

# Sound How To

7:30am:

1. Power up the board by using the power switch on the right rear of the sound board. Then power up the two power conditioners on the top right of the amp rack on the stage.
2. There are two main types of sound checks: quick and complete. This how-to will cover the quick method.
  - a. Before beginning sound check:
    1. Verify that all channels are muted (channel number is lit red) and sliders are all the way down.
    2. Verify that the monitor masters are muted and sliders all the way down.
  - b. Sound check - Main or House Mix (the speakers that face the congregation):
    1. Note who is playing and in what channel. Many of our channels stay the same (vocals, piano, bass, etc.). Channels may need to be reassigned.
    2. One by one, unmute (press red channel number button) each used channel and slowly bring slider up to a good volume.
  - c. Sound check - Monitors (speakers facing the band):
    1. There can be up to five different monitor (or aux or bus) mixes - four for the band and one for the room across the hall (Aux 8).
    2. Each "master" bus level is show on the corresponding bus layer.
    3. "Sends on Faders" button is your friend! When this is selected, just select Bus 1-8 and the levels of each channel in that bus is now showing on the channel faders. Or, select a channel and it's level in each bus is show on the bus fader.
    4. Often the band will want to play at least part of a song together and then request more changes now that they know how loud each other are in the monitors. If they have the Behringer X32 app for iPhone, iPad, or Android, they can also adjust this themselves.

8:00am (After sound check - band practice):

1. The band will continue with practice. Tweak house levels as needed and monitors as requested.
2. Note changes in instrumentation (if there is an instrumental solo, if the lead vocals switch on entire songs or within a song, etc.) and practice "playing" the sound board as an instrument. Learn about other parts of the sound board like EQ, compressors, reverb, etc.

9:00am (After band practice):

1. The computer operator is preparing pre-service music. Be sure iMac channel is ready to go.
2. Verify that sound is coming through across the hall in the overflow room.
3. Sound check the podium mic and wireless mic.

9:30am (member service):

1. The podium mic as well as the music leader's channels will be used. Sometimes a wireless mic will also be used.

10:30am (congregational meeting):

1. Prior to sermon, select USB Recorder in the top center of the board and begin recording.
2. When sermon finishes, end the recording. Leave the USB drive plugged into the board.

12:30pm (After the service):

1. The computer operator is preparing post-service music. Be sure iMac channel is ready to go.
2. Mute all instruments and monitors so the band can unplug and pack up.

Links:

- Here's the source of following screenshot: [http://media.music-group.com/media/PLM/data/docs/P0ASF/X32\\_QSG\\_WW.pdf](http://media.music-group.com/media/PLM/data/docs/P0ASF/X32_QSG_WW.pdf)
- Here's the full manual: [http://media.music-group.com/media/PLM/data/docs/P0ASF/X32\\_M\\_EN.pdf](http://media.music-group.com/media/PLM/data/docs/P0ASF/X32_M_EN.pdf)

# CFC Tech How-to

## Board Layout:

1. Channel Strip: This section will give details on whatever channel (input or output) is selected. Here you find the following sections:
  - a. Config / Preamp: Here is where the gain and phantom power are found.
  - b. Gate / Dynamics: Here is where noise gate, ducker, compressor, and expander are found.
  - c. Equalizer: Here you can adjust the four different EQ frequency, bandwidth (Q), and gain as well as add high cut and low cut settings.
  - d. Bus Sends: Here is one of the many methods to send an input channel to a bus.
  - e. Main Bus: Here is where you can adjust the level of the main mono mix (which we don't use) or pass a channel left or right.
  - f. USB Recorder: Here is where you can insert a USB drive and record the main mix of the board directly to a WAV file on that drive.
2. Input Channels - This is where many people get confused. This board has motorized faders (sliders), meaning that the various faders on this board represent different channels depending on which layer is selected. To the far left of this bank of faders there are four different layers.
  - a. Ch 1-16: This layer moves this bank of faders to represent channels 1-16.
  - b. Ch 17-32: This layer moves this bank of faders to represent channels 17-32.
  - c. Aux In / USB / FX Returns: This layer moves this bank of faders to represent Aux 1-8 (1/4" and RCA plugs on rear of board - which we use for iMac), USB playback (to play back from the USB recording drive), and FX Returns.
  - d. Bus Master: This layer moves this bank of faders to represent bus mixes 1-16.
  - e. On each fader strip you will find a channel select button, an input level meter, a Compressor and Gate indicator (top and bottom lights of the input level meter), Solo button, channel label (know of the Scribble Strip), Mute button, the channel select button, and a motorized fader.
3. Display and Monitoring
4. Group/Bus/Main Channels - This is another group of 8 faders that can represent different levels, depending on what layer is selected. All of these represent groups and outputs (no inputs here). This group also has the main output fader, which is always available no matter what layer is selected.
  - a. Group DCA 1-8: DCA (digitally controlled amplifier) is a kind of channel groups. When the level is turned down or muted, that group of channels will have the level lowered or muted. It's like doing that to all the channels in that DCA at the same time. We've assigned the following DCAs:
 

DCA 1 as drums	DCA 5 as speaking mics (podium & wireless mics)
DCA 2 as lead vocals	DCA 6 as iMac
DCA 3 as background vocals	DCA 7 as sub
DCA 4 as instruments	DCA 8 as overflow
  - b. Bus 1-8: This is the same as the fourth layer on the Input Channel bank of faders, but just shows the first 8.
  - c. Bus 9-16: This is the same as the fourth layer on the Input Channel bank of faders, but just shows the last 8.
  - d. Matrix 1-6, Main/Center: We use Main/Center for our subwoofers.
5. Scene/Assign/Mute Groups
  - a. We do not typically use this section. Muting groups of channels is done via DCAs.

