Sony TV Screen Sharing and Network Connection Guide

This guide provides information on how to share a laptop, tablet, or smartphone screen to the wall-mounted Sony TV display found in most 102 Tower offices, as well as information on how to connect office TVs to the network. **Note:** this guide does **NOT** apply to conference room displays.

Screen Sharing Options

Option 1 - HDMI: Offices are pre-wired with HDMI cables that can be used to share a display from a device to the TV. A mobile device must have an available HDMI or Micro-HDMI port and the capability to switch the display to the HDMI output. Various dongles can be purchased to convert from HDMI to Display port (e.g. USB-C).

On the Sony TV:

Step 1: Verify the HDMI cable is connected to the correct input

On the mobile device:

Step 1: Connect the HDMI or micro-HDMI cable to the mobile device. If there are multiple cables, you will need to determine which cable connects to which input, as they are not labeled.

Step 2: Switch the mobile device display to **presentation mode**

Option 2 - Miracast: Sony TVs have built-in support for Miracast, . Miracast allows Windows 8.1 or newer, Windows Phone 8.1 or newer, and Android 4.2 or newer devices to connect wirelessly to the TV's own built-in wireless access point. A Microsoft Surface running Windows 10 and an Android Phone running 6.0.1 were tested using the steps below. During testing, the Surface video lagged behind by several seconds, but the Android was fast and in-sync. **Note:** using Miracast may degrade/interfere with University Wi-Fi (e.g. UConnect, UGuest, eduroam).

On the Sony TV:

Step 1: Select the **Input** button from the TV remote

Step 2: Choose **Screen Mirroring**

Step 3: Select **Next** and note the name of the TV

On the Windows laptop:

Step 1: Navigate to **Display Settings** by either searching in the bottom-left toolbar or right-clicking on the desktop, then select **Connect to a Wireless Display**

Step 2: Select the name of the Sony TV you wish to connect to

On the Android device:

Step 1: Select **Settings**, **Display**, **Cast** or **Screen Mirroring**

Step 2: In the upper right corner, select **Enable Wireless Display**

Step 3: Select the name of the Sony TV you wish to connect to

Option 3 - Apple TV: An Apple TV can be purchased and used to share a screen from an iOS or MacOS device to the Sony TV. The Apple TV MAC address must be registered and connected to UGuest.

Find the Apple TV MAC address:

> Step 1: Navigate to **Settings > General > About**

> Step 2: Look next to **Ethernet Address** to find the MAC address

Register the Apple TV MAC address:

> Step 1: Visit **https://uguest.utah.edu/gaming-registration**

> Step 2: Select to **accept the terms**, and log in with your uNID and password

> Step 3: Enter the Apple TV's MAC address, and select **register**

On a MacOS device:

> Step 1: Select the Airplay icon in the **upper right corner** of the menu bar

> Step 2: Choose your **Apple TV** from the list to connect

On an iPad, iPod, or iPhone:

> Step 1: Swipe up from the bottom of your device screen to open **Control Center**

> Step 2: Select **Airplay Mirroring**

> Step 3: Select your **Apple TV** from the list

On Windows and Chrome OS:

> An "AirParrot" app can be purchased and installed:
> http://www.airsquirrels.com/airparrot/download/

Other options: The Crestron AirMedia is the most enterprise-oriented option with broad OS support (Windows, Mac, iOS, Android), but is expensive (~$999). Additional screen sharing options are available for purchase (typically less than ~$100) but have not been tested at this time. Look for more information soon regarding the following options:

- Crestron AirMedia
- Google Chromecast
- Roku
- Amazon Fire TV
- Miracast USB Adapter

Network Connectivity Options

A network connection is not required for the TV in order to share screens from a mobile device to the TV's display. If you decide to connect the TV to the network, here are some connectivity options:

Option 1 - Ethernet: In order to connect your Sony TV to the wired LAN, you will need an Ethernet patch cable. In most cases, the switch port that the wall jack is connected to will already be active.

Request a patch cable:

Step 1: **Submit a request** via it.utah.edu to the desktop team for a 5-foot patch cable (if you don't already have one)

Step 2: **Connect the cable** to the LAN port on the TV and the wall jack behind the TV (if not already connected)

Verify connectivity:

Step 1: **Verify** that the connection is active by opening an app

Step 2: (If applicable) Submit **port activation** request including jack number

Option 2 - UGuest: In order to connect your Sony TV to the UGuest wireless network, you must find and register the MAC address of the TV at the registration portal.

Complete the initial TV setup:

Step 1: On the Welcome screen at the Select Language prompt, choose **English**

Step 2: **Select No** next to **"**Do you have an Android tablet or phone?"

Step 3: Select your Wi-Fi network by choosing **UGuest**

Step 4: Wait for the "Unable to connect to Google" message

Step 5: Select **Continue without network**

Find the MAC address of the Sony TV:

Step 1: Select the **Home** button

Step 2: Navigate to **Settings**

Step 3: On the Device Network screen, choose **WiF**i

Step 4: On the Wi-Fi screen, select **UGuest**

Step 5: On the UGuest screen, select **Status Info** and record the MAC address

Register the MAC address:

Step 1: Visit **https://uguest.utah.edu/gaming-registration** from another computer

Step 2: Select **accept the terms**

Step 3: **Log in** with uNID and password

Step 4: Type in the MAC address, and select **Register**

Step 5: Wait two minutes for the status to change from Not Connected to **Connected**