



CROGA
STUDIO
BUILDS

EVERYTHING YOU NEED FOR PROFESSIONAL PODCAST RECORDING AT HOME

SPECIAL OFFERS WITH INCLUDED TECH SUPPORT AND TRAINING

If you need to record your voice to a professional standard in your own home, let's face it: the mic built into your phone just isn't going to cut it. But with some help, your smartphone or computer can be the centre of your own little studio.

All you need is a quiet room and a laptop, tablet or smartphone. An experienced sound engineer will contact you to help with:

- Installation and setup
- Software training - recording, editing and exporting your files for use by agencies
- Feedback on your recordings

... until we're confident that you're getting the best possible results.

- **TIER 3: £695** inc. VAT

The most cost-effective way to produce broadcast-quality recordings, with four hours of installation support and feedback on your recordings, which you can use whenever you need it.

- **TIER 2: £895** inc. VAT

Better quality gear for higher quality recordings, plus six hours of installation support, training and feedback to use whenever you like.

- **TIER 1: £1,295** inc. VAT

Premium equipment for top-notch recordings and a full eight hours of support, training and feedback that you can use at your convenience.

Each kit includes all the equipment, software and cables that you need. Unlike online shops we will guide you through the process, offer feedback on your setup and technique, and suggest ways to improve the acoustics of your recording space. We can also offer discounts on acoustic treatment should you need it.

For more information and to buy, email enquiries@crogastudiobuilds.com or call us on **+44 (0)203 405 2260**

GUIDE: EQUIPMENT

There are three main parts to your studio that you need to budget for.

WIDE DIAPHRAGM CONDENSER MICROPHONE

Universally accepted as the best type of microphone for vocal work due to their sensitivity, these mics can reach astronomical prices. But thankfully, these days they don't have to.

Many of the more expensive microphones out there offer little benefit even to musicians, and manufacturers such as Rode have been producing affordable mics with excellent frequency response, low self-noise and solid build-quality for years.

All our kits also include a reflection filter, pop filter, mic stand, a 6m microphone cable and a headphone extension cable.



AUDIO INTERFACE

This little box translates the signal from the microphone into a language your phone or computer can understand. All the interfaces we've listed here are 'bus powered', which means you don't need to plug them into the wall; they take the power they need from your device.



They are also all 'class compliant', meaning you can plug them into any Windows 10 or Mac OSX desktop or laptop, or most Android or iOS tablets or phones. No drivers are required – just plug them in and admire the sound of your own voice.

SPEAKERS AND HEADPHONES

To make your life easier and more comfortable we'd recommend using headphones while you record, and listening back on speakers while you edit.

If you've never owned a pair of studio monitors, you can look forward to sound quality that's in another league compared to your TV and most Hi-Fi systems.



PODCAST PACKAGE

TIER 1: £1295 inc VAT

There are many extravagantly priced microphones out there, and the returns they bring swiftly diminish as their cost rises exponentially. But the Rode NT1 breaks that paradigm by offering an affordable microphone that is closely modelled after the legendary Telefunken U47, which comes in at a snip under £10k. Most listeners can't tell the difference between these mics in a blind test.

The audio interface in this kit is manufactured by MOTU, who are more famous for high-end interfaces with dozens of channels and built-in signal processing. They've applied their same exacting standards to the M4, which is a class-compliant interface with two microphone inputs, two balanced line inputs, four balanced line outputs, independent headphone volume control, direct monitoring and a backlit LCD display with continuous meters, so you can check your levels at a glance. The two additional input and output channels enable connections to other equipment; audio processors, recorders or a second pair of speakers.



The Eris series speakers by Presonus are by most accounts more pleasing to listen to than many 'industry standard' monitors at this price point, such as Yamaha's HS offerings. The low end is tighter and the mid range less boxy, and in our opinion they provide a more faithful reproduction of most sources. The E8 XT model have 8" woofers for an extended bass response. All XT models feature an updated waveguide design that expands the listening 'sweet spot' in your room.

We complete this kit with Beyerdynamic DT-770 250 Ohm closed back studio headphones, which have found their way into the studios of countless professional broadcasters and musicians alike.

PODCAST PACKAGE

TIER 2: £895 inc VAT

Our mid-weight package begins with the Audio-Technica AT2035, an improved version of the popular AT2020, which has been the go-to mic in home studios for the last decade or so. The AT2035 is cleaner and more sensitive than its predecessor, making it perfect for close vocal work.

The MOTU M2 is a scaled-back version of the M4. It is a class-compliant interface with two microphone inputs, two balanced line outputs, independent headphone volume control, direct monitoring and a backlit LCD display with continuous meters, so you can check your levels at a glance. It's based on the same professional-grade hardware as its bigger brother, and still provides two mic inputs.



The Eris series speakers by Presonus are by most accounts more pleasing to listen to than many 'industry standard' monitors at this price point, such as Yamaha's HS offerings. The low end is tighter and the mid range less boxy, and in our opinion they provide a more faithful reproduction of most sources. The E5 XT model have 5" woofers; the 'XT' denotes an updated waveguide design that expands the listening 'sweet spot' in your room.

As for headphones, don't make the mistake of thinking that Sennheiser's HD-280 Pro headphones are in any way lesser than the HD-300s in our lower cost kit – they've been around for longer but are aimed firmly at the professional market. They're more comfortable, more sturdy and offer a more accurate sound than their newer cousins.

WHAT'S IN THE BOX

Eight hours of support and training
Microphone: Rode NT1
Interface: MOTU M4
Speakers: Presonus Eris E8
Headphones: Beyerdynamic DT-770

- Reflection filter
- Pop filter
- Shock mount
- Weighted mic stand
- 6m mic cable
- 6m headphone extension

WHAT'S IN THE BOX

Six hours of support and training
Microphone: Audio-Technica AT2035
Interface: MOTU M2
Speakers: Presonus Eris E5
Headphones: Sennheiser HD-280 Pro

- Reflection filter
- Pop filter
- Shock mount
- Weighted mic stand
- 6m mic cable
- 6m headphone extension

PODCAST PACKAGE

TIER 3: £695 inc VAT

This is our most affordable option, but we haven't sacrificed anything in terms of quality.

The SE Electronics X1S matches up to microphones that cost a great deal more; not only in terms of spec, but in build quality too. Self-noise is lower than its peers at 9dB, and it's equipped with switches for 10dB pad and low-cut that are often missing in budget mics.

Behringer is a name that is synonymous with cost effective entry-level audio technology. Their UMC 202HD interface is a perfect example of that - a class-compliant interface with two microphone inputs, two balanced speaker outputs, independent headphone volume control and direct monitoring.

Mackie MR524 speakers and Sennheiser HD-300 headphones complete this kit. Both are trusted brands in the industry, and their entry-level products carry their reputations well.

The MR524s are particularly well suited to small studio spaces, with switches that adjust the frequency response for placement on stands, against a wall, or in corners.

WHAT'S IN THE BOX

Four hours of support and training
Microphone: SE Electronics X1S
Interface: Behringer UMC202HD
Speakers: Mackie MR254
Headphones: Sennheiser HD-300

- Reflection filter
- Pop filter
- Shock mount
- Weighted mic stand
- 6m mic cable
- 6m headphone extension



WHILE WE PRESENT THESE OFFERS AS TIERS, WE CAN OF COURSE TAILOR YOUR SYSTEM TO YOUR NEEDS.

DO YOU NEED TO RECORD SEVERAL PEOPLE?

OR DO YOU NEED TO STREAM PROFESSIONAL QUALITY VIDEO ONLINE?

MAYBE YOU'D LIKE TO FULLY SOUNDPROOF A ROOM SO YOU CAN PLAY GUITAR FOR THE NEXT EIGHT WEEKS.

WHATEVER YOUR NEEDS, GET IN TOUCH AND WE'D BE DELIGHTED TO HELP.



GUIDE: TOP TEN TIPS FOR PODCAST RECORDING

#1: ACOUSTICS MATTER!

The best environment in which to narrate your podcast is one that is acoustically 'dry'.

Soft furnishings, acoustic foam, thick drapes or blankets can all go a long way towards deadening the sound of a room.

It may be tempting to try recording in a small space such as a walk-in closet, but it's more likely that you'll hear reverb in your recordings if you do. Acoustically speaking, there are only two things that separate a warehouse from a concert hall (and your kitchen from a recording studio): absorption and diffusion.

Absorption is the thing you should focus on first - if you have problems with reverb in your recordings, you should cover any large, hard, flat surfaces with thick, soft fabric or hang up duvets. For a more permanent solution, we can supply acoustic foam panels.

#2: USE A REFLECTION FILTER

A reflection filter serves two purposes: it absorbs the direct sound emitted from the mouth after it has passed the microphone, reducing the amount that reaches the wall behind it, and it also blocks reflected sound from entering the back of the microphone capsule.

Whilst cardioid mics are most sensitive from the front, and are excellent at rejecting sound from the sides, they also have a 'lobe' of sensitivity at the back. The waves entering the back of the capsule will often be out of phase with those coming from your mouth, causing some frequencies to be louder and some to be quieter than they should be.

#3: USE A POP FILTER

Another essential item for professional dialogue recording - the pop filter breaks up the rush of air we produce when we pronounce plosives - P, B, F and H sounds can all cause a low rumble when the breath that we use to create them eventually hits the diaphragm. Some are made of thin fabric, some are a metal mesh; they both work perfectly well.

#4: USE A SHOCK MOUNT

A good microphone suspension or 'shock mount' will absorb vibrations that would otherwise travel up from the floor, through the microphone stand and into the microphone. This could be you moving your feet as you deliver your lines, or it could be passing vehicles.

#5: USE DIRECT INPUT MONITORING

Your audio interface takes a few milliseconds to do its work converting the signal from your mic into data. Your recording software will then take its sweet time with your signal before passing it back to the audio interface, which then has to take a few more milliseconds to convert that back to analogue and send it to your headphones.

The result of this is a delay that can be downright disorientating when you're trying to record your own voice or play an instrument.

The solution is built into most audio interfaces, including all the ones we supply. There's usually a dial on the front that lets you adjust the balance of audio taken direct from the input (your microphone) and from the software. For recording dialogue this should usually be set to send only the sound from your mic into your headphones.

#6: BREW SOME GINGER TEA

It's an antioxidant, and anti-inflammatory, and it's delicious. It also helps to thin your saliva, reducing unwanted clicks when you speak. Hot chilli sauce will do in a pinch (if you can handle it). Avoid cheese or chocolate for a few hours before you have to record. I know, it's sad. But when you're done you can fondue yourself into a coma.

#7: THROW AWAY THE SCRIPT

Wait, not yet! Practise it first.

Practise the script as you sip on that ginger tea. Your delivery will be more authentic if your mind is free to focus on the *meaning* of what you're saying, rather than on reading the words from the page. Try reading ahead further than you intend to record. If ad-libbing is your thing, it can come more easily once you have a firm grasp on the original script.

#8: WARM UP

The sillier, the better. While the vocal chords aren't muscles that need to be warmed up in the athletic sense, your voice is an instrument. When you approach the microphone, get to grips with your voice. Flex. Remind yourself of your range, and your delivery will be more colourful.

#9: GET CLOSE (BUT NOT TOO CLOSE)

A good rule of thumb is to place the pop filter 10cm (3") away from the mic, and then position yourself the same distance from the pop shield, so that your mouth is 20cm away from the microphone. If you get too close, the bass becomes disproportionately loud, which is known as the proximity effect.

The ideal mic technique will vary depending on the context - a whisper may sound best with the mic a few centimeters away, off centre. If you need to shout, you may want to back off from the mic, but be aware that in relative terms the reverberation of the room will become much louder. That can be used for effect, but if you want a clean shout, try reducing the input gain on your interface or engaging a pad switch on your mic.

#10: TAKE YOUR TIME

While it isn't always possible or desirable to record every line multiple times, you may wish to try recording a few lines of the script and listening back before you get stuck in. Check the recording for reverb, proximity effect or other problems. More haste, less speed!



CROGA STUDIO BUILDS

WHO WE ARE

Croga is the industry leader in the design, construction and integration of custom studio solutions for bespoke media payout. We offer a 360 service from structural design through to media strategy, production services and channel management. Croga is Irish for brave, and we bring brave passion and thinking to all of our projects.

WHO WE SERVE

We offer unrivalled expertise and project management to broadcast, film, commercial and corporate clients wanting to produce, broadcast or stream their own content channels without the need for third party services.

WHAT WE OFFER

From multi-purpose sound stages to fully integrated automated live play-out facilities, we can provide custom studio solutions designed to meet specific production requirements of all scales. Our studios services include:

- Set Design
- Studio Customisation
- Construction
- Systems Integration
- Channel Management
- Media Strategy
- Legal & Compliance

PORTFOLIO IMAGES

A selection of project images from our portfolio.





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