

SPACE 877

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

Inspired by the most commonly used and most widely known condenser microphone in top professional studios in the world today. Beautifully presented with a gloss, electroplated finish, the Space 87 offers the open, smooth and refined sound of the original 87 and will take your vocal, drums, and acoustic instruments to a higher level. Great ambient 'pick-up', and fantastic tonal quality coupled with top-quality components, (WIMA capacitors, Fairchild resistors and a Cinemag transformer) ensure this microphone will deliver excellence and reliability time and time again.







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 87 studio condenser microphone! In these pages, you'll find a detailed description of the features of the Space 87 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 87 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 87 studio condenser microphone
- Shock Mount
- Metal Case
- Innovative magnetic pop filter



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

Inspired by the most commonly used and most widely known solid state condenser microphone in professional studios today, the Space 87's exceptional sound quality and ability to capture fine details makes it suitable for a variety of recording applications.

As you would expect, the Space 87 handles recording vocals with ease, whether it's for singing or spoken word, just like it's famous predecessor. Its smooth and natural frequency response helps capture the nuances and tonal qualities of the speaker/singer's voice.

It is, in fact, something of a workhorse and able to capture various musical instruments, such as acoustic guitars, pianos, strings, and brass instruments with clarity and detail. Its ability to accurately reproduce the sound of instruments makes it a versatile choice for different genres and styles of music.

Using the Space 87 to record drum overheads can help capture the overall sound of a drum kit with clarity and depth. The Space 87's wide frequency response and sensitivity make it suitable for capturing the nuances of various drum elements.

When placed strategically in a room, the Space 87 will capture the natural ambience and reverb of the space, adding depth and realism to recordings. Also ideal for recording choirs, vocal ensembles, or small orchestras, bass amplifiers and percussion, the Space 87 will soon become the 'go to' mic in your studio or portable recording set up, such is its adaptability.

The Space 87 features switchable polar patterns - cardioid, omnidirectional, and Figure-8, (bi-directional) and is designed with low self-noise. It can capture quiet and delicate sound sources without introducing unwanted hiss or noise and is therefore, ideal for capturing subtle nuances and intimate performances.

Complete with -10 dB pad and low cut switches just like the original, the Space 87 is an extremely adaptable and versatile microphone.

Premium components contribute to the Space 87's unique tonal and full-bodied character, such as WIMA capacitors, Fairchild resistors, and a highly regarded, handmade Cinemag transformer.

The Space 87'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 touch of class, reflecting the quality of the internal construction. The electroplated finish also helps reduce self noise in the microphone.

The Space 87 package comes complete with a high quality, durable shock mount, an innovative magnetic pop shield and a robust, hard-wearing metal storage box.



- Cardioid, omnidirectional, and bidirectional patterns
- Low cut and -10dB pad switches
- Excellent for recording vocals and instruments in a studio environment with the classic '87 sound'
- Extremely versatile
- 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 and a Cinemag transformer
- Rugged construction with all metal body
- Extremely high grade, electroplated finish
- Innovative magnetic pop shield
- Robust and durable shock mount
- Strong and hard-wearing metal storage case and the biggest, most important feature of all;
- The sound!

Operating the Space 87

Powering the Space 87

The Space 87 is a condenser microphone and therefore needs to be operated by connecting a phantom power supply. Phantom power is standard on most quality mixers, outboard mic pre-amps (MIC pres), and hard disk recorders. If necessary an external phantom power supply can also be used. The Space 87 receives the phantom power directly from a microphone cable when connected to a mixer or other microphone input that includes a phantom supply. The power is actually sent OUT of the microphone INPUT, riding silently along with the audio signal. Most mixers have a switch to engage the phantom power so be sure to check that the phantom power is on.

Safety Warning: Please ensure any speakers are at a minimal level or turned off when connecting your microphone. 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 87 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 87 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 any more. 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 87 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, 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 87 with the cardioid pattern selected) 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 87 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.

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.

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.



Low Cut switch

Switching the low cut on can help eliminate low-frequency rumble (such as air conditioning noise, footsteps, or traffic). This can result in clearer audio.

Some engineers and recordists commonly apply a low-cut filter to vocals to help remove plosive sounds or unwanted low-frequency rumble from breath noises.

Acoustic guitars or pianos can benefit from the removal of low-frequency resonance or unwanted noise that could be picked up by the microphone.

Engaging the low-cut switch can help mitigate the proximity effect (as described in the 'Microphone Placement' section), when recording at close distances.

Optimal use of the 'low cut' switch depends on the specific recording environment and the sound source you're recording. It's not always necessary or beneficial in every situation. As always, when recording audio, experimentation is the key!



-10 dB pad Switch

The Space 87's '-10 dB pad' switch is used to attenuate the microphone's sensitivity to loud sound sources

This is potentially useful for sound sources like guitar amplifiers, brass instruments, drums, or loud vocal performances. When these sources are recorded with a sensitive microphone like the Space 87, the microphone's capsule can become overloaded by the high sound pressure levels. This can result in distortion or clipping, which negatively affects the audio quality. Using the -10 dB pad reduces the sensitivity of the microphone to prevent overloading and maintain clear, undistorted recording.

Using the '-10 dB' pad can help maintain a balanced and undistorted sound when recording sources with a wide dynamic range, such as instruments that have both very soft and very loud passages. This ensures that both the quiet and loud parts of the performance are accurately captured without unwanted clipping.

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 87 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 some of the components and the companies that have supplied them;

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 87? 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 87 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 87!

Mounting the Space 87

Mount your Space 87 into the provided shock-mount clip as the illustration below

demonstrates.



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

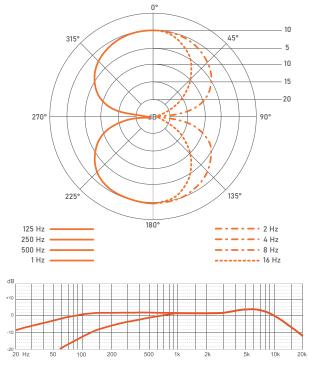


Specifications

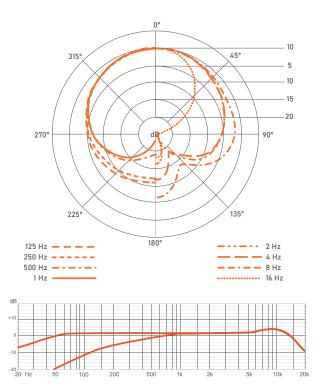
Acoustical operating principle	Pressure gradient transducer
Directional Pattern	Omnidirectional, cardioid, figure-8
Frequency Range	20 Hz 20 kHz
Sensitivity at 1 kHz into 1 kohm	20/28/22 mV/Pa ± 1 dB (Omni/cardioid/8)
Rated Impedance	200 ohms
Rated load impedance	1 kohms
Equivalent noise level, CCIR ¹⁾	26/23/25 dB (Omni/cardioid/8)
Maximum SPL for THD 0.5% with preattenua	ation ²⁾ 127 dB
Signal-to-noise ratio, CCIR (re. 94 dB SPL) ¹⁾	.68/71/69 dB (Omni/cardioid/8)
Maximum output voltage	6 dBu
Supply voltage (P48, IEC 61938)	48 V ± 4 V
Current consumption (P48, IEC 61938)	0.8 mA
Matching connector	XLR 3 F
Dimension	60mmX60mmX216mm
	2.36"(L) x 2.36"(W) x 5.8"(H)
Weight	0.773 kg (1.7lb)

Frequency response-vary axis

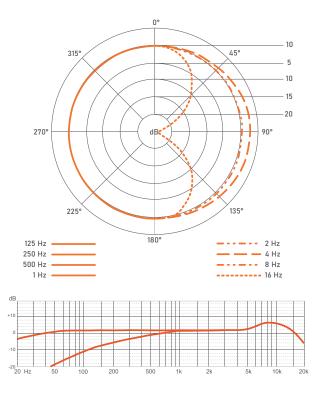




Cardioid



Omni



Services

If your Space 87 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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