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To meet FCC and other requirements, certified KOOP programmers must perform and record specific actions.

**Station Logs:**

The Station Log (daily program schedule on clip board in studio) is used to inform programmers of scheduled announcements/readings/tests, and is the official record of five key areas:

- **Sign In-Out:**
  - The sign in/out is legal documentation that a certified programmer is present, as required, to work the board at all times that KOOP is on air. Programmers must both sign and legibly write their full name.

- **Legal ID:**
  - “K-O-O-P Hornsby Austin” is KOOP’s legal ID. This exact phrase must be aired at specific times. No words can be added to or removed from the legal ID.

- **Announcement Schedule:**
  - The announcements scheduled for each program are listed with suggested times to play (Enco) or read (from binder) the announcements during the program.
  - The actual time the announcement is played must be noted on the announcement schedule.

- **Transmitter Power Readings:**
  - Times are scheduled for when to call the transmitter to check and record the signal strength.
  - The transmitter power reading is recorded in a separate log labeled “Transmitter Power Readings”.
  - The time of the reading must be noted on the Station Log in the announcement schedule section.

- **Error Log:**
  - All FCC violations that are broadcast or dumped must be logged in the error log.
  - Equipment failure or broadcast anomalies should also be logged.

- **EAS Log:**
  - The time of transmission for scheduled EAS tests must be noted in the EAS log.
  - The time of transmission for all automated EAS tests or alerts must be noted in the EAS log.

The log is an official document that the FCC may review at any time. Information should never be falsified. Never erase any part of the logs. If necessary strike out an entry with a single line and initial the change. Failure to properly complete the logs will result in warnings and possible suspensions.

**Transmitter Power Reading:**

A transmitter power meter reading refers to calling the transmitter to check the strength of the broadcast signal. Readings must be taken once per hour, as scheduled. The Tower can be called from any phone. Power meter readings are logged in the Transmitter Power Reading Log.

1) Dial 933-0643. You will hear a modem noise followed by a computerized voice saying “VMC”
2) After the recording says “VMC” dial **555
3) After the recorded message says “0-1 ready” dial 0-1
4) The voice will then tell you a number, that number is the power level at which the tower is transmitting
5) Note the power level in the Transmitter Power Reading log
4) After the voice says “ready”, press 3-9 then hang up
   If the power meter reading is above 99.9 contact the tech team.

The steps to take a power reading are also noted in the Transmitter Power Reading log in the studio.

All logs should be filled in using an ink pen. Never use a pencil to fill in the logs.
Emergency Alert System (EAS):

Once each week a scheduled EAS alert pattern must be sent out. This appears in the Station Log daily schedule and must be recorded in the EAS Log.

During an FCC inspection, the programmer in the studio will be asked to transmit an EAS test. Other EAS tests and alerts are automated. Programmers cannot and should not try to turn off an automated EAS broadcast.

(Below is an example of an EAS weekly test scheduled in the program section of the log)

<table>
<thead>
<tr>
<th>Time</th>
<th>Program/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30p</td>
<td><strong>Super Training Show</strong> Legal ID (“K-O-O-P Hornsby-Austin”)</td>
</tr>
<tr>
<td>5:00p</td>
<td>Tower Meter Reading</td>
</tr>
<tr>
<td></td>
<td>PRM Community Council</td>
</tr>
<tr>
<td></td>
<td>UA Cinema 41</td>
</tr>
<tr>
<td></td>
<td>EAS RWT</td>
</tr>
<tr>
<td>5pm</td>
<td>Legal ID (&quot;K-O-O-P Hornsby-Austin&quot;)</td>
</tr>
<tr>
<td></td>
<td>UA Austin Foodie 2</td>
</tr>
</tbody>
</table>

To send the EAS test pattern signal:

1) Press the square yellow button in the center of the console marked EAS RWT (Emergency Alert System Required Weekly Test)
2) Three sharp bursts of static, then a pause, then three more bursts of static will play
3) During the Test Signal continue broadcasting. Do not stop the regular program.
4) Note EAS system test in the EAS Log indicating a ‘successful’ or ‘failed’ test

The EAS signal goes directly to the transmitter without a delay. The alert signal will overlap the 40 seconds of broadcast prior to pressing the smart button. Always try to send the signal in the middle of a song or program segment, and never right after a station ID or underwriting announcement.

Automated Tests & Actual Emergency Alerts:

All Texas radio stations are required to participate in a state wide EAS test the first Tuesday of each month. An actual emergency alert signal could be broadcast at any time.

These tests and alerts do not require any action from the programmer to be transmitted. If an automated EAS transmission occurs, continue normal programming. (Due to the delay, stopping, then restarting a program will create dead air) Log the time of all tests and alerts in the EAS Log section of the Station Log.

If there is a true emergency broadcast, music may be played while programmer determines whether further action/information may be valuable to the listeners.

To learn more about the EAS systems, there is a binder in studio marked EAS, or you may visit www.tab.org

KOOP does not accept emergency information issued by fax, e-mail or phone call from someone who claims to be a public safety officer. Legitimate emergency responders have access to the EAS system and will not contact the station by other means. This specifically includes Amber Alert or missing person information from any other sources. These alerts must be issued through the EAS.
The FCC requires that all stations be capable of ending their transmission if need be. All certified programmer must know how to shut down the transmitter.

Reasonable Cause:
A request for immediate transmitter shut down will usually come by phone from a government official, but the need to shut down transmission may also come from KOOP itself. The following list is of acceptable reasons for a transmitter shut down.

- A life threatening situation exists at the transmitter site.
- You are instructed by the KOOP staff or engineers to execute this procedure.
- KOOP has lost control of its studios or transmitter to unauthorized individuals.
- An FCC, FAA, city or regional public safety official has called the station instructing KOOP to do so because the transmitter is interfering with public safety frequencies.

Receiving a Transmitter shut down request:
If such a call is received keep the caller on line and refer to the red “Emergency” binder.

- In the binder find the transmitter shut down request contact sheet.
- Write the callers information onto the transmitter shut down request contact sheet.
- When the contact sheet is complete end the call.
- Call back the person requesting the transmitter shut down using their call back number.
- Verify that the call back number and the request is legitimate.
- Once the legitimacy of the request has been confirmed open the sealed transmitter shut down instructions located in the red “Emergency” binder.
- Follow the Instructions and shut down the transmitter.
- When the shut down is complete contact the the chief engineer and station staff.
- Place the transmitter shut down request contact sheet in the Executive director's mailbox.
- Continue normal programming for the web stream.

Public File:
Every FCC licensed radio station is required to maintain and make accessible to the public a Public Inspection File.

This File contains documents relevant to the stations operation and documentation of political and community issues presented on the air. Koop is required to have the public inspection file available to the public during regular business hours. The public inspection file is kept in the office.

If someone requests to see the public inspection file put them in contact with the office.
  (the phone number for the office is noted in the studio)

**DO NOT** tell someone requesting to see the public file that they need to make an appointment.
KOOP studios are equipped with cassette decks for playing audio cassettes or recording a broadcast. These machines do not have a remote start option.

The Controls are the same for deck A and B

For Playback
- "Pre-cue" cassettes for broadcast prior to the show. Attempting to cue a cassette during a show is very difficult.
- To cue a tape: find the beginning of the piece for playback. Then turn back the tape spools one turn by hand.
- Check that the deck is set to play in the anticipated direction.
- Turn the cassette deck fader channel on and set the volume to -15.
- Use the "Play" and "Stop" buttons on the deck to start and stop the cassette.
- Once the cassette is playing re-adjust the fader levels if needed.

For Recording
- Press the red "Record" button. It will automatically pause.
- Adjust the line levels using the input level control knob.
- Then press the "Play" button to begin recording.

Because the cassette deck does not get regular use, always be sure to turn it off after using.

More cassette decks features may be found in the instruction manual on file at the station.
Each studio is equipped with three identical CD players that are capable of playing standard CD, CDR/RW and MP3 format disks. Always be sure to use the "Open/Close" button when loading or unloading CDs. It is very important NOT to close them manually. One of the most useful features is the ability to remotely start them on the console. Although the two studios have different model CD players, they interact almost identically, but the Studio 2 decks are better at reading CDR/Ws.

The default settings are: Time: remaining  Repeat: off  Play Mode: single

The Studio 2 decks do not have a knob for track selecting rather they have “Up” and “Down” selection buttons. These decks have no single button control to choose the play mode.

The numeric track selection buttons (marked 1-9 and +10) can be used to pre program a custom track playback order.

One quirk to remember about the Studio 2 decks: Pressing the remote start for these decks on the console once, will start the CD playing, pressing the remote start a second time will pause the CD, and pressing the remote start button a third time will start the CD again.
The “IN” and “OUT” jacks (4 different sets) on the rack are direct lines in to and out from the console. The “in” points are used to send an audio signal to the console from external equipment such as ipods, MP3 players, or laptops. The “out” points are for sending an audio signal from the console to external equipment, most often for recording. None of these jacks have a remote start option.

### RCA Jacks

- Are unbalanced. This means that one jack is needed for the left audio channel and one for the right.
- Are primarily used to connect to audio devices via an 1/8” jack.
- Always make sure to send the signal from any external device at full volume.
- Deactivate any beeps or other key sounds the device might make, so they are not broadcast.
- If your program is heavily dependent on an external device, it is advisable to bring your own audio cable.
- The RCA in audio source is named “IPOD In”. This is the source on the screen of the assigned fader channel.

### XLR In Jacks:

- Are unbalanced. This means that one jack is needed for the left audio channel and one for the right.
- These XLR connections will not work for a microphone.
- These are most often used for connecting an external turntable mixer (for DJs to perform in studio).
- The XLR in audio source is named “XLR In”. This is the source on the screen of the assigned fader channel.

### Headphone Jack:

The host headphone jack is housed in the component rack. This is the only headphone jack that will interact with all the options on the console. Like all other headphone jacks it has an independent volume control.

### RCA & XLR Out Jacks:

- Are unbalanced. This means that one jack is needed for the left audio channel and one for the right.
- These are most often used for recording from the console to an external device.
Each studio has two identical turntables. These turntables are set up to be started and stopped from the fader channel controls on the console. They are also equipped with needles that allow for playing records forward and in reverse.

**Cueing up a Record:**
- **Turn the turntable on:** Rotate the black knob marked “Power” clockwise. When the unit is on, a red light will shine from the side of the “On/Off” knob.
- **Set the record speed:** There are two buttons for speed control, one for 45rpm and one for 33rpm. For 78rpm press both speed control buttons at once. (Note: The needles loaded on the turntables should not be used for 78rpm records)
- **Placing the needle:** Use the tone arm lever to raise the arm. Then using the tone arm handle position the needle as desired. Lower the needle on to the record by using the tone arm lever.
- **Finding the track:** While listening to the turntable in preview mode, use either the on deck “Start/Stop” button or manually rotate the record to find the beginning of the desired track.
- **Cue the Record:** With the turntable stopped at the beginning of the track. Manually rotate the record back one half turn counter clockwise. This half turn will allow for the turntable to start without creating a lurching sound.

**Because the turntables do not get constant use, always be sure to turn them off after using**

If you’re interested in learning more advanced features of the turntables the instruction manual is on file at the station or contact the training team for a more in depth explanation.
The digital recorder, often referred to as the “Tascam”, records audio from the console to compact flash cards. It allows programmers to record audio from either studio for archiving or editing. It is most often used to record phone interviews or prerecord in-studio interviews. It can also be used to prerecord demo programs or an entire episode of your show.

The basic interface of the machine is similar to a tape deck and once an audio file has been recorded on a compact flash card it can be played back through the console.

To Record:
- To open the CF card port door, gently pull the door forward from the top right corner. The door will hinge downward.
- Once the door is open, insert a compact flash card into the CF card port.
- Press the “Record” button once, the “Record” button and the “Pause” button will light up.
- At this point, the recorder is in “record ready” mode, any audio sent through the Studio 2 console will show on the line level meters of the recorder’s LCD screen. In “record ready” mode, use the input controls to make sure that the audio levels are good for recording (not too strong & not too weak).
- To start recording press the “Play” button. The recorder goes into “record” mode, the “Record” button will stay lit red. The track timer will start counting the seconds of your recording.
- When finished recording, press the “Stop” button.

To start a new track while recording it is not necessary to stop the recorder and go into record ready mode again. While recording simply press the “Record” button again and it will start a new track.

To Play Back Recordings:
- First turn on the recorder’s console channel and fader. The fader for the recorder is the farthest right fader on the studio 2 console, titled “S2 Flash R”.
- Press the “Play” button on the recorder, the “Play” button will light up green.
- The recorder will now play back all of the tracks continuously until the “Stop” button is pressed.
- To play back a particular track, use either the track selection buttons or the track selection knob to jog through the different tracks.
- The CF card “Eject” button is inside CF card port door, on the right. Press the “Eject” button twice to eject a card.

USB port

The digital recorder cannot record audio files to a USB flash drive, but it can access audio files on a USB drive for play back. Both mp3 and wav. formats can be played back.

Files can also be transferred from CF card to USB drive using the menu options.

KOOP does not provide CF cards for programmers, but these cards are widely available. The chart to the right lists the average recording time available for different sized cards.

<table>
<thead>
<tr>
<th>Media/Capacity</th>
<th>44.1 kHz</th>
<th>48 kHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>512 MB</td>
<td>48 minutes</td>
<td>44 minutes</td>
</tr>
<tr>
<td>1 GB</td>
<td>1 hour 36 minutes</td>
<td>1 hour 28 minutes</td>
</tr>
<tr>
<td>2 GB</td>
<td>3 hours 12 minutes</td>
<td>2 hours 56 minutes</td>
</tr>
<tr>
<td>4 GB</td>
<td>6 hours 24 minutes</td>
<td>5 hours 52 minutes</td>
</tr>
<tr>
<td>8 GB</td>
<td>12 hours 48 minutes</td>
<td>11 hours 44 minutes</td>
</tr>
</tbody>
</table>

If you’re interested in learning more the full instruction manual is on file at the station and available online at the Tascam website.
The Axia Consoles have 16 fader channels. These faders control almost all the audio that KOOP broadcasts. But what is a fader? Fader is a term used for an audio control that allows for increasing and decreasing volume, “fading in or out”. These channels have many options and capabilities, but for day-to-day use only four buttons are actually needed.

**Which fader is which:**

Each fader channel on the console is assigned to a specific microphone or piece of audio equipment in the studio. The audio source assigned to the channel is displayed on a green and black LCD screen at the top of the fader channel.

CD players have red knobs, turntables have grey knobs, the host mic’s fader knob is silver, and all other fader knobs are black.

**Turning a channel on & off:**

The red button at the bottom of the fader will turn the audio channel on. As long as the channel is on the red button will stay lit. To turn the channel off, press the yellow button.

**Setting the Volume:**

Sliding the fader upwards will increase the signal strength. Generally the optimum level is near the red (zero) mark, although the meters on the monitor always need to be closely watched.

**Remote Start:**

The CD players and turntables have remote start fader controls. When the red “On” button is pressed for a channel assigned to one of these “remote start” components, it will start the components play back. The Yellow “off” button will also stop the turntables.

**Preview:**

“Preview” mode allows for material to be listened to and cued up before it is broadcast. Pressing the preview button on a channel sends the audio from that channel to both the host headphones (when selected) and the preview speaker (under the console desk), without sending the audio to the studio monitors or to the transmitter.

A channel’s fader knob will not increase or decrease the preview volume. There are separate volume controls for the preview function on the console. (For preview controls see page #14)

**Cough Button:**

Holding down the “On” button of the host mic fader channel will cut the audio from that mic until the “On” button is released.
Each studio is equipped with five microphones. These are high quality dynamic microphones that are very sensitive and must be handled with extreme caution and care. The microphones and the microphone mounts can be easily damaged so be sure to handle them correctly.

**Good touch / Bad touch:**

- The microphones are suspended by rubber shock mounts inside of a metal yoke that is attached to a boom arm.
- The mic boom arms should be used to change a mic’s position.
- The metal yoke (shown green) may be used as a handle to fine tune mic position.
- The rubber shock mounts should never be handled.
- Do not pull on microphone cables.
- Pop filters may be adjusted up or down, but are not mic handles.

**Caution:** the booms and yokes can create unwanted noise when adjusted on air.

**Yoke Screw:**

- This screw holds the yoke to the boom. It can become loose with use. Check tightness at beginning of program.

**Using the microphone:**

- Position your lips approximately two inches from the pop filter.
- Always wear headphones when microphone fader channels are on.
- The audio monitors go silent when a mic fader channel is turned on (prevents feedback).
- “Cough” feature: Hold down the “On” button of the host mic fader channel to temporarily silence the host mic (until button is released).

**Studio Noise**

- Be aware of studio noise when mics are on.
- Even the sound of buttons being pressed can be heard on mic.
- To avoid button noise, fade the mic levels up after the channels are turned on.

**Pop Filters:**

- Position directly in front of the microphone.

**Always explain to guests how to properly handle and use the microphones.**
The Axia console has a video monitor to show what the console is doing. All the audio that goes through the studio, and many of the board settings, are displayed on the Monitor.

**Good levels mean good radio:**

The Audio meters are one of the most important things to watch. If an audio signal is too loud the meters will turn red, as a warning sign. When levels are too high it causes "clipping", this creates a popping sound. If the levels are too low it is difficult for listeners to hear the broadcast.

Level meters have three colors:

- **Yellow is the average audio level**
- **the single Blue bar is the actual peak**
- **Red shows the levels are clipping**

The optimum level for the audio signal is to have the average, or the yellow, in the red bar marked “20”.

**Preview mode settings:**

The Preview function is very useful, and has three different settings. The video monitor is the only quick way to check the current setting.

- **Auto**: preview is off (default)
- **Stereo**: preview to headphones in both channels.
- **"Split"**: preview to headphones in left channel and program audio in the right channel.

**Status Panel:**

The status panel is found on bottom left hand side of the screen, it shows the on or off status of four functions, mics, preview, talk back, and the delay. When the field around the name of a functions is colored blue or red that function is on or engaged.

Note: if the monitor does not display the default “clock” screen, look for a lighted option button on one of the fader channels. Pressing the lighted option button will return the video monitor to the default screen.

**Stack Lights:**

The Monitor is not the only visual indicator in the studio. The stack light is another studio indicator. It has different colored lights to signal different events. Stack lights are also visible outside the studio, letting people in lobby or in the other studio know a studio’s status a glance.

- **Red**: Microphone(s) are on
- **Amber**: Something is wrong
- **Green**: Studio is transmitting
- **Blue**: Broadcast is automated
- **White**: Phone is in use in studio
- **White blinking**: Phone is ringing
Each studio has a set of speakers above the console. These are called “monitors” because they allow programmers to monitor different audio signals. Knowing how to control the volume of the monitors is very important, but knowing how to listen to different audio sources can be even more useful. The Monitor Control Module is located on the far left of the console. This console section controls three different audio outputs: studio monitors, the host headphones, and “preview”. 

**Volume Controls:**
- **Preview:** controls the preview speaker (located under the console desk)
- **Monitor 1:** controls the studio monitors over the console.
- **Headphones:** controls only the volume of the host headphones.
- The other studio headphones have independent volume controls.

**Audio Source Controls:**
- There are two sets of 10 audio source buttons. The right set, above the volume control marked “headphones” selects the audio sources for the host headphones.
- The left set above the volume control marked “Monitor 1” selects the audio sources for the monitors.

**Program:**
- There are four program source buttons.
  - Program #1 is the audio from the console itself.
  - Program #4 is for recording to the enco.

**Aux Sends:**
- These are not currently in use

**External Sources:**
- External 1 is the audio leaving the studio
- External 2 is the audio leaving the Transmitter
  - External 1 is pre-delay. External 2 is post-delay. For more about the delay system see page #16.

**The “Link” button:**
- When lit it pairs the monitor and headphone sources together.
- When unlit it allows the sources to be selected independently

**“Preview to HP”:**
- Toggles between 3 preview settings for the host headphones
  - Off - Unlit - no preview to headphones “Auto” (default setting)
  - On - Lit - preview to headphones in both channels “Stereo”
  - On - Lit - preview to headphones left channel only “Split” (right channel will be host headphone audio source)
  - To check the current preview setting (Auto/Stereo/Split) reference the video monitor (page #13)

**Note:** Guest headphones source will be the same as the studio monitor.
For simple access to different functions of the console “Smart Buttons” have been programmed. These are the square, colored buttons to the left of the faders. Each button is assigned one specific task. It is very important for every programmer to know how and when to use them, even though use may be infrequent.

**Give Studio:**

Only one KOOP studio can broadcast at a time. Switching the broadcast between studios may be necessary if there is an equipment failure, but there are also other reasons a programmer may choose to broadcast from the other studio, such as extra time to set up a live band or prepare for broadcast without interfering with the preceding program. It is simple to switch the broadcast between studios, using the ‘Give Studio’ button.

**Transferring broadcast between studios:**

- Press the “Give Studio” smart button in the active studio. The active studio will remain broadcasting until the transfer is complete.
- Press the “Take Studio” button in the standby studio. Once “Take Studio” has been pressed the transfer is complete.

**Note:** The “Take Studio” button in the standby studio will remain pink until a transfer is initiated, at which point it will change color to green.

**Cancelling a studio transfer:**

The transfer may be cancelled before it is complete. After the transfer is initiated by pushing the ‘Give Studio’ button, the button text will change to read ‘Cancel’. Any time it is in ‘Cancel’ mode, pushing it again will halt the transfer.

The stack lights show which studio is active or passive (page #13)

**Emergency Alert System:** for more information on the EAS see page #2

All programmers are required to know how to send an EAS alert. In the case of an actual emergency an EAS announcement will broadcast automatically, but by law KOOP must test the console’s EAS alert once a week. The tests are scheduled on the logs. If the station is inspected by the FCC, they may ask the programmer to send an EAS alert.

**To test the EAS alert:**

Press the amber smart button titled “EAS RWT” and then record the test in the EAS log. (Emergency Alert System Required Weekly Test)

Because the EAS signal goes directly to the transmitter without a delay, an EAS signal will overlap the 40-seconds of broadcast prior to pressing the smart button. Always try to send the signal in the middle of a song or program segment, and never right after a station ID or PSA.

**Profanity delay or dump:** for more information on the digital delay see page #16

Because KOOP broadcasts with a 40 second delay, programmers have the option to “dump” audio that has left the studio before it goes to the transmitter.

This is important to avoid broadcasting profanities, calls to action, or dead air.

**Pressing the “Dump” button**

- Will remove the previous 10 seconds of audio from the broadcast.
- The “Dump” can be pressed four times in a row to remove the previous 40 seconds.

After using the “Dump” button to remove FCC violations, the action must be noted in the error log.

**Known Good:**

This is the Axia console “reset” button. By pressing “Known Good” the console’s controls and faders will return to their default settings.

The console may develop a glitch or the settings might get changed. The simplest way to fix these types of problems is to press the “Known Good” button.

This should be the first step in attempting to fix a console or equipment error.
The digital delay is always in use during broadcast. It holds the KOOP audio signal for 40 seconds before the signal is sent to the transmitter tower for broadcast. During the 40 seconds that the audio signal is being held in the digital delay, programmers can delete or ‘Dump’ a portion of the audio signal to prevent it from being broadcast.

**The digital delay is a very important safeguard, used to prevent FCC violations from being broadcast.**

Profanities, indecencies, and calls to action can all occur during a live broadcast. If so, simply use the ‘Dump’ button to prevent broadcast and note the incident in the Event Log.

There are two dump buttons. One is the square red smart button to the left of the faders. The other is one of the delay controls on the far left of the console and is marked “#!@#”.

**Dumping Audio:**

The digital delay deletes audio from the broadcast in 10 second increments. Each time a “Dump” button is pressed 10 seconds will be deleted from the audio in the delay. After an FCC violation occurs start counting the seconds until the “Dump” button is pressed. The number of seconds counted between the violation and the “Dump” button being pressed will indicate the number times the “Dump” button needs to be pressed.

<table>
<thead>
<tr>
<th>Number of Seconds</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-9 seconds</td>
<td>Press the dump button 1 time</td>
</tr>
<tr>
<td>10-19 seconds</td>
<td>Press the dump button 2 times</td>
</tr>
<tr>
<td>20-29 seconds</td>
<td>Press the dump button 3 times</td>
</tr>
<tr>
<td>30-40 seconds</td>
<td>Press the dump button 4 times</td>
</tr>
</tbody>
</table>

Check that the delay is engaged: (recommended prior to program)

Outside the studio:

Check the LCD “Delay” screen on the digital delay unit in the hall.
- If the screen shows 40.0 the delay is working properly.
- If the screen shows 00.0 the delay is off, and should be started.

To check in studio:

- Use the video monitor.
- The delay status will be colored blue if the delay is engaged.
  (for more on Audio Monitor Controls see page #14)

**Start/Engage**

If the digital delay unit is powered on but the delay is not engaged;
- Press the “Engage” or “Start” button to start the delay.
- It may take three minutes to build up a full 40 second delay

**Exit:**

The “Exit” button will drain the time in the delay.
- The delay will take around three minutes to fully exit.
- Never broadcast without the delay!

**Pause:**

The “Pause” button cuts off all audio going to the delay, for as long as it is pressed. It can be used in case of a disturbance in the studio.

Digital Delay Unit (located in the server cabinet in the hall)
Both Studios have a phone set to the left of the console. These interact with the consoles and allow for multiple calls to be broadcast on air at the same time.

**Receiving Calls:**
An incoming call will blink green in the “Line Status Screen” for the corresponding line.
- Pick up the handset.
- Press the corresponding button in the “Handset” column.
- Placing the handset back on the base will end the call.

**Making a Call:**
- Pick up the handset.
- Press one of the active line buttons in the handset column.
- Use the keypad to dial. (No number or code is needed for an outside line).

**Queuing a Call:**
To transfer a call from the handset module to the board first ‘queue’ the call for fader assignment by pressing the line’s “Fader Queue” button.
The line’s status symbol will change from “X” (In Use) to a “check” (In Queue).
This inactivates the handset, until the line’s “Handset” button is pressed again, removing the call from the fader queue.

**Additional Functions:**
- **Speaker Phone:** Switches from handset to the phone base speaker
- **Mute:** Turns off the handset. Mutes all audio in and out of the handset.
- **Busy:** Makes all lines busy. All incoming calls will get a busy tone (will not drop calls assigned a line).
- **Next:** Sends calls to handset in order received (for multiple call ins).
- **Drop:** Drops live calls and calls in queue without using the handset.
- **Hold:** Puts a line on hold

**Note:** When mics are live the phone ringer will not sound. The white stack light will indicate incoming calls.

**Line Status Screen**
- Line Available
- Line In Use
- Incoming Call
- Call on Handset
- Call on Speakerphone
- Call on Hold
- Call Screened, Ready For Air
- Call is Next in Ready-for-Air Queue
- On Air, Hybrid 1
- Locked On Air, Hybrid 1
- On Air, Hybrid 2
- Locked On Air, Hybrid 2
- Busy All Lines
The “Call Control Module” (CCM) can broadcast two different callers at once. Calls can be transferred to the control module from the handset module or calls may be dialed and answered directly from the control module.

The two LED columns at the center of the module will show each line by number (left LED) and status (right LED). The buttons on either side of an LED Line Status Screen are used to assign the selected line to the corresponding side's fader channel.

Transferring a call from the handset module to a fader channel:
Place a call 'In Queue' on the hybrid. It will show as a “check” on the CCM "Line Status Screen". Press the “line selection” button on the side of the desired fader channel (left or right) to assign the call to a channel. The Line Status Screen will now show an “arrow” pointing to the fader channel assigned.

Receiving Calls (off air):
The CCM’s “Line Status Screen” will show the same line activity as the handset module base. To answer a ringing incoming call off the air, press the “Preview” button on a hybrid fader channel. Then use the fader channel’s “lign assignment” button. The call will then be heard through the “Preview” channel. To talk with a call in preview mode, hold the talk back button down. (The talk back function is similar to a walky-talky). Press the “Drop” button to end the call.

Receiving Calls (on air):
Assign the line of the incoming call to a hybrid fader channel. Press the red “On” button of the assigned channel. (Tell the caller that they are on air)
Adjust the channel's fader knob for proper levels. To talk with the caller on-air use a live studio microphone. Press the “Drop” button to end the call.

Making a Call (off air):
Assign an active line to one of the hybrid fader channels. Press the “Preview” button of the assigned channel. A ringtone will be heard through preview channel. Dial using the module’s keypad. (to the left of the hybrid 1 fader). Press the “Drop” button to end the call.

Moving a call from Preview to Broadcast:
Pressing the fader channel's red “On” button will switch a call from preview to broadcast. Adjust the channel's fader knob for proper levels. To talk with the caller on air use a live microphone. Press the “Drop” button to end the call.

Set button:
The set button will transfers a call from the console to the hybrid handset module.

The FCC requires:
That all members of a call must be made aware that they are being broadcast, or will be broadcast, before they are ever broadcast.
KOOP has an incredibly varied & tight schedule. We've learned that the following 'Studio Protocols' make a big difference in how smoothly the programming flows.

**First show of the day:**

The first programmer of the day has extra responsibilities and should arrive at the station 30 minutes early. This provides enough time to boot the servers (if need be) before the beginning of the broadcast day.

Instructions for booting the servers are located in the studio in the red binder labeled “Emergency”.

- **Digital Delay:**
  - Check the delay's screen to make sure it is on. If the delay is engaged, it will read "40.0".
  - If the delay's screen reads “00.0” press the “Start” button.

KOOP’s broadcast day starts at 9 a.m. after the automated KVRX to KOOP hand off. To avoid dead air broadcasting immediately after the handoff, follow these steps:

- Cue and start a piece of instrumental music a few minutes before the hour, long enough to play up to 9:01.
- Set the levels for the music being played.
- Switch the monitor setting from “External 1” to “External 2”
  - External 2 will play KVRX as it is being broadcast from the transmitter.
  - When the broadcast switches from KVRX to the music being played at KOOP:
    - Switch the monitors back to “External 1”
    - Begin the broadcast day

**Pre-show:**

- All programmers should arrive at the station 10-15 minutes prior to the beginning of the program.
- Note the time accumulated on the Digital Delay (40.0 seconds is expected status).
- Check your program mailbox and the studio bulletin board for any pertinent messages.
- It is considered polite to enter the studio no more than 5 minutes prior to your own program’s start time (unless otherwise agreed upon).
- Check with the programmer on duty for information on any broadcast issues or malfunctions.

**Post-show:**

- Towards the end of your program, make sure there is room for the next programmer to set up.
  - (e.g. at least one CD player is available & your CD’s/papers/etc. don't take up the entire space)
- Check that the CD players are in their default settings.
- Straighten the Logs and make sure there is a pen.
- Notify the incoming programmer of any broadcast issues or malfunctions.
- Have your guests exit the studio quietly, so the next programmer can speak on air without background noise.
- Put back any cables or mic stands you or your guests may have used.
- Pick up any and all trash that might have accumulated during your studio time.
- Re-file any music from the KOOP library.

**Last show of the day:**

- Clean up after yourself and anyone else who may not have been so polite.
- On the Console: Turn off all channels, slide down all faders, press the “Known Good” smart button.
- Turn off turntables, CD players and cassette decks.
- Close all studio doors.
- Turn off all lights.
- Activate the security alarm located by the front door immediately before exiting the building.

Instructions for activating the security alarm are posted above the alarm keypad by the front door.
It is critical to be able to handle an accident or emergency, should it arise, as quickly and safely as possible.
Good safety habits are key to preventing and minimizing accidents.

**Computer Security:**
- DO NOT insert any USB drive in any studio computer.
- DO NOT make any changes to studio systems without tech team consent.
- The computers in the lobby are available for volunteers to use for KOOP activities only.
  - Do not use the volunteer computers for inappropriate web sites.
  - NEVER download software or other files to the volunteer computers.
- Regularly perform virus scans on any flash cards or USB drives that you use at KOOP.

**Equipment Malfunctions:**
The programmer on duty is responsible for maintaining broadcast continuity (to the extent possible) in the case of any equipment malfunctions.

In the case of an equipment malfunction:
- Press the “Known Good” smart button.
- If the malfunction continues, but it is still possible to broadcast, do so.
  - Note the malfunction in the error log and contact the tech team.
- If it is not possible to continue broadcasting, transfer to the other studio. Press the “Give Studio” smart button, move to the other studio and press “Take Studio” button.
- If the studio switch is successful, continue broadcasting.
  - Note the malfunction in the error log and contact the tech team.
- If a studio switch is not successful contact the tech team.
- Never mention technical problems on air.
- Never give a station ID or an underwriting announcement immediately after a malfunction occurs.

**Electrical Shorts:**
Exposing electrical equipment to water can create a dangerous electrical arc.
Liquids and food are never allowed in the studios.
Should an electrocution hazard arise take these steps:
- DO NOT touch someone that is being electrocuted
- Turn off the electrical power immediately
  1) Do not touch a electrified piece of equipment or the electrical cord of the equipment.
  2) Locate the Triplite UPS at the bottom of the rack and press the “Off” button
  3) Turn off the electrical breaker in the breaker box (labeled by studio).
- Call 911 immediately if anyone has been injured.
- Contact the tech team.

**Tornado/Severe Weather**
Seek shelter away from exterior windows.
The studio areas and rear wall of the station are safer than the front windowed areas.
Avoid the tech room, the racks and the outside antennas in the event of lightning.
Should lightning strike the building the cables entering the building in the tech area must be inspected.
These cables present a possible fire risk. Contact the tech team.
If smoke or a burning smell is present contact the fire department.

Tech team contact information and emergency instructions are located in the RED binder
You are responsible for ensuring the safety of yourself, your guests, and KOOP. You must be familiar with the handling of emergencies that may arise.

**Fire Prevention:**

- Maintain a clean Station  
  - Do not allow combustible material like paper to accumulate.  
  - Pick up loose trash and help to empty trash cans regularly.  
- Keep doors closed and exits clear  
  - Closed doors reduce the spread of fire, especially the doors to the studios and tech space.  
  - Do not use anything other than standard door stops.  
  - Keep areas clear for emergency exiting (consider possible mobility challenges).  
- No smoking or open flames (i.e. candles) are permitted at the station.  
- Do not use or store flammable materials like paint, soldering irons, or heat guns at the station without consulting the tech team or administration first.

**Equipment Shorts & Fires:**

If you ever smell or see smoke in the studio follow these steps:

a. Try to determine which piece of equipment is causing smell/smoke.  
b. Turn off only the problematic piece of equipment, using its “On/Off” switch.  
c. If no “On/Off” switch is found, or if it is unresponsive, unplug the piece of equipment.  
d. If absolutely necessary, turn off the main power for the rack/ console or an entire studio.  
   - For a rack/ console: locate the Tripplite UPS at the bottom of the rack and press the “Off” button.  
   - For a studio/ room: flip the appropriate breaker in the breaker box next to the tech room door.  
e. If the smoke becomes a flame, KOOP has several extinguishers to stop small fires.  
f. Should a fire develop close the studio doors (if they are open).  
   - This both limits the oxygen to feed a fire and stops a fire from spreading quickly.

**Note:** The UPS unit must be turned off to immediately cut electricity to a rack or console.  
If it is not turned off, it will provide full power for fifteen minutes even with the breaker off.

**Fire Extinguishers:**

- Extinguishers are located throughout the building.  
- Some are marked with green stripes and are labeled “CLEANGUARD.”  
- The Cleanguard extinguishers do not damage electronic equipment or computers.  
- The standard dry chemical extinguishers will damage electronics.  
- Always use the Cleanguard fire extinguishers first.

**Using Fire Extinguishers:**

Always keep your back to an unobstructed exit. Stay eight to ten feet away from the fire, and follow the PASS (Pull Aim Squeeze Sweep) four-step procedure:

- **PULL** the pin - This unlocks the operating lever and allows you to discharge the extinguisher.  
- **AIM** low - Point the extinguisher’s nozzle (or hose) at the base of the fire.  
- **SQUEEZE** the lever above the handle - This discharges the extinguishing agent.  
  - Releasing the lever will stop the discharge.  
- **SWEEP** from side to side - Moving carefully toward the fire, keep the extinguisher aimed at the base of the fire and sweep back and forth until the flames appear to be out. Watch the fire area.  
  - If the fire re-ignites, repeat the process.
You are responsible for ensuring the security and safety of yourself, your guests, and KOOP. You must be familiar with the handling of emergencies that may arise.

Security Alarm:

The Security Alarm keypad is located by the Front door.
The last person to leave the station each day needs to activate the alarm.
Once the security alarm is activated, the station cannot be entered until morning.
The alarm activation instructions are posted above the keypad with the activation code.

To activate the alarm:

- Close the front door.
- Enter the security alarm activation code.
  After the alarm beeps three times, exit the door.
- Close the front door, then check that the door is locked.

Automatic door Lock:

As part of the security system, the station door locks each day automatically.
The door will remain unlocked during business hours and locked after 6:00 pm.
When the automatic lock is activated, the door can be opened from inside but not from the outside.
Be aware of this when exiting the station after hours.
When the doorbell is pressed, it sounds in the lobby and activates a security monitor in the studio.
Programmers on air after hours may need to open the door for other programmers.

Fire Alarm:

KOOP is equipped with an automatic fire alarm. If there is a fire and the alarm does not sound, activate the alarm manually. The manual “pull handle” to activate the alarm is located by the front door.

STEPS TO TAKE:

ACTIVATE the fire alarm.

- Lift up the clear plastic guard to reach the pull station.
  - A buzzer will sound when the clear plastic guard is raised. This is not the fire alarm.
  - Pull the white handle down on the pull station to activate the alarm.
  - When the alarm is activated, a voice warning system will sound to assist sight-impaired guests.
  - This system will announce “EXIT” followed by a distinctive noise to help locate the front door.

ASSIST in evacuating the building.

- Make sure all rooms are clear: offices, music library, studios.
- Close all the doors possible as you leave the building.
- Meet outside away from the building. Stay with the group. Make sure everyone is accounted for.
  - Note: If you are on the air when a fire occurs, you will also evacuate immediately.
  - Do not make an on air announcement or attempt to continue broadcasting.

CONTACT the fire department by calling 911.

- Stay on the line to provide details so they can dispatch accurately.
- Do not rely on the alarm to automatically notify the fire department.
- Notify neighboring businesses.

ASSESS whether you can mitigate the damage by using a portable fire extinguisher.

- Only do this if evacuation is in progress, and the fire is small.
- Make sure other station members know where you are.
- Before beginning, confirm you have a way to safely exit if your efforts are not successful.