

# Intermediate Unit 3: Live Sound and Recording Tech

Content Area: **Arts**  
Course(s): **Music Technology**  
Time Period: **Semester 1 & 2**  
Length: **2 Weeks**  
Status: **Published**

## Standards

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MU.9-12.1.3E.12acc.Pr4a	Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.
MU.9-12.1.3E.12acc.Pr6a	Using digital tools and resources, demonstrate technical accuracy and expressive qualities in prepared and improvised performances of a varied repertoire of music representing diverse cultures, styles, and genres.
MU.9-12.1.3E.12acc.Re7	Perceiving and analyzing products.
MU.9-12.1.3E.12acc.Re7a	Select and critique contrasting musical works, defending opinions based on manipulations of the elements of music, digital and electronic aspects, and the purpose and context of the works.
VPA.1.3.12.B.CS1	Technical accuracy, musicality, and stylistic considerations vary according to genre, culture, and historical era.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
TECH.8.1.12.A	Technology Operations and Concepts: Students demonstrate a sound understanding of technology concepts, systems and operations.
TECH.8.1.12.A.CS1	Understand and use technology systems.

## Enduring Understandings

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1. Live recording is the process of capturing both musical instruments and the space they occupy.
2. The skills developed using in a digital audio workstation are transferrable to a live sound environment.
3. Familiarity with practical stage logistics and live mixing are powerful, marketable skills for any music producer.

## Essential Questions

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1. What are the various microphones, cables and mixing consoles used for live event recording?
2. What is gain-staging and what are the tools available to a producer to control signal flow and level?
3. How does a producer acquire real world experience and opportunities producing live events?

## Knowledge and Skills

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Music Technology Students will be able to:

- Identify and categorize a variety of recording devices and interfaces.
- Implement understanding of digital and analog cable types into the set-up of a recording environment.
- Students will be able to complete basic routing and mixing operations on a Behringer X32 Studio console.

Terminology:

- Digital
- Analog
- Line Level
- Instrument Level
- Mic Level
- Preamp
- Gain
- Balanced
- Unbalanced
- Midi Cable
- TRS Cable
- XLR Connector (Male/Female)
- Phantom Power
- Noise Gating
- Filtering
- USB/Firewire/Thunderbolt

## Transfer Goals

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1. Students will be able to independently build and maintain an effective instrumental and vocal recording environment.
2. Students will be able to employ industry standard recording techniques to optimize quality and accuracy of live sound recordings.

## Resources

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- FL Studio Recording Software (<https://www.image-line.com/flstudio/>)
- In The Mix FL Studio Training (<https://www.youtube.com/channel/UCIcCXe3iWo6lq-iWKV40Oug>)

- Microphones, audio interfaces, related cables)
- Related Google Slides Presentations ([https://docs.google.com/presentation/d/e/2PACX-1vS3Ns7-QcSN42Jky9roZ955fQhHV6pgZOtlI2xM8RG7EGcZMWupGxF9PCgJ1HAmYOPeFfL09kPtGei\\_/pub?start=false&loop=false&delayms=3000](https://docs.google.com/presentation/d/e/2PACX-1vS3Ns7-QcSN42Jky9roZ955fQhHV6pgZOtlI2xM8RG7EGcZMWupGxF9PCgJ1HAmYOPeFfL09kPtGei_/pub?start=false&loop=false&delayms=3000))
- Splice.com Sampling Application (<https://splice.com/home>)
- Classroom (M:) Drive
- Supplementary Videos
- Nail the Mix tutorials (<https://www.nailthemix.com/>)
- Behringer X32 Manual and Guidance ([https://protolight.com/files/2019/08/Behringer-X32\\_Manual.pdf](https://protolight.com/files/2019/08/Behringer-X32_Manual.pdf))
- Live Mixing Training Playlist (<https://www.youtube.com/watch?v=eKbBQvidT4o>)

## **Assessments**

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[Assessments](#)

## **Modifications**

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[Modifications](#)