How to Play Your Media Easily

Manual for sets of screen covers and Samsung professional signage screens



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1. Thank you

Thank you for your interest in digital communication at point of sale and public spaces which brings you:

- **Power of "Moving Pictures"** Videos attract attention and tell stories i.e. transfer emotions and explain details.
- Show more & at the right time Single screen can show various messages and change them during time in the morning, at the weekend, if it's raining...
- Speed From idea to content displayed everywhere in minutes, not weeks
- **Interactivity** You can provide visitors with much broader content e.g. access to the whole e-shop or to get the instant feedback... when you are ready for that.

This guide will help you to prepare necessary media and let them play on our sets of screen covers and **Samsung** professional screens in various scenarios and **fully exploit their potential**.

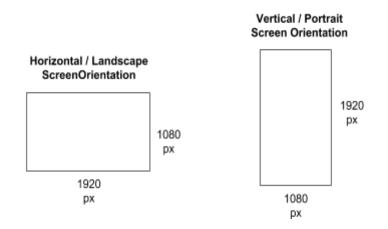
2. How to prepare media

Preparation of videos and pictures for large format screens has its own specifics. It is different than preparation of materials for print or websites. The most important rules are:

- Use the right dimensions of pictures or videos They should be as same as dimensions
 of the screen in pixels, so typically 1920 x 1080 px for the screens with Full HD resolution to
 gain good looking result. A ratio of width and height should be kept at minimum i.e. 16:9 for
 Full HD screens.
 - Note: A majority of signage screens have Full HD resolution, smaller screens can have another resolution. Even screens with 4K resolution will show Full HD content accordingly.
- **Beware the screen orientation** you use a portrait or a landscape and due to this you must prepare your media.
 - Note: Videos can't be turned easily. If you want to show fullscreen video at the screen in portrait orientation, video must be made in specific sizes i.e with width 1080px and height 1920px.

Sizes of pictures and videos for screens with "Full HD" resolution

Sizes are in pixels (px). They are independent on the screen's physical size e.g. 32" or 55".



- **Use high resolution of pictures** Very small details can be seen on large screens. So your pictures should be in really good quality with no or small compression.
- Beware video frame rate There are still limitations in screen performance for playing videos. It's recommended to use lower video frame rates typically 25 frames per second (fps) to be safe that videos will be displayed well. If you want to use higher frame rates, it's recommended to test videos on the final screens.
- Beware video codecs The video format given by a file extension like AVI or MP4 does not
 guarantee that the screen will display videos well. It's necessary to use what is called "codec"
 supported by the screen for video generation codecs should be verified while using currently
 existing videos. It's recommended to test each of your video on particular model(s) of the
 screen before spreading them out.

File extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi	AVI MKV ASF MP4 3GP MOV FLV VRO VOB PS TS SVAF	H.264 BP/MP/HP	4096x2160	4096X2160: 24	40	AC3
*.mkv			**	3840X2160: 30		LPCM ADPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) DTS (Core , LBR) G.711(A-Law, µ-Law)
*.asf		HEVC (H.265 - Main,		60	80	
*.wmv		Main10, Main4:2:2 10)				
*.mp4		Motion JPEG	i i	30	80	
*.mov *.3gp		MVC	1920x1080	60	20	
*.vro		-				
*.mpg		Divx 3.11 / 4 / 5 / 6				
*.mpeg		MPEG4 SP/ASP				
*.ts		Window Media Video				
*.tp		v9 (VC1)				
*.trp		MPEG2				
*.mov		MPEG1				
*.flv		Microsoft MPEG-4 v1,		30	20	
*.vob		v2, v3				
*.svi *.m2ts		Window Media Video				
*.mts		v7(WMV1),v8(WMV2)				
*.divx		H 263 Sorrenson				
		VP6				
*.webm	WebM	VP8	1920x1080	90	20	Vorbis
		VP9	4096x2160	4096X2160: 24	20	
				3840X2160: 30		
*.rmvb	RMVB	RV8/9/10 (RV30/40)	1920x1080	60	20	RealAudio 6

The examples of supported codecs for Samsung PMF model line More info in the manual for your screens

3. How to play media simply

Signage screens have the possibility to copy **pictures or videos** from the USB flash to the screen and **play it**. The beauty of this solution is **simplicity**. There is **no dependence on IT experts or signage specialists**. You just buy signage screens or complete sets of screen and cover and you are ready to start. It's recommended approach for for small and medium business for pilot projects in corporations to gather experiences, realistic estimates and become ready for broader investment.



Before you start

The screens embedded in our housings are set in a way that you just plug housing to power and the screen starts to operate itself.

It's NOT necessary to switch screen on by pressing red button **ON** or switch off by power off button on a remote control nor by pressing switch on screen.

The key buttons used for navigation:

- Arrows are used to move in setup menu.
- Confirm button is available among the arrows.
- Exit or Return buttons can be used to return to the previous state usually.

The USB sockets used for media upload are usually on bottom or rear sides of the housing.



Copy media from USB flash drive to screen and play them

If you do not want to leave the USB flash drive in the screen, you can copy media files from the USB flash drive to internal memory of the screen.

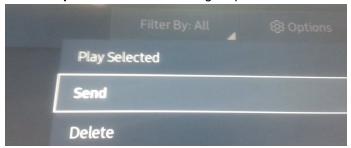
- 1. Insert the USB flash drive to an USB socket available at the bottom part of this housings. It is connected to this USB socket of embedded screen.
- 2. Press remote control buttons **Source**, wait 2-5 sec. and press **Home** to navigate to the main content setting of the screen. You should see **Player** at left bottom screen corner after this step



- 3. Choose **Player** as a source of signal.
- 4. Set source from **Internal Memory** to **USB/ Mass Storage/Flash Drive** at screen left top corner.



5. Choose **Options** at the screen's right up corner and select **Send**.



- 6. Select the files which you want to put to the internal memory.
- 7. Confirm this selection by **Send** and select **Internal** as a target, invoke **Start**.
- 8. Put the USB flash out of the screen, it sets the source to **Internal Memory** automatically. Alternatively leave USB flas in screen and press **Return** button on the remote control, which returns you to the player where you can set the source to **Internal**.
- 9. Select pictures or videos to be played. If you want to play only some videos or pictures, choose Options > Play Selected, select the particular pictures or videos and confirm selection by Play button. If there are all videos or pictures to be played stored in one folder, select this folder. The videos or pictures stored in this folder will start to play in alphabetical order.

Play media directly from USB flash drive

The easiest way to play your media is directly from the USB flash drive. This USB flash drive must be inserted in the screen for the whole time when your media shall be displayed.

- 1. Insert the USB flash drive to USB socket available at the bottom part of housings. It is connected to USB socket of embedded screen.
- 2. Choose remote control buttons Source and Home to navigate to main content setting of the screen. You should see Player at left bottom screen's corner after this step



- 3. Choose **Player** as a source of signal.
- 4. Set source from Internal Memory to USB/ Mass Storage/Flash Drive at screen left top corner.



5. Select pictures or videos to be played. If you want to play only some videos or pictures, choose Options > Play Selected, select the particular pictures or videos and confirm selection by Play button. If there are all videos or pictures to be played stored in one folder, select this folder. The videos or pictures stored in this folder will start to play in alphabetical order.

Note: If there are folders "Contents" and "Schedule" stored on your USB flash drive, the screen player expects that these files were made in the program **Samsung MagicINFO** and it will prefer them as a source of this content. We recommend to delete or rename these folders on the USB flash drives used for direct upload of media to the screens.

Play media at certain time only

If you want to play pictures or videos at certain time only and let the screen to be "off" in other periods i.e. during nights or weekends, you can use screen **On/Off Timer**.

- 1. Press a button Home
- 2. Choose On/Off Timer
- 3. Choose Switch On
- 4. Choose one of the options, e.g Time 1
- 5. Then choose other data:
 - a. Days of playing e.g. Mo Fr
 - b. Time On
 - c. Volume
 - d. **Source** the USB/internal memory
 - e. Content choose pictures, videos, their positions and their order
- **6.** Choose **Switch Off** you will set the time to switch the screen off in a similar way just set e.g. Time 1.
- 7. You can switch the screen off by Power OFF button now . The screen will switch on automatically in first switch on time in timer.

There is an additional setting to Timer needed: **Menu / System / Power control / Auto Power to OFF**. That prevents the screen to be switched on automatically when the power outage finishes. If

you do NOT use Timer and you want screen to play your content all the time, change the setting to Menu / System / Power control / Auto Power to ON.

Note: This approach enables you to set order of playing files in another order than the alphabetical one.

4. What are other ways how to control the screens' content

Connecting the screen to the network via cable or WiFi

The professional signage screen can be managed via computer network. It is just necessary to connect it via:

• Ethernet cable:

- o plug the network cable to Ethernet RJ-45 socket available at the screen rear side
- enter the screen setup menu by pressing the button "Menu" on the screen remote control.
- choose Network > Open Network and select Fixed Network connection and optionally change the default network setting. Your IT will provide you with the details like if DHCP server is used or with the exact connection parameters..

WiFi:

- o enter the screen setup menu by pressing button "Menu" on the screen remote
- choose Network > Open Network and select Wireless Network
- o choose the right SSID and entering the password of the particular WiFi Access Point.

Note: Sometimes your IT specialists also must do additional setting in the company network to enable screen to be visible for other devices in the network, to enable them access to the Internet etc.

After connecting the screen to the network, you will have available other ways how to control the screen's content discussed further.

Displaying Web Pages

You can also set the screens to show the of particular **web pages**. Just press button **Source** and Select **Web Browser** and enter particular web address / URL via remote control. The screen must be connected to the computer network and must have the access to public internet. Follow the instructions in the screen manual for that.

Note, the office suites like **Google Suite** or **MS Office 365** are able to make their documents public in the form of the web pages. This can be the quick and easy way to prepare and public content on screens easily by anybody with no or limited training, typically for internal communication. Steps at Google Drive: Choose **File / Publish to the web** on your document / sheet / presentation / drawing / etc to be shown on the screen, store URL address in clipboard via Ctrl+C, use some URL shortener like www.bit.ly to make it shorter, enter the short URL into web browser on screen.



"Publish to the web" dialog at Google Drive

Note, devices with touch screens or touch foils can be used for interactive control of content by end users. Therefore you can e.g. provide production workers with access to detail product documentation via **Google Drive, MS Office 365, local FTP service** with the web interface etc. Ask your supplier of sets with screen about the touch functionality.

Screen Mirroring

Another way is to user so called screen mirroring:

- Select "Screen Mirroring" as a source of signal for the Samsung screen via button "Source" and selection "Screen Mirroring" view remote control. Your PC will not "see" the screen otherwise while trying to connect to screen.
- Please note: The PC must support resp. <u>Miracast</u> or <u>WiDi</u> technology, which are usually supported by new notebooks with Windows 10, but it is not a standard especially at older PCs.
- Set the screen mirroring at your PC via these steps.

Simple Management From Mobile/Tablet/PC

The content of the each screen can be also controlled remotely via PC, tablet or mobile phone via Samsung MagicInfo Express 2 software. It is provided free of charge. Its Windows and Mac versions are available for download here. You will find related guidelines in "MagicInfo Express 2 for PC - Tutorial" videos at "Samsung B2B Solutions Tutorials" playlist. This solution has some limitations - your device must be connected to same Wifi/LAN as screens, limited types of content can be published like set of pictures and videos etc.

Enterprise Solutions

There are also more robust enterprise solutions for content management with central storage and corporate network access (WAN) like <u>Samsung MagicInfo</u>, <u>ONELAN for Samsung</u> and others. We recommend you to use local partners for the implementation and support in these cases.

5. Ensuring the screen operation

If you want to ensure smooth operation of the screens we recommend to instruct your stuff with following rules:

• Switching on and off

- DO use the screens timers to control periods when the screens should show content (see chapter above).
- o DO NOT unplug the screens from power supply.

- DO NOT switch the screens by the switch on the screen.
- o DO NOT switch the screens by the remote control.

Cleaning

- DO NOT wash the screens and their housing inappropriately.
- DO follow cleaning instructions in their housing and the screen manuals.

Location

- The screens and their housings are intended to be used INDOOR if it is not stated explicitly that they can be used in outdoor environment.
- DO NOT place them in inappropriate environment, follow conditions described in the screen and housing manuals.

• USB flash drive manipulation

- If you play media directly from the USB flash drive, DO NOT pull it out from the screen from another purposes if you want your content to be played.
- It's highly recommended to use dedicated USB flash drives only for upload the media to screen and DO NOT to store other files on these USB flash drives.

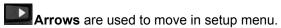
6. How to prepare your own screen

A professional signage screens are able to be set up in lot of different set ups. We have chosen the most important ones which we recommend to set up for **Samsung Professional Signage Screens**.

The screens embedded in housings are set in a way that you just plug housing to power and the screen starts to operate. If you use your screen and the screen does not start to operate, try to turn it on by pressing red button **ON** on a remote control and check if power switch on the screen is on.

Access setup

You enter the main screen setup menu by pressing button "Menu" on the screen remote control in the majority of situations. Alternatively press "Source", wait 1 – 5 seconds to be sure that the screen really reacted on the command and press "Menu".



Confirm button is available among the arrows.

Exit or Return buttons can be used to return to the previous state usually.

Change the language

If you want to change the language of the screen menu, enter the main screen setup menu, select "**Menu on screen**", choose "**Language**" Item, and select the wanted language via remote control buttons described above.

Exercise set up

The screens embedded in housings are set in a way to be prepared for an upload of a content and an operation. The set up described below is already done. If you use your own screens or if you want to tailor the default setting, go through the following settings.

1. Set up date and time: System > Time

Clock Set: Date & Time
 Note: Without setup of time you can't use internal screen player.

2. Set up picture:

- a. Picture > Picture mode: recommended VideoWall a Text Note, if you change this, economy settings will be changed too, so you must repeat economy settings. This settings is also related to source of signal like HDMI.
- b. Picture > Backlight: 100
- 3. Set up eco solutions: System> Eco Solutions
 - a. Energy Saving Mode > Off
 - b. Eco Sensor: On & Min. Backlight: 100 or lower if you are satisfied with a picture visibility
 - c. Screen Lamp Schedule: Off
 - d. No Signal Power Off: Off
 - e. Auto Power Off: Off
- 4. **Set up power:** System > Power Control
 - a. Stand By Control: Off
 - b. Auto Power: On
 - c. Max Power Saving: Off
- 5. **Set up orientation of the screen a portrait or a landscape:** Menu On Screen Display > Display orientation, where:
 - a. Screen menu orientation for the screen menu displayed
 - b. Source content orientation for videos and photos displayed

7. Claims in the EU countries

Claims of housing

Contact your supplier to process a claim of housing i.e. the screen cover where the screen is mounted.

Claims of the screen

The Samsung screens used in our housings can be claimed in whatever the EU country. A procedure of its claim:

1. Prepare necessary information

- a. You will need to know **screen model, model code and serial number**. Find them on label screen or inside their housing or on related documents.
- b. You will need to know **day of purchase**. Find them on an invoice or delivery note related to this purchase. Beware the purchase by the end user of the screen not by distributors or resellers is taken into account for these claims purposes.

2. Contact Samsung Customer Center

- a. Find the necessary contacts on Samsung's country web pages in the section "Technical Support" section e.g. http://www.samsung.com/cz/info/contactus/.
- b. Contact the call center with the information that you have the problem with LFD "large format display" and the details about the screen and the purchase.
- c. Customer center will do the initial diagnoses of the problem and choose the service partner appropriate for you.

3. Contact Samsung Service Partner

- a. Based on the information provided by Samsung customer center contact the service partner or wait for the service partner to contact you.
- b. Agree if the **onsite repair** (technician repairs the screen on your side) or **screen pick-up** (screen is transported to the service and returned back after repair or new screen is provided) will be applied and on conditions and timing for that.

Note: 3 years warranty is provided for Samsung Signage Screens as a standard.