



SPACE251

Tube Condenser Microphone

Welcome to a new world of recreated classic microphones – classic tone without compromise.

Inspired by the extremely popular tube vocal microphone of the 1960's and considered one of the greatest condenser microphones ever created, the Space 251 is strikingly beautiful and gloriously presented with a gloss, electroplated finish. The Space 251 offers the silky and smooth, open, airy, and incredibly detailed sound of the original and will record vocals and instruments with ease. Complete with its own power supply as per the original, you can be assured of the quality of this condenser tube microphone, especially given the caliber of the components, (i.e. the very highly regarded 12AY7 tube, WIMA capacitors, Fairchild resistors, Cinemag transformers and power supply cabling by Gotham Audio, Switzerland). The Space 251 not only looks beautiful, it sounds beautiful.







RISK OF ELECTRIC SHOCK DO NOT OPEN RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIE





The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated hazardous voltage within the device's enclosure, which may be of sufficient magnitude to induce 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 device.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVIDEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED PERSONNEL

ATTENTION: POLIR EVITER LES RISQUES DE CHOC ELECTRIQUE: NE PAS ENLEVER LE COUVERCLE, AUCUN ENTRETIEN DE PIECES INTERIEURES PAR L'USAGER CONFIER ENTERETIEN AU PERSONNEL QUALIFIE AVIS: POUR EVITER LES RISQUES D'INCENDIE OL D'ELECTROCUTION, N EXPOSEZ PAS CET ARTICLE A LA PLUIE OU A L'HUMIDITE

Important Safety Instructions

- 1. Read this manual thoroughly before using this unit.
- 2. Keep this manual for future reference.
- 3. Take notice of and comply with all warnings included in the user's manual or indicated on the appliance.
- Follow all instructions included in this manual.
- 5. Do not expose this unit to rain or moisture. Avoid having water or other liquids spilled on this unit.
- 6. Do not block any ventilation openings or interfere with the proper ventilation of this unit. Install in accordance with the manufacturer's instructions.
- 7. Do not use or store near any heat sources such as radiators, heat registers, stoves, or other heatproducing appliances.
- 8. To avoid the risk of electrical shock, do not touch any exposed wiring while the unit is in operation.
- 9. Only use attachments/accessories specified by the manufacturer.
- 10. Unplug this microphone and all connected electrical equipment during lightning storms or when left unused for a long period of time.
- 11. Refer all servicing to qualified service personnel. Servicing is required when the appliance has been damaged in any way or fails to operate normally.

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Introduction

Firstly, congratulations on your purchase of the ICON Pro Audio Space 251 studio condenser microphone! In these pages, you'll find a detailed description of the features of the Space 251 tube studio condenser microphone, as well as instructions for its setup and use in addition to a full list of specifications.

Please register the product on our website at the link below my.iconproaudio.com/registration

As with most electronic devices, we strongly recommend you retain the original packaging. In the unlikely event that the product is returned for servicing, the original packaging (or reasonable equivalent) is required. With proper care and adequate air circulation, your Space 251 Studio condenser microphone will operate flawlessly for many years to come.

We trust that this product will provide years of excellent service and in the unlikely event that your product does not perform to the highest standard, every effort will be made to address the issue.

What's in the package?

- Space 251 studio condenser microphone
- Shock mount
- Power supply w/ polarity switch
- Metal Case
- Innovative magnetic pop filter
- Gotham Audio cable (7 pin) power supply connection



Register your ICON Pro Audio product to your personal account

1. Check the serial number of your device

Please go to my.iconproaudio.com/registration or scan the QR code below.



Input your device's serial number and the other information on the screen. Click "Submit"

A message will pop up showing your device information such as model name and its serial number. Click "Register this device to my account". If you see any other message, please contact our after-sales service team

2. Log in to your personal account page for existing users or sign up for new users

Existing user: Please log into your personal user page by inputting your

user name and password.

New user: Please click "Sign Up" and fill in all the information.

3. Download all useful materials

All your registered devices under your account will show on the page. Each product will be listed along with all its available files such as drivers, firmware, user manuals in different languages and bundled software etc. for download.

Features

First introduced in the late 1950's, the original 251 is synonymous with exceptional sound quality and vintage character. Some say the original 251 is the best condenser microphone ever produced.

The Space 251 is inspired by this legendary and highly sought-after microphone which is often associated with classic recordings from the 1960's and 1970's and is still used extensively by top-tier recording studios and audio professionals today. Famous users include Bruce Springsteen, Celine Dion, Shirley Manson of the band Garbage and Tom Petty. There's a very good reason why the original version of this microphone is Beyonce's 'go to' vocal mic!

The Space 251 has a natural and smooth top-end that adds 'air' and 'sparkle' to recordings without any trace of harshness. The midrange is lush and full-bodied, adding depth to vocals and instruments. The Space 251 is adept at capturing low frequencies with a warm and rounded quality, contributing to solid and well-rounded low-end in recordings.

While perfect for vocals, the Space 251 is versatile and can be used on a wide range of instruments, including acoustic guitars, pianos, strings, and more to achieve a classic and timeless sound.

The Space 251 features three switchable polar patterns - cardioid, omnidirectional, and Figure-8, (bi-directional), selectable via the power supply unit and is designed with low self-noise.

Premium components contribute to the Space 251's unique tone and character, such as a 12AY7 tube, WIMA capacitors, Fairchild resistors, and highly regarded, handmade Cinemag transformers. Even the cabling between the power supply unit and the Space 251 is of the highest quality and provided by Gotham Audio, Switzerland.

The Space 251's robust and durable construction will stand the test of time. Its sturdy design and high-quality materials ensure that it can withstand the rigors of professional studio environments.

The exterior, beautiful, glossy, electroplated high-grade finish provides a classy, refined look, at home in any professional, world-class studio as it is in the project studio. The electroplated finish also helps reduce self noise in the microphone.

The Space 251 package comes complete with a high-quality, durable shock mount, an innovative magnetic pop shield, a Gotham Audio cable to connect to its own power supply as per the original as well as a robust, hard-wearing metal storage box.



- Cardioid, omnidirectional, and bidirectional patterns
- Excellent for recording vocals and instruments in a studio environment - renown for exemplary vocal recordings
- Pressure-gradient transducer with shock-mounted capsule
- Low noise floor enabling the mic to be used to record quiet and intimate material
- Top-quality components including WIMA capacitors, Fairchild resistors, Cinemag transformers, and Gotham Audio cabling
- Rugged construction with all metal body
- Extremely high grade, electroplated finish
- Innovative magnetic pop shield
- Robust and durable shock mount
- Power supply unit with polarity switch
- Strong and hard-wearing metal storage caseand the biggest, most important feature of all;
- classic and timeless sound!

Operating the Space 251

Powering the Space 251

As with the original, the Space 251 is equipped with its own power supply, which must be used. Phantom power is not appropriate for this microphone. Polar patterns may be selected on the power supply unit.

Please connect the microphone to the power supply as directed in the diagram below.

Safety Warning: Please ensure any speakers are at a minimal level or turned off when connecting your microphone/power supply. Headphones should not be worn when connecting any equipment to protect your ears in the event of audio anomalies such as feedback.



Setting up the signal level

When connecting the Space 251 to a mixer or recorder input, be sure that the input is of an acceptable/low level. Most mixers and recorders of reasonable quality will offer a microphone input with MIC trim (usually called Trim or Gain) control. The purpose of the MIC trim control is to optimize the amount of good signal to any noise associated with the mixer's electronics. A good MIC pre with trim will also have a Peak or Clip LED. To set a good level on the MIC, set the Space 251 up in front of the desired sound source and slowly raise the MIC trim control until you see the Peak LED light up. Then, turn the mix trim control down until the LED does not light anymore. On most mixers, the ideal setting is that the trim control is turned up as much as possible without lighting the Peak LED.

Microphone Placement

In order to maximize the sound quality, you must pay careful attention to the placement of your Space 251 and how it is positioned for the instrument or vocalist that you are miking. All microphones, especially unidirectional or cardioid microphones, exhibit a phenomenon known as the "proximity effect". Very simply put, the proximity effect is a resulting change in the frequency response of a microphone based on the position of the microphone capsule relative to the sound source. Specifically, when you point a cardioid microphone (or a microphone such as the Space 251 with the cardioid pattern selected on the power supply box) directly at the sound source (on-axis) you will get the best frequency response. However, when you start pointing the microphone slightly away (off-axis) you will notice the low frequency dropping off and the microphone will start to sound thinner.

For most vocal applications you'll want to position the microphone directly in front of the artist when the Space 251 is used for vocals, using the cardioid pattern. The same may be true for miking instruments. However, you can make some pretty amazing equalization adjustments by slightly changing the angle of the capsule to the sound source.

Cardioid, Omni and Figure-8 Patterns - practical uses

Cardioid: This is the 'go to' for most users - great at capturing vocals and instruments.

Omni: This is great for capturing the sound of a room – i.e. room mics for a drum kit, groups of instruments played collectively or to capture the 'ambiance' of a space.

Figure-8: Most often used to record duets with two singers standing either side of the mic, (front and back). As the 'sides' of the mic will not pick up sound, this can also be used strategically to filter unwanted noise at source.

P-Popping

P-Popping is that annoying pop sound that you can get when the microphone diaphragm gets a blast of air from a vocalist pronouncing words with the letter "P" included, (because it is a "plosive" syllable). Using the included innovative magnetic pop shield filter will help eliminate these unpleasant sounds.

Components

iCON Pro Audio does not make microphones that simply look like their famous ancestors and don't deliver. In fact, the opposite is true. The Space 251 is presented to you in a beautiful, bold, futuristic design – fit for the 21st century, whilst every effort has been made to replicate the sound of the original, using high-grade components, at a fraction of the cost of the original. Classic tone without compromise.

Here is some brief information on the components and the companies that have supplied them;

The 12AY7 tube

Developed by RCA in 1946, the 12AY7 tube has been in continuous production since 1947 by a few, selected manufacturers, such is its popularity and high regard. The 12AX7 tube is known for its warm, rich, and harmonically complex sound, often described as "vintage" in character.

Fairchild resistors

You know the name and you know it is indelibly connected with the revered, world-famous Fairchild 660/670 compressor, used in Abbey Road (then called EMI studios), for many of The Beatles recordings, but did you know they make small components for microphones like the Space 251? Fairchild are of course well known for the exemplary quality of their products and attention to detail - their resistors being no exception.

Cinemag transformer

With experience going back to the 1940's, Cinemag is world-famous for producing excellent components and is well-placed to produce the transformer for our Space 251 microphone. Cinemag's transformers feature excellent impedance matching between the microphone and the pre-amplifier, very low distortion, and superior bandwidth.

WIMA capacitors

Hailing from Germany, WIMA is the world's foremost specialist in capacitors and has been in operation since 1948. They are also the world's leading manufacturer of capacitors and have an enviable reputation in this field. No wonder then, that we have used their engineering expertise for our Space 251!

Gotham Audio cable

This is an extremely high-grade, 7-pin cable to connect to the power supply. It plays a vital role for the microphone in that it carries both audio and voltage for the tube on different pins. Gotham Audio is a world-class leader in the field of audio cabling – some say the world-class leader, with some audio professionals only ever using Gotham cabling. Gotham Audio's reputation speaks for itself.

Mounting the Space 251

Mount your Space 251 into the provided shock-mount clip as the illustration below

demonstrates.



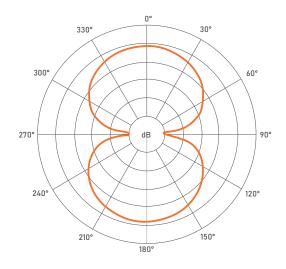
Insert your magnetic shock mount by simply dropping it into place:

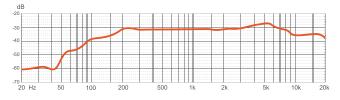


Specifications

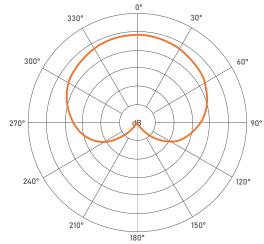
Acoustical operating principle	Pressure gradient transducer
Directional Pattern	Omnidirectional, cardioid, figure-8
Frequency Range	20 Hz 20 kHz
Rated Impedance	200 ohms
Rated load impedance	
Maximum SPL for THD 0.5% ²⁾	132dB (<0.5% THD)
S/N Ratio:	80dBA
Equivalent Noise:	12dBA (IEC651)
Supply voltage (P48, IEC 61938)	48 V ± 4 V
Matching connector	Microphone: spec. 7pin, Power
	Supply: XLR 3 F
Dimension	45mmX45mmX247mm
	1.35"(L) x 1.35"(W) x 7.41"(H)
Weight	0.611 kg (1.35lb)

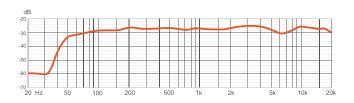
Figure-8



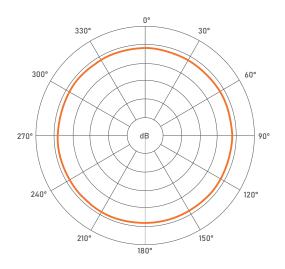


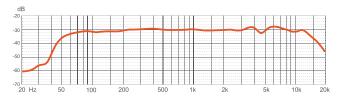
Cardiod





Omni





Services

If your Space 251 needs servicing, follow these instructions.

Check our online Help Center at http://support.iconproaudio.com/hc/en-us, for information, knowledge, and downloads such as:

- 1. FAQ
- 2. Download
- 3. Product Registration
- 4. Video Tutorials

Very often you will find solutions on these pages. If you don't find a solution, create a support ticket at our online Help Center at the link below, and our technical support team will assist you as soon as we can.

Navigate to http://support.iconproaudio.com/hc/en-us and then sign in to submit a ticket.

Once you have submitted an inquiry ticket, our support team will assist you to resolve the problem with your ICON Pro Audio device as soon as possible.

To send defective products for service:

- 1. Ensure the problem is not related to operation error or external system devices.
- 2. Keep this owner's manual. We don't need it to repair the unit.
- Pack the unit in its original packaging including end card and box. This is very important. If you have lost the packaging, please make sure you have packed the unit properly. ICON is not responsible for any damage that occurs due to non-factory packing.
- 4. Ship to the ICON tech support center or the local return authorization. See our service centers and distributor service points at the link below:

If you are located in the **United States** please visit our help centre - https://support.iconproaudio.com and submit a ticket to the technical support team.

If you are located in **Europe**, please email the support team and wait for a response before sending the product to:

Sound Service GmbH European Headquarters Moriz-Seeler-Straße3 D-12489 Berlin Telephone: +49 (0)30 707 130-0 Fax: +49 (0)30 707 130-189

E-Mail: service@sound-service.eu

If you are located in **Hong Kong** please email the support team and wait for a response before sending the product to:

ASIA OFFICE:

Unit F, 15/F., Fu Cheung Centre, No. 5-7 Wong Chuk Yueng Street, Fotan.

Sha Tin, N.T., Hong Kong. Tel: (852) 2398 2286 Fax: (852) 2789 3947

Email: info.asia@icon-global.com

For additional update information please visit our website at: www.iconproaudio.com



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