TH-550S Series Servo System

USER MANUAL

1. Controller

Ac220







Moto

Speed Adjuster Synchronizer

2. Panel



3. Operating Instruction

3.1. Speed Adjusting Setting, Rotation Direction Setting, Needle Positioning setting, Speed of Motor Stop setting Keep pressing, then press to enter parameter setting interface P-01, press or to choose P-01 to P-06, then press to enter parameters, press to add, press to minus, then press to save it; then press to exit, back to the Stand-by interface.

3.2. Shortcut of setting Needle Position: Enter P-05, adjust into 0000, press (11), the third decimal point is light, means needle up position, then press (11), the fourth decimal point is light, means needle down position, reversely step down the pedal, needle would immediately return up. Then press (11), the decimal point is extinct, needle position function is off.

4. Parameter Description

- 4.1. Turn the controller on, enter the Stand-by interface, the nixietube shows 0000;
- 4.2. Keep pressing (**), then press (11), the nixietube shows P-01 to P-06, enter the parameter setting interface.
 - P-01: Speed Limitation, range from 500 to 5000rpm, factory set is 3800rpm;
 - P-02: Lowest Speed, range from 300 to 800rpm, starting speed of factory set is 500rpm;
 - P-03: Motor Rotation

When the nixietube shows 0000; it's anti-clockwise (same as rotation of lockstitch machine);

when the nixietube shows 0001; it's clockwise (same as rotation of overlock machine); factory set is anti-clockwise.

P-04: Sewing machine type . 0001---lockstitch machine 0002---overlock machine.

P-05: Needle Positioning

0000---- needle positioning function is on; 0001---needle positioning function is off. Factory set is off.

P-06: Speed of Motor Stop: the nixietube shows 0 to 30, stands for 0 to 3000rpm; the faster the motor runs, the faster it stops; conversely, the slower the motor runs, the slower it stops.

5. Measure Function

At the Stand-by interface, keep pressing , then press for two seconds, the nixietube shows F-01, press to get the current parameter, then press return to F-01, press to F-02, then press to F-03, press back to the Stand-by interface.

F1: Measure the Hall signal of motor: Turn the wheel a circle, if the nixietube shows 01-02-03-04-05-06 or in reverse order, it's normal; if skip number or shows 00, please check the connection between motor and plugs, and make sure they are reliable; and make sure the contact pins are in their places;

F2: Measure the speed adjuster, if the nixietube shows 1.9-2.0, it's normal; if shows 1.7 or less, please adjust or replace the speed adjuster.

F3: Measure the Hall signal of neddle positioning: turn the wheel to the mark of needle positioning, if the nixietube shows 01-00-01 alternatively, it's normal; if shows 00, it's no singnal. please check the connection between motor and plugs, and make sure they are reliable; and make sure the contact pins are in their places.

6. Error Code and Diagnosis Instrution

Error Code	Meaning	Solution
E1	Hardware Overflow	Turn off the power, reset it after 10 seconds;
E2	Over Voltage Protection	Turn off the power, check the input power voltage, restart the controller after the voltage resumes;
E3	Errror of Needle Positioning	Please check Needle Positioning function P-05, 0000fuction is on, check and make sure the plugs of synchronizer is well; if don't need needle positioning, please adjust it to 0001.
E7	Motor Stalled	Please check if anything makes the loading heavier, such as material thickness,