

ETD Series Electronic Tensioner Product Manual

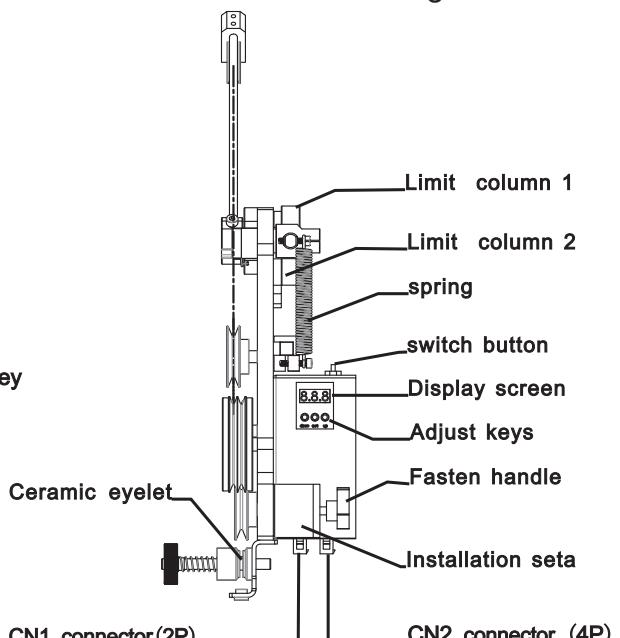
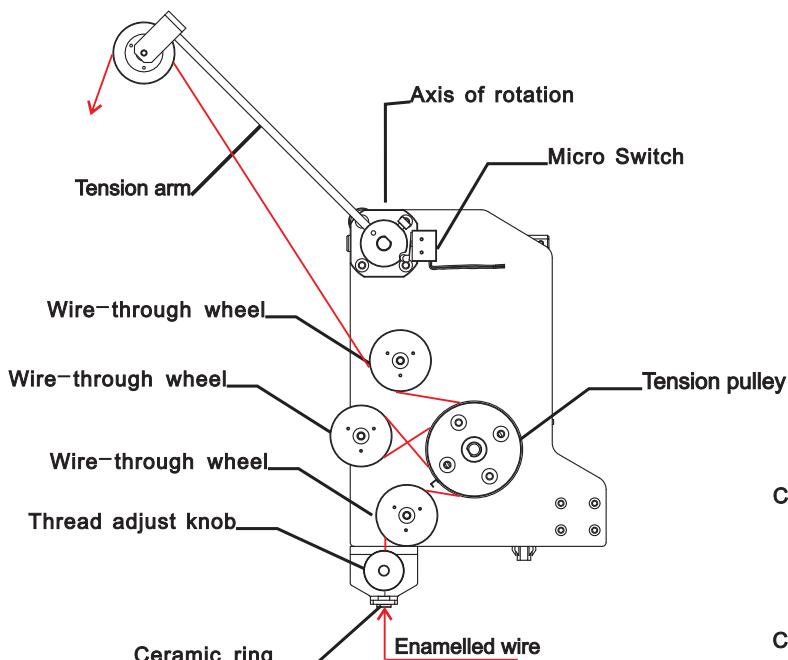
□ ETD-8000

① Product Introduction

ETD-8000 tensioner applies the hysteresis principle to produce stable torque by controlling the input excited current. Two steps of tension values can be switched. It is suitable for 0.2 ~1.6 diameter wires winding equipment like motor winding machines and rotor winding machines.

ETD - 8000				
Specification	Series	Maximum output torque		
Model	Reference wire diameter scope(mm)	Tension scope(g. f)	Tension arm	Spring
ETD-8000	Φ0.20-Φ1.6	260-8000	EA13	ES11

② Exterior Schematic Diagram



③ Environmental conditions

1. Temperature range: -5°C-40°C Humidity range: 30%-80%.

2. 1. Enamelled wire requirement: Keep the wires surface clean, without any oil, dust and impurity.

④ Operation

1. Installation and tuning

Step1 Install the fixing base / foot mounting and tighten the fixing screw.

 Please retain the warranty cards by cutting along the dotted line.

Welcome to buy the series of products of our company. Please checking and accepting the product after opening the package.

NO.	ITEMS	QUANTITY	REMARKS
1	Electronic Tensioner	1	Standard configuration
2	Tension Arm	1	Standard configuration
3	Fasten Handle	1	Standard configuration
4	Spring	3	Standard configuration
5	Power Line	1	Standard configuration
6	Product Manual	1	Standard configuration

Note: Check all parts. If you find any defective or missing parts contact your local dealer when you opening the package.

ETD Electronic Tensioner WARRANTY CARD

Username	Telephone
Address	
Zip code	Purchase date
Purchase address	
Retail price	Sales NO.
Product type	Product's P/N
Dealer signature	User signature

(STAMPED)

Step2 Install the tension arm into the rotating axis. Tighten the fixing screw by suitable tools with the help of "reference edge" (See figure 2). Direction of tension arms, wheels and wiring route refers to the diagram figure 1

Step3 Tune the knob of eyelet, release it for the convenience of passing through wires.

Step4 Connect the power signal input wire to CN1, and the block signal input wire to CN2 (See figure 3). Caution: Maximum current is 1A to each tensioner. The current distribute to each tensioner in a system depends on the number of tensioners (or spindles of machines). Below recommendation is for reference
 1~2 machine / spindles—48W—2A;
 3~4 machine / spindles—96W—4A;
 5~6 machine / spindles—144W—6A;
 7~12 machine / spindles—288W—12A

2. Tuning

Step1 Route the wire according to fig1.and start running

Step2 The display shows the current setting value of tensioner. Higher the value, greater the tension. Tension value can be tuned by button. Increase by "UP" and decrease by "DOWN".

Step3 The position of Fasten slider determines the back tension force . Back tension force will be increased by moving Fasten slider left and decreased by moving it right (See figure 4.). Tight the fixing screws after tuning well. (There is a marker with values on surface for convenience but it doesn't stand for the exact tension values).

Step4 There is a tuning knob at the back of the tensioner to adjust the tightness to the wire (clockwise turning to be tight, anticlockwise turning to be loose). Tightness of wool clamp depends on the value of tension. In small tension, tightness should be just enough to hold the wire from falling out from the wool clamp, while it should be tight for large tension.

Step5 Start running.

3. Buttons Operations

There are two modes of "S" buttons: "Short-pressed" (Single press) and "Long-pressed" (Press and hold for 2 seconds) Functions are "Enter values setting", "Values saving and return" and "Exit"

4. Parameters Setting

(1) P01 value setting:

Connect the power supply to start operation. Long-pressed "S" to enter the value setting mode. LCD will display "P01". Short-pressed "S" to change the tension value. This value can be altered when it is twinkling. Change then tension values (0%-100%) by pressing "□" and "□" , Short-pressed "S" once to save the value and return to P01. Long-pressed "S" once to exit.

(2) P02 value setting:

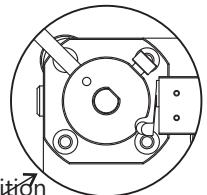
Long-pressed "S" to enter the value setting mode. LCD will display "P02". Short-pressed "S" to change the tension value (0%-100%) by pressing "□" and "□" , Short-pressed "S" once to save the value and return to P02. Long-pressed "S" once to exit.

(3) P03 Undefined yet:

- (4) pressing "□" and "□" , (1)to change the tension value (0%-100%). Short-pressed "S" once to save and lock the value. All buttons are invalid after locking and LED at the bottom right corner of display lights up. Unlock and resume operating by Long-pressed "S".
- (5) Automatic lock occurs after 5 seconds unattended. LED at the bottom right corner of display lights up. Unlock and resume operating by Long-pressed "S".
- (6) Red button: When it displays P01 value, press the Red button a while, it will display the P02 values. (For fast tuning of P02, not switching function).

*Remarks: Tensioner outputs the P01 value when the external input signal is invalid; whereas it outputs P02 value when the external input signal is valid. LED at the bottom right corner of display lights up as an indicator that P02 value is executed.

Figure 2



The aimed at flat position of fasten screw

Figure 3

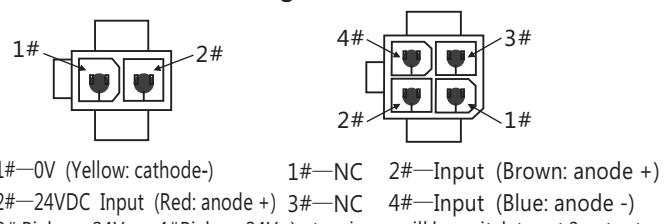
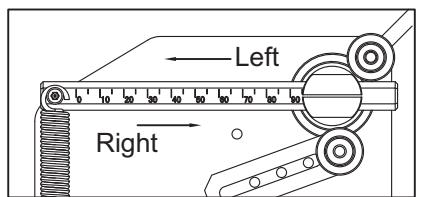


Figure 4



5 Note

- (1) Do not touch the tension pulley and tension rod under working condition.
- (2) Prevent tension fall, and avoid strong damage caused by the impact.
- (3) Winding speed not more than 5 m / s; winding machine start-up speed of not more than 1 m / sec.
- (4) By the time that the enameled wire over the wheel line, you must check whether the hanging wire on each guide wheel, ensure the guide wheel work well and not be stuck at work.
- (5) It can't have pulley oil on the tension or will affect the normal use, if stucked oil, cotton dipped in ethanol can be used in the tension pulley groove pulling back and forth to clean the grease on the O-ring.
- (6) Please select the appropriate tension rod and spring, the tension will be damaged beyond the scope of use or shorten its use life.
- (7) It is prohibited to use does not match the machine operation; use is strictly prohibited over parameter limit; prohibited without consultation and disassemble parts..
- (8) If the surface of enamelled wire with waxiness, you'd better clean wire rolling frequently and replace wool clampingring regularly. Otherwise, it will cause frequent tension change or wire-through wheel skidding, and shorten operating life of O Ring in tension pulley

6 Maintenance

1. According to the use condition, regular cleaning of tension control, wool felt, Zhang Lilun, porcelain eyes, passing line wheel; replacement of wool; ensure the normal work of tension device.

7 Troubleshooting

FAULTS		TREATMENT
1	Tension pulley slip while operating	1, Clamp wool felt appropriately; 2, Use the cotton thread with absolute alcohol, and then pull back and forth to clean tension pulley; 3, Wrap around tension pulley by enamelled wire more than 1 in order to increase drags.
2	Tension pulsating exists	First adjust the tension value to maximum, and then turn down it slowly, turn around tension pulley continuously at the same time until pulsation disappear.
3	Wire-through wheel of tension arm get stuck to be not moved	1, Take the wheel out after loosening fastening screw to clear debris; 2, Change a new wheel if the old is aging.



This instruction was revised in June 2016. You will not be noted if any content changed.

Warranty Description:

- 1, Our company promises: Since the products sold on the date of one year free warranty but the situation are not included in the repair guarantees as follow.
 - Outward appearance natural attrition.
 - The quality problems caused by irresistible natural disasters.
 - The damage from abnormal use or wrong operation.
 - The damage from the use of ultra-range caused by using wrong type.
 - The damage from improper storage by user.
 - The damage from repairing by self-disassembly without allowed by our company.
- 2, Wool felt, oriented porcelain parts, Wire-through Wheel, Tension arm are easily damaged so needed extra charge if replaced within warranty period.
- 3, When the product appears a quality problem please send it and the warranty card back to our company and you are responsible for the postage.

Maintenance Records

	Date	Description of fault	Parts replaced	Serviceman	User signature
1					
2					
3					
4					
5					