Mobile Audio Recording in the Field
(And How To Get a Clear Sound from the Streets)

Your mobile phone is an instant audio-recording and storage device, and it can be used anywhere. This How-To article provides tips for recording and sharing clear-sounding audio from a mobile phone. Often, recording on a handset is done in less-than-ideal environments. This article offers recording tips to help you capture quality audio to ensure a clear sound, even when you report on the ground and outside of a professional recording studio. We'll describe the best way to create, share and edit audio content depending on what resources you have (or do not have). You will also find a brief outline of some of the most popular and easy-to-use tools for creating, editing, and sharing audio content. Some tools require a specific call-in number and thus are geographically limited in scope. Other tools are Internet-based and widely available while others are specific to smartphones or iPhones. This article will give you a solid overview of what is available depending on your locale and resources, and will offer guidance for further tips and techniques.

First, it is important to know how to best record clear audio content. Regardless of your intent for the audio files, quality audio capture is a necessary step when recording from your mobile phone or computer. The New Media Lab at Rhodes University has some tips for recording from a mobile phone. It is important to keep in mind the size and type of recording space. If you are able to record from a home or office, place the mobile phone so it faces the subject or yourself if you are recording self-spoken audio. Remember that the microphone is usually at the bottom of the phone. The New Media Lab suggests that you have your subject repeat the question as part of the answer. This may also make editing easier if you plan to edit the piece.
Cut Down on Background Noise

Mobile microphones tend to pick up the loudest noise, so beware of spaces with dead background audio or too much background noise. Often, this includes noises from fans, air conditioning, refrigerators, or computers. If possible, turn off or deactivate these noise sources. An article on Suite101.com suggests that experimentation is important to help cut down ambient sound. Practice with test clips before you produce and disseminate the material. Another tip is to connect and use an external microphone with your mobile phone. An external microphone may help you achieve a better sound than by using only the built-in handset speaker.

Set up Your Hardware

External microphones can drastically improve the quality of audio. However, mobile phones' audio jacks are designed for headset-based microphones; it is often a bit challenging to get them to work with normal external microphones. Some resources to get mobile phones to work with traditional external microphones include: Shelby Highsmith's blog post discussing solutions for a Nokia N95, and a forum page at MacOSXHints.com, which deals with iPhone external mic issues. If you are regularly planning on recording audio on a phone, consider buying a microphone designed for mobile phones. There are some vendors who sell microphones made especially for iPhones and other devices with 3.5 mm headset jacks with four pins (see some phones with such jacks at GSMArena.com). A comparison of the Vericorder Mini Mic (3.5mm), Brando Mini Capsule Microphone (3.5mm) and Blue Mikey (iPhone-specific) is available in this YouTube review by user DizzyDougTV. Microphone adapters useful for other phones may be available at KVconnection.com.

Find Good Recording Spaces

Freelance radio reporting on a mobile phone often occurs on the spot where you might not have access to a studio, home, or office. Journalist Victoria Foley suggests that
you record from inside a car, which provides great audio insulation and a makeshift
sound booth. If you have more time to plan for a recording, Audiobag.com gives
tips on how to set up a home studio. Some tips include putting pillows against nearby
walls to decrease wall reverberation noise or placing a windscreen on your microphone
to knock out more noise. You can also create a makeshift sound booth inside your home
or office using cushions. Just build a three-sided structure, cover it with a blanket, and
pop your head inside to start recording on your mobile phone.

Make Sure the Signal Strength is Good

Especially if you are recording live or uploading content right after recording, make sure
to find a space with good signal strength. Poor signal strength can result in poor audio
quality. Finding a good signal is sometimes as simple as moving to a different location.
A post on WiseBread.com also suggests five rather creative and inexpensive ways to
help increase signal strength. For a potentially more reliable (and costlier) signal boost,
there are many external network extenders and mobile boosters that may help improve
voice reception and signal strength—a review of several wireless extenders is
available at cnet.com.

You probably want to record your audio and then publish it to a wider audience.
Depending on whether your mobile phone has data/Internet access, and whether you
have a computer available, different methods of recording and publishing will be
available to you. Following is a scenario-by-scenario guide to recording and publishing
audio.

I have a mobile phone without Internet access, and I don't have a computer.

If you have a basic mobile phone that can make phone calls but doesn't have Internet
access, you can use services that allow you to record your audio via a phone call. To
make this audio available to others, you will need to either use call-based publishing
services or you enlist the support of a friend or colleague with Internet access.
In India, you can use a service called **Bubbly**. Bubbly works by call and record and requires no Internet connection. **Bubble Motion**, the social network provider behind the service, explains Bubbly as "like Twitter, with a voice." It's a voice blogging service for mobile phones, where users “click, talk and send.” Anyone with a phone can follow your "Bubbles" and listen to your broadcasts. A [Wireless Week article](http://www.wiweek.com) goes into more detail on the process. “Users enter a short code and start recording their messages. To follow another voice blogger, users dial the Bubbly phone number for whomever they want to follow. Whenever there's a new audio update, followers are notified via SMS with instructions on how to listen. Bubblers can also control who is able to listen to their messages and have the option of masking their actual phone number to prevent followers from calling them directly.” The service is expanding to Japan, the Philippines, Indonesia, and Brazil (see an article in Advertising Age).

A similar option that is available to more countries is **BubbleTalk**, which is a voice version of an SMS message. To send an audio message to multiple parties, however, you must first establish 'groups.' A review of BubbleTalk on [Engadget.com](http://www.engadget.com) says that pricing sits in the middle between texting and using regular phone minutes.

In the U.S. or Canada, you can use **RecordiaPro**, which allows you to record messages and phone calls on any cell phone and store them on the RecordiaPro website. Once you set up an account, you can call in audio and an organization or colleague can then access the content online.

Other tools are more globally available and couple with cell phones to create instant podcasts.

Take for example, **Utterli**. Utterli allows anyone to call a country-specific number and record a podcast, which can automatically be published on the Internet. For example, if you are interviewing community members about a topic, you can record the sounds and interviews on your mobile phone and immediately post it to the Utterli website. Note: Utterli is now defunct. [Drop.io](http://www.drop.io), an online file sharing service, is one alternative. Users can upload audio content to a private “drop” where it is shared with specified users in a
private, real-time environment. A drop can be password protected and set to expire after a period of time. To submit an audio message by phone, a user dials the drop phone number and voicemail is saved as an audio file. Drop.io is a U.S.-based service, but International Direct Dialing call rates may be affordable in many areas. The audio content can also be uploaded via e-mail or the Internet. Drop.io can be used to send information too sensitive to be carried by an individual. It can also be used as a shared online workspace for journalists or editors collaborating on the same audio content.

In addition to creating podcasts, some mobile phones have built-in audio recorders that can record audio from one to five minutes in length. These audio files can then become live broadcasts over the Internet later and made accessible by anyone with services such as Talkshoe.

It is worth noting here, however, that these kind of recordings take up phone minutes, so you need to be aware of your mobile phone plan or pre-paid minutes, and your talk allowance.

Another option is to have your organization set up an IVR system. This is a technically much more involved process, however. We are producing additional information on IVR systems in a future article.

In the U.S. and U.K., there are even more options. Two services known as Jott (U.S.) and reQall(U.K.) were set up to record phone messages for yourself as reminders. However, features such as the ability for audio content to be sent to yourself or other contacts (and in the case of Jott, the blogging site LiveJournal) can be used creatively for reporting purposes. Outside the U.S. and the U.K., the blog logfile.ch suggests using Rebtel to generate low-cost international calls. Rebtel works by creating a local landline number and routing the international call. To share or forward your recording over the web with these tools, however, you will ultimately need Internet access.
I have a mobile phone with Internet access.

If you have a mobile phone with Internet access, you can record audio on your handset using web-based services or smartphone applications and share the content with others by forwarding or posting to audioblogging sites. With a phone that is not a smartphone, but has Internet access, you can record audio and make it accessible to listeners on the web. Even without a smartphone, you can publish, share, and receive audio programming through services like Blogtalkradio, an entirely web-based social radio network. It’s a free radio forum and may be useful for short-form radio news bursts. You’ll also be able to forward and share messages you create through services like Jott and reQall that we described above. Many smartphones have free voice recorder applications and you can also use paid services like RecordiaPro to share content. With mobile phones with Internet access, you can post audio to online hosting tools in many ways. Tools like Shozu and PixelPipe allow mobile phones (both smartphones and feature phones) to upload various multimedia including audio. On smartphones, services like Audioboo and Cinchcast provide apps that link to social media audio sharing platforms. Audioboo is a mobile and web platform that allows you you record and upload audio for others to hear, available on the iPhone and Android platforms. Cinch helps you create audio posts to broadcast on most social sites including Facebook and Twitter. To create a "cinch," you use an iPhone application or call a U.S.-based number from your phone. After your "cinch" is uploaded, you can search, share, and interact with other cinches.

On some smartphones, you can even edit your audio before sending it off for publishing. On the iPhone, applications such as Vericorder's VC Audio Pro and Hindenburg Mobile allow you to adjust levels and splice together clips from multiple audio recordings, which may help with news stories or interviews from the field.
My mobile phone has no Internet access, but I have access to a computer that does.

If this is the case, you can record audio on your phone and transfer it to your computer. To transfer audio from your mobile phone to your computer, connect a USB cable from your phone to the computer. On most mobile devices, you'll select media transfer as the connection mode, then select items or files to transfer and drag and drop to your computer. Some phones have a memory card slot that you can use to transfer files to a computer. You can also use a blue tooth file transfer to send files from your phone to your computer. Another option is to transfer audio content from phone to phone. This way, you can record from a phone without Internet and transfer to a phone with Internet to upload and share audio content. Once the audio files have been transferred to your computer, you can use many different editing tools to adjust levels and splice clips from multiple recordings. One popular and free service is Audacity, an open source editing program. Hongkiat.com also lists 25 digital audio editors that are worth knowing about.

I don’t have a mobile phone, but I have a computer.

If you don’t have a mobile phone, you can still record audio content directly to your computer as well as edit it. If you have Internet access, you can also share the content through web-based services or audiblogging sites.

First, does the computer have access to the Internet? If so, you have several options to create and disseminate audio messages. A how-to article on Intel.com includes information on recording directly to your computer and suggests you “just think of your computer like one big tape recorder that creates tapes that anyone who’s connected to the Internet can play.” You can speak directly into the computer speakers, or you can attach an external microphone. A USB model microphone is widely available and relatively low in cost compared with professional recording equipment. You can also record directly to the computer using Internet-based services like Gabcast or Gcast. Once you’ve captured the sound, you can use free, open-source software

Source: MobileActive.org
www.tavaana.org
like Audacity for sound editing. The article on Intel.com walks you through the basics of sound editing with Audacity. Once the audio is where you want it, you can use many of the above-mentioned web-based tools to share your content with others.

I have other recording hardware, too.

Outside of mobile phones and computers, you can record using hardware such as minidisc recorders and digital voice recorders. Depending on your resources, these tools may work in conjunction with your handset or computer for dissemination of the audio content. Traditional methods of recording outside a studio include minidisc recorders, digital voice recorders including Marantz and computer hardware like a USB microphone. Minidisc recorders were introduced as a replacement for analog cassette recorders. They are typically moderately priced and have long recording times that may be useful for impromptu or multiple-source field reporting. However, if you use a minidisc recorder, be sure the file can be manipulated. Many early models can only record and play so the message cannot be copied to a computer or shared via mobile phone.

A voice recorder is another option. It is typically smaller than a minidisc recorder, making it light and useful for field recording in a number of situations. Files are usually readily converted and many come with built in microphones, though the sound quality may not be as high as with the minidisc version. A Marantz or similar professional digital recorder is a high quality tool often used by professionals. Files are easily transferred, but the cost of a digital recorder may be prohibitive. Use what is available, but be sure you’ll be able to transfer and manipulate the audio file after you’ve recorded it.

Other new tools and services will surely emerge as demand and necessity grow. In any case, if you take a few precautions when recording audio content from the field on your mobile phone, you’ll be on your way to high-quality and clear content to share with others in your community and around the world.