



MOBIUS

M9 USER GUIDE

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WELCOME TO THE

# MOBIUS M9 SORTER

## INTRO

This User Guide is a comprehensive manual covering the operation and maintenance of the M9 Sorter machine as of the date of publication. ETEROS TECHNOLOGIES reserves the right to make updates to the machine from time to time. In the event of an update, this User Guide will remain appropriate for the safe operation and maintenance of your unit. This User Guide, as well as any documentation supplied by component manufacturers, are to be considered the information package associated with this device. Every operator must read and understand the User Guide. The manual should be located within easy access for periodic review.

# SAFETY INSTRUCTIONS

To ensure operator safety while in use, this device includes decaling, guarding, and other safety features. Operators are encouraged to use caution and best judgment when using equipment. Equipment should be serviced when required.

To avoid possible damage to the machine and risk of injury to the operator, consult with an ETEROS TECHNOLOGIES representative to answer any questions.

All operators must read and understand this User Guide and be trained in safe operation and use of the M9 SORTER. We recommend the owner of this equipment develop a standard operating procedure specific to each worksite to address any local hazards or other conditions not outlined in this User Guide. The M9 SORTER must be inspected regularly for damage, component failure, and wear. Results of inspection activity should be documented.

ETEROS TECHNOLOGIES makes every effort to ensure the M9 SORTER is compliant with all current safety standards. It is the responsibility of the owner to ensure all municipal, provincial, state, county, territorial, and federal codes, regulations and standards have been met in each working location.

Do not lend or rent your machine without providing the User Guide. A first-time operator should receive practical instruction before using the machine.

This machine is not to be used for any purpose other than those expressly stated in the User Guide, advertising literature, or other ETEROS TECHNOLOGIES written material pertaining to the M9 SORTER.

## **DISCLAIMER**

ETEROS TECHNOLOGIES recognizes that the M9 Sorter is a purpose-built machine for processing cannabis by licensed producers. Please check all municipal, provincial/state, and federal laws and regulations before using the M9 Sorter. ETEROS TECHNOLOGIES does not promote or condone the use of processing equipment in any way that may be deemed illegal.

ETEROS TECHNOLOGIES recognizes that our equipment can be used for processing herbs, hops, flowers and many other products. It is not the responsibility of ETEROS TECHNOLOGIES to confirm alternative applications for our equipment.

## GENERAL

# SAFETY PRECAUTIONS

### Safety Precaution Checklist

- 1 READ and become familiar with the entire User Guide. LEARN the equipment applications, limitations, and possible hazards.
- 2 DO NOT USE THE DEVICE IN A DANGEROUS ENVIRONMENT or damp or wet locations. Never expose the control panel directly to rain or water. Keep the work area well illuminated.
- 3 DO NOT use the device in the presence of flammable liquids or gases.
- 4 KEEP WORK AREA CLEAN. Cluttered areas and workspaces invite accidents.
- 5 WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 6 POWER DOWN AND DISCONNECT EQUIPMENT before washing, servicing and when changing accessories.
- 7 CHECK FOR DAMAGED PARTS PRIOR TO OPERATION. The equipment should be inspected prior to use to ensure proper operation in performing its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. Any damaged part including guards should be properly repaired or replaced.
- 8 ALWAYS WEAR EYE PROTECTION.

# SERVICES & REPAIRS

Repairs may only be carried out by Eteros Technologies or a designated authorized agent (service technician).

Should the need arise, please notify us:

ETEROS TECHNOLOGIES

26 Industrial Ave. Carleton Place, Ontario, Canada K7C 3T2

[www.eteros.com](http://www.eteros.com)

1.866.874.6244

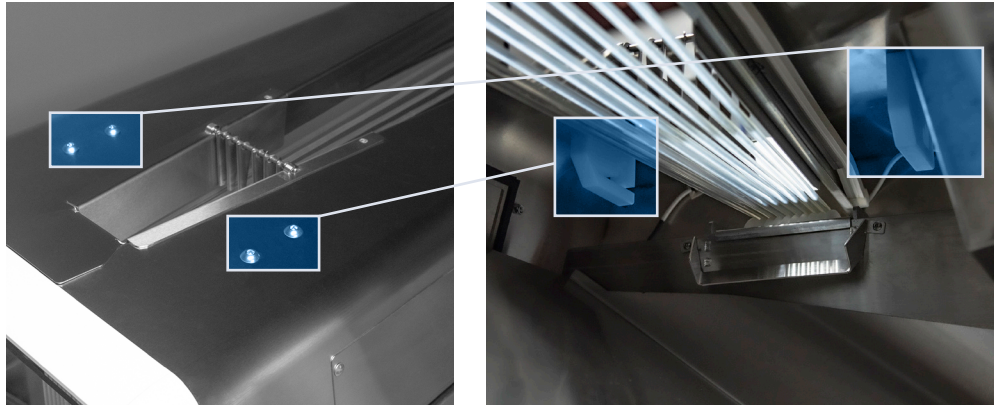
Improper interfacing, improper repair, or unauthorized modification could result in void *warranty claims*.

## INITIAL

# SETUP

### Initial Assembly & Inspection

- 1 Inspect the crate and crate contents to ensure no damage occurred during shipping.
- 2 Carefully remove M9 Sorter from crate.



- 3 Insert hopper Pins into Adjustment Blocks to lock hopper in position. The blocks are mounted on the opposite side of their intended position for shipping purposes.
- 4 Attach Shelf on the outfeed side of the Sorter by inserting holes on shelf onto pins and pushing down on shelf to wedge in place.
- 5 Attach Slide-Outs by hooking them onto the edge of the Slide Out Table. This will allow Slide-Outs to be adjustable.
- 6 Once initial assembly is complete, inspect the M9 Sorter to confirm that it is ready to operate:
  - i Confirm the power cord is in good condition.
  - ii Ensure the sorter belts are placed properly within pulley grooves.
  - iii Ensure rear tailgate is properly closed.
  - iv Ensure casters are in the locked position.
  - v Attach Slide-Outs to desired distance for sorting into totes.
  - vi Ensure polycarbonate end covers are in place and safety sensors activated.
  - vii Place a tote under Slide-Outs and on the outfeed shelf to collect sorted material.



This support is to ensure no sagging while shipping in the inner plate

- 1 Inspect the crate and crate contents to ensure no damage occurred during shipping.
- 2 Carefully remove M9 Sorter from crate.
- 3 The support will need to be removed on either end of the Sorter by removing the hex bolts.



- 4 If the supports aren't removed, the operator will not be able to disassemble the belts off for cleaning.

## Remove and Install Belts and Rollers

- 1 Unplug the machine.
- 2 Remove the overflow shelf and side panels.



- 3 Locate the belt tensioner on the infeed side of the M9.
- 4 Pull out the adjustment plunger and move the entire tension assembly up to the maximum height. This will take the tension off the belts.



- 5 Move to the back side of the Sorter and open the tailgate by releasing the two compression latches.

- 6 Working through the openings on the two ends and tailgate, pull a belt away from the rollers and out of the machine. As necessary, proceed with removing some or all of the belts in the same manner. Note: Removing the rollers can be done with or without the belts in place. As long as there isn't any tension on the belts, it's easy to work around them.



- 7 Both rollers on the outfeed side and the top roller on the infeed side can be removed by simply sliding them out of their cradling brackets.

- 8 The bottom (drive) roller on the infeed side is secured in place with a locating pin. Pull up on the pin to release the roller and pull it out of its cradling bracket.



- 9 To reinstall the rollers and belts, simply reverse the process: Start with the belt-tensioning assembly set to the highest position so that you have maximum slack to work with. Reposition the four rollers, ensuring the flat part of each shaft sits flush against the bracket and the locating pin on the drive roller is secured in its place.

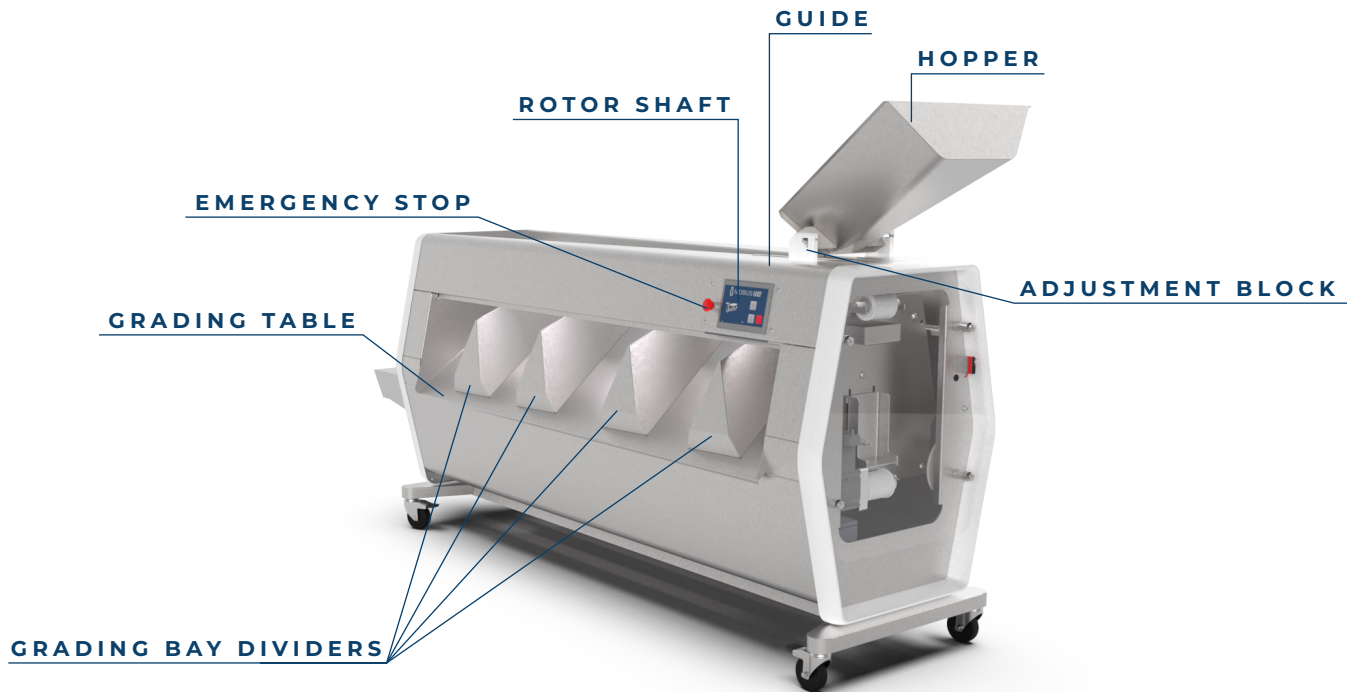
- 10 To reinstall a belt, start by working it onto each of the four rollers, aligning it into the same channel on each roller.

- 11 Once all of the rollers and belts are in place, pull the adjustment plunger and lower the tension assembly to the desired position.

- 12 Close up the tailgate, and replace the side panels and overflow shelf.

GET TO KNOW YOUR

# MOBIUS M9 SORTER





## WHAT'S IN THE BOX

### Your M9 Arrives With The Following Components:

Your Mobius M9 Sorter comes lightly assembled, tested, and ready for operation. When unpacking the device, please ensure the following items are included:

- 1 M9 Sorter Machine
- 2 Shelf
- 3 Slide-Outs
- 4 Hopper

## GENERAL

# OPERATION

### Control Panel Overview

E-STOP - Emergency stop button - stops all moving parts on the device. PRESS THE E-STOP BUTTON AT ANY TIME TO STOP ALL MOVING PARTS AND TURN OFF THE MACHINE

Buttons on HMI Screen:

START BUTTON - Green button energizes the motor to start turning the belts. This button will be illuminated when in operation.

STOP BUTTON - Red button will stop the motor and stop the belts from moving.

Speed Control - Up Arrow will increase the speed of the belts - Down Arrow will decrease the speed of the belts. Speed adjustment goes from 1 to 11.

### Machine Start Up Sequence

- 1 Ensure rear door of Sorter is properly closed.
- 2 Check and make sure Polycarbonate covers are properly in place.
- 3 Place totes under Slide-Outs to collect material.
- 4 Place tote on outlet shelf to capture larger sized material.
- 5 Plug the power cord into a 110V outlet.
- 6 Disengage the E-Stop.
- 7 Press the Start Button (Green button) on the HMI screen which will start the motor. When active, the Start/Green button will be illuminated.
- 8 Press the up arrow on the HMI Screen to increase the speed of the belts.
- 9 Adjust Hopper to allow for flow of material onto the belts.
- 10 Adjust Slide-Outs to desired sizing.
- 11 When totes are full, press the STOP/red button on the HMI to stop belts from turning during tote changeover.

# CLEANING & MAINTENANCE

M9 Sorter is washdown rated - to clean the Sorter as follows:

- 1 Engage the E-Stop and disconnect the power cord.
- 2 Remove both end plate polycarbonate covers.
- 3 Open tailgates.
- 4 Using warm or hot water (maximum 55oC/130oF), rinse down the interior of the machine, pulleys, belts, Slide-Outs, etc. The belt and pulley assemblies can also be removed for a more thorough cleaning process.
- 5 Spritz body (interior and exterior) and any removed parts with degreaser, allowing time for the degreaser to sit on surfaces and penetrate any soils. Use a cloth to remove any stubborn soils. Rinse thoroughly (pressure washer ok) with warm or hot water (maximum 55oC/130oF) and allow to dry. Apply a sanitizer if necessary as part of your sanitation SOP.
- 6 Reinstall the pulley assemblies (if removed), belts (if removed), Slide-Outs (if removed) and the Polycarbonate Covers.

## Preventative Maintenance

- 1 Eteros recommends that the pulleys and belts be cleaned off regularly to avoid buildup of resin on these parts. This cleaning process should take place at the end of each session or more frequently, depending on the operating environment and condition of material being processed.
- 2 Eteros recommends cleaning the inside of the machine on a regular basis.

# SPECIFICATIONS

## Wet / Dry Flower Capable

Yes

## Construction

Anodized Aluminum & 304 Stainless Steel

## Speed & Adjustments

11 Speed Settings

## HMI Control

Yes

## Belt Material

Polyurethane

## Belt Diameter

5 / 16"

## Number of Belts

9

## Belt Drive Motor

1 / 10HP

## Power Requirements

110 V - 1.5 A

## Tool-less Disassembly

Yes

## Width

30" / 76 CM

## Length

94" / 239 CM

## Height

46.5" / 118 CM

## Weight

450 LBS

## Warranty

1 Year

## Certification

CSA / CE / UL Certified Electronics

## Sorter Accessories

M9 Autofeed Conveyor

Additional Grading Dividers

Additional Belts and Drive Rollers





