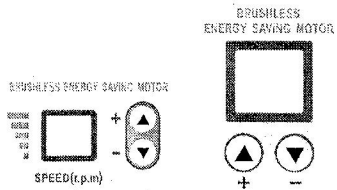


BRUSHLESS ENERGY SAVING MOTOR USER MANUAL

1、Front Panel



	Name	Description
	Display area	Display parameter or operating mode
	Up(+)	Parameter select or set
	Down(-)	Parameter select or set

2、Display Mode of Front Panel

After power on, two rotation cursors will be displayed. When accessed parameter mode, it display parameter index or value. After setting parameter, it will back to show rotation cursors automatically.

If parameter N.4 set to ON, "P" will be displayed on left bar, and display of right bar remains.

If a warning appears, the bar will display EX.(X means the error code)

3、How to Set Parameter

Steps	Description
1	Press "-" until display N.0
2	Press "+" to increase index, then select the parameter to be modified
3	Press "-" to show the value
4	Use "+" or "-" to change the value, then wait to return
5	After the change, waiting for return

Note:N6-NY parameter settings please contact your dealer or manufacturer.

4、Parameter Table

Index	Range	Default	Description
N.1	30~90	35	Startup speed. Speed = value x 10 (spm)
N.2	05~45	30	Max speed. Speed = value x 100 (spm)
N.3	0-1	0	Needle stop position. 0: down; 1:up
N.4	OF-ON	OF	Synchronizer function. OF: close, ON: open Note: Do not open the parameter if not connected to synchronizer.
N.5	OF-ON	OF	Motor reverse rotation function. OF: close, ON: open
N.6	10-60	30	Increase time from 0 to 4500 (spm). A value bigger means acceleration is quicker.
N.7	10-60	30	Decrease time from 4500(spm) to 0. A value bigger means deceleration is quicker.
N.A	1-24	10	Down position adjustment, only effect when N.D is 1
N.B	OF-ON	OF	Speed-lock function. OF: close, ON: open
N.C	OF-ON	OF	When it is ON, the motor will move to up position and stop automatically as power on.
N.D	1-2	2	Synchronizer type. 1: single signal, 2: double signal
N.E	OF-ON	ON	Pedal backward function. OF: close, ON: open. When value is ON, if motor stop at down position, pedal anti-step will move motor to up position.
N.G	OF-ON	OF	When value is ON, turn on the power again, after twinkling of "IN" finished, all parameters will be restored

N.I	*	*	Software version
N.M	05~45	45	System speed limitation, motor speed never exceeds this parameter. Speed = value x 100 (spm)
N.Y	10~90	60	Stop speed. Speed = value x 10 (spm) Effected by connect to synchronizer.

5、Error Code Table

Code	Cause	Measurement
E1	When motor stop voltage is too high	Check the AC power.
E2	Voltage is too low	Check the AC power.
E3	Over current	Check motor connector, or replace control box
E4	Pedal fault	Check pedal connector
E5	Synchronizer fault	Check Synchronizer connector and position signal
E6	Hall fault	Check motor connector, or replace motor
E7	Lock rotor fault	Check motor connector, or machine head
EC	When motor run voltage is too high	Check the AC power.
EE	Power down fault	Check the power plug
EF	Data storage fault	Power off, restart motor
EG	Current loop fault	Power off, restart motor
EH	Overspeed fault	Power off, restart motor
EI	Motor reverse fault	Power off, restart motor
EL	Motor overload	Check whether the motor load is overweight or overload operation

6、Check Function

Press "-" can enter the check function, use "-" to switch the index.

No.	Item	Method
A	Pedal	Press pedal, from back to front, it will be shown: B, S, L, 1~9.
B	Synchronizer	Turn the hand wheel, vertical bar of left and right shown signal.
C	Hall	Rotate motor to display hall value 1-6

7、Special Function

Software Restart

In the check condition or fault condition, press the "+" to allow the control box reset.

Quick Recovery Parameter

After power switch on, press "+" and "-" together more than three seconds will automatically restore the parameters and reset.

8、Display Characters Table

0	1	2	3	4	5	6	7	8	9	Arabic
A	B	C	D	E	F	G	H	I	J	English Alphabet
K	L	M	N	O	P	Q	R	S	T	
U	V	W	X	Y	Z					