# **TR-3631** Box Vending Machine Manual



## Preface

Welcome to use our box vending machine! Before you install and operate this machine, please read the manual carefully. In order to make good use of superior performance of the machine, we strongly recommend you install and maintain it strictly following the instruction of manual. And keep this manual for your future reference.

If you have any question about operation or service, feel free to contact us.



Preface1
Product pictures and components2
Description of Installation and function
Troubleshooting9
Technical specification 13

## Product pictures and components





Note: The pictures are only for reference and they should be subject to the real machine.

## The description of installation and function

Note: In order to use this machine safely, ensure its good operation and better being maintained, be sure to carefully read and strictly follow the manual before the installation and use of this machine.

### 1. Installation description

#### 1.1 Cautions

- □ The machine should be installed on the steady and solid plane
- □ The machine should use the suitable power supply (it is suitable for AC100-120V) The connected ammeter and power should be on the basis of the machine capacity.
- □ The machine shouldn't be installed in the wet or dusty area
- □ The machine should have a reliable grounding wire
- □ The power wire should be installed safely and protected properly.
- □ The certain space should be reserved around the machine to make sure the machine door can be opened and closed normally.
- □ The installation space: 500mm should be reserved on the left side of the machine and 400mm on the right side of the machine.
- □ After finishing the installation, please remove the special fixing kits on the machine used for the safe transportation before operating the machine.

#### 1.2 Tools & materials needed

- Electrical drill with a drilling bit (diameter 10mm, for drilling holes on the wall)
- □ Four bulgy screws (M8, or similar size)
- □ Sleeve wrench suitable for M8 nuts (or similar size nuts)
- □ Cross screwdriver

#### 1.3 Mount the machine

- □ Choose a wall with flat surface which can bear the weight of the machine
- Drill four holes on the wall at an appropriate height (the height should be suitable for easy operating of the machine, distances between the holes refer to the picture followed on next page)
- □ Insert bulgy screws into the holes
- Put the machine on the bulgy screws (through the holes on the back of the metal case of the machine)
- Put on the gaskets and nuts then fasten the nuts of the bulgy screws
- □ Check whether the machine has been mounted firmly



## 2. Preparation for using the machine

#### 2.1 Clean the machine

Before using the machine, please clean the metal case, glass and column which also need to be cleaned regularly in the future. If the product is damaged or leaks the liquid, please clean the machine in time. Otherwise, it will cause something wrong in dispensing the products.

#### 2.2 Change ad paper and the sample products in the show window

After opening the machine door, remove the fixing nuts on the show window back and take away the show shelf, the ad paper and the sample products can begin to be changed. Each product should be relevant with the column so that the customers can choose the right product. The products can be put according to the following illustration of the column numbers:



Sample Product Show Window View

## **3** Function Description

#### 3.1 Add goods

Please make sure the width of the columns and the height of the product dispensing mechanism. The width of the column should be equal to the length of the product packing box plus 3mm. The height of the product dispensing mechanism should be as 1.2 times as the thickness of the product packing box.

#### 3.2 Bill acceptor use

The used bill acceptor is highly precise and when leaving the factory, it has been set to accept 200, 100, 50,20pesos bill but it may refuse to the following bills:

- a The bill is too old, dirty, oily, faded or damaged.
- b The bill is folded partly
- c The bill has a bad printed quality.
- d The damaged bill is repaired by sticking.

## Operation guide: (please put the following points as a sticker on the front panel of the machine)

1.Before buying, please press the button to confirm whether there is the product in the current column. (*F1*:Sellout; *F2*:No change; *F3*:Error; *0.0*: product available)

2. Acceptable bills: 200, 100, 50, 20 pesos

3. Acceptable coin: 10pesos

4. Please flat the bills before inserting them.

5. Please insert coins one by one in turn.

6. Please press the relevant button to get the product after the inserted money is displayed on the display panel.

7. It will change you automatically within 6 seconds of closing the transaction.

8. Please make sure your bill or coin is not wetted, damaged, or too rugate.

#### 3.4.1 working diagram



3.4.2 Vending operation initialization







After opening the machine door, you will find there are two buttons on the right of the control board, one is red and the other is green. In this menu all the functions are almost finished by pressing two buttons.(Refer to the left picture)

#### 3.4.4 Function operation

#### 3.4.4.1 Enter Menu

Press red button once and "F00.0 "is displayed on the screen

#### 3.4.4.2 Exit Menu

Press red button again when "F00.0 "is displayed on the screen

#### 3.4.4.3 Enter Secondary Menu

Press red button once and "F00.0 "is displayed on the screen, then press green button once and the screen will display Fmn.0, of which mn is the function number, e.g. F06.0 means function6. (This menu includes 12 functions). Then press red button again to enter the corresponding secondary function. Once finishing a secondary function, press green button to exit the present secondary function to the main menu, meanwhile the screen returns to "F00.0"

#### 3.4.4.4 Secondary Menu

#### Function1-F01.0:

#### 1) Check the column unit price

After entering F01.0, press the relevant column button, the display panel will display the unit price of the current column. Then press green (exit) button to return to F01.0, press the other relevant column button to continue to check its unit price by the same way.

#### 1)Set the column unit price

After entering F01.0, press the relevant column button, the display panel will display the unit price of the current column. At this moment the price can be reset by pressing the column1, 2, 3 and4 buttons to choose the required number from 0-9 to respectively set unit place, tenths place and hundreds place. Press "Enter" button once after coming to the required price and the beeper will sound "bi- ", then press "Enter" again to confirm to make the chosen price effect. Then the machine will return to "F01.0"

#### Function 2- F02.0: Test the dispensing mechanism

After entering "F02.0", press the relevant column number and the display panel will display the column number "F02.n" (if it is column 1, "F02.n " will be "F02.1"), meanwhile, a piece of package (product) will come out from the machine. Then press "Exit" button to return to "F00.0" The way test the dispensing mechanism of any column is the same as above. The dispensed products when testing mechanism will not be recorded to the consumption data. If the dispensing mechanism is wrong, this function can be tried to both restore the motor and test whether the motor is wrong.

#### Function 2- F03.0: Check the related data

#### 1) Check the accumulated product transaction quantity of each column

After entering "F03.0", press the relevant column button, the display panel will display the

accumulated product transaction number (the unit is box). If the number is more than 10000, the display panel will display it by rolling screen. At present, according the machine software the maximum number is 65535 and it will overflow if it is more than 65535. Therefore in order to make the data accurate, it should backup the data in time and then reset the number to "0" to make the machine (column) restart recording the number.

#### 2) Check the transaction amount

Press column 1 button, the display panel will display the accumulated bill amount;

Press column 2 button, the display panel will display the accumulated received coin quantity Press column 3 button, the display panel will display the accumulated changed coin quantity After finishing the above each checking, press "Exit" button to return to "F00.0).

#### Function5-F05.0: Clear the related data

After entering "F05.0", press column 1 button, the display panel will display "clr" (Abbr. Of Clear), then press "Enter" button, all the recorded data including consumption dispensed product quantity, accumulated bill amount, accumulated received coin number and accumulated changed coin number will be cleared, at this moment, if "sellout" light on the display panel flashes to return to "F00.0", it means the operation is successful, if "Error" light flashes to return to "F00.0", it means the operation is failed.

After entering "F05.0", press "Exit" button to exit the operation.

Note: After finishing any operation of the above functions, the machine has to be power off and be restarted to make the system initialization, otherwise, the system operation may happen something wrong.

#### 3.4.5 Update or upgrade the system program.

When the machine leave the factory, the program is new and good, it is unnecessary to be update or upgraded but with the time passing, our company will update or upgrade the program in order to improve the reliability and stabilization of the machine. And the client needs to update or upgrade the program by changing a special chip (ATC89C52or ATC89S52) which loads the whole program. Refer to the following 40PIN chip illustration to change the chip. Firstly pull up the chip by special chip puller and insert the relevant new chip carefully. Keep the chip stitch well and rightly insert the chip, otherwise, it will make the chip damaged forever.



## Troubleshooting

When maintaining the machine, you can refer to the following pictures:



**Motor Driving Board View** 



**Dispensing Module View** 



#### Note:

- □ Be sure not to put your hands, tools or other things into the dispensing mechanism to avoid hurting you or damaging the unit.
- □ The control unit on the bottom of the machine case is connected with high voltage so non-professional people don't maintain it to avoid the accident.
- □ It is necessary to power off when it needs to pull out some unit from the control board, otherwise it will cause the control board damaged permanently.
- Don't change the switch setting of bill and coin systems in our factory to avoid the bill and coin systems don't accept the real money but accept the fake money.

Troubles	Causes	Solution		
No response after turning on	1. Check whether the power supply plug is put on	1 Put on the plug		
	2. Check the indicator light of power supply of the driving board is on	2. Repair the driving board		
	3. Check whether the fuse is blew out	3. Replace a fuse with a new one		
	4. Check whether the power switch is good	4. Replace the power switch with a new one		
Dispensing mechanism error				
	1. The product package is distorted	1. Replace the product package with the new one.		
	2. The column shelf is distorted	2. Repair the column shelf		
	to block the dispensed product.			
Goods jam or goods				
out	3. Sellout sensor is wrong	3.Replace the sellout sensor with a new one		
	4. Dispensing module is wrong	4. Replace the module with a new one.		
	5. The crank on the motor is loose or broken	5. Replace the crank with a new one.		
	6. Motor driving board is wrong	6. Replace the board with a new one.		
Motor error				
Crank of the motor can't revolve to the	1.Crank position sensor is wrong	1.Replace the sensor with a new one		
right position	2. Motor is wrong	2.Replace the motor with a new one		
bill system error				
Refuse bills	1.The bill is too rugate or damaged	1.Insert good bill		
	2.It is a coin shortage in the hopper and only coins can be accepted.	2.Add coins.		

		TR-5051 Dox vending mach
		1. Press and lift two small buttons on the
		top of bill acceptor to pull out the jammed
		bill. Then plug back the position sensor
		and the bill acceptor will return to work
		normally.
Bill jam	1. The bill is too rugate or damaged.	Two small buttons
Changed system error		
	1. Check the mechanism of	
Coin jam	changed system is wrong	1.Replace hopper with a new one
	2.Check whether something is	2.Remove something jammed.
	jam in the hopper	
	3.Check the motor is wrong	3.Replace the motor with a new one
Coin Jam	1. Check whether the goods package is good	1.Put the goods with a new package
	2. Check the column shelf is	
	deformed because of the long	
	transportation or other reasons	2.Replace the column shelf with a new one
	to make the goods blocked	
	3. The motor is wrong	3.Replace the hopper with a new one

## **Technical Specifications**

Item	Performance parameters
Dimension	(H)790mm×(D)320mm×(W)540mm
Net weight	34KG
Ambient temperature and	0~40℃&10%~85%
humidity	
Power	AC110~120V 50Hz/10Hz
Power consumption	50W when standing by and 70W when working
Acceptable coin	10pesos
Acceptable bills	200, 100, 50,20 pesos
Change coin	10pesos
Coin capacity	About 400pcs
Bill capacity	1000pcs
Display	4-digit, LED
Dispensing speed	Less than 3 seconds

Thank you for your choosing our products again.