

CNC MINI MUSCLE

INSTRUCTIONS

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS MACHINE.



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GENERAL INFORMATION

This manual has been compiled by CNC Design Ltd and is an integrated part of the product with which it is enclosed and should be kept with for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual it will ensure both the product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by CNC Design Ltd to help illustrate the operation of the product.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the CNC Design Ltd policy of continuous improvement determines the right to make modifications without prior warning.

DECLARATION OF CONFORMITY



CERTIFICATE & DECLARATION OF CONFORMITY FOR CE MARKING

Company contact details:

CNC Design Limited
Unit 5S Lanvale Estate, St Columb Major Industrial Estate, Cornwall, TR9 6SF, England
Tel: +44 1637 881520 info@ukcnc.info

CNC Design Limited declares that their:
CNC Mini Muscle Machine Machine MK2

complies with the Essential Requirements of the following EU Directives:

Machinery Directive 2006/42/EC
Electromagnetic Compatibility Directive 2004/108/EC
EU RoHS 2 Directive 2011/65/EU

and further conforms with the following EU Harmonized Standards:

EN ISO 12100:2010
EN 61000-6-3:2007+A1:2011
EN 61000-6-1:2007

Dated: 17 February 2015

Position of signatory: Director

Name of Signatory: Sean Hegarty

Signed below:

on behalf of CNC Design Limited

SPECIFICATION

The CNC Design Ltd policy of continuous improvement determines the right to change specification without notice.

Dimensions of base plate (L x W x H)	465mm x 465mm x 410mm (approx.)
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Dimensions of work area (L x W x H)	310mm x 310mm x 90mm
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Clamping Area	370mm x 160mm
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Weight	31Kg
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Stepper Motor Torque	3.1Nm
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Drivers	4.2amp stepper drivers
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Rails	12mm Quad Rails on Z-Axis 12mm Quad Supported Rails on X-Axis 12mm Dual Supported Rails on Y-Axis
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WARRANTY

12 months Return to Base warranty is offered all assembled machines. This is on a Return to Base policy which means the customer will be liable to pay for the shipping of the faulty parts back to us and we will be liable for the cost of replacing and shipping back to the customer.

SAFETY WARNING

Keep hands clear of moving parts during operation.

Ensure all bolts are fully tightened before operating.

Make sure the power is switched off before connecting the power supply to the controller box.

MAINTENANCE

The machine has been designed to be low maintenance.

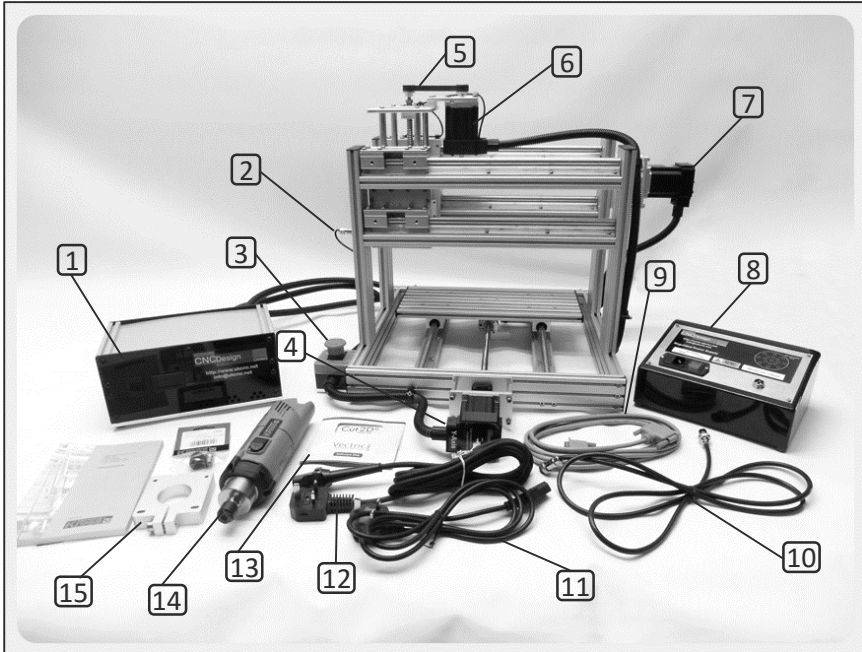
Your machine has been delivered dry as such to keep the machine as clean as we can when assembling.

Please make sure to apply grease to the Ball Screws and all the Rails before running the machine too hard or fast.

Any moving parts such as the Axis Ball Screws and Rails needs to be lightly greased periodically depending on use.

Check the tightness of all nuts and bolts.

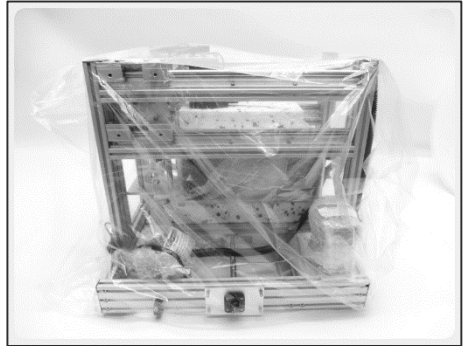
GETTING TO KNOW YOUR CNC MINI MUSCLE



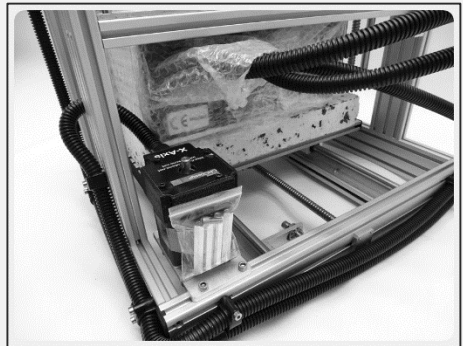
1	Controller Box	9	Serial Cable
2	Limit Switch	10	DC Cable
3	Emergency Stop Button	11	Power Supply Cable
4	Y-Axis Motor	12	Spindle Power cable
5	Belt Pulley System	13	Cut2D Software
6	Z-Axis Motor	14	Kress Spindle
7	X-Axis Motor	15	Custom Spindle Holder
8	Power Supply		

UNPACKING YOUR CNC MINI MUSCLE

Remove Machine from box, remove wrapping and bubble wrap.



Unbolt the X-axis motor and move the controller box.

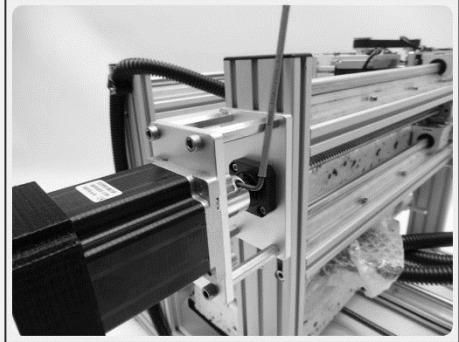


Attach the 4 spacers to the X-axis and tighten.

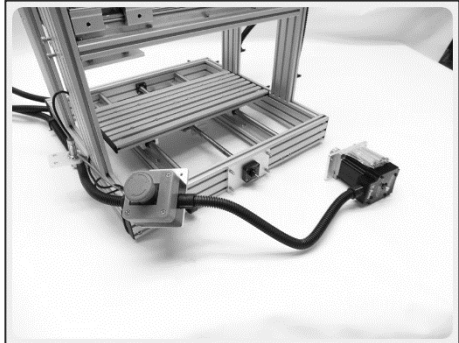


UNPACKING YOUR CNC MINI MUSCLE

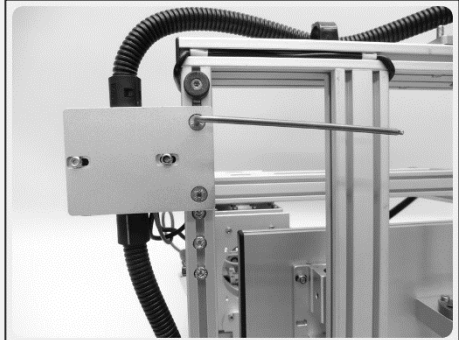
Bolt the X-axis motor onto the spacers and tighten the coupler.



Remove the bubble wrap and cable ties, then unbolt the Y-axis motor.

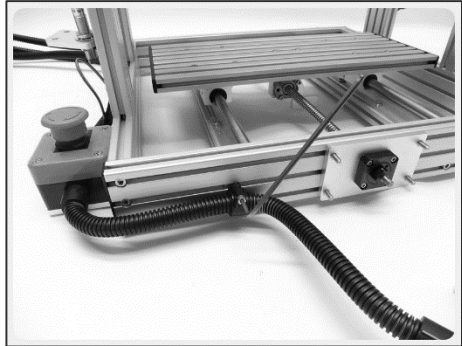


Bolt the emergency stop button to the bottom of the frame with the 2 countersunk bolts.

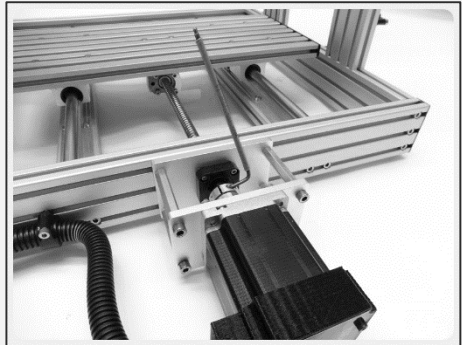


UNPACKING YOUR CNC MINI MUSCLE

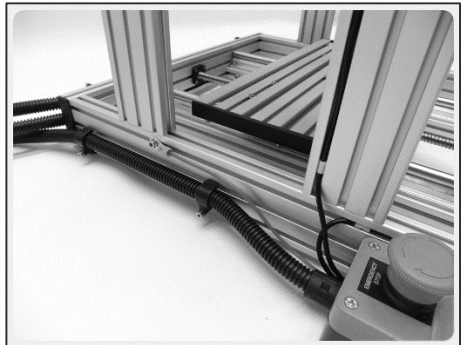
Place the conduit in the P-clip that's on the front of the frame.



Tighten the 4 spacers onto the Y-axis, bolt on the motor and tighten the coupler.



Slide the ground line away from the emergency stop button.



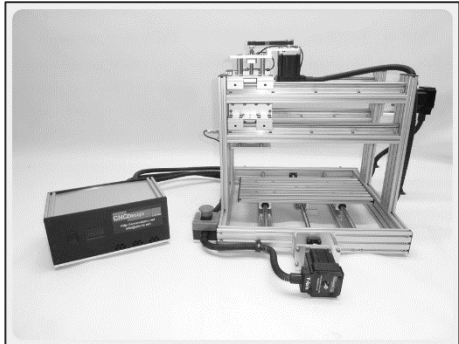
UNPACKING YOUR CNC MINI MUSCLE

Bolt the X-limit switch plate onto the side of the frame.



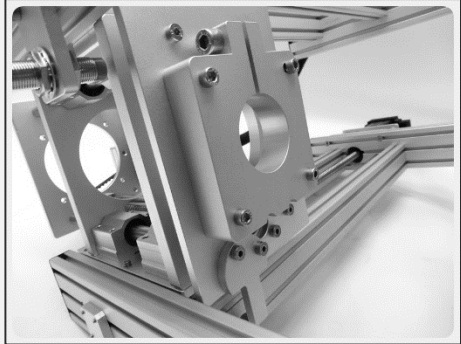
All complete and ready to run up the software and test.

Please note: Make sure the power switch is always set to off before connecting to the mains, hot plugging could damage the electronics.

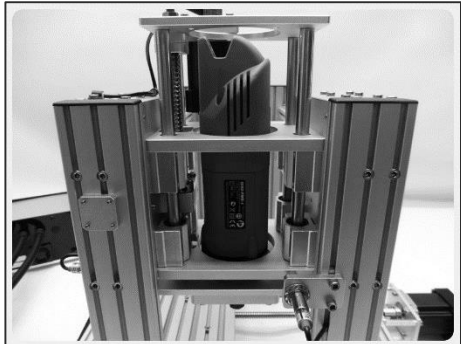


OPERATION AND USE

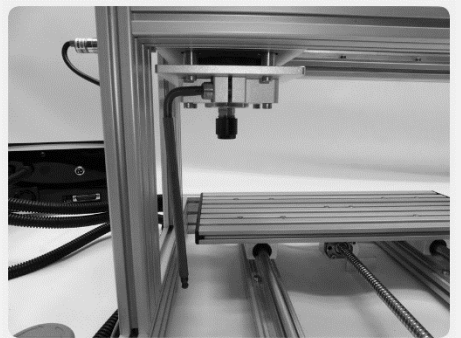
Insert all 4 of the M5 x 25mm bolts, tighten up the back 2 securely leaving the 2 front ones loose.



Insert spindle.



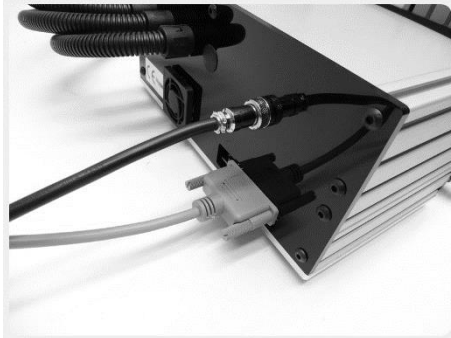
Tighten off the M8 Bolt on the spindle holder (making sure it's secure) and finally tighten off the two front M5 x 25mm bolts.



OPERATION AND USE

Insert the dc and parallel cable into the controller box.

Please note: Make sure the power switch is always set to off before connecting to the mains, hot plugging could damage the electronics.



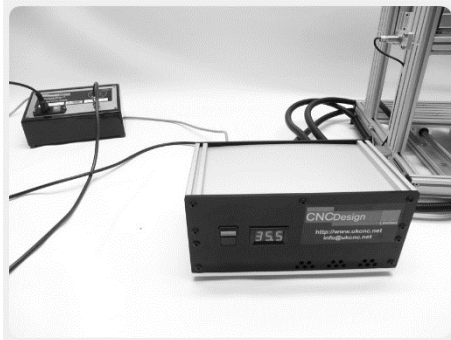
Make sure the power switch is set to off and then insert the DC and AC cables into power supply.

Now insert the AC Mains lead into your Mains socket.



All finished and ready to be used with your CNC Mini Muscle.

Please Note: Switch on the power supply first then switch on the controller box otherwise this could damage the electronics.





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