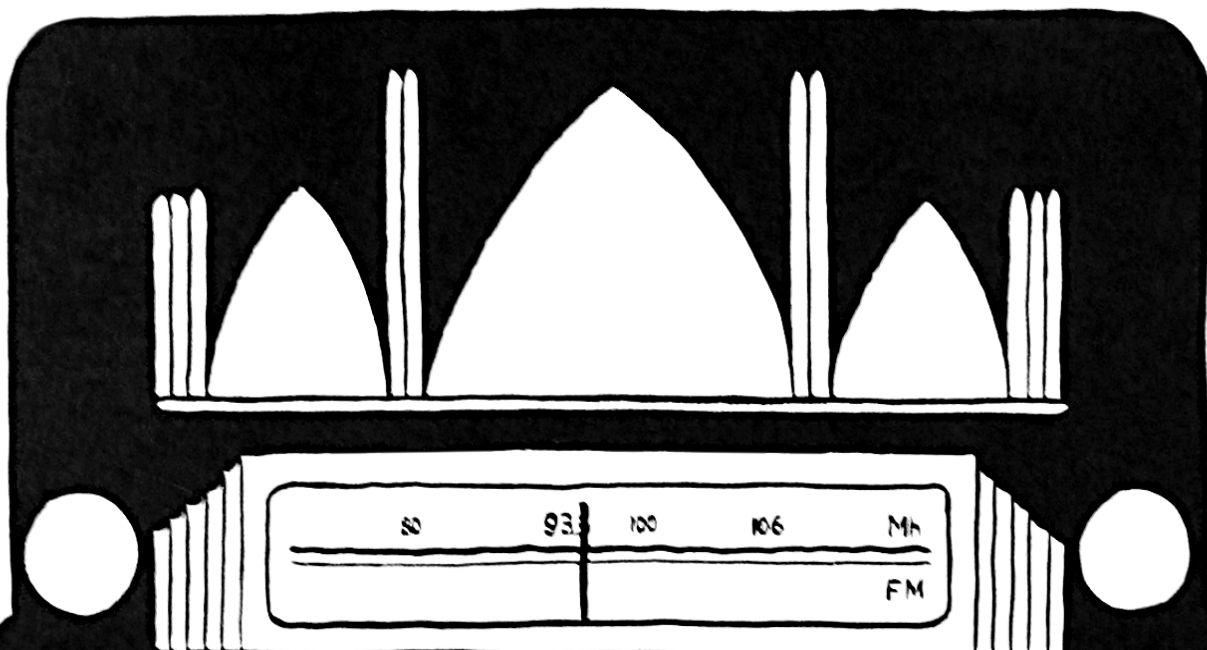


# CFRU

## ON-AIR MANUAL





## CFRU On-Air Manual

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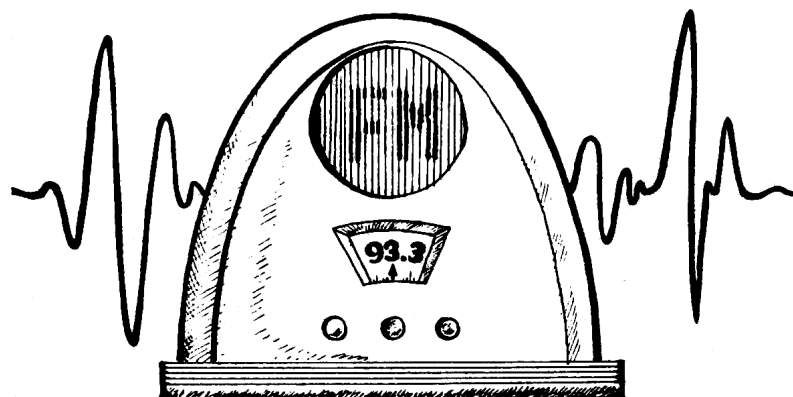






## ***Studio Rules and Procedures***

- 1. No food or drink anywhere in the studios.** Spilled food or drink can cause permanent damage to our mixing board. It costs over \$9000 to replace the console, and there are many other costly components in the room. Bringing food or drink into any studio is grounds for immediate suspension from CFRU, so please don't do it. It's okay to have food or drink in the hallway, the lounge, and the offices, but don't under any circumstances bring it into the studios. You are also responsible for ensuring that your guests know and understand this rule.
- 2. No smoking, alcohol, or drug use while programming.** There is no smoking allowed in the University Centre, and, even if it were allowed, smoke is extremely damaging to audio equipment. Programming under the influence of alcohol and/or drugs generally results in bad radio, and the Broadcast Act dictates that we can't consume either in the radio station. If the University or the CRTC receives a complaint about any illegal activities at CFRU, it could jeopardize our broadcast license.
- 3. Show up at least fifteen (15) minutes before your show.** Programmers must show up at least 15 minutes before the start of their show and be ready to go on air at the scheduled time. Programmers should also develop a transition system between shows. (For example, some programmers will end their show with a song and let the next programmer take over once it starts playing. Others will talk to the top of the hour and then put on the next programmer's first CD, having worked out in advance what that will be. The important thing is to find a system that works for both parties.)
- 4. Leave the studio promptly once your show ends.** Organize your CDs, LPs, and other paraphernalia so that you can leave quickly once your show is over. It's generally good to start doing this during your last song or in the last five minutes of your show. Also, make sure that your show ends when it's supposed to; it's not fair to other programmers for you to go into their time.
- 5. You are responsible for the behaviour of your guests (including telephone guests).** If you have guests on your show, you are responsible for ensuring that they don't violate CFRU's rules and policies. This includes what they say on-air, how they treat station property, and how they behave toward station volunteers. Note that the on-air studio can accommodate four guests and that there are other microphones in the production studio and new releases library. If you would like to have more than four guests or feature a band or your show, please talk with a staff member.
- 6. Don't alter the studio set-up without asking permission.** Please don't change the settings on the computer or the way any equipment is wired. If you use an extra microphone or other piece of equipment during your show, please ensure that you return everything to the way it was. If you need to make changes, please contact the tech coordinator at [tech@cfpu.ca](mailto:tech@cfpu.ca). If you bring extra chairs in to the studio remove them when you are finished.
- 7. If something is broken, let a staff member know.** If there is a major malfunction (e.g., our broadcast signal goes off the air), please telephone the emergency contact numbers for CFRU staff listed in the studio above the light switch. Start with the Tech Coordinator – unless the problem is about programming, in which case you should start with the Programming Coordinator. If something that's not critical breaks down, you should either tell the Tech Coordinator in person or fill out a fault report form and leave it in the folder beside the tech room.
- 8. Keep the studio clean.** Over 100 volunteers use the on-air studio. They shouldn't have to deal with your mess. Please take any papers, CD wrappers, etc., out of the studio once your show is over. If you find garbage in the studio, please throw it out.
- 9. Do not enter the on-air studio when someone is speaking on the air.** The microphones in the on-air studio pick up even the slightest noise, so please avoid entering the studio when a microphone channel is on. The light outside the studio door will light up when the microphone is on and turn off when it is safe to enter. If you must enter the studio while someone is speaking on the air, please be as quiet as possible and do not distract the speaker. Please keep the studio door closed whenever possible and avoid excess noise in the hallway.



# EQUIPMENT OVERVIEW

## Mixing Console

The Audioarts Console (a.k.a. mixing board) combines audio from diverse sources into a single stereo channel that we can transmit over the airwaves. The console allows programmers to select material for broadcast and to maintain consistent volume levels.



## Microphones

There are a variety of microphones in the studio designed to pick up voices (and instruments).

## Computer Systems

There are two computers in each studio. The first, on the left, is for playing announcements (ads, PSAs, etc.) and pre-programmed shows. The second, on the right, is for general use -- which includes browsing the web, recording programs, and playing audio files. Note that there is only one mouse for the two computers.



## CD Players Turntables and other inputs.

There are CD players, turntables and cassette players for playing back each of their respective media.

## Monitors and Headphones

Headphones and monitor speakers allow you to hear what is being broadcast, what you're recording, and what you've got lined up to play next.



The Program VU meters in the on-air studio will always display the dB levels for whatever content we are sending to the transmitter for broadcast. These meters should always be moving.



For ideal sound quality, the meter levels should peak in the -3 to 0 range.

Occasionally peaking in the red is okay, but not for long and not frequently.

Note that the Program VU meters only indicate the strength of the signal that we are sending to our listeners. This has no direct connection to the internal studio volume (i.e., speaker and headphones).



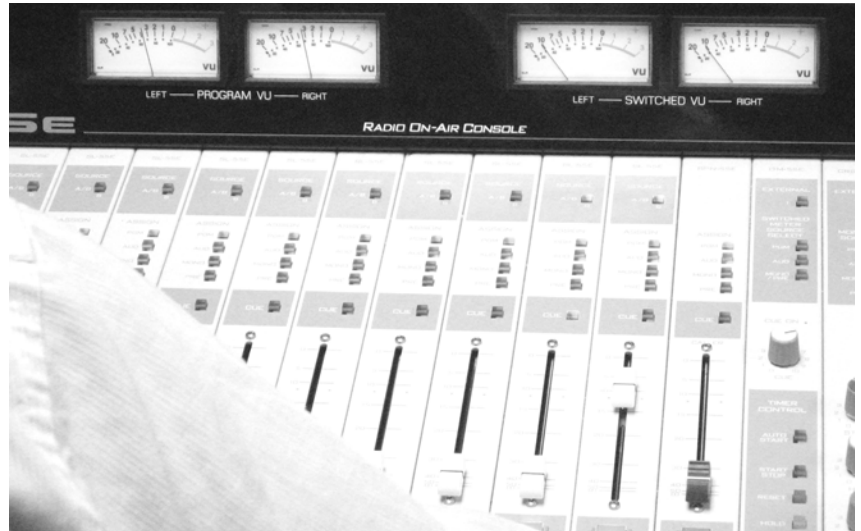
# CONSOLE - VU METERS

## Volume Unit (VU) Meters

VU meters provide a visual representation of the audio levels for any material you are broadcasting (or recording or cueing). The audio levels are indications of your signal strength (i.e. the average amplitude) and are measured in decibels (abbreviated dB).

The VU meters operate like a car's speedometer, in that the volume will be low if the needle is pointing to the left side of the dial and high if it is pointing to the right side. Ideally, you want the audio levels to be fluctuating in the range between -3 and 0. If your levels are consistently in the high end of the red section, then you are “peaking,” and what you broadcast will likely sound distorted to a person listening at home. If your levels are consistently low, it will be too quiet.

The meter bridge at the top of the console has two pairs of meters. The pair on the left, labelled “Program VU,” will always show the volume levels for the material that is being sent to our transmitter for broadcast. The pair on the right, labelled “Switched VU,” can display the levels for a variety of things.



The “Switched Meter Source Select” buttons are located above the cue volume knob (see photo to left). These allow you to set the Switched VU meters to show the levels for the Program Bus (identical to the left VU meters), the Audition Bus, the Mono and Pre Busses (left meter shows Mono, right meter shows Pre), or an external source that shows our actual broadcast strength through levels from an FM tuner.

If you have the Cue bus activated for one or more channels, the Switched VU meters will automatically shift to “Cue On” mode (a display light for which located just above the cue volume knob). In this mode, the Switched VU meters will display the audio levels for anything being played on Cue as though the fader levels were set to the -12dB dot on the board. [But perhaps we’re getting ahead of ourselves; see the next page for a detailed explanation of fader levels and the Cue bus.]

In the photo to the left, the Switched Meter Source Select switch has Program (PGM) selected, so that the meters show what is being sent from the console to be broadcast.

# CONSOLE

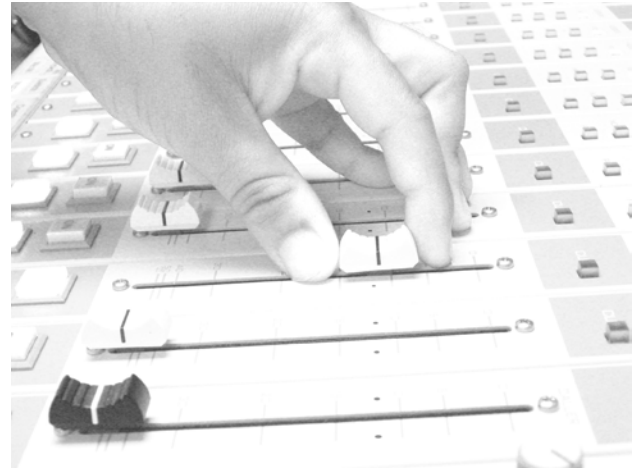
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# FADERS

The console channels allow you to determine which material is played through the board, its volume levels, and where the audio is sent.

A channel must first be **turned on** for its audio to be sent anywhere (i.e., for broadcasting or recording). This is done by pressing the red 'on' button. Conversely, a channel can be turned off by pressing the yellow 'off' button. Some devices (such as the CD players in the on-air room) will automatically start playing if you press the 'on' button. The on-air turntables are tricky: pressing the "on" button will either start a track if it's ready to play, or stop the track if it's already in motion.

The **Output Fader** for each channel can be moved up and down. As it is moved upward, the volume of the audio signal increases, and as it is moved downward the volume decreases. Note that different recordings (on CD, LP, etc.) will have different audio levels; the output faders let you to adjust the volume for each track to an optimal level. The slider also allows you to fade in or out of a piece, as you wish.



The position of the fader sets the volume of the input.

Most of the channels on our mixing console have two audio inputs. The **input selector**, located at the top of each channel, determines which input is in use. For instance, CD 2 and Turntable 2 share the same channel. When the input selector button is up and unlit, it will accept the A input (CD 2, in this case), and, when it is down, it will light up orange and accept the B input (in this case, Turntable 2). All other shared channels work in the same way.

\*

The **Bus Output Switches** determine where the audio for each console channel is sent. Audio can be directed through any combination of the output busses. [Yes, "busses" is the correct spelling here. Not like the vehicle, which is pluralized as "buses."]

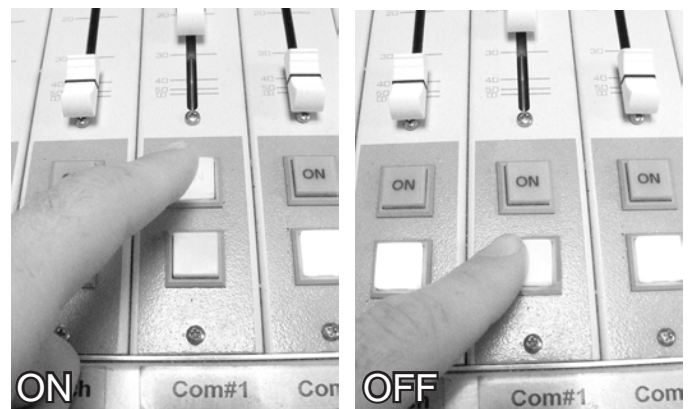
The **Program** (PGM) bus in the on-air room is used for broadcasting (in the Training Studio, it's mostly just used for demonstration). When you are broadcasting a show, the PGM button should be activated for **all** on-air channels. If you ever find that what you are playing is not audible through the mixing console, or if the Program VU meters are not moving, you should check that the relevant PGM buttons are pressed down.

The **Audition** (AUD) bus is used for recording. This bus routes the audio to computer B, where it can be recorded and saved. (There are also audio jacks located underneath CD Player 3 in the on-air studio that you may use to record to your own device.)

The **Cue** bus is activated by pressing one or more of the 'Cue' buttons on the board. (These buttons should **not** be confused with the 'Cue' buttons on the CD players, which have a completely different function.) The main advantage of using the Cue bus is that it allows you to preview a recording before broadcasting it over the air. The bus can also be helpful for finding the beginning of a cassette or LP track, checking that a CD or other device is working, or confirming the volume levels of a track. The Switched VU meters are "pegged" to the -12 dB dot on the board for all tracks played on Cue.

When using the cue bus, you will hear whatever is being played on the corresponding console channel(s) through an internal speaker on the meter bridge (located just to the right of the Switched VU meters) and also through your headphones. For instance, if you have the 'cue' button activated on the Turntable #1 channel and you play something on Turntable #1, the audio will come through the internal speaker and your headphones. Provided that the Turntable #1 channel is turned off, the audio will not go out over the air. However, having the cue bus turned on **does not automatically prevent** something from being broadcast. If something is on cue and its console channel is on, then the material **will** be broadcast.

It is very unlikely that you will ever need to use **Mono** or **Pre**.





## Source Select Switch

Switches between the two possible inputs for the channel (e.g., CD #2 or Turntable #2).

## Bus Output Switches

Assign the selected source to any combination of the console's output buses. Program (PGM) is for broadcasting; Audition (AUD) is for recording.

## Cue

Sends the channel's signal to the Cue bus so that it can be heard in the Cue speaker and headphones

## Fader

Sets the volume of each input.

Up is louder, down is softer.

The dot at -12 is a good default starting point.

## ON (red) and OFF (yellow)

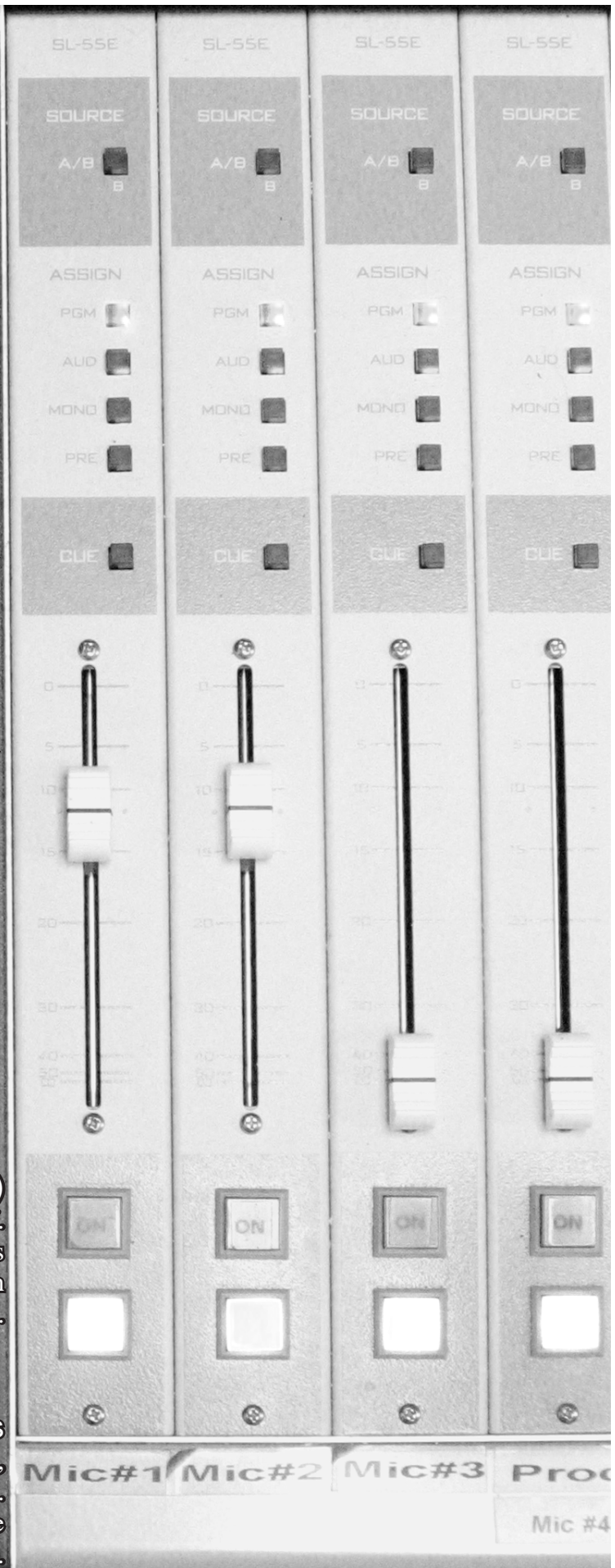
Turns the channel on or off.

Also remotely starts or stops inputs that have this capability (such as CD players). Note that turning on Mics 1, 2, or 3 will mute the monitor speakers.

## Labels

The A source is labelled on top, and the B source is labelled on the bottom.

The first three mics and the telephone channel have no B sources.



# - CONSOLE -

## OUTPUT/CONTROL ROOM

### MODULE

It's possible to record something on the Audition bus while broadcasting something different on Program. If you ever do this, please use caution! Make sure that whatever is supposed to be featured on air is **actually broadcast** and that you aren't stuck with dead air. Also, make sure that you don't leave your Audition track accidentally turned to Program as well -- this will cause the track to cut in to the on-air broadcast. Finally, make sure that all the Program bus selectors are turned on again when you leave the studio, so that the next programmer can broadcast normally.

#### Volume controls:

The lower part of the mixing console has three volume control knobs.

The lowest knob [Light Blue] is labelled **CR** for Control Room. Turning this knob adjusts the volume output from the speakers mounted to the wall. (Note that this has absolutely no bearing on the audio levels being sent out for broadcast or recording.)

You can change the output from these speakers with the **Monitor Source** buttons (located just to the right of the Switched Meter Source Select buttons). The speakers can be set to play the Program, Audition, Mono, or Pre busses, the external FM signal, or the Program bus from an adjoining room. (Selecting "Room 202" in the on-air studio will allow you to hear the Training Studio's Program bus; selecting "Room 204" in the Training Studio will allow you to hear the on-air room's Program bus.)

The middle knob [Cream] is labelled **HDPN** for headphones. This knob, as you might expect, affects the volume of all the headphones around the room.

The top knob [Dark Blue], labelled **STUDIO**, does nothing. If it were connected, it would control levels for monitoring in another studio.

There is also a **Cue volume** knob [Green] located over the timer controls. This controls the volume for the cue speaker on the meter board. Whenever the Cue bus is turned on, the Cue volume knob will also control the headphone volume levels. (Note: If you are playing different audio content through either Program or Audition while the Cue bus is turned on, you will still be able to hear that content on the main control room speakers.)

Please note that the monitors and cue speakers will be muted whenever any microphone channel is turned on. This is done to prevent feedback.

The **TB button** (talk back, bottom of the picture) is an intercom channel from on-air Mic #1 to the new music room. The Mic channel does not need to be turned on; the intercom functions automatically whenever the TB button is pressed. (Note: the TB button in the Training Studio sends the Training Studio mic to the cue bus.)



### Monitor Source

Select a bus to play through the headphones and monitor speakers. PGM will let you hear the content we are sending for broadcast.

### Cue Volume

This controls the volume of the cue speaker (located to the right of the VU meters). It also controls the headphone volume whenever a cue channel is turned on.

### Headphone Volume

This controls the volume of all headphones (unless a cue channel is turned on -- see above).

### Control Room Volume

This controls the volume of the monitor speakers.

### Talk Back Button

This allows Mic 1 in the on-air room to work as an intercom channel to the new CD room.

# MICROPHONES

There are three microphones in the on air studio, each mounted on its own boom (i.e., an adjustable arm connecting it to the board) and having its own channel on the console. All of the microphones are directional and are designed for programmers to speak into them more-or-less directly from the front. The mics, and their respective channels on the console, are arranged from left to right.

When using a microphone, it's best to position yourself 4 to 8 inches away (the width of your hand is a good approximation). This will allow the listener to hear some of the ambient space of the studio, which improves the overall sound quality. If you are too far away, then your voice will sound too quiet, and listeners will hear echo effects and other unwanted sounds. If you are too close, then very small facial motions will result in large volume changes; this makes it more likely that listeners will hear unwanted "popping" sounds (particularly when you pronounce plosives -- "P", "T", "B", and "S" sounds), and you will have an unnatural boosting of the lower frequencies (producing a deep voice effect).

The microphone should always be generally positioned toward your mouth, but shifting it a little to the side can help to reduce plosive sounds (and allow you to see a guest or computer screen). The mic boom can also be repositioned in relation to where you are sitting (i.e., adjusting the height and depth). Please be certain your mic channel is off before repositioning the microphone.

When you turn on a microphone in the on-air studio, the monitor speakers will become muted and a warning light (aka "tally light") will flash in the hallway, so that people outside the studio will know not to walk in when you are talking. Mics #2 and #3 in the on-air studio have red lights attached to their booms; each of these will light up when the corresponding mic channel is turned on, so that your guest(s) will know when their mics are active. Mic #1 does not have a light on its boom (as of yet); you will need to check the console to confirm if the mic is on or off.

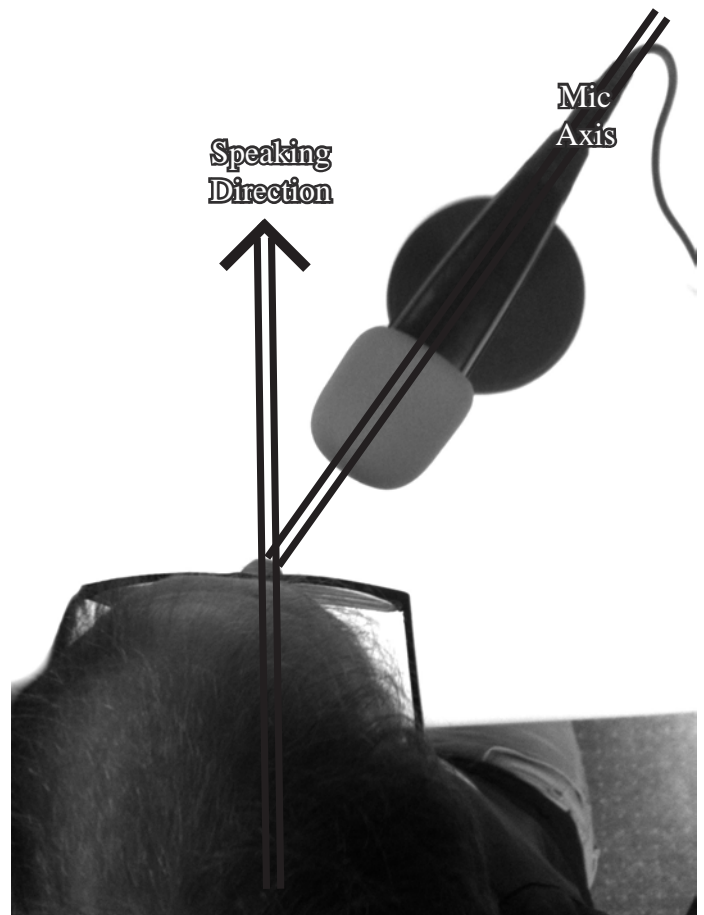
Please close the studio door before using a microphone channel, so that you won't have unwanted hallway noises transmitted over the air (closing the door will also reduce the noise levels for others working in the neighbouring studios). Be sure to turn your mic off once you've finished speaking, so that unwanted sounds will not end up on the air and people who need to enter the studio during your show may do so quietly.

Always put on a pair of headphones before turning on your mic channel -- this is the only way to hear yourself "on air." Your radio voice will likely sound different from what you would expect, and wearing headphones will let you know what you actually sound like to listeners. Using headphones will also make you aware of any sudden volume changes and will let you know if one person is louder than another.

When you are speaking, you should try to keep your mic at a consistent level with peaks between -5 and 0 dB (as shown on the VU meters), just as you would do with music.







**Light**  
 Mic #2 and Mic #3  
 have lights to indicate  
 when their respective  
 channels are active.

### **Mic Pattern**

The mics in the on air studio are receptive to sound in a three-dimensional pattern (somewhat like the sideways heart/strawberry shape shown above). These mics are directional but are also more sensitive to closer sounds.

# CD PLAYERS

## CD Players #1 & #2 - Denon DN-C635

The on-air studio currently has two Denon DN-C635 CD players. For the most part, the Denon CD players operate like any other consumer CD Player. When you insert a CD into the player, it will automatically cue to the first song (a process that has absolutely nothing to do with the “Cue” function on the console, btw). A cued CD is basically a CD that is paused and ready to play. If a CD track is cued in one our Denon players, it will automatically start playing when its console channel is turned on (and when you turn the channel off, the CD track will pause).

Other features of the Denons include:

- 1.) Tray Open/Close: This button ejects the CD tray. It will not (normally) eject a CD that is playing.
- 2.) Display: The display shows the track number, remaining or elapsed time, and other settings on the machine.
- 3.) Cue button: This cue button (which is separate from the Cue bus on the console) pauses the current track and returns it to a set cue point. The default cue point is the start of a track, though pressing “pause” or “search” will set it to a new point. Whenever a CD is cued, the red light above the cue button will be lit.
- 4.) Track select knob: This knob may be turned to either side to advance or reverse between tracks.
- 5.) Play Mode button: The play mode button switches the CD between single and continuous play. When in single play mode, a track will play to the end of the song and then cue to the next track. When in continuous play mode, the CD will continue through all the tracks to the end of the CD.
- 6.) Time button: The time button switches the display clock between showing the elapsed time of a track and the time remaining. When you are in continuous play mode, it can also display the total time remaining on the CD.
- 7.) Search buttons: These buttons will move through a track of music, similar to how fast-forward and reverse buttons work on a DVD player. On the Denon players, this function starts very slowly and gradually builds up speed if you continue to hold the button down.
- 8) Repeat button: Pressing this button when you are in single play mode will cause a track to play again from the beginning once it reaches its conclusion. When you are in continuous play mode, pressing the button will cause the entire CD to play again.

The Denon players have the ability to play MP3 CDs. The files on an MP3 disc will show up as individual tracks and can be played like tracks on a typical audio CD. The MP3s are not always assigned track numbers as based upon the CD order, so you may need to cycle through the tracks to find your desired files. The title and folder buttons should help you navigate the disc. Unfortunately, the Denons do not play MP3 DVDs.

## CP Player #3/#4 - Denon DN-C4500 Dual Well CD player

This CD player has two individual units (one on each side). Each unit has functions similar to those on CD players #1 and #2 as well as some other features designed for club DJ use. The Play, Pause, Cue, and track selector functions operate the same. Ask a staff member if you wish to know more.



### 1.) Tray Open/Close

This button opens and closes the CD tray.

### 2.) Display

This shows the current track number, followed by either the time elapsed or time remaining on the track or the time remaining on the disc. In this illustration, the CD player is at the beginning of the first track. Below that, you can also see that it is set to continuous play and to repeat the CD.



### 3.) Cue Button

Not to be confused with the Cue bus on the console, this button returns the track to a set cue point.

### 4.) Track Selector

This knob may be rotated to change track or return to the beginning of the current track.

### 6.) Time

This button allows you to switch between "time elapsed" and "time remaining" on the display.

### 5.) Play Mode

Pressing this button allows you to switch between single mode and continuous mode. Single mode is most often used because generally programmers only want to play a single track from a disc.

### 7.) Search

To move forward (or backward) through a track, press and hold either of the search buttons. It will advance slowly for the first few seconds but will build up speed after that.

# COMPUTERS

Each studio has two computers labelled “Computer A” and “Computer B.” In each case, a single mouse and keyboard combination controls both screens -- you can move the cursor between the screens with your mouse, and the keyboard will work on whichever computer the cursor is located.

## Computer A

The Computer A screen is the one located on the left side. This computer is designed primarily to schedule and play PSAs (Public Service Announcements), station IDs, and advertisements.

Use the channel labelled “Switch” to play back all items from this computer. The Switch channel combines the computer’s left and right channels (individually known as “Com 1” and “Com 2”) and can also switch the BBC satellite feed on and off when it appears in the iMediaTouch playlist.

Generally, there are four playable items assigned for each hour (usually including a station ID, two PSAs, and another station announcement such as a show promo). There will also be a memo for the Top of the Hour announcement and a Talk Break, but these are simply written reminders -- the files do not contain any audio.

The items you need to play will appear in sequence on the left side of the screen. Each item will have a magenta “Play” button to its immediate left and a “Cued” button of a different colour to its right. The latter button will show the total duration of the file.

To preview an item in iMediaTouch before playing it on air, first make sure that the “Switch” channel on the console is turned off but that its “Cue” bus is active. Then, press the “Cued” button to the right of any iMediaTouch item. You will hear a preview of the file’s intro and the outro, and then the item will be re-cued. Clicking the “Cued” button a second time when the track is playing will cause it to jump to the last 15 seconds; clicking it a third time will automatically set the track back to “Cued” mode.

To then play the item, deactivate the “Switch” channel’s cue function on the console and turn the channel on. Clicking once on the magenta “Play” button on the left will cause the item to start playing; it will also shift the item to the top of the playlist, if it is not already there.

Once the playback has started, clicking the START button a second time will pause the file, and clicking it a third time will resume playback. If you click the RECUE button when the file is in PAUSE mode, it will return to the beginning and revert to CUED mode.

When an item is playing, the bar at the bottom of the file display area will decrease in length to show how much time remains; it will turn red when there are only 15 seconds left. Also, a VU meter above the playlist will show the volume of the item as it is played. (Keep in mind that this only refers the source output level, not the fader level on the console; you will need to adjust the levels on the board as you would with any other source).

If the “auto” function at the top of the screen (in the centre) is set to “AUTO OFF,” then the iMediaTouch playback will stop after each track. If it is set to “AUTO ON,” the tracks will play in continuous mode. In the latter circumstance, the Talk Break will stop the auto playback.



There are several different tabs on the right side of the Computer A screen, but the most frequently used is the 'showlog' tab (listed underneath the grid, far left). The showlog display allows you to load and play back a variety of short soundclips -- for example, there are entries for short and long station IDs. To change the list on display, click the 'showlog load' button (turquoise, right side) and double click on the list you wish to load.

#### Basic Troubleshooting:

If you do not see any items scheduled for your show on the left side of the screen, follow these steps until you do:

- 1.) Check to see if the "Top" button in the lower left corner of the display is flashing. If it is, click on it to return to the top of the play list.
- 2.) If this does not work, click on the iMediaTouch logo in the upper right corner.
- 3.) Click on the "move to current time" button (you will also need to click on an "ok" button).
- 4.) If this does not display the items you need, repeat step 2.
- 5.) Click on "Reload Log" button (you will, once again, need to click on an "ok" button).
- 6.) Repeat steps 2 and 3.
- 7.) Click on the "Done" button to bring back the regular display on the right side of the screen.

# COMPUTERS

## Computer B

The Computer B screen is the one located on the right side above the console. This computer is for general playback of audio files, reading/writing scripts, recording and editing, and digital log sheets. you can also use it to surf the “Web”!

Playback of audio through the console takes place on the channel labelled “Comp B”. Audio can be routed into this computer (for recording purposes) by using the “Audition” (AUD) bus. The process of cueing/previewing items for from Computer B is similar to the same process used with CD players, individual playback programs may also have additional level control.

If you are playing back audio from an external source like a USB drive or website, be sure to make a ‘local copy’ to play back, Streaming audio and similar methods are often subject to freezing, buffering or other interruptions. Also, if the source files are on the volunteer drive, it would be best to make a copy on the computer itself (a ‘local copy’) to play instead.

The “Volunteer Drive” is a locally shared network for the temporary storage of files and can be accessed from all workstations in the station. There is a shortcut to it on the desktop of each computer. Please keep files organized in folders related to each individual or show’s name in either the “Music” or “Spokenword” folders. There is a text file on the volunteer drive called ‘about the drive’ that explains some basic information about using it.

Winamp is the primary audio player on Computer B, though iTunes and Windows Media Player are also available. Winamp is used primarily for audio playback, and can be used to make playlists.

There is a link on the desktop that opens the Democracy Now broadcasters download page (which brings you directly to current show downloads). Democracy Now is played every weekday at 11:00 AM. If you are responsible for setting up Democracy Now to play, follow the link on the desktop and right click on the ‘Audio’ link. This will bring up a mouse menu, where you can click ‘Save Link As...’. From here, you should save the file to the desktop (the file name will be ‘dn’ followed by a number sequence describing the date). A ‘download’ pop-up will show the new file highlighted, and you can double click that or the file on the desktop to open and play it in Winamp. Make sure to download the file (to be played in Winamp), rather than playing it through the browser.

Another desktop link can be used to play the BBC in Winamp. This is provided in case the BBC feed on the console is not working, or if you need to line up the BBC in Winamp to play after items in your playlist.

There is also a link on the desktop brings you to the Weather Canada page, which displays basic weather news for the station (alerts, forecasts, etc.).



There is a USB extension that runs from the Computer B tower to the box that is to the right of the console. This simply adds another USB port, which may be easier for you or your guests to reach.



## Computer B

The computer tower is located on the counter beside the rack that has the CD players. You may wish to use the optical drive (aka DVD/CD drive) to play back MP3 cds and other discs that can't be played in the CD players. You may also wish to plug a USB drive in to this computer to access other files on your own drive

# TELEPHONE

The telephone channel on the console is unique in that it not only receives audio from your caller, but also sends audio back to the caller allowing them to hear you. The phone channel looks identical to other channels except that it does not have an A/B source switch and its fader is blue.

The CFRU request line (aka on-air line) phone number is 519-837-2378. This is the number for the on-air studio and also the phone near the station's front door, beside the couch. There is also a production number, 519-837-0372, which is used in the production and training studios. There are no phone ringers in the studios. Instead a white flashing light will let you know that the phone is ringing (you may also hear the hall phone ringing, depending on where you are).

Having a caller on the air requires similar consideration to having a guest in the studio. When you have a caller on the air you are responsible for what the caller says. For this reason we do not allow random call-ins. You must also make sure that you have the consent of the caller before putting them on the air. Be sure to ask them. You may also dial the wrong number, have someone other than who is expected answer, or receive a call from someone other than the person that you are expecting to call. For these reasons always start your call using the handset.

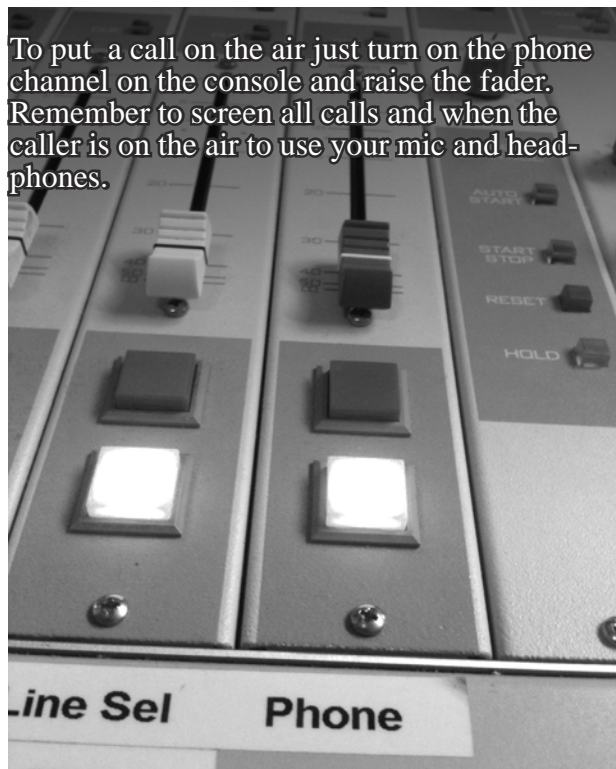
To transfer a call to the air (once you've established the connection) press the on button on the phone channel. This will remotely turn on the phone hybrid as well as turning on the channel, diverting the call from the handset to the phone channel on the console. The handset will go dead and you may put it back on the receiver. If your mic channel is not already on turn it on and put your headphones on to hear your caller.

Raising or lowering the phone fader on the console will adjust the volume of your caller. Your caller will hear whatever is on the same output bus as the phone channel; for instance, if you have the phone channel assigned to the Program bus (to go on the air) and you also have your mic on and assigned to the program bus, then your caller will be able to hear you.

When you are finished using the phone, be sure to turn the phone channel off and put the phone handset back on the base so that you can once again receive calls.



To put a call on the air just turn on the phone channel on the console and raise the fader. Remember to screen all calls and when the caller is on the air to use your mic and headphones.



The phone in the on-air studio is used for placing or receiving calls. When you turn on the phone channel, it will be disconnected.

The phone light in the on-air studio will flash white when someone is calling the on-air line



The phone that is at the end of the hall beside the couch will ring when someone is calling the on-air line.

# LOG SHEETS

CFRU uses digital log sheets through the program FileMaker

- 1) If the program isn't running when you begin your show, double click on the "Logsheet" icon on Computer B.
- 2) Select your show name from the drop down menu next to "Show Title". Fill in the show name, "Start", and "End" details at the top of the page. Please note that you'll need to use the 24 hour clock (1pm = 13:00). If you are doing a fill-in select "Fill-in" from the menu and enter all other required information.
- 3) Fill out each row of the log sheet as you would with a paper log. Remember to document the start and end times of all spoken segments, including interviews, PSAs, ads and show promos.
- 4) As you need more rows, click "create a new entry"
- 5) At the end of your show, when you've finished filling out the log sheet, click the green button at the top of the page. If you need a little more time to finish up click the yellow button and your logsheet will be sent to the computer in the new releases library, where you can complete it (not forgetting to hit the green button when you are done). Please do not click the green or yellow buttons before you've finished.
- 6) The paper log sheets are still available on the shelf in the hall way in case you have difficulty or a technical problem completing a digital log sheet (but please give Filemaker a shot, as it would be great to cut down on the paper we're using).

FileMaker Pro Advanced - [logsheet]

File Records Edit Tools Window Help

Records 30 Total (Unsorted)

Show All New Record Delete Record Find Sort

Layout: standard logsheet View As: Preview

show title **Awesomeshow Ever** show start 09:00:00 show end 11:00:00 guests in studio  
 programmer **Jane Doe** date 01/02/2012 show description indie and underground music, with a focus on upcoming local live shows  
 email **awesome@cfmu.ca** weekday Wednesday show cat # 21

LOG #	start time	end time	ARTIST / TALK	ALBUM / SOURCE	LABEL (if new)	SONG / LANGUAGE (if n...	CHECKBOXES
12	9:00	9:15	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Wax Mannequin	and Gun		This Weather	<input checked="" type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Rae Spoon	I can't keep all of our secrets	saved by radio	curse on us	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	9:24	9:25	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Patti Smith	Outside Society	Legacy	Smell Like Teen Spirit	<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	9:30	9:33	talking and PSA's				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Jandek	Seattle Friday	corwood industries	Live Right	<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Pauly and the blow bots	Stone Boner	Label Fantastic	Blend the Blue	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	9:44	9:45	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Al Tuck	Under Your Shadow	New Scotland	None but your mother	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Bry Webb	Provider	Idee Fixe	Rivers of Gold	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	9:55	9:55	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Coeur De Pirate	Blonde	Grosse boite	Golden Baby	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Charlotte Gainsbourg	Stage Whisper	Because Music	Memoir	<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Young Galaxy	Versus	Paper Bag Records	Spellwork	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			MOTem	soundcloud	gebbz Steelo	sinking feeling	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	10:16	10:17	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			KRS ONE	The BDP	Mess Hall	The Solution	<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			The Get By	Let Go	ind.	Stereotypes	<input checked="" type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			The Roots	Undun	Def Jam	Tip the Scale	<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			MED	Classic	Stones Throw	Where I'm From	<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			VA: Royal Blood	Noah 23	CFRU	Can't Stay Mad	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Mayer Hawthorne	How do you do?	Univeral Republic	Can't Stop	<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	10:40	10:43	talking and PSA's				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			The Diodes	Action/ Reaction	Bongo Beat	Heat or the Beat	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Martha and the Muffins	Echo Beach 7"		Echo Beach	<input checked="" type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	10:52	10:53	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			VA: Everybody Dance Now	Miramichi	cfmu	Gretta	<input checked="" type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
21			Neon Indian	Era Extrana	Static Tongues	Hex Girlfriend	<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
12	10:57	11:00	talking				<input type="checkbox"/> cancon <input type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl
							<input type="checkbox"/> cancon <input checked="" type="checkbox"/> new <input type="checkbox"/> hit <input type="checkbox"/> instrmntl

**MUSIC LOG NUMBERS:** 21 - Pop / Rock / Dance; 22 - Country/Country-Oriented; 23 - Acoustic; 31 - Concert; 32 - Folk / Folk-Oriented; 33 - World beat / International; 34 - Jazz / Blues; 35 - Non-Classic Religious

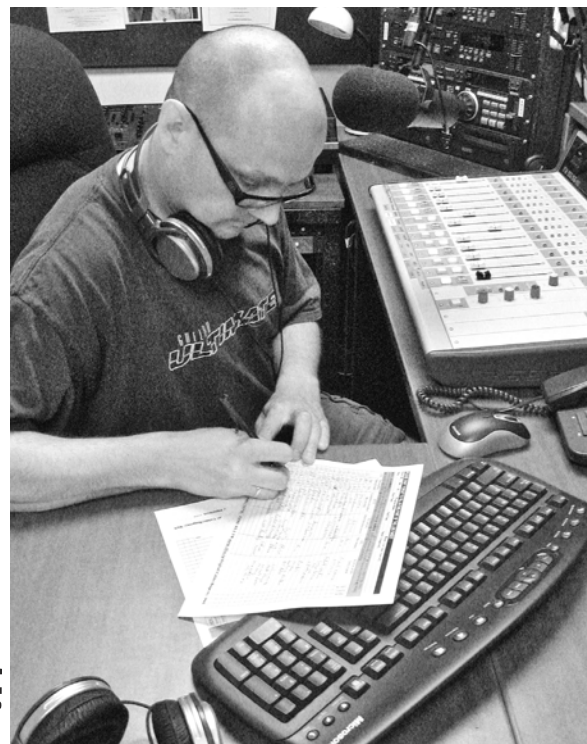
**OTHER LOG NUMBERS:** 11 - News; 12 - Spoken Word (all other talking including PSA's); 41 - Themes; 42 - Tech Tests; 43 - Station ID; 44 - Programmer / Show ID; 45 - Show Promo; 51 - Ads; 52 - Sponsor ID; 53 - Promo / Sponsor Mention

CFRU 93.3 FM - Guelph, Ontario - 250 Watts  
 Request line: (519) 837-CFRU(2378)  
 Digital Cable(Rogers): 948  
 www.cfru.ca

100% Browse

Start 1. Democracy Now! - De... FileMaker Pro Advanc... Show Promos CFRU 93.3 FM - Mozilla F...

11:31



If for some reason you are unable to access or complete the digital log sheets we still have paper logs. However, we try to avoid using paper logs when possible.



# MIC MIXER

If you need to use more than the three microphones permanently installed in the on-air studio, there is also a mic mixer that can allow you to add up to an additional four microphones. This mixer is located above the CD players in the rack to the left of the console (see photo). It has four inputs and one output; there are individual volume knobs for each input, and there is additional knob (located to the right of the mixer's VU meter) that will control their combined output volume.

The inputs are numbered from "one" to "four" and are colour coded. Number one (yellow) is the leftmost mic in the new music library; this mic also has a yellow windscreen. The second mic (blue) is located to the right of mic one, also in the new music library. The jacks for inputs three and four (green and red) are located low on the wall opposite the console in the on-air studio, beneath the black bulletin board (we can assist you to connect microphones here if you let us know in advance that you need them). These mono XLR jacks are designed for mic inputs and will provide phantom power for your condenser mic if needed.



Unlike the individual inputs which simply change volume for each mic, the output will either reduce the summed output of the mixer, if turned counterclockwise, or will apply compression if turned fully clockwise.



# HEADPHONES

Headphones are not just for decoration. Since the monitors (speakers) in the studio are muted whenever a microphone is turned on, you will need to use your headphones to monitor the broadcast levels. This is especially important for speaking on-microphone; very slight changes in mic direction or distance from the microphone can cause huge differences in the way things sound.

## Isolation

Ideally your headphones should do two jobs: blocking out the sounds of the surrounding environment, and letting you hear what you are broadcasting. To do this well, you'll need to have the volume loud enough to cancel unwanted noise, but quiet enough for comfort. You don't want to hurt your ears!

## Volume / Loudness

With headphones you will be able to recognize the differences in volume between different sources. This is especially important with guests or panel discussions. A guest with a naturally carrying voice will sound louder than another individual, but you can adjust the volume of each individual (by adjusting the fader positions of the mic channels) so they sound similar in your headphones. You will also want to use your headphones to make sure that your voice is audible over backing music.

## Cuing function

When you activate 'Cue' on any channel, the audio from that channel will automatically be sent into your headphones, replacing whatever program you would otherwise hear. Remember to take everything off 'cue' before you turn your mic on, as you will not hear the mic channel in your headphones in this situation (which can be very disorienting).

## Volume control

You will need to use a combination of the VU meters on the console and volume changes in your headphones to judge the 'true' volume of what is being broadcast over the air. First, make sure that what you are broadcasting (or about to broadcast, if you are cueing something) has levels that peak in the -5 to 0 db range on the VU meters, then adjust your headphone volume (using the volume knob marked HDPN) to a comfortable level where you can clearly hear the details of what you are broadcasting.

If you have guest(s) who require greater or lesser volume in their headphones you can adjust the volume for each jack by adjusting the headphone amplifier (which is located just below the mic mixer). The numbers on the headphone amp correspond with the numbers of the headphone jack on the metal box beside the console.

# LINE-IN

To play other devices on the air you will need to plug them in to the console using one of the line-in jacks.

The jack for Line-In #1 is located on the metal box to the right of the central board. There should be a purple cable plugged in to this jack (though sometimes it is in the jack for Line-In #2). This cable is designed to fit a stereo headphone jack such as those commonly found on laptops, MP3 players, and many phones.

If you wish to have your device to the left of the board or if you need a different type of input jack, there are more inputs located below CD Player #4 (in the bottom right corner of the desktop audio rack). You will need to push the Line select button on the console that corresponds to the Line-In jack that you are using. This is located in the upper right corner of the control surface of the board (to the right of the Monitor Source” buttons).

The output from the Line-In switch goes to the channel on the console where it is labeled Line-Sel.

