| | |
|---|---|
| **Project No.** | 6066 |
| **Equipment** | Sachet cartoner packing line |
| **Model** | 40CPM |
| **Series No.** | VAN256066 |

## Version History

| Version | Issued date | Reason for issue |
|---|---|---|
| V 1.0 | 5-Aug-25 | Initial issue |

# Contents

# 1. Equipment safety matters

## 1.1 overview

1. In addition to reading the safety rules, every transportation, loading and unloading, operation and maintenance personnel must read the relevant content in the manual.

2. The manual must be placed in a place commonly used by the relevant personnel, such as in the designated toolbox or tool bag.

3. All work must comply with the terms of the manual.

4. All kinds of safety, danger, operation and protection signs on the machine must be complete and clear.

5. If there are any additional safety clauses in the contract, they must also be complied with.

## 1.2 Use it correctly

1. It must be used in accordance with the conditions indicated and required by the manual, and the user must have full safety awareness.

2. Any unsafe factors affecting the machine should be corrected immediately.

3.It must be strictly implemented in accordance with the installation, disassembly, use, operation, maintenance and repair instructions formulated by the manufacturer to ensure proper use.

## 1.3 Transport and installation

1. Read and follow the following instructions before lifting the machine

2. Due to design requirements, the center of gravity of the machine is inside the machine.

3. Use ropes and hooks with sufficient capacity.

4. Use a rope of sufficient length.

5. Check the rope guidance on the lifting device according to the hoist specifications

## 1.4 staff member

1. The personnel entrusted with the work must be familiar with this use and maintenance manual, especially the safety manual. There are the same requirements for those who work on the machine, when necessary, such as maintenance personnel who come to replace gears.

2. For safety's sake, long hair must be tied back, and clothes must be tight without jewelry to prevent injury.

3. Only use personnel with good quality and responsibility to be responsible for operation, assembly, maintenance and repair.

4. People who have not been trained, trained or guided by experienced personnel are not allowed to engage in start-up work.

5. That personal protection equipment required in accordance with the rules or "use and maintenance instructions" should be used.

6. The operator should ensure that the machine is not operated by unauthorized personnel.

## 1.5 Operation, maintenance and handling

1. The safety and accident prevention procedures of the country where the equipment is installed are adapted to the operation of the machine.

2. The machine can only be operated under the following circumstances:

— Equipped with all protective equipment

— There is an "emergency stop" device

The above equipment must be guaranteed to be effective and fully functional.

3. The power connection must be completed by a qualified person.

4. Any construction of electrical components or materials can only be carried out by

trained electricians or under the supervision of trained electricians in accordance with relevant regulations.

5. All control devices and "emergency stop" devices must be checked in advance before operation.

6. Before starting work, be familiar with the environment and situation around you, such as obstacles in the work area.

7. The operator must make sure that there is no one in the working area when starting.

8. Every situation mentioned in the safety regulations must be avoided! Tasks that have not been considered for security cannot be carried out!

9. Any operation that may cause harm to the machine must be avoided.

10. In case of operation error, stop immediately and prevent restart. Correct the mistake immediately.

11. Check the external visual damage and fault of the machine at least once per shift. If necessary, it should be shut down immediately and prevent restart.

12. Must comply with the starting alarm device and control display.

13. The machine must be turned on and off in the manner specified in the operation instructions of the "Use and Maintenance Instructions".

14. If the machine fails to work normally due to a safety failure at work, it should be stopped immediately and reported to the management department and personnel.

15. Regular inspection and maintenance must be carried out in accordance with the provisions of the "Use and Maintenance Instructions".

16. Fully guarantee maintenance within the safe range.

17. The modification, modification and addition of new functions to the machine will affect safety, so it must not be implemented without the permission of the manufacturer.

18. Before starting work, maintenance or repair, the situation must be briefly introduced to the operator, and a special person must be appointed to supervise the process.

19. The machine works on electricity. If it is not skilled, it may bring serious or disastrous consequences for illegal operation and repair.

20. The isolation switch must be disconnected before the machine is repaired to prevent accidental restart.

21. All pneumatic parts must be operated by personnel with aerodynamic knowledge and experience!

22. Please release the pressure (compressed air) in the component pipe before construction!

23. When handling lubricating oil, detergents or other chemicals, it should be used with reference to the relevant safety materials of this product and comply with the safety instructions of applicable food machinery standards.

## 1.6 Other hazards

This section outlines the dangers that may arise during transportation, storage, installation, operation, disassembly, maintenance and repair.

1. Mechanical danger

- Squeeze or cut off people's limbs between machine parts or between the mold releaser and the surrounding objects.

- Pinched or strained by rollers, gear wheels, conveying devices and pneumatic devices.

— The machine slid down or moved unexpectedly.

— The machine is not stable enough.

2. Electrical hazards

— The cable is damaged.

3. Pneumatic danger

— Clamped by a pneumatic device.

4. Dangers caused by temporary failure of mechanical protection

- Remove the protective device or control device during the maintenance process.

In order to eliminate the above dangers, the safety instructions in the "Usage and Maintenance Instructions" must be strictly followed.

# 2.Equipment and operating environment

## 2.1 Power requirements

The power supply voltage adopts three-phase 220V and is converted into three-phase 380V through the transformer.

## 2.2 Device power

--Total power of equipment: see electrical schematic diagram

--Equipment power supply voltage: three-phase system (220V AC)

## 2.3 Detect before powering on

1. The bumps of the equipment during transportation may cause some screws of electrical components to be loose. Before the equipment is sent, please check whether the screws of all electrical components are loose and tighten the screws.

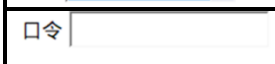
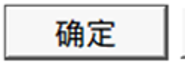
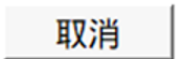
2. Check whether the equipment line is complete

3. Check whether the three-phase power supply is connected correctly (the grounding resistance should not exceed 4Ω)

# 3. Device touch interface

## 3.1 User permission login interface


**Interface explanation:**

| No. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Login blank  |  | User login information |
| | |  | User option |
| | |  | Password input |
| | |  | Confirm |
| | |  | Cancel |
| 2 | Language chooses | N/A | Click the language |

| | | | |
|---|---|---|---|
| | English 中文 | | option to switch the corresponding language. |

Priority explanation:

| No. | User Level | User name | Password | Explanation | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Main | Manual | Servo | Servo P. | Parameter | IO | RECIPE | Function | User | Alarm |
| 1 | 0 | Administrator | 8 | √ | √ | √ | √ | √ | O | √ | √ | √ | O |
| 2 | 1 | Operator | 1 | √ | √ | √ | X | O | O | X | √ | X | O |
| 3 | 2 | Engineer | 6 | √ | √ | √ | √ | √ | O | √ | √ | √ | O |

**Note:**
" √ " means available to modify.
"O" means available to view.
"X" means not available to view or modify.

**Operation explanation:**

Step 1: Select the user level [0: Administrator, 1: Operator, 2: Engineer]

Step 2: Enter the login password: [Administrator: 8. Operator: 1. Engineer: 6]

Step 3: Log in [Click to enter the system]

## 3.2 Status bar

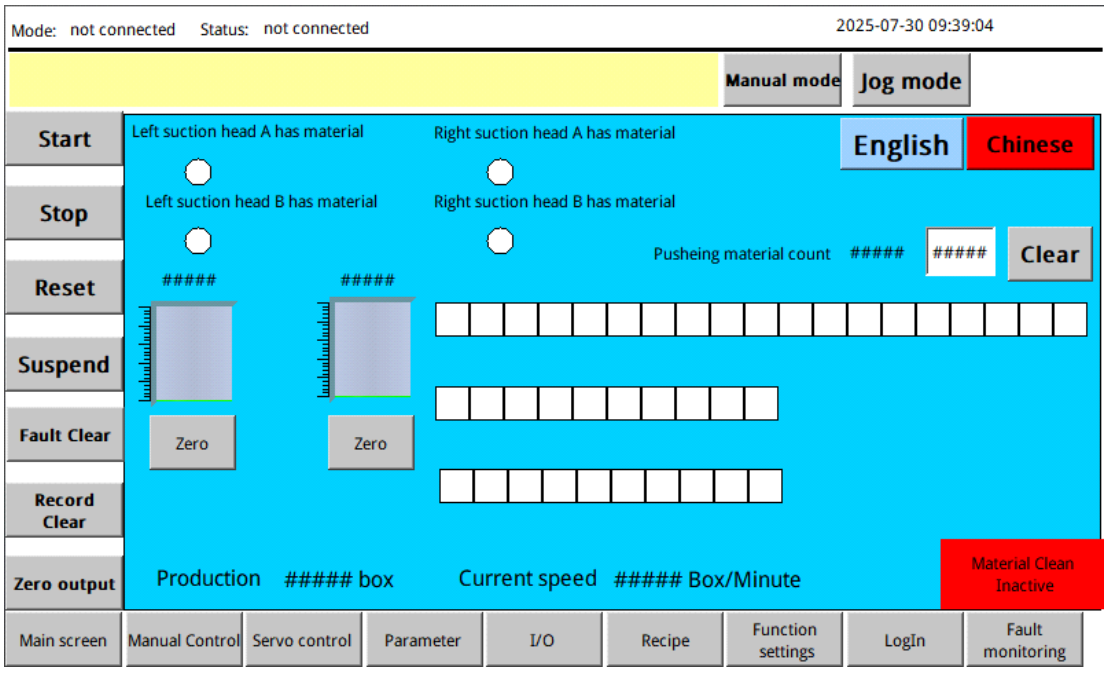

The status bar is from left to right:

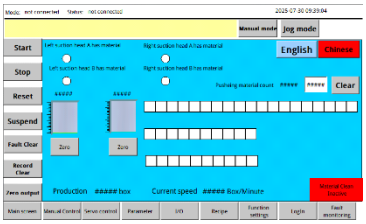
1. Device operation mode

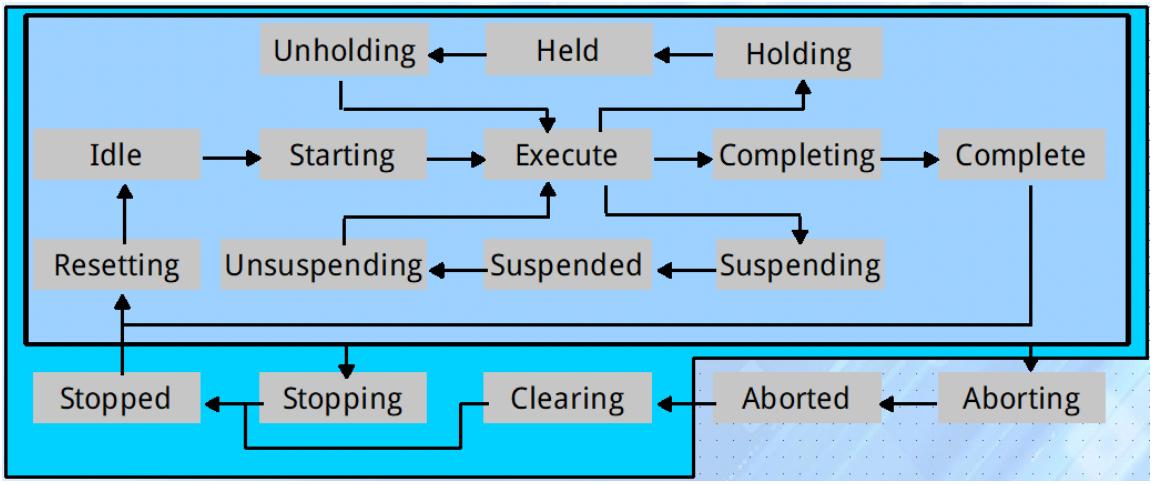
2. The operating status of the device

3. Current system time

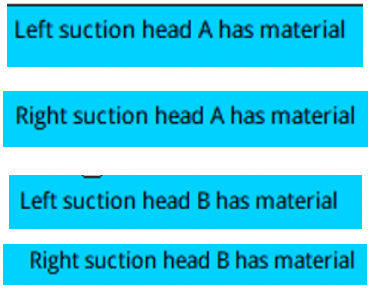
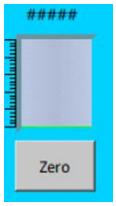
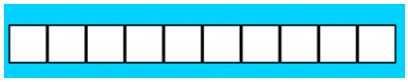
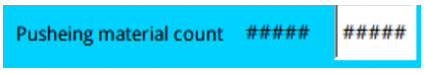
## 3.3 Main screen




| No. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Main screen  | Main screen | Click relative button on the bottom bar, display main screen. |
| 2 | Language chooses   | N/A | Click the language option to switch the corresponding language. |



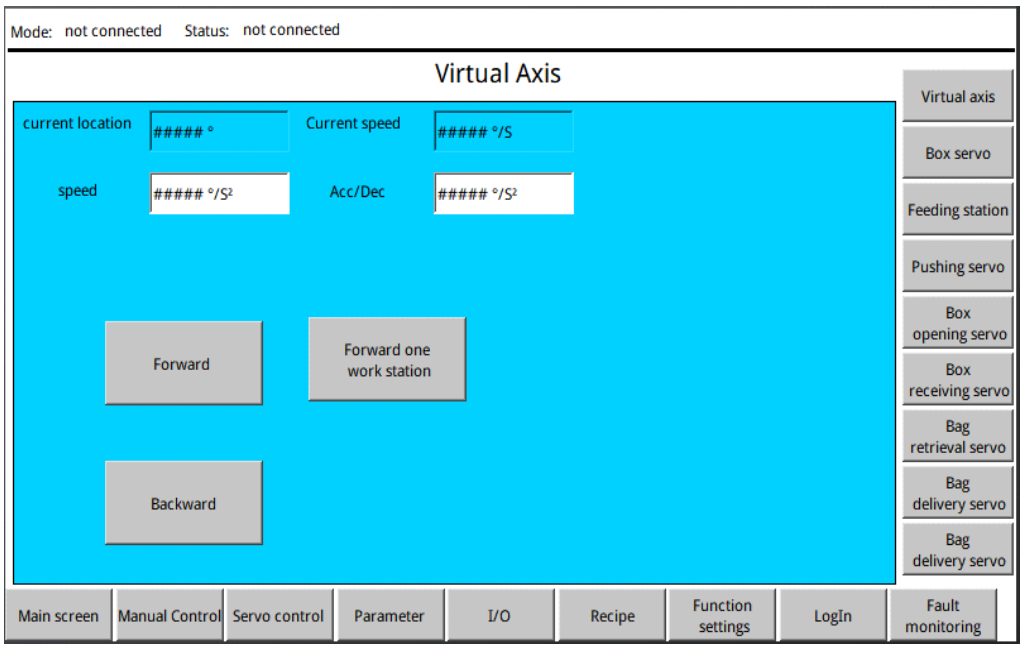

Device start-up process: The device runs according to the flow chart shown above. On the main screen, you can click the left button to start the device.

| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Left suction head A paid, left suction head B paid, right suction head A paid, right suction head B paid |   | real-time display of the material bag of 4 suction heads. |
| 2 | The bar chart on the left |   | shows the number of loading packages placed in the current workstation, and the reset button can clear the record when it is down. |
| 3 | The grid table on the right |  | shows whether there is a material package of the feeding workstation, the inspection of the material suction box record, and the box record of the box workstation with the box. |
| 4 | Manual pushing number |   | In the mode of manual packaging, |

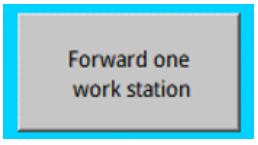
| | | | |
|---|---|---|---|
| | | | the current number of pushing is displayed and the number of pushing is set. |

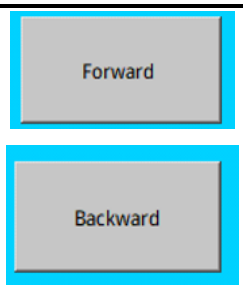
## 3.4 Servo control interface

- Virtual axis servo
-
-

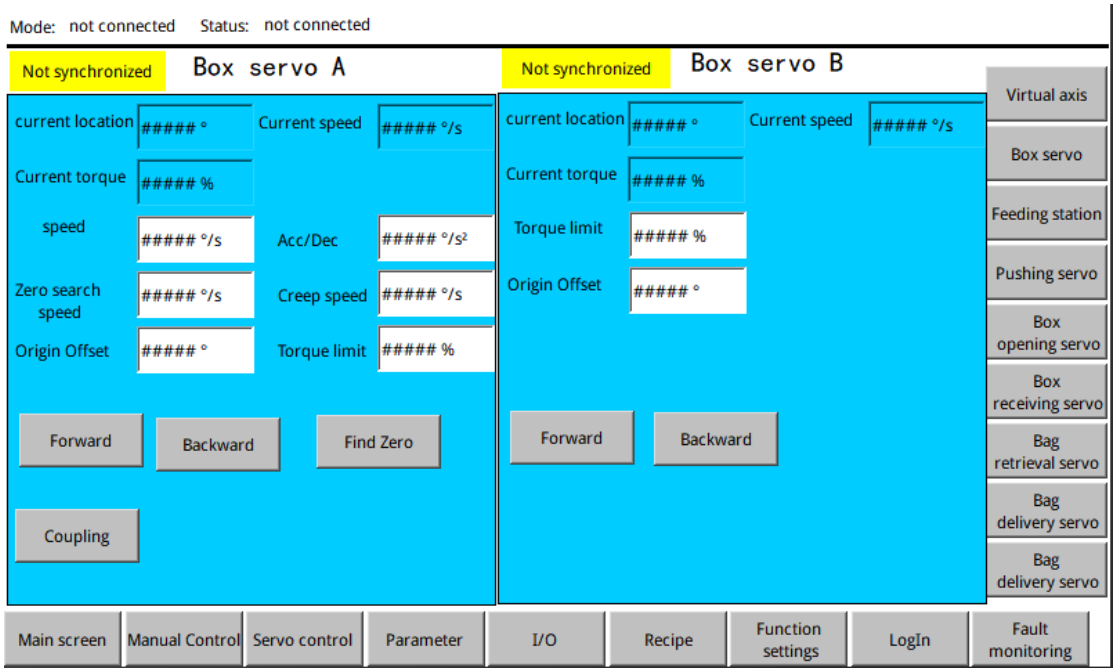



Before simple manual operation can be carried out in the manual mode stop state of the equipment, it is necessary to set the debugging parameters, such as the electric forward and reverse rotation of the servo motor and the operating distance of one station.

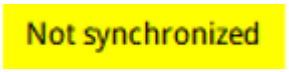
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Servo speed |   | the cycle running speed after the coupling of each axis in time |
| 2 | Acceleration |   | start-stop acceleration after coupling of each axis in time |
| 3 | Go to one station |   | A station changes at the relevant position of the virtual axis |

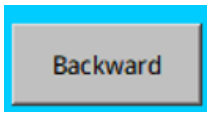
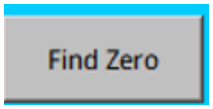
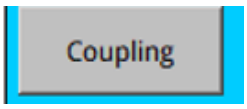
| | | | |
|---|---|---|---|
| 4 | Forward / Reverse Rotation of the Virtual Axis |  | The virtual axis rotates according to the set operating speed |

Box servo




Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting are required before simple manual operation can be carried out in manual mode and stop state.

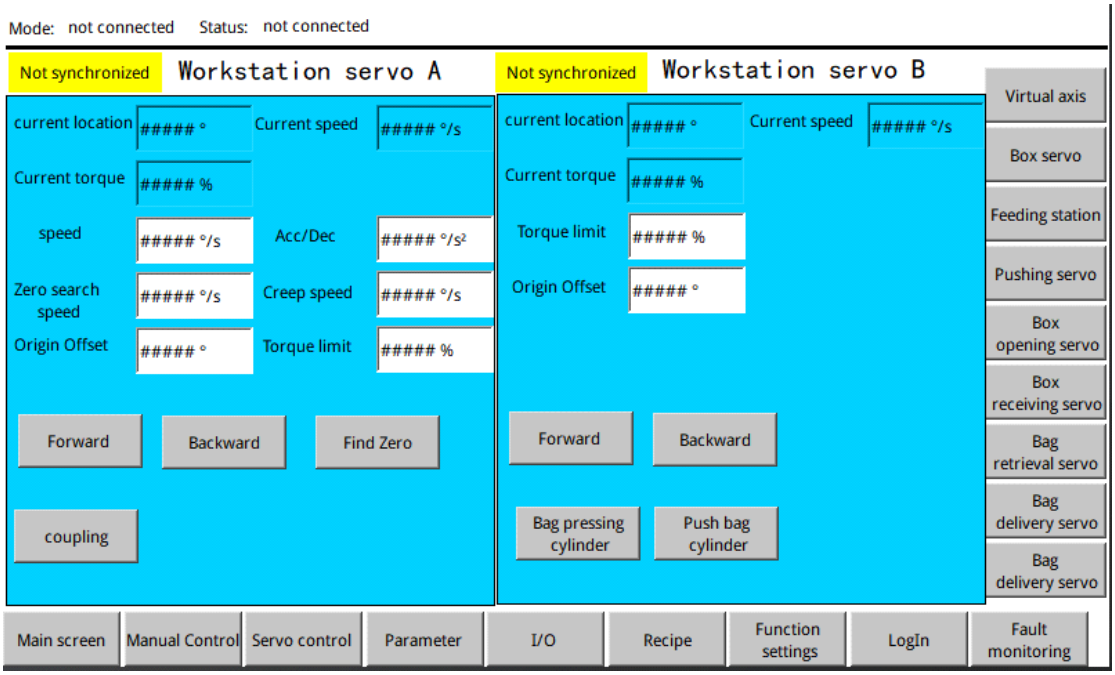
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Not synchronized |  | Whether the current real axis is bound to the virtual axis. |
| 2 | Servo speed |  | single-axis jog speed in manual mode stops. |
| 3 | Acceleration and deceleration speed |  | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization. |

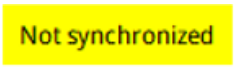
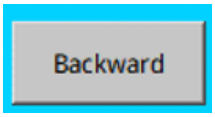
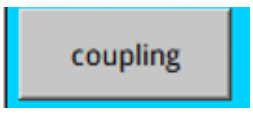
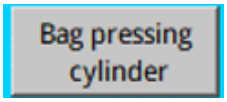
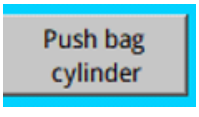
| | | | |
|---|---|---|---|
| 4 | Zero search speed |  | After finding the reference point switch, the servo motor slows down and positions the speed at the reference point position. |
| 5 | Origin offset |  | Refers to the zero-position offset value input. |
| 6 | Torque limit |  | The limit value of the current motor torque. |
| 7 | Forward |  | the current real axis jogs the forward rotation button. |
| 8 | Backward |  | The current solid axis jogging the reversal button. |
| 9 | Find Zero |  | The current solid axis is looking for the reference point operation. |
| | Coupling |  | The current real axis is bound to the virtual axis. |

- Workstation servo

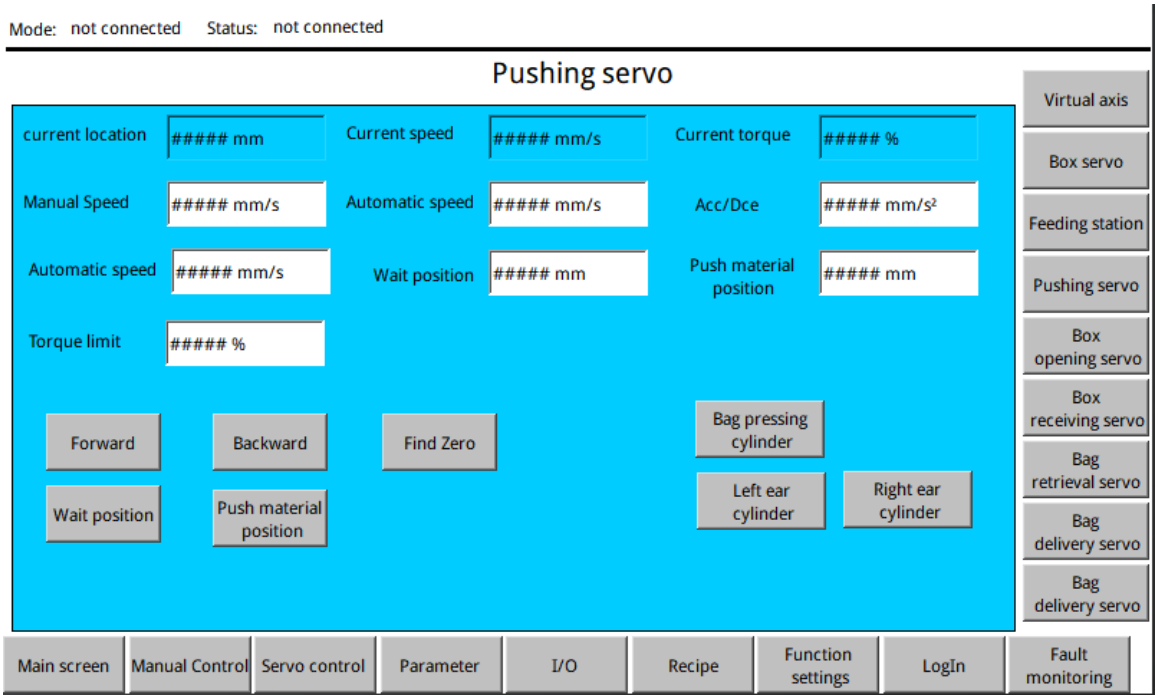
Commissioning parameters such as electric forward and reverse rotation of servo motors

and parameter setting are required before simple manual operation can be carried out in manual mode and stop state.



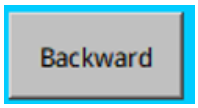
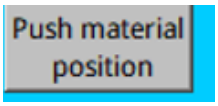
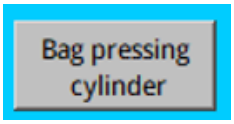
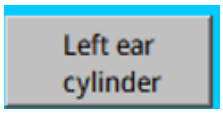
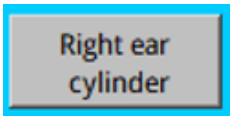
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Not synchronized |  | Whether the current real axis is bound to the virtual axis. |
| 2 | Servo speed |  | single-axis jog speed in manual mode stops |
| 3 | Acceleration and deceleration speed |  | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization |
| 4 | Zero search speed |  | After finding the reference point switch, the servo motor slows down and positions the speed at the reference point position. |
| 5 | Origin offset |  | Refers to the zero-position offset value input. |
| 6 | Torque limit |  | The limit value of the current motor torque. |
| 7 | Forward |  | the current real axis jogs the forward rotation button. |
| 8 | Backward |  | The current solid axis jogging the reversal button |
| 9 | Find Zero |  | The current solid axis is looking for the reference point operation. |
| 10 | Coupling |  | The current real axis is bound to the virtual axis. |
| 11 | Bag pressing cylinder |  | realize the action and retraction of the bag pressure cylinder. |
| 12 | Push bag cylinder |  | realize the action and retraction of the bag pushing cylinder. |

- Pushing servo

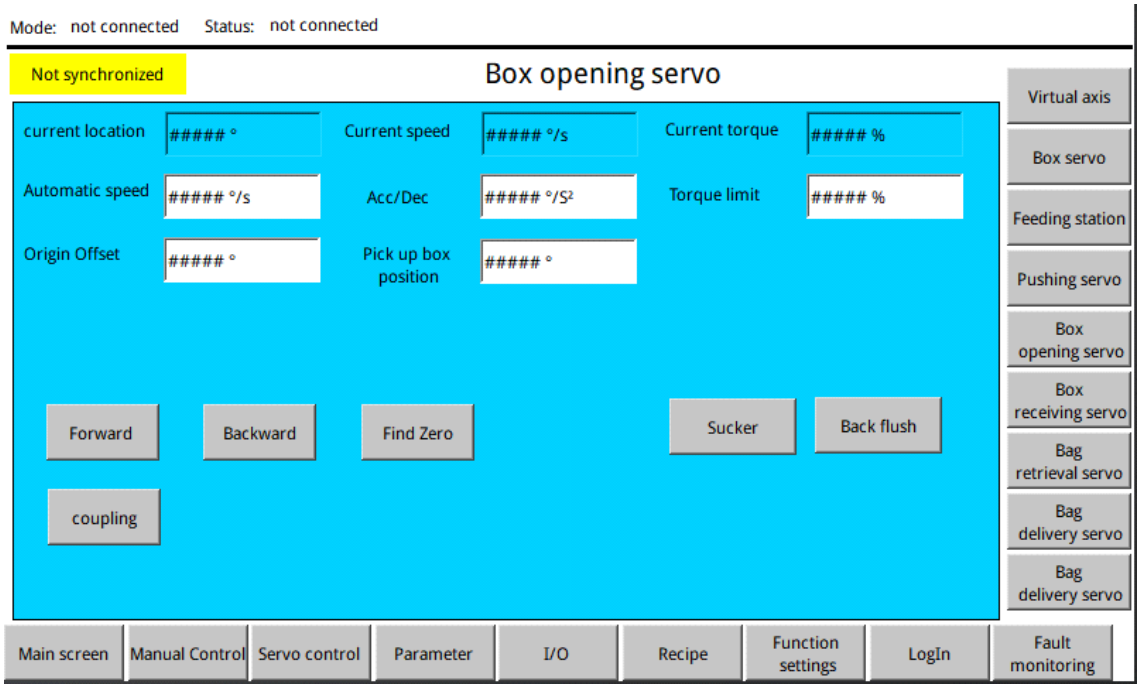



Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting are required before simple manual operation can be carried out in manual mode and stop state.

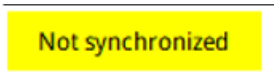
| NO. | description | Refer to picture | explanation |
|---|---|---|---|
| 1 | Manual speed | Manual Speed ##### mm/s | The speed of the unit axis jog in the manual mode stopped state. |
| 2 | Feeding speed | Automatic speed ##### mm/s | The speed of a single axis from the waiting position to the pushing position in the stop state of manual mode, and the acceleration of the virtual axis after synchronization. |
| 3 | Return speed | Automatic speed ##### mm/s | In the manual mode stop state, the single axis returns from the push position to the waiting position speed, and runs at the acceleration of the virtual axis after synchronization. |
| 4 | Acceleration and deceleration speed | Acc/Dce ##### mm/s² | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization. |

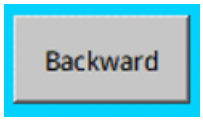
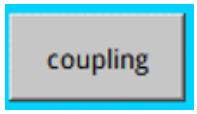
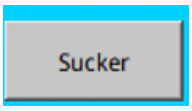
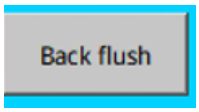
| | | | |
|---|---|---|---|
| 5 | Torque limit |  | The limit value of the current motor torque. |
| 6 | Servo waiting position |  | The position where the servo motor is waiting for the push on a single axis. |
| 7 | Servo pushing position |  | The position where the servo motor single-axis pushing is completed. |
| 8 | Forward |  | the current real axis jogs the forward rotation button. |
| 9 | Backward |  | The current solid axis jogging the reversal button. |
| 10 | Zero finding |  | The current solid axis is looking for the reference point operation. |
| 11 | Waiting position |  | The current real axis is positioned and waiting position according to the position of the imaginary axis. |
| 12 | Push material position |  | The current solid shaft positions the push material according to the position of the virtual axis. |
| 13 | Bag pressing cylinder |  | realize the action and retraction of the bag pressure cylinder. |
| 14 | Left ear cylinder |  | realize the action and retraction of the left open ear cylinder. |
| 15 | Right ear cylinder |  | realize the action and retraction of the right open ear cylinder. |

- Box opening servo

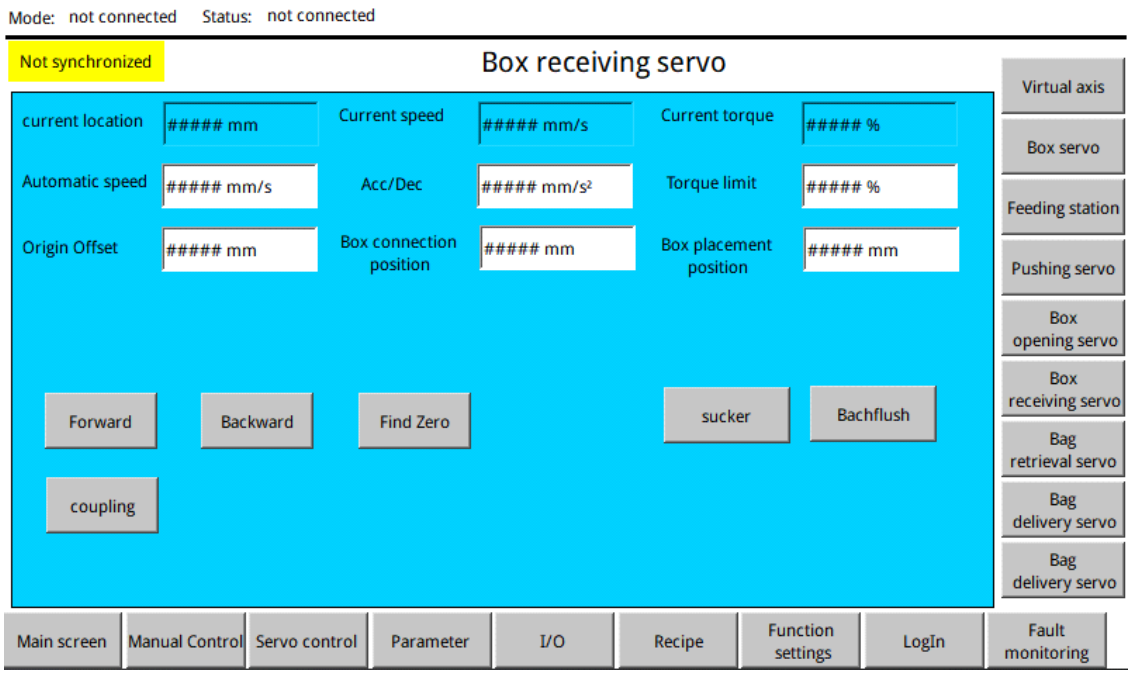



Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting need to be set before simple manual operation can be carried out when the equipment is stopped in manual mode.

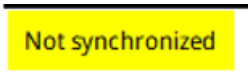
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Not synchronized |  | Whether the current real axis is bound to the virtual axis. |
| 2 | Auto Speed |  | The speed at which it runs in automatic mode. |
| 3 | Acceleration and deceleration speed |  | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization. |
| 4 | Torque limit |  | The limit value of the current motor torque. |
| 5 | Origin Offset |  | Input the offset value of the origin position. |
| 6 | Pick up box position |  | The position of the box pick-up action |
| 7 | Forward |  | the current real axis jogs the forward rotation button. |

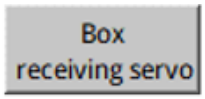
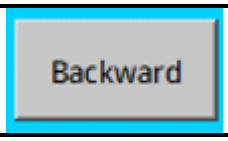
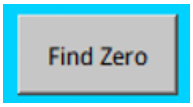
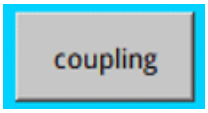
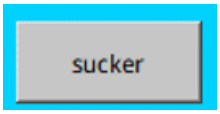
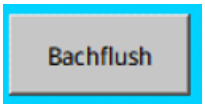
| | | | |
|---|---|---|---|
| 8 | Backward |  | The current solid axis jogging the reversal button. |
| 9 | Find Zero |  | The current solid axis is looking for the reference point operation. |
| 10 | Coupling |  | The current real axis is bound to the virtual axis. |
| 11 | Sucker |  | Suction cup cylinder opening and closing. |
| 12 | Back flush |  | blow back cylinder opening and closing. |

- Box receiving servo

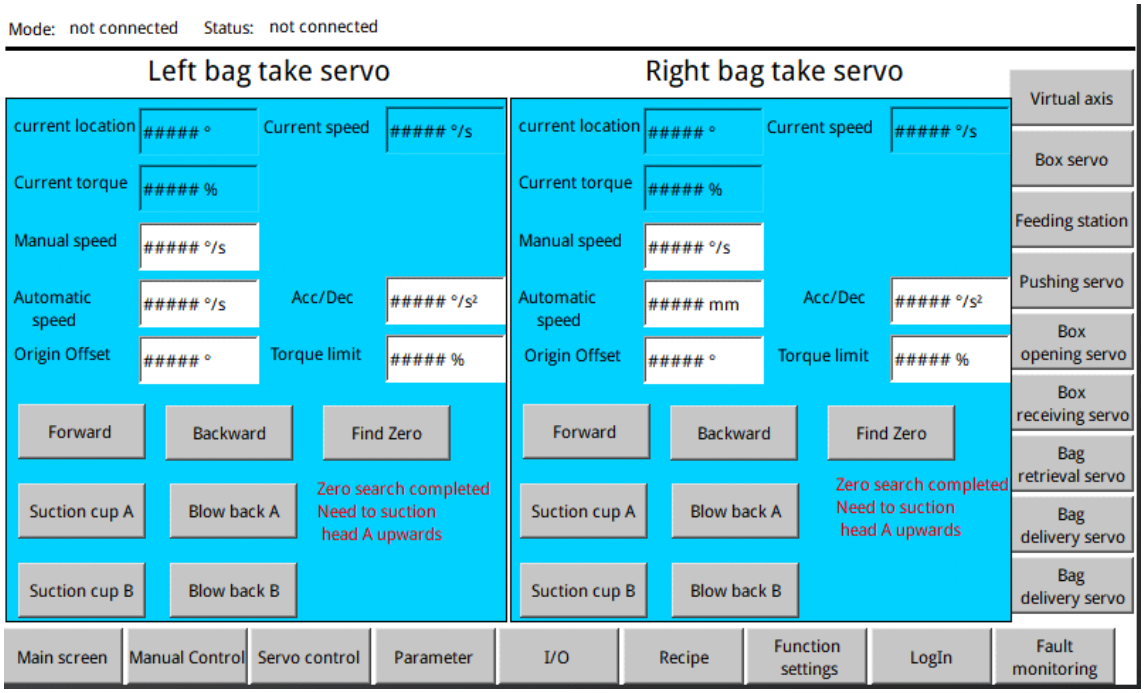



Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting need to be set before simple manual operation can be carried out when the equipment is stopped in manual mode.

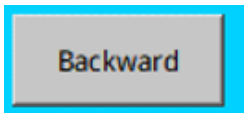
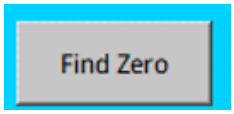
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Not Synchronized |  | Whether the current real axis is bound to the virtual axis. |

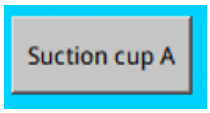
| | | | |
|---|---|---|---|
| 2 | Auto Speed |  | The speed at which it operates in automatic mode. |
| 3 | Acceleration and deceleration speed |  | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization. |
| 4 | Origin Offset |  | Input the offset value of the origin position. |
| 5 | Torque limit |  | The limit value of the current motor torque. |
| 6 | Box receiving servo |  | the position of the box receiving action |
| 7 | Box placement position |  | The position of the box placement |
| 8 | Forward |  | the current real axis jogs the forward rotation button. |
| 9 | Backward |  | The current solid axis jogging the reversal button. |
| 10 | Find zero |  | The current solid axis is looking for the reference point operation. |
| 11 | Coupling |  | The current real axis is bound to the virtual axis. |
| 12 | Sucker |  | opening and closing of the box of the vacuum air cylinder. |
| 13 | Backflush |  | The opening and closing of the box blow back cylinder. |

- Take the bag servo

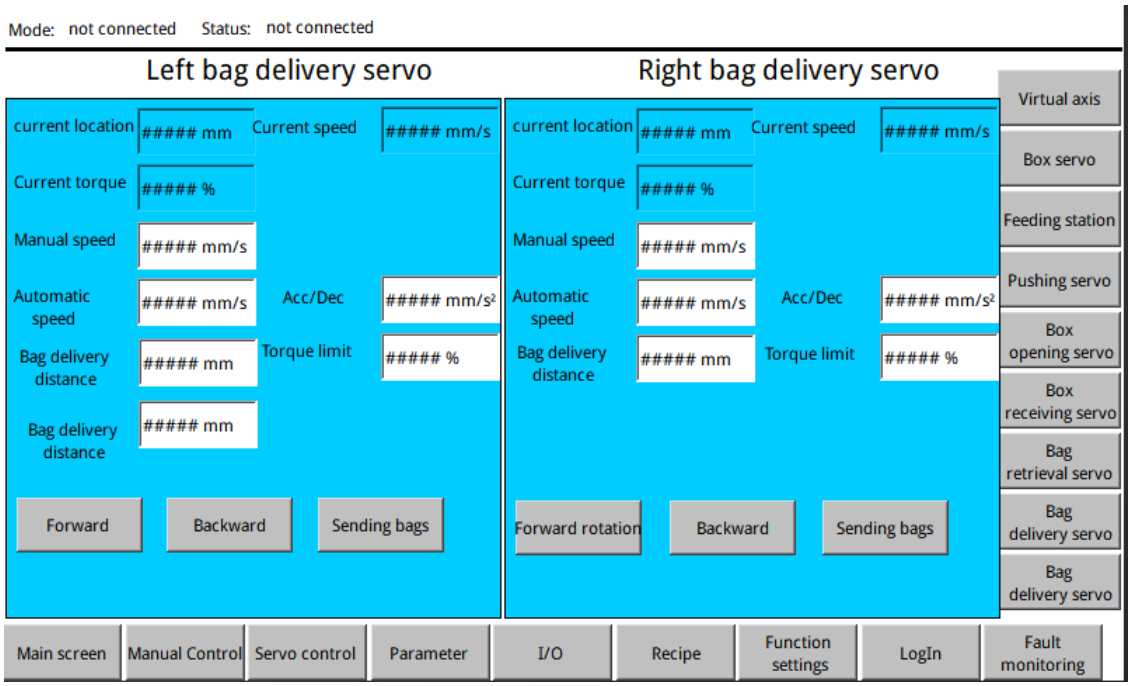



Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting need to be set before simple manual operation can be carried out when the equipment is stopped in manual mode.

| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Manual speed |  | The speed of the unit axis jog in the manual mode stopped state. |
| 2 | Auto Speed |  | The speed at which it operates in automatic mode. |
| 3 | Acceleration and deceleration speed |  | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization. |
| 4 | Torque limit |  | The limit value of the current motor torque. |
| 5 | Forward |  | the current jogging forward rotation button with box A solid shaft and box B solid shaft. |
| 6 | Backward |  | The current jogging reversal button with box A solid shaft and box B solid axis. |
| 7 | Find Zero |  | The current operation of finding the reference point between the solid axis with box A and the solid axis with box B. |

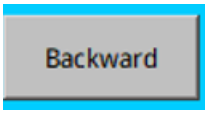
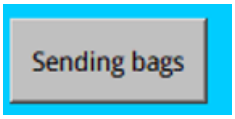
| | | | |
|---|---|---|---|
| 8 | Suction cup |  | opening and closing of the vacuum air cylinder for bagging. |
| 9 | Blow back |  | the opening and closing of the bag blow back cylinder. |

## Bag delivery servo

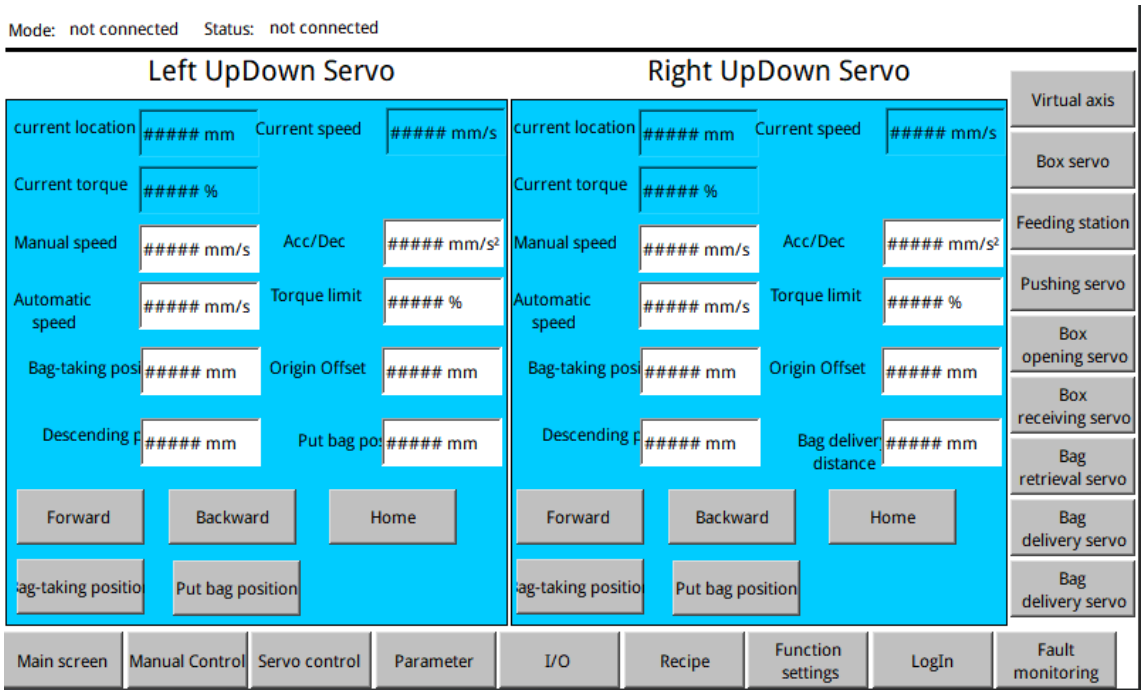



Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting are required before simple manual operation can be carried out in manual mode and stop state.

| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Manual speed |  | The speed of the unit axis jog in the manual mode stopped state. |
| 2 | Auto Speed |  | The speed at which it operates in automatic mode. |
| 3 | Acceleration and deceleration speed |  | The acceleration and deceleration of single-axis jogs in the manual mode stop state, and the acceleration of the virtual axis after synchronization. |

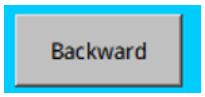
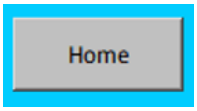
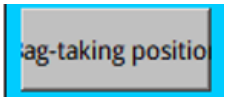
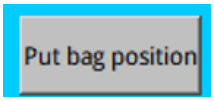
| | | | |
|---|---|---|---|
| 4 | Bag delivery distance |  | The distance of the bag feeding action. |
| 5 | Torque limit |  | The limit value of the current motor torque. |
| 6 | Number of bag feeds |  | Count the number of times the bag delivery action is performed. |
| 7 | Forward |  | the current jogging forward rotation button with box A solid shaft and box B solid shaft. |
| 8 | Backward |  | The current jogging reversal button with box A solid shaft and box B solid axis. |
| 9 | Sending bags |  | Perform the bag feeding action. |

- Up Down servo

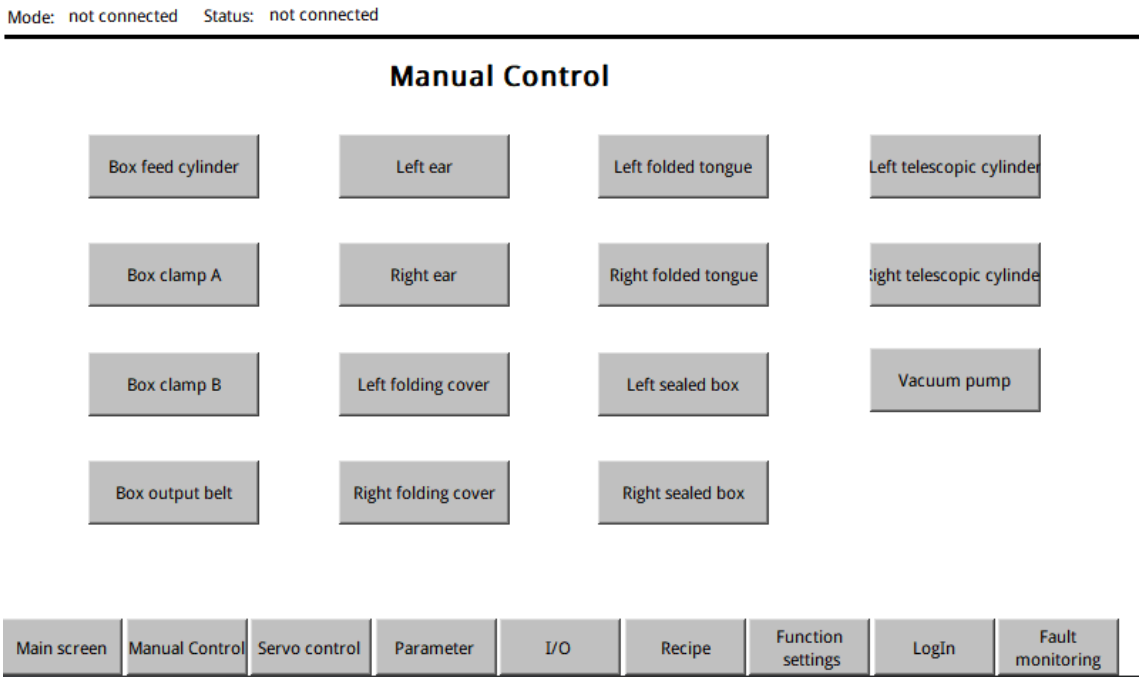



Commissioning parameters such as electric forward and reverse rotation of servo motors and parameter setting are required before simple manual operation can be carried out in manual mode and stop state

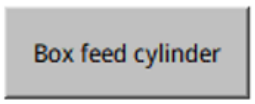
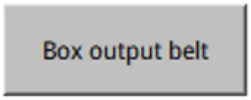
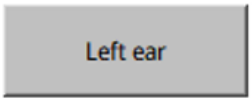
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|

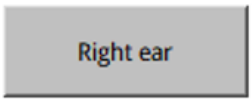
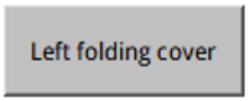
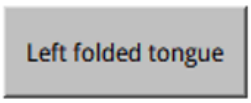
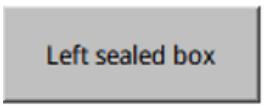
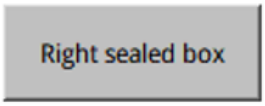
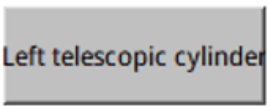
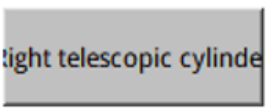
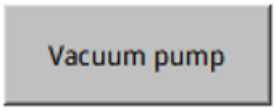
| | | | |
|---|---|---|---|
| 1 | Manual speed |  | The speed of the uni axis jog in the manual mode stopped state. |
| 2 | Auto Speed |  | The speed at which it operates in automatic mode<br>Acceleration and deceleration speed: single-axis jog acceleration and deceleration speed in manual mode stop. |
| 3 | Torque limit |  | The limit value of the current motor torque. |
| 4 | Descendant |  | Servo picking to complete the descent distance. |
| 5 | Origin Offset |  | Input the offset value of the origin position. |
| 6 | Forward |  | the current jogging forward rotation button with box A solid shaft and box B solid shaft. |
| 7 | Backward |  | The current jogging reversal button with box A solid shaft and box B solid axis. |
| 8 | Home |  | The servo finds the origin according to the set parameters. |
| 9 | Bag tacking position |  | When the manual mode is stopped, click the servo to reach the bag picking position according to the set parameters. |
| 10 | Put bag position |  | When the manual mode is stopped, click the servo to reach the bag placement position according to the set parameters. |

## 3.5 Manual control interface



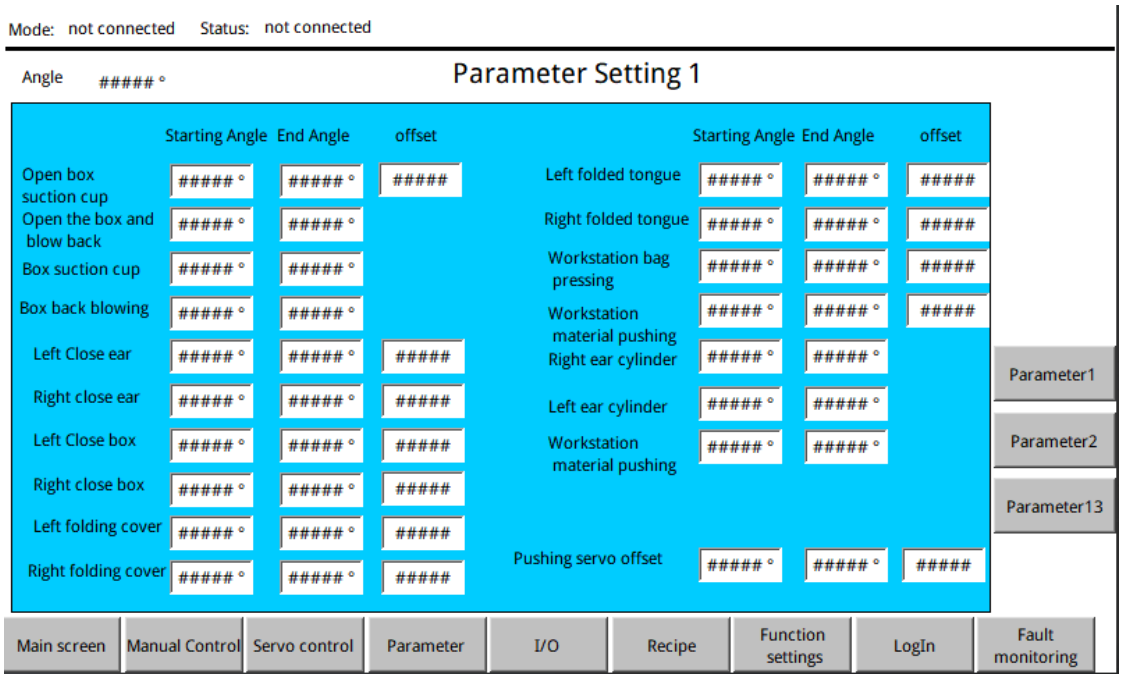

Before simple manual operation can be performed in the manual mode of the device, debugging parameters need to be set, such as the electric forward and reverse and parameter setting of the servo motor.

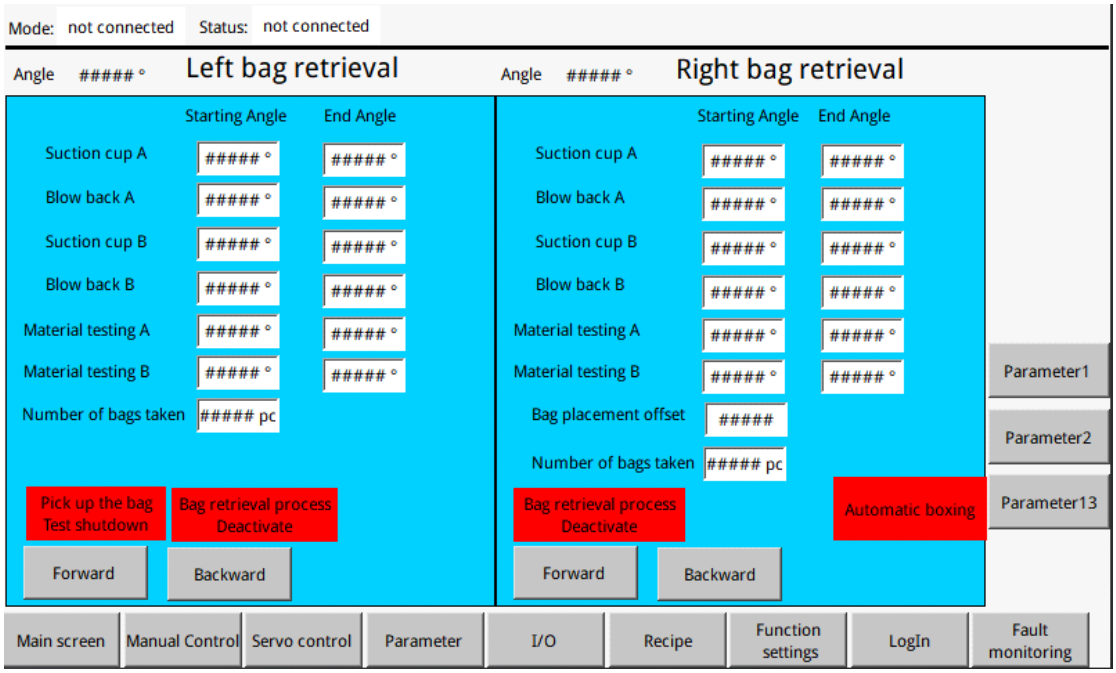
| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Box feed cylinder |   | opening and closing of delivery box cylinder. |
| 2 | Box clamp A |   | Out-of-box clamp A belt action. |
| 3 | Box clamp B |   | Out-of-box clamp B belt action. |
| 4 | Box output belt |   | out-of-box belt action. |
| 5 | Left ear |   | the opening and closing of the left closed ear cylinder. |

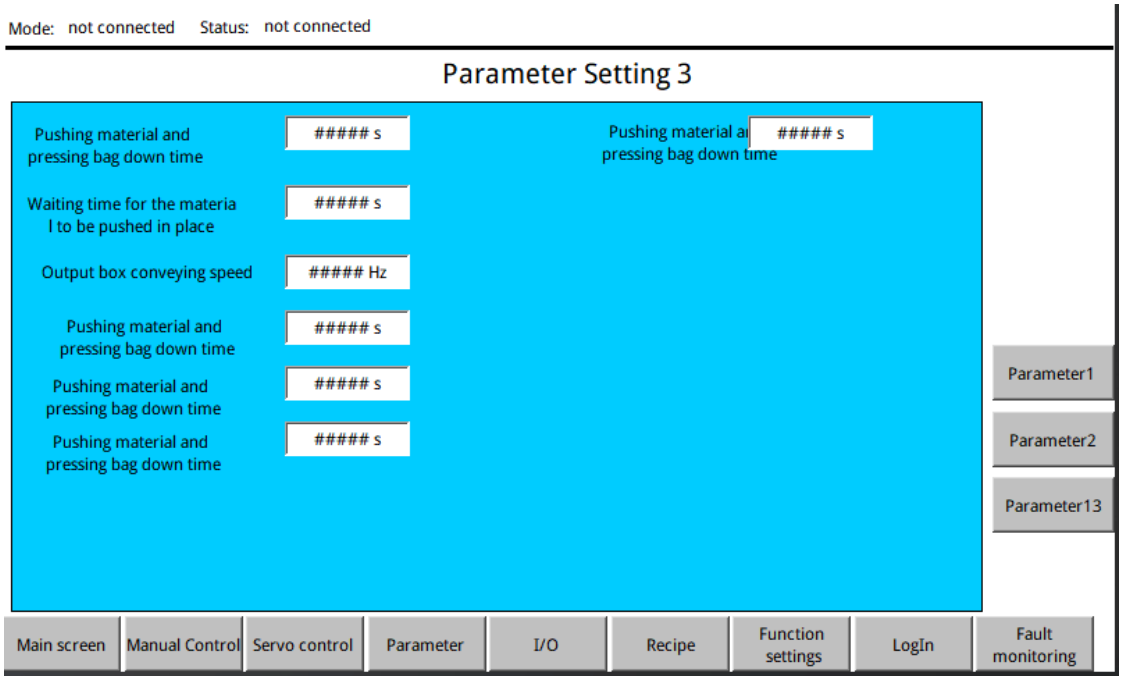
| | | | |
|---|---|---|---|
| 6 | Right ear |  | opening and closing of the right closed ear cylinder. |
| 7 | Left folding cover |  | opening and closing of the left folding cover cylinder. |
| 8 | Right folding cover |  | the opening and closing of the right folding cover cylinder. |
| 9 | Left folded tongue |  | opening and closing of the left-fold tongue cylinder. |
| 10 | Right folded tongue |  | opening and closing of the right-folded tongue cylinder. |
| 11 | Left sealed box |  | opening and closing of the left sealing box cylinder. |
| 12 | Right sealed box |  | opening and closing of the right sealing box cylinder. |
| 13 | Left telescopic cylinder |  | opening and closing of the left telescopic cylinder. |
| 14 | Right telescopic cylinder |  | opening and closing of the right telescopic cylinder. |
| 15 | Vacuum pump |  | action of vacuum pump. |

## 3.6 Parameter setting interface

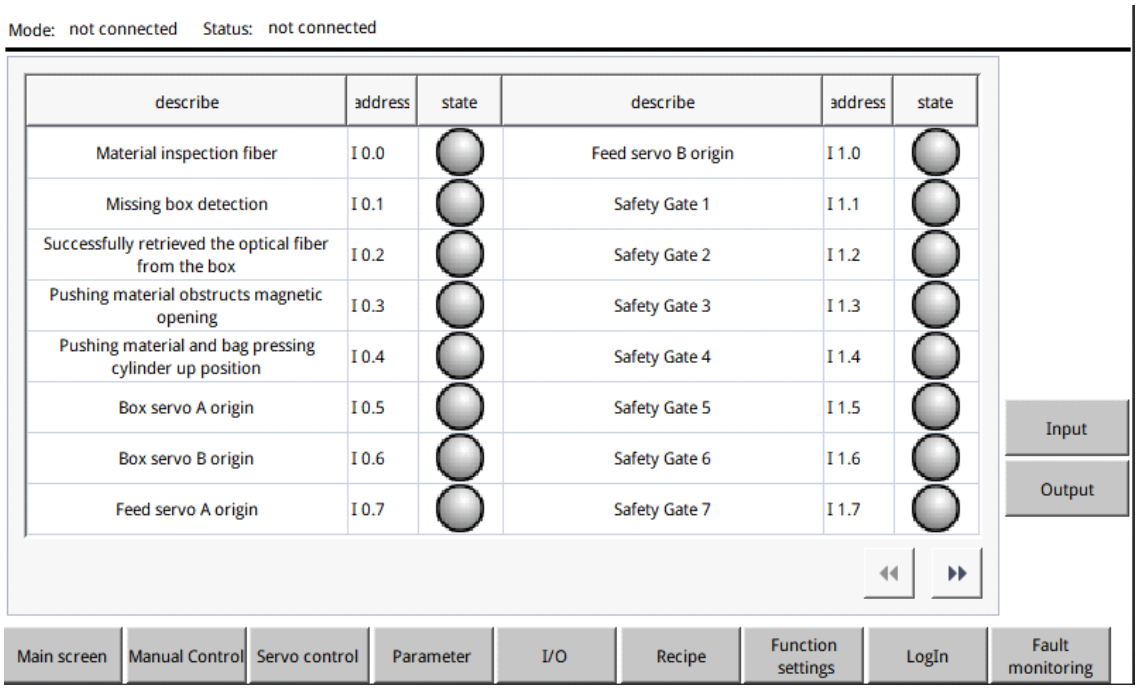
It is used to modify the operating parameters of the equipment (modified by professionals). All the offsets are filled in according to the previous successful record on the workstation. Generally, it is enough to follow the factory settings, and it is not necessary to change it.

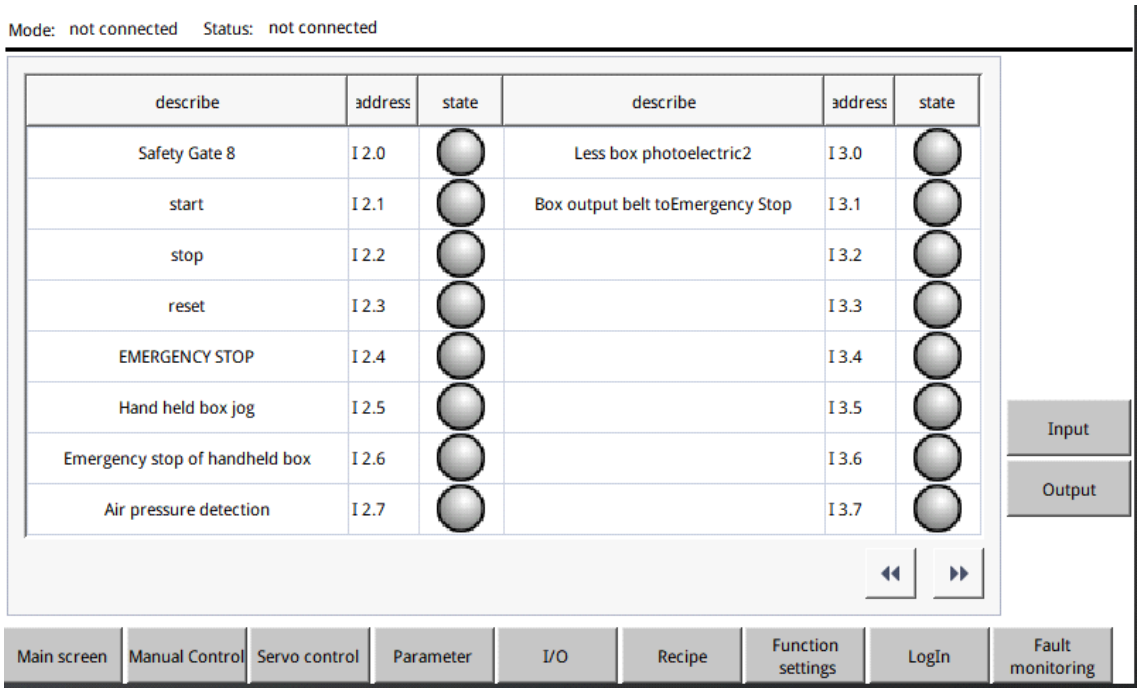

Mode: not connected Status: not connected
Angle ##### °
Parameter Setting 1
Starting Angle End Angle offset
Open box suction cup
Open the box and blow back
Box suction cup
Box back blowing
Left Close ear
Right close ear
Left Close box
Right close box
Left folding cover
Right folding cover
Starting Angle End Angle offset
Left folded tongue
Right folded tongue
Workstation bag pressing
Workstation material pushing
Right ear cylinder
Left ear cylinder
Workstation material pushing
Pushing servo offset
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring

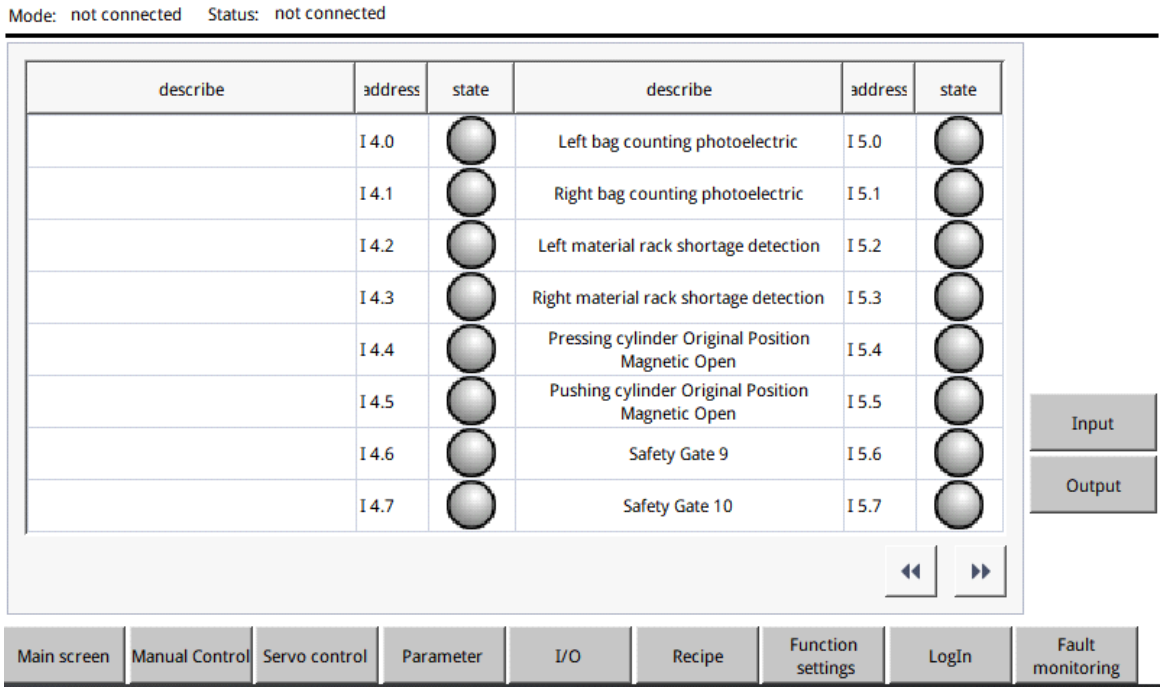

Mode: not connected Status: not connected
Angle ##### °
Left bag retrieval
Angle ##### °
Right bag retrieval
Starting Angle End Angle
Suction cup A
Blow back A
Suction cup B
Blow back B
Material testing A
Material testing B
Number of bags taken ##### pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Starting Angle End Angle
Suction cup A
Blow back A
Suction cup B
Blow back B
Material testing A
Material testing B
Bag placement offset
Number of bags taken ##### pc
Bag retrieval process Deactivate
Automatic boxing
Forward
Backward
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring

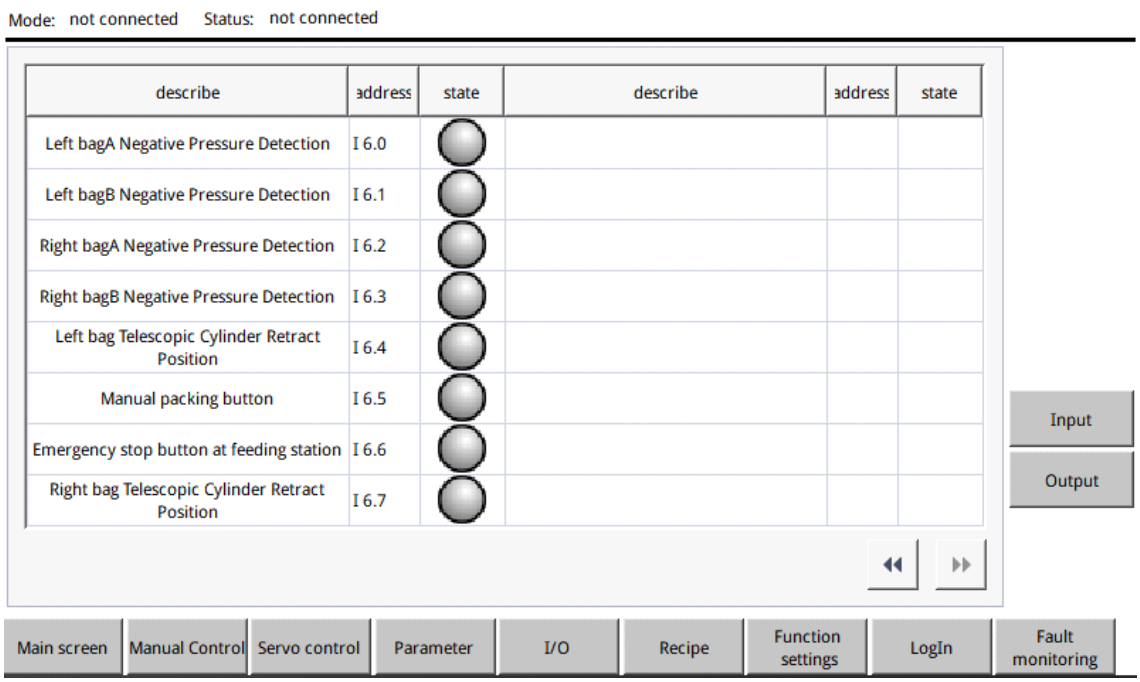



## 3.7 Input information interface



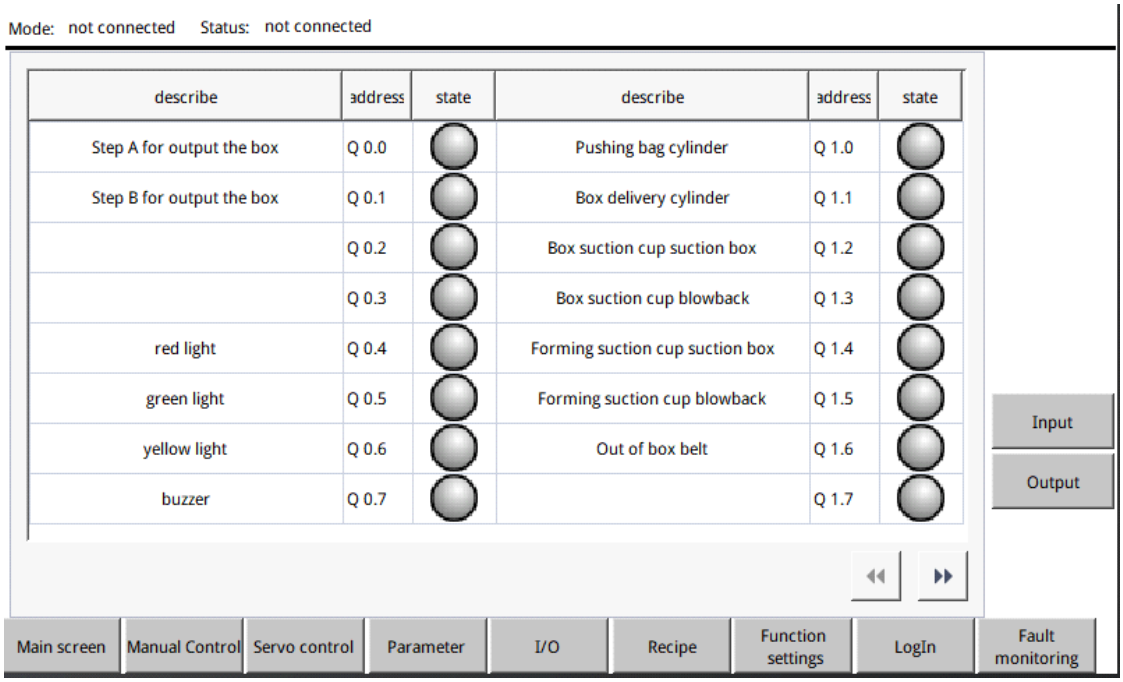

Mode: not connected Status: not connected
describe address state describe address state
Safety Gate 8 I 2.0
start I 2.1
stop I 2.2
reset I 2.3
EMERGENCY STOP I 2.4
Hand held box jog I 2.5
Emergency stop of handheld box I 2.6
Air pressure detection I 2.7
Less box photoelectric2 I 3.0
Box output belt toEmergency Stop I 3.1
I 3.2
I 3.3
I 3.4
I 3.5
I 3.6
I 3.7
Input
Output
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring

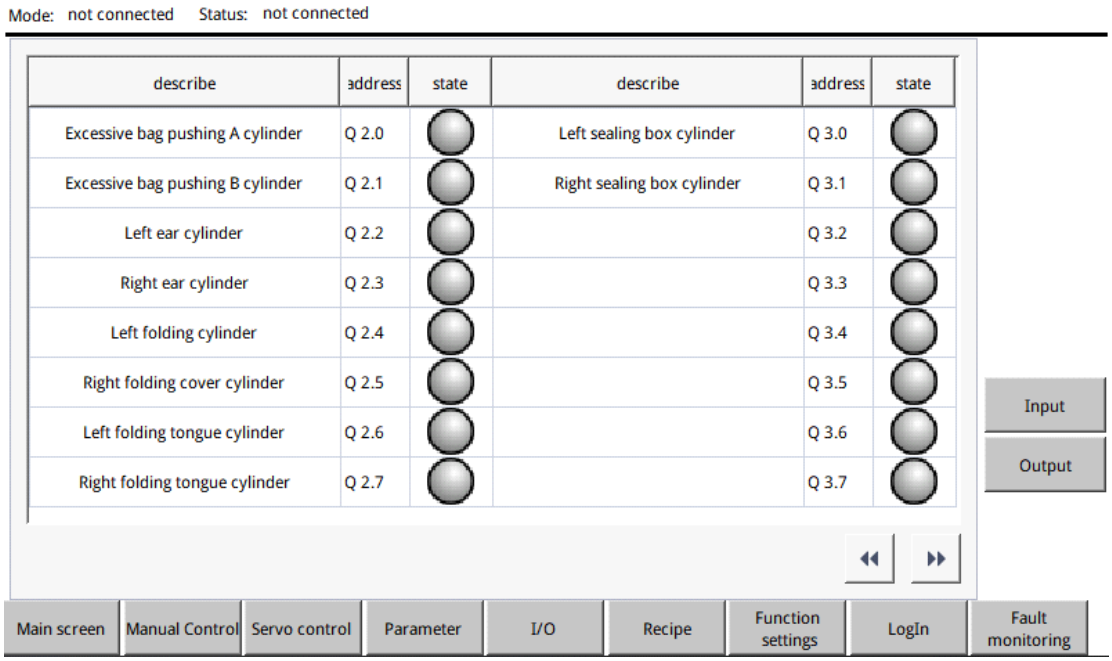

Mode: not connected Status: not connected
describe address state describe address state
I 4.0 Left bag counting photoelectric I 5.0
I 4.1 Right bag counting photoelectric I 5.1
I 4.2 Left material rack shortage detection I 5.2
I 4.3 Right material rack shortage detection I 5.3
I 4.4 Pressing cylinder Original Position Magnetic Open I 5.4
I 4.5 Pushing cylinder Original Position Magnetic Open I 5.5
I 4.6 Safety Gate 9 I 5.6
I 4.7 Safety Gate 10 I 5.7
Input
Output
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring

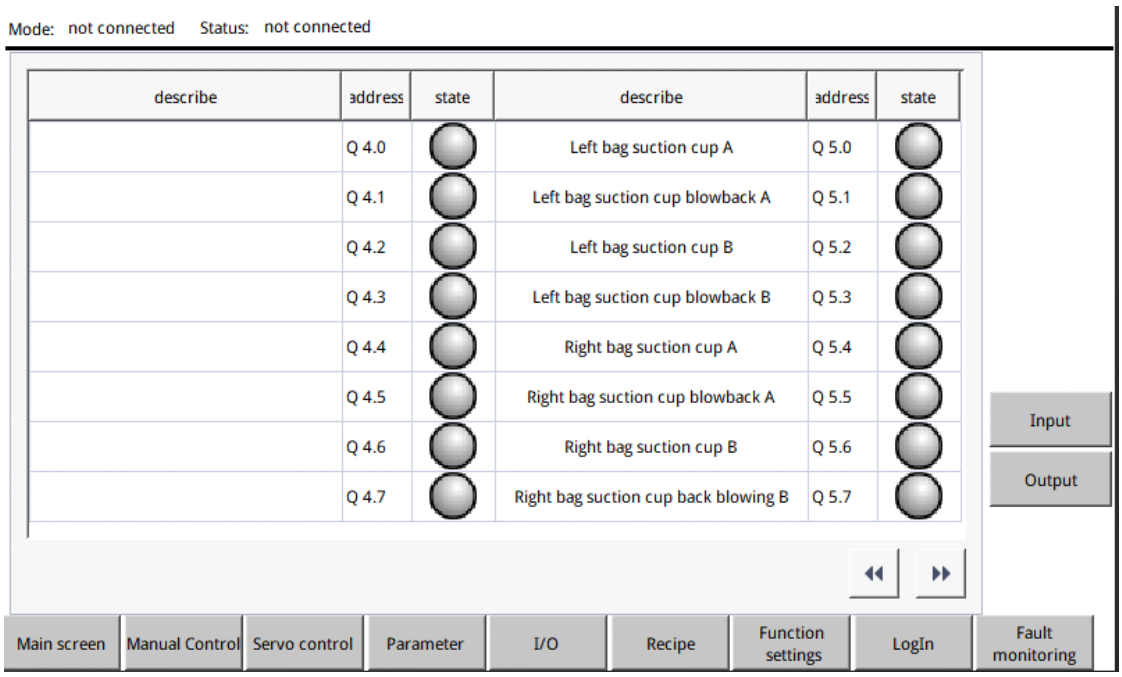


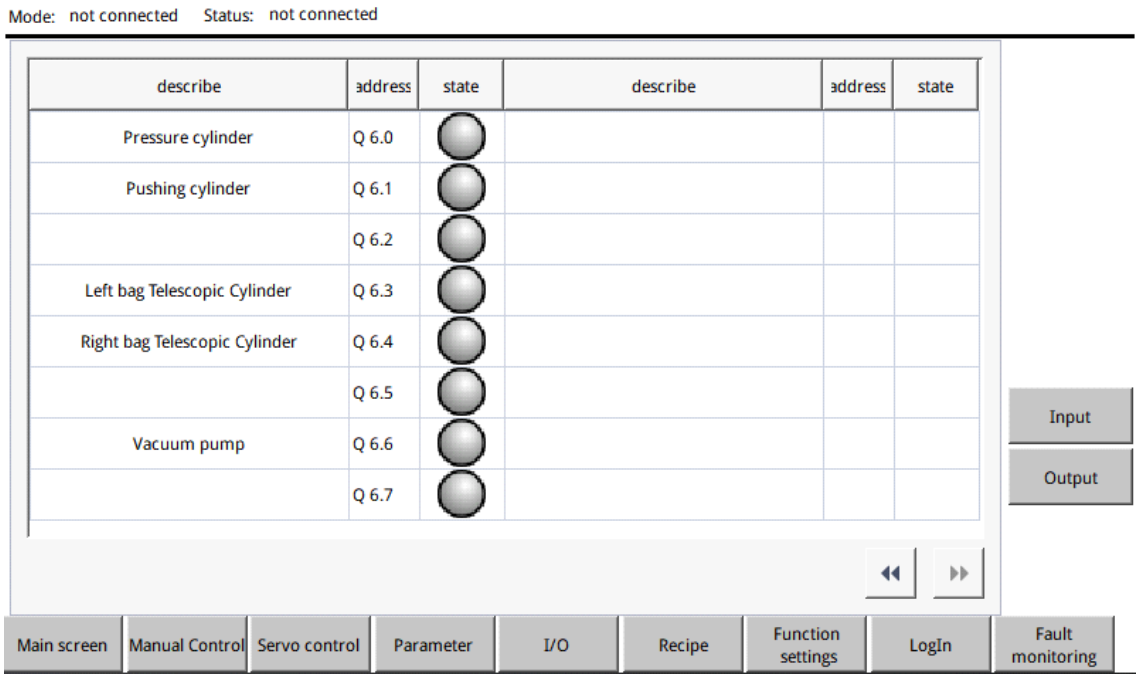

PLC input point information, when the input indicator light is gray, the corresponding input has no signal access, otherwise there is input.

## 3.8 Output information interface



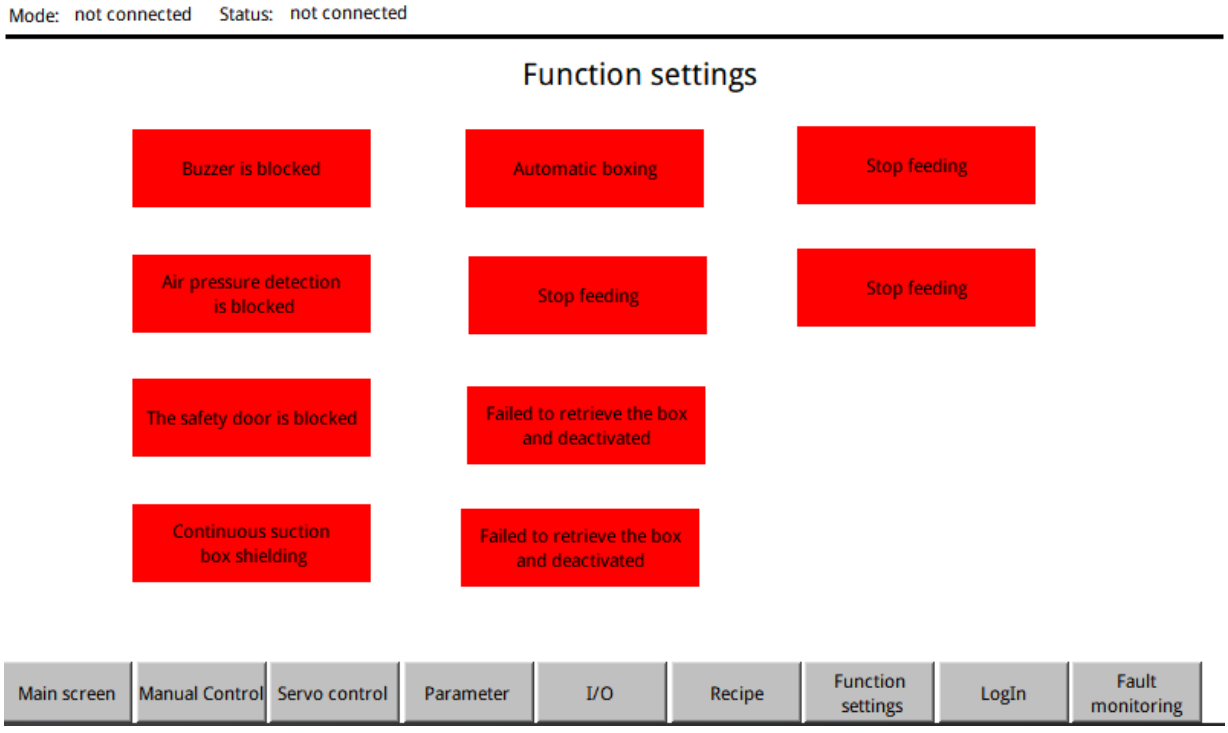

Mode: not connected Status: not connected
describe
address
state
describe
address
state
Excessive bag pushing A cylinder
Q 2.0
Left sealing box cylinder
Q 3.0
Excessive bag pushing B cylinder
Q 2.1
Right sealing box cylinder
Q 3.1
Left ear cylinder
Q 2.2
Q 3.2
Right ear cylinder
Q 2.3
Q 3.3
Left folding cylinder
Q 2.4
Q 3.4
Right folding cover cylinder
Q 2.5
Q 3.5
Left folding tongue cylinder
Q 2.6
Q 3.6
Right folding tongue cylinder
Q 2.7
Q 3.7
Input
Output
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring

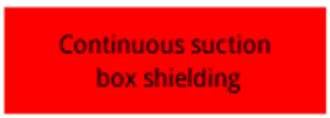
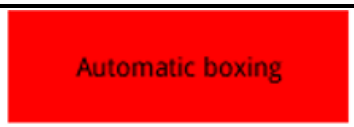
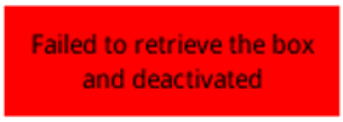
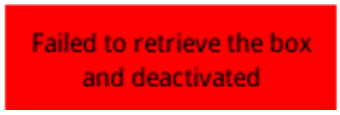

Mode: not connected Status: not connected
describe
address
state
describe
address
state
Q 4.0
Left bag suction cup A
Q 5.0
Q 4.1
Left bag suction cup blowback A
Q 5.1
Q 4.2
Left bag suction cup B
Q 5.2
Q 4.3
Left bag suction cup blowback B
Q 5.3
Q 4.4
Right bag suction cup A
Q 5.4
Q 4.5
Right bag suction cup blowback A
Q 5.5
Q 4.6
Right bag suction cup B
Q 5.6
Q 4.7
Right bag suction cup back blowing B
Q 5.7
Input
Output
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring



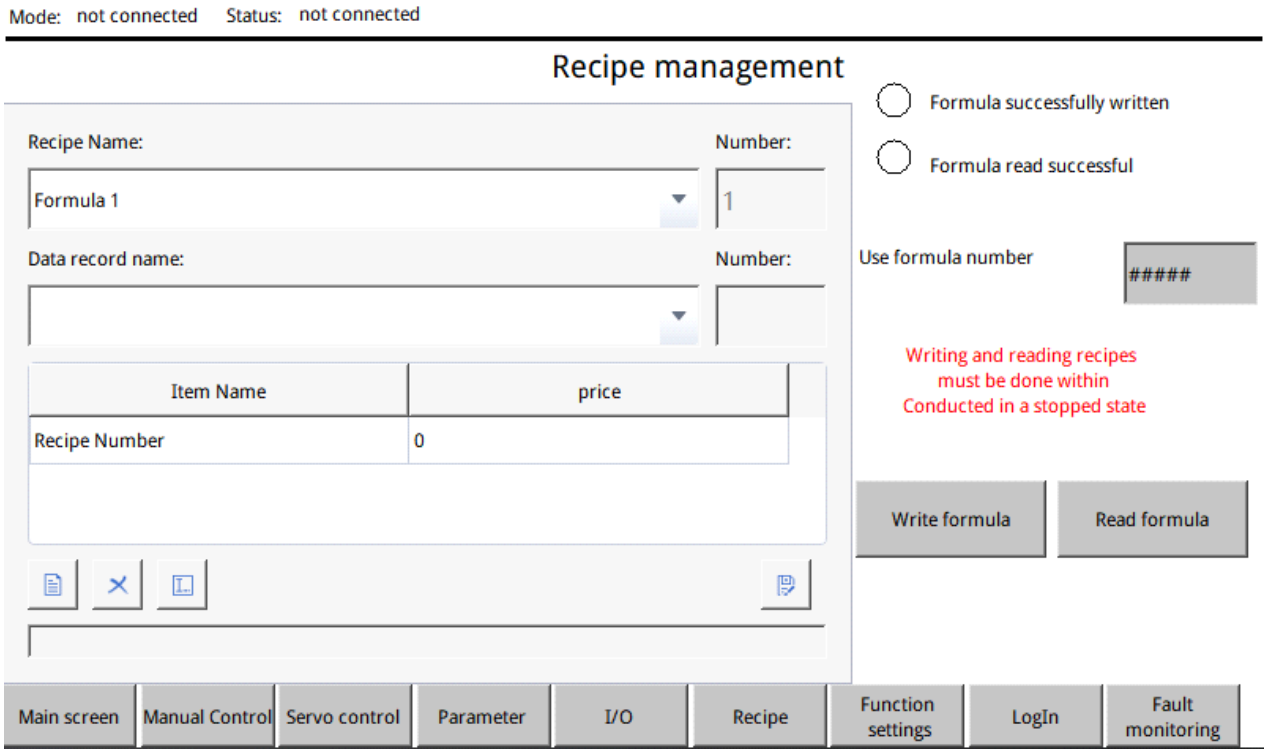

PLC output point information, when the input indicator light is gray, there is no output, otherwise there is output.

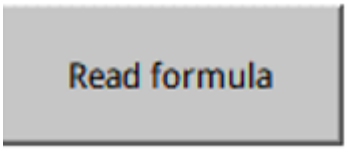
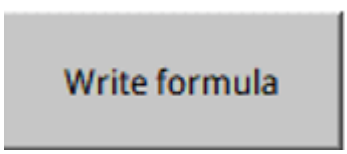
## 3.9 Function Settings Interface



| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | The buzzer has been blocked |  | Press this button, and the fault will not issue an audio alarm. Status abnormalities will not trigger the alarm (use with caution). |
| 2 | Air pressure detection has been shielded |  | Press this button, air pressure detection will be disabled, and abnormal air source pressure will not trigger the alarm (use with caution). |
| 3 | The security door has been blocked |  | Press this button, the security door will be disabled, and the security door will not trigger the alarm when it is opened when running (use with caution). |
| 4 | Continuous suction box shielding |  | Press this button, the suction box will not be judged by whether there is material, and the box will continue to be removed. |
| 5 | Automatic boxing |  | Press this button, and the boxing action will no longer be completed automatically. |
| 6 | Deactivation of feeding |  | Press this button, and the feeding action will stop. |
| 7 | Disabled failure to pick up the box |  | Press this button, and the failure to pick up the box will not trigger the alarm. |
| 8 | Deactivation of feeding and unloading |  | Press this button, and the feeding and unloading action will stop. |
| 9 | Deactivation of the left bag |  | Press this button, and the action of taking the left bag will stop. |
| 10 | Right bag removal disabled |  | Press this button, and the right bag removal action will stop. |

# 3.10 Recipe management interface




| NO. | Description | Refer to picture | Explanation |
|---|---|---|---|
| 1 | Formula name |   | self-defined formula name. |
| 2 | Data record name |   | self-defined recipe data name. |
| 3 | Read the recipe operation |   | Select 'Use Recipe Number' and press and hold the read the recipe button for 1 second, and the data in the recipe will be restored to the specified variable. |
| 4 | Write to the recipe operation |   | Select 'Use Recipe Number' and press and hold the write to the recipe button for 1 second, and the data in the parameter variable will be saved in the specified formula number. |

From left to right：create a new record name, delete the data of the current formula, and rename the current data name.

# 4. Fault information and handling methods

## 4.1 Fault information interface**Figure4-1-1**

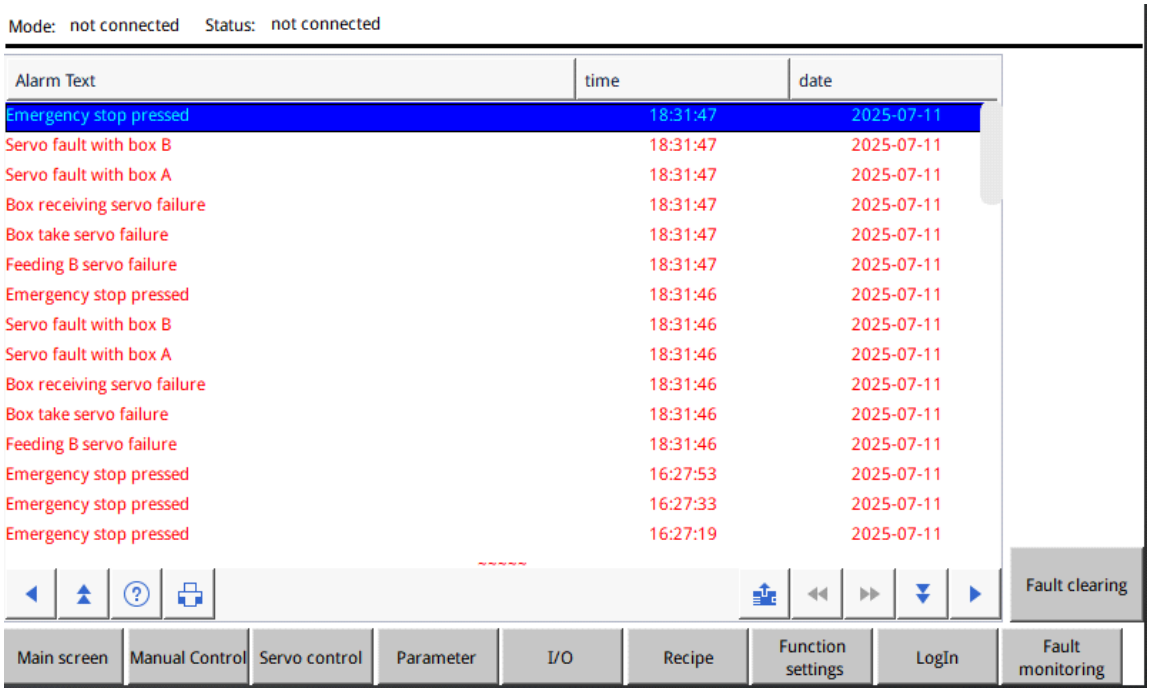



Figure 4-1-1

Fault interface: Fault monitoring interface to view the current alarm information

Enter the alarm message bar of the fault monitoring interface as shown in Figure 4-1-1

Some faults can be reset by the "Fault Clear" button.

## 4.2 HMI fault information list

| NO. | Text | Explanation |
|---|---|---|
| 1 | Compressed air pressure low | When the pressure sensor detects that the air source pressure remains consistently below the preset value, the system triggers an alarm. |
| 2 | Feeding B servo failure | The feeding B servo system has an abnormality, resulting in the inability to execute the control command normally and triggering an alarm. |
| 3 | Pushing servo failure | The pushing servo system is abnormal, resulting in the inability to execute control instructions normally and triggering an alarm. |
| 4 | Box take servo failure | The box picking servo system is abnormal, causing the control command to be unable to be executed normally and triggering an alarm. |
| 5 | Box receiving servo failure | The box receiving servo system has an abnormality, resulting in the inability to execute control commands normally and trigger an alarm. |
| 6 | Servo fault with box A | The servo system with box A has an abnormality, resulting in the inability to execute the control command normally and trigger an alarm. |
| 7 | Servo fault with box B | The servo system of Box B has malfunctioned, preventing the execution of control instructions normally and triggering an alarm. |
| 8 | Virtual spindle fault | If there are problems with the software logic, signal transmission or interconnection of the multi-axis collaborative system, it will result in the failure of multi-axis synchronization or trajectory control. |
| 9 | Feeding A servo torque exceeds the limit | The torque output by the 送料 A servo system exceeded the preset value, triggering a protective alarm in the system. |
| 10 | Feeding B servo torque exceeds the limit | The torque output by the feeding B servo system exceeds the preset value, triggering a protective alarm in the system. |
| 11 | Pushing servo torque exceeds the limit | The torque output by the feeding servo system exceeded the preset value, triggering a protective alarm in the system. |
| 12 | Box taking servo torque exceeds the limit | The torque output by the box servo system exceeded the preset value, triggering a protective alarm of the system. |

| | | |
|---|---|---|
| 13 | Box receiving servo torque exceeds the limit | The torque output by the receiving box servo system exceeded the preset value, triggering a protective alarm of the system. |
| 14 | Box A servo torque exceeds the limit | The torque output by the servo system of Box A exceeded the preset value, triggering a protective alarm in the system. |
| 15 | Box B servo torque exceeds the limit | The torque output by the Box B servo system exceeded the preset value, triggering a protective alarm in the system. |
| 16 | Delivery bag A servo failure | The servo system of bag A has malfunctioned, preventing it from properly executing the control instructions and triggering an alarm. |
| 17 | Delivery bag B servo failure | The servo system of Bag B has malfunctioned, preventing it from properly executing control instructions and triggering an alarm. |
| 18 | Bag A servo malfunction | The servo system of bag A has malfunctioned, preventing it from properly executing the control instructions and triggering an alarm. |
| 19 | Bag B servo malfunction | The servo system of bag B has malfunctioned, preventing it from properly executing the control instructions and triggering an alarm. |
| 20 | Handheld box emergency stop pressed | The emergency stop button on the portable operation handheld box was activated. |
| 21 | Emergency stop pressed | The emergency stop device in the safety system that is fixed to the equipment was activated. |
| 22 | The safety door1 has been opened | The safety interlock device 1 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 23 | The safety door2 has been opened | The safety interlock device 2 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 24 | The safety door3 has been opened | The safety interlock device 3 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 25 | The safety door4 has been opened | The safety interlock device 4 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 26 | The safety door5 has been opened | The safety interlock device 5 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |

| | | |
|---|---|---|
| 27 | The safety door6 has been opened | The safety interlock device 6 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 28 | The safety door7 has been opened | The safety interlock device 7 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 29 | The safety door8 has been opened | The safety interlock device 8 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 30 | The safety door9 has been opened | The safety interlock device 9 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 31 | The safety door10 has been opened | The safety interlock device 10 for isolating and protecting the dangerous areas of personnel and equipment was activated, triggering an alarm. |
| 32 | Delivery bag A servo torque exceeds the limit | The torque output by the servo system of bag A exceeded the preset value, triggering a protective alarm in the system. |
| 33 | Delivery bag B servo torque exceeds the limit | The torque output by the Bag B servo system exceeded the preset value, triggering a protective alarm in the system. |
| 34 | The servo torque of bag A exceeds the limit | The torque output by the servo system of bag A exceeded the preset value, triggering a protective alarm of the system. |
| 35 | The servo torque of bag B exceeds the limit | The torque output by the Bag B servo system exceeded the preset value, triggering a protective alarm of the system. |
| 36 | Box taking and forming failed | When it is detected that the box body grasping process or the box body shape formation process does not meet the standard requirements, a protective alarm is triggered. |
| 37 | Pressure cylinder malfunction | The pressurizing cylinder failed to complete the extension and retraction actions as per the instructions, or the action process was sluggish or misaligned, triggering an alarm. |
| 38 | Pushing cylinder malfunction | The push material cylinder failed to complete the extension and retraction actions as per the instructions, or the action process was sluggish or misaligned, triggering an alarm. |
| 39 | Pushing bag cylinder | The pusher and bag press cylinder failed to complete the extension and retraction actions as per the |

| | | |
|---|---|---|
| | malfunction | instructions, or the action process was sluggish or misaligned, triggering an alarm. |
| 40 | Out box emergency stop pressed | The emergency stop device installed in the safety system of the feeding area was activated. |
| 41 | Feeding emergency stop pressure | The emergency stop device installed in the safety system at the exit conveyor belt was activated. |
| 42 | The servo torque of Left box Up down exceeds the limit | The emergency stop device fixed in the safety system at the exit conveyor belt was activated. The torque output by the left bag retrieval lifting servo system exceeded the preset value, triggering a protective alarm of the system. |
| 43 | Left box Up down servo malfunction | The left bag lifting and lowering servo system malfunctioned, preventing the normal execution of control instructions and triggering an alarm. |
| 44 | The servo torque of Right box Up down exceeds the limit | The torque output by the right bag lifting and lowering servo system exceeded the preset value, triggering a protective alarm of the system. |
| 45 | Right box Up down servo malfunction | The right bag lifting and lowering servo system has malfunctioned, preventing the normal execution of control instructions and triggering an alarm. |

## 4.3 HMI fault information description

| condition | solution |
|---|---|
| Emergency stop | When the "Emergency Stop" button is pressed, HMI displays the alarm text. |
| Low air pressure | If the air pressure is insufficient, check the gas source. |
| Security door switch alarm | The security door is opened, and the security door can be closed. |
| Virtual axis failure | Restart the PLC and click the "Clear Fault" button. If you still report a fault, please contact the administrator. |
| Servo failure | Query the servo fault manual |
| Servo torque exceeds the | If there is any obstacle within the motor rotation radius, please remove it. If there is no possibility of increasing the torque of the synchronous |

| | |
|---|---|
| limit | belt, please increase the servo torque limit appropriately. |
| Cylinder failure | When the cylinder is moving, the magnetic switch is not sensed within the specified time, and it is determined that the cylinder expansion and contraction is faulty. |

# 5. Servo drive fault code query table

## 5.1 Faults and Warnings

Faults and warnings are divided into the following three levels based on severity: No.1 > No.2 > No.3.

■ No. 1 non-resettable fault

No. 1 resettable fault

No. 2 resettable fault

No. 3 resettable warning

"Resettable" means the keypad stops displaying the fault/warning once receiving the reset signal.

To reset a fault/warning, use one of the following two methods:

Set 200D-02h to 1 (Fault reset).

Set the rising edge of bit7 of the control word 0x6040 through the host controller.

To reset a No. 1 or No. 2 fault, turn off the S-ON signal and send a fault reset signal.

For No. 3 warnings, the servo drive resets warnings automatically after the warning source is cleared.

**Related parameter**

| Para. No. | Name | Value Range | Function | Setting Condition | Effective Time | Default Value |
|---|---|---|---|---|---|---|
| 200Dh 02h | Fault reset | 0: No operation 1: Reset the fault and warning | Used to stop the keypad from displaying the fault/warning when a resettable fault/warning occurs. After fault/warning reset, 200Dh-02h is | At stop | Immediately | 0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | restored to 0 (No operation) immediately. | | | |

## Solutions to faults and warnings occurred upon start

| Start Process | Fault Symptom | Cause | Confirming Method |
|---|---|---|---|
| Switch on the control power supply (L1C, L2C) and main power supply (L1, L2, L3) | The LED neither lights up nor displays "ry". | 1. The voltage of the control circuit power supply is abnormal. | Check whether the value of H0B-63 is 1.<br>Measure the AC voltage between L1C and L2C |
| | | 2. Phase loss occurs on the input power supply. | Check whether the value of H0B-63 is 2.<br>Voltage must be present in all the phases of a three-phase 380<br>V power supply. |
| | | 3. The voltage of the main circuit power supply is abnormal. | Check whether the value of H0B-63 is 3.<br>◆ For single-phase 220 V models, measure the AC voltage<br>between L1 and L2. The keypad displays "nr" when the DC<br>bus voltage amplitude (between terminals P and N) of the main circuit power supply is lower than 235 V.<br>◆ For three-phase 220 V/380 V models, measure the AC voltage<br>among L1, L2, and L3. The keypad displays "nr" when the DC<br>bus voltage amplitude (between terminals P and N) of the main circuit power supply is lower than 235 V/451 V. |

| | | | |
|---|---|---|---|
| | | 4. The servo drive is faulty. | - |
| | The keypad displays | See "6.3 Solutions to Faults" and "6.4 Solutions to Warnings" for solutions. "Exxx.x". | |
| | The keypad displays "ry" when preceding faults are cleared | | |

| Fault | Display | Name | type | Rest | Fault Range | Error Code (603Fh) | Auxiliary Code (203Fh) |
|---|---|---|---|---|---|---|---|
| E101 | E101.0 | System parameter error | No.1 | No | Servo drive fault | 0x6320 | 0x01010101 |
| | E101.1 | 2000h/2001h parameter error | No.1 | No | Servo drive fault | 0x6320 | 0x01010101 |
| E102 | E102.0 | FPGA communication initialization error | No.1 | No | Servo drive fault | 0x7500 | 0x01020102 |
| | E102.8 | Software version mismatch | No.1 | No | Servo drive fault | 0x7500 | 0x01020102 |
| E104 | E104.1 | MCU operation timeout | No.1 | No | Servo drive fault | 0x7500 | 0x11040104 |
| | E104.2 | Current loop operation timeout | No.1 | No | Servo drive fault | 0x7500 | 0x11040104 |
| | E104.4 | MCU reference update timeout | No.1 | No | Servo drive fault | 0x7500 | 0x11040104 |
| E108 | E108.0 | Parameter write error | No.2 | Yes | Servo drive fault | 0x5530 | 0x01080108 |
| | E108.1 | Parameter write error | No.2 | Yes | Servo drive fault | 0x5531 | 0x01080108 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | E108.2 | Invalid check on data written in EEPROM | No.2 | Yes | Servo drive fault | 0x5532 | 0x01080108 |
| | E108.3 | Invalid check on data written in EEPROM | No.2 | Yes | Servo drive fault | 0x5533 | 0x01080108 |
| E120 | E120.0 | Unknown encoder type | No.1 | No | Axis fault | 0x7122 | 0x01200120 |
| | E120.1 | Unknown encoder type | No.1 | No | Axis fault | 0x7122 | 0x01200120 |
| | E120.2 | Unknown encoder type | No.1 | No | Axis fault | 0x7122 | 0x01200120 |
| | E120.5 | Motor current and drive current mismatch | No.1 | No | Axis fault | 0x7122 | 0x01200120 |
| | E120.6 | FPGA and motor model mismatch | No.1 | No | Axis fault | 0x7122 | 0x01200120 |
| E122 | E122.0 | Multi-turn absolute encoder setting error | No.2 | Yes | Axis fault | 0x6320 | 0x01220122 |
| | E122.1 | Different DIs assigned with the same function | No.2 | Yes | Axis fault | 0x6320 | 0x01220122 |
| | E122.3 | Upper limit invalid | No.2 | Yes | Axis fault | 0x6320 | 0x01220122 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E136 | E136.0 | Encoder parameter error | No.1 | No | Axis fault | 0x7305 | 0x01360136 |
| | E136.1 | Encoder communication error | No.1 | No | Axis fault | 0x7305 | 0x01360136 |
| E140 | E140.0 | Encryption chip check error | No.1 | No | Servo drive fault | 0x0140 | 0x0140 |
| | E140.1 | Encryption chip check failure | No.1 | No | Servo drive fault | 0x0140 | 0x0140 |
| E150 | E150.0 | STO signal input protection activated | No.1 | Yes | Servo drive fault | 0x0150 | 0x01500150 |
| | E150.1 | STO signal input error | No.1 | Yes | Servo drive fault | 0x0150 | 0x01500150 |
| | E150.2 | Abnormal voltage detected | No.1 | Yes | Servo drive fault | 0x0150 | 0x01500150 |
| | E150.3 | STO upstream optocoupler detection failure | No.1 | Yes | Servo drive fault | 0x0150 | 0x01500150 |
| | E150.4 | PWM Buffer detection failure | No.1 | Yes | Servo drive fault | 0x0150 | 0x01500150 |
| E201 | E201.0 | Phase-P overcurrent | No.1 | No | Servo drive fault | 0x2312 | 0x12010201 |
| | E201.1 | Phase-U overcurrent | No.1 | No | Axis fault | 0x2312 | 0x12010201 |
| | E201.2 | Phase-V overcurrent | No.1 | No | Axis fault | 0x2312 | 0x12010201 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | E201.4 | Phase-N overcurrent | No.1 | No | Servo drive fault | 0x2312 | 0x12010201 |

## 5.2 Communication Faults and Warning Codes

| Fault | Display | Name | type | Rest | Fault Range | Error Code (603Fh) | Auxiliary Code (203Fh) |
|---|---|---|---|---|---|---|---|
| E208 | E208.0 | MCU position reference updated frequently | No.1 | Yes | Axis fault | 0x0208 | 0x02080208 |
| | E208.2 | Encoder communication timeout | No.1 | Yes | Axis fault | 0x0208 | 0x02080208 |
| | E208.3 | Current sampling fault | No.1 | Yes | Axis fault | 0x0208 | 0x02080208 |
| | E208.4 | FPGA current loop operation timeout | No.1 | Yes | Axis fault | 0x0208 | 0x02080208 |
| E210 | E210.0 | Output short-circuited to ground | No.1 | No | Axis fault | 0x2330 | 0x02100210 |
| E234 | E234.0 | Runaway protection | No.1 | No | Axis fault | 0x0234 | 0x02340234 |
| E400 | E400.0 | Main circuit overvoltage | No.1 | Yes | Servo drive fault | 0x3210 | 0x04000400 |
| E410 | E410.0 | Main circuit undervoltage | No.1 | Yes | Servo drive fault | 0x3220 | 0x04100410 |
| E420 | E420.0 | Phase loss fault | No.2 | Yes | Servo drive fault | 0x3130 | 0x04200420 |
| E430 | E430.0 | Control circuit undervoltage | No.2 | Yes | Servo drive fault | 0x0430 | 0x04300430 |
| E500 | E500.0 | Motor overspeed | No.1 | Yes | Axis fault | 0x8400 | 0x05000500 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | E500.1 | Speed feedback overflow | No.1 | Yes | Axis fault | 0x8400 | 0x05000500 |
| | E500.2 | FPGA position feedback pulse overspeed | No.1 | Yes | Axis fault | - | 0x05000500 |
| E602 | E602.0 | Angle auto-tuning erro | No.1 | Yes | Axis fault | 0x0602 | 0x06020602 |
| | E602.2 | Wrong UVW phase sequence detected during angle auto-tuning | No.1 | Yes | Axis fault | 0x0602 | 0x06020602 |
| E605 | E605.0 | Speed upon S-ON too high | No.1 | Yes | Axis fault | 0x8400 | 0x06050605 |
| E620 | E620.0 | Motor overload | No.1 | Yes | Axis fault | 0x3230 | 0x06200620 |
| E630 | E630.0 | Motor stall | No.1 | Yes | Axis fault | 0x7121 | 0x06300630 |
| E640 | E640.0 | IGBT over-temperature | No.1 | Yes | Axis fault | 0x4210 | 0x06400640 |
| | E640.1 | Flywheel diode over-temperature | No.1 | Yes | Axis fault | 0x4210 | 0x06400640 |
| E650 | E650.0 | Heatsink over-temperature | No.1 | Yes | Axis fault | 0x4210 | 0x06400650 |
| E660 | E660.0 | Air-cooled motor over-temperature | No.1 | Yes | Axis fault | 0x4210 | 0x06600660 |
| E661 | E661.0 | Auto-tuned gains too low | No.2 | Yes | Axis fault | 0x4210 | 0x06610661 |
| E731 | E731.0 | Encoder battery failure | No.2 | Yes | Axis fault | 0x0661 | 0x07310731 |
| E733 | E733.0 | Encoder multi-turn counting error | No.2 | Yes | Axis fault | 0x7305 | 0x07330733 |
| E735 | E735.0 | Encoder multi-turn counting overflow | No.2 | Yes | Axis fault | 0x7305 | 0x07350735 |
| E740 | E740.2 | Absolute encoder error | No.1 | No | Axis fault | 0x7305 | 0x67400740 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | E740.3 | Absolute encoder single-turn calculation error | No.1 | No | Axis fault | 0x7305 | 0x67400740 |
| | E740.6 | Encoder write error | No.1 | No | Axis fault | 0x7305 | 0x67400740 |
| E755 | E755.0 | Nikon encoder communication failure | No.1 | No | Axis fault | - | 0x07550755 |
| E760 | E760.0 | Encoder over-temperature | No.2 | Yes | Axis fault | 0x4210 | 0x07600760 |
| E765 | E765.0 | Nikon encoder beyond the limit | No.1 | No | Axis fault | - | 0x07650765 |
| EB00 | EB00.0 | Position deviation too large | No.2 | Yes | Axis fault | 0x8611 | 0x1B000B00 |
| | EB00.1 | Position deviation overflow | No.2 | Yes | Axis fault | 0x8611 | 0x1B000B00 |
| EA33 | EA33.0 | Encoder read/write check error | No.1 | No | Axis fault | 0x7305 | 0x0A330A33 |
| EB01 | EB01.1 | Position reference increment too large for once | No.2 | Yes | Axis fault | 0x6320 | 0x1B010B01 |
| | EB01.2 | Position reference increment too large continuously | No.2 | Yes | Axis fault | 0x6320 | 0x2B010B01 |
| | EB01.3 | Reference overflow | No.2 | Yes | Axis fault | 0x6320 | 0x3B010B01 |
| | EB01.4 | EB01.4: Target position beyond upper/lower limit | No.2 | Yes | Axis fault | 0x6320 | 0x4B010B01 |
| EE09 | EE09.0 | Software position limit setting error | No.2 | Yes | Axis fault | 0x6320 | 0x0E090E09 |
| | EE09.1 | Home setting error | No.2 | Yes | Axis fault | 0x6320 | 0x1E090E09 |
| | EE09.2 | Gear ratio beyond the limit | No.2 | Yes | Axis fault | 0x6320 | 0x2E090E09 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | EE09.3 | No synchronization signal | No.2 | Yes | Axis fault | 0x6320 | 0x3E090E09 |
| | EE09.5 | PDO mapping beyond the limit | No.2 | Yes | Axis fault | 0x6320 | 0x5E090E09 |
| EE08 | EE08.0 | SYNC signal loss | No.2 | Yes | Axis fault | 0x0FFF | 0x0E086E08 |
| | EE08.1 | Network status switchover error | No.2 | Yes | Axis fault | 0x0FFF | 0x1E086E08 |
| | EE08.2 | IRQ loss | No.2 | Yes | Axis fault | 0x0FFF | 0x2E086E08 |
| | EE08.3 | LAN cable connected improperly | No.2 | Yes | Axis fault | 0x0FFF | 0x3E086E08 |
| | EE08.4 | Data frame loss protection error | No.2 | Yes | Axis fault | 0x0FFF | 0x4E086E08 |
| | EE08.5 | Data frame transfer error | No.2 | Yes | Axis fault | 0x0FFF | 0x5E086E08 |
| | EE08.6 | Data update timeout | No.2 | Yes | Axis fault | 0x0FFF | 0x6E086E08 |
| EE11 | EE11.0 | ESI check error | No.2 | Yes | Servo drive fault | 0x5530 | 0x0E110E11 |
| | EE11.1 | EEPROM read failure | No.2 | Yes | Servo drive fault | 0x5530 | 0x1E110E11 |
| | EE11.2 | EEPROM update failure | No.2 | Yes | Servo drive fault | 0x5530 | 0x2E110E11 |
| EE12 | EE12.0 | Ether CAT external device error | No.1 | No | Servo drive fault | 0x0E12 | 0x0E120E12 |
| EE13 | EE13.0 | Synchronization cycle setting error | No.2 | Yes | Servo drive fault | 0x6320 | 0x0E130E13 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EE15 | EE15.0 | Number of synchronization cycle errors too large | No.2 | Yes | Servo drive fault | 0x0E15 | 0x0E150E15 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E121 | E121.0 | Invalid S-ON command | No.3 | Yes | Warning | 0x0121 | 0x01210121 |
| E600 | E600.0 | Inertia auto-tuning failure | No.3 | Yes | Warning | 0x0600 | 0x06000600 |
| E601 | E601.0 | Homing timeout | No.3 | Yes | Warning | 0x0601 | 0x06010601 |
| | E601.1 | Home switch error | No.3 | Yes | Warning | 0x0601 | 0x16010601 |
| | E601.2 | Homing mode setting error | No.3 | Yes | Warning | 0x6320 | 0x2601E602 |
| E730 | E730.0 | Encoder battery warning | No.3 | Yes | Warning | 0x7305 | 0x07300730 |
| E900 | E900.0 | Emergency stop | No.3 | Yes | Warning | 0x0900 | 0x09000900 |
| E902 | E902.0 | Invalid DI setting | No.3 | Yes | Warning | 0x6320 | 0x09020902 |
| | E902.1 | Invalid DO setting | No.3 | Yes | Warning | 0x0902 | 0x19020902 |
| E908 | E908.0 | Model identification check byte invalid | No.3 | Yes | Warning | 0x0908 | 0x09080908 |
| E909 | E909.0 | Motor overload warning | No.3 | Yes | Warning | 0x3230 | 0x09090909 |
| E920 | E920.0 | Regenerative resistor overload | No.3 | Yes | Warning | 0x3210 | 0x09200920 |
| E922 | E922.0 | Resistance of external regenerative resistor too small | No.3 | Yes | Warning | 0x6320 | 0x09220922 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E924 | E924.0 | Braking transistor over-temperature | No.3 | Yes | Warning | 0x3230 | 0x09240924 |
| E941 | E941.0 | Parameter modifications not activated | No.3 | Yes | Warning | 0x6320 | 0x09410941 |
| E942 | E942.0 | Parameter saved frequently | No.3 | Yes | Warning | 0x7600 | 0x09420942 |
| E950 | E950.0 | Forward overtravel warning | No.3 | Yes | Warning | 0x5443 | 0x09500950 |
| E952 | E952.0 | Reverse overtravel warning | No.3 | Yes | Warning | 0x5444 | 0x09520952 |
| EA41 | EA41.0 | Torque ripple compensation failure | No.3 | Yes | Warning | 0x0A41 | 0x0A410A41 |

## 5.3 Solutions to Faults

■ E101.0: System parameter error

Direct cause:

The total number of parameters changes, which generally occurs after software update.

Parameter values in groups 2002h and above exceed the limit, which generally occurs after software update.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1. The control power voltage drops instantaneously. | Check whether the voltage drops during control power (L1C, L2C) cutoff or whether instantaneous power failure occurs | Restore system parameters to default values (2002-20h = 1), and write parameters again. |
| | Measure whether the voltage input to the control circuit cable during operation is within the following range:<br>220 V servo drive:<br>Effective value: 220 V to 240 V<br>Allowable deviation: –10% to +10% (198 V to 264 V)<br>380 V servo drive:<br>Effective value: 380 V to 440 V<br>Allowable deviation: –10% to +10% (342 V to 484 V) | Increase the power capacity or replace with a power supply of larger capacity. Restore system parameters to default values (2002 20h = 1), and write parameters again. |
| 2. Instantaneous power failure occurs during parameter saving. | Check whether instantaneous power failure occurs during parameter saving. | Power on the system again, restore system parameters to default values (2002-20h = 1), and write parameters again. |
| 3. The number of | Check whether | Change the write mode and |

| | | |
|---|---|---|
| write operations exceeds the limit. | parameters are updated frequently through the host controller. | write parameters again. If the servo drive is faulty, replace it. |
| 4. The software has been updated. | Check whether the software has been updated | Reset the servo drive model and the servo motor model, and restore system parameters to default values (2002-20h = 1). |
| 5. The servo drive is faulty. | If the fault persists after several times of restart and parameter initialization, the servo drive is faulty | Replace the servo drive. |

■ E101.1: 2000h/2001h parameter error

Direct cause:

The total number of parameters changes, which generally occurs after software update.

Parameter values in group 2000h or 2001h exceed the limit, which generally occurs after software update.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1. Instantaneous power failure occurs during parameter saving. | Check whether instantaneous power failure occurs during parameter saving. | Set the servo drive model (2001-0Bh) to a wrong value first and perform a power cycle, and then set the servo drive model to a correct value and perform a power cycle. |

| | | |
|---|---|---|
| 2. Instantaneous power failure occurs during the write operation. | Check whether instantaneous power failure occurs during writing motor parameters. | Write motor parameters using the software tool |
| 3. The software has been updated. | Check whether the software has been updated. | Set the servo drive model (2001-0Bh) to a wrong value first and perform a power cycle, and then set the servo drive model to a correct value and perform a power cycle. |
| 4. The servo drive is faulty. | If the fault persists after repeated execution of steps 1 and 2 and multiple times of restart, the servo drive is faulty. | Replace the servo drive. |

■ E102.0: FPGA communication initialization error

Direct cause:

The FPGA- or MCU-related hardware is damaged, resulting in communication failure between the MCU and FPGA.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1. The FPGA is faulty.<br>2. The MCU cannot communicate with the FPGA. | The fault persists after the servo drive is powered off and on several times. | 1. Confirm whether the FPGA has been upgraded. Ensure the programming is successful.<br>2. Replace the servo drive. |

■ E102.8: Software version mismatch

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The software version of MCU or FPGA is wrong | Check whether the MCU version (H01-00) is 9xx.x (the fourth digit displayed on the keypad is 9). Check whether the FPGA version (H01-01) is 9xx.x (the fourth digit displayed on the keypad is 9). | Contact Inovance for technical support and update to mutually matching FPGA or MCU software. |

■ E104.1: MCU operation timeout

Direct cause:

The access to MCU times out

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1. The FPGA is faulty. | The fault persists after the servo drive is powered off and on several times | Replace the servo drive. |
| 2. The communication handshake between FPGA and HOST is abnormal. | | |
| 3. Access timeout occurs between HOST and the coprocessor. | | |

■ E104.2: Current loop operation timeout

Direct cause:

The operating time of the current loop exceeds the scheduling time. This fault is reported only in the commissioning stage.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The time interval of MCU torque interrupt scheduling is abnormal. | The fault persists after the servo drive is powered off and on several times. | Replace the servo drive. |

■ E104.4: Command update timeout

Direct cause: Replace the servo drive. Take the moment when entering the interrupt as the starting time. If the duration of the command-write operation in MCU is longer than the start time of the FPGA position and speed regulator, a warning will be reported.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The interrupt time of the current loop is too long. | Check whether the interrupt time of the torque loop is too long through the software tool. | Hide unnecessary functions. |

■ E108.0: Parameter write error

Direct cause: Parameter values cannot be written to EEPROM.

| Root Cause | Confirming | Solution |
|---|---|---|

| | Method | |
|---|---|---|
| An error occurs when parameter values are read in EEPROM | Modify a certain parameter value, power off and on the servo drive again, and check whether the modified value is saved. | If the modified value is not saved and the fault persists after the servo drive is powered off and on again, replace the servo drive. |

■ E108.1: Parameter read error

Direct cause:

Parameter values cannot be read in EEPROM.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| An error occurs when parameter values are read in EEPROM. | Modify a certain parameter value,power on a servo derive again,and check whether the modified value is saved | If the modified value is not saved and the fault persists after the servo drive is powered off and on again, replace the servo drive. |

■ E108.2: Invalid check on data written in EEPROM

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The check on the data written in EEPROM fails. | Modify a certain parameter value, power off and on on again, replace the servo drive. Solution the servo drive again, and check whether the modified value is saved. | If the modified value is not saved and the fault persists after the servo drive is powered off and on again, replace the servo drive. |

■ E108.3: Invalid check on data read in EEPROM

| Root Cause | Confirming Method | Solution |
|---|---|---|
| An error occurs when parameter values are read in EEPROM | Modify a certain parameter value, power off and on the servo drive again, and check whether the modified value is saved. | If the modified value is not saved and the fault persists after the servo drive is powered off and on again, replace the servo drive. |

■ E120.0: Unknown encoder type

Direct cause:

The servo drive detects the encoder model during initialization upon power-on. If the encoder type does not comply with the requirements, the servo drive reports E120.0.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The encoder model does not match the servo drive. | Check whether the encoder model is correct. | Replace the encoder. |

■ E120.1: Unknown motor model

Direct cause:

The servo drive detects the motor model (H00-00) during initialization upon power-on. If the motor model does not exist, the servo drive reports E120.1.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The motor model is set | Check whether H00-00 | Set H00-00 to a proper value |

| | | |
|---|---|---|
| improperly. | (Motor code) is set properly. | that matches the motor model. |

■ E120.2: Unknown drive model

Direct cause:

The servo drive detects the servo drive model (H01-10) during initialization upon power-on. If the servo drive model does not exist, the servo drive reports E120.2.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The servo drive model is set improperly. | Check whether H01-10 (Servo drive series number) is set properly. | Set H01-10 to a proper value that matches the servo drive model. |

■ E120.5: Motor current and drive current mismatch

Direct cause:

The rated output current of the servo drive is higher than the rated current of the motor.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The internal scaling value is abnormal. | Check whether the servo drive model is correct. If the rated current of the set servo drive model is larger than the rated current of the motor,calculation overflow will occur. | Replace with a servo drive of lower rated output current or a motor with higher rated current. |

■ E120.6: FPGA and motor model mismatch

Direct cause:

1. The motor model is set improperly, causing mismatch and malfunction of the servo drive.

2. The motor model is set properly, but the motor encoder is not supported by the servo drive.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The FPGA does not support the motor encoder. | Check whether the motor encoder is supported by the FPGA version (H01-01). | Update FPGA software or replace the motor encoder. |

■ E122.0: Multi-turn absolute encoder setting error

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The motor does not match the absolute position mode or the motor code is set improperly. | Check the motor nameplate to see whether the motor is equipped with an absolute encoder. Check whether 200D-01h (Motor code) is set properly. | Set 200D-01h (Motor code) correctly according to the motor nameplate or replace with a matching motor. |

■ E122.1: Different DIs assigned with the same function

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1.The same function is assigned to different DIs | View 2003-03h, 2003-05h...2003-15h, 2017-01h, and | Assign different DI functions to parameters that have been assigned with the same DI |

| | | |
|---|---|---|
| | 2017-03h...2017-1Fh to check whether they are assigned with the same DI function No. | function. To enable such assignments, restart the control circuit or switch off the S-ON signal and send a "RESET" signal. |
| 2. The DI function No. exceeds maximum setting number allowed for DI functions. | Check whether the MCU software has been updated. | Restore system parameters to default values (2002-20h = 1) and power off and on the servo drive again. |

■ E122.3: Upper limit invalid

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The upper limit value of the mechanical single-turn position exceeds 231 in the absolute position rotation mode. | Check the mechanical gear ratio setpoint, the upper limit of the mechanical single-turn position, and the electronic gear ratio in the absolute position rotation mode (H02-01 = 2). | Reset the mechanical gear ratio, the upper limit of mechanical single-turn position, and the electronic gear ratio to ensure the upper limit of the mechanical single-turn position (reference range) does not exceed 231. |

■ E136.0: Encoder parameter error

Direct cause:

When the servo drive reads parameters in the encoder ROM, no parameters are saved or parameter values are inconsistent with the expected values.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1. The servo drive model does not match the servo motor model | View the servo drive and servo motor nameplates to check whether the devices | Replace with the mutually-matching servo drive and servo motor. |

| | | |
|---|---|---|
| | used are Inovance SV630N series servo drive and servo motor. | |
| 2. A parameter check error occurs or no parameter is stored in the serial incremental encoder ROM. | Check whether the encoder cable provided by Inovance is used. For cable specifications, see 〃1.4 Cable Models〃. Ensure the cable is intact and in good contact at both ends. Measure signals PS+, PS-, +5V and GND at both ends of the encoder cable and observe whether signals at both ends are consistent. For signal definitions, see 〃3 Wiring〃. | Use the encoder cable provided by Inovance. Ensure the cable is connected to the motor securely and tighten the screws on the servo drive side. Use a new encoder cable if necessary. Do not bundle encoder cables together with power cables (RST, UVW). Lay encoder cables and power cables through different routes |
| 3. The servo drive is faulty. | The fault persists after servo drive is powered off and on again. | Replace the servo drive. |

■ E136.1: Encoder communication error

Direct cause:

1. The encoder cable is disconnected.

2. The encoder communication suffers from interference

| Root Cause | Confirming Method | Solution |
|---|---|---|
| A fault occurs on the communication | Observe the value of H0B-28 to see whether it is not 0 | Check whether the encoder cable is connected properly. |

| | | |
|---|---|---|
| between FPGA and the motor encoder during initialization upon power-on. | | Check whether the motor model is set properly.<br>Check whether H01-00 (MCU software version) and H01-01 (FPGA software version) are the correct ones |

■ E140.0: Encryption chip check error

Direct cause:

The check on the encryption chip fails.

Direct cause:

The check on the encryption chip fails.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The encryption software is not programmed. | Power off and on again to check whether the fault persists. | Contact Inovance to program the encryption software again. |

■ E140.1: Encryption chip check failure

Direct cause:

The check on the encryption chip fails.

| Root Cause | Confirming Method | Solution |
|---|---|---|
| The key of the encryption chip is incorrect, causing failure in decrypting the Renesas chip. | 1. Check the softwrae version. Check whether encryption is programmed in the servo drive.<br>2. Check whether the encryption chip is abnormal. | Power off and on the servo drive again. If the fault persists, contact Inovance for maintenance. |

■ E150.0: STO signal input protection activated

Direct cause:

The STO input protection applies (safety state).

| Root Cause | Confirming Method | Solution |
|---|---|---|
| 1. The STO is activated. | Check whether the STO function is activated. | There is no need to take any actions. Clear the fault through the fault reset function after the STO terminal is restored. |
| 2. The STO power supply is abnormal. | Check whether the 24 V power supply of the STO works normally | Measure the 24 V power supply of the STO to check whether it is stable. Tighten the cables that are loose or disconnected. |
| 3. The STO is inactive. | The fault persists after preceding actions are taken. | Replace the servo drive. |

| NOTE | When H0A-21 is set to 0, STO displays the STO state. When H0A-21 is set to 1, STO displays E150.0. |
|---|---|

**Circuit diagram**

Reference Electrical Principle

# 6. Paper box requirements

## 6.1 Shape and size

In order to minimize the downtime of the machine during operation, it is very important to keep the materials of the cartons the same as the maintenance of the machine, and to keep them at an excellent standard level. Some important and useful information about the carton is explained here.

1.The thickness of the required paper for some specific paper boxes should depend on the following factors, such as the type of paper box, the style of the paper box to be made, the weight of the contents, the direction of the paper fibers, etc. The strength of the paper depends on the type of paper, thickness, basic sheet weight, etc. It should be remembered that when the thickness of the paper is doubled, its strength increases by eight times, which is always greater in the direction of the machine of the paper than in the horizontal direction. Therefore, the direction of the machine should always run across the longest folding line, which will help to minimize the wrinkle phenomenon in the box-making process. The type, thickness and strength of the paper must be determined by the price and function. The basic weight of the paper should not be less than 275 grams per square meter.

2.The crease is made on the carton blank, so that it can provide a carton blank with appropriate strength and a folding line that is easy and accurately folded. Making creases is one of the most important operations in the manufacture of cartons. In order to have good performance, there must be a correct relationship between the fold depth/width and the strength of the paper. The relative cracking force of the crease must be 60% of that of the no creases carton. Too shallow creases will cause the lining of the paper to crack, too narrow creases will give pressure to bulge the ridge, too deep creases will cause the paper body to crack, and too wide creases will give wrinkles inside the fold. Poor edge cutting operation will produce powder and connect the pieces to each other. Narrow creases are preferred, but the lining of the paper must not be broken. All creases must have full depth on the full length and meet correctly at all intersections. The width of the crease is about 0.5~0.8mm.

3.Please do not use the same-side design for the color box. The same-side design conflicts with the existing equipment (box folding machine), and additional manpower must be added to fold the box manually.

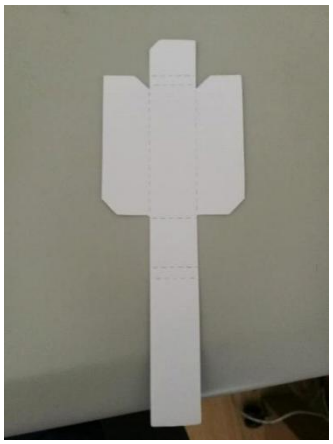
4.It is important to make the paper pieces flat, because the deformed paper box blanks are stacked, which is difficult to operate, and it is also difficult to feed neatly and

smoothly into the processing box. They will also be crowded and stuck in the guide rail and become difficult to shape. Bent and rolled pieces of paper often have bad effects in operation.

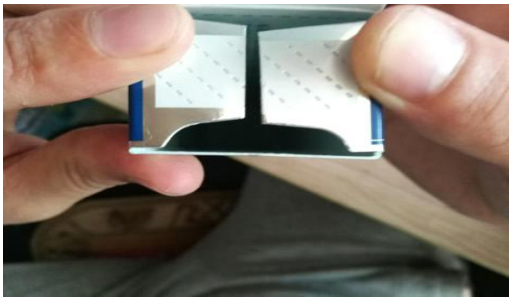
5.When the cardboard box comes in, it needs to be pre-folded in advance. A carton of excellent quality should be easy to open with a little pressure with your fingers and thumb. Cardboard boxes that are difficult to open by hand, or cardboard boxes that are not easy to close, will inevitably cause trouble on the machine. When the materials used in cartons and cartons are of excellent quality, the faster the manufacturing speed, the more important it is.

6.After the product is put into the carton, the size of the carton cannot be changed, and there should be a gap at the top and bottom sealing of the box to facilitate the sealing of the box.

7.If there is an inner lining in the box, the inner lining cannot affect the sealing of the box, and there must be a gap for the sealing box. Reference as shown in the figure.

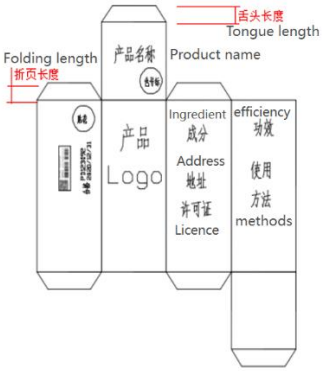


When sealing the box, the gap of the tongue should be 1~1.2 times that of the paper. If the gap is too small, the box will not be sealed, and the sub-grade rate of the box folding machine will increase. The size of the cardboard box edge and the folding page edge is 0.6, as shown in the figure.

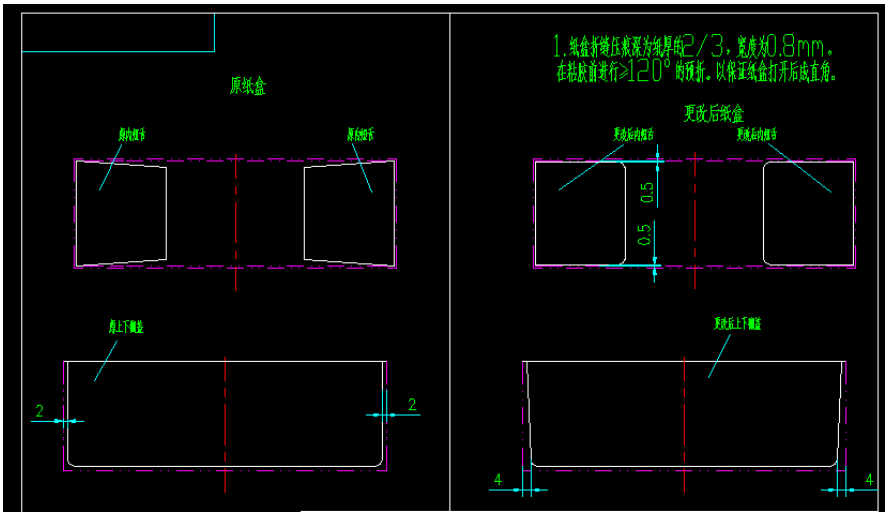


The length of the folding pages on the left and right sides should not exceed 1/2 of the front width of the carton, the length of the tongue is 12mm, the rounded corner is 10,

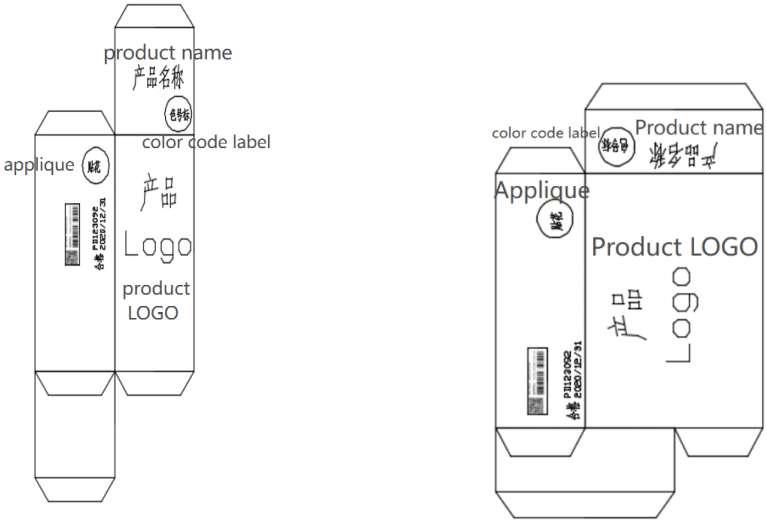
the tongue length is 15, the rounded corner is 12, the width of the open buckle tongue is the width of the box minus the width of two pages of paper, and the width of the hidden buckle tongue is the same as the width of the inside of the carton. If it is too long, it will lead to the box folding machine. Rise. As shown in the picture




The short tongue and upper and lower flaps in the box in the form of dispensing will be slightly changed. As shown in the picture

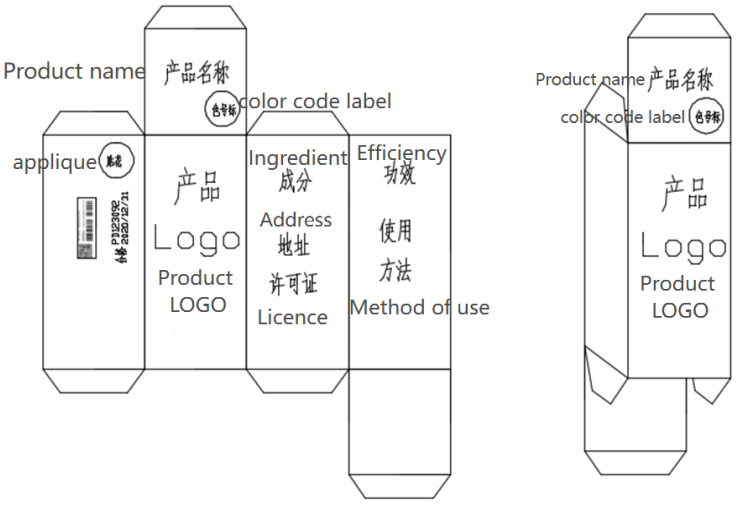


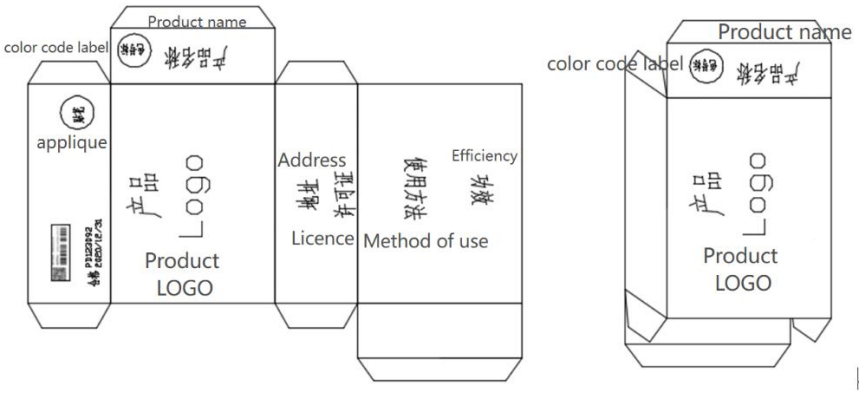

The material direction of the color box is suggested as shown in the figure.




Incoming material direction

1. Design suggestions for the position of the QR code, printing code, stickers, color label, and text direction on the color box are as shown in the picture.






## 6.2 Storage and use

In most cases, unevenness, curling and lifting are due to poor storage and handling or loading and unloading conditions. The carton blank should not be transported in the package, especially it should not be loaded into the package and then tied with ropes and bandaging, which will cut into the blank and cause damage. If the carton blanks are transported in a corrugated fiberboard box, they are well protected. Carton blanks should not be stored on the ground, in direct sunlight or near heat sources, and should avoid stacking such boxes to the extent that they reach high stacks. The paper used to make the carton absorbs moisture from the humid air and loses moisture when dry, thus changing its size. The temperature of the storage location also affects the size of the cardboard, because the paper is made of fibers, and these fibers do not need to shrink and elongate to each other when atmospheric conditions change, so bending and lifting occur. Unevenness is often caused by poor storage conditions.

Storage should be carried out at about 20°C and relative humidity of 60-65%, in a relatively dry environment, the paper will tend to crack, especially when folded, and the wet paper will lose its strength.

When ordering a new machine for the first carton processing, try to buy as little as possible. Sometimes the carton looks like it doesn't have any defects, but after the first trial process, some degree of defect appears. This allows corrections to be made before

the next delivery.

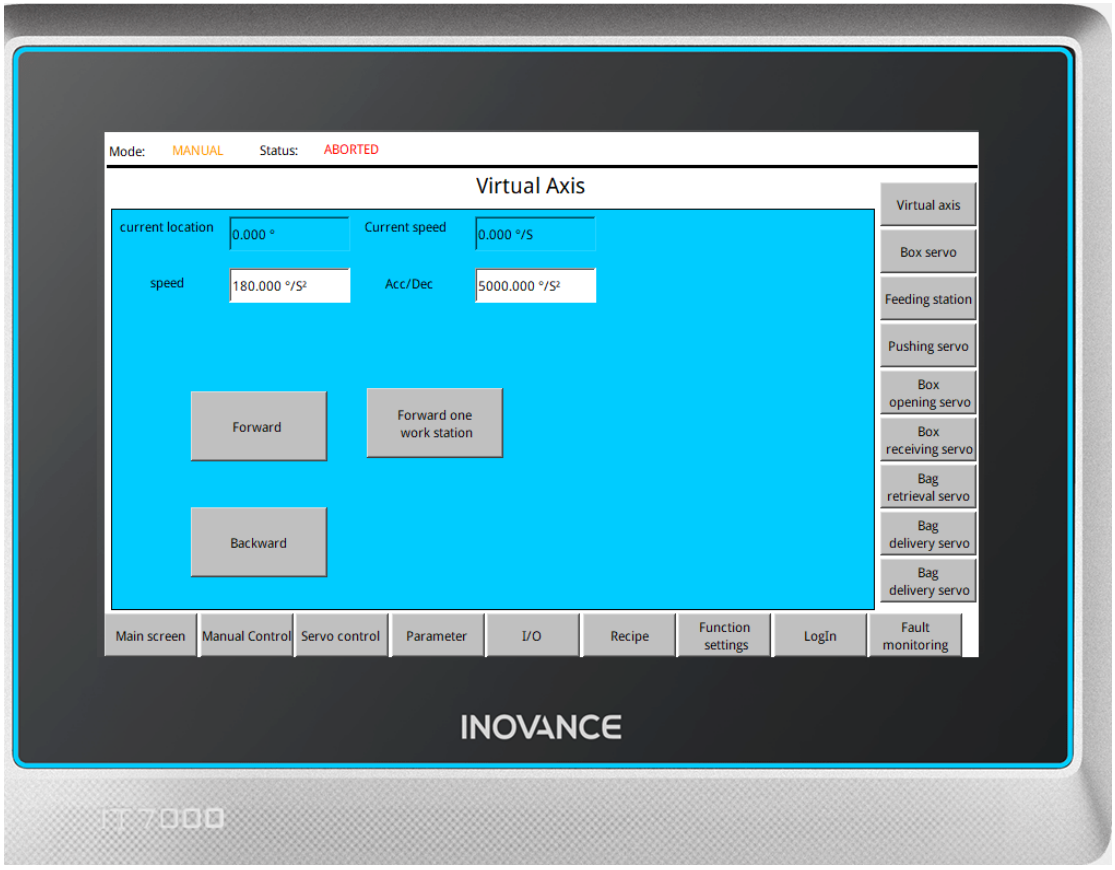
The packaging of the pieces of paper should not be too tight, that is, they should not bulge after applying moderate pressure with your hands. Place a pile of paper on the table, there must be some rebound after a little pressure with your hand, and then relax. If a completely flat piece of paper does not have this resilience, poor performance often occurs in the box making machine.

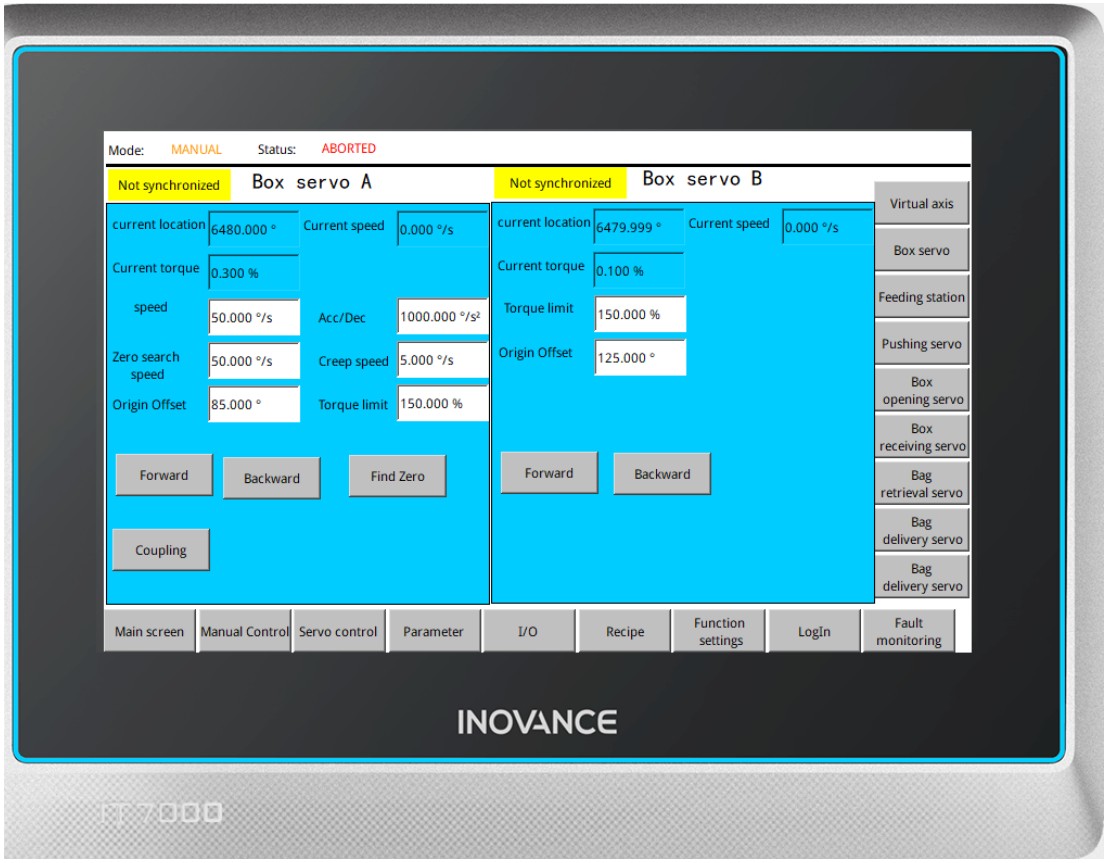
# 7. Operation parameters

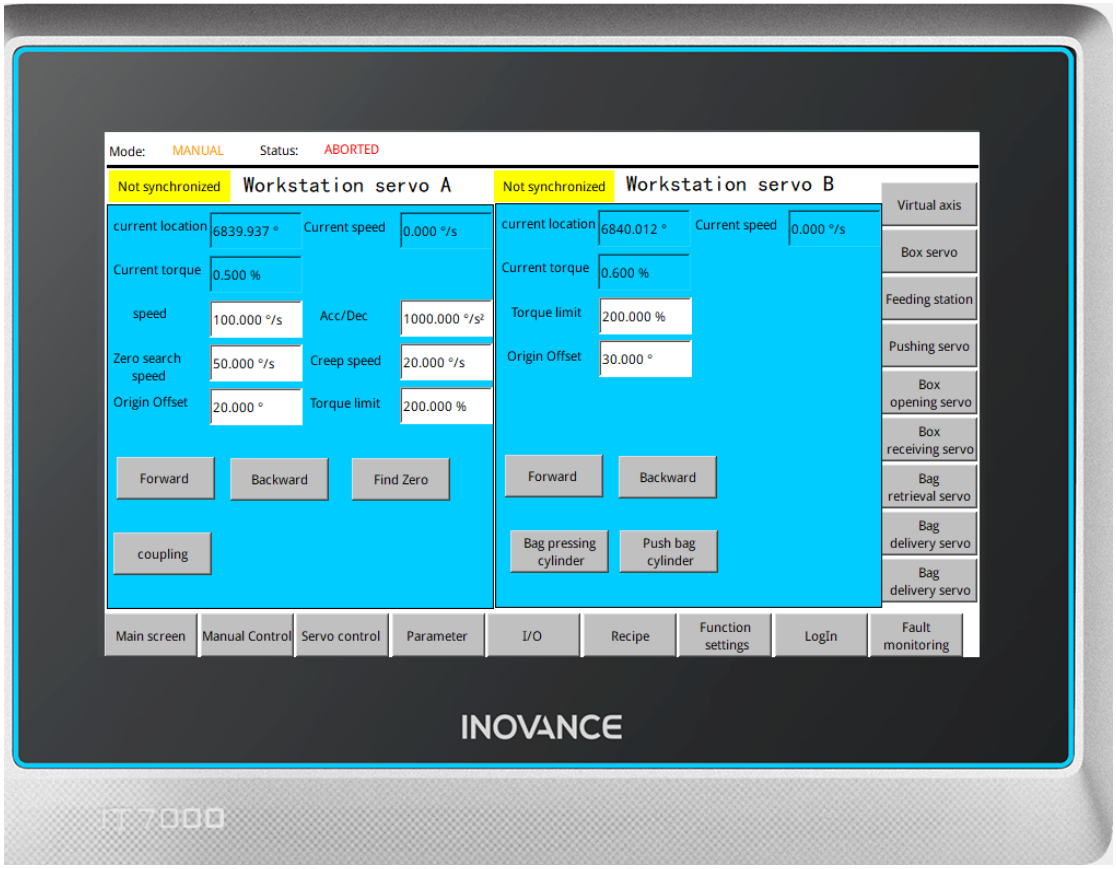
The parameters C-boost 8pcs during FAT tests, they are only for reference. Could be modified according to final testing material and product.

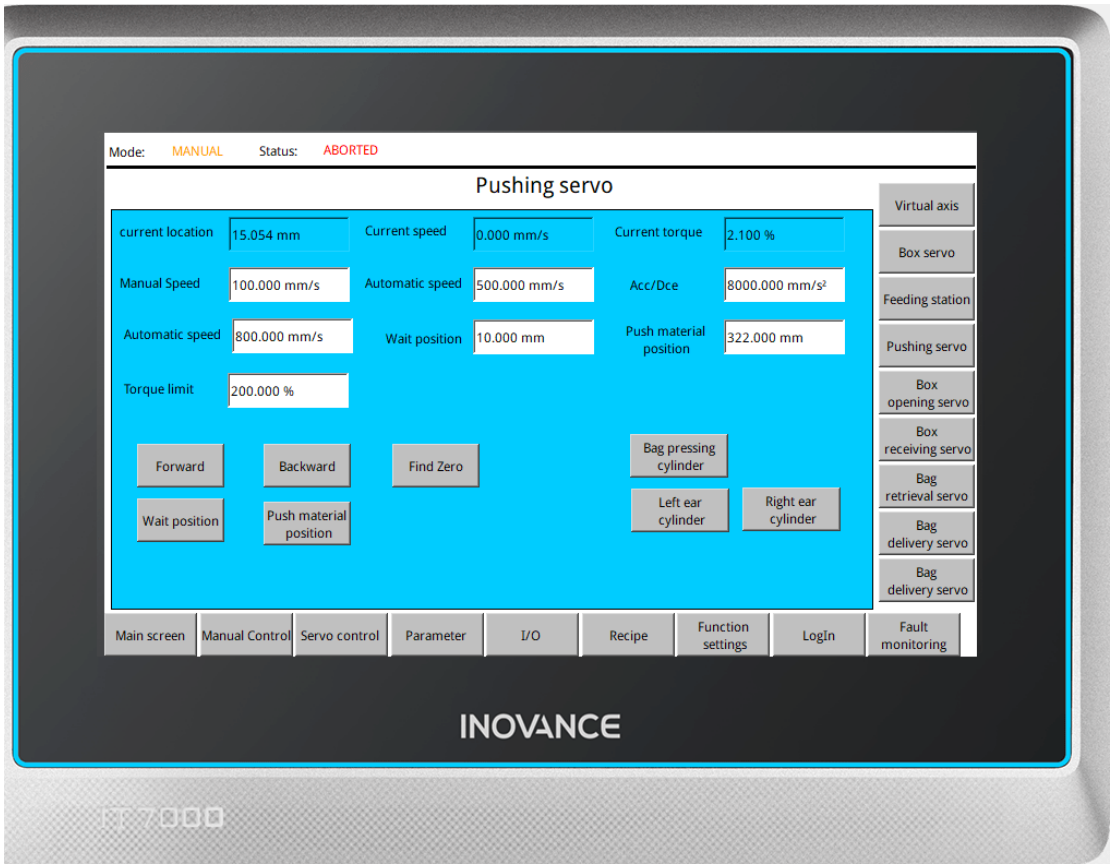
## 7.1 Cboost-8pcs

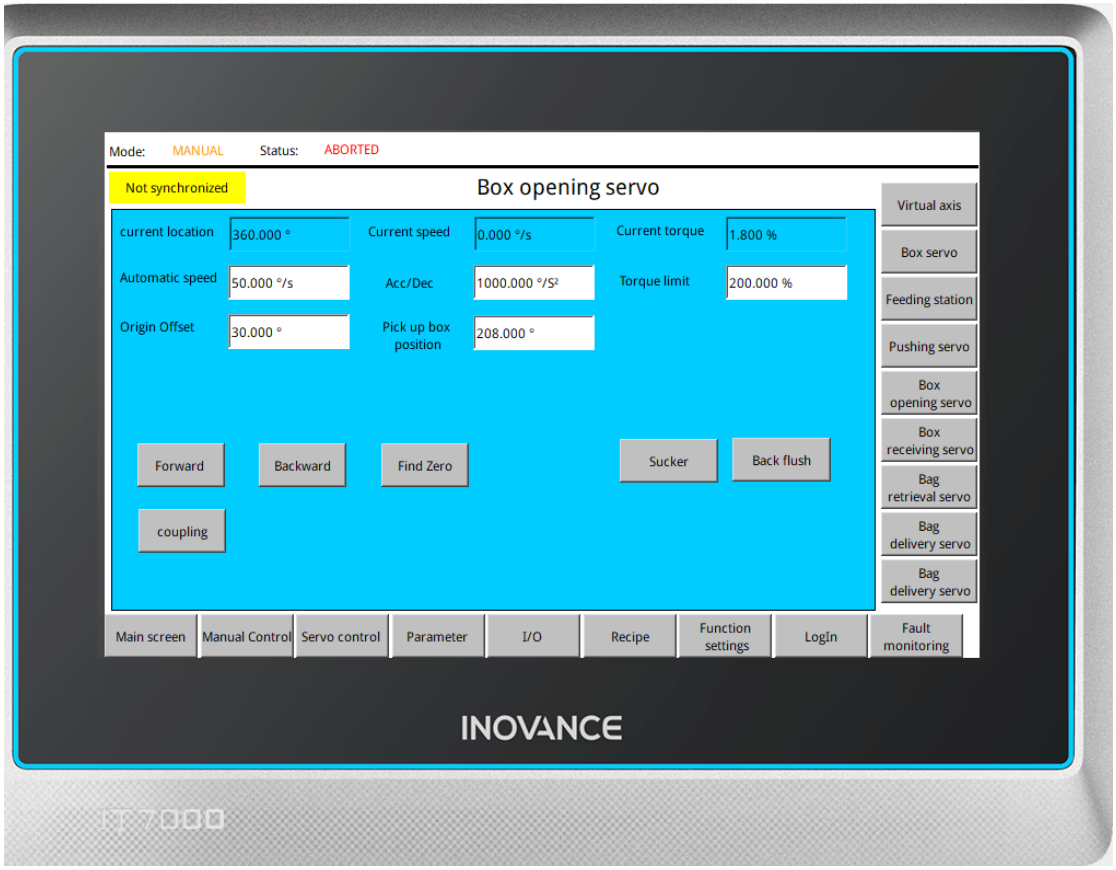
The parameters setting for Cboost-8pcs counting and cartonering packing is shown as following.

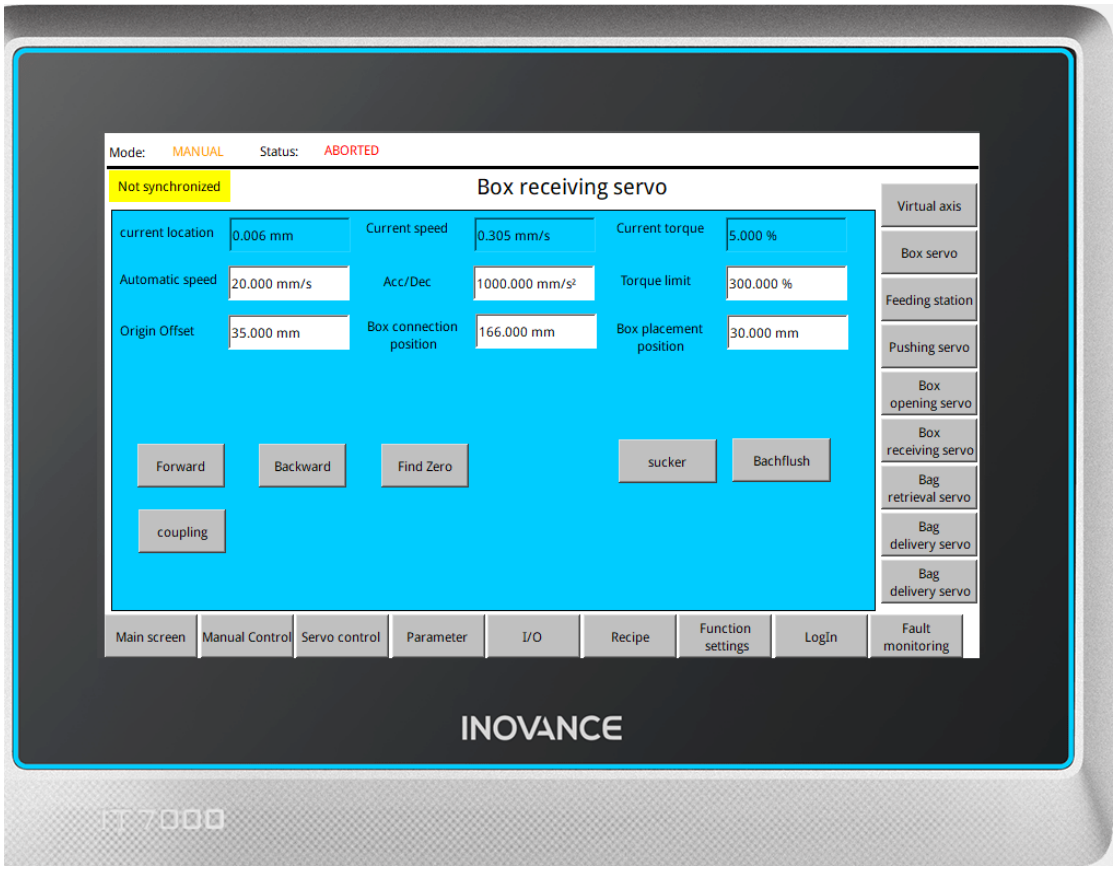


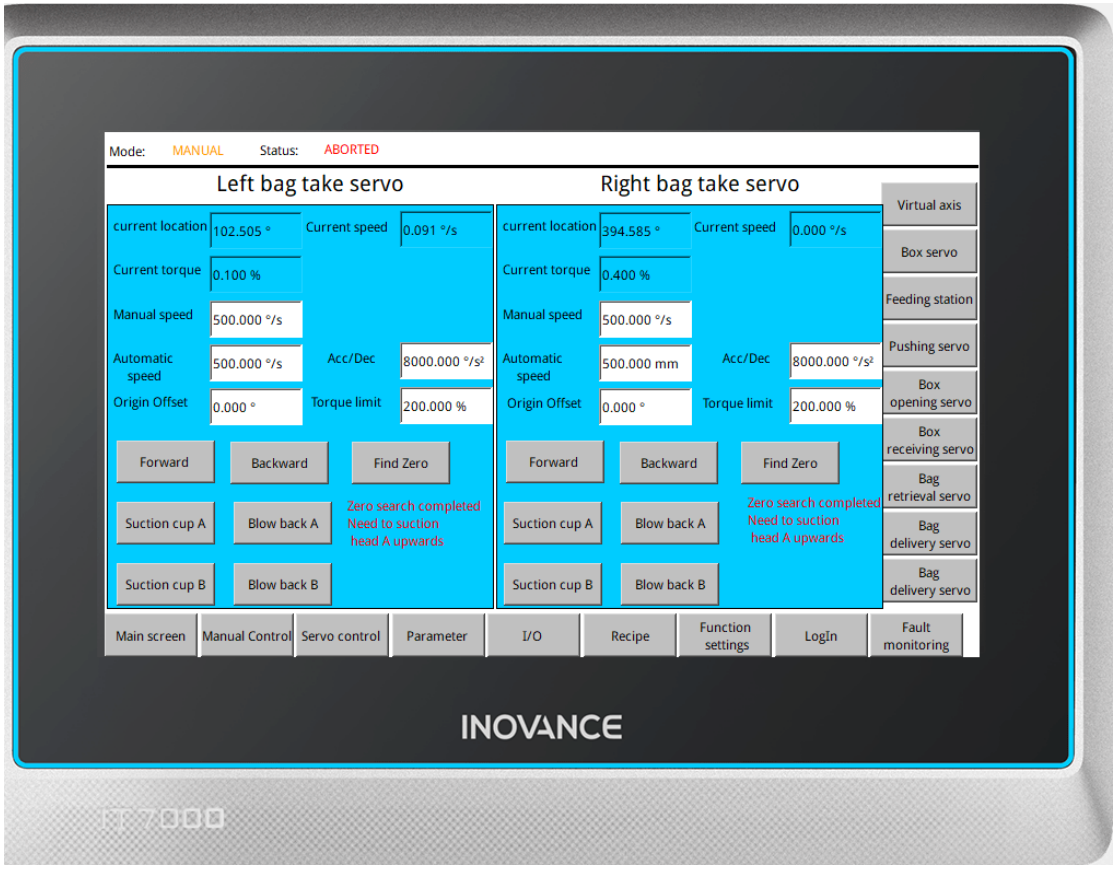

Mode: MANUAL Status: ABORTED
Not synchronized
Box servo A
current location 6480.000 °
Current speed 0.000 °/s
Current torque 0.300 %
speed 50.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 5.000 °/s
Origin Offset 85.000 °
Torque limit 150.000 %
Forward
Backward
Find Zero
Coupling
Not synchronized
Box servo B
current location 6479.999 °
Current speed 0.000 °/s
Current torque 0.100 %
Torque limit 150.000 %
Origin Offset 125.000 °
Forward
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

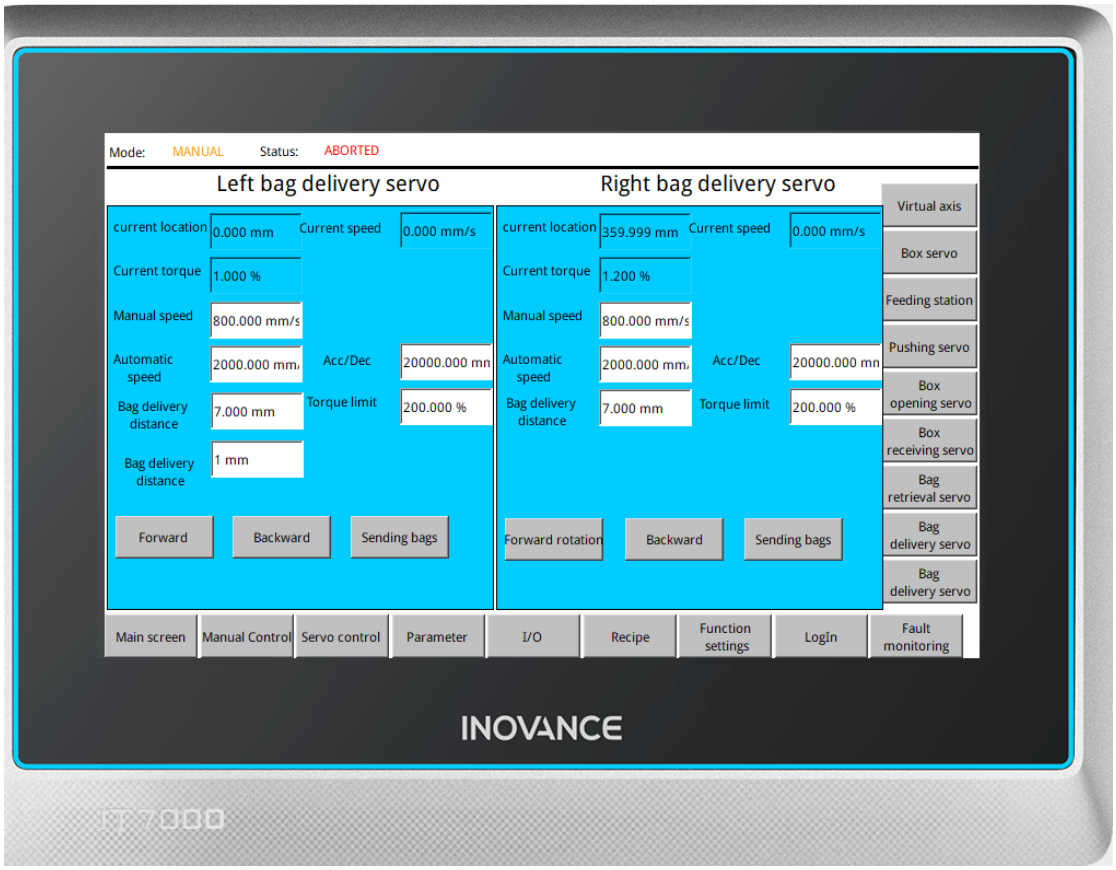

Mode: MANUAL Status: ABORTED
Not synchronized
Workstation servo A
current location 6839.937 °
Current speed 0.000 °/s
Current torque 0.500 %
speed 100.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 20.000 °/s
Origin Offset 20.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
coupling
Not synchronized
Workstation servo B
current location 6840.012 °
Current speed 0.000 °/s
Current torque 0.600 %
Torque limit 200.000 %
Origin Offset 30.000 °
Forward
Backward
Bag pressing cylinder
Push bag cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

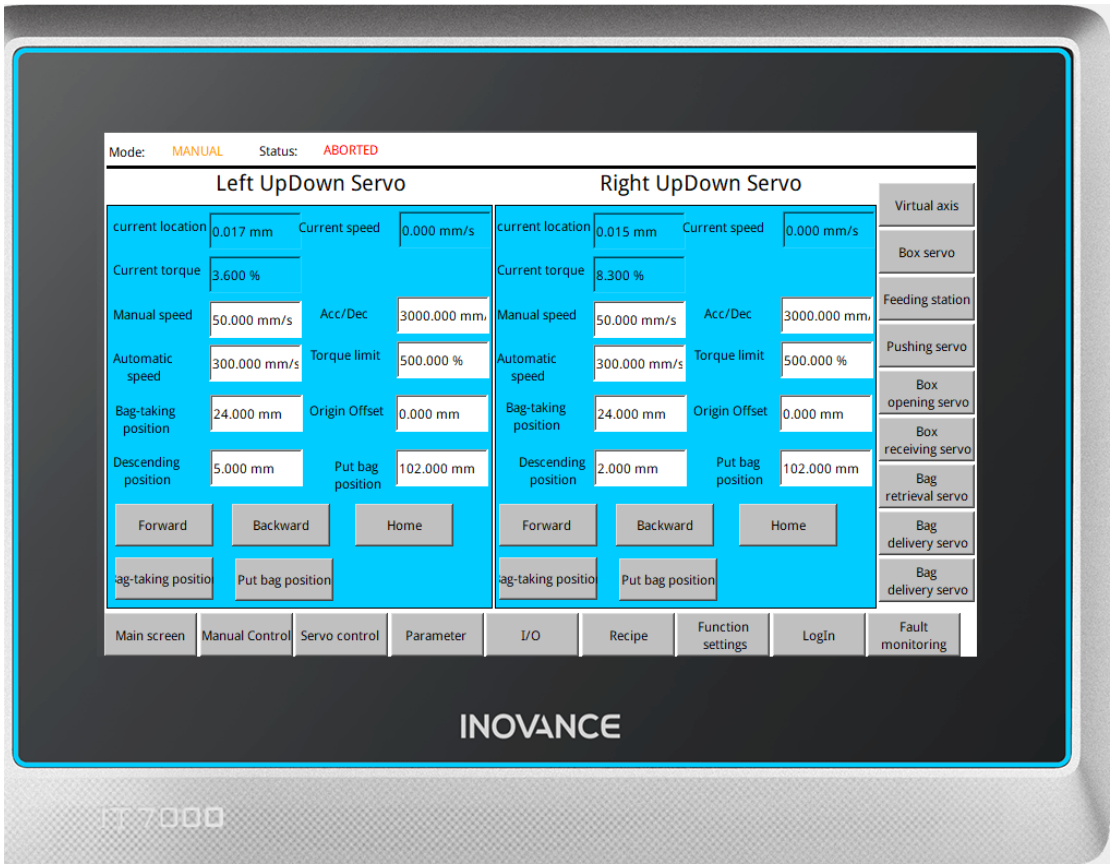

Mode: MANUAL Status: ABORTED
Pushing servo
current location 15.054 mm
Current speed 0.000 mm/s
Current torque 2.100 %
Manual Speed 100.000 mm/s
Automatic speed 500.000 mm/s
Acc/Dce 8000.000 mm/s²
Automatic speed 800.000 mm/s
Wait position 10.000 mm
Push material position 322.000 mm
Torque limit 200.000 %
Forward
Backward
Find Zero
Bag pressing cylinder
Wait position
Push material position
Left ear cylinder
Right ear cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

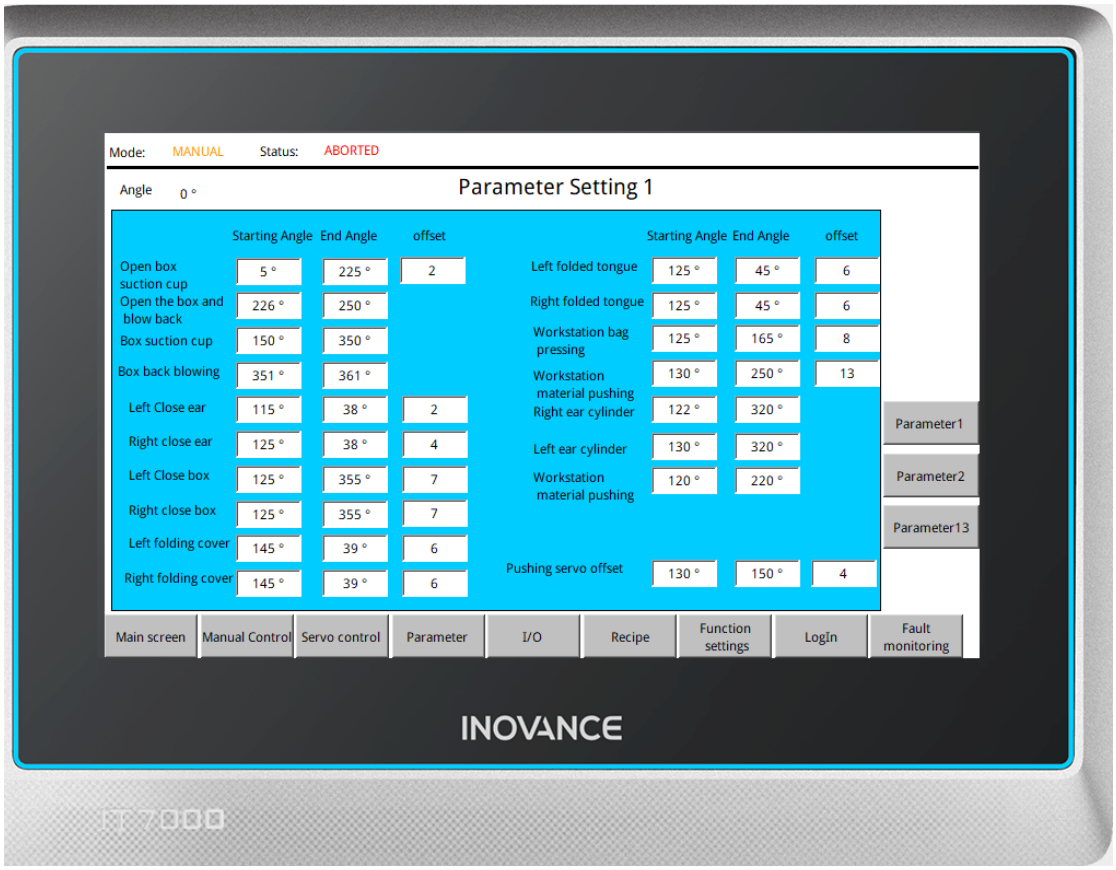

Mode: MANUAL Status: ABORTED
Not synchronized
Box opening servo
current location 360.000 °
Current speed 0.000 °/s
Current torque 1.800 %
Automatic speed 50.000 °/s
Acc/Dec 1000.000 °/S²
Torque limit 200.000 %
Origin Offset 30.000 °
Pick up box position 208.000 °
Forward
Backward
Find Zero
Sucker
Back flush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

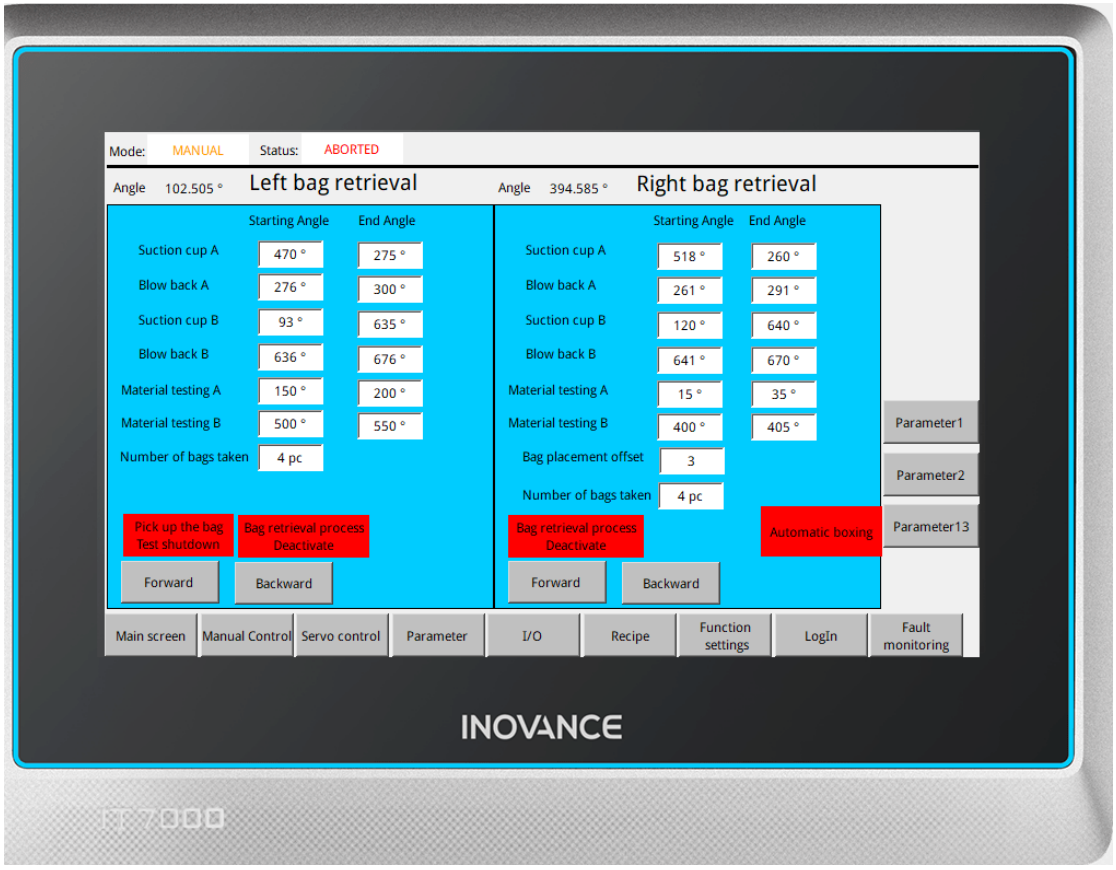

Mode: MANUAL Status: ABORTED
Not synchronized
Box receiving servo
current location 0.006 mm
Current speed 0.305 mm/s
Current torque 5.000 %
Automatic speed 20.000 mm/s
Acc/Dec 1000.000 mm/s²
Torque limit 300.000 %
Origin Offset 35.000 mm
Box connection position 166.000 mm
Box placement position 30.000 mm
Forward
Backward
Find Zero
sucker
Bachflush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

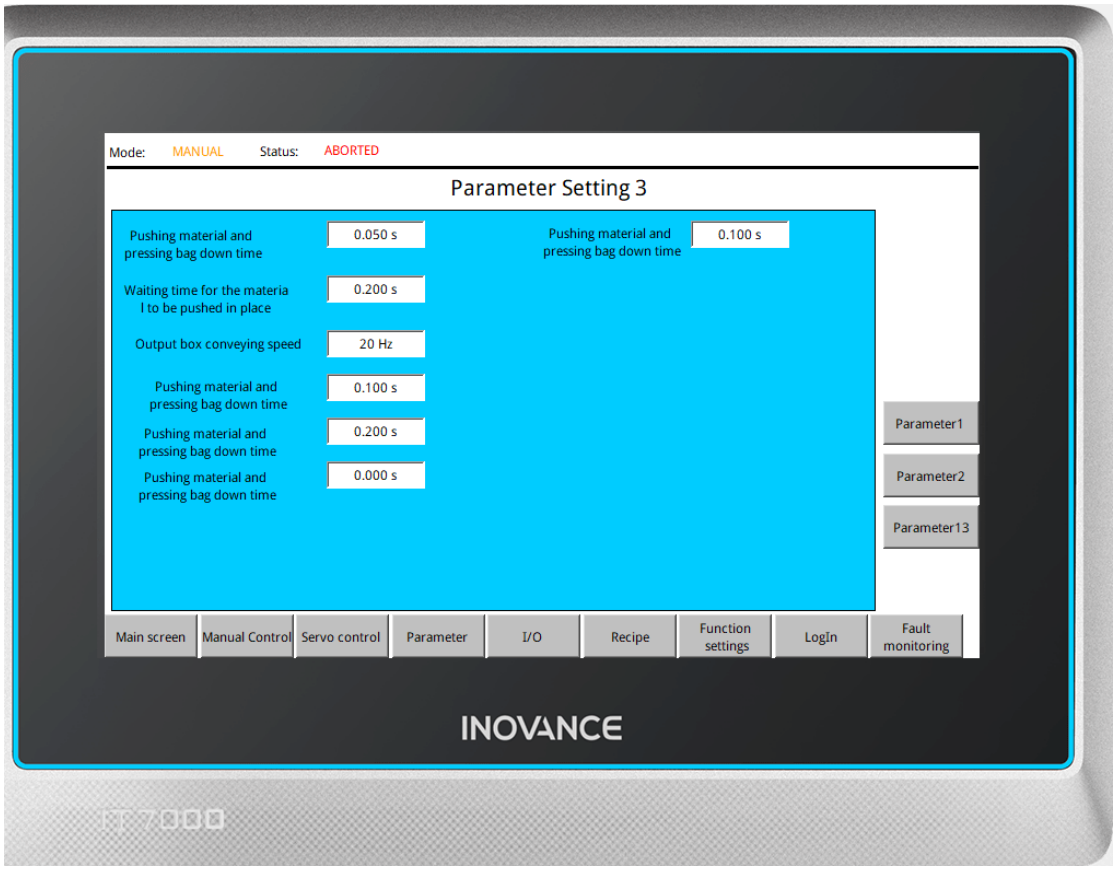

Mode: MANUAL Status: ABORTED
Left bag take servo
Right bag take servo
current location 102.505 °
Current speed 0.091 °/s
Current torque 0.100 %
Manual speed 500.000 °/s
Automatic speed 500.000 °/s
Acc/Dec 8000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Zero search completed
Need to suction head A upwards
Suction cup A
Blow back A
Suction cup B
Blow back B
current location 394.585 °
Current speed 0.000 °/s
Current torque 0.400 %
Manual speed 500.000 °/s
Automatic speed 500.000 mm
Acc/Dec 8000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Zero search completed
Need to suction head A upwards
Suction cup A
Blow back A
Suction cup B
Blow back B
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left bag delivery servo
Right bag delivery servo
current location 0.000 mm
Current speed 0.000 mm/s
Current torque 1.000 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 7.000 mm
Torque limit 200.000 %
Bag delivery distance 1 mm
Forward
Backward
Sending bags
current location 359.999 mm
Current speed 0.000 mm/s
Current torque 1.200 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 7.000 mm
Torque limit 200.000 %
Forward rotation
Backward
Sending bags
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left UpDown Servo
Right UpDown Servo
current location 0.017 mm
Current speed 0.000 mm/s
Current torque 3.600 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 24.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
current location 0.015 mm
Current speed 0.000 mm/s
Current torque 8.300 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 24.000 mm
Origin Offset 0.000 mm
Descending position 2.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

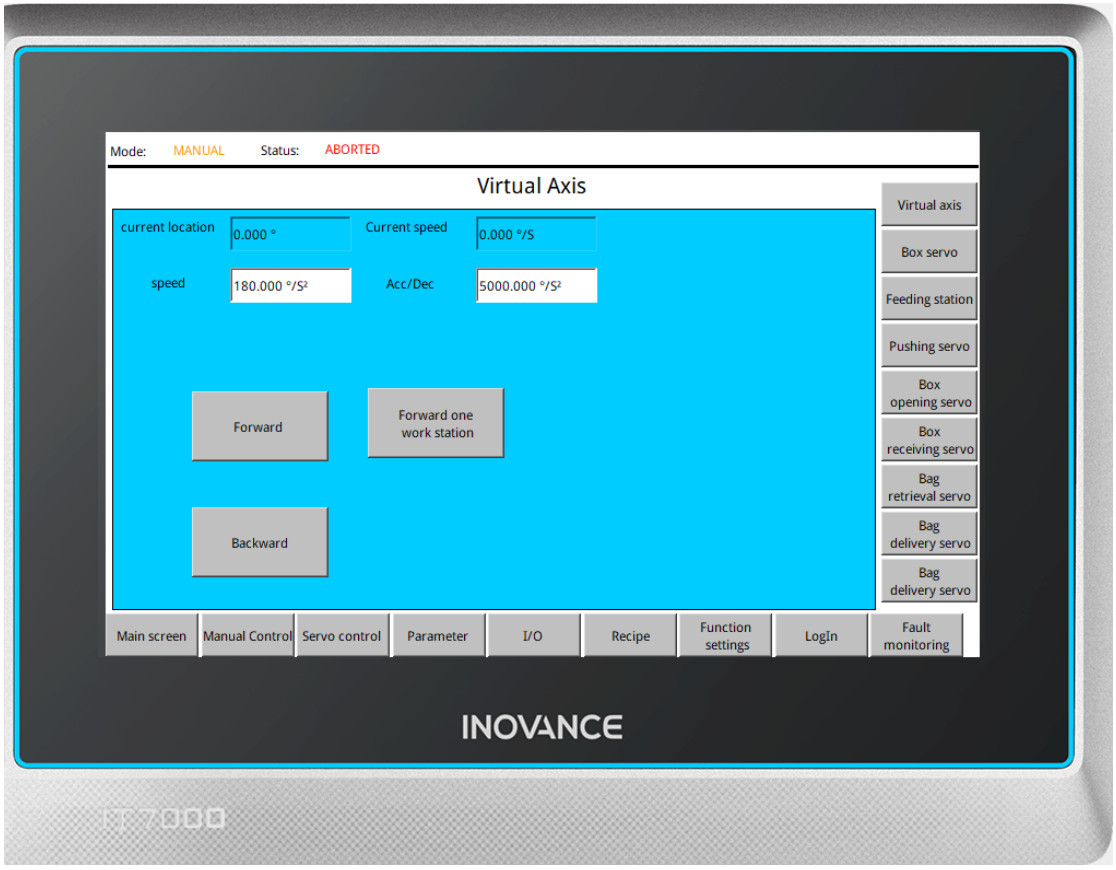

Mode: MANUAL Status: ABORTED
Angle 0 °
Parameter Setting 1
Starting Angle End Angle offset
Open box suction cup 5 ° 225 ° 2
Open the box and blow back 226 ° 250 °
Box suction cup 150 ° 350 °
Box back blowing 351 ° 361 °
Left Close ear 115 ° 38 ° 2
Right close ear 125 ° 38 ° 4
Left Close box 125 ° 355 ° 7
Right close box 125 ° 355 ° 7
Left folding cover 145 ° 39 ° 6
Right folding cover 145 ° 39 ° 6
Starting Angle End Angle offset
Left folded tongue 125 ° 45 ° 6
Right folded tongue 125 ° 45 ° 6
Workstation bag pressing 125 ° 165 ° 8
Workstation material pushing 130 ° 250 ° 13
Right ear cylinder 122 ° 320 °
Left ear cylinder 130 ° 320 °
Workstation material pushing 120 ° 220 °
Pushing servo offset 130 ° 150 ° 4
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

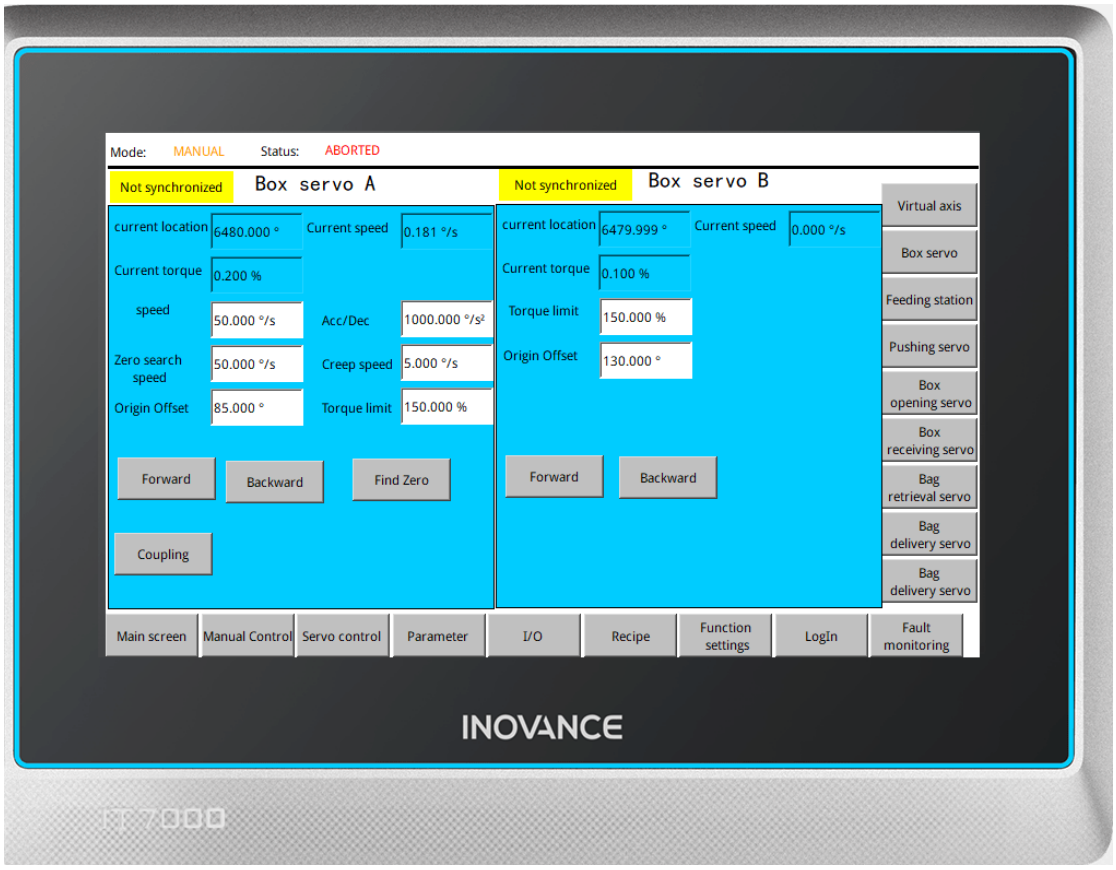

Mode: MANUAL Status: ABORTED
Angle 102.505 ° Left bag retrieval
Angle 394.585 ° Right bag retrieval
Starting Angle End Angle
Suction cup A 470 ° 275 °
Blow back A 276 ° 300 °
Suction cup B 93 ° 635 °
Blow back B 636 ° 676 °
Material testing A 150 ° 200 °
Material testing B 500 ° 550 °
Number of bags taken 4 pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Starting Angle End Angle
Suction cup A 518 ° 260 °
Blow back A 261 ° 291 °
Suction cup B 120 ° 640 °
Blow back B 641 ° 670 °
Material testing A 15 ° 35 °
Material testing B 400 ° 405 °
Bag placement offset 3
Number of bags taken 4 pc
Bag retrieval process Deactivate
Automatic boxing
Forward
Backward
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

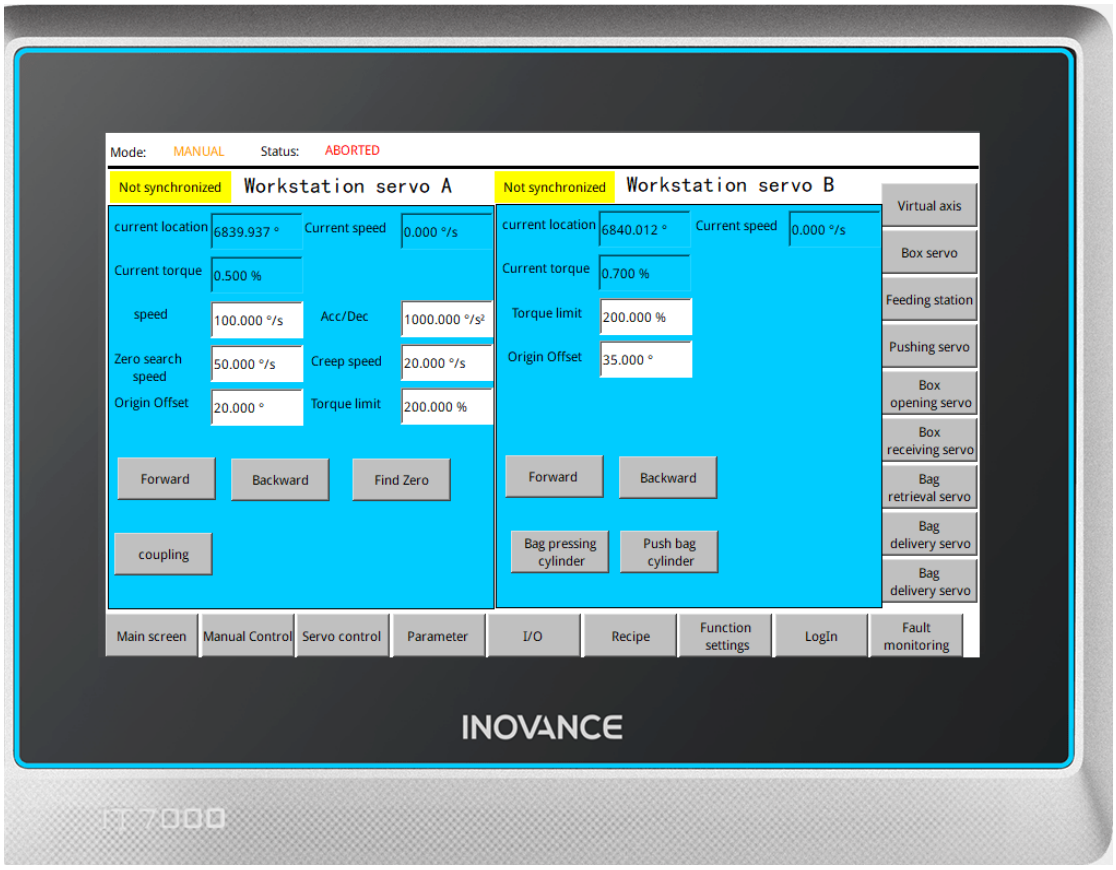

Mode: MANUAL Status: ABORTED
Parameter Setting 3
Pushing material and pressing bag down time
0.050 s
Pushing material and pressing bag down time
0.100 s
Waiting time for the materia l to be pushed in place
0.200 s
Output box conveying speed
20 Hz
Pushing material and pressing bag down time
0.100 s
Pushing material and pressing bag down time
0.200 s
Pushing material and pressing bag down time
0.000 s
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE
HT 7000

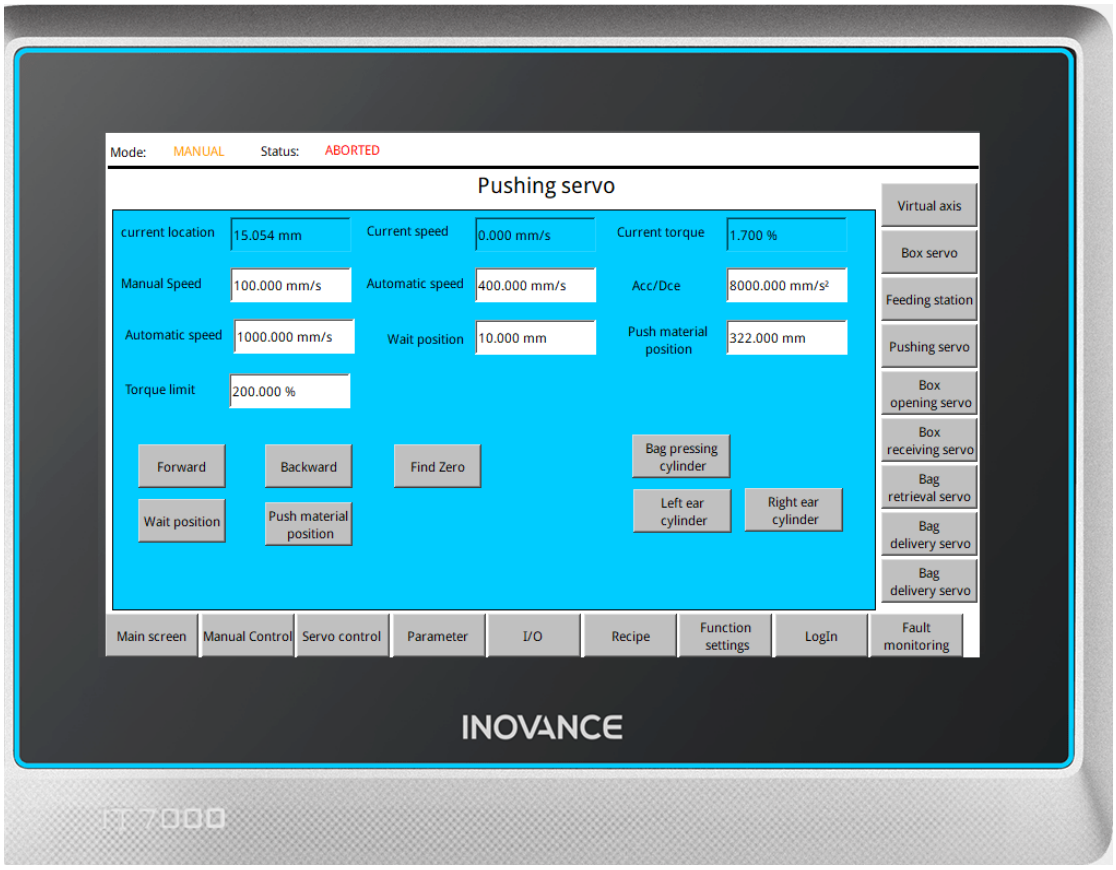
## 7.2 Cboost-10pcs

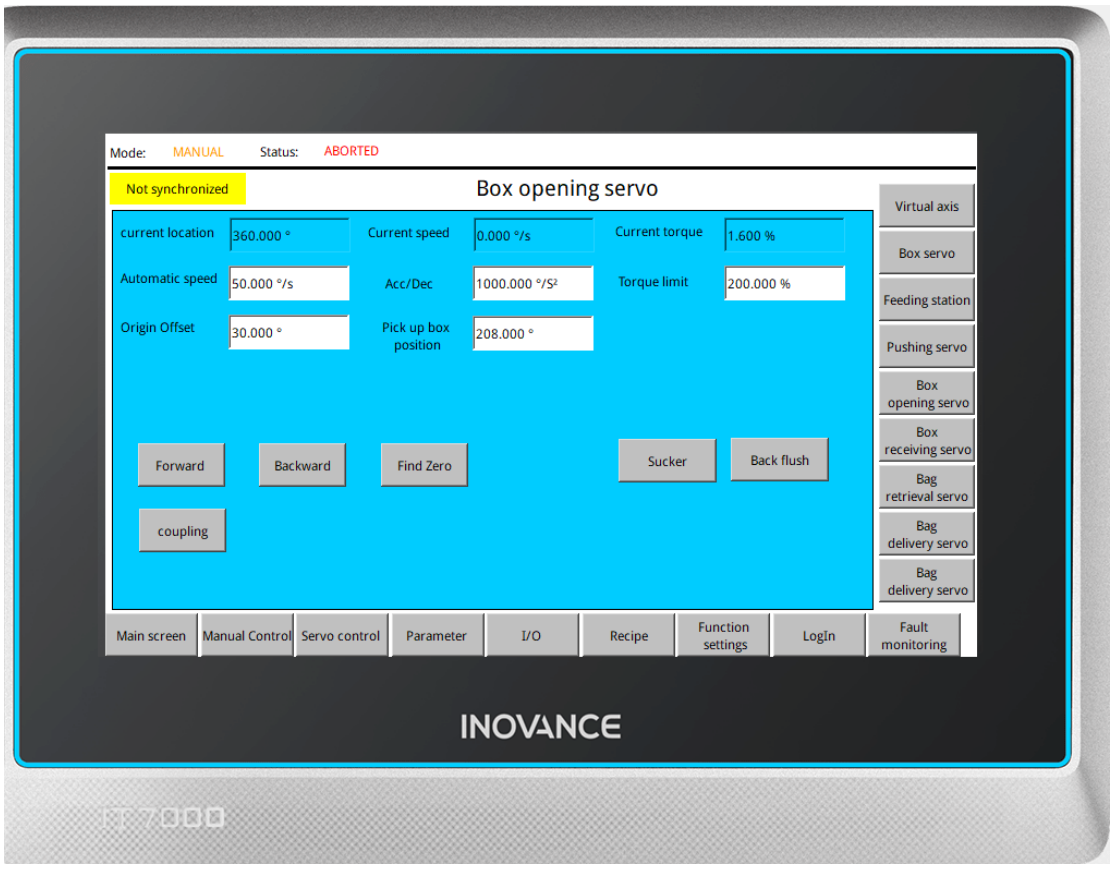
The parameters setting for Cboost-10pcs counting and cartonering packing is shown as following.

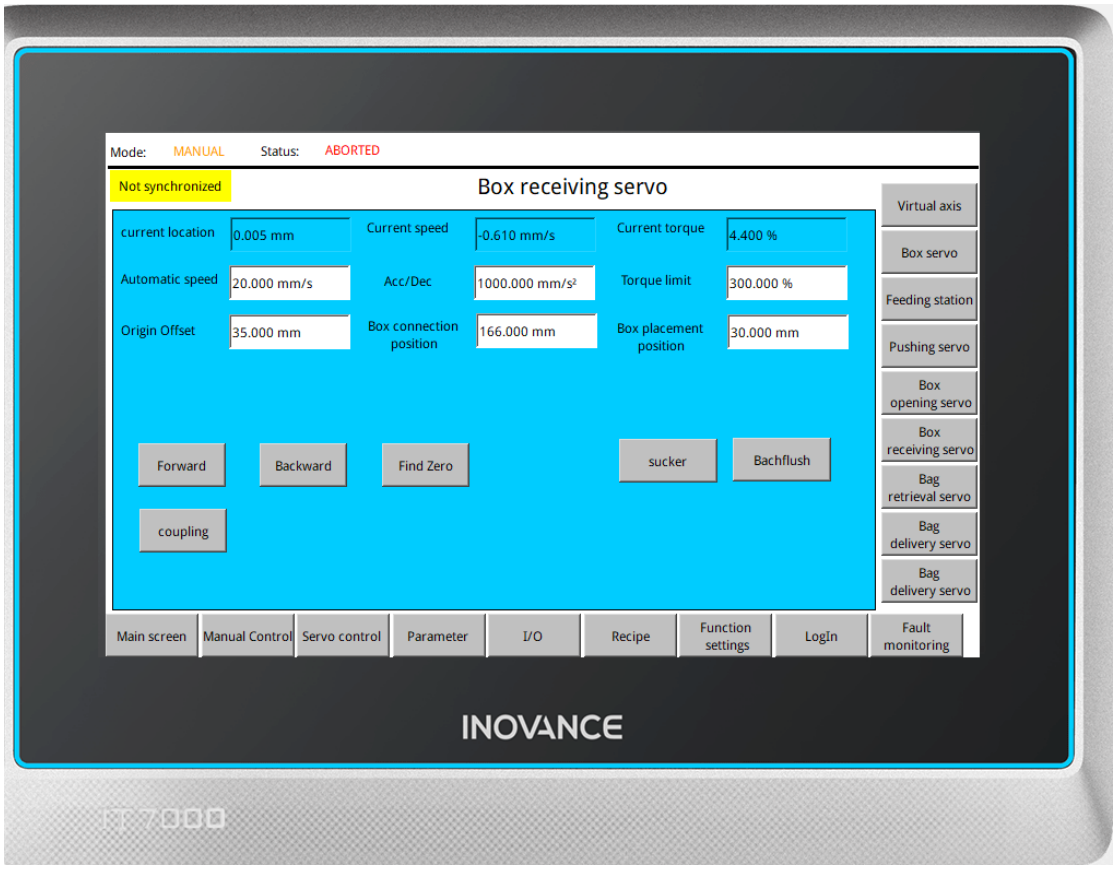


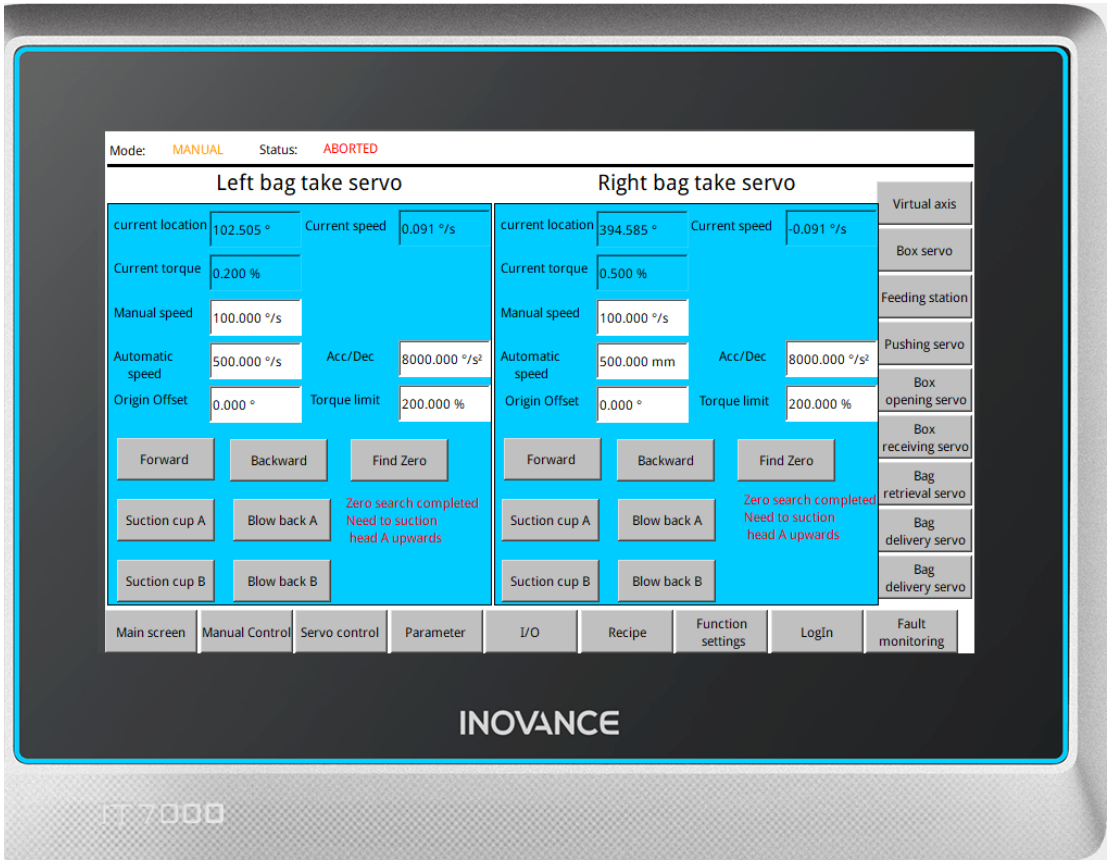

Mode: MANUAL Status: ABORTED
Not synchronized
Box servo A
current location 6480.000 °
Current speed 0.181 °/s
Current torque 0.200 %
speed 50.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 5.000 °/s
Origin Offset 85.000 °
Torque limit 150.000 %
Forward
Backward
Find Zero
Coupling
Not synchronized
Box servo B
current location 6479.999 °
Current speed 0.000 °/s
Current torque 0.100 %
Torque limit 150.000 %
Origin Offset 130.000 °
Forward
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

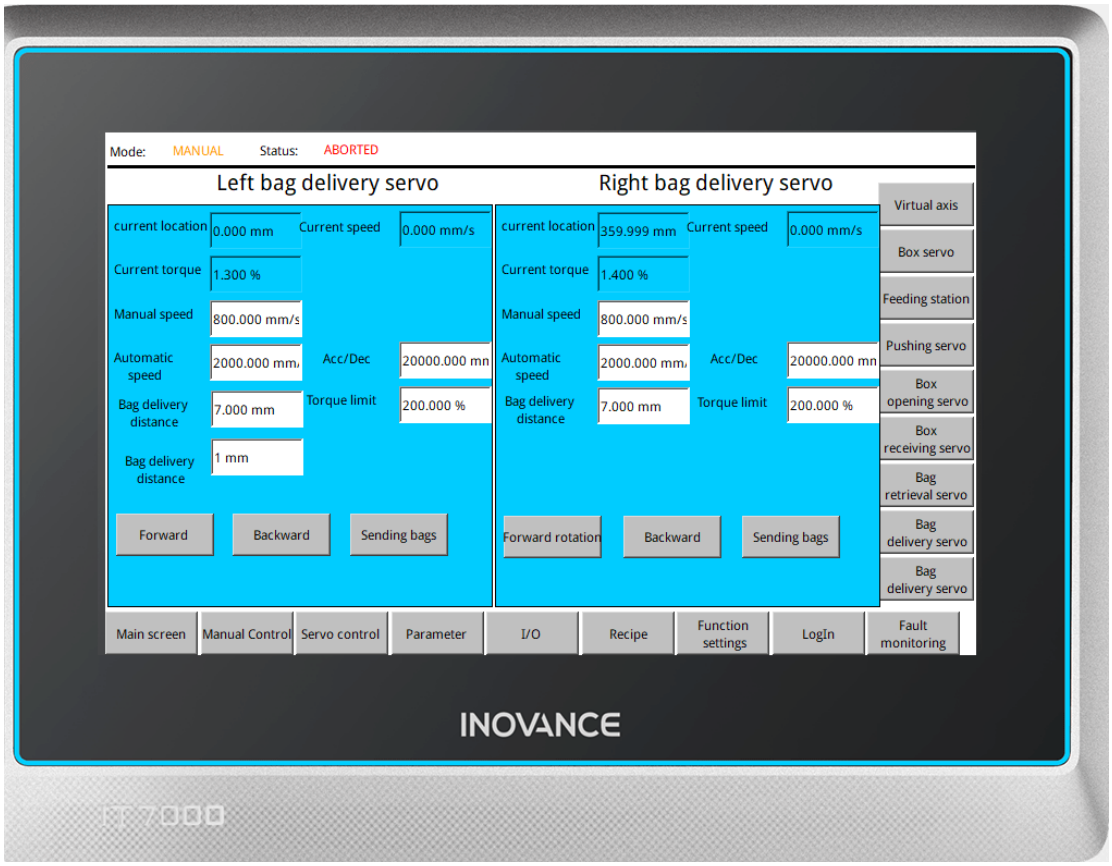

Mode: MANUAL Status: ABORTED
Not synchronized
Workstation servo A
current location 6839.937 °
Current speed 0.000 °/s
Current torque 0.500 %
speed 100.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 20.000 °/s
Origin Offset 20.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
coupling
Not synchronized
Workstation servo B
current location 6840.012 °
Current speed 0.000 °/s
Current torque 0.700 %
Torque limit 200.000 %
Origin Offset 35.000 °
Forward
Backward
Bag pressing cylinder
Push bag cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

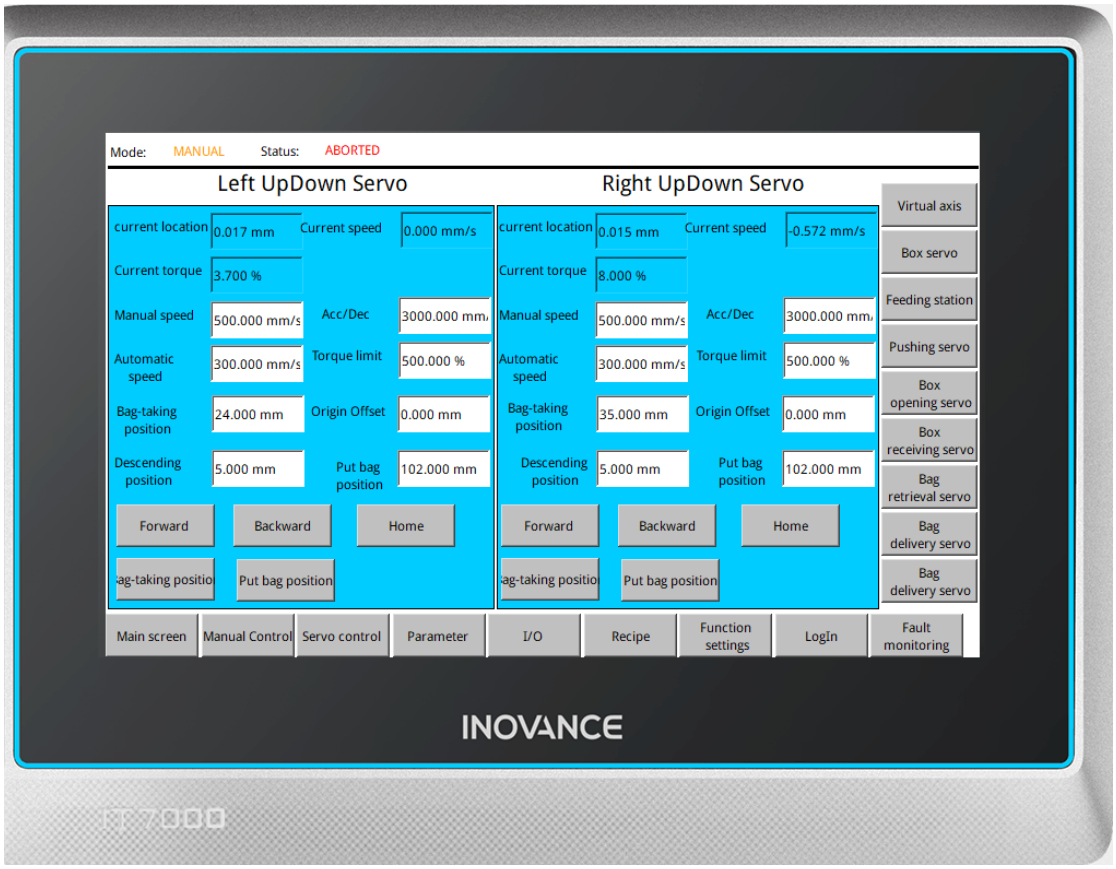

Mode: MANUAL Status: ABORTED
Pushing servo
current location 15.054 mm
Current speed 0.000 mm/s
Current torque 1.700 %
Manual Speed 100.000 mm/s
Automatic speed 400.000 mm/s
Acc/Dce 8000.000 mm/s²
Automatic speed 1000.000 mm/s
Wait position 10.000 mm
Push material position 322.000 mm
Torque limit 200.000 %
Forward
Backward
Find Zero
Bag pressing cylinder
Wait position
Push material position
Left ear cylinder
Right ear cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

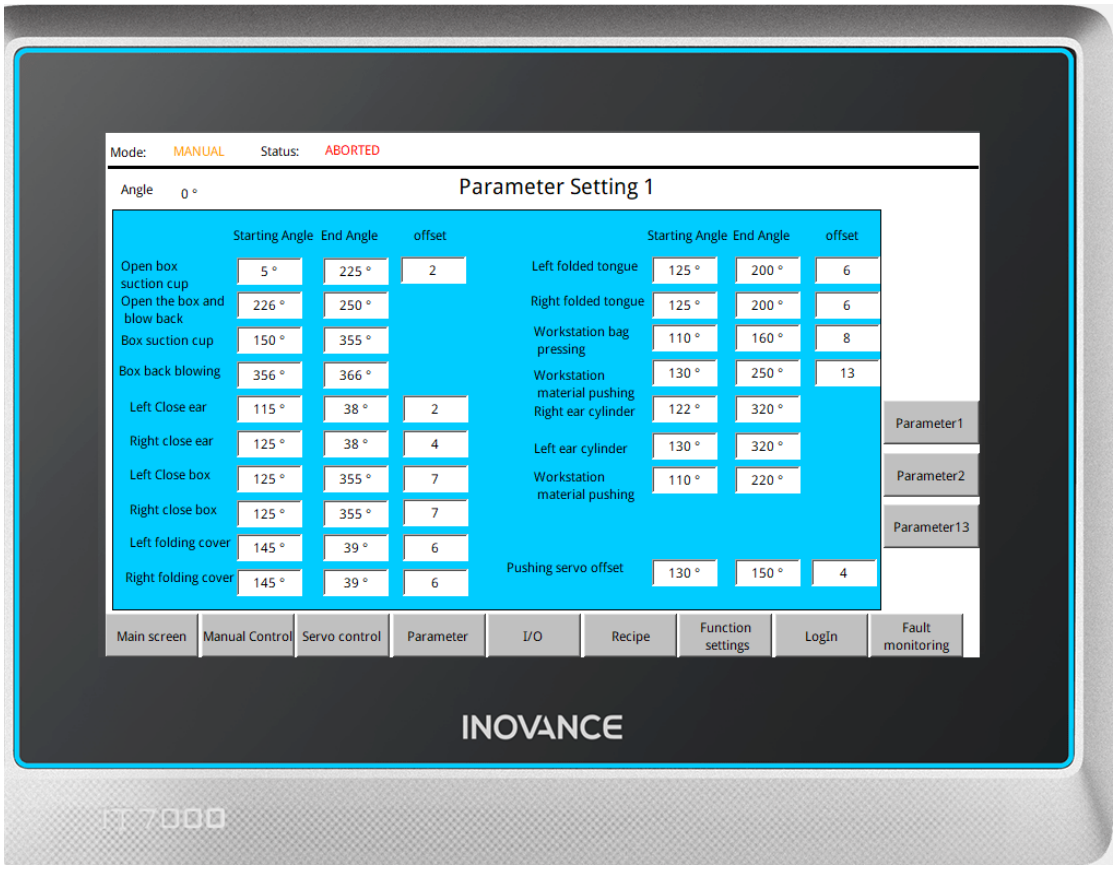

Mode: MANUAL Status: ABORTED
Not synchronized
Box opening servo
current location 360.000 °
Current speed 0.000 °/s
Current torque 1.600 %
Automatic speed 50.000 °/s
Acc/Dec 1000.000 °/S²
Torque limit 200.000 %
Origin Offset 30.000 °
Pick up box position 208.000 °
Forward
Backward
Find Zero
Sucker
Back flush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

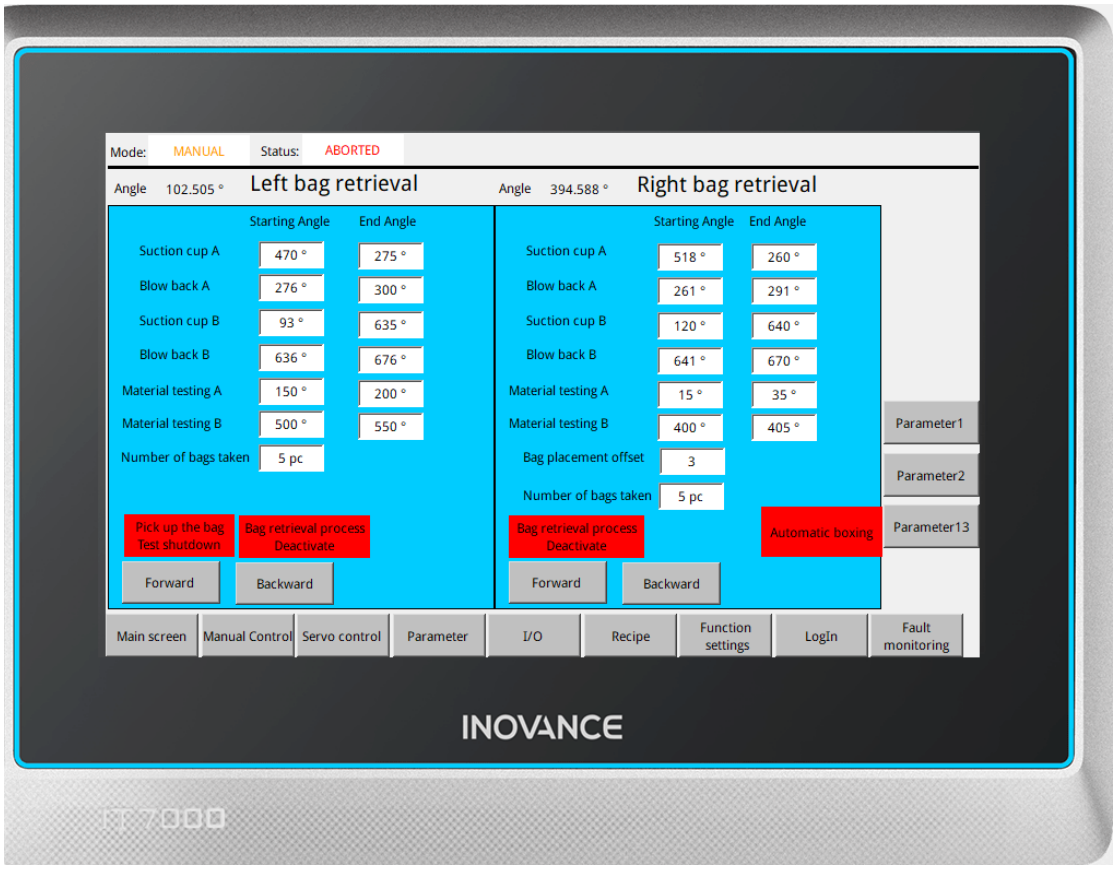

Mode: MANUAL Status: ABORTED
Not synchronized
Box receiving servo
current location 0.005 mm
Current speed -0.610 mm/s
Current torque 4.400 %
Automatic speed 20.000 mm/s
Acc/Dec 1000.000 mm/s²
Torque limit 300.000 %
Origin Offset 35.000 mm
Box connection position 166.000 mm
Box placement position 30.000 mm
Forward
Backward
Find Zero
sucker
Bachflush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

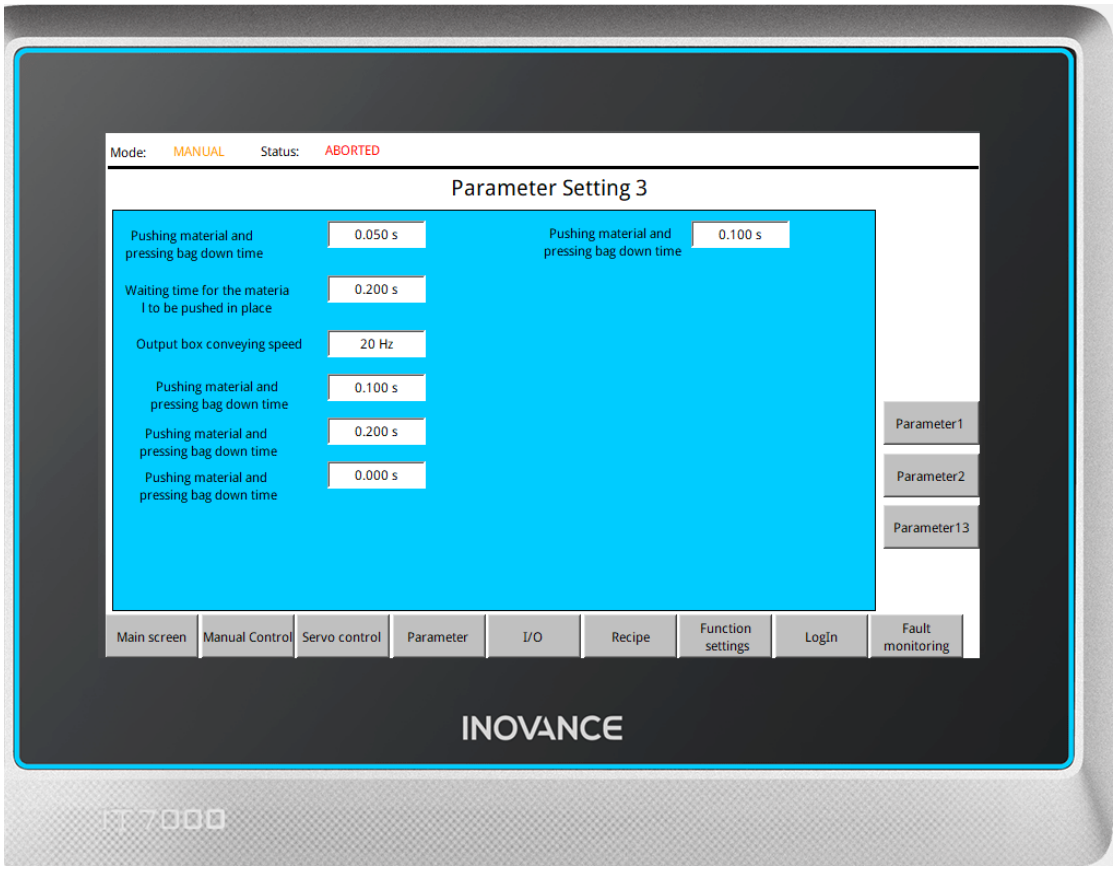

Mode: MANUAL Status: ABORTED
Left bag take servo
Right bag take servo
current location 102.505 °
Current speed 0.091 °/s
Current torque 0.200 %
Manual speed 100.000 °/s
Automatic speed 500.000 °/s
Acc/Dec 8000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Suction cup B
Blow back B
Zero search completed
Need to suction head A upwards
current location 394.585 °
Current speed -0.091 °/s
Current torque 0.500 %
Manual speed 100.000 °/s
Automatic speed 500.000 mm
Acc/Dec 8000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Suction cup B
Blow back B
Zero search completed
Need to suction head A upwards
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left bag delivery servo
current location 0.000 mm
Current speed 0.000 mm/s
Current torque 1.300 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 7.000 mm
Torque limit 200.000 %
Bag delivery distance 1 mm
Forward
Backward
Sending bags
Right bag delivery servo
current location 359.999 mm
Current speed 0.000 mm/s
Current torque 1.400 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 7.000 mm
Torque limit 200.000 %
Forward rotation
Backward
Sending bags
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left UpDown Servo
current location 0.017 mm
Current speed 0.000 mm/s
Current torque 3.700 %
Manual speed 500.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 24.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Right UpDown Servo
current location 0.015 mm
Current speed -0.572 mm/s
Current torque 8.000 %
Manual speed 500.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 35.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

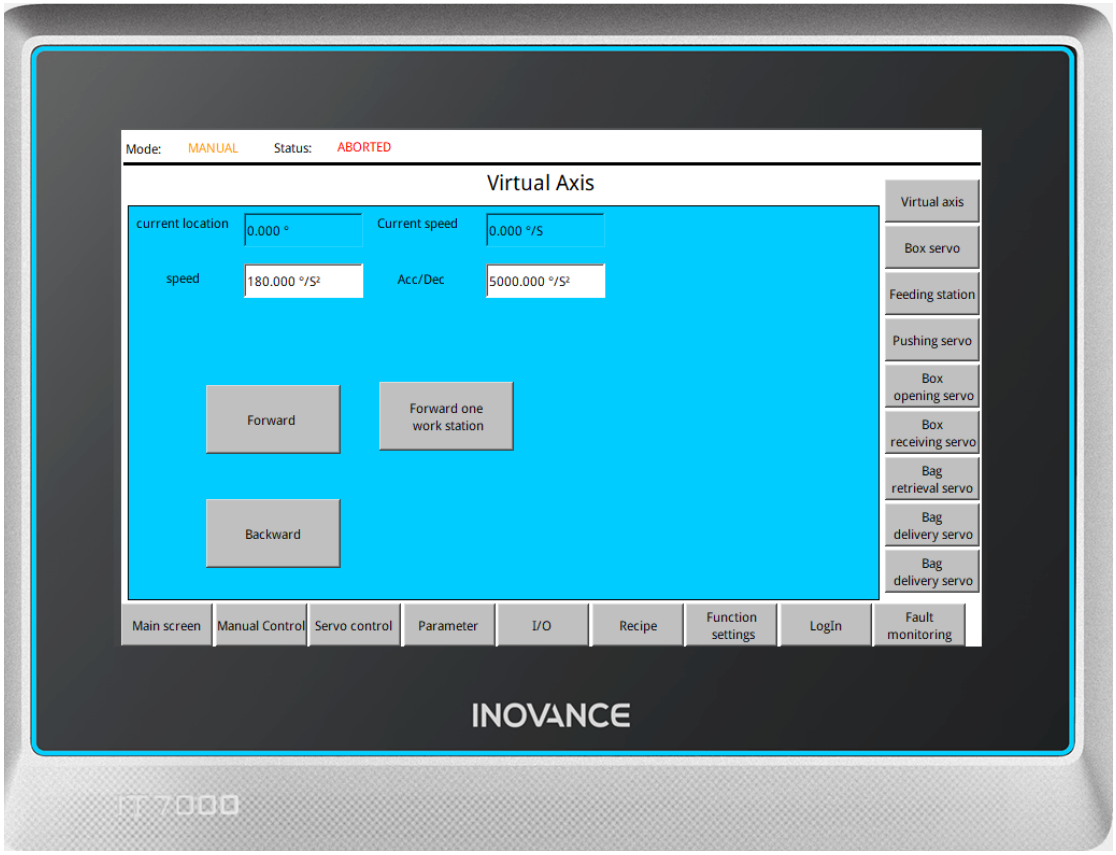

Mode: MANUAL Status: ABORTED
Angle 0 °
Parameter Setting 1
Starting Angle End Angle offset
Open box suction cup 5 ° 225 ° 2
Open the box and blow back 226 ° 250 °
Box suction cup 150 ° 355 °
Box back blowing 356 ° 366 °
Left Close ear 115 ° 38 ° 2
Right close ear 125 ° 38 ° 4
Left Close box 125 ° 355 ° 7
Right close box 125 ° 355 ° 7
Left folding cover 145 ° 39 ° 6
Right folding cover 145 ° 39 ° 6
Starting Angle End Angle offset
Left folded tongue 125 ° 200 ° 6
Right folded tongue 125 ° 200 ° 6
Workstation bag pressing 110 ° 160 ° 8
Workstation material pushing 130 ° 250 ° 13
Right ear cylinder 122 ° 320 °
Left ear cylinder 130 ° 320 °
Workstation material pushing 110 ° 220 °
Pushing servo offset 130 ° 150 ° 4
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

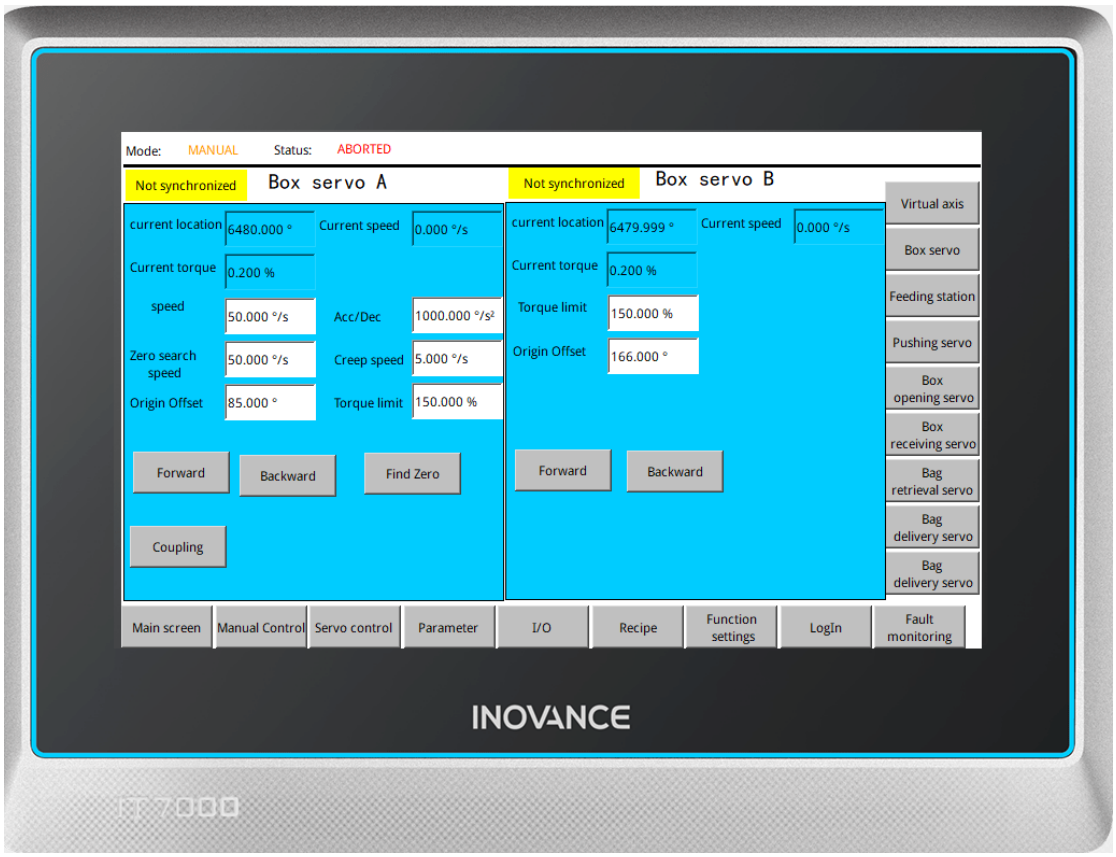

Mode: MANUAL Status: ABORTED
Angle 102.505 ° Left bag retrieval
Angle 394.588 ° Right bag retrieval
Starting Angle End Angle
Suction cup A 470 ° 275 °
Blow back A 276 ° 300 °
Suction cup B 93 ° 635 °
Blow back B 636 ° 676 °
Material testing A 150 ° 200 °
Material testing B 500 ° 550 °
Number of bags taken 5 pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Starting Angle End Angle
Suction cup A 518 ° 260 °
Blow back A 261 ° 291 °
Suction cup B 120 ° 640 °
Blow back B 641 ° 670 °
Material testing A 15 ° 35 °
Material testing B 400 ° 405 °
Bag placement offset 3
Number of bags taken 5 pc
Bag retrieval process Deactivate
Automatic boxing
Forward
Backward
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

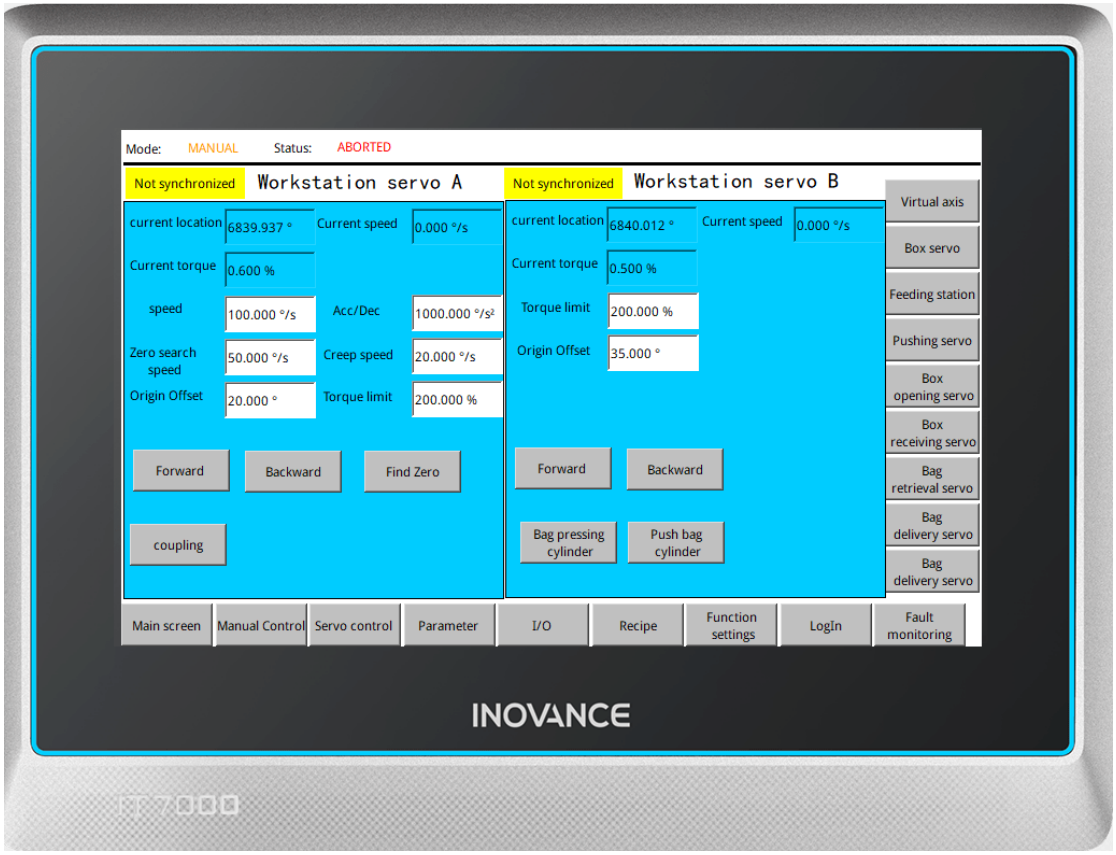


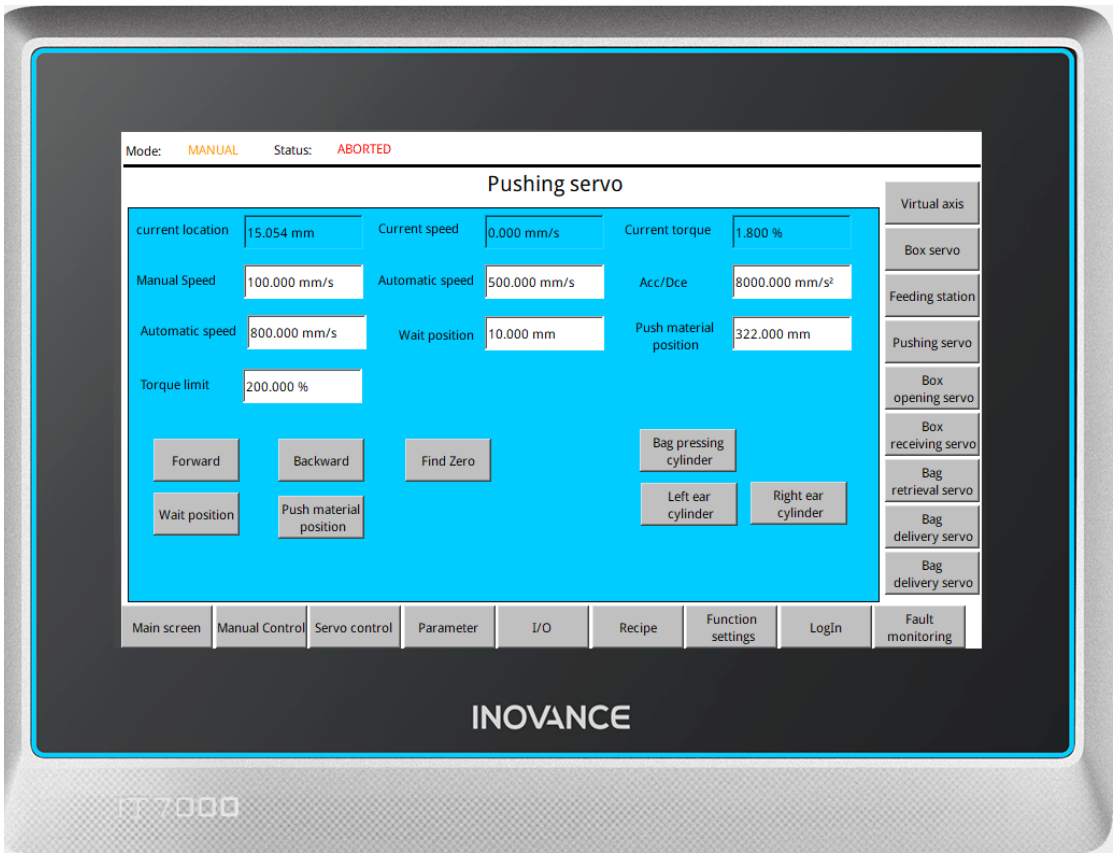

## 7.3 Cboost-15pcs

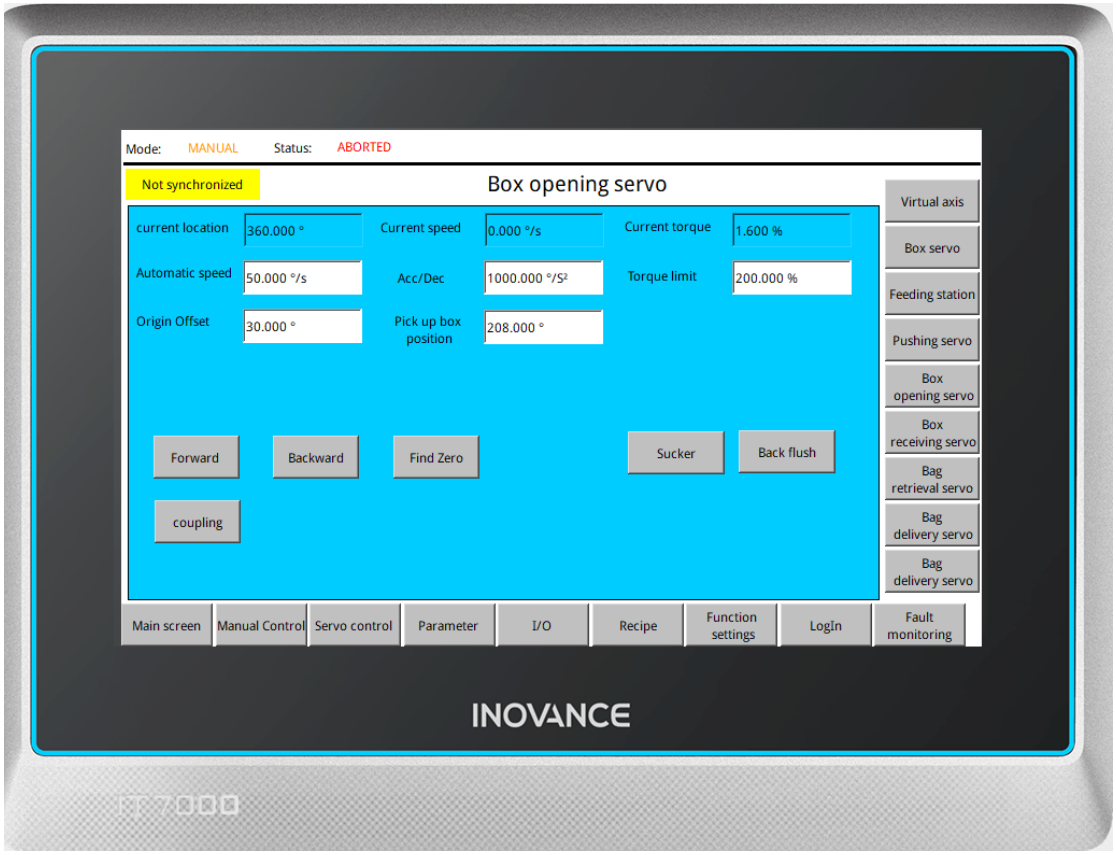
The parameters setting for Cboost-15pcs counting and cartonering packing is shown as following.

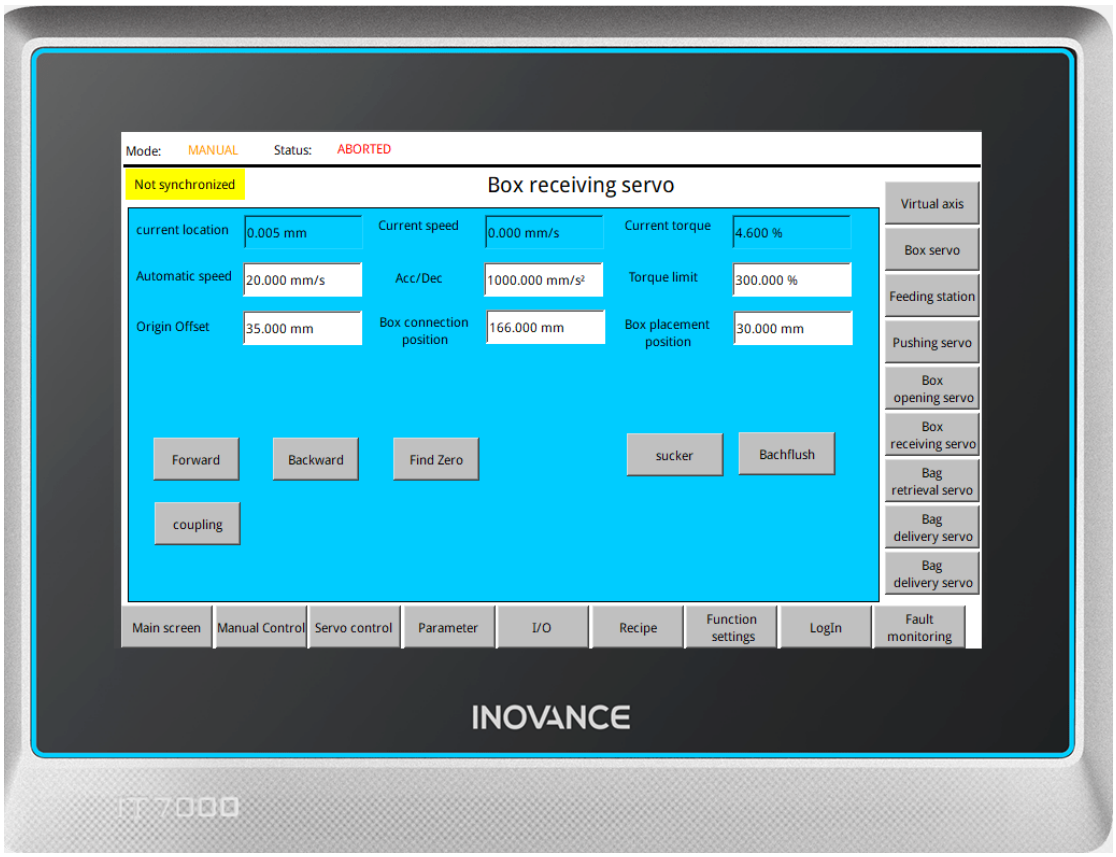

Mode: MANUAL Status: ABORTED
Virtual Axis
current location 0.000 °
Current speed 0.000 °/S
speed 180.000 °/S²
Acc/Dec 5000.000 °/S²
Forward
Forward one work station
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

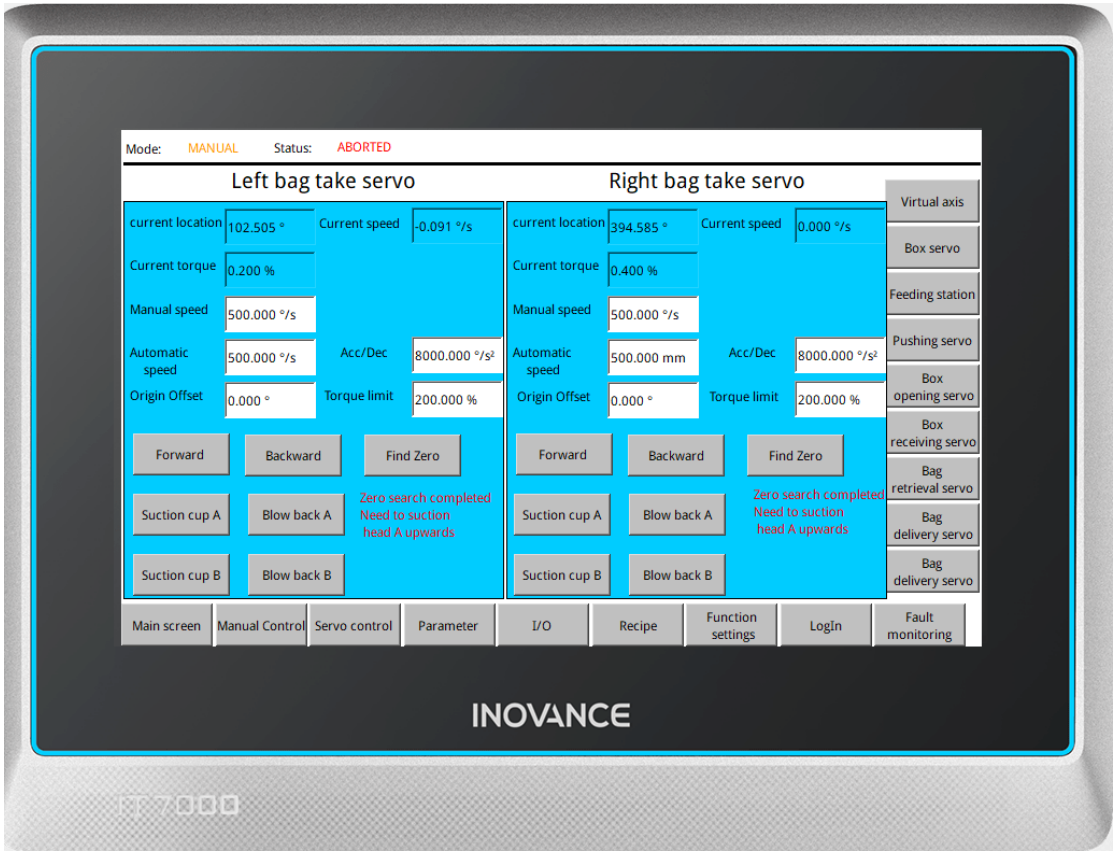

Mode: MANUAL Status: ABORTED
Not synchronized
Box servo A
current location 6480.000 °
Current speed 0.000 °/s
Current torque 0.200 %
speed 50.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 5.000 °/s
Origin Offset 85.000 °
Torque limit 150.000 %
Forward
Backward
Find Zero
Coupling
Not synchronized
Box servo B
current location 6479.999 °
Current speed 0.000 °/s
Current torque 0.200 %
Torque limit 150.000 %
Origin Offset 166.000 °
Forward
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

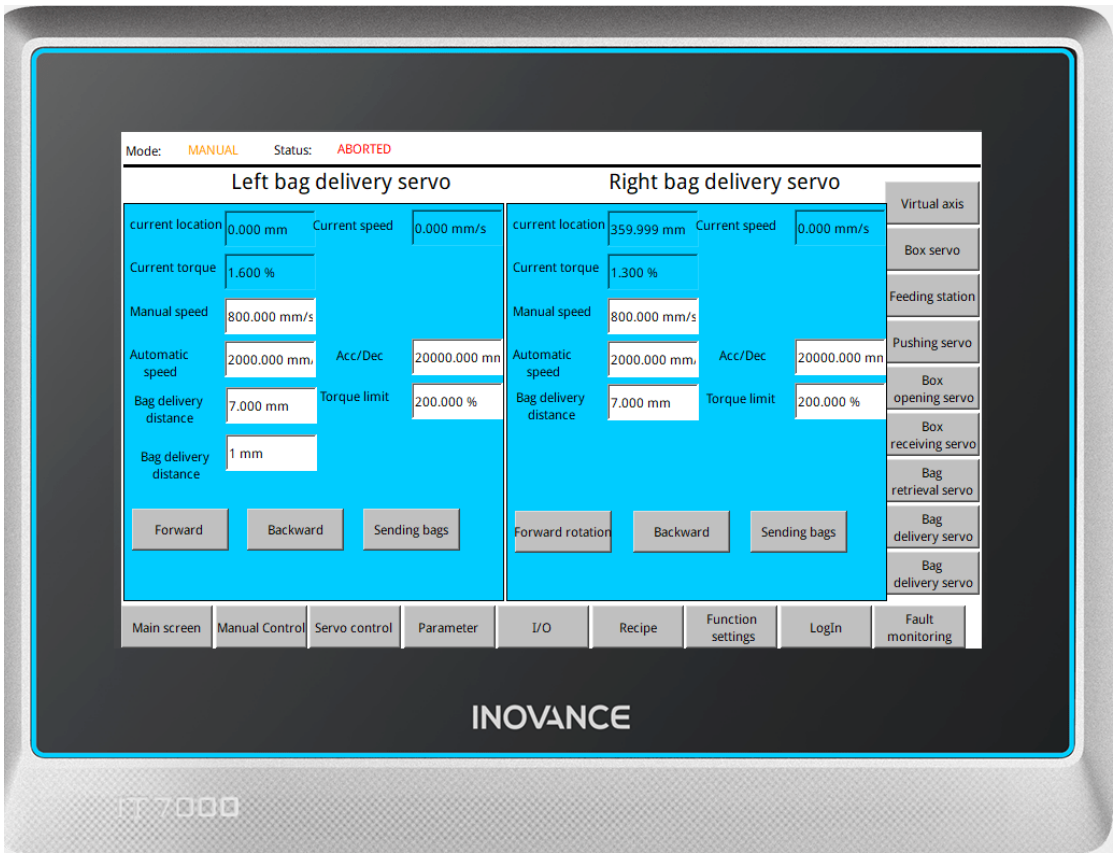

Mode: MANUAL Status: ABORTED
Not synchronized
Workstation servo A
current location 6839.937 °
Current speed 0.000 °/s
Current torque 0.600 %
speed 100.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 20.000 °/s
Origin Offset 20.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
coupling
Not synchronized
Workstation servo B
current location 6840.012 °
Current speed 0.000 °/s
Current torque 0.500 %
Torque limit 200.000 %
Origin Offset 35.000 °
Forward
Backward
Bag pressing cylinder
Push bag cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

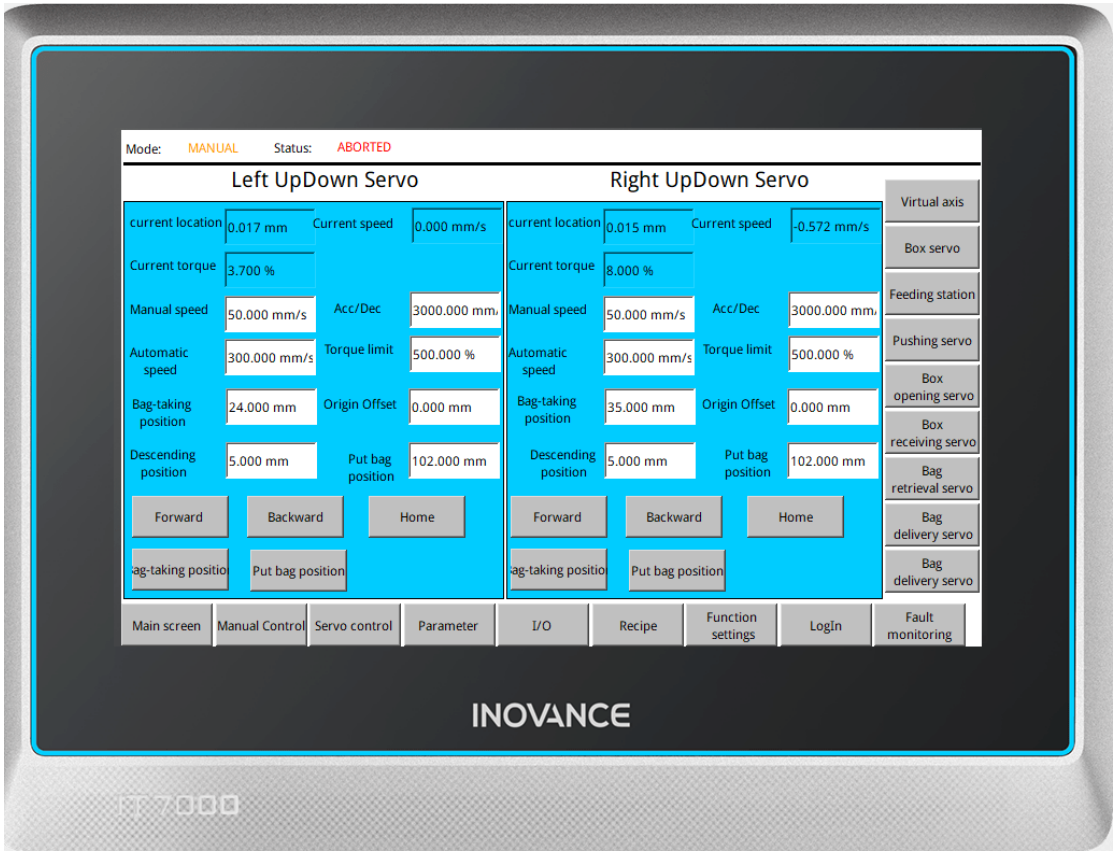

Mode: MANUAL Status: ABORTED
Pushing servo
current location 15.054 mm
Current speed 0.000 mm/s
Current torque 1.800 %
Manual Speed 100.000 mm/s
Automatic speed 500.000 mm/s
Acc/Dce 8000.000 mm/s²
Automatic speed 800.000 mm/s
Wait position 10.000 mm
Push material position 322.000 mm
Torque limit 200.000 %
Forward
Backward
Find Zero
Wait position
Push material position
Bag pressing cylinder
Left ear cylinder
Right ear cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

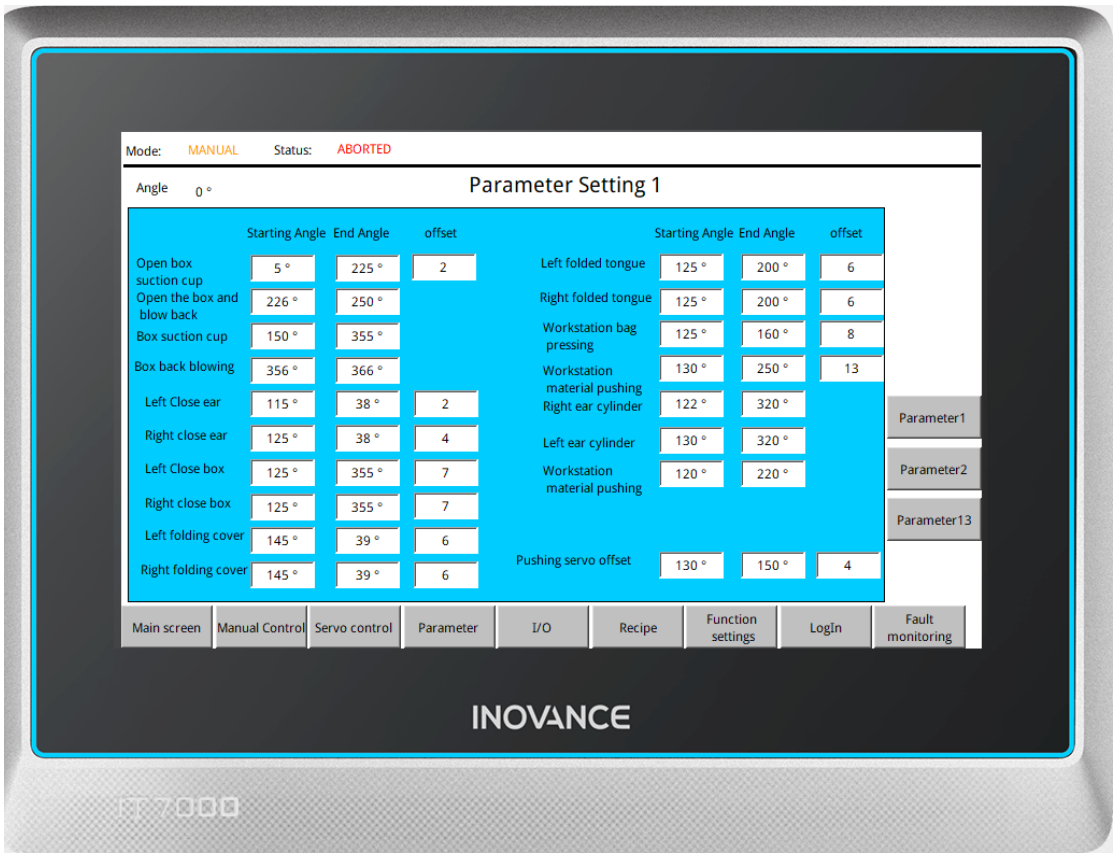

Mode: MANUAL Status: ABORTED
Not synchronized
Box opening servo
current location 360.000 °
Current speed 0.000 °/s
Current torque 1.600 %
Automatic speed 50.000 °/s
Acc/Dec 1000.000 °/S²
Torque limit 200.000 %
Origin Offset 30.000 °
Pick up box position 208.000 °
Forward
Backward
Find Zero
Sucker
Back flush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

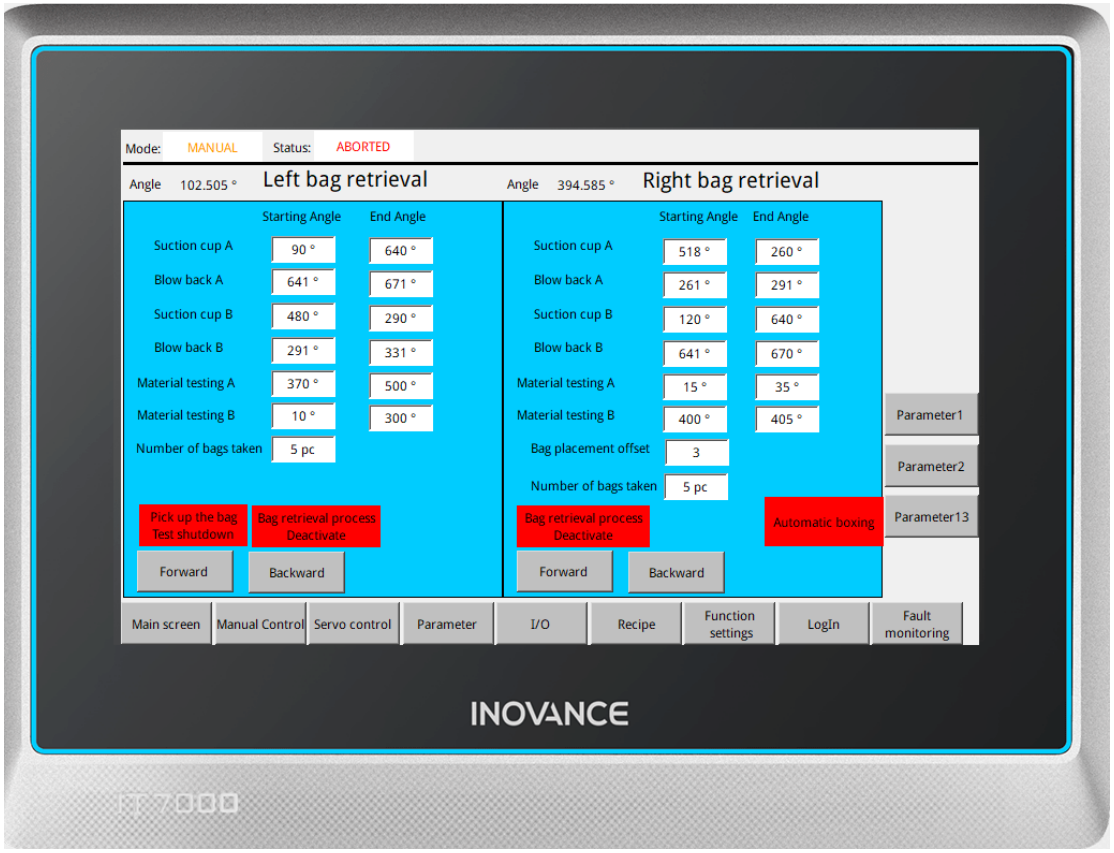

Mode: MANUAL Status: ABORTED
Not synchronized
Box receiving servo
current location 0.005 mm
Current speed 0.000 mm/s
Current torque 4.600 %
Automatic speed 20.000 mm/s
Acc/Dec 1000.000 mm/s²
Torque limit 300.000 %
Origin Offset 35.000 mm
Box connection position 166.000 mm
Box placement position 30.000 mm
Forward
Backward
Find Zero
sucker
Bachflush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

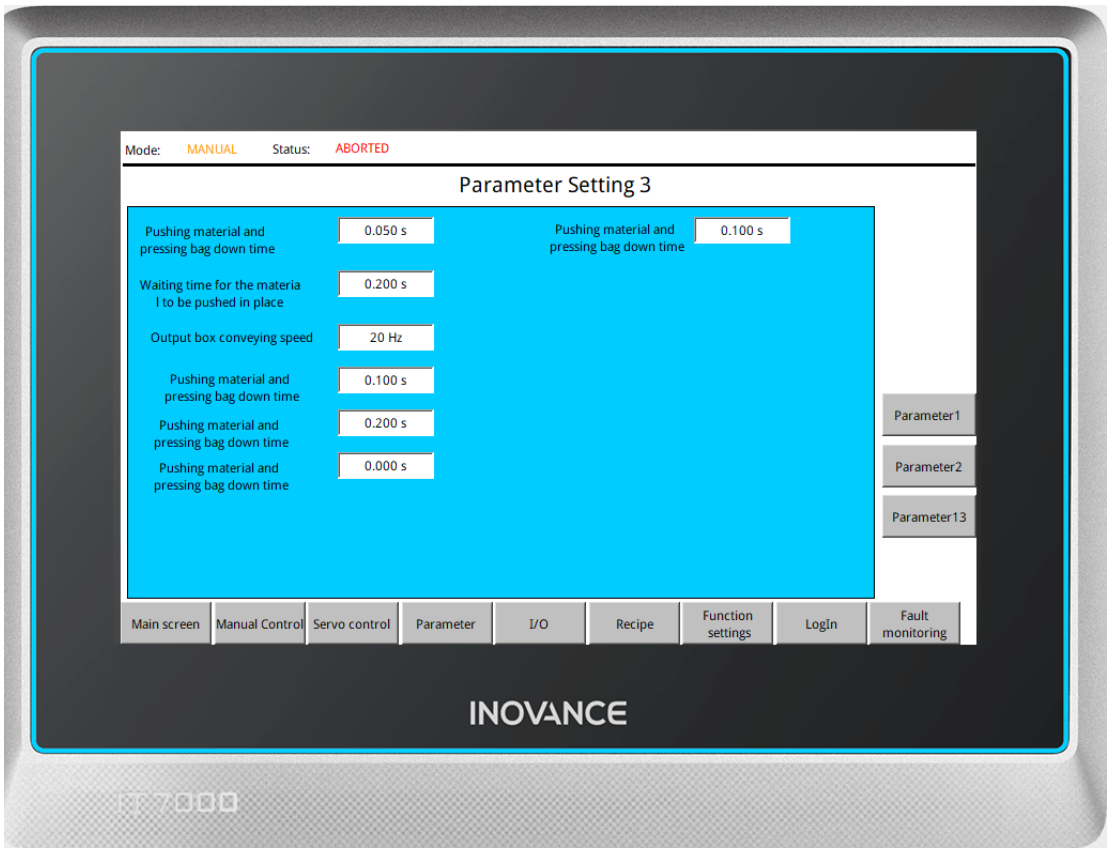

Mode: MANUAL Status: ABORTED
Left bag take servo
Right bag take servo
current location 102.505 °
Current speed -0.091 °/s
Current torque 0.200 %
Manual speed 500.000 °/s
Automatic speed 500.000 °/s
Acc/Dec 8000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
current location 394.585 °
Current speed 0.000 °/s
Current torque 0.400 %
Manual speed 500.000 °/s
Automatic speed 500.000 mm
Acc/Dec 8000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left bag delivery servo
Right bag delivery servo
current location 0.000 mm
Current speed 0.000 mm/s
Current torque 1.600 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm
Acc/Dec 20000.000 mm
Bag delivery distance 7.000 mm
Torque limit 200.000 %
Bag delivery distance 1 mm
Forward
Backward
Sending bags
current location 359.999 mm
Current speed 0.000 mm/s
Current torque 1.300 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm
Acc/Dec 20000.000 mm
Bag delivery distance 7.000 mm
Torque limit 200.000 %
Forward rotation
Backward
Sending bags
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left UpDown Servo
current location 0.017 mm
Current speed 0.000 mm/s
Current torque 3.700 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 24.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
Put bag position
Right UpDown Servo
current location 0.015 mm
Current speed -0.572 mm/s
Current torque 8.000 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 35.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
Put bag position
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

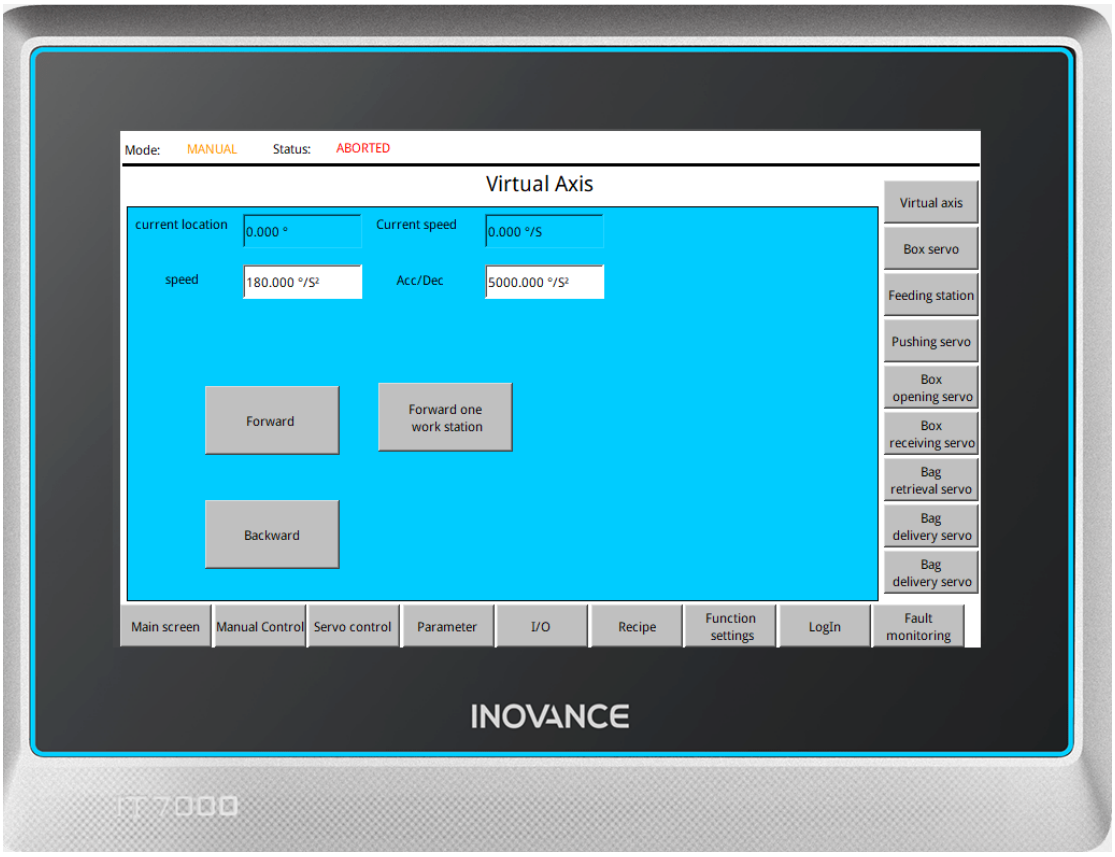

Mode: MANUAL Status: ABORTED
Angle 0 °
Parameter Setting 1
Starting Angle End Angle offset
Open box suction cup 5 ° 225 ° 2
Open the box and blow back 226 ° 250 °
Box suction cup 150 ° 355 °
Box back blowing 356 ° 366 °
Left Close ear 115 ° 38 ° 2
Right close ear 125 ° 38 ° 4
Left Close box 125 ° 355 ° 7
Right close box 125 ° 355 ° 7
Left folding cover 145 ° 39 ° 6
Right folding cover 145 ° 39 ° 6
Starting Angle End Angle offset
Left folded tongue 125 ° 200 ° 6
Right folded tongue 125 ° 200 ° 6
Workstation bag pressing 125 ° 160 ° 8
Workstation material pushing 130 ° 250 ° 13
Right ear cylinder 122 ° 320 °
Left ear cylinder 130 ° 320 °
Workstation material pushing 120 ° 220 °
Pushing servo offset 130 ° 150 ° 4
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

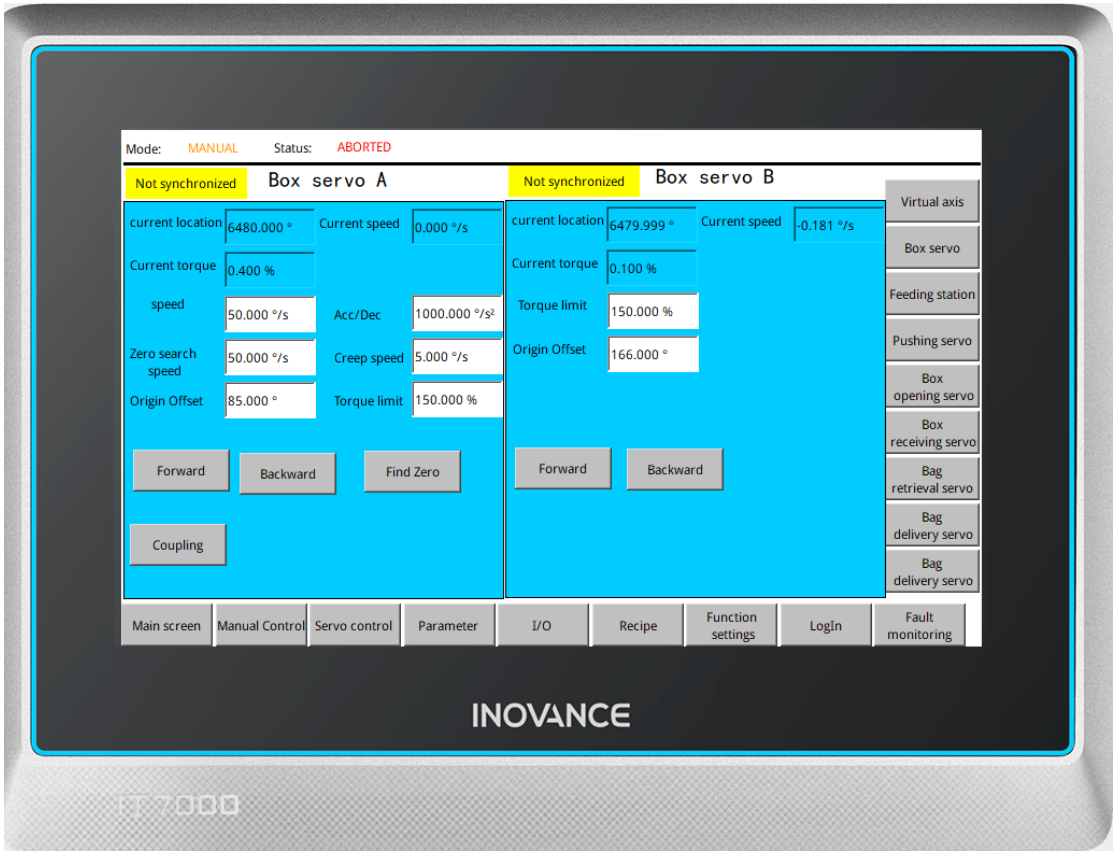

Mode: MANUAL Status: ABORTED
Angle 102.505 °
Left bag retrieval
Angle 394.585 °
Right bag retrieval
Starting Angle
End Angle
Suction cup A 90 ° 640 °
Blow back A 641 ° 671 °
Suction cup B 480 ° 290 °
Blow back B 291 ° 331 °
Material testing A 370 ° 500 °
Material testing B 10 ° 300 °
Number of bags taken 5 pc
Suction cup A 518 ° 260 °
Blow back A 261 ° 291 °
Suction cup B 120 ° 640 °
Blow back B 641 ° 670 °
Material testing A 15 ° 35 °
Material testing B 400 ° 405 °
Bag placement offset 3
Number of bags taken 5 pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Bag retrieval process Deactivate
Forward
Backward
Automatic boxing
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

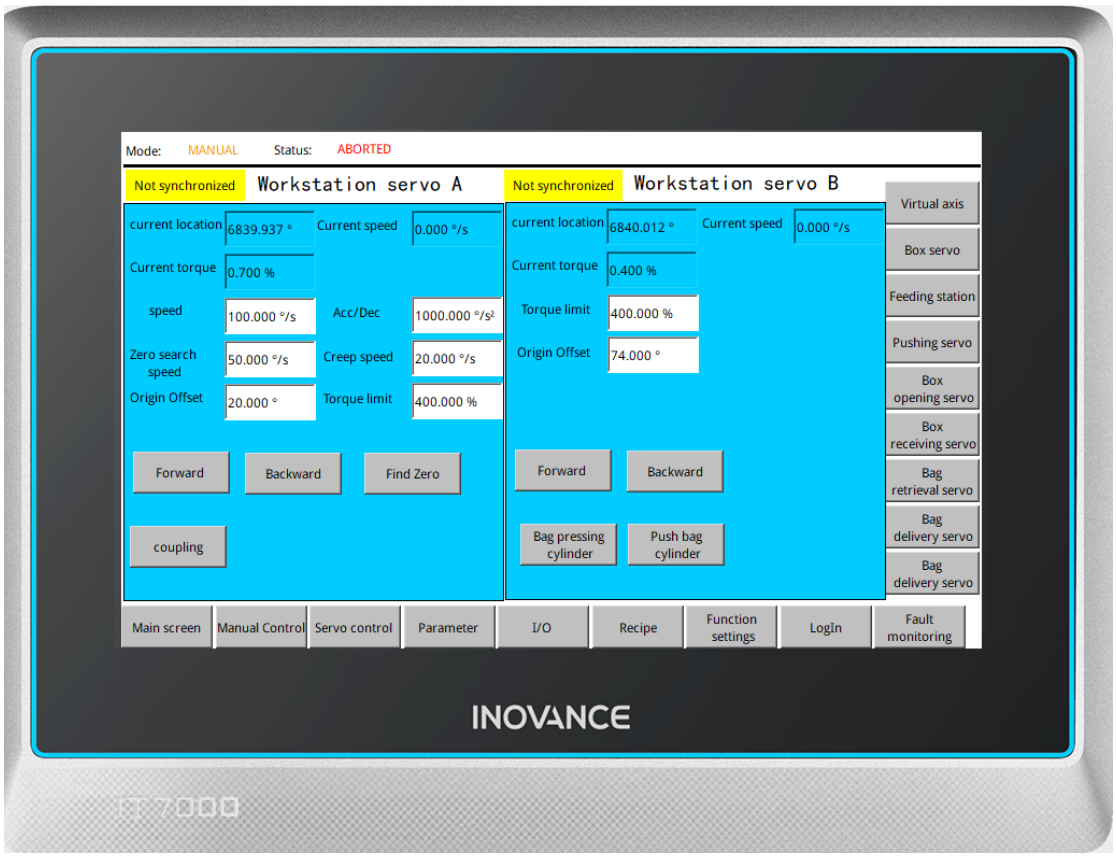

Mode: MANUAL Status: ABORTED
Parameter Setting 3
Pushing material and pressing bag down time 0.050 s
Pushing material and pressing bag down time 0.100 s
Waiting time for the materia l to be pushed in place 0.200 s
Output box conveying speed 20 Hz
Pushing material and pressing bag down time 0.100 s
Pushing material and pressing bag down time 0.200 s
Pushing material and pressing bag down time 0.000 s
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

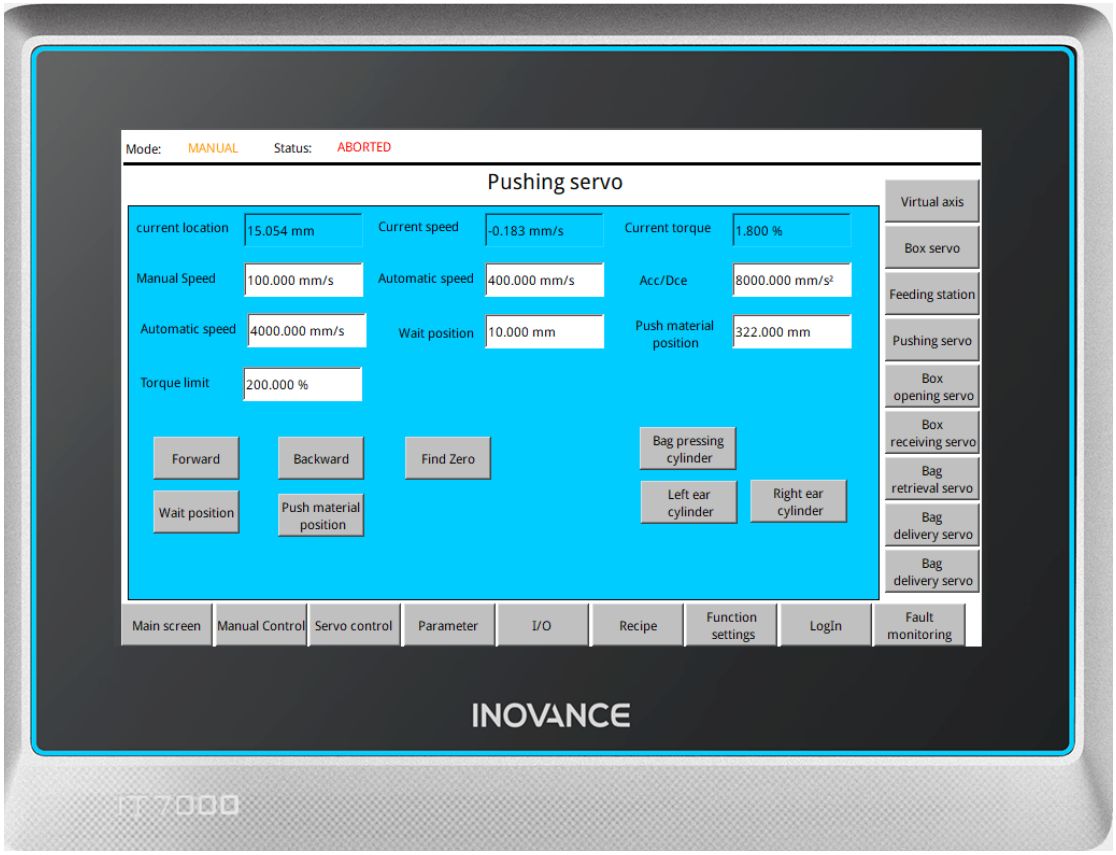
# 7.4 Fibotax-10pcs

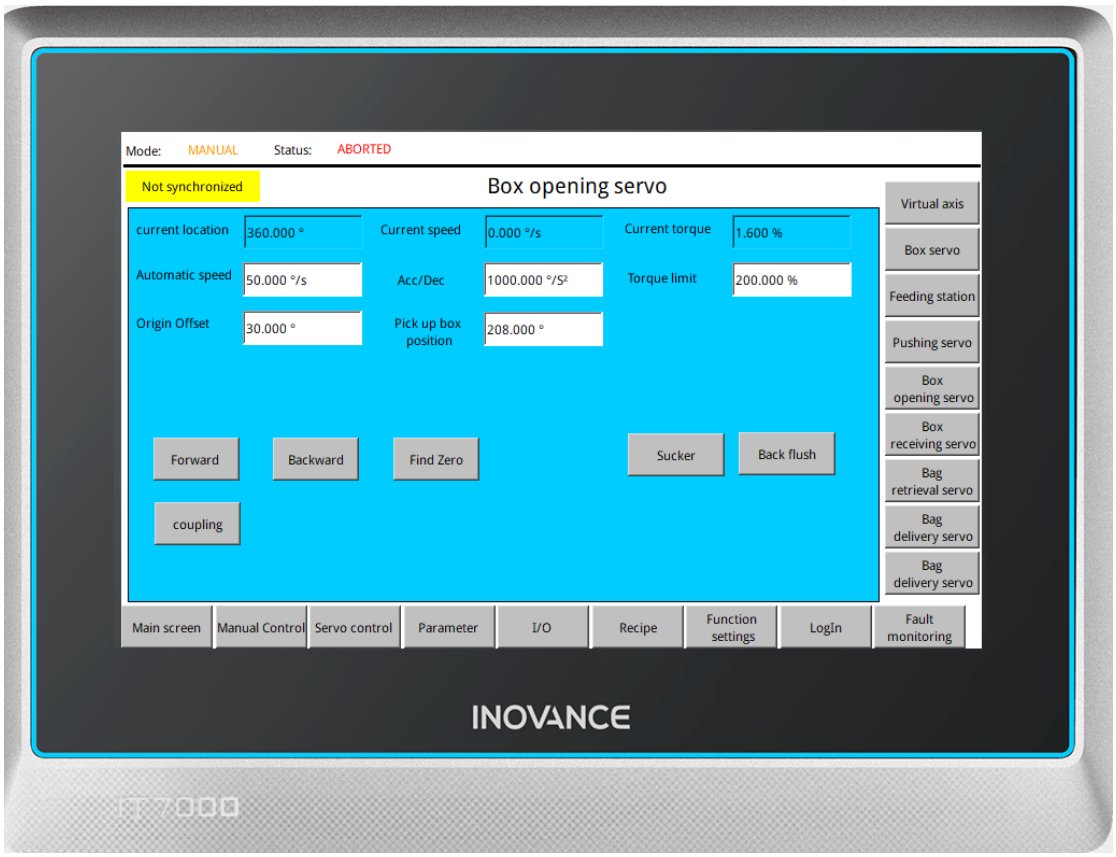
The parameters setting for Fibotax-10pcs counting and cartonering packing is shown as following.

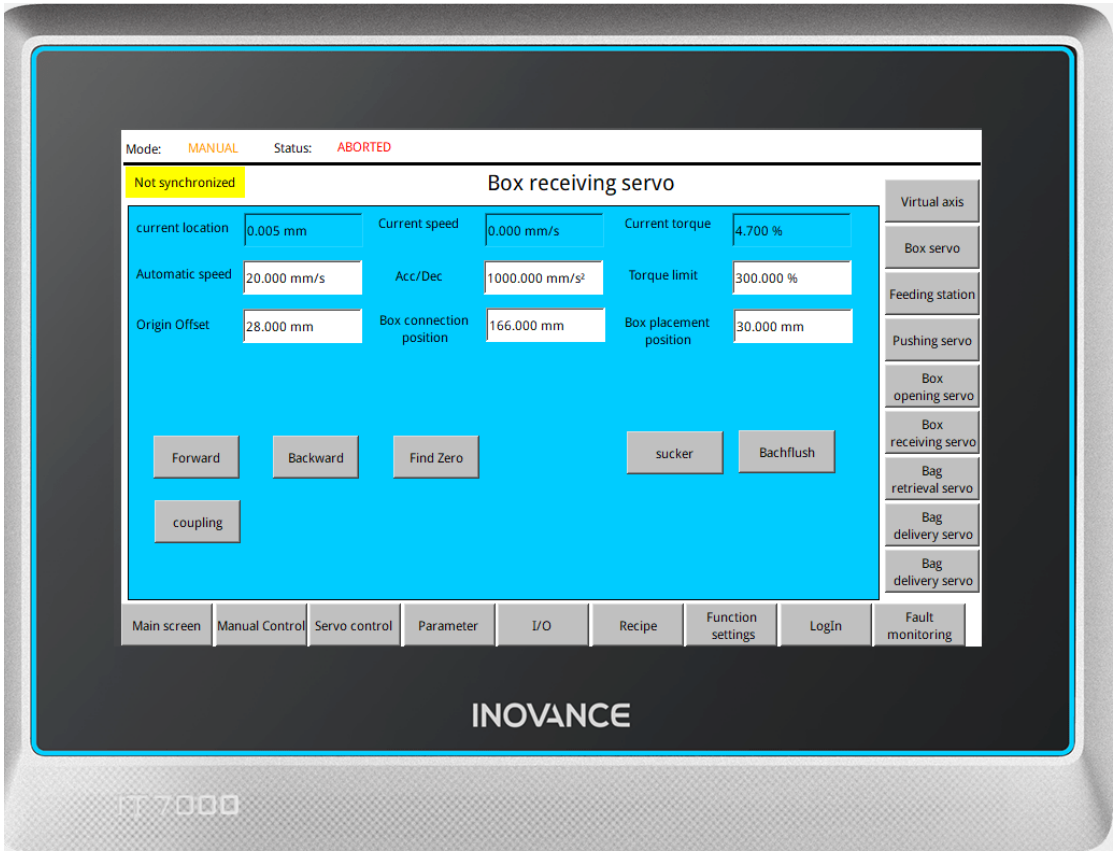


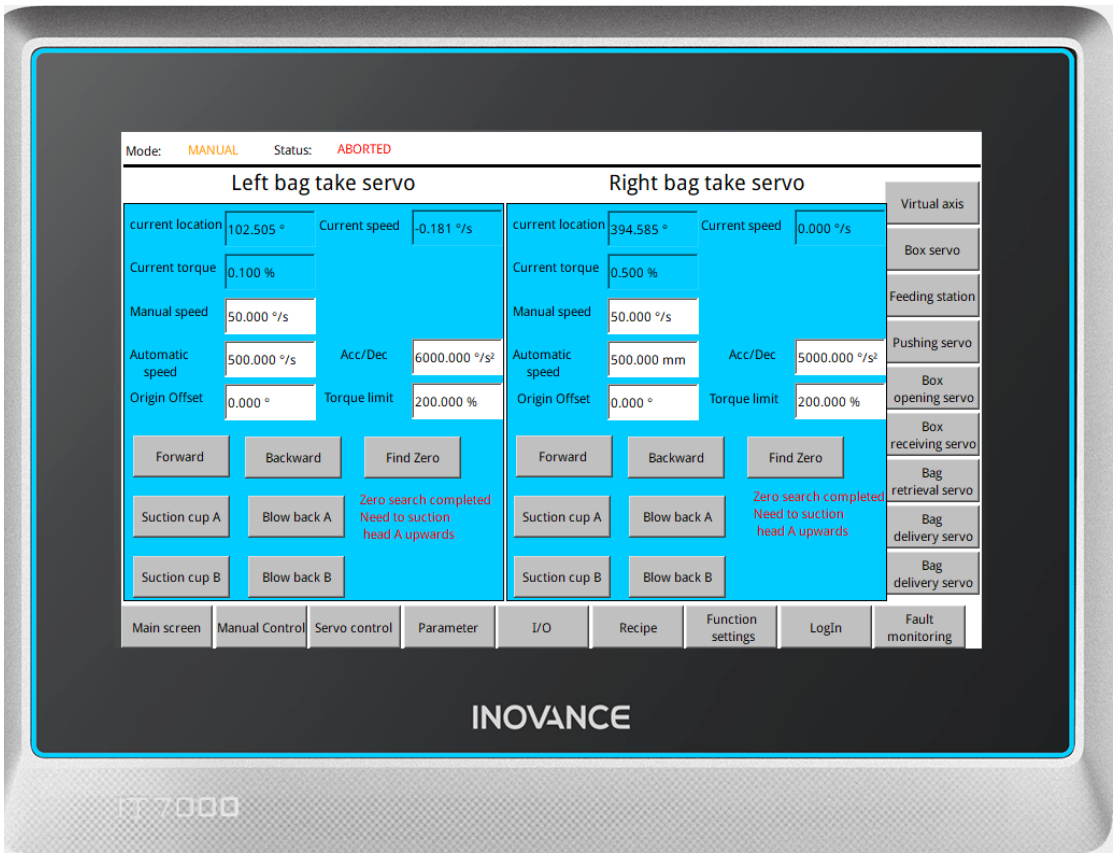

Mode: MANUAL Status: ABORTED
Not synchronized
Box servo A
current location 6480.000 °
Current speed 0.000 °/s
Current torque 0.400 %
speed 50.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 5.000 °/s
Origin Offset 85.000 °
Torque limit 150.000 %
Forward
Backward
Find Zero
Coupling
Not synchronized
Box servo B
current location 6479.999 °
Current speed -0.181 °/s
Current torque 0.100 %
Torque limit 150.000 %
Origin Offset 166.000 °
Forward
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

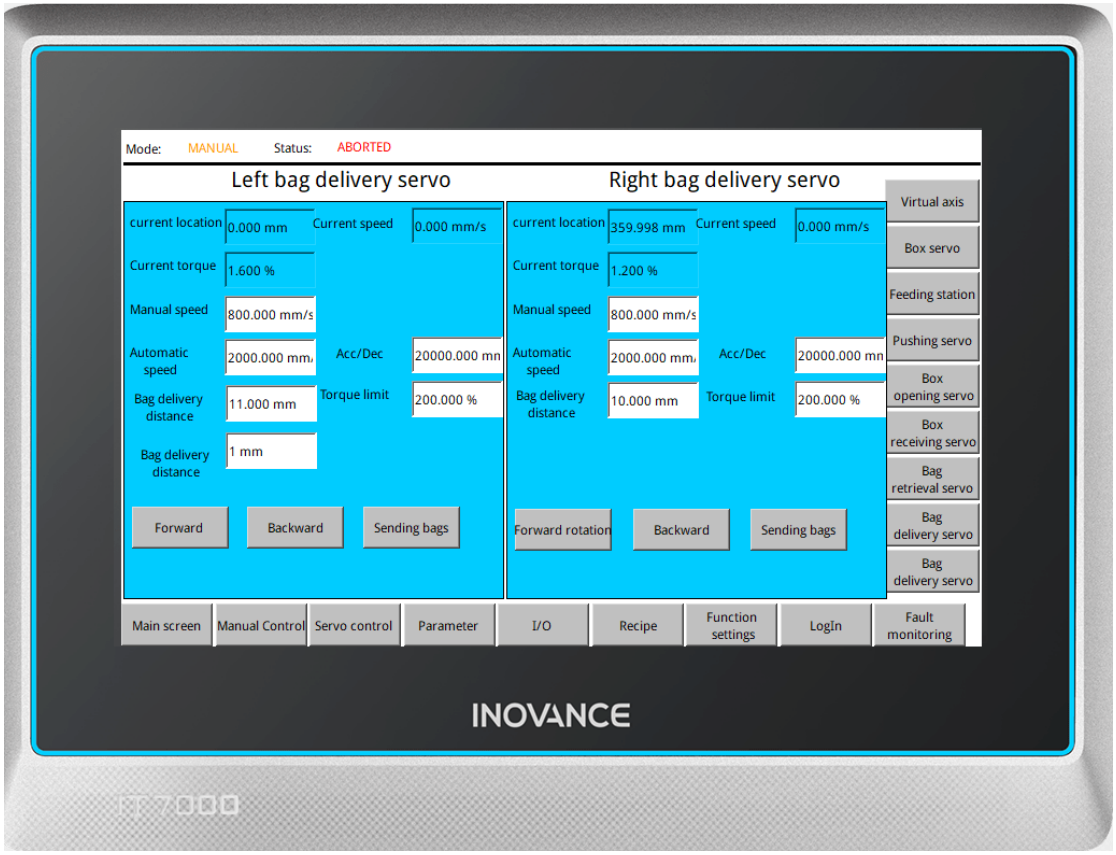

Mode: MANUAL Status: ABORTED
Not synchronized
Workstation servo A
current location 6839.937 °
Current speed 0.000 °/s
Current torque 0.700 %
speed 100.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 20.000 °/s
Origin Offset 20.000 °
Torque limit 400.000 %
Forward
Backward
Find Zero
coupling
Not synchronized
Workstation servo B
current location 6840.012 °
Current speed 0.000 °/s
Current torque 0.400 %
Torque limit 400.000 %
Origin Offset 74.000 °
Forward
Backward
Bag pressing cylinder
Push bag cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

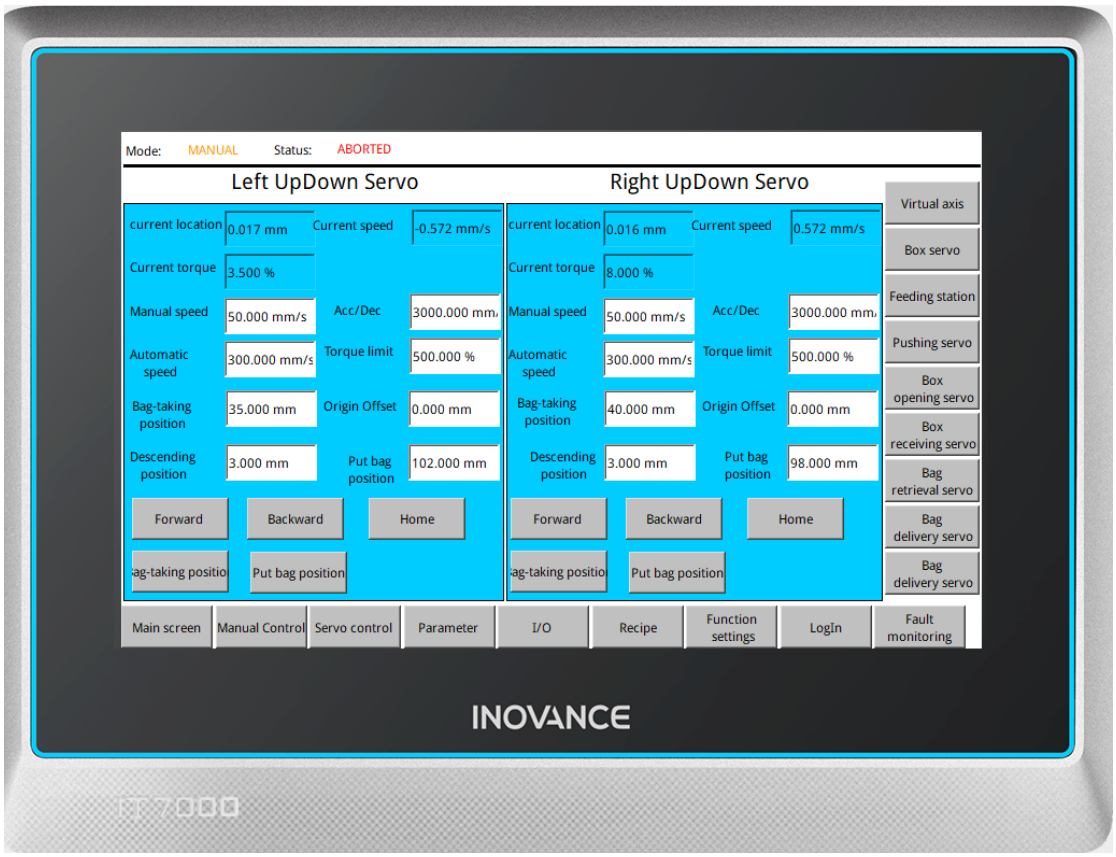

Mode: MANUAL Status: ABORTED
Pushing servo
current location 15.054 mm
Current speed -0.183 mm/s
Current torque 1.800 %
Manual Speed 100.000 mm/s
Automatic speed 400.000 mm/s
Acc/Dce 8000.000 mm/s²
Automatic speed 4000.000 mm/s
Wait position 10.000 mm
Push material position 322.000 mm
Torque limit 200.000 %
Forward
Backward
Find Zero
Bag pressing cylinder
Wait position
Push material position
Left ear cylinder
Right ear cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

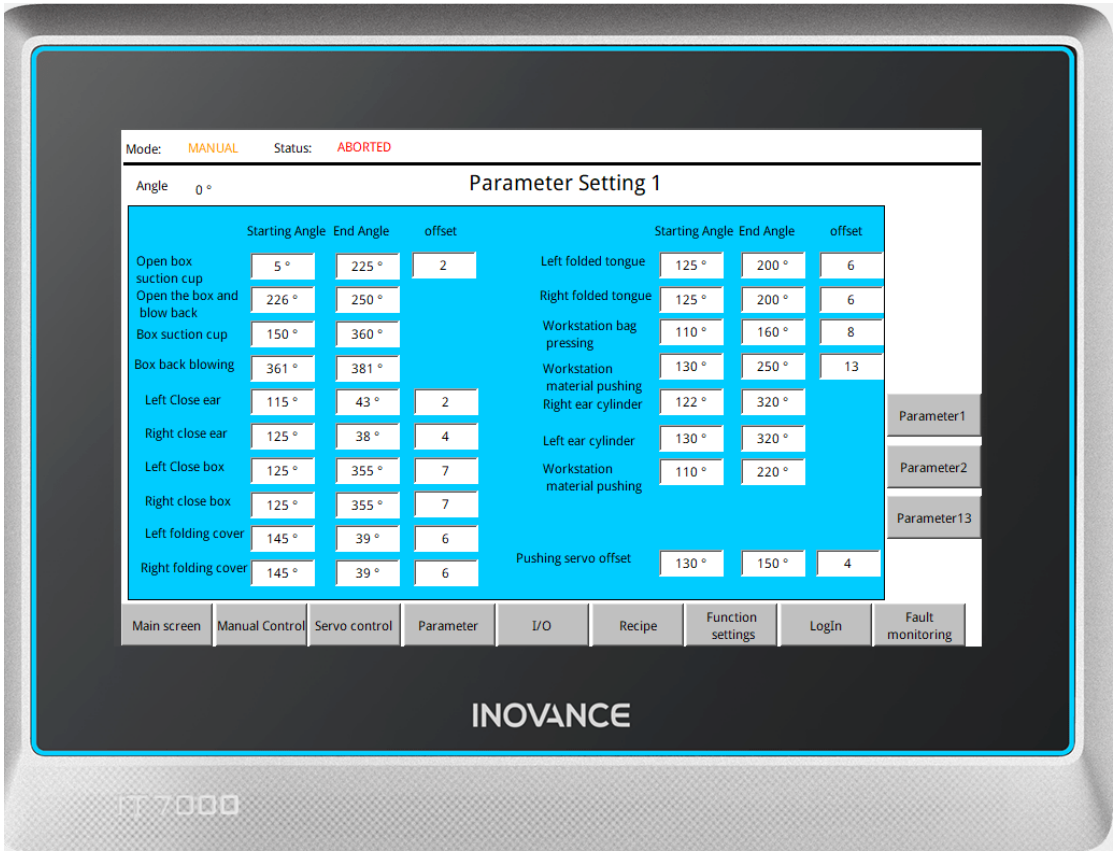

Mode: MANUAL Status: ABORTED
Not synchronized
Box opening servo
current location 360.000 °
Current speed 0.000 °/s
Current torque 1.600 %
Automatic speed 50.000 °/s
Acc/Dec 1000.000 °/S²
Torque limit 200.000 %
Origin Offset 30.000 °
Pick up box position 208.000 °
Forward
Backward
Find Zero
Sucker
Back flush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

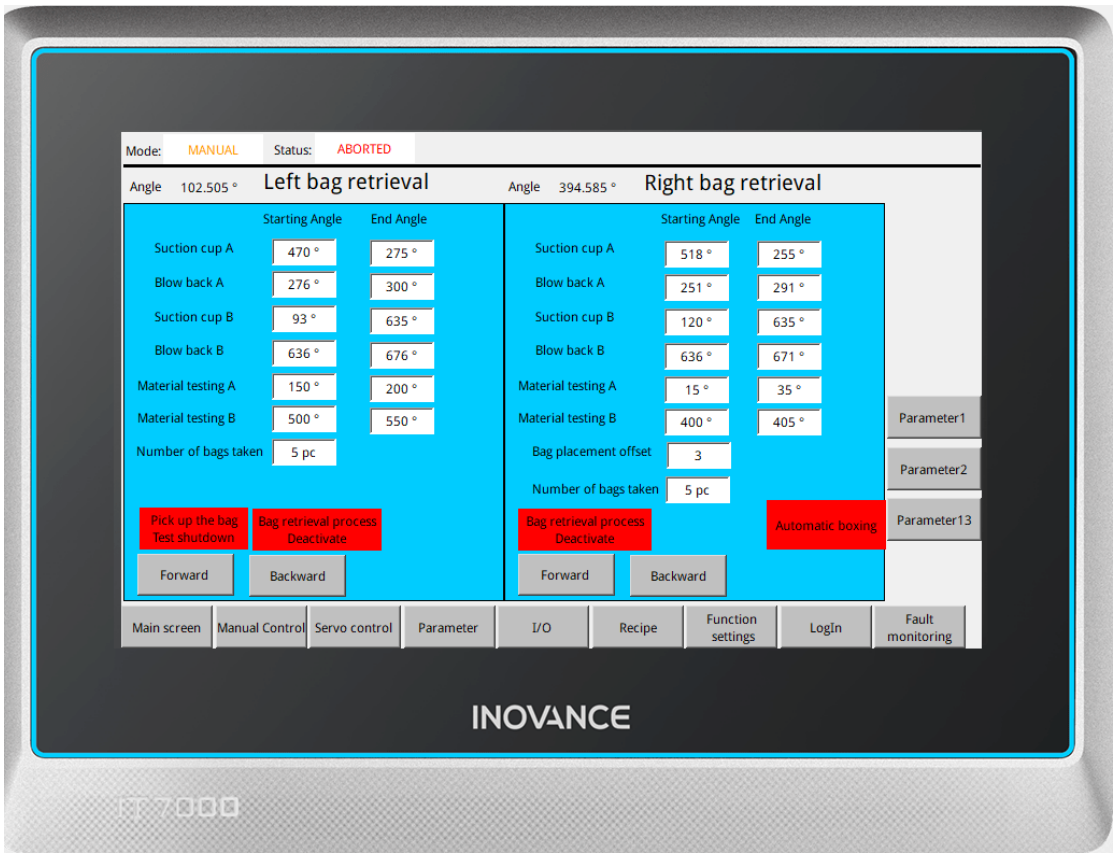

Mode: MANUAL Status: ABORTED
Not synchronized
Box receiving servo
current location 0.005 mm
Current speed 0.000 mm/s
Current torque 4.700 %
Automatic speed 20.000 mm/s
Acc/Dec 1000.000 mm/s²
Torque limit 300.000 %
Origin Offset 28.000 mm
Box connection position 166.000 mm
Box placement position 30.000 mm
Forward
Backward
Find Zero
sucker
Bachflush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

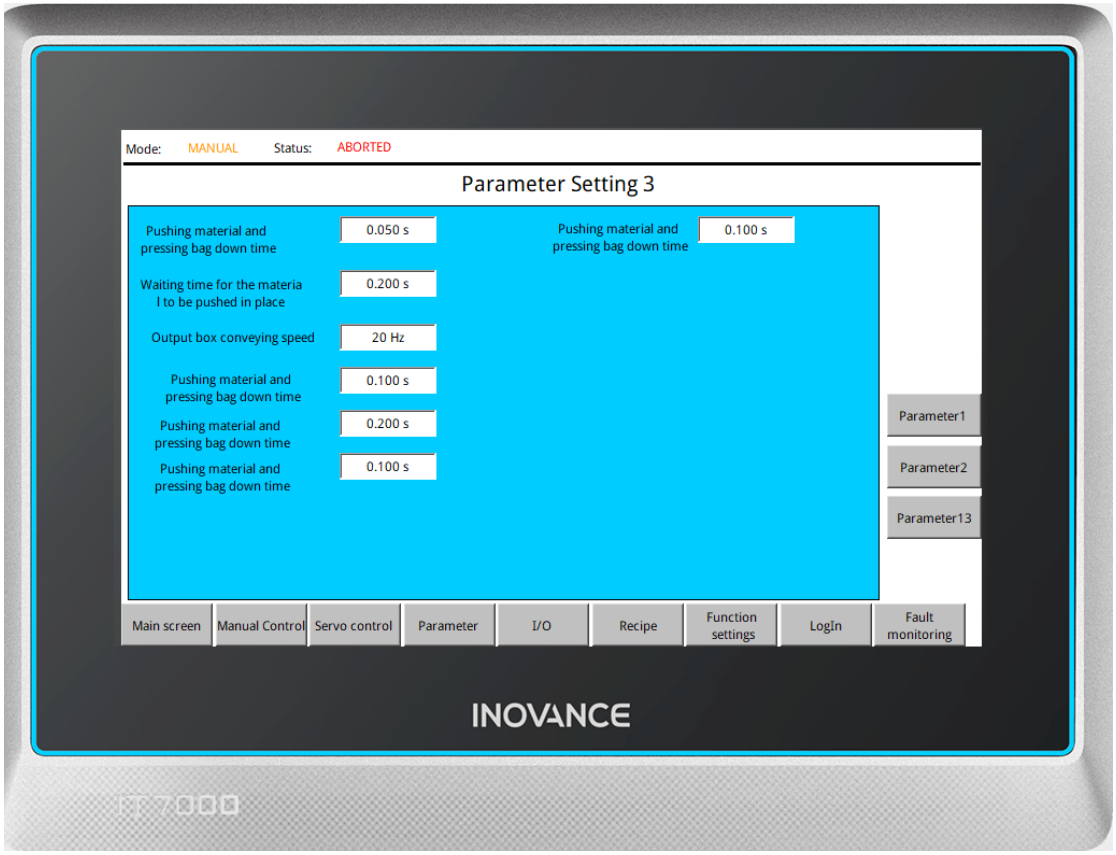

Mode: MANUAL Status: ABORTED
Left bag take servo
Right bag take servo
current location 102.505 °
Current speed -0.181 °/s
Current torque 0.100 %
Manual speed 50.000 °/s
Automatic speed 500.000 °/s
Acc/Dec 6000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
current location 394.585 °
Current speed 0.000 °/s
Current torque 0.500 %
Manual speed 50.000 °/s
Automatic speed 500.000 mm
Acc/Dec 5000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left bag delivery servo
current location 0.000 mm
Current speed 0.000 mm/s
Current torque 1.600 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 11.000 mm
Torque limit 200.000 %
Bag delivery distance 1 mm
Forward
Backward
Sending bags
Right bag delivery servo
current location 359.998 mm
Current speed 0.000 mm/s
Current torque 1.200 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 10.000 mm
Torque limit 200.000 %
Forward rotation
Backward
Sending bags
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left UpDown Servo
current location 0.017 mm
Current speed -0.572 mm/s
Current torque 3.500 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 35.000 mm
Origin Offset 0.000 mm
Descending position 3.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Right UpDown Servo
current location 0.016 mm
Current speed 0.572 mm/s
Current torque 8.000 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 40.000 mm
Origin Offset 0.000 mm
Descending position 3.000 mm
Put bag position 98.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

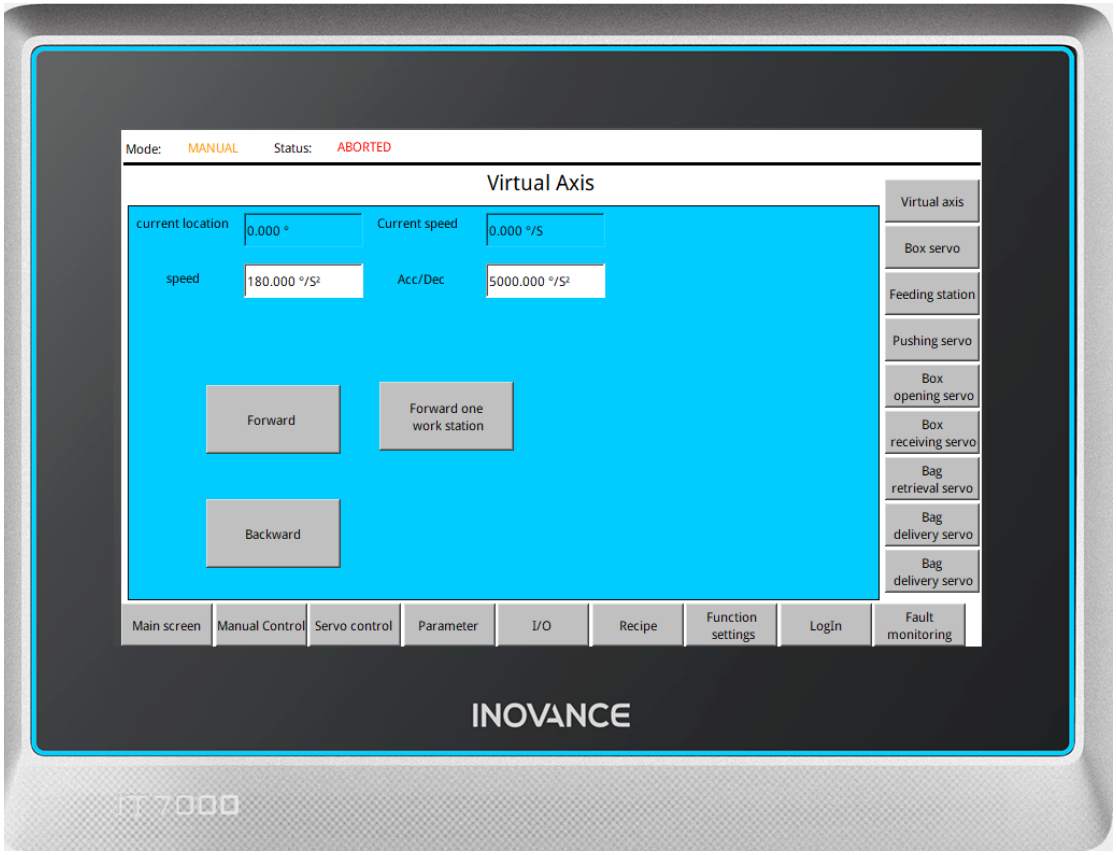

Mode: MANUAL Status: ABORTED
Angle 0 °
Parameter Setting 1
Starting Angle End Angle offset
Open box suction cup 5 ° 225 ° 2
Open the box and blow back 226 ° 250 °
Box suction cup 150 ° 360 °
Box back blowing 361 ° 381 °
Left Close ear 115 ° 43 ° 2
Right close ear 125 ° 38 ° 4
Left Close box 125 ° 355 ° 7
Right close box 125 ° 355 ° 7
Left folding cover 145 ° 39 ° 6
Right folding cover 145 ° 39 ° 6
Starting Angle End Angle offset
Left folded tongue 125 ° 200 ° 6
Right folded tongue 125 ° 200 ° 6
Workstation bag pressing 110 ° 160 ° 8
Workstation material pushing 130 ° 250 ° 13
Right ear cylinder 122 ° 320 °
Left ear cylinder 130 ° 320 °
Workstation material pushing 110 ° 220 °
Pushing servo offset 130 ° 150 ° 4
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

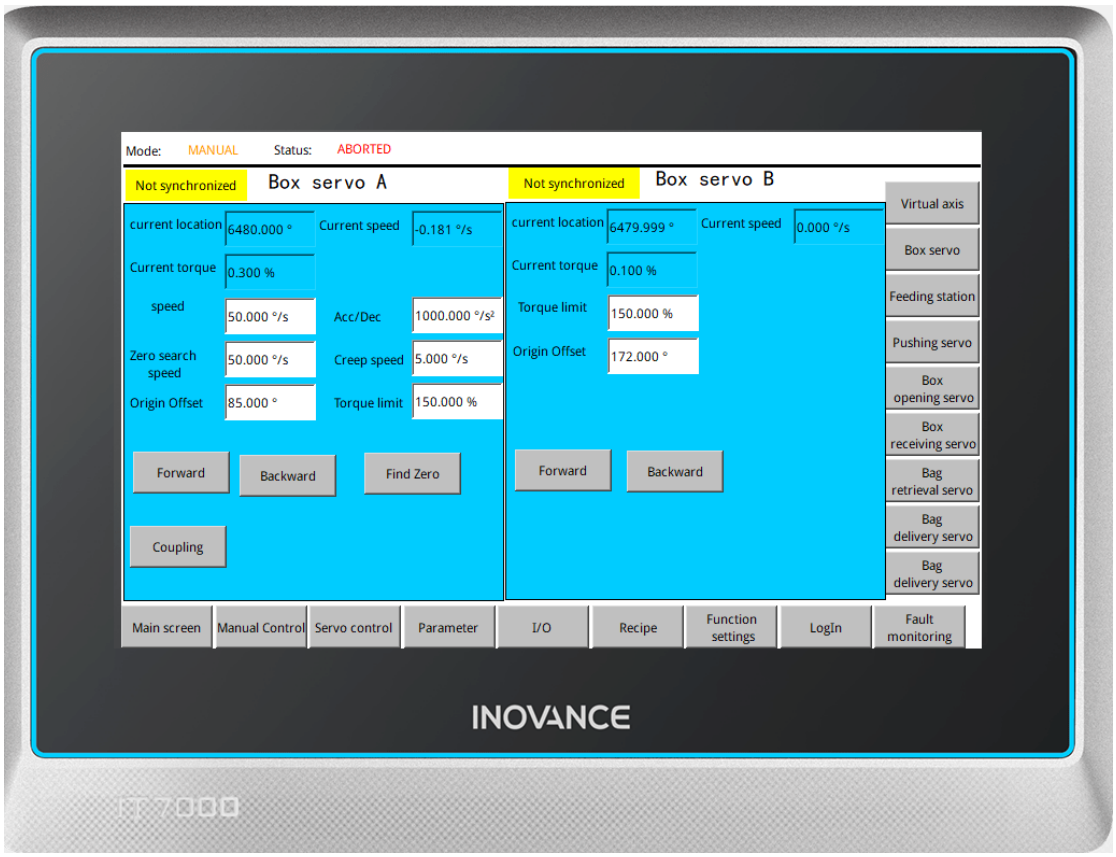

Mode: MANUAL Status: ABORTED
Angle 102.505 ° Left bag retrieval
Angle 394.585 ° Right bag retrieval
Starting Angle End Angle
Suction cup A 470 ° 275 °
Blow back A 276 ° 300 °
Suction cup B 93 ° 635 °
Blow back B 636 ° 676 °
Material testing A 150 ° 200 °
Material testing B 500 ° 550 °
Number of bags taken 5 pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Starting Angle End Angle
Suction cup A 518 ° 255 °
Blow back A 251 ° 291 °
Suction cup B 120 ° 635 °
Blow back B 636 ° 671 °
Material testing A 15 ° 35 °
Material testing B 400 ° 405 °
Bag placement offset 3
Number of bags taken 5 pc
Bag retrieval process Deactivate
Forward
Backward
Automatic boxing
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

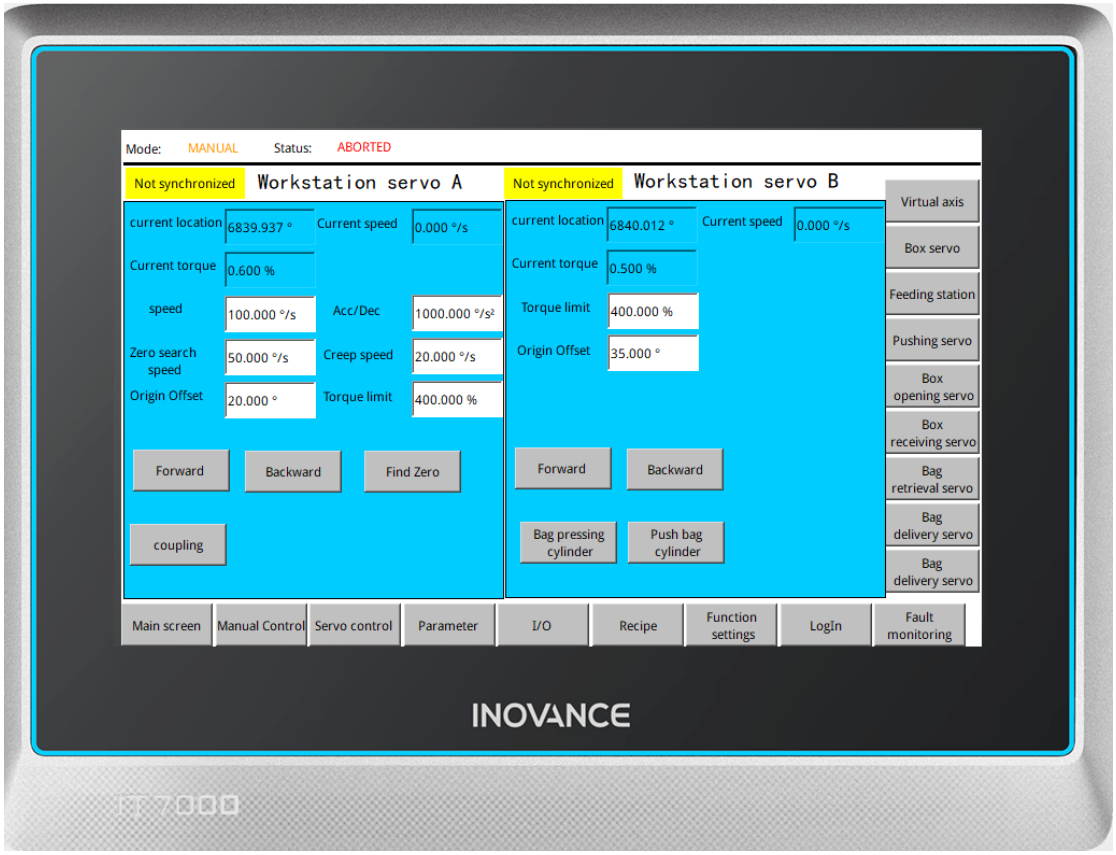


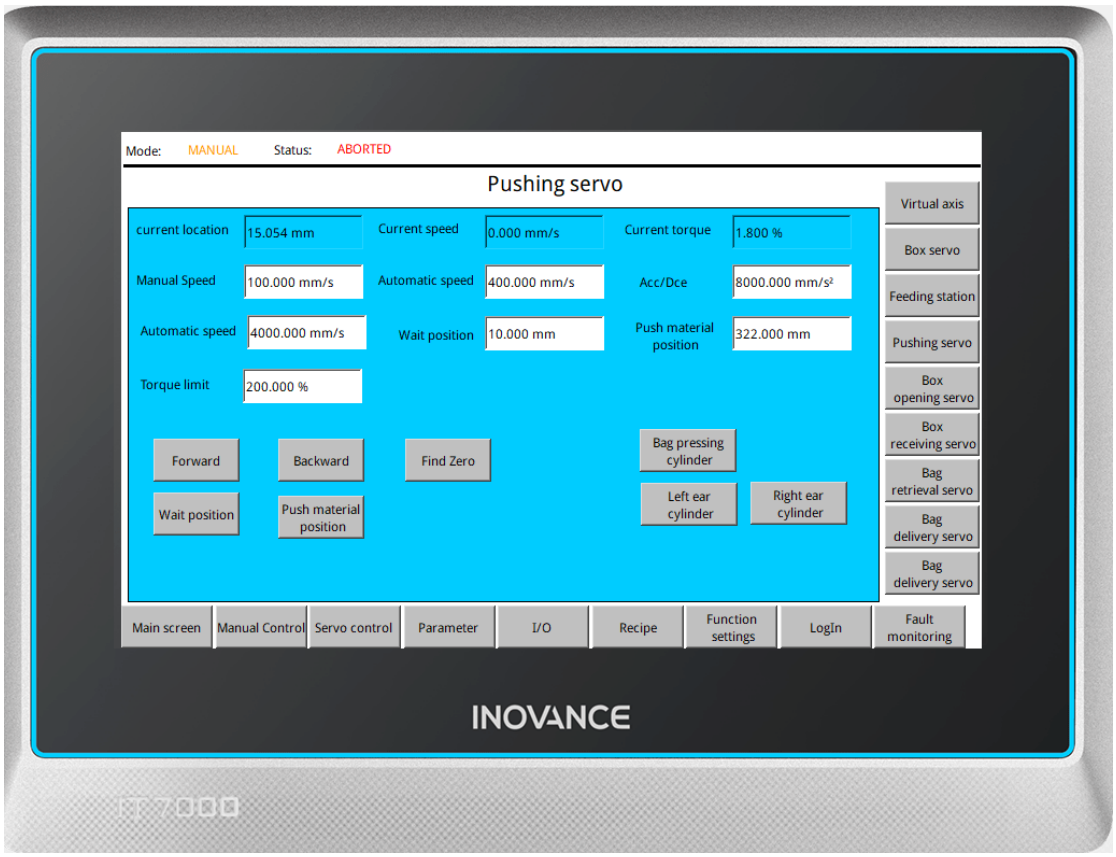

## 7.5 Simfex-15pcs

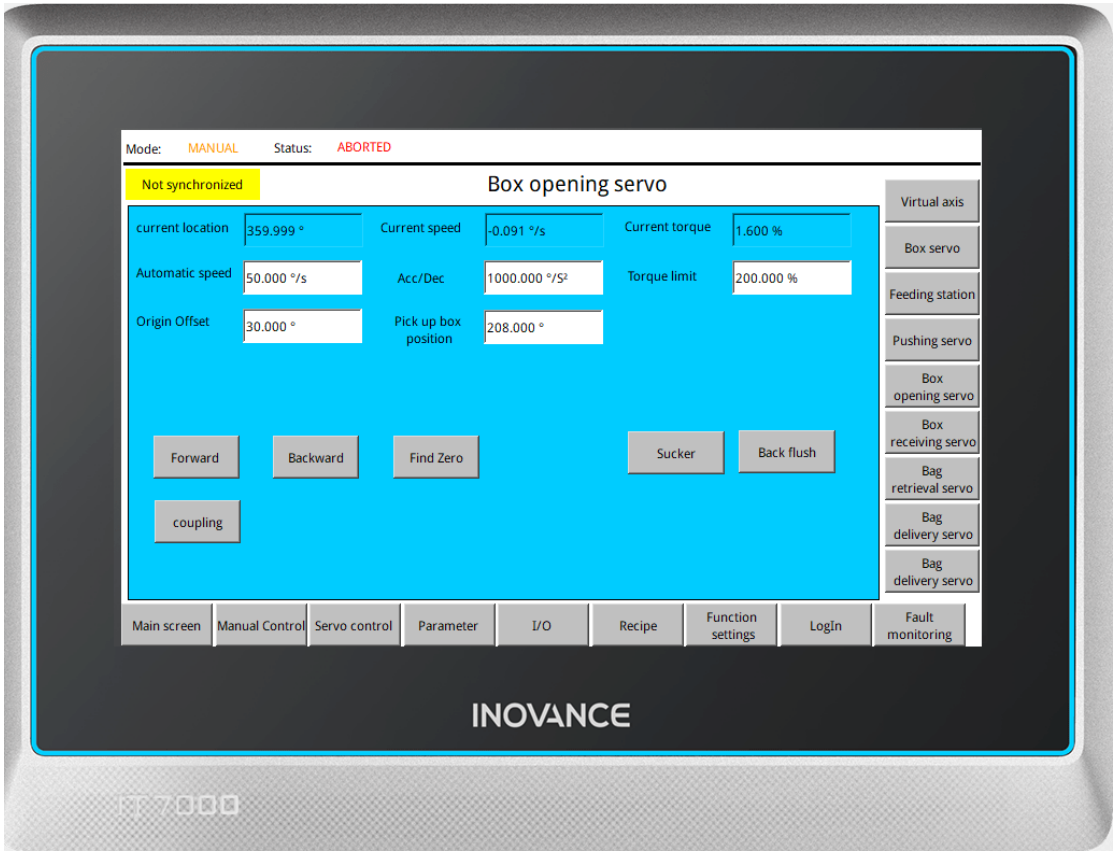
The parameters setting for Simfex-15pcs counting and cartonering packing is shown as following.

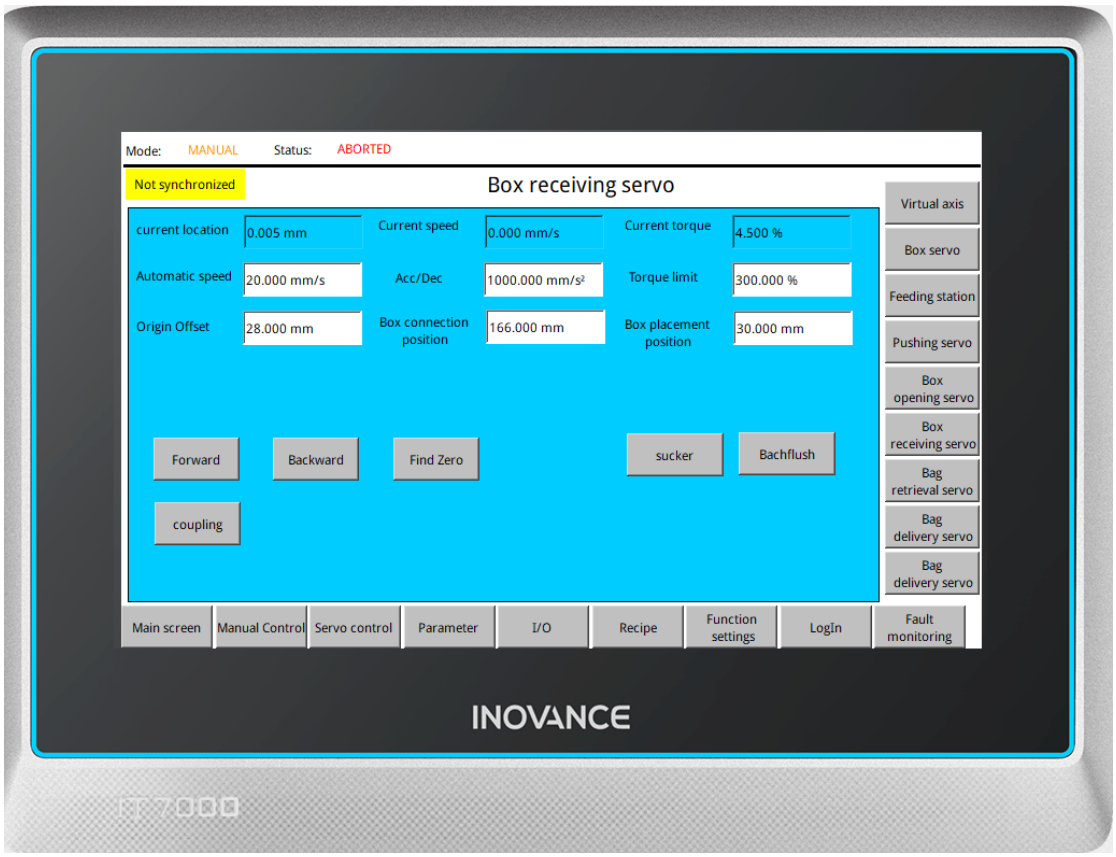

Mode: MANUAL Status: ABORTED
Virtual Axis
current location 0.000 °
Current speed 0.000 °/S
speed 180.000 °/S²
Acc/Dec 5000.000 °/S²
Forward
Forward one work station
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

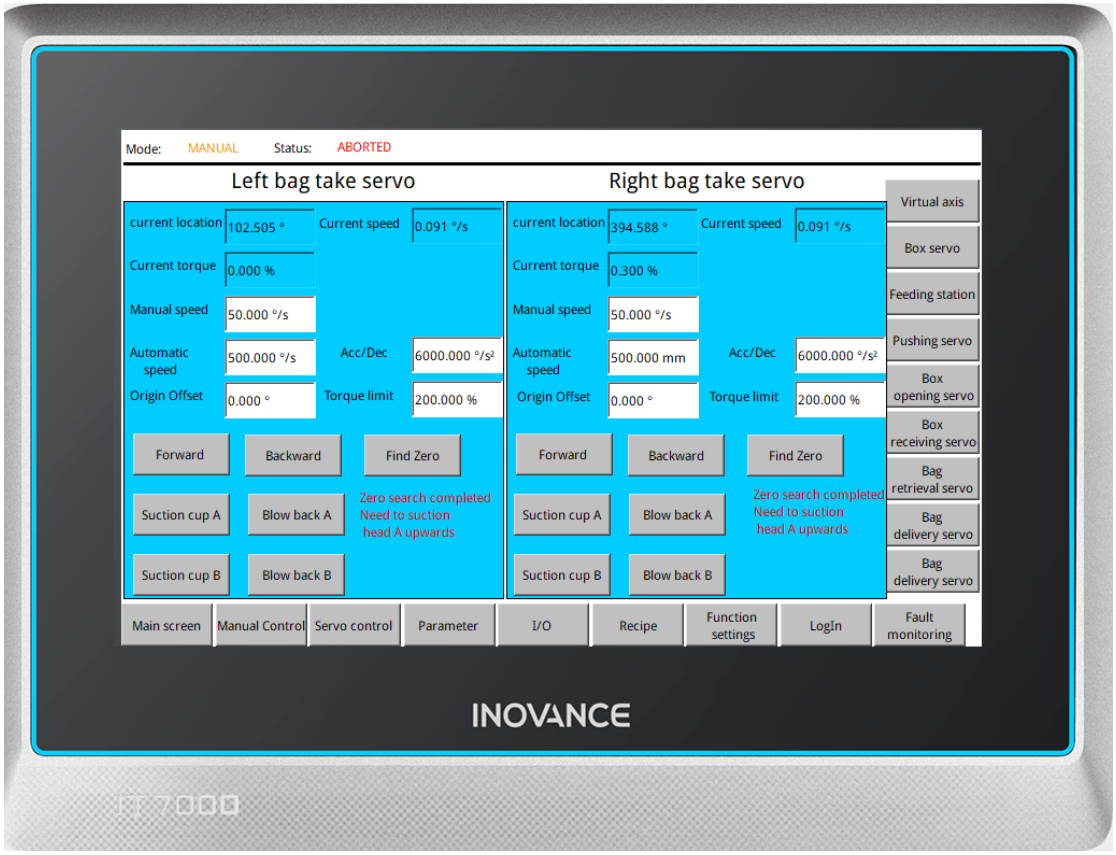

Mode: MANUAL Status: ABORTED
Not synchronized
Box servo A
current location 6480.000 °
Current speed -0.181 °/s
Current torque 0.300 %
speed 50.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 5.000 °/s
Origin Offset 85.000 °
Torque limit 150.000 %
Forward
Backward
Find Zero
Coupling
Not synchronized
Box servo B
current location 6479.999 °
Current speed 0.000 °/s
Current torque 0.100 %
Torque limit 150.000 %
Origin Offset 172.000 °
Forward
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

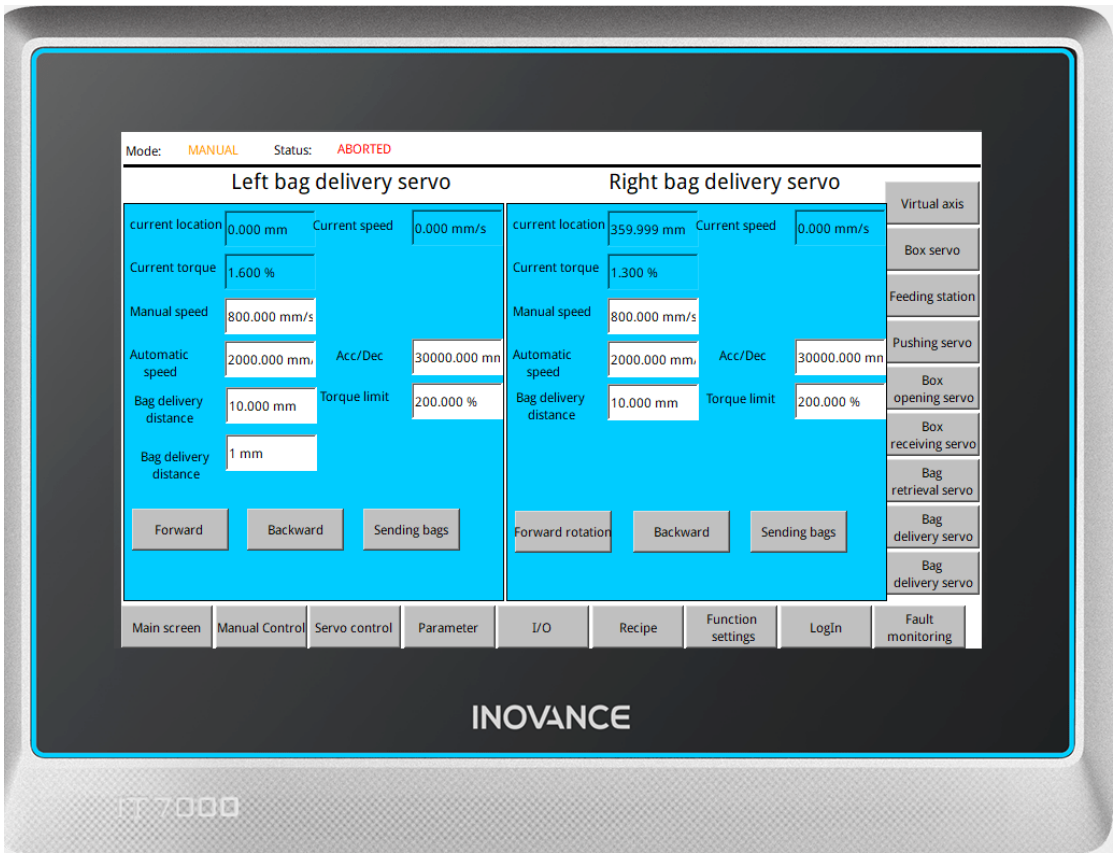

Mode: MANUAL Status: ABORTED
Not synchronized
Workstation servo A
current location 6839.937 °
Current speed 0.000 °/s
Current torque 0.600 %
speed 100.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 20.000 °/s
Origin Offset 20.000 °
Torque limit 400.000 %
Forward
Backward
Find Zero
coupling
Not synchronized
Workstation servo B
current location 6840.012 °
Current speed 0.000 °/s
Current torque 0.500 %
Torque limit 400.000 %
Origin Offset 35.000 °
Forward
Backward
Bag pressing cylinder
Push bag cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

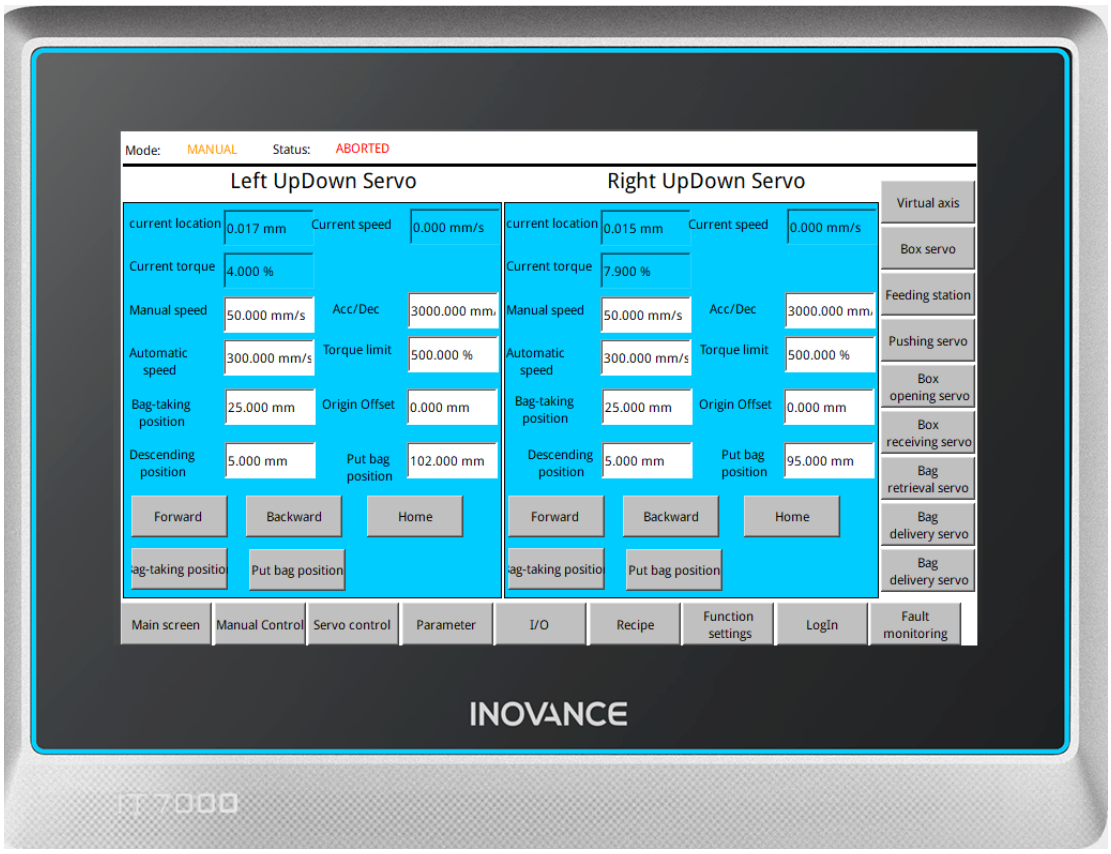

Mode: MANUAL Status: ABORTED
Pushing servo
current location 15.054 mm
Current speed 0.000 mm/s
Current torque 1.800 %
Manual Speed 100.000 mm/s
Automatic speed 400.000 mm/s
Acc/Dce 8000.000 mm/s²
Automatic speed 4000.000 mm/s
Wait position 10.000 mm
Push material position 322.000 mm
Torque limit 200.000 %
Forward
Backward
Find Zero
Wait position
Push material position
Bag pressing cylinder
Left ear cylinder
Right ear cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

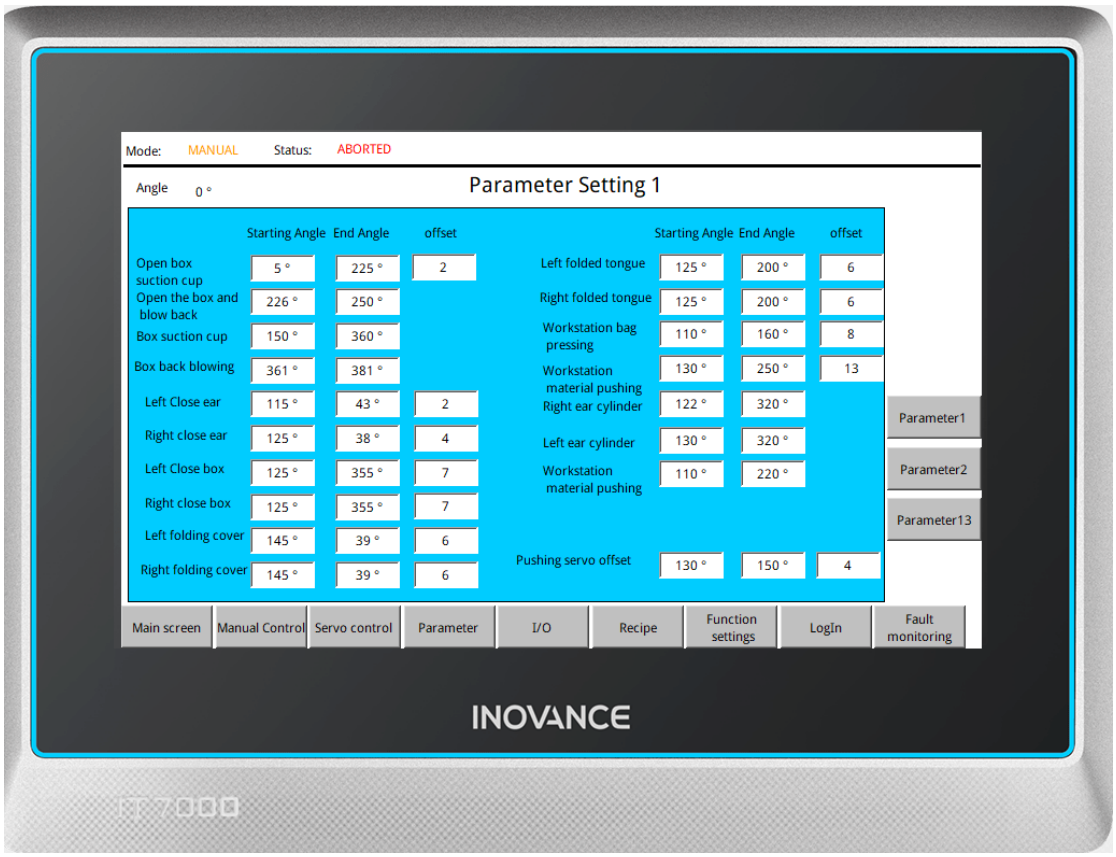

Mode: MANUAL Status: ABORTED
Not synchronized
Box opening servo
current location 359.999 °
Current speed -0.091 °/s
Current torque 1.600 %
Automatic speed 50.000 °/s
Acc/Dec 1000.000 °/S²
Torque limit 200.000 %
Origin Offset 30.000 °
Pick up box position 208.000 °
Forward
Backward
Find Zero
Sucker
Back flush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

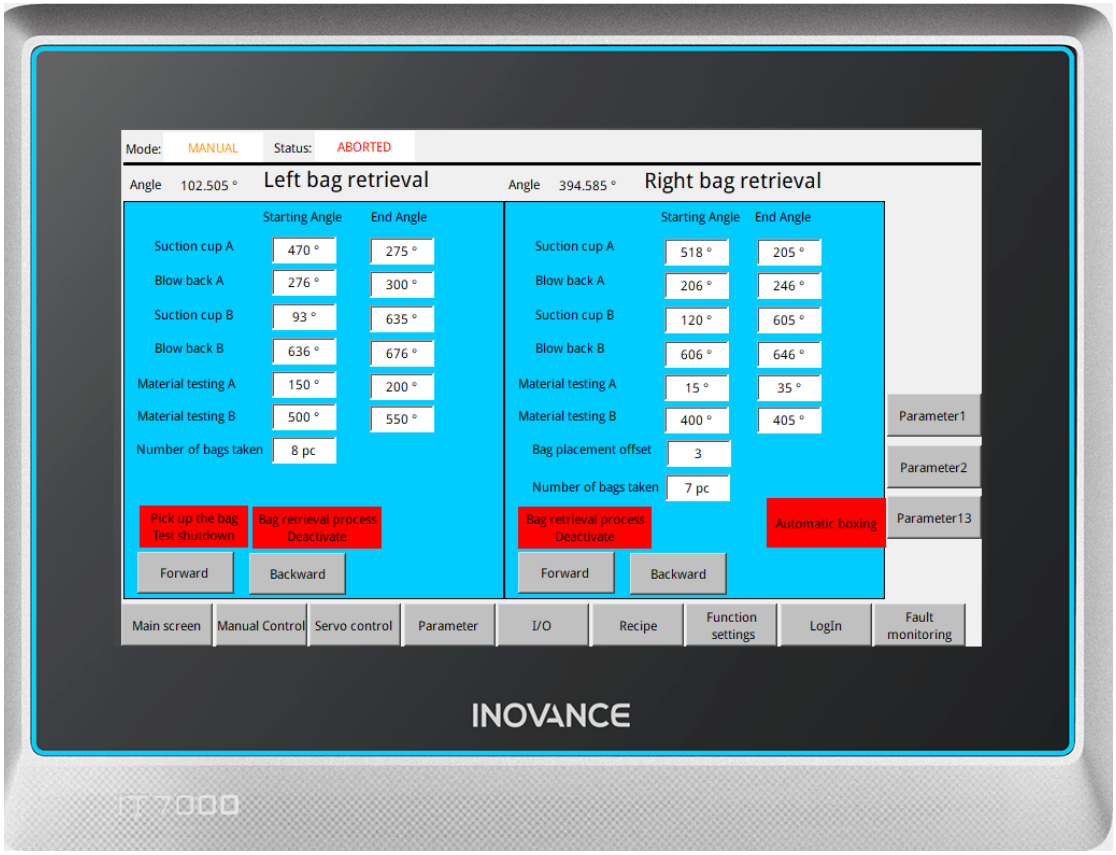

Mode: MANUAL Status: ABORTED
Not synchronized
Box receiving servo
current location 0.005 mm
Current speed 0.000 mm/s
Current torque 4.500 %
Automatic speed 20.000 mm/s
Acc/Dec 1000.000 mm/s²
Torque limit 300.000 %
Origin Offset 28.000 mm
Box connection position 166.000 mm
Box placement position 30.000 mm
Forward
Backward
Find Zero
sucker
Bachflush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

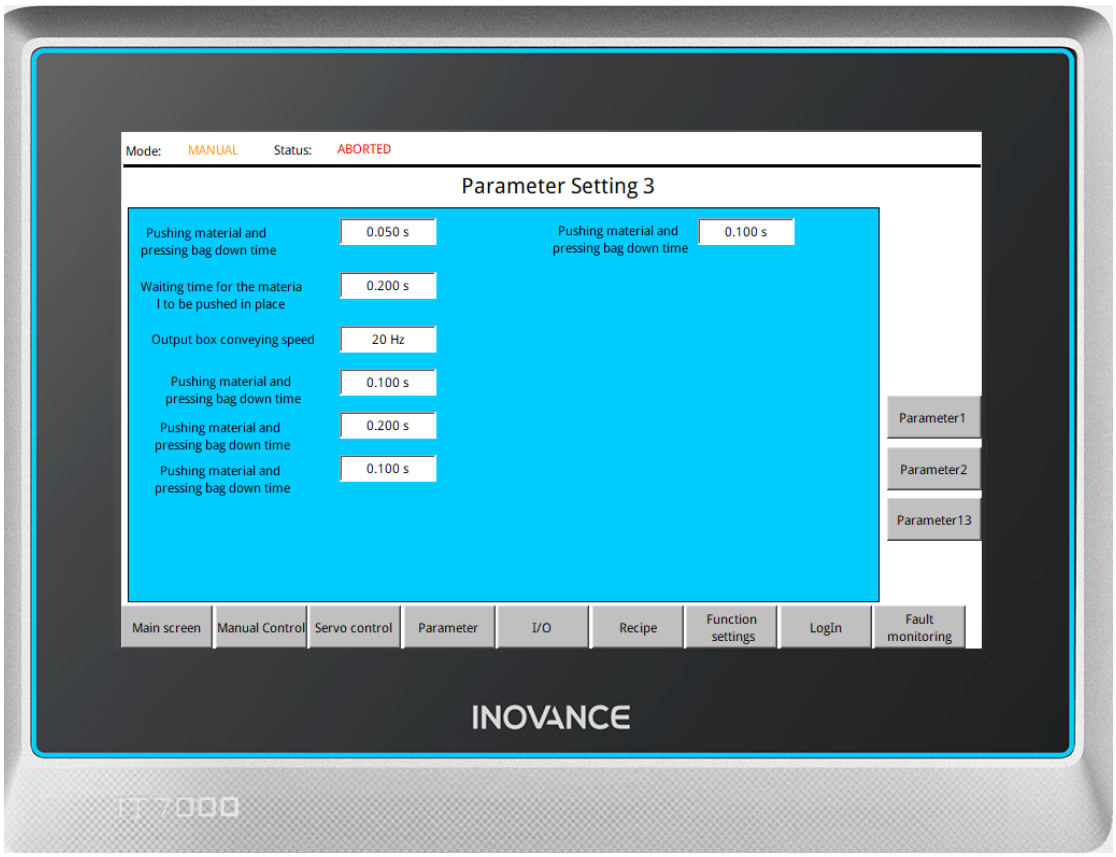

Mode: MANUAL Status: ABORTED
Left bag take servo
Right bag take servo
current location 102.505 °
Current speed 0.091 °/s
Current torque 0.000 %
Manual speed 50.000 °/s
Automatic speed 500.000 °/s
Acc/Dec 6000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
current location 394.588 °
Current speed 0.091 °/s
Current torque 0.300 %
Manual speed 50.000 °/s
Automatic speed 500.000 mm
Acc/Dec 6000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left bag delivery servo
Right bag delivery servo
current location 0.000 mm
Current speed 0.000 mm/s
Current torque 1.600 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm
Acc/Dec 30000.000 mm
Bag delivery distance 10.000 mm
Torque limit 200.000 %
Bag delivery distance 1 mm
Forward
Backward
Sending bags
current location 359.999 mm
Current speed 0.000 mm/s
Current torque 1.300 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm
Acc/Dec 30000.000 mm
Bag delivery distance 10.000 mm
Torque limit 200.000 %
Forward rotation
Backward
Sending bags
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left UpDown Servo
Right UpDown Servo
current location 0.017 mm
Current speed 0.000 mm/s
Current torque 4.000 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 25.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
Put bag position
current location 0.015 mm
Current speed 0.000 mm/s
Current torque 7.900 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 25.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 95.000 mm
Forward
Backward
Home
Put bag position
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

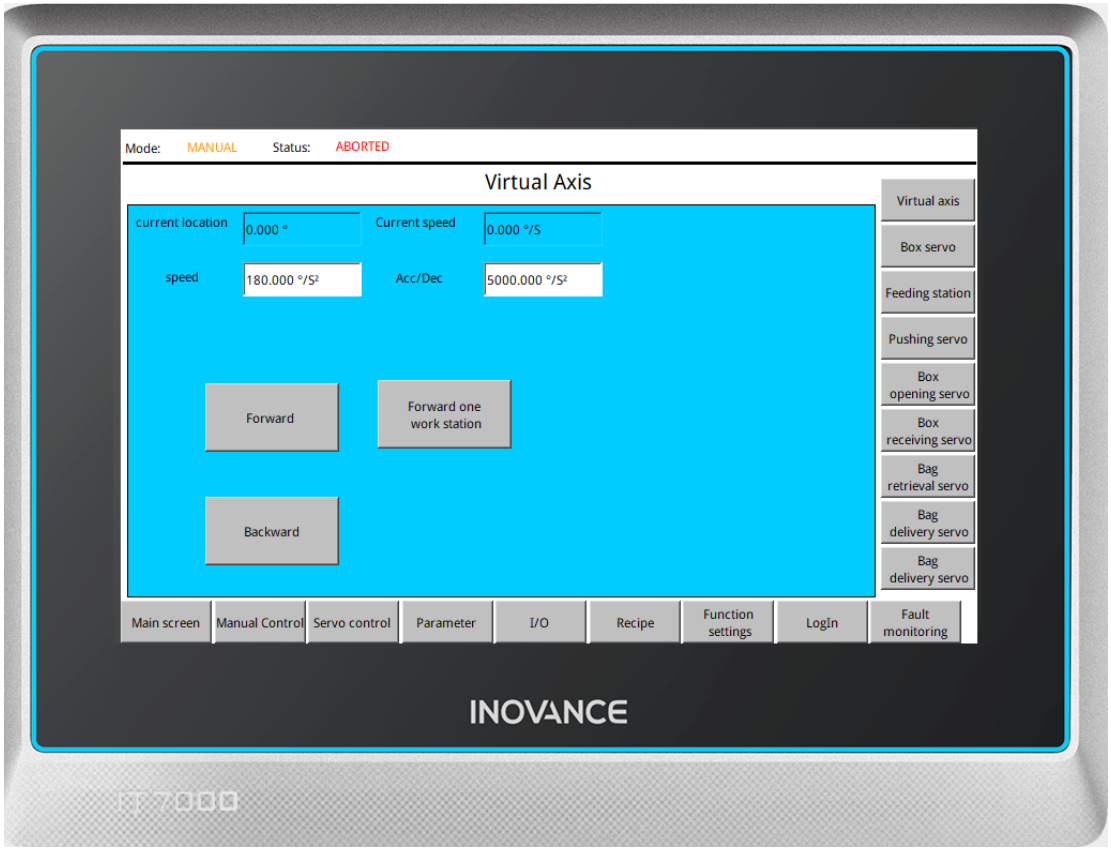

Mode: MANUAL Status: ABORTED
Angle 0 °
Parameter Setting 1
Starting Angle
End Angle
offset
Open box suction cup 5 ° 225 ° 2
Open the box and blow back 226 ° 250 °
Box suction cup 150 ° 360 °
Box back blowing 361 ° 381 °
Left Close ear 115 ° 43 ° 2
Right close ear 125 ° 38 ° 4
Left Close box 125 ° 355 ° 7
Right close box 125 ° 355 ° 7
Left folding cover 145 ° 39 ° 6
Right folding cover 145 ° 39 ° 6
Left folded tongue 125 ° 200 ° 6
Right folded tongue 125 ° 200 ° 6
Workstation bag pressing 110 ° 160 ° 8
Workstation material pushing 130 ° 250 ° 13
Right ear cylinder 122 ° 320 °
Left ear cylinder 130 ° 320 °
Workstation material pushing 110 ° 220 °
Pushing servo offset 130 ° 150 ° 4
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

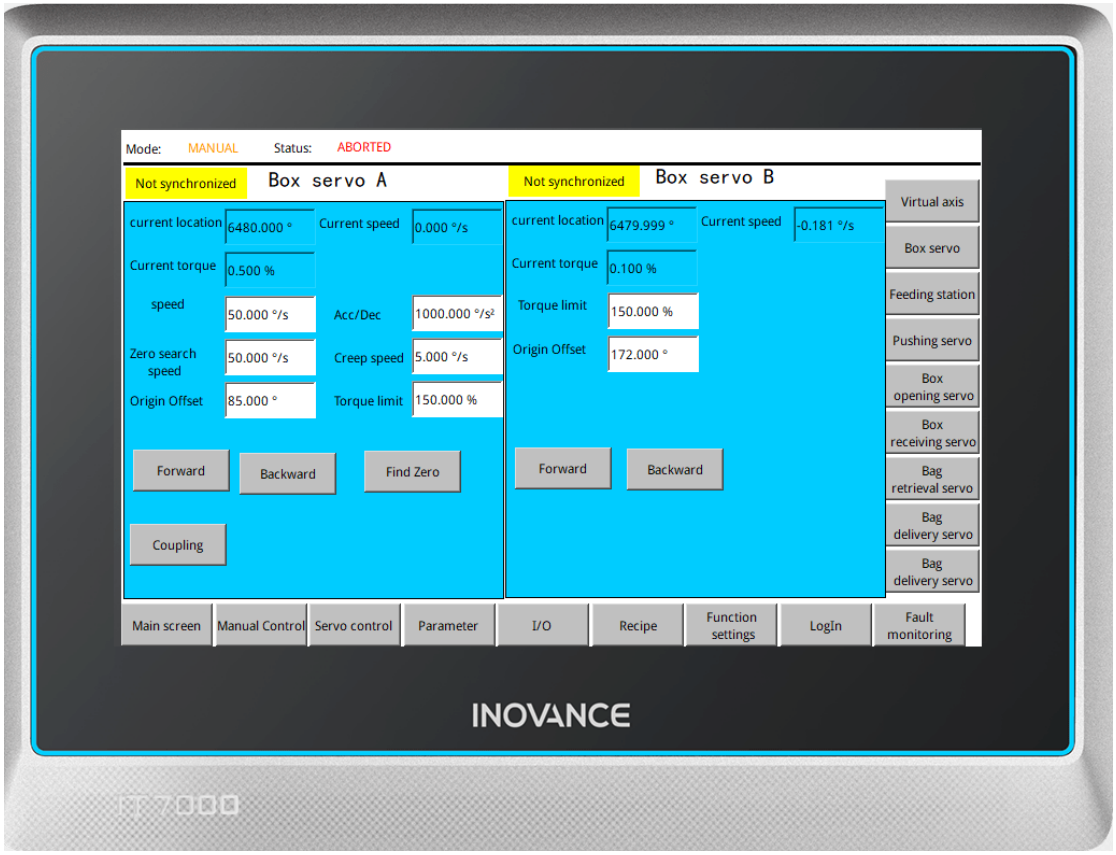

Mode: MANUAL Status: ABORTED
Angle 102.505 °
Left bag retrieval
Angle 394.585 °
Right bag retrieval
Starting Angle
End Angle
Suction cup A 470 ° 275 °
Blow back A 276 ° 300 °
Suction cup B 93 ° 635 °
Blow back B 636 ° 676 °
Material testing A 150 ° 200 °
Material testing B 500 ° 550 °
Number of bags taken 8 pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Starting Angle
End Angle
Suction cup A 518 ° 205 °
Blow back A 206 ° 246 °
Suction cup B 120 ° 605 °
Blow back B 606 ° 646 °
Material testing A 15 ° 35 °
Material testing B 400 ° 405 °
Bag placement offset 3
Number of bags taken 7 pc
Bag retrieval process Deactivate
Forward
Backward
Automatic boxing
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

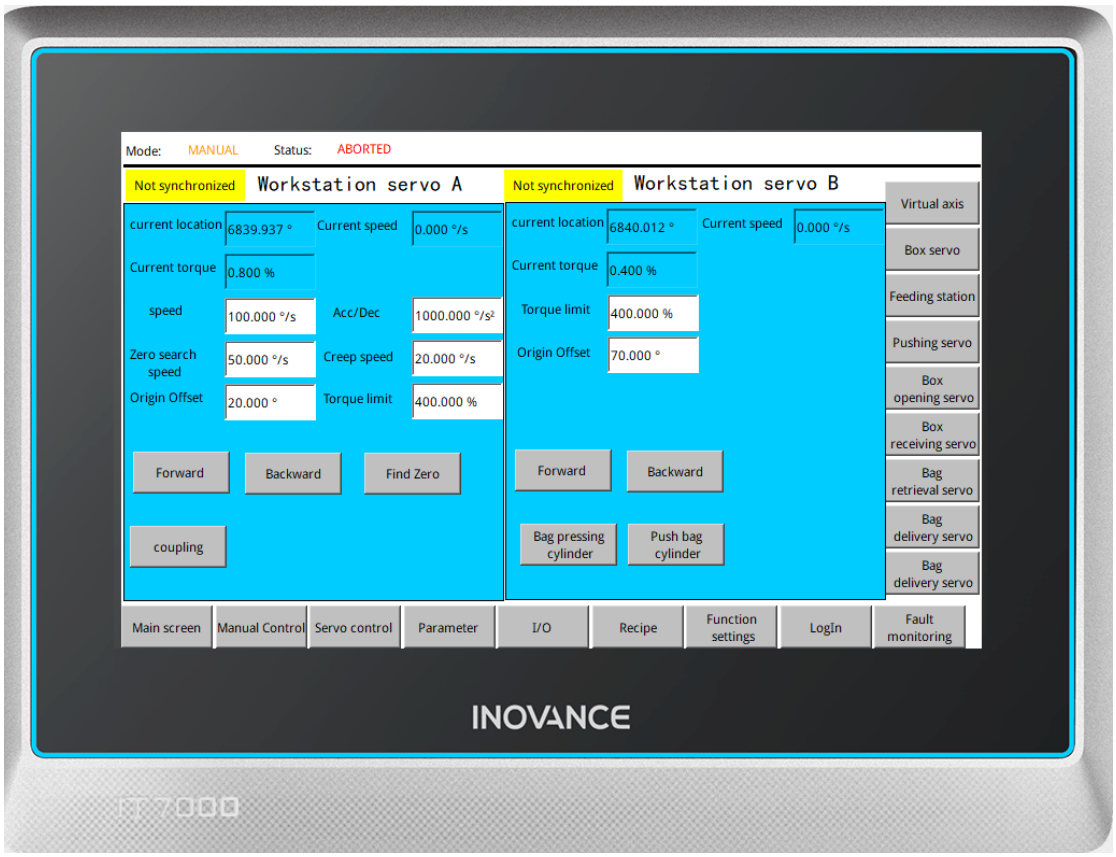

Mode: MANUAL Status: ABORTED
Parameter Setting 3
Pushing material and pressing bag down time 0.050 s
Waiting time for the materia l to be pushed in place 0.200 s
Output box conveying speed 20 Hz
Pushing material and pressing bag down time 0.100 s
Pushing material and pressing bag down time 0.200 s
Pushing material and pressing bag down time 0.100 s
Pushing material and pressing bag down time 0.100 s
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

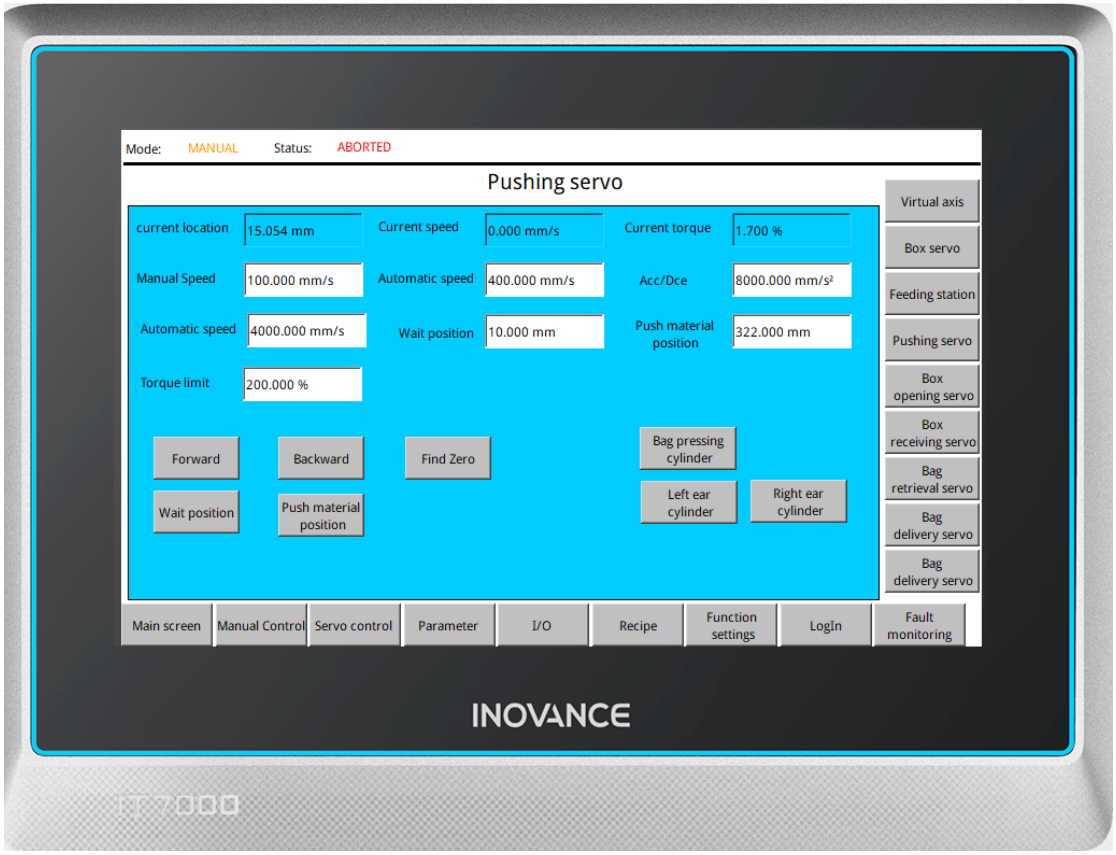
## 7.6 Manual line

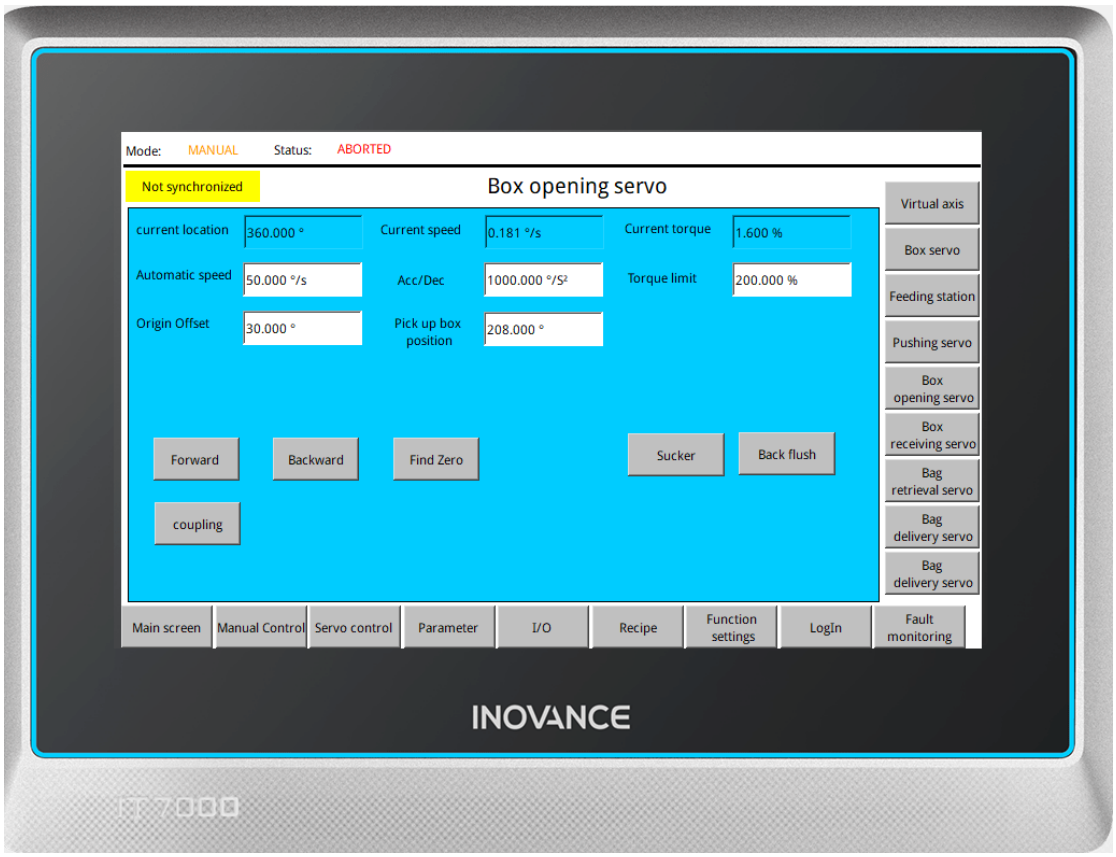
The parameters setting for Simfex-15pcs counting and cartonering packing is shown as following.

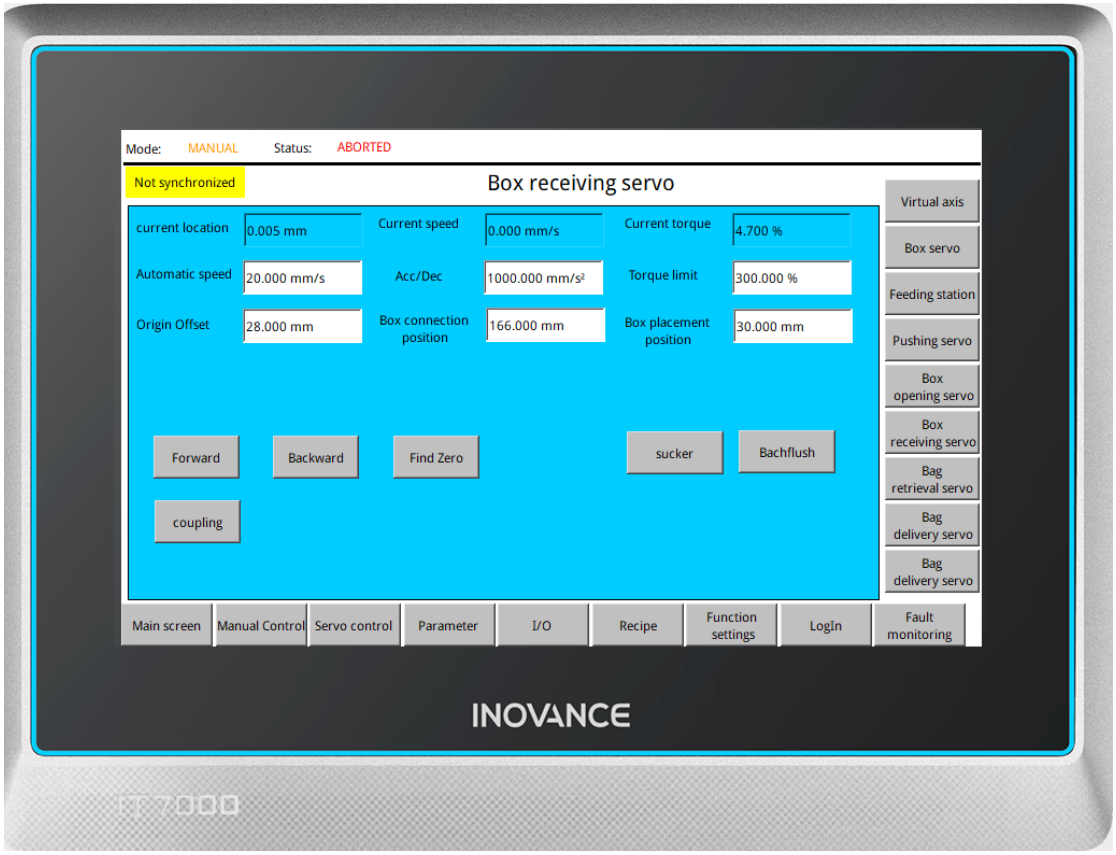


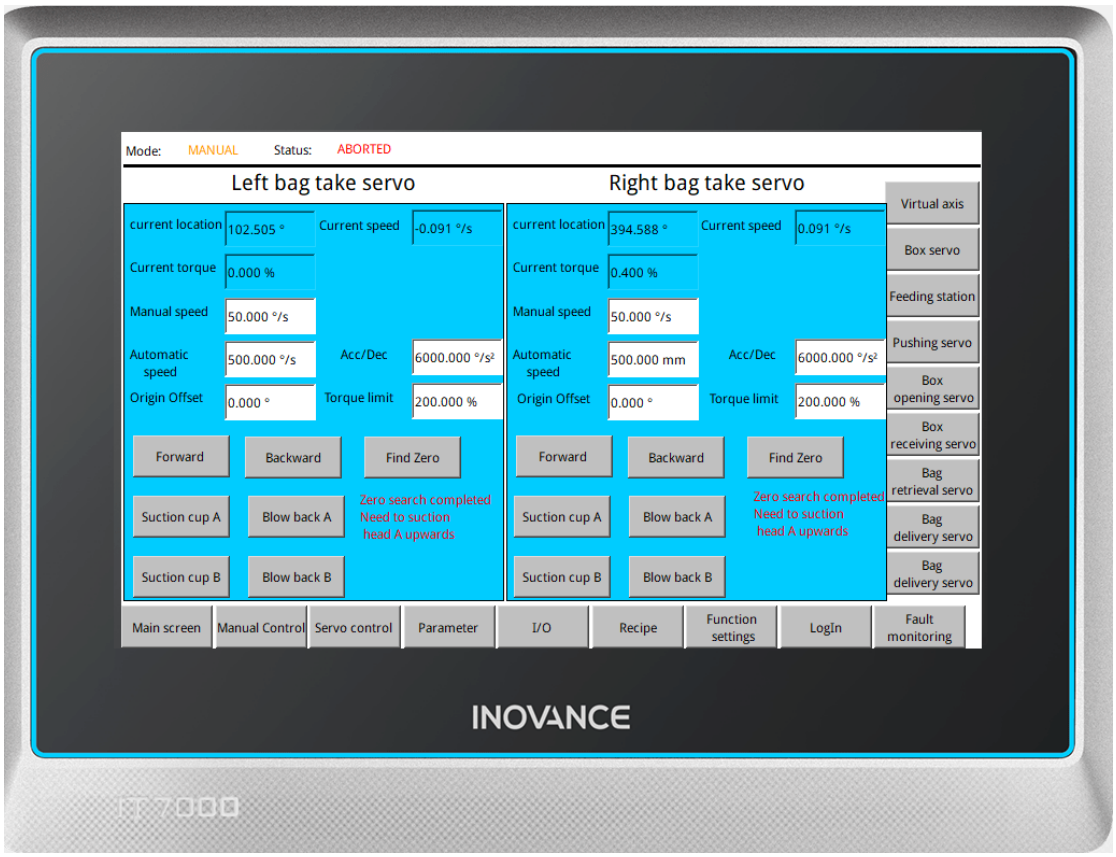

Mode: MANUAL Status: ABORTED
Not synchronized
Box servo A
current location 6480.000 °
Current speed 0.000 °/s
Current torque 0.500 %
speed 50.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 5.000 °/s
Origin Offset 85.000 °
Torque limit 150.000 %
Forward
Backward
Find Zero
Coupling
Not synchronized
Box servo B
current location 6479.999 °
Current speed -0.181 °/s
Current torque 0.100 %
Torque limit 150.000 %
Origin Offset 172.000 °
Forward
Backward
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

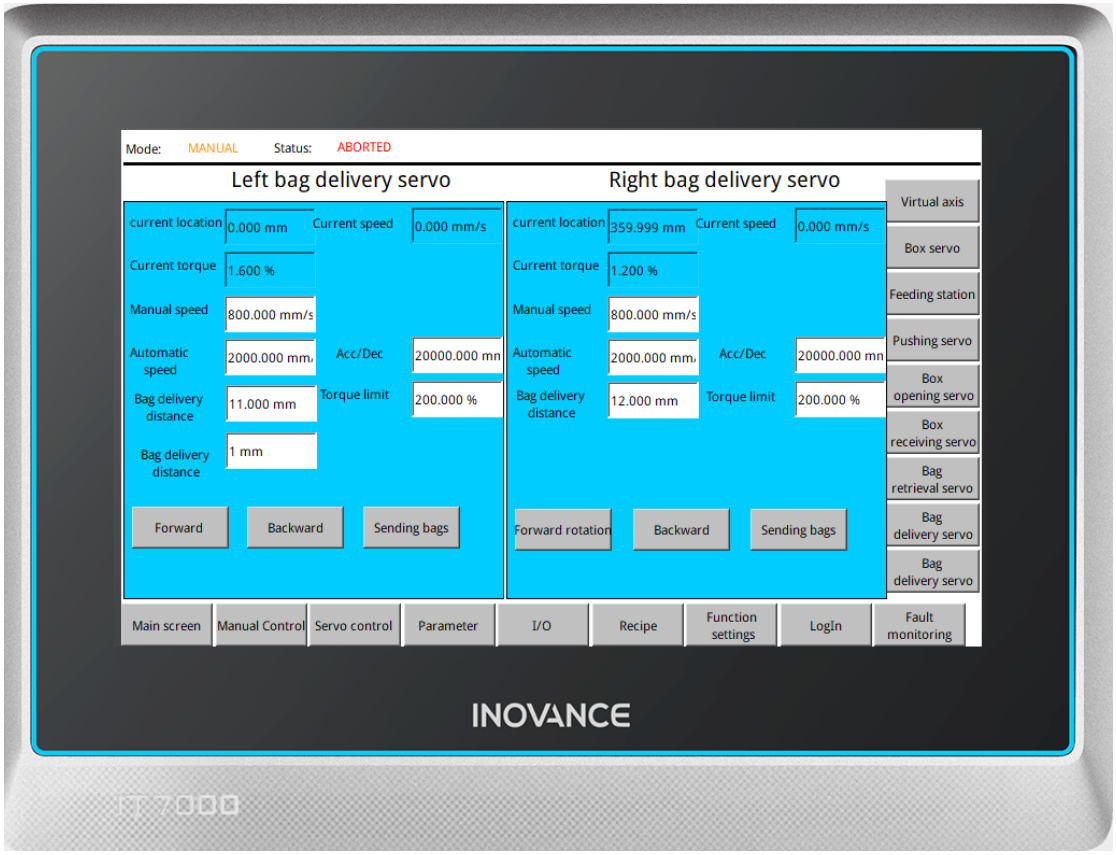

Mode: MANUAL Status: ABORTED
Not synchronized
Workstation servo A
current location 6839.937 °
Current speed 0.000 °/s
Current torque 0.800 %
speed 100.000 °/s
Acc/Dec 1000.000 °/s²
Zero search speed 50.000 °/s
Creep speed 20.000 °/s
Origin Offset 20.000 °
Torque limit 400.000 %
Forward
Backward
Find Zero
coupling
Not synchronized
Workstation servo B
current location 6840.012 °
Current speed 0.000 °/s
Current torque 0.400 %
Torque limit 400.000 %
Origin Offset 70.000 °
Forward
Backward
Bag pressing cylinder
Push bag cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

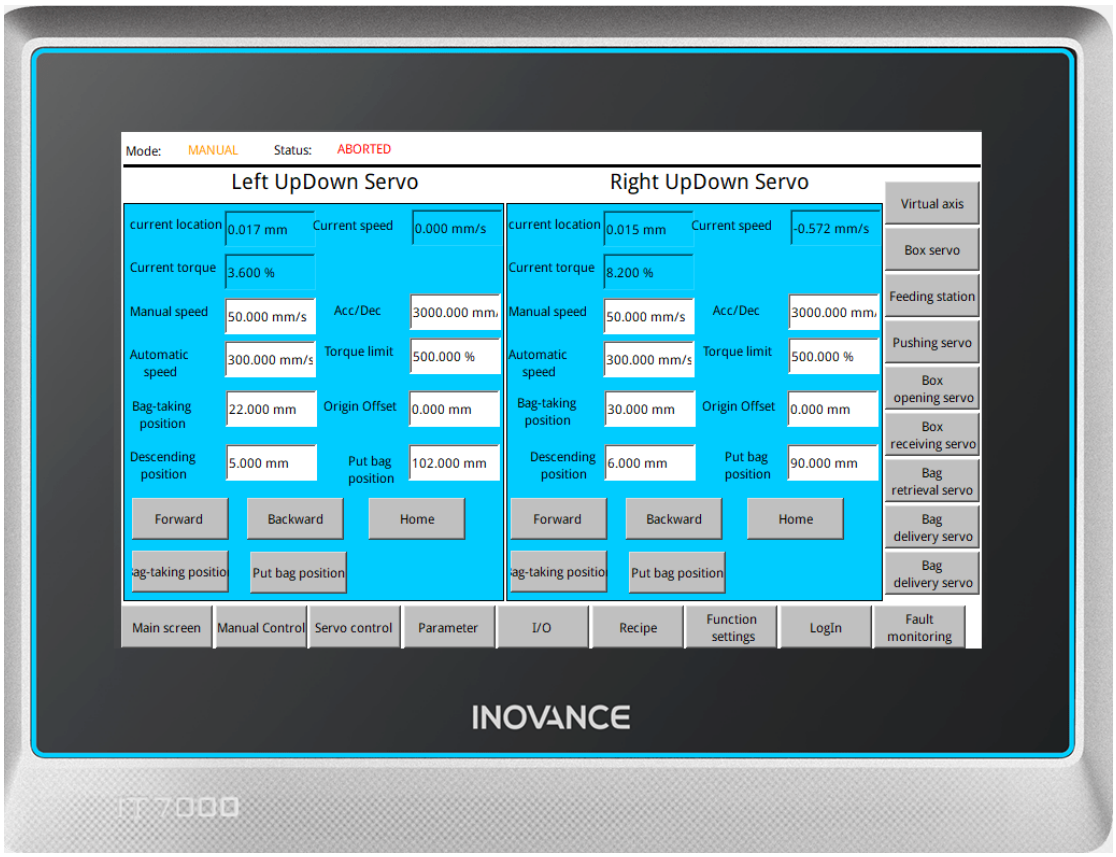

Mode: MANUAL Status: ABORTED
Pushing servo
current location 15.054 mm
Current speed 0.000 mm/s
Current torque 1.700 %
Manual Speed 100.000 mm/s
Automatic speed 400.000 mm/s
Acc/Dce 8000.000 mm/s²
Automatic speed 4000.000 mm/s
Wait position 10.000 mm
Push material position 322.000 mm
Torque limit 200.000 %
Forward
Backward
Find Zero
Bag pressing cylinder
Wait position
Push material position
Left ear cylinder
Right ear cylinder
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

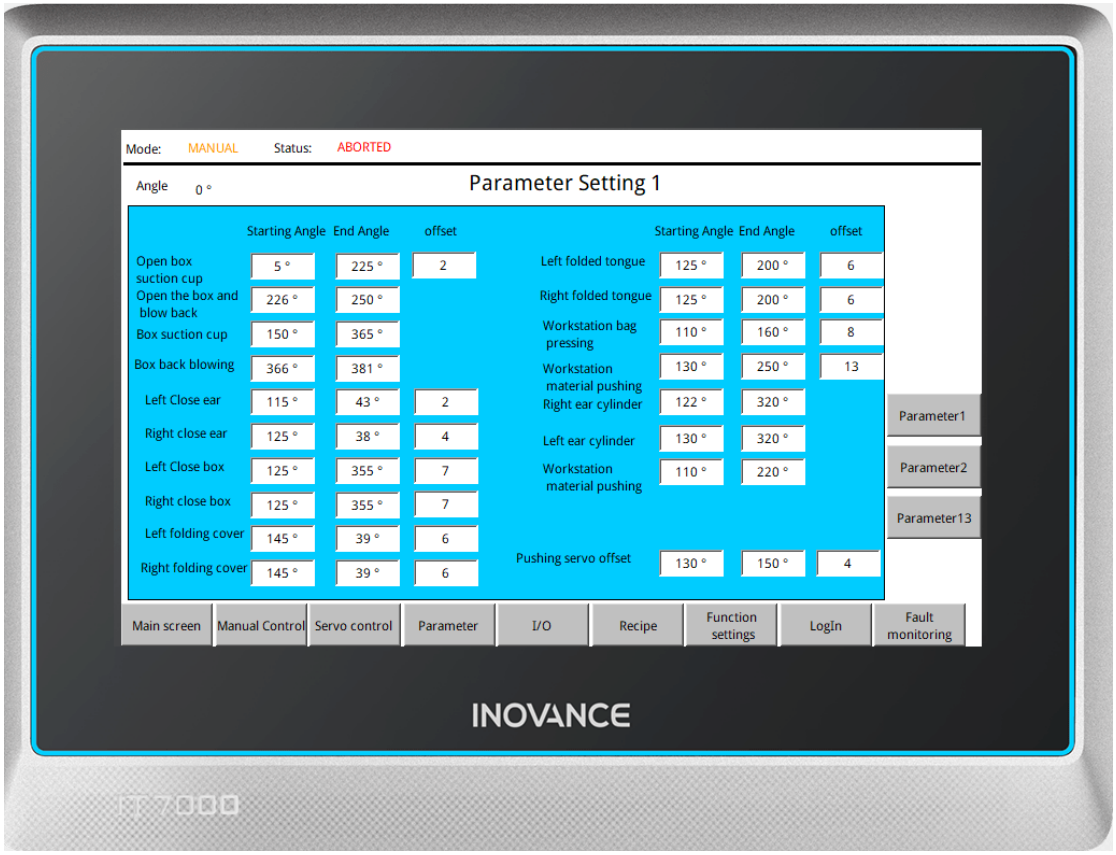

Mode: MANUAL Status: ABORTED
Not synchronized
Box opening servo
current location 360.000 °
Current speed 0.181 °/s
Current torque 1.600 %
Automatic speed 50.000 °/s
Acc/Dec 1000.000 °/S²
Torque limit 200.000 %
Origin Offset 30.000 °
Pick up box position 208.000 °
Forward
Backward
Find Zero
Sucker
Back flush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE

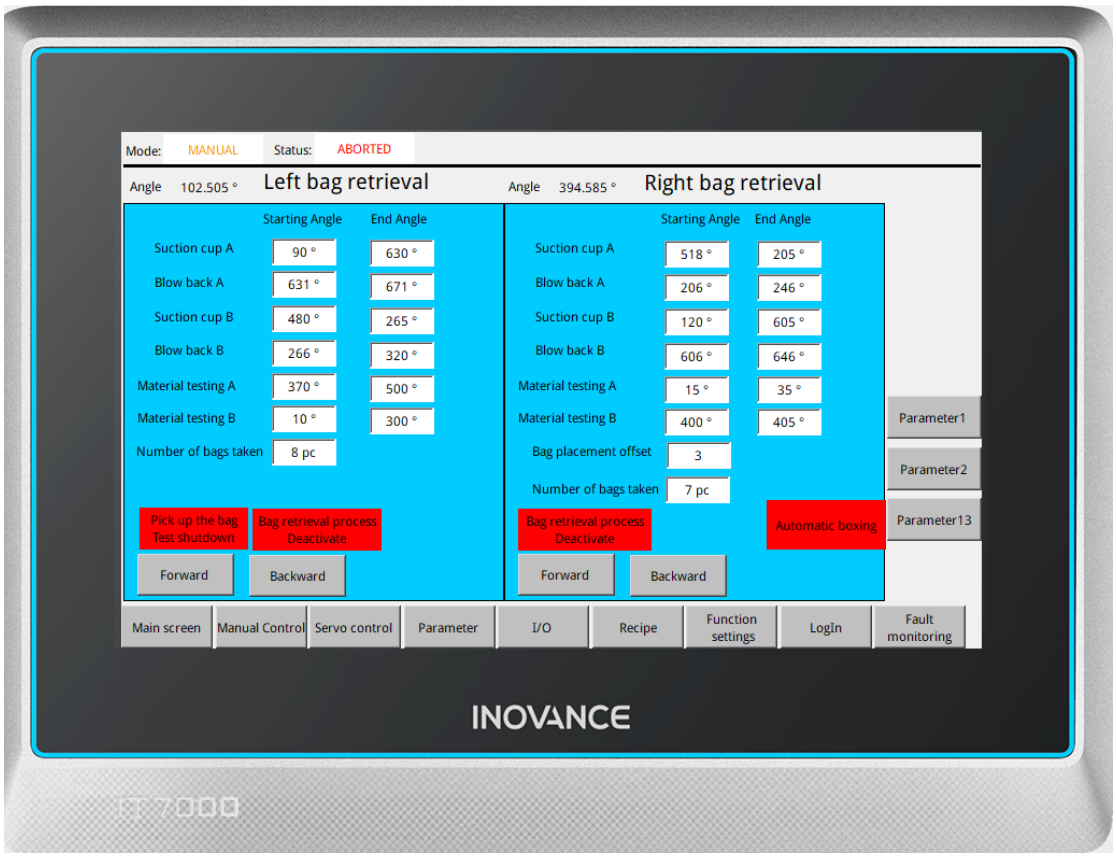

Mode: MANUAL Status: ABORTED
Not synchronized
Box receiving servo
current location 0.005 mm
Current speed 0.000 mm/s
Current torque 4.700 %
Automatic speed 20.000 mm/s
Acc/Dec 1000.000 mm/s²
Torque limit 300.000 %
Origin Offset 28.000 mm
Box connection position 166.000 mm
Box placement position 30.000 mm
Forward
Backward
Find Zero
sucker
Bachflush
coupling
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE

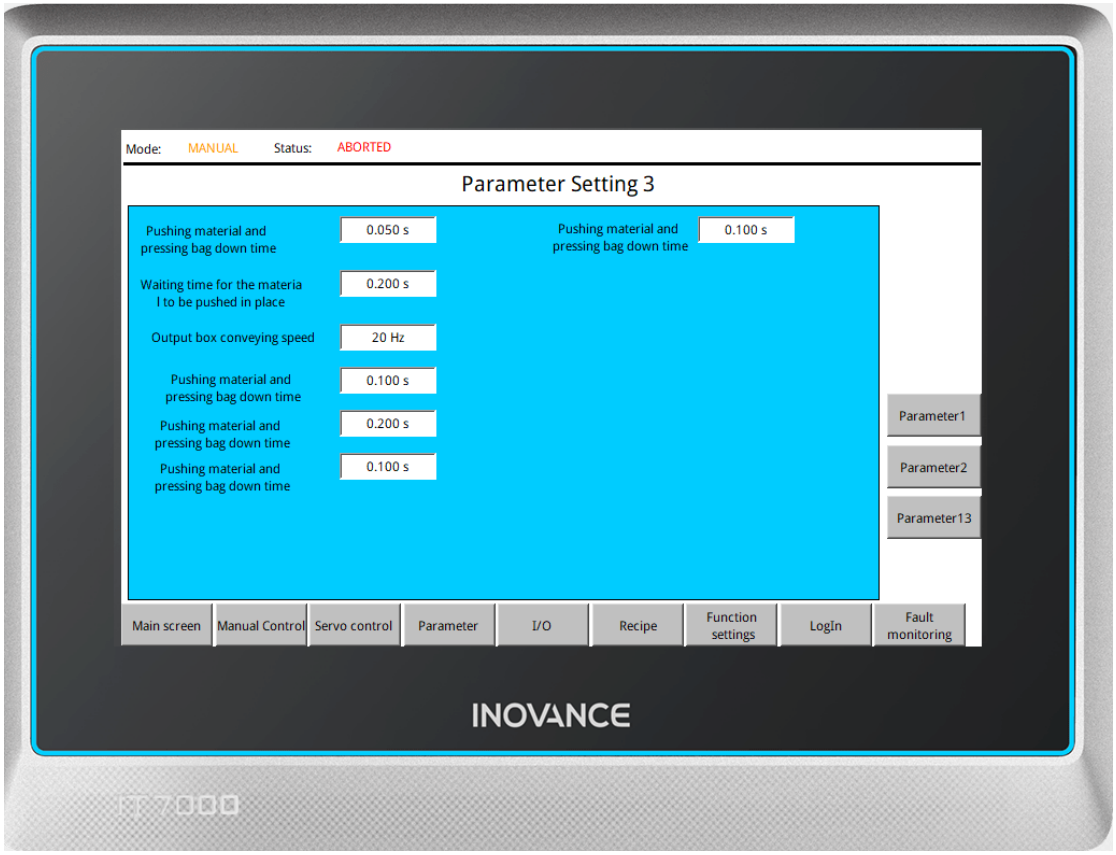

Mode: MANUAL Status: ABORTED
Left bag take servo
Right bag take servo
current location 102.505 °
Current speed -0.091 °/s
Current torque 0.000 %
Manual speed 50.000 °/s
Automatic speed 500.000 °/s
Acc/Dec 6000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
current location 394.588 °
Current speed 0.091 °/s
Current torque 0.400 %
Manual speed 50.000 °/s
Automatic speed 500.000 mm
Acc/Dec 6000.000 °/s²
Origin Offset 0.000 °
Torque limit 200.000 %
Forward
Backward
Find Zero
Suction cup A
Blow back A
Zero search completed
Need to suction head A upwards
Suction cup B
Blow back B
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left bag delivery servo
current location 0.000 mm
Current speed 0.000 mm/s
Current torque 1.600 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 11.000 mm
Torque limit 200.000 %
Bag delivery distance 1 mm
Forward
Backward
Sending bags
Right bag delivery servo
current location 359.999 mm
Current speed 0.000 mm/s
Current torque 1.200 %
Manual speed 800.000 mm/s
Automatic speed 2000.000 mm/
Acc/Dec 20000.000 mm
Bag delivery distance 12.000 mm
Torque limit 200.000 %
Forward rotation
Backward
Sending bags
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Left UpDown Servo
current location 0.017 mm
Current speed 0.000 mm/s
Current torque 3.600 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 22.000 mm
Origin Offset 0.000 mm
Descending position 5.000 mm
Put bag position 102.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Right UpDown Servo
current location 0.015 mm
Current speed -0.572 mm/s
Current torque 8.200 %
Manual speed 50.000 mm/s
Acc/Dec 3000.000 mm/
Automatic speed 300.000 mm/s
Torque limit 500.000 %
Bag-taking position 30.000 mm
Origin Offset 0.000 mm
Descending position 6.000 mm
Put bag position 90.000 mm
Forward
Backward
Home
ag-taking positio
Put bag position
Virtual axis
Box servo
Feeding station
Pushing servo
Box opening servo
Box receiving servo
Bag retrieval servo
Bag delivery servo
Bag delivery servo
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
Login
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Angle 0 °
Parameter Setting 1
Starting Angle End Angle offset
Open box suction cup 5 ° 225 ° 2
Open the box and blow back 226 ° 250 °
Box suction cup 150 ° 365 °
Box back blowing 366 ° 381 °
Left Close ear 115 ° 43 ° 2
Right close ear 125 ° 38 ° 4
Left Close box 125 ° 355 ° 7
Right close box 125 ° 355 ° 7
Left folding cover 145 ° 39 ° 6
Right folding cover 145 ° 39 ° 6
Starting Angle End Angle offset
Left folded tongue 125 ° 200 ° 6
Right folded tongue 125 ° 200 ° 6
Workstation bag pressing 110 ° 160 ° 8
Workstation material pushing 130 ° 250 ° 13
Right ear cylinder 122 ° 320 °
Left ear cylinder 130 ° 320 °
Workstation material pushing 110 ° 220 °
Pushing servo offset 130 ° 150 ° 4
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE


Mode: MANUAL Status: ABORTED
Angle 102.505 ° Left bag retrieval
Angle 394.585 ° Right bag retrieval
Starting Angle End Angle
Suction cup A 90 ° 630 °
Blow back A 631 ° 671 °
Suction cup B 480 ° 265 °
Blow back B 266 ° 320 °
Material testing A 370 ° 500 °
Material testing B 10 ° 300 °
Number of bags taken 8 pc
Pick up the bag Test shutdown
Bag retrieval process Deactivate
Forward
Backward
Starting Angle End Angle
Suction cup A 518 ° 205 °
Blow back A 206 ° 246 °
Suction cup B 120 ° 605 °
Blow back B 606 ° 646 °
Material testing A 15 ° 35 °
Material testing B 400 ° 405 °
Bag placement offset 3
Number of bags taken 7 pc
Bag retrieval process Deactivate
Forward
Backward
Automatic boxing
Parameter1
Parameter2
Parameter13
Main screen
Manual Control
Servo control
Parameter
I/O
Recipe
Function settings
LogIn
Fault monitoring
INOVANCE




Manual operation

Warm notice:

Need take off the guard plate front of manual pusher.