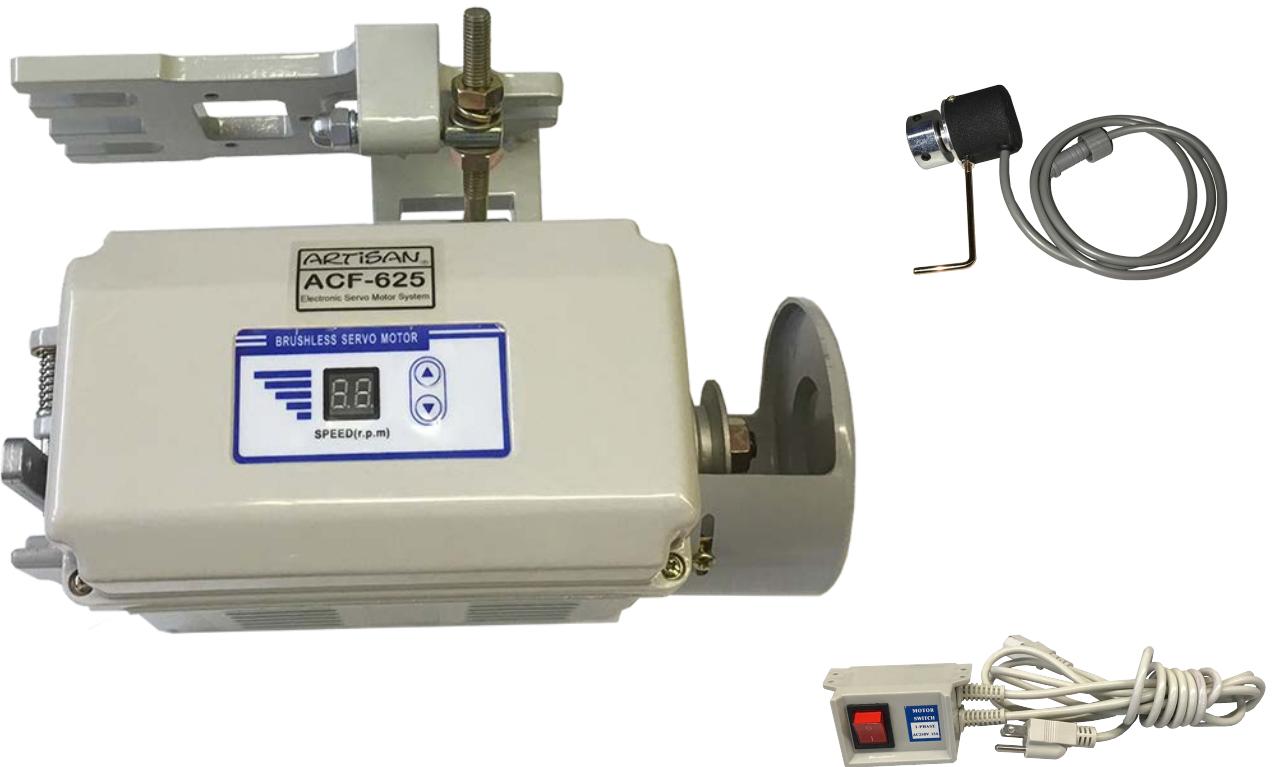


ARTiSAN®

Brushless A/C Digital Electronic Servo Sewing Machine Motor

ACF-625 C

110 volt, 60 HZ



Artisan Sewing Supplies, LLC
San Francisco, CA USA 94103
info@artisansew.com

ARTiSAN ®Model ACF-625 C

Thank you for investing in the newest generation ARTiSAN® ACF-625 digital electronic brushless servo sewing machine motor. You will find this newest generation electronic motor a pleasure to use and wonderful tool designed to help you control the operating speeds of your industrial sewing machine. The new ACF-625 series motor is also highly efficient and is energy saving as well. The motor stays at ambient temperature and is much quieter and easier to use than all now obsolete old style sewing machine clutch motors. With the ACF-625 series servo motor, operators can preset the top end sewing speeds to match the sewing conditions. One can sew very slowly from stitch to stitch and control the RPM of the motor variable from 0 (stopped) up to any desired maximum speed (full speed) of the sewing machine or operator.

New Artisan ACF-625 series motors are warranted against manufacturing defects for period of three years from the date the motor is first put into service. Artisan will repair or replace any motor, at our option, found to be defective. If you require warranty service, please contact Artisan directly. We continue to improve and occasionally we introduce new motor models. In the future, If this model is replaced by a new generation motor, at our option we may replace your motor instead of repairing the defective unit. We offer a 20% discount to existing registered customers needing to replace an existing servo motor after the warranty period up to 60 months.

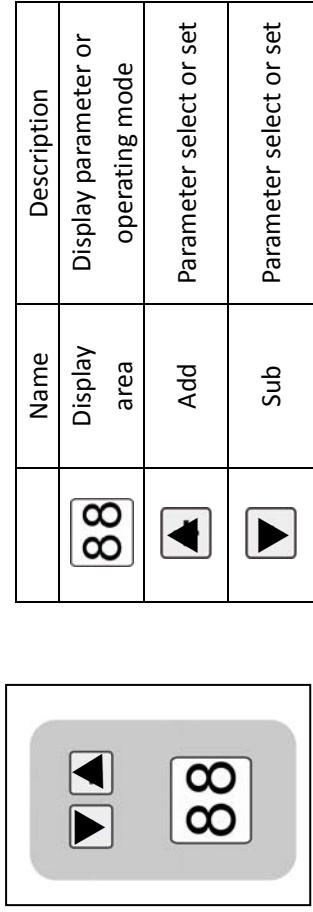
Important Safety Information:

- A. Please turn off the electric power to the motor at the on/off switch or disconnect the power supply cord from the wall receptacle before servicing any part of your sewing machine.
- B. When powering up the motor, please do not rest or place any foot pressure on the sewing machine treadle, (speed controlling pedal). The internal circuit breaker will engage and the motor will not run if the treadle is depressed while the on/off switch is turned on. If this occurs, Turn the motor switch off for 30 seconds, then turn the power on again.
- C. Never leave the motor turned on when the sewing machine is unattended.

ARTISAN® ACF-625 C

Servo Motor User Manual

I. Front Panel



II. Display Mode of Front Panel

- After power on, two rotation cursors will be displayed. Press down arrow ▼ when accessing the parameter mode. The display will show the parameter or value.
- 5 seconds after setting the parameter, the cursors are automatically set.
- If parameter S.4 set to ON, "P" will be displayed on left bar, and display of right bar remains the same.

III. How to Set Parameter (This manual offer the method for S1-S5 setting only)

Steps	Description
1	Press ▼ display S.0 is shown
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

Attention: All steps will be re-set and memorized after 5 seconds
 Note: S6-SY parameter settings please contact your dealer or manufacturer.

IV. Parameter Table

	Index	Range	Default	Description	Note: Do not open the parameter if not connected to synchronizer.
S.1	0~9	3	Startup speed. Speed = (value+1) x 100 (spm)	Needle stop position. 0: down; 1:up	Increase time from 0 to 4500 (spm). Time = 900 / value (ms)
S.2	RP~RE	RP	RP: Normal CCW rotation. RE: clock-wise rotation	Max speed. Speed = value x 100 (spm)	System speed limitation, motor speed never exceeds this parameter. Speed = value x 100 (spm)
S.3	01~25	10	Motor current limitation. Higher the value greater the strength	Kp parameter	Motor current limitation. Higher the value greater the strength
S.4	OF~ON	OF	Synchronizer function. Of: OFF, ON: ON	Kp parameter	Kp parameter

★	S.Q	1~9	1	Kp gain parameter
★	S.R	1~99	1	Ki parameter
★	S.S	1~9	5	Ki gain parameter
★	S.Y	10~90	60	Stop speed. Speed = value × 10 (spm)

V. Error Code Table

Code	Cause	Measurement
E1	Voltage is too high	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
E8	Erase fault	Do upgrade again
E9	Program fault	Do upgrade again
EA	Upgrade tool does not match	The upgrade tool is not compatible with the current control box, re-download the correct software version.
EB	Upgrade tool data fault	The data in upgrade tool is damaged, need to re-download the data.

VI. Check Function

Press  until display "T" during power on, the press  to switch the index.

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

VII. Special Function

► Software Restart

The motor controller uses digital switching power supply, so lower energy consumption and slower power-down, in order to avoid for waiting a long time for shutdown in check function or fault state, it provide the software restart function, there is no need to turn off the power switch, press the  to allow the control box reset.

► Quick Recovery Parameter

Arabic Number									
٠	١	٢	٣	٤	٥	٦	٧	٨	٩
A	ب	ب	ت	د	ه	ف	ج	ه	ع
ك	ل	ل	م	ن	ن	و	و	ر	ف
ع	ع	ع	ي	ي	ي	ي	ي	س	ـ

VIII. Display Characters Table

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

► Software Upgrade

The motor controller can provide out-of-the-box software upgrade. Insert the upgrade tool to the synchronizer interface then switch on, the system will automatically detect the upgrade tool and show the version of software stored in it, press  until display the progress of the upgrade, it will display "OK" to prompt the upgrade was successful, then unplug the upgrade tool and reboot, the control box can work with the latest version.