the player to it.
- Connect the HDMI cable to the player and the monitor.



Step 3: Connect inputs and outputs

Always switch OFF the power on each device before connecting it to your **KDS-MP2**.

For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **KDS-MP2**.



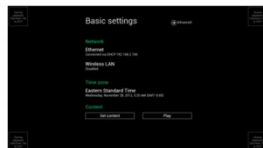
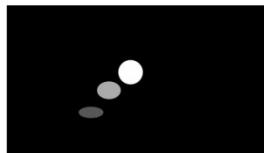
Connect the 12V DC power adapter to the **KDS-MP2** and plug the adapter into the mains electricity.



Step 4: System setup

- 1 Connect an HDMI cable to your monitor.
When using HDMI, audio and video are sent over a single HDMI cable.
- 2 Connect the AC power adapter.
The Status LED on the main unit lights.
- 3 Set your display to the HDMI input.
The player boot up screen appears (shown at right).
- 4 Wait until the player boots up. When "Basic settings" appears on the screen, the unit is ready to update content or configure the menu.
- 5 Connect a USB mouse to the USB port.
- 6 Set the correct time/date AND time zone.
IMPORTANT: You must set the time zone correctly in the menu or via management software for scheduled playback.
- 7 Set a Password in the menus to prevent unauthorized changes.
IMPORTANT: The password is requested when entering the setup menu during playback.
- 8 If needed, click the Set Content button to configure your signage appliance to the content service.
For advanced player configuration, such as static IP, display resolution, and firmware update, visit: <http://www.kramerav.com>.

Note: Though it appears in the menus, wireless LAN is not available for use.



Step 5: Troubleshooting

How do I interrupt playback and enter the Setup menu?

- 1 Move the mouse cursor to the corner of the screen.
- 2 Press and hold the left key for 10 seconds to exit playback and enter setup menu.
- 3 Reset the player to the factory defaults (AC adapter is required).
- 4 If modifying settings cause unintended results or if you have forgotten your password, reset the player. Local contents are also removed.
- 5 Press and hold the reset button with a pen.
- 6 Using the AC adapter, re-connect the power cord while holding reset button.
- 7 Wait until the orange status LED flashes, release the reset button and wait for the system to initialize to the factory default state.



Contents

1	Introduction	1
2	Getting Started	2
2.1	Achieving the Best Performance	2
2.2	Safety Instructions	2
2.3	Recycling Kramer Products	3
3	Overview	4
3.1	Defining the KDS-MP2 Digital Media Player	6
3.2	About KDS-MP2 Setup	7
4	Connecting the KDS-MP2	8
5	Configuring the Player	10
5.1	System Connections	10
5.2	Basic Settings	11
5.3	Connect the Player to the Network	13
5.4	Time Zone Settings	17
5.5	Content Settings	18
5.6	Player Information	20
5.7	Content Configuration – AppStart	22
5.8	Content Configuration – FailSafe	22
5.9	Content Configuration – EasyPlay	23
5.10	Display Settings	27
5.11	Sound Settings	31
5.12	System Configuration – Player Name	33
5.13	System Configuration – Security	34
5.14	System Configuration – Time Server	35
5.15	System Configuration – Scheduled Reboot	36
5.16	System Configuration - Firmware Update	37
5.17	System Configuration - Factory Reset	38
5.18	System Configuration – Power Save	39
5.19	Content Management	40
5.20	Authoring in HTML5	40
5.21	Working with SMIL	40
5.22	Frequently Asked Questions	41
6	Kramer Media Manager Installation	44
7	Technical Specifications	45

Figures

Figure 1: KDS-MP2 Digital Media Player - Front	6
Figure 2: KDS-MP2 Digital Media Player – Rear	6
Figure 3: Connecting the KDS-MP2 Digital Media Player	9

1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront video, audio, presentation, and broadcasting professionals on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Our 1,000-plus different models now appear in 14 groups that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Routers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Video Products; GROUP 12: Digital Signage; GROUP 13: Audio; and GROUP 14: Collaboration.

Congratulations on purchasing your Kramer **KDS-MP2** Digital Media Player. This product, which incorporates HDMI™ technology, is ideal for:

- Digital signage

2 Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual



Go to www.kramerav.com/downloads/KDS-MP2 to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

2.1 Achieving the Best Performance

To achieve the best performance:

- Use only good quality connection cables (we recommend Kramer high-performance, high-resolution cables) to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Do not secure the cables in tight bundles or roll the slack into tight coils
- Avoid interference from neighbouring electrical appliances that may adversely influence signal quality
- Position your **KDS-MP2** away from moisture, excessive sunlight and dust



This equipment is to be used only inside a building. It may only be connected to other equipment that is installed inside a building.

2.2 Safety Instructions



Caution: There are no operator serviceable parts inside the unit

Warning: Use only the Kramer Electronics power supply that is provided with the unit

Warning: Disconnect the power and unplug the unit from the wall before installing

2.3 Recycling Kramer Products

The Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring it to be collected and recycled. To comply with the WEEE Directive, Kramer Electronics has made arrangements with the European Advanced Recycling Network (EARN) and covers any costs of treatment, recycling and recovery of waste Kramer Electronics branded equipment on arrival at the EARN facility. For details of Kramer's recycling arrangements in your particular country go to our recycling pages at www.kramerav.com/support/recycling/.

3 Overview

The **KDS-MP2** is a high quality LAN-based digital signage media player. The **KDS-MP2** receives content streamed from the Network, saved in its internal memory or from an external USB memory stick and shows it with up to 1080p HD image quality on an HDMI display.

The **KDS-MP2** *Digital Media Player* features:

- 1080p full HD support
- High quality video and audio output via the HDMI output connector
- MPEG-1, MPEG-2, MPEG L2, MP3, H.264/MPEG-4, and VC-1 codec format support
- 8GB internal built-in memory, sufficient for 360 minutes of typical 720p video @3Mbps
- Micro SD card expansion slot for additional storage – up to 32GB
- NTP client for time synchronization
- CMS device management in LAN environments using the integrated SMIL control
- SMIL 3.0 instructions (sub-set) support, HTML5, Android
- A perforated side panel for efficient heat dissipation

The Kramer DigiTOOLS® **KDS-MP2** is enclosed in a VESA standard mounting bracket and can be mounted on-wall, inside a cabinet or to the VESA standard screw holes on the rear panel of a display.

The **KDS-MP2** comes with **Kramer Media Manager** software which is an easy and simple way to manage digital signage content via a PC (See [Section 5](#)).

KDS-MP2 Manager:

- Enables creating or modifying content playback schedules
- Introduces seven Smart Widgets that allow players that support HTML5 to schedule dynamic contents
- Enables publishing multiple PowerPoint slides directly to the Player (2003/2007/2010, static only)
- Supports Video Input sequence in playlist scheduling
- Supports full screen portrait mode (auto rotates content)
- Supports Looping or Weekly schedule
- Schedules energy saving video display on/off
- Auto detects IP, MAC address, and models
- Supports easy setup for multi-zone layout
- Features multi-zone (split-screen) scheduling
- Features minute-accurate time slot scheduling
- Features firmware upgrade
- Features image fit, crop, and stretch options

3.1 Defining the KDS-MP2 Digital Media Player

This section defines the **KDS-MP2**.

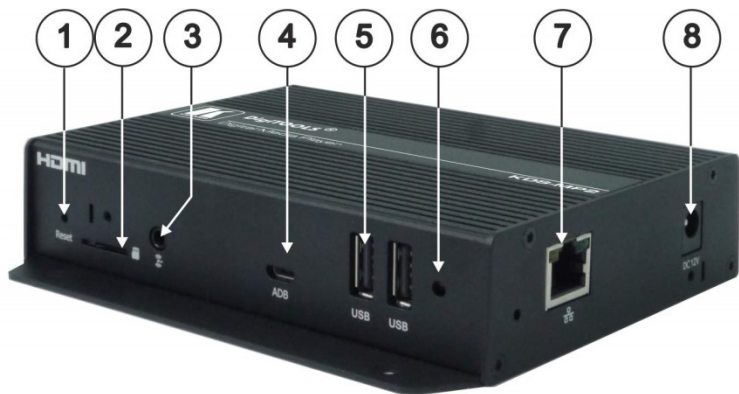


Figure 1: KDS-MP2 Digital Media Player - Front

#	Feature	Function
1	Reset Button	Returns to factory configuration
2	Micro SD Card Slot	Connects to a micro SD card for additional 32GB storage
3	Audio Out 3.5mm Mini Jack	Connects to an unbalanced stereo acceptor
4	ADB Connector	N/A
5	USB Connectors (2)	Connect to a mouse and a keyboard
6	Status LED	Lights green when powered on, red when error detected
7	Ethernet RJ-45 Connector	Connects to a network
8	DC IN Connector	Connects to a 12V DC power supply

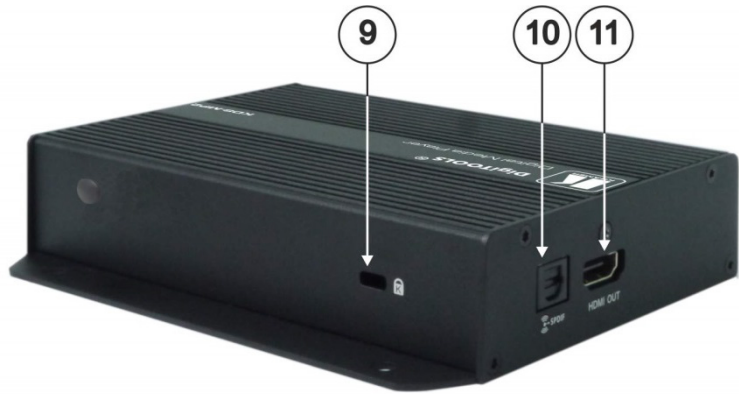


Figure 2: KDS-MP2 Digital Media Player – Rear

#	Feature	Function
9	Kensington Lock	Connects to a Kensington-style locking cable
10	S/PDIF Connector	Connects to digital audio acceptor
11	HDMI OUT Connector	Connects to an HDMI display

3.2 About KDS-MP2 Setup

To prepare the **KDS-MP2** for operation, you need to:

- **Connect the machine**, see [Section 4](#)
Connect the **KDS-MP2** to play media; connect a USB keyboard to configure the **KDS-MP2**
- **Configure the machine**, see [Section 5](#)
Before using the **KDS-MP2** you have to configure it. When powering the unit, the machine boots up to the configuration mode if it does not recognize content for playback.
At any point, configuration is possible when connecting a USB keyboard
- **Prepare the content and export**
Use the **KDS-MP2 Manager** to prepare the content to playback

4 Connecting the KDS-MP2



Always switch off the power to each device before connecting it to your **KDS-MP2**. After connecting your **KDS-MP2**, connect its power and then switch on the power to each device.

To connect the KDS-MP2, as illustrated in the example in [Figure 3](#), do the following:

1. Connect the HDMI connector to an HDMI acceptor (for example, an LCD display).
2. Connect an amplifier to the 3.5mm mini-jack connector.
3. Connect a USB mouse to a USB connector.
4. If needed, connect a memory stick to a USB connector.
5. Connect the Ethernet RJ-45 connector to the network via a LAN cable.
6. Connect the power adapter to the 12V DC socket on the **KDS-MP2** and to the mains electricity (not shown in [Figure 3](#)).

5 Configuring the Player

This section describes how to configure the player.

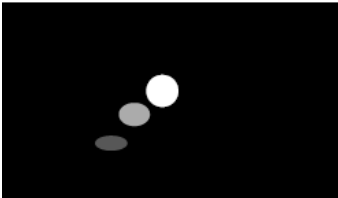
5.1 System Connections

If **KDS-MP2** is a media player, connect it to a monitor via an HDMI cable.

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 is displayed on screen as shown below:

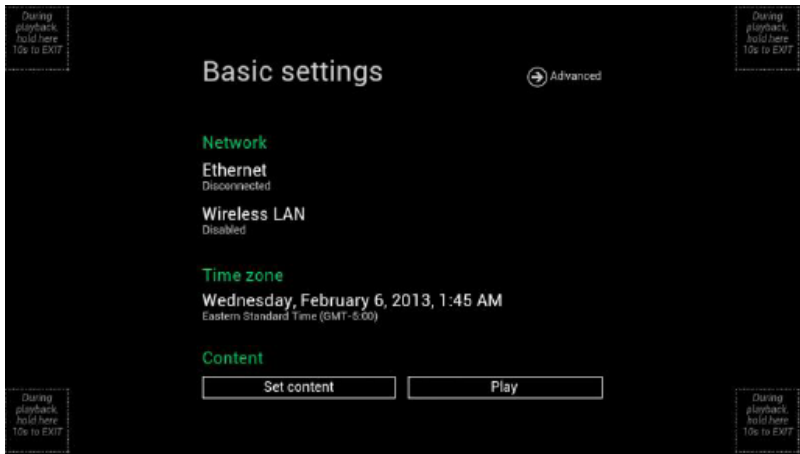


2. The boot-up process takes approximately 40 seconds to complete.

Troubleshooting Tips for media players

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

- Ensure that your video cable (HDMI) 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

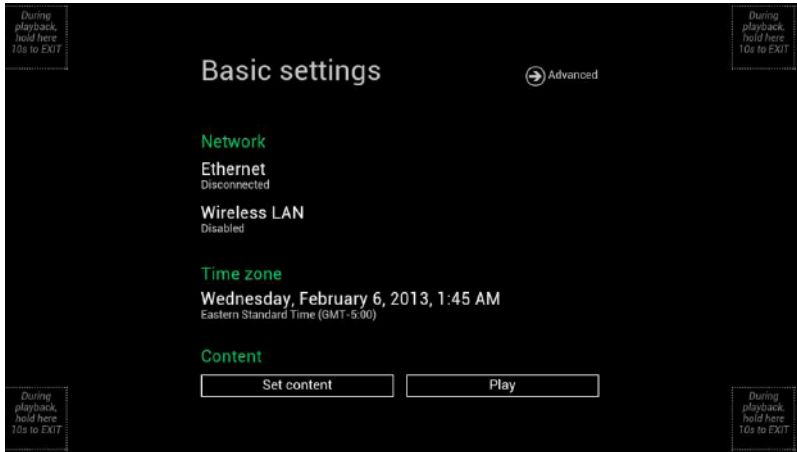


After boot-up completes, the player stays in Basic settings menu if no content service has been configured (i.e. first boot-up for brand new unit or after a factory reset).

If you have already set content into the player, contents play back automatically 15 seconds after boot-up.

5.2 Basic Settings

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



Basic settings:

– Network, Time zone and Content.

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

- 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 a touch screen, tapping and holding the corner areas for 10 seconds brings you to the menu.

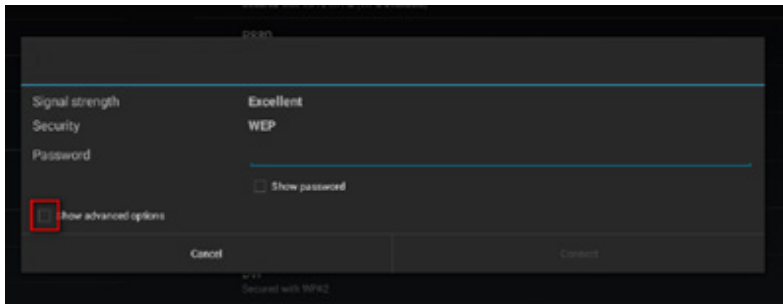


The player asks for a password if a password has been configured.

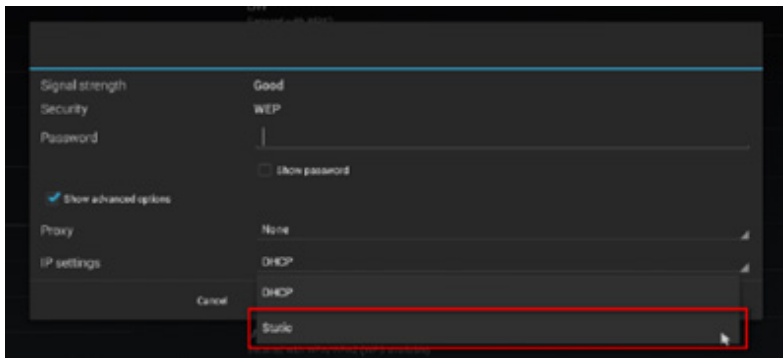
5.3 Connect the Player to the Network

Static IP – Manually assign network IP address

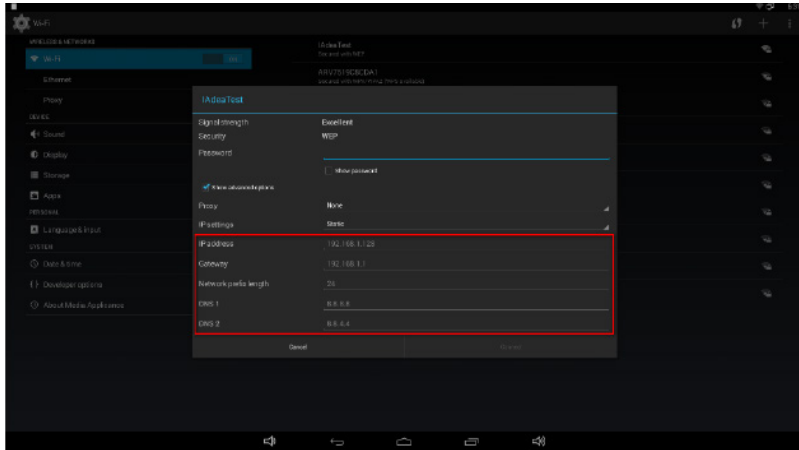
1. Check the box that says "Show advanced options".



2. Click the down arrow to hide the keyboard if needed.
You can also scroll down/ swipe to see the rest of the menu.
3. Under IP settings, change DHCP to Static.



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

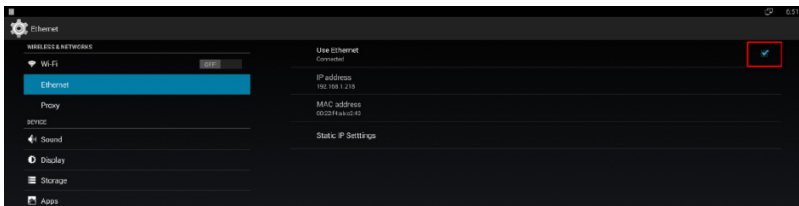


Wired Connection

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

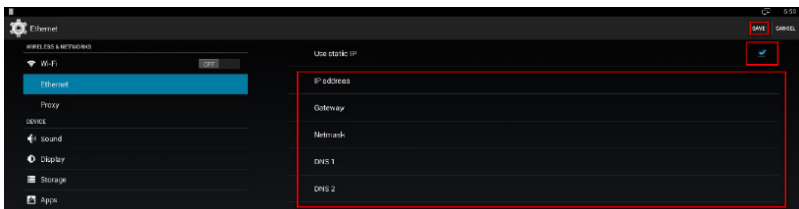
DHCP – Automatically assign network IP address

- Turn on Ethernet. If using DHCP, no further action is required.



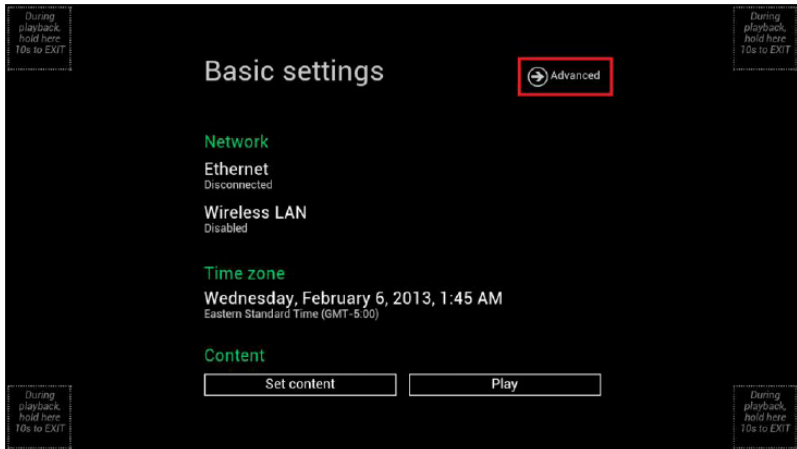
Static IP – Manually assign network IP address

- Click Static IP Settings to configure static IP address.

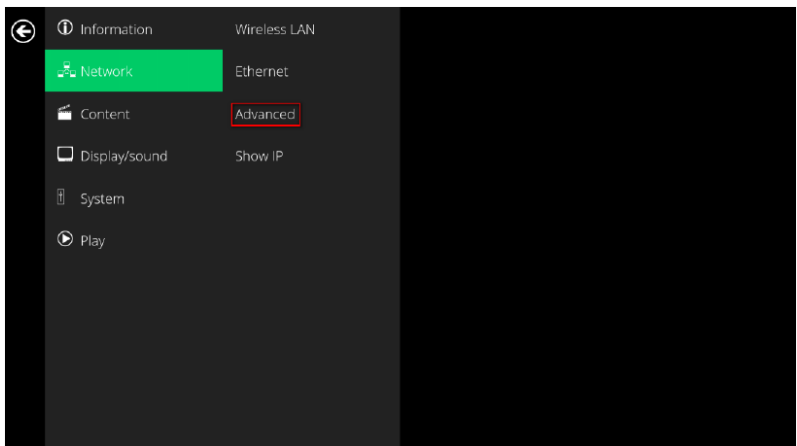


Proxy Settings

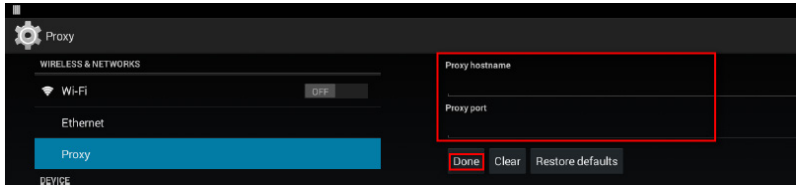
1. In Basic settings, click the Advanced button. The advanced configuration menu is launched.



2. Click Network, and then click Advanced.

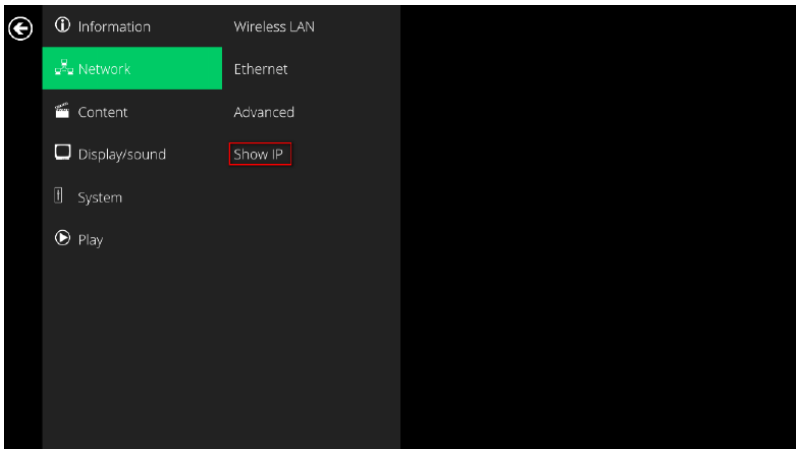


3. The proxy setting menu is launched. Input proxy hostname and port, then click Done to finish the configuration.

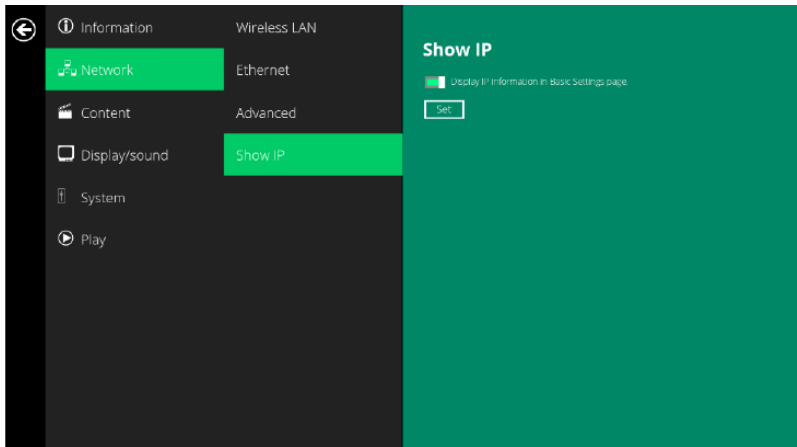


Show IP Settings

1. In Basic settings, click the Advanced button. The advanced configuration menu is launched.
2. Click Network, then click Show IP.

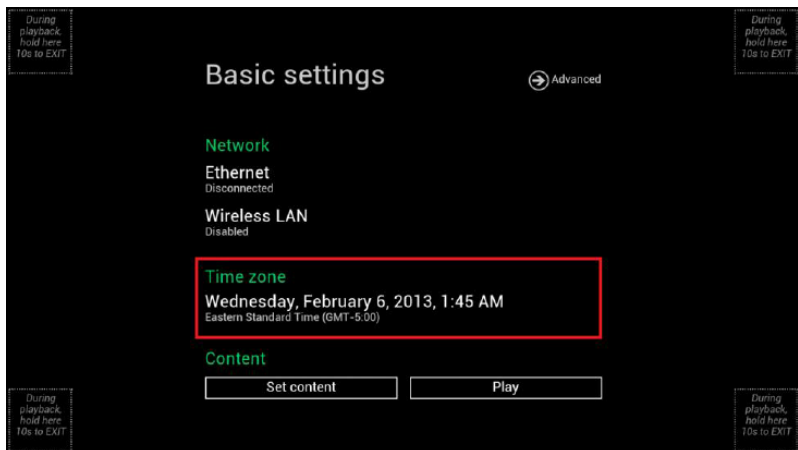


3. This feature controls whether the IP address is displayed in the Basic settings menu. This is enabled by default. When disabled, Basic settings displays “connected” instead of IP address.

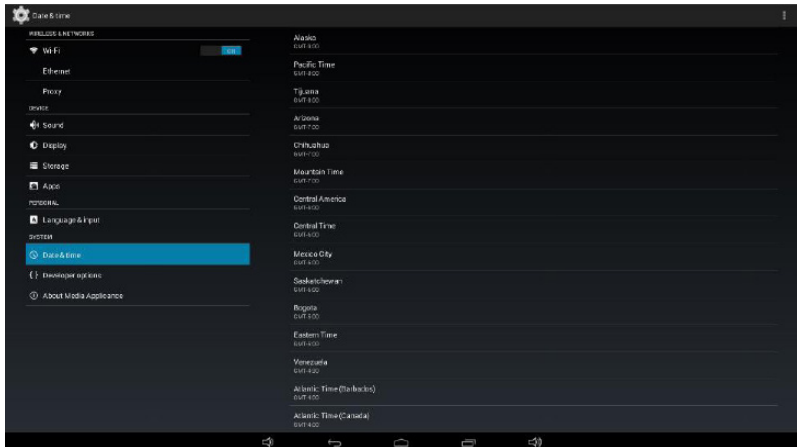


5.4 Time Zone Settings

1. Click Time zone.

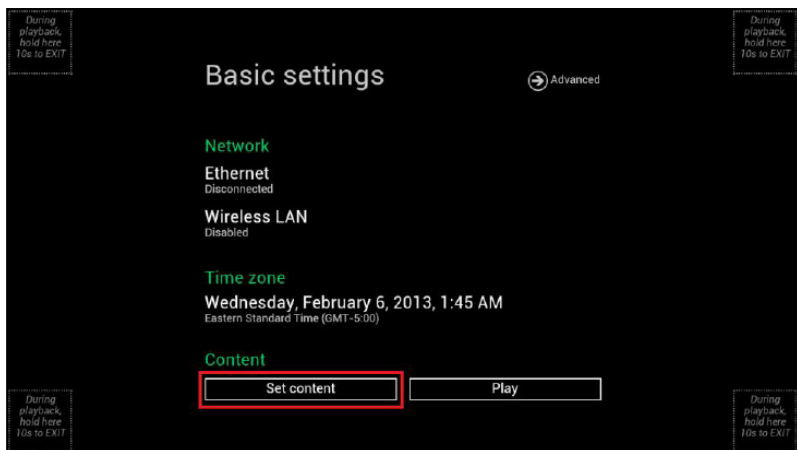


2. Choose the correct time zone from the available options.

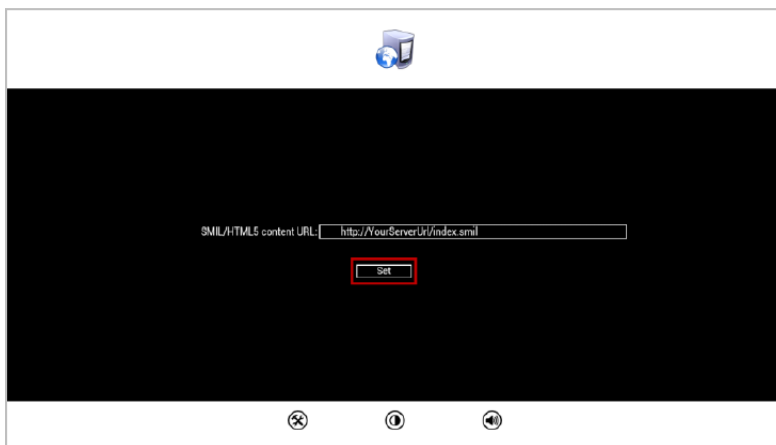


5.5 Content Settings

1. Click the Set content button.



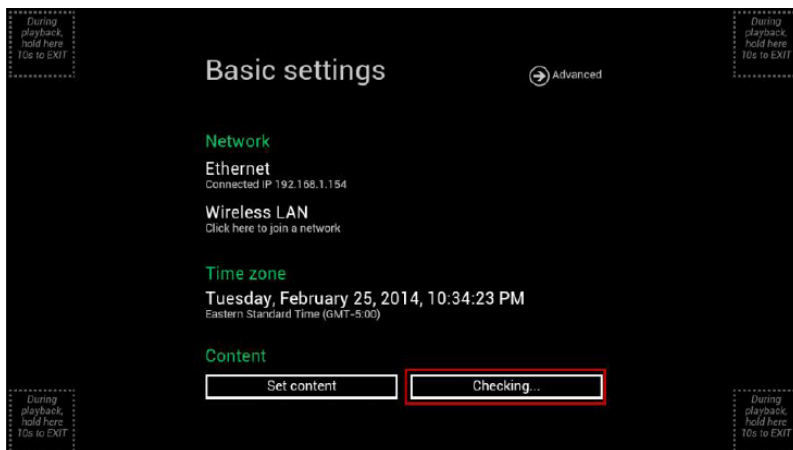
2. Input the SMIL/HTML5 content URL and click Set. It returns to Basic Settings automatically.



3. The player checks the availability of SMIL/HTML5 content URL, with the Play button showing Checking...

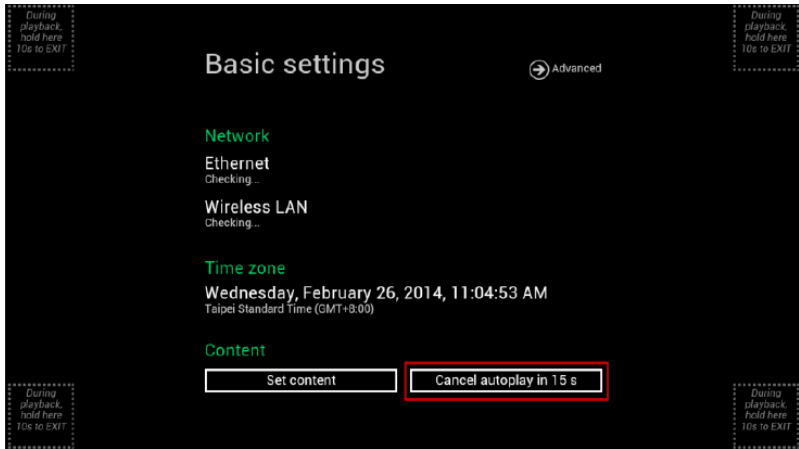
To cancel the checking action, click the Checking... button. It returns to Play.

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



4. If the SMIL/HTML5 content URL is available, the Play button changes to a 15-second countdown and the playback starts after the countdown. The countdown can be canceled by clicking the button.

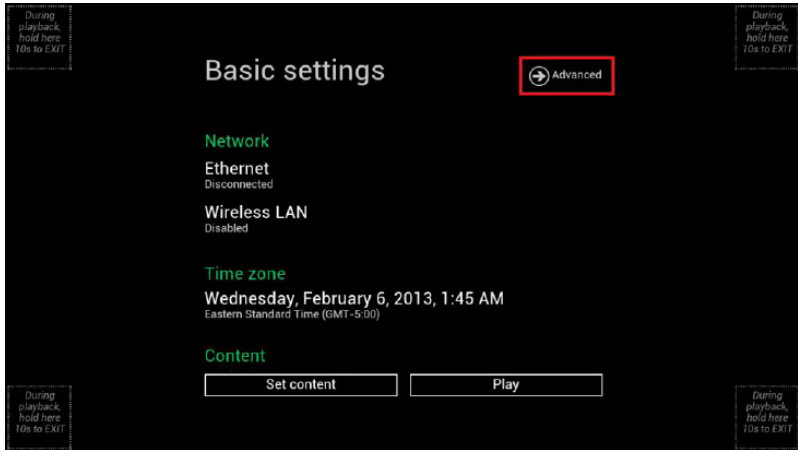
If Checking... shows for a long time, go back to Set content to check the correctness of the URL.



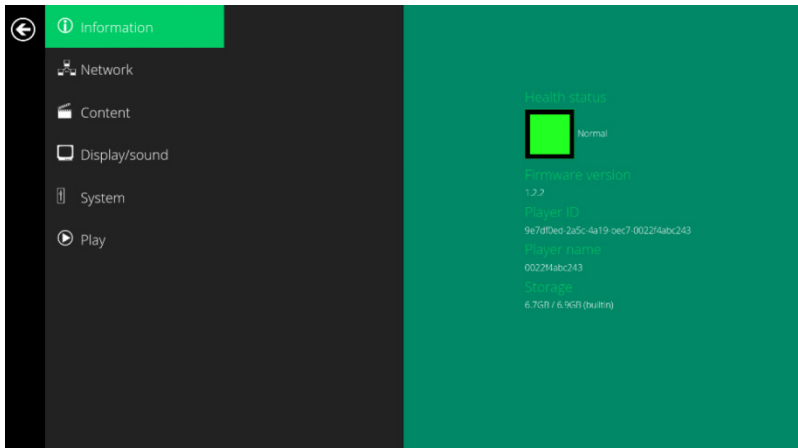
5.6 Player Information

The user can check the player's basic information including its Health status, Firmware version, and Player ID.

1. Click the Advanced button. The advanced configuration menu is launched.



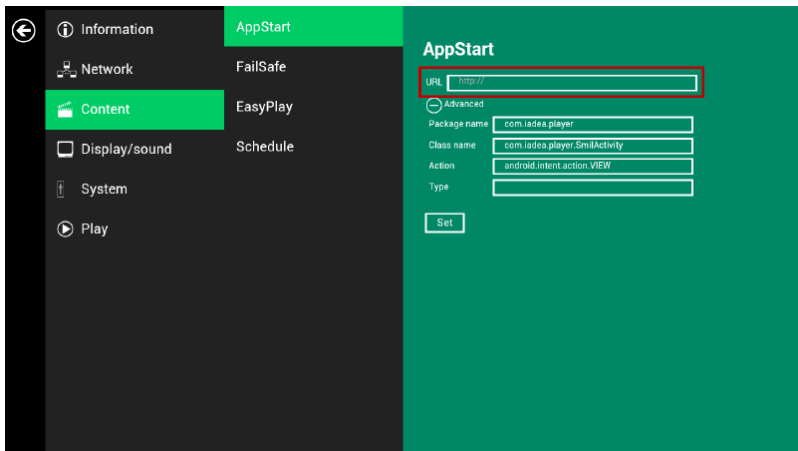
- Click on Information. The definitions of the Health Status are:
 Green – Normal. The device is connected to the URL server.
 Blue – Local. The device is playing content from the USB drive.
 Gray – Disconnected. The device is disconnected.



5.7 Content Configuration – AppStart

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

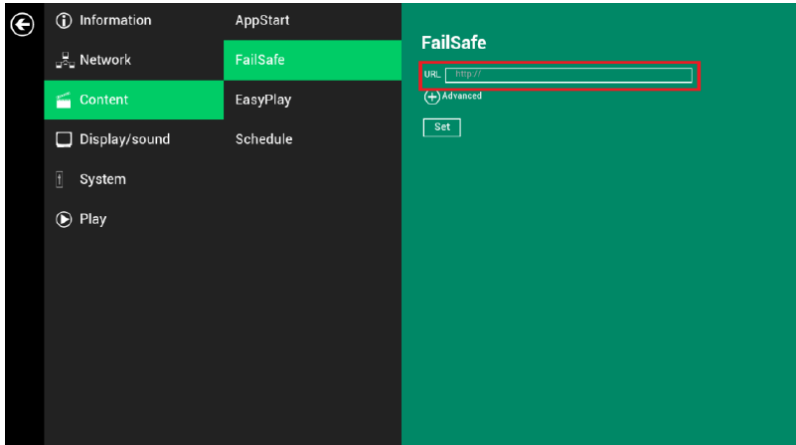
1. Click the Advanced button.
2. Click on Content, and then click on AppStart.
3. Enter the valid URL of HTML/SMIL in AppStart. If you already configured SMIL/HTML5 content URL via "Set content", the URL is shown here.
4. The Advanced option is used for 3rd-party App configuration only.



5.8 Content Configuration – FailSafe

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

1. Click the Advanced button, the advanced configuration menu is launched.
2. Click on Content, 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.

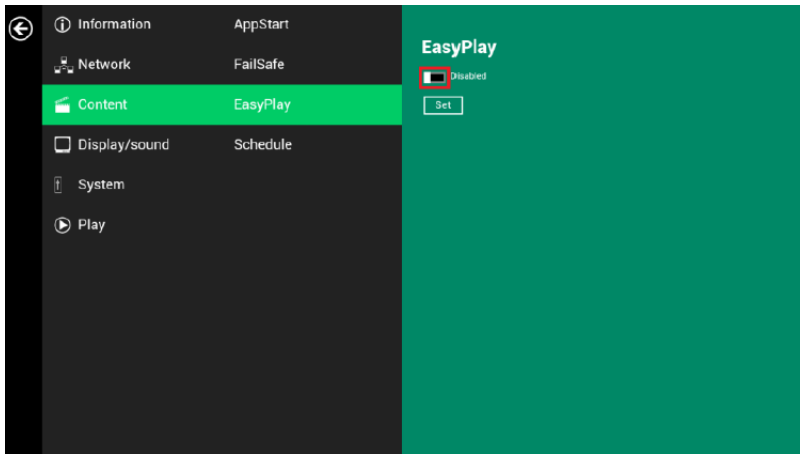


5.9 Content Configuration – EasyPlay

The feature EasyPlay allows the player to play media content from the USB flash drive directly. Note, media files are not copied to the player's internal storage, so the USB flash drive must not be removed.

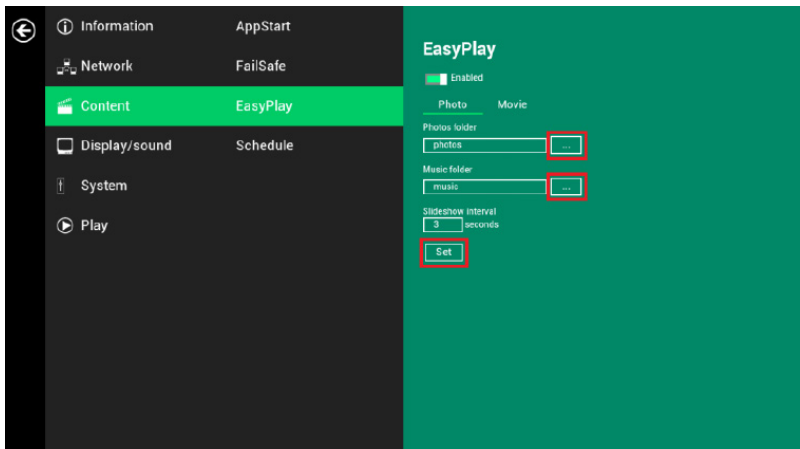
When EasyPlay is enabled, the player plays content only from the USB drive. If user wants to play content from the URL server configured via "Set content", EasyPlay must be disabled.

1. Insert a USB drive containing media content that you want to play.
2. Click the Advanced button.
3. Click on Content, then click on EasyPlay.
4. Click Disabled/Enabled button to enable EasyPlay, and choose from two available operation modes, Photo Mode and Movie Mode.



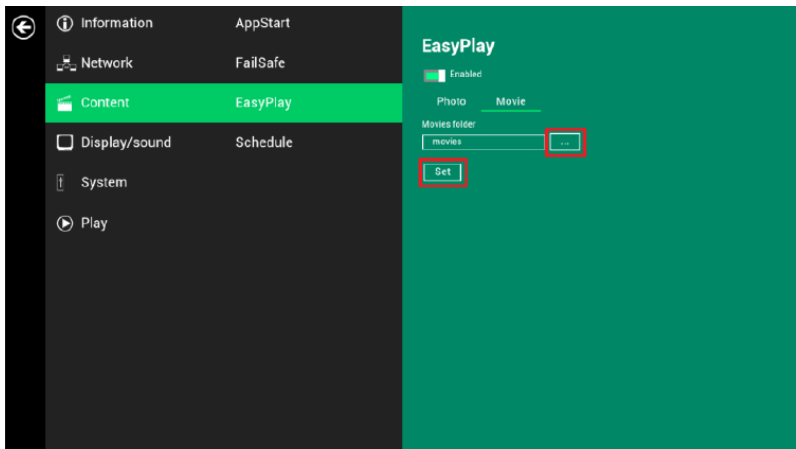
Configure Photo Mode

1. Click on Photo for choosing photos and music. Click on the buttons marked in red below, and select the directories for photos and music from the USB drive.
2. Click Set button after selecting the directories.



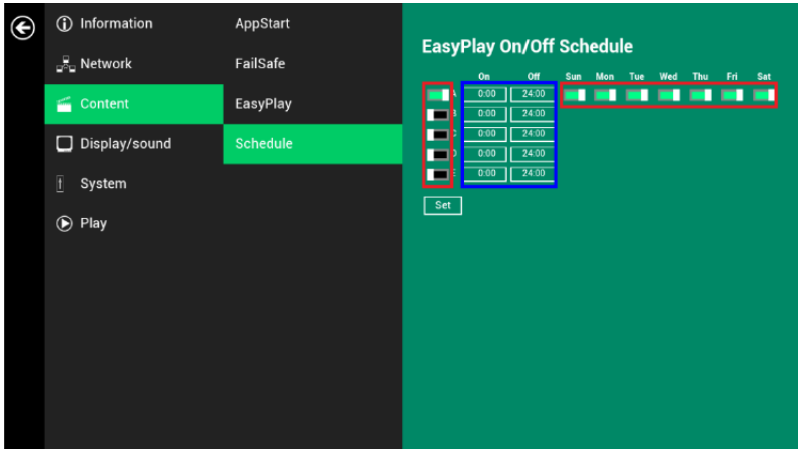
Configure Movie Mode

1. Click on Movie. Click on the buttons marked in red below and select the directory for movies from the USB drive.
2. Click Set button after the folder is selected.
3. The files in the selected folders are played after clicking the Play button in the Basic or Advanced settings menu.

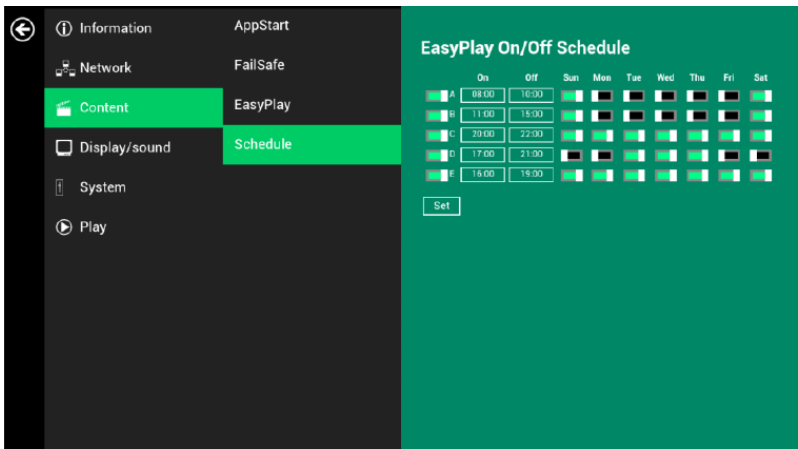


EasyPlay Schedule Configuration

1. Click the Advanced button.
2. Click on Content, then click on Schedule.
3. Click on the buttons marked in red below to enable/disable the EasyPlay schedule for each time slot.
4. Type the scheduled time in the dialogue boxes marked in blue below by using the pop-up keyboard or the USB keyboard.



5. The "On" times assigned in the time slots A-E are inclusive. See a schedule assigned in the following example:



The exact playback time is shown in the time slots marked. The dark blue parts are the overlap time of C/D and D/E.

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
00:00							
01:00							
02:00							
03:00							
04:00							
05:00							
06:00							
07:00							
08:00	Blue						Blue
09:00	Blue						Blue
10:00							
11:00	Blue						Blue
12:00	Blue						Blue
13:00	Blue						Blue
14:00	Blue						Blue
15:00							
16:00	Blue	Blue	Blue	Blue	Blue	Blue	Blue
17:00	Blue	Blue	Dark Blue	Dark Blue	Dark Blue	Blue	Blue
18:00	Blue	Blue	Dark Blue	Dark Blue	Dark Blue	Blue	Blue
19:00			Blue	Blue	Blue		
20:00	Blue	Blue	Dark Blue	Dark Blue	Dark Blue	Blue	Blue
21:00	Blue	Blue	Blue	Blue	Blue	Blue	Blue
22:00							
23:00							

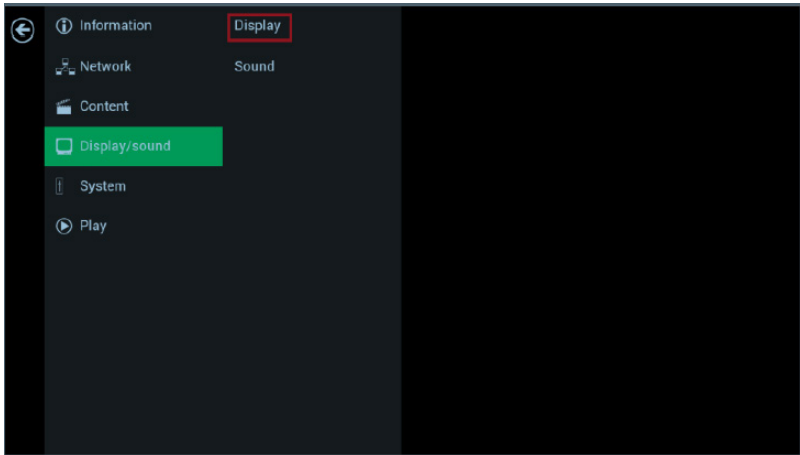
5.10 Display Settings

Resolution Settings (for media players)

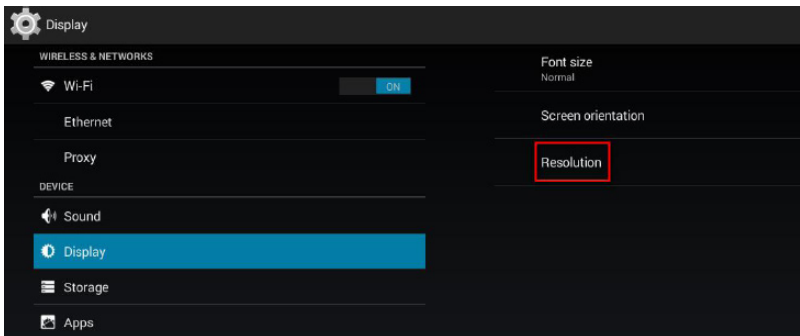
For best quality and to avoid image scaling and blur, set the output resolution to match your display's native resolution.

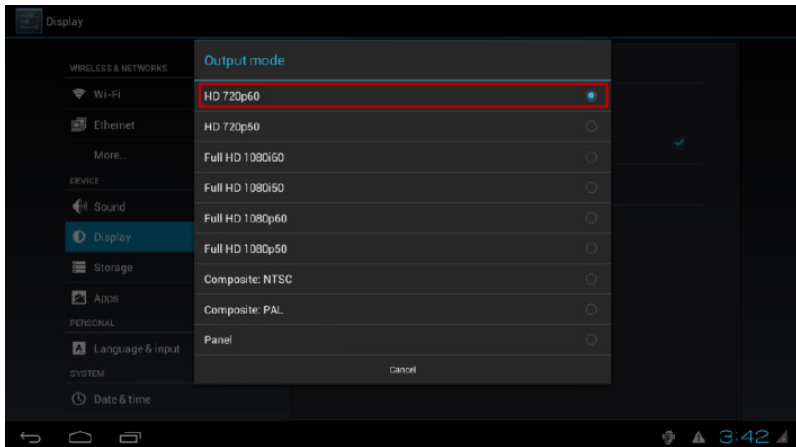
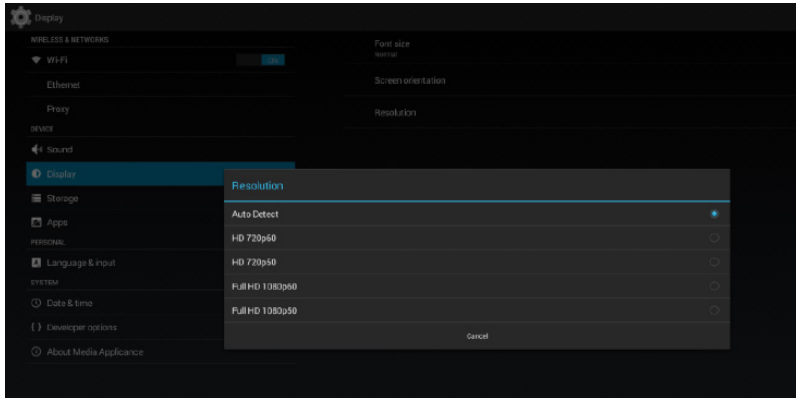
If you are connecting an LCD computer monitor, projector, or plasma display, refer to the device specifications for optimal settings.

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



3. Click on Resolution and select suitable resolution from the popup menu. The default configuration is Auto Detect where a player automatically detects and uses the best optimized resolution that your display supports.

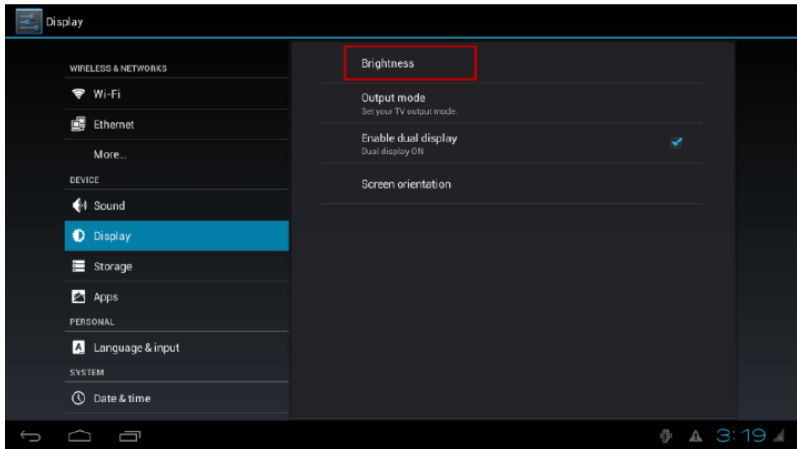




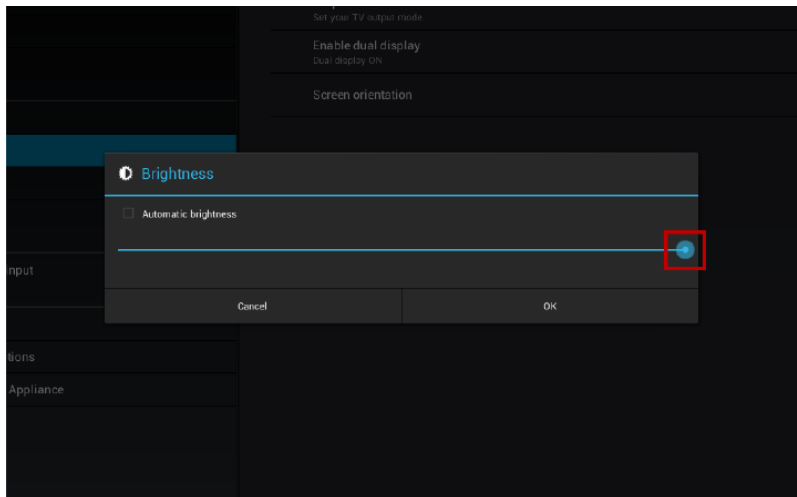
Panel Brightness (for signboards)

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

1. Click the Advanced button, advanced configuration menu is launched.
2. Click the Display/sound button, and then click on Display. The Display Settings page is launched.
3. Click on Brightness.



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

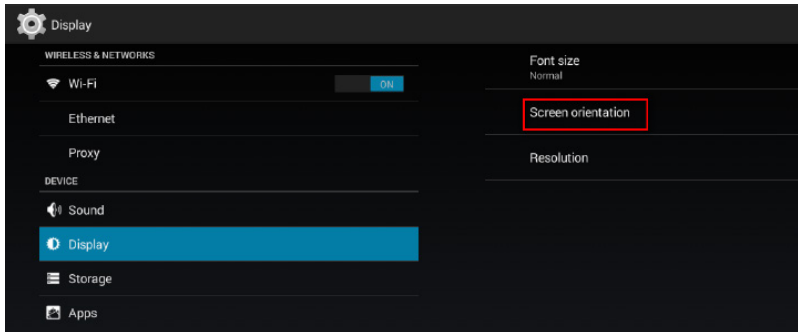


Screen Orientation

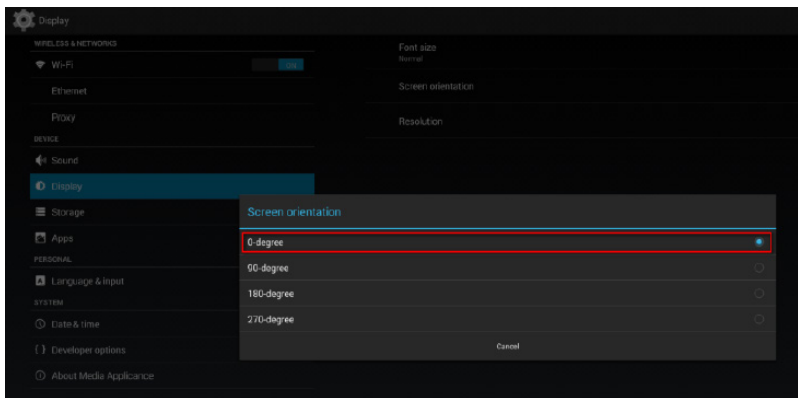
Screen orientation is to set the display to rotate 90/180/270 degrees.

1. Click the Advanced button. The advanced configuration menu is launched.

2. Click the Display/sound button, and then click on Display. The Display Settings page is launched.
3. Click on the Screen orientation marked in red below.



4. Click on the preferred angle from the menu.

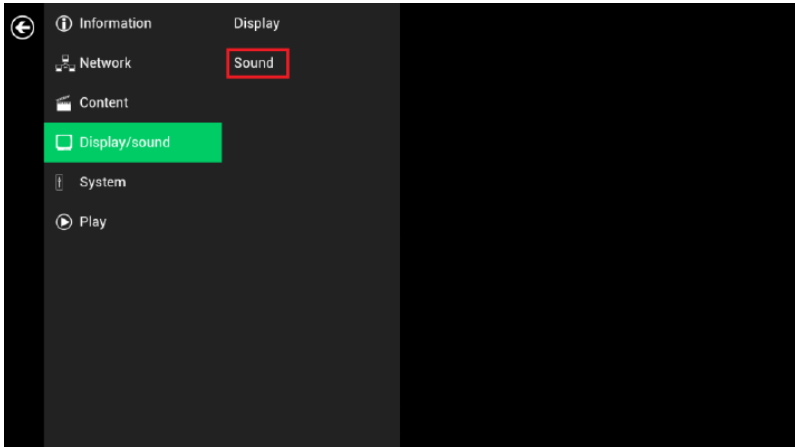


5.11 Sound Settings

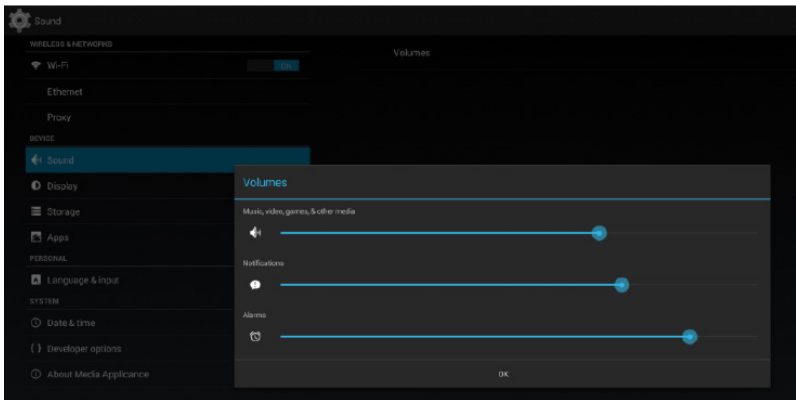
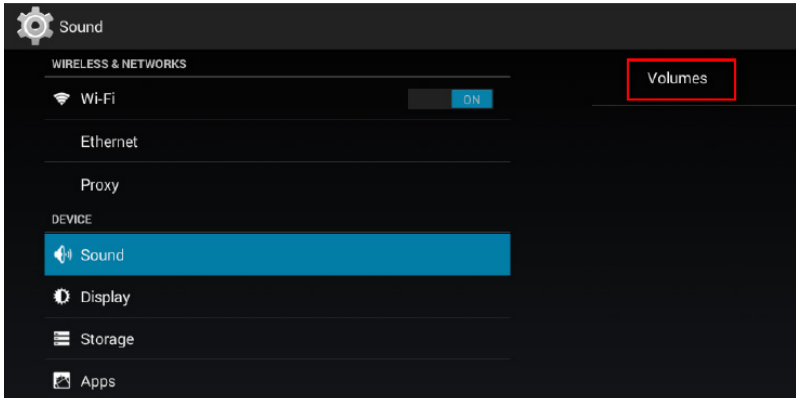
To control the output sound volumes and touch sounds:

1. Click the Advanced button, the advanced configuration menu is launched.

2. Click the Display/sound button, and then click on Sound. The Sound Settings page is launched.



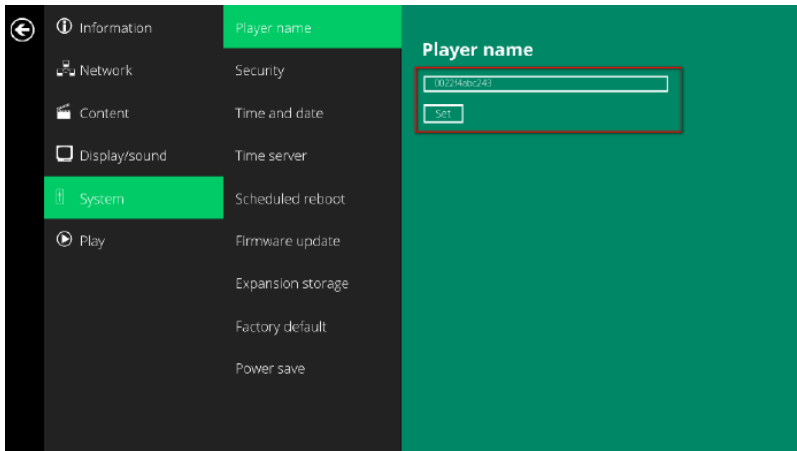
3. Click on Volumes, the Volumes settings page is launched. Drag the blue sliders to adjust the volumes for the selected options, then click on OK to save the new settings.



5.12 System 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).

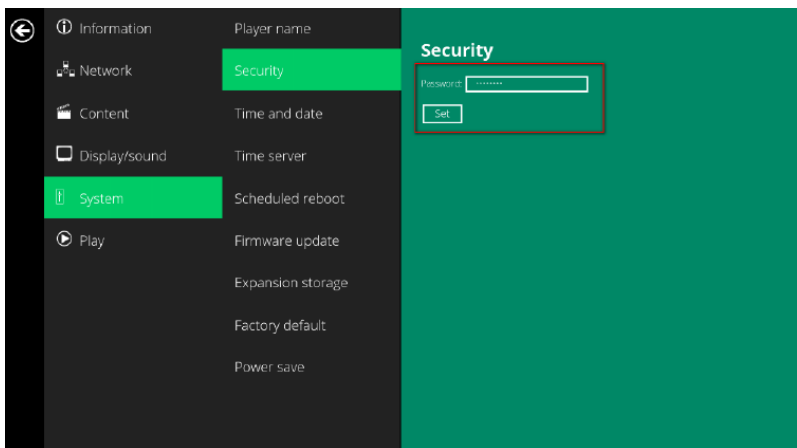
1. Click the Advanced button, advanced configuration menu is launched.
2. Click on System, and click on Player name.
3. Input a name for the field and click Set.



5.13 System Configuration – Security

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

1. Click the Advanced button, the advanced configuration menu is launched.
2. Click on System, and click on Security.
3. Input a password in the field and click Set.



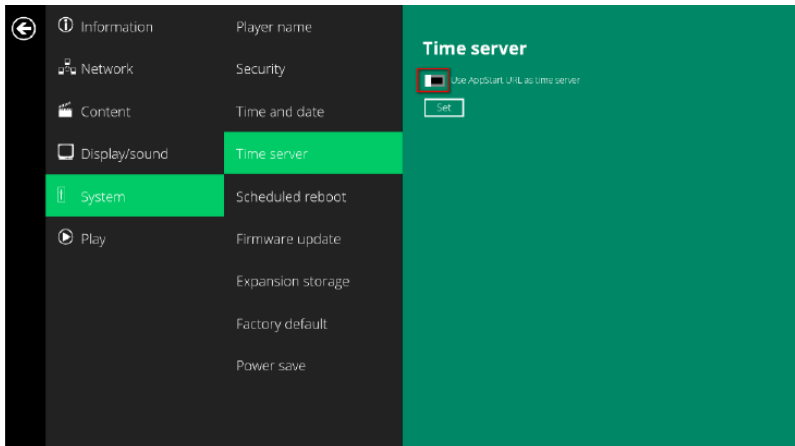
5.14 System Configuration – Time Server

This feature allows the user to synchronize the player's time with the Web server where the appStart URL is hosted. It is disabled by default.

When disabled, the player synchronizes its time with the Android default time server (ntp.pool.org). This requires an Internet connection.

When enabled, the player synchronizes its time with the Web server where the appStart URL is hosted (based on http response header's time).

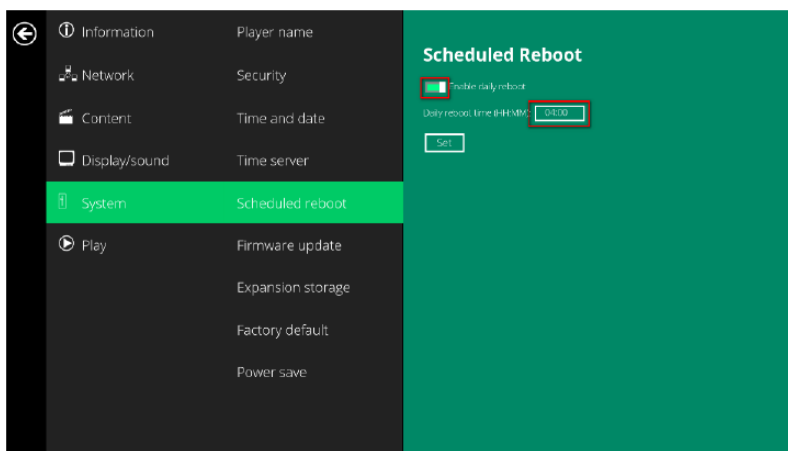
1. Click the Advanced button, the advanced configuration menu is launched.
2. Click on System, and click on Time server.
3. Click the Use AppStart URL as the time server button as marked in red below to enable/disable the time server function.
4. Click on Set to save the setting.



5.15 System Configuration – Scheduled Reboot

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

1. Click the Advanced button, the advanced configuration menu is launched.
2. Click on System, 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 dialog 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.

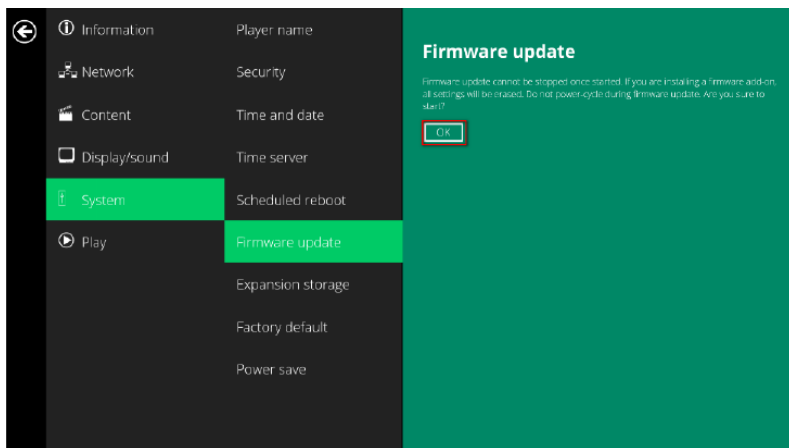


5.16 System Configuration - Firmware Update

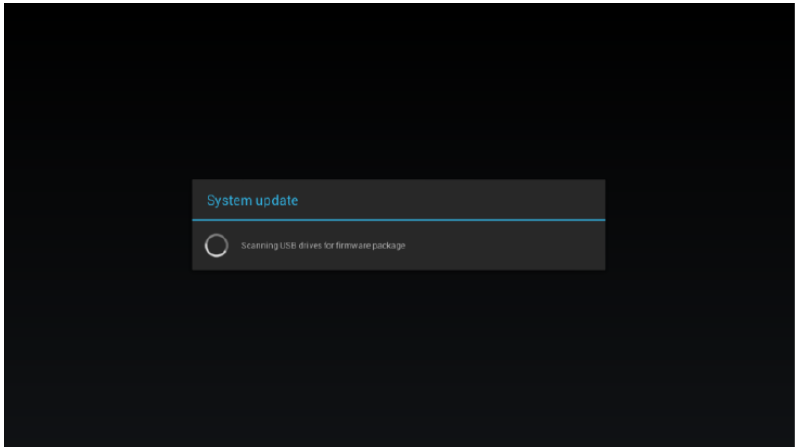
Firmware updates can be performed using a USB flash drive. Read the release notes regarding the changes made to your player before applying the upgrade.

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

1. Download the latest firmware from www.KramerAV.com and copy it to the root directory of a USB drive.
2. Plug the power cord into the device and connect to the electricity.
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 OK to begin the firmware update.



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



5.17 System Configuration - Factory Reset

If the system password is forgotten, you must reset the system to regain access to the player.

Using the Reset Button

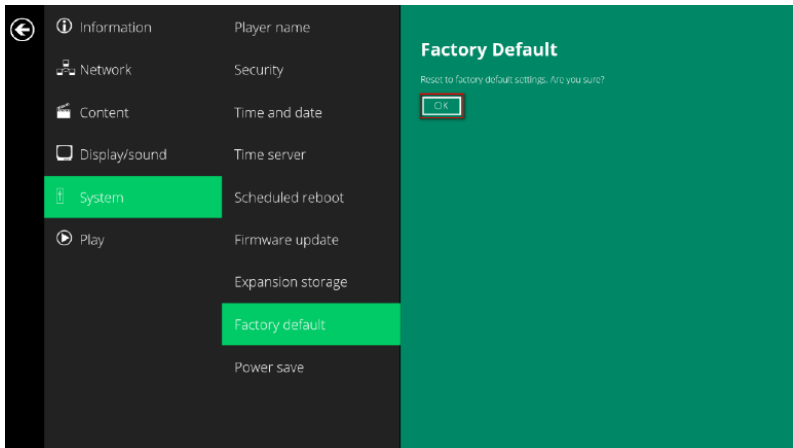
1. PRESS and HOLD the reset button with a pen or small blunt screwdriver.
2. RE-CONNECT the power cord.
3. WAIT until the status LED flashes.
4. RELEASE the reset button and wait for the system to initialize.

Using a USB Mouse

System reset re-initializes the system, clears passwords and returns the settings to their default values. Perform the following:

1. CONNECT a USB mouse or use a touch screen for input.
2. Click the Advanced button, the advanced configuration menu is launched.
3. Click on System configuration and choose Factory default.

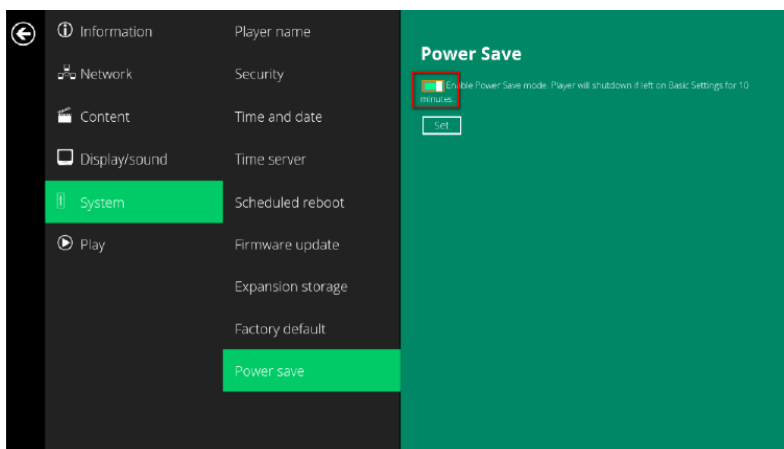
4. Click the OK button to perform the system reset.



5.18 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, the advanced configuration menu is 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.



5.19 Content Management

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

5.20 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 www.KramerAV.com

5.21 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.

5.21.1 Introduction check font

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.

5.21.2 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, visit www.a-smil.org.

5.22 Frequently Asked Questions

What video format can I play?

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

What should I do if I forgot my password?

Perform a factory reset.

Use the S/W RESET button located at the back of the media player to restore factory settings. This also clears 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.

Can 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 (i.e. Manager Express) 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 does not playback smoothly in the media player, likely due to storage I/O bottleneck.

Visit www.KramerAV.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 two 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 is 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. 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 (www.irfanview.com/).

Does the media player support video streaming?

No. Media players play files from local storage and do not support real-time video streaming over the network. This delivers an optimum viewing experience free of playback quality issues such as stuttering, blocking, or blue-screens.

The player is not playing. What should I do?

Play list errors and scheduling issues are two major causes of playback problems. To determine if the problem is caused by a bad playlist, just delete the playlist and restart the player. The player should loop through all media files, indicating a fault with the play list.

If the playback is scheduled to play at specific time, check to see if the device is set to the right time zone on the world clock. If nothing seems wrong, the time zone setting is often the reason the program is not played.

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

Check volume (mute) settings on monitor.

6 Kramer Media Manager Installation

Download the **Kramer Media Manager** from the Kramer Web site.

For further information, see the *Kramer Media Manager User Guide*.

7 Technical Specifications

I/O CONNECTORS:	1 HDMI, 2 USB 2.0, 1 Ethernet on a RJ-45 connector, 1 unbalanced stereo audio on a 3.5mm mini jack, 1 S/PDIF digital audio connector, 1 micro SD card slot
VIDEO FORMAT SUPPORT:	POPai Screen Media Standards S6 (MPEG-1 SIF, 3Mbps CBR) S7 (MPEG-1 480p, 10Mbps CBR) S8 (MPEG-1 720p, 15Mbps CBR) S9 (MPEG-2 480p, 6Mbps CBR) S10 (MPEG-2 720p, 12Mbps CBR) S11 (MPEG-4 AVC, 480p, 6Mbps CBR) S12 (MPEG-4 AVC, 720p, 10Mbps CBR) E4 (VC-1/WMV9, MP@ML, 720p) E7 (MPEG-4 ASP, 480p, 10Mbps CBR) E8 (MPEG-4 AVC, 1080p, 10Mbps CBR)
IMAGE FORMAT SUPPORT:	POPai Screen Media Standards S1 (JPEG 480p baseline) S2 (JPEG 720p baseline) S3 (JPEG 1080p baseline) E1 (PNG 24bpp+alpha, 480p) E2 (PNG 24bpp+alpha, 720p) E3 (PNG 24bpp+alpha, 1080p)
AUDIO CODEC SUPPORT:	POPai Screen Media Standards S4 (MPEG L2 audio) S5 (MP3 audio, 320Kbps)
DYNAMIC CONTENT:	W3C HTML5 (HTML, CSS, JavaScript) W3C SMIL 3.0 instructions (sub-set)
LOCAL STORAGE:	8 GB on-board flash memory (up to 360 minutes of typical 720p video @3Mbps), micro SD card expansion slot (up to 32GB additional storage – replaces internal storage when in use)
INDICATOR LEDS:	Power (green), status (orange)
ACCESSORIES:	AC adapter, HDMI cable
SAFETY:	UL/FCC/CE/CCC/C-Tick/VCCI certified power supplies
CERTIFICATIONS:	CE/FCC/VCCI/TELEC/CCC/IC
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F)
STORAGE TEMPERATURE:	-40° to +70°C (-40° to 158°F)
HUMIDITY:	10% to 90%, RHL non-condensing
POWER CONSUMPTION:	12V, 1.5A, 18W
DIMENSIONS:	167mm x 118.8mm x 24.5mm (6.57" x 4.67" x 0.96") W, D, H
WEIGHT:	0.275kg (0.61lbs)
INCLUDED ACCESSORIES:	AC adapter, HDMI cable

LIMITED WARRANTY

The warranty obligations of Kramer Electronics for this product are limited to the terms set forth below:

What is Covered

This limited warranty covers defects in materials and workmanship in this product.

What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Kramer Electronics to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product.

Without limiting any other exclusion herein, Kramer Electronics does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long Does this Coverage Last

Three years as of this printing; please check our Web site for the most current and accurate warranty information.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What Kramer Electronics will do

Kramer Electronics will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1. Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition. Kramer Electronics will also pay the shipping costs necessary to return this product once the repair is complete.
2. Replace this product with a direct replacement or with a similar product deemed by Kramer Electronics to perform substantially the same function as the original product.
3. Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

What Kramer Electronics will not do Under This Limited Warranty

If this product is returned to Kramer Electronics or the authorized dealer from which it was purchased or any other party authorized to repair Kramer Electronics products, this product must be insured during shipment, with the insurance and shipping charges prepaid by you. If this product is returned uninsured, you assume all risks of loss or damage during shipment. Kramer Electronics will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. Kramer Electronics will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

How to Obtain a Remedy under this Limited Warranty

To obtain a remedy under this limited warranty, you must contact either the authorized Kramer Electronics reseller from whom you purchased this product or the Kramer Electronics office nearest you. For a list of authorized Kramer Electronics resellers and/or Kramer Electronics authorized service providers, please visit our web site at www.kramerelectronics.com or contact the Kramer Electronics office nearest you.

In order to pursue any remedy under this limited warranty, you must possess an original, dated receipt as proof of purchase from an authorized Kramer Electronics reseller. If this product is returned under this limited warranty, a return authorization number, obtained from Kramer Electronics, will be required. You may also be directed to an authorized reseller or a person authorized by Kramer Electronics to repair the product.

If it is decided that this product should be returned directly to Kramer Electronics, this product should be properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization number will be refused.

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IF ANY PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES IS A "CONSUMER PRODUCT" UNDER THE MAGNUSON-MOSS WARRANTY ACT (15 U.S.C.A. §2301, ET SEQ.) OR OTHER APPLICABLE LAW, THE FOREGOING DISCLAIMER OF IMPLIED WARRANTIES SHALL NOT APPLY TO YOU, AND ALL IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE, SHALL APPLY AS PROVIDED UNDER APPLICABLE LAW.

Other Conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by Kramer Electronics or (iii) this product is not purchased from an authorized Kramer Electronics reseller. If you are unsure whether a reseller is an authorized Kramer Electronics reseller, please visit our Web site at www.kramerelectronics.com or contact a Kramer Electronics office from the list at the end of this document.

Your rights under this limited warranty are not diminished if you do not complete and return the product registration form or complete and submit the online product registration form. Kramer Electronics thanks you for purchasing a Kramer Electronics product. We hope it will give you years of satisfaction.

KRAMER



P/N: 2900-300518



Rev: 5



SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing

For the latest information on our products and a list of Kramer distributors, visit our Web site to find updates to this user manual.

We welcome your questions, comments, and feedback.

www.KramerAV.com
info@KramerAV.com