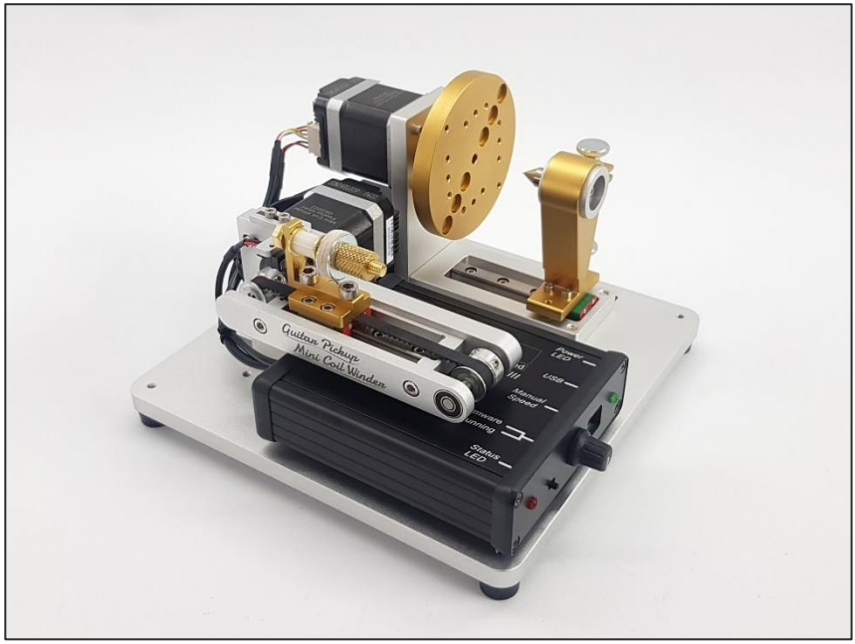
CNCDesign Limited

CNC MINI COIL WINDER MK5

INSTRUCTIONS

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



CE

Version 1 – 15/09/2022

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CONTENTS

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.

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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:
Desktop CNC Coil Winder Model: MK1x
Desktop CNC 200mm Coil Winder
Desktop Mini Coil Winder

comply 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 conform 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)	210mm x 210mm
Weight	4Kg
Maximum feeder travel	40mm
Maximum Stepper motor RPM	1500 RPM (800 RPM recommended MAX)
Maximum bobbin diameter	100mm
Wire range	0.02mm-0.3mm
Feeder max resolution	0.0125mm

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.

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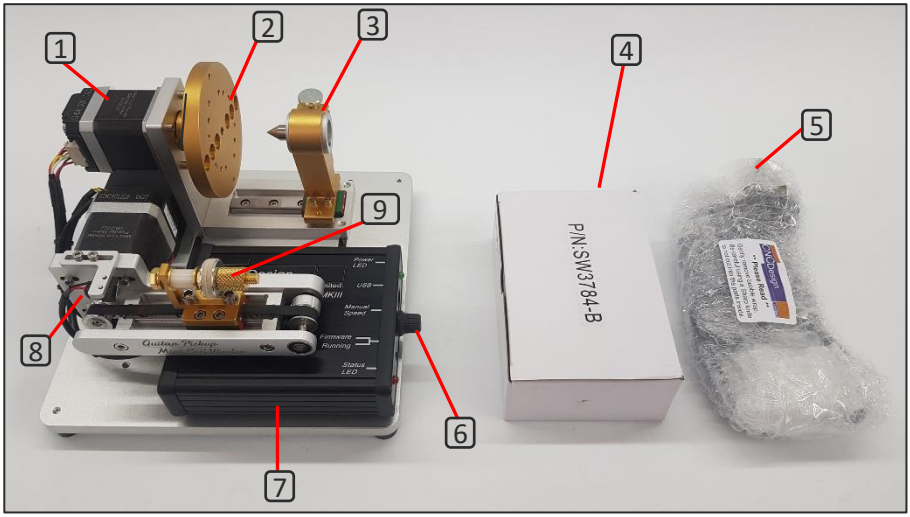
GETTING TO KNOW YOUR COIL WINDER



1	Integrated Stepper Motors	**6**	Manual Wind Control
2	Bobbin Plate	**7**	Controller Box
3	Tailstock	**8**	Limit Switch
4	Power Supply	**9**	Felt Wire Tensioner
5	Cables		

OPERATION AND USE

The Mini Coil Winder is fitted with a controller box that has a USB socket, dial and a switch. At the back of the machine is an isolated 24v DC power box.

The switch at arrow 1 determines the controller's functional state.

- Right position - Firmware mode: Used for applying firmware updates.
- Left position – Running mode: Used to interact with the software.

The dial at arrow 2 is the manual speed control. To use the Manual Speed, you still need to first run up the software and choose Manual Control.

The machine is supplied with a USB A-B lead. Connect the B plug side into arrow 3 as shown in the picture.

The final connection in position 4, is the power supply that came with your machine. With the Mini coil Winder, we supply a 90v-240v AC input and 24V DC output power supply with a UK lead.
If you are outside the UK then you can either cut the plug off and fit a plug to suit your AC outlet or use a lead that you may already have around the house.

Please note that the controller board is powered from the 5V USB socket on your computer. The motors on your machine are powered from the 24V DC Power Supply.

The green LED on the front of the controller box shows that we have power from the USB port to the controller board. Each motor has a blue LED on the back of them that will light up when the 24V DC power is switched on.

GENERAL INFORMATION

A Larger document with clearer instructions is located on the memory stick supplied.

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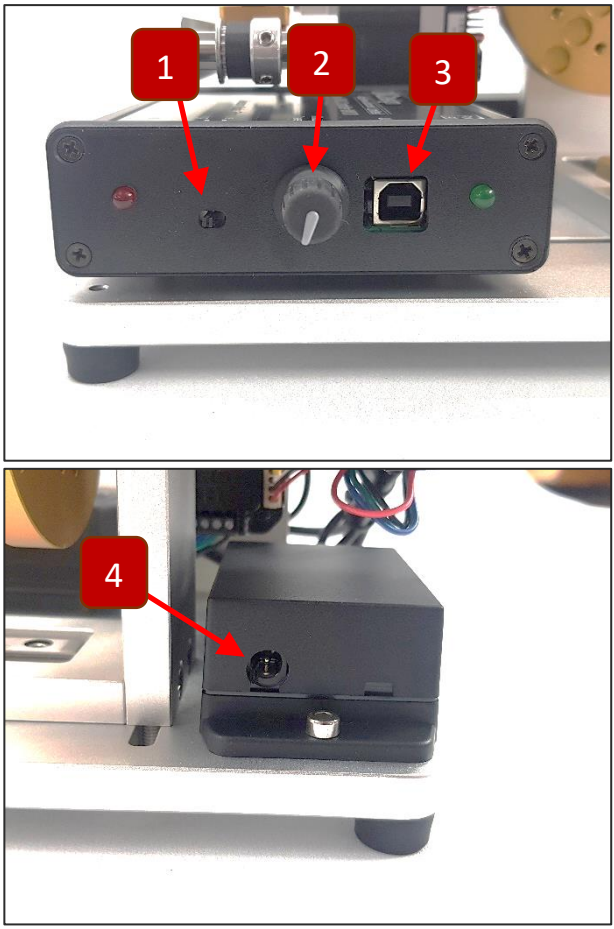
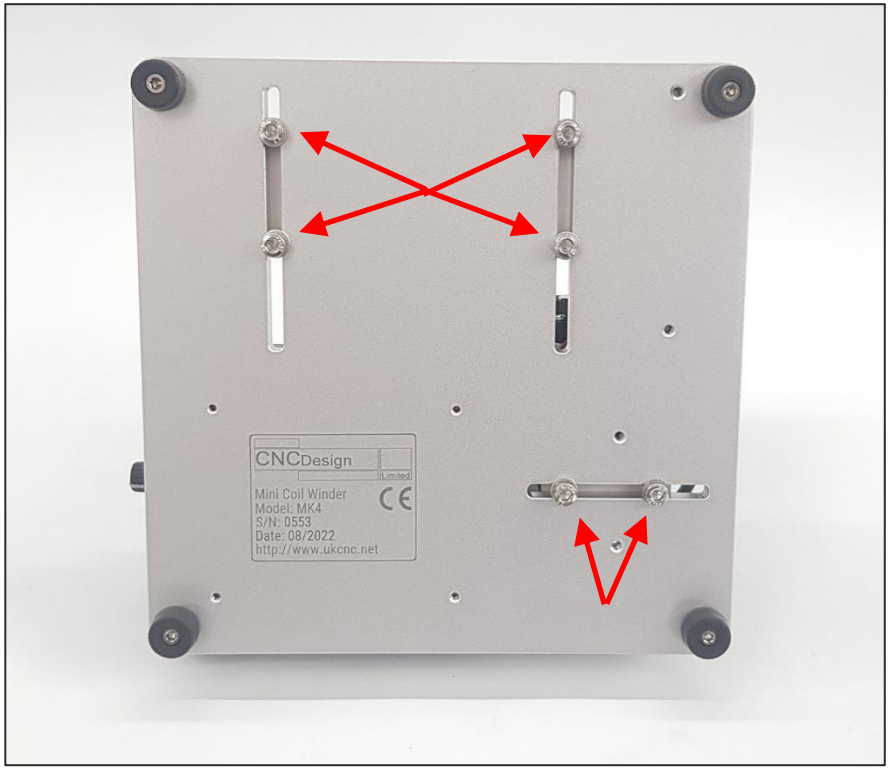
OPERATION AND USE



1	Selection mode switch – Left: Running, Right: Firmware
2	Manual Speed Controller
3	Connection point for USB Lead
4	Connection point for 24V DC Power Supply

OPERATION AND USE



The machine is pre aligned but you can adjust the feeder and bobbin to your preference by loosening off the bolts above.

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OPERATION AND USE

First, check that the controller's selection mode is set to running.

The switch should be pushed to the Left.

Connect the USB lead. Then plug the USB into the computer.

The Power supply comes with an inline power switch. Ensure this is turned off when connecting to the DC power box.

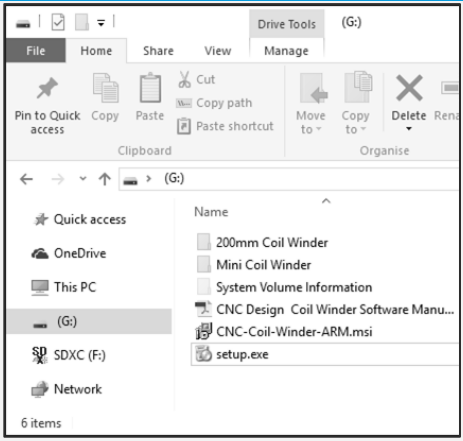
All complete and ready to run up the software and test.

GENERAL INFORMATION

A Larger document with clearer instructions is located on the memory stick supplied.

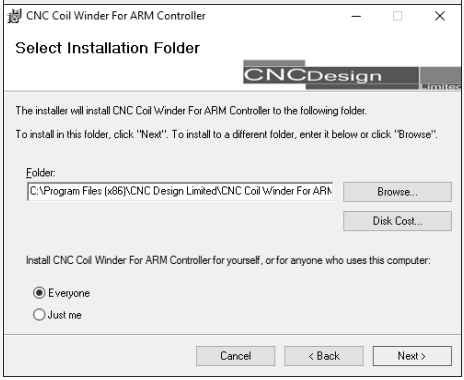
INSTALLING SOFTWARE

Insert the enclosed USB stick into your computer, browse to the device and run setup.exe.



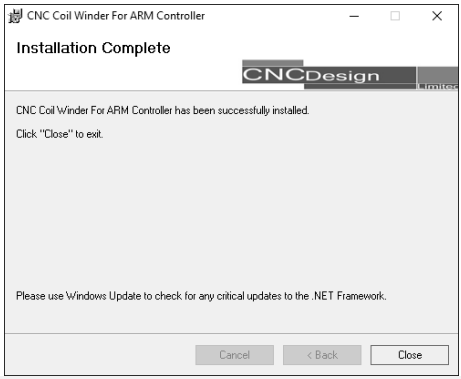
Proceed through the wizard.

Here you can select the installation folder and choose to install this for multiple users or a single user.

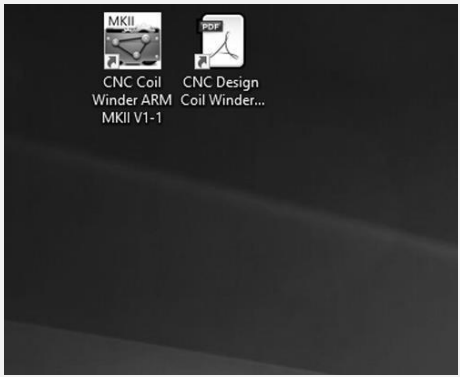


INSTALLING SOFTWARE

After installing the software click close.



Browse to your desktop for a new shortcut as shown.



Upon start-up of the software, you'll be asked if an Estop/Limit kit is installed.

Tick this checkbox and then click the mini coil winder button above it.

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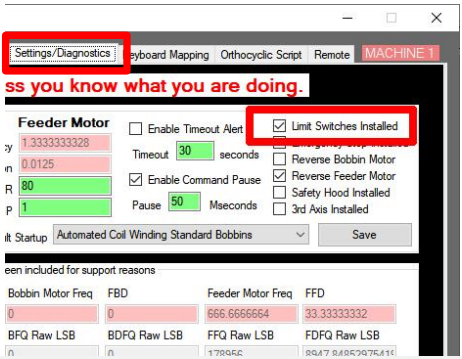
INSTALLING SOFTWARE

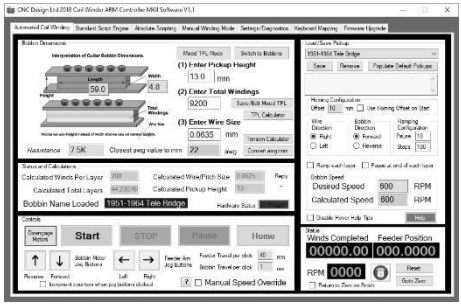
Browse to Settings/Diagnostics via the top row of tabs.

Then make sure the 'Limit Switches Installed' box is ticked.



On the same page under 'Feed Settings' change the parameters shown on the right to those values.

All finished and ready to be used with your Coil Winder.



SAFETY WARNING

Keep hands clear of moving parts during operation.

Ensure the bobbin is attached securely to the plate and the tailstock is fully locked down before operating.

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

Any moving parts such as the feeder and tailstock rails need to be lightly greased periodically depending on use.

Check the tightness of all nuts and bolts.

CONTACT DETAILS

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