

# Using WICN's Studio 50

## A Workflow Guide for Engineers

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### **Introduction**

The purpose of this guide is to provide audio engineers with a comprehensive understanding of Studio 50's equipment and facilities, as instructions based on certain established techniques. It is assumed that engineers utilizing this document already possess experience and knowledge regarding music recording, mixing, and mastering. However, this guide serves to provide them with the necessary resources to deliver top-quality services to clients at Studio 50.

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# **Inventory**

## **Computer Equipment**

- Apple iMac with OS 10.13
- Genelec 5" Powered Studio Monitors (pair)
- JBL 308P MkII Powered Studio Monitors (pair)
- ProTools Ultimate 2020 DAW Software
- Plugins
  - Celemony Melodyne
  - Izotope Ozone

## **Outboard Equipment**

- Behringer X32 Mixer
- Stage Rack with mounted equipment
  - Midas DL16 Midas DL16 16-input / 8-output Stage Box
  - Behringer distribution amp
- Behringer Powerplay P16-M 16-channel Digital Personal Mixer ( x 6 )
- Soundcraft Mixer (backline mixer)
- Avid C24

## **Instruments**

- Baldwin Grand Piano with bench
- Taye Jazz drum kit
  - Kick Drum
  - Snare Drum (sith stand)
  - High Mid and Low Toms
  - 2 Cymbal Stands
  - Hi Hat Stand

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**NOTE:** All of the following equipment is located in the black cabinet in the control room.

### **Dynamic Microphones ( Top Shelf )**

- Shure SM57 ( x 3 )
- Shure SM58 ( x 2 )
- Shure Beta 52A, Dynamic Kick Drum
- Shure SM7B, Vocal Mic
- Audix D4, Hypercardioid Dynamic ( x 2 )

### **Condenser Microphones ( Second Shelf )**

- Audio Technica 414
- Vanguard Audio Labs V1, Stereo Pencil Condenser kit, includes two each: cardioid, wide cardioid, hypercardioid, and omnidirectional capsules
- Vanguard V4
- Audio Technica AT4040 ( x 2 )
- Royer R-10, Large Ribbon Element
- Lauten LA-320, Vacuum Tube Condenser Microphone
- Sennheiser E914, Pencil Cardioid ( x 2 )
- Neumann m80

### **DI Boxes ( Bottom Shelf )**

- Radial ProD2, Passive 2 channel DI, compact design with 2 Radial transformers
- Radial ProDI, Passive direct box, compact design with Radial transformer
- pro co DI ( x 3 )
- Radial DI
- Radial stereo DI

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## Headphones

There are many Audio Technica, Beyerdynamic, and other branded headphones within the control room.

## Cables and Stands

XLR, TRS, and Instrument cables are stored on the wall mounted board in the control room next to the cabinet. Several mic stands of multiple sizes are available for use as well, including a large overhead mic stand.

## Client Management

Audio engineers are vital in assisting clients to achieve their desired sound and music goals. To ensure a positive and productive experience, audio engineers should approach their clients with care, respect, and open and clear communication, as well as a willingness to be understanding and flexible. Adhering to these guiding principles establishes a healthy dynamic and fosters a working relationship with the client to achieve optimal results.

## Receiving Clients

As of 2023, WICN's website features a [booking form](#) that is used to vet clients before they schedule a session. This form provides WICN with client contact information, the type of session they wish to book, their intended timeframe, and a short description of their project. Engineers can use this information to gauge whether a potential project would be a good fit for themselves or the studio, even before reaching out to them.

Contact the station manager David Ginsburg, or the head audio engineer Brad Pierce about potential clients. They will provide the contact and project information they submitted through the new form on WICN's website.


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## **Session Procedures**

### **Rider**

There will be a Rider – a binding document between the client, the performer, the engineer and anyone else involved – that should be followed to the letter for every event.

1. Make a copy of the following Rider template:

 WICN Rider Template 022523

2. Rename document to: *"client or group name at WICN Rider, date of event"*
3. Fill out currently known information into Rider.
  - a. Name of client/group, known instruments,
4. Share with the client via google drive and ensure that they then fill out the necessary information for their session needs. Remind them that changes to the rider need to be made well in advance of the event date.

### **Stage Plot**

The stage plot is a blueprint of the Studio room that should be setup to create a clear picture of how the session will be laid out physically.

1. Make a copy of the following Stage Plot template:

 WICN Stage Plot Template 022523

2. Rename document to: *"client or group name at WICN Stage Plot, date of event"*
3. Share with the client via google drive.

### **Cable Usage**

An aspect of audio engineering that is often overlooked and ironically important is wrapping cables properly, as well as routing them. Below are bullet points detailing the expectation for how they are to be wrapped and routed at Studio 50.

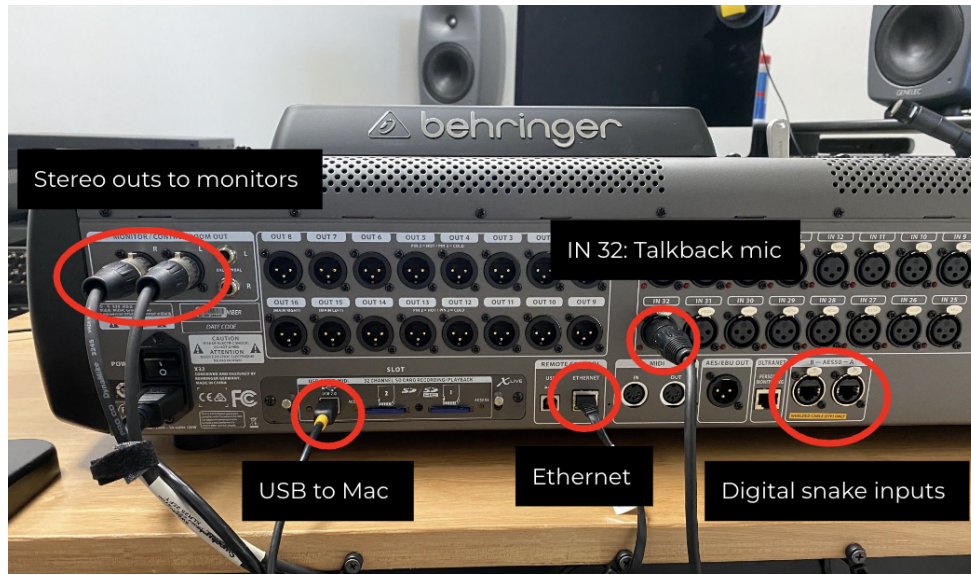
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- Routing cables
    - Minimize tripping hazards
      - When possible, cover cables with rugs available in the room.
      - Route cables around players' areas.
    - Leave room for adjustments
      - Leave a few feet of coiled cable at the base of mic stands so they can be moved freely.
      - Ensure there is slack in the cables near adjust points on mic stands. (i.e. mic clips should be able to rotate freely after routing)
  - Wrapping cables
    - Please follow the correct procedure when wrapping cables to ensure their longevity by avoiding tangles.
    - Use a cable wrapping technique like the Over Under method, demonstrated here: [▶ How To Wrap a Cable the Right Way Over Under](#)

## Computer

1. Boot devices: audio interface, computer, mixer, studio monitors.
2. Login, then open a ProTools template depending on the event.
  - a. Session templates are located on an external hard drive SSD plugged into USB port

## Mixer

Please review the [Behringer X32 Mixer User Manual](#) for operational instructions. The mixer is frequently moved between the control room and the performance space for different events. See the following image for the proper connections when moving the mixer back into the control room:



## Live Streamed Event

Each live event must be set up differently according to the needs of the client, how many people there are, etc... However, typically the engineer will be seated adjacent to the audience with the X32, adjusting levels and ensuring the sound quality going to the radio is how it should be. For all live events, follow procedures for administering [Riders and Stage Plots](#).

## Equipment Setup

All of the necessary equipment should be set up and checked at least a day before the live event, in addition to a sound check before the event starts.

### List of Equipment needs

- Microphones and stands
- X32 Mixer
- Radio connections via wall circuit located opposite the radio windows
- Stage rack connected to mixer
- Provide music stands if necessary

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- Room speaker / monitors
  - Cables checked and routed correctly
  - Chairs for live audience

### Picture Example of Live Streamed Set Up



### Video Examples

[Mark Mandeville & Raianne Richards Live in WICN Studio 50](#)

[Kala Farnham Live in WICN Studio 50](#)



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## Podcast and Music Recording

Music recording techniques are generally left up to the expertise of the engineer. Podcast technique recordings also generally refer to the engineer. However, we have provided an example of a typical setup for a podcast recording session. Setup for these types of sessions is subject to the audio engineer running the session.

### Equipment Setup

- Microphones
  - Microphones placed on boom arm
  - Space mics roughly 5-6 inches from face ( use hand spacing: 🤝 )
  - Level mic at nose level
  - Pointing towards the mouth of the speaker
- Personal Mixers
  - Place on the left side of the speaker
  - Set all volume levels to 75% of max
  - Write the channel labels on a strip of tape on the personal mixers
- Typically provide a pair of headphones, and a music stand for notes / scripts.

### Example

This podcast included 5 people who each needed to be recorded with their own setup.



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## **ProTools Usage**

Pro Tools has become the go-to choice for many professional audio engineers due to its widespread adoption, comprehensive feature set, compatibility with different workflows, and strong support. While other engineers may have their own preferences and workflows, Pro Tools is the digital audio workstation of choice at Studio 50.

### **File Formatting**

#### **Saving Files**

Historical Safety: Keep session files in an organized manner to ensure their safety.

When working on tracks on a new day, create and save duplicates incrementing number labels by 1.

(Ex. Recording bass, name is "Bass .01" Once you begin working on it "Bass .02", if you work on it two days later... Duplicate it, and rename "Bass 0.03" )

#### **Exporting files**

Ensure that clients have access to files through a file sharing system such as Dropbox, Google Drive or SugarSync. Share the link to the file sharing system with the client.

#### **Naming Conventions**

Keep files organized with uniform naming for all session files. Use the following formatting:

Client Name / Date Code (Ex. Susan's Trio 022123)

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## QR Code

To share this document, use the following QR Code:

