



LIGHTCAST V1.2

Software Guide for projectors

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INTRODUCTION

LightCast is an easy to use set of applications designed to maximize the connectivity and interactivity of your InFocus projector. There are two levels of LightCast support for InFocus Projectors: with or without the optional LightCast key.

NOTE: This guide covers LightCast version 1.2 and above. To check your version, go to the Settings > System and Security menu and review About LightCast for the version number.

FEATURES AVAILABLE IN A LIGHTCAST READY PROJECTOR INCLUDE:

Document reader

- Documents (doc, docx, ppt, pptx, pdf, txt, xls, xlsx)
- Pictures (bmp, jpg, jpeg, png)
- Videos (avi, flv, mkv, mov, mpg, mp4, ts, wmv, 3gp)

Network control (if projector is equipped with a wired network connector)

USB-A connectors which can be used for:

- LightCast key
- USB storage device (such as a thumb drive, camera, or external hard drive)
- Touch device (such as a touchpad)
- Wireless USB keyboard/mouse

Current limit on both connectors is 1A.

ADDITIONAL FEATURES ENABLED WITH A LIGHTCAST KEY INCLUDE:

- Wireless display (AirPlay, LightCast, Miracast)
- Whiteboard
- Internet browser

REGISTRATION WHEN USING A LIGHTCAST KEY

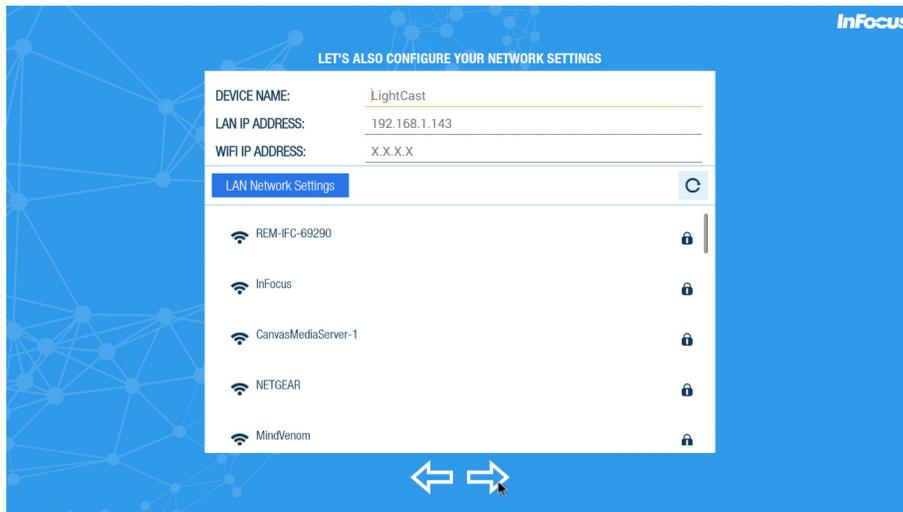
- 1) Insert the LightCast key into an available USB-A port and then turn on the projector.
- 2) Press the **Source** button on the remote or projector keypad.
- 3) Navigate to **LightCast**.
- 4) Press the **Enter/Select** button on the remote or projector keypad. The LightCast registration welcome page displays.



- 5) Click the arrow.

A blue screen with a network pattern background. The InFocus logo is in the top right corner. The text "TELL US HOW WE CAN CONTACT YOU FOR IMPORTANT UPDATES AND INFORMATION?" is centered. Below this is a white form with the following fields: "CONTACT NAME: John Doe", "EMAIL ADDRESS: John.doe@Unknown.com", "PHONE NUMBER: 800-123-4567", and "ORGANIZATION: John Doe Investigations". At the bottom of the form is a checkbox with the text "Would you like to sign up for the InFocus newsletter and receive information about new products and important updates?". A mouse cursor is visible over the form. At the bottom center of the screen, there are two white arrows pointing left and right.

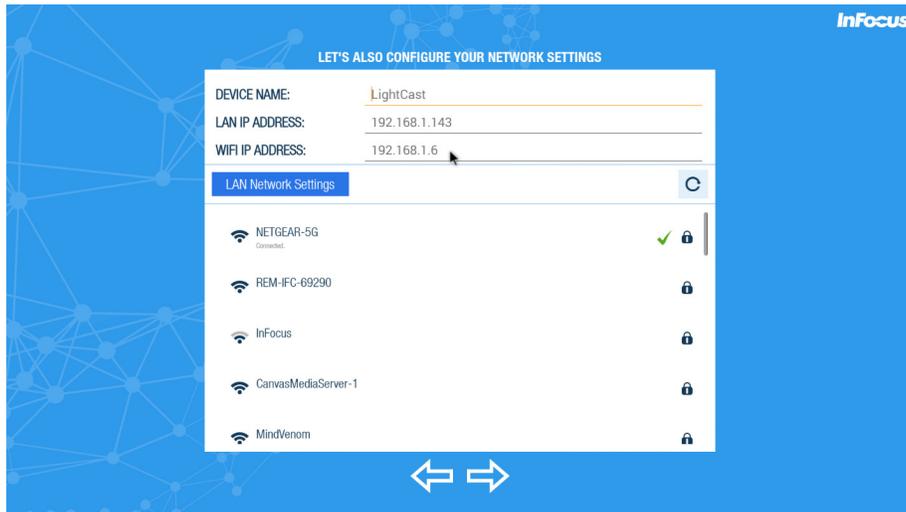
- 6) Enter the information for registration using either a wireless keyboard/mouse (not included) or the on screen keyboard and remote. Click the right facing arrow.



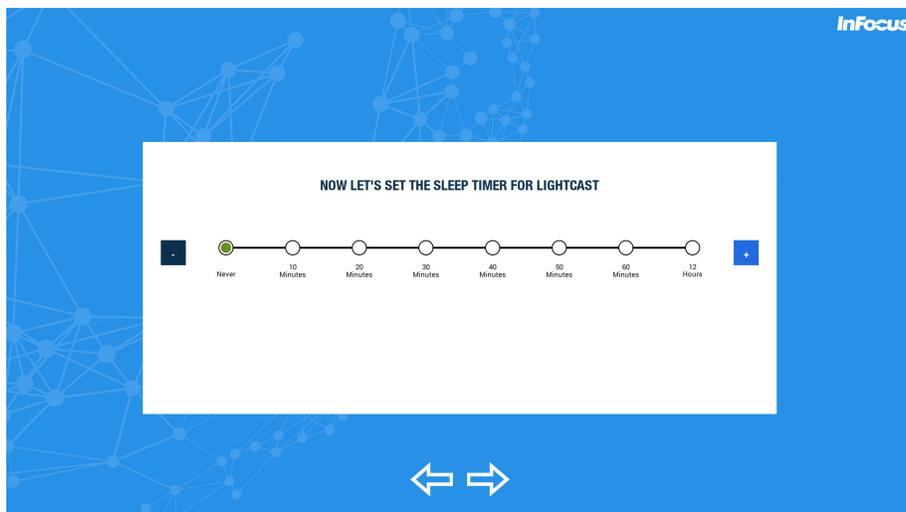
- 7) Use a keyboard/mouse or on screen keyboard and remote to rename the device. This is useful to differentiate between different projectors that have LightCast enabled.
- 8) The Wired LAN IP address and local SSIDs displays.
- 9) Log onto a wireless network:



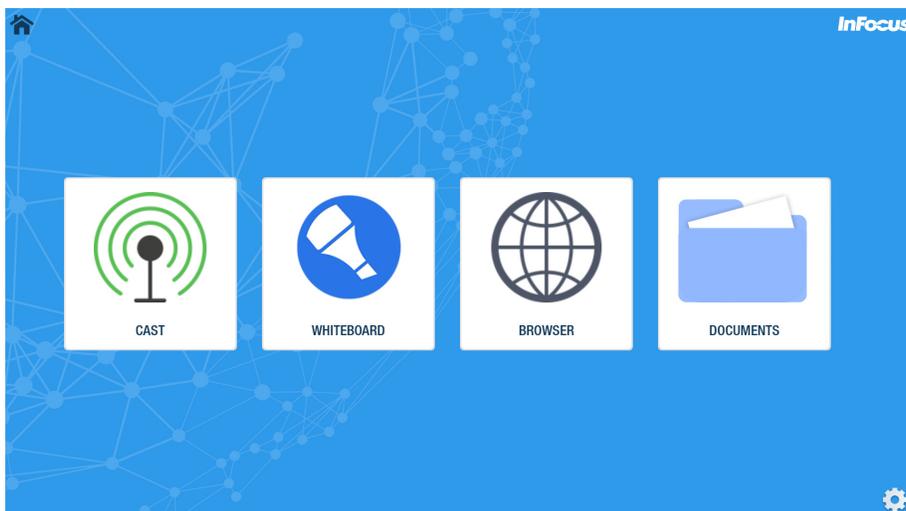
- 10) Highlight an SSID.
- 11) Press **Select/Enter**.
- 12) If the SSID is encrypted, enter the password.
- 13) The word "Connected" displays below the SSID when the connection is made. A green checkmark displays next to saved SSIDs.



14) Click to select the desired time parameter for the sleep timer.



15) If a software update is available, an update window displays. Click **Update** and follow the prompts to complete the update process. When registration is complete, the LightCast home page displays.



BASIC NAVIGATION

Using the remote and projector keypad

- 1) Use the arrow keys to highlight items in LightCast.
- 2) Press the **Select** button on the remote or the **Enter** button on the projector to select the highlighted item.
- 3) Press the **Esc** button on the remote to back out of the currently running item.
- 4) Press the **Auto Image** button on the remote or **Auto** button on the projector to return to the LightCast home screen.

Using the on screen keyboard

- 1) In the desired field, highlight and click **Select** using the projector keypad or remote.
- 2) The on screen keyboard is displayed.
- 3) Use the arrow keys to highlight characters.
- 4) Click **Select** when the correct character is highlighted.
- 5) After each field is completed, highlight and click **Done** to go to the next field.

Using a mouse and keyboard

- 1) Plug a mouse and keyboard into an available USB-A connectors on the projector.
- 2) Use the mouse and keyboard as you normally would.

DOCUMENT VIEWER

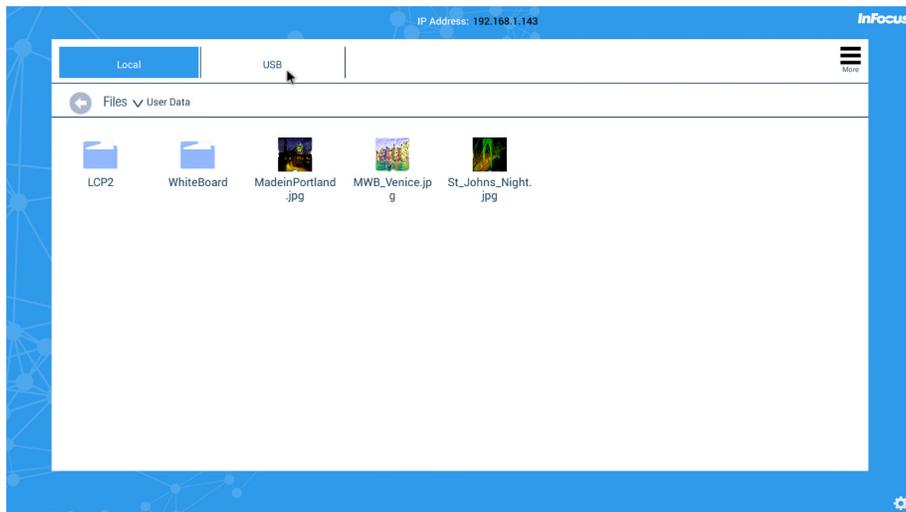
The Document Viewer allows you to display images, files, and videos from your projector's internal memory or from a USB thumb drive.

Supported document types

Supported File Types	File Extensions
Images	.jpg, .jpeg, .bmp, .png
PowerPoint	.ppt, .pptx
Excel	.xls, .xlsx
Word	.doc, .docx
Adobe PDF	.pdf
Video files	.avi, .flv, .mkv, .mov, .mpg, .mp4, .ts, .wmv, .3gp
Other files	.txt

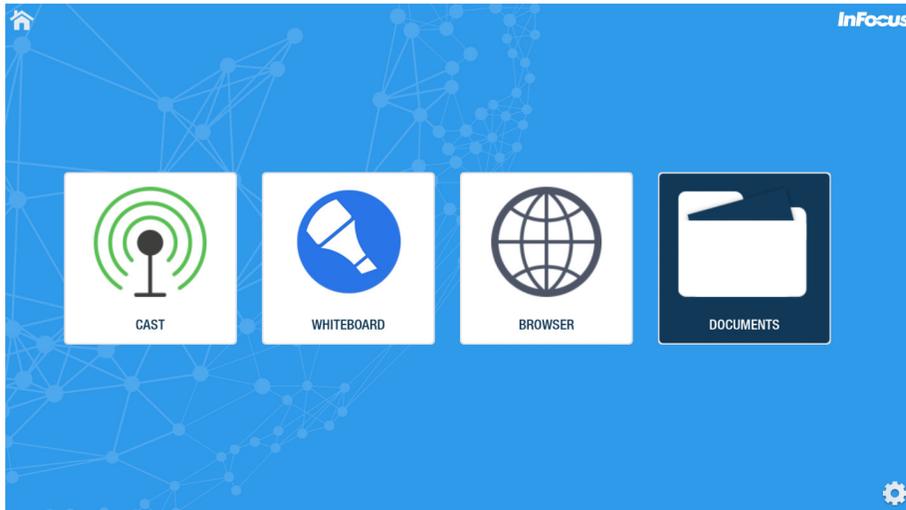
To access the Document Viewer without the LightCast key (sold separately), follow the instructions below:

- 1) Turn on the projector.
- 2) Press the **Source** button on the remote or projector keypad.
- 3) Navigate to **LightCast**.
- 4) Press the **Enter/Select** button on the remote or projector keypad. The Document Viewer displays.

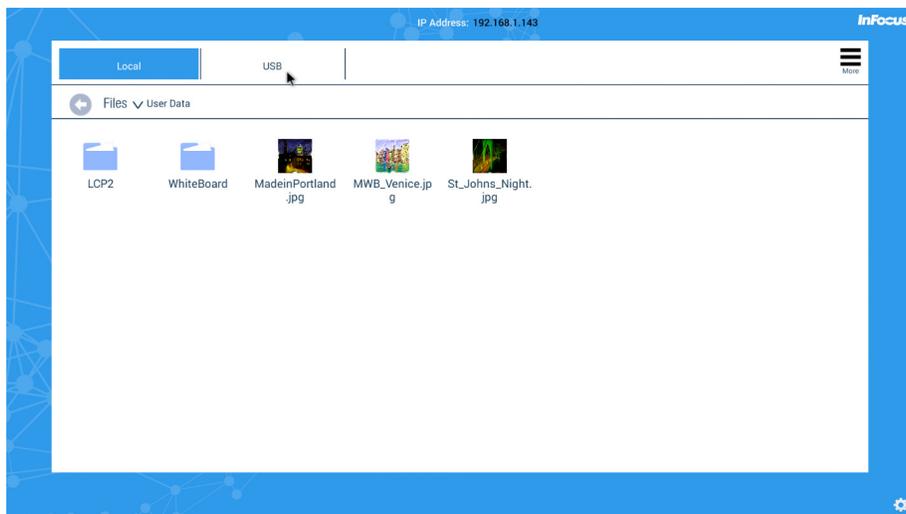


To access the Document Viewer using the LightCast key, follow the instructions below:

- 1) Insert the LightCast key into an available USB port on the back of the projector.
- 2) Turn on the projector.
- 3) Press the **Source** button on the remote or projector keypad.
- 4) Navigate to **LightCast**.
- 5) Press the **Enter/Select** button on the remote or projector keypad. The LightCast home page displays.



- 6) Navigate to **Documents**.
- 7) Press the **Enter/Select** button on the remote or projector keypad. The Document Viewer displays.



Open document files

- 1) Navigate to the desired file and either click the file with an attached mouse, or press the **Select/Enter** button on the remote or projector keypad. **NOTE:** Files can be opened from the local folder or a USB thumb drive.
- 2) Use the menu options to navigate through the file. **NOTE:** File-level tools vary depending on the file type.
- 3) To move the tool bar position, use a mouse to click the vertical dots and drag the tool bar to one of four positions. Or use the remote or projector keypad to highlight the vertical dots and press the **Select/Enter** button. Then use the up or down arrow buttons to move the tool bar and press the **Select/Enter** button when done.
- 4) When finished with the document file, click the **Return** button to return to the document folder.
- 5) To return to the LightCast home page, click the **Home** button.

Document Viewer tools

NOTE: Document tools vary based on file type.



Button		Description
	Return	Exits the document view and returns to the folder view.
	Up	When displaying an Excel, Word, or PDF document, selecting up scans up the open document. When displaying a PowerPoint document, selecting up goes to the previous slide in the slideshow. When an image is shown in full screen, selecting Up displays the previous image in the same folder. When the document is zoomed in, selecting Up scans up the open document.
	Down	When displaying an Excel, Word, or PDF document, selecting down scans down the open document. When displaying a PowerPoint document, selecting down goes to the next slide in the slideshow. When an image is shown in full screen, selecting Down displays the next image in the same folder. When the document is zoomed in, selecting Down scans down the open document.
	Left	When the document is zoomed in, selecting Left scans the open document to the left.
	Right	When the document is zoomed in, selecting Right scans the open document to the right.
	Previous	For Excel documents only: Selects the previous tab in the file.

	Next	For Excel documents only: Selects the next tab in the file.
	Rotate	Rotates the document ninety degrees clockwise.
	Zoom In	Magnifies the document view.
	Zoom Out	Reduces the document view.
	Reset Zoom	Returns the document back to its original document width.
	Annotation	When selected, allows the user to annotate the document. See "Annotate the file" on page 11 for more information. NOTE: Annotation is only available when a mouse (or touch device) is connected to one of the USB-A connectors.
	Video menu	For video files only: Click to open the video controls.
	Return	For video files only: Click to close the video file and return to the folder view.
	Play	For video files only: Click to play the video file.
	Pause	For video files only: Click to pause the video file.
	Previous Video	For video files only: Click to show the previous video file.
	Rewind	For video files only: Click to rewind the current video file 5 seconds. Click and hold to scan backwards.
	Forward	For video files only: Click to forward the current video file 5 seconds. Click and hold to scan forward.
	Next Video	For video files only: Click to show the next video file.
	Video Repeat	For video files only: Click to show all video files within the selected folder repeatedly.
	Video Repeat (One-time only)	For video files only: Click to show all video files within the selected folder one time only.
	No Repeat	For video files only: Click to play the current video file only.
	Slideshow	For image files only: Click to display all image files within the selected folder in a sequence. By default, images are displayed 20 seconds each. Note: The Slide Show time value can be changed in the Settings > Device menu.
	Slideshow loop	For image files only: Click to display all image files within the selected folder in a sequence repeatedly.

Annotate the file

Document files can be annotated and saved using the Annotation submenu.

NOTE: You must attach a mouse (or touch device) to use the annotation feature. If a mouse (or touch device) is not detected, a warning displays.

CREATE A DRAWING

- 1) Open a file from the document viewer.
- 2) Click **Annotation**.
- 3) Click **Tools** and select a drawing tool.
- 4) Click **Color Wheel** to adjust the color, size, and opacity of the selected drawing tool.
- 5) Draw on the page using the mouse (or touch device).
- 6) Use **Eraser**, **Select**, **Undo**, **Re-do**, and **Clear** to modify the drawing. See "Annotation tools" on page 13 for more information.

ADD TEXT

NOTE: Text boxes overlay the open document and do not affect the text within the displayed document.

- 1) Open a file from the document viewer.
- 2) Click **Annotation**.
- 3) Click **Tools**.
- 4) Click **Text**.
- 5) Click the screen where you want the text box to be. A text box opens.
- 6) Adjust the font family, size, color, and text attributes, as desired.
- 7) Using either a keyboard or the on-screen keyboard, type your text.
- 8) Click **OK** when finished.



Annotation tools

Button		Description
	Current tool	Click to use the current tool.
	Eraser	Click Eraser , and then click and drag across the drawing object to erase the portion you touched. Only drawing objects are affected.
 Color Wheel	Color Wheel submenu	Click to access the color submenu.
	Color wheel	Click to choose a color using a color ramp. The current selected color displays in the middle of the color wheel.
	Segmented color wheel	Click to choose a color from the segmented color wheel. The current selected color displays in the middle of the color wheel.
 Size	Size	Click and drag the thumbnail button along the slider path to adjust the size of the pen/line width.
 Opacity	Opacity	Click and drag the thumbnail button along the slider path to adjust the size of the highlighter/shape opacity.
	Tools submenu	Click to select an annotation tool. NOTE: Each object has its own color, pen width, and pen transparency setting.
	Pen	Click to use a pen. NOTE: Opacity control is not available for the pen object.
	Highlighter	Click to use a highlighter.
	Rectangle	Click to draw a rectangle.
	Circle	Click to draw a circle.
	Line	Click to draw a line.
	Text	Click to add a text box. Adjust the font size, color, and type attributes as desired. Type your text and click OK .
	Laser	Click to highlight something temporarily. The mark disappears when a new mark is made. Laser marks cannot be saved.

	Select	Click Select . Click and drag the selection box around the drawing objects which you want to move, cut, copy, paste, or delete. Once selected: <ul style="list-style-type: none"> • Click and drag to move the selection. • Click Copy to copy the selection, and then click Paste to create a duplicate object set. • Click Delete to delete the selection.
	Undo	Click to delete the last annotation.
	Redo	Click to display the last deleted annotation.
	Clear	Click to delete all annotations from the file.
	More submenu	Click to access additional menu features.
	Save	Click to save the file as a JPG image or PDF file.
	Paste	Click to paste the clipboard onto the image.
	Share	Only available when the projector is connected to a network. Click to send the annotated image as a JPG image by email.
	USB	Click to save the annotated picture to a USB device as a JPG image or PDF file.
	Exit	Click to exit the annotation submenu.

Save the file

- 1) From the annotation submenu, click **More**.
- 2) Click **Save**.
- 3) Type the file name in the **Name** field.
- 4) Select the desired **File Type** (JPG or PDF).
- 5) Select **Current View** to save the displayed page or **Whole View** to save the entire file.
- 6) Browse to the **Location** you would like to save the file to or accept the default location.
- 7) Click **Save**.

Save Files

Name
20160830105849884a

File Type
 JPEG
 PDF

JPG Options
 Current View
 Whole View

Location
/User Data/LCP2

Save

Share the file

- 1) From the annotation submenu, click **More**.
- 2) Click **Share**.
- 3) Type the recipient email address in the **To:** field.
- 4) Type information about the file in the **Description** field, if desired.
- 5) Click **Send** (envelope icon).

Share

From : InFocus Document

To :

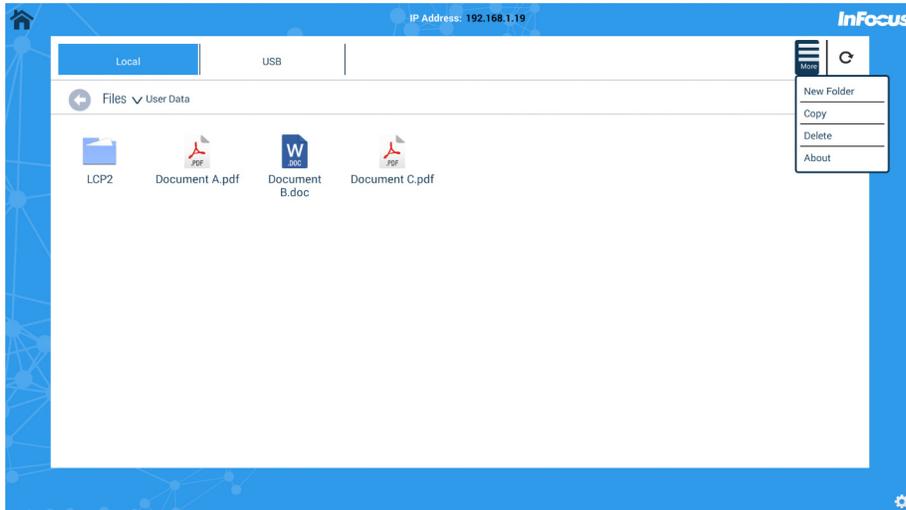
Subject : InFocus shared annotations

Attachment : 1472666424803.jpg 111.5 kB

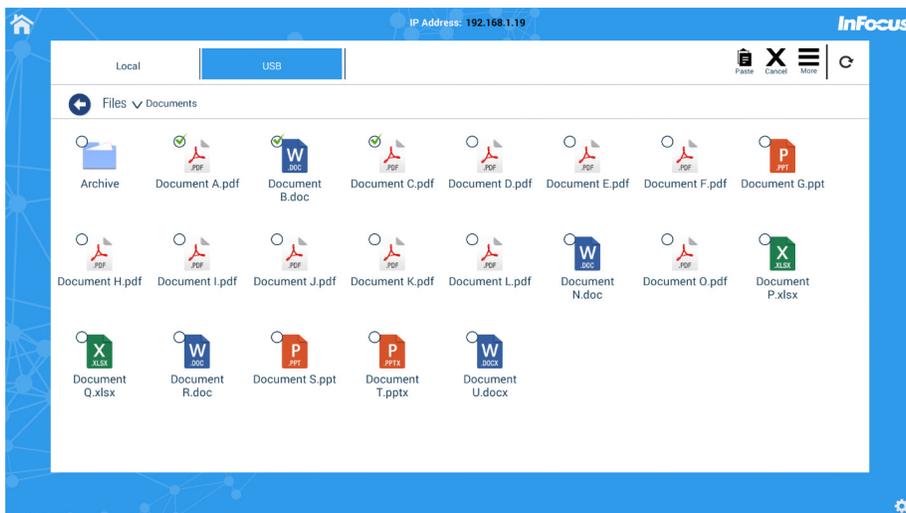
Description

Copy a file or folder

- 1) Navigate to the desired file or folder location.
- 2) Navigate to **More**.
- 3) Click **Select/Enter** on the remote or projector keypad.



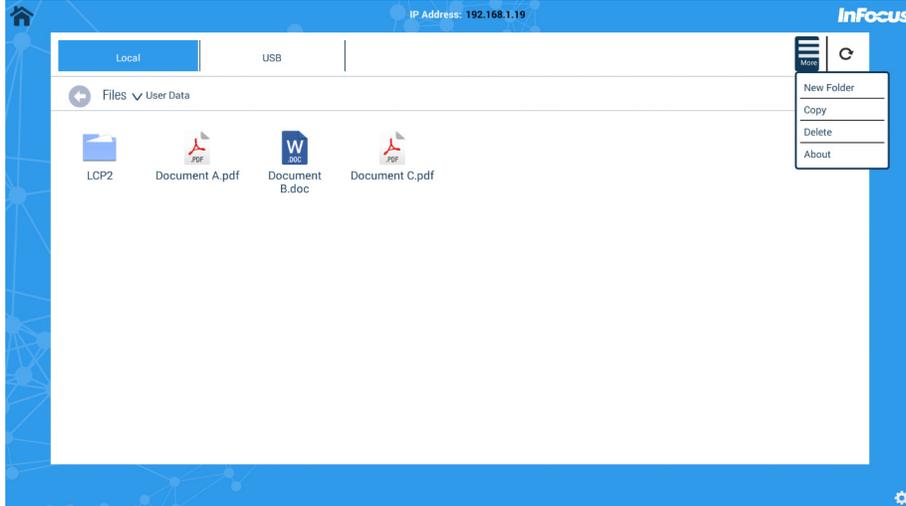
- 4) Navigate to **Copy**.
- 5) Click **Select/Enter** on the remote or projector keypad.
- 6) Navigate to the desired file or folder.
- 7) Click **Select/Enter** on the remote or projector keypad. A green checkmark displays.



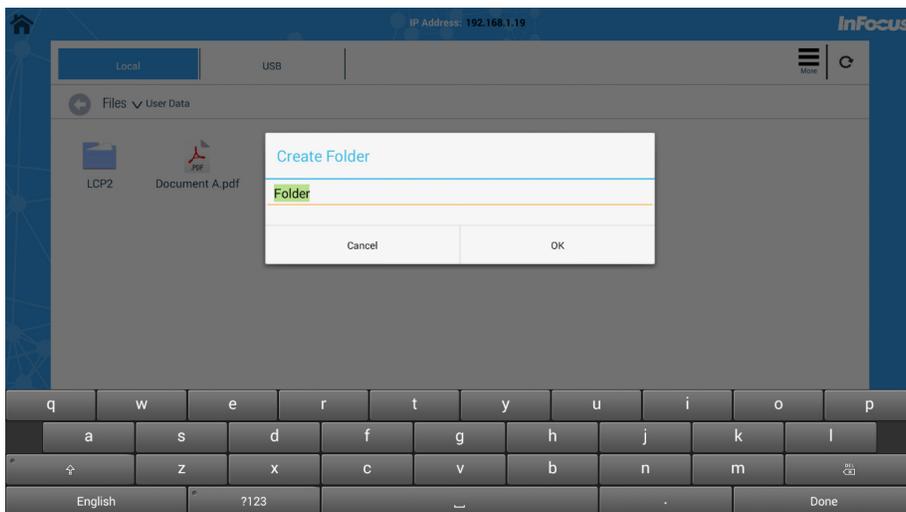
- 8) Repeat until all desired files or folders are selected.
- 9) Navigate to the location where you would like to paste the copied files.
- 10) Navigate to **Paste**.
- 11) Click **Select/Enter** on the remote or projector keypad.
- 12) Click **Done**.

Create a new folder

- 1) Browse to the desired folder location.
- 2) Navigate to **More**.



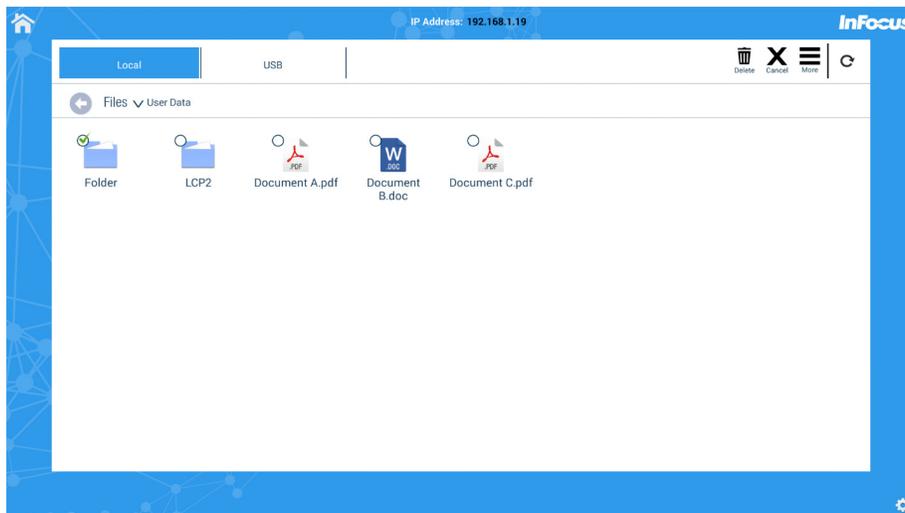
- 3) Click **Select/Enter** on the remote or projector keypad.
- 4) Click **New Folder**.



- 5) Using an attached keyboard or the virtual keyboard, enter the desired folder name. **NOTE:** If using the virtual keyboard, use the arrows and Select/Enter button on the remote or keypad to select the letters. Select **Done** when the folder name is complete.
- 6) Click **OK**.

Delete files and folders

- 1) Navigate to the desired file or folder location.
- 2) Navigate to **More**.
- 3) Click **Select/Enter** on the remote or projector keypad.
- 4) Navigate to **Delete**.
- 5) Click **Select/Enter** on the remote or projector keypad.
- 6) Navigate to the desired file or folder.
- 7) Click **Select/Enter** on the remote or projector keypad. A green checkmark displays.
- 8) Repeat until all desired files or folders are selected.



- 9) Navigate to the **Delete** icon.
- 10) Click **Select/Enter** on the remote or projector keypad.
- 11) Click **Done**.

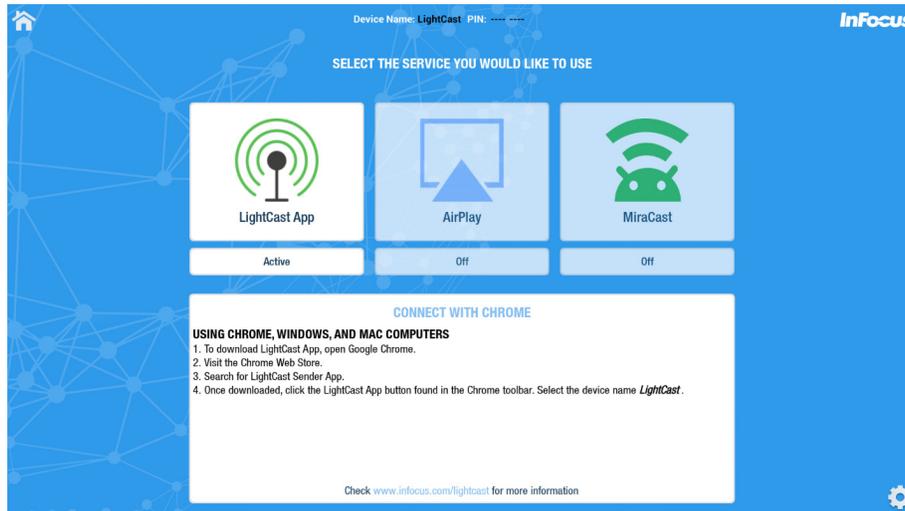
CAST (WIRELESS DISPLAY)

NOTE: This feature is only available when a LightCast key is attached to one of the USB-A inputs on the projector.

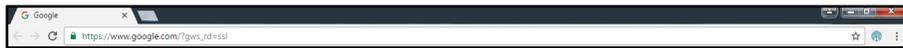
From the LightCast home page, select **Cast**. From the Cast screen, select which service to use. To protect the display, you can enable an eight digit PIN. See "Network Settings" on page 34 for more information.

LightCast

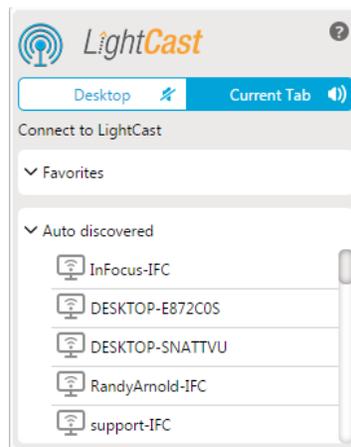
To send video and audio wirelessly using the Chrome browser on Windows, Chrome OS, and OS X computers, download and install the **LightCast Sender** application from the Chrome web store.



- 1) With Chrome open, click the **LightCast** icon in the toolbar.

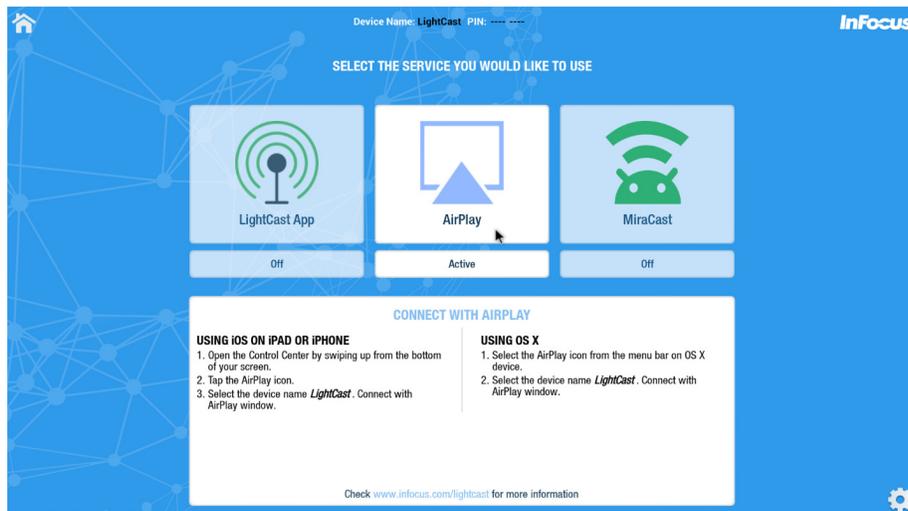


- 2) Select the Current Tab with the audio in order to pass audio to the projection device. Otherwise no audio will pass through. Select the projector from the list.



AirPlay

Display using an iPhone, iPad, iPod Touch, or stream audio and video from a Macintosh computer. Your device and LightCast must be connected to the same wireless network.



TO DISPLAY FROM A MAC COMPUTER

- 1) Click the **AirPlay** icon in the menu bar, then choose the name of the LightCast device under "Connect To AirPlay Display." The icon turns blue when your Mac is using an AirPlay display.
- 2) From the same AirPlay menu, choose either **Extended Desktop** or one of the mirroring options under "Use AirPlay Display To."

TO DISPLAY FROM AN IOS DEVICE

- 1) Swipe up from the bottom of your screen to open Control Center.
- 2) Click **AirPlay**.
- 3) Click the name of the device you want to stream content to. You'll see (TV) or (speaker) next to each device, so you know what type of content you can stream.

COMPATIBILITY

- iPhone 4 or later. iPhone 4s or later for AirPlay Mirroring.
- iPad, iPad mini. iPad 2 or later for AirPlay Mirroring.
- iPod touch (4th generation) or later. iPod touch (5th generation) or later for AirPlay Mirroring.

For mirroring your display or extending your desktop, any of the following Mac computers with OS X Mountain Lion v10.8 or later:

- iMac (Mid 2011 or later)
- Mac mini (Mid 2011 or later)
- MacBook (Early 2015 or later)
- MacBook Air (Mid 2011 or later)
- MacBook Pro (Early 2011 or later)
- Mac Pro (Late 2013 or later)

Miracast

Your device and LightCast should be connected to the same wireless network for best performance.



USING AN ANDROID TABLET OR PHONE

- 1) Launch the Miracast application (See device instructions).
- 2) Select the LightCast device.

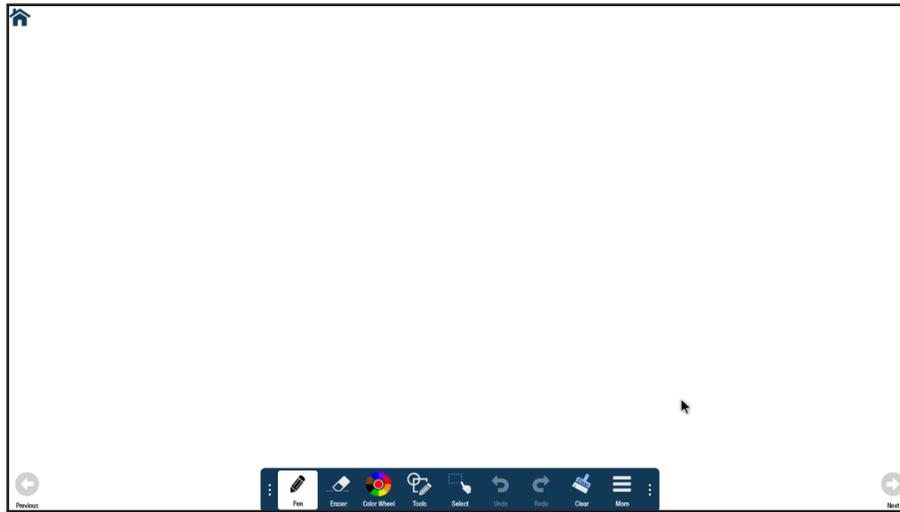
USING A WINDOWS 8.1 OR 10 PC

- 1) Open the Charms menu on the right side of the desktop.
- 2) Select **Devices**.
- 3) Select **Project**.
- 4) Select **Add a Wireless Device**.
- 5) Select the LightCast device.

WHITEBOARD

NOTE: This feature is only available when both a LightCast key and a mouse (or touch device) are attached to the projector.

Use the whiteboard feature to brainstorm ideas, create graphs and workflows, or whatever you desire. The blank slate lets you collaborate, share, and save your ideas.



Navigation

- 1) From the LightCast home page, select **Whiteboard**.
- 2) Click **Next**  to add or go to the next page. **Note:** The whiteboard feature supports up to 3 pages total.
- 3) Click **Previous**  to add or go to the previous page. **Note:** The whiteboard feature supports up to 3 pages total.
- 4) To return to the LightCast home page, click the **Home** button.

Create a drawing object

- 1) Click **Tools** and select a drawing tool.
- 2) Click **Color Wheel** to adjust the color, size, and opacity of the selected drawing tool.
- 3) Draw on the whiteboard canvas with the mouse (or touch device).
- 4) Use **Eraser**, **Select**, **Undo**, **Re-do**, and **Clear** to modify the drawing. See "Whiteboard tools" on page 23 for more information.

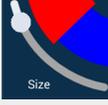
Add text

NOTE: Text boxes overlay the open document and do not affect the text within the displayed document.

- 1) Click **Tools**.
- 2) Click **Text**.
- 3) Click the screen where you want the text box to be. A text box opens.
- 4) Adjust the font family, size, color, and text attributes, as desired.
- 5) Using either a keyboard or the on-screen keyboard, type your text.
- 6) Click **OK** when finished.

Whiteboard tools



Icon	Tool Name	Description
 Previous	Previous	Click to go to the previous page.
	Current tool	Click to use the current tool.
	Eraser	Click Eraser , and then click and drag across the drawing object to erase the portion you touched.
 Color Wheel	Color Wheel submenu	Click to access the color submenu.
	Color wheel	Click to choose a color using a color ramp. The current selected color displays in the middle of the color wheel.
	Segmented color wheel	Click to choose a color from the segmented color wheel. The current selected color displays in the middle of the color wheel.
 Size	Size	Click and drag the thumbnail button along the slider path to adjust the size of the pen/line width.
 Opacity	Opacity	Click and drag the thumbnail button along the slider path to adjust the size of the highlighter/shape opacity.
	Tools submenu	Click to select a drawing object. NOTE: Each object has its own color, pen width, and pen transparency setting.

	Pen	Click to use a pen. NOTE: Opacity control is not available for the pen object.
	Highlighter	Click to use a highlighter.
	Rectangle	Click to draw a rectangle.
	Circle	Click to draw a circle.
	Line	Click to draw a line.
	Text	Click to add a text box. Adjust the placement, font size, color, and type attributes as desired. Type your text and click OK .
	Laser	Click to highlight something temporarily. The red laser mark disappears when a new mark is made. Laser marks cannot be saved.
	Select	Click Select . Click and drag the selection box around the drawing objects which you want to move, cut, copy, paste, or delete. Once selected: <ul style="list-style-type: none"> • Click and drag to move the selection. • Click Copy to copy the selection, and then click Paste to create a duplicate object set. • Click Delete to delete the selection.
	Cut	Click to cut the selected object(s).
	Copy	Click to copy the selected object(s).
	Paste	Click to paste the last copied or cut object(s) onto the whiteboard canvas.
	Delete	Click to delete the selected object(s).
	Cancel	Click to remove the selection box.
	Undo	Click to reverse the last executed command.
	Redo	Click to reverse the last Undo command.
	Clear	Click to clear the drawing objects from the whiteboard canvas.
	More submenu	Click to access additional menu features.
	Canvas	Click to view thumbnails of all the edited pages. Click a thumbnail to navigate to that page.

	New	Click to open a new whiteboard canvas.
	Open	Click to open a saved file.
	Save	Click to save the annotated pages as a DigiEasel whiteboard file (.mwbx), JPG image, or PDF file.
	Paste	Click to paste the last copied or cut object(s) on the whiteboard canvas.
	Import	Click to import an image onto the whiteboard canvas. To remove an imported image, click the red X in the top right-hand corner of the image.
	Share	Only available when the projector is connected to a network. Click to send the annotated image as a JPG image by email.
	USB	Click to save or open files from an external USB thumb drive.
	Next	Click to go to the next page.

Save the whiteboard canvas

- 1) Click **More**.
- 2) Click **Save**.
- 3) Type a file name in the **Name** text box.
- 4) Select the file type:

File Type Option	Choose this file type if you want to...
DigiEasel	Saves the whiteboard file (.mwbx) for future editing.
JPG	Creates an image file.
PDF	Creates a printable document for others to view.

- 5) For JPG and PDF file types, click **Current view** to save the visible portion of the canvas or click **Whole view** to save the entire canvas. **Note: Whole view** creates multiple pages and requires extra time to complete.
- 6) Browse to the desired file location or accept the default location.
- 7) Click **Save**.

The screenshot shows a 'Save Files' dialog box with the following fields and options:

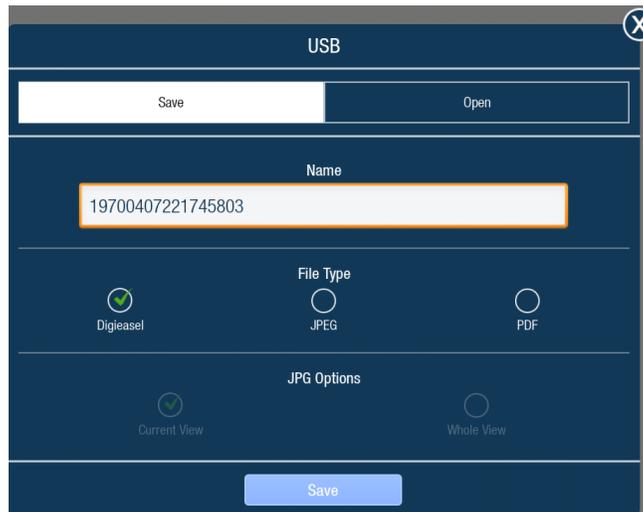
- Name:** 20160830105849884a
- File Type:** JPEG (selected), PDF
- JPG Options:** Current View (selected), Whole View
- Location:** /User Data/LCP2
- Save** button

Save the whiteboard canvas to a USB thumb drive

- 1) Click **More**.
- 2) Click **USB**.
- 3) Click **Save**, if not already highlighted.
- 4) Type a file name in the **Name** text box.
- 5) Select the file type:

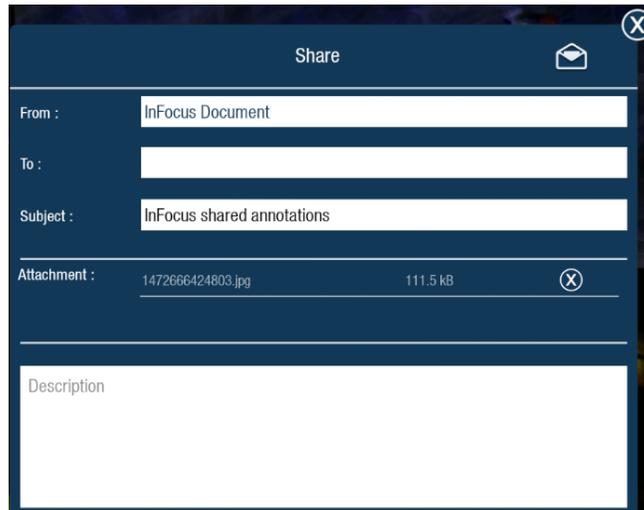
File Type Option	Choose this file type if you want to...
DigiEasel	Saves the whiteboard file (.mwbx) for future editing.
JPG	Creates an image file.
PDF	Creates a printable document for others to view.

- 6) For JPG and PDF file types, click **Current view** to save the visible portion of the canvas or click **Whole view** to save the entire canvas. **NOTE: Whole view** creates multiple pages and requires extra time to complete.
- 7) Click **Save**.



Share the file

- 1) Click **More**.
- 2) Click **Share**.
- 3) Type the recipient email address in the **To:** field.
- 4) Type information about the file in the **Description** field, if desired.
- 5) Click **Send** (envelope icon).



Open a new whiteboard canvas

- 1) Click **More**.
- 2) Click **New**.
- 3) Select **Save** to save the existing canvas or **Don't save** to delete the existing canvas and open a new one. **Cancel** returns the user to the current canvas.

Open a whiteboard file

- 1) Click **More**.
- 2) Click **Open**.
- 3) If the whiteboard canvas contains objects, you are prompted to save the existing canvas. Select **Save** to save the existing canvas or select **Don't save** to delete the existing canvas and open a new one. (**Cancel** returns the user to the current canvas.)
- 4) By default, the **Open Files** window displays whiteboard files saved internally on the projector. To open a saved file from a USB thumb drive, click the **USB** icon at the top of the Open Files window, and navigate to the desired USB thumb drive.
- 5) Browse to the desired folder and click the whiteboard file you wish to open.

Open a whiteboard file from a USB thumb drive

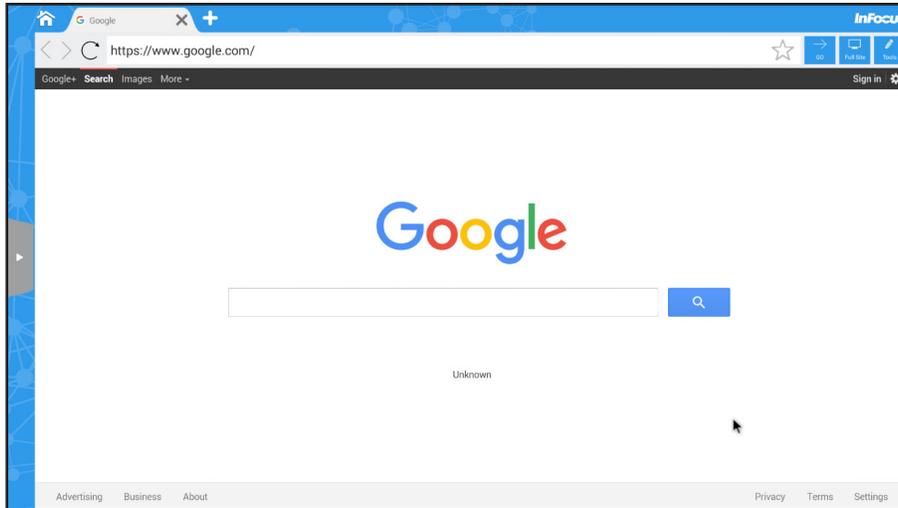
- 1) Click **More**.
- 2) Click **USB**.
- 3) Click **Open**.
- 4) Browse to the desired folder and click the whiteboard file you wish to open.

BROWSER

NOTE: This feature is only available when a LightCast key is attached to one of the USB-A inputs on the projector.

Use the Browser to access the internet, save links to favorite web pages, and annotate images of web pages.

- 1) From the LightCast home page, select **Browser**.
- 2) To return to the LightCast home page, click the **Home** button.



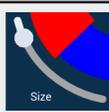
Navigation controls

Button		Description
	Home	Click to return to the LightCast home page.
	Close	Click to close the current browser tab.
	Add	Click to open another browser tab.
	Back	Click to return to the previous web page.
	Forward	Click to go to the next web page.
	Refresh	Click to refresh the browser window.
	Favorite	Click to add the current URL to your Favorites list.
	Go	Click to go to the URL address listed in the browser address bar.
	Full Site/ Touch Site	Select Full Site to go to a non-touch site. Select Touch Site to return.

	Tools/ Exit Tools	Select Tools to annotate and save an image of the browser site (see the Tools submenu section below). Select Exit Tools to exit out of annotation mode.
	Favorites bar	Click to expand or minimize the Favorites bar.

Tools submenu

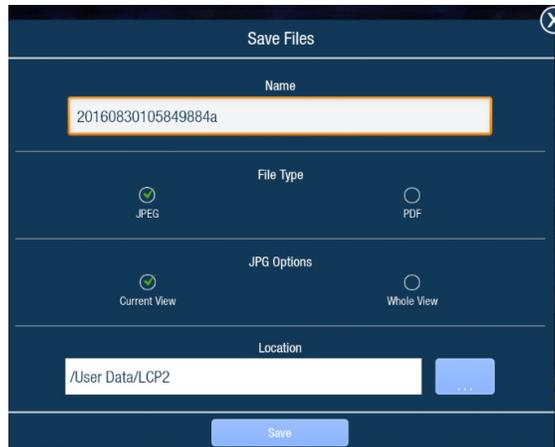
Use the Tools submenu to annotate the browser image.

Button		Description
	Scroll	Click to scroll up or down the web page.
	Current tool	Click to use the current tool.
	Eraser	Click Eraser , and then click and drag across the drawing object to erase the portion you touched. The picture is not affected.
	Color Wheel submenu	Click to access the color submenu.
	Color wheel	Click to choose a color using a color ramp. The current selected color displays in the middle of the color wheel.
	Segmented color wheel	Click to choose a color from the segmented color wheel. The current selected color displays in the middle of the color wheel.
	Size	Click and drag the thumbnail button along the slider path to adjust the size of the pen/line width.
	Opacity	Click and drag the thumbnail button along the slider path to adjust the size of the highlighter/shape opacity.
	Tools submenu	Click to select an annotation tool. NOTE: Each object has its own color, pen width, and pen transparency setting.
	Pen	Click to use a pen. NOTE: Opacity control is not available for the pen object.
	Highlighter	Click to use a highlighter.
	Rectangle	Click to draw a rectangle.
	Circle	Click to draw a circle.

	Line	Click to draw a line.
	Text	Click to add a text box. Adjust the placement, font size, color, and type attributes as desired. Type your text and click OK .
	Laser	Click to highlight something temporarily. The mark disappears when a new mark is made. Laser marks cannot be saved.
	Select	Click Select . Click and drag the selection box around the drawing objects which you want to move, cut, copy, paste, or delete. Once selected: <ul style="list-style-type: none"> • Click and drag to move the selection. • Click Copy to copy the selection, and then click Paste to create a duplicate object set. • Click Delete to delete the selection.
	Undo	Deletes the last annotation.
	Redo	Displays the last deleted annotation.
	Clear	Deletes all annotations from the file.
	More submenu	Accesses additional menu features.
	Save	Saves the file as a JPG image or PDF file.
	Paste	Pastes the clipboard onto the image.
	Share	Only available when the projector is connected to a network. Sends the annotated image as a JPG image by email.
	USB	Saves the annotated picture to a USB device as a JPG image or PDF file.

Save the file

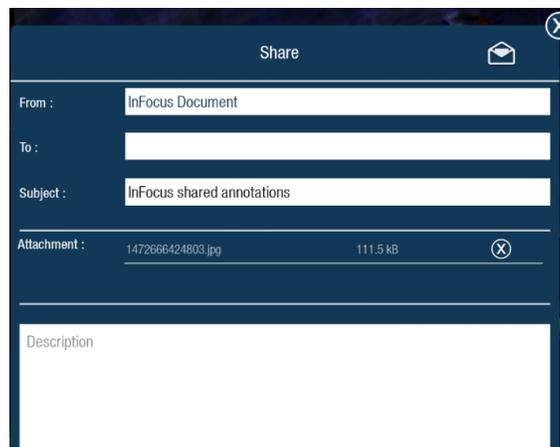
- 1) From the Tools submenu, click **More**.
- 2) Click **Save**.
- 3) Type the file name in the **Name** field.
- 4) Select the desired **File Type** (JPG or PDF).
- 5) Select **Current View** to save the displayed page or **Whole View** to save the entire file.
- 6) Browse to the **Location** you would like to save the file to or accept the default location.
- 7) Click **Save**.



The screenshot shows a 'Save Files' dialog box with a dark blue background. At the top, there is a title bar with 'Save Files' and a close button (X). Below the title bar, there are several sections: 'Name' with a text input field containing '20160830105849884a'; 'File Type' with two radio buttons, 'JPG' (selected) and 'PDF'; 'JPG Options' with two radio buttons, 'Current View' (selected) and 'Whole View'; and 'Location' with a text input field containing '/User Data/LCP2' and a browse button (three dots). At the bottom, there is a 'Save' button.

Share the file

- 1) From the Tools submenu, click **More**.
- 2) Click **Share**.
- 3) Type the recipient email address in the **To:** field.
- 4) Type information about the file in the **Description** field, if desired.
- 5) Click **Send** (envelope icon).



The screenshot shows a 'Share' dialog box with a dark blue background. At the top, there is a title bar with 'Share' and a close button (X). Below the title bar, there are several fields: 'From:' with 'InFocus Document'; 'To:' with an empty text input field; 'Subject:' with 'InFocus shared annotations'; and 'Attachment:' with '1472666424803.jpg' and '111.5 kB' and a close button (X). At the bottom, there is a 'Description' field with a text input area.

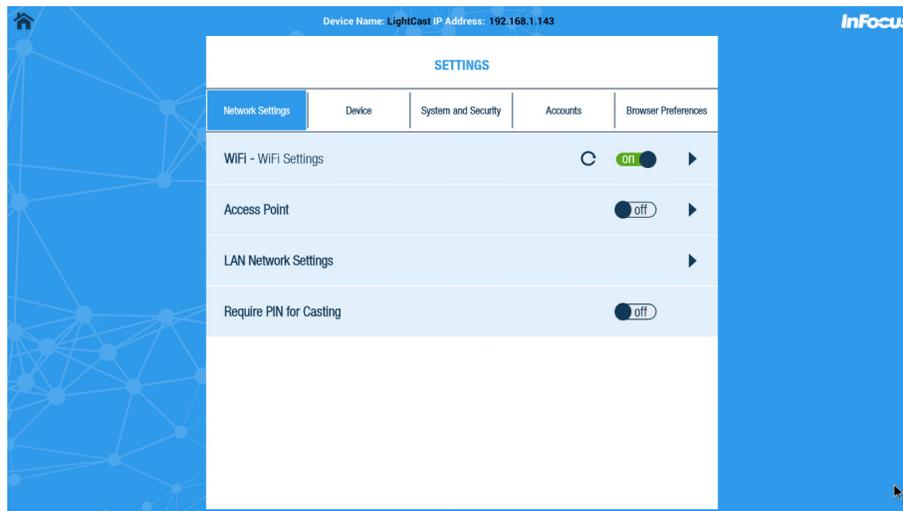
SETTINGS

NOTE: Only the Device and System and Security menus are available by default. All other menus are only available when a LightCast key is attached to one of the USB-A inputs on the projector.

To access setting options, click the **Settings** gear icon in the lower right corner of the LightCast home page.

Network Settings

Use this menu to configure wireless and network settings. **NOTE:** This menu is only available when a LightCast key is attached to one of the USB-A inputs on the projector.



WiFi - WiFi Settings allows you to turn WiFi on and off, and to select and connect to visible SSIDs.

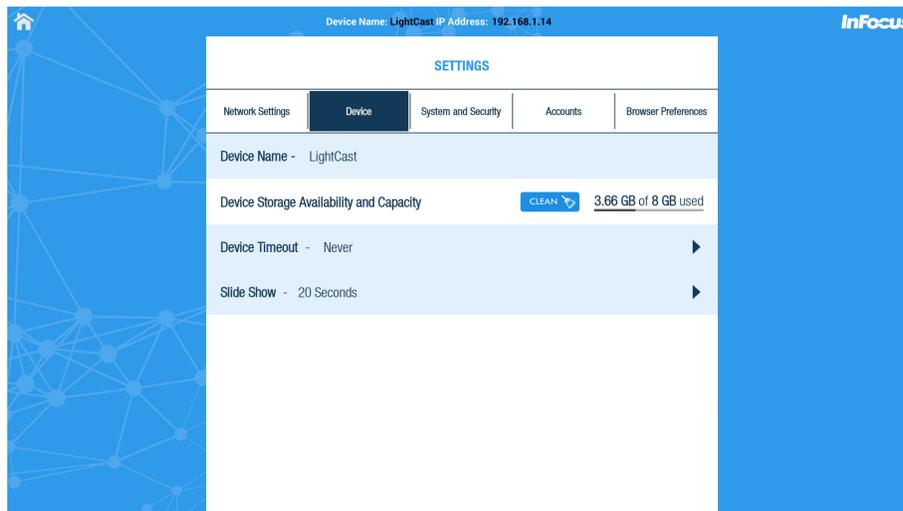
Access Point allows you to configure the projector as a WiFi access point. The internet connection is passed down from the wired connection. This is also useful for casting video using LightCast or AirPlay when another network is not available. (See "Access Point Setup" on page 39 for additional information.)

LAN Network Settings allows you to set up a wired network connection between the projector (if this feature is available) and the wired network. The wired network connection can be configured as fixed or non-fixed IP or go through a proxy.

Require PIN for Casting allows you to enable or disable a security PIN for casting onto the projector. When enabled, the user must enter a random eight digit PIN to connect. The PIN displays in the top center of the screen.

Device

Use this submenu to define the projector name, determine how much local storage on the projector is available, and when the projector should go to sleep.



Device Name displays the current device name. Click the name to edit it. This helps differentiate between different projectors that have LightCast enabled.

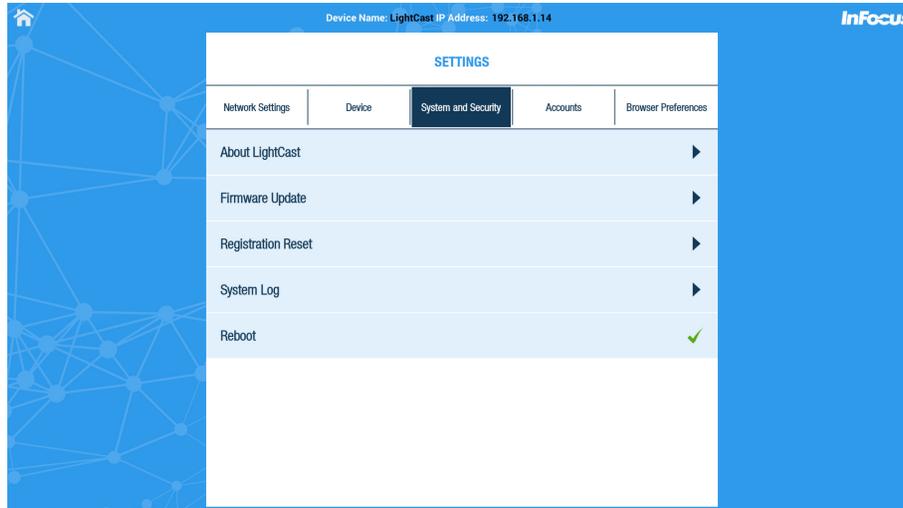
Device Storage Availability and Capacity displays the current flash memory usage.

Device Timeout puts the LightCast projector to sleep but does not shut off the projector immediately. If no other video sources are active or if Auto Source is disabled, the projector shuts off based on the Sleep Timer setting in the projector menu (Never by default).

Slide Show allows you to configure the amount of time each image is displayed when the slide show feature is active (20 seconds by default).

System and Security

Use this submenu to review LightCast information, update the LightCast firmware, reset registration, and reboot the firmware.



About LightCast displays the LightCast revision, projector serial number and the MAC addresses for WiFi and LAN (if present on the projector).

Firmware Update allows you to define the update method:

- **Online Update** searches for a newer version of LightCast firmware on the internet automatically. This requires a valid internet connection. Follow the prompts to complete the update.
- **SD Card/USB Update** allows you to update the LightCast firmware from a USB storage device. Visit www.infocus.com/support to download the latest version of LightCast firmware. Select the correct .zip file from the list to continue.
- **Factory reset** completely erases all personal data in memory, including registration information, and return all settings to default.

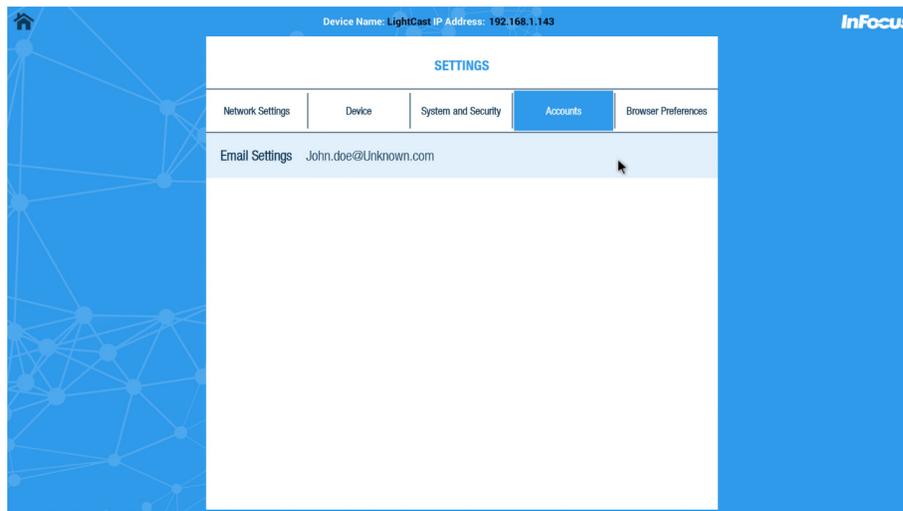
Registration Reset erases the registration information but not personal data in memory.

System Log is for service use only.

Reboot restarts LightCast while the projector continues to run. LightCast displays when the reboot is complete.

Accounts

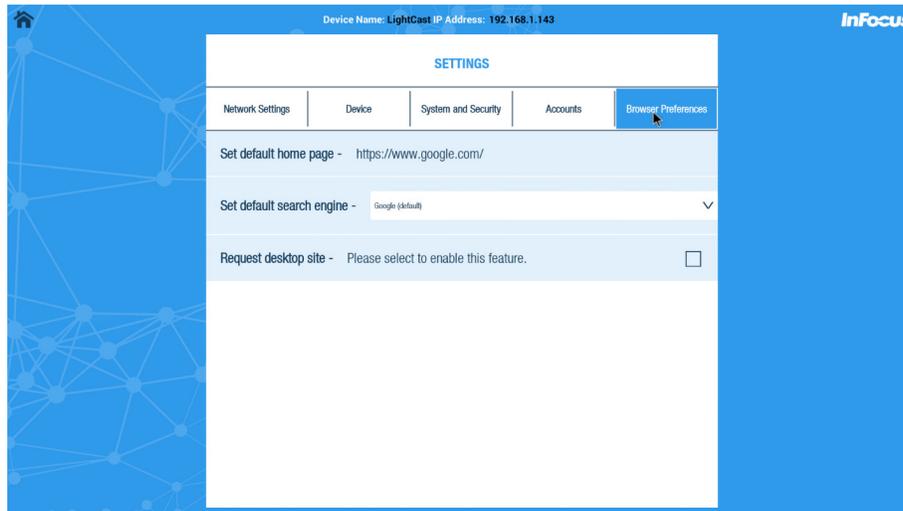
Use this submenu to define the registered email address. **NOTE:** This menu is only available when a LightCast key is attached to one of the USB-A inputs on the projector.



Email settings displays the email address initially defined during the registration process. To change the address associated with this device, click the current email address and enter the new email address.

Browser Preferences

Use this submenu to define the browser default home page, default search engine, and the request desktop site. **NOTE:** This menu is only available when a LightCast key is attached to one of the USB-A inputs on the projector.



Set default home page allows you to define the home page that displays when the browser is opened. Click the existing home page to change the address.

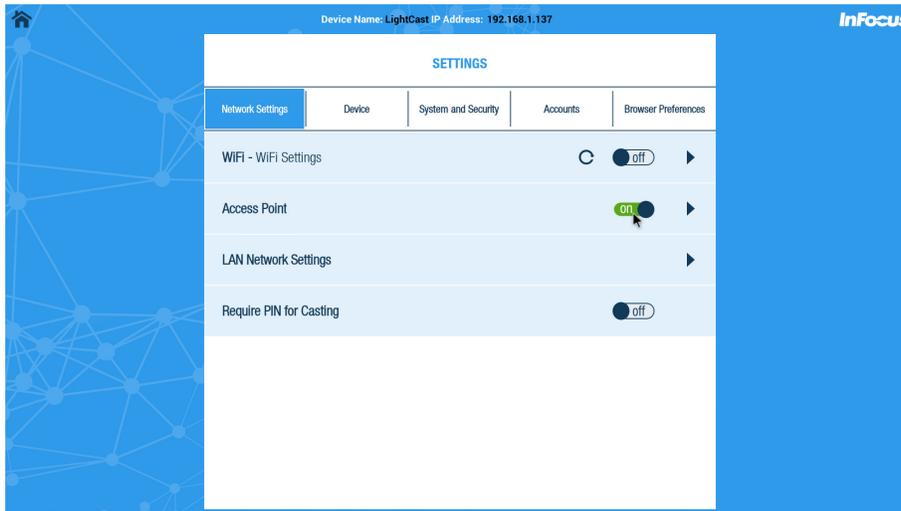
Set default search engine allows you to define the default search engine when the browser is opened. Click the down arrow to choose from the options.

Request desktop site allows you to change the web page type from a Touch Site (default) to a Full Site (non-touch page). Enabling the feature displays the page as a Full Site.

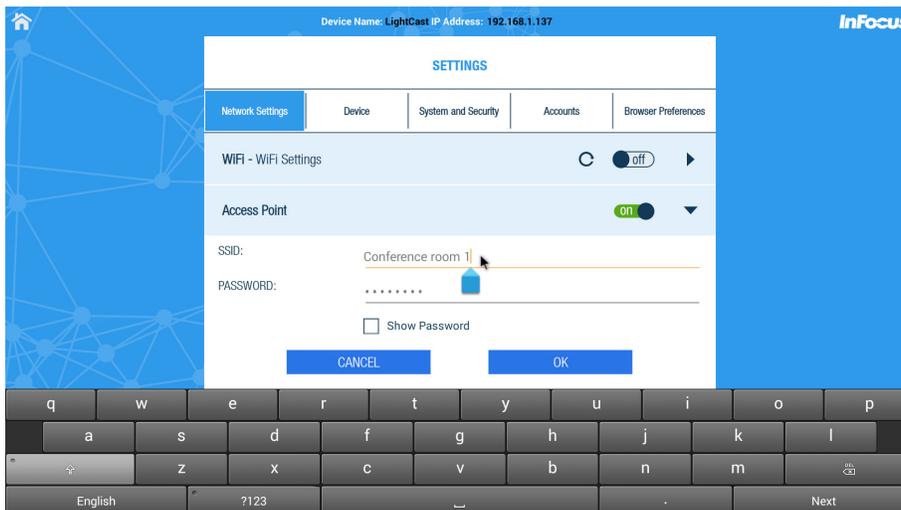
APPENDIX

Access Point Setup

- 1) From the home page, click the **Settings** icon.
- 2) Navigate to the **Network Settings** tab.
- 3) Click the **Access Point On/Off** button, so that **On** is selected. This disconnects the current WiFi connection.
- 4) Click the right arrow to open the **Access Point** submenu.



- 5) By default, the SSID is LightCastAP. If other LightCast equipment is being used nearby, change the SSID to a unique name using a mouse and keyboard, or the remote and on screen keyboard.



- 6) Enter a password (min. 8 characters) and click **OK**.

Port Requirements for AirPlay, Miracast, and LightCast Sender App

AIRPLAY

Port Number	Type	Protocol	RFC	Used by
80	TCP	HTTP	2616	AirPlay
443	TCP	HTTPS		AirPlay
554	UDP/TCP	RTSP	2326	AirPlay
3689	TCP	DAAP		iTunes Music Sharing/AirPlay
5297	TCP			Bonjour
5289	UDP/TCP			Bonjour
5353	UDP	MDNS		Bonjour/AirPlay
49159	UDP	MDNS (Windows)		Bonjour/AirPlay
49163	UDP	MDNS (Windows)		Bonjour/AirPlay

MIRACAST

Miracast uses the network differently than AirPlay and the LightCast Sender App. Miracast connects directly using WiFi protocol between your sending device and the LightCast (receiving) device. Your sending device (PC or mobile device) must be Miracast compatible in order for communication to occur. No router or internet connection is needed.

LIGHTCAST SENDER APP

The three server addresses listed below must be entered into the firewall allowing them through on UDP port 443 outbound. UDP ports 5000-65534 are required for internal network communication only and should not be opened outside of the firewall, or blocked internally.

Application	Port
M360.api.splashtop.com	443
Turn.relay.splashtop.com	443
Wbs.relay.splashtop.com	443