iLoud Precision MKII

USER MANUAL

IK MULTIMEDIA

Table of Contents

iLoud Precision MKII

Thank you for purchasing iLoud Precision MKII.

Your package contains:

- iLoud Precision MKII speaker (single)
- Power cord
- ARC microphone and clamp
- Isolation pods
- USB cable
- Safety manual and registration card

The iLoud Precision MKII monitors are the next evolution of the acclaimed Precision series. They build upon the legacy of the MKI with advanced DSP-powered technology and a host of unique features, some typically found only in products costing several times more.

Like the iLoud MTM MKII and the iLoud Micro Monitor Pro, the iLoud Precision MKII features linear-phase crossovers and perfectly time-coherent sound reproduction. This level of precision is nearly unheard of at this price point, with only a few competitors offering similar technology at significantly higher costs.

The MKII series also introduces a fully automated built-in room correction system based on the acclaimed ARC System technology. With a simple press of a button and the included ARC microphone, the speakers auto-calibrate to their environment. An exceptional feature rarely found in this class of monitor.

While the iLoud Precision MKII monitors offer various speaker emulations and tonal adjustments via ARC X technology, their most important setting remains the native iLoud Precision MKII voice. This delivers the flattest, most extended, uncolored, and phase-coherent response, ensuring exceptional accuracy in any studio environment.

Register your iLoud Precision MKII

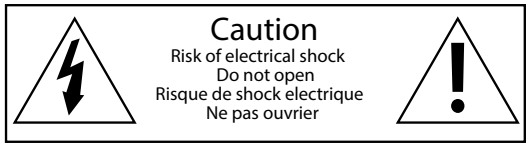
To ensure that your product is running the latest firmware, we strongly recommend that you register it. By registering, you can access technical support, activate your warranty and receive free JamPoints™, which will be added to your account. JamPoints™ allows you to obtain discounts on future IK purchases. Registering also keeps you informed of the latest software updates and IK products.

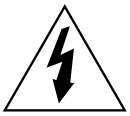
How to register:

1. Download IK Product Manager from **ikmultimedia.com/pm**
2. Launch IK Product Manager application and follow the online instructions
3. Use serial number found on the registration card to register your product

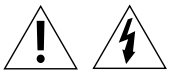
Safety Instructions

Please read the following safety instructions before setting up your system. Keep the instructions for subsequent reference. Please heed the warnings and follow the instructions.



 The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

 The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

 CAUTION: The power supply cord is used as the main disconnect device, ensure that the socket-outlet is located/installed near the equipment and is easily accessible.

 To reduce the risk of fire or electric shock, do not expose this loudspeaker to rain or moisture.

 No naked flame sources, such as lighted candles, should be placed on the loudspeaker.

 To reduce the risk of fire or electric shock, do not open this speaker, no user serviceable parts inside.

 Never replace any fuse with a value or type other than those specified. Never bypass any fuse.

 Do not use this speaker near water. Never use this speaker in a humid environment.

 Clean only with dry cloth.

 Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.

 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

 Do not defeat the safety purpose of the polarized or grounding - type plug. A polarized plug has two blades with one wider than the other. A grounding - type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the loudspeaker.

 Only use attachments/accessories specified by the manufacturer.

 Unplug this speaker during lightning storms or when unused for long period of time.

 Always keep electric equipment out of the reach of children.

 Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

 Refer all servicing to qualified service personnel. Servicing is required when the loudspeaker has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the speaker, the speaker has been exposed to rain or moisture, does not operate normally, or has been dropped.

 Do not expose this speaker to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the speaker.

 To completely disconnect the speaker from the AC mains, disconnect the power supply cord plug from the AC receptacle. The mains plug of the power supply cord shall remain readily operable.

 The speaker should be connected to a mains socket outlet with a protective earthing connection.

 Check that the specified voltage matches the voltage of the power supply you use. If not, do not connect the loudspeakers to a power source. Please contact your local dealer or national distributor.

 Never use flammable or combustible chemicals for cleaning audio components.

 Never expose this speaker to extremely high or low temperatures. Never operate this product in an explosive atmosphere. Rear panel may become too hot to touch, leave enough space for proper ventilation.

 Assure free airflow behind the speaker to maintain sufficient cooling by keeping a distance of at least 10 centimeters (4”) to the wall.

 Always switch off your entire system before connecting or disconnecting any cables, or when cleaning any components.

 Always use fully checked cables. Defective cables can harm your speakers. They are a common source of any kind of noise, hum, crackling etc.

 Avoid touching the speaker membranes.

 Please note that the diaphragms build up a magnetic field. Please keep magnetically sensitive items at least 0.5m away from the speaker.

 The equipment is capable of delivering sound pressure level considerably higher than 90dB, which may cause permanent hearing damage.

Maintenance

 Please switch the loudspeaker off before cleaning!

 Please note that the diaphragms build up a magnetic field. Please keep magnetically sensitive items at least 0.5m away from the speaker.

 Please make sure that no liquids get inside the cabinet. Do not spray any fluids on the speaker. Do not use a wet cloth for cleaning.

 Do not use flammable or acidic chemicals for cleaning.

 Do not touch the membranes of the loudspeakers.

 We recommend using a lint-free, damp cloth for cleaning. The loudspeaker membranes may be dusted using a very soft brush.

System Description

The iLoud Precision MKII series comprises active, two-way, 96 kHz digitally processed studio monitors. The range includes three models: the iLoud Precision 5 MKII, the iLoud Precision 6 MKII, and the iLoud Precision MTM MKII.

Thanks to the built-in ARC room correction system and the measurement microphone connected to the speaker, the system can auto-calibrate its in-room frequency response.

A set of push buttons on the back can manually contour the system's response.

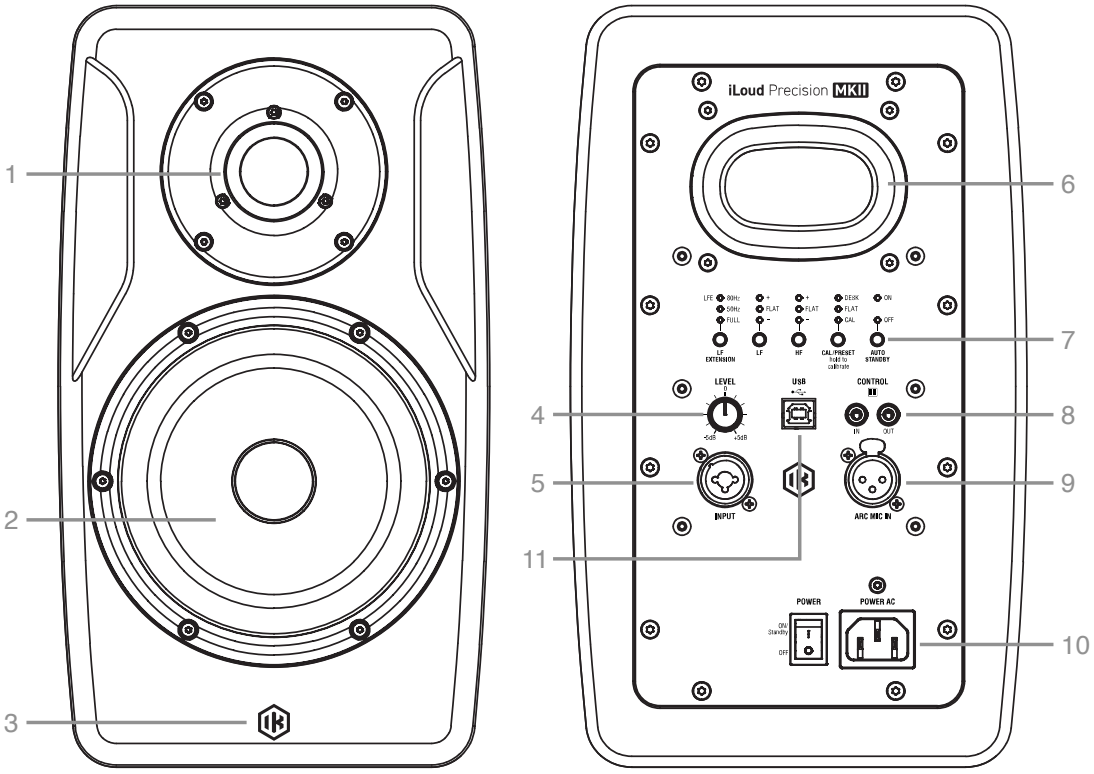
Thanks to the included ARC X software functionality, the system can emulate the sound of various listening devices, such as studio monitors, TV sets, portable devices, and car stereos.

The system can be remotely controlled using a small wired remote controller (sold separately) with four illuminated pushbutton switches. The switches' functionality is factory-assigned to four ARC X "voices'‘ and can be modified with the control software.

The ARC custom response and the ARC X target responses are stored and processed in the speaker as IR filters. This minimizes the responses' memory footprint and allows lightweight processing requirements even for high resolution at low frequencies. This is especially important, considering the system runs at 96 kHz.

The system can also be controlled by free ARC X software (for macOS and Windows) when the iLoud Precision MKII is connected via USB to a computer.

iLoud Precision 5 MKII



1. 1.5” chambered graphene-reinforced textile dome tweeter
2. 5” woofer
3. Multi-color LED
4. Volume control
5. 1/4” / XLR combo input
6. Bass reflex port
7. Rear controls
8. Remote control ports
9. ARC microphone input
10. Power section
11. USB port

Features:

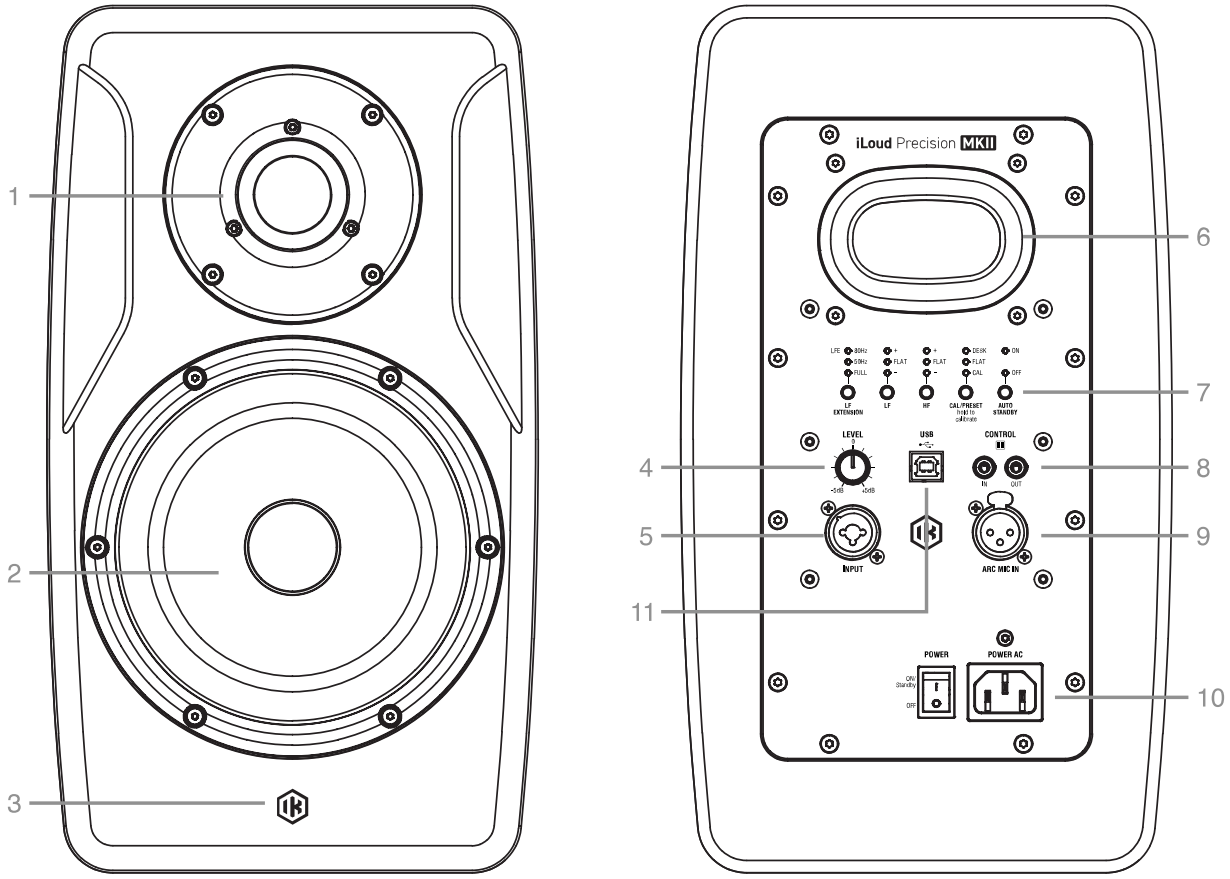
- 135 W total RMS power
- Reference frequency response: 46 Hz - 30 kHz +/- 1dB
- 39 Hz low-frequency extension at -4 dB
- Max SPL, continuous: 101.6 dB
- Max SPL, peak: 113.3 dB
- 5” ultralight coated paper mid-woofer
- 1.5” high output, low distortion graphene reinforced textile dome tweeter

- Linear phase response, +/- 20˚ from 150 Hz up
- Coherent time response across the audio spectrum
- Individually calibrated, 0.5 dB unit-to-unit sensitivity consistency
- Built-in ARC room correction
- Compatible with ARC X ecosystem
- Compatible with iLoud Precision Mounting Bracket
- DSP-controlled acoustic system with 96 kHz internal processing
- Advanced acoustic space controls
- Auto Standby
- Optional hardware remote control

Box content:

- 1x iLoud Precision 5 MKII
- 1x Power cord
- 1x USB-B to USB-A cable
- ARC Microphone with clamp
- 4x High-performance isolation pods

iLoud Precision 6 MKII



1. 1.5” chambered graphene-reinforced textile dome tweeter
2. 6.5” woofer
3. Multi-color LED
4. Volume control
5. 1/4” / XLR combo input
6. Bass reflex port
7. Rear controls
8. Remote control ports
9. ARC microphone input
10. Power section
11. USB port

Features:

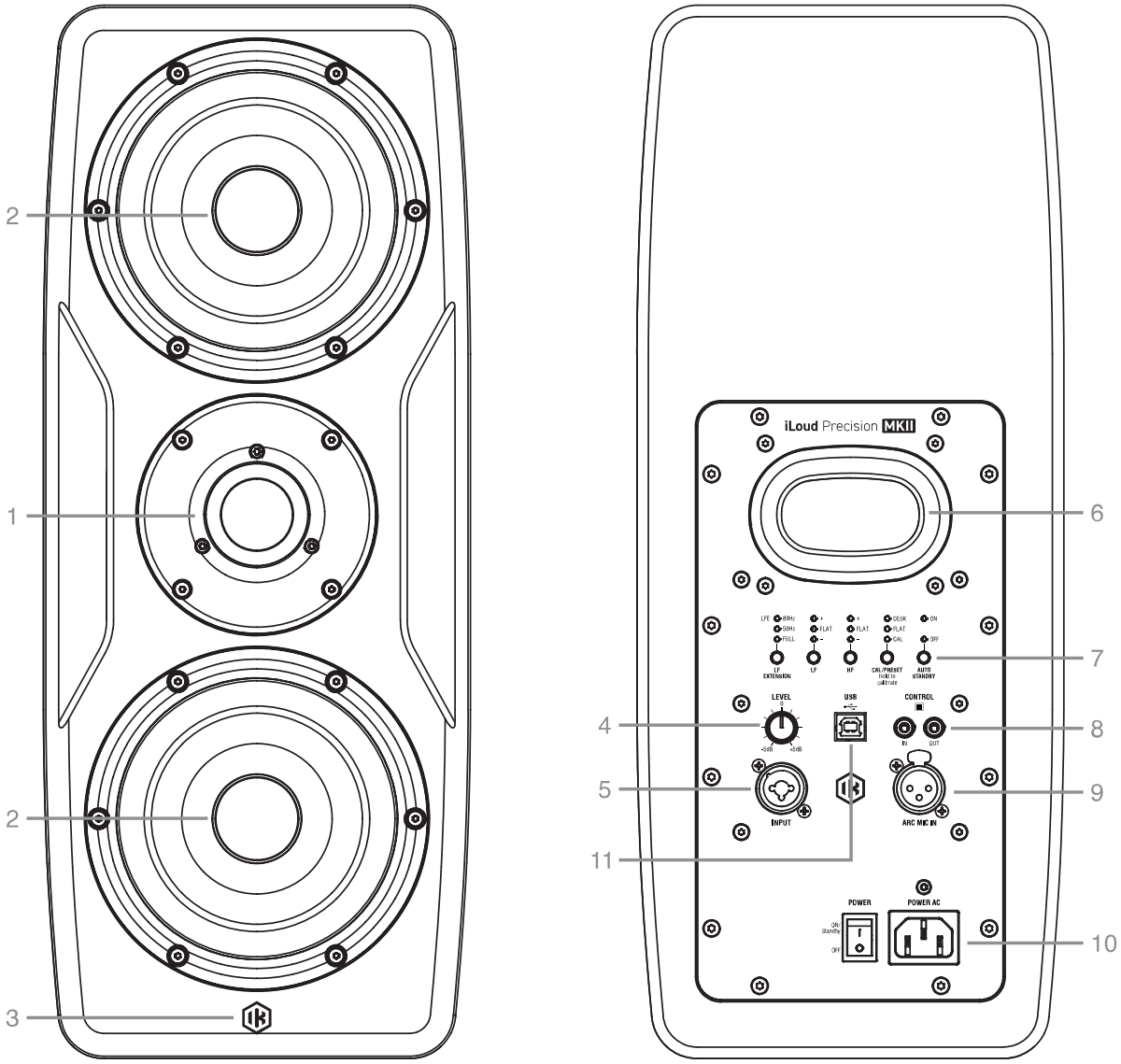
- 150 W total RMS power
- Reference frequency response: 45 Hz - 30 kHz +/- 1dB
- 37 Hz low-frequency extension at -4 dB
- Max SPL, continuous: 103.0 dB
- Max SPL, peak: 115.2 dB

- 6.5” ultralight coated paper mid-woofer
- 1.5” high output, low distortion graphene reinforced textile dome tweeter
- Linear phase response, +/- 20˚ from 150 Hz up
- Coherent time response across the audio spectrum
- Individually calibrated, 0.5 dB unit-to-unit sensitivity consistency
- Built-in ARC room correction
- Compatible with ARC X ecosystem
- Compatible with iLoud Precision Mounting Bracket
- DSP-controlled acoustic system with 96 kHz internal processing
- Advanced acoustic space controls
- Auto Standby
- Optional hardware remote control

Box content:

- 1x iLoud Precision 6 MKII
- 1x Power cord
- 1x USB-B to USB-A cable
- ARC Microphone with clamp
- 4x High-performance isolation pods

iLoud Precision MTM MKII



1. 1.5” chambered graphene-reinforced textile dome tweeter
2. 5” woofers
3. Multi-color LED
4. Volume control
5. 1/4” / XLR combo input
6. Bass reflex port
7. Rear controls
8. Remote control ports
9. ARC microphone input
10. Power section
11. USB port

Features:

- 175 W total RMS power
- Reference frequency response: 45 Hz - 30 kHz +/- 1dB
- 37 Hz low-frequency extension at -4 dB
- Max SPL, continuous: 105.5 dB
- Max SPL, peak: 117.0 dB
- 2 x 5” ultralight coated paper mid-woofers
- 1.5” high output, low distortion graphene reinforced textile dome tweeter
- Symmetrical MTM design for superior imaging and precision
- Linear phase response, +/- 20° from 150 Hz up
- Coherent time response across the audio spectrum
- Individually calibrated, 0.5 dB unit-to-unit sensitivity consistency
- Built-in ARC room correction
- Compatible with ARC X ecosystem
- Compatible with iLoud Precision Mounting Bracket
- DSP-controlled acoustic system with 96 kHz internal processing
- Advanced acoustic space controls
- Auto Standby
- Optional hardware remote control

Box content:

- 1x iLoud Precision MTM MKII
- 1x Power cord
- 1x USB-B to USB-A cable
- ARC Microphone with clamp
- 4x High-performance isolation pods

1 – Installation and setup

We recommend using high-quality audio cables to guarantee optimal performance. The speakers must also stand firmly on a solid surface. Please note that the loudspeakers will take a few days to achieve optimum sonic performance.

1. Ensure that the iLoud Precision MKII's volume control is set to a minimum and that the ON/OFF switch on the rear panel is set to OFF.
2. Adjust the vertical alignment of the speaker.
3. Connect the power cord.
4. Connect the audio input source to the input connector of iLoud Precision MKII.
5. Switch on the ON/OFF switch on the rear panel. After a short delay, the front LED will illuminate steady white.
6. Turn on your audio playback system (Mixing console, Audio interface, etc.). Adjust the volume control to a lower position only if necessary or if you require different levels between the speakers.
7. Adjust the speaker response with the dedicated controls on the rear panel if needed.
8. You can perform a speaker calibration to perfectly fit your iLoud Precision MKII into your acoustic environment (refer to the dedicated paragraph in this manual).

Note: Remember the "last on, first off" rule for powered speakers before plugging them in and turning them on. When powering up your system, ensure all the wires are connected, turn on your mixer/interface and any other outboard gear, and then turn on your iLoud Precision MKII. When powering down, turn off your iLoud Precision MKII first, followed by your mixer/interface and outboard gear.

2 – Control panel

2.1 – Audio input

Combo XLR-1/4” balanced line input

This combo connector connects an analog audio source (e.g., mixer/audio interface bal/unbal line out). Using balanced signal cables, professional equipment with balanced outputs can connect to the speaker’s XLR or 1⁄4” TRS input.

2.2 – ARC Mic input

Connect the ARC microphone to this female XLR, and you can calibrate the speaker to suit your environment perfectly.

2.3 – Level

This control allows you to adjust the input level of the audio source from -5 dB to +5 dB.

2.4 – USB port

This USB type-B port is used for service purposes, such as firmware updates, factory checks, or remotely controlling the iLoud Precision MKII via its control software.

2.5 – Control I/O

These 3.5 mm jacks are used to connect the optional remote controller. The controller will be connected to the IN port, and then the OUT port will be connected to the IN port of the other speaker to control it: this lets you daisy chain all of the speakers included in the system.

2.6 – Power

Power switch: this switch allows you to power on and off your device.

Power AC: connect the (included) power cord to this AC socket.

IMPORTANT: Before connecting or disconnecting the power cord, ensure the power switch is set to OFF.

3 – Rear Controls

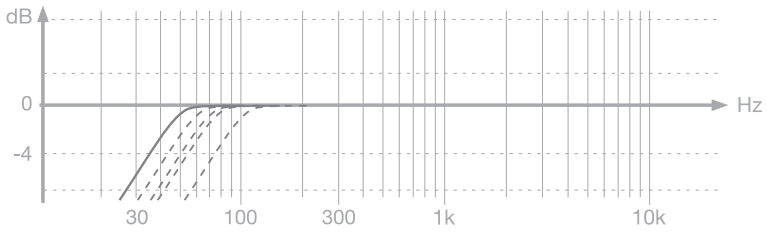
The pushbuttons on the back panel help you perfectly match iLoud Precision MKII to every acoustic environment. The LEDs on the back panel have two levels of brightness.

When the buttons are operated, the LEDs are lit at maximum intensity. After 10 seconds of no operation, the LEDs will dim.

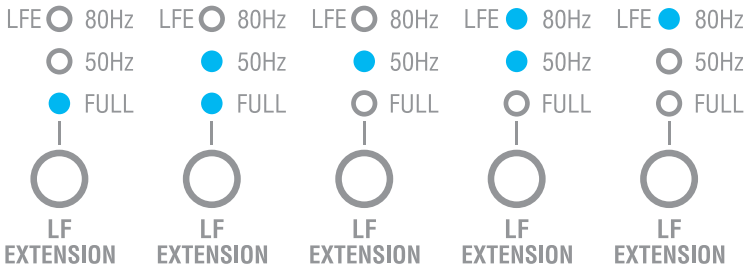
The first button press will bring the brightness back to its standard value but will not activate any of the functions, including the “hold” ones: after 10 seconds of no operations, the first button press will only “wake up” the panel.

3.1 – LF extension

This pushbutton controls the global HPF filter, and it has five positions (FULL – 35 Hz – 50 Hz – 65 Hz – 80 Hz LFE):



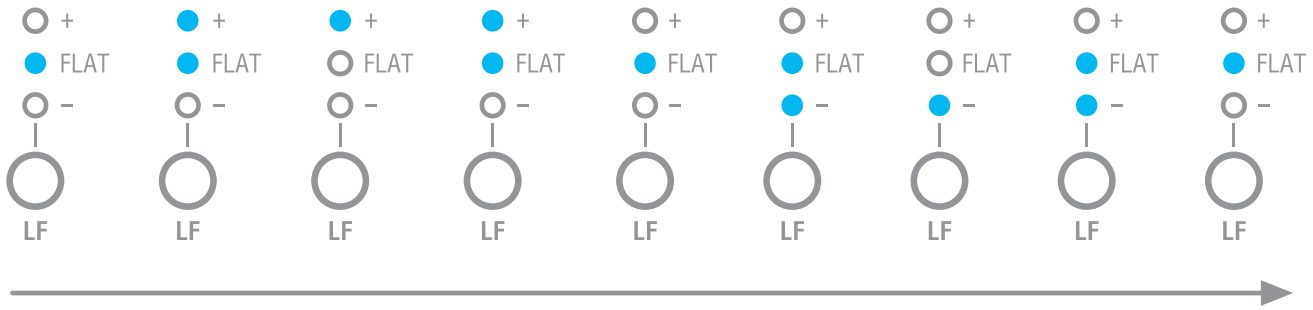
The setting changes with each button release, starting from the lowest setting to the highest in five steps, including the intermediate ones. Two LEDs are turned on to indicate when an in-between setting is selected.



When the highest setting is selected, an additional release will return to the lowest setting.

3.2 – LF and HF filters

The LF and HF pushbuttons control the main low and high shelving filters: each button has five positions, and it cycles through the positions in this sequence:



LEDs light up to indicate the following status:

FLAT = 0 dB (default)

FLAT & + = +1.5 dB

+ = +2.5 dB

FLAT & - = -1.5 dB

- = -2.5 dB

LF: low-shelving @100 Hz, Q: 0.6

HF: high-shelving @10 kHz, Q: 0.6

3.3 – Auto Standby

This pushbutton turns ON or OFF the auto standby function. By default, this control is set to ON.

When ON, the speaker automatically switches to low power mode when no audio is fed to the input for longer than the time set by the control software, which is 60 minutes by default.

The speaker will turn fully on as soon as the audio returns.

When the speaker enters standby mode, the front LED dims its brightness relative to its normal condition.

3.4 – CAL/Preset

This pushbutton allows you to cycle between the DESK filter, FLAT (the default) and custom user calibration (if present). The Desktop filter sets an attenuation filter to compensate for a console or desk's typical acoustic effect. Such placement usually results in a boost in the lower midrange.

By holding this button for three seconds, the speaker will start the ARC calibration process (the control software can also launch the ARC calibration process).

Refer to the next chapter (4. ARC calibration) to perform a custom calibration.

IMPORTANT: Units shipped from our factory do not have a custom calibration loaded, so the CAL position will not be available until the user performs a custom calibration.

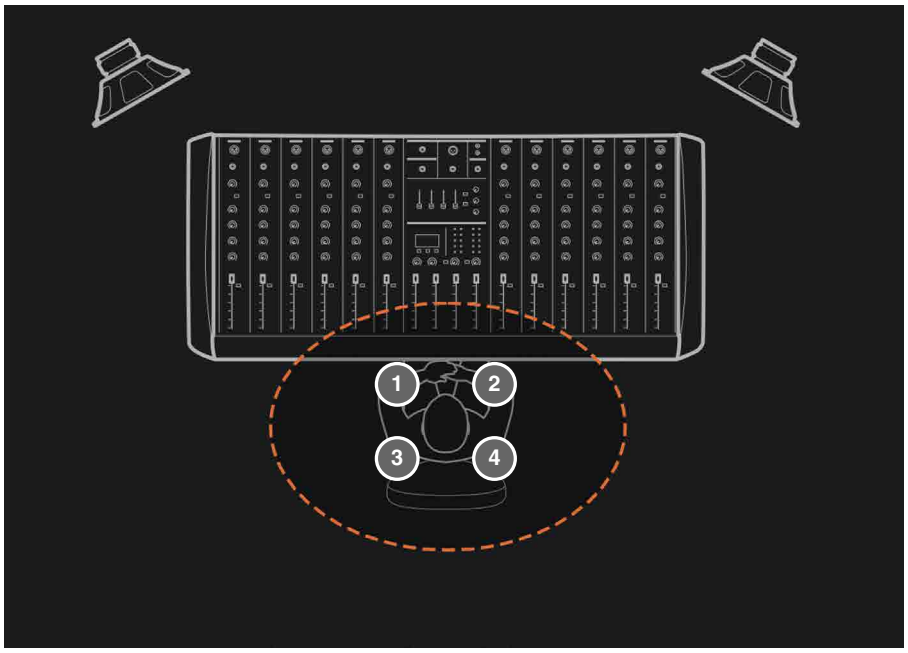
Once the ARC calibration has been completed, this pushbutton controls the switch between FLAT, DESK and CAL settings by cycling among the three in this sequence:

FLAT -> CAL -> DESK -> FLAT -> ...

4 – ARC calibration

Thanks to the ARC technology, iLoud Precision MKII can be tailored to fit your listening space perfectly.

The iLoud Precision MKII ARC calibration measurement is taken at four points for improved sonics. The four points are taken around the listening position, as shown in the image below:

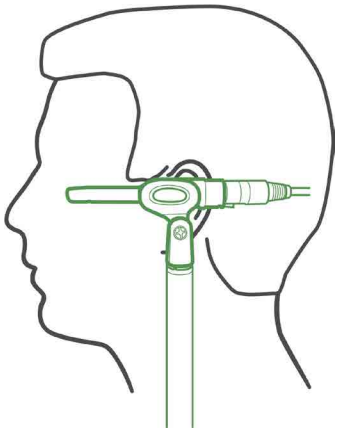


4.1 – Position the microphone

Connect the ARC microphone to the ARC MIC INPUT on the back of the iLoud Precision MKII using a suitable XLR microphone cable.

PLEASE NOTE: The measurement microphone must be positioned HORIZONTALLY.

Example of correct microphone positioning:



Make sure that you attach the microphone to a standard mic stand.

Try to use a mic stand with a boom arm extended as far away from the stand as possible. This helps avoid reflections from the stand that may interfere with the analysis at high frequencies.

Do not stand or sit near the microphone while the analysis procedure is running.

As the figure above indicates, the microphone must be set at the same height as your ears when listening to the speakers.

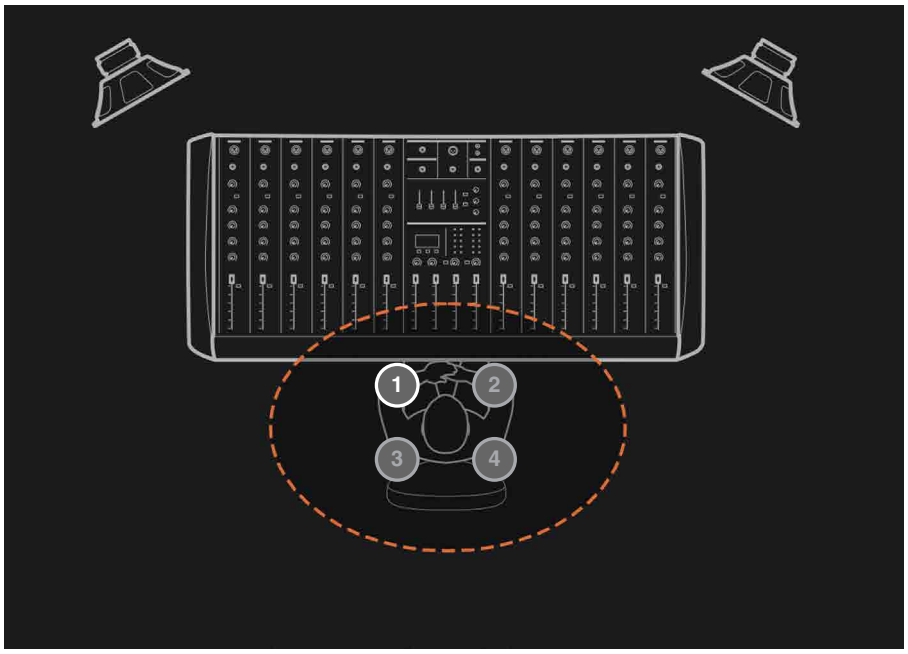
4.2 – Custom calibration

At this point, the ARC calibration process can be launched in two ways.

4.2.1 – From the speaker

To perform a custom calibration from the speaker, please follow the following steps.

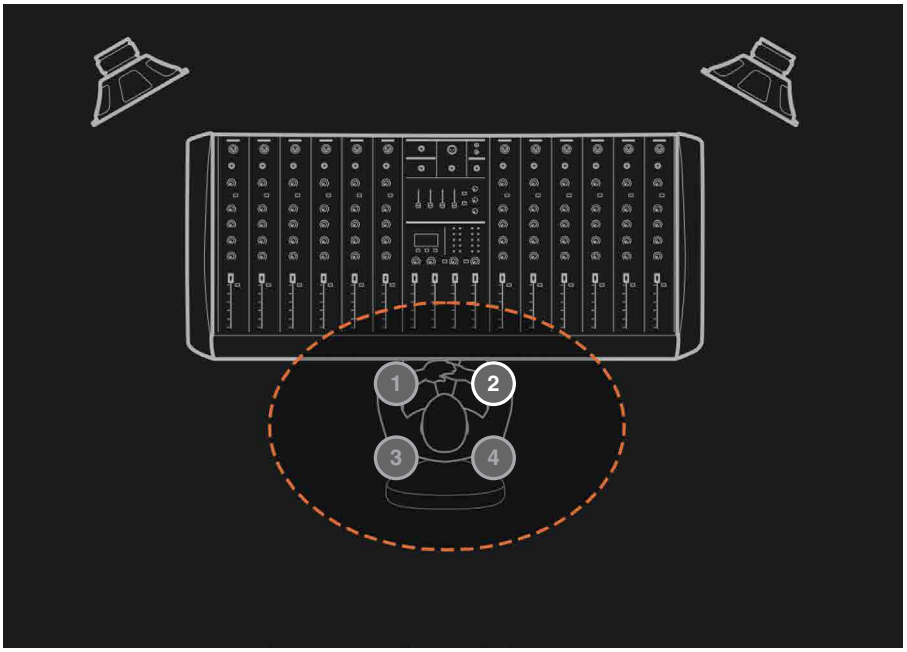
Place the microphone at point 1:



Keep the CAL/PRESET button pressed for three seconds. It switches the speaker into Calibration mode:

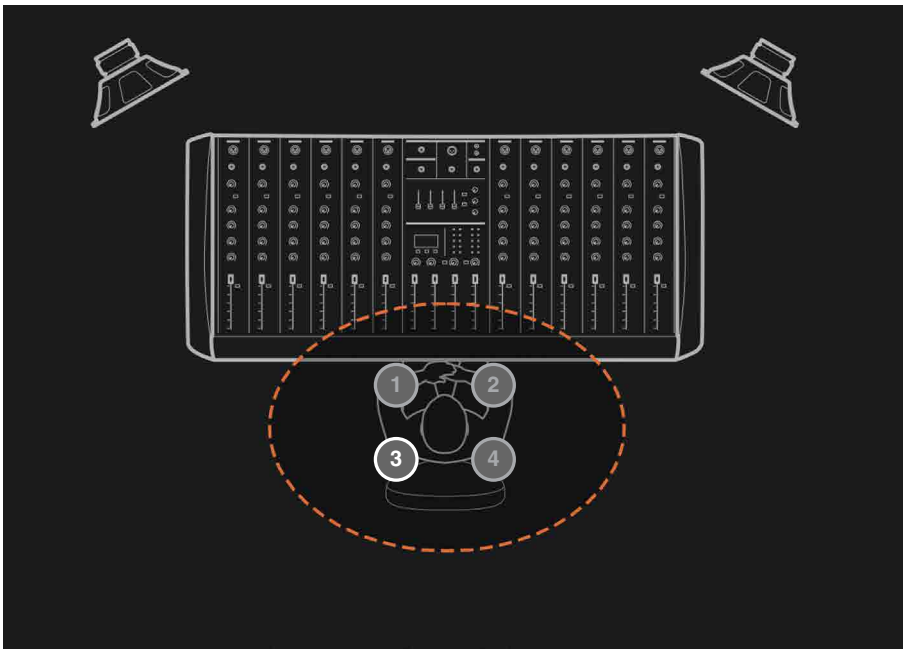
- The CAL LED on the back will start blinking together with the front LED (white).
- Press the CAL/PRESET button again to start the calibration process.
- After 5 seconds, the speaker will emit the calibration test signals (chirps).

1) Once the chirps are over, move the microphone to point 2 and press again the CAL/PRESET button:



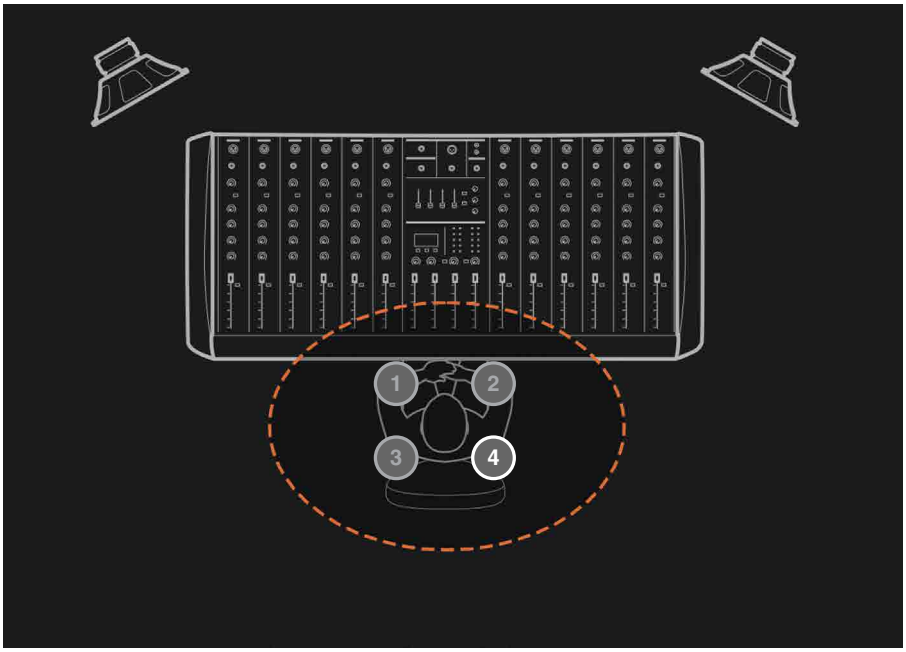
- After 5 seconds, the speaker will emit the calibration test signals (chirps).

2) Once the chirps are over, move the microphone to point 3 and press again the CAL/PRESET button:



- After 5 seconds, the speaker will emit the calibration test signals (chirps).

3) Once the chirps are over, move the microphone to point 4 and press again the CAL/PRESET button:

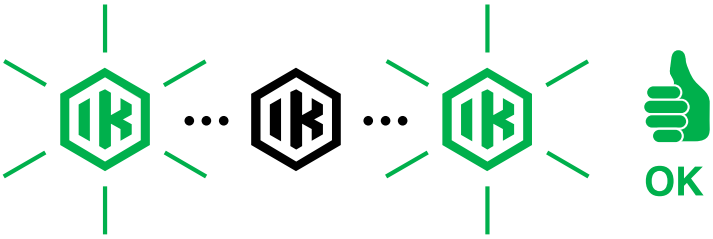


- After 5 seconds, the speaker will emit the calibration test signals (chirps).

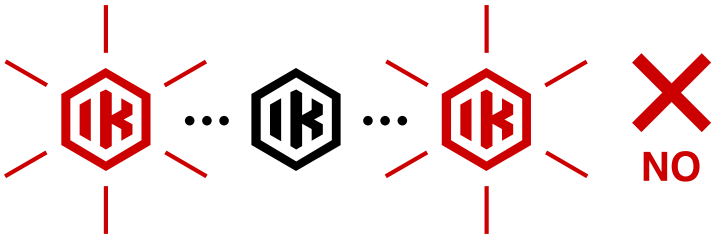
IMPORTANT: During the measurement process, ensure that the environment is as silent as possible, do not touch the speaker or microphone, and that the overall room setup is as similar as possible to the one used during normal iLoud Precision MKII usage.

Once the last measure has been taken, the system will automatically start calculating the ARC calibration filters.

If the calculation process concludes without issues, the front LED will blink green for 3 seconds to confirm the ARC calibration has been successful and that it has been stored: the system will automatically load the calibration just registered.



If the calibration ends unsuccessfully, the front LED will blink RED for 3 seconds to indicate an error, and the system will automatically exit the CAL procedure. In this case, try repeating the calibration process.



The procedure must be repeated for each speaker in the system, paying attention to placing the microphone in the same spot for each position.

NOTE: The measurement signal level is independent of the volume control. The audio test signal level is fixed and optimized for best performance.

TIPS: To facilitate calibration, you can measure different speakers simultaneously, leaving the microphone in one position as you move to the next speaker. When you've measured all your speakers from that position, move to the next position. This way, you don't have to worry about replacing the microphone in the exact position between the different speakers in the setup.

4.2.2 – From the control software

Please follow the control software's manual instructions to perform a custom calibration.

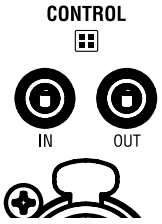
5 – Factory Reset

Holding the CAL/PRESET and AUTO STANDBY buttons for three seconds will reset the system's factory defaults. Then, all back LEDs will flash five times for one second, and the system will revert to its original factory state, including emptying the custom CAL curve and factory assignment for the remote control.

6 – Hardware Remote Control

The iLoud Precision MKII remote control (sold separately) can be conveniently placed on a mixing desk, near the monitoring section or anywhere else it is most comfortable to operate. This little remote allows you to switch the monitor voices as if more than one pair of monitors were set up in the studio or conveniently perform the ARC calibration process from the seating position.

It is possible to connect the remote controller to the CONTROL IN port using the supplied TRRS cable, and the OUT port will then be connected to the IN port of the other speaker to control it: this lets you daisy chain all the speakers included in the system.



6.1 – ARC X voice control

Once connected to the iLoud Precision MKII monitors for the first time, the remote will automatically set to position “1”, selecting the ‘Wide dispersion, quasi-linear phase’ precision voice. You can switch the ARC X voices by pressing switches 2, 3, or 4. By default, these are the voices assigned to the four switches:

- Button 1: Analytic, linear phase
- Button 2: High-end 3-ways
- Button 3: Classic 7 AMT
- Button 4: Studio White

6.2 – Other functionalities

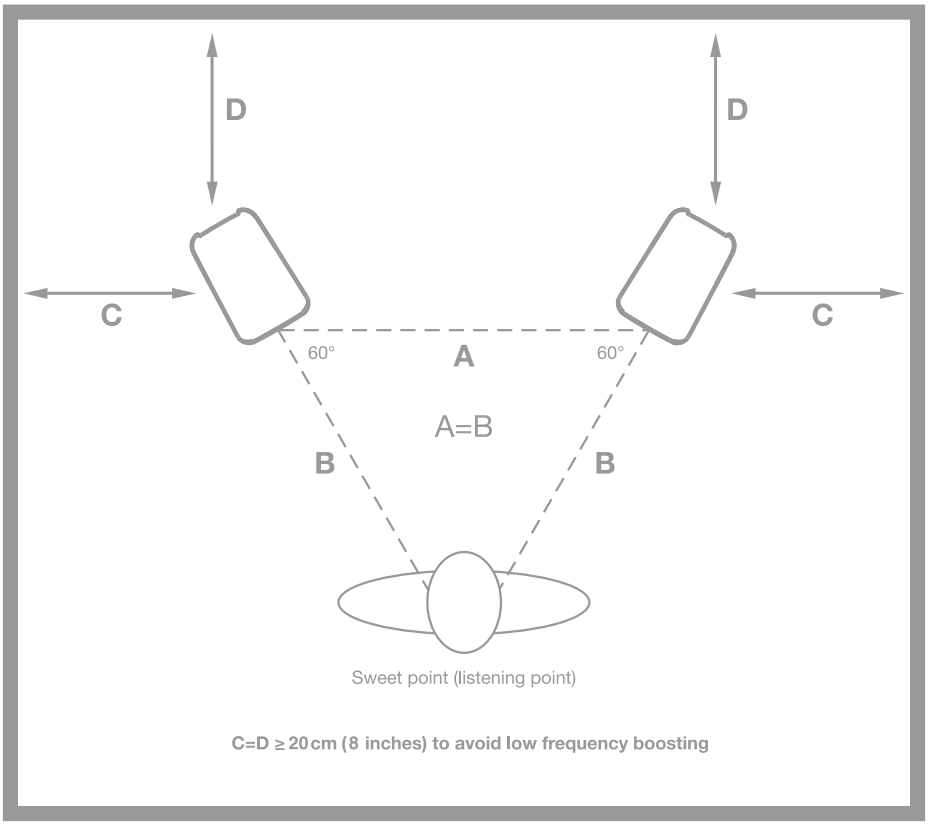
From the control software, it’s possible to assign other functionalities to the remote control, such as:

- Speakers MUTE
- Speakers DIM
- ARC on/off

Please refer to the ARC X manual for complete usage instructions and feature details.

7 – Listening Position

When using iLoud Precision MKII for stereo applications, the optimum listening position should be in the middle of an imaginary triangle. This means that your listening point (sweet spot) will be at the top of an equilateral triangle, and the two loudspeakers should be placed at the other two corners. Furthermore, symmetrical positioning is also important: this applies to the distance between speakers and the walls, ceiling and floor. To have a symmetrical stereo image, it is also important to have symmetrical reflections: we recommend keeping a distance of at least 20 cm (8 inches) from the walls to avoid low-frequency emphasis.



7.1 – Room acoustics

Room acoustics play a key role in the performance of your monitoring system. It is always advisable to treat your environment acoustically, at least minimally. This, along with the correct monitor's positioning, will improve the linearity and precision of the listening experience.

Troubleshooting

I have connected my device to iLoud Precision MKII, but no sound comes out

Set up the volume with the volume control on iLoud Precision MKII and/or your device's volume control.

Sound is distorted

When noticeable distortion occurs, please turn down the level of the speakers or the connected audio source.

Calibration ended unsuccessfully (front LED blinks red)

If the calibration ends unsuccessfully and the front LED blinks red, ensure you have correctly inserted the XLR cable on the microphone and the ARC mic input on the rear of iLoud Precision MKII.

Support

For any questions you may have, please refer to the FAQ webpage at:

ikmultimedia.com/faq

Here you will find answers to the most commonly asked questions.

To submit a Technical Support Form, go to:

ikmultimedia.com/support

For warranty information, please visit:

ikmultimedia.com/warranty

For other requests such as Product, Sales, or Web info, please go to:

ikmultimedia.com/contact-us

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Regulatory

Model: iLoud Precision MKII

Model Number: IK137, IK138, IK139

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.

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