How to Measure Neighbor Noise for a Complaint (Step-by-Step Guide)

Tired of losing sleep over neighbor noise? Learn how to measure decibel levels with your phone, document disturbances with timestamps and evidence reports, and file an effective noise complaint that landlords and authorities actually take seriously.

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Neighbor noise is one of the most common sources of stress in apartment living. Whether it is late-night bass music, a barking dog at dawn, or footsteps that rattle your ceiling, the frustration builds fast. The problem is that telling your landlord "it is really loud" rarely leads to action. What does work is cold, measurable data: decibel readings with dates, times, and duration.

This guide walks you through exactly how to measure neighbor noise for a complaint, step by step. You will learn what decibel levels actually mean, how to record them properly, and how to package your evidence into something a landlord, HOA, or local authority will take seriously. The only tool you need is your iPhone and a free app called **NoiseLedger**, which turns your phone into a calibrated decibel meter with built-in session logging and evidence export.

Download NoiseLedger free on iOS

What Noise Level Is Too Loud? Understanding Decibel Limits

Before you start measuring, it helps to understand the decibel scale. Decibels (dB) measure sound intensity on a logarithmic scale, which means every 10 dB increase represents roughly a doubling of perceived loudness. Here is a quick reference table of common sounds and their approximate decibel levels:

Sound	Approximate dB Level
Whisper	30 dB
Quiet library	40 dB
Normal conversation	60 dB
Vacuum cleaner	70 dB
Busy street traffic	80 dB

Sound	Approximate dB Level
Lawn mower	90 dB
Rock concert / nightclub	110 dB
Jet engine at 100 m	130 dB

Most residential noise ordinances set limits in two tiers. During the day (typically 7 AM to 10 PM), the acceptable ambient noise level for residential zones is usually between 55 and 65 dB. After 10 PM and before 7 AM, limits drop to 45 to 55 dB. Some cities measure at the property line, while others measure inside the affected dwelling. These thresholds vary significantly by city, county, and state, so check your local noise ordinance for the exact numbers that apply to you.

For context, if your neighbor's music registers at 65 dB inside your apartment after 10 PM, it almost certainly exceeds the nighttime limit in most jurisdictions. That is the kind of data point that turns a vague complaint into an actionable one.

Keep in mind that prolonged exposure to elevated noise levels is also a health concern. For workplace reference, OSHA and NIOSH noise exposure limits set action levels at 85 dB over an 8-hour workday. Your home should be significantly quieter than that.

What You Need to Document Noise Complaints

A successful noise complaint is built on evidence, not emotion. Here is what you need to collect:

- **A smartphone with a reliable dB meter app.** Your phone's microphone can measure sound pressure levels with reasonable accuracy, especially when the app supports calibration.
- **A systematic log.** Each entry should include the date, start and end time, duration, measured dB levels (minimum, average, and maximum), and a brief description of the noise source.
- **Multiple measurements over several days.** A single reading is easy to dismiss. A pattern across a week or more demonstrates that the disturbance is chronic, not a one-time event.

Subjective complaints like "my neighbor is loud" are hard for a landlord or authority to act on. But a log showing that bass music reached 72 dB inside your bedroom at 11:45 PM on four consecutive Fridays is a different matter entirely. Data shifts the conversation from opinion to fact.

How to Measure Noise Step by Step

Step 1 -- Download a Reliable dB Meter App

Not all sound meter apps are created equal. Many are loaded with ads, require accounts, or send your data to remote servers. For documenting neighbor noise, you need an app that is accurate, private, and capable of logging sessions over time.

NoiseLedger is a free iOS app designed specifically for noise measurement and documentation. It offers real-time dB readings with FAST and SLOW response modes, tracks MIN, LEQ (equivalent continuous level), and MAX values per session, and includes FFT spectrum analysis so you can see which frequencies are dominant. There are no ads, no account required, and no data ever leaves your device.

For the most accurate results, consider calibrating the app. NoiseLedger supports calibration with an offset value and offers both A-weighting (which mimics human hearing sensitivity) and Z-weighting (flat, unweighted response). A-weighting is the standard for noise complaints because it reflects how humans perceive loudness. If you have access to a reference sound source or a calibrated meter, you can adjust the offset to align your phone's readings more closely with a professional instrument. Even without calibration, modern iPhone microphones are reasonably accurate in the 40 to 90 dB range, which covers most residential noise scenarios. For more detail on this topic, see our article on accuracy of phone dB meter apps.

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Step 2 -- Set Up Your Measurement Session

Open NoiseLedger and start a new recording session. Before you begin capturing audio data, take a moment to organize your session so the evidence is clear and easy to interpret later.

Title your session with something descriptive: "Neighbor bass music -- Friday night" or "Dog barking -- Unit 4B morning." This title will appear on your exported report, so make it meaningful.

Add tags to categorize the type of noise. Tags like "neighbor-music," "barking-dog," "construction," or "party" help you sort and filter sessions when you have multiple recordings. If you are building a case over several weeks, consistent tagging makes it easy to group related incidents.

Add notes with specific context: "Loud bass music started at approximately 11:30 PM. Walls vibrating. Asked neighbor to lower volume at 11:45 PM with no change." Notes add a narrative layer to the raw data and are included in the exported report.

You can also drop **markers** during a session to flag specific moments -- for example, when the noise suddenly spikes or when you hear a particular sound like a subwoofer kick or a door slam. Markers are timestamped and appear in the session timeline, making it easy to correlate specific events with dB readings.

Step 3 -- Record During Peak Noise Times

Timing matters. Measuring ambient noise at 2 PM on a Tuesday will not help your complaint about weekend parties. Focus your recordings on the times when the disturbance actually occurs.

Common peak noise times:

- Weekday evenings, especially 9 PM to midnight
- Friday and Saturday nights after 10 PM
- Early mornings (5 AM to 7 AM) for barking dogs or construction

- Sunday mornings for lawn equipment or music

Each recording should last at least 30 seconds to capture a meaningful LEQ (average) value. For intermittent noises like a barking dog, longer sessions of 5 to 15 minutes will better represent the pattern. During the session, NoiseLedger continuously tracks the minimum, average, and maximum dB levels, so you do not have to worry about catching the perfect moment -- the app captures everything.

Place your phone in the room where you experience the noise most, ideally on a flat surface at ear height and at least one meter away from walls or windows to avoid reflections that could skew readings. Do not hold the phone in your hand, as body contact can muffle the microphone.

Repeat measurements over multiple days. A single recording might catch an unusually loud night, or an unusually quiet one. Building a log across at least five to seven days (including weekends) establishes a pattern that is much harder to dismiss. If you can show that noise exceeds the local limit on multiple occasions, your complaint carries significantly more weight.

Step 4 -- Export Your Evidence

Raw numbers on your phone screen are useful for you, but a landlord or noise enforcement officer needs something more polished. NoiseLedger offers two export formats designed for exactly this purpose.

PNG report export generates a clean, visual summary of the session. The report includes the session title, date and time, duration, MIN/LEQ/MAX dB values, and a timeline graph showing how noise levels changed over the recording period. This is the format to attach to emails and complaint forms -- it is immediately understandable even by someone who has never used a sound meter.

CSV data export gives you the raw timestamped data in a spreadsheet-compatible format. This is useful if you need to aggregate data across multiple sessions, calculate averages, or present detailed evidence in a legal or administrative proceeding.

For a quick visual reference, you can also take a screenshot of the measurement screen showing the current MIN, LEQ, and MAX values with the real-time dB display. This works well for informal communication, like a text message to a neighbor or a quick email to your landlord.

How to Use Your Noise Data

Talking to Your Neighbor

In many cases, a direct conversation is the fastest resolution. The key is to keep it non-confrontational. Instead of saying "you are too loud," try: "I have been measuring the noise levels in my apartment, and the readings show your music reaches 68 dB in my bedroom after 11 PM. The local nighttime limit is 50 dB. Can we find a compromise?"

Showing actual data takes the emotion out of the conversation. It is harder for someone to argue with a graph and numbers than with a subjective complaint. Many people genuinely

do not realize how much sound travels through walls, and seeing the data can be enough to prompt a change.

Filing a Complaint with Your Landlord

If talking to your neighbor does not work, the next step is a formal complaint to your landlord or property management company. A strong complaint includes:

- A written description of the ongoing noise issue
- The dates and times of documented disturbances
- Exported PNG reports from NoiseLedger showing dB levels for each incident
- A reference to the relevant local noise ordinance and its limits
- A note about any previous attempts to resolve the issue directly

Attach the PNG report exports to your email or letter. The visual format makes it easy for the landlord to see at a glance that the noise is above acceptable limits. If you have multiple sessions, export each one and include them all -- the pattern is just as important as any individual reading.

Filing a Legal Noise Complaint

When a landlord is unresponsive or the situation involves serious or repeated violations, you may need to involve local authorities. In most cities, you can file a noise complaint with the police non-emergency line, the city's code enforcement office, or a dedicated noise control board.

When contacting authorities, provide the same package of evidence: written descriptions, NoiseLedger PNG reports, and CSV data exports if requested. Some jurisdictions accept app-based measurements as supporting evidence, while others may send an officer with a calibrated professional meter. Either way, your documented history of measurements shows a pattern that supports their investigation.

If the complaint escalates to a legal proceeding -- small claims court, a lease violation hearing, or a mediation session -- the timestamped, exported data from NoiseLedger serves as credible supporting evidence. Courts generally look favorably on documented, systematic measurement over informal testimony.

Why NoiseLedger Is the Best Tool for Noise Documentation

There are many sound meter apps available, but most are designed for quick one-off readings. NoiseLedger is purpose-built for the kind of ongoing, documented measurement that noise complaints demand. Here is what sets it apart:

- **Privacy-first architecture.** NoiseLedger is completely offline. No data is sent anywhere, no account is needed, and there is no tracking of any kind. Your noise data stays on your device and only leaves when you explicitly export it.
- **Session history with tags and markers.** Every recording is saved with its title, tags, notes, and markers. You can scroll through weeks of sessions and instantly find the recordings that matter.

- **FFT spectrum analysis.** Beyond simple dB readings, NoiseLedger shows which frequencies dominate the noise. This is useful for identifying the type of disturbance -- bass music has a distinctive low-frequency signature that is visually obvious on the spectrum, which can strengthen your complaint by showing exactly what kind of noise you are dealing with.
- **Professional-grade export.** The PNG report export produces a clean, evidence-quality document. The CSV export provides raw data for detailed analysis. Together, they give you everything you need for any level of complaint, from a casual email to a courtroom exhibit.
- **Completely free with no ads.** There are no premium tiers, no feature gates, and no advertisements. Every feature is available from the moment you install the app.
- **Calibration support.** With A-weighting and Z-weighting options plus a user-adjustable offset, you can fine-tune accuracy to match your specific device and environment.

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Frequently Asked Questions

Can I use phone recordings as legal evidence?

In most jurisdictions, decibel measurements from a smartphone app are accepted as supporting evidence, especially when combined with a systematic log and exported reports. However, they may not carry the same weight as readings from a certified, professionally calibrated meter. The strength of app-based evidence lies in the documented pattern -- multiple sessions across multiple days with consistent methodology. Check with your local noise enforcement agency to understand what they accept.

How accurate are phone decibel meters?

Modern smartphone microphones are reasonably accurate in the 40 to 90 dB range, which covers most residential noise scenarios. The main limitations are at very low levels (below 35 dB, where the phone's noise floor affects readings) and very high levels (above 95 dB, where microphone clipping can occur). Using an app with calibration support, like NoiseLedger, improves accuracy further. For a detailed discussion, see our article on accuracy of phone dB meter apps.

What is the best time to document noise?

Document noise when it actually occurs. If the disturbance happens at night, measure at night. Most noise ordinances have stricter limits after 10 PM, so nighttime measurements are especially valuable for complaints. Record during peak disturbance times and repeat over multiple days to establish a pattern. At least five to seven days of data, including at least one weekend, provides a strong foundation for any complaint.

Do I need to calibrate the app?

Calibration is not strictly required for a noise complaint -- even uncalibrated readings from a modern iPhone are useful as relative measurements and typically fall within a few dB of a professional meter. However, if you want the highest accuracy, NoiseLedger allows you to

enter a calibration offset. If you have access to a calibrated reference meter, take a simultaneous reading with both devices and adjust the offset accordingly. For most residential complaint scenarios, the default calibration is sufficient to demonstrate whether noise exceeds local limits.

Take Control of Your Noise Situation

Neighbor noise does not have to be something you simply endure. With the right approach -- systematic measurement, proper documentation, and clear evidence -- you can file a complaint that gets results. The process is straightforward: measure the noise with NoiseLedger, log your sessions with dates and descriptions, export your reports, and present the data to your landlord or local authority.

The difference between a complaint that gets ignored and one that gets action is evidence. Start documenting tonight.

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