

## iKonix KS-810

# iKonix KS-810 Post-Bed Lockstitch Sewing Machine Head User Manual

Model: KS-810

## 1. INTRODUCTION

Thank you for choosing the iKonix KS-810 Post-Bed Lockstitch Sewing Machine Head. This heavy-duty, single-needle machine is designed for precise stitching on thick materials such as leather, denim, canvas, and vinyl. Its post-bed design and roller feed mechanism provide excellent control and maneuverability for specialized sewing tasks. This manual provides essential information for the safe and efficient operation, setup, and maintenance of your sewing machine head.

## 2. SAFETY INSTRUCTIONS

- **Read all instructions:** Before operating the machine, thoroughly read and understand all instructions in this manual.
- **Power Disconnection:** Always disconnect the machine from the power source before cleaning, servicing, or making any adjustments.
- **Eye Protection:** Wear appropriate eye protection during operation to prevent injury from flying debris or broken needles.
- **Keep Fingers Clear:** Keep fingers and hands away from the needle, presser foot, and other moving parts during operation.
- **Proper Ventilation:** Ensure adequate ventilation in your workspace, especially if using lubricants or cleaning agents.
- **Stable Surface:** Mount the machine head securely on a stable, level table designed for industrial sewing machines.
- **Qualified Personnel:** Only qualified personnel should perform maintenance or repairs beyond basic user adjustments.

## 3. PACKAGE CONTENTS

The iKonix KS-810 sewing machine head package includes the following items:

- iKonix KS-810 Sewing Machine Head
- Thread Stand
- Bobbin Winder
- Oil Pan/Knee Lifter assembly
- Extra Bobbins
- Extra Needles
- Instruction Manual (this document)
- Screw Driver

**Note:** A sewing machine table and motor are **NOT** included with this product and must be acquired separately.

## 4. SETUP

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Assembly is required for the iKonix KS-810 sewing machine head. Please follow these general steps for initial setup:

1. **Mounting the Machine Head:** Securely mount the KS-810 head onto a compatible industrial sewing machine table. Ensure all mounting bolts are tightened to prevent vibration during operation.
2. **Motor Installation:** Install your chosen industrial sewing machine motor according to its specific instructions. Connect the motor belt to the machine head's pulley.
3. **Thread Stand Assembly:** Assemble the thread stand and place it in its designated position, typically behind or to the side of the machine.
4. **Oil Pan and Knee Lifter:** Install the oil pan beneath the machine head and connect the knee lifter mechanism. Ensure the knee lifter operates smoothly, providing approximately 1/2" (10 mm) of presser foot lift.
5. **Initial Oiling:** Before first use, apply sewing machine oil to all designated oiling points as indicated in the detailed instruction manual (if provided separately) or by consulting a qualified technician.
6. **Power Connection:** Once all components are securely installed and oiled, connect the motor's power cord to a suitable electrical outlet.

## 5. OPERATING INSTRUCTIONS

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### 5.1 Threading the Machine

Proper threading is crucial for consistent stitch quality. Follow the threading path carefully, ensuring the thread passes through all guides, tension discs, and the take-up lever before entering the needle eye.



Figure 1: Roller foot and threading path. The yellow thread is guided through the machine's components towards the needle.



Figure 2: Post-bed design with needle and presser foot area. The elevated post bed facilitates sewing on three-dimensional items.

## 5.2 Adjusting Stitch Length

The stitch length can be adjusted using the dial located on the side of the machine head. Rotate the dial to select a stitch length between 1 mm and 5 mm. For longer stitches, the machine supports up to 8 mm (approximately 6-16 stitches per inch).



Figure 3: Stitch length adjustment dial. Numbers 1 through 5 indicate stitch length settings.

### 5.3 Reverse Stitching

To reinforce stitches, especially at the beginning and end of a seam, use the spring-loaded reverse lever. Press and hold the lever to sew in reverse; release it to resume forward stitching.

### 5.4 Presser Foot Operation

- **Roller Foot:** The machine comes equipped with a heavy-duty roller foot and roller feed, ideal for controlling thick materials like leather.
- **Changing Presser Foot:** The roller presser foot can be changed to a flat presser foot if desired, depending on the material and application.
- **Knee Lifter:** Use the knee lifter mechanism to raise the presser foot. This allows for hands-free lifting, providing a lift of approximately 1/2" (10 mm). The presser foot can also be lifted by hand up to 1/4" (7 mm).

### 5.5 Sewing Speed

The iKonix KS-810 is capable of sewing at speeds up to 2,500 to 3,000 stitches per minute (s.p.m.) with steady precision. Adjust your motor speed control for optimal performance based on material thickness and stitch complexity.

## 6. MAINTENANCE

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Regular maintenance ensures the longevity and optimal performance of your sewing machine.

- **Oiling:** Regularly oil all moving parts and designated oiling points with high-quality sewing machine oil. Refer to the machine's specific oiling diagram for precise locations. The included oil pan helps manage lubrication.
- **Cleaning:** Keep the machine clean from lint, dust, and thread scraps. Use a brush or compressed air to clean the bobbin area, feed dogs, and tension discs.
- **Needle Replacement:** Replace needles frequently, especially when sewing thick or tough materials, or if the needle shows signs of bending or dullness. Use only DPx5 #14 (Standard) needles or equivalent.
- **Belt Tension:** Periodically check the motor belt tension. It should be taut enough to prevent slipping but not so tight as to strain the motor or machine bearings.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, consult a qualified sewing machine technician.

Problem	Possible Cause	Solution
Skipped Stitches	Incorrect needle, bent needle, improper threading, incorrect tension.	Replace needle (DPx5 #14), re-thread machine, adjust tension.
Thread Breakage	High tension, burr on needle/thread path, poor quality thread, incorrect needle size.	Reduce tension, check thread path for rough spots, use quality thread, ensure correct needle.
Uneven Stitches	Incorrect tension, worn feed dogs, inconsistent material feeding.	Adjust tension, clean feed dogs, ensure consistent material handling.
Machine Jams	Thread tangled in bobbin case, lint buildup, incorrect bobbin winding.	Clear bobbin area, clean machine, re-wind bobbin correctly.

## 8. SPECIFICATIONS

- **Model:** iKonix KS-810 (Head Only)
- **Machine Type:** Post-Bed Lockstitch Sewing Machine
- **Needle Type:** Single Needle
- **Feed Mechanism:** Roller Feed
- **Application:** Heavy Duty (Leather, Denim, Canvas, Vinyl, etc.)
- **Max. Sewing Speed:** 2,500 - 3,000 s.p.m. (stitches per minute)
- **Stitch Length:** Adjustable 1-8 mm (approx. 6-16 stitches per inch)
- **Presser Foot Lift (by Hand):** 1/4" (7 mm)
- **Presser Foot Lift (by Knee Lifter):** 1/2" (10 mm)
- **Post Height:** 7" (178 mm)
- **Application Needle:** DPx5 #14 (Standard)
- **Max. Material Thickness:** Up to 1/8" (approx. 3 mm)
- **Power Source:** Corded Electric (requires external motor, not included)

## 9. WARRANTY AND SUPPORT

For information regarding warranty coverage, technical support, or spare parts, please refer to the documentation

provided at the time of purchase or contact your iKonix dealer. Keep your purchase receipt as proof of purchase for any warranty claims.