

Quick Start Guide

v1.2



Thank you for purchasing SmartBench!

Now that the large format, mobile CNC routing is unleashed, we hope you have a lot of fun with your future projects. Please let us know how you get on - we are always keen to receive feedback, and follow what SmartBench creates!



What's in the box

Start by getting familiar with SmartBench's key components.

Check the contents. If any of the above items are damaged or missing, please contact your point of purchase immediately.

Box 1	Box 2			
1 x Z Head assembly	1 x X Beam upper			
1 x Console	1 x X Beam lower			
1 x Tools (17mm spanner and 6mm hex)	2 x Leg set			
Box 3 1 x Y Bench	1 x IEC Power lead 1 x Extraction power lead			



Key components

Figure 1: Y Bench

Figure 2: ZHead

Figure 3: Leg Set (x2)

Figure 4: Console

Figure 5: X Beam Upper

Figure 6: X Beam Lower

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Fit the X Beam Lower



Identify the home end of the *Y* Bench (Figure 1, page 2) by looking for the Home Icon.



Elevate the home end of the Y Bench.



Identify the home face of the *XBeam Lower* (Figure 6, page 2) by looking for the Home Icon.



Slide the X Beam Lower onto the Y Bench such that both Home Icons face the same way, as shown.



Fit the Legs



Unfolda Leg Set (Figure 3, page 2). Lift the Y Bench to accept the location pins of the Leg Set.



Push the clamp handles down flat to the YBench end plate to tighten.



 $\label{eq:lift} Lift the remaining end and repeat the process.$



Slide the leg clamp pins into the slots in the Y Bench end plate.



At this stage your SmartBench should look something like this.



The YBench and XBeam Lower assembly should look like this.



Fit the X Beam Upper



Identify on the Home Icon on the inside rail of the X Beam Upper (Figure 5, page 2). Position it above the X Beam Lower, so that all 3 Home Icons are visible from the same side.



Slide the X Beam Upper down until the rollers rest on the Y Bench



Locate the socket on the X Beam Lower



The X Beam Upper can now be mounted onto the X Beam Lower. Again, ensure all 3 Home Icons are visible from the same side.



The quick release handle can now be rotated clockwise and the pushed flat to secure



Connect the X Beam Upper cable into the X Beam Lower socket



Attach the ZHead



Slide the ZHead (Figure 1, page 2) onto the X Beam Upper ensuring the orientation as shown.



Secure in place using the thumbscrew. Ensure the cable is tucked into the recess on the plate.



Repeat for the power cable connector.



Fit the cable connector latch plate to the Z Head carriage plate as shown.



Connect the Z Head signal cable and secure using the thumb screw.



Connect the extraction hose to the Z Head. The arrow denotes to location of the lug.



Fit the Console



Place the *Console* into the locating slots in the E Stop end of the X Beam Upper.



Plug the *Console* cable into the connector on the right-hand side of the *X Beam Upper*.

Fit the power cable



The mains *power cable* connects to the socket on the underside of the *X Beam Lower*.



Hook the mains power cable over the strain relieving bracket to ensure it doesn't unplug during operation.



Fit the extractor

<u>SmartBench has a dedicated power outlet for extractors, to enable auto-extraction, but</u> <u>the extractor must not draw more than 10 amps.</u> If the extractor draws more than 10 amps, the extractor must be powered from a separate power outlet and operated manually.



Attach the extraction hose to the underside of the X Beam Lower



Either: plugin your extractor to a separate power outlet...



Or: if the extractor does not exceed the power rating, plug in your extractor to SmartBench's extractor power outlet



Check cable connections

Check that all cables are connected correctly:

- 1. Z Head Signal
- 2. Z Head Power
- 3. X Beam
- 4. Extraction power (if using the auto-extraction system)
- 5. Console
- 6. Mains Power



Figure 7: Z Head Signal



Figure 10: Extraction Power



Figure 8: Z Head Power



Figure 11: Console



Figure 9: X Beam



Figure 12: Mains Power



Turning on SmartBench

Assuming the above instructions have been followed correctly, SmartBench can now be powered on by releasing the Emergency stop button. To release the button, it must be twisted clockwise.



Figure 13: E-Stop Button



Connecting to Wifi

Connecting SmartBench your local network gives the following functionality:

- Software updates
- File transfer via your WiFi network

		Refresh status		
Q	5	GB 1 Network name 2		
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Ø		IP address info here		
		mX: mY: mZ: wX: wY:	wZ:	JP

- 1. Location Important! Leave location set as GB
- 2. Insert your Network name:
 - $\hfill\square$ Touch on the network name box
 - Clear the text "Network name..." using the solution on the pop-up keyboard
 - □ Once the Network name box is empty add your WiFi network name (SSID)
- 3. Network Password:
 - □ Touch on the Network password box
 - Clear the text "Network password..." using the button on the pop-up keyboard
 - $\hfill\square$ Once the Network password box is empty add your WiFi network password
- 4. Connect to WiFi:



- □ Close the keyboard using the button in the lower right corner
- \Box Press the connect button.

Please note the system will then automatically reboot.

The console screen will go black as the console restarts - this is normal.



Update EasyCut software

To complete the EasyCut setup, update the software. In doing this you'll get the benefit of the following updates:

- □ Additional functionality to improve our customers user experience
- □ Virtual jig (from Q3 2019)
- \Box Cutting apps (from Q4 2019)

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You'll find the software update button in the Settings > Developer screen

□ Press the Get SW update button



The system will automatically connect to our server, download and update the latest version of EasyCut, and then reboot.

It is important to note:

- $\hfill\square$ none of your job files will be touched, and
- $\hfill\square$ the last set datum or park points will be retained



Home SmartBench

□ From the Lobby screen press to go to CAD/CAM operation



□ Press the home button. The home button will appear on all screens



□ Wait for SmartBench to home.



Step 12 – Open a file

- \Box Go to Job screen (1)
- □ Press the file explorer (2)



- \Box Choose your file (1)
- □ Accept your file choice (2)



□ For full details on file transfer/loading go to the EasyCut user manual



Set X/Y datum (start point for the job)

The X/Y datum refers to the point at which the job will start. This is set by moving the cutter to the intended point, and telling EasyCut when you are happy with the position.

- □ Go to Move Screen (1)
- \Box Move the X Axis (2)
- \Box Move the Yaxis (3)



□ Set the job start point (1)





Now check that your job location fits within SmartBench's bounds:

- \Box Go to Map screen (1)
- □ Makesure the X/Y Datum (2) is in the right position and your job does not reach beyond the extents of the X/Y space.
- \Box If not, repeat the previous steps to reposition the datum.





Set Z datum (start point for the job)

Once the X/Y datum is defined, the tip of the router cutter needs to be registered relative to the material. This is referred to as setting the Z datum, and should be done near the X/Y datum. Start by going to the X/Y datum:

- Go to the Map Screen (1)
- Press 'Go to X/Y Datum' (2) to place the Z Head at the X/Y datum





Now you need to place the cutter at the height you want your Z datum (typically either the top or bottom surface of the material, depending on the job).

To set the Z height with the Z probe:

- Go to the Move screen (1).
- Take out the Z probe plate from its holder.
- Remove the front of the dust shoe.
- Place the Z probe plate directly below the cutter tip.
- Make sure the back of the probe plate lies flat on the surface you are trying to probe. The probe plate should be silver side up.
- If the tip of the cutter isn't close to the top of the stock, manually move it downwards to about 10mm (3/8") away from the probe using the Z down button (2). Take care not to overshoot!
- When close, press the 'Z0' button (3). The Zhead will automatically lower until the tool tip touches the probe plate (on touching, an electrical circuit is closed, the software remembers this position, and subtracts the thickness of the probe plate).
- When the cutter retracts, the Z datum is set.





Run job

□ To run your job, press the play button (1)



• Confirm you wish to run your file by pressing the 'GO' button (1)



For more details on EasyCut, please download the full EasyCut user manual www.yetitool.com/support/downloads



Support

If you require any support, please visit our website and raise a support ticket.

www.yetitool.com/support/submit-a-ticket