

SAMSON®

Q9U

DYNAMIC
BROADCAST
MICROPHONE



Owner's Manual

Q9U - Introduction

Congratulations on your purchase of the Samson Q9U XLR/USB Dynamic Broadcast Microphone. The Q9U features a humbucking dynamic neodymium capsule that offers enough output to seamlessly integrate into any setup without the need for external gain boosting devices. The analog XLR output allows the microphone to connect to any standard mixer or audio interface. Additionally the Q9U features a USB-C connection for instant plug-and-play, driverless connectivity to a computer. The Q9U includes sought after features such as a 24bit/96kHz analog to digital converter, zero-latency headphone output and an onboard mute switch. The Low-cut and mid-presence boost controls offer further onboard sound tailoring options. An internal air-pneumatic shock mount isolates the capsule from mechanical noise and a cardioid pickup pattern provides excellent off-axis rejection, minimizing ambient noise and capturing the perfect amount of sound without adding coloration to the original signal source. In order to minimize the popping and plosives we have included a foam windscreen.

In these pages, you'll find a detailed description of the features of the Q9U, as well as step-by-step instructions for its setup and use. If your microphone was purchased in the United States, you'll also find a registration card enclosed—don't forget to follow the instructions so that you can receive online technical support and so that we can send you updated information about this and other Samson products in the future. Also, be sure to check out our website www.samsontech.com for complete information about our full product line.

We recommend you keep the following records for reference, as well as a copy of your sales receipt:

Serial number: _____

Date of purchase: _____

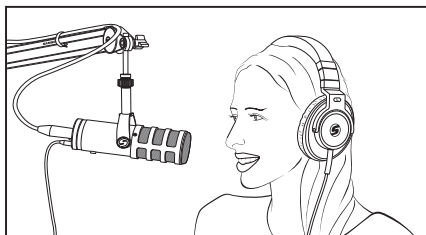
If you have any questions or comments regarding the Q9U or any other products from Samson, do not hesitate to contact us at support@samsontech.com.

With proper care and maintenance, your Q9U will operate trouble-free for many years. Should your Q9U ever require servicing, a Return Authorization (RA) number must be obtained before shipping your unit to Samson. Without this number, the unit will not be accepted. Please visit www.samsontech.com/ra for an RA number prior to shipping your unit. Please retain the original packing materials and, if possible, return the unit in its original carton. If your Q9U was purchased outside of the United States, contact your local distributor for warranty details and service information.

Applications

- Podcasting
- Broadcast
- Streaming
- Music Production
- Live Sound
- Voice-over

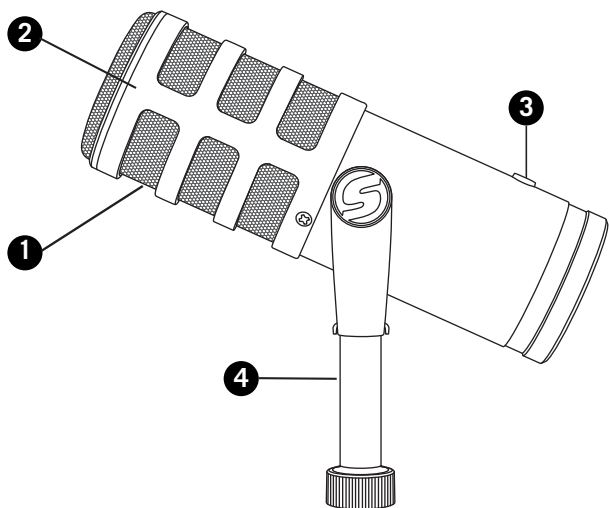
NOTE: Drawing depicts typical use case with Samson MBA38 boom arm, mic cable, and Z Series headphones.



Add on Accessories

- Samson SR & Z Series Headphones - Studio Reference Headphones
- Samson TOURtek Pro Cables - XLR Mic cables
- Samson MBA series - boom arms for tablemounting
- Samson MD5 - mini round base stand for desktop
- Samson BL3/BT4 - tripod base boom type mic stand
- Samson PS01 - Pop filter
- Samson RC10 - Reflection filter

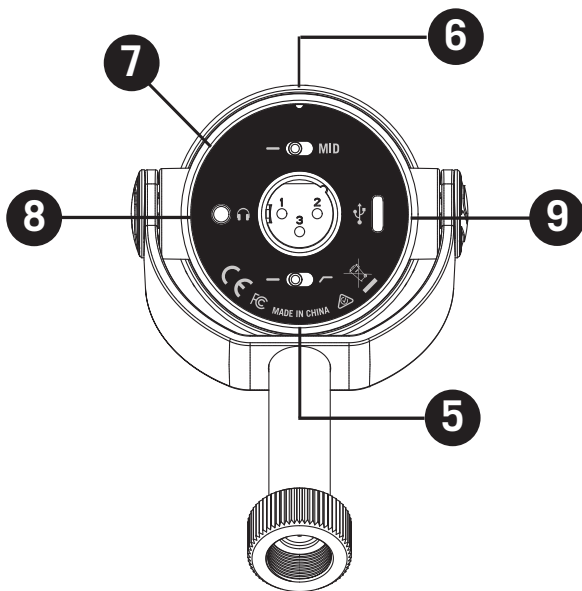
Q9U Callouts



1. **Metal Windscreen** – Dual stage grill protects the capsule and helps reduce wind noise and p-popping.
2. **Capsule Element** – End address humbucking dynamic neodymium, internally shockmounted capsule with cardioid polar pattern.
3. **Mute Button** – Press in to mute signal sent to both analog XLR and USB audio output jacks. Mutes the output of the microphone to the computer and headphone output.
4. **Integral Stand Mount** – This swivel style yoke mount was designed for ease of use considering the requirements of broadcast, vlogging, and voice over applications. The Q9U can be mounted to all types of stands that have a standard mic thread by turning the knurled knob.

Q9U Callouts Continued

- 5. Low Cut** – When engaged this slide switch will cut low frequencies by 3dB at 200Hz. Use only if you feel the signal is muddy or too bass heavy.
- 6. Mid** – When this slide switch is engaged you will hear a boosted midrange presence in your audio signal. Ideal for spoken word applications.
- 7. XLR** – Male XLR connector used to send an analog output signal to a mixer or other input device that accepts mic level signal.
- 8. Headphone Output** – Zero latency monitoring from 1/8" Headphone output jack. NOTE: user preference, 1/8" output can be connected to ear buds, Studio headphones, or Studio Monitor Speakers.
- 9. USB Connection** – C size USB connector for interfacing with your Windows or Mac computer. NOTE: if using a smartphone or tablet a powered USB hub is required for the Q9U to function properly.



Quick Start - Connect to a computer

Follow this simple quick start for a typical set-up to start recording.

Using the Q9U with a computer

1. Mount the Q9U on your microphone stand according to your desired application.
2. Connect headphones to the Headphone output located at the end of the microphone body.
3. Plug the included USB cable into the Q9U and plug the other end of the cable into an available USB port on your computer
4. Set the Q9U as the input and output audio device by following the steps in the section “Windows & macOS”. (page 7)
5. Launch your recording software.
6. Set the low cut and mid switches to your desired setting based on application and personal preference.
7. Create an audio track in your DAW. Note: Input names may vary depending on software.
8. Arm the track for recording.
9. Set the input levels of the microphone by following the steps in the section “Setting Levels”.
10. Set the direct monitor setting by following the steps in the section “Direct Monitor”.
11. While singing/speaking or playing your instrument into the Q9U, adjust the DAW input gain control until the audio output is at a reasonable level (not clipping or distorted). NOTE: if you hear “garbled” audio it indicates the Q9U’s sample rates do not match your software, review the section “Windows & macOS” and follow all the steps one by one).
12. Press the record button and start creating.

Windows Setup

Using the Q9u with Windows 10 Computers

1. Connect the Q9U to the computer using the included USB cable.
2. From the Start Menu, open **Settings - System - Sounds**.
3. Under **Input and Output** select the **Samson Q9U** as the audio device.
4. While playing music adjust the **Master volume** until the headphone output is at a comfortable listening level
5. To adjust the microphone recording level click **Device Properties** in the **Input** section.
6. Press **Start Test**, this will allow you to see recording levels.
7. While speaking at a normal level adjust the **Volume** slider until all levels are visible. NOTE - this adjusts the internal preamp of the Samson Q9U.
8. Press Stop Test to see the peak level. Level should not exceed 50%.
9. To see the microphone gain in dB click **Additional device properties + Level** tab, right click within the number box and select decibels. NOTE - adjusting this slider has the same affect as the **Volume** slider.

Windows 10 Volume

1. Click the Start Button
2. Type Control Panel
3. Press Enter
4. In the Search bar type "sound" and press enter
5. Click Change Sound Settings (or simply press Enter)
6. This will open typical settings for y our machine's sound card

macOS Setup

Using the Q9U with macOS

1. Connect the Q9U to the computer using the included USB cable.
2. Open **System Preferences** from the dock or the main Apple Menu.
3. Select the **Sound** preference icon, choose the **Input** tab and select Samson Q9U.
4. Set the Q9U as the output device by clicking the **Output** tab and selecting Samson Q9U.
5. To set the sample rate, from the **Applications** folder, open the **Utilities** folder and open **Audio MIDI Setup**.
6. From the **Window** menu, select **Show Audio Devices**.
7. Select the Samson Q9U.
8. From the **Format** dropdown menu, select the desired sample rate and bit depth.

Direct Monitor

The Q9U has a direct monitor system built internally which provides zero latency monitoring. Simply plug headphones directly into the Q9U headphone output jack to take advantage of this sophisticated design.

What is this thing called “latency”??

Latency is the delay time between recording and playback that all computer software have when recording and monitoring simultaneously. Simply stated, when recording, the computer software needs to recognize the input signal, then crunch a bunch of numbers and then send the signal through to the output. Depending on several factors such as the speed of your computer, the amount of tracks you've recorded, and whether or not you're using the effects in the software this can take a few to several milliseconds. A delay of several milliseconds can sometimes make it hard for a musician to play or sing on time. To solve this problem the Q9U lets you monitor the internal microphone directly on the headphones without making the round-trip in and out of the computer. As a result you hear the input signal without latency.

Quick Start - Connect to a Mixer

Follow this simple quick start to connect your Q9U to a mixer or interface.

1. Mount the Q9U on your microphone stand according to your desired application.
2. Connect to the mixer or interface using a standard XLR cable.
3. Follow the manufacturer's instruction for the mixer or interface in order to properly set input gain in order to optimize performance.

Microphone Polar Pattern

An important characteristic of any microphone is its directionality or polar pattern. The Q9U features a unidirectional (cardioid) dynamic element with humbucking coil.

The following is a brief explanation of the features of this polar pattern to help you understand the many use cases for a microphone such as the Q9U.

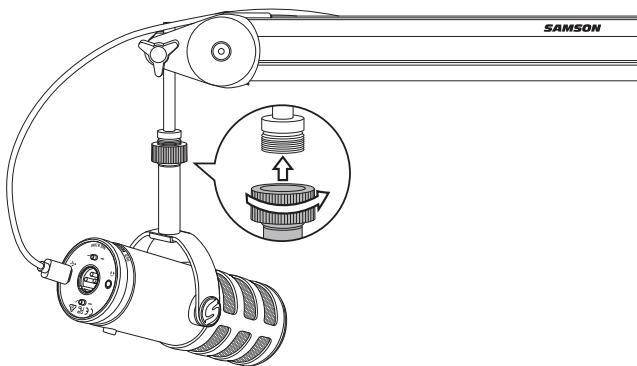
The cardioid pickup pattern is the most widely used for studio and live miking applications. It captures sound in front of the microphone and rejects sound from the sides and back, which allows for better separation of instruments in the studio, and picks up more of the instrument sound in relation to the sound of the room. The separation also allows for more control and more gain before feedback in live sound reinforcement situations.

Cardioid microphones exhibit a phenomenon known as proximity effect. 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. In general as the microphone moves closer to the sound source the bass response increases.

Mic Stand & Windscreen Installation

Illustrations below depict mounting the Q9U to a boom arm (Samson MBA38) as well as installation of the foam windscreen accessory.

We suggest using the windscreen for spoken word and other vocal applications as it will help eliminate plosive sounds from words with hard “P” and “B” sounds.



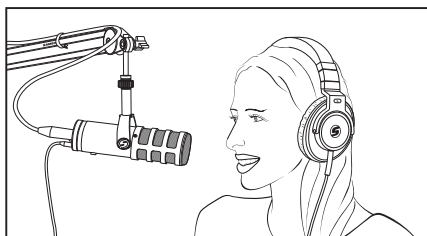
Quick Start - Microphone Placement

Careful attention should be made in regards to microphone placement when miking instrumentalists, vocalists, and other sound sources.

We suggest that the microphone be placed directly in front of the performer at a distance of 4-12 inches. This will help focus the mic's pickup of the vocal performance while blocking out unwanted background noise.

Small adjustments to placement can change the tone of the microphone. For example pointing the microphone directly at the sound source (on axis) will pickup all the lows and highs (frequencies) however changing this angle to be slightly away from the sound source (off axis) will reduce the highs and increase the lows.

Feel free to experiment as experience and a keen ear will aid you in capturing the performance - this is the best way to learn, so let's plug in and start recording, streaming, and podcasting!



Specifications

Element Type	Dynamic with Humbucking Coil
Frequency Response	50Hz–20kHz
Polar Pattern	Cardioid (unidirectional)
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 and positive digital signal
Electromagnetic Hum Sensitivity (no weighting)	
	60Hz: 24 dB SPL/mOe 500Hz: 24 dB SPL/mOe 1kHz: 27 dB SPL/mOe
Impedance	250 Ω
Max Sensitivity	XLR -57 dBV/Pa (1 kHz)
Max Sensitivity	USB -16 dBFS/Pa (0 dB gain, 1 kHz)
Self-noise (USB)	+23 dB SPL(A) (max gain)
Max. SPL	>140 dB SPL
Bit Depth/Sample Rate	24-bit/Up to 96kHz
Power Requirements	USB bus-powered/170 mA
Analog Output	Male XLR
Digital Output	USB-C
Headphone Output/Impedance	1/8" (3.5mm)/ 16 Ω
Headphone Power Output	38mW @ 32 Ω
Controls	Mute button, Low Cut switch, Mid switch
Body Construction/Grille	Zinc Alloy/Steel
Accessories	2m USB-C to USB-C cable, USB-C to USB-A cable, foam windscreen
Product Dimensions	3.12" x 7.02" diameter (79.5mm x 178.5mm diameter)
Product Weight	2.13lb (.97kg)

Important Safety Information

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that of the receiver.

Consult the dealer or an experienced radio/TV technician for help

WARNING: Listening to music at high volume levels and for extended durations can damage one's hearing. In order to reduce the risk of damage to hearing, one should lower the volume to a safe, comfortable level, and reduce the amount of time listening at high levels.

Please use the following guidelines established by the Occupational Safety Health Administration (OSHA) on maximum time exposure to sound pressure levels before hearing damage occurs.

- 90 dB SPL at 8 hours
- 95 dB SPL at 4 hours
- 100 dB SPL at 2 hours
- 105 dB SPL at 1 hour
- 110 dB SPL at 1/2 hour
- 115 dB SPL at 15 minutes
- **120 dB SPL - avoid or damage may occur**



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 28 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

**Having Trouble with your Q9U?
We can help!**

**CONTACT OUR SUPPORT TEAM: support@samsontech.com
Our experts can help you resolve any issues.**



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