



Podcasting Basics

Easy Guides to Podcasting
Terminology and Technology



Mic Gain

What is it? Why does it matter?

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No gain, no..gain?

If you're a beginner podcaster you may have seen the term 'gain' and you may have a rough idea of what it means.

At its most basic gain is the amount of amplification applied to a signal to increase its strength.

In podcasting, it's the volume you record your microphone signal at. A microphone puts out a VERY weak signal so it needs to be amplified to be usable.



Microphone Preamps



A microphone needs a pre-amplifier before the signal can be recorded. A pre-amplifier is a low powered amp that gives a recordable signal level.

If you have a USB microphone the pre-amp is built in.



If you have an audio interface or recorder, you plug your microphone into the mic-level input which is usually an XLR port.

This is input has a pre-amp.



How Much of it?

So how much gain do you need?

There isn't a definite answer to this, but when I record my recording levels are a balance of two factors.

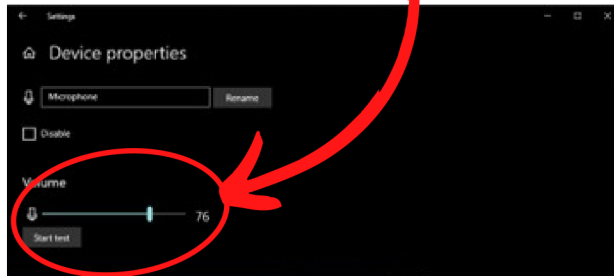
Mic gain and mic position.

1) Setting mic gain to minimise noise floor.

I like a noise floor at or below -60dB when I start. So I set the recording gain in windows to get the required noise floor



The meter plugin I use is the FREE
mMeter2 from TBProAudio
[DOWNLOAD HERE](#)





2) Mic positioning to achieve desired voice level

You may see different recommendations for the recommended recording level. Some will recommend peaks of -3dB to -6dB , or -12dB to -6dB .

As you'll see from the below graphic, I'm in the -12dB to -6dB camp.



I find that higher recording gain means I struggle to get the right loudness without distortion.

Positioning Your Mic

Different mics have different characteristics. And this will affect their positioning.

Beginner podcasters are often recommended **dynamic microphones** which are less sensitive, so need to be run at higher gain and be closer to your mouth. Some users struggle to have the mic that close and the microphone will be on camera if you're doing a video podcast.



The other common microphone type is a **condenser microphone**. Most gaming mics, headset microphones and lapel mics are condenser microphones.

These are very sensitive to background noise, room tone and passing traffic. But you can have them further away so they are more comfortable to use. They really need a nice recording environment though.

