

## **VOICE**

### **Level I:**

- Correct posture, support and technique
- Basic vowel sounds and correct articulation
- Relaxation exercises
- Basic microphone technique
- Introduction to basic music theory, triads and inversions
- Introduction to stage technique
- Learning to sing and perform a range of songs supporting the materials covered

### **Level II:**

- Warm up routines
- Improving technique and control, including placement, high notes and volume
- Improving music theory
- Aural skills
- Developing mic technique
- Introducing ensemble singing
- The role of the backing vocalist
- Stage presentation
- Learning to sing and perform a range of songs supporting the materials covered

### **Level III:**

- Develop more advanced warm up routines, including lips and jaw
- Exploring more advanced technique and control, including vowel pronunciation, note placement, dynamics
- Developing music theory, including minor scales
- Developing ensemble and backing vocal work
- Developing aural skills
- Exploring mic technique
- Learning to sing and perform a range of songs supporting the materials covered

Look up Melissa Cross for proper Vocal Screams. [YOUTUBE.COM](https://www.youtube.com/user/MelissaCross)

# Microphone Techniques

## Learn, laugh & interact at [www.vocalist.org.uk](http://www.vocalist.org.uk)



Few singers practice their microphone technique enough, which results in some fantastic voices being overlooked due to poor sound quality or bad technique when performing live.

How do you prevent this without the aid of a sound engineer or years of experience? Simple! - Practice makes perfect and if you have the facilities to set up a P.A. and tape recorder at home or use a rehearsal studio you have a distinct advantage!! Even if you don't have this equipment, you can still experiment with amplified sound by using your home stereo or karaoke machine and a microphone. The quality may be extremely poor and muffled (depending on how good the system), but you should still be able to get a basic idea of mic positioning and distance with a little practice.

Obvious points to remember when using amplification of any kind:

Pointing the microphone towards a speaker when you are too close causes a high pitched noise called FEEDBACK.

Having the volume too high will cause FEEDBACK and DISTORTION.

Incorrect wiring & connections can cause electric shocks, equipment breakdowns, horrible humming or even pick up the radio!

The most common mistake is holding the microphone too close or too far from your mouth. This results in your singing sounding muffled and distorted, too distant or no vocal sound at all. With a little practice this is easy to rectify and should become a part of your rehearsal routine.

Set your volume controls so that the backing track is lower than your singing.

To avoid distortion, ensure the mic is held no closer than 2 to 3 inches from your mouth during normal singing. You will have to experiment a little as the distance is dependant on the individuals natural power and ability to project.

Gradually move the microphone away as you continue to sing and listen to the effect - at what point does the vocal sound start to fade? - That is your furthest point to remember. The optimum distance for clarity is between the shortest and furthest points.

There are times when you will be using more volume, hitting higher or lower notes or almost whispering. Practice using different distances and positions to see how using the mic creates different effects.

Avoid moving the microphone closer to your mouth when aiming for high or more powerful notes and practise using the microphone to enhance or lessen certain effects until it becomes second nature.

### Hiding Faults

Microphones can be used effectively to hide as well as enhance a singers faults. One of the most common techniques used to hide a lack of sustained breath control is to hold the microphone away from you when starting a sustained note and bringing it closer to the mouth as the note diminishes. To the audience the note appears to maintain it's volume, although it is important to keep on pitch and not attempt to hold the note for longer than is comfortable!

The distance and placement of the microphone also affects the sound and tone of the voice as heard by the listener. Some microphones are designed to pick up sound from any direction, (known as omni-directional) others are designed to pick up sound from a limited area. There are several different microphone types, referred to as dynamic, cardoid, supercardoid, condenser.... to learn about these in more depth read the DAT-Heads FAQ and articles listed further down the page.

### Vocal Effects

Using a microphone allows the singer to employ various vocal effects to enhance a recording or performance including: Adjusting airflow through the nose, opening the throat to provide more resonance, glottal attack, soft-palate edge (with vibration of the uvula), good enunciation and diaphragmatic pulsation (like a pant).

### Avoiding Pop's & Hisses

Certain consonants create sounds that when electrically amplified become abrasive or detract from the intended effect. B's & P's can sound over-exaggerated causing a 'pop', whilst the natural sibilance of C, S & Z can produce a hissing sound. These are problems that can be avoided by using a combination of correct [diction](#) and [mic technique](#).

When using a microphone for the first time, the natural instinct is to place it in right in front of your mouth, but with todays technology, most microphones are extremely sensitive and capable of picking up sound from any direction, moving the microphone further from your mouth, angling it to one side or lowering the mic and angling it more towards the ceiling will lessen the sensitivity by just enough to prevent the pops and hisses, the adjustment can be quite fine depending on the EQ & gain settings plus equipment type and quality.

### Common Problems with Microphones

Despite improvements in technology, Radio microphones can be the cause of many a singers nightmares with mini cab or police transmissions blasting out over the speakers,

cut outs and dodgy batteries causing distortion. Small microphones attached to clothing can easily work loose causing loss of sound and even hand held radio mic's left on while backstage can pick up discussions or noises that you would rather remain private! Even the humble lead mic if left on in a stand will pick up footsteps or other loud vibrations from the stage and floor. If using a radio mic, always use check the batteries before use, keep a couple of spare batteries handy, make sure arials or leads are not twisted or bunched up and have a lead mic available in your kit bag for emergancies. Switch off all microphones during breaks or when not in use.

#### Which Mic?

Everyone has their own personal preferance, but omni-directional microphones are pretty common for live work and although they lack the sensitivity of some other microphones, they have the advantage of being robust and capable of picking up sound from any direction. There are lead and wireless versions, both of which can be hand-held or placed in a stand. Head-set mic's are useful for dancers or singers who want to have complete freedom of movement but are 'fixed' in front of or to one side of the mouth, this means that the singer is unable to manipulate the microphone.

Before purchasing a microphone it is worth trying out several types. A mic that makes one singer sound great can make another sound bassy or tinny and although this may be due in part to the EQ settings or effects used, it can also be due to the microphone response. Most recording studios carry several microphones to cater to all types of vocalist and singer/songwriters may find that purchasing a microphone for 'live' performance and one for 'recording' solves a few clarity problems.

Personal fav's include the Shure SM58 (shown below) and [Trantec](#) Radio Mic (twin arial).



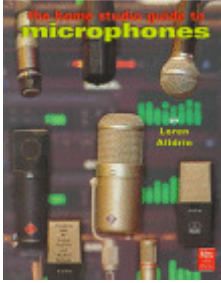
#### [Shure SM58 \(SM58-LC\)](#)

Cardioid dynamic vocal microphone. 50 to 15,000 Hz.

Consistently the first choice of professional performers around... Discover a range of microphones at [Christmas Crackers - Musical Gifts](#).

#### [Dat-Heads FAQ Microphone Edition](#)

This is a collection of information of potential interest to users of microphones, especially those who use them to record live musical performances. The information was contributed by the users of the DAT-Heads mailing list.



## The Home Studio Guide to Microphones

Loren Alldrin, George Petersen, Michael Molendra

Here's a hint: it's not in your latest 24-bit effects processor or whiz-bang digital recorder. Instead, great recordings start with the right microphone positioned well. Sound simple? It is. - In The Home Studio Guide to Microphones, you'll learn how mics work, how they differ and which mic to use when. Plus, you'll learn how to best record dozens of popular instruments. Finally, an extensive buyer's guide gives you specs and application info on over 70 popular mics.

[Home Studio Guide to Microphones at Amazon UK](#)

[Home Studio Guide to Microphones at Amazon USA](#)

Also Read

[What Does It Mean to have Good Mic Technique by Taxi](#)

## Related Articles & Sites

These are a small selection available in our [Articles](#). All links open in a new window.

### [20 Tips on using Microphones](#)

It doesn't matter how good the microphone, put it in the wrong place and you might as well be using cocoa tins and string. Hugh Robjohns shares some of his top tips...from Sound On Sound Magazine.

### [Basic Microphone Techniques](#)

Provides an overview on microphone placement for recording vocals by The Musician's Homepage.

### [Capacitor Microphones Explained](#)

Paul White from Sound on Sound Magazine looks at the workings of capacitor mics and discusses their advantages for studio recording.

### [How do microphones work, and why are there so many different types?](#)

A guide for the complete beginner from How Stuff Works.

### [M-Audio](#)

The Record Now Mic Guide is now available for Free Download! Volume 1 of the Record Now Series, "Choosing & Using Microphones," is a necessary tool for musicians to make informed choices about music technology and application. Download the tutorial at no cost today. Visit the site to read the tutorials or download .pdf file. To get the guide

enter the keywords 'Mic Guide' into the search box located in the top right hand side of the page.

#### [Mic Types & Characteristics](#)

article by Paul White from Sound on Sound providing explanations and descriptions of each type of microphone.

#### [Microphone FAQ](#)

A review of the different techniques used to record ambient sounds in stereo, covering common configurations using two, three and four microphones. Provided by Oade Brothers Audio, Inc.

#### [Microphone Techniques & Soundstage Maps](#)

Textual Description of equipment, set up and resulting sound which was included as a sound sample on the CD accompanying the magazine (no sample on site). Article at Stereophile Magazine by John Atkinson & Robert Harley.

#### [Microphone Tutorial](#)

An introduction to microphones with explanations of microphone types, pick up patterns, microphone and studio techniques for musicians, singers and budding sound engineers. Article from Digital Music World by Yamaha.

#### [Microphones and Microphone Technique](#)

Advice for beginners plus article on band sound checks from engineer Peter Davies.

#### [MusicStudioTechniques](#)

contains valuable information about recording engineering, mixing, audio technology, microphone choice, and microphone placement techniques to achieve a variety of desired sounds with specific instruments. Visit their Techniques section to read the articles which include descriptions of various models of the Sennheiser, Shure, Electro-Voice, Beyerdynamic, and Neumann ranges of microphones.

#### [Online Classes](#)

Articles studying examples of sound system and microphone applications for speakers and singers plus how to get the best results. Produced by The Internet Sound Institute helping you learn about sound systems.

#### [Sennheiser Evolution Series Microphones](#)

Useful article by freelance audio engineer Andrew Roberts comparing the various uses, responses and pricing of the Sennheiser Evolution range.

#### [Stereo Microphone Techniques](#)

Article explaining the uses and set up of stereo microphone techniques for singing ensembles and soloists by Bruce Bartlett at Tape.com

### [Using Microphones](#)

A basic guide to using microphones from Audio Technica which includes the differences between various types of microphones and the advantages of important microphone features and A Brief Guide to Microphone Selection and Use for Places of Worship

### [Transom Mic Shootout - Blindfold Test](#)

Write up from a mic shootout which compared a wide variety of announce mics in a neutral setting from Transom Tools.

### [Transom Handheld Mic Shootout](#)

Part two of this shootout from Transom Tools compares a range of handheld microphones.

# How to Do Harsh Death Metal Vocals

Are you in awe of the raw vocal stylings of death metal bands? Do you ever want to sing along? Here's how to emulate the guttural lyrics that make metal music distinct.

## [\[edit\]](#) Steps

1. Listen to any album using harsh vocal techniques. If you're not already familiar with the genre, browse the links listed below. Buy CDs from bands and singers whose voices you admire.
2. Learn how to sing properly. The most important technique for performing death metal vocals is to be able to control your breathing, establishing a balance between the force used by your diaphragm and vocal cords. Using only the vocal cords will put undue pressure on them and is sure to damage them (minor damage will heal in time). Proper technique is established by using the diaphragm to push air out of your lungs.
3. Try going ssssss quietly and then increase in volume. The feeling in your stomach is your diaphragm. This is what you want to feel when performing death metal vocals.
4. Pick a lyric you want to perform. Always try to pick songs from bands like Slayer, Metallica or other bands who do not use the death grunts as it will be easier to rehearse your grunts. Try singing it normally, then slowly add more "fire" to it, until you can feel your diaphragm really pushing and you're getting that deep sound you're looking for. If you don't succeed in the deep guttural vocals try the raspier approach to these vocals like Mark Hunter of Chimaira. Anyone can achieve this, men as well as women (listen to the current vocalist for Arch Enemy). So long as your vocal range is Alto or lower. Arch Enemy's Vocalist Angela Gossow is an alto, and will say herself, if you are a Soprano, don't even try Death Growls.
5. Practice barking like a dog, not just a bowow, but force it out from the bottom of your belly, really imitating the barking sound. Then extend the barking sound and try it with several words and before you do it take a deep breath and go from your diaphragm. Breathing like a dog, as stupid as it sounds, can also help you get a guttural sound to your grunts.

## [\[edit\]](#) Tips

- Learn to control rasp and phlegm. Rasp = air coming up; phlegm = saliva in your mouth/throat
- Harsh vocals will grow in volume as you gain skill with them.
- Don't use distortion or effects to cover any lack of vocal ability. It sounds bad and it's obvious why you did it.



- To create a more "brutal" sound, you can experiment with saliva in your mouth. It can be trapped between your tongue and throat. It's that "gurgling" you hear in many songs. An open throat is the key. The notes sung and air must come up with ease. One can use their tongue to deflect air being forced up and change tone. The lips are the second method of changing tone. You should never change tone by tightening your throat. There are many techs used in harsh vocals, but keep with a simple growl and scream until you've gained quite the skill within this vocal type.
- Act like you are gargling, but without the water, of course. Practice this until you can hear the gargling noise in the back of your throat.
- To create even lower harsh vocals, use the inhaling technique. Pinch the incoming air flow a bit farther back in the throat than when "gargling" an outgoing air flow. Moving the base of the tongue back creates a smaller opening and higher pitch; with the tongue forward (even sticking out if you like) the pitch will be lower. This inhaling technique can produce an extreme range of pitch, allowing you to both grunt and squeal like a pig. The incoming airflow will be nowhere near the volume of normal speech. You will need to speak using exaggerated lip movements and the front of the tongue while keeping the back of the tongue muscle in place. While an "inhale vocal tech" may sound "cool", be careful using it. It can (and likely will) damage your vocal cords. The inhale sound can still be created from properly done harsh vocals but requires range needed.
- Over time you'll learn your range, skills increase and you can try to achieve your favorite sounds.
- Practice normal singing for a month first. This will really strengthen your vocals cords and make it easier on you when you start doing death growls.
- 1. Be sure to have variation in your vocals. Monotone growling will sound boring after awhile, no matter how impressive your vocals are. A good vocalist for inspiration is Matthew Chalk, formerly of Psychoptic.
- Drinking a warm liquid may aide in expanding your vocal cords, helping your voice get deeper.
- If you're already good at [screaming](#), picking up death metal vocals should be a piece of cake. Already having skill in death metal singing is also a benefit when learning to scream, especially for metalcore.
- A way to get the nice guttural sound, is to breathe like a dog. Yes, this sounds and looks funny, but it will help you opening your throat. Don't do it loudly at the beginning, this is just to teach you how to open your throat, which is used for the guttural sound.
- Switching between screaming vocals and clean like such bands as Reign Of Chaos or Trivium who only have the one singer it is best to focus on breath control more, some bands have 2 singers one for clean vocals and one for the screaming side but if you are singing solo you are best to focus on breath control more than anything before this is attempted as your clean vocals may sound really off. Practice makes perfect.

## [\[edit\]](#) **Warnings**

- You can and will severely damage your voice if you use prolonged bad technique.
- Don't be surprised if you don't sound like your favorite harsh vocalist--it's akin to everyone having a different singing voice.

## [\[edit\]](#) **Things You'll Need**

- Patience.
- Inspiration.
- Singing lessons help alot!

# How to Properly Stress Your Vocal Chords With Screaming

This article will teach you how to properly stress your vocal chords without hurting yourself and sounding good. This is a very hard singing ability.

## [\[edit\]](#) Steps

1. Decide whether you will have a low, mid, or a high scream. This is *not* decided by your regular speaking voice. If you have a low voice, for example, your scream will be louder, and more powerful. If you have a higher voice, your scream will be quieter, and not as powerful. Listen to different bands and find a scream which you believe is in your scream range.
2. Warm up. Go up and down a simple 5-note scale, the same old boring 5-note scale used in just about every choir as a warm- up, but do it on 'ga.' Make sure that you do it from all parts of your throat, it will make different sounds when you switch parts. This is more of a mental warm-up. It trains your body to accept the potentially harmful feeling on the vocal chords while making a raw sound.
3. Sing the sounds of the vowels-- Eh, Ee, Ah, Oh, Oo --on that same 5-note scale, except every time you pass by, try putting a little raspiness on one of the vowels. Try pulling the sound up the back of the throat and through the nostrils, making it a more nasally sound. This trick will save your vocal chords. At first this exercise will make you sound like you're in pain, and you just might be, if you don't do it correctly.
4. Pour your heart and soul into a song just like you pour your body (vocal chords) into it or else it won't sound sincere. It's an attitude thing, it makes 100% of a difference if you mean what you're singing and put emotion into it. This also helps with using your diaphragm, since you will most likely use it to emphasize mostly everything already.
5. Sometimes trying too hard, will result in throwing up..

## [\[edit\]](#) Tips

- Be patient. Learning to scream safely can take approximately a year, and for the first many months, often times, it simply sounds bad. Don't give up. It will come out eventually, and after a lot of practice.
- Don't scream too much. This can damage your vocal cords. If you do, rest your voice after!
- Practice screaming into a pillow. This makes it much easier for beginners.

- Once you have decided what pitch you are going for take a deep breath. Push the air out of your lungs and let the air dance off your throat. For some it helps to tighten the throat. Don't do this too tight, though; you may harm your vocal chords.
- Scream from your diaphragm, not your throat. This is very similar to [singing](#). Make sure the air and voice you are using is coming from your chest and not your head. The first way you will be able to tell if you are screaming from your head is if the pitch isn't similar to your speaking voice. The second way is if your chest doesn't recede when you are pushing the air.
- Take a deep breath whenever possible, in between screams. You don't want to hurt yourself and you also don't want the scream to sound forced [i.e. cracking and losing pitch].
- Scream alone for a while, it can be embarrassing to scream around others who already know how to scream. Once you are ready show them your scream and let them honestly critique it.
- DO NOT scream each scream with all of your air. Moderation is the key, if you use everything you have, it'll hurt very badly and not sound good at all.
- Scream along with music, especially songs in which screaming is already taking place.
- Scream along with music that has no screaming and see how it sounds. You will have your own personal sounding scream that no one else in the world has.
- Drink lots of water before, during, and after screaming. Always drink room-temperature, or warm water. Adding a little bit of lemon may stop mucas from forming.
- The more you practice, the easier it gets and the longer you'll be able to scream without grasping for water. You'll be able to talk normal right after screaming over time as well.
- If you prefer something more flavoured, try some weak (heavily diluted) squash. Although it's not entirely bad for your screaming, water is a better recommendation.
- To avoid some harm to the vocal chords, add a slight 'yeh' sound before each dangerous inner-word vowel. So, 'attack' would sound like 'attyack,' etc.
- To avoid some more harm to the vocal chords, scream nasally. Imagine that the sound is going up and out of your nose. This helps with both health and sound.
- IF YOU WANT TO SOUND NORMAL! If you find that you have trouble with raspiness in your voice while you're trying to perform in choir or a musical, [sing](#) from your upper back and make sure that you sing 'from your eyes.' If this explanation makes no sense, try envisioning it and feeling it. It should work. Also, try singing more nasally and not so deep in the vocal chords. This will also make you project more and (while it might not make a perfect sound) it'll make you louder. If none of this works, drink a lot of water, and perhaps try changing voice parts. If you scream in the tenor range, try singing baritone, and vice- versa, etc.
- If you do hurt your voice, either from screaming, or just yelling too much at a party There is always the option of vocal rest. Don't scream for a while, don't sing. Don't even talk or hum, and especially don't whisper. When your voice is hurt any form of vocalisation can delay the healing process. Whispering is the worst, as it closes your vocal cords together, causing a

similar effect to screaming with improper technique. If you must speak, use your full speaking voice. It still isn't great, but it's the least damaging option. Most times, your voice should, and will, come back after implementing vocal rest for a day. If you wait a while, and nothing works, there are vocal surgeries that are very expensive and painful, but it'll get the job done.

- Warm up your voice before AND after screaming. This will prevent vocal damage.
- Skill in [death metal singing](#) can be a great jumpstart for learning to scream, especially for metal screaming.
- If you are interested in more tips, purchase The Zen of Screaming. It is a DVD by Melissa Cross on how to scream.

Screaming is 30% skill and 70% confidence. You have to be thinking "I am the best screamer in the world!!" at all times. Nervousness shows. So just relax and have a good time!

## [\[edit\]](#) Warnings

- If you don't drink water your throat can feel very dry and damage your voice.
- Make sure your voice doesn't hurt too bad after you scream. This means that you are stressing your vocal chords too much. Loosen up and let it out.
- You may have some jaw-cramping if you are not experienced with screaming/growling. Do not continue a scream if you get a cramp! You won't be able to scream/sing/growl for weeks afterwards.
- Also, be prepared to have a hard time singing correctly again. The raspiness will most likely be permanently engraved into your vocal chords and, while you will be able to scream safely, it will rule out any pretty choir or musical that you want to be in. Of course, there are other tips to overcome this listed in the Tips section.
- While screaming, try your best to scream from the stomach, not so much the throat. Screaming from the throat may cause a cyst to develop along the vocalcord, requiring surgical removal.