COMPUTERIZED WIRE STRIPPING MACHINE

This manual should be made available to all users of this equipment. For best results, and for maximum durability of the equipment, carefully read and follow all instructions. Failure to do so can lead to serious injury or catastrophic damage to the user, machine, supplies, or surrounding areas. All safety suggestions must be followed closely, and extreme precaution must be taken to assure proper use of the equipment by only qualified personnel who have read this guide.

Contents

I. Getting Started

In light of the ever-changing nature of technology, the company reserves the right to modify specifications or procedures for this wire stripper without notice. The company will not assume any responsibility for equipment damage or malfunction that is due to improper operation, incorrect repairs, or use of parts from another company.

The wire stripper has passed ISO90001 and ISO14001. Like all of our products, it is made with quality materials at an affordable price. This wire stripping machine is suitable for cutting, head-stripping, middle-stripping, and tail-stripping of both single and multi strand wires.

The company provides a 12 month warranty from the date of the sale. During this first year, the company is responsible for any replacement parts needed because of manufacturing or material issues. After this 12 month period, the company will only replace parts at their current retail cost.

The warranty will only be in effect if all instructions in the manual are followed fully. The warranty does not cover unforeseeable forces of nature, or 'acts of god,' (fire, earthquakes, floods, etc.).

When warranty service is required, inform the company and describe the problem. When doing so, please include the following information: Purchase Date, Order Number, Consignee Name, and Delivery Address.
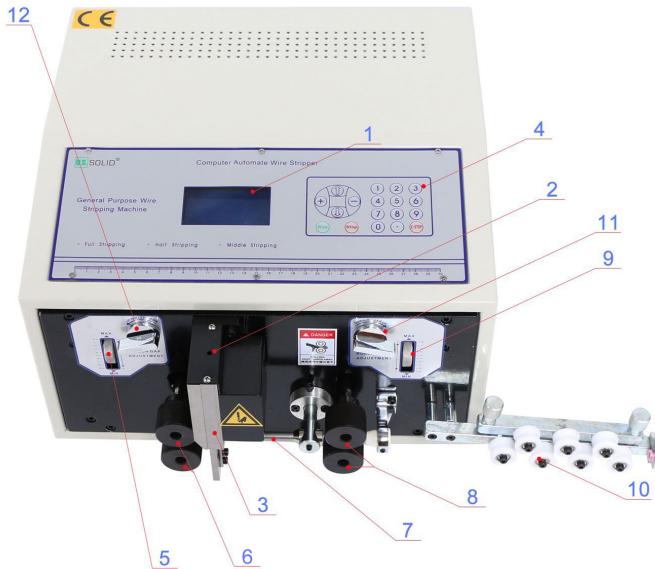
This manual includes basic safety precautions and instructions regarding installation, operation, and maintenance. Therefore, before operating the equipment, please read carefully and fully comply with all instructions, and fully understand the listed product requirements.

This manual does not include instructions for all possible uses or functions of this machine.

II. Safety Notes

- Always use a grounded outlet.
- Check that all plugs, receptacles, or other attachments are removed from your wire before stripping.
- Do not wear loose fitting or baggy clothes while operating the machine. This type of clothing can get caught in the machine, causing serious injury or death.
- Turn off and unplug the machine when making any physical adjustments or repairs.
- Turn off and unplug the machine when not in use.
- Keep the area around the machine clear and free of any debris. This will allow the stripped wire to fall freely and avoid getting jammed or tangled up.
- This machine should only be operated by adults who have read and fully understood this manual.
- Never allow operation of this equipment by children..
- Keep fingers and other objects away from the wire stripping machine rollers. This could lead to serious injury and/or damage to the machine.
- To avoid blockages in the machine, only use wire that meets the specifications for your model, as outlined in this manual.
- Only use parts from the original manufacturer to ensure safety and highest performance of the machine.
- Once the wire has been fed, do not touch the wire as it runs through the machine.

III. Parts of the Wire Stripper

1. Liquid Crystal Display Screen
2. Oiling Hole
3. Knife Rack Assembly
4. Operating Panel
5. Wire-outlet Gap Adjusting Rollers
6. Wire-outlet Conveying Rollers
7. Conduit Pipe Assembly
8. Wire-inlet Conveying Rollers
9. Wire-inlet Gap Adjusting Rollers
10. Wire Inlet
11. Inlet Conveying Rollers Lifting Knob (Adjusts up and down).
12. Outlet Conveying Rollers Lifting Knob (Adjusts up and down)

Note: You need to add several drops of engine oil to the oiling hole at the top of the knife rack to keep it running properly.

IV. Operating the Machine

General Operation

The wire will move through the wire inlet rollers and the wire outlet rollers. The wire cutting and stripping is completed in the knife rack assembly. All of these parts are controlled by the microcomputer.

Each Part's Main Function

1. Wire-inlet Rollers- Convey wires.
2. Wire-outlet Rollers- Convey wires.
3. Knife Rack Assembly- Cuts wires, strips heads and tails.
4. Wire-inlet Gap Adjuster- Adjust the wire inlet gap. Turn down to decrease the gap, turn up to increase the gap.
5. Wire-outlet Gap Adjuster- Adjust the wire outlet gap. Turn down to decrease the gap, turn up to increase the gap.
6. Conduit Pipe Assembly- Ensures smooth transition between rollers and knife rack assembly.

After Turning on the Machine

1. When the machine is first powered on, the following parameters will appear on the display. Explanation of parameter is shown in parentheses.
PRG (Program)
LEN (Wire Length)
A-C (Wire Head Length)
B-C (Wire Tail Length)
SPD (Speed)
AMT (Number of Wire Segments that have been Cut)
A-S (Head Stripping Length)
B-S (Tail Stripping Length)
TOT (Quota)
DLY (Delay)
DIA (Diameter of Wire Core)
GRP (Quantity per Bunch)
M S (Middle Stripping)
RTL (Knife Retreating)

2. Press ⇓ or ⇑ to move the cursor to PRG, use + or - or just use the keyboard to enter the desired program number. In the PRG settings, 01-59 is conventional programming, 60-89 is middle stripping, and 90-99 is for ultra short wires (See Section VI for details). When using short wire programs, loosen or remove the rollers. To remove rollers, simply unscrew from under the machine and take off.
Note: If the wire length is less than 50mm, be sure to select a short wire program.

3. Set the stripping length using the LEN parameter. This length is in mm, and corresponds to the length the wire will be cut to.

4. Set the Wire Head Length (A-C). This is the amount of insulation to be stripped from the front of the wire. See Figure 1 for an example.

5. Set the Head Stripping Length (A-S). This is how far the insulation should be displaced from the head of the wire. See Figure 1.

A-C: Wire Head Length

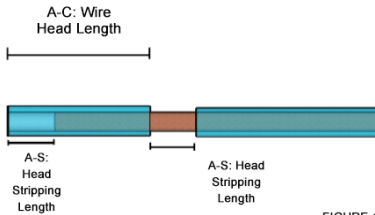A-S: Head Stripping Length

A-S: Head Stripping Length

FIGURE 1

EXAMPLE 1: If A-C: 20 and A-S: 25, it will fully strip the head of the wire at a length of 20 mm.

EXAMPLE 2: If A-C:20 and A-S: 5, it will cut a 20 mm in length piece of the casing, which will be pulled by 5 mm. This means the casing will hang off by 5 mm, and there will be 5 mm of exposed core wiring.

6. Set the Wire Tail Length (B-C) and Tail Stripping Length (B-S) just as you did for the Wire Head.

7. Press the wire to be stripped into the middle of the wire outlet rollers. Adjust the wire-outlet roller gap to make the gap less than the outer diameter of the wire. Take the wire out and adjust the inlet roller gap to match the outlet roller gap.

8. Put the wire into the wire inlet and the wire inlet rollers, then through the conduit pipe and the knife edge. Use the arrows to scroll to DIA on the second page of the menu. Pres the Stop button one time. The two knives will cut the wire. Take out the wire and review the result. If insulation is not fully cut, decrease the value of DIA. If wire is severed, increase the value of the DIA. Continue to adjust the value of the DIA until wire insulation is properly cut.

9. For wire less than 0.5 mm², it is best to adjust the knife retreating (RTL) to be between 06 and 08. The thinner the wire covering is, the smaller the knife retreating needs to be. Generally, it can be set at the default value (08). It is suggested that the running speed of the machine be between 01 and 05. For thicker wire, choose lower speeds.

10. Press the Run button to start trial stripping. Before wire stripping, the front wire needs to be put through the knife edge. The conduit pipe mouth should align about 1-2 mm below the middle of the knife edge. When the value of the tail stripping is greater than ten, move the conduit pipe a little farther back.
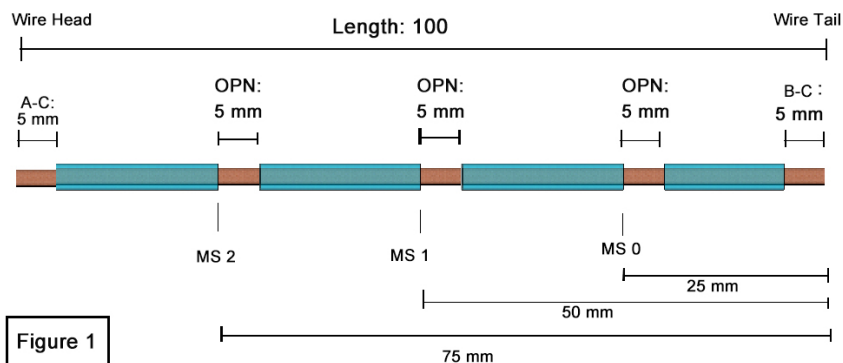
11. The quota can be set according to the required quantity. The output amount (AMT) is preset to AMT:0000. When the output amount equals the quota, the machine will stop running.

12. Press the run key again to get started.

V. Middle Stripping

Middle stripping is used to create sections of fully stripped wire at different intervals. The decimal point (.) button on the keyboard is used to turn on or off the middle stripping function. If the MS parameter shows 'Off', just press the decimal point once to turn on the middle stripping function.
Middle Stripping can be completed in programs 60-89 (PRG:60-89). You must stretch the wire-outlet rollers as to not press the wire or remove the wire-outlet rollers
You can set up to 10 intervals for middle stripping, as denoted by M0-M09. The OPEN parameter is the length of fully stripped wire, at the given intervals. See the table below for a sample Program Setup, and Figure 1 for the resulting wire.

Display Name	Value	Display Name	Value
A-C	5	A-S	6
B-C	5	B-S	6
OPN	5	MS0	25
MS1	50	MS2	75

Figure 1

The example middle stripping program would have a 5mm head, fully stripped (since A-S >A-C).
Since the OPEN parameter is 5, wire will be fully stripped for 5mm at each distance, as designated by MS0, MS1, and MS2.
In this case, since MS0 is 25, 25mm from the front of the wire, the wire is stripped fully for 5mm. Similarly at 50mm and 75mm from the front. Since B-C is 0, there is no tail stripping.

VI. Short Wire Stripping

For wire lengths less than 50 mm, select a short wire program (PRG:90-99).
You must open up the rollers as to not press the wire in these programs.
Alternatively, you can remove the rollers by unscrewing them from under
the machine. Look at Figure 2 for an example setup, using a wire of
length 30 mm.

```
PRG: 90      SPD: 05
LEN: 0030    AMT:0000
A-C: 05.0    A-S: 06
B-C: 05.0    B-S: 06

TOT:  1000         GRP:
0100
DLY: 03      M S: Off
DIA: 35      RTL:08
```

Figure 2

VII. Data Storage and Clearance

While stopped, press ⇩ or ⇧ to move the cursor to the parameter you are hoping to set.
Input the parameter directly through the keyboard. For two digit and 4 digit numbers,
remember leading zeros. This means, for a two digit data entry, to type '9' you would
instead enter '09.' This same convention will hold true for parameters that accept
four digits. After entering the digits, use + and - to adjust the number. If parameter
changes are needed while the machine is running, press E-Stop, and then make
changes as discussed above.

To clear all the data, including data saved in any of the programs from
00-99, press 0 and then turn off the machine. The data will be cleared.

VIII. Maintenance

1. Pour the engine oil into the oil hole of the knife rack regularly. This will
keep it lubricated, lower the noise level, and prolong the service life of
the machine (about once a week is ideal).

2. Turn off the power and remove the knife rack when you are replacing
the knife blade. Line up properly and replace the blade in its original
position. If the machine gives an error prompt about the knife rack not
being reset, the position of the knife is not correct, and you need to again
make sure the blade is in the original position.

3. Regularly clean the inlet and outlet rollers of any dirt or debris.
Any buildup on the rollers can lead to slippage and wires being cut
incorrectly.

IX. Troubleshooting

Problem: The wire head or wire tail does not strip off.
Causes:
- The diameter is incorrectly set.
- The gap between the wire inlet or outlet rollers is too large.
- The wire stripping length is less than 2mm.
- There is a blockage in the wire inlet pipe.
Solutions:
- Try a different value for the diameter.
- Decrease the gap between the rollers.
- Make sure the head/tail stripping values are greater than 2mm.
- Clean out wire inlet pipe.

Problem: The wire casing is getting crushed.
Causes:
- Rollers gap is too small.
- Rollers are broken.
Solutions:
- Adjust the gap between rollers.
- Contact manufacturer to replace conveying rollers.

Problem: Wire core is cut.
Cause:
- The diameter is incorrectly set.
- Gap between rollers is too large.
- Blockage in wire inlet pipe.
Solutions:
- Make sure the correct diameter is set for the wire core.
- Adjust the gap in the rollers.
- Clean out the wire inlet pipe.

Problem: Wires are not being cut to the desired length.
Cause:
- Dirty inlet and/or outlet rollers.
- Wires are uneven in thickness.
Solution:
- Make sure rollers are clean and not overly waxy, as this can lead to slippage and uneven cuts.
- Make sure wire being used is of uniform thickness.

Problem: When using partial stripping, revealed wire core lengths are too long.
Cause:
• The set diameter is too small.
Solution:
• Adjust diameter to be larger.

Problem: The wires are not being cut fully, meaning cut sections are linked together.
Cause:
• Knife ensemble is not properly oiled.
• Speed is too fast.
• Wire is too small.
• Blade is blunt.
Solutions:
• Oil the moving parts of the knife edge. Oil should be added every 8 hours of run time.
• Adjust to a slower speed.
• Wire must be at least AWG#10 (6mm^2).
• Replace blade.

Problem: The blade edge leans on parts of the wire, or is not cutting straight.
Cause:
• Wire is overly curved.
• Wire is not aligned to center of blade.
Solution:
• Make sure wire is straightened before feeding into the machine. Put wire through wire straightener to help this process.
• Always align the wire to the center of the blade when feeding.

X. Explanation of Parameters

1. Program: Stores settings for different lengths and sizes of wires. Remember, Programs 01-59 are regular programs, PRG:60-89 are Middle Stripping Programs, and PRG:90-99 are for short wires (<50mm). PRG:00 is for a trial run, without storing settings in memory.

2. Quota: The quantity of wires to be stripped/cut. After reaching the preset quota, an alarm will go off and the machine will stop.

3. Amount: Shows the amount of wires that have been prepared. An alarm will sound automatically after 100 pcs have been cut, though the machine will continue. When the amount cut is equal to the quota, an alarm will sound again and stop the machine.

4. Wire Length: The total length each piece of cut wire.

5. Wire Head Length: The length of the insulation to be stripped from the front of the wire.

6. Wire Tail Length: The length of the insulation to be stripped from the end of the wire.

7. Head Stripping Length: How far the insulation should be displaced from the head of the wire. If the Head Stripping Length is larger than the Wire Head Length, the insulation will be fully removed from the wire head.

8. Tail Stripping Length: How far the insulation should be displaced from the tail of the wire. If the Tail Stripping Length is larger than the Wire Tail Length, the insulation will be fully removed from the wire tail.

9. Diameter: The diameter of the wire core.

10. Speed: The running speed of the machine. Can be set from 00 to 09, and it can be adjusted by + or – operation. 00 is the slowest and 09 is the fastest.

11. Quantity per Bunch: The quantity of the wires per bunch. In general, one bunch includes 100 pcs of wires. After one bunch is completed, a short delay occurs to allow for clearing of previous bunch.

12. Delay: the machine will stop automatically for the processor to have time to tidy up the area when the quantity reaches one bunch. The default value is 3 seconds.

13. Middle Stripping: Turn on or off middle stripping. Refer to Section V for a more detailed explanation.

XI. Specifications

Weight: 30-31 KG

Overall Dimensions: 390 mm x 350 mm x 235 mm

Power: 160 - 300 W

Mode of Display: LCD Liquid Crystal Display Screen

Cutting Length: 1 mm – 9999 mm

Cutting Tolerance: ≤ 0.002×L (L = Cutting Length)

Stripping Length: Head 0 – 35 mm ,Tail 0– 15 mm

Maximum Cutting Corss-section Area of Wire Core:
     USS-WPM00001: 4.5mm^2, USS-WPM00002: 8mm^2

Middle-stripping: 10 stripping areas maximum

Material of Knife: High-quality Tungsten Steel Alloy

Stripping Speed: 3000 – 80000 p c s /h

Adjustable Speed: 0 Slowest, 9 Fastest

Types of Wire that can be Cut: PVC, Teflon, Silicone, and Fiberglass;
For other kinds of wire please contact customer service

XII. Parts List

Upon receipt of this machine, please take out and verify the presence of all of the following parts:

Basic Parts	Quantity
Wire Stripping Machine	1
Hexagonal Wrench (Allen Wrench)	3
Instruction Manual	1
Power line	1
Knife Blade (Spare)	2
Fuse (Spare)	3
Conduit Pipe(Spare)	2

Optional Parts
Wire Straightener
Iron Roller
Rubber Roller
Synchronous Belt

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