

Distortion: The Sound of Rock and Roll's Menacing Spirit

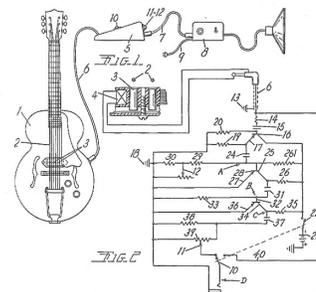
OVERVIEW

ESSENTIAL QUESTION

What is distortion, and how did it become a desired guitar effect in Rock and Roll?

OVERVIEW

On a late winter day in March 1951, a carful of teenage musicians headed toward their first recording session in Memphis, Tennessee. Short on space inside the vehicle, the band had tied much of their equipment to the roof, including their guitar amplifier, which at one point came loose and tumbled to the ground.



Upon setting up at the recording studio, the band's guitarist Willie Kizart discovered that, though the fallen amp still functioned, it made his guitar sound distorted and "fuzzy." There were no other amplifiers to use, and the excited young men weren't going to let a technical malfunction ruin their day. They recorded anyway, fuzzy guitar and all.

That session produced "Rocket 88," considered by many the first Rock and Roll recording, and Kizart's "distorted" guitar was an essential component. Engineered by Sam Phillips at his Memphis Recording Service studio, the song was released via Chicago's Chess Records label and quickly became a Number One hit. Though credited to Jackie Brenston and his Delta Cats, the group was actually the Mississippi-based Kings of Rhythm, led by future Rock and Roll Hall of Famer Ike Turner.

Only months later in July 1951, another band from Mississippi made its way to Sam Phillips' Memphis studio. This time Phillips recorded guitarist Willie Johnson's snarling six-string on Howlin' Wolf's "How Many More Years." But Johnson's aggressive guitar tone wasn't due to a mechanical mishap. The guitarist was intentionally pushing the limits of his amplifier's power toward the brink of destruction, creating a seriously fuzzy sound.

Like "Rocket 88," "How Many More Years" was a Chess Records release and became a major hit on the Rhythm & Blues chart. While the songs' success primed listeners' ears to the sound of distorted guitar, it would be several years before this byproduct of frazzled equipment would become a defining feature of Rock and Roll. First, another pioneering song would cause a far-reaching rumble.

Released on Cadence Records in 1958, Link Wray's instrumental "Rumble" was created during an impromptu jam at a show in Fredericksburg, Virginia. Electrified by the song as it

came to life onstage, the audience worked itself into a frenzy. Seeking to hear Wray's guitar over the din of the excited crowd, a microphone was placed in front of his amplifier. The instrument crackled with distortion as it blasted through the venue's public address system.

Later, on the recording session for the song, Wray couldn't get that same sound. He grabbed his amp, punctured the speakers, plugged in, and let it rip. It worked. Wray's amplifier emitted a distorted growl, conjuring up the sonic spirit heard when the tune first lurched into existence. Although banned from airplay in certain markets out of concern that the track would inspire teenage delinquency, the song was a hit.

"Rumble" helped define the sound of the electric guitar, and to many, Wray's distorted chords instilled a menacing spirit in the emerging Rock and Roll persona. As distortion became a sought-after guitar sound in Rock and Roll, the ability to reliably reproduce the effect without breaking equipment had to be achieved.

In 1960, Nashville recording engineer Glenn Snoddy was working with Country artist Marty Robbins when a strange sound filled the studio. Snoddy noticed that session guitarist Grady Martin's solo on the song "Don't Worry" was distorted due to a damaged component in the mixing console. The guitar's tone was fuzzy.

Inspired by the experience, Snoddy and fellow Nashville audio engineer Revis Hobbs developed and patented a prototype distortion effect box. They sold the design to the musical instrument company Gibson, who marketed it as the Maestro Fuzz-Tone guitar pedal. The Fuzz-Tone, however, failed to catch on until the pedal got into the hands of a Rolling Stone.

During the Rolling Stones' Spring 1965 U.S. tour, Gibson furnished the band with amplifiers and a couple Fuzz-Tone pedals. When the group was in Los Angeles, they recorded their next single, "(I Can't Get No) Satisfaction." Rolling Stones guitarist and songwriter Keith Richards used his newly acquired Fuzz-Tone pedal to record the tune's iconic single-note guitar hook. The song was an immense success and brought distorted guitar to the ears of a global audience. Encapsulated in a pedal, now the Rock and Roll spirit that distortion conveyed was available to all with the push of a button.

In this lesson, students will listen to recordings that illustrate how guitar distortion evolved into a defining sound in Rock and Roll. Students will examine key events in the development of the effect and use a techtool to compare and contrast the sound of a guitar when distortion is in the electronic signal path and when it is not.

OBJECTIVES

Upon completion of this lesson, students will:

1. KNOW (KNOWLEDGE):

- How to identify the sound of distorted guitar in a recording
- Key figures, events, and recordings in the evolution of distorted guitar as a defining sound in Rock and Roll
- How a distorted electronic signal looks in comparison to a non-distorted signal

2. MASTERY OBJECTIVE

- Students will be able to explain why distorted guitar is a defining characteristic in Rock and Roll and how it was achieved.

ACTIVITIES

MOTIVATIONAL ACTIVITY

1. Play **Clip 1, “Smells Like Teen Spirit.”** Ask students:

- How might you describe the music?
- How might you describe the sound of the guitar?
- How do you think the guitar sound was achieved?
- What do you think the guitar sound contributes to the recording?

PROCEDURE:

1. Print **Handout 1 - History of Guitar Distortion.** Divide students into at least five groups and distribute one page of the handout to each group.
2. Ask each group to read the page from their handout, and to search for and play an excerpt of the song featured in their handout on an electronic device (laptop, tablet, phone). Instruct students to use the Discussion Questions for each handout to identify specific details about each event.
3. Ask groups to use a map, or a mapping program (Google Maps, MapQuest, Apple Maps, etc.) on their electronic device to determine the location of each event featured in the handout.
4. Have each group present the history of their specific event, making sure they mention where their event takes place, based on their mapping activity.
5. Ask students:
 - Are there geographic similarities and differences between the events? If so, explain the similarities and differences.
 - What conclusions might you draw based upon the locations of these events? What might this say about the music industry in the 1950s?
6. In their groups, have students open the “Guitar Effects TechTool.” Instruct students

to toggle back and forth between the “Clean” sound (the signal path without distortion) and “Fuzz” sound (the signal path with distortion). (*Prompt students that “fuzz” is a descriptive term used to define a distorted guitar sound.*) Ask students:

- What do you notice aurally when you toggle between the sounds?
- What do you notice visually when you toggle between the sounds?
- What words might you use to describe the sound?
- What words might you use to describe the visualization of the soundwave?
- Based on the visualization, how might distortion be achieved?
- Why do you think a guitarist might want to use the effect?

SUMMARY ACTIVITY

1. Play **Clip 2, “The Development of the Fuzz Tone.”** (*Prompt students that “fuzz tone” is a descriptive term used to define a distorted guitar sound.*) Ask students:

- What words do the musicians featured in the video use to describe the fuzz tone sound in the video?
- Based on what you’ve listen to in this lesson, how might you describe the sound of the fuzz tone?
- How might the sound of the fuzz tone effect make someone feel?
- What might be the benefit of using the fuzz tone effect on a recording or in a live performance?
- According to those interviewed in the clip, how was the fuzz tone sound achieved?

EXTENSION ACTIVITY

Design Your Own Distortion Pedal!

1. Divide students into groups, and display **Image 1, Distortion Pedal Designs.** Using Image 1 as inspiration, instruct students to name their own distortion pedal and provide a prototype in sketch form. After creating the prototype, have the groups develop a simple marketing campaign for the product, which they will share with the class. Tell students that their pedal must relate in some way to the history of guitar distortion. (For instance, the name, shape, or imagery on the pedal should relate to the people, places, or songs tied to the development of guitar distortion.)
2. Send photographs of your student’s distortion pedal designs to info@rockandrollforever.org!

COMMON CORE STATE STANDARDS

College and Career Readiness Anchor Standards for Reading (K-12)

Reading 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

Integration of Knowledge and Ideas 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Integration of Knowledge and Ideas 8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

College and Career Readiness Anchor Standards for Writing (K-12)

Text Types and Purposes 2: Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

Production and Distribution of Writing 4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Research to Build and Present Knowledge 7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

College and Career Readiness Anchor Standards for Language (K-12)

Language 1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

College and Career Readiness Anchor Standards for Speaking and Listening (K-12)

Comprehension & Collaboration 1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Comprehension & Collaboration 2: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally

Presentation of Knowledge 4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.



NATIONAL CURRICULUM STANDARDS FOR SOCIAL STUDIES – NATIONAL COUNCIL FOR THE SOCIAL STUDIES (NCSS)

Theme 1: Culture

Theme 2: Time, Continuity, and Change

Theme 3: People, Place, and Environments

Theme 5: Individuals, Groups, and Institutions

Theme 7: Production, Distributions, and Consumption

Theme 8: Science, Technology, and Society



NATIONAL STANDARDS FOR MUSIC EDUCATION – NATIONAL ASSOCIATION FOR MUSIC EDUCATION (NAFME)

Core Music Standard: Responding

Interpret: Support interpretations of musical works that reflect creators' and/or performers' expressive intent.

Evaluate: Support evaluations of musical works and performances based on analysis, interpretation, and established criteria.

Core Music Standard: Connecting

Connecting 11: Relate musical ideas and works to varied contexts and daily life to deepen understanding.



RESOURCES

VIDEO RESOURCES

- "Smells Like Teen Spirit"
- *Soundbreaking* - "The Development of the Fuzz Tone."

HANDOUTS

- Handout 1 - History of Guitar Distortion