

# PHG A/V Setup

## Preface

The PHG A/V equipment and setup are designed to meet 2 primary objectives:

- Sound amplification so in-room members can hear speakers
- Projection of PHG computer screen so in-room members can see presentations

With the advent of Zoom meetings, we now have 2 additional objectives:

- Amplification of audio from Zoom participants so in-room participants can hear their contributions
- Passing in-room audio to Zoom participants via the PHG laptop so Zoom participants can hear in-room speakers and presenters

While the primary objectives are fairly easy to accomplish, the additional objectives for Zoom support necessitate additional equipment that makes the whole setup more complicated and requires additional knowledge about the setup of the laptop, connections between the laptop and the audio system, and knowledge about Zoom and its settings. This guide will cover the physical connections and setup, and will attempt to provide enough information to allow support for the Zoom participants. Since those objectives rely on software from both Apple and Zoom which is subject to change, this will not be an exhaustive discussion of that part of the setup, but will cover the normal expected setup as of the date of this writing.

## Notes

- The guild uses an Apple MacBook Air for meetings. If you are not familiar with using a Mac the basics are in the appendix.
- There is a separate PDF in the Documents folder on the laptop that shows the current Zoom settings for future reference should things stop working after a Zoom update.

## Equipment

There are 8 primary pieces of equipment used to support monthly program meetings:

- **PHG Laptop:** This is currently an Apple MacBook Air. It is typically running the latest versions of Mac OS and Zoom software. The laptop and its associated cables and adapters have **GREEN** tags and are stored in a bag with a **GREEN** tag. (**NOTE:** The laptop has no password on it. If you are asked for a password to access the laptop just hit “RETURN” to log in.)



- **Epson Projector:** For projection of the computer screen the guild has an Epson projector. **Note: This is NOT used in the MAC auditorium.** For meetings in the MAC auditorium we use the MAC projector mounted on the ceiling. This is covered in the **Setup in the MAC Auditorium** section. The guild projector and its associated cables have **YELLOW** tags and are stored in a bag with a **YELLOW** tag.



- **Peavey Wireless Microphone:** For microphones the guild uses Peavey wireless microphone units. The system includes a regular hand-held microphone and a clip-on lavalier microphone. The Peavey wireless microphone and its associated cables have **WHITE** tags and are stored in a plastic case with a **WHITE** tag.



- **2 Harbinger speakers:** For sound amplification the guild uses 2 Harbinger amplified speakers. We have split them up into 2 different bags. The **MAIN SPEAKER** bag is used in ALL setups. Its associated cables have **BLUE** tags, and are stored in a bag with a **BLUE** tag.



- For meetings in larger rooms like the MAC auditorium or MAC gymnasium a second speaker is also used. The **SECOND SPEAKER** bag is used only in these large room setups. Its associated cables have **RED** tags, and are stored in a bag with a **RED** tag. (This second speaker is NOT needed in Room 30.)



- Speaker Stands: To elevate the speakers off the ground the guild has 2 speaker stands. Each has its own bag. These are not tagged.



- Retractable Screen and Stand: For meetings in locations that do not have a screen the guild has a small screen.



- Computer Stand: The guild has a folding computer stand that has an upper shelf for the projector, and a lower shelf for the computer

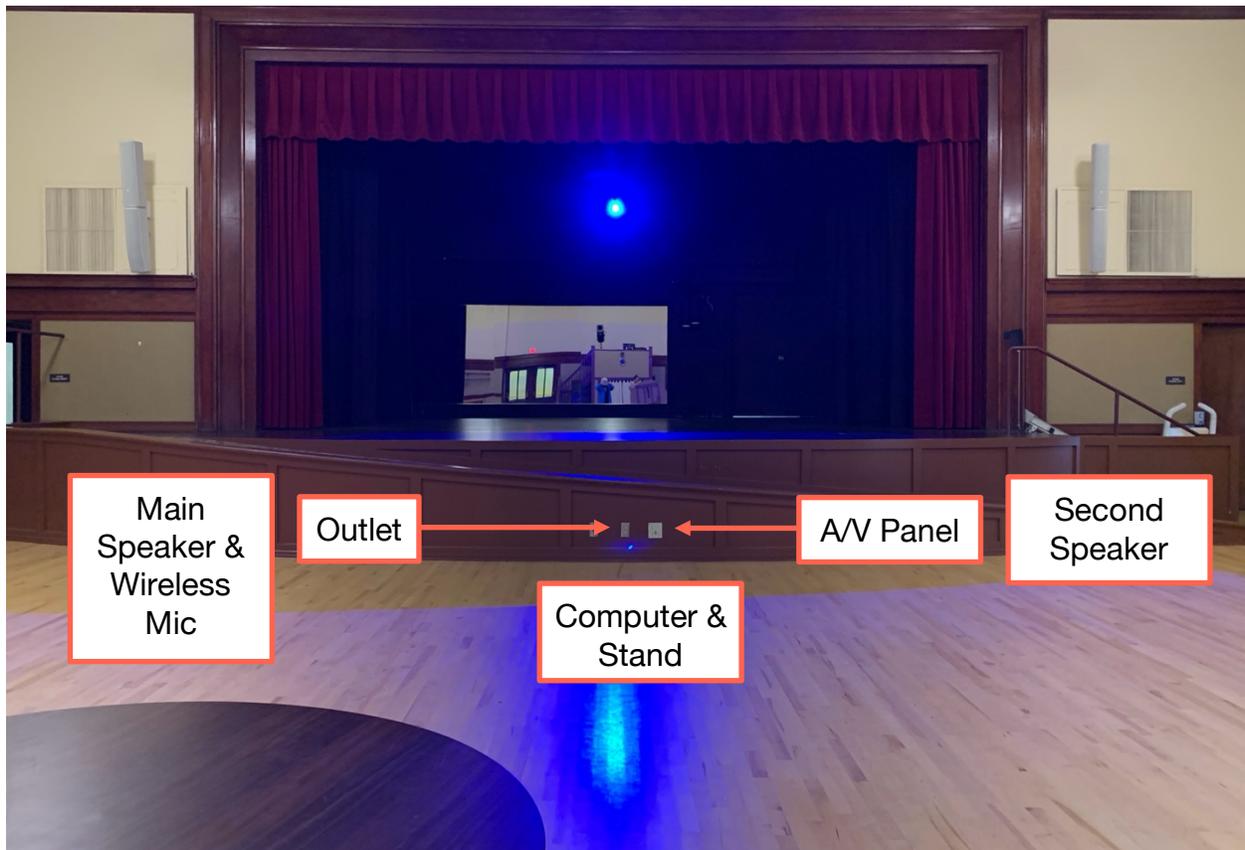


# A/V Setup

Here's how to setup and connect everything for the PHG meetings. All cables are numbered and color coded to match the tag on the bag where they should be stored: BLUE for Main Speaker, RED for Second Speaker, GREEN for Computer Bag, YELLOW for Projector Bag, WHITE for Peavey Wireless Microphone case.

## Physical Setup

Since nearly half of our meetings occur in the MAC auditorium the photo below shows the normal setup for our meetings. When in Room 30, the gym, or any other location determine where you'll setup the screen for the projector and make that the 'front' of the room, and place the other items accordingly.



- Start by setting up the screen at the front of the room if using the guild screen. In the auditorium ask the front desk to have the projector turned on and the screen lowered.
- Then setup the computer on the computer stand in the middle of the room near the front. Be sure to leave an appropriate amount of space between the computer stand and the screen.

- Set up the speakers on the speaker stands. In smaller rooms such as room 30 in the senior center you can use just the **MAIN SPEAKER** set in the front corner of the room. For larger rooms like the MAC auditorium or the MAC gym use both the **MAIN SPEAKER** and the **SECOND SPEAKER**. Setup one on each side of the room, also near the front.
- The Peavey wireless microphone unit should be placed atop the main speaker.
- Extension cords and outlet strips are stored in each bag as needed.
  - Take an extension cord from the **MAIN SPEAKER** bag and run it from an outlet at the front of the room to the main speaker.
  - Connect an outlet strip and plug in the speaker and the Peavey wireless microphone unit. Power cords for each of these are stored in their associated bag/case.
  - Take a second extension cord from the **MAIN SPEAKER** bag and run it from the main speaker to the **COMPUTER STAND**.
  - Connect the second outlet strip to this extension cord and plug in the computer. Its power cord and adapter are in the computer bag pouch and will have **GREEN** tags.
  - For large rooms where needed plug in the extension cord from the **SECOND SPEAKER** bag and run it to the second speaker to provide power for the second speaker. The power cord for the second speaker is in the **SECOND SPEAKER** bag, and will have a **RED** tag.

## Audio Cables and Connections

<p>1. Connect the USB Audio Adapter plug labeled <b>(1)</b> to the first computer USB port that has the matching <b>(1)</b> label. The adapter and associated cables should be in the pouch of the computer bag, and they should have <b>GREEN</b> tags.</p>	
<p>2. Connect the USB Video Adapter plug labeled <b>(2)</b> to the other computer USB port that has the matching <b>(2)</b> label. The adapter and cable should also be in the pouch of the computer bag, and they should have <b>GREEN</b> tags.</p>	
<p>3. Connect the HDMI cable connector with the <b>(3)</b> label to the Video Adapter HDMI port that has the matching <b>(3)</b> label. This cable should be in the pouch of the computer bag, and should have a <b>GREEN</b> tag. It may already be connected to the video adapter.</p>	
<p>4. Connect the HDMI cable to the appropriate projector.</p> <p>a. For the MAC Auditorium, connect the HDMI cable connector with the <b>(4)</b> label to the MAC projector HDMI input located in the MAC A/V panel at the front of the stage. The cable is stored in the pouch of the computer bag and has a <b>GREEN</b> tag.</p>	

- b. For rooms where you are using the PHG projector connect the HDMI cable connector with the **(4)** label to the PHG projector HDMI input with the matching **(4)** label.



5. Connect one end of the short audio cable with the **(5)** label to the Harbinger Speaker Input 1 jack with the matching **(5)** label. This carries the audio from the Peavey wireless microphone unit to the Harbinger Speaker Input 1 jack. This cable should be found in the Peavey wireless microphone case, and should have a **WHITE** tag. (Note: Speaker switches and settings are covered on Page 19.)



6. Connect the end of the short audio cable with the **(6)** label to the audio output jack on the Peavey wireless microphone unit with the matching **(6)** label. Note that the 6 has a line underneath it so you don't confuse it with a 9. This carries the audio from the Peavey wireless microphone unit to the Harbinger Speaker Input 1 jack. This cable should be found in the Peavey wireless microphone case, and will have a **WHITE** tag.

7. Plug the end of the audio cable with the **(7)** label into the Peavey wireless microphone unit audio jack. The other end will connect to the computer. This cable should be stored in the computer pouch, and will have a **GREEN** tag. The other end of this cable may already be connected to the computer audio adapter.



8. Plug the end of the audio cable with the **(8)** label into the computer USB Audio Adapter **RED** jack with the matching **(8)** label. This supplies audio from the Peavey wireless microphone unit to the computer to provide audio for the Zoom participants. This cable and the adapter should be stored in the computer bag pouch, and will have a **GREEN** tag. It will probably already be connected as we usually store them that way. **(NOTE:** There are extender cables available in the **MAIN SPEAKER** bag if the cable is too short. They will have **BLUE** tags.) Note that the plugs on the USB audio adapter are different colors - one yellow, one red. The numbering should make sure that they connected correctly.

9. Plug the end of the audio cable with the **(9)** label into the computer USB Audio Adapter **YELLOW** jack with the matching **(9)** label. This supplies the computer audio to the speakers. This cable and the adapter should be stored in the pouch on the computer bag pouch, and will have a **GREEN** tag. It will probably already be connected as we usually store them that way. **(NOTE:** There are extender cables available in the **MAIN SPEAKER** bag if the cable is too short. They will have **BLUE** tags.) Note that the plugs on the USB audio adapter are different colors - one yellow, one red. The numbering should make sure that they connected correctly.



10. Plug the end of the audio cable with the **(0)** label into the Harbinger speaker Input 2 jack with the matching **(0)** label. This cable supplies the computer audio to the in-room speakers. The cable should be in the computer bag pouch, and will have a **GREEN** tag. The other end of this cable should be connected to the computer USB audio adapter. (NOTE: There are extender cables available in the **MAIN SPEAKER** bag if the cable is too short. They will have **BLUE** tags.)



**For small rooms the setup and connections are complete. If setting up in a large room and you will need to continue to setup and connect the **SECOND SPEAKER****

11. Plug the end of the long audio cable with the **(11)** label into the Harbinger speaker LINK OUT jack on the MAIN SPEAKER with the matching **(11)** label. The long audio cable is stored in the second speaker bag and has a **RED** tag.

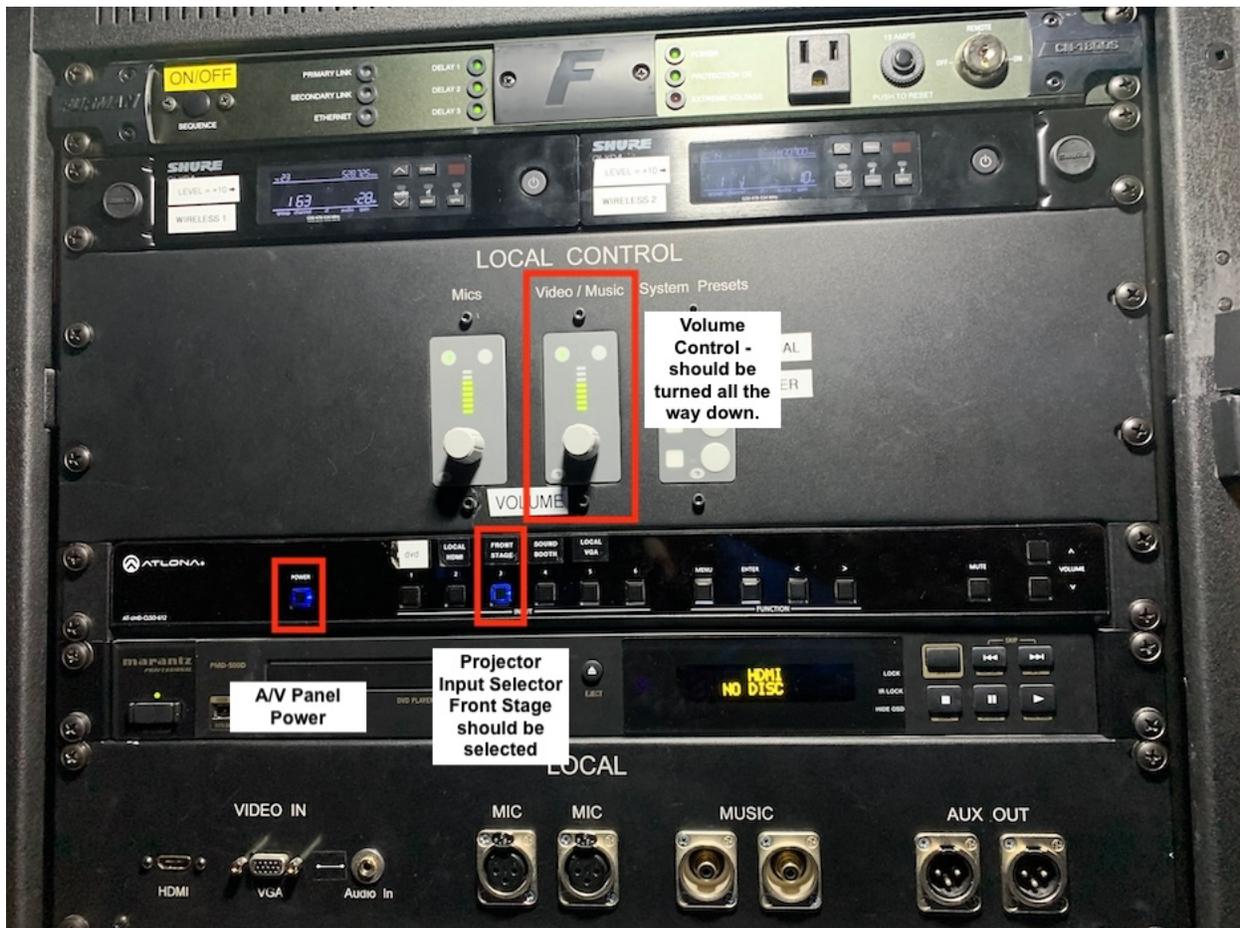


12. Plug the end of the long audio cable with the **(12)** label into the **INPUT 1** jack on the **SECOND SPEAKER** with the matching **(12)** label. The long audio cable is stored in the second speaker bag and has a RED tag.



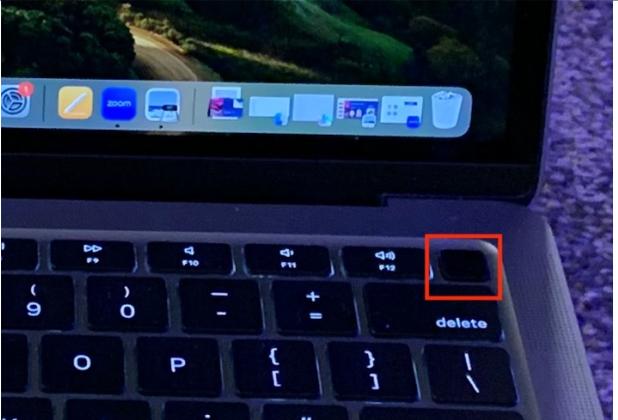
## EXTRA REQUIREMENTS FOR MAC AUDITORIUM

If setting up in the MAC auditorium and using the MAC projector, the MAC staff will need to open the A/V cabinet behind the stage, turn on the projector, and lower the screen. Just ask the person at the front desk to turn on the projector for you and let them know we'll be connecting to the projector from the front of the stage. There is a volume control for the audio from the HDMI cable that feeds the auditorium sound system. This should be turned down all the way since we will be running the computer audio through the PHG computer and speakers.



At this point everything should be connected.

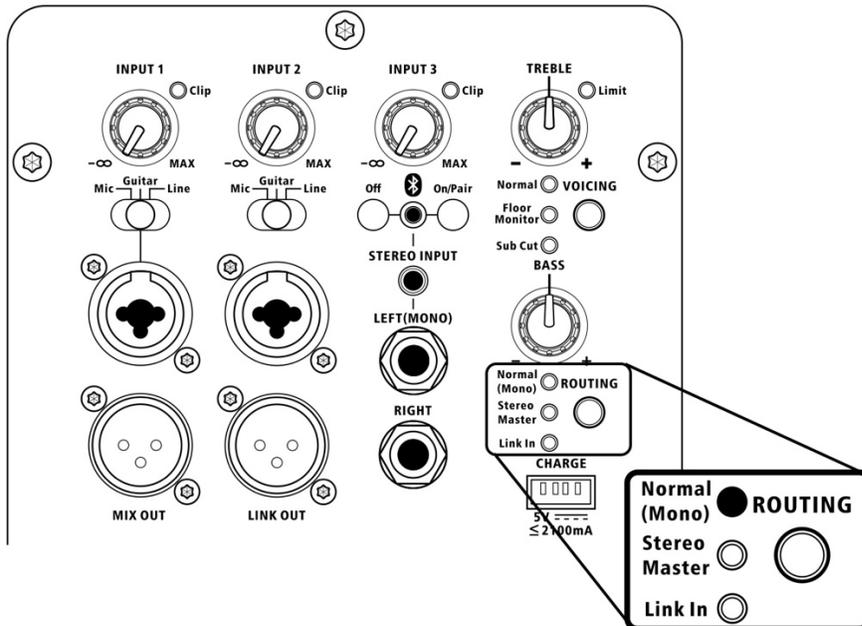
Now, make sure that you have turned everything on, including:

<p>The computer (Power button is the unlabeled key in the upper right corner of the keyboard)</p>	 A close-up photograph of a laptop keyboard. The power button, which is a small, unlabeled key in the upper right corner, is highlighted with a red rectangular box. The surrounding keys include function keys (F10, F11, F12) and standard alphanumeric keys (9, 0, -, +, =, delete).
<p>The projector (PHG projector power button is button next to the Status led and above the Lamp and Temp leds)</p>	 A close-up photograph of the control panel of an Epson projector. The power button, located next to the 'Status CB' indicator and above the 'Lamp' and 'Temp' indicators, is highlighted with a red rectangular box. Other buttons include 'Menu', 'H/V', 'Esc', 'Source Search', 'Enter', and 'Help'. The model number 'EX7220' is visible.
<p>The Peavey wireless microphone station (power switch is on the front of the unit)</p>	 A close-up photograph of the front panel of a Peavey PCX-U12 wireless receiver. The power switch, located on the left side of the panel, is highlighted with a red rectangular box. The panel also features two antennas, a volume knob, and various input ports.
<p>The Harbinger Speaker(s) (power switch is located in the lower left of the speaker next to the power cord)</p>	 A close-up photograph of the back panel of a Harbinger speaker. The power switch, located in the lower left corner next to the power cord input, is highlighted with a red rectangular box. The panel includes technical specifications such as '220-240V-50/60Hz 110-120V-50/60Hz 100W' and a production date of '2024 03'.

Lastly, turn on the wireless microphone(s) (Photo needed) Note: The microphones are battery operated. There should be extra batteries in the computer bag.



# Speaker Settings



## Main Speaker

**Input 1 and Input 2 have an input selector switch.** The input selector switch is below the dial, between the dial and the input jack, and can be set to Mic, Guitar, or Line.

**Input 1:** Set Input 1 to Mic.

**Input 2:** Set Input 2 to Line.

**Input 3:** Input 3 is unused and should be turned down all the way.

**Treble and Bass** can be adjusted as desired, but setting to the middle is a good start.

**Voicing** should be set to Normal. This is done by pressing the VOICING button until the desired setting is lit.

**Routing** should be set to **Stereo Master**. This allows you to control the volume for both speakers on the main speaker. This is done by pressing the ROUTING button until the desired setting is lit.

## Second Speaker

The second speaker is identical to the Main Speaker, but uses different settings.

**Input 1:** Set Input 1 to Line.

**Input 2:** Input 2 is unused and should be turned down all the way.

**Input 3:** Input 3 is unused and should be turned down all the way.

**Treble and Bass** can be adjusted as desired, but setting to the middle is a good start.

**Voicing** should be set to Normal. This is done by pressing the VOICING button until the desired setting is lit.

**Routing** should be set to **Link In**. This allows you to control the volume for both speakers on the main speaker. This is done by pressing the ROUTING button until the desired setting is lit.

If the **Clip** LED lights up on any input during normal operation then you need to turn down that input.

**Volume Controls:** Volume for the microphone is controlled by Input 1 on the MAIN SPEAKER, and volume for the audio from the computer (Zoom attendees) is controlled by Input 2 on the MAIN SPEAKER. If you don't hear audio from the Zoom participant make sure that the Zoom audio settings are correct. (Page 23)

## Computer Setup and Usage

As already noted, the guild computer is an Apple MacBook Air. If you are not familiar with using a Mac there's an appendix that provides VERY basic instruction on how to navigate and use it.

The computer is used to connect to Zoom so people can attend the meeting remotely. Powerpoint or Keynote presentations can also be run from the computer (Keynote is the Apple presentation app, and will automatically open Powerpoint files), **but** running presentations from the guild computer means that you can't see the closed captions from Zoom. It is **PREFERRED** to have guests run their presentations from their own computer, and for them to connect to the Zoom meeting by going to the PHG website, navigate to the meeting event in the calendar (should appear on the home page) and use the Zoom link included in the program information. This allows them to run their slides from their own computer by invoking Screen Share in Zoom AND the PHG computer will still show the captions on the screen.

- As noted earlier, the Power button is the unlabeled button in the top right corner of the keyboard next to the F12 key.
- The computer is setup to automatically boot up without requiring a password.
- If you accidentally lock the computer the system will prompt for a password. There is no password, so just hit the **RETURN** key to log back in.
- To join the Wifi click the Wifi symbol in the menu bar or go to System Settings and select Network, then Wi-fi.



in the menu bar or



in the dock at the bottom

At MAC select CityGuest from the network options. A popup will appear prompting you to accept the MAC terms of service. Accept those and you should have internet access.

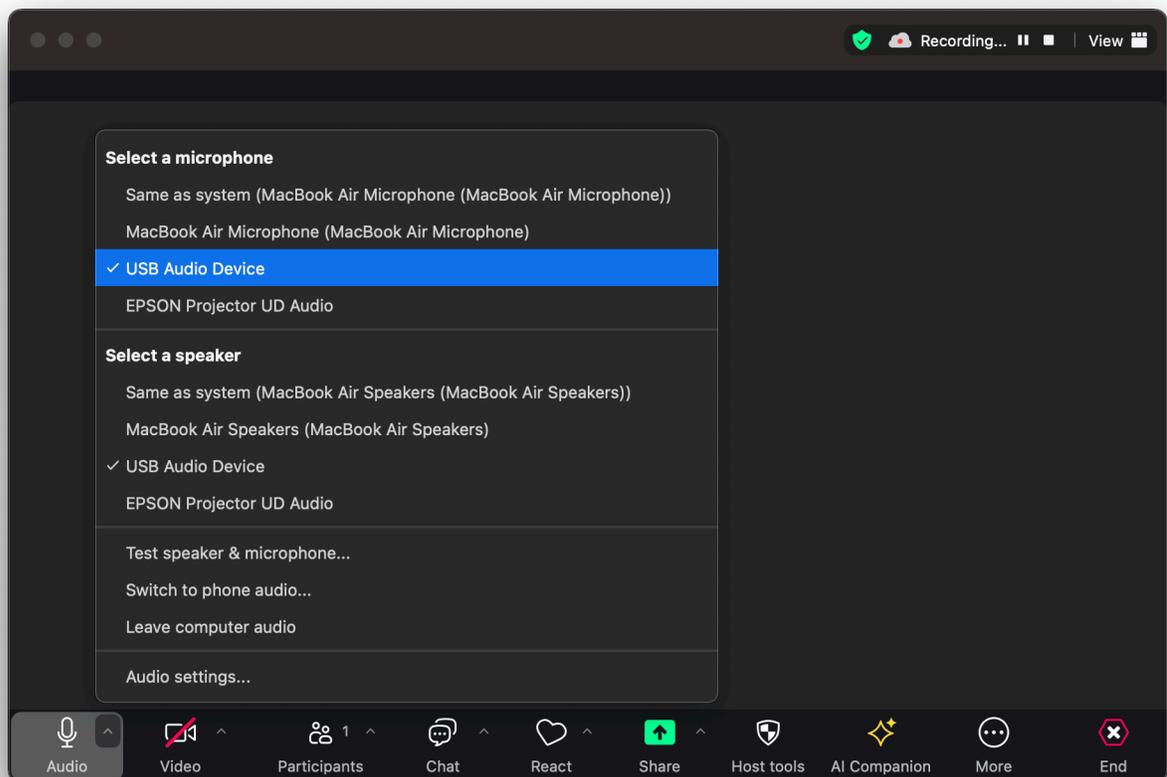
- System is setup to launch Safari web browser automatically. You can also click it in the dock to open it. Safari is setup with the PHG website as the browser home page.



- You should be able to use any event in the calendar with a Zoom link to connect to the meeting Zoom session. (We use the same link for all meetings.)

## Zoom Configuration and Usage

Again, to connect to Zoom just click the Zoom link from the meeting page in the PHG website calendar, or double-click the “PHG Zoom Meeting” icon on the desktop. After connecting make sure that Zoom is using the USB device for audio both for microphone and for speaker. Do this by clicking the up arrow on the Audio button in the Zoom window and choose USB Device for both the “Select a Microphone” and “Select a Speaker” settings.



- Zoom is setup to automatically:
  - Allow anyone to connect
  - Record a new meeting
  - Enable closed captions

For members with hearing challenges you need to display the Closed Captions in the Zoom window. Click the Closed Captions button then select “Show Captions.” If you don’t see a Closed Captions button click “More” and you’ll find it there.

You may connect to the meeting as the host, but if you don’t you can enter in a Host Code to access the host controls, including the ability to mute or drop people as

needed. To enter the host code click on the Participants button to display the participants sidebar, then click the Claim Host button at the bottom of the sidebar and enter the code.

Zoom account info:

Host Code: 878179

Note: The Host Code is all you should need to have full control of the Zoom meeting. The login information below shouldn't be needed except in cases where Zoom has released an update that changes our normal settings, which doesn't happen very often.

Username: president@portlandhandweaversguild.org

Password: junrivnirhaQkoqpa7

Login requires 2FA code. (2FA is short for 2 Factor Authentication, and it provides added security to our account AND allows us to log in from different computers without having to plug in a confirmation code that can only go to one phone number.)

You can get a code from Google Authenticator app using this QR Code:



For additional information about Zoom and the Zoom account settings see the Zoom Setup PDF in the Documents folder.

## Appendix - Mac OS Basics

Here's the basics of the Mac.



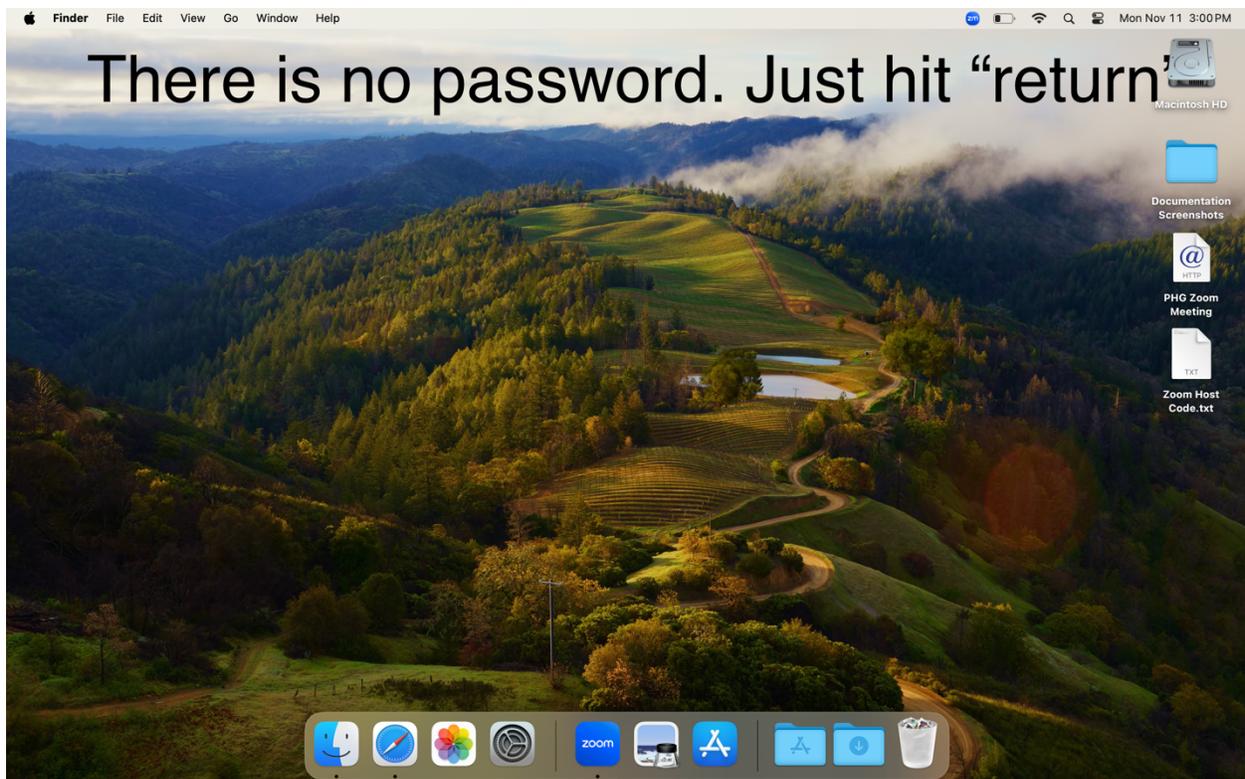
The MacBook Air is a standard laptop computer, with a display, keyboard and trackpad. The power button is the unlabeled button in the top right corner of the keyboard, just to the right of the F12 key, and just above the Delete key. (See page 18) The function keys have special functions as noted by the symbols above their function numbers.

- F1 and F2 Decrease and Increase the screen brightness
- F3 shows all open windows and allows you to quickly switch between windows.
- F4 takes you to Spotlight Search which allows you to search both the computer and the internet
- F5 is used to invoke Dictation

- F6 enables/disabled Do Not Disturb
- F7 – F9 control media playback (back, play/pause, forward)
- F10 – F12 control speaker volume (mute, softer, louder)

The trackpad is multi-touch enabled, meaning that a single finger will move the cursor, and two fingers moving in the same direction will scroll up and down or side to side, depending on the placement of the cursor and the window you are trying to manipulate. You can also use 2 fingers to click to pull up secondary menus and options, or Control-click to access those same menus and options. Other options are available in the Trackpad section of the System Settings, available in the Apple menu.

## The desktop for the Mac



The screen is separated into 3 zones. At the very top is the Menu bar. It's split into 2 sections.

The Apple and application menus are on the left. The name closest to the Apple symbol tells you what application the computer is focused on right now. In the example screenshot below the system says you're working in the Finder.



On the right side of the screen are the helper icons for things like date and time, Wifi access, and battery status. In the example below we see that Do Not Disturb is enabled (crescent moon shape), the battery is just under 50% charged, and Wifi is enabled and active. The magnifying glass gives you access to Spotlight, while the picture of the 2 sliding controls gives you access to controls for Wifi, Bluetooth and Airdrop status, Do Not Disturb / Focus, Stage Manager, Screen Mirroring, Display brightness, volume, and iTunes access and controls.



At the bottom of the screen is the Dock. This shows applications that are frequently used on the left, and recent applications on the right.



The icons in the dock are:

- The Finder, which give you access to files and folders
- Safari, which is the standard MacOS web browser
- Photos
- System Settings
- Zoom
- Preview (used for viewing photos and pdf files)
- The Apple App Store
- The Applications Folder
- The Download folder
- Trash

A single click on an icon in the dock will launch an app, or bring it to the top and make it the active app if it is already open.