



iRig[®] Mic Studio

Digital studio microphone

USER MANUAL

Table of Contents

| Contents | 2 |
|--|----|
| Contents | L |
| English | 3 |
| iRig Mic Studio | 3 |
| Register your iRig Mic Studio | 3 |
| iRig Mic Studio overview | 4 |
| Installation and setup | 5 |
| iOS/Android devices | 5 |
| Mac/PC | 7 |
| Mounting iRig Mic Studio on a stand | 7 |
| Status LED | 8 |
| Setting optimal gain | 9 |
| Usage note | 9 |
| Signal flow | 9 |
| Cardioid unidirectional pickup pattern | 10 |
| Proximity effect | 10 |
| Recording applications | 10 |
| Vocals and speech | 10 |
| Acoustic instruments | 11 |
| Electric guitars | 11 |
| An all around microphone | 11 |
| Troubleshooting | 11 |
| Specifications | 12 |
| Warranty | 12 |
| Support and more info | 12 |

iRig Mic Studio

Thank you for purchasing iRig Mic Studio.

Your package contains

- iRig Mic Studio
- Micro-USB to Lightning cable
- Micro-USB to USB cable
- OTG cable
- Microphone stand mount
- Tabletop stand
- Velvet pouch
- Quick start guide
- Registration card



iRig Mic Studio is a professional USB condenser microphone, designed to work with iOS and Android devices, MAC and PC. This microphone completes IK's range of digital microphones that also includes iRig Mic Field and iRig Mic HD. Developed for professional recordings, iRig Mic Studio uses a studio-quality 1" capsule, low-noise preamp and high-quality A/D-D/A converter for high-definition 24 bit - 44.1/48kHz sound. iRig Mic Studio includes a gain potentiometer, a multicolor LED indicator and a built-in stereo output for monitoring that can be used with headphones. Despite its professional features iRig Mic Studio is extremely compact. With just a 45 mm diameter and a length of only 117mm, it lets you capture pro quality sound anytime and everywhere. iRig Mic Studio is available in black or silver version.

Register your iRig Mic Studio

By registering, you can access technical support, activate your warranty and receive free JamPoints[™] which will be added to your account. JamPoints[™] allow you to obtain discounts on future IK purchases! Registering also keeps you informed of all the latest software updates and IK products.

Register at: www.ikmultimedia.com/registration

iRig Mic Studio overview



- 1. Studio-quality 1" condenser capsule (front side)
- 2. Microphone gain
- 3. Status LED
- 4. Headphone level
- 5. Headphone output jack
- 6. Micro-USB port

Installation and setup

iOS/Android devices

- 1. Connect the included "Lightning to Micro-USB cable" (for iOS) or "OTG to Micro-USB cable" (for Android) to the Micro-USB port on iRig Mic Studio.
- 2. Connect the Lightning or OTG cable to the port on your iOS or Android (that supports USB host mode) device. The status LED on iRig Mic Studio will turn dark blue.



3. Download your preferred audio processing or recording app like VocaLive, EZ Voice or iRig Recorder, and launch it. The status LED on iRig Mic Studio will turn bright blue.



ikdownloads.com/irigmicstudio

4. Start talking or singing into iRig Mic Studio. Adjust the input level as required by using the gain knob (see the "Setting optimal gain" section in this manual).



5. Connect your headphones to the iRig Mic Studio headphone output to monitor your recording and adjust its level.



The on board headphone output lets you monitor the processed signal coming from your device. Make sure that your app supports "real-time monitoring".



WARNING: Permanent hearing loss may occur if earbuds or headphones are used at high volume. You can adapt over time to a higher volume of sound, which may sound normal but can be damaging to your hearing. Set your device volume to a safe level before that happens. If you experience ringing in your ears, reduce the volume or discontinue use of earbuds or headphones with your device.

Mac/PC

- 1. Connect the included "Micro-USB to USB cable" to iRig Mic Studio.
- 2. Connect the USB cable to a free USB port on your computer, the status LED on iRig Mic Studio will turn dark blue.



- 3. Launch any Core Audio-compatible application and select iRig Mic Studio as the input device from the audio preferences. The status LED on iRig Mic Studio will turn bright blue.
- 4. Start talking or singing into iRig Mic Studio. Adjust the input level as required using the gain knob.
- 5. Connect your headphones to the iRig Mic Studio headphone output to monitor your recording and adjust its level.

Mounting iRig Mic Studio on a stand

You can mount iRig Mic Studio to its table top stand or to any microphone stand.







Status LED

The multicolor LED on iRig Mic Studio gives you important information about the iRig Mic Studio's operating status. Each status is indicated by a different color:

- LED is off: iRig Mic Studio is not connected to any power source.
- LED is **dark blue**: iRig Mic Studio is connected and in standby mode.
- LED is bright blue: iRig Mic Studio is connected and active.
- LED is green: iRig Mic Studio is active and the input signal is low.
- LED is orange: iRig Mic Studio is active and the input signal is OK.
- LED is red: iRig Mic Studio is active and the input signal is too high.

Setting optimal gain

Check the status LED when singing or talking into iRig Mic Studio.



• If the LED is alternating between BLUE and GREEN or is always BLUE or GREEN, you should increase the iRig Mic Studio input gain by rotating the level control clockwise.

• If the LED is sometimes flashing RED you should decrease the iRig Mic Studio input level by rotating the gain control counterclockwise.

• When your level setting is optimal, the LED should alternate between GREEN and ORANGE while you talk or sing.

Usage note

The frequency response of iRig Mic Studio features a slight boost in the top-end at about 7-10kHz. This bump adds definition and clarity, creating a pleasant presence in your recordings, much like listening to the recorded signal right next to your ear. The mid and lo-mid range of iRig Mic Studio features a smooth and linear response that's very well suited for recording voices as well as acoustic instruments, giving an accurate recording of the sound source.

Signal flow

iRig Mic Studio employs only quality electronic components. Its studio-quality diaphragm (the mic capsule) converts sound into electrical energy which is then amplified as accurately as possible and with minimal coloration. This signal is then passed off to the microphone's digital conversion circuitry which converts the analog signal into digital data. All these features make iRig Mic Studio the ideal microphone for recording no matter whether you're capturing vocals, acoustic instruments or electric instruments in a studio or using it for podcasts or radio — the possibilities are endless.

Cardioid unidirectional pickup pattern

iRig Mic Studio has a cardioid (unidirectional) pickup pattern. This design means that it primarily picks up sounds arriving in front of the microphone as opposed to from the sides or behind. This minimizes the risk of feedback. This makes it ideal for capturing singing, vocals, speech and instruments.



Sounds arriving at the front of the iRig Mic Studio: sound capture is optimal.

Sounds arriving from the sides or rear of the iRig Mic Studio: sounds are rejected.

Proximity effect

iRig Mic Studio is unidirectional, therefore it changes its response to low frequencies depending on the distance from the sound source.

If you want more warmth and bass (fuller, bigger voices, for example), speak or sing very close to the microphone, just a few inches or even less.

If you are searching for a lighter and brighter sound, speak or sing at a further distance from the microphone, greater than 10 inches/25 centimeters.

This rule not only applies to vocals, the microphone will also respond this way with all instruments and sound sources.

Recording applications

Vocals and speech

iRig Mic Studio is a great microphone for recording voice and speech thanks to its large diaphragm condenser capsule and its premium electronics. As said, the proximity effect allows you to model the sound of your recording. The closer you get to the mic, the more warmth and bass you'll get. For a "big" vocal sound with maximum presence, get the vocalist within one to three inches of the capsule (microphone head). For a lighter sound, place iRig Mic Studio further from the vocalist. The use of a Pop Filter helps avoiding plosives during vocal recording.

The acoustic environment plays a key role in the success of a good recording. A room with carpet and curtains

will cause much less reverberation in your vocals, making the recording sound more dry. This allows your recording to be more easily manipulated during the mixing process. By contrast, a room with glass surfaces, marble, wood floors or tile will yield natural reverb, which may be pleasing to the ear but difficult to remove at a later time, and may make your recording more difficult to mix.

Acoustic instruments

Thanks to its features, iRig Mic Studio can also be used for recording acoustic instruments with studio-quality sound. For example, place iRig Mic Studio so that it's facing the neck of an acoustic guitar—right where the neck joins the body (usually around the 12th or 14th frets) — for a balanced sound with plenty of sparkling highend. Place the microphone in front of the sound hole to capture a blend of low-end. Or, for more high-end detail, place the microphone farther from the guitar either at the same neck position or above the instrument near the guitarist's head. Experiment with different positions to reach the sound you want.

Electric guitars

For the brightest sound, position iRig Mic Studio 6" to 8" from the grill cloth, with the capsule centered on the dome of the speaker. This position usually sounds too bright, but it's a good starting point.

The tone becomes warmer as you move the microphone from the center towards the edge of the speaker. Keeping the mic 6" to 8" from the grill cloth, move the mic halfway between the dome and the outside edge of the speaker.

Try the same position but closer to the cabinet (3" to 5" from the grill cloth). Being closer to the speaker, you'll notice more direct sound with very little room ambiance. You'll also notice the bass building up as you move the mic closer to the cabinet: this is due to proximity effect, as explained above. You can balance the bass and bring more highs in by moving the mic closer to the center of the speaker.

You can also try to move the mic back to a distance of two or three feet. You'll get speaker and cabinet development, and the spaciousness can sound remarkably good. The sound of the room you're recording in will affect your results - a good sounding room can add a nice character to your guitar tracks.

An all around microphone

What do you want to record with your iRig Mic Studio? Thanks to its wide gain range and supported sound pressure level it is possible to record an extremely broad range of instruments: piano, drums, wind instruments — you name it, iRig Mic Studio is a true all-around microphone.

Troubleshooting

I have connected iRig Mic Studio to my iOS device, but it is not recognized and none of my audio apps work with it.

Remember to always connect the Lightning cable to the iRig Mic Studio before connecting it to the iOS device.

Sound is distorted.

Check that the input level on iRig Mic Studio has been set properly. If the red LED is lighting when you talk or sing decrease the input level as described in this guide.

I've connected iRig Mic Studio, the headphone to the device headphone out and launched the recording app, but no sound comes out.

Make sure to connect the headphone to your device only after you launched the recording app.

The iRig Mic Studio status LED is always dark blue and I don't get any sound.

In order for iRig Mic Studio to turn on, a Core Audio-compatible audio app must first be launched on your iOS device or Mac.

iOS: Be sure you are using an app that works with digital audio input from the 30-pin or Lightning dock connector.

Mac: Be sure you have set "iRig Mic Studio" as the audio input device on the audio app you are using.

Specifications

- Type: Large diaphragm, back electret 1" condenser capsule
- Polar pattern: Cardioid
- Diaphragm: 3µm Nickel sputtered
- Resolution & Sample Rate: 24 bit, 44.1kHz / 48kHz
- Freq. response: 20Hz 20kHz ±3dB
- Max SPL: 133dB SPL for THD=0.5%
- Sensitivity: -42±3dB (@1 kHz,0dB=1V/Pa)
- Gain range: 40dB
- 3,5mm headphone out jack
- Supply voltage: power supply via USB
- Multicolor LED for status and level indication
- Controls: Gain knob and headphone volume knob
- Size: Ø 45mm x 117mm
- Connection: Micro-USB
- 30-pins cable sold separately

Warranty

Please visit: www.ikmultimedia.com/warranty for the complete warranty policy.

Support and more info

www.ikmultimedia.com/support

www.irigmicstudio.com

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.



FCC statement

This device complies with Part 15.107 and 15.109 Class B of the FCC Rules CFR47: October 2010. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



"Made for iPod," "Made for iPhone," and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone, or iPad may affect wireless performance.

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