# **INSTRUCTION MANUAL**



**NCM 2020** 

Guide Book for Digital Cutting Machine

#### **Preface**

Before using this machine, please read this book carefully, and make sure that you have paid enough attention to the safety. Using this machine properly, you cannot only avoid accidents, but also prolong the life of the equipment. So please do give your attention to the operation. To make this machine work to its best, you should live up to the things below.

- 1. Please do read this book carefully and make sure that you have understood it well, and then you may carry on operation, maintenance as well as attendance.
- 2. If you want to transfer this machine to someone else, please transfer this book together with the machine.
- 3. Please keep this book in a place where you can get at any moment, and put it in good condition.
- 4. We provide the customers with high standard service, and we have carried out "one- year maintenance and lifetime upkeep" for the all of our customers.
- 5. This machine has one-year guarantee (starting at the day of the assignment). During the guaranty period, if there are any problems caused by the quality, such as the machine cannot work soundly, or something abnormal happens while it is operating. Please contact with our Maintenance Department or Sales Department for instant management.
- 6. Beware that the circumstances below are beyond maintenance.
  - a) Damages caused by improper use.
  - b) Damages caused by tearing down the machine privately.
  - c) Damages caused by using the improper voltage.
  - d) Damages caused by the force majeure.
- 7. Exceeding 1 year limited, we will charge you proper fee for changing the wearing parts and fittings.
- 8. You can either deliver the machine to our factory or ask our technicians to yours for repair.

  And their travel expense will be count on your if the maintaining happens beyond the guaranty.
- 9. You can contact us through telephone call or E-mail so that we may provide you with satisfied service.

#### **NOTICE**

- 1. The machine works under the order of the computer. Stable voltage is essential to ensure the precision and efficiency of the blades. If the voltage is non-stable, the user must fit out stable power supply. (OPS:  $AC220V \pm 10\%$ , 50-60HZ)
- 2. To assure safety operation and the disposal of the disturbance of static when you put the machine into use, you must equip the jacks of power supply with ground cable and specific power wire.
- 3. Make sure that the machine is working under the clean circumstance: such as, free from soot, corrosive chemicals and strong electromagnetic field. Or the fast temperature rise will not only lead to the function decrease of the machine, but also damage the electrical components. (The place where the temperature is high should better have fans set around it so as to decrease the temperature.)
- 4. Never try to use the same switch board together with these which are frequently used or the electromagnet or the things like that.
- 5. Lubricate the mechanical drive parts regularly.
- 6. If the machine cannot work soundly, please stop to check it out, and if possible, please do some adjustments by yourself. And if you cannot settle the problem, please contact our Maintenance Department or Sales Department for help.

### **Specification**

1. Cutting Length 0.1mm----99999mm

2. Cutting Width 0.1mm----99999mm

3. The Largest Set Amount of Processing 99999 pieces

4. Storage Number 10 pieces

5. Feeding Motor Stepping Motor

6. Cutting Motor Alternating Motor

7. Wire run-out sensor Natural drooping

8. Cutting detect sensor Time controlling -2 seconds

9. Measurement(W $\times$ D $\times$ H) 350mm $\times$ 250mm $\times$ 320mm

10. Weight 25Kg

#### **Exostructure**

The following are the picture of control board and the buttons' function on the control board.



- <SET> is the key for setting programs.
- <LEFT> and <RIGHT> are available in moving cursor.
- <+> and <-> are used to adjust the numerical where the cursor stay.
- <RESET> is used to unchain self-locking of the motor, make the bundling amount return to zero and clean away the incorrect data.
- <ENTER> Press this button, you can store the data that you have set. By this way the computer accept the order you have set.
- <CUT> Press this key, the machine runs a whole process to produce one piece of pipe.
- <FEED> Press this key, it will feed wire once at the length you have set.
- <STAR> Press this key; it will operate the program, and the cutting number will count from zero.
- <GO ON> Press this key; it will operate the program, and the cutting number will count from the preceding number.
- <STOP> Press this key; the machine will stop moving after finishing processing a whole wire.
- Video Screen (4027): LCD Display with blue backlight
- <EMRG> refers to emergency button. If the machine cannot run with the power on, press the emergency button to run the machine; or if some thing emergency happened, the machine still to run, press the emergency button to stop the machine.
- <POWER> is the mains switch.

#### Setting of display modes and procedures

1. When switch on the machine, the video screen will show a picture below.

M	Е	M		L		0	0	+		С	О	U	N	Т		S	Е	D	
	0			0	0	0	0	0		0	0	0	0	0			0		
	CODING			LENGTH				BUNDLING AMOUNT					SPEED						

First, press the <SET> key, some figures will be appearing on the screen. For these figures are encode mode, which can store up to 10 pieces of the processing data from 0# to 9#.

Second, Press <+> or <-> key, it will show the stored processing data. When you are in need of them, you just pick it out.

If the figure under the MEM shows "o", it means that this coding is still available for setting new processing data.

What's more, the messages that have been stored can be revised.

#### 2. The way to setting

- 1) Press the <SET> key once, the cursor will be shining at the corresponding coding figure, (The indicator light under <SET> is on at this moment.) Press the <+> or<-> key to pick out the data that you are in need of, or to reset data if there aren't any. (Beware that once you press the key, the buzzer will give out beep.)
- 2) Press the <SET> key twice, (The indicator light under <SET> is on at this moment.) The cursor is shining at the first digit under <L>, you can shift it by pressing the <LEFT> or <RIGHT>key, and press <+> or <-> to adjust the numerical value of it. (Notice: the numerical value is measured by mm.)
- 3) Press the <SET> key thrice, (The indicator light under <SET> is on at this moment.) The cursor is shining at the compensation part "00+" of <L>, press <+> or <-> to adjust the numerical value of it. An increase or decrease in the value is equivalent to 0.1mm.
- 4) Press the <SET> key fourth, (The indicator light under <SET> is on at this moment.) The cursor will be shining at the first digit of bundling amount (or total processing number), and now you can shift it by pressing the <LEFT> or <RIGHT> key, and press <+> or <-> key to adjust the bundling amount (or total number of processing).
- 5) Press the <SET>key fifth, (The indicator light under <SET> is on at this moment.) The

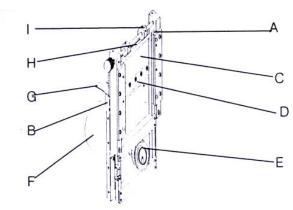
- cursor is shining at the processing speed, and you can adjust the processing speed from 0# to 9# by pressing the <+> or <-> key.
- 6) Finally, press <ENTER> key to make the Digital Cutting Machine accept the instructions, at the same time, the screen twinkles for one time to show that the computer has accepted the instructions simultaneously the indicator light goes off. If the input instruction is incorrect, the buzzer will give out beep if you press the <STAR>key.

#### 3. Wire testing and start to processing

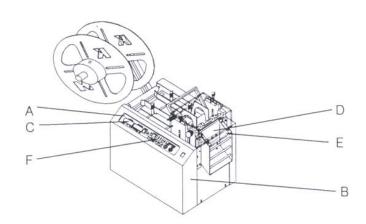
If you have finished the setting, you shall press the <STAR> key to cut one piece of pipe and to check the precision. If you want to make some adjustments, you can make it through pressing the <SET> key thrice, to change the compensation numerical value. After you finished setting, please press the <ENTER> key again to have the computer accept the instructions. And the screen will twinkle for one time to show that the computer has accepted the instructions, simultaneously, the indicator light goes off. If the satisfied with the result, please press the <STAR> key and the machine will carry on continuous processing, simultaneously, the bundling number will start to count from zero. While if you press the <GO ON> key, the processing number will start from the amount that has been processed.

When the machine is working, the motor is self-locked. If you need to operate it by manual, you should press the reset key to have the motor unlocked, meanwhile, the bundling number will go back to zero. (Notice: You must press the <ENTER> key to have the data stored every time you set.)

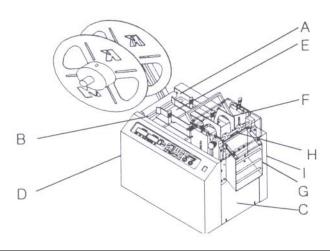
## **ACCESSORIES**



NO.	APPELLATION OF THE ACCESSORY	DRAWING NUMBER OF THE ACCESSORY		
A		NCM 2020-07-02		
В	GUARD BOARD AXIS OF CUTTING KNIFE	NCM 2020-04-12		
С	ECCENTRIC SHAFTB EARING	NCM 2020-07-01		
D	JACKET FOR GUARD BOARD AXIS OF CUTTING	NCM 2020-04-13		
	KNIFE			
Е	ECCENTRIC	NCM 2020-04-14		
F	SMALL HANDWHEEL	NCM 2020-04-07		
G	BALANCE KEY FOR ECCENTRIC	NCM 2020-07-02		



NO.	APPELLATION OF THE ACCESSORY	DRAWING NUMBER OF THE ACCESSORY
Α	KEYBOARD AUX PLATE	NCM 2020-07-02
В	FRONT CASE	NCM 2020-07-02
С	LIQUID CRISTAL DISPLAY	NCM 2020-07-02
D	SAFTY COVER	NCM 2020-07-02
Е	FRONT SAFTY COVER	NCM 2020-07-02
F	FRONT MEMBRANE	NCM 2020-07-02



NO.	APPELLATION OF THE ACCESSORY	DRAWING NUMBER OF THE ACCESSORY
A	STEPPING MOTOR FIXING UNIT	NCM 2020-06-06
В	BODY DRIVE FIXING UNIT	NCM 2020-06-07
С	RECEIVER FIXING PLATE	NCM 2020-05-03
D	POWER SUPPLY FIXING PLATE	NCM 2020-06-10
Е	GUIDE FIXING UPPER PLATE	NCM 2020-02-07
F	MATERIAL SUPPLY ADJ GUIDE	NCM 2020-02-02
G	MATERIAL RECEIVER	NCM 2020-05-04
Н	MATERIAL PRESSING ADJ PLATE	NCM 2020-04-21
I	REAR CASE	NCM 2020-06-02