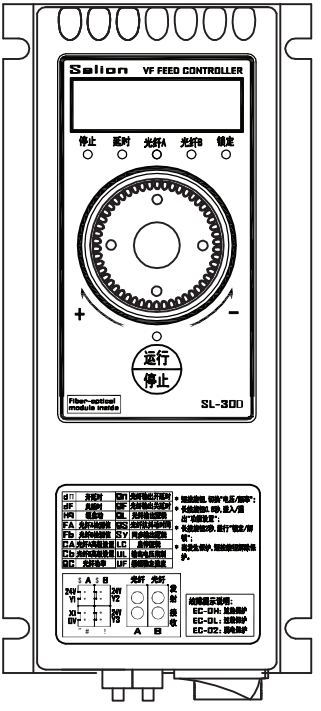
SL-30D Digital Variable Frequency Vibration Feeding Controller

(Built in dual channel fiber amplifier and automatic amplitude closed-loop control)



Precautions for use:

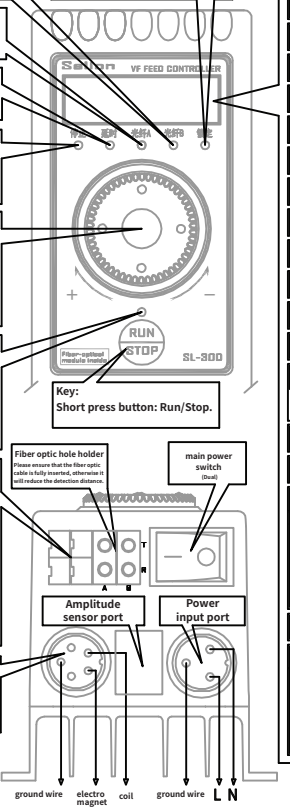
1. When wiring the ports of this machine, please make sure to turn off the power first and wait for the digital tube to no longer display before proceeding with the wiring operation. And personnel with professional electrical knowledge are required to perform wiring operations!
2. Please make sure to confirm that the input ground wire of the local AC power supply and the output ground wire of the vibration disc are reliably connected! Otherwise, it may lead to personal electric shock accidents!
3. Please use the power input and vibration disc output aviation plug cable provided by our company. If modification or substitution is required, please make sure to confirm that the wiring of the aviation plug cable is correct. Otherwise, it may cause serious damage to the device or personal electric shock accidents!
4. Please keep this device away from flammable and explosive materials!
5. The input power voltage of this machine should not exceed 270V, otherwise it may cause damage to the machine!
6. The external control signal input port of this machine can withstand a voltage of -20V~+28V. Do not exceed this range when using, otherwise it may cause damage to the machine!
7. To ensure long-term stable and reliable operation of this machine, please keep it away from any dust, oil stains, and liquids.
8. When the machine is operating in a continuous high load output state, to avoid overheating protection, please install the machine vertically for heat dissipation and in a ventilated environment.
9. Do not install any electrical switch devices between the output end of the local vibration plate and the vibration plate, as this will seriously reduce the service life of the machine.
10. Except for human or uncontrollable destructive forces, this machine comes with a three-year warranty (excluding accessories).
11. We will not be held responsible for any civil or criminal liabilities arising from non-compliance with this manual.

The vibrating disc body must be reliably grounded, otherwise significant personal injury or property damage may occur Please confirm that the wiring of each port is reliable before inserting the power cord into the power socket

Product specifications and parameters:

Use power supply: AC85~265V50/60Hz
Suggest using ambient temperature: -20~40°C
Usage environment humidity:<90% (no condensation)
Output voltage: 0~250V (sine wave)
output frequency: 400~4000Hz
Applicable vibration disc type: electromagnetic type
Overheating protection temperature: 63°C
static power consumption:<3W(85~265VAC)
Control the input port to withstand voltage:-20V~+28V24V
Output port driver capability:200mA(48W)
Output power (ambient temperature=25°C,Continuous operation without stopping the machine)
M(medium power)>750VA(3A)
L(high power)>1250VA(4.5A)
Product Appearance Scale: 150mm(long)*69mm(wide)*70/90mm(tall)

SL-30D panel operation and wiring port instructions:



Fiber optic B-channel indicator light:
Bright: A valid signal has been detected.

Lock indicator light:
Bright: Function settings are locked.
Extinguish: Function settings are not locked.

Fiber optic A-channel indicator light:
Bright: A valid signal has been detected.

Delay indicator light:
Flash: In the start stop delay state.

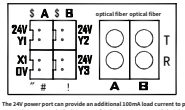
Stop indicator light:
Bright: stopped state.
Extinguish: Output status.

Knob:
Short press the knob to switch between "voltage/frequency". Long press the knob for 0.8 seconds to enter or exit the "Function Settings". Long press the knob for 3 seconds to "lock/unlock".

Operation indicator light:
Bright: in standby operation state. At this point, the output is determined by the fiber optic signal or external start stop port.
Extinguish: In a shutdown state.

Key:
Short press button: Run/Stop.

Control port:



The 24V power port can provide an additional 100mA load current to power external sensors; X1 is the input port for the start stop control signal; Y1Y2 and Y3 can independently drive solenoid valves with a power less than 4W, but the total driving power of the three ports cannot exceed 6W. When using Y1Y2 and Y3 ports to drive loads through a power source not provided by this controller, the ports do not have overcurrent and short-circuit protection.

Fiber optic hole holder
Please ensure that the fiber optic cable is fully inserted, otherwise it will reduce the detection distance.

main power switch
(Dual)

Amplitude sensor port

Power input port

Output port:
Be sure to connect the ground wire reliably when connecting to the vibration disc.

Parameter setting instructions:

U 125	Output voltage (V)
P 080	AMPLITUDE

When the vibration sensor is connected, "U" will switch to "P"; When "P" flashes, it indicates that no effective amplitude has been detected; When '080' flashes, it indicates that the controller has exceeded the voltage limit (UL parameter).

F 130.0	Output frequency (Hz)
dn 00	Opening delay (S)
dF 00	Off delay (S)
H9 0.6	slow start
FA038	Fiber A detection value
FL200	Lower limit of fiber optic threshold
FH999	Fiber optic threshold upper limit
CA	Advanced settings for Fiber A
Cb	Advanced settings for Fiber B
9C 02	Fiber power setting
9n000	Fiber open delay (mS)
9F000	Fiber delay time (mS)
9L 00	Fiber optic output logic

00: The fiber channel outputs independently;
01: Both A and B fibers meet the output conditions, and this channel outputs

95 08	Anti jitter time (ms)
SY 01	Synchronous output logic
LC000	Start stop logic

X1 A B

X1=0: External start stop port X1 is low level shutdown.
X1=1: The external start stop port X1 is running at low level.
A=1: Fiber optic A shutdown control is effective.
B=1: Fiber B shutdown control is effective.
A=1, B=1: Fiber A and B stop only when there is a signal at the same time. (External start stop port X1 is the priority signal)

UL250	voltage limit
UF 01	Stable amplitude speed

The smaller the value, the faster the amplitude stability speed, which is suitable for most feeding situations.
The larger the value, the slower the amplitude stability speed, but it can filter out the impact force on the vibrating disc when heavy workpieces fall back and improve the amplitude stability.

Precautions for use:

1. Please confirm that the power input is AC 85-265V.
2. The ground wire must be reliably connected.
3. After completing the wiring, turn on the main power switch.
4. Please avoid installing in machine positions with excessive vibration amplitude.

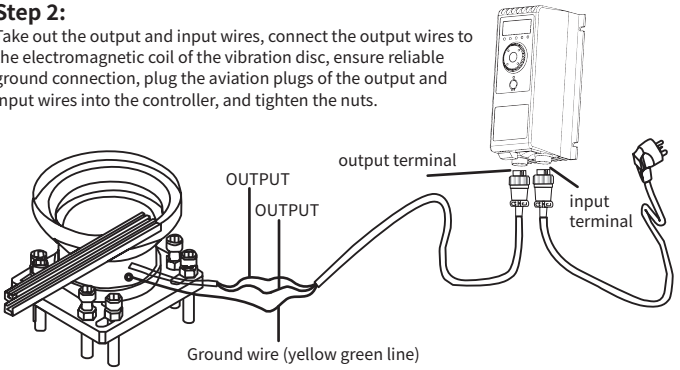
Troubleshooting:

No display: Confirm if the power is connected.
E-0H: Overheating protection. Install the controller in a ventilated area, and if possible, on a metal machine to facilitate heat dissipation
E-OL: Overload protection. Check: whether the gap between the electromagnetic coil and the armature is too large, whether the power of the vibration disc matches the controller, and whether the output cable is short circuited.

Quick installation and usage guide:

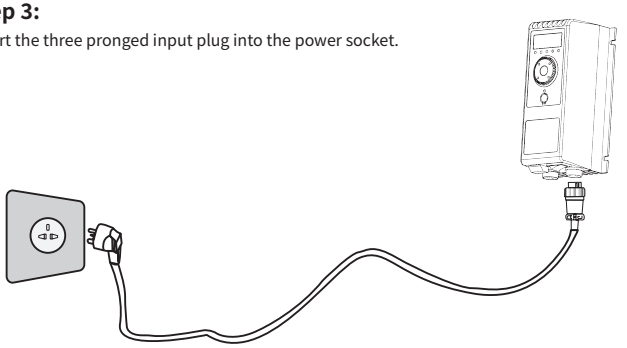
Step 1:
Open the outer packaging of the controller, check the appearance and side label model of the controller, and determine if it is the required model.

Step 2:
Take out the output and input wires, connect the output wires to the electromagnetic coil of the vibration disc, ensure reliable ground connection, plug the aviation plugs of the output and input wires into the controller, and tighten the nuts.



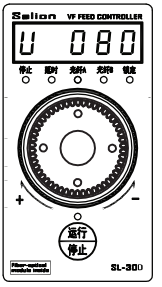
- Be sure to confirm that the electromagnetic coil is connected to both output pins and that the controller heat sink needs to be reliably grounded. Otherwise, it will cause the controller to be subjected to electrostatic shock, which may lead to controller failure. The yellow and green ground wires should be reliably connected, and not connecting them may cause serious safety accidents!!!

Step 3:
Insert the three pronged input plug into the power socket.



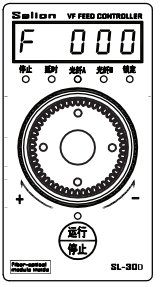
Step 4:

Turn on the power switch of the controller, rotate the "knob" to adjust the output voltage, and adjust the output voltage "U" to between 80 and 100.



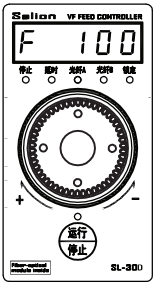
Step 5:

Short press the "knob", and the panel will display "F", indicating that the current parameter is "output frequency". Rotate the "knob" to adjust the output frequency and find the frequency with the maximum amplitude of the vibration disc (resonance frequency).



Step 6:

After finding the natural frequency of the vibrating body, briefly press the knob to return to the voltage adjustment function and adjust it to the optimal feeding speed.

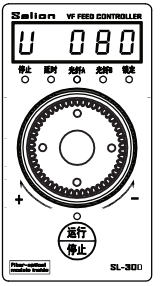


- To achieve optimal working conditions, please adjust this parameter and increase the 'output voltage' to the desired feeding speed.

Parameter Settings:

U(output voltage):

By default, the panel displays "U", indicating that it is in the output voltage setting state. At this time, press the "+" or "-" to set the range: 0~250V, with 1V as the step.

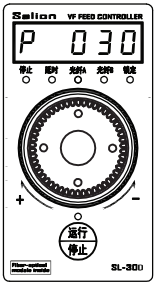


prompt:

1. The output voltage is limited by the "UL (output voltage limit)" parameter. If the "UL" parameter is set to 200, the maximum "U" voltage can be set to 200.

P(AMPLITUDE):

When the amplitude sensor is connected, it automatically enters amplitude stabilization mode and displays "P".

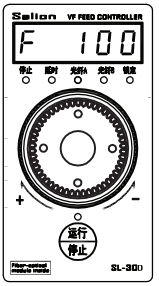


prompt:

When 'p' flashes, it indicates that no effective amplitude has been detected; When "030" flashes, it indicates that the output amplitude has been limited by the maximum output voltage parameter.

F(output frequency):

Short press the "knob" and the panel will display "F", indicating that it is in the output frequency setting state. At this time, rotating the "knob" can set the range: 40.0~400.0 Hz, with 0.1 Hz as the step.

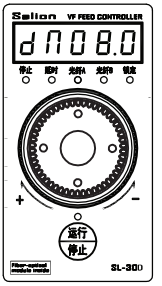


prompt:

1. Short press the "knob" again to switch to the "U (output voltage setting)" state.

dn(Open delay time):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "dn", then press the "knob" briefly, and "dn" will flash. At this time, rotating the "knob" can be used for settings. The setting range is 0.0~999 seconds, with 0.1 second as the step.



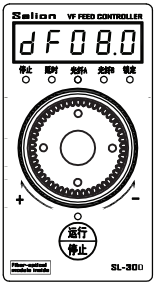
prompt:

In the running state (with the running indicator light on), when the signal from the external start stop or photoelectric sensing port meets the starting conditions, it needs to go through an "on delay time" before starting the output. At the same time, the "delay indicator light" on the panel will flash.

Regarding the operating conditions, please refer to the description of "LC (Start Stop Logic)".

dF(Delay time):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "dF", then short press the "knob", and "dF" will flash. At this time, rotating the "knob" can be used for settings, with a setting range of 0.0~999 seconds, with 0.1 seconds as the step.

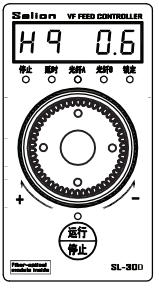


prompt:

1. In the running state (with the running indicator light on), when the signal from the external start stop or photoelectric sensing port meets the stop conditions, the output needs to go through a "shutdown delay time" before stopping. At the same time, the "delay indicator light" on the panel will flash.
2. Regarding the stopping conditions, please refer to the description of "LC (Start Stop Logic)".

Hq(Slow start time):

Long press the "knob" for 0.8 seconds to enter the function settings. Rotate the "knob" to select the function parameters until the panel displays "Hq". Then press the "knob" briefly, and "Hq" will flash. At this time, rotating the "knob" can be used for settings. The setting range is 0.1~9.9 seconds, with 0.1 second as the step.

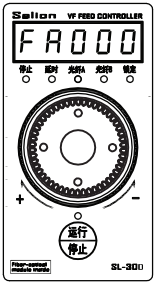


prompt:

1. When the controller starts the output, the output voltage will gradually (at the speed of this slow start time) increase linearly from 0V to the set output voltage to eliminate the impact on the vibration plate and prevent the workpiece from falling off.

FA(Fiber A detection value):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "FA", which is the value detected by fiber A.

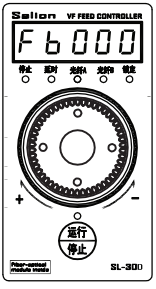


prompt:

The value of "FA" is the value detected by the optical fiber, and the signal output will be generated when the value between the lower limit of "FL" and the upper limit of "FH" is detected.

Fb(Fiber B detection value):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "Fb", which is the value detected by fiber B.

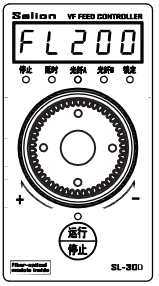


prompt:

The value of "Fb" is the value detected by the optical fiber, and a signal output will be generated when the value between the lower limit of "FL" and the upper limit of "FH" is detected.

FL(Lower limit of fiber A/B threshold):

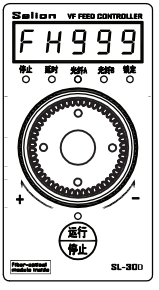
Long press and hold the "knob" for 0.8 seconds to enter the function settings. Rotate the "knob" to select the function parameters until the panel displays "FA" or "Fb". Short press the "knob" to enter "FL". At this point, rotate the "knob" to make settings, with a range of 0~999.



prompt:
Set the lower limit value of the "FL" fiber optic detection value.

FH(Fiber A/B threshold upper limit):

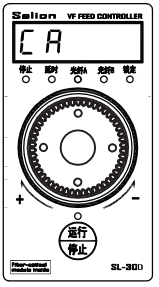
Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "FA" or "Fb", short press the "knob" to enter "FL", and then short press the "knob" to enter "FH". At this time, rotating the "knob" can set the range: 0~999.



prompt:
The upper limit value setting for the "FH" fiber optic detection value.

CA(Advanced settings for Fiber A):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "CA".

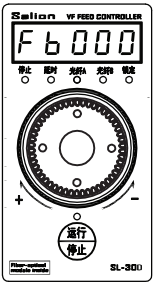


prompt:

Advanced settings for "CA" fiber A, which can set fiber A power, fiber A on delay, fiber A off delay, fiber A output logic, and anti jitter time.

Cb(Advanced settings for Fiber A):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "Cb".

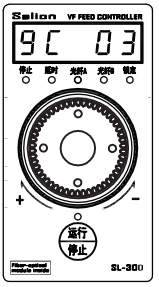


prompt:

Advanced settings for "Cb" fiber B, which can set fiber B power, fiber B on delay, fiber B off delay, fiber B output logic, and anti jitter time.

gc(Fiber A/B power setting):

Long press and hold the "knob" for 0.8 seconds to enter the function settings. Rotate the "knob" to select the function parameters until the panel displays "CA" or "Cb". Short press the "knob" to enter "gc". At this time, rotate the "knob" to set the settings, with a range of 00~03.

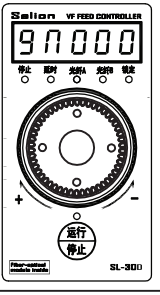


prompt:

1. Enter 'CA' to set the power of fiber A;
2. Enter "Cb" to set the power of fiber B;
3. There are 4 levels in total, with "00" having the weakest fiber power and "03" having the strongest fiber power.

gn(Fiber A/B open delay setting):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "CA" or "Cb", then short press the "knob" and find "gn". At this time, rotate the "knob" to set it, with a setting range of 000-99 milliseconds.

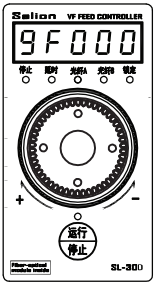


prompt:

1. Enter "CA" to set the delay for fiber A opening;
2. Enter "Cb" to set the delay for fiber B opening;
3. Can be set within the range of 000-99 milliseconds.

gF(Fiber A/B turn off delay setting):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "CA" or "Cb", then short press the "knob" and find "gF". At this time, rotate the "knob" to set it, with a setting range of 000-99 milliseconds.

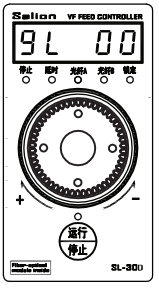


prompt:

1. Enter 'CA' to set the delay for fiber A shutdown;
2. Enter "Cb" to set the delay for fiber B shutdown;
3. Can be set within the range of 000-99 milliseconds.

gL(Fiber A/B output logic settings):

Long press and hold the "knob" for 0.8 seconds to enter the function settings. Rotate the "knob" to select the function parameters until the panel displays "CA" or "Cb". Then, short press the "knob" and find "gL". At this point, rotate the "knob" to make settings. The setting range is from 00 to 01

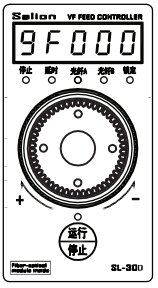


prompt:

1. Enter "CA" to set the output logic of fiber A;
2. Enter "Cb" to set the output logic of fiber B;
3. 00: This fiber channel independently outputs:
   01: Both A and B fibers meet the output conditions, and this channel outputs.

gS(Fiber A/B anti jitter time):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "CA" or "Cb", then short press the "knob" and find "gS". At this time, rotate the "knob" to set it, with a setting range of 00~30 milliseconds.

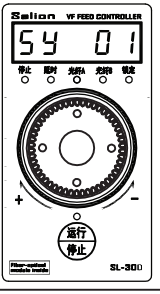


prompt:

1. Enter "CA" to set the anti jitter time of fiber A;
2. Enter "Cb" to set the anti jitter time of fiber B;
3. The adjustable range is from 00 to 30 milliseconds.

SY(Synchronous output logic):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "Sy", then short press the "knob", and "Sy" will flash. At this time, rotating the "knob" can be used for settings, with a range of 0~1.

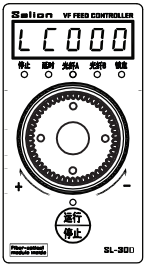


prompt:

Sy "=00: The runtime output is valid;
Sy "=01: Output is valid when stopped.

LC(Start stop logic setting):

Long press the "knob" for 0.8 seconds to enter the function settings. Rotate the "knob" to select the function parameters until the panel displays "LC". Then press the "knob" briefly, and the "LC" will flash. At this time, rotate the "knob" to set the range: 000-111.

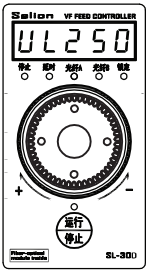


prompt:

X1=0: External start stop port X1 is low level shutdown;
X1=1: The external start stop port X1 is running at a low level;
A=1: Fiber optic A shutdown control is effective;
B=1: Fiber B shutdown control is effective;
A=1, B=1: Fiber A and fiber B both have signals before shutting down.
(External start stop port X1 is the priority signal)

UL(Output voltage limit):

Long press the "knob" for 0.8 seconds to enter the function settings. Rotate the "knob" to select the function parameters until the panel displays "UL". Then press the "knob" briefly, and the "UL" will flash. At this time, rotate the "knob" to set the range: 0V~250V.

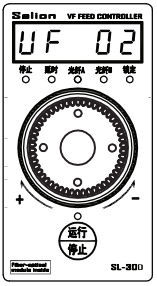


prompt:

Setting an upper limit value for this parameter can prevent users from accidentally operating and causing the output voltage to be too high, resulting in damage to the vibration disc.
When the setting of this parameter is less than "U (output voltage)", "U (output voltage)" will automatically decrease.
This parameter is also applicable to the external analog voltage regulation mode.
When "UC" (output voltage control mode)=1 and it is an external analog control mode, the UL parameter will automatically adjust the external analog control range: VPLC=0~10V, corresponding to output voltage: 0~"UL".

UF(Stable amplitude speed):

Long press the "knob" for 0.8 seconds to enter the function settings, rotate the "knob" to select the function parameters until the panel displays "UF", then press the "knob" briefly, and "UF" will flash. At this time, rotating the "knob" can be used for settings, with a range of 0-6.

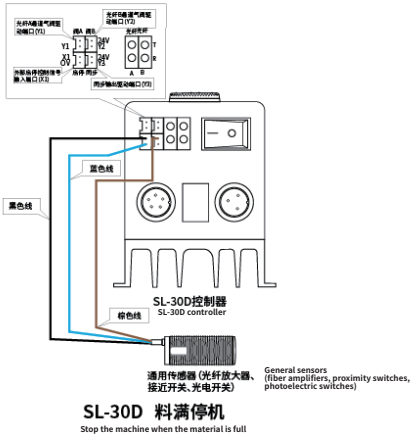


prompt:

The smaller the UF value, the faster the stable speed, which is suitable for most feeding situations.

The larger the value, the slower the amplitude stability speed, but it can filter out the impact force on the vibration disc when heavy workpieces are dropped and returned, and improve the amplitude stability.

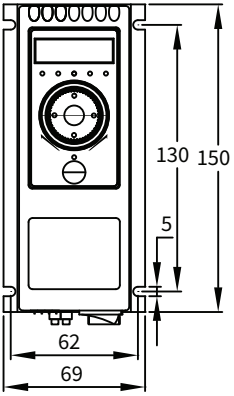
SL-30D external start stop control port:



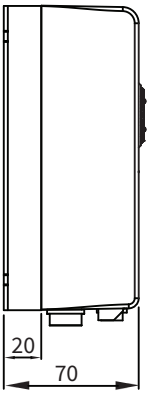
SL-30D 料满停机

Stop the machine when the material is full

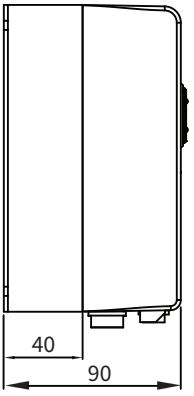
Dimensions of SL-30D controller:



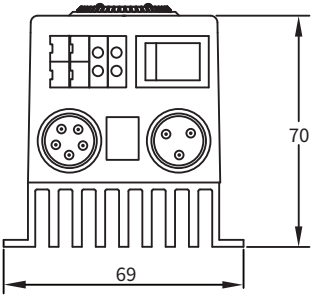
SL-30D (Top View)



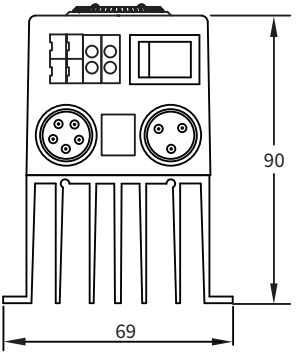
SL-30D 3A (left view)



SL-30D 4.5A (left view)



SL-30D 3A (front view)



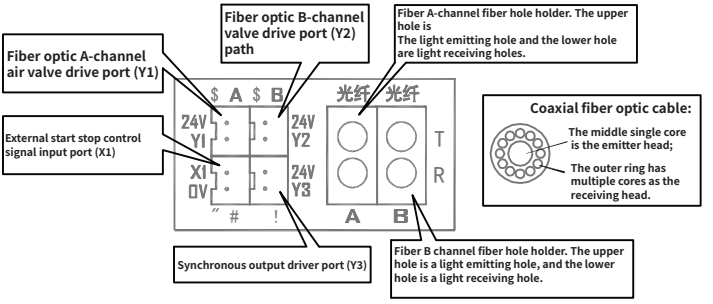
SL-30D 4.5A (front view)

prompt:
SL-30D medium power:150 (long) *69 (wide) *70 (tall) high power:150 (long) *69 (wide) *90 (tall) unit:mm

Vision and exclusion:

No display	Confirm if the power is connected and check if the fuse is intact. (Fuse specification: 250V 6.3A fast melting type 5 * 20mm)
EC-0H	Overheating protection. Install the controller in a ventilated area. If possible, install it on a metal machine to facilitate heat dissipation.
EC-0L	Overload protection. Check: whether the gap between the electromagnetic coil and the armature is too large, whether the power of the vibration disc matches the controller, and whether the output cable is short circuited.
EC-02L	Leakage protection. Inspection: Electromagnetic coil (this leakage protection is only detected when powered on and not during operation).
When 'P' flashes	Indicates that no valid amplitude was detected.
When '030' flashes	Indicates that the output amplitude has been limited by the maximum output voltage parameter.

Description of control, drive ports, and fiber ports:



The 1 24V power port can provide an additional 100mA load current to power external sensors;
2 Y1 Y2 and Y3 can individually drive solenoid valves with a power less than 4W, but the total driving power of the three ports cannot exceed 6W;
When using Y1, Y2, and Y3 ports to drive loads through power sources not provided by this controller, the ports do not have overcurrent and short-circuit protection.

Precautions for fiber optic cable installation:

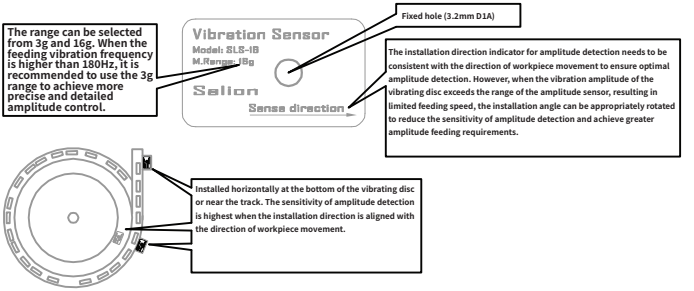
The fiber optic cable that comes with the controller is a coaxial fiber optic cable. It is necessary to distinguish between the transmitting and receiving ends, otherwise it will seriously affect the detection effect;
Before inserting the fiber optic cable into the fiber optic socket, it is recommended to use the attached "fiber optic cable dedicated cutter" to cut the fiber optic cable head flat, and then insert the fiber optic cable into the fiber optic socket for optimal detection performance;
Do not excessively bend the fiber optic cable (the recommended bending diameter is greater than 25mm), and avoid damaging the outer surface of the fiber optic cable, otherwise it will seriously reduce the sensitivity and reliability of fiber optic detection;
After the fiber optic cable is connected to the fiber optic socket of the controller, it is strongly recommended to immediately clamp and fix the fiber optic cable to the controller housing using the attached "fiber optic socket" to prevent accidental pulling of the fiber optic cable, which may cause it to loosen from the fiber optic socket and cause detection function failure;
After inserting the fiber optic cable into the fiber optic socket, try to avoid repeatedly plugging and unplugging the fiber optic cable;

Function and parameter description of fiber amplifier:

The controller is equipped with two completely independent fiber amplifiers, which can detect 10000 times per second and output 1000 valid detection results per second, with extremely low temperature drift
And with wide temperature adaptability (0-40 degrees Celsius better than 1%, -20~60 degrees Celsius better than 2%), specially designed for workpiece sorting applications;
Even if the detection light emitted by the two sets of fiber channels is irradiated on the same detection point of the workpiece, there will be no optical interference between the two sets of fibers; 3. It can set up upper and lower limits for 999 level fiber optic detection values (window detection), 4 levels (better than 100 times) of optical power adjustment for workpieces with different reflectivity, switch delay of solenoid valves, anti shake time for workpiece detection, and parameters such as A and B group fiber optic cooperation;
In addition to being used for workpiece sorting, the two sets of fiber amplifiers can also be used for material full stop function applications;

Parameter Code	parameter description
FA Fb	Display the current detection values of group A and B fiber channels.
FL FH	FL: Set the lower threshold; FH: Set the upper limit of the threshold. When the fiber optic detection value is in the FL and FH range, the workpiece detection result is valid.
gC	Optical power setting, consisting of four levels of optical power, is set based on the reflectivity of the workpiece and the distance between the workpiece and the fiber head. It should be noted that the higher the detection value, the better, but it is better to keep the workpiece detection value in the middle range of 0-999 as much as possible.
gn	Electromagnetic valve opening delay (mS), when the detection result is valid, the electromagnetic valve will only open after this delay time. This parameter is an important parameter for sorting workpieces using the coherence of their reflective features.
gF	Electromagnetic valve closing delay (mS), when the detection result is invalid, the electromagnetic valve will only close after this delay time. Generally used to match the working characteristics of solenoid valves and pneumatic components.
gL	When GL=01; The two sets of fiber channels work together to activate. At this time, the solenoid valve will only be activated when the detection of the two sets of fiber channels is valid. This parameter is generally used for applications where two feature points need to be sorted and judged on the same workpiece.
gS	Fiber optic detection anti jitter time (mS), this parameter is used to reduce the misjudgment caused by the swinging of the workpiece and the presence of debris spots on the surface of the workpiece. However, this parameter is only used as an auxiliary parameter for workpiece sorting through delay. When the feeding speed is high, this parameter needs to be reduced.

Amplitude sensor and installation instructions:



To achieve optimal amplitude detection, the amplitude sensor should be installed as horizontally as possible (with the text facing up or down); Generally speaking, amplitude sensors are installed near the track or at the bottom of the disc. However, due to differences in the size and rigidity of the vibrating disc, the amplitude of the disc and the feeding track may not be consistent. Amplitude sensors only detect the amplitude of the feeding track near the installation position. Therefore, the optimal installation position of the amplitude sensor needs to be selected based on the actual working conditions of the vibrating disc.

Quick steps for setting up automatic amplitude stabilization function:

1. Install the amplitude sensor properly.
The connector of the amplitude sensor is not connected to the controller for now, and the controller is operating in normal mode.
3. Place a large number of workpieces into the vibrating disc to keep it fully loaded with workpieces.
Firstly, set the appropriate "output voltage" and press the "run" button to operate the vibration disc. Adjust the "output frequency" to find the frequency with the maximum amplitude, then increase the output voltage to the desired feeding speed, and then fine tune the "output frequency" again to find the frequency point with the maximum amplitude.
Connect the amplitude sensor connector to the controller, and the controller will display "P", indicating that it has entered the automatic amplitude stabilization working state and the setting is complete.

Additional explanation for automatic amplitude stability control:

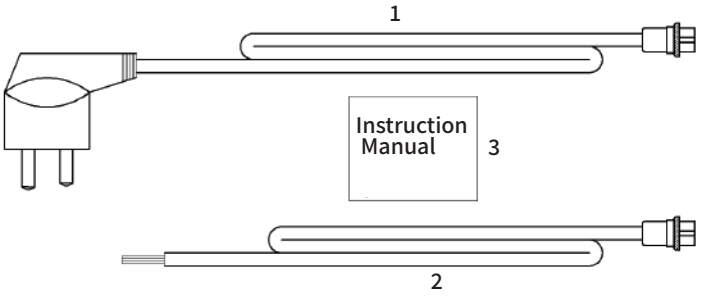
When the vibration sensor is connected to the controller, it switches to automatic amplitude stable working mode (the panel displays "P" and maintains the current feeding speed operation; When the amplitude sensor is unplugged, it switches to normal operating mode (the panel displays "U").
2 "UF" is the amplitude stable speed parameter, the smaller the value, the faster the amplitude stable speed. This parameter is used to filter out the vibration and impact caused by the dropping of workpieces with large individual weights, resulting in unstable amplitude. Generally speaking, the lighter the individual workpiece weight, the smaller the "UF" value can be set.
When a mechanical failure occurs in the vibrating disc, such as collision between the armature and electromagnet, severe failure of the shrapnel, or rigid collision between the vibrating disc body and surrounding objects during operation, it may lead to inaccurate amplitude detection and loss of amplitude stability function.
Due to the differences in mechanical rigidity and vibration transmission characteristics of each vibrating disc, automatic amplitude stabilization control only stabilizes the amplitude at the installation position of the amplitude sensor. Therefore, the installation position of the amplitude sensor needs to be optimized and adjusted according to the actual operating conditions.

Abnormal elimination of automatic amplitude stabilization mode:

1 "P" flashing indicates that no valid amplitude has been detected. Check: whether the amplitude setting value is too low, whether the output frequency does not match the resonance point of the vibration disc, whether the amplitude sensor is correctly installed on the vibration disc. If this abnormality occurs during startup, try reducing the "slow start speed" parameter.
When the "output amplitude" value flashes, it indicates that the output voltage is limited by the "output voltage limit" parameter. If the "output voltage limit" parameter is already at its maximum (250), it indicates that the output amplitude has reached its limit. At this point, if the feeding speed still cannot meet the requirements, first confirm whether the input voltage of the power supply is too low, and then try to readjust the output frequency parameters (refer to the previous "Quick Setting Steps").
When the "saturation" indicator light is on, it indicates that the output amplitude has reached its limit. At this point, if the feeding speed still cannot meet the requirements, first confirm whether the input voltage of the power supply is too low, and then try to readjust the output frequency parameters (refer to the previous "Quick Setting Steps").
When the feeding speed cannot meet the demand and there is currently no abnormal status displayed (the digital display shows no flashing, and the "saturation" indicator light is not lit), the reason is that the amplitude of the vibrating disc exceeds the maximum range of the sensor. By adjusting the installation angle of the amplitude sensor to reduce the sensitivity of amplitude detection, the maximum range of the sensor can be indirectly increased to increase the feeding speed of the vibrating disc.

Standard accessories:

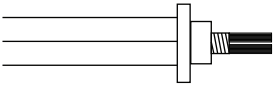
1. Power plug cable 2. output cable 3. instruction manual



Optional accessories:

1. Fiber optic cable 2.potentiometer 3. solenoid valve 4. amplitude sensor


1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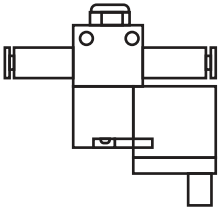
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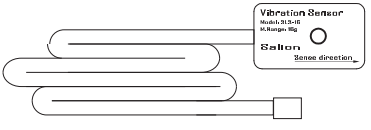

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