

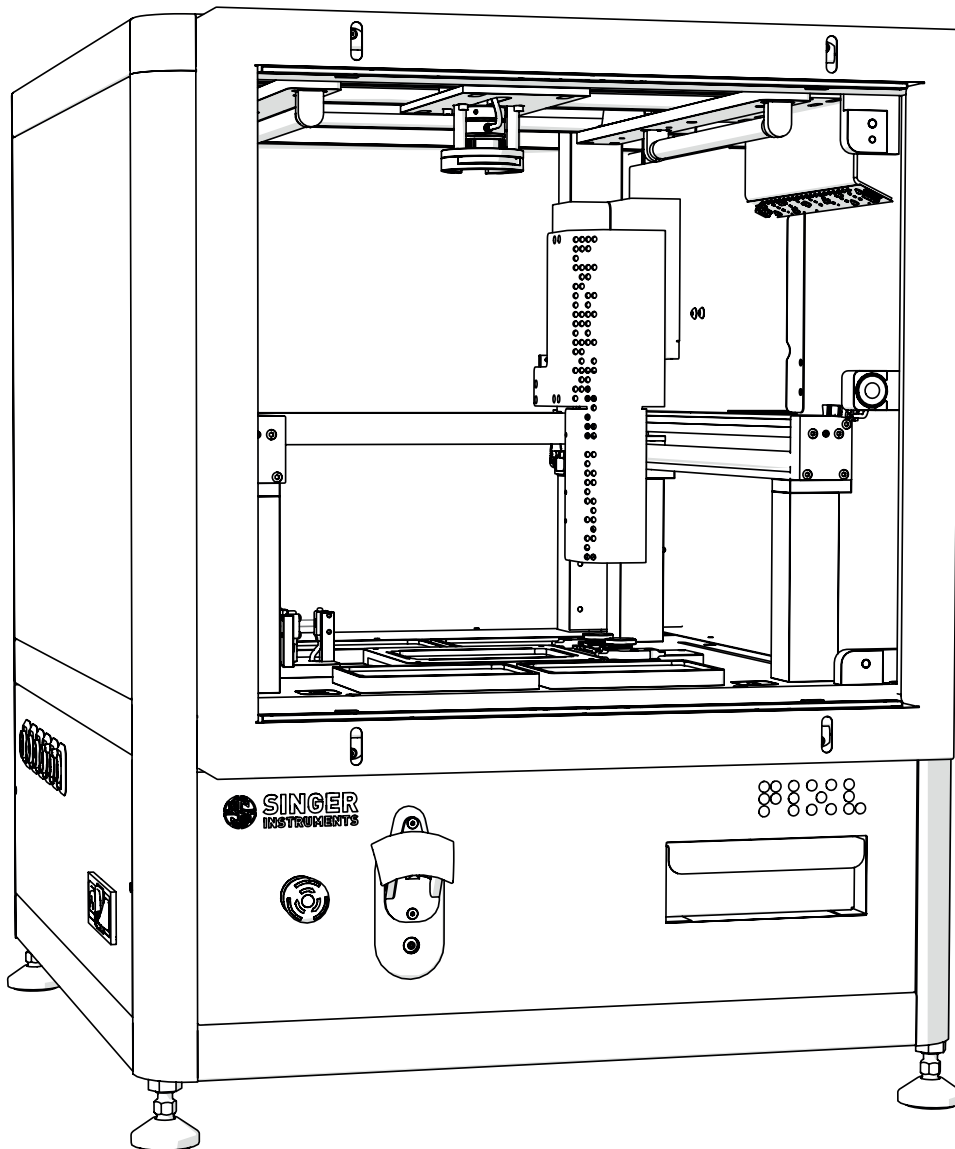


**SINGER
INSTRUMENTS**
A RESPONSIBILITY TO SCIENCE!



LIGHT CURTAIN

USER GUIDE v1.3



For more support
resources visit
bit.ly/PIXLhelp





READ BEFORE YOU START!

- **The blade is sharp!** Be careful when handling the PIXL blade. Always follow the instructions on page 45 when changing blades.
- **Hand feed the PickupLine™ carefully.** When feeding a PickupLine™ into the machine, if you feel resistance, pull back slightly and re-feed. Forcing the PickupLine™ through will cause damage to the machine.
- **Remove lids when placing plates into the PIXL.** Lids need to be manually removed. Failure to do so will cause damage to the picking arm.
- **The nozzle is hot!** Be careful when removing the nozzle as it can get quite hot.
- **The feed button is disabled.** The feed button is disabled on all PIXL machines. The retract button is fully functional during the change PickupLine maintenance routine.
- **Light curtain.** The light curtain PIXL is sold without a door to allow access for robotic arms and 3rd party integrations. The light curtain is a safety feature that will stop any potentially dangerous moving components if the beam is broken. UV sterilisation is disabled on Light curtain PIXLs as there is no physical barrier between the UV bulbs and the user. Do not attempt to tamper with or override the light curtain sensors. Please report any faults with the light curtain, or any of the safety mechanisms immediately to your technical support team.
- **Do not use >2% agar when using agar piercing.** Agar piercing allows the PickupLine tip to pierce the surface of the agar. Using >2% will reduce effectiveness of this feature.

JOIN OUR DISCOVERY COMMUNITY!

Join our Discovery community and help us to make the product features YOU want.

The Discovery Community is a group of scientists helping us to understand and solve anything causing frustration in their lab.

Help us to shape product development and have a say in future product updates. You'll also get early access to new features and be able to test things before release.

We'll even throw in some cheeky vouchers, Singer discounts and maybe even some cake!

Scan the QR Code or visit bit.ly/CustomerDisco to join.



bit.ly/CustomerDisco

A NOTE ON INSTALLATIONS

We are starting to perform in-person installations again! But for those we can't make it to, never fear! To get you up and running as quickly as possible we have instead included detailed instruction on how to self-install the PIXL (see page 12). We ask that you contact our Tech Support Team to let them know when you're planning to perform the self-installation so they can be on hand should you require any assistance: technicalsupport@singerinstruments.com

Once the installation is complete, please fill-in the online Self-Installation Form: <http://bit.ly/Selfinstallation>

You will be asked to create an account before you start. You can also use this form to report any issues encountered during installation.

NOTE: Completion of this form will activate the start of your warranty period. Failure to complete the form may affect the support we are able to offer during the warranty period.

Thanks for being awesome!

2	Read before you start!
4	Introduction
5	Anatomy & features
11	Unboxing & assembly
16	Troubleshooting

PIXL™

INTRODUCTION

An ultra-reliable and super-easy-to-use microbial colony picker. It automates imaging, colony recognition, colony selection, and picking; from Petri dishes to multiwell plates.

The information in this guide relates to software version:
3.24.1125.1

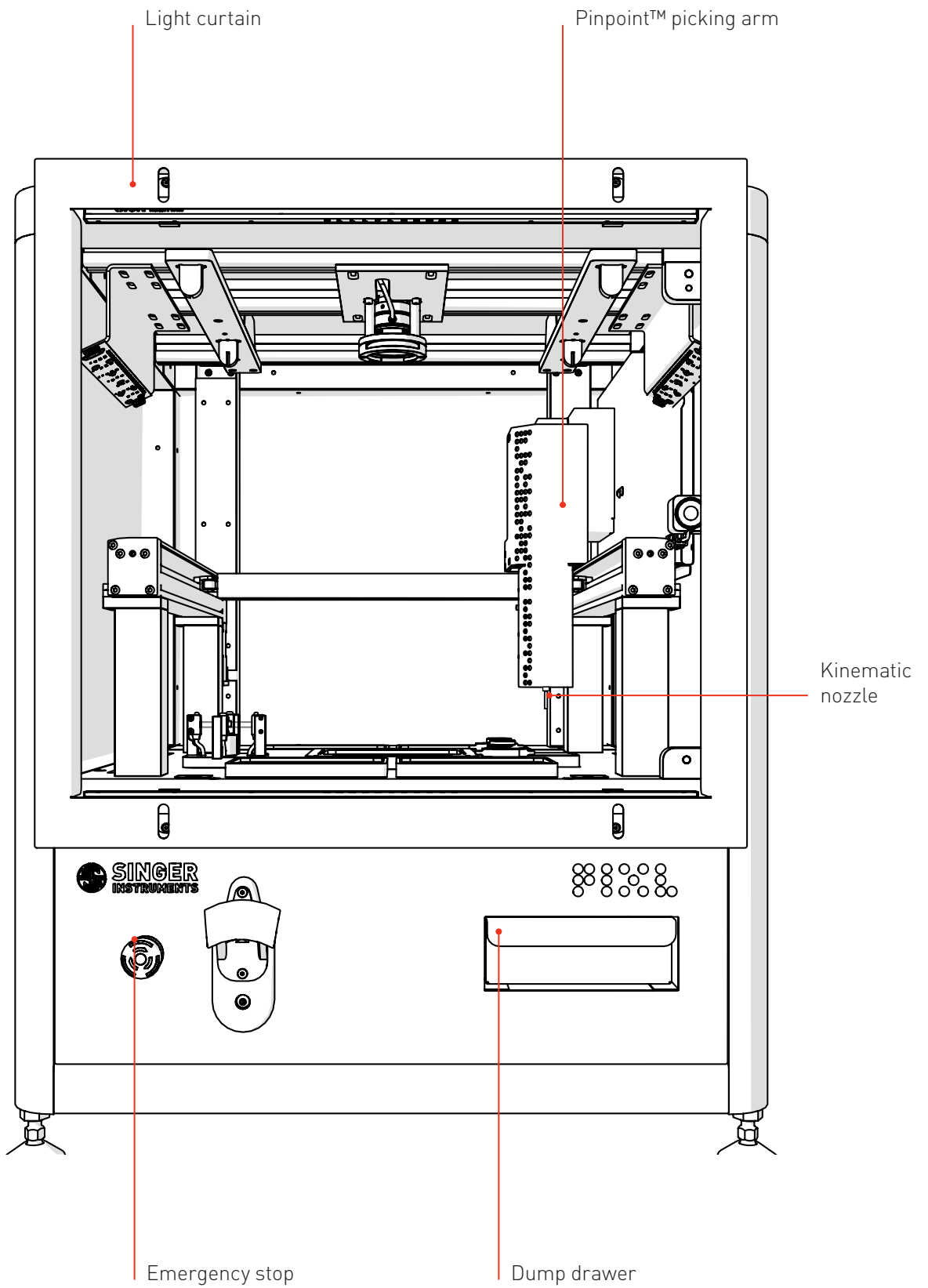
FULL USER GUIDE AVAILABLE HERE:



bit.ly/PIXLguide

ANATOMY & FEATURES

FRONT



ANATOMY & FEATURES

CAMERA & LIGHTING

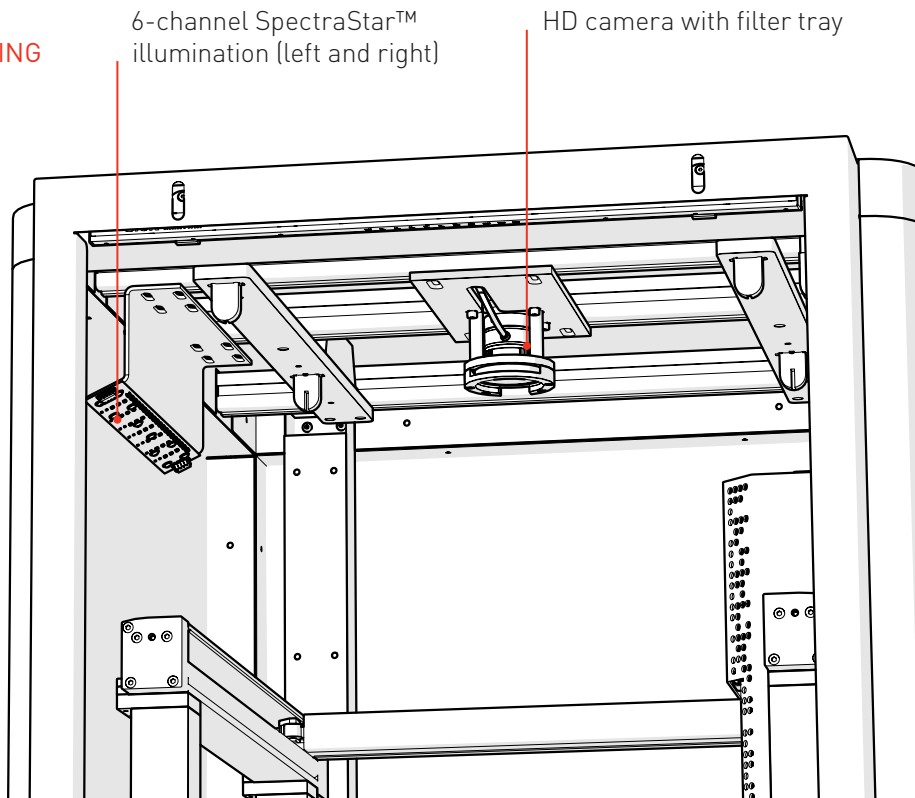
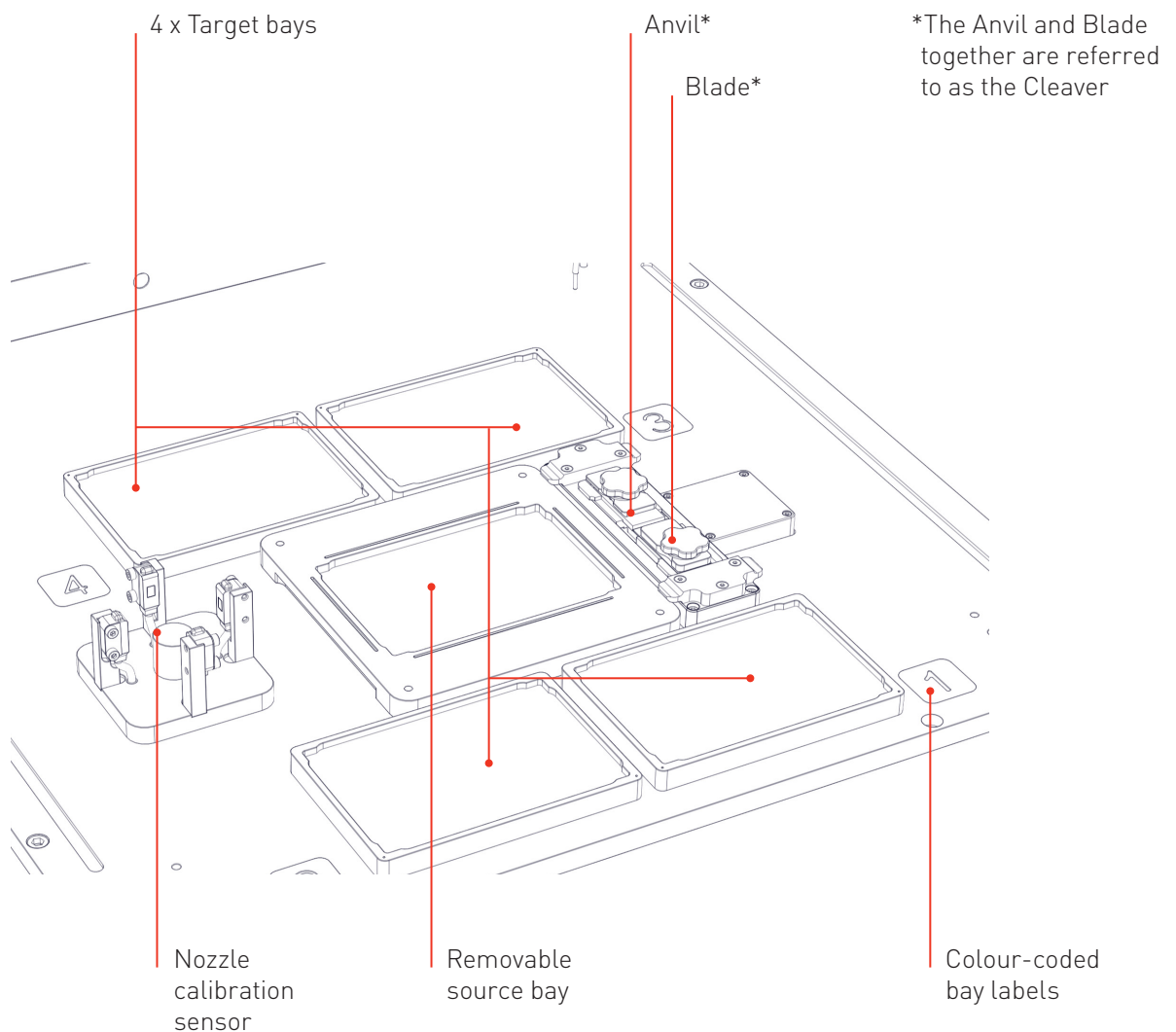


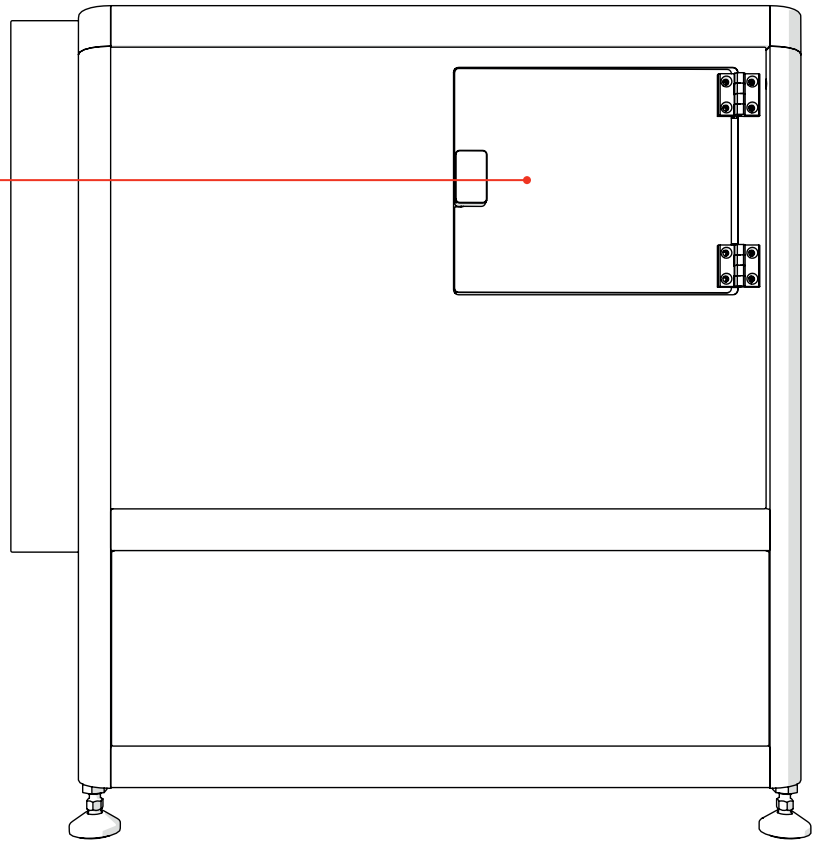
PLATE BAYS



ANATOMY & FEATURES

RIGHT

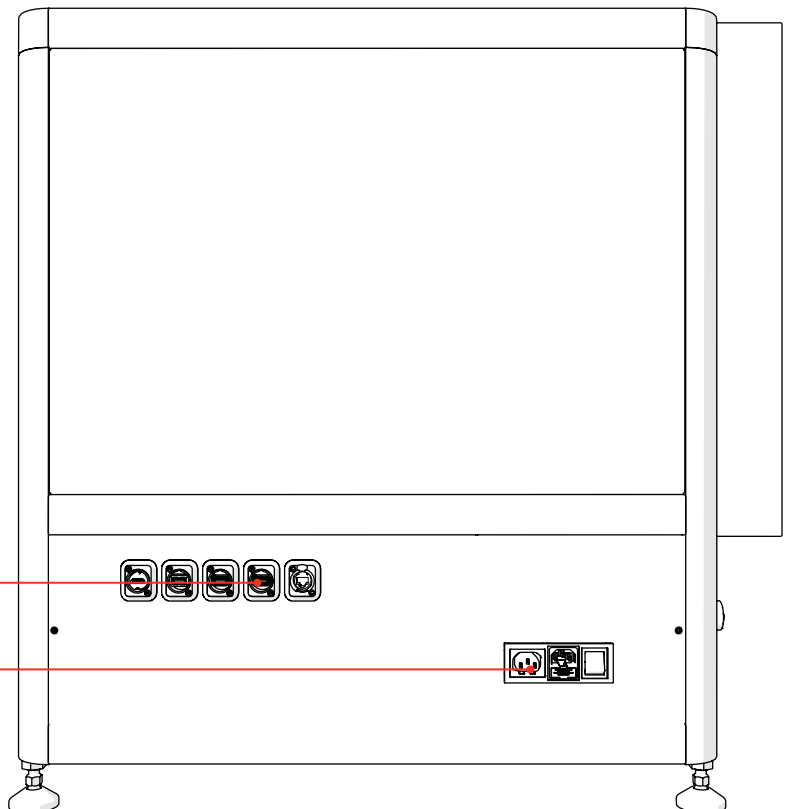
PickupLine™
compartment



LEFT

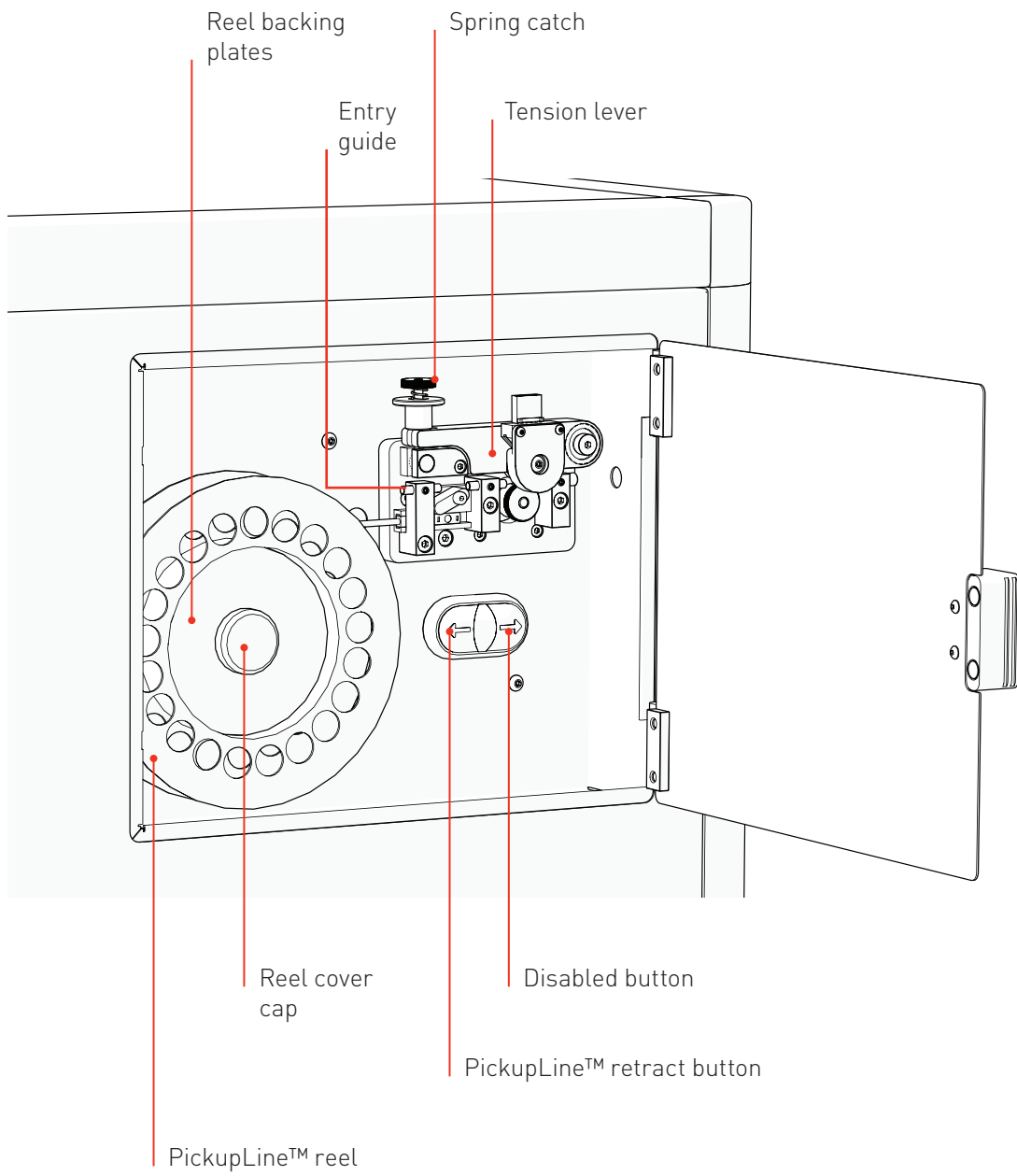
Connections:
1 x HDMI
1 x USB 3.0
2 x USB 2.0
1 x RJ45

Power switch



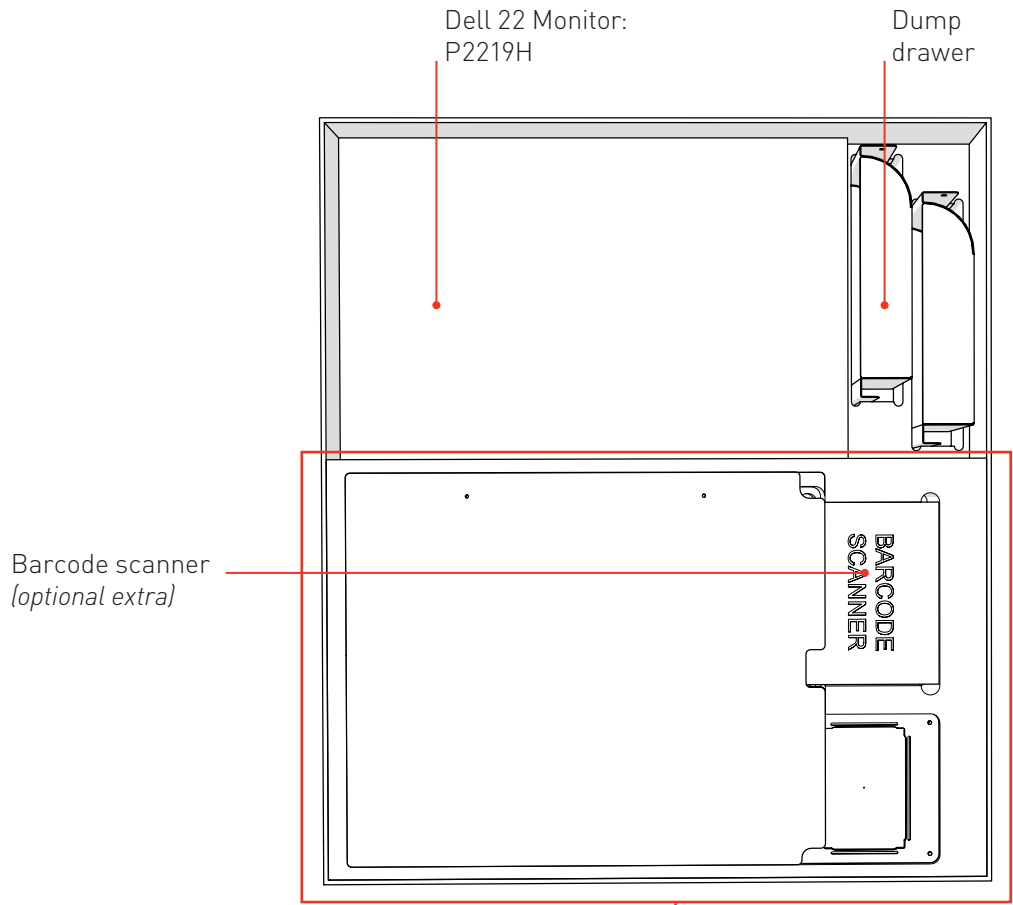
ANATOMY & FEATURES

PICKUPLINE™ COMPARTMENT

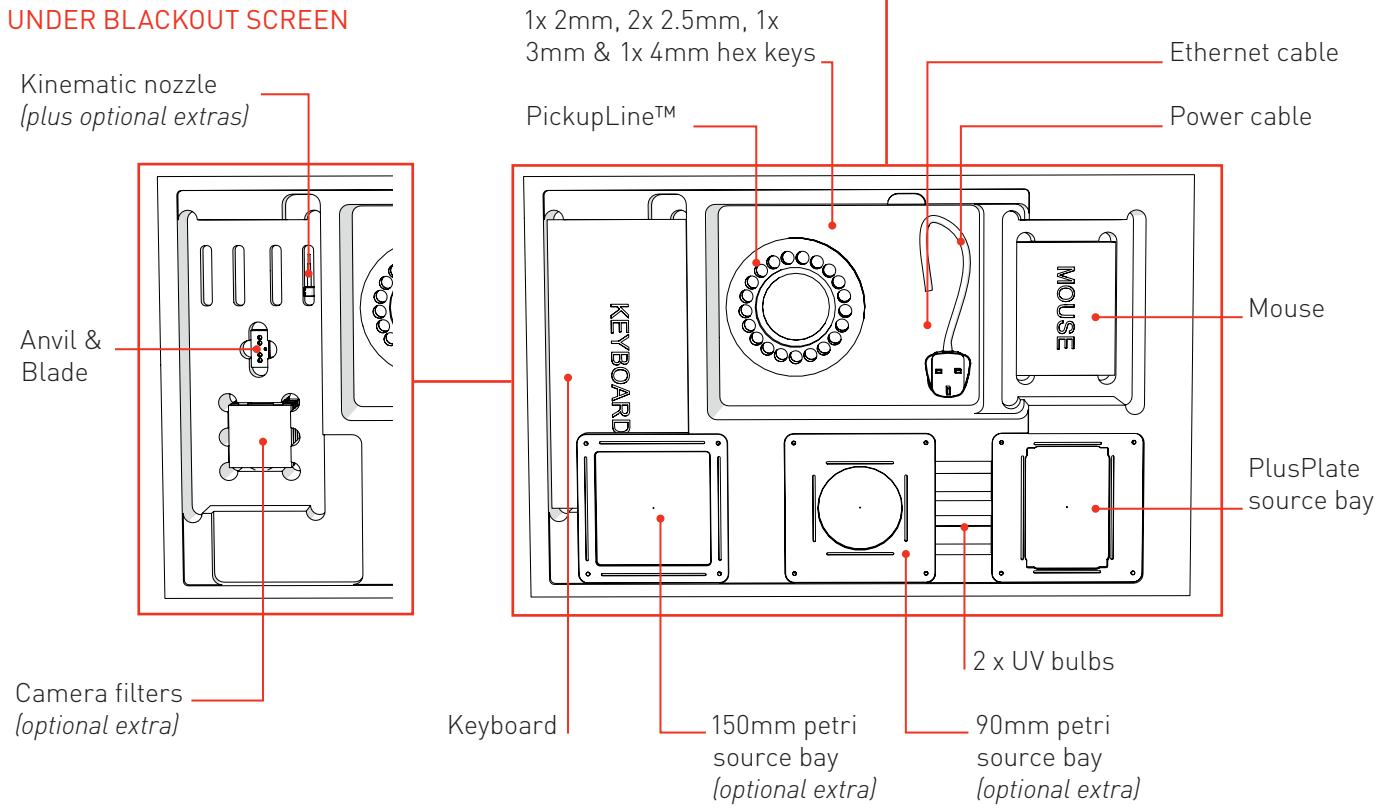


ANATOMY & FEATURES

ACCESSORIES

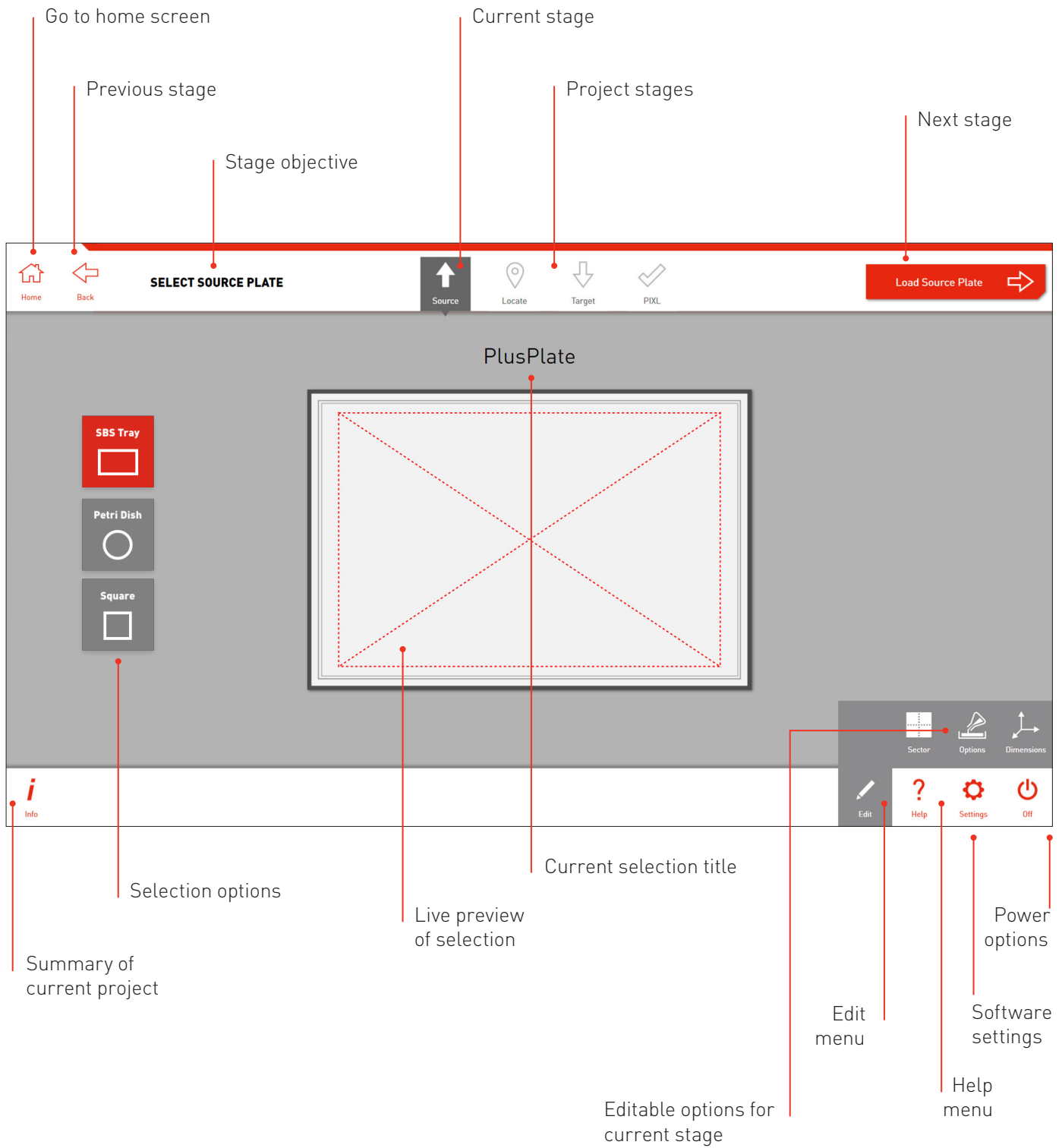


UNDER BLACKOUT SCREEN

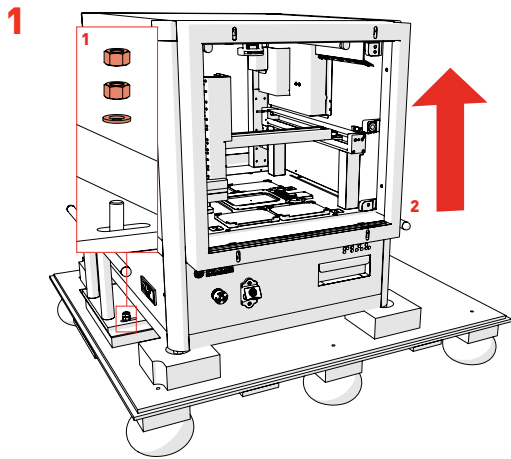


ANATOMY & FEATURES

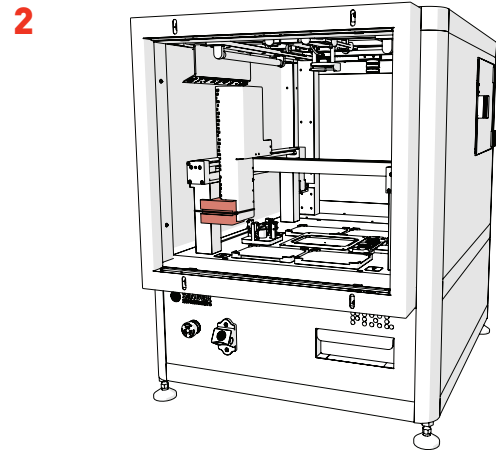
SOFTWARE



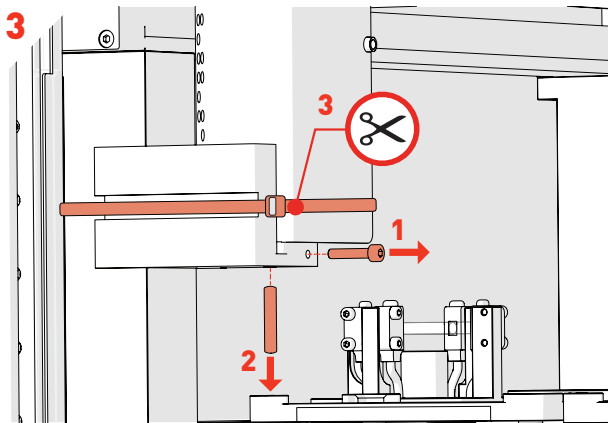
UNBOXING & ASSEMBLY



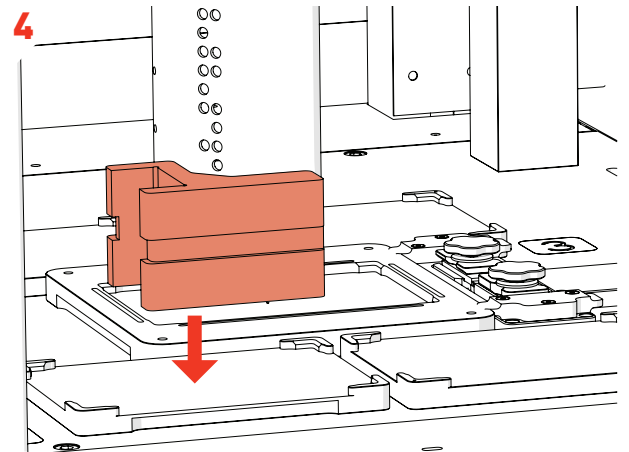
- Remove *Packing Crate Side Panels* and locking nuts (1).
- Carefully lift the PIXL and Place on a sturdy desk (2).
- **HEAVY: Minimum of 4 people recommended**



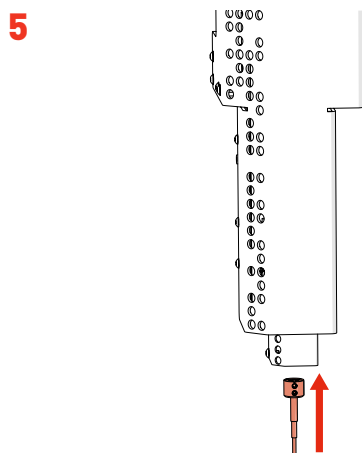
- To remove the *Red Transit Bracket* follow steps 3 and 4 below.



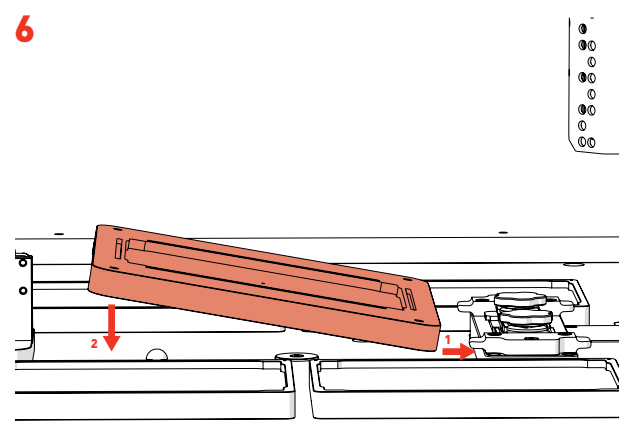
- Use *2mm Hex Key* to undo *Front Screw* (1), then remove *Securing Rod* (2). Cut the cable tie securing the floating head transit bracket with a pair of scissors (3).



- Position the floating head in the middle of the machine and remove the transit bracket.

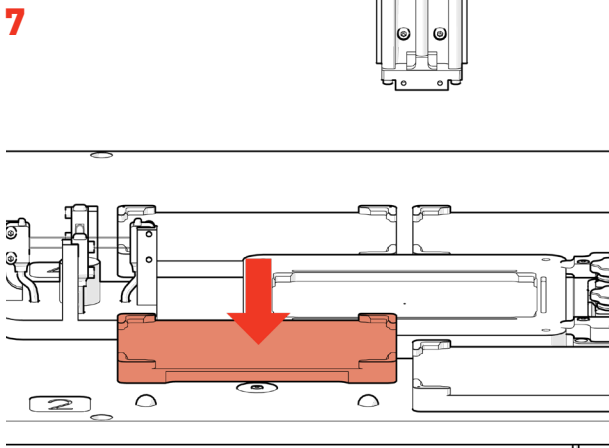


- Attach the *Kinematic Nozzle* onto the securing magnetic ring.
- Ensure the screws are at the front of the nozzle.

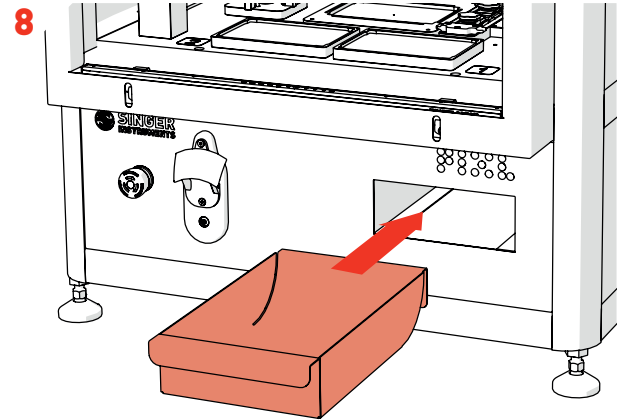


- Install the *Source Bay* by sliding the right side under the *Cleaver Tabs*, then lowering the left side onto the magnetic base.

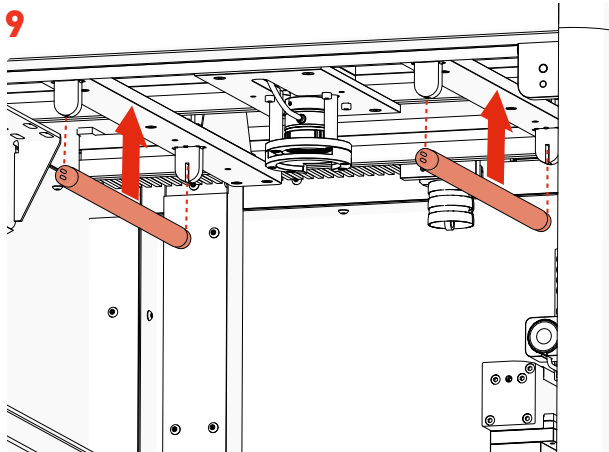
UNBOXING & ASSEMBLY



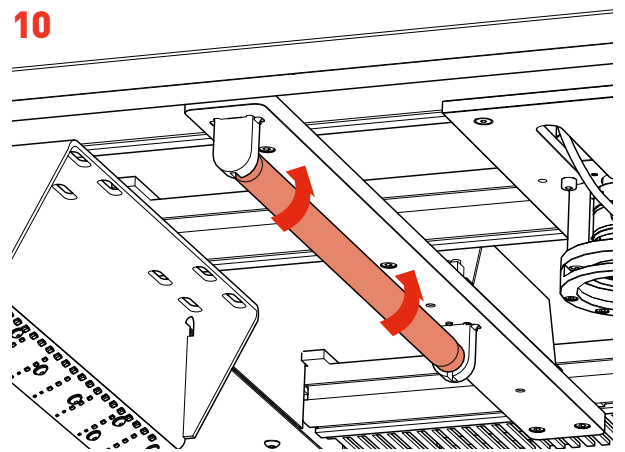
- If you have a Maldi compatible PIXL, install the removeable target bay in the Bay 2 position.



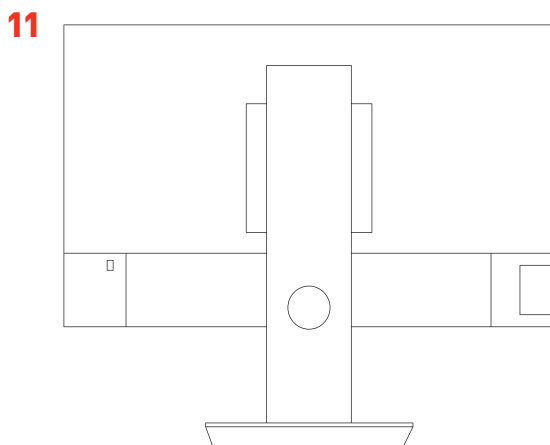
- Ensure the *Dump Drawer* is installed.



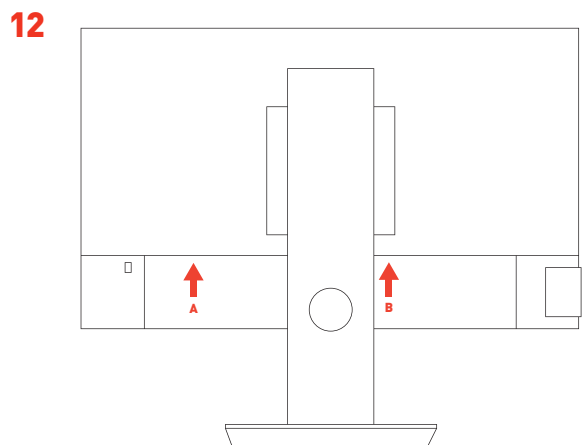
- Remove the 2 *UV Bulbs* from their protective box and slide between the *UV Sockets* attached to the roof of the main cabinet.
- **NOTE:** Wear gloves.



- To lock into place, turn each *UV Bulb* 90 degrees in any direction until you hear a click.

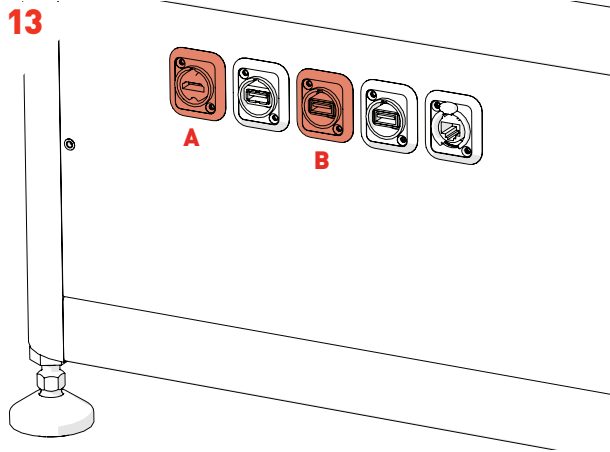


- Set up the *Screen Stand* according to the manufacturer's instructions.

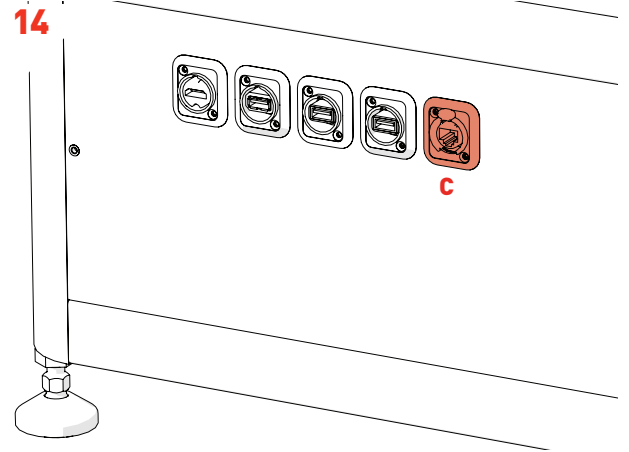


- Plug in the provided Screen cables: *Power (A)* and *HDMI (B)*.

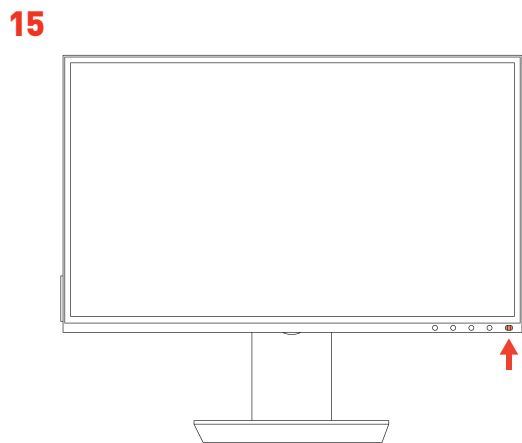
UNBOXING & ASSEMBLY



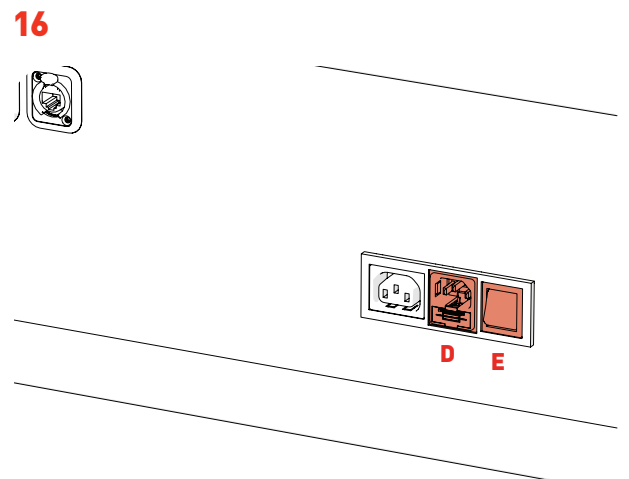
- Connect the Screen to the PIXL: *HDMI (A)*.
- If using the *Bluetooth* mouse/keyboard, place the *Bluetooth* dongle into an available *USB* slot (B).



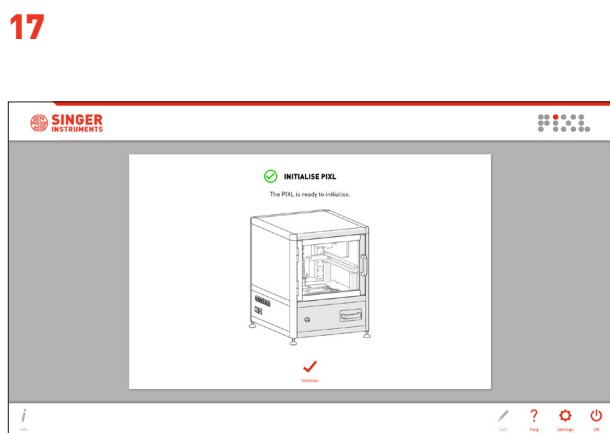
- For internal network access, connect an *Ethernet* Cable to the *RJ45* Socket (C).



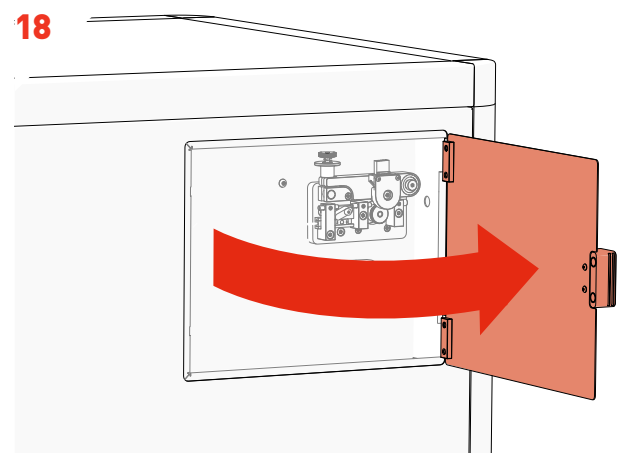
- Turn on the *Screen Power Switch*.



- Plug in the *PIXL Power Cable (D)* and press the *Power Switch (E)*.
- The Screen will also turn on.



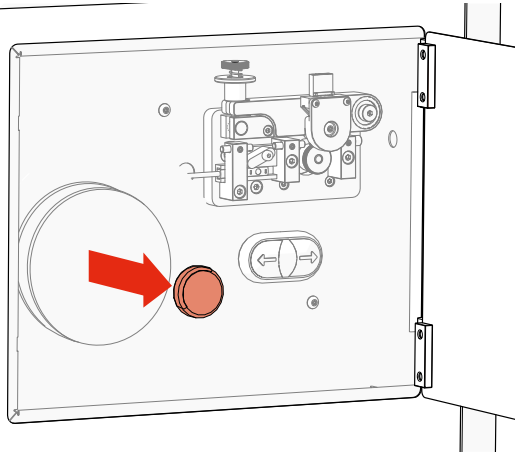
- After initialising follow on-screen instructions for *PickupLine™* installation.



- Open the *PickupLine™* Compartment.

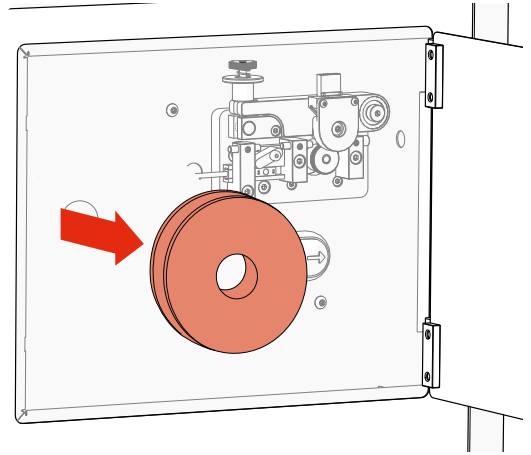
UNBOXING & ASSEMBLY

19



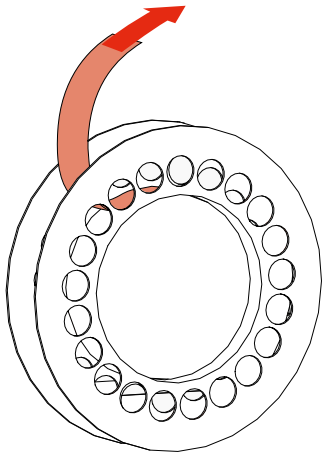
- Remove the *Reel Cap Cover*.

20



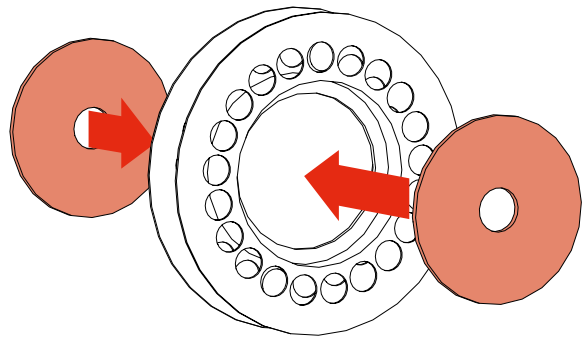
- Remove the *Reel Backing Plates*.

21



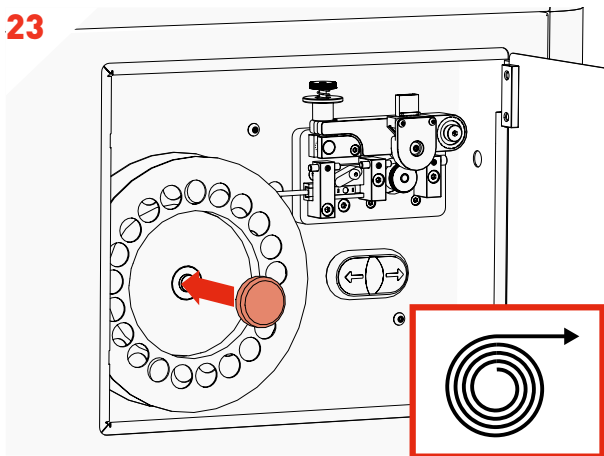
- Remove the new *PickupLine™ Reel* from its sterile packet and dispose of the *Securing Tape/Velcro*.

22



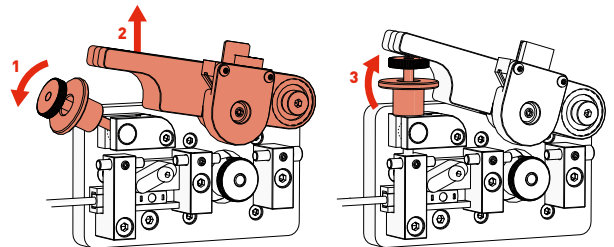
- Fit the *Reel Backing Plates* into the new *PickupLine™ Reel*.

23



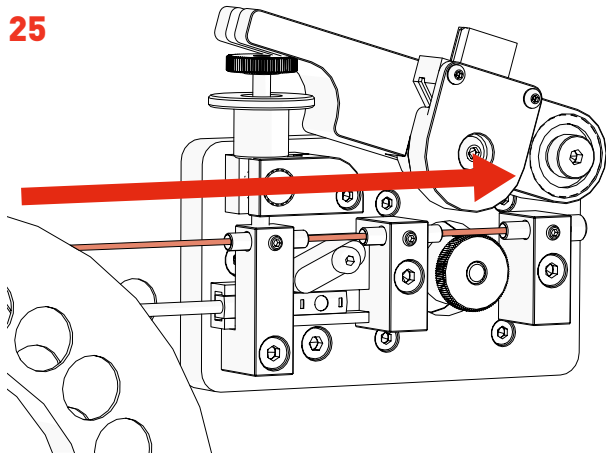
- Fit the new *PickupLine™ Reel* ensuring it feeds in a clockwise direction.
- Replace the *Reel Cap Cover*.

24



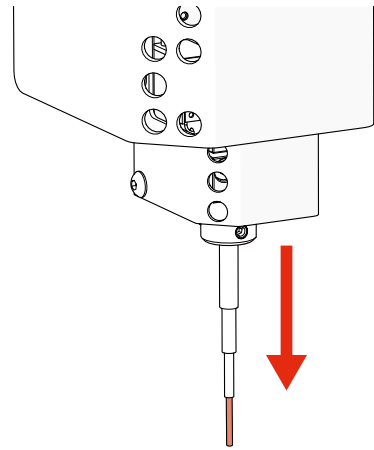
- Carefully lift the *Tension Lever* and rest it on the *Spring Catch* as shown.

25



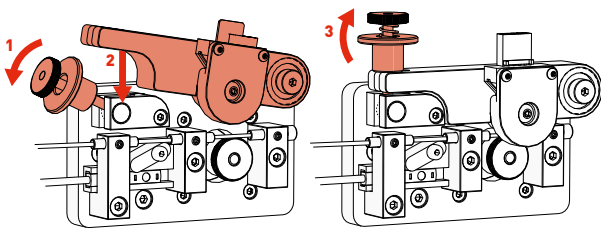
- Gently feed the *PickupLine™* by hand through the 3 *Entry Guides*. The *PickupLine™* is sterilised at the nozzle but for extra sterility gloves should be worn.
- If you meet resistance, pull back slightly and re-feed.

26



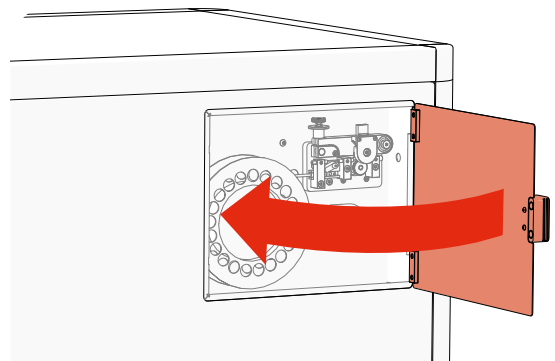
- Feed the *PickupLine™* until it protrudes 10mm from the *Kinematic Nozzle*.

27



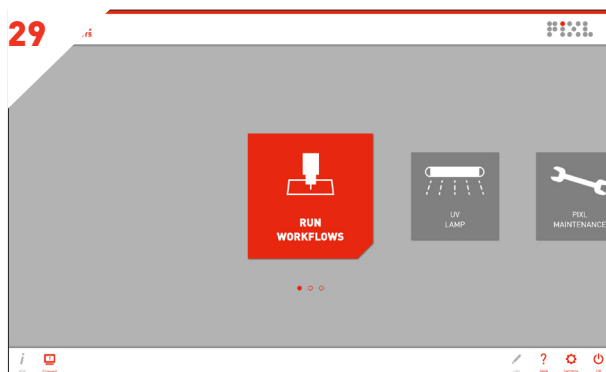
- Reset the *Tension Lever*.

28



- Close the *PickupLine™ Compartment*.

29



- Boom! You're ready to PIXL!

TROUBLESHOOTING

PROBLEM

Plate guides could not be detected

The PickupLine™ hits the top plate as the picking arm moves between positions

The PIXL is missing colonies.

Blades wear down quickly.

SOLUTION

Ensure that a source plate holder is installed into the PIXL.

Ensure that the plate dimensions in the software match that of the plate being used. If the plate type is unsupported please contact technicalsupport@singerinstruments.com and we'll make a new dimensions file for the plate.

Ensure that the nozzle has been calibrated by running the 'Calibrate Nozzle' routine in the software. Ensure that the Detect automatically' option is selected for 'Agar Depth'.

Please correctly follow instructions for changing the blade in the PIXL software.



For more support resources visit
bit.ly/PIXLhelp



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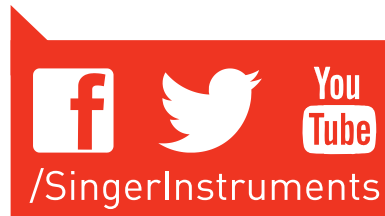
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**SCAN TO VISIT WEBSITE FOR MORE
HELPFUL TIPS AND TUTORIALS!**



DISCLAIMER

At Singer Instruments, we are constantly seeking to improve our products and adapt them to the requirements of modern research techniques and testing methods. This involves modification to the mechanical structure and optical design of our instruments. Therefore, all descriptions and illustrations in this user guide, including all specifications are subject to change without notice.