INTRODUCTION

This document is intended to be used as a training course or as a reference source for educators and trainers using Newline Touch Panels. If you see the icon, there is a link to the 2NDGEAR on-demand video training module.

The specific panel used for these materials is the Newline TRUTOUCH RS+ Series. Note that the Newline TRUTOUCH Q Series will replace the RS+ Series during 2022, but the contents of this manual will still be relevant as the interface will not change significantly. Where there are differences between the models, these will be called out in the text.

ABOUT 2NDGEAR

2NDGEAR is the premium value-added reseller of Newline Touch Panels.

With dedicated sales and support team members, we can recommend the right panel and configuration to create your dynamic learning environment.

The 2NDGEAR Newline Training Suite can be found here (your 2NDGEAR Account Executive will be able to give you the current password). This resource offers on-demand training lessons that cover all aspects of using the features in the touch panels, and best practices on using the panels in physical, remote and hybrid learning scenarios.

TABLE OF CONTENTS

INTRODUCTION 1

ABOUT 2NDGEAR 1

UNBOXING AND SETTING UP YOUR PANEL 3

- Panel Ports, Inputs and Outputs 3
- Built-In Windows PC (OPS) 4

THE 'HOME' PAGE 5

- Favorite Shortcuts 5
- Gadget Buttons 5
- Inputs & Preview Area 5
- Side Task Bar 5
- Admin Shortcuts Area 5
- Clock 5

USING THE WHITEBOARD 5

- Getting Started with the Whiteboard 6
- Pen/Pencil/Chalk 6
- Object Recognition 6
- The Whiteboard Canvas 7
- Managing Multiple Whiteboards 8
- Markers 8

Shapes....8
Manipulating Shapes, Pens and Objects on the Canvas....9
Eraser Options....9
Clear the Canvas....9
Manipulating Multiple Objects. The 'Lasso' Tool....10
Using a Stylus vs. Using Fingers to Draw and Write....10
Adding Additional Content to your Whiteboard....11
Exporting, Saving and Sharing your Whiteboard....13
SIDEBAR MENU....14
WHITEBOARD OVERLAY....15
Automatic Saving -....15
Retrieving and Saving Whiteboard Overlays....16
Capture Whiteboard Overlays to your Full Whiteboard....16
Whiteboarding over Windows, MAC OS, Chromebook etc. Sources....17
GADGETS (APPLICATIONS)....17
Using Gadgets....18
Adding Gadgets....18
The Newline App Store....18
Installing a Gadget....19
Customize the Gadget Favorites....19
NEWLINE CAST....19
Starting a Newline Cast Session....19
Managing Newline Cast Attendees....20
Panel (host) Functionality....21
NEWLINE BROADCAST....22
Starting a Newline Broadcast Session....22
Viewing the Broadcast Session....22
CONNECTING & USING PC'S WITH YOUR PANEL....23
Navigating Input Sources....23
CUSTOMIZE SIDEBAR/TOOLBAR SETTINGS....24
QUICK SETTINGS....24
SETTINGS....24
Network....24
Bluetooth....25
Language & Input....25

Date & Time 25
Apps 26
Whiteboard: Classic/New 26
Display & Theme 26
Tool Bar 27
Power 27
Smart Eye Protection 27
FILE COMMANDER 28
Add Cloud 28
Managing Files & Folders 29
Add to Favorites 29
Categories 29
Managing Storage 30
NEWLINE DISPLAY MANAGER 31
Newline Display Management Tutorials 31
Newline Display Manager Setup Guide 31

UNBOXING AND SETTING UP YOUR PANEL

The unboxing is not typically something that an educator or trainer will need to understand but it is good to know what to expect.

Firstly, assembling the stand and hanging the panel is not a one-person process, hanging the panel itself is at least a three-person process, so be prepared. Even though the panel is lighter than most, that does not mean it is actually 'light'.

Panel Ports, Inputs and Outputs

The assembly and setup is pretty straightforward. A few things to note:

- The wireless network dongle should be plugged into the USB port on the back of the panel that is labelled 'USB 2.0 Embedded'.
- The port labelled 'HDMI Out' can be used to mirror the panel to other monitors or projectors. Note that the wireless network dongle is potentially easy to miss in the package. It looks a little like an eraser.
- The lower ports on the back of the panel can accept laptop of computer inputs. '1 HDMI Touch' and '2 HDMI Touch' would be connected to the corresponding ports on your device. The HDMI will be used for the video and sound input, the USB will be used to create the 'touch' functionality on the panel.

- The front panel door opens to reveal the front HDMI and 'Touch' ports for another device. There are also USB ports here that can be used for a document camera (for example), or more commonly, your USB flash/thumb drive. There are also volume and other panel control buttons in this section.

Q Series Notes

The Q Series also has the option to connect to the panel using a USB-C connection, this will allow video, audio, touch and charging through one cable.

The Q Series also has wireless connectivity (Wi-Fi 6) included within the panel, so there is no wireless dongle to install.

Built-In Windows PC (OPS)

If you have also purchased the option to have a built-in PC with your panel, you will install this into the slot on the upper-rear of the panel. The installation is straightforward, although the screws are incredibly tricky to tighten (maybe it's just me?).

Once installed, the OPS PC (Open Pluggable Specification) will appear as the top option in your available inputs. My device is labelled 'Built-in PC'. You can rename these inputs, and this is covered later in this document.

THE 'HOME' PAGE

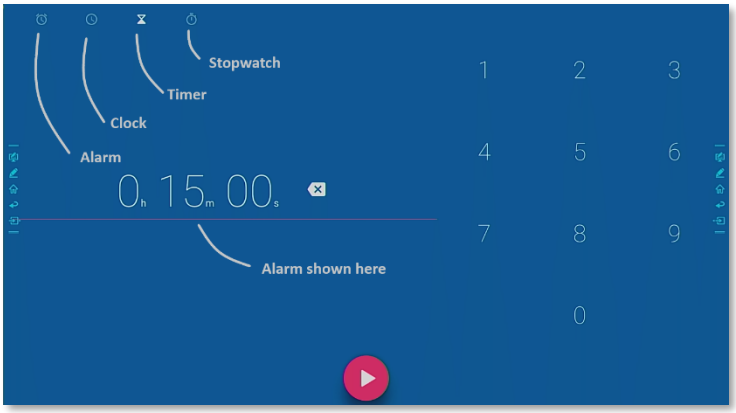
Once the panel is powered-on (the illuminated red button to the bottom-left of the panel), you will see what you can consider the 'Home' page. There are a few areas here where functions are grouped together:

Favorite Shortcuts – Here you can add your most common tasks. These can be customized (see later in this document, but if you want the quick route, just long-press on one of the shortcuts to change it to another option). It is a good idea to agree on this layout across your team as this will likely be common to all users of the board and you want to easily find your whiteboard (for example).

Gadget Buttons – You can add your favorite gadgets to this area. Again, it makes sense to agree generally how you want this laid out across your organization. Touch the 'Add' button to add or remove a gadget (more details later in this document). You can add up to five gadgets here.

Inputs & Preview Area – Here you can see your available inputs. If the input is white, there is a device attached to that input, if it is greyed-out then there is currently no device attached to that input. You can customize the input names, so your setup may not be the same as mine. We will cover this in more detail later in this document.

Side Task Bar – This sidebar is aways available to you and it is likely on both sides of your panel. It contains the everyday tasks such as home, back. Whiteboard-overlay, whiteboard and your customized buttons as well. You can move it up and down to work under it by dragging it. This sidebar is also customizable.



Admin Shortcuts Area – Here you will find shortcuts to the File Commander (file browser), Wi-Fi settings, the main settings menu and an exit to the startup screen.

Clock – The clock to the top-left of the screen can be moved to fill the screen by tapping on it. You will also see the option to use a stopwatch, timer or set an alarm.

USING THE WHITEBOARD

We will spend a fair amount of time on the whiteboard, because it is fundamentally the most important tool in the panel for educator or trainer. As ease-of-use is typically the primary consideration, we can start by just jumping in and using the whiteboard.

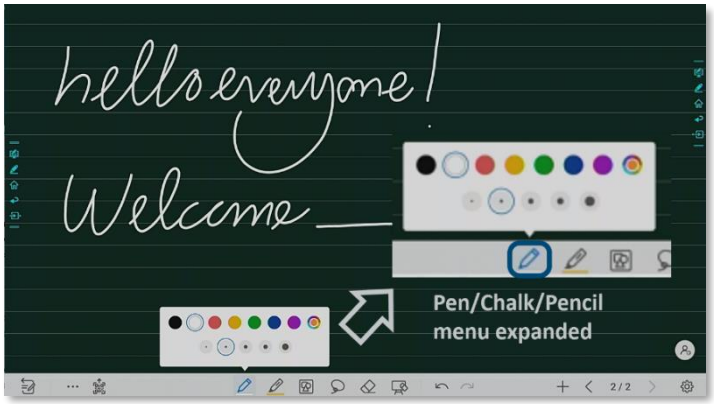
Getting Started with the Whiteboard – From the home screen, you can start the whiteboard by either tapping on the large 'Whiteboard' button in the favorites shortcuts area, or by tapping on the pen icon (second from the top) on the sidebar. This all assumes, of course, that you have not customized the buttons.

Depending on how your whiteboard is set up, you will see a clean canvas that may have lines or a background. For this example, we have a dark green canvas with lines (we will show you how to change this later in this document).

Pen/Pencil/Chalk - The most common tool you will use is the pen (pencil/chalk) option. This is the first icon to the bottom of the whiteboard. When you touch the pen icon (or use the stylus), you will see the options for size and color of the pen

The color option to the far right of the menu allows you to se a custom color for that spot. The pen size options are below the colors.

Choose a color and start writing with your stylus.

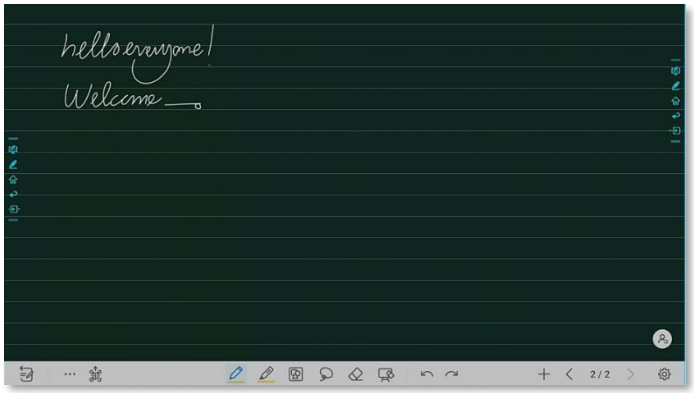


Object Recognition – This is a really important aspect of the ease-of-use of the Newline panels. The panel has the ability to recognise the difference between a stylus, a finger (or fingers) and the back of your hand (or the palm of your hand). Let's explore a little around why you might want to use this.

You can open up your whiteboard and immediately start writing with the stylus. It does not need to be a specific stylus, just a wooden or plastic pen-like object. I use bamboo chopsticks as I find them easy to hold and they don't make too much of a 'tapping' sound when you write. They are also, of course, quite easy and cheap to replace, and environmentally friendly! This might be 90% of what you will ever do with this panel. Turn the panel on, tap to start the whiteboard and start writing.

You write with the stylus (chopstick). To move your text to another location on the panel, touch the panel with a single finger and drag. The text will move appropriately. To zoom the text in or out, touch the panel with two fingers ("one on each hand) and expand or compress the space…the panel and the text will zoom in, zoom and and mov appropriately.

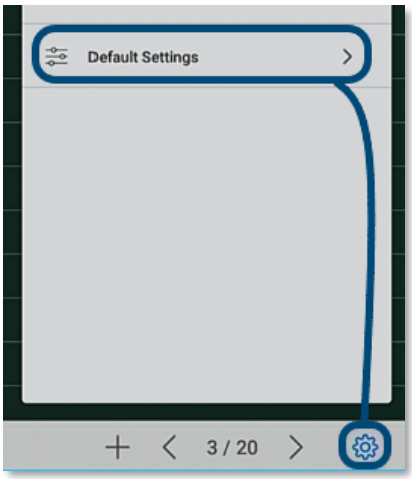
Turn your hand towards your face and rug the back of your hand across your text and you will remove the text oblects.



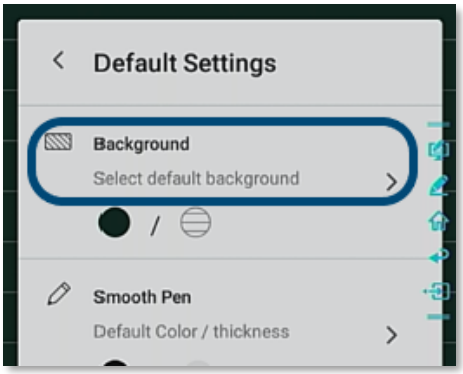
If you repeat these motions, pen to draw, fingers to move and zoom, back of your hand to erase and you are already an expert with the panel.

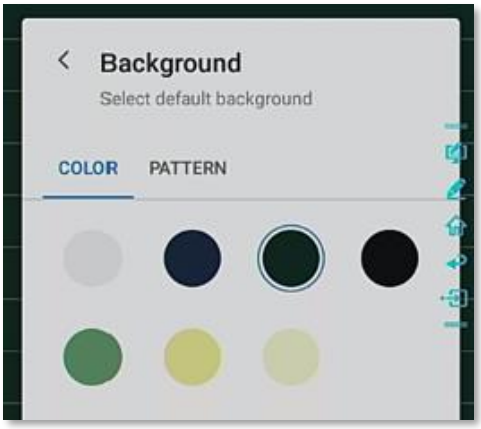
Open your hand to expose your palm…lift it towards your opposite shoulder and pat yourself on the back! Nicely done! In truth, you have already picked up a huge part of what you will want to do with the panel…and…rest!

The Whiteboard Canvas – The canvas on your whiteboard is an 'infinite canvas'. You can keep adding to this and moving it around, zooming out and moving content 'off-stage' forever (well, I suspect there is a limit somewhere, if you find the 'Restaurant and the end of the Universe' somewhere on your canvas, send me an awesome picture!).



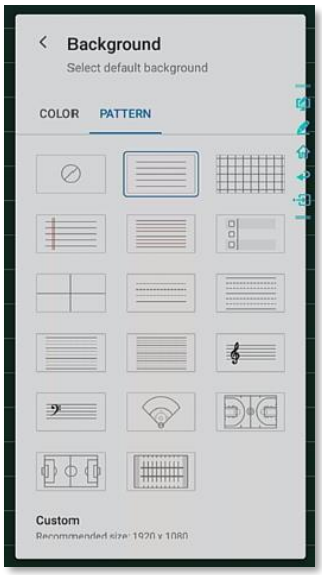
Practically, you will want to have multipe canvases (whiteboards) and skip between them. Let's look at how we can do that. To the bottom-right of the whiteboard, you will see a 'cog' icon. Tap on that and then 'Default Settings. Then you can tap on 'Select Default Background'. The next option allows you to select the 'Color' and the 'Pattern' for the (next) default background (or 'canvas').





You can select 'green' and 'lined' and the next time you click the '+' icon to the right of the whiteboard navigtion numbers, you will have a shiny new green, lined whiteboard canvas.

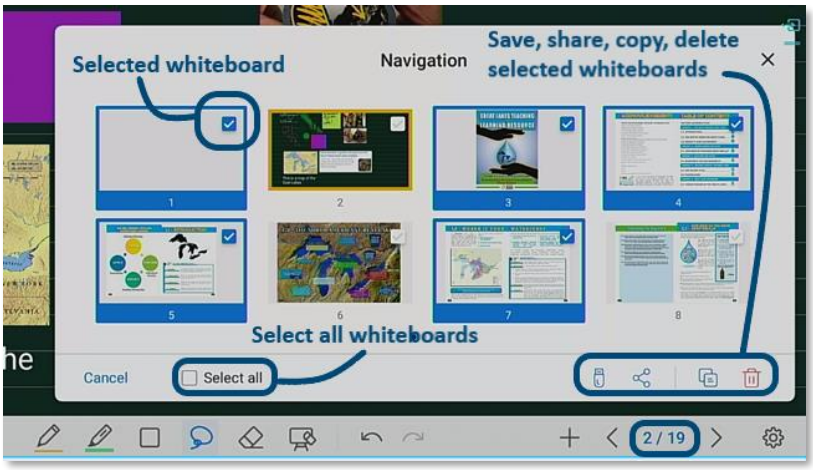
Repeat as necessary.



Using the whiteboard navigation option to the bottom-right of the whiteboard ('< 3/20 >') you can use the arrows ('<' or '>') to move forward and backwards through your whiteboards/canvasses, or long-press on the navigation numbers ('3/20') to see all of your whiteboards/canvasses.

Each time you select a new default canvas, you can create a new whiteboard using these settings using the '+' icon.

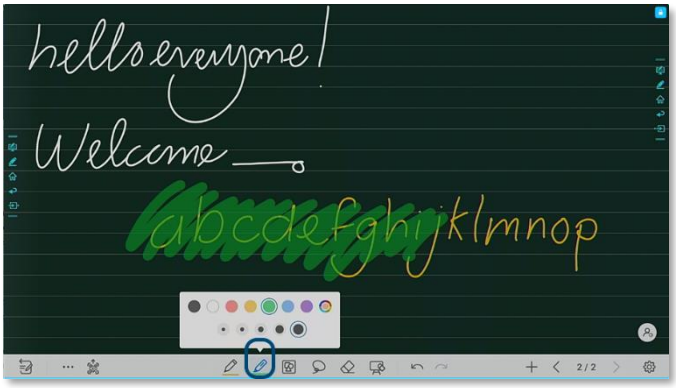
Managing Multiple Whiteboards – To manage the mutipe whiteboards you have created, long-press on the navigation numbers ('2/19') and the whiteboards you have created will be displayed. You can 'Select all' to pick all of your content, or just tap on the whiteboards that you want to select them, they will be identified with a checkmark to the top-right of the whiteboard.



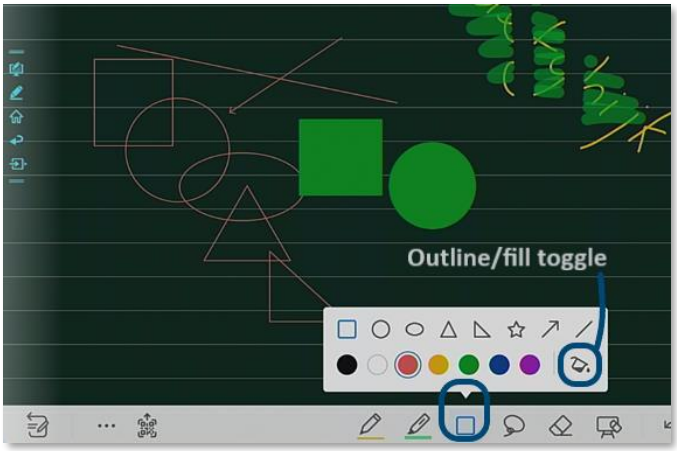
Once you have selected the whiteboards, you can use the icons to the bottom-right of the dialogue box to save, share, copy or delete the selected whiteboards.

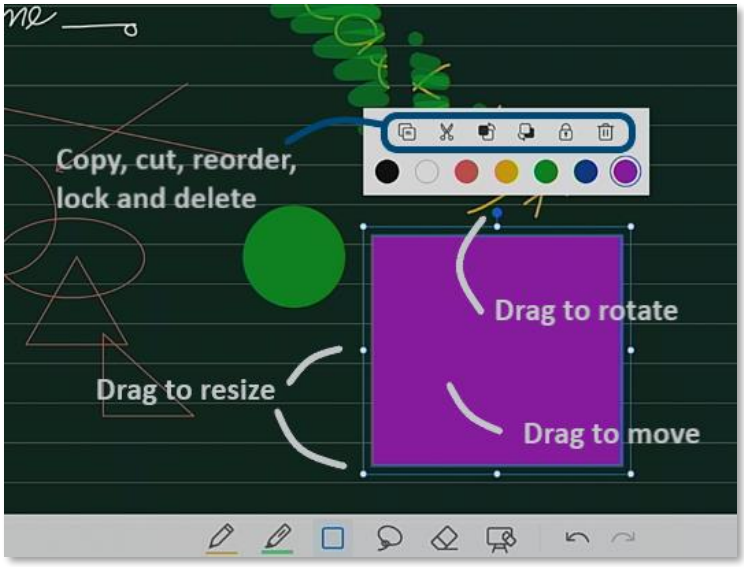
This is also how you would delete just a few of your whiteboards, a common requirement. Open the whiteboard navigation (long-pres the numbers) and select a few whiteboards that you want to delete by tapping on them, then delete with the garbage can icon.

Markers – The markers are, of course, very similar to the pens, but they are transparent and allow you to highlight content without completely obscuing it.



Shapes – The shapes options are pretty straightforward. Once you selet a shape, you can change the color of the shape and decide whether you want an outline or a solid fill before placing it on the canvas. Drag the shape to the correct size on the canvas.



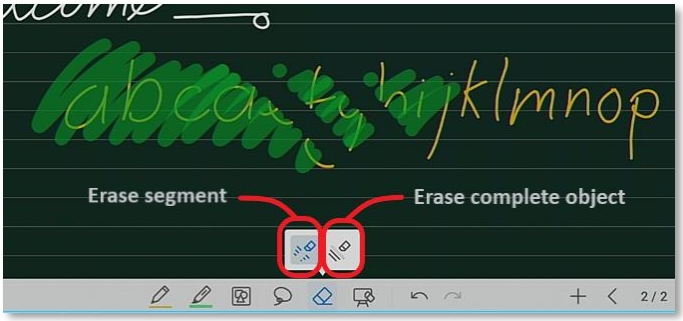


Manipulating Shapes, Pens and Objects on the Canvas – Once the content has been placed on the canvas, you can still manipulate it.

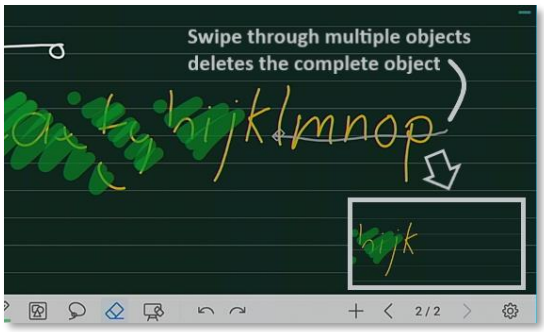
Select the content by tapping on it and the options will appear. You can change the color of the pen, marker, shape and use the icons to copy, cut, move forward or backwards, lock and delete the object.

From the points that appear around the object, you can resize, rotate freely and move the shape or content.

Eraser Options – The erase option (the back of your hand) can be configured in a couple of different ways. If you select the left icon, you will erase only the 'path' of your hand and 'cut through' the lines on the canvas. If you select the right icon you will select any complete object, such as a whole letter or set of connected lines in a single swipe.

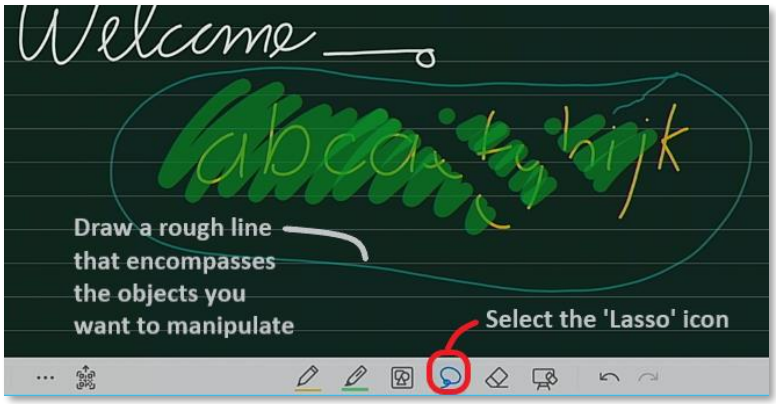


In the option to erase segments, the erasing will happen as your hand passes over the lines. If you select the option to erase a complete object, there will be a grey line drawn under your hand as you pass over the lines/objects. When you stop the erasing an raise your hand from the panel, the complete objects will be removed.

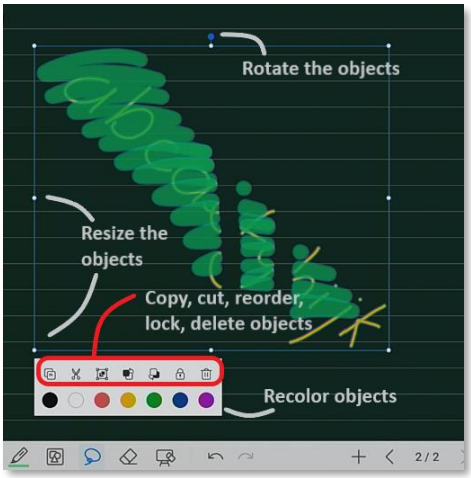


Clear the Canvas – The icon to the immediate right of the eraser icon allows you to clean the canvas, you will need to reconfirm this when you select this item. As noted above, you can also delete whole whiteboards, or a collection of whiteboards form the whiteboard navigation manager.

Manipulating Multiple Objects. The 'Lasso' Tool – The lasso icon allows you to draw a line around a group of objects and then manipulate them as a group. Use the stylus to trace a line around the objects and ensure it overlaps/joins at the end.



Once the objects are selected, you will see all of the options to manipulate them that you would see when you select an individual object, content or a line. A typical use-case for this would be to 'grab' a group of lines (text, shapes etc.) and resize and move them to another part of the canvas as a lesson progresses.



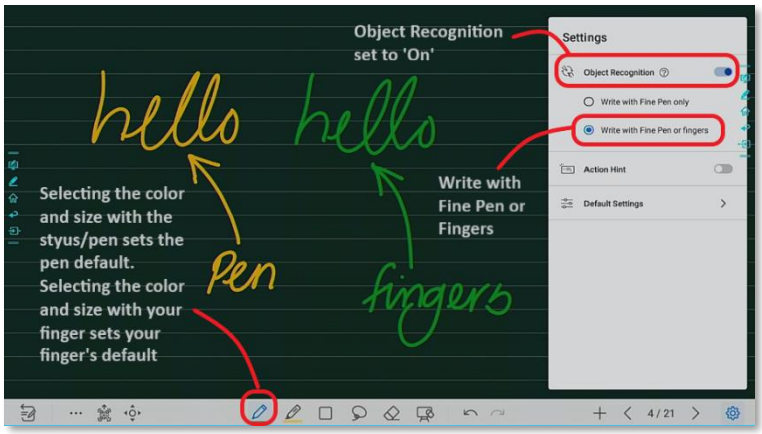
In this manner, the infirnite canvas becomes a very powerful way to progress through, and navigate around complex lessons and topics. It also serves to create a more 'organic' and responsive teaching environment, vs. a more linear progression through, what are essentially slides.

Once the lasso tool is mastered, it is a very useful way to create a more dynamic and interesting learning space and learning process.

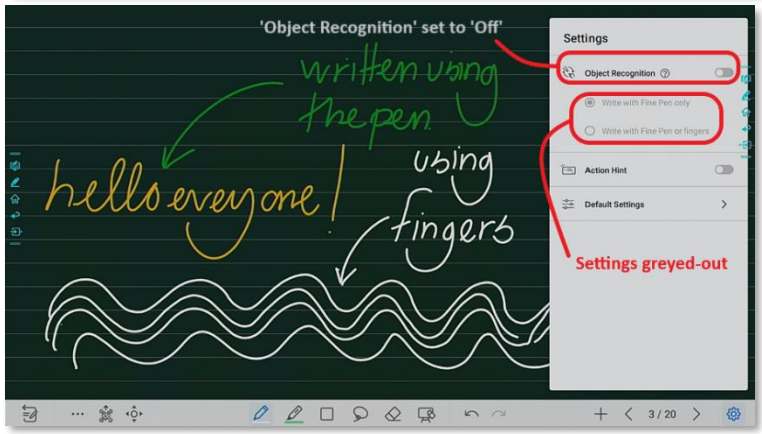
Using a Stylus vs. Using Fingers to Draw and Write – Although the 'Object Recognition' we discuss earlier in this document is incredibly powerful, there may be times when you want to either have multiple touchpoints on the panel (multiple student inputs) or touse your fingers to draw, or to mix both pen and fingers as drawing tools.

Note that your most common mode is *likely* to be using the 'Object Recognition', but we can discuss the alternative use-cases here.

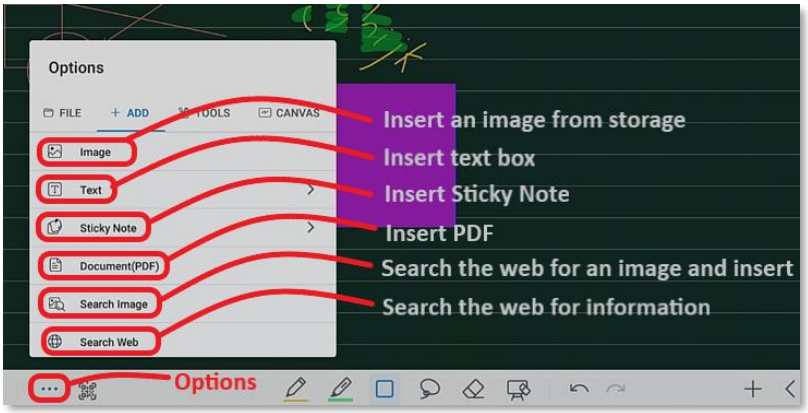
Mode: 'Object Recognition' - 'On', 'Write with fine Pen or Fingers' – 'On'. This is kindof fun, and cool to show-off if you are feeling rather ambitious and rather ambidextrous.



You can write on the panel independently with either your pen/stylus or your finger. You can also use the pen to select the color and size for the pen and then separately use your finger to select the color and size for your finger to write on the panel canvas. This means that you can have a different color for the pen and your finger simulataneously as 'Object Recognition' is still enabled…quite fun!



Mode: 'Object Recognition' - 'Off' (the other settings will be greyed-out as they are really irrelevant). You can kindf consider this as a 'free-for-all' on the canvas. A stylus/pen will write appropriately, as will your finger and as will up to 20 of your fingers (if you have 20 fingers, again, a photo is in order!). This would be a use-case that is something between 'collaboration' and 'anarchy'…but still fun and a very legitimate use-case for interactive touch panels! (I'm not suggesting you resort to 'anarchy'…)

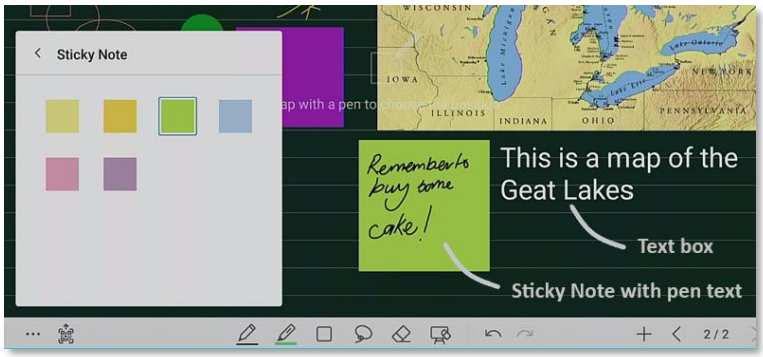


Adding Additional Content to your Whiteboard – There are a few ways to add images and graphics to your whiteboard canvas. We can look at a few of these here.

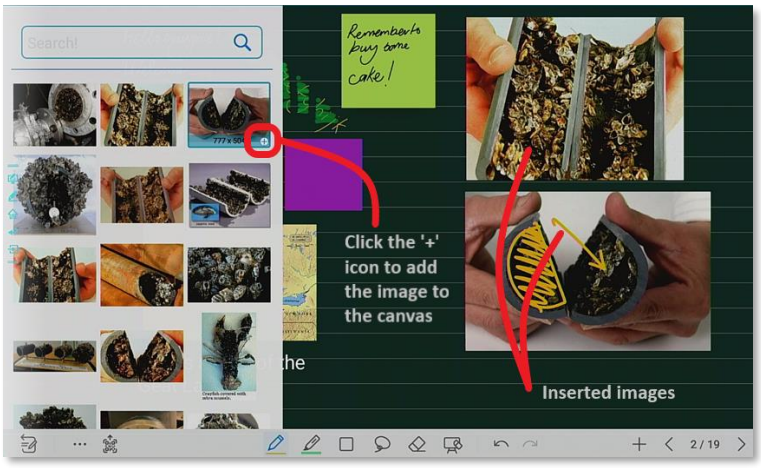
Insert 'Image': You can use this option to navigate to an image that is stored on the panel, on the panel SD Card or on a USB Drive inserted into a USB Port on the panel. You will also have the option to naviate to a cloud drive such as Google Drive, OneDrive, Dropbox etc. The selected image will be dropped onto your canvas and can be manipulated as you have seen eaelier in this document. Select the object and all of the manipulation options will appear.

Insert 'Text': You can select 'Text' and you will see a prompt on the canvas to tap with your pen to insert the text. Tap and use the pop-up keybard to add the text. Again, you have the option to resize and manipulate the text as you would with any other object.

Insert 'Sticky Note': In this case, you will have the option to choose color for your sticky note and place it on the canvas. You can add notes to the sticky note with the pen/stylus and move ot wherevr you choose.

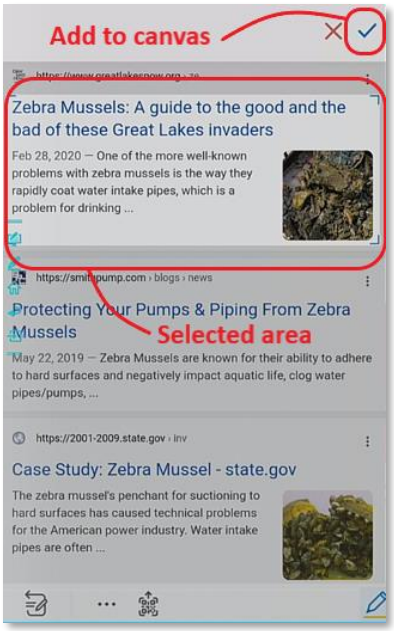


Insert 'Document (PDF)': This selection inserts a PDF into the canvas, but beware. It inserts each page of the PDF as a new whiteboard, so if you have a 20 page PDF, you will have 20 additional whiteboards. There is logic here, but it can be a little confusing to see 20 additional whiteboards added. If you just want to view a PDF file and read through it with your students, you mgith be better served by opening it from the 'File Commander' and using the included 'Office Suite' to display and work through the document with your audience.

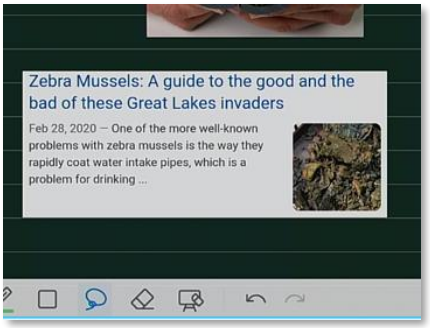


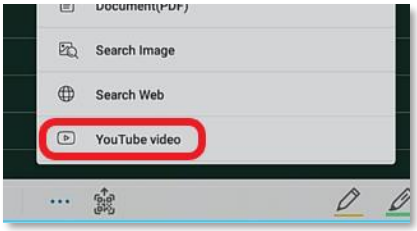
'Search Image': This is essentally a Google image search that is embedded into th whiteboard. Very powerful option to immediately expand the reach of a lesson or class. Once you find the appropriate image, you can click on the '+' icon on the iamge to insert it onto your canvas.

'Search Web': This option has some interesting possibilities if you want to have a more fluid lesson and move in different directions on-the-fly. You can search the web on a topic and the results will be displayed in the embedded browser. If you find a video included in the results, you will be able to play the video directly from the browser for your audience.

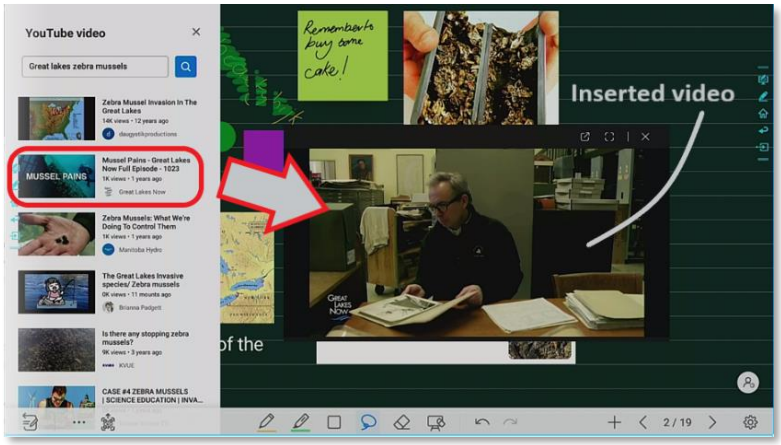


There is also an interesting option if you find an image or a segment of text that you want to capture. To the top-right of the embedded browser you will see a camera capture icon. If you tap on this you will see a capture window that you can resize to dynamically to identify an area you what to add to your whiteboard canvas. Select the area to be captured and then the 'check-mark' to the top-right of the browser, this will capture the selected area an add it to your whiteboard canvas.





'Search YouTube Video': This option is actually kindof hidden. You need to scroll upwards on the options menu to reveal the 'YouTube Video', which is 'below the fold' of the options menu. You can search for a video topic here and you will see a list of relevant content. If you select the video content, it will be inserted into your whiteboard and you can play it directly from your whiteboard. Making it full-screen makes a lot of sense in this scenario, using the embedded YouTube player controls.

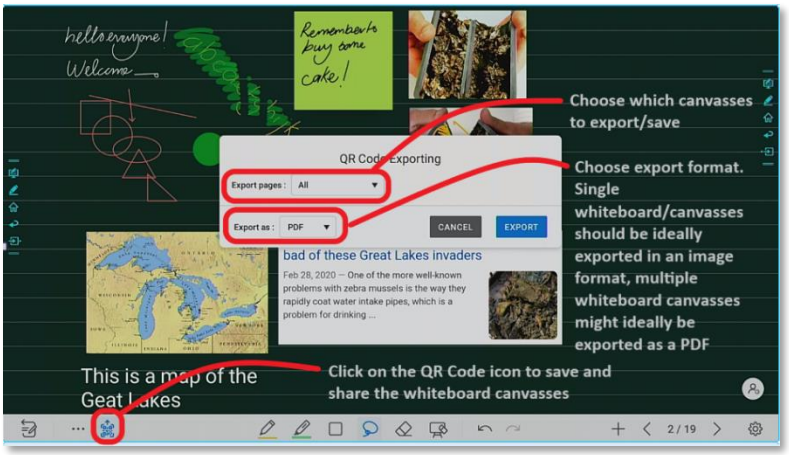


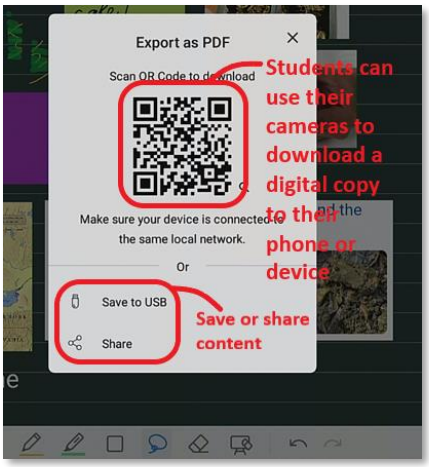
Exporting, Saving and Sharing your Whiteboard – You may want to keep your whiteboard, or share it with others. There are a few ways to do this and we can cover them here.

We have already covered how you can save your whiteboard canvasses above in the section 'Managing Multiple Whiteboards'. Here we can look at how you can share your whiteboards with your students and save from there on-the-fly.

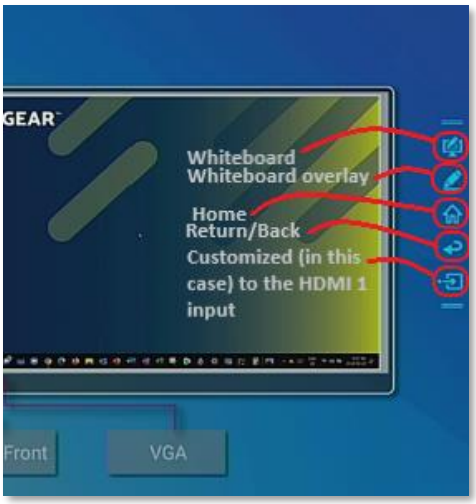
To export the whiteboard canvasses, press the 'QR Code' icon to the left of the lower menu bar. This will open the 'QR Code Exporting' dialogue. From here you can choose to export or save a single whiteboard canvas, or all of the canvasses at the same time. You can also choose the format for the shared/saved file.

It seems reasonable to assume that the most common and flexible format for a single whiteboard canvas would be an image format. If you have multiple pages to export, it seems to make sense to use the PDF format as this is very 'readable' and accepted for multiple pages in a document.





Once you choose to 'Export', you will be offered a QR Code that you can allow students or attendees to photograph/scan using their devices. When they scan this QR Code, they will be able to download and view a digital copy of the whiteboard canvas or canvasses. You can also choose to save the canvas or canvasses to the USB in your panel, or to share it using the services, email apps and functions available on the panel.



SIDEBAR MENU

Most of the common navigation happens from the sidebar menu. By default, there will be menu on the left and the right of the panel, but this can be changed in the 'Settings' menu discussed later in this document. You can move the menu by dragging it up and down the side of the panel, you will want to move it out of the way of other navigation on-the-fly.

You should look over the 'settings' menu section in this document to see how you can customize the sidebar menu. It can save a lot of time to make the bottom option a shortcut to your favorite input (such as your Chromebox).

The most common option on the sidebar menu will likely me the 'Home' icon. The simplest way to get back to the main screen. You have the option to the very top-most icon to enable the 'whiteboard overlay' , this is something you can touch and enable anytime you want to markup *anything* on the panel, from the panel itself to a PC input

to a browser. The second icon will open the regular whiteboard from essentially anywhere. The 'return/back' icon will take you back one step in the process…mostly.

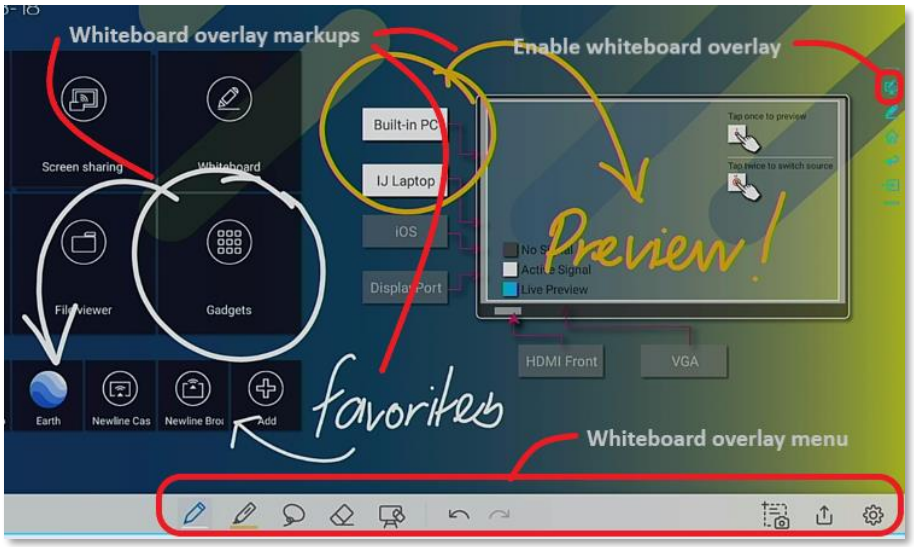
WHITEBOARD OVERLAY

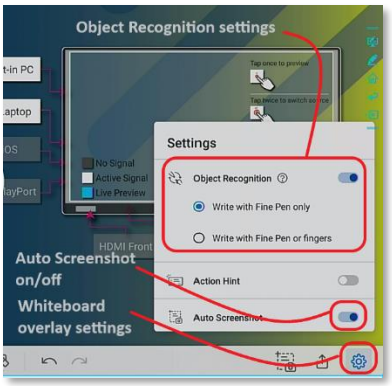
This tool can be enabled at essentially any time when using the panel. It has the capabilities of the regular whiteboard, but it can be enabled and used to whiteboard over anything on the panel.

You can enable this (as noted above) from the sidebar menu.

The whiteboard tools can be used to add text, lines, shapes and manipulate them as an overlay over anything displayed on the panel.

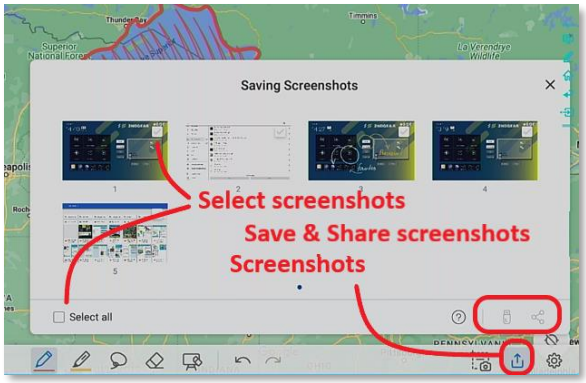
Automatic Saving - When you turn off the whiteboard overlay (touch the sidebar whiteboard overlay icon again) the whiteboard will by default 'save' and swipe to the left of the panel. The default behavior of the whiteboard overlay is to save the whiteboard whenever it is disabled. This means you always have the option to retrieve the whiteboard content you have created.



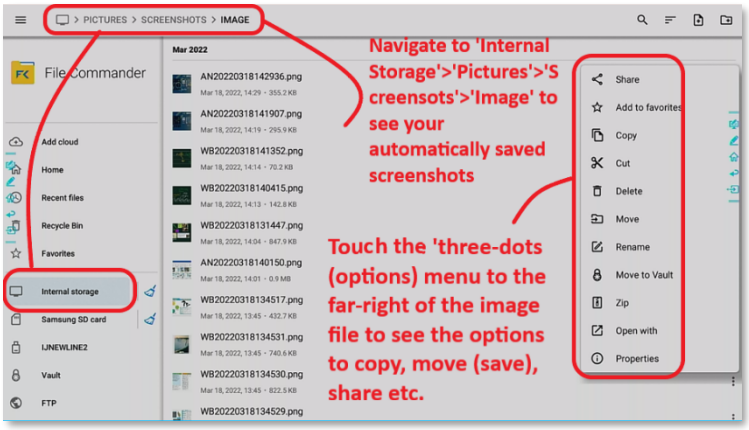


You can choose to disable the option to automatically save the screenshots each time you turn off the whiteboard overlay from the 'Settings' icon (the 'cog'). You can also manage the Object Recognition options from this area if you want to (for example) write with your fingers vs. a stylus/pen.

Retrieving and Saving Whiteboard Overlays - You can see the screenshots that are available from the icon to the left of the settings 'cog'. From here you can select a specific screenshot, or multipe screenshots and either save them to your USB drive etc., or share them using a cloud storage option or the installed email application.

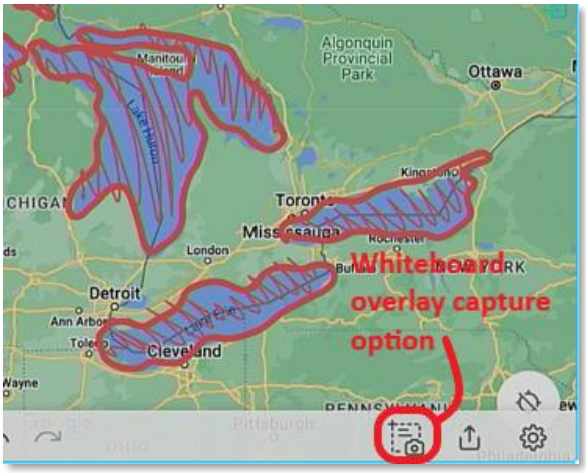


If you have set the whiteboard overlay to save your screenshots automatically, you can find them and save them more permanently using the File Commander (file browser). The screenshots are saved in the 'Internal Storage' on the panel and you need to navigate to 'PICTURES'>'SCREENSHOTS'>'IMAGE' to find them. The latest screenshots will be at the bottom of the list typically, but don't assume your very latest screenshot will be the very bottom image in the list, scroll up a little and you should see the thumbnail for your image.



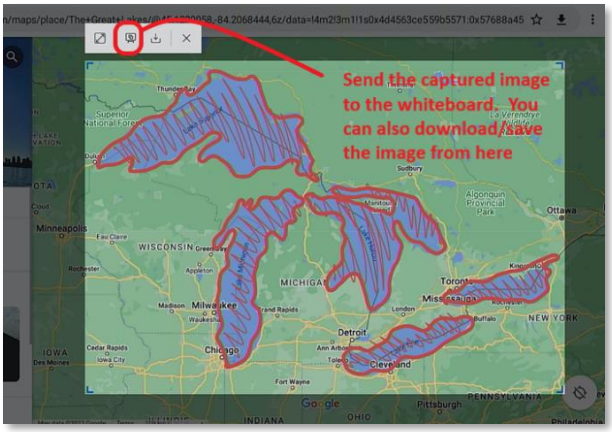
If you look to the far-rightof your imge you will see the 'three dots' where the optons for this file reside. From there you can copy, move (save), share etc. the file.

Note that you do have the option to purge this folder if appropriate, we cover later in this document.

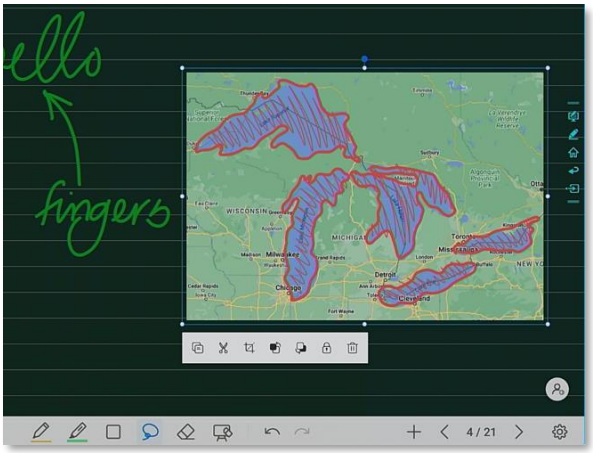


When the whiteboard overlay is enabled, you will see a 'camera' icon towards the bottom right of the screen. If you select this option, you will see the option to crop a section of the whiteboard.

Capture Whiteboard Overlays to your Full Whiteboard - A very useful option with the whiteboard overlay is to capture your work and immediately add this to your full whiteboard.

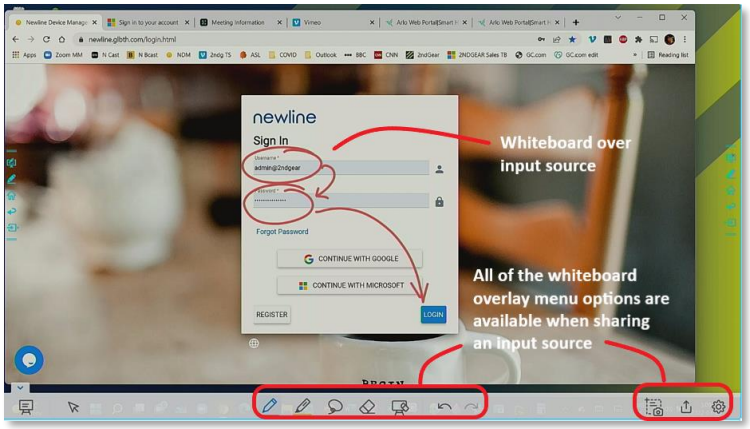


Resize the capture window to the content you want to keep or share.



From the menu, select the second icon from the left (the whiteboard icon) and the image will immediately be added to your current whiteboard and it will take you to that whiteboard. The image will be pasted into the full whiteboard and it can be manipulated as you would any other object.

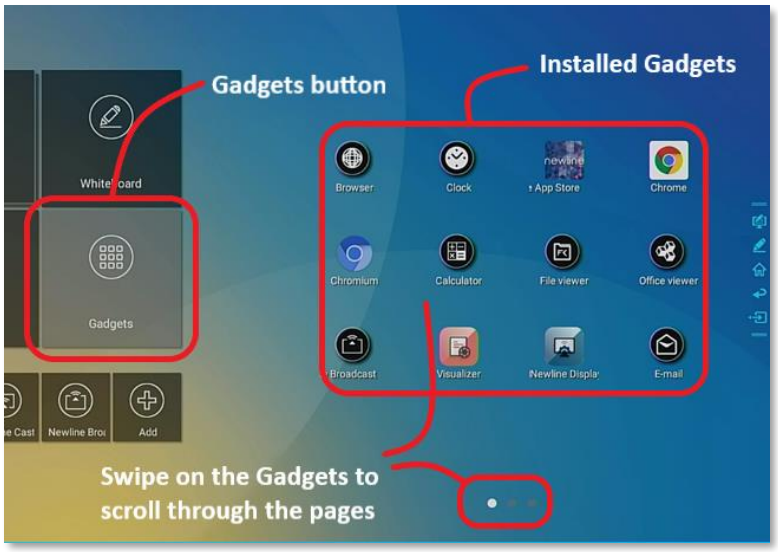
Whiteboarding over Windows, MAC OS, Chromebook etc. Sources – A simple, but useful option is to use the whiteboard overlay to markup and capture interactions with one of the input sources, such as a Windows PC, Mac, Chromebook or Chromebox etc. You can markup the content on these sources and immediately capture a section and have it automatically pasted into your full whiteboard. An example might be to quickly markup and capture a piece of music form the web or on your PC and make it available in the full whiteboard for further interactions.



GADGETS (APPLICATIONS)

Your Newline panel is non-proprietary, it is built on the Android operating system. This is a very compelling feature as it means you are not tied to any operating system, or to applications and tools only created and supported by the panel manufacturer.To access the gadgets, tap on the large 'Gadgets' area/button on your main (home) sreen. The gadgets installed on your panel will appear to the right of the home screen.

You can scroll through these installed gadgets by swiping on the gadget icons.

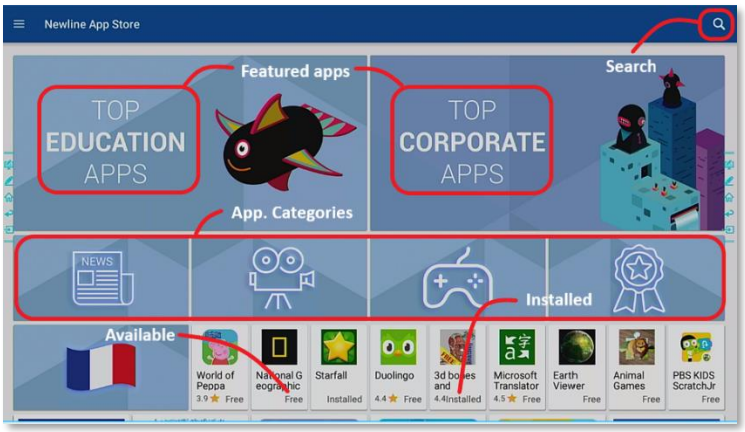


Using Gadgets – You simply touch one of the gadgets to open it. Some of the gadgets will completely take pver the screen (such a a browser), other gagets will essentally 'overlay' the screen and be available as you move between functions on the panel (such as a 'Classroom Tools' gadget).

You will likely see the option to close/exit a gadget as a part fo the gadget interface, but if you are stuck, you can always just tap the 'Home' option on your persistent sidebar menu.

Adding Gadgets – There is a curated (managed) Newline App. Store that is installed and immediately available on your panel. To access the list of available gadgets, tap on the 'Newline App Store' gadget. This will open a browsing interface showing the available 'curated' apps available to you.

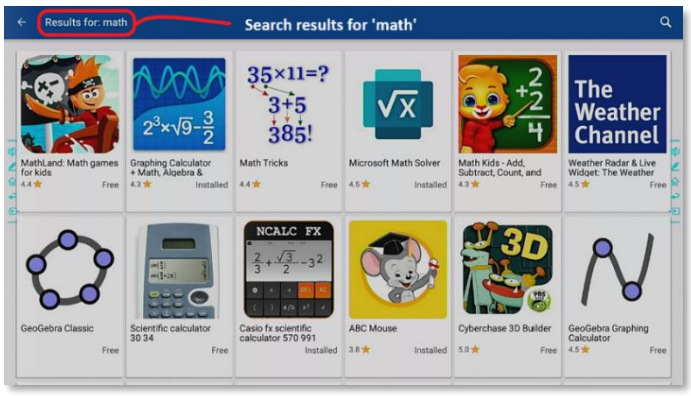
Note that you can install any compatible application from the full Google Play store as well. A good example might be to install the full Google Chrome brower vs. using the pre-installed Chromium browser. This is something that would typically be done by your IT team and you can get detailed instuctions from th Newline Support group.



The Newline App Store – When you open the Newline App. Store, you will be presented with the home page of the store. This displays the top (featured) apps., search categories (news for example) and a list of available the installed apps.

You can touch one of the categories to see a search of (for example) the available and installed 'news' apps.

You can also search for available apps. From the top-right icon. You might want to search for 'math' for example, or for a specific app. name.

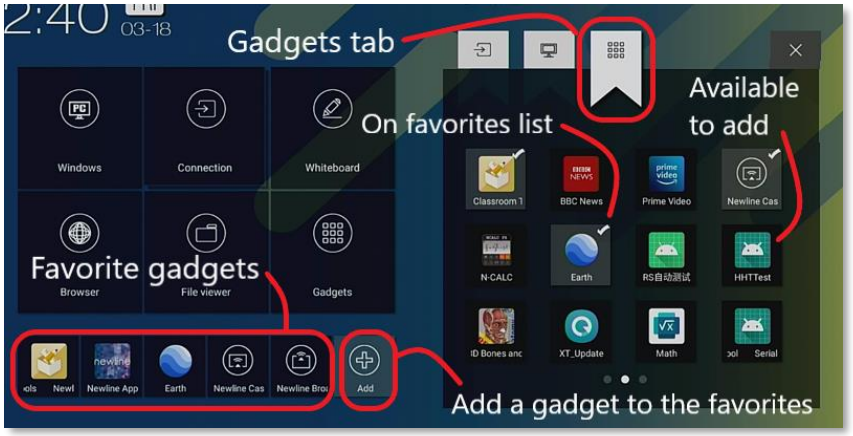


Installing a Gadget – Once you find a gadget that you want to install, tap on the gadget and you will see the option to 'Install'. Be aware that the permission to install the application is a little hidden to the bottom-right of the panel. The installation itself should only take a few seconds. Once the app. is installed you will see the option to 'Open' the app.

immediately.

The installed app. will also appear in the 'Gadgets' navigator discussed above.

Customize the Gadget Favorites – To the bottom-left of the Home screen, there is a list of your favorite gadgets. You can customize this list by tapping on the '+' icon ot the right of the list. This will open a listing of the available gadgets intalled on your panel. You can select a gadget from the list and it will be added to your gadget favorites. The gadget already in your gadget favorites will have a small check-mark on them. To remove these gadgets from the list, tap on an installed gadget.

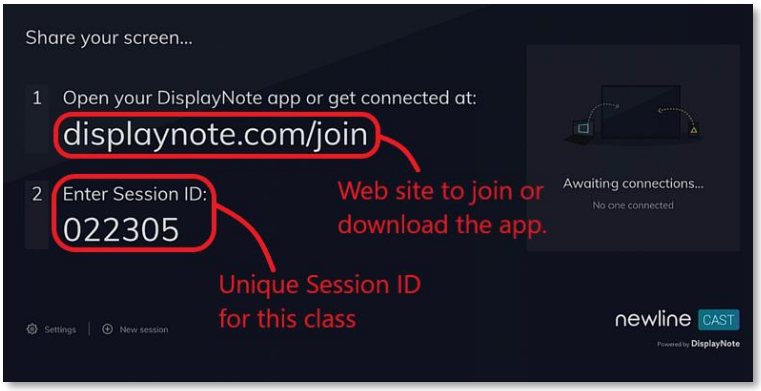


NEWLINE CAST

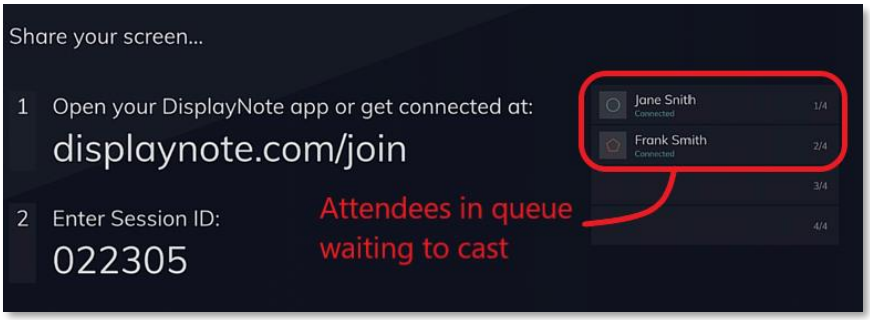
Newline Cast is the gadget or app. that allowsup to four students or learners to simultaneously cast their devices to the panel. You might use this as a part of a collaboration exercise and have multiple attendees woking on the panel at the same time from their seats, or you might want idividuals to cast to the panel and demonstrate a math solution, show artwork or anything that they have on their device.

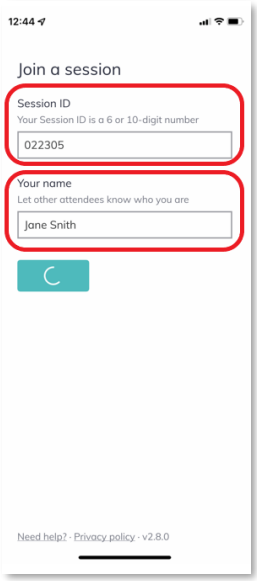
Starting a Newline Cast Session – The Newline Cast gadget can be started from the gadget list (look for 'Newline Cast'), or from the larger button on the home screen tht is titled 'Screen Sharing'.

When you start the session, you will see the option to 'Share your screen…' displayed for you audience. They can either go to the website displaynote.com/join to attend from a browser, or install the Display Note' app.



The displaynote.com/join page will give you the information you need to download and join the session using the DisplayNote app. for Windows, Mac OS, iOS and Android operating systems.

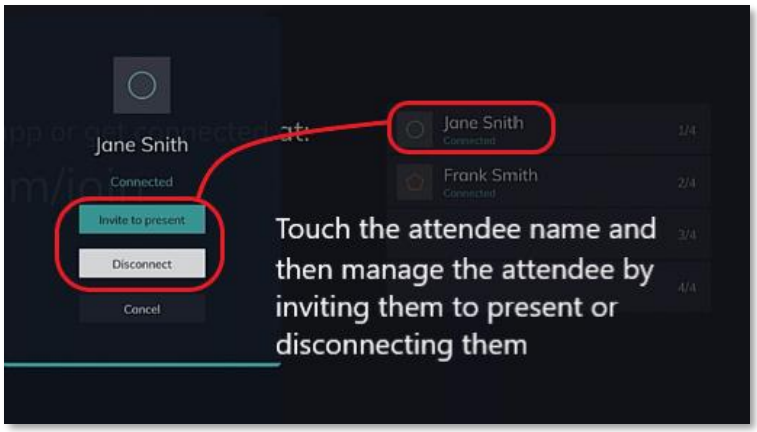




If you have the app installed on your device, you can simply open the app. and enter the session ID and your name directly into the DisplayNote app. If you use the browser, you enter the information directly into the browser. As with any solution, the app. is typically a more reliable and more full-featured experience.

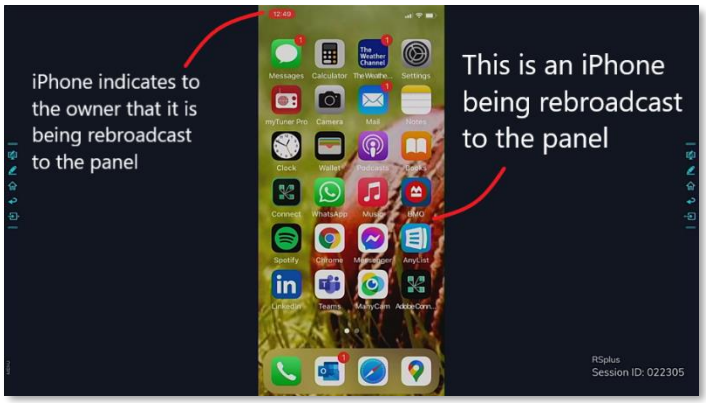
Note that each Newline Cast session will have a unique 'Session ID', this means that attendees from previous sessions will not have the ID to enter a subsequent session.

Managing Newline Cast Attendees - When an attendee joins the session, they will appear in the list to the right of the screen. You can have up to four attendees waiting to cast in this 'queue'. If you have set the option in Newline Cast under 'Settings' to 'Moderator Mode', the attendees will not be able to cast until you 'invite' them to cast. If you have not set the session Moderator Mode', the attendees will immediately see the option to cast from their devices.

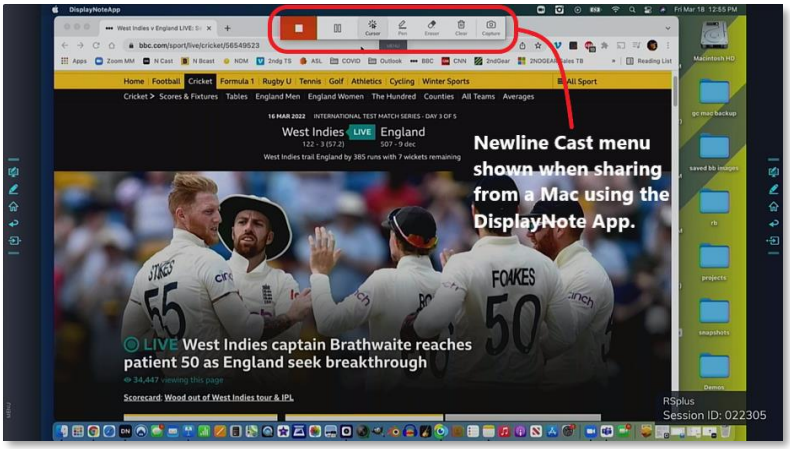


To manage an attendee, touch on their name and then you will see the option to invite the attendee to present (share their screen up to the panel) or you can also disconnect the attendee.

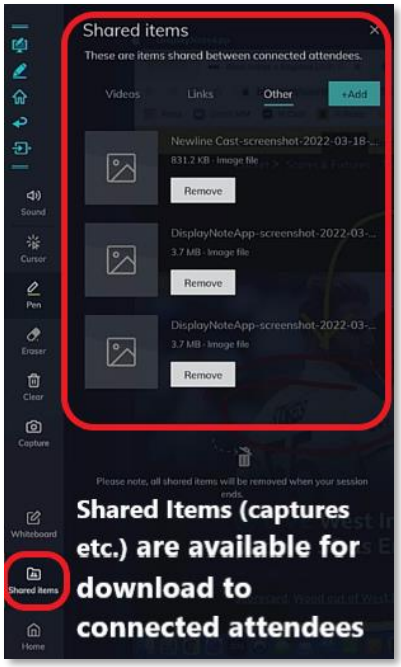
When you give an attendee the right to present they will see this on their device. On an iPhone (for example), you will see the option to 'Start Broadcast'. When you select ths option on your device, you will see a countdown and then your device screen will be rebroadcast up to the panel. The device owner can stop the broadcast by tapping on the appropriate option on their device. On an iPhone, this is the red icon to the top-left of the screen.



This ‘casting’ will respect the portrait and landscape settings in the mobile device and change the orientation on the panel accordingly.



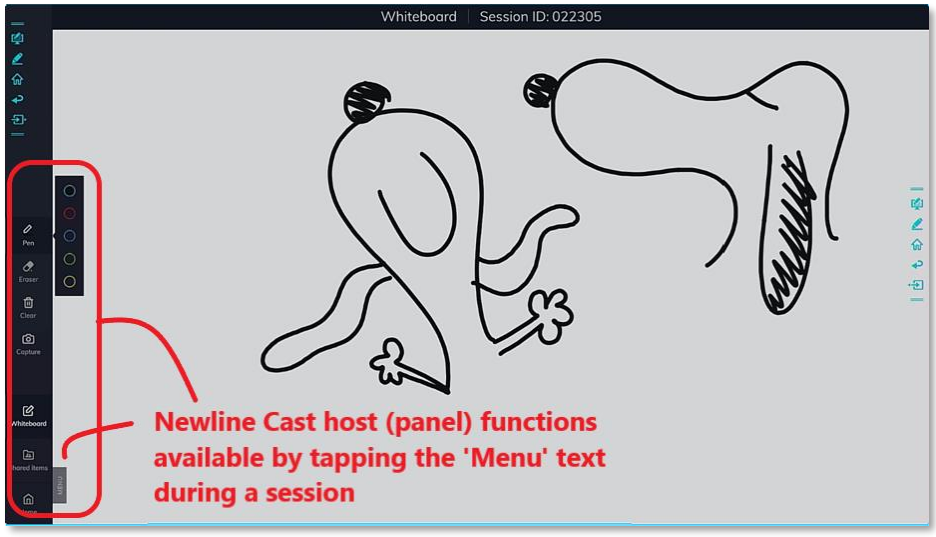
When using the DisplayNote app on a laptop such as a Mac, the experience is a little difference (a more fully-functioned experience).



The app. functions in the same way (the attendee enters the session ID and their name). They will see a menu that also allows the attendee to whiteboard over the shared content and to capture the content and make it available to the others in the session. The session host on the panel can also add content to the ‘Shared Items’ area of course.

Note that these items are only available for the duration of the session and will be deleted when the session ends.

Panel (host) Functionality – The host is the person on the panel and there is some additional functionality that may be a little hidden typically. There is a very small section with the text ‘Menu’ to the bottom-left of the Newlie Cast interface. If you tap on that ‘menu’ text, you will expand and open the other functionality for the Newline Cast tool.



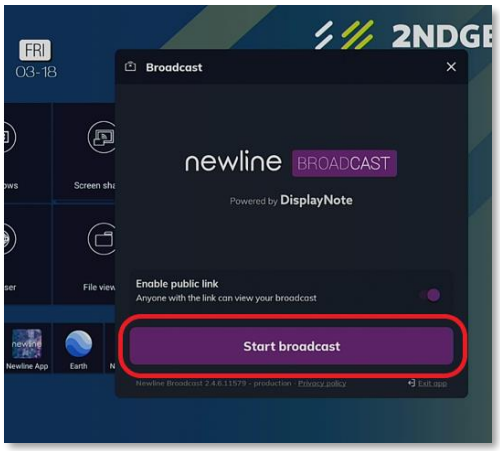
From this toolset, you can view and manage ‘Shared Items’, use the whiteboard (actually a very responsive and friendly whiteboard) and capture the screen (this will be saved in ‘Shared Items’).

Note that the Newline Cast solution is ‘cloud-based’. This means that you do not need to worry whether your attendees are on the same network, they can even be attending from their homes or from another country.

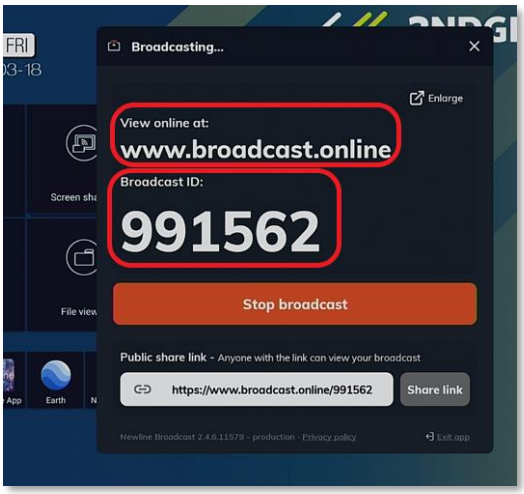
NEWLINE BROADCAST

Just as Newline Cast is used to have attendees cast their devices up to the panel, Newline Broadcast allows you to broadcast the panel to up to 200 devices.

You might use this to broadcast to share your panel within the class to extend the reach of the panel to other connected display devices. You might also use broadcast to share the panel with students who have accessibility challenges and would benefit from the panel and lessons being mirrored to their personal devices for clarity.

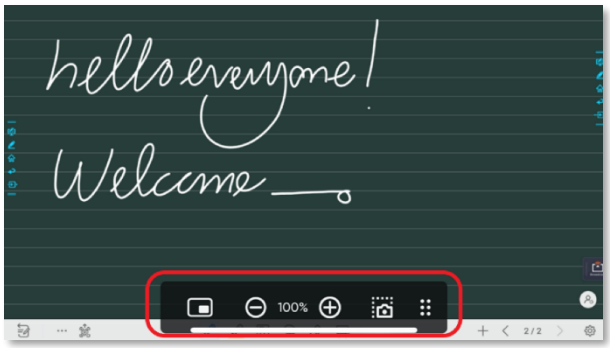


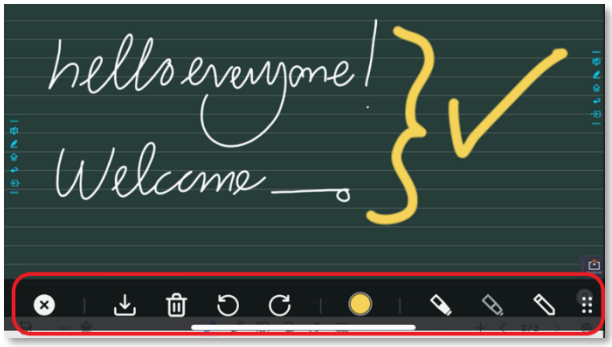
You could broadcast the panel to all of the other panels in the district or organization by having the other panels navigate to the web site with an embedded browser and enter the 'Broadcast ID'.



Starting a Newline Broadcast Session – As with the Newline Cast app., you can find the Newline Broadcast app. in the 'Gadgets' area. Start the app. and you will see the option to 'Start Broadcast. When you start the broadcast, you will see the web site to view the broadcast, and the unique 'Broadcast ID' will be displayed.

Viewing the Broadcast Session – The attendees can view the broadcast by navigating to the link broadcast.online and entering the broascast ID. Once entered, the panel content will be displayed on the device. The attendee has a menu where they can zoom the content, take a snapshot and mark up the content for themselves and save a copy.





Note that the examples shown here are taken from an iPhone viewing the panel through the Safari browser.

Stopping the Broadcast Session – You would typically minimize the broadcast interface by clicking on the 'x'. You will need to maximize the interface again for the small 'floating' icon to tap the 'Stop Broadcast' option when you are done with your session.

CONNECTING & USING PC'S WITH YOUR PANEL

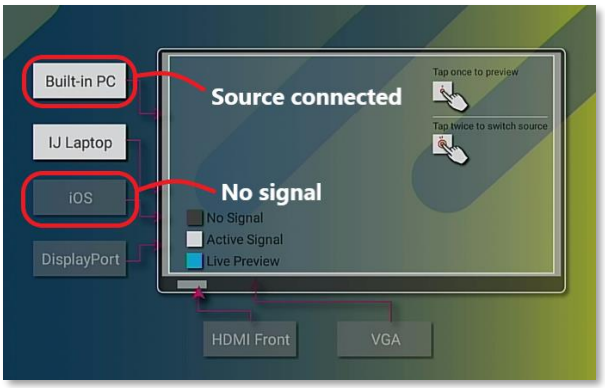
One of the obvious use-ases for your panel is to connect a PC and navigate the PC from the panel. Once connected to the panel, any PC becomes a 'touch-screen' PC, even if the actual PC is not touch-screen.

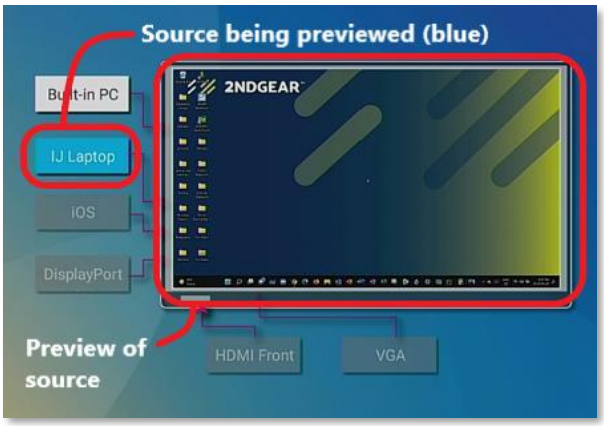
The connection is made using an HDMI and a USB cable. The HDMI cable transmits the audio and video to the panel, the USB cable enables the touch capabilities on the panel to be enabled on the PC. The cables will plug into one of the rear or front inputs on the panel (see 'Panel Ports, Inputs and Outputs' earlier in this document) and into the HDMI-out and USB ports on the PC.

Q Series Notes

The Q Series also has the option to connect to the panel using a USB-C connection, this will allow video, audio, touch and charging through one cable.

Navigating Input Sources – When a source is connected to the panel, the label for the source will turn white, if the source has no connection, it will be greyed-out as there is no signal.



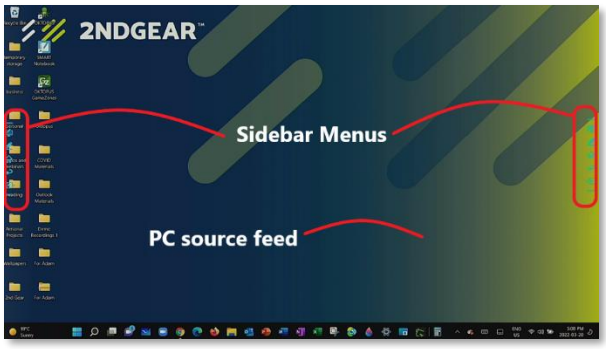


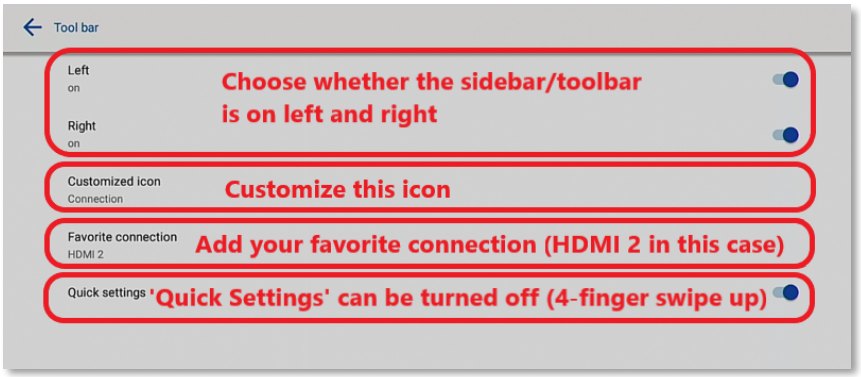
You can tap on any of the connected (white) sources to preview the source. The preview of the connected source will appear on the right-side in the main panel. The label for the source being previewed will be blue.

Using the preview, you can toggle easily through the connected sources, and ensure that the source you are going to display at full-size on the panel is what you expect. You can also ensure that the source is displaying the appropriate content on the larger panel.

To switch to the appropriate source, double-tap on the label or tap on the preview pane and the source will fill the panel (the sidebar menu will be the only representation that you are sharing the source input on the panel).

You can use the sidebar menu to switch back to the 'Home' screen, or if you have configured the sidebar menu yourself, you can switch feeds directly from there.



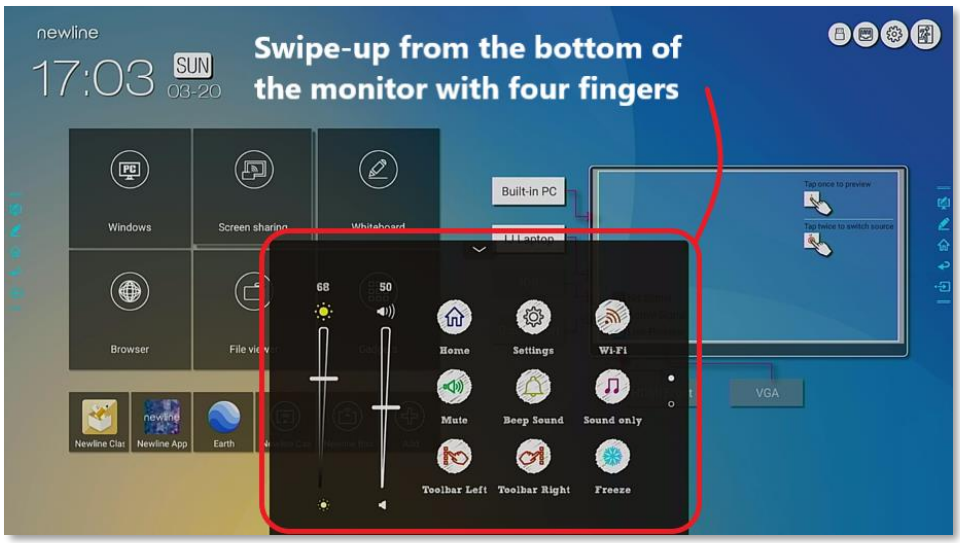


CUSTOMIZE SIDEBAR/TOOLBAR SETTINGS – You can change some of the sidebar/toolbar settings from the 'Settings' menu (the 'cog' icon to the top-right of the 'Home' screen). From the first settings window, select 'Toolbar'. On the next screen you can work through the options for the sidebar/toolbar.

QUICK SETTINGS

The Quick Settings can be accessed by swiping up from the bottom of the screen with four fingers. If you do not see this working, check the setting above for the toolbar/sidebar.

This is a very useful option for both navigation, and an 'emergency volume intervention'.

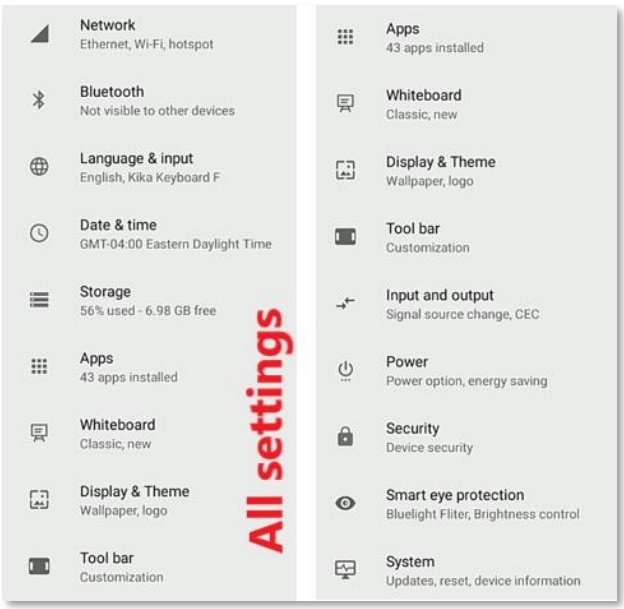


SETTINGS

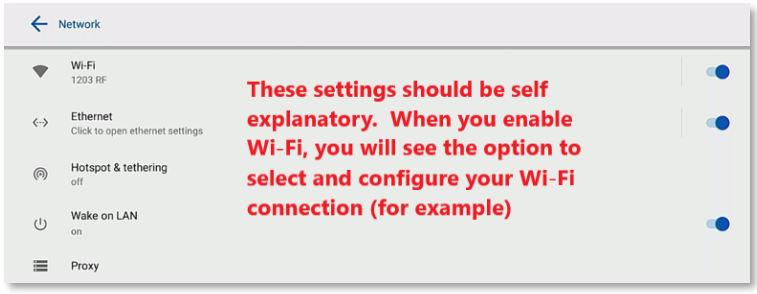
The 'Settings' menu covers all of the administration for your panel. You can access this from the 'cog' icon to the top-right of the 'Home' screen. We can go through all of the options here.

Network – Most of the settings in the 'Network' section of your panel shoud just be something you can tap on and follow-along with.

It was simple enough that I actually do not even remember the process for connecting to my Wi-Fi…it was just obvious. All of this notwithstanding, your IT folks are probably going to do this anyway. You would use this interface if you moved the panel to another classroom of location and you wanted to connect to a different wireless router or network.



As noted earlier in this document, the wireless capailities are enabled by inserting the wireless 'dongle' that was shipped with your panel. I have connected my panel using both Wi-Fi and a wired ethernet cable.



Q Series Note - The Q Series also has wireless connectivity (Wi-Fi 6) included within the panel, so there is no wireless dongle to install.

You can also turn your panel into a wireless 'hotspot' for your class from this interface.

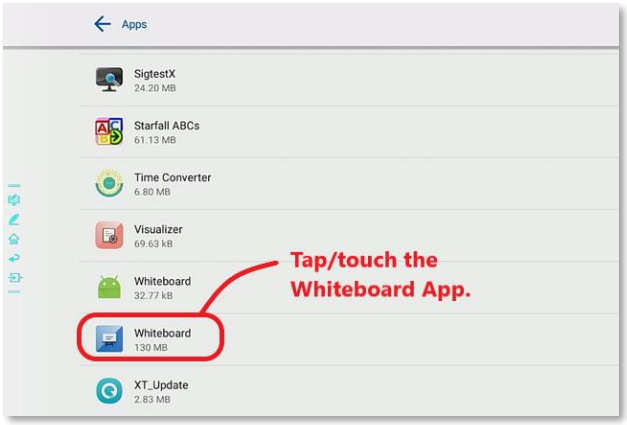
Bluetooth – At the time of writing this manual, I do not have experience with the buetooth capabilities of the Newline Interactive Touch Panel.

Language & Input – I am going to suggest, for the sake of this manual, that we stick with 'English' on all of these levels (unless you want to mess with a fellow educator on April Fools Day and switch everything to a foreign language). It has happened to me…

Date & Time – It is tough to imagine ever selecting anything other than 'Automatic date & time' in this interface. If you select this option then it 'just works'. This was the default for my panel and I cannot imagine evr changing it.

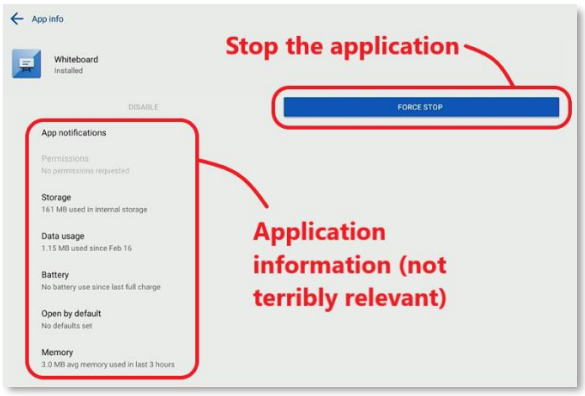
Now if you want to pretnd you are in California, because Boston is covered in snow, deselect the option above and pick your 'Pacific Time' as your time-zone and dream away!

The rest of this interface, I think you have covered! (counting to 24…).

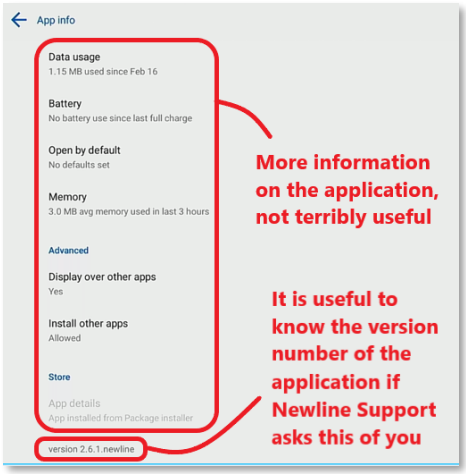


Apps – The 'Apps' area will list all of the pre-installed and post-deployment-installed apps on the panel. You can tap any app to delve a little deeper into the settings and functionality for the app.

We are going to scroll to the bottom of the list and choose the 'Whiteboard' app.



The first page of information is mostly irrelevent, but this is the place where you can choose to force-close the application for some reason when you are on the panel. This is, of course, something you can defer to your IT team as they can do this from the Newline Device Manager (discussed later in this document).

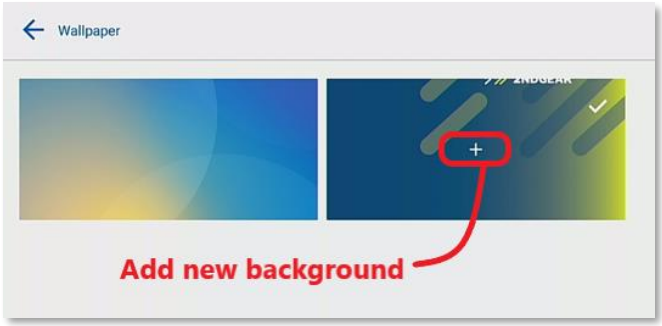


The lower part of the information on the application may be useful to you, but it is likely that the most useful information is the version number for the application if you are working with the Newline Support team and trying to diagnose an issue.

Again, your IT folks may be able to do all of this diagnosis from the Newline Device Manager console.

Whiteboard: Classic/New – This is a pretty simple option. I have never had cause to change my whiteboard on the panel to 'Classic', and this document only cover the setting for the 'New' whiteboard.

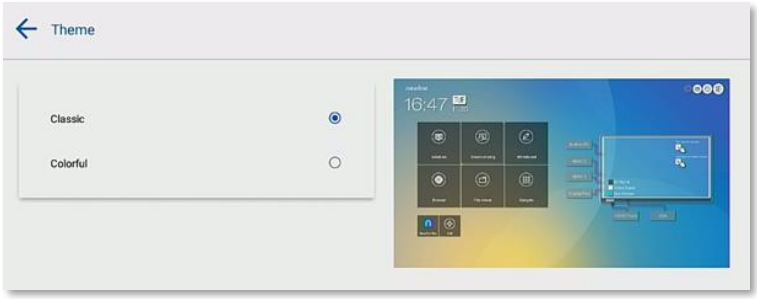
Display & Theme – From this settings area you can cutomize aspects of the look-and-feel of your panel. It is lkely that your branding folks will want to lead the look-and-feel of course panel.



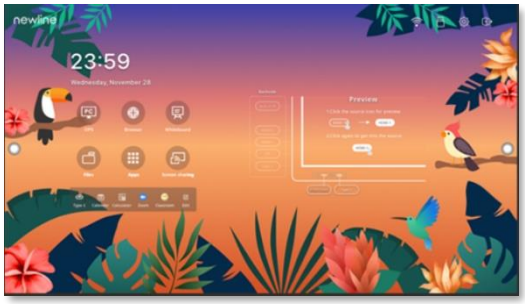
Background: The background of your home/main screen can be updated to a custom branding image or a photograph. Consider the aspect-ratio of your new background, in that it should respect the aspect ratio of the panel. Also consider the interface on the home screen and the menus and functionality that might obscure your backgound, and of course that your backgroup might make the elements of the board interface difficult to see.

Logo: From th is area, you can change the logo shown when you lock your screen/panel and the home logo.

Theme: There are two theme options in the panel that might be considered 'formal' (Classic) and 'playful' (Colorful). All of the snapshots in this manual are using the more formal'corporate look for the theme, but the more colorful theme might be something to consider for younger age-groups and education organizations working with Pre-K classes.



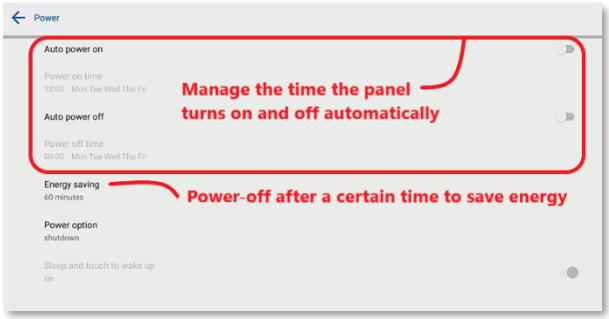
Q Series Note - The Q Series has an updated interface. The juxtaposition of the elements is the same, but it employs some transparency around the interface elements to allow more display of the background and more branding/customization look-and-feel.



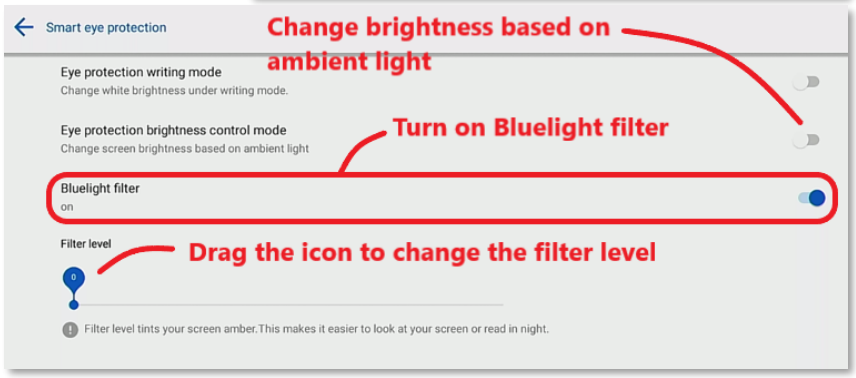
Tool Bar – The toolbar/sidebar custmization is covered earlier in this document.

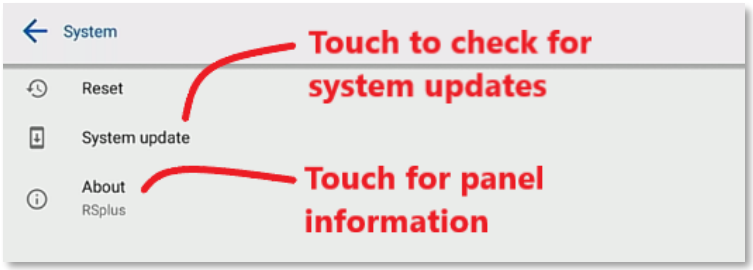
Power – This is quite a useful option. From here you can set the panel to automatically turn on or off at a set time. You might want to especially set the automatic 'off' time to ensure that panels are not left on when you know the classrooom or meetng area will not be in use. A lot easier that walking around and finding a panel has been on all night and unused.

You can also sent the panel to shut down after (say) 60 minutes of non-interactction and have a similar effect to the auto power-off.



Smart Eye Protection – The most likely things you will want to enable from this section is the Bluelight filter. Wearing bluelight filter glasses is commonplace and adding the filter to the panel itself should be beneficial to your class and your audience. You can drag the balloon icon to change the bluelight filter level (amber filter).





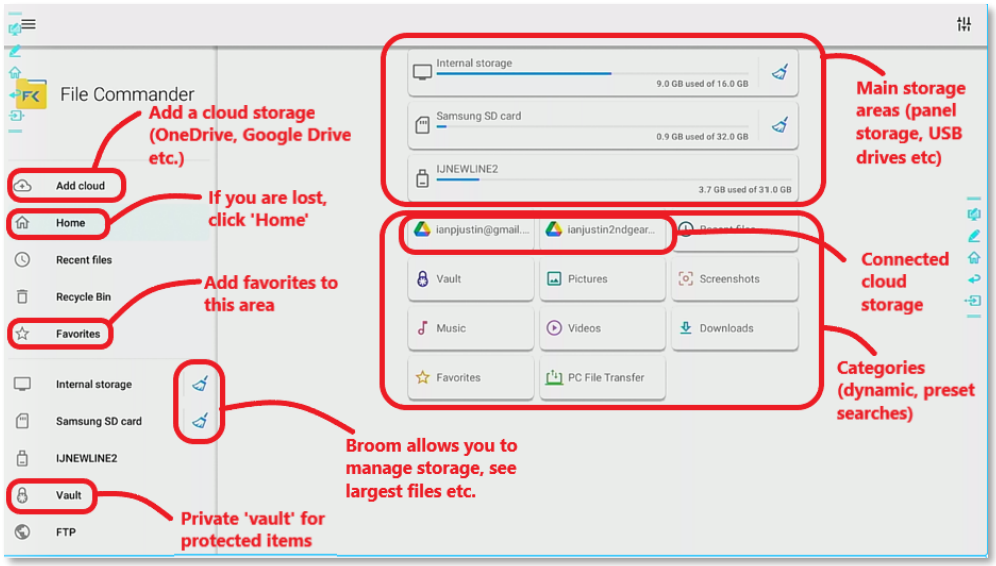
System – The useful option here is the ability to check for a 'System update' if you want this to be done from the panel itself. As noted earier, your IT team can carry our updates remotely from the Newline Device Manager portal.

You can also find out more about the panel from the 'About' option.

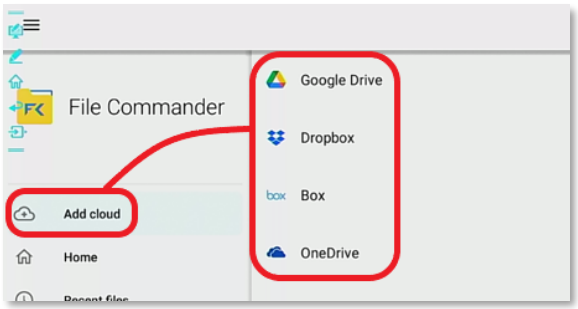
FILE COMMANDER

As you might imagine, the File Commander (file browser) is the main area where you will navigate to and manage your files.

On the left-side you can see the folders and resources available to you to manage your files.

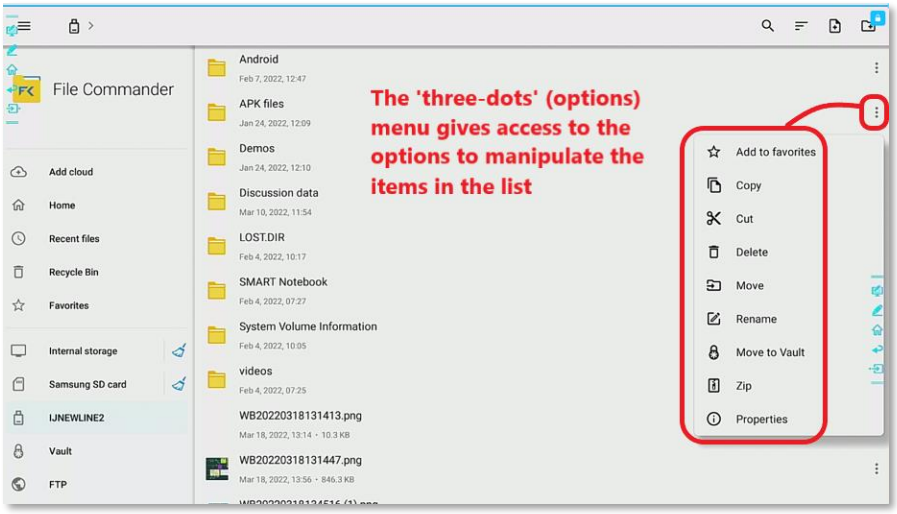


On the right-side you can see the main storage options connected to this panel, included the cloud storage options (in this case Google Drives). Below on the right-side are the preset categories for searches of your files.

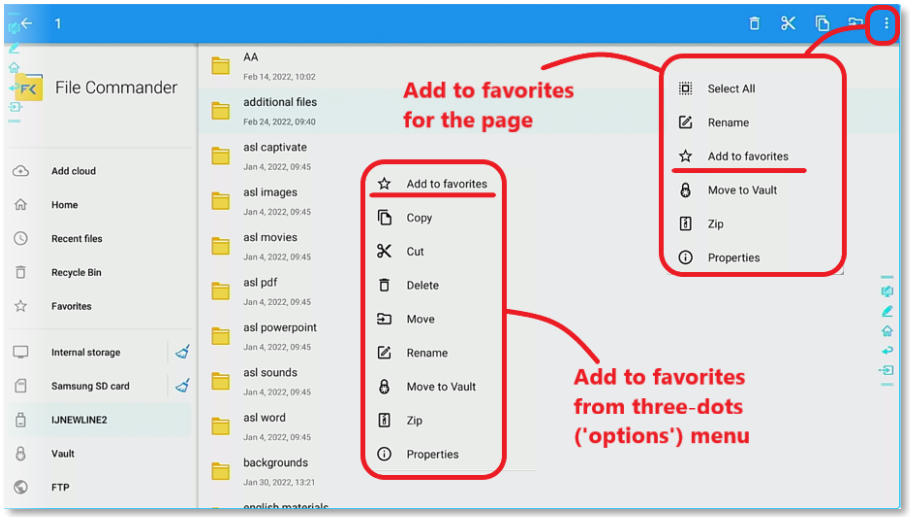


Add Cloud – If you tap on this option, you can configure a cloud storage option such as Google Drive, Dropbox, Box or OneDrive into your panel. In the case of a school, this might be a shared resource that is available to all educators, and/or personal resources. The cloud drives will be visible on the right-side when configured and these configurations are persitient, they will remain.

Managing Files & Folders – When you tap on a storae device or resource, you have a list of folders and files. To the far-right of the itesm you will see the three-dots optons menu. If you tap on the options menu, you will see the possible options you have to manipulate the items. This will allow you to manage the content, (delete, move, rename, copy, cut etc.).

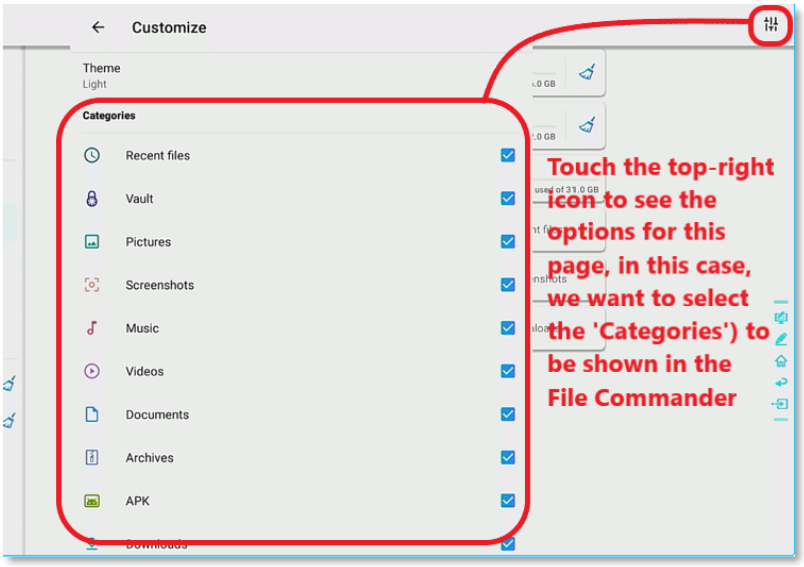


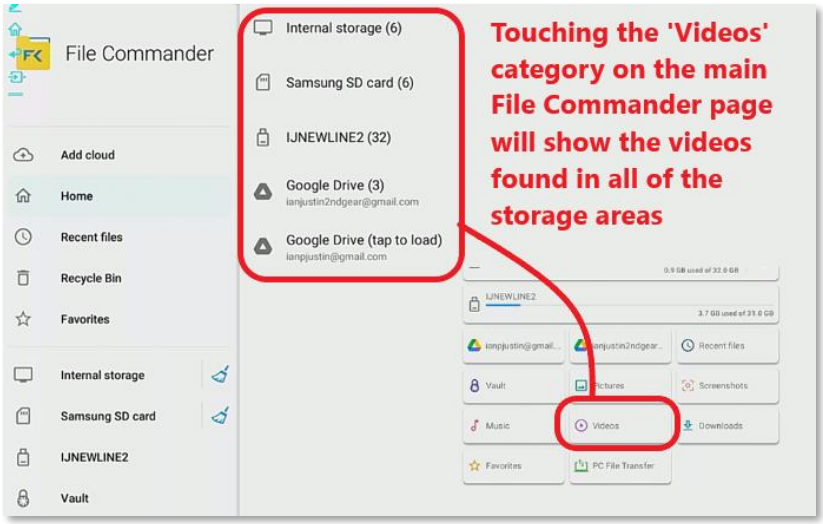
Add to Favorites – You can add drives, folders and files to the 'Favorites' section in the File Commander (in the lef-side column). Useful to have quick access to your most common, and typically your most 'hidden' folders.



You should look for the 'three-dots' (options) menu wherever you are in the File Commander and this will typically give you the option to 'Add to Favorites'. When you select the 'Favorites' option on the left-side column, you will see your list of most common resources and folders there.

Categories – You can see the 'Categories' on the main File Commander page above, to the right and below the main storage areas. You can choose what categories you wish to show in this area by touching the icon to the top-right of the main File Commander page. You will see a list of the possible categories, I have chosen to show them all on my panel, I find them very helpful.



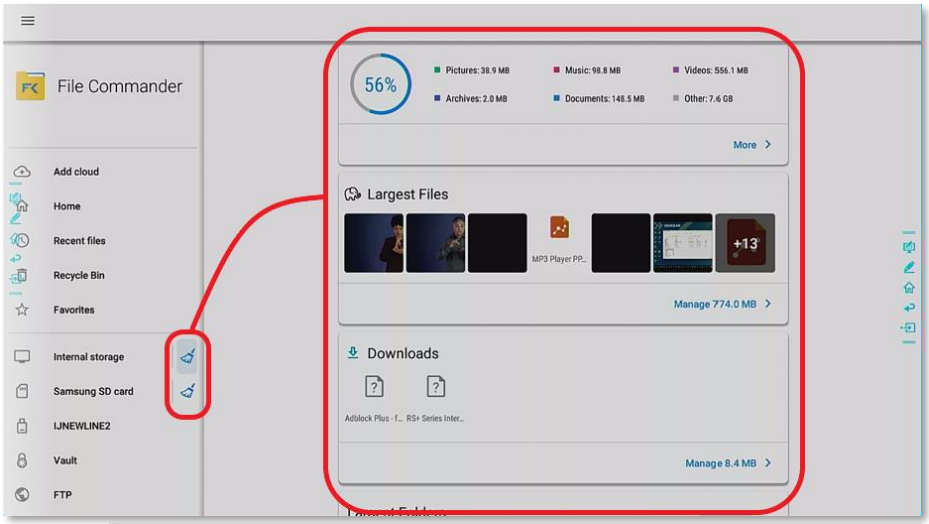


When you touch the categories option on the main File Commander page (in this case, 'Videos'), it will display the number of videos found in each of the storage areas after the name of the storage option in brackets ('Internal Storage (6)' means that there are 6 videos found in the Internal Storage on the panel).

If you have a cloud drive connected to the panel, you will need to tap on the cloud storage to initiate the search for the videos (in this case) in that area.

These category options make it a lot easier to search for a specific file-type, without sifting through each storage directory. Very useful.

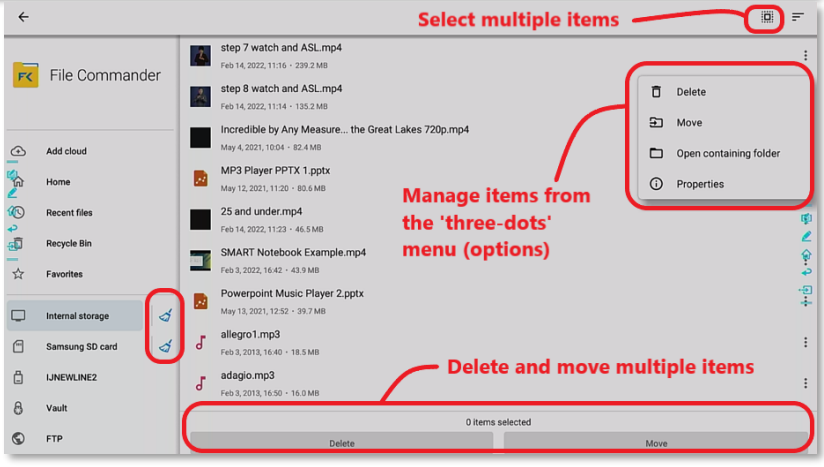
Managing Storage – Aside from setting directories to purge after a certain amount of time, and ensuring you delete larger files diligently, you have an option to see what files might be taking up space on your storage drives.



If you touch the 'broom' icon to the right of the 'Internal Storage' or 'Samsung SD Card' storage devices, you can see the largest files on this drive. From here you can navigate to the file system.

From the file system you can tap on the 'three-dots' (options) menu to delete of move a single file, or choose to select multiple items and delete or move these as a set.

Moving them to a selected USB drive or a cloud storage area will, of course free up space on your panel.



NEWLINE DISPLAY MANAGER

The Newline Device Manager is a portal that allows your IT team (typically) to manage all of your panels from a single, central web portal.

This portal has some excellent online tutorials, and as this document is intended to support educators and trainer, we are adding links here to the Newline Display Management Tutotials.

Newline Display Management Tutorials - Navigate to https://newline-interactive.com/usa/products/newline-display-management/ and scroll down to 'Newline Display Management Tutorials'.

Newline Display Manager Setup Guide - https://newline-interactive.com/wp-content/uploads/2020/08/DisplayManagementPlus_SetupGuide_2007.pdf