

How to Record Yourself with a Smartphone

Best Practices



Introduction

Smartphones are always getting better! They're incredibly powerful, so why not use them to document and share our practice?

This course covers the basics of recording yourself with a smartphone – either for a tonebase class, sharing publicly, or documenting progress for your own personal use.

This is not a deep dive into working with an interface or a professional microphone, although I provided some options and recommendations for what works great with those as well.

Click “Join Forum Thread” to access resources!

Outline

Smartphone Prep

Setup and Framing

Recording Position and Mic Placement

Playing with a Track or Metronome

External Microphones

Smartphone Video Editing

Uploading for tonebase Intensive

Sharing with Friends and Family

Why Record Yourself?

Participating in the tonebase Intensive Classes is one of the best ways to structure your practice, get direct feedback, and connect with peers. Video assignments are always optional, but the ability to record yourself means you're getting tailored feedback and are therefore improving more quickly!

Perhaps you want to document or keep track of your practice progress for your own personal reasons.

Or, perhaps you want to record pieces to share with friends, family, your community, colleagues, or even record and edit full performances on your own.

Smartphone Prep

iPhone or Android phone / any advanced camera phone from the last 5-7 years

Camera Settings (iPhone Demo)

- HD 30 fps (NOT 4k or ProRes)
- Cinematic Video (shallow depth of field) (iPhone 13 or newer) + AF Tracking Lock

Rear camera is nicer quality, but front camera is much more convenient

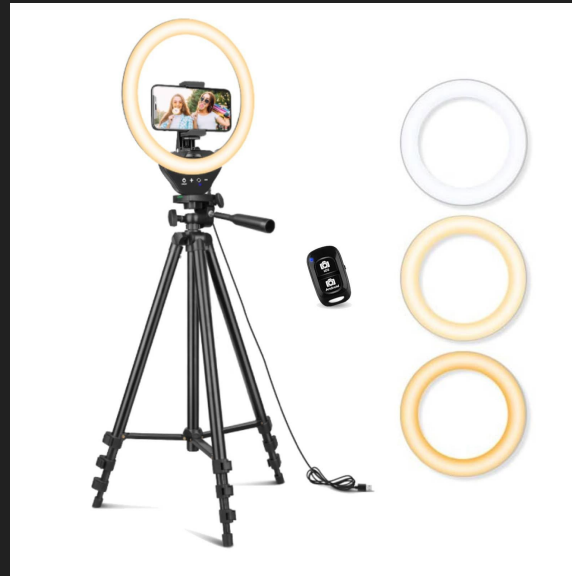
Ensure you have enough storage space!

Charge your phone!

Helpful Accessories

Ring Light

Tripod + Smartphone Mount



Setup and Framing

Prepare Your Recording Space

Record where you practice so you're comfortable: bedroom, practice room, garage, (if you have access to a studio that's ideal!)

Avoid too much rear light / make sure you are well lit

Ensure the background is appropriate

Ensure the space isn't noisy (close windows, turn off AC, politely ask neighbors to keep it down)

Sound Treatment

Record in a large, lightly reflective room

If your room sounds bad, your instrument probably will too

Low-frequency buildup, standing waves, room modes, flutter echoes, slapback, etc.

If you're doing a lot of recording, you might think about acoustic treatment in your space. At the very least, avoid large empty walls!

Basic: Fill your room with furniture to absorb sound

Intermediate: Hang 24 acoustic foam panels in your room

Advanced: Sound curtains and bass traps

If you're just doing casual recording, this might not be necessary!

Prepare Your Recording Setup

Place your phone on a music stand (or at the right height)

Landscape is ideal for YouTube / most screens (default)

Portrait is ideal for Instagram/Facebook/TikTok

Standing vs. sitting

Think about intended consumption of your recording: is this a performance that others will see?

Recording Position

Source sound (the instrument itself) vs. room sound (reflections that characterize that space)

Closer microphone position = less room sound and more bass

Farther microphone position = more room sound and more treble

Trumpet/trombone are highly directional: be careful where you point your bell. Playing off to the side avoids peaking/distorting. Keep the mic at least 3 feet away (also avoids mouth sounds).

Ideally 4-6 feet away from the mic, and bell slightly off to the side, gives you the best sound for most purposes

Mic Placement (for Trumpet)

For a bright sound: place bell 12-16 inches away and slightly off-axis

For a darker/mellow sound: place bell 24 inches away and further off axis

For something orchestral and very rich: place microphone as far away as possible and 6 feet or more off the ground to capture the room sound

Recording Position, Winds and Piano

Less directional wind instruments (flute/clarinet/voice) benefit from a similar setup as trumpet - experiment with distance depending on your room

Piano – Upright pianos are domestic, often in small rooms with bad acoustics. Best to record on a grand in a studio!

But if you must record in a small room, you want to balance the way the registers are picked up for best quality

Place a mic in the middle slightly above the piano (consider exposing strings)

[Excellent Sound on Sound article for nerds](#)

If you have to use your camera phone, expose strings and place centered directly behind you

Recording Position, Guitar and Strings

Guitar – very soft - essential to have a quiet environment - mic should be relatively close, but can vary quite a bit

Violin - microphone is best positioned a few feet above and to the side

Cello/Bass - usually 6 or more feet away to capture more room sound

Ultimately: you must experiment!

Phone mics sound better farther away than a pro mic. This helps shrink the dynamic range.

We'll talk about using pro mics a bit later

Playing with a Track or Metronome

Must be coming from a separate speaker than the camera device

Options:

- Use tablet for sheet music and to play the track. Connect it to a bluetooth speaker and then use your smartphone for video recording.
- Use your laptop to play the track and connect it to a speaker.
- Print out sheet music and use a real physical metronome or sufficiently large computer speakers (no built-in laptop speakers).

The track has to compete with the sound of the trumpet

Ensure the distance of the speaker is sufficient and make a test recording

Instrument and Practice Prep

Prepare your instrument before: clean it, valve oil, strings, tuning, etc.

Be prepared – don't practice on camera. Record on a day where you're not practicing.

To get started: do everything right and make a quick test recording!

Tips When Recording

Recording is taxing! Pace yourself & rest often.

When you're under pressure, things feel different

Don't be a perfectionist! Context matters

If it takes you 5 or more takes to get something right, you're probably not ready to record it yet

Don't ruin a take just because you think it might be bad!

Don't listen back right away / make sure you listen on nice speakers or Bluetooth headphones

What if I'm unhappy with the smartphone audio?

- External Phone Mic
- Field Recorder
- XLR Mic (with laptop and interface)

External Phone Mics: Preliminary Info

Dynamic:

- Excellent for live playing, strong and sturdy, less nuanced

Condenser: (most external phone mics)

- Good middle ground – just make sure your room is well treated and quiet

Ribbon:

- Can capture more nuanced sounds, be careful about placement, avoid explosive transients

External Phone Mics: Best Options

Zoom IQ7: Stereo
Condenser Mic (\$99)



Shure MV88: Stereo
Condenser Mic (\$149)

(Also available as tripod kit)



Apogee MiC+ USB
Condenser Microphone
(\$179)



External Phone Mics: Other Considerations

Make sure to figure out whether you need a tripod and phone mount

You probably can't place your phone on a music stand if you're using an external mic

Make sure your phone is charged before recording!

Field Recorder

Advantage: the camera doesn't have to be in the same place as the mic!

Zoom H6 is the industry standard

Stand-alone recorder with great audio quality

Install an SD card

Transfer files to computer for editing



XLR Microphones (for use with Interface and DAW)

Microphones for Trumpet

Here are some of the mics we prefer.

Condenser

- [Neumann U 87 Ai](#)
- [Lauten Audio Atlantis FC-387](#)
- [Shure KSM32](#)

Ribbon

- [Beyerdynamic M 160](#)
- [Royer R-121](#)
- [AEA R92](#)

Dynamic

- [Sennheiser MD 421-II](#)
- [Electro-Voice RE20](#)
- [Shure SM57](#)

That's not all you can use! Here are some other microphones that perform well on trumpet.

Condenser

- [Neumann TLM 102](#)
- [MXL Revelation Mini](#)
- [RODE NT1-A](#)

Ribbon

- [Royer R-10](#)
- [Cloud Microphones 44-A](#)
- [RODE NTR](#)

Dynamic

- [Shure SM7B](#)
- [Sennheiser e 609](#)
- [sE Electronics V7](#)

Instrument-mounted microphones

- [DPA 4099 CORE](#)
- [Shure Beta 98H/C](#)
- [Sennheiser e 908 B](#)

XLR Mic vs. USB Mic?

There ARE USB microphones out there that you can plug directly into a laptop

Pros of USB mic:

- Audio interface is built into the microphone, so it's efficient and convenient
- Very simple and cheaper if you're just starting out

Cons of USB mic:

- Often a mono signal
- Less control over the character of the sound (you're locked into that setup)

Ultimately, sound quality can still be quite good with a USB mic!

XLR Microphone Starter Pack

Shure SM57 + Mic Stand + XLR Cable

Use a pop filter on your mic to prevent against sudden bursts of air, esp. ribbons

Focusrite Scarlett Solo 4th Generation + USB connection to computer

Free Digital Audio Workstation (DAW) = Reaper, Audacity, Protools First, etc.

Paid Digital Audio Workstation (DAW) = Logic, Protools, Cubase, Ableton

If you're recording the audio separately on your computer, you'll need to edit the smartphone video together with the computer audio:

Free: DaVinci Resolve, Capcut, iMovie

Paid: Adobe Premiere, Final Cut Pro

Tips When Recording on Another Device

If you're recording audio on a separate device from video (field recorder or XLR microphone):

- Start recording audio first, then video
- Confirm/double check both devices ARE recording!
- Clap every take to make a loud sound / make aligning easier later
- Stop recording both between takes
- Optional: keep a notepad to record which takes were the best / where to make edits

Editing and Sharing

Smartphone Video Editing

Built-in Photos App to trim our videos

Advanced editing: CapCut, iMovie

Demo of Basic Video Editing

If you recorded audio into your computer, you'll need to transfer the video to your computer and edit there

Demo or Transferring Smartphone Video to Computer

- *iCloud Photos or Google Photos*
- *AirDrop or Email as last resort*

Uploading for tonebase Intensive

Uploading to YouTube Unlisted (Only people with the link will be able to see it, and it won't show up on YouTube search)

Demos

- Uploading to YouTube on phone
- OR send to computer and uploading there

Copying link and pasting it into the tonebase Forum

Sharing with Colleagues, Friends, and Family

I want one person to see it:

- It's a small video file: text, e-mail, AirDrop
- It's a large video file: WeTransfer, Google Drive, Dropbox

I want a specific group of people to see it:

- WeTransfer, Google Drive, Dropbox

I want my whole network or community to see it:

- Social Media: Instagram/Facebook/YouTube

Summary: Checklist

Click “Join Discussion Thread” Below for a PDF checklist

- Smartphone Prep
- Setup and Framing
- Instrument and Practice Prep
- Pick the Right Equipment and Software

Summary: Decision Flowchart

