iRig® Pro Duo I/O

**Mobile 2-channel audio/MIDI interface for
iPhone, iPad, Android and Mac/PC**

USER MANUAL

Contents

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Safety information

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

iRig Pro Duo I/O can ONLY be used with:

• Consumer grade non-rechargeable CARBON-ZINC batteries

• ALKALINE batteries

• Consumer grade Ni-MH rechargeable batteries

iRig Pro Duo I/O

Thank you for purchasing iRig Pro Duo I/O.

Your package contains:

• iRig Pro Duo I/O

• 2 AA batteries (alkaline)

• Mini-DIN to Lightning cable

• Mini-DIN to USB-A cable

• Mini-DIN to USB-C cable

• 2 MIDI adapters

• Quick start guide

• Registration card
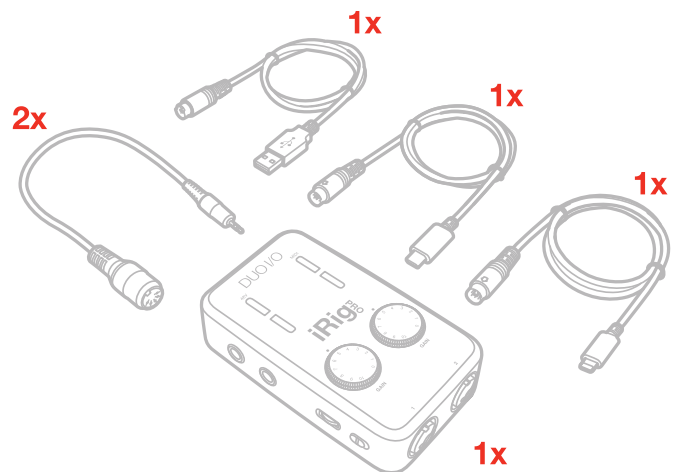
iRig Pro Duo I/O is a universal mobile 2 channel audio and MIDI interface with an ultra-compact and highly portable enclosure, that packs all the necessary connections for making and recording high-quality music on the go with iOS/Android or Mac/PC. On iOS and Mac iRig Pro Duo I/O is plug-and-play, simply connect it to the host device and it's ready to start recording (on Windows based DAWs, IK Multimedia's proprietary driver needs to be installed for latency control).

Register your iRig Pro Duo I/O

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 Pro Duo I/O overview
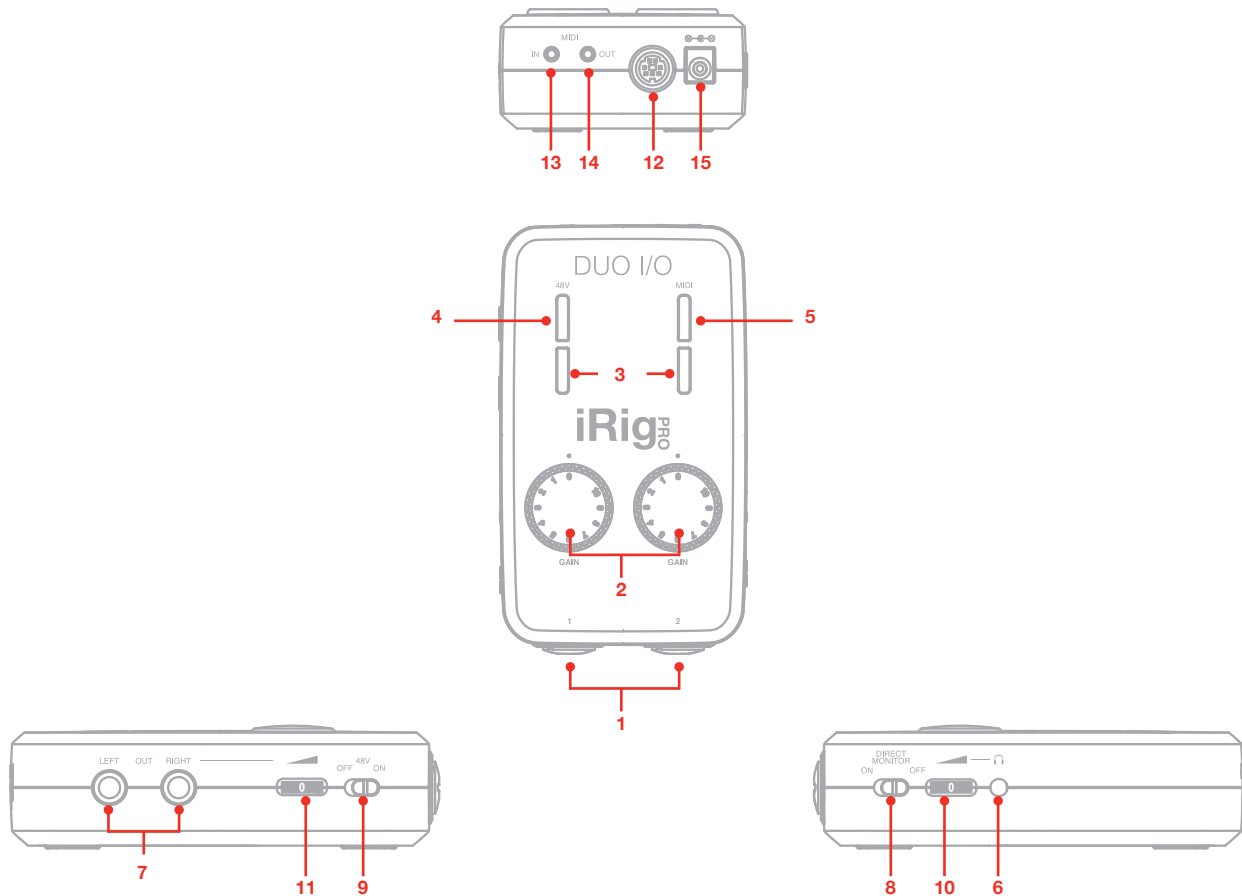
1. Microphone/Instrument inputs
2. Input gain knobs
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4. Phantom power (+48V) LED
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6. Headphone output
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8. Direct monitor switch
9. Phantom power (+48V) switch
10. Headphone level control
11. Main output level control
12. Mini-DIN device port
13. MIDI IN port
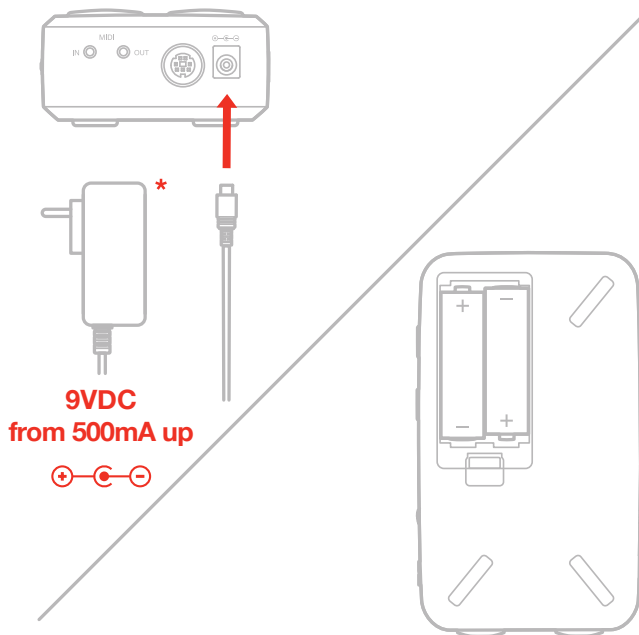14. MIDI OUT port
15. 9V DC IN

Installation and setup

For iOS users: when working with iOS devices, iRig Pro Duo I/O only works when powered by two AA batteries. See specifications about battery life. Insert the included AA batteries in the battery compartment on the bottom side of iRig Pro Duo I/O. If you want to play for a long time, you can connect the DC In port on iRig Pro Duo I/O to an external 9VDC - 500mA (minimum) PSU, for unlimited playing time without a battery.

IMPORTANT: *the external power supply will NOT charge the device's battery.*

For MAC/PC and Android users: when connected to an USB class compliant host, iRig Pro Duo I/O can be powered as follow:

- By internal AA batteries;
- USB powered, ONLY if the host device is capable of providing enough current. When connected to Android devices, we recommend that you use the internal batteries or the external PSU to avoid running out of battery life;
- By external 9V PSU (no matter if batteries are installed).

**9VDC
from 500mA up**

IMPORTANT: iRig Pro Duo I/O is powered by batteries even when it is connected to a USB port. This allows it to work even with USB ports that can only provide a small amount of current. If you want your iRig Pro Duo I/O to be powered by the USB port please remember to REMOVE the batteries from it.

*Power adapter not included

Battery life

Recording - Max load*: **3 hours, 30 minutes** (NiMH rechargeable); **45 minutes** (Alkaline)

Playback - Min load**: **10 hours** (NiMH rechargeable); **3 hours** (Alkaline)

*Max load condition is as follow: both inputs connected to two 1,5mA phantom powered loads, input gains set to maximum, outputs set to maximum.

**Min load condition is as follow: music playing, phantom power OFF.

iOS/Android devices

1. Connect the included Lightning or USB cable to iRig Pro Duo I/O Mini-DIN port.

2. Connect the Lightning or USB cable to your iOS or Android device. Make sure phantom power is turned off by setting the phantom power switch to the OFF position. Check that the phantom power LED is OFF.

1

Android

2

iPhone
iPod touch
iPad

48V OFF
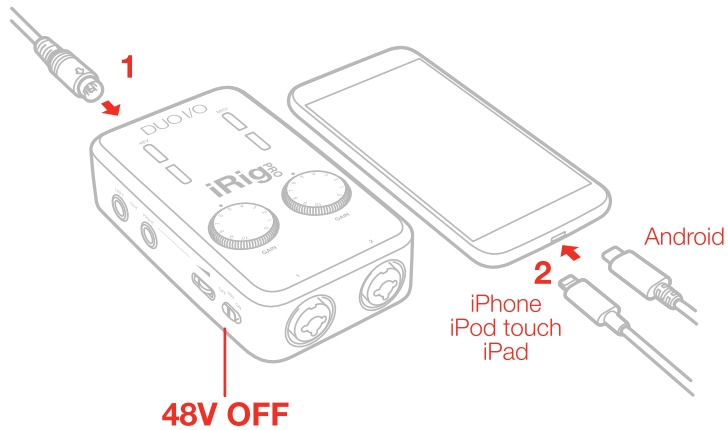
3. Download the IK apps and software.

FREE DOWNLOAD
IK software, apps, in-app content
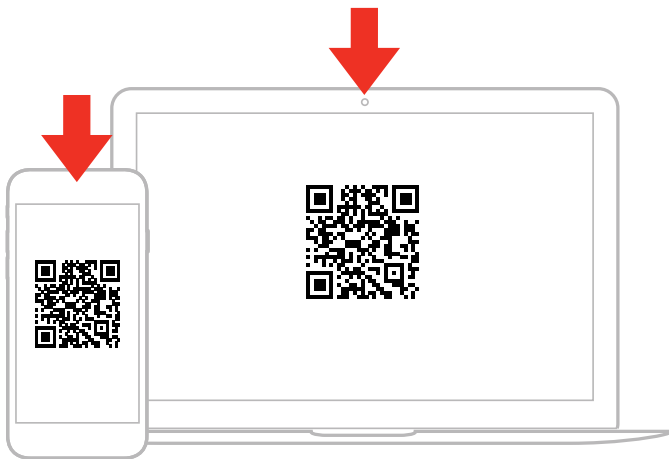
ikdownloads.com/irigproduoio

4. If you are using a microphone connect it using an XLR cable to one of the iRig Pro Duo I/O microphone inputs.

XLR

2

1

48V ON

XLR

48V OFF

5. If you are using an instrument like a guitar or a bass, connect it using a regular ¼" guitar cable to one of the iRig Pro Duo I/O instrument inputs.

48V OFF

1/4"
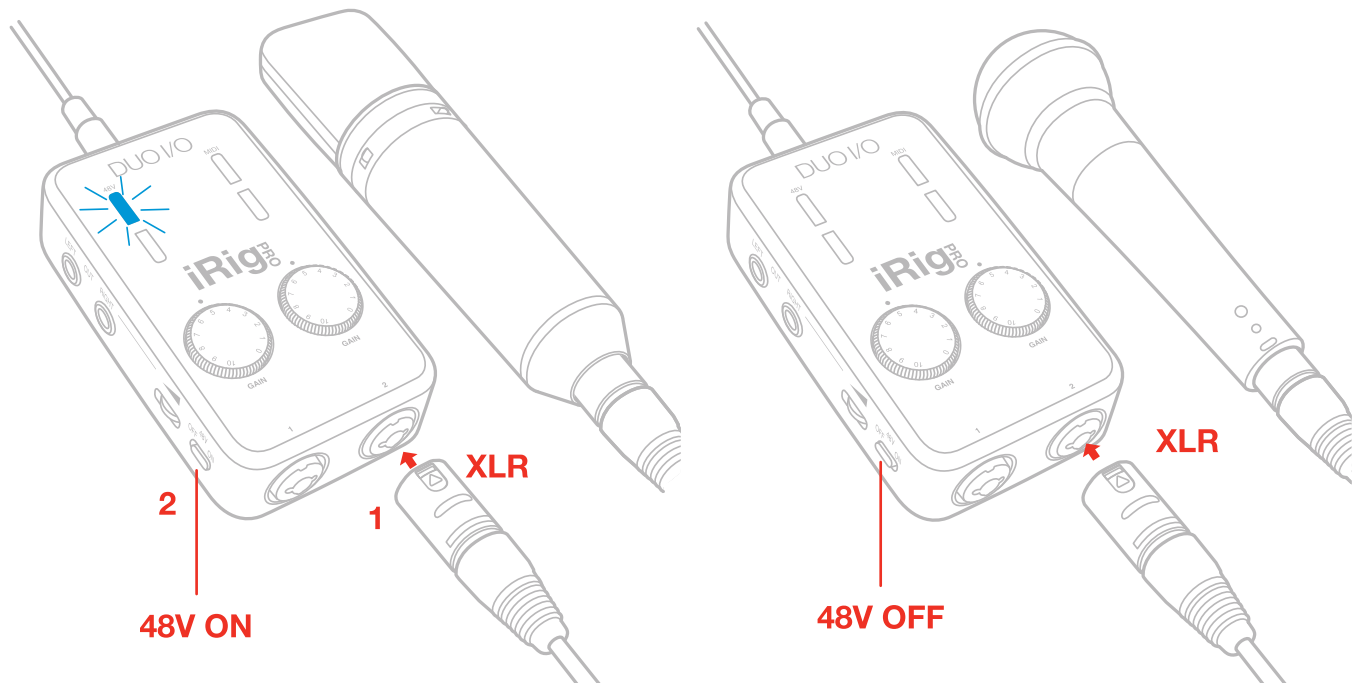
6. To play MIDI compatible apps from an external controller, use the included MIDI cable to connect your controller's MIDI OU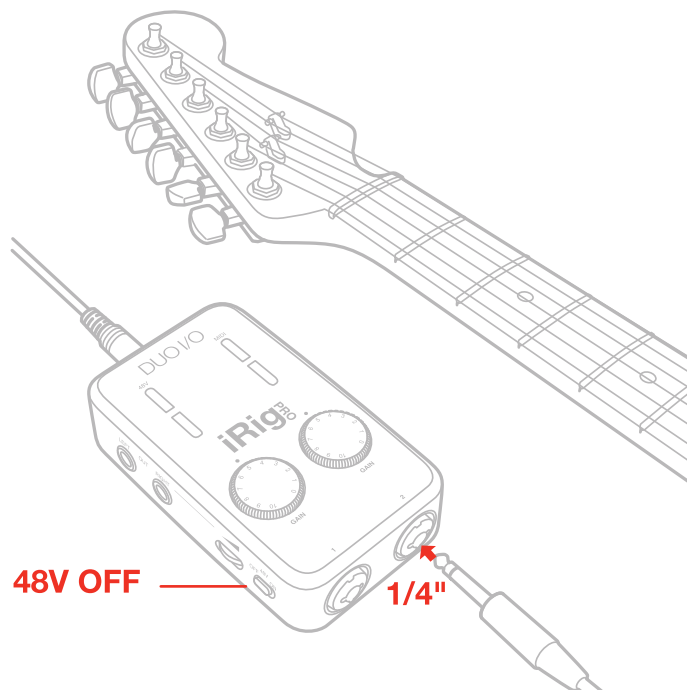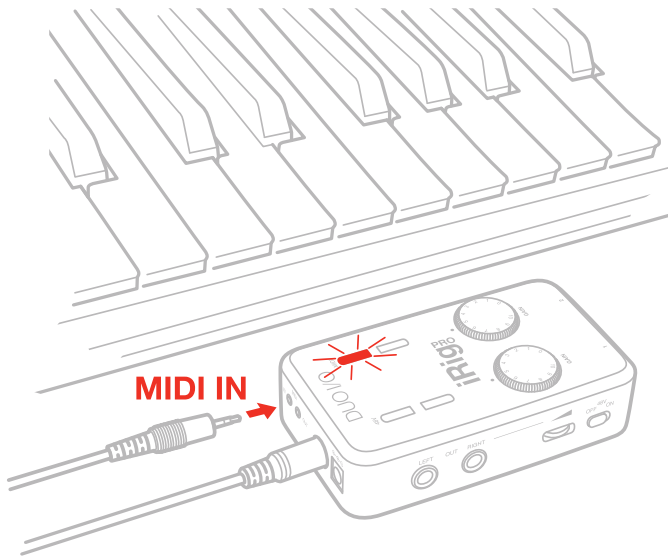T port to iRig Pro Duo I/O's MIDI IN port. Always check the specific MIDI input settings in your app to make sure that the app is ready to receive incoming MIDI data.

MIDI IN

7. To control an external MIDI device from an app, use the included MIDI cable to connect the MIDI OUT port of the iRig Pro Duo I/O to the MIDI IN port of the external device. Always check for specific MIDI output settings in your app to make sure they are set to transmit MIDI data.

MIDI OUT
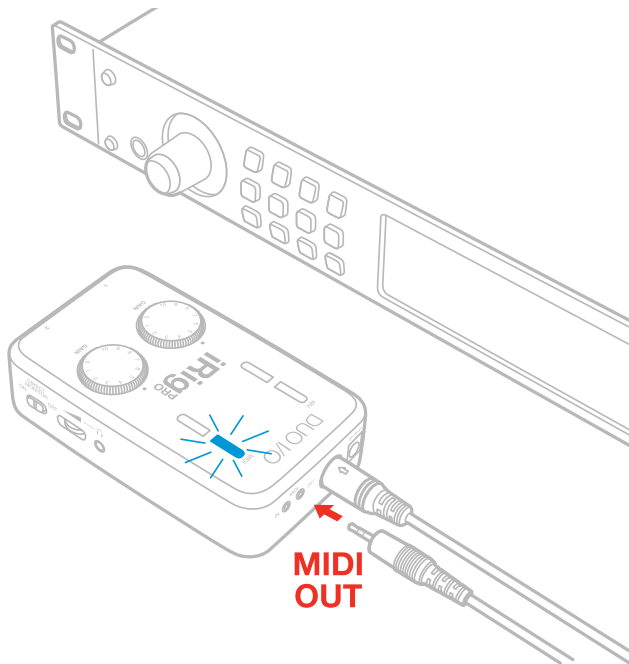
8. Connect your headphones to the Headphone Output jack on iRig Pro Duo I/O and set its level via the dedicated volume wheel.

9. Connect your mixer or powered speakers to the Main Line Output jacks on iRig Pro Duo I/O and set its level via the dedicated volume wheel. These outputs are high quality balanced outputs, so you don't need to use any DI box when connecting to a PA or Mixer onstage.
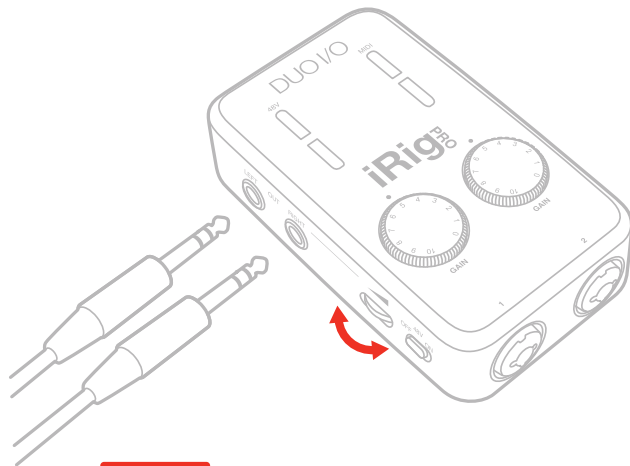
Mac/PC

On Windows based DAWs, IK Multimedia's proprietary driver needs to be installed for latency control. Please visit https://www.ikmultimedia.com/userarea/ to download the driver.

1. Connect the included USB cable to iRig Pro Duo I/O's Mini-DIN connector.

2. Connect the USB cable to a free USB port on your Mac/PC.
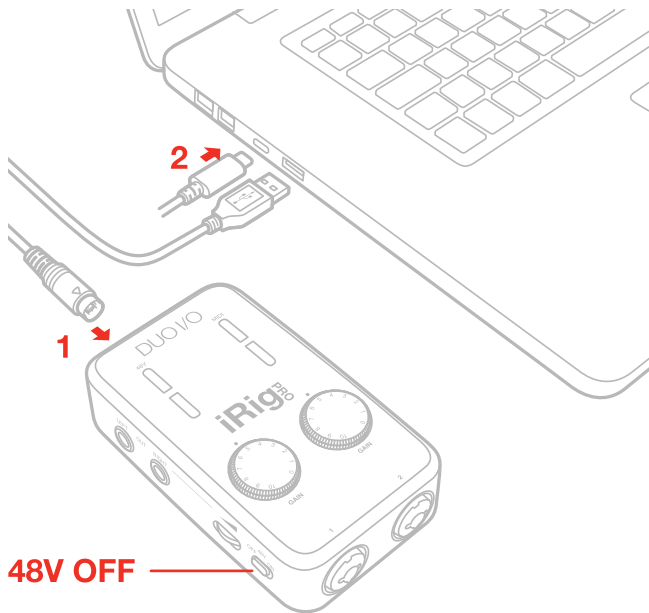
3. Make sure phantom power is turned off by setting the Phantom Power switch to the OFF position. Check that the phantom power LED is OFF.

48V OFF

4. If you are using a microphone connect it using an XLR cable to one of the iRig Pro Duo I/O microphone inputs.

5. If you are using an instrument like a guitar or a bass, connect it using a regular ¼" guitar cable to one of the iRig Pro Duo I/O instrument inputs.

6. Launch AmpliTube or any other Core Audio-compatible application and select "iRig Pro Duo" as the input device from your system's audio preferences.

7. Connect your headphones to the headphone output jack on iRig Pro Duo I/O and set its level via the dedicated volume wheel.

8. Connect your mixer or powered speakers to the Main Line Output jacks on iRig Pro Duo I/O and set its level via the dedicated volume wheel.

Connecting an external power supply

If you want to play for an extended period of time when connected to your iOS device, you can connect the DC In port on iRig Pro Duo I/O to an external power supply (not included), this way you don't need to worry about iRig Pro Duo I/O's battery life. You can use any guitar pedal power supply unit: 9VDC - 500mA

IMPORTANT: *the external power supply will NOT charge the device's battery.*

iRig Pro Duo I/O LEDs

The four LEDs on iRig Pro Duo I/O give you important information about the unit's operative status. Each status is indicated by a different color.

Status / Audio level LEDs

For each channel iRig Pro Duo I/O will show the audio signal level and the status of the unit as follow:

- Both LEDs Off: iRig Pro Duo I/O is not connected to any power source.

- Both LEDs Dark blue: iRig Pro Duo I/O is connected and in standby mode.

- Ch. LED Bright blue: iRig Pro Duo I/O is connected and a signal is present at the input of the corresponding channel.

- Ch. LED Green: The input signal of the corresponding channel is low.

- Ch. LED Orange: The input signal of the corresponding channel is OK.

- Ch. LED Red: The input signal of the corresponding channel is too high.

Phantom and MIDI LEDs

The two upper LEDs show the phantom power and MIDI status.

Phantom LED

- Off: phantom power is OFF

- Flashing Blue: phantom power is powering ON. To avoid audio bumps iRig Pro Duo I/O is muted while phantom power is turning ON, so it is normal to not hear any signal until this LED turns steady BLUE when turning on +48V phantom power.

- Steady Blue: phantom power is ON

- Flashing Red: internal AA batteries are LOW! Before iRig Pro Duo I/O shuts down this LED will start blinking. This means that the battery level is low and it should be replaced as soon as possible.

LOW
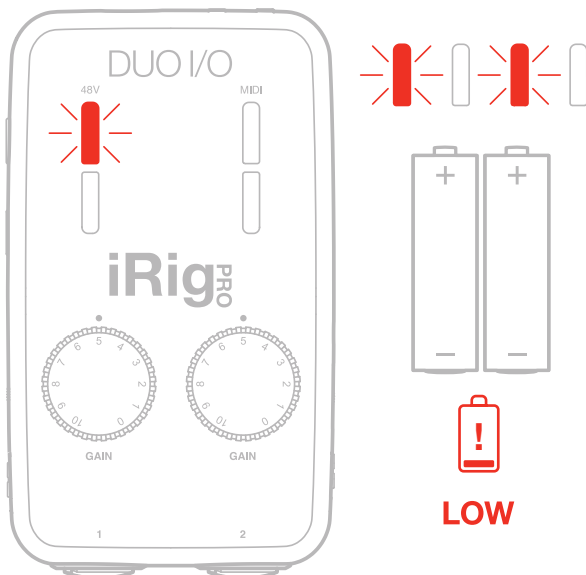
MIDI LED

• Off: iRig Pro Duo I/O is not receiving any MIDI messages.

• Blinking Blue: iRig Pro Duo I/O is transmitting MIDI messages.

• Blinking Red: iRig Pro Duo I/O is receiving MIDI messages.

Direct monitoring

When recording an audio signal into your audio software, there is often a slight delay before it reaches the outputs of the software and iRig Pro Duo I/O. This delay, called latency, is caused by the computer processing required to convert and record audio. Since this delay can be distracting, iRig Pro Duo I/O provides a direct monitoring path from the inputs to the outputs, which is activated by the Direct Monitor switch. When Direct Monitoring is enabled, the input signal is mixed with the output signal from your audio software and routed directly to both the Line and Headphone outputs. This lets you hear the "live" inputs without latency. The Direct Monitor switch has no effect on what is being recorded by your software. When using the Direct Monitor feature, make sure any software monitoring option for direct (or "low latency") monitoring is disabled. Disabling low latency monitoring prevents "double-monitoring" of input audio signals when using the Direct Monitoring feature. When "double-monitoring" occurs, there will be an increase in volume and an undesirable "phasing" sound. For more details about its monitoring function, refer to the documentation for your audio software.

Connecting microphones

Always connect microphones to iRig Pro Duo I/O with XLR-to-XLR balanced cables. This will ensure a pristine and clean performance from your microphone with iRig Pro Duo I/O.

NOTE: In your audio software, select the appropriate iRig Pro Duo I/O input (1 or 2) as the source of the track you will be recording to. Adjust the channel gain knob until you have a sufficient audio signal without clipping.

Dynamic microphones

Before connecting dynamic microphones make sure phantom power is turned OFF. Check that the Phantom Power switch is in the OFF position and that the Phantom LED is turned off.

48V OFF

XLR
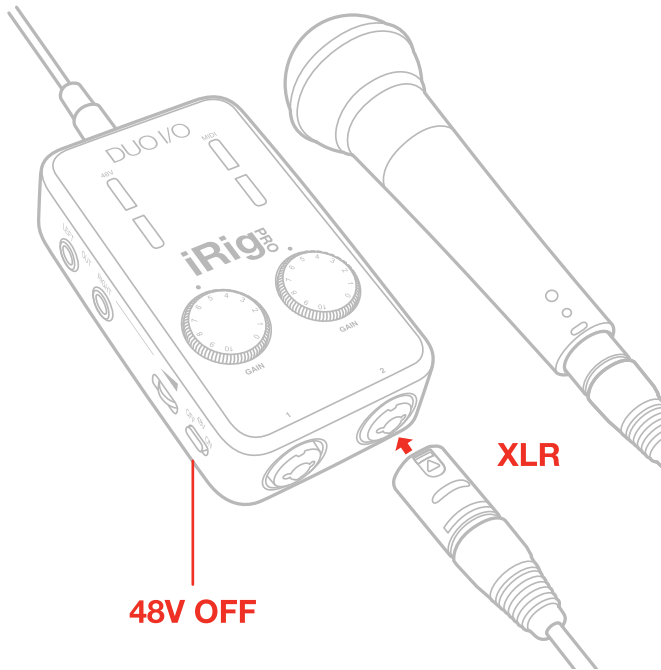
Condenser microphones

Most condenser microphones require external phantom power. If phantom power is ON, switch it OFF, and then connect your microphone. Turn phantom power ON only after the microphone is connected. Once it's turned ON, check that the phantom power LED has become blue (it will flash for a few seconds before staying on). If the LED doesn't turn blue, check that working batteries are inserted in the iRig Pro Duo I/O's battery compartment on the bottom side, and that an application that is using iRig Pro Duo I/O is open. Phantom power will NOT turn ON if iRig Pro Duo I/O is in standby (status LED lit up dark blue).
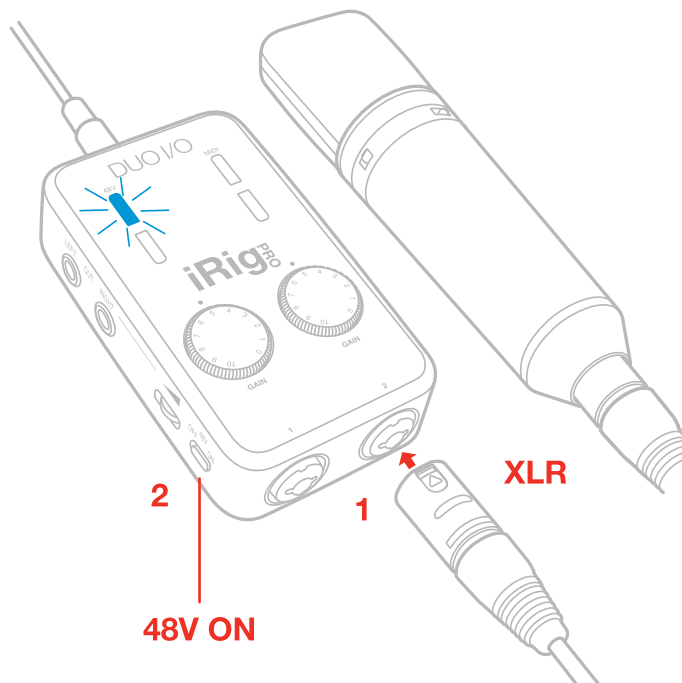
Ribbon microphones

Before connecting a ribbon microphone, turn OFF phantom power and check the microphone's operating instruction manual to see if it requires it. Most ribbon microphones don't require phantom power, and some can even be damaged by it. If you're in doubt just leave it OFF. If the microphone won't work, check its user manual, it may need phantom power. Please note that when +48V phantom power is turned on, it works on both channels simultaneously. It is not possible to turn +48V phantom power on one channel only.

Connecting instruments

Connect your guitars, basses or any other mono instruments to the instrument inputs on iRig Pro Duo I/O using an 1⁄4" plug unbalanced (TS or "mono") guitar cord.

IMPORTANT: the instrument input on iRig Pro Duo I/O will NOT work if a cable with balanced (TRS or "stereo") 1⁄4" plug is used.
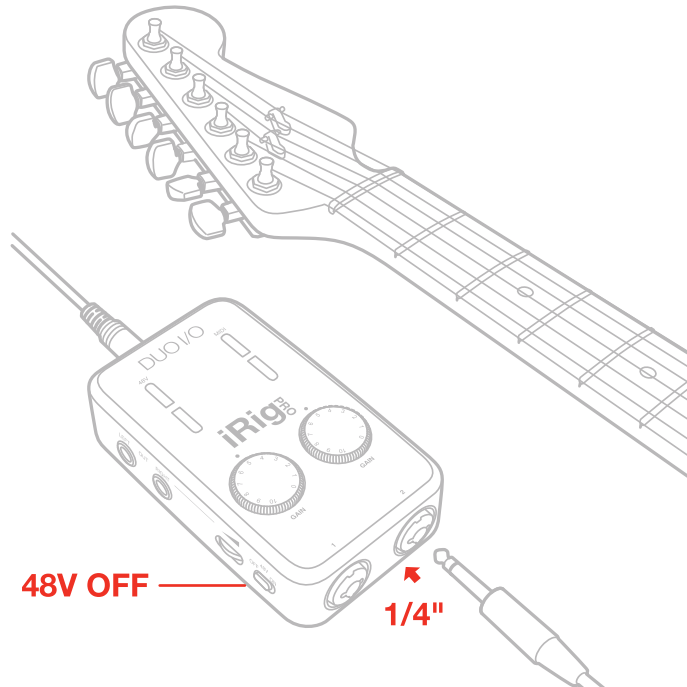
48V OFF

1/4"

NOTE: In your audio software, select the appropriate iRig Pro Duo I/O input (1 or 2) as the source of the track you will be recording to. Adjust the channel gain knob until you have sufficient audio signal without clipping.

Connecting monitors and headphones

- Connect a pair of active studio monitors or an audio amplifier to the 1/4" Line Output jacks labeled Left-Right. If your monitor inputs or amplifier inputs are the RCA type, use 1/4" to RCA cables or adapters to make the connection.
- Connect headphones to the 1/8" output jack and adjust its level via the headphone thumbwheel.

MIDI IN/OUT

MIDI IN

- Connect the 2.5mm-to-MIDI cable to the iRig Pro Duo I/O MIDI IN port and to the MIDI OUT port on your keyboard or controller.
- Open a Core MIDI compatible application on your iOS device or on your computer and set "iRig Pro Duo I/O" as the MIDI input device.
- When iRig Pro Duo I/O is receiving MIDI messages the MIDI LED will blink blue.

MIDI OUT

- Connect the 2.5mm-to-MIDI cable to the iRig Pro Duo I/O MIDI OUT port and to the MIDI IN port on, for example, your sound module.

- Open a Core MIDI compatible application on your iOS device or on your computer.

- When iRig Pro Duo I/O is sending MIDI messages the MIDI LED will blink blue.

Setting input gain on iRig Pro Duo I/O

BLUE

GREEN / ORANGE

RED
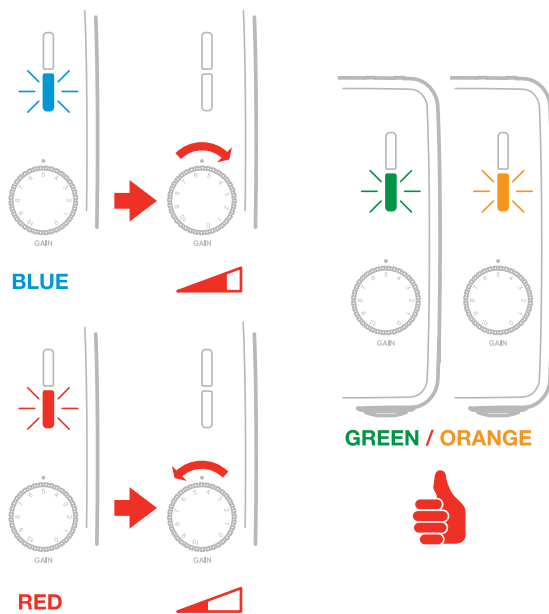
When talking or singing into your microphone, or when playing your instrument, check the audio level/status LED of the corresponding channel on iRig Pro Duo I/O.

- If the LED is alternating between BLUE and GREEN, or is always GREEN, you should increase the iRig Pro Duo I/O input gain by rotating the GAIN control clockwise.

- If the LED sometimes flashes RED, you should decrease the iRig Pro Duo I/O input gain by rotating the GAIN control counter-clockwise.

- When your gain setting is optimal, the LED should alternate between GREEN and ORANGE while you play or sing.

Troubleshooting

Sound is distorted.

You're probably overloading the input. Check that the input gain on iRig Pro Duo I/O is set properly. If the Audio Level LED is red when you play your instrument or sing or talk into a mic, decrease the input gain as described in this guide.

I don't get any sound.

In order for iRig Pro Duo I/O 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 audio input from the Lightning dock connector.

Mac: be sure you have set "iRig Pro Duo" as the audio or MIDI input device on the audio app you are using.

Phantom power doesn't turn ON.

Check that you have inserted working AA batteries in iRig Pro Duo I/O's battery compartment, or that you've connected iRig Pro Duo I/O to an external power supply.

I can't get any sound from my condenser microphone.

Your microphone may need phantom power. Turn phantom power on by moving the iRig Pro Duo I/O switch to the ON position and check that the Phantom LED has turned on.

I can't get any sound from my guitar / instrument input.

iRig Pro Duo I/O only works with 1⁄4" MONO guitar cables. Never use stereo (TRS) plugs cables as the iRig Pro Duo I/O instrument inputs will be muted.

When I connect iRig Pro Duo I/O to my computer or Android device I get a message that says that this device needs more power and the USB port will be disabled. How can I use my iRig Pro Duo I/O on my host device?

This means your USB host device is not capable of providing the necessary current. Please install two AA batteries in iRig Pro Duo I/O in order to use it with this USB host.

I have connected iRig Pro Duo I/O to my iPhone or iPad but it doesnt' turn ON.

iRig Pro Duo I/O only works with AA batteries when connected to iOS devices.

I use iRig Pro Duo I/O onstage and get buzzes and noises when connected to a PA system or main mixer.

Always connect iRig Pro Duo I/O outputs with balanced TRS cables to balanced line inputs. This way your signal will always be perfectly clear.

I do remote recording with my iPad using iRig Pro Duo I/O and two condenser microphones and the iRig Pro Duo I/O's battery life is very short under these conditions.

Use rechargeable high-performance AA batteries from 1,900 mA/h up. iRig Pro Duo I/O will last approx 3.5 hours in these recording conditions.

Specifications

Microphone Input

Microphone Inputs: 2x balanced, XLR. Pin 2: hot / Pin 3: cold / Pin 1: ground

Microphone Input Level: from 6 mVpp to 1.4 Vpp

Microphone Input Impedance: 3,2 kOhms

Gain Range: 50 dB

Phantom Power: +48V ± 4V

Frequency Response: 20 Hz to 20 kHz (+-1.5dB)

Input Noise: -103 dB(A), -97 dB RMS

Instrument Input

Instrument Inputs: 2x unbalanced, Hi-Z, TS 1/4" Jack, Tip: signal / Shield: ground

Instrument Input Level: from 30 mVpp to 6.9 Vpp

Instrument Input Impedance: 1 MOhms

Gain Range: 27 dB

Frequency Response: 20 Hz to 20 kHz (+-1.5dB)

Input Noise: -103 dB(A), -97 dB RMS

Line Output

Line Outputs: 2x balanced, TRS 1/4" Jack, Tip: hot / Ring: cold / Shield: ground

Floating Balanced Outputs with automatic level compensation when working in unbalanced mode

Maximum Output Level: +16 dBu into 600 Ohms balanced load

Instrument Input Impedance: 1 MOhms

Frequency Response: from 10 Hz to 21 kHz (-3dB)

Output Dynamic Range: 106 dB(A)

Output Impedance: 150 Ohms balanced

Common

AD and DA Resolution: 24-bit

Sampling Rate: 44.1 kHz and 48 kHz

Power: USB bus power, battery power (2xAA), or DC power supply (9VDC - 500mA min. positive outside - not included)

Metering: Multicolor LED

Size: 75mm/2.95" x 127mm/5" x 37mm/1.46"

Weight: 197.2g/6.96oz (batteries excluded)

Battery Life:

- Recording - Max load*: 3 hours, 30 minutes (NiMH rechargeable); 45 minutes (Alkaline)
- Playback - Min load**: 10 hours (NiMH rechargeable); 3 hours (Alkaline)

*Max load condition: both inputs connected to two 1,5mA phantom powered loads, input gains set to maximum, outputs set to maximum.

**Min load condition is as follow: music playng, phantom power OFF.

Warranty

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

Support and more info

www.ikmultimedia.com/support

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

FCC

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 iPhone iPad

"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.

2020/01/22