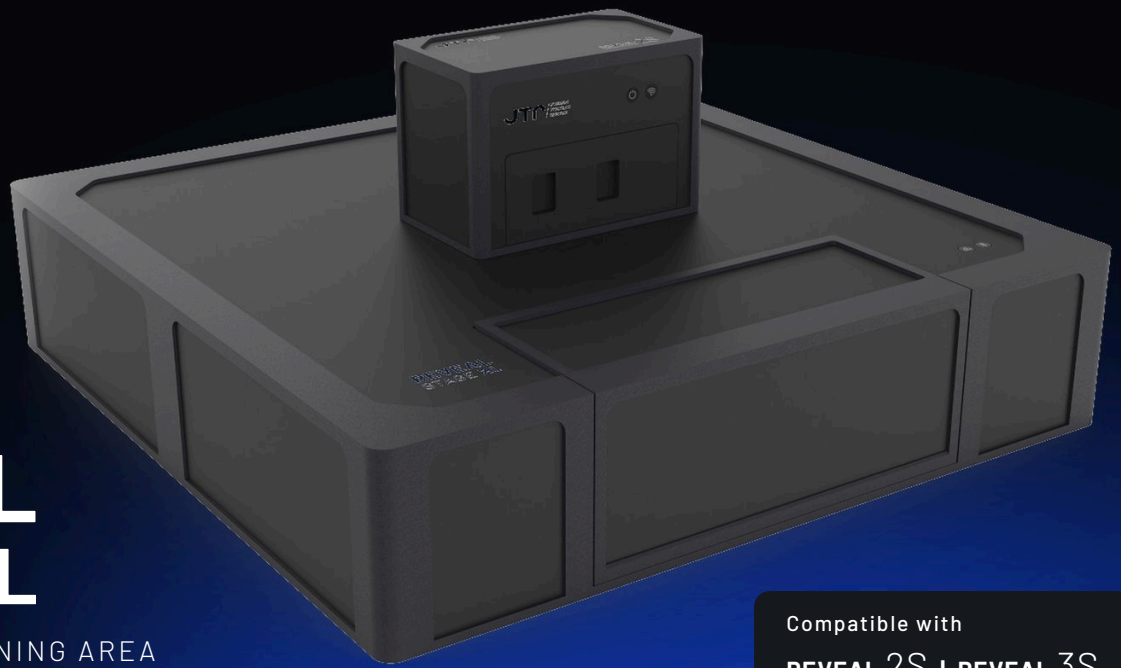
JEWELLERY
TECHNOLOGY
RESEARCH

USER SETUP MANUAL



REVEAL
STAGE XL

THE LARGEST SCREENING AREA
THE FASTEST RESULTS

Compatible with
REVEAL 2S | **REVEAL** 3S

1 WELCOME

Thank you for choosing the REVEAL STAGE XL. The STAGE XL gives your REVEAL Diamond Detector 3S & 2S the largest analysis area in the industry, 12 1/64" x 10" (305 x 254 mm), on a motorized tray divided into six selectable sections. Each section travels automatically under the REVEAL for scanning, so you can screen 130 rings in under four minutes, up to 30 bracelets per cycle, and high jewelry cluster necklaces that no other automated screening device can handle.

Setup takes about ten minutes and needs no tools beyond your hands. Follow the steps in order, and do not connect power until Step 7.

The warnings in Section 7 matter more than anything else in this manual, so please read them before you unpack.

WARNING

Do not power on the device before removing the tray shipment locks. Leave the power cable unplugged until Step 7.

Your REVEAL Diamond Detector 3S or 2S is not included. The STAGE XL is an extension module and does not screen diamonds on its own.

2 IN THE BOX

- REVEAL STAGE XL
- REVEAL Accessory Plate (universal, compatible with REVEAL Diamond Detector 3S & 2S)
- 1.5 mm Allen key
- M2x8 spare screws
- STAGE XL power adapter (brick and cable)
- USB-C data cable (STAGE XL to REVEAL)
- Loose Diamond Tray
- Jewelry Tray
- Jewelry Tray Section overlay
- Necklace / Bracelet Grid overlay
- Loose Diamonds Grid overlay
- This manual

Keep the box and all of its packaging. See Section 7.

Trays and overlays.
The Jewelry Tray and the Loose Diamond Tray sit on the analysis tray and hold what you are screening. The three overlays lay on top of them: the Jewelry Tray Section overlay marks out the six selectable sections so you can see which section each piece sits in, the Necklace / Bracelet Grid overlay positions bracelets and necklaces, and the Loose Diamonds Grid overlay keeps loose stones separated. Check that all five are in the box before you start.

3 KNOW YOUR STAGE XL

Top panel

REVEAL mount. The recessed cradle where your REVEAL Diamond Detector sits, facing down onto the tray. It ships covered by the REVEAL mount cover.

REVEAL mount cover. The textured plate with two rectangular cutouts that closes the mount whenever a REVEAL is not seated in it. Removed during setup, refitted every time the REVEAL comes out. It is not packaging; keep it with the device.

Home button (tray icon with a downward arrow). Returns the tray to its home position. Press it once at the end of setup. The device uses the same home routine at the start of every analysis.

Bluetooth button. Reserved for future features. It has no function in the current software release, and pressing it does nothing. Your STAGE XL is controlled by the REVEAL Diamond Detector over the USB data cable.

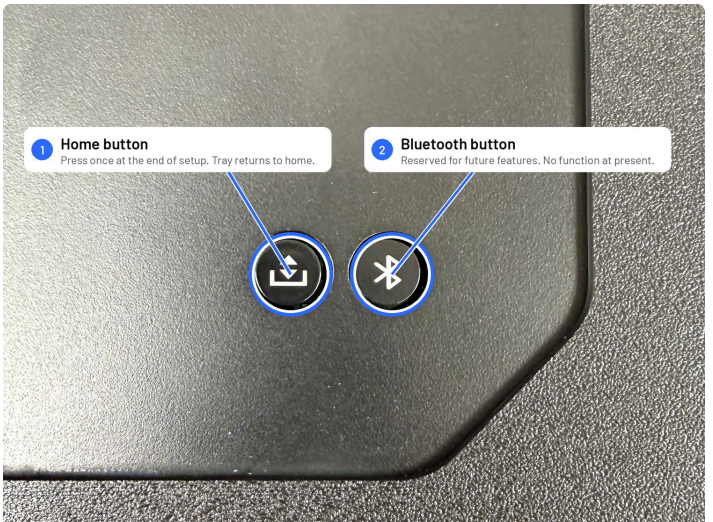


Figure 3.1 Top panel controls. Press Home with the lid open and wait for the tray to stop before closing the lid.

Front

Front lid. Folds down to give you access to the tray. Open it to load and unload jewelry.

Analysis tray. The motorized platform inside. Its surface is one continuous plate divided into six sections, with no physical dividers between them, much like a 3D printer bed. Everything you screen sits on this tray, and each section you select travels automatically under the REVEAL during analysis.

Tray shipment locks. Two black brackets with thumb screws, one on each side of the tray bar. They hold the tray rigid in transit. They must come off before first power on and go back on before the device is ever moved or shipped.

Back panel

Two USB-C ports side by side, each marked with an icon.
Lightning bolt: power in, for the STAGE XL's own power adapter.
USB icon: data, for the USB-C cable to your REVEAL Diamond Detector. The two ports look identical. Check the icon above the port before you plug anything in.

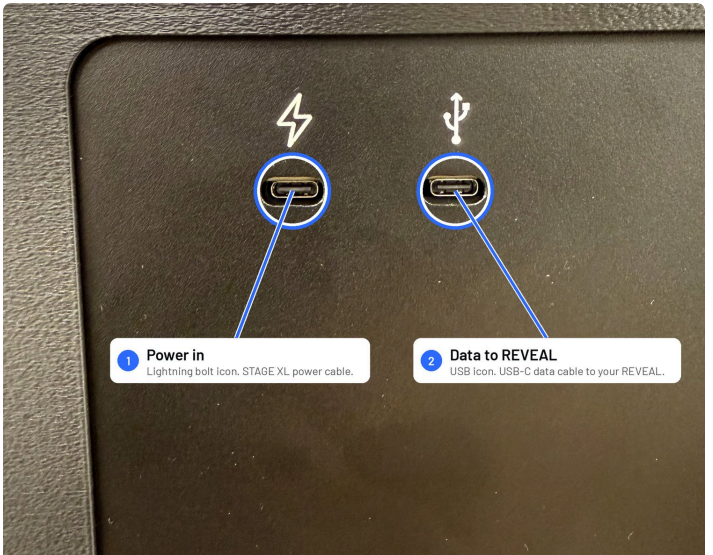


Figure 3.3 Back panel: two USB-C ports, identical in shape. Check the icon before you plug in.

4 BEFORE YOU BEGIN

- Place the STAGE XL on a flat, stable surface with clearance in front for the lid to fold down fully. The STAGE XL has a large footprint, so check the bench before you unpack.
- Make sure the surface can take the combined weight of the STAGE XL and your REVEAL.
- Keep the back panel reachable. Both cables connect there.
- Have your REVEAL Diamond Detector 3S or 2S and its own power adapter ready. The STAGE XL and the REVEAL each have a separate adapter.

Decide how you will operate the device.
STAGE XL features are available in two operating modes: standalone, with a monitor, keyboard and mouse connected to the REVEAL, or desktop connection from a computer. STAGE XL features are not supported in the myREVEAL app. If you normally run your REVEAL from your phone, set up one of these two modes before continuing. See the help center articles on desktop mode and standalone operation at jtr.org.

WARNING
Do not power on the device before removing the tray shipment locks. Leave the power cable unplugged until Step 7.

5 SETUP

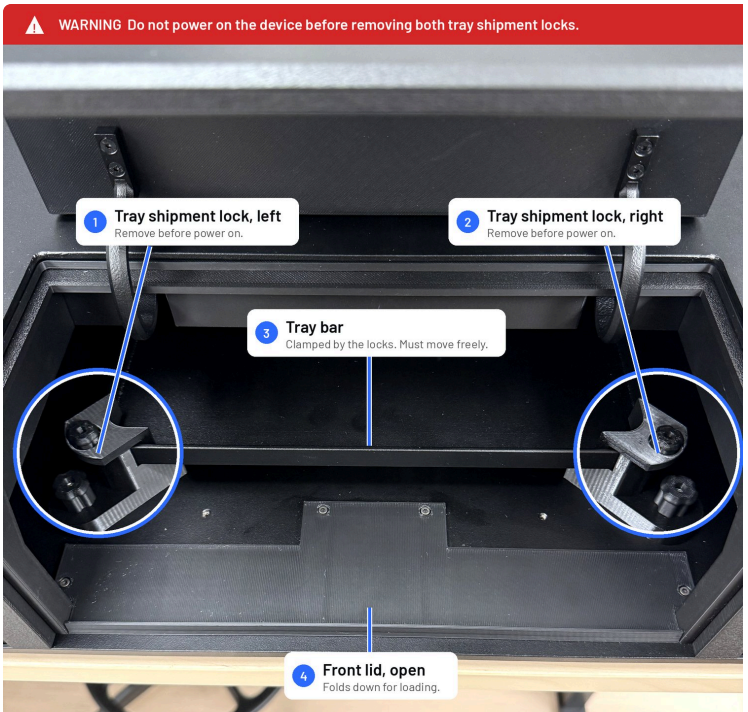


Figure 5.1a Step 1. Front lid open: two tray shipment locks, one on each side of the tray bar.

1

Remove the tray shipment locks

Fold the front lid down. Inside, on the left and right of the tray bar, you will see two black brackets, each held by thumb screws with knurled knobs.

The tray homes itself as soon as the device has power. If the locks are still fitted, the tray drives against them and the mechanism can be damaged. Do not power on until both locks are off.

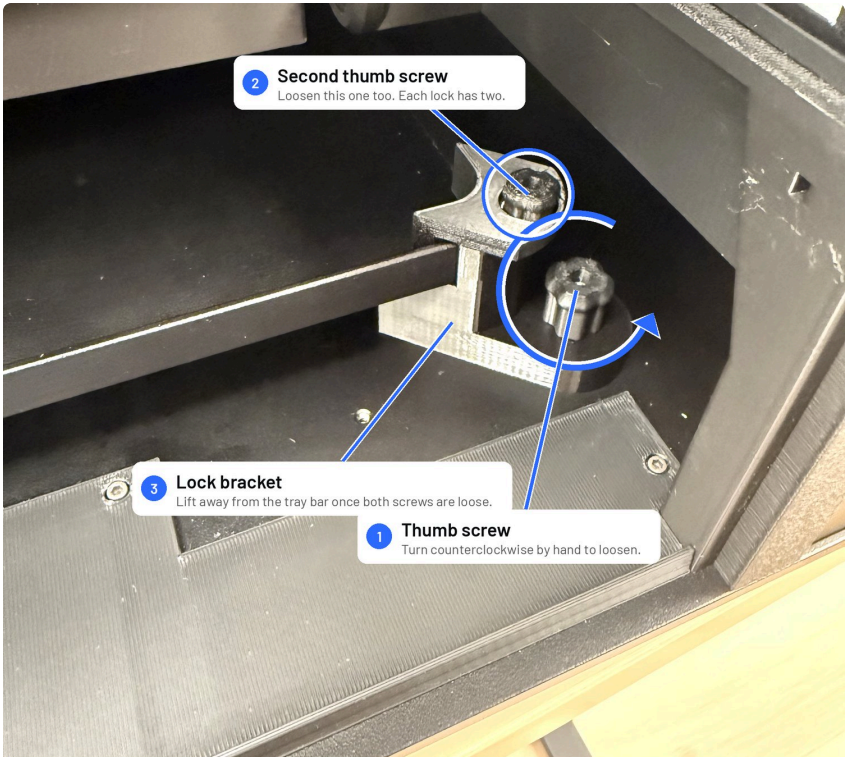


Figure 5.1b Step 1 detail. Loosen both thumb screws on each lock and lift the bracket clear. Keep all parts for shipping.

Step 1, continued

Unscrew each thumb screw by hand, counterclockwise. Each lock has two. Once both are loose, lift the bracket away from the tray bar. Repeat on the other side.

Put both brackets and all thumb screws in the box. You will need them again whenever the device is moved.

The tray must move freely before you go any further. If it still feels held, check for a lock you missed.

2 Remove the REVEAL mount cover

On the top panel, lift the REVEAL mount cover away from the unit. Beneath it is the open REVEAL mount, a rectangular cradle sized to the base of your REVEAL Diamond Detector. Keep the cover within reach of the device, not in the box. It must go back on every time the REVEAL is removed. See Section 7.

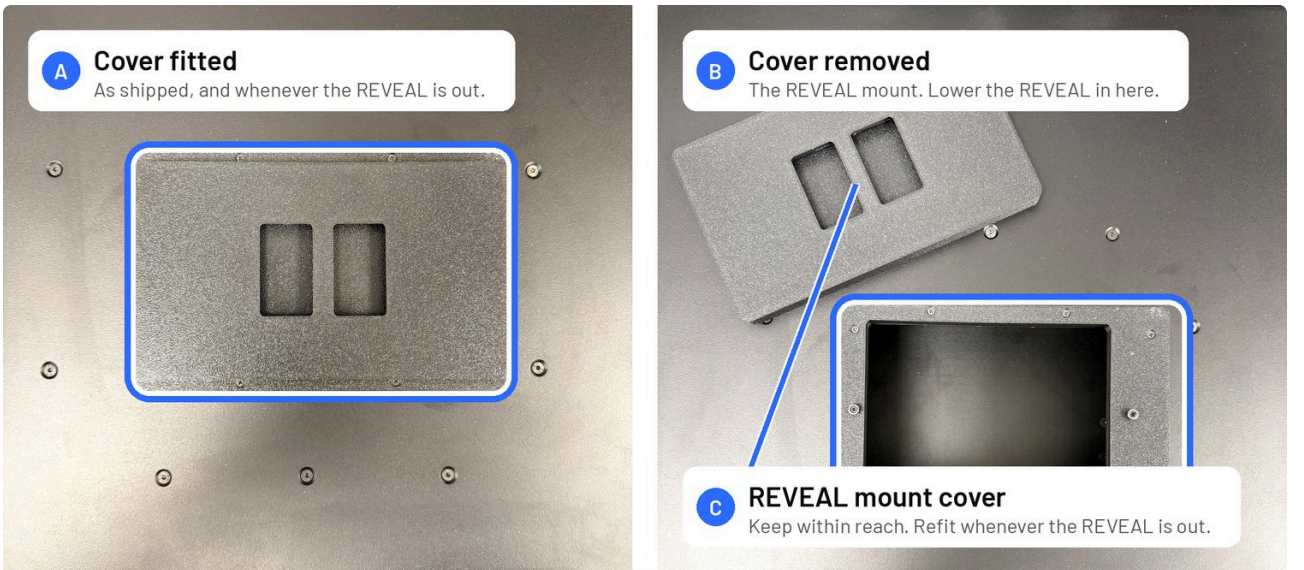


Figure 5.2 Step 2. Lift the REVEAL mount cover away to expose the REVEAL mount.

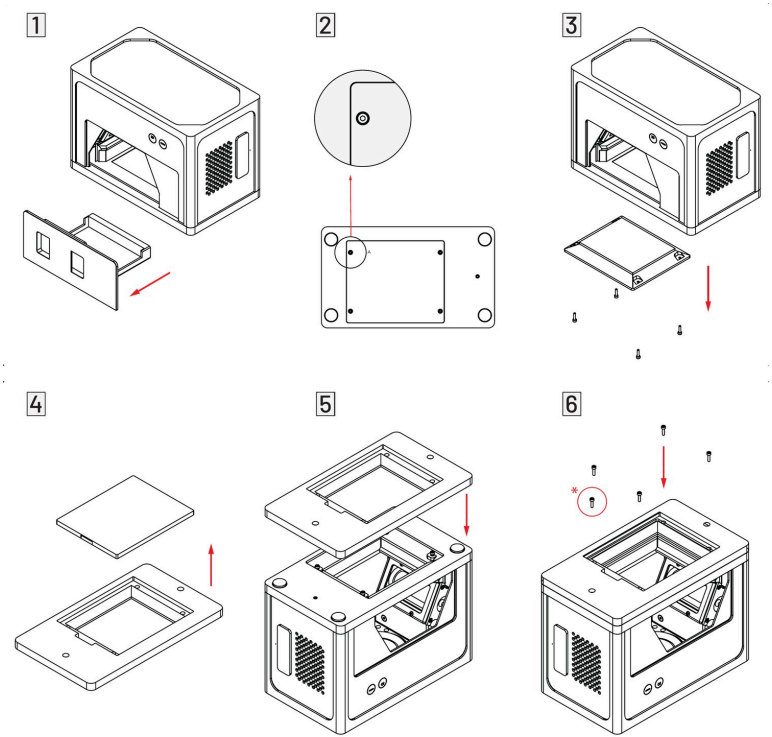


Figure 5.3 Step 3. Fit the REVEAL Accessory Plate: remove the analysis drawer (1), loosen and remove the four accessory cover screws with the 1.5 mm Allen key (2, 3), remove the magnetic cover from the plate (4), align the plate (5) and secure it with the same four screws (6).

3 Fit the REVEAL Accessory Plate

The STAGE XL holds your REVEAL by the REVEAL Accessory Plate, which bolts to the underside of the REVEAL Diamond Detector 3S or 2S in place of the standard accessory cover. If your REVEAL already carries one from a 360 Base or STAGE L, skip to Step 4.

With the REVEAL unplugged, on a clear bench: slide out the analysis drawer (1); loosen and remove the four accessory cover screws with the 1.5 mm Allen key and lift the cover off (2, 3); remove the magnetic cover from the plate (4); align the plate with the screw holes (5); secure it with the same four screws (6). If there is a fifth hole in the middle, add one M2x8 spare screw. Do not refit the standard drawer; the STAGE XL tray goes in its place (Step 4).

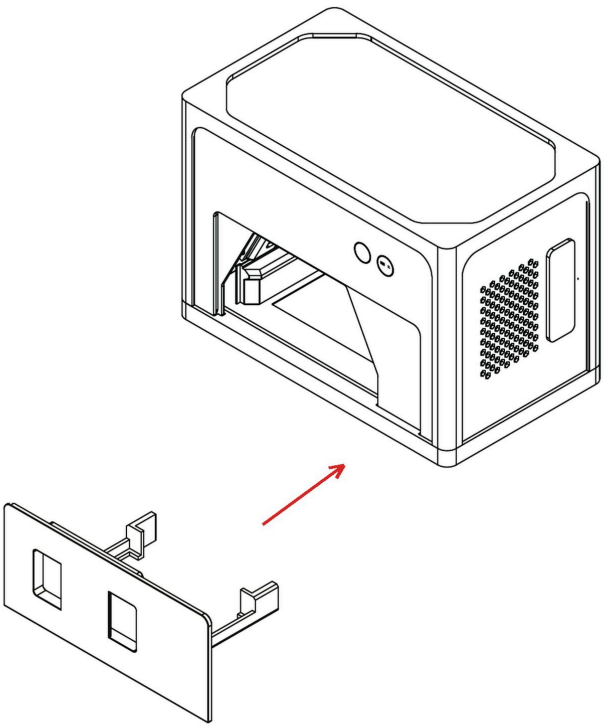


Figure 5.4 Step 4. Slide the tray supplied with the STAGE XL into the REVEAL in place of the standard analysis drawer. STAGE XL features need this tray fitted.

4 Fit the STAGE XL tray into the REVEAL

The STAGE XL ships with its own tray for the REVEAL. It slides into the REVEAL in place of the standard analysis drawer you removed in Step 3, and STAGE XL features only work with it fitted.

Slide the tray into the drawer opening on the front of the REVEAL until it seats fully. Keep the standard analysis drawer in the box; refit it whenever you take the REVEAL off the STAGE XL to use it on its own.

5 Place your REVEAL

Lower your REVEAL Diamond Detector 3S or 2S, with the Accessory Plate and the STAGE XL tray fitted, into the mount, camera side facing down into the chamber. It should seat flat and square in the cradle with no rocking. Do not force it. If it does not drop in cleanly, lift it out, check the orientation, and try again.

6 Connect the USB data cable

The cable is USB-C on one end and USB-A on the other. **STAGE XL end (USB-C):** the port marked with the USB icon, not the lightning bolt. **REVEAL end (USB-A):** either of the two USB-A ports on the back of the REVEAL. Both work identically; the other stays free for a keyboard, mouse or barcode scanner. Do not use the REVEAL's USB-C port, and leave HDMI for your monitor.

This cable carries the commands that move the tray. Without it the two devices cannot talk, and the STAGE XL will not appear in the REVEAL interface.

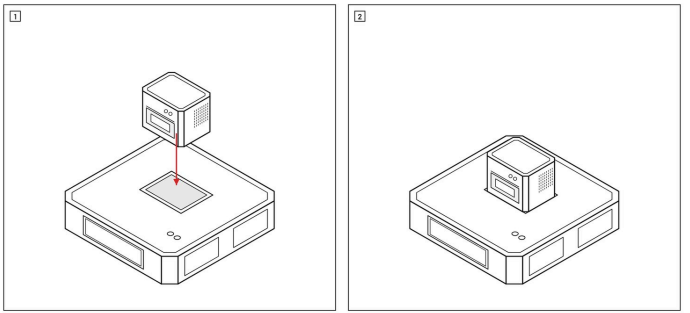


Figure 5.5 Step 5. Lower the REVEAL, with the Accessory Plate and the STAGE XL tray fitted, into the STAGE XL mount (1) until it sits flat and square (2).

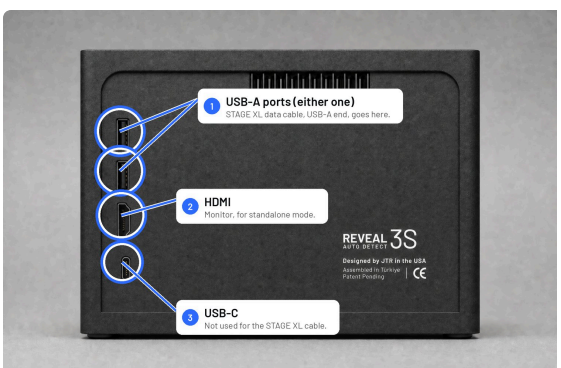


Figure 5.6 Step 6. REVEAL end. Plug the USB-A end of the data cable into either USB-A port on the back of the REVEAL. The USB-C end goes to the STAGE XL.

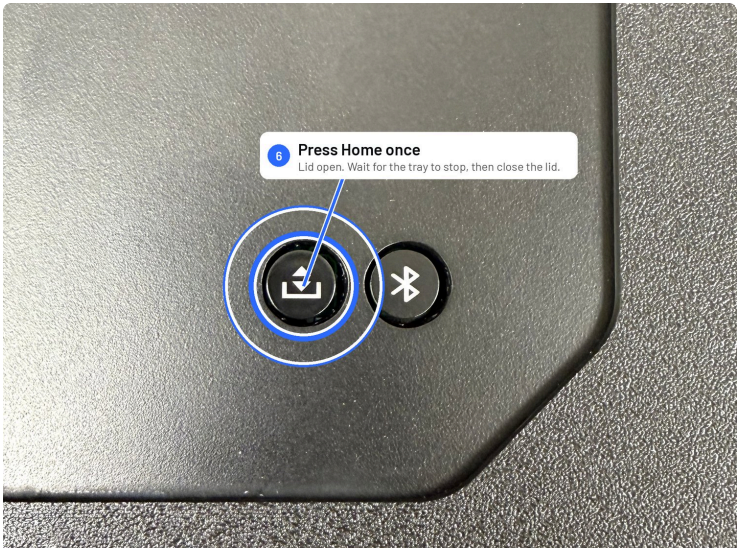


Figure 5.8 Step 8. Press the Home button. Do not close the front lid until the tray has homed itself.

7 Connect power, two adapters

The STAGE XL and the REVEAL are powered separately, each from its own adapter (brick and cable). **STAGE XL:** the adapter from the STAGE XL box, into the lightning bolt port, then into mains. **REVEAL:** its own adapter, into its own power port, as before. Do not swap the two adapters and do not try to power one device from the other; the USB data cable carries no power.

8 Press the Home button

With the front lid still open, press the Home button on the top panel once. The tray will travel to its home position and stop.

Wait until the tray has stopped moving completely. Only then close the front lid.

Your STAGE XL is now ready. In the REVEAL interface, select the tray sections you want to screen and start your first analysis. No pairing step is needed.

6 GOOD TO KNOW

Do not close the lid until the tray homes itself.
After you press Home, and at the start of every analysis, the tray moves to find its home position. Closing the lid while it is still travelling can interfere with the tray. Watch for it to stop before you close up.

Your REVEAL stays fully portable.
The REVEAL Diamond Detector lifts straight out of the mount. Fit the mount cover back on immediately, and the STAGE XL is protected until next time.

Screen only the sections you need.
The six tray sections are independently selectable. Load one section or all six, select them in the REVEAL interface, and the tray brings only those sections under the REVEAL.

Operate from a monitor or a computer, not the app.
STAGE XL features are available in standalone mode (monitor, keyboard and mouse connected to the REVEAL) or through a desktop connection from a computer. They are not supported in the myREVEAL app. The app still works for everything else your REVEAL does.

What fits on the tray.
Up to 130 rings across all six sections, up to 30 bracelets per cycle, loose diamonds, and high jewelry cluster necklaces. Large rigid pieces that cannot be bent or folded, often spanning 10 to 14 inches or more when laid flat, sit directly on the tray and are screened whole.

7 WARNINGS AND CAUTIONS

WARNING: DO NOT POWER ON THE DEVICE BEFORE REMOVING THE TRAY SHIPMENT LOCKS.

On power up the tray moves to find its home position. With the locks fitted it cannot move, and forcing the mechanism against the locks can damage the tray drive. Remove both locks first, every time, before the power cable goes in.

Do not dispose of the box.

JTR accepts returns and service center shipments only in the original box with its packaging. Without it, the device cannot be shipped safely and a return or service request cannot be accepted. Fold it flat if you must, but keep every part of it.

Always close the mount with the REVEAL mount cover when the REVEAL is removed.

Whenever your REVEAL Diamond Detector 3S or 2S is taken out of the STAGE XL, fit the REVEAL mount cover over the open mount straight away. The open mount leads directly into the analysis chamber. Left uncovered, dust settles on the tray and the optical path, and objects dropped into the opening can damage the tray mechanism. Do not run the STAGE XL with the mount open and empty.

Do not move or ship the device without the tray shipment locks applied.

The tray is a precision moving assembly. Unlocked, it can shift inside the housing during transport and damage the mechanism. Before moving the STAGE XL anywhere, refit both shipment locks exactly as they were when the device arrived. Damage caused by transport without the locks is not covered.

8 MOVING OR SHIPPING

1. Remove your REVEAL Diamond Detector from the mount and fit the REVEAL mount cover.
2. Open the front lid. Press Home if the tray is not already at its home position, and wait for it to stop.
3. Disconnect the STAGE XL power adapter and the USB data cable.
4. Refit both tray shipment locks. Seat each bracket against the tray bar and tighten the thumb screws by hand until the tray cannot move.
5. Close the front lid.
6. Pack the STAGE XL in its original box with the original packaging.

For a service center shipment, contact JTR support first for instructions and a return authorization.

SUPPORT

jtr.nyc@jtr.org | jtr.org

Help Center: jtr.org, Reveal 2S & Reveal 3S, Extension Modules and Accessories.

REVEAL STAGE XL User Setup Manual, v1, October 2026. REVEAL and LOUPE S are products of JTR Jewellery Technology Research Inc. Made in Turkey.

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