



Connecting, Updating and Configuring Your WorkBee

This guide goes over connecting to your WorkBee CNC Machine, updating the WorkBee firmware to the latest release, and setting the Machine Dimensions.

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The screenshot shows a web browser window with the WorkBee CNC Machine interface. The browser's address bar is partially obscured by a black redaction box. The interface includes a top navigation bar with a status indicator "Idle" and a "Send" button. Below this is a "Machine Status" section with a table for head position (X, Y, Z) and speeds. A sidebar on the left contains "Machine Control" options like Job Status, G-Code Console, and G-Code Files. The main area features "Head Movement" controls with buttons for homing and moving in various increments. A yellow warning banner at the bottom states "The following axes are not homed: X, Y, Z". An "Edit bookmark" dialog box is open in the foreground, showing the bookmark name "WorkBee CNC Machine" and a "Turn on sync..." button. The dialog also displays the user's name "Ryan Lock" and email "ryanmlock93@gmail.com".

Machine Status			
Head Position	X	Y	Z
	0.00	0.00	0.00
Speeds	Requested Speed	Top Speed	
	0 mm/s	0 mm/s	
Sensors	Vin	MCU Temp.	Z-Probe
	24.1 V	21.2 °C	0

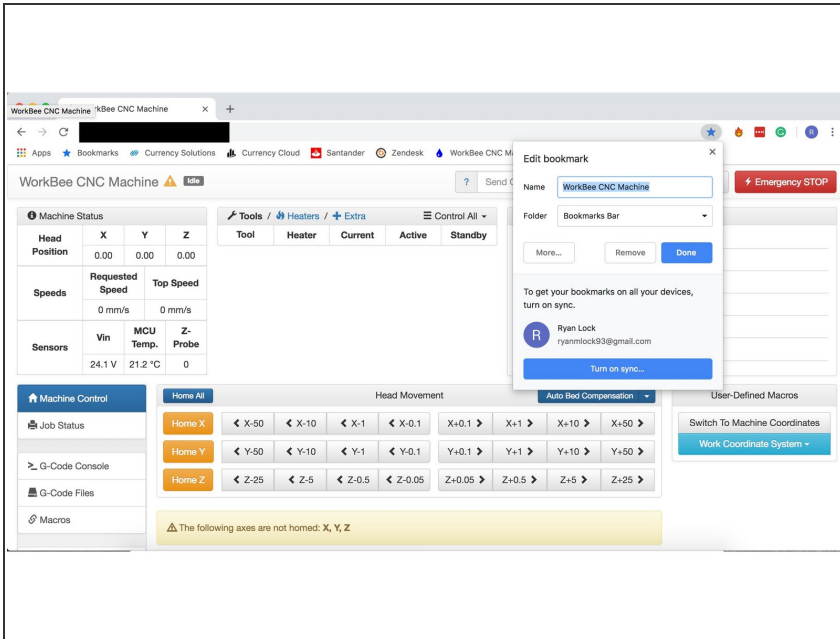
Head Movement								
Home X	◀ X-50	◀ X-10	◀ X-1	◀ X-0.1	X+0.1 ▶	X+1 ▶	X+10 ▶	X+50 ▶
Home Y	◀ Y-50	◀ Y-10	◀ Y-1	◀ Y-0.1	Y+0.1 ▶	Y+1 ▶	Y+10 ▶	Y+50 ▶
Home Z	◀ Z-25	◀ Z-5	◀ Z-0.5	◀ Z-0.05	Z+0.05 ▶	Z+0.5 ▶	Z+5 ▶	Z+25 ▶

⚠ The following axes are not homed: X, Y, Z

INTRODUCTION

This guide goes over connecting to your WorkBee CNC Machine, updating the WorkBee firmware to the latest release, and setting the Machine Dimensions.

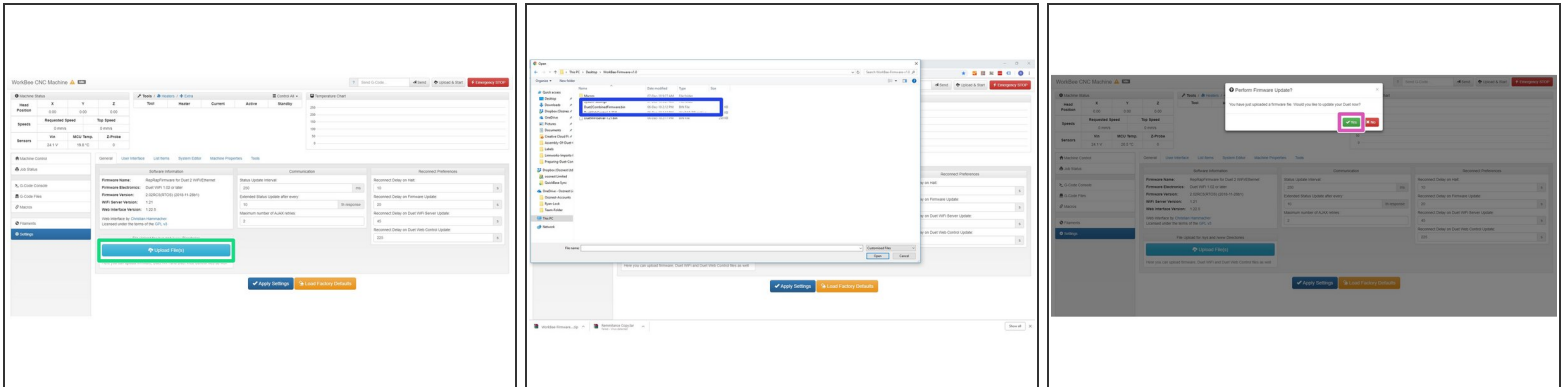
Step 1 — Setup Web Control



⚠ Disconnect and unplug via USB

- Switch on the power supply. The controller cooling fans should activate.
- In your browser of choice enter into the address bar `http://"DuetIPAddress"`
- ① Replace "DuetIPAddress" with the ip address noted down from the previous guide.
- ① If no connection can be established make sure either the ethernet cable is plugged in, or your computer is connected to the same Wifi network as the WorkBee.
- In your browser bookmark this page for easy access to the Web Control.

Step 2 — Update Firmware



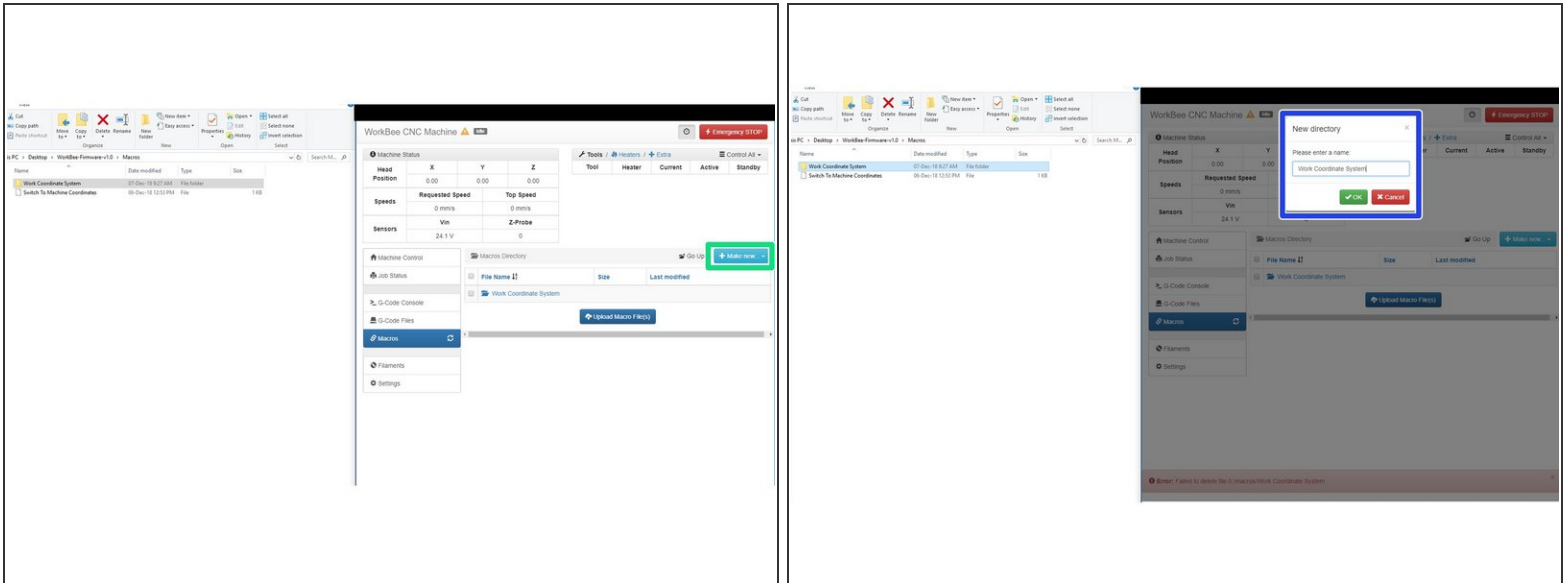
- Download the latest firmware from: [WorkBee Firmware Releases](#)
- Unzip the folder to somewhere on your computer.
 - ⚠ Do not unzip any folders inside this one.
- In WorkBee Web Control go to Settings > General
 - Press Upload File
 - Navigate to the unzipped firmware folder and select "Duet2CombinedFirmware.bin"
 - Wait for the file to upload, and press "Yes" on the update prompt.
- ⚠ Wait for the update to complete.

Step 3 — Repeat



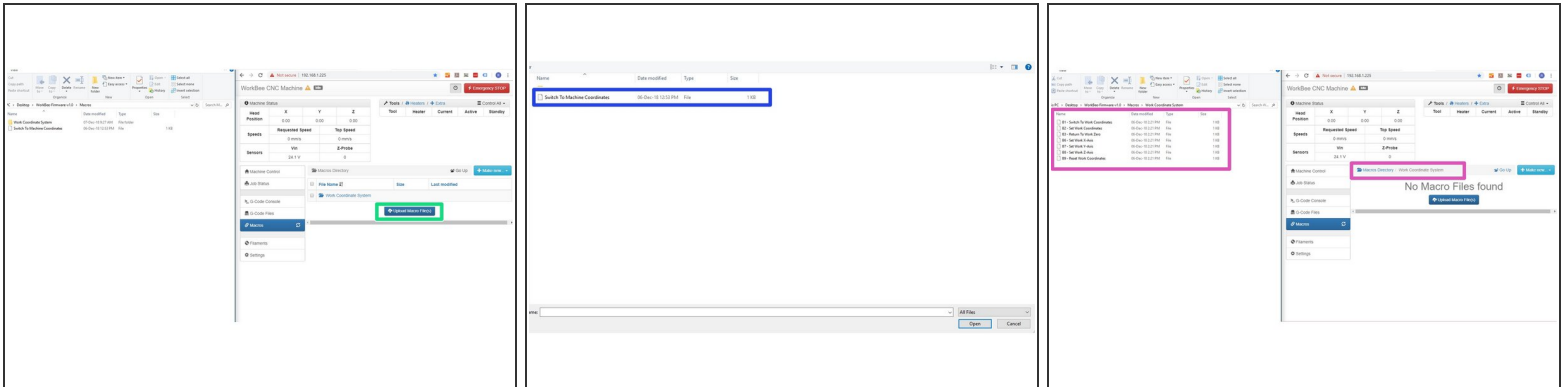
- Repeat Step 2 but this time for DuetWifiServer.bin (If applicable)
 - ⚠ Do not do this step if you have the ethernet version.
- Repeat again for DuetWebControl.zip
 - ⚠ There is no prompt to confirm the update when uploading this file.
- Repeat again, but this time navigate to System-Settings, and then the folder which matches your machine drive setup. Select all the files inside.
 - ⚠ There is no prompt to confirm the update when uploading these files.

Step 4 — Macro Folders.



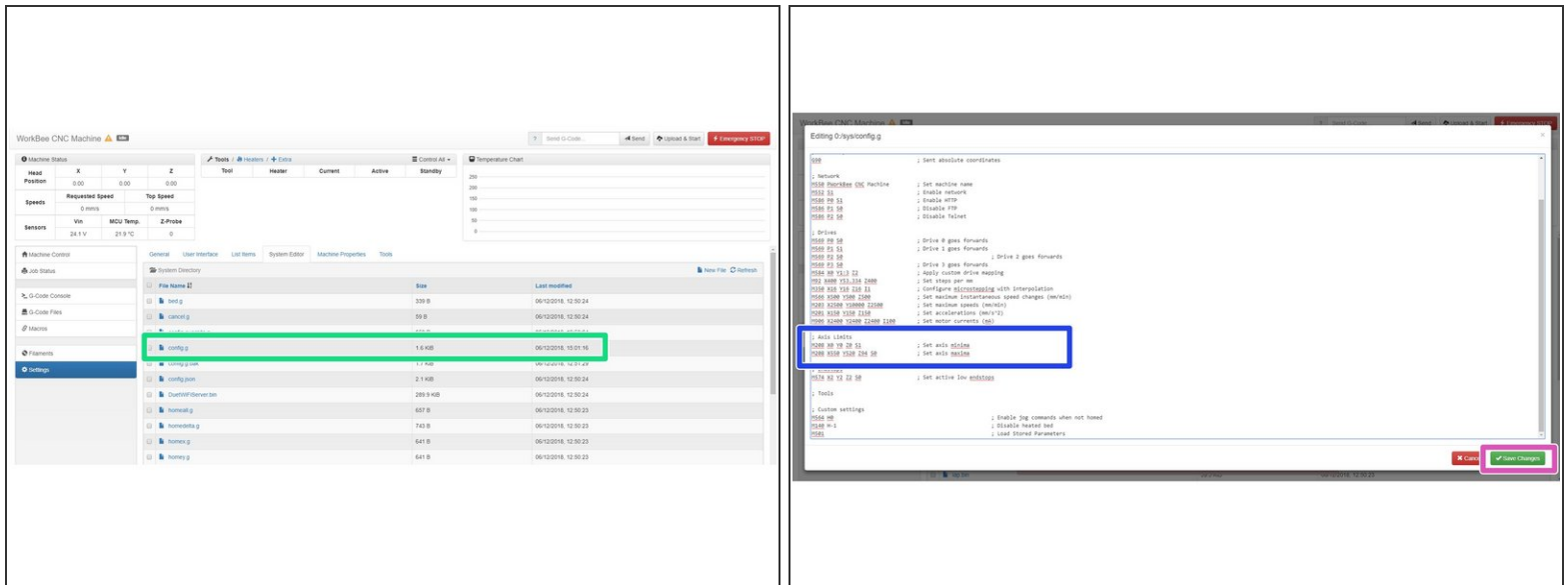
- Open the Macros folder in the WorkBee Firmware folder.
- In WorkBee Web Control, navigate to Macros.
- ❗ Inside the Macros Folder on your computer you will notice there is additional folders inside. These folders need to be created inside WorkBee Web Control. If they are already present, you do not need to re-create them.
 - In WorkBee Web Control, under the Macros section, press the 'Make New' button, and select Directory.
 - Enter the name of the Directory you want to create. Matching it to the name inside the WorkBee Firmware Folder.
 - Press 'OK'
 - Repeat this for all Folders that are missing from your Macros section in WorkBee Web Control.

Step 5 — Uploading Macros



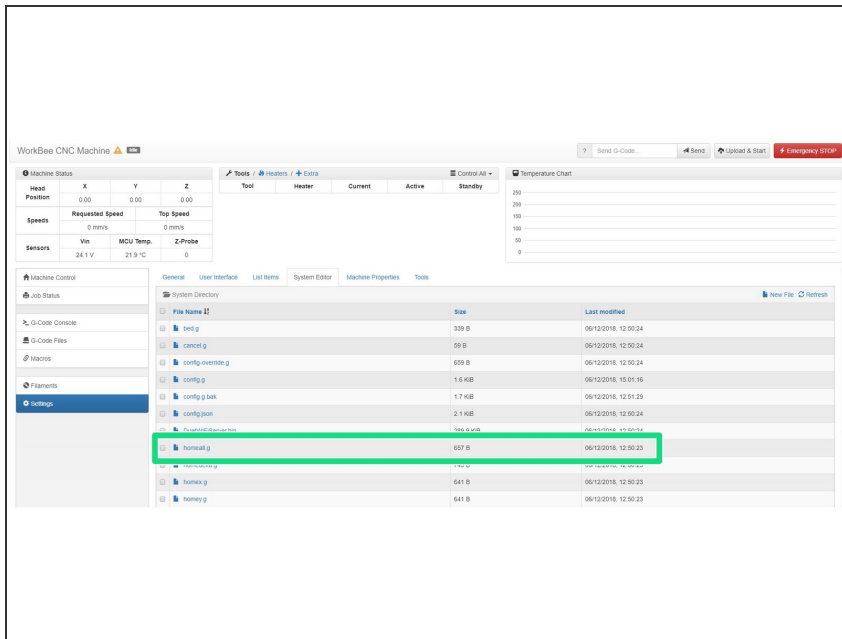
- With all the folders created, go back to the Macros Directory Root inside WorkBee Web Control.
- Press Upload Macros
 - Navigate to the Macro Folder inside the WorkBee Firmware Folder, and select all the files. Wait for the macros to upload.
- ⚠ Do not select any Macro Directory's inside the Macros folder. Just select the files.
- Open up a Macro Directory in WorkBee Web Control and repeat this process, but uploading the files in the corresponding folder inside WorkBee Firmware.
 - Repeat this process for all the Macro Directory's

Step 6 — Set Config Machine Size



- Go to System > System Editor and click on the file named config.g
- Inside the file, find the section with heading 'Axis Limits'.
 - Under this heading, find the second line, named 'Set Axis Maxima'
 - Change the X & Y values to match the working area for your size machine on this page: [WorkBee Critical Machine Dimensions](#)
- For example if you had a 1500x1500mm Belt Drive machine the line should read 'M208 X1300 Y1270 Z94 S0'
- Do not change the Z value.
- Once complete, Press 'Save Changes', and reboot the Duet.

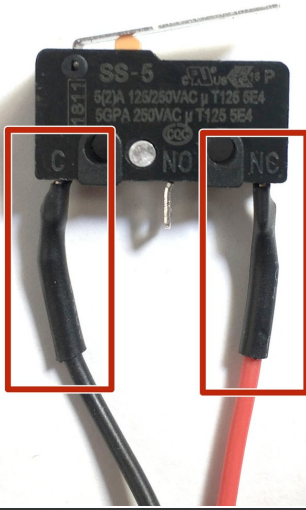
Step 7 — Set Homing Machine Size



⚠ This step is only for WorkBee Firmware Version 1.0.4 or greater.

- Inside system editor, click on the file name homeall.g. Inside the file, find the line: G92 X550 Y520 Z94
- Change the X & Y values to match the working area for your size machine on this page: [WorkBee Critical Machine Dimensions](#)
- For example if you had a 1500x1500mm Belt Drive machine the line should read 'G92 X1300 Y1270 Z94'
- Once complete, Press 'Save Changes'
- Repeat for homex.g, but for the line: G92 X550 Z94. In this case just the X and Z Value need setting.
- Repeat for homey.g, but for the line: G92 Y520 Z94. In this case just the Y and Z Value need setting.
- Repeat for homeZ.g, but for the line: G92 Z94. In this case just Z Value need setting.

Step 8 — Configure Limit Switches



⚠ Please check if your limit switches are wired the same as in the image. One wire going to the 'C' terminal and one wire going to the 'NC' terminal. If they are continue with this step. If they are not the same, then this step can be skipped.

- Inside system editor, click on the file name config.g. Inside the file, find the line: M574 X2 Y2 Z2 S0
- Change it to: M574 X2 Y2 Z2 S1
- Once complete, Press 'Save Changes' and reboot.

Thanks for following the guide. Please move onto the next guide to learn how to use your WorkBee CNC Machine. Any issues, please contact us!