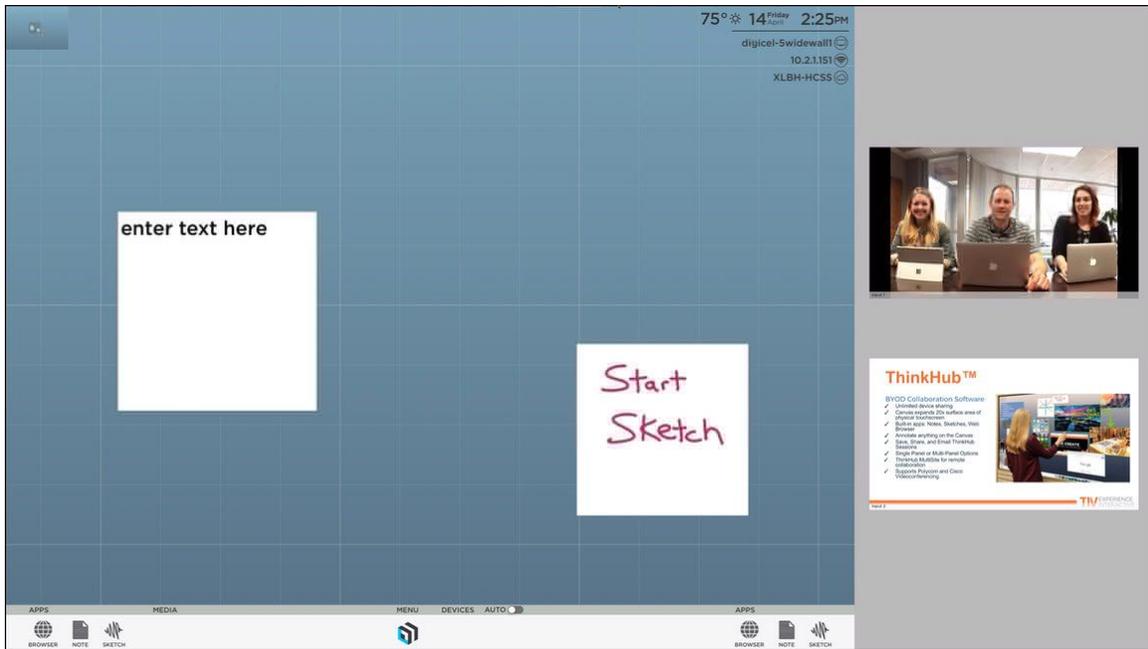
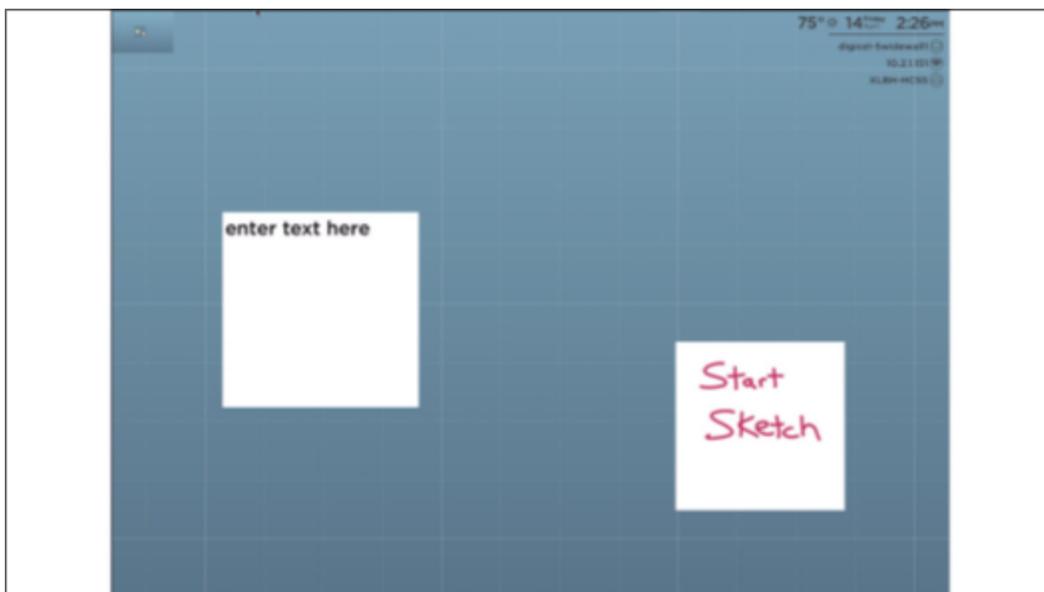


ThinkHub Videoconference Mode Setup 4K touchscreen with 1080p VC output

TOUCHSCREEN VIEW

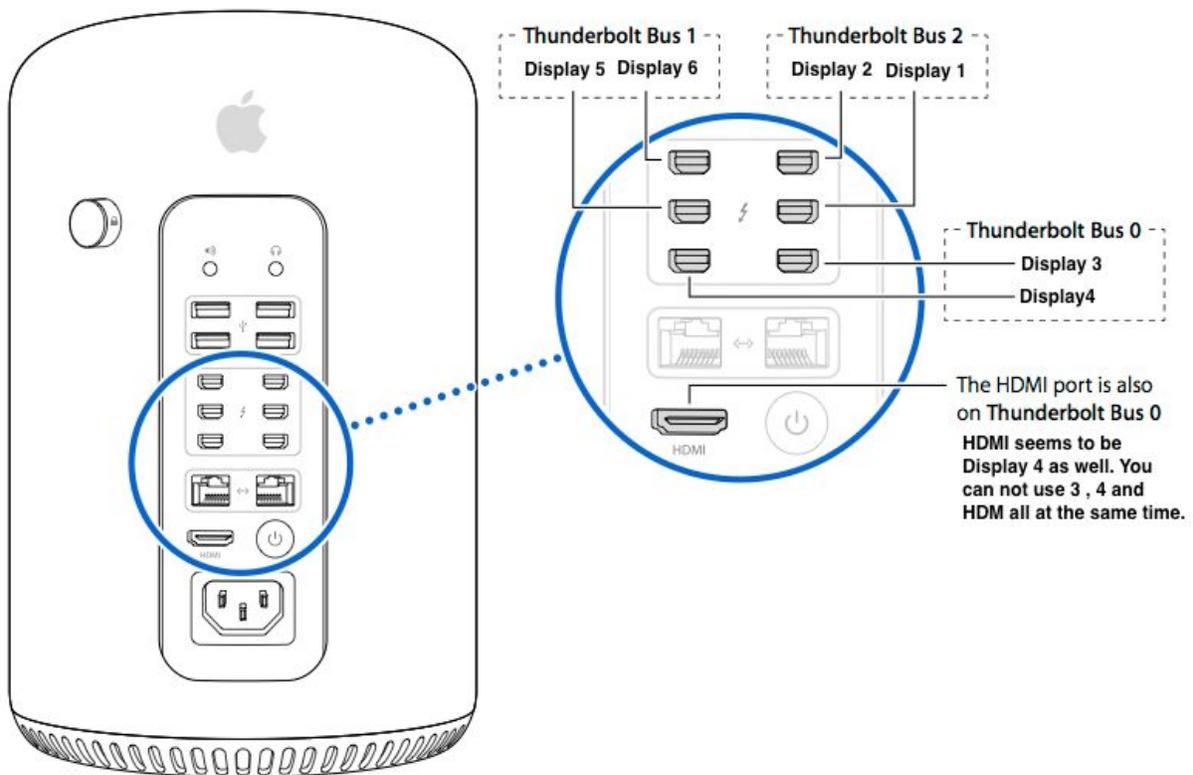


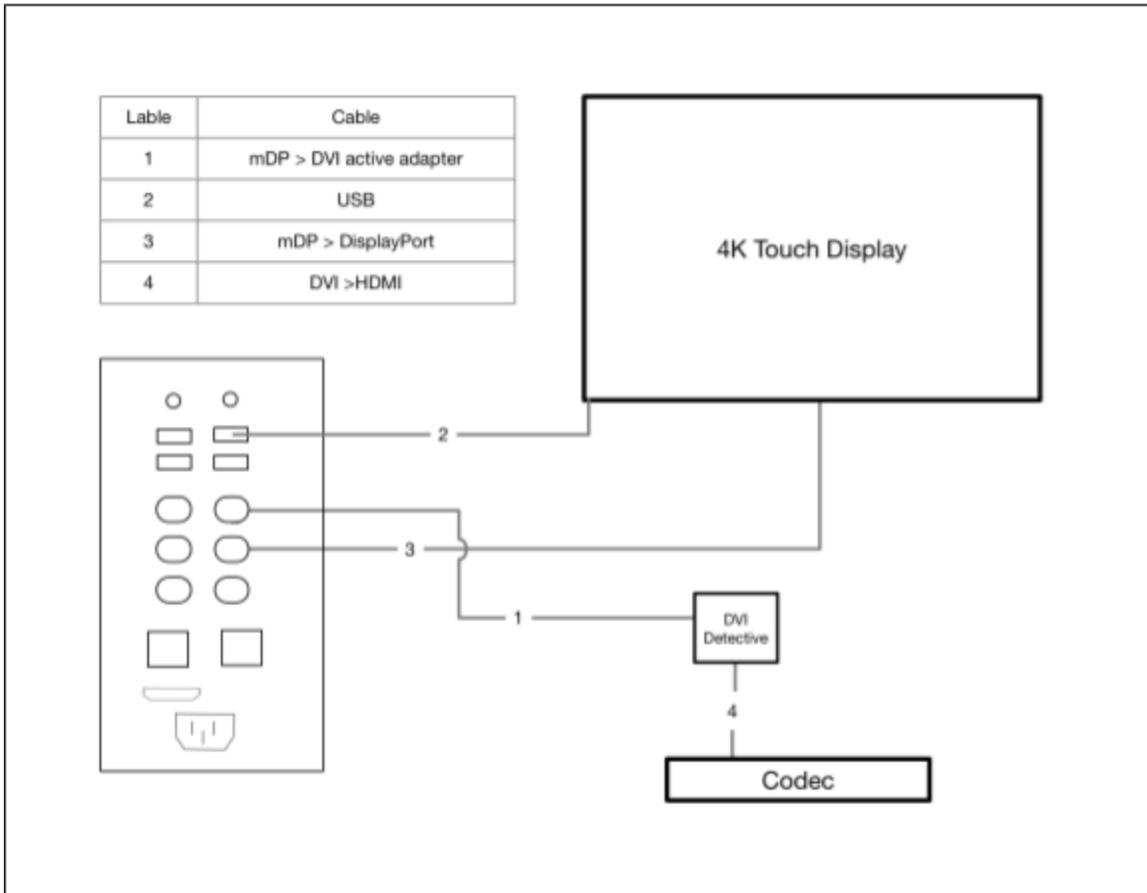
REMOTE PARTICIPANT VIEW



DISPLAY LAYOUT

- a. Touchscreen is plugged into Display #1 Thunderbolt Port
 - mDP to DisplayPort cable
 - Display set to not power down so the computer sees the Display's EDID always
- b. VC display is plugged into Display #2 Thunderbolt port
 - mDP to DVI active Adapter > DVI Defective > DVI cable to VC codec

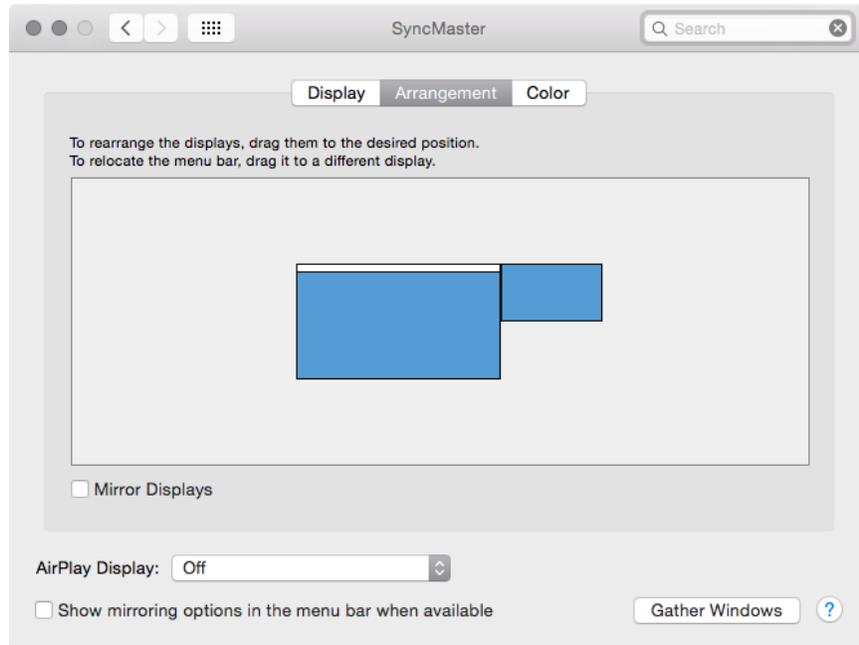




Cables used for VC codec connection:



SETTING UP DISPLAY ARRANGEMENT



- a. Go to System Preferences. Set up the displays in the operating system to have Display #1 on the left & Display #2 top justified on the right. The Menu bar is on the left display.
- b. Run screenArrange.app to save arrangement for reboot arrangement check
 - Run this command in the terminal:
 - `/Users/t1user/T1VApps/screenArrange/screenArrange save`
- c. Edit crontab
 - Remove the “#” in front of the screenArrange line and “display count” line
 - Save
 - Edit Crontab: (don't type any of the quotes)
 - To do this open terminal and type “crontab -e” without the quotes
 - Navigate with the arrow keys. Find the following lines.
 - `#@reboot /bin/sleep 80;`
`/Users/t1user/T1VApps/screenArrange/screenArrange checkAndRestore`
 - `#@reboot /bin/sleep 65; /bin/bash /Local/scripts/checkDisplayCount.sh 4`
`--rebootAndNotify`
 - Go into insert mode by pressing “i” on your keyboard. Move the cursor over the “@” and press “DELETE” to remove the preceding “#”. Do this on both of the respective lines.
 - Exit insert mode by pressing “ESCAPE” key
 - Save and exit
 - Type “:” key followed by “wq” + “ENTER KEY”

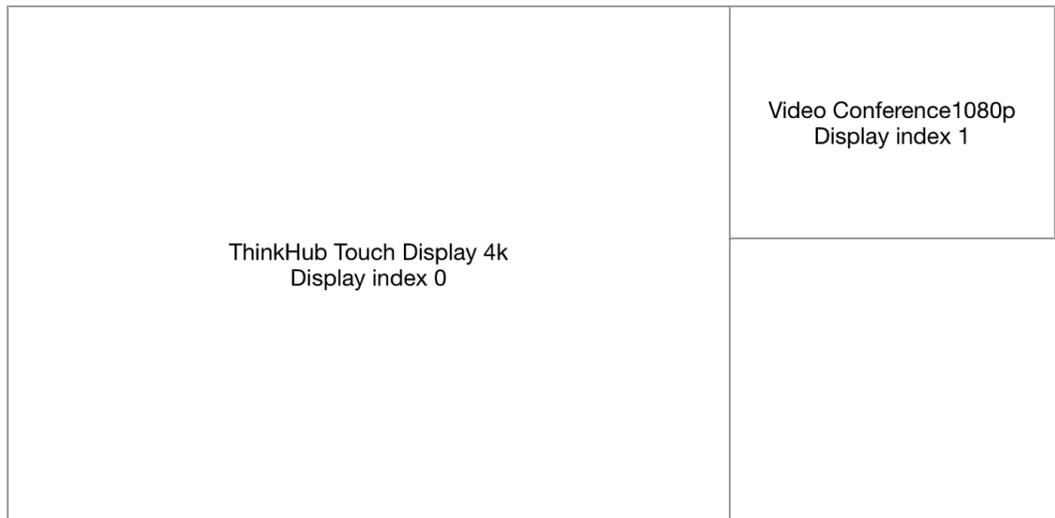
- If your edit was without error you will see:
 “crontab: installing new crontab” at the command line
- If there was a formatting error you will see
 crontab: errors in crontab file, can't install

VIDEOCONFERENCE MODE DEFAULTS

- a. Define which display is for ThinkHub and which display is for the video conference feed. The default `secondaryScreenIndex` defines which display is used for the video conference feed. Note for this example, where there is one touch screen and one video conference feed, the `secondaryScreenIndex` is always = 1.

`defaults write com.t1visions.TTMenu secondaryScreenIndex 1`

`secondaryScreenIndex default = 1 in the below example`
`t1v-th-xxx:~ t1user$ Defaults write com.t1visions.TTMenu secondaryScreenIndex 1`

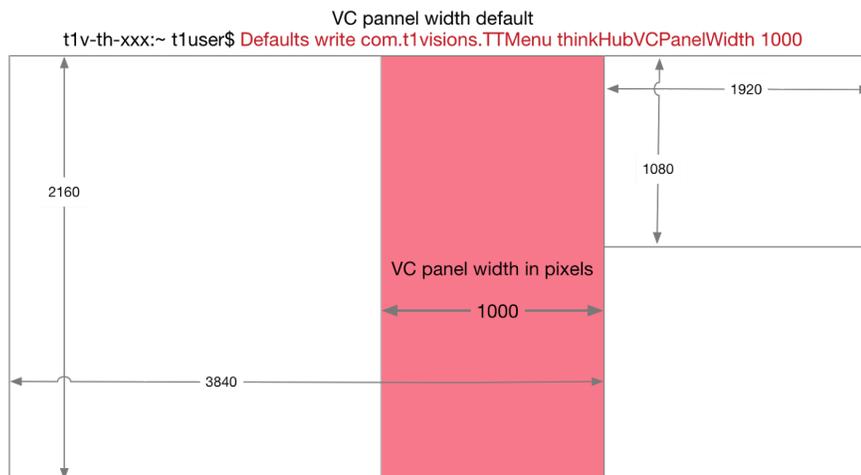


- b. Let ThinkHub know it has a secondary display

`defaults write com.t1visions.TTMenu SecondaryScreenType second`

- c. Define the width of the VC Panel. This defines the portion of the screen that feeds coming from the video conference system will be displayed in.

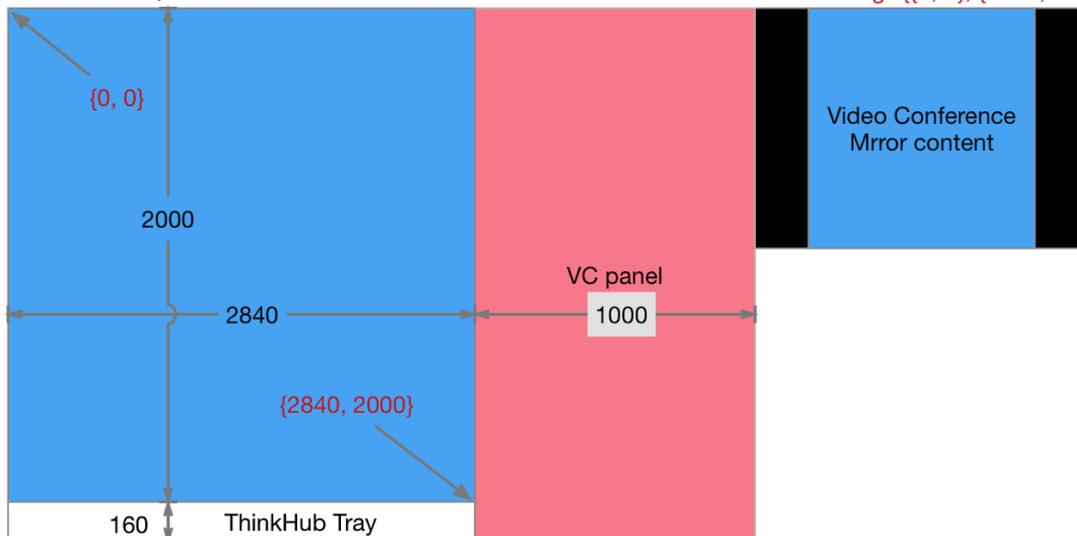
`defaults write com.t1visions.TTMenu thinkHubVCPanelWidth 1000`



d. Define the region of ThinkHub that should be mirrored to the video conference system.

```
defaults write com.t1visions.TTMenu thinkHubVCMirrorRect -string "{{0, 0}, {2840, 2000}}"
```

thinkHubVCMirrorRect default defines content to share on VC screen
t1v-th-xxx:~ t1user\$ Defaults write com.t1visions.TTMenu thinkHubVCMirrorRect -string "{{0, 0}, {2840, 2000}}"

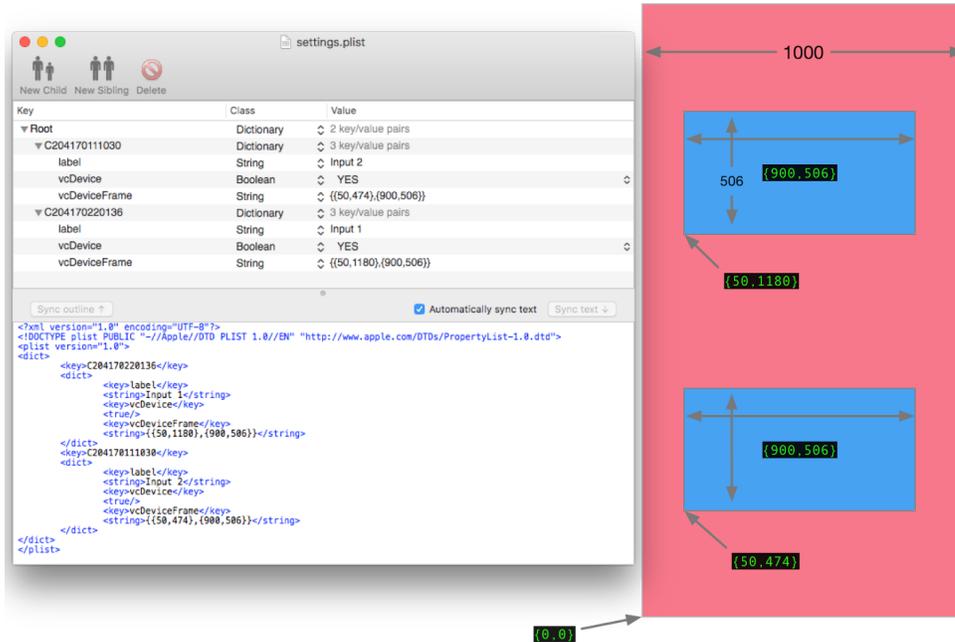


HARDLINE INPUTS - DEVICE SETTINGS PLIST (requires TTMenu version 7.24.18+)

- a. [Download example settings plist - \(Click Here\)](#)
- b. Edit the setting plist (recommended to use Plist Edit Pro)
 - This file should be placed in /Users/t1user/Documents/settings.plist
 - Each hardline will have a key identifying it
 - This identification is based on its name as it shows up in ThinkHub
 - Turn on device labels to see the corresponding device names used in this plist.
 - Assign it a Label:
 - The label is the name it will show up as in ThinkHub
 - Assign it as a vcDevice:
 - True means it will show in the slide out tray
 - Assign its' vcDeviceFrame:
 - This is the coordinates of the bottom left corner of the feed relative to the bottom left of the vcTray. For reference the bottom corner of the VC tray is bounds {0,0} for this purpose.
 - Save the changes to the example file once completed editing
- c. Write the default
defaults write com.t1visions.TTMenu deviceSettings
"/Users/t1user/Documents/settings.plist"

VC Panel feed bounds
edit plist in ~/Documents/settings.plist
set default to read plist

t1v-th-xxx:~ t1user\$ defaults write com.t1visions.TTMenu deviceSettings "/Users/t1user/Documents/settings.plist"



EXTERNAL CONTROL SERVER

- Telnet command Receiver
- Typical use:

- a crestron controller makes a socket connection to the ThinkHub over port 8023
- The crestron controller issues the command (ie. enableVCMODE)
- ThinkHub will issue a response : 1 or 0 for success or failure
- Then the crestron controller then closes the socket connection
- Note: it is important to disconnect from the socket after you have sent the command as only one connection can be active at a time. If you leave this open by accident and the Crestron side timeout ThinkHub may still think an active connection is in place and Crestron will no longer be able to access the socket.

- Deployment of Telnet command receiver:

- cp/Local/scripts/externalCommand/com.t1v.externalCommandTelnetServer.plist/
Users/t1user/Library/LaunchAgents/
- launchctl load
-w/Users/t1user/Library/LaunchAgents/com.t1v.externalCommandTelnetServer.p
list

- Log messages are stored in /Users/t1user/Documents/externalCommand.log