

# 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.

Written By: Ryan Lock

→ C <sup>4</sup>	Bookmarks	6	Currency S	olution	s 🕕 Currency	Cloud	Santander (	🗿 Zendesk	WorkBee Cl				× 8 🖬 🕲 🖪
								0		Edit	bookmark		
/orkBee	CNC Ma	achii	ne 🔺	Idle					? S	end (Name	WorkBee	CNC Machine	F Emergency STOF
Machine	Status				F Tools /	Heaters /	+ Extra	≡	Control All 👻	Folder	Bookmark	s Bar	•
Head	x	Y	1	z	Tool	Heater	Current	Active	Standby				
Position	0.00	0.0	0 0.	00						Mo	ore	Remove	Done
Speeds	Requested Speed Top		Top Sp	ed						To ge	t your bookm	arks on all your d	levices,
	0 mm/s 0 mm/s							turn o	on sync.				
Sensors	Vin	Vin MCU Temp.		z- obe						R	Ryan Lock ryanmlocks	3@gmail.com	
	24.1 V	21.2	°C	D							Tu	rn on sync	
A Machine	Control		Hoi	ne All			ŀ	Head Moveme	ent	-	Auto Bed Com	pensation 👻	User-Defined Macros
Job Statu	ıs		Но	me X	<b>&lt;</b> X-50	<b>&lt;</b> X-10	<b>《</b> X-1	<b>≮</b> X-0.1	X+0.1 >	X+1 🔰	X+10 🕽	X+50 >	Switch To Machine Coordinates
	_		Но	me Y	<b>&lt;</b> Y-50	<b>&lt;</b> Y-10	<b>《</b> Y-1	<b>《</b> Y-0.1	Y+0.1 >	Y+1 🕽	Y+10 >	Y+50 >	Work Coordinate System -
G-Code			Но	me Z	<b>《</b> Z-25	<b>&lt;</b> Z-5	<b>\$</b> Z-0.5	<b>&lt;</b> Z-0.05	Z+0.05 >	Z+0.5 >	Z+5 🕽	Z+25 🕽	
	-lies												

# 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

→ C													*	• 🖬 (	9 0 :
orkBee (				Gurrenc	y Cloud 🌄	Santander	Zendesk	WorkBee C	NC M	Edit bo	okmark	CNC Machine	~	∳ Emerc	ency STOP
Machine	Statuo			F Taola (	() Heaters /	de Cutes	-	Control All +		Folder	Bookmar		-		
Head X Y		z	Tool	Heater	Current Active		Standby		Folder				_		
Position	0.00	0.00	0.00							More	a	Remove	Done	-	
Speeds	Requested Speed Top Speed										arks on all your	devices,			
	0 mm/s 0 mm/s								turn on				-		
Sensors	Vin	MCU Temp.	Z- Probe							R	Ryan Lock ryanmlocks	3@gmail.com			
	24.1 V	21.2 °C	0								π	rn on sync			
Machine	Control		Home All				Head Moverne	ent	1	A	uto Bed Com	pensation 👻	U	ser-Defined Ma	cros
Job Statu	s		Home X	<b>《</b> X-50	<b>《</b> X-10	<b>≮</b> X-1	<b>《</b> X-0.1	X+0.1 >	X+	1 >	X+10 🕽	X+50 🕽	Switch	To Machine Co	ordinates
			Horne Y	<b>&lt;</b> Y-50	<b>4</b> Y-10	<b>&lt;</b> Y-1	<b>《</b> Y-0.1	Y+0.1 >	Y+	1 >	Y+10 🕽	Y+50 🕽	Work	Coordinate Sy	stem <del>v</del>
G-Code C	Console	_	Home Z	<b>&lt;</b> Z-25	<b>≮</b> Z-5	<b>&lt;</b> Z-0.5	<b>\$</b> Z-0.05	Z+0.05 >	Z+0	0.5 >	Z+5 >	Z+25 >			
G-Code F	iles														

# A 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"
  - (i) Replace "DuetIPAddress" with the ip address noted down from the previous guide.
  - (i) 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

Poster 200 000  Spees Engineer Spees  Berners Via MCD Neep  34.1V VIA-C	Z 500 Peaker Current 000 700 5940 00mm 2/holae	Constants     Constants     Constants     Constants     Constants     Constants	Recomment Deray on Duer With Server Lopater 45 8 Recomment Deray on Duer Vitris Control Lipitale	-		Maket         K         Y           Possibility         C.00         9.00           Rejensitiv         Gamera         Samuel           Sensory         Million         Million           Sensory         Sensory         Sensory	Press and a second	Cipetiti a constraint of the c	Image:
€ snp	P (Anno Freige)	Physics (Section 2000)		· Comment for ·	Jame on your 3		(a) mark to get some home.           (b) mark to get some home.           (c) mark to get some home.           (c) mark to get some home.	And 2005 Street of Sources	

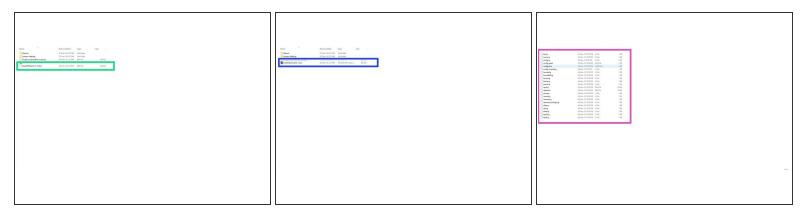
- Download the latest firmware from: WorkBee Firmware Releases
  - Unzip the folder to somewhere on your computer.

 $\bigwedge$  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.

Mait for the update to complete.

## Step 3 — Repeat



- Repeat Step 2 but this time for DuetWifiServer.bin (If applicable)
   ① Do not do this step if you have the ethernet version.
- Repeat again for DuetWebControl.zip

A 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.

A There is no prompt to confirm the update when uploading these files.

#### Step 4 — Macro Folders.

A Congression of the second of	Name         X         Y         Z         The           Person 0.00         0.00         0.00         0.00         0.00           Specify 0.00         0.00 <td< th=""><th>S Anorymou Sillow      S Anorymou Sillow</th><th>And A Contract of the second s</th><th>VorkBen Ch/C Machine &amp; III New directory III Para eller a lane. III Continue trainer III Continue trainer IIII Continue trainer IIIIII Continue trainer IIII Continue</th></td<>	S Anorymou Sillow      S Anorymou Sillow	And A Contract of the second s	VorkBen Ch/C Machine & III New directory III Para eller a lane. III Continue trainer III Continue trainer IIII Continue trainer IIIIII Continue trainer IIII Continue

- 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.

A 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 Machine Size

								WorkBan CNC Machine A	The second se	A tent 🔶 post à tint 🚮
VorkBee CNC Machine 🔺 📼	é Taur	ts / # Heaters / + Extra			Count At a	Send G-Code     Temperature Chat	el Send 🌾 Upicad & Start 🕹 Emergency STOP	Editing 0-/sys/config.g	; Sent absolute coordinates	
Speeds         0 mm/s           Vin         MCU Temp.           24.1 V         21.9 °C	0.00 Top Speed 0 mms Z-Probe 0	bol Heater	Current	Active	Standby	200 200 100 100 80 0		: Network 1528 Anarchites (352 Packlise 1552 31 1 1555 21 1 1555 22 12 1555 22 12 1555 22 19 1555 28 19 1555 28 19 1555 28 19	: Set NACION NAME 1 Institute and 1 Institute and 2 Institute and 2 Institute Tables 2 Institute Tabl	
	General User Interface	List Items System Editor	Machine Propert	ties Tools			h New File O Retrist	1550 22 50 1550 22 50 1550 23 50 1550 21 50 1551 22 50 152 8400 753,354 2400	2 Drive 3 gens forwards 1 April Content Afrike Angolog 2 Sets Steps parts	
≥, G-Code Console G-Code Files	File Name II     B bedg     B cancelg				Size 339 8 59 8	Last modified 06/12/2016, 12:50:24 06/12/2016, 12:50:24		10/2 Anno Yalalah Zene 1056 Xino Yiko Ziko 1201 Xiko Yiko Ziko 1201 Xiko Yiko Ziko 1201 Xiko Yiko Ziko 1201 Xiko Yiko Ziko	I confige a <u>Scannaging</u> with tempolation is in matches interactions apred damping (anviet) is in statuse interactions apred damping (anviet) is in a statuse interaction (and) is in a statuse interaction (and)	
Ø Hacros Ø Filaments	<ul> <li>B config.g</li> <li>B config.g</li> <li>B config.g</li> </ul>				1.6 KB	06/12/2016, 15:01:16		1 Anis Limits H200 NO YO 20 51 H200 X550 Y520 204 50	) for ants addam ; for ants mains	
O Settings	b configion     b DuetWilderverbin				2.1 KB 209.9 KB	06/12/2018, 12:50:24 06/12/2018, 12:50:24		15274 32 12 58	; set active low <u>methods</u>	
	b homeatg     b homeatg     b homeatg				657 8 743 8 641 8	06/12/2016, 12/20/23 06/12/2016, 12/20/23 06/12/2016, 12/20/23		: Custom settings M564 mm M1400 m-1 M501	: braile jng commants when not homed : Slaids head and head : Load Stored Amanderia	
	C b homeyp				6418	06/12/2018, 12:50:23				× Cano

- 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: <u>WorkBee Critical Machine Dimensions</u>
  - For example if you had a 1500x1500mm Belt Drive machine the line should read 'M208 X1300 Y1270 Z94 S0'

 $\bigwedge$  Do not change the Z value.

Once complete, Press 'Save Changes', and reboot the Duet.

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!