

# Note Dispenser User Guide



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# Thank you for choosing TOP VME .

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# 1. Introduction

### 1-1. Overview

XC100 Bill Dispenser is a machine that counts the number of banknotes, easy to set the amount of banknotes for accurate output. Correct the function of paper thickness, can be applied to all banknote currencies, make it easier for you to count. Large-capacity cash box can put approx.700 bills (Depending on the thickness of the paper ).

### 1-2. Features

- Large-capacity cash box
- Double display subtitles
- Speed Extremely fast

# 1-3. Precautions

- 1. Bill test environment
  - a. Temperature : 0° C~50° C
  - b. Voltage : 24 V DC
  - c. Do not continuously issue more than 3,000 notes, avoid overloading the motor and overheating
- 2. Confirm before use the value of L\_IR and R\_IR between 100~160, and the values cannot differ by more than 10.
- 3. Check Dip switch whether there is a corresponding currency.
- 4. Use more than 60% new bills place the billboard in a neat position.
- 5. Cannot be clicked without white card status Calibration IR or long press S2 button.

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XC100

# 2. Specifications

# 2-1. General

| Speed           | 10 pcs / second     |
|-----------------|---------------------|
| Dispensing Type | Single - Continuous |
| Interface       | Pulse or RS232      |
| Installation    | Indoor              |

# 2-2. Electronic

| Power Source | 24V DC                             |
|--------------|------------------------------------|
| Dowor        | Standby : 0.06A / 1.5W             |
| Consumption  | Operration Current : 1.20A / 29W   |
| Consumption  | Maximum : 3.40A / 82W              |
|              | Operating Temperature : 0° C~60° C |
| Temperature  | Storage Temperature : -10° C~70° C |
| Range        | Humidity : 20%~70%RH               |
|              | (no condensation)                  |

## 2-3. Machine

| Weight               | Approx. 5 KG         |
|----------------------|----------------------|
| Outline<br>Dimension | 220 x 150 x 200 mm   |
| Bill Dimension       | 100~170 mm / <80 mm  |
| Box Capacity         | Approx. 700 bills    |
| Display              | Four digital display |

# 3. Packing List

| XC100 Note Display       |
|--------------------------|
| Installation guide       |
| Harness                  |
| two Keys                 |
| DIP Switch Setting Guide |
|                          |

# Note Dispenser

# 4. Dimension

Unit : mm [ inch ]









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# 5. Installation

### 5-1. Harness Application

| Interface | Voltage | Usage                         | Harness NO.     | Page |
|-----------|---------|-------------------------------|-----------------|------|
| RS232     |         | Data<br>Communication         | WEL-R7U06       | 5    |
|           | 24V DC  | Power & Data<br>Communication | WEL-N0002-1     | 6    |
|           | 24V DC  | Power                         | 2WIR-DA-0054-A0 | 7    |



NOTE : Update program port

Please refer to the G-BOX Operation manual for a guide step by step how to download or update using the G-Box programmer. You can obtain it from your local agent or contact us at : <u>service@topvme.com.tw</u>

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Note Dispenser



| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| 黑 | 棕 | 紅 | 橙 | 黃 | 綠 |

| PIN1  | PIN2  | PIN3 | PIN4 | PIN5 | PIN6 |
|-------|-------|------|------|------|------|
| VEND- | VEND+ | N/C  | N/C  | GND  | +24V |

RS232 PINS

| 2 | 4 | 6 | 8 |
|---|---|---|---|
| 1 | 3 | 5 | 7 |

| PIN1 | PIN2 | PIN3 | PIN4 | PIN5 | PIN6 | PIN7 | PIN8 |
|------|------|------|------|------|------|------|------|
| GND  | N/C  | N/C  | N/C  | N/C  | VCC  | RX   | TX   |

PULSE INTERFACE DEFINE

Power's pins define

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
|   |   |   |   |   |   |

П

黑棕紅橙黃綠

| PIN1  | PIN2  | PIN3           | PIN4           | PIN5 | PIN6 |
|-------|-------|----------------|----------------|------|------|
| VEND- | VEND+ | CREDIT<br>IN2- | CREDIT<br>IN2+ | GND  | +24V |

HOPPER INTERFACE DEFINE

Power's pins de

| , | ofino          | Г.           |         |            |            |          |             |      |   |      |
|---|----------------|--------------|---------|------------|------------|----------|-------------|------|---|------|
|   | enne           |              | 1       | 2          | 3          | 4        | 5           | 6    |   |      |
|   |                |              | 黑       | 棕          | 紅          | 橙        | 黃           | 綠    |   |      |
|   | PIN1           | PIN2         | 2       | PIN        | 13         | PI       | N4          | PIN5 |   | PIN6 |
|   | HOPPER<br>SW - | HOPP<br>SW + | ER<br>+ | HOP<br>SSF | PER<br>R - | HO<br>SS | PPER<br>R + | GND  | ) | +24V |

PULSE pins define

| _ |   |   |   |   | - |
|---|---|---|---|---|---|
| 2 | 2 | 4 | 6 | 8 |   |
|   | L | 3 | 5 | 7 | F |
|   | _ |   |   |   | - |

| PIN1 | PIN2           | PIN3 | PIN4 | PIN5 | PIN6 | PIN7           | PIN8         |
|------|----------------|------|------|------|------|----------------|--------------|
| GND  | CERDIT<br>IN 1 | N/C  | N/C  | N/C  | VCC  | CLEAR<br>ERROR | ERROR<br>OUT |

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## 5-2. Button Application



S1 Button function :

- a. Give Bills
- b. The number of withdrawals per time is controlled by DIP SW1 and DIP SW2. (Refer-DIP SWITCH SETTING)

S2 Button Function :

Long press for 3 seconds, automatic correction.DIP SW10 Control correction mode. (Refer DIP SWITCH SETTING)

S3 Button Function :

- a. Clickj to detect the bill dispenser, display panel normal and IR normal.
- b. Long press for 3 seconds, set password.

S4 Button Function :

- a. Short press to clear the error message.
- b. Long press for 3 seconds, clear Spit out / cumulative number.

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#### 5-3. Password Release & Setting Method

Machine password is six digits, Before using the button, must first remove the password. Default setting <u>123434</u>.

#### Password release :

In order S1-S2-S3-S4-S3-S4. Release success, RS232 display "- - - - "  $\cdot$  PULSE display " \_\_\_\_ " . No button within 10 seconds, need to press the password again.

#### Password setting :

In the password release state, Long press S3 approx. 3 seconds Display Setp, Enter the password setting mode.Enter 6 digits in order, display "- - - - ", successfully change the password.

Note: Forget your password, use the password too. (Get Password) retrieve password (RS232).

### 5-4. Operation Process Introduction

- 5-4-1. Standby mode (Password release status)
- A. After powering on, display accumulated value is standby, It is a state in which bill can be issued.
- B. Password release status, press S1 button, the number set by the DIP Switch will start to be billed., and accumulate it on the display.
- C. Long press S4 button 3 seconds, will clear the cumulative number to zero.
- D. PC control tool can inhibit button, also can release Inhibit button.
- E. If something goes wrong, the fault message will be displayed on the display.
- F. If the count exceeds 9999, will count back from 0 again.

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5-4-2. Prepare before starting to issue notes (Automatic correction) Our company has corrected the firmware, No need to do white card calibration again to change the currency value, DIP SW adjusted to appropriate. If you re-program the program, please do White Card Calibration or Learning calibration first.

- A. White Card Calibration: Before White Card Calibration Please adjust the correction reference first. Adjusted by DIP SW4 and DIP SW5 and DIP SW6. Put the white card provided by the supplier into the money bin, DIP SW10 adjust to ON. Long press S2 button 5 seconds, white card automatic spit out, display left and right sensor correction value.
- B. Learning Calibration : Put the bills to be deposited into the money bin. DIP SW10 adjusted to OFF. Press and hold S2 for 5 seconds, and the coin paper will be automatically ejected. If the learning is successful, "GOOD" will be displayed, and if the learning fails, "BAD" will be displayed. If you fail, please try again.

# 5-5. PC Control Tool Interface Description (RS232)

| ID10         ID_1         Port         Baud Rate           0         0         COM1 ▼         9600 ▼ | Calibra                         | tion IR                         | *      | AUTO TEST   |
|--|---------------------------------|---------------------------------|--------|-------------|
| Start Protocol End Protocol  | Clear Count<br>Clear Cou        | Clear Error                     |        | MOTOR SPEED |
| DIP SWITCH   | Key Disable Key Enable          |                                 | ~      | R_IR        |
|  | Error Record Clear Err Record   |                                 | *      | ENC         |
| Out Bill 1~100   | Powerf<br>Password Enable       | ul Out Bill<br>Password Disable | ~      | COUNTER     |
| Exit OPVME (R) copy right  | All Bill Record<br>Get Password |                                 | *<br>* | DIP SWITCH  |
| C Debug  |                                 |                                 |        |             |

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|                       | General Operation  |
|-----------------------|--|
| Software operation    | Description  |
| ID_1                  | Set the communication position between PC and                          |
| ID 10                 | Reserved   |
| Port                  | Set COM PORT   |
| Baud                  | Set BOW  |
| Start Protocol        | Start communication  |
| End Protocol          |  |
| DIP Switch            | Display firmware version and Dip switch                                |
| Out Bill 1~100        | One instruction to set the number of banknotes at a time               |
| Out Bill One          | One order for issuing a banknote at a time, the number of the set out. |
| EXIT                  | Exit PC control tool   |
| Calibration IR        | This feature is not available  |
| Clear Error           | Clear the error message on the display                                 |
| Clear Count           | Counter zero   |
| Clear Count and Error | Clear the error message on the counter and the display simultaneously. |
| Key Disable           | Set button inhibit   |
| Key Enable            | Release button inhibit   |
| Status                | Get machine status   |
| Error Record          | Read machine cumulative error record                                   |
| Clear Err Record      | Clear machine cumulative error record                                  |
| Total Count           | Read accumulated dispenser quantity                                    |
| Powerful Out Bill     | Forced out the bill, malfunction or bill jammed to use.                |
| Password Enable       | Set a password to use the button                                       |
| Password Disable      | Set no password to use the button                                      |
| All Bill Record       | Read machine all history dispenser quantity                            |
| Get Password          | Get button Password  |

| AUTO TEST Auto | AUTO TEST Automatic Detection Bill Dispenser |  |  |  |  |  |  |  |
|----------------|--|--|--|--|--|--|--|--|
| Mark           | Description                                  |  |  |  |  |  |  |  |
| MOTOR SPEED    | Motor speed                                  |  |  |  |  |  |  |  |
| L_IR           | Left sensor value                            |  |  |  |  |  |  |  |
| R_IR           | Right sensor value                           |  |  |  |  |  |  |  |
| ENC            | Grating                                      |  |  |  |  |  |  |  |
| DISPLAY        | monitor                                      |  |  |  |  |  |  |  |
| COUNTER        | counter                                      |  |  |  |  |  |  |  |

-The middle black part is RS232 communication display.

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#### XC100

### 5-6. Protocol

| RS232 Specification |      |  |  |  |  |  |  |
|---------------------|------|--|--|--|--|--|--|
| Baud Rate           | 9600 |  |  |  |  |  |  |
| Parity Check        | None |  |  |  |  |  |  |
| Data Length         | 8    |  |  |  |  |  |  |
| Stop Bit            | 1    |  |  |  |  |  |  |

- a. Bill Dispenser Received instructions from the PC, will return the status to the PC within 50 milliseconds
- b. Normal status : ACK 0x06
- c. Fault status : NCK 0x0a (Check code failure, Data value failure )
- d. The host sends an instruction to control the operation of the bill dispenser, if any abnormal state occurs, including failure, the bill dispenser returns its status to the host.

#### 5-6-1. USART Format

| BYTEO | BYTE1 | BYTE2 | BYTE3 | BYTE4 | BYTE5 | BYTE6 | BYTE7 | BYTE8 | BYTE9 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| STX   | ID_10 | ID_1  | CMD   | DATA1 | DATA2 | DATA3 | DATA4 | CS    | ETX   |

- 1. STX : Start code 0x02
- 2. ID\_10 : Bill dispenser ID number 10th digit, Default is" 0" (0x30)
- 3. ID\_1 : Bill dispenser ID number 1st digit  $\cdot$  " 0" ~" 9" (0x30~0x39)
- 4. CMD : instruction ( B, E, I, U, K, S, R, C, T, A, D, P )
- 5. DATA 1 ~4 : Data buffer
- 6. CS : Check code (The last 2 codes from the sum of BYTE0 to BYTE7)
- 7. ETX : End code (0x03)

|                              | Host to Bill dispenser 'B' $\rightarrow$ Response : ACK |       |               |                  |                       |               |        |       |       |  |  |  |  |  |
|------------------------------|---|-------|---------------|------------------|-----------------------|---------------|--------|-------|-------|--|--|--|--|--|
| BYTE0                        | BYTE1   | BYTE2 | BYTE3         | BYTE4            | BYTE5                 | BYTE6         | BYTE7  | BYTE8 | BYTE9 |  |  |  |  |  |
| STX                          | ID_10   | ID_1  | 'B'           | '0'              | Hundreds<br>digit     | Ten<br>digits | Digits | CS    | ETX   |  |  |  |  |  |
| Bill dispenser to host ' b ' |   |       |               |                  |                       |               |        |       |       |  |  |  |  |  |
|                              |   |       | Bill          | dispens          | er to host '          | b'            |        |       |       |  |  |  |  |  |
| BYTEO                        | BYTE1   | BYTE2 | Bill<br>BYTE3 | dispens<br>BYTE4 | er to host '<br>BYTE5 | b '<br>BYTE6  | BYTE7  | BYTE8 | BYTE9 |  |  |  |  |  |

#### 5-6-2. Cash out Instruction

#### 5-6-3. Clear Accumulated Number And Fault Message

|       | Host to Bill dispenser ' I ' → Response : ACK |       |       |       |       |       |       |       |       |  |  |  |  |  |
|-------|---|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|
| BYTE0 | BYTE1   | BYTE2 | BYTE3 | BYTE4 | BYTE5 | BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |  |  |  |
| STX   | ID_10   | ID_1  | 11    | '0'   | '0'   | '0'   | '1'   | CS    | ETX   |  |  |  |  |  |

BYTE7: '1' Clear accumulation / Cash is dispensed

| BYTE0 | BYTE1 | BYTE2 | BYTE3 | BYTE4 | BYTE5 | BYTE6 | BYTE7 | BYTE8 | BYTE9 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| STX   | ID_10 | ID_1  | ' '   | '0'   | '0'   | '0'   | '2'   | CS    | ETX   |

#### BYTE7: ' 2 ' Clear fault information

| <b>BYTE0</b> | BYTE1 | BYTE2 | BYTE3 | BYTE4 | BYTE5 | BYTE6 | BYTE7 | BYTE8 | BYTE9 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| STX          | ID_10 | ID_1  | ' '   | '0'   | '0'   | '0'   | '3'   | CS    | ETX   |

BYTE7: '3 ' Clear fault information and count

#### 5-6-4. Inhibit Bill Dispenser press

| Host to Bill dispenser ' K ' $\rightarrow$ Response : ACK   |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|
| BYTEO BYTE1 BYTE2 BYTE3 BYTE4 BYTE5 BYTE6 BYTE7 BYTE8 BYTE9 |  |  |  |  |  |  |  |  |  |  |  |
| STX ID_10 ID_1 'K' '1' '0' '1' '0' CS ETX                   |  |  |  |  |  |  |  |  |  |  |  |

#### BYTE 4 BYTE 6 : ' 1 ' Inhibit button

| BYTEO | BYTE1 | BYTE2 | BYTE3 | BYTE4 | BYTE5 | BYTE6 | BYTE7 | BYTE8 | BYTE9 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| STX   | ID_10 | ID_1  | 'K'   | '0'   | '0'   | '0'   | '0'   | CS    | ETX   |

BYTE 4 BYTE 6 : ' 0 ' Release Inhibit button

#### 5-6-5. Clear Error Record

| Host to Bill dispenser ' U ' $\rightarrow$ Response : ACK   |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|
| BYTE0 BYTE1 BYTE2 BYTE3 BYTE4 BYTE5 BYTE6 BYTE7 BYTE8 BYTE9 |  |  |  |  |  |  |  |  |  |  |  |
| STX ID_10 ID_1 'U' '0' '0' '0' '0' CS ETX                   |  |  |  |  |  |  |  |  |  |  |  |

#### 5-6-6. Check The Status Of The Banknote

| Host to Bill dispenser ' S ' |       |       |                 |                   |                    |              |       |       |       |  |  |
|------------------------------|-------|-------|-----------------|-------------------|--------------------|--------------|-------|-------|-------|--|--|
| BYTEO                        | BYTE1 | BYTE2 | BYTE3           | BYTE4             | BYTE5              | BYTE6        | BYTE7 | BYTE8 | BYTE9 |  |  |
| STX                          | ID_10 | ID_1  | ' S '           | '0'               | '0'                | '0'          | '0'   | CS    | ETX   |  |  |
| Bill dispenser to Host ' s ' |       |       |                 |                   |                    |              |       |       |       |  |  |
|                              |       |       | Bill            | dispense          | r to Host          | ' S '        |       |       |       |  |  |
| BYTEO                        | BYTE1 | BYTE2 | Bill (<br>BYTE3 | dispense<br>BYTE4 | r to Host<br>BYTE5 | 's'<br>BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |

Note :

- 1. val1 : 'w' --> Busy , 'r' --> Standby , 'e' --> Malfunction (val2 : error code ), 't' --> Test mode
- 2. BYTE6 : Button S1 Locked or Unlock ('0': Unlock , '1': Locked )
- 3. BYTE7 : Button S4 Locked or Unlock ('0': Unlock , '1': Locked )

#### 5-6-7. Get Error Message Record

| Host to dispenser ' R ' |       |       |       |               |           |       |       |       |       |  |  |
|-------------------------|-------|-------|-------|---------------|-----------|-------|-------|-------|-------|--|--|
| BYTEO                   | BYTE1 | BYTE2 | BYTE3 | BYTE4         | BYTE5     | BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |
| STX                     | ID_10 | ID_1  | ' R ' | '0'           | '0'       | '0'   | '0'   | CS    | ΕTΧ   |  |  |
|                         |       |       | Di    | spenser       | to Host ' | r'    |       |       |       |  |  |
| BYTEO                   | BYTE1 | BYTE2 | BYTE3 | BYTE4         | BYTE5     | BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |
| STX                     | ID_10 | ID_1  | 'r'   | ERROE<br>Item | counter   | '0'   | '0'   | CS    | ETX   |  |  |

#### 5-6-8. Check Out The Billing Item

| Host to Dispenser ' C ' |       |       |             |                  |                    |              |       |       |       |  |  |
|-------------------------|-------|-------|-------------|------------------|--------------------|--------------|-------|-------|-------|--|--|
| BYTE0                   | BYTE1 | BYTE2 | BYTE3       | BYTE4            | BYTE5              | BYTE6        | BYTE7 | BYTE8 | BYTE9 |  |  |
| STX                     | ID_10 | ID_1  | 'C'         | '0'              | '0'                | '0'          | '0'   | CS    | ETX   |  |  |
| Dispenser to Host ' c ' |       |       |             |                  |                    |              |       |       |       |  |  |
|                         |       |       | Di          | spenser          | to Host '          | С'           |       |       |       |  |  |
| BYTEO                   | BYTE1 | BYTE2 | Di<br>BYTE3 | spenser<br>BYTE4 | to Host '<br>BYTE5 | c '<br>BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |

| 5-6-9. Bill Dispenser Total N | Number Of Banknotes |
|-------------------------------|---------------------|
|-------------------------------|---------------------|

|                       |       |       | Ho    | ost to Dis           | penser '            | Τ'                            |                           |       |       |  |  |
|-----------------------|-------|-------|-------|----------------------|---------------------|-------------------------------|---------------------------|-------|-------|--|--|
| BYTE0                 | BYTE1 | BYTE2 | BYTE3 | BYTE4                | BYTE5               | BYTE6                         | BYTE7                     | BYTE8 | BYTE9 |  |  |
| STX                   | ID_10 | ID_1  | 'T'   | '0'                  | '0'                 | '0'                           | '0'                       | CS    | ETX   |  |  |
| Dispenser to Host 'y' |       |       |       |                      |                     |                               |                           |       |       |  |  |
| <b>BYTE0</b>          | BYTE1 | BYTE2 | BYTE3 | BYTE4                | BYTE5               | BYTE6                         | BYTE7                     | BYTE8 | BYTE9 |  |  |
| STX                   | ID_10 | ID_1  | 'y'   | '0'                  | '0'                 | hundred<br>thousand<br>digits | Ten<br>thousand<br>digits | CS    | ETX   |  |  |
|                       |       |       | Dis   | spenser t            | o Host '            | Z                             |                           |       |       |  |  |
| <b>BYTE0</b>          | BYTE1 | BYTE2 | BYTE3 | BYTE4                | BYTE5               | BYTE6                         | BYTE7                     | BYTE8 | BYTE9 |  |  |
| STX                   | ID_10 | ID_1  | 'z'   | 'Thousand<br>digits' | 'Hundred<br>digits' | 'Ten<br>digits'               | 'One<br>digits'           | CS    | ETX   |  |  |

#### 5-6-10. Get Button Password

| Host to Dispenser ' P ' |       |       |       |           |          |                 |                 |       |       |  |
|-------------------------|-------|-------|-------|-----------|----------|-----------------|-----------------|-------|-------|--|
| BYTE0                   | BYTE1 | BYTE2 | BYTE3 | BYTE4     | BYTE5    | BYTE6           | BYTE7           | BYTE8 | BYTE9 |  |
| STX                     | ID_10 | ID_1  | 'P'   | '0'       | '0'      | '0'             | '0'             | CS    | ETX   |  |
|                         | •     | •     | Dis   | spenser t | o Host ' | р'              | •               | •     |       |  |
| BYTE0                   | BYTE1 | BYTE2 | BYTE3 | BYTE4     | BYTE5    | BYTE6           | BYTE7           | BYTE8 | BYTE9 |  |
| STX                     | ID_10 | ID_1  | 'p'   | '0'       | $1^{th}$ | 2 <sup>th</sup> | 3 <sup>th</sup> | CS    | ETX   |  |

BYTE 5 : First digit of password BYTE 6 : Second digit of password

BYTE 7 : Third digit of password

| Dispenser to Host 'w'   |  |  |  |  |  |  |  |  |       |  |
|---|--|--|--|--|--|--|--|--|-------|--|
| BYTEO BYTE1 BYTE2 BYTE3 BYTE4 BYTE5 BYTE6 BYTE7 BYTE8 BYTE5   |  |  |  |  |  |  |  |  | BYTE9 |  |
| STX         ID_10         ID_1         'w'         '0'         4 <sup>th</sup> 5 <sup>th</sup> 6 <sup>th</sup> CS         ETX |  |  |  |  |  |  |  |  |       |  |

BYTE 5 : Fourth digit of password

BYTE 6 : Fifth digit of password

BYTE 7 : Sixth digit of the password

#### 5-6-11. Get DIP SWITCH position

| Host to Dispenser ' D ' |                         |       |       |            |              |       |       |       |       |  |  |
|-------------------------|-------------------------|-------|-------|------------|--------------|-------|-------|-------|-------|--|--|
| BYTE0                   | BYTE1                   | BYTE2 | BYTE3 | BYTE4      | BYTE5        | BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |
| STX                     | ID_10                   | ID_1  | 'D'   | '0'        | '0'          | '0'   | '0'   | CS    | ETX   |  |  |
|                         | Dispenser to Host ' d ' |       |       |            |              |       |       |       |       |  |  |
| BYTE0                   | BYTE1                   | BYTE2 | BYTE3 | BYTE4      | BYTE5        | BYTE6 | BYTE7 | BYTE8 | BYTE9 |  |  |
| STX                     | ID_10                   | ID_1  | 'd'   | DIP<br>SW9 | DIP<br>SW1~8 | '0'   | '0'   | CS    | ETX   |  |  |

#### 5-6-12. Bill DisPenser Reply Error Code

| Dispenser to Host ' E '   |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|
| BYTE0 BYTE1 BYTE2 BYTE3 BYTE4 BYTE5 BYTE6 BYTE7 BYTE8 BYTE  |  |  |  |  |  |  |  |  |  |  |
| STX         ID_10         ID_1         'E'         val         '0'         '0'         '0'         CS         ETX |  |  |  |  |  |  |  |  |  |  |

val : Please refer to 7. Troubleshooting

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### 5-6-13. DIP SW Setting

#### RS232 INTERFACE DEFINE - DIP SW

| Functio                      | n   | 1   | 2   | 3   | 4 | 5 | 6 | 7   | 8   | 9   | 10  |
|------------------------------|-----|-----|-----|-----|---|---|---|-----|-----|-----|-----|
| Speed slow                   |     | ON  |     |     |   |   |   |     |     |     |     |
| Speed fa                     | ast | OFF |     |     |   |   |   |     |     |     |     |
| *1 pcs                       | 5   |     | ON  | ON  |   |   |   |     |     |     |     |
| 5pcs                         |     |     | OFF | ON  |   |   |   |     |     |     |     |
| 10pcs                        |     |     | ON  | OFF |   |   |   |     |     |     |     |
| 20pcs                        |     |     | OFF | OFF |   |   |   |     |     |     |     |
| *ID_1                        | 0   |     |     |     |   |   |   | ON  | ON  | ON  |     |
| ID_1                         | 1   |     |     |     |   |   |   | OFF | ON  | ON  |     |
| ID_1                         | 2   |     |     |     |   |   |   | ON  | OFF | ON  |     |
| ID_1                         | 3   |     |     |     |   |   |   | OFF | OFF | ON  |     |
| ID_1                         | 4   |     |     |     |   |   |   | ON  | ON  | OFF |     |
| ID_1                         | 5   |     |     |     |   |   |   | OFF | ON  | OFF |     |
| ID_1                         | 6   |     |     |     |   |   |   | ON  | OFF | OFF |     |
| ID_1                         | 7   |     |     |     |   |   |   | OFF | OFF | OFF |     |
| ** White Card<br>Calibration |     |     | •   |     |   |   |   |     |     | ~   | ON  |
| Learning white Card          |     |     |     |     |   |   |   |     |     |     | OFF |

#### PULSE INTERFACE DEFINE - DIP SW

| Function |                | 1 | 2 | 3 | 4 | 5 | 6 | 7   | 8   | 9   | 10 |
|----------|----------------|---|---|---|---|---|---|-----|-----|-----|----|
| 1:1      | 1 Pulse 1 out  |   |   |   |   |   |   | ON  | ON  | ON  |    |
| 2:1      | 2 Pulse 1 out  |   |   |   |   |   |   | OFF | ON  | ON  |    |
| 3:1      | 3 Pulse 1 out  |   |   |   |   |   |   | ON  | OFF | ON  |    |
| 4:1      | 4 Pulse 1 out  |   |   |   |   |   |   | OFF | OFF | ON  |    |
| 5:1      | 5 Pulse 1 out  |   |   |   |   |   |   | ON  | ON  | OFF |    |
| 10:1     | 10 Pulse 1 out |   |   |   |   |   |   | OFF | ON  | OFF |    |
| 20:1     | 20 Pulse 1 out |   |   |   |   |   |   | ON  | OFF | OFF |    |
| 50:1     | 50 Pulse 1 out |   |   |   |   |   |   | OFF | ON  | OFF |    |

#### DIP SW National Currency Recommended Adjustment Position

| Functio               | n | Curronau  | DIP | DIP | DIP |
|-----------------------|---|---|-----|-----|-----|
| Functio               | n | Currency  | SW4 | SW5 | SW6 |
|                       | 1 | Learning correction mode  | ON  | ON  | ON  |
| Bill<br>Transmittance | 2 | Single currency setting   | OFF | ON  | ON  |
|                       | 3 |   | ON  | OFF | ON  |
|                       | 4 | For various currency settings, please refer to the setting drawings | OFF | OFF | ON  |
|                       | 5 |   | ON  | ON  | OFF |
|                       | 6 |   | OFF | ON  | OFF |
|                       | 7 |   | ON  | OFF | OFF |
|                       | 8 |   | OFF | OFF | OFF |

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# 6. Banknote Output Restriction Function

When the inventory quantity is lower than or equal to the minimum inventory limit, the device will perform an error action (declaring that there is no banknote).

Setting operation:

(1) Enter setting mode

Press and hold the S4 button first, and then press the S3 button for 3 seconds to enter the banknote discharge limit setting mode. When entering the banknote output restriction setting mode, the count value on the panel will be reset to zero.

#### (2) Setting

The front panel will display "HxLy": the default is "H5L5". 'Hx' : indicates the number of banknotes putting. 'x' is set by S3, ranging from 1 to 10 (A), and the unit is 100 (sheets). 'Ly': indicates the minimum inventory limit quantity. 'y' is set by S1,

ranging from 1 to 10 (A), and the unit is 10 (sheets).

(3) Exit setting mode

- 1. In the same way as entering, press and hold the S4 button first, and then press the S3 button for 3 seconds to exit the banknote output limit setting mode. At this time, the currently set parameter values will be stored.
- 2. If no operation is performed for more than 20 seconds, it will automatically exit the setting mode, and the currently set parameter values will not be stored.

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(4) Release the error status

When the banknote output limit is triggered, the method of clearing is to clear the current number of banknotes issued, and just long press S4 to clear it.

Actual screen :



Trigger mechanism :

H5 indicates that the number of banknotes in stock is at least 5 \* 100 = 500, and L5 indicates that the minimum number of banknotes in stock is 5 \* 10 = 50. In the state of no banknote output and no error, when the remaining banknotes are equal to or lower than the minimum inventory ((500 - number of output banknotes) <= 50) to report an error.

If the inventory before outputting the banknote is greater than the minimum limit inventory, but after outputting the banknote, it will be smaller than the minimum limit inventory. At this time, the error will be reported only after the banknote is output.

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# XC100

# 7. Maintenance

- 7-1. Clean inside and add lubricant
  - 1.Clean with a soft brush draw out port and the junction of the banknote and the roller (A), prevent the sensor from being blocked by dust.

2.Regularly press the billboard and the rail (B) add oil and keep it dry.



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## 7-2. Matters for cleaning the inner rollers

1. Remove the screws (marked with 4 in the box) and pull apart the wire. (A)

2. Remove the screws on the lower sheet metal (two hexagonal frames are marked). (A)

3. Use an air gun or a soft brush to remove dust and paper dust from the roller. (B)



|         | Maintenance Notice<br>(Any improper maintenance will result invalid warranty.) |  |  |  |  |
|---------|--|--|--|--|--|
| Alcohol | Recommended  | Mild,non-abrasive,a small amount of soapy water. |  |  |  |
|         | DO NOT USE   | Organic solvent , Alcohol, Volatile liquid.      |  |  |  |

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# 8. Troubleshooting

| Error Code           | Reason                                       | Processing method  |   |  |  |  |  |
|----------------------|--|--|---|--|--|--|--|
| 0                    | Not enough bills.                            | Please add your own bills.                               |   |  |  |  |  |
| 7                    | Double Cash out<br>( two bills or too old ). | Adjust wheel set clearance screw,<br>turn clockwise      |   |  |  |  |  |
| А                    | Motor error                                  | SENSOR or motor error,<br>please inform TOP.             |   |  |  |  |  |
| b                    | Left IR electric eye start erro              | Left IR electric eye start error, please inform TOP.     |   |  |  |  |  |
| С                    | Right IR electric eye start err              | Right IR electric eye start error,<br>please inform TOP. |   |  |  |  |  |
| D                    | Left IR electric eye start erro              | Need to ne re white card calibration, please inform TOP. |   |  |  |  |  |
| F                    | Right IR electric eye start err              | Need to ne re white card calibration, please inform TOP. |   |  |  |  |  |
| G                    | The values cannot differ by mor<br>10 error. | Need to ne re white card calibration, please inform TOP. |   |  |  |  |  |
| Н                    | Automatic correction error                   | Need to ne re white card calibration, please inform TOP. |   |  |  |  |  |
| g                    | Sensor error                                 | Please inform TOP.                                       |   |  |  |  |  |
| r                    | Right sensor have foreign obj                | Clean with a soft brush cash<br>withdrawal.              |   |  |  |  |  |
| L                    | Left sensor have foreign obje                | Clean with a soft brush cash<br>withdrawal.              |   |  |  |  |  |
| Easy troubleshooting |  |  |   |  |  |  |  |
|                      |  |  | May be stuck in the billboard.  |  |  |  |  |
| Cash out not smooth  |  |  | Palin loose under the pedestal.   |  |  |  |  |
|                      |  |  | Change bills are not adjusted DIP SW or<br>need white card Calibration. |  |  |  |  |
|                      |  | D  | DIP SW no adjusted to positioning                                       |  |  |  |  |

|                                    | DIP SW no adjusted to positioning   |  |  |  |
|------------------------------------|---|--|--|--|
| Bill jammed                        | The bill is too old.  |  |  |  |
| 5                                  | Change bills are not adjusted DIP SW or<br>need white card calibration.                     |  |  |  |
| Banknote tilt                      | The left and right sides of the pin wheel are<br>uneven · adjust wheel set clearance screw. |  |  |  |
| Button not available               | The button is locked by the PC control tool.  |  |  |  |
| Motor no response                  | Motor Error   |  |  |  |
| View "Automatic detection bill dis | penser" value or abnormal action  |  |  |  |

 $\mathbf{V}$ 

If the error can not be solved after corrective actions or happen again, please contact TOP for technical support.

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