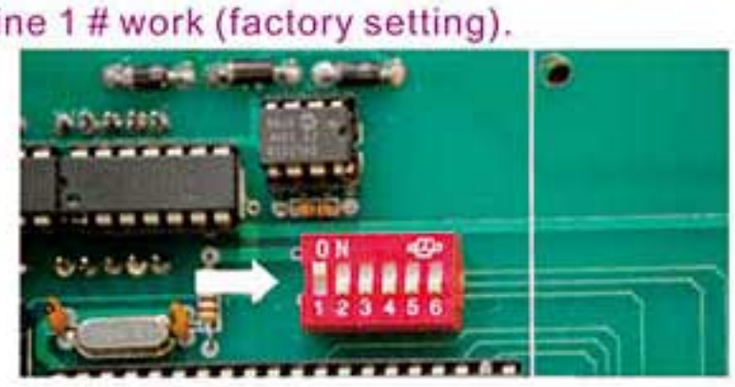
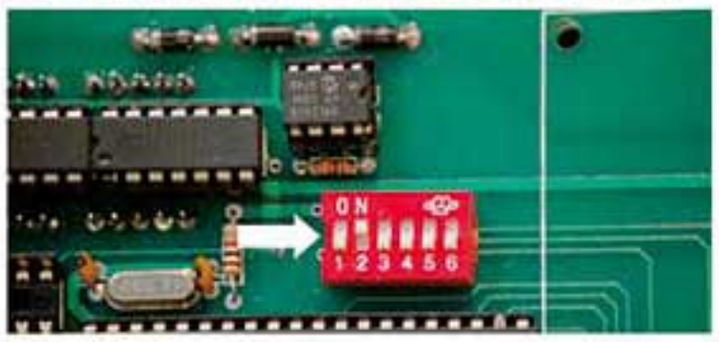
IX.Instructions for the Red Dial Switches on the Back of the Circuit Board of the Panel

	Function	ON	OFF
1	F1(V1)OUTPUT	Valid √	Invalid×
2	F2(V2)OUTPUT	Valid √	Invalid×
3	F1、F2(V1、V2) DUPLEX CONVERSION OUTPUT	Valid √	Invalid×
4	RUN MODE	TEXT	RUN
5	LANGUAGE	ENGLISH	CHINESE
6	REV/FRW	Unwinding work	Winding work

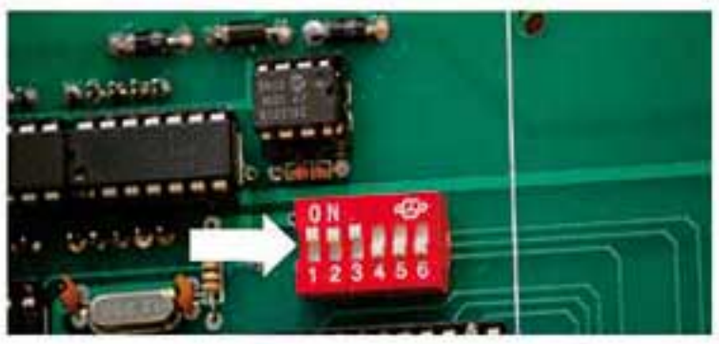
1. When the 1st DIP switch upward ONk, 1 # stations (F1 / V1) load output 2 # stations (F2 / V2) load output is turned off. The machine 1 # work (factory setting).



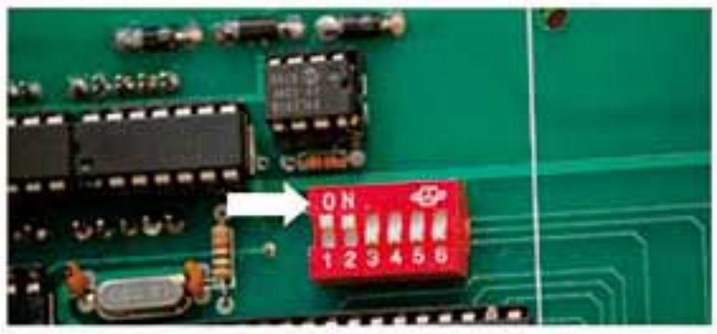
2. When the 2nd DIP switch ON upward position, 2 # stations (F2 / V2) load Output, 1 # and 2 # stations (F1 / V1) at the same time load output in 1 # and 2 # stations.



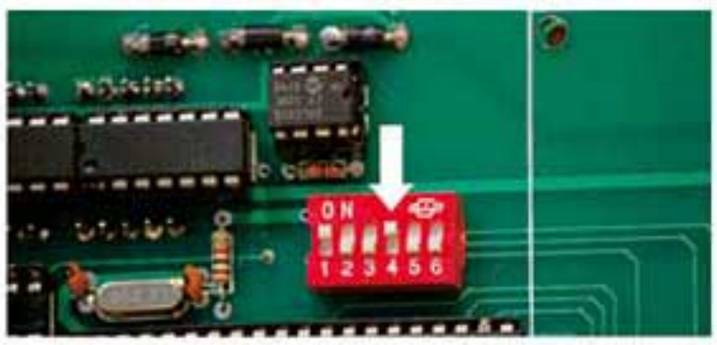
3. When the 1st, the 2nd, the 3rd DIP switch ON upward position while dial 1 # Station (F1 / V1) and 2 # stations (F2 / V2) load output can be duplex phase Mutual conversion.



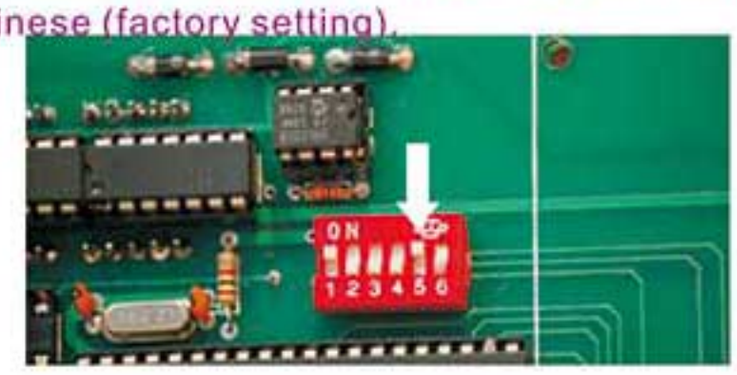
Special case: When No. 1, No. 2 and DIP switch ON simultane ously dial upward position, 3 In the OFF position, # 1 and # 2 station station loads can be output simultaneously.



4. When the 4th DIP switch upward to the ON position, the internal controller of automatic test Open, press [Auto] key is pressed, the machine directly into the automatic mode. (Factory inOFF position)



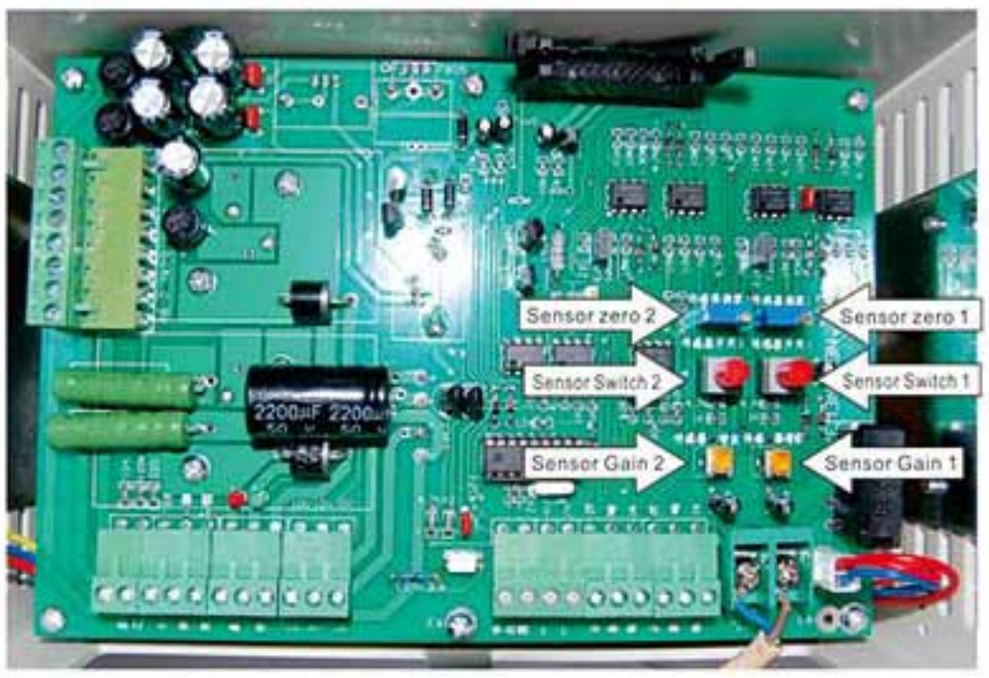
5. When the 5th DIP switch upward to the ON position, the panel LCD conversion English screen. When the 5th DIP switch to the OFF position downward panel liquid Crystal display screen for the Chinese (factory setting).



6. When the 6th DIP switch upward to the ON position and winding work automatically, When the 5th DIP switch to the OFF position below the unwinding tension automatic work (Factory setting).

7. The terminal board two "magnetic" terminal above the indicator's role is:When the green light is on, # 1 station is working, when the red light When representing 2 # station is operating, when the red and green lights are on, indicating 1 # 2 # station simultaneously, the counting wheel is disabled, enable runtime terminal, External contac work, attention to the need to remove the counter wheel wires.

Note that all the above !! function settings must cut off the power after the power was effective



The sensor switch is powered down and the bounce is off.
The sensor increases clockwise and counterclockwise.
The sensor gain is clockwise and counterclockwise.

Automatic Tension Controller

Usage Manual

1、Technical Performance

Model: US-80MTA / US-90MTA

Power supply: single-phase AC 220 / 110V, 50 / 60HZ 130W

Output voltage: DC0-24V 4A (max), DC0-10V 4-20mA

Tension control: 0-2000Kg

Tension Resolution: 0.1Kg and 1Kg

Display: Digital display / LCD display in English

Indicator: Kgf / N /% units, automatic / manual, power supply

Configuration: Tension sensor SH-TD, speed detector NEW-S2

Weight: 3Kg / 5Kg

Setting type: automatic, manual from the digital potentiometer (or arrow keys) bifunctional Menu settings, press the reset button Quick access to initial preset value.

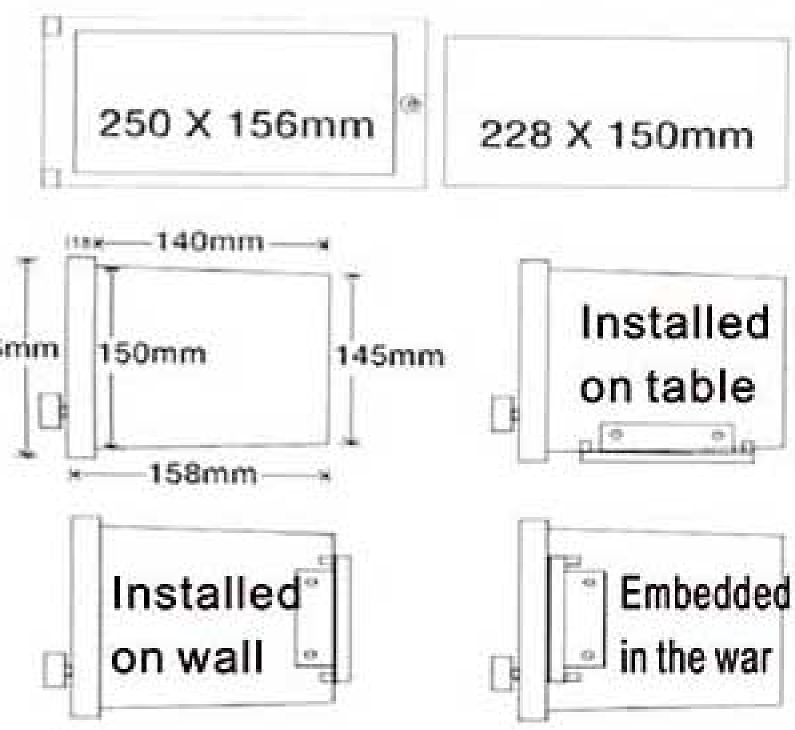
Tension way: Unwinding Tension Control, Rewinding closed loop taper tension control.

Installation: table-top, wall embedded

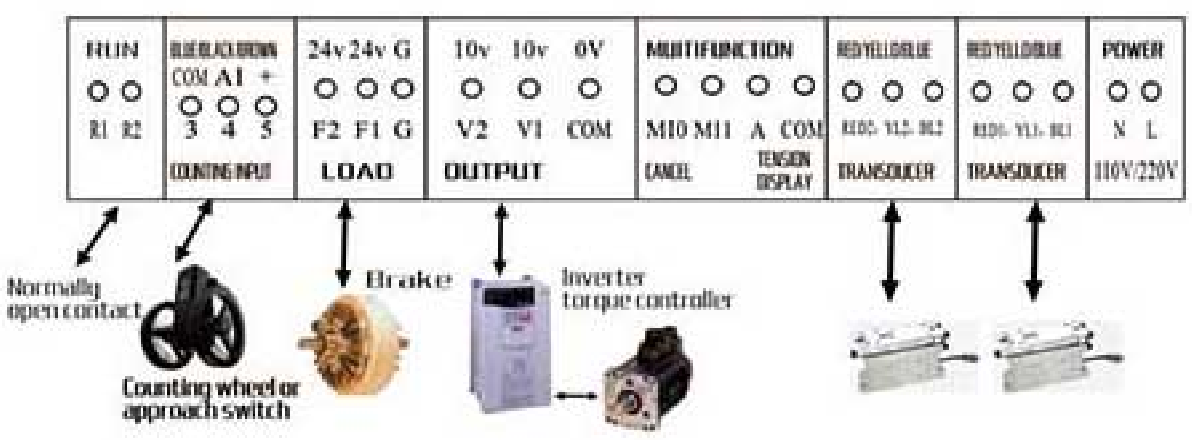
Zero function: having two sensor corresponding to zero performance menu settings too. Process automatically cleared.

Start smooth transition within 30 seconds duplex process, the new station early Start value can ... e of the

II.Outside Dimensions and mounting



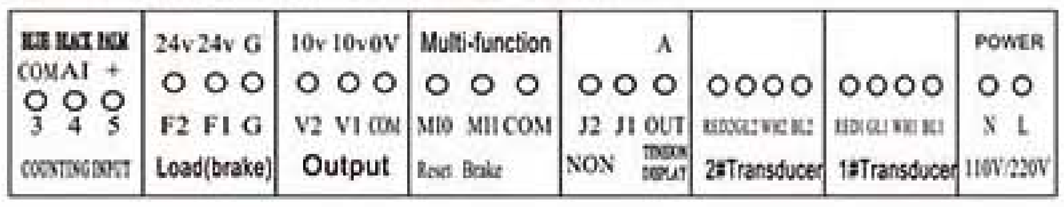
III.Terminals connection for US-80MTA



I/O Specifications

Items		Terminal	Instruction
Power supply	Input	L N	220 / 110V AC ± 10%, 50HZ,130VA, built-in power supply Insurance
Normally open contact	Input	R1,R2	You can choose to run an external normally open contacts(Do not allow the counting wheel simultaneously)
Counting input (counting wheel or approach switch)	Input	COM,AI,+	For counting ring,terminals COM,AI,+are to be connected with yellow(3),red(4), blue(5),wire resp ectively. For approach switch,terminals G, AI, +are to be connected with blue,blac, brown wire respectively
Load(brake) 0-24v	Output	F2 , F1 , G	G-F1 For 1# reel(the above green light's turning on means indicates 1#reel is working), G-F for 2#reel(the above red light's turning on indicates 2# reel is working),both with overload/short circuit preventing function inside, If both light is off,there must be short circuit with outside load,which should be moved out before starting the machine.
Voltage (0-10v)	Output	V2 , V1 , 0V	0V-V1, 0V-V2 is electrical current output of 0-10V for 1# and 2#reel respectively. Load is inverter,torque controller and so on.
Multi-function	Output	MI0 , COM	Can be outside canceling function
		MI1 , COM	Can be custom ordering function
Tension display	Output	A , COM	Is signal output of transducer(0-5V)
2#Transducer	Input	RED2 , YL2 , BL2	Terminal RED2,YL2,BL2 contactred, yellow,blue wire respectively
1#Transducer	Input	RED1 , YL1 , BL1	Terminals RED1,BL1 contact red,yellow, blue wire respectively.

Terminals connection for US-90MTA



VI.Start the Machine

Power, the initial state of the panel, a red light controllers into operation.

V.Front Panel Setup for the First Operation

(Automatic unwinding tension)

Press [Enter] key, the screen displays: Enter password ......

Follow the screen prompts, rotating panel knob, enter the password 007

The display shows: Enter duplex conversion time in the range of 00-30 seconds,Rotating panel knob, as needed, enter the appropriate value, press [Enter] key to confirm.

Screen: Please enter F0 is the initial value of the load voltage percent(Each reset or duplex convert that value) in the range of F00-F99,Rotating panel knob and press [Enter] key to confirm.

The display shows: Enter the sensitivity constant of integration and automatic operation of For, the lower the sensitivity, the larger the constant. Range 00-99, the general out Unwinding set before factory between 15-30, winding set at between 50-80, Press [Enter] key.

The display shows: Enter the brake voltage value% (terminal MI1, G closed effective) Generally used when unwinding work, using high-speed work.

Press [Enter] key, the screen displays: sensor dying it?

Press [Enter] key to confirm the sensor die.
Zero value adjustment of> 000, Press [Enter] key to working if the zero value less than or equal to 000, the (Regulation scheme see page 6).

Setting is completed, the screen displays: Found tension value 000 load output: (%).

First Step Check box red DIP switch location (see IX)

VI.Operation Procedures

1、Manual operation

Press the [manual] key, so that the machine in the manual position, the green light above the key Bright. Then rotate the knob to adjust the panel with load output%, the tension to a suitable value.

2, Automatic operation

Tension to be stabilized after the appropriate state, press [Au button, then the top of the red Green light flashing alternately u the counting wheel (or proximity switch) starts running, the red Light, green light off, automatic operation is effective.

In this case the measured tension on the screen is the current tension. Set tension An appropriate value is set in the automatic mode (work, if you feel the tension is too small,Tuning panel knob clockwise to increase the tension setpoint, if you feel the tension too Large, adjustable panel knob counterclockwise to reduce the tension setpoint).

Load output voltage for the current percentage output value (work, if it is Unwinding operation, the voltage percentage of the 8th screen display will gradually decrease, if it is Winding operation, the voltage percentage of the 8th screen display will slowly increase). On Screen Beam of light on the screen in the forth of display, and use keys to write right.

VII Instruction of the Special Function Keys on the Panel

1、[exchange] using keys Press the right side of the screen if the 8th green light,The tension setting is displayed, if the red light on the right side, then the display Load output percentage value.

Use duplex conversion bonds: At this point, if the load station in [# 1], 2 Press [#] key.

Screen: are duplex conversion (the number of seconds below the start of the countdown) pourTiming will be converted duplex setting the number of seconds to 01 seconds starting end (turnDuplex exchange during the load while the output) after the end of the countdown, the loadConversion from # 1 to # 2 station work station; 2 # station red light, while 1 # Station indicators off. Round of work is resumed.

2、 and winding work (note DIP switch on the 6th working effectively in the ON position)

When rolling work, please use this feature, enter the winding units of rice value.Ranging from 01 to 99. The larger the value, the slower the taper decreasing. The factory is generally set to 50.

3、in the rolling work, please use this feature, enter the winding main taper value.Ranging from 01 to 99. The smaller the value, the slower the taper decreasing. Factory General Settings99.

4、and winding automatic operation: With the increase of winding length, tension continues Decreasing the percentage value constantly on the rise, rolling press the reset button or duplex conversion Tension tracking the percentage value is reset.

5. If you need to change the volume down, press 3 [output] key, the top this time Red light, the 6th screen displays "load off", the 8th-screen display "OFF", Load output temporarily closed. Change volume is completed, then the 3rd [output] key, the top of the red light is off, all Display restitution, loads opened a new round of work is resumed.

VIII.Instructions for the Screen Display and Push-buttons

[1#], [2 #] key to duplex conversion key. Press 1 to # key, change to a working machineBit operation (the original is in the 2-position), press 2 # key, the machine change to 2 station (formerly at 1 station).

(3) [Output / OUTPUT] key. Load output (OFF / open) conversion key (onSide lamp is on, lights off).

(4) [Auto / AUTO] key to automatically work keys

(5) [manual / MANUAL] key to manual work keys

(6) multi-function LCD screen display menu

(7) For the voltage percentage values% and tension N Display switching key (indicated by 8 # screen)

(8) for the digital display. Display voltage Percentage value when the right side of the red light.Show tension value N value (from seven # key operation) the green light

(9) [CANCEL / RESET] to open the key. When the setup menus or look at the menu, click here Key to exit. Press to restore the voltage percentage of the initial value at work

(10) [POWER / Power] key to open when the upper red light to turn off.

(11) [ENTER / INPUT] key. Used to navigate through menus and set up parameter setting Set Confirm

(12) to increase key (13) to reduce the bond. Functionally equivalent to the (14) knob(See # 14 below)

(14) is a multi-function knob for each parameter input and operation parameters Adjustments