

Set Up and Calibrate Carbide Motion

With the hardware installed, you now need to setup Carbide Motion control software to recognize and calibrate your BitSetter.

NOTE: Carbide Motion v4.26 or higher is required to use the BitSetter. If you have not already done so, download the latest version of Carbide Motion now at: carbide3d.com/carbidemotion.

Connect to Shapeoko

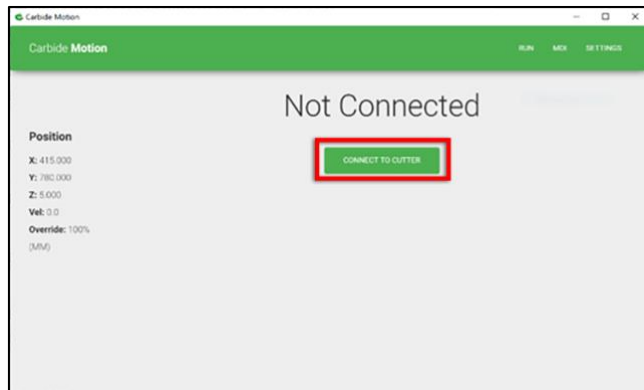


Figure 14

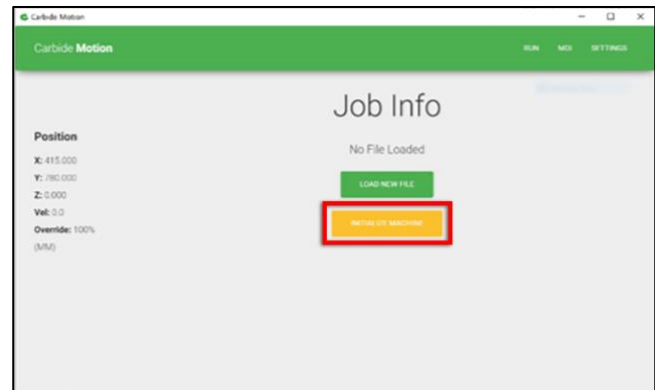


Figure 15

1. Open Carbide Motion.
2. Power on the Shapeoko, then click the **Connect to Cutter** button. See *Figure 14*.
3. After the software connects, click the **Initialize Machine** button. This will begin a homing cycle. See *Figure 15*.

Clear Offsets and Change to Machine Coordinates



Figure 16

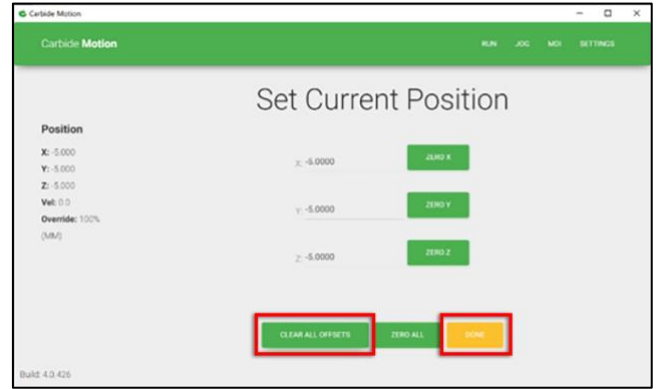


Figure 17

Clear Offsets

1. After homing completes, click **Jog** in the top menu bar.
2. Click the **Set Zero** button. See *Figure 16*.
3. On the Set Current Position screen, click the **Clear All Offsets** button. Then, click **DONE**. See *Figure 17*.
4. Click the **Position** label. This will toggle the view to the machine coordinates. See *Figure 18*.

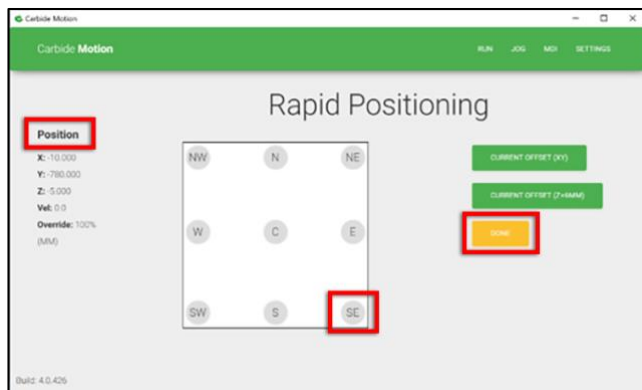


Figure 18

5. Click **Rapid Position**, then click the **SE** button to move the spindle to the front-right of the machine. Once in position, click **DONE**. See *Figure 18*.
6. From the JOG screen, use the arrows on the screen (or the arrows on your keyboard) to jog the gantry so the spindle is directly above the BitSetter (as shown in *Figure 19*).



Figure 19

Configure the Permanent Position of the BitSetter

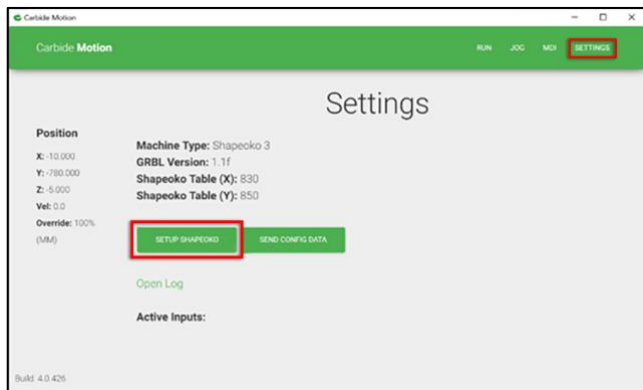


Figure 20

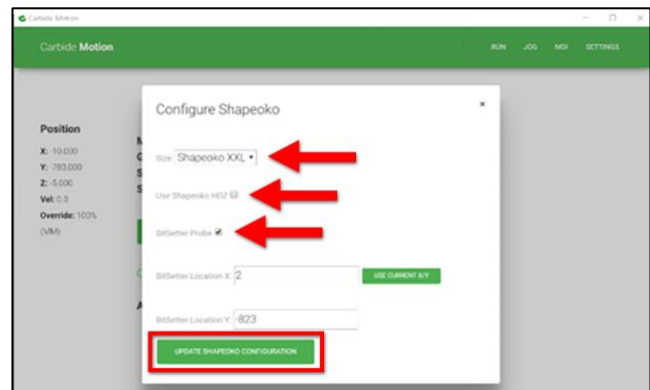


Figure 21

1. Click **Settings** in the top menu bar.
2. Click the **Setup Shapeoko** button. See *Figure 20*.
3. Select the appropriate size Shapeoko from the **Size dropdown list** (Shapeoko 3, XL, XXL). See *Figure 21*.
4. Select the **Use Shapeoko HDZ** checkbox, if you are using an HDZ.
5. Select the **BitSetter Probe** checkbox. This will expand the window and allow you to configure the permanent location of the BitSetter.
6. With your spindle directly above the BitSetter, click the **Use Current X/Y** button to set the location. This will permanently save the X/Y location of your BitSetter.

NOTE: If you physically change the BitSetter location, you will need to re-run this setup.

7. Click the **Update Shapeoko Configuration** button to save the settings.

CONGRATULATIONS! Your BitSetter is ready to use!

Operating Your Bitsetter

The start-up workflow using the BitSetter is as follows:

1. Power on and connect to machine.
2. Initialize Machine – this will begin a homing cycle.
3. After the homing cycle completes, the gantry will automatically move to the front-right location and prompt you to insert a tool. Think of this as ‘homing’ the tool offset.
4. After the tool is inserted or confirmed, the machine will then measure the length of the tool in the spindle.
5. Once the initialization sequence is complete, you can load and run a job by using the **Load File** feature.

Notes About Using Your BitSetter

- Ensure tools are long enough to reach the BitSetter trigger button. The minimum length the tool must extend from the collet is 0.5.”
- In order to instantiate a tool change and offset measurement, your CAM program must post unique tool numbers with each new tool. Carbide Create does this by default.
- If you ever physically move the BitSetter, you will need to reconfigure its new location by following these instructions again.

Check Out the BitSetter Installation Video

There is also a complimentary video to go along with these installation instructions, which can be viewed at: <https://youtu.be/I97XwLBmyuc>.