# Taking Charge of your Performance Career: Performing Online

## Optimising your Audio
Presented by Mairéad O'Reilly

**KEY TAKEAWAYS**
- ➢ Concentrate on getting your source audio as good as possible
- ➢ Export audio .mp3 @320kbps
- ➢ Check the capabilities of apps
- ➢ Use headphones AND meters
- ➢ Be careful of input levels
- ➢ Compare levels of your final files to similar music on iTunes or Spotify
- ➢ Test all final files and links on as many platforms and speakers as possible

**Some major factors that will affect source audio quality**
Venue/location
Compression/ file formats

<div align="center">

**LIVE STREAMING or PRE-RECORDING**

</div>

**Two Fundamental Methodologies**
1. Capture audio & video together [one device] and stream 'live' or record [phone or computer]
2. Record audio & video simultaneously but to two devices, sync back together in software.

<div align="center">

**EQUIPMENT**

</div>

**SMART PHONES** ☐
**❗Limitations:**
- o Built in voice recording apps are not ideal. ☐ Download music recording app.

**Apps**:
- o iPhone – Garageband.
- o Android - Voice Recorder
- o ❗Video apps – Check availability of audio settings

**MICROPHONES** - some choices
- o **Vocals**: Shure SM58, Shure Beta 57, Shure Beta 87**C**, Audio Technica AT4040 [€ 100– €400]
- o **Acoustic instruments:** Shure SM 81 [€350]

- o **Amps:** Shure SM58/57 [or Betas]
- o **Percussion:** Audix & Sennheiser
- o **Choirs:** – [Stereo pair required] - hanging mics
  - o Audio Technica Pro45 Cardiod, Audio Technica U853 [wide cardioid pattern recommended] [ballpark €150 - €400 each]
  - o Shure SM 81, Shure Beta 87**C** [C= cardioid essential]. Height on stands could be difficult

## ADDITIONAL ITEMS
- o **Pop shields**
- o **DIs:** BSS/ RADIAL /ART [€50 - €150]
- o **Headphones:** Sennheiser HD 25 Mk11 – Industry Standard [€ 150]
- o **Cables & Accessories**
- o **Mic stands /tripod for camera /phone**
- o **!SD card for recorder** [Sandisk - format in recorder]
- o **!Batteries** [new, alkaline, or use mains]

## AUDIO SOFTWARE – some options
- o **Audacity** – Mac & PC - free
- o **Reaper** - Mac & PC
- o **Logic** - Mac
- o **Garageband** - Mac, IOS
- o **ProTools** - Mac & PC

## FILES & FORMATS
- o **Audio**: Recording sample rate 44.1kHz @ 24 or 16Bit .Wav or .AIFF
  - o **Export:** .mp3 , Bitrate 320kbps
- o **!Audio & Video** – Recording sample rate 48kHz @ 24/16bit .Wav or AIFF
  - o **Export:** .mp4

## Create Free Test Accounts
- o SoundCloud [audio]
- o YouTube unlisted [video]
- o Facebook test page [streaming]

---

**LINKS**

**Audio Hardware Suppliers**
Big Bear Sound [Dublin, local shop] **https://www.bigbearsound.com/**
Thomonn Online **https://www.thomann.de/ie/index.html**

**Sound on Sound - Audio Equipment Reviews**
**https://www.soundonsound.com/reviews**

**GIK Acoustics -** Acoustic panels
**https://gikacoustics.eu/product-category/acoustic-panels-6/?gclid=Cj0KCQiAzsz-BRCCARIsANotFgPVjHH5_FiRPcAstS9elErT9uSTUak92myZ0bqc3_0JdpVv6pJFTi4aAhFhEALw_wcB**

**Streaming -OBS** https://obsproject.com/
OBS Beginners Guide [basic guide, how to check best settings for audio]
https://www.youtube.com/watch?v=4fKTda87AH8

**Remote collaboration - Source Connect**
https://www.source-elements.com/products/source-connect/