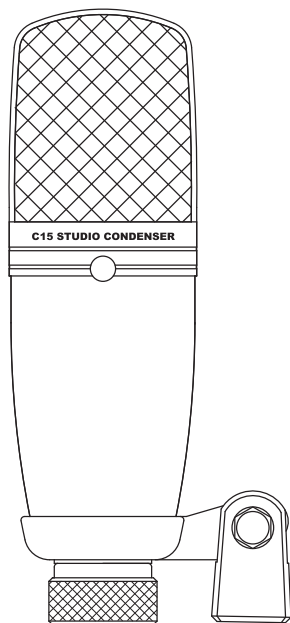


C15



Studio Condenser Microphone
Owners Manual

SAMSON
A U D I O

Table Of Contents

Introduction	3
C15 Features	4
Operating the C15	5
Powering the C15	5
Polar Pattern	5
Microphone Placement	5
Setting up the Signal Level	6
P-Popping	6
Stand Mounting	6
Using the Optional SP01 “Spider” Shock-Mount	7
Specifications	8

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Introduction

Congratulations on your purchase of the Samson C15 studio condenser. The C15 features a large, 19mm ultra thin diaphragm capsule which faithfully reproduces a variety of sound sources including vocals, acoustic instruments and overhead cymbals to name a few. The extended frequency and fast transient response insures an accurate reproduction with linear characteristics from bottom to top.

In these pages, you'll find a detailed description of the features of the C15 Studio Condenser Microphone, as well as step-by-step instructions for its setup and use, and full specifications. You'll also find a warranty card enclosed—please don't forget to fill it out and mail it in so that you can receive online technical support and so we can send you updated information about these and other Samson products in the future.

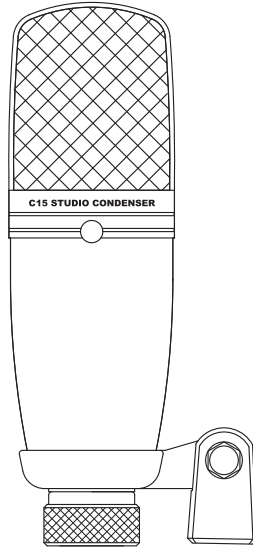
With proper care and adequate air circulation, your C15 will operate trouble free for many years. We recommend you record your serial number in the space provided below for future reference.

Serial number:

Date of purchase:

Should your unit ever require servicing, a Return Authorization number (RA) must be obtained before shipping your unit to Samson. Without this number, the unit will not be accepted. Please call Samson at 1-800-3SAMSON (1-800-372-6766) for a Return Authorization number prior to shipping your unit. Please retain the original packing materials and if possible, return the unit in the original carton and packing materials.

C15 Features



C15 Features

- Large Diaphragm Studio Condenser
- 19mm Capsule with 3-micron Diaphragm
- Smooth and transparent sound reproduction
- Hyper Cardioid pick-up pattern
- 36-52 Volt Phantom Power
- Internal Shock-mount
- Extended frequency response
- Solid ABS construction
- Swivel Stand Mount and Carry Pouch included

Operating the C15

Powering the C15

The C15 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-pres and hard disk recorders. If necessary an external phantom supply can also be used. The C15 receives the phantom power directly from a mic 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. (Fairly mysterious, eh?) Most mixers have a switch to engage the phantom power so be sure to check that the phantom power is on.

Polar Pattern

The most important characteristic of any microphone is its directionality or “pick-up pattern”. There are three basic categories of pick up patterns; omni, bi and uni-directional. Omni mics pick up sound from all directions, bi-directional (figure 8) mics pick up the sound directly in front and back of the microphone while rejecting the sound on the left and right sides, and uni-directional (cardioid) mics pick up the sound in front of the microphone.

While omni and bi-directional microphones are very useful for a variety of applications, the majority of “micing” situations in recording and live sound require uni-directional or cardioid microphones. The uni-directional nature allows for better separation of instruments in the studio and more control over feedback in live sound reinforcement. The C15 condenser’s pick-up pattern is hyper-cardioid, which offers even more side-to-side rejection. When positioned correctly the hyper-cardioid pick-up pattern allows you to pick up more of the sound you want and less of the sound you don’t want.

Microphone Placement

In order to maximize the sound quality, you must pay careful attention to the placement of your C15 and how it is positioned for the instrument or vocalist that you are micing. All microphones, especially uni-directional or cardioid microphones, exhibit a phenomenon known as “proximity effect.” Very simply put, proximity effect is a resulting change in the frequency response of a microphone based on the position of the mic capsule relative to the sound source. Specifically, when you point a cardioid mic 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 response 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. The same may be true for micing instruments, however, you

Operating the C15

can make some pretty amazing equalization adjustments by slightly changing the angle of the capsule to the sound source. This can be a very useful technique in capturing the optimum sound of drum set, acoustic guitar, piano or other instruments in a live room or sound stage. Experimentation and experience are the best teachers in getting good sounds, so plug in!

Setting Up the Signal Level

When connecting the C15 to a mixer or recorder input, be sure that the input is of microphone level. Also, be sure that the phantom power is engaged as explained in the previous section "Powering the C15". Most mixers and recorders of reasonable quality will offer a microphone input with mic trim (usual 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 mixers electronics. A good mic pre with trim also will have a PEAK or CLIP LED. To set a good level on the mic, set the C15 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 mic 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.

P-Popping

P-Popping is that annoying pop that you can get when the microphone diaphragm gets a blast of air from a vocalist pronouncing words with the letter "P" included. There are a few ways to deal with the problem including using an external pop filter. Some famous engineers have relied on an old nylon stocking over a bent clothes hanger, which actually works very well. You can also try placing the microphone slightly off axis (on a slight angle) from the vocalist. This can often solve the problem without using an external pop filter.

Stand Mounting the C15

The C15 can be mounted to a standard microphone stand using the included swivel mount adapter. If you are using a U.S. 5/8" mic stand, you will need to remove, by unscrewing, the Euro stand adapter. Simply screw on the swivel adapter on your mic stand or boom arm. Now, loosen the thumbscrew and adjust the microphone to the desired angle. Once set, tighten the thumbscrew to secure the microphone in place.

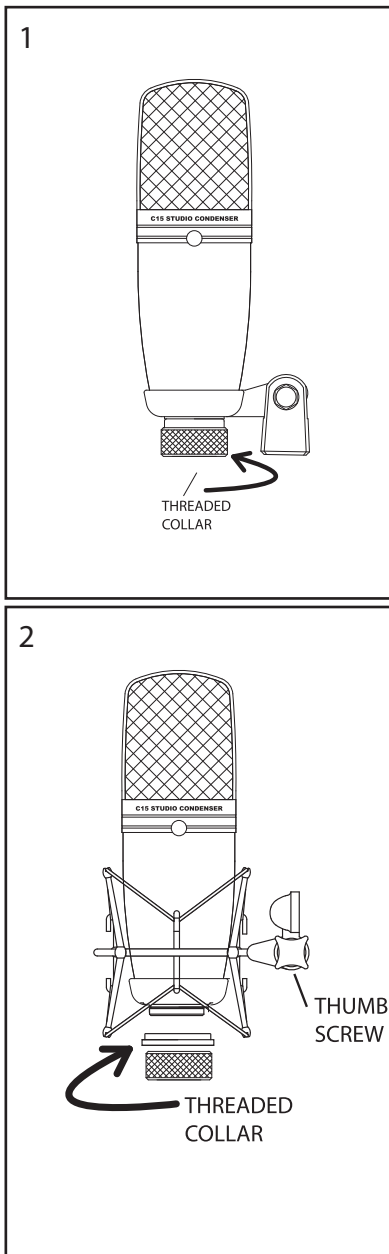
Using the Optional SP01 Shock-Mount

Using the Optional SP01 “Spider” Shock-Mount

For additional isolation the C15 can be fitted on the optional SP01 “Spider” shock mount. Follow the steps below to install the SP01.

- First, screw the SP01 shock mount onto your mic stand or boom arm. If you’re using a US 5/8” mic stand or boom, remove the Euro adapter.
- Remove the C15 swivel mount by rotating the threaded collar counterclockwise as shown in figure 1.
- Install the C15 into the SP01 by fitting the microphone into the center of the web, positioning the C15 onto the bottom mounting plate.
- Secure the SP01 by reinstalling the threaded collar, rotating clockwise until tight. (Figure 2)
- Now, loosen the thumb screw to adjust the angle of the microphone and position the C15 to the desired location. Once set, tighten the thumbscrew to secure the microphone in place.

Note: Be careful not to cross thread or over tighten the threaded collar or thumb screw.



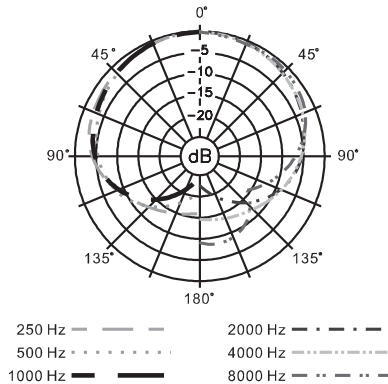
C15 Specifications

C15 Specifications

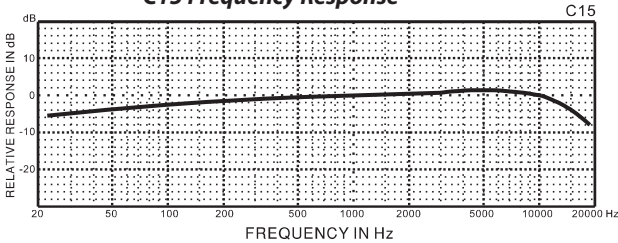
Frequency Response	40~20000 HZ
Polar pattern:	Hyper- cardioid
Element type	Back condenser type
Sensitivity	-37 dB/Pa (14m V[Pa])
Impedance	200 Ohms
SPL	136 dB
Power supply voltage:	phantom power 36V - 52V
Weight	2 lbs. (30.9 kg)
Dimensions	Height: 6.69" (170 mm) Dia: 2.13" (52 mm)
Shipping Weight	0.55 lbs.(250 g)

Specifications subject to change without notice.

C15 Polar Pattern



C15 Frequency Response



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