

# Instruction for Playing Media on Televisions

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Version: 1.3

## Introduction

This document explains how to:

1. Play or show media files on the flat screen TV's located in the three meetinghouses that have this capability.
2. Save video, audio and photo files to a USB stick to later play or show on one of the flat screen TV's.

At the end of this document there is a section that shows what each of the nine media cart located in our three buildings is capable of showing.



## Table of Contents

Introduction .....	1
Start the Samsung LED TV .....	2
Play video files on the Samsung LED TV .....	4
Copy media files to a USB stick.....	5
Show photo files on the Samsung LED TV.....	8
Play audio files on the Samsung LED TV .....	10
Add background music to slide shows .....	11
File type considerations .....	12
File system considerations.....	13
Capabilities of available media carts in the Calgary Alberta Stake .....	15

## Where these instructions do not apply

These instructions do not apply to:

1. Some flat screen TV's even though these flat screen TV's have USB ports. Some of our TV's do not have the functionality described in this document.
2. LCD projectors available for use in the Calgary Alberta Stake because they do not have USB ports.

If you want to play or show the files on these other devices, you must use a laptop with an HDMI or a VGA cable. You will also want to use external speakers to increase the sound quality and volume.

## Play time considerations

The ideal play time length of videos or a slide show in a classroom setting is four to seven minutes.

It may be useful to edit videos down to this play time where feasible. You can use Movie Maker on Windows or iMovie on a Mac to easily clip some of the video to shorten the play time to this length range.

To play a slide show for this play time will require 15 to 30 unique photos.

## Start the Samsung LED TV<sup>1</sup>

### Step 1: Plug in the media cart

The TV is already plugged into the power bar on the media cart.

Plug the media cart power cord into a wall outlet.

Ensure the TV power light at front, bottom right corner is on.

### Step 2: Insert the USB stick

Insert the USB stick into the USB port on the back of the Samsung LED TV.



### Step 3: Turn on the TV



Turn on the TV by pressing the red power button at the top left of the remote.

You will hear a chime indicating the TV is turning on.

The TV does not need to be set to any particular channel to show media.



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<sup>1</sup> The instructions for the LG TV located on Cart 3 downstairs in the Calgary Alberta Stake Center are very similar to the instructions for the Samsung TV illustrated here.

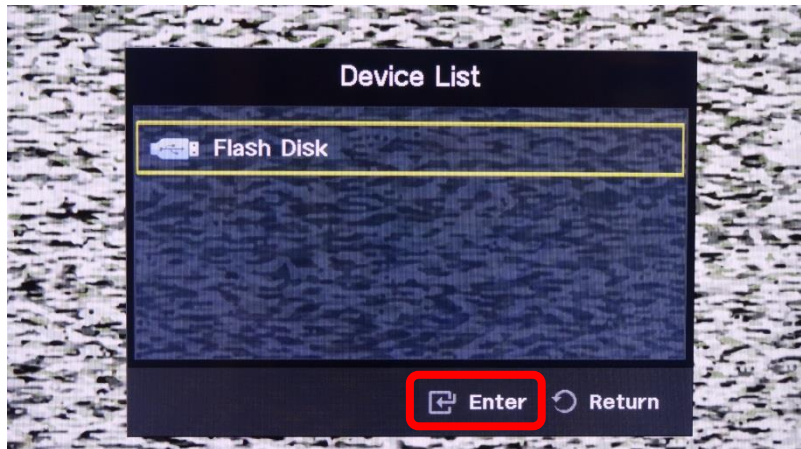
## Step 4: Select the USB stick

Press Enter on the remote to select the USB stick.

If the Device List dialogue box does not appear on the TV as shown at right, press the MEDIA.P button on the remote

**MEDIA.P**

to have the TV to sense the presence of the USB stick.



If you are not sure about how to download media files and copy them to a USB stick, read page 5 below.

## Play video files on the Samsung LED TV

### Step 1: Select Videos from the Media Play menu

Use the left or right arrows on the remote to select Videos.

Press Enter on the remote.



### Step 2: Select the video from the list

Use the up or down arrows on the remote to select the video you want to play from the list of video files available on the USB stick.

Press Enter on the remote to begin playing the video.

Only video files will appear even if the USB stick contains other media files.



### Step 3: Control video play

You can use the Volume +/- buttons on the remote to change the sound volume.



You can use the Pause button on the remote to interrupt play to discuss some aspect of the video.



You can use the Stop button on the remote to stop the video.

Press Enter to display the menu across the bottom of the screen.



## Copy media files to a USB stick

This section assumes you are using a Windows computer. The Mac instructions are similar.

### Step 1: Navigate to the web page

Navigate to the web page that contains the video, audio or photo file you want to use.

The examples in this document are all based on media files downloaded from lds.org. Media files are found in many places on lds.org. Good places to find media include:

1. Clicking on Additional Helpful Resources on the right side of the web page of your lesson.
2. On the LDS.org home page, clicking on Resources > [Media Library](#).

### Step 2: Select file for download

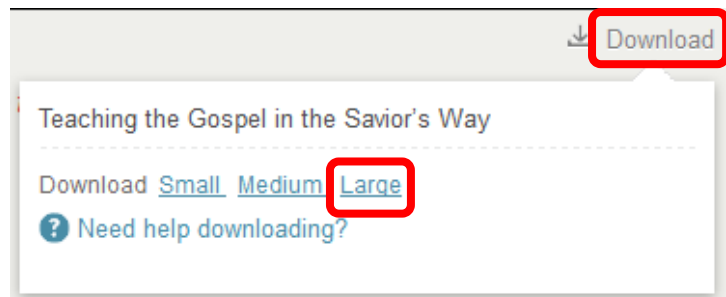
Click on Download.

The Download selection dialogue box will appear.

Typically, you will click on Large for videos and photos. Audio is rarely available in multiple sizes.

While Large selects the largest file, this file will also produce the best viewing image on the LED TV.

If, for some reason, you have limited space on your USB stick, you can choose Medium or even Small.



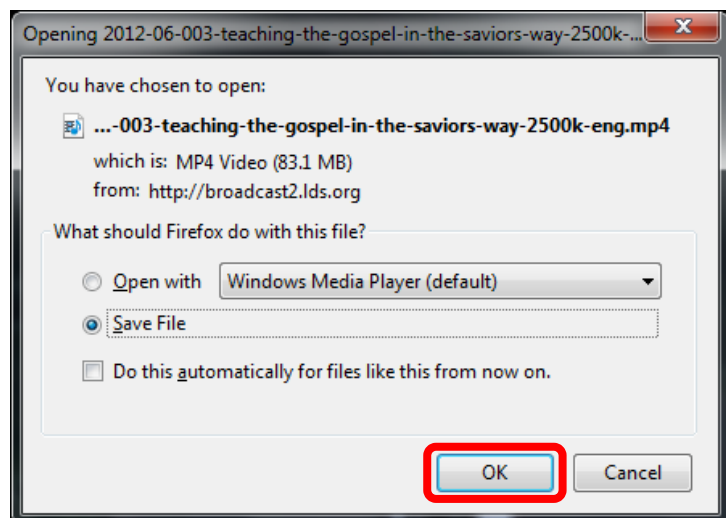
### Step 3: Download the file

Confirm default Save File is selected.

Click on OK to start the download to computer.

This dialogue box does not appear for some brands of web browser. In this case, the file will be copied to your Downloads directory.

Depending on the brand of web browser you are using, some type of progress bar will appear during the download.



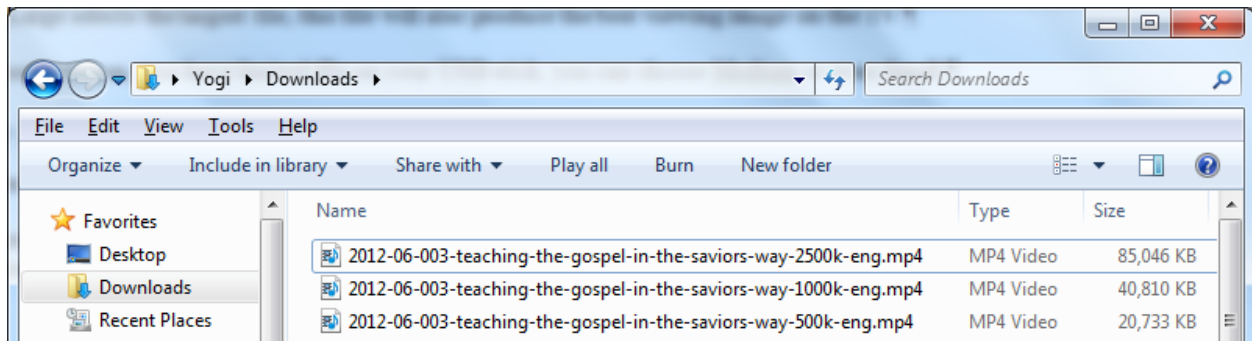
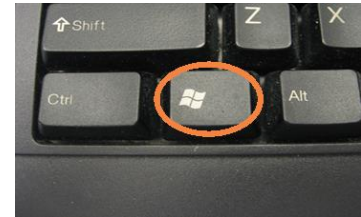
Typically the file will be copied to the Downloads directory associated with your username.



### Step 4: Confirm downloaded file location

Using Windows Explorer, you can view the downloaded file list.

You can launch [Windows Explorer](#) from the Start button at bottom left of your screen or by pressing the Windows key + E.



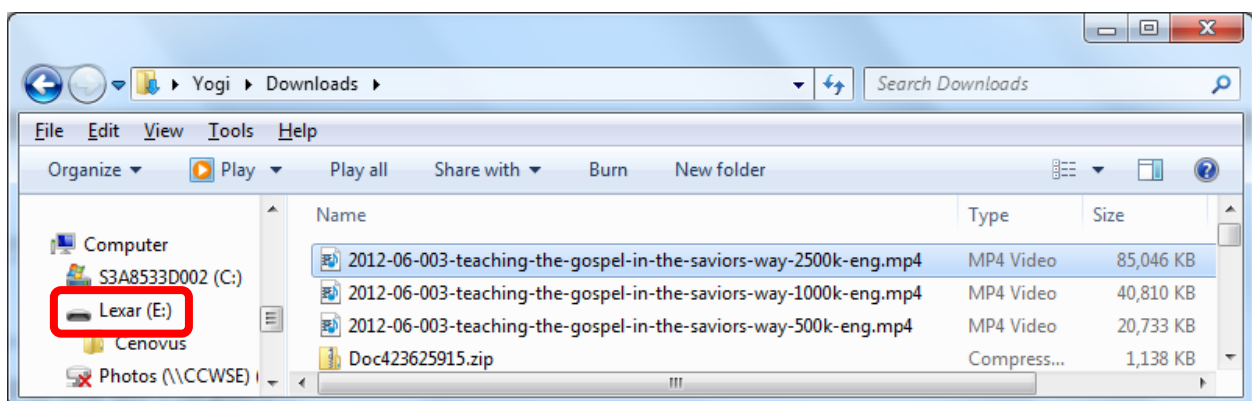
This screen print shows how downloads for Large, Medium and Small versions of one video will appear.

### Step 5: Copy downloaded file to USB stick

Insert USB stick into a USB port.

It advantageous to use an empty USB stick because:

1. It will be easier to navigate to the file you want to show on the TV.
2. The TV won't inadvertently display thumbnails or show photos on the USB stick that are not relevant to your lesson.

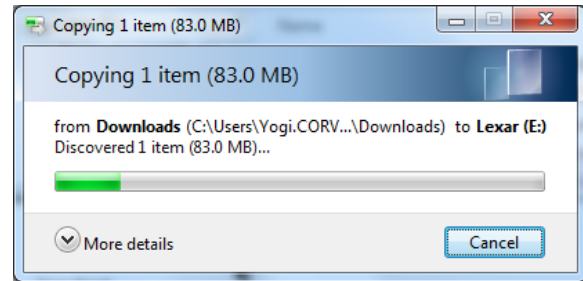


Click on the downloaded file you want to copy to the USB stick.

Drag the file name to USB drive letter by clicking and holding left mouse button.

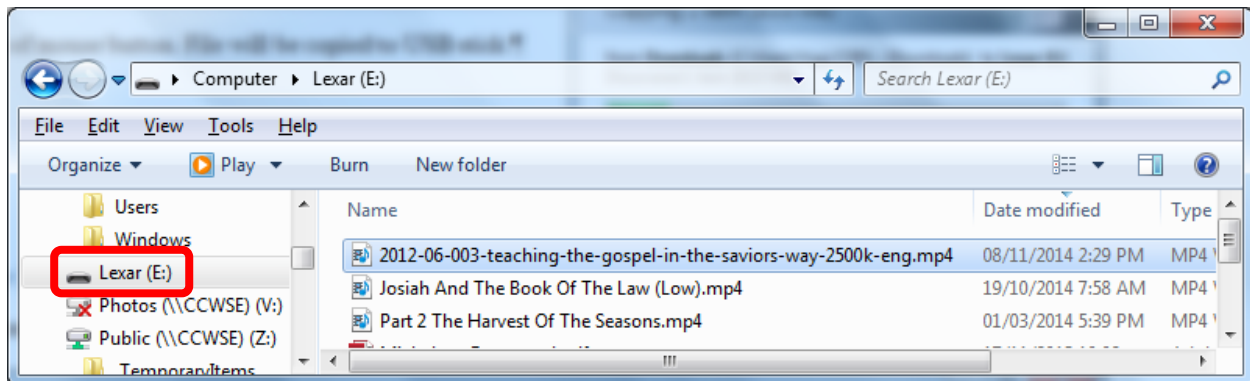
Let go of mouse button. File will be copied to USB stick.

Typically this progress bar will appear during the copy.



### Step 6: Confirm downloaded file exists on USB

Click on USB drive letter.



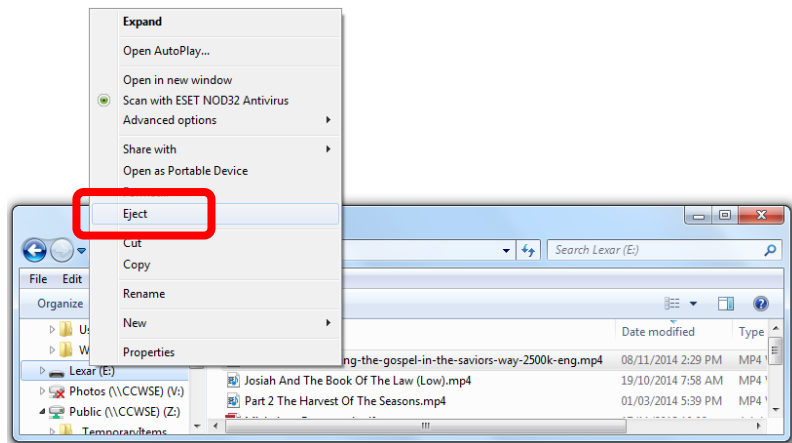
Confirm downloaded video file is shown on right.

### Step 7: Eject USB stick

Right-click the USB drive letter.

Select Eject from the pop-up menu.

Remove the USB stick.



## Show photo files on the Samsung LED TV

### Step 1: Select Photos from the Media Play menu

Use the left or right arrows on the remote to select Photos.

Press Enter on the remote.



### Step 2: Select a photo from the thumbnails displayed

Use the up or down, left or right arrows on the remote to select the first photo you want to show from the photo thumbnails displayed.

Press Enter on the remote to begin showing the photo.

Only photo thumbnails will appear as thumbnails even if the USB stick contains other media files.

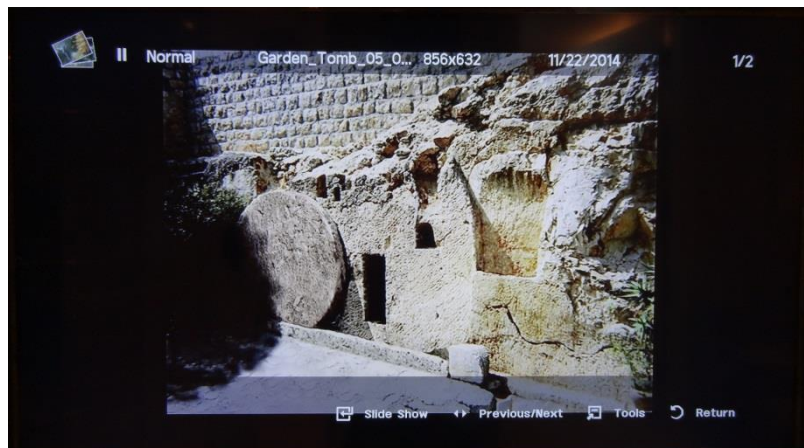


### Step 3: Control photo show

You can use the left or right arrows on the remote to select the next or previous photo.

If you do not press any keys on the remote, the TV will automatically advance through the available photos.

Press Enter to display the menu across the bottom of the screen.





## Step 4: Zoom in to increase the size of photos

Press Tools on the remote to display the Tools menu.

Select Zoom on the Tools menu.

Press the right arrow to increase the size of the photo until it fills the screen.

The TV will display photos using their original dimensions and will automatically decrease the size of photos that are too large to fit without changing their aspect ratio. This decreasing operation will produce black bars on the left and right or top and bottom of the screen.



The TV will not automatically:

1. Increase the size of photos to make better use of the screen area.
2. Rotate photos for correct orientation.

The ideal dimension of photos that will fill the screen is  $1920 \times 1080^2$  pixels.

The ideal [aspect ratio](#) of photos that will fill the screen is  $16 \times 9^2$ .

If you're not sure of the characteristics of your photo, use software like Microsoft Picture Manager to:

1. Display the dimensions and the implied aspect ratio.
2. Rotate photos and save with correct orientation for display.
3. Crop photos to a better aspect ratio.

There is no value in resizing photos<sup>3</sup> for display.

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<sup>2</sup> Horizontal dimension is the first number; vertical dimension is the second number.

<sup>3</sup> Resizing photos reduces the resolution and the file size of photos to conserve space or speed up downloading of web pages.

## Play audio files on the Samsung LED TV

### Step 1: Select Music from the Media Play menu

Use the left or right arrows on the remote to select Music.

Press Enter on the remote.

It may be easier to use a laptop, tablet or smartphone with an external speaker to play music than to use the TV.



### Step 2: Select the music from the list

Use the up or down arrows on the remote to select the music you want to play from the list of music files available on the USB stick.

Press Enter on the remote to begin playing the music.

Only music files will appear even if the USB stick contains other media files.



### Step 3: Control music play

You can use the Volume +/- buttons on the remote to change the sound volume.

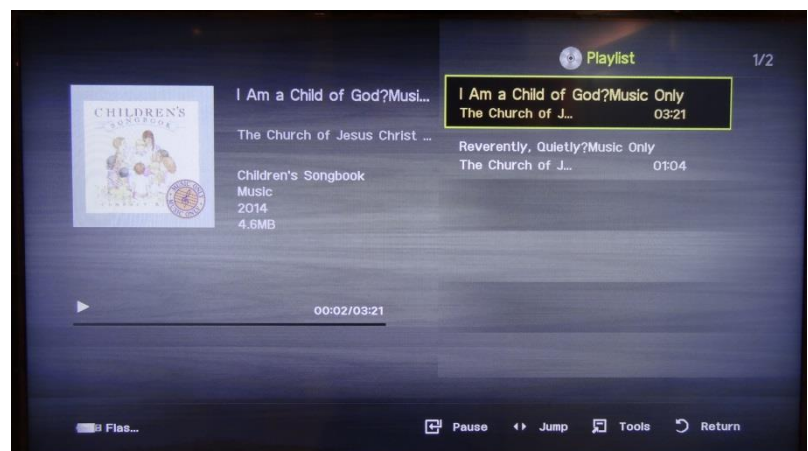


You can use the Pause button on the remote to interrupt play to discuss some aspect of the music.



You can use the Stop button on the remote to stop the music.

Press Enter to display the menu across the bottom of the screen.



## Add background music to slide shows

### Step 1: Select Photos from the Media Play menu

Use the left or right arrows on the remote to select Photos.

Press Enter on the remote.



### Step 2: Select Background Music feature

Press Tools on the remote to display the Tools menu.

Use the down arrow on the remote to select Background Music.

Press Enter on the remote.



### Step 3: Turn on Background Music

Press the right arrow on the remote to turn On Background Music.



## Step 4: Set up Background Music

Press Enter on the remote to set up background music.



## Step 5: Select Background Music file

Use the up or down arrows on the remote to select the background music file.

Press Enter on the remote to begin playing the background music.



## File type considerations

The LDS church's website offers media using the following file types:

Media type	File extension	Samsung TV capability
Video	.mp4	Yes
Audio only	.mp3	Yes
Photos	.jpg	Yes
Text	.pdf or .html	No

The Samsung TV's can:

1. Also play video files with many other file types. See page 10 of the Samsung LED TV user manual attached behind this document. You may encounter these other video file types at other websites.
2. Show a series of photos as a slide show. Optionally, The Samsung TV's can play an audio file as background music with the slide show.

The flat screen TV's can only show PowerPoint presentations from a laptop with an HDMI cable. The alternative is to make use of the slide show feature described above, perhaps using the PowerPoint Save As .jpg feature.



## File system considerations

### Introduction

This section contains discussion of various file systems found on USB sticks and their compatibility with the Samsung TV's. This section contains useful information for the rare case when the Samsung TV cannot read your USB stick.

The Samsung TV's support these file systems: FAT16, FAT32 and NTFS.

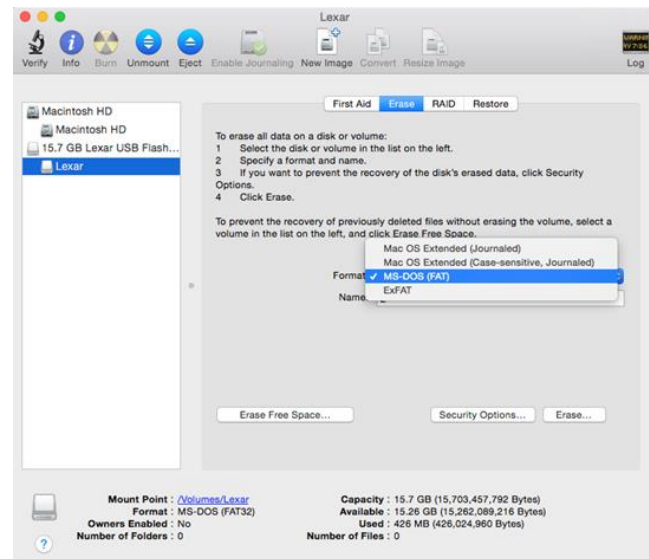
Most USB sticks come from the manufacturer formatted with the FAT32 file system. These common USB sticks are routinely and easily read by the Samsung TV's.

### Reformatting a USB stick on a MAC

If you have reformatted a USB stick to the HFS+ file system on a MAC, then the Samsung TV's won't be able to read it. In this case, you must reformat the USB stick to use the FAT32 file system on your MAC and then recopy your files to the USB stick.

See MAC dialogue box at right for help with this reformat process.

Since this process deliberately wipes out all data on you USB stick, be doubly sure you are selecting the correct volume. It's easy to accidentally erase all the data on the main hard drive of your MAC.



### USB file system to Device Compatibility

Device	FAT32	NTFS	HFS+	exFAT	FAT16
PC - Windows 7, 8	Read/Write	Read/Write	No	Read/Write	No
MAC - OS X	Read/Write	Read only	Read/Write	Read/Write	No
Samsung TV's	Read	Read	No	No	Read

Here are some useful points related to file systems that can be found on USB sticks:

1. If you are sharing a USB stick between computers and don't need to use big files, FAT32 works almost everywhere but doesn't support files bigger than 4GB. This is the default file system for USB sticks since it works everywhere.
2. FAT32 format is supported by both Mac and PC. It doesn't support files bigger than 4GB.
3. If you are only adding files from Windows and you need to use big files, NTFS works almost everywhere including the Samsung TV's. However, NTFS is read-only on OS X and doesn't work on some media players.
4. If you do need to use files bigger than 4GB, exFAT works on Windows, Linux (with FUSE), and OS X. This is probably the best choice for a shared USB hard drive that will only be plugged into a computer. The Samsung TV's do not support this file system.
5. HFS+ the primary file system of OS X on Apple MAC computers. USB sticks with HFS+ will not work on the Samsung TV's.
6. FAT16 is now largely outdated. It doesn't support files bigger than 4GB.



## Available file systems for USB sticks

If you must format a USB stick on a Windows or MAC:

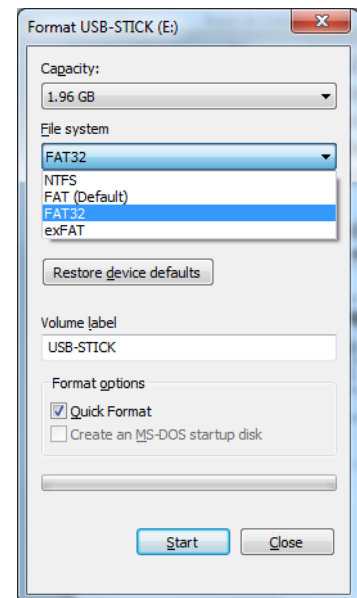
1. In most cases, choose FAT32.
2. In rare cases, when you know you will show files bigger than 4GB, choose exFAT.
3. Never choose HFS+.

See Windows dialogue box at right for help with this format process.

Since this process deliberately wipes out all data on you USB stick, be doubly sure you are selecting the correct volume. It's easy to accidentally erase all the data on the main hard drive of your laptop.

This table describe the available file systems to choose from when formatting a USB stick:

Operating System	FAT32	NTFS	HFS+	exFAT	FAT16
Windows	Yes	Yes	No	Yes	No
MAC OS X	Yes	No	Yes	Yes	No



## Capabilities of available media carts in the Calgary Alberta Stake

### Coach Hill Meetinghouse

The media carts are located in the Materials Center in the Coach Hill meetinghouse.

There is an available HDMI cable to use with your laptop.

Bring your own VGA cable if required by your laptop.

If you want to use an iPad, you must bring a Lightning to HDMI adaptor.

Capability Summary	Cart 1	Cart 2	Cart 3
Show video from USB	No	No	No
Show graphic images from USB	No	Yes	No
Connect to laptop with HDMI	Yes	Yes	Yes
Connect to laptop with VGA	Yes	Yes	Yes
Show video from DVD	Yes	Yes	Yes
Show video from VCR	Yes	No	Yes
Play music from USB	No	Yes	No

Cart number	Location	Make	Type of Device	Capability
1	Materials Center	Dynex DX32L152A11	LCD television	HDMI1, HDMI2 VGA, USB service <sup>4</sup>
		Samsung	Media player	DVD, VCR
2	Materials Center	LG 32LH200C	LCD television	HDMI1, HDMI2 VGA, USB jpg photos, music <sup>5</sup>
		Panasonic	Media player	DVD
3	Materials Center	Dynex DX32L152A11	LCD television	HDMI1, HDMI2 VGA, USB service <sup>4</sup>
		Toshiba	Media player	DVD, VCR

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<sup>4</sup> Service means for use by a technician to update the TV firmware. The TV cannot display files stored on a USB.

<sup>5</sup> The TV cannot play videos from the USB.

## Stake Center

The media carts are located at the Calgary Alberta Stake Center in the materials closet:

1. Upstairs next to the High Council room.
2. Downstairs across from the Materials Center.

There is an available HDMI cable to use with your laptop on Cart 1, Cart 2 and Cart 3.

There is an available VGA cable to use with your laptop on Cart 1.

If you want to use an iPad, you must bring a Lightning to HDMI adaptor.

<b>Capability Summary</b>	<b>Cart 1</b>	<b>Cart 2</b>	<b>Cart 3</b>	<b>Cart 4</b>
Show video from USB	No	Yes	Yes	No
Show graphic images from USB	Yes	Yes	Yes	No
Connect to laptop with HDMI	Yes	Yes	Yes	No
Connect to laptop with VGA	Yes	No	Yes	No
Show video from DVD	Yes	Yes	Yes	Yes
Show video from VCR	Yes	Yes	Yes	Yes
Play music from USB	Yes	Yes	Yes	No

<b>Cart number</b>	<b>Location</b>	<b>Make</b>	<b>Type of Device</b>	<b>Capability</b>
1	Upstairs by High Council room	Haier LE39F2280a	LCD television	HDMI1, HDMI2 VGA, USB jpg photos, music <sup>5</sup>
		Toshiba	Media player	DVD
		Nikko	Media player	VCR
2	Upstairs by High Council room	Samsung UN32EH4003	LCD television	HDMI1, HDMI2 USB
		Panasonic	Media player	DVD
		Sharp	Media player	VCR
3	Downstairs across from Materials Center	LG 32LY340C	LCD television	HDMI1, HDMI2 VGA, USB
		Philips	Media player	DVD
		JVC	Media player	VCR
4	Downstairs across from Materials Center	JVC AV-27D304	CRT television	No capability
		Toshiba	Media player	DVD
		Hitachi	Media player	VCR

## Heritage Drive Meetinghouse

The media carts are located in the Materials Center in the Heritage meetinghouse.

Bring your own HDMI cable if required by your laptop.

If your laptop can only output VGA, the TV's cannot support that so bring a USB stick.

It's easier to use the USB on the TV's than the one on the DVD players.

If you want to use an iPad, you must bring a Lightning to HDMI adaptor and an HDMI cable.

<b>Capability Summary</b>	<b>Cart 1</b>	<b>Cart 2</b>
Show video from USB	Yes	Yes
Show graphic images from USB	Yes	Yes
Connect to laptop with HDMI	Yes	Yes
Connect to laptop with VGA	No	No
Show video from DVD	Yes	Yes
Show video from VCR	Yes	No
Play music from USB	Yes	Yes

<b>Cart number</b>	<b>Location</b>	<b>Make</b>	<b>Type of Device</b>	<b>Capability</b>
1	Materials Center	Samsung UN37EH5000F	LCD television	HDMI1, HDMI2 USB
		Samsung	Media player	DVD, USB
		JVC	Media player	VCR
2	Materials Center	Samsung UN22F5000AF	LCD television	HDMI1, HDMI2 USB
		Samsung	Media player	DVD, USB

The Samsung TV remote is the one with the Channel, Volume and Media.P keys. The Samsung DVD remote does not have these keys.