



Data Audit Box

# DAB-E

Installation Guide



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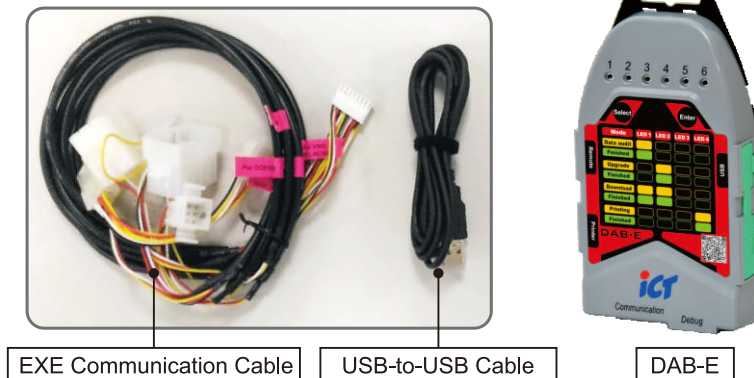
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## Before to Use

To check below:

1. Need to install [.Net Framework 4 Client Profile ] version (you can download from Microsoft website) on your PC (Microsoft OS, XP above) before operating DAB on your PC via DAB Audit Box Tool.
2. Need to install Office Excel 2003 or above.
3. DAB's power feed is from VMC while DAB installed on the vending machine.
4. You need to prepare a power support for DAB while DAB connecting to PC for parameter settings.
5. You can re-set the encryption key via DAB Audit Box Tool if you would like to change the factory default value "0, 0, 0, 0".  
Please refer to section 2-5 AUDIT FILE.
6. You can re-set DAB time setting to your local time (please refer to section 2-4). The default setting is GMT+01 : 00.
7. You would find below items on DAB Product:
  - a. DAB-E
  - b. USB-to-USB type-A cable
  - c. EXE Communication cable



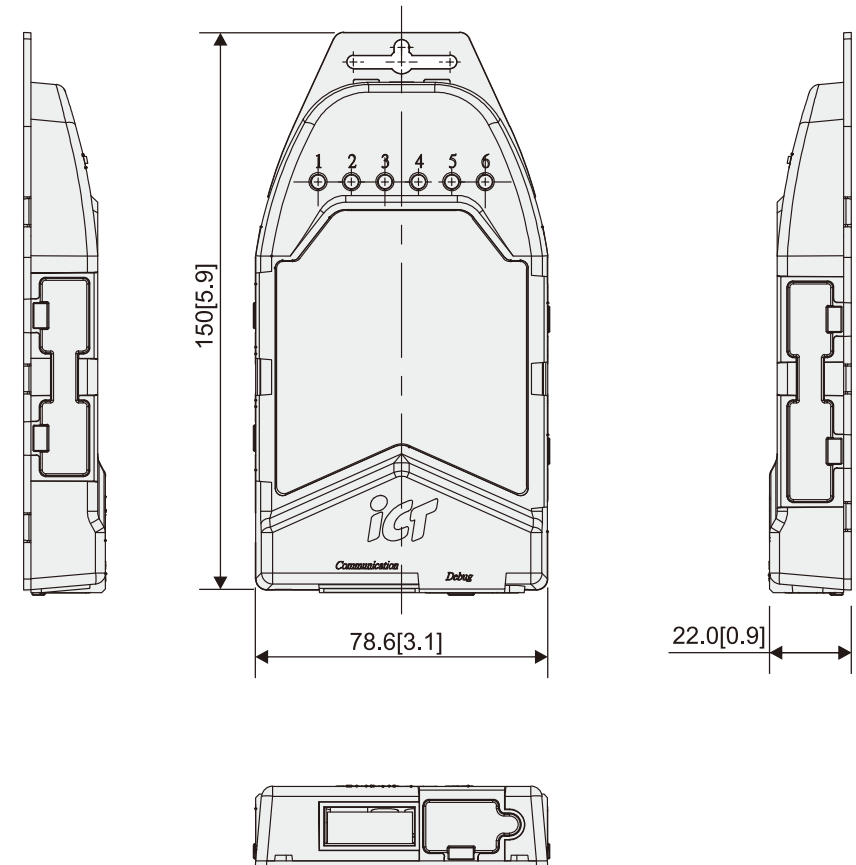
EXE Communication Cable

USB-to-USB Cable

DAB-E

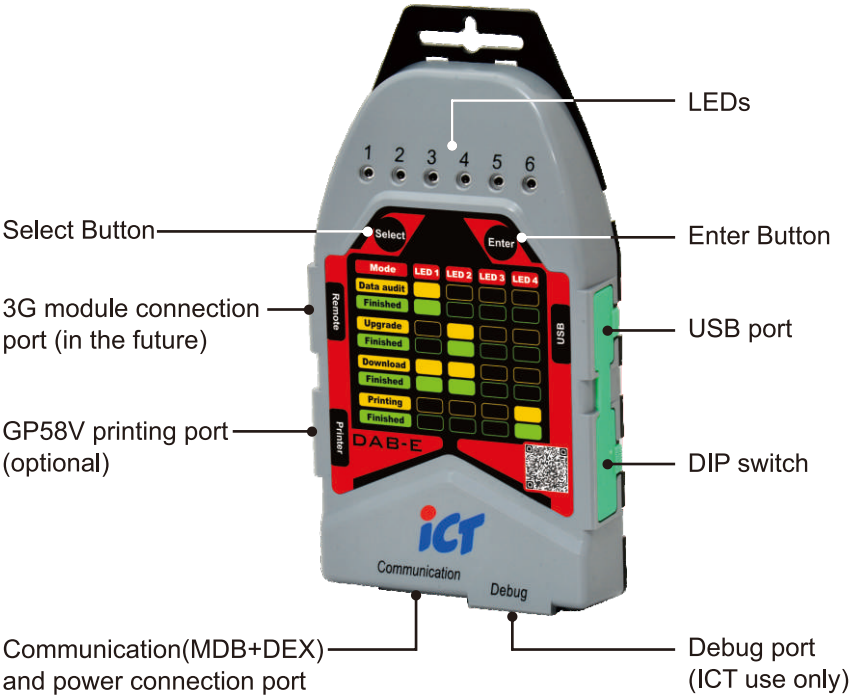
## 1. DAB-E Operating User Manual

### 1-1. Dimension



Unit : mm [inch]

1-2. DAB LED indicator function introduction



LED type

Indicator	Function
LED1~LED4	Mode Status Indicator
LED5	Upgrade Error Indicator
LED6	Stand-by-mode Indicator VMC Indicator/ time setting Indicator

Mode Status Indicator

Please refer to each section of mode operation.

Upgrade Error Indicator

Please refer to section 1-8, page 13.

Stand-by-mode Indicator

1. LED6 flash in green means the DAB is under stand-by-mode ready for functionality
2. LED6 flash in red means the DAB is under stand-by-mode, but time setting is back to default value of [2016/01/01 00:00:00] due to no coin battery or low battery power. You need to power-off DAB and replace the coin battery, reset the time setting and then power-on to show you LED6 flash in green again.
3. LED6 flash in orange means the DAB is under stand-by-mode, but is working on getting the debug code from peripheral devices. LED6 would back to flash in green once the task finished.



### Function for Stand-by-mode

Function	Remark
Record the communication (log) data	Save the communication data front/ to VMC/ Coin Change/ Bill Acceptor
Record the transaction data	1. Save EVA/DTS data 2. Save each single transaction data

### Peripheral Device (VMC/BA/CC/Cashless) Status Indicator

On stand-by-mode (LED6 flash in green), and without to press “**select**” button, the LED1, LED2, LED3 and LED4 would show the status of the devices connected to the DAB. Below is the LED Indicator description.

LED#	Communication in normal	No Communication
LED1	Green light, VMC communication normally	No light, VMC is no communication or device is not existed
LED2	Green light, coin change communication normally	No light, coin change is no communication or device is not existed
LED3	Green light, bill acceptor communication normally	No light, bill acceptor is no communication or device is not existed
LED4	Green light, chashless communication normally	No light, chashless is no communication or device is not existed

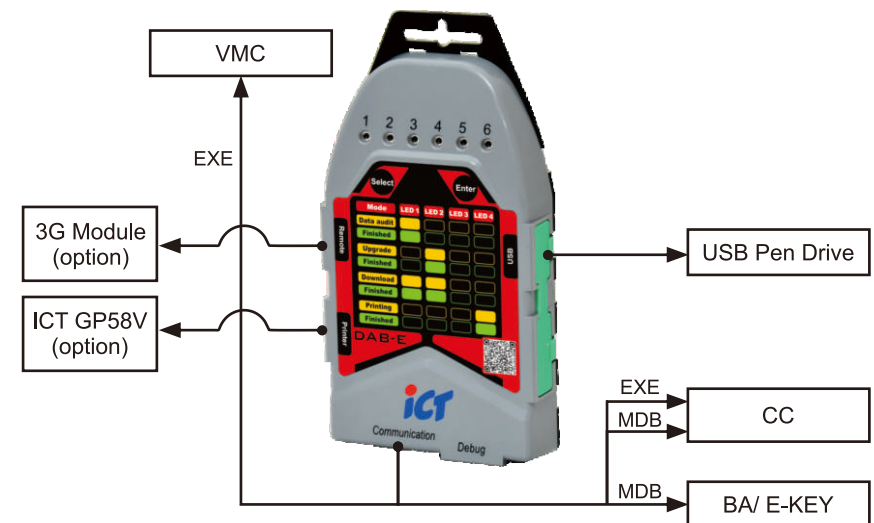
## 1-3. Installation (connect to VMC & peripheral device)

### First step

Shut down/ Power-off the vending machine.

### Second step

- Connect DAB's MDB\_master (w/ label: For MDB\_Master) connector to ICT Coin Changer's connector (MDB female connector).
- Connect DAB's MDB\_device (w/ label: For MDB Device) connector to ICT BA's connector (MDB male connector).
- Connect DAB's EXE & Power connectors (w/ label: For VMC) to VMC's EXE Communication & Power connectors.
- Connect DAB's EXE & Power connectors (w/ label: For CC6100) to ICT Coin Changer's EXE Communication & Power connectors.



### 1-4. DAB Initialized (boot up for self-testing)

DAB will automatically process a self-test while the power feed. During the self-test, it would check its hardware, memory, checksum, etc. Once the self-test completed successfully, DAB would be on **“Stand by mode”** with LED6 flashing in green as below.



For this mode, the DAB would start monitoring/recording the transaction data the way from/to VMC & Bill Acceptor, Coin Acceptor.

Once the self-test is failed, it would show all the 6 LEDs in red. For that, please contact ICT's Sales/FAE for the support.



### 1-5. Stand-by Mode

Generally, DAB would be on stand-by mode in default, which shows LED6 flashing in green as below.



In stand-by mode, DAB would work on monitoring and recording communication/transaction data between VMC and BA/CC.

Function	Description	Remark
Record the communication (log) data	Record the log data while communicating among VMC, BA and CC	Log data would be helpful for ICT technician for troubleshooting
Record the transaction data	Record each transaction data while VMC machine operating	1. record EVA/DTS data 2. record each transaction data

### 1-6. Transaction Export Mode

In stand-by mode, the user can simply plug the USB Pen Drive into USB port to upload the transaction data automatically into the USB Drive. When the LED1 is in green, it means the upload process finished and DAB would go ahead next two operations of **“DAB firmware upgrade mode”** & **“Upgrade BA/CC firmware mode”**. When above operations finished, the user can un-plug the USB Pen Drive.

Please refer to below LED status while the transaction data export.

#### LED Indicator

LED1 LED2 LED3 LED4	LED1 would light in yellow means the system in <b>“Transaction export mode”</b> .
LED1 LED2 LED3 LED4	LED1 would flash in yellow means the system in process of transaction data exporting.
LED1 LED2 LED3 LED4	LED1 would light in green means the transaction data export completed.
LED1 LED2 LED3 LED4	LED1 would light in red, it means the transaction data export failed.

**During operating this mode, DAB would cut out the communication among VMC, BA and CC**

Function	Description	Remark
EVA/DTS Data output	Those EVA/DTS data would be saved to the folder “ <b>EVADTS</b> ” of USB Pen Drive (the folder would be created automatically).	Output filename: “ <b>Version_read time.eneva</b> ”
Audit Data backup output	Those EVA/DTS data would be backup to Pen Drive as well.	Please refer to [ <a href="#">Audit's Backup Data export mode</a> ]
Single Transaction data output	Single transaction data would be saved to the folder “ <b>PAY</b> ” of USB Pen Drive (the folder would be created automatically).	Output file name: “ <b>Serial number_1<sup>st</sup> record time_the last record time.enbin</b> ”





**Note:**

1. Extension filename is [enbin] or [eneva] means the file is encrypted.
2. Before those two “**DAB firmware upgrade mode**” & “**Upgrade BA/CC firmware mode**” finished, please do not remove USB Pen Drive.

## 1-7. DAB Firmware Upgrade Mode

Upon above transaction export mode finished, keep the USB Pen Drive in plug, DAB would go ahead to check if any DAB itself firmware needed to upgrade. In case of new firmware existed, DAB would process firmware upgrade and the LED would be shown as below. When the LED2 is in green, it means the firmware upgrade finished and DAB would go ahead next operation of “**Upgrade BA/CC firmware mode**”.

### LED Indicator

 LED1 LED2 LED3 LED4	LED2 shine in amber, it means system in “ <b>DAB update firmware mode</b> ”.
 LED1 LED2 LED3 LED4	LED2 flash in amber, it means system searching the file or firmware upgrading.
 LED1 LED2 LED3 LED4	LED2 shine in green, it means DAB firmware upgrade completed.
 LED1 LED2 LED3 LED4	LED2 shine in red, it means DAB firmware upgrade failed.

**During operating this mode, DAB would cut out the communication among VMC, BA and CC**

Function	Description	Remark
Sorting Path and setting	DAB would check if [ <b>ecf</b> ] folder existed in Pen Drive, if yes, then go to this folder to get the file for upgrading DAB firmware. If no [ <b>ecf</b> ] folder, then go to root older to find the ecf file for upgrading DAB firmware.	1. [ <b>ecf</b> ] wording can be big or small letter. 2. User can create ecf folder on USB Pen Drive in advance.
Recognize and Read the firmware file	This firmware would be with extension file name “ <b>.bin</b> ” for DAB to recognize.	In case of two files existed, DAB would choose the latest one to process of firmware upgrade.
Upgrade DAB Firmware	In process of the firmware upgrade with “ <b>.bin</b> ” file.	DAB would run this new firmware once the upgrade finished.





**Note:**

Please make sure the firmware must be saved to the root folder or the folder “**ecf**” of USB Pen Drive before inserting this Pen Drive to DAB.

## 1-8. Upgrade BA/CC Firmware

Upon above DAB firmware upgrade finished, DAB would automatically check if the firmware of BA/CC existed then go to BA/CC firmware update process. The LEDs would be shown as below. When both LED1 & LED2 are in green, it means the BA/CC firmware upgrade finished and the user can un-plug the USB Pen Drive. Please make sure the BA/CC devices should be FTL protocol supported.

### LED Indicator

	LED1 & LED2 in amber light, it means system in “ <b>update BA/CC firmware mode</b> ”.
	LED1 & LED2 flash in amber, it means system searching the file or firmware upgrading.
	LED1 & LED2 in green light, it means Device firmware upgrade completed.
	LED1 & LED2 in red light, it means Device firmware upgrade failed.

**During operating this mode, DAB would cut out the communication among VMC, BA and CC.**







Function	Description	Remark
Sorting Path and setting	DAB would check if [ <b>ecf</b> ] folder existed in Pen Drive, if yes, then go to this folder to get the file for upgrading. If no [ <b>ecf</b> ] folder, then go to root older to find the ecf file for upgrading.	1. [ <b>ecf</b> ] wording can be big or small letter. 2. User can create ecf folder on USB Pen Drive in advance.
Recognize and Read the firmware file	This firmware would be with extension file name “ <b>.ecf</b> ” for DAB to recognize.	In case of two files existed, DAB would choose the latest one to process of firmware upgrade.
Upgrade DAB Firmware	In process of the firmware upgrade with “ <b>.bin</b> ” file.	DAB would run this new firmware once the upgrade finished.

**Note:**

1. Please make sure the firmware of BA/CC or ICT GP58V must be saved to the root folder or the folder “**ecf**” of USB Pen Drive before inserting this Pen Drive to DAB.
2. Please do not put the different version firmware in the same USB Pen Drive, or the wrong firmware version.

**Upgrade fail with below LED indicators:**





**Error LED indicators as below would flash with 2 sec period in recycle.**

DAB USB Pen Drive failed	 Flash one time
Coin Change firmware upgrade failed	 Flash two time
Bill Acceptor firmware upgrade failed	 Flash three time
CL firmware upgrade failed	 Flash four time
Document Check (DC) firmware upgrade failed	 Flash five time
ICT GP58V firmware upgrade failed (in the future)	 Flash six time

## 1-9. Log export Mode (only for ICT Engineer Debug Use)

To operate this mode, the user needs to first press DAB’s “**Select**” button to select the LED3 in amber light. Plug in the USB Pen Drive, press “**Enter**” button, then the LED3 would flash in amber for processing the log data export. When the LED3 turns to green light, it means the log export finished, the user can un-plug the USB Pen Drive, DAB would be returned to stand by mode.

### LED Indicator

 LED1 LED2 LED3 LED4	LED3 shine in amber, it means system in “ <b>Log export mode</b> ”
 LED1 LED2 LED3 LED4	LED3 flash in amber, it means the Log file in exporting.
 LED1 LED2 LED3 LED4	LED3 shine in green, it means the Log file export complete.
 LED1 LED2 LED3 LED4	LED3 shine in red, it means the Log file export fail.

Function	Description	Remark
Log Data output	Log file data would upload to the folder “LOG” of USB Pen Drive.	Output file name: “Serial number_LOG_MDB_read time.bin”. “Serial number_LOG_VCCS_read time.bin”. “Serial number_LOG_VCCS_DEVICE_read time.bin”.
Debug Message output	Debug Message would upload to the folder 【DEBUG_MESSAGE】 of USB Pen Drive.	In case of two files existed, DAB would choose the latest one to process of firmware upgrade.

**Note:**

1. The user must press “Enter” button within 10 seconds. Otherwise, DAB will be returned to “Stand by mode” automatically.
2. During operating this mode, DAB would cut out the communication among VMC, BA and CC.
3. Please do not remove USB drive before Log file uploading finished.



**Log records message**

Message	Description
LOG_OUT	Log export.
PC_TOOL	Setup and test function execution.
AUDIT	Transaction data Export.
EVA\DTS_BACKUP_OUT	EVA\DTS backup export.
DOWNLOAD	Devices firmware upgrade.
UPGRADE	DAB firmware upgrade.
DOWNLOAD_RECORD_CLEAR	Devices download record clear.
RESTART	DAB reboot.
REPEATING	Log records repeat, will not record.

**1-10. Setup and Testing Mode (link to PC Tool)**

To operate Audit Box Tool (WinXP OS or above environment) to set up DAB's parameters, the user need to at first press DAB's “Select” button to select both LED1 & LED3 to shine in amber, and then press “Enter” button to entry to “Setup and testing mode” . Then, plug in double-male A-type USB cable to connect PC to DAB, opening Audit Box Tool on your PC. When both LED1 & LED3 are in green, it means the connection is successful. When the parameter settings finished, then to remove the USB cable, the DAB would be returned to the stand by mode.

**LED Indicator**

 LED1 LED2 LED3 LED4	LED1 & LED3 shine in amber, it means system in “Setup and testing mode”.
 LED1 LED2 LED3 LED4	LED1 & LED3 shine in red, it means system entered “Setup and testing mode”.
 LED1 LED2 LED3 LED4	LED1 & LED3 shine in green, it means system connected to tool.

**Setup and testing mode function**

Function	Description	Note
Communication to Audit Box Tool	1. Function test: GPIO, FRAM, External Flash, etc. 2. Parameter Setup: Local Time, Serial number, etc. 3. Version Checking: DAB FW version, Checksum version, etc.	

**Note:**




1. On this mode, you should have power supply to support power to DAB.
2. The user must press “Enter” button within 10 seconds. Otherwise, DAB will be returned to “Stand by mode” automatically.



## 1-11. Audit Backup Data Export Mode (History data)

To operate this mode, the user need to at first press DAB's **"Select"** button to select both LED2 & LED3 to shine in amber, then plug in the USB Pen Drive, and press **"Enter"** button to entry to **"Audit's backup data Export mode"**. Both LED2 & LED3 would flash in amber for data exporting. When both LED2 & LED3 are in green, it means the EVA/DTS file export finished. For this time, the user can un-plug the USB Pen Drive, the DAB would be returned to the stand by mode.

### LED Indicator

	LED2 & LED3 shine in amber , it means system in <b>"EVA/DTS export mode"</b> .
	LED2 & LED3 flash in amber , it means the EVA/DTS file in exporting.
	LED2& LED3 shine in green, it means the EVA/DTS file export complete.
	LED2& LED3 shine in red, it means the EVA/DTS file export fail.

### Setup and testing mode function

Function	Description	Note
EVA/DTS file export	EVA/DTS file save to the <b>"EVA DTS Backup"</b> folder of USB driver.	Export filename : [ Serial number_BACKUP_ read time.eneva ]



#### Note:

1. The user must press **"Enter"** button within 10 seconds. Otherwise, DAB will be returned to **"Stand by mode"** automatically.
2. filename extension as [eneva] means the file is encryption file.
3. The method to decrypt EVA/DTS backup file, please refer the chapter Audit Box Tool with section of [EVA/DTS file].

## 1-12. Clear Up Devices (BA/CC) Upgrade Records Mode

To operate this mode, the user need to at first press DAB's **"Select"** button to select all the LED1, LED2 & LED3 to shine in amber. And then press **"Enter"** button to entry to **"Clean Up Devices (BA/CC) Upgrade records mode"** , system will Clear Devices Upgrade records. When all the LED1, LED2 & LED3 are in green, it means clear the records finished, and the DAB would be returned to stand by mode.

### LED Indicator

	LED1, LED2 & LED3 shine in amber , it means system in <b>"Clear Devices Update records mode"</b> .
	LED1, LED2 & LED3 shine in green, it means the upgrade records complete..





#### Note:

1. The user must press **"Enter"** button within 10 seconds. Otherwise, DAB will be returned to **"Stand by mode"** automatically.
2. This mode is for the purpose when the user changes a new BA/CC instead of original one. In this case, we must tell DAB the new BA/CC replaced happened and ask for DAB can start the upgrade process via FTL.

## 1-13. Parameter Setting Mode (via USB Pen Drive)

To operate this mode, the user need to at first press DAB's **"Select"** button to select LED4 in amber light, then plug in the USB Pen Drive, and press **"Enter"** button to entry to **"Parameter Setting mode"** to write down the parameters to DAB. When LED4 indicator turns to green light, the parameter setting finished. After that, the user can un-plug the USB Pen Drive, the DAB would be returned to the stand by mode.

### LED Indicator

	LED4 in amber light means system in <b>"Parameter Setting Mode"</b> .
	LED4 in flash means system in process of the Parameter Setting.
	LED4 in green light means the Parameter Setting finished and success.
	LED4 in red light means the Parameter Setting failed.

### Note:

1. The user must press **"Enter"** button within 10 seconds. Otherwise, DAB will be returned to "Stand by mode" automatically.
2. The user should save the parameters setting via Audit Box Tool into the USB Pen Drive before operating this mode.

## 2. DAB Audit Box Tool

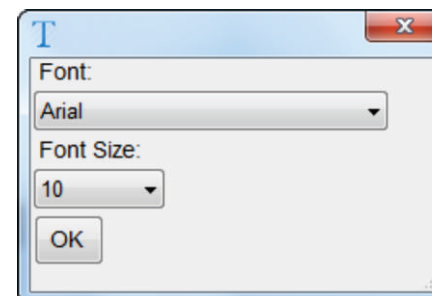
### 2-1. Before Start

DAB Audit Box Tool is designed with English version. The user can change it to what language you want. To achieve this, please, after tool installed on your PC, find out the **Global.ini** on the folder of **\My Documents\ICT\Audit Box Tool\Language** and open it as below screen:

```
getText = Obtain
setText = Set
informationText = Information
noTest = No.
resultTest = Result
clearButtonText = Clear
startText = Start
ExportButtonText = Export
addressLabelText = Address:
writeButtonText = Write
readButtonText = Read
otherButtonText = Extra
```

You can change the English texts the right side of **"="** to what language characters you want. Please don't change the texts the left side of **"="**. Save the file after you finished. Open the tool program and it would show you below screen to setup the font/size.

### Font/Size initialized settings



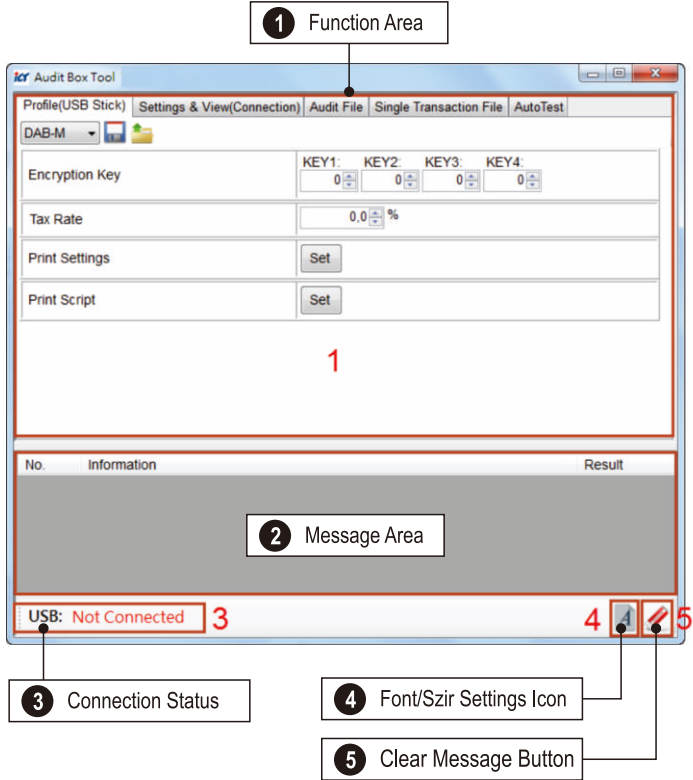
### Please note:

You can skip this section if you would use English version of Audit Box Tool.



2-2. Parameter Setting Mode (via USB Pen Drive)

Before starting, please install Audit Box Tool on your PC (WinXP or above). Open Audit Box Tool and it would show the GUI screen as below:

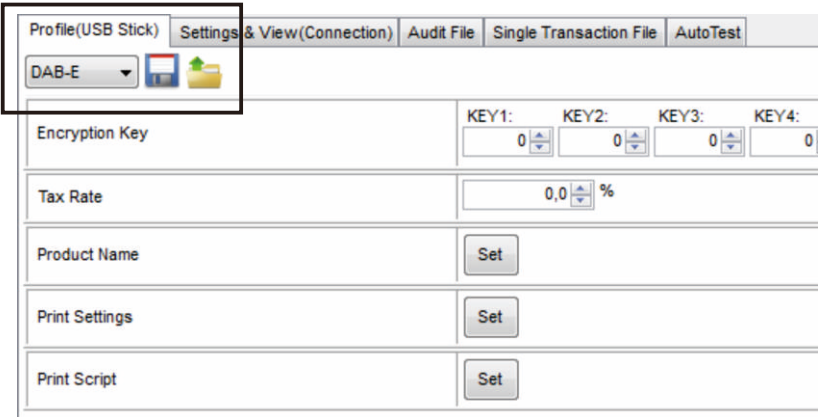


Please connect DAB to your PC via USB-to-USB cable (please refer to section 1-10). When DAB connected successful, the screen “3” will be changed to below:



2-3. Profile (USB Stick)

Please choose and click “DAB-E” on menu driven to entry this setting screen.



Function Icon

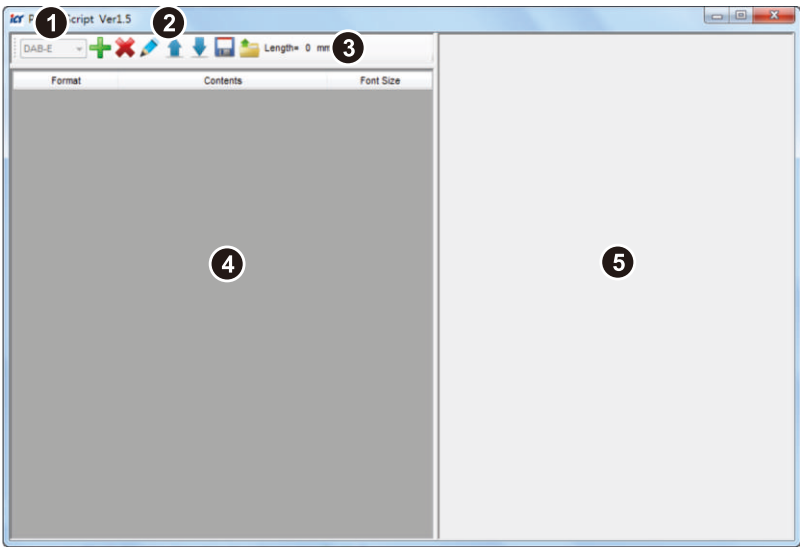
Icon	Name	Function
	Save	Save the parameters to USB Stick *Before to save data, please plug USB Stick into your PC
	Read	Read parameter from USB Stick that your saved last time *Before to save data, please plug USB Stick into your PC

**Tax Rate:** Set up the goods tax rate. The range can be 0.0%~99.9%

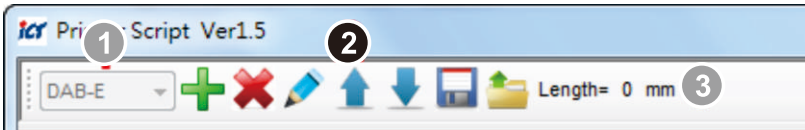
**Encryption Key:** Encryption for Audit data, including EVA/DTS & Single Transaction. Factory default is 0 ,0, 0, 0.  
Note: Please take good care of the four digit keys.

2-3-1. Printer Scripe

Click [ Set ] icon of Print Script, the screen is as below.

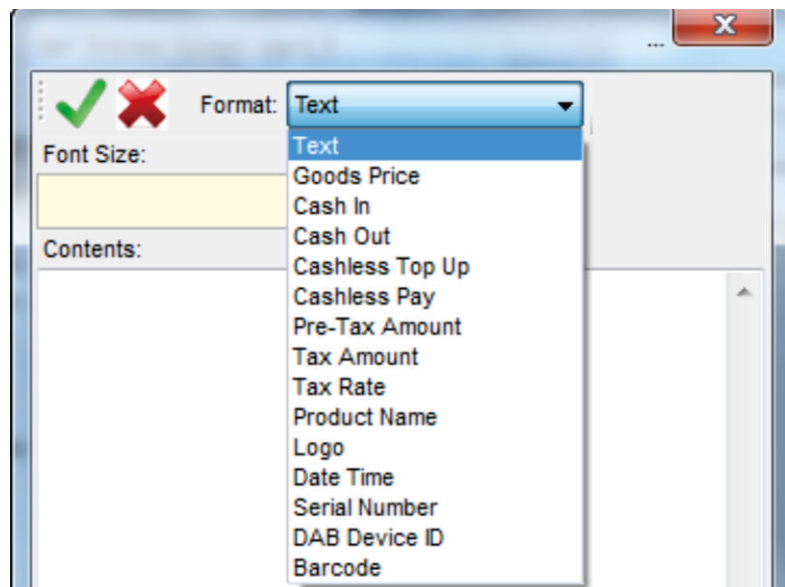


Zone	Function Name	Function Description
1	Model Selected	Show you the DAB model you selected
2	Printing Function Icon	Click icon for the print parameter settings
3	Print length (mm)	Set up the paper length to print out
4	Printing setting/edit window	A list for the Items you choose
5	Pre-view window	Pre-view for the printing script you edited



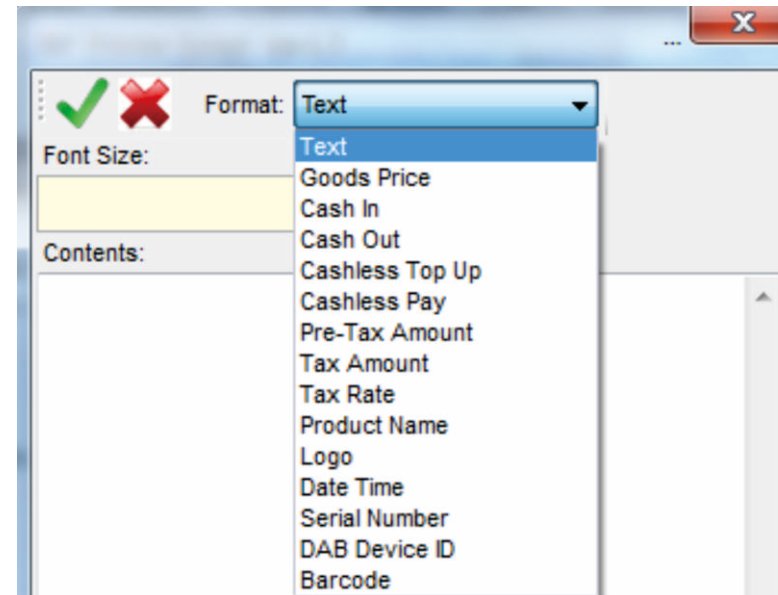
Icon	Function	Description
	Add	Click and then automatically open [printing edit window]. Click [ ✓ ] after finished the data input.
	Delete	Delete the data you choose on [printing edit window].
	Edit	To edit what the printing function you choose. Click and then open [ printing setting/edit window]. After finished, then press [ ✓ ] to save the data edited.
	Move-up	Move-up cursor to choose the printing function you want.
	Move-down	Move-down cursor to choose the printing function you want.
	Store	Store the printing settings to USB Pen Drive. *Make sure the USB be plugged into your PC.
	Read	Read the printing settings from USB Pen Drive. *Make sure the USB be plugged into your PC, and the setting value already existed inside.

Print edit window is as below-1



Name	Description
Text	By this item, the user can key-in any texts to show on Note: Five font-size be option for the user
Goods Price	The item would show the goods price you vend
Cash In	The item would show the cash-in value
Cash Out	The item would show the cash-out value
Cashless Top Up	The item would show the cashless top-up value
Cashless Pay	The item would show the value you pay by cashless
Pre-Tax Amount	The item would show the goods price of pre-tax
Tax Amount	The item would show the value of the goods tax

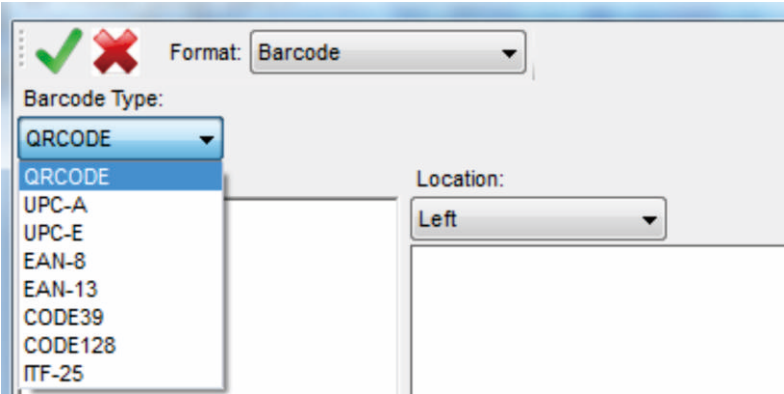
Print edit window is as below-2



Name	Description
Tax Rate	The item would show the tax rate you setup
Product Name	The item would show the Goods name you key-in
Logo	You can add the photo, the format would be bmp、jpg、jpeg、png、gif、tif、tiff. It would translate to bmp format in mono.
Date Time	The item would show the time while transaction happened
Serial Number	The item would show the DAB's built-in serial number
DAB Device ID	The item would show the DAB's device ID the user setup
Barcode	The item would show the one or two –dimension bar code you setup

Barcode

It can support QRCODE、UPC-A、UPC-E、EAN-8、EAN-13、CODE39、CODE128、ITF-25 for barcode creation.



1. QRCODE

The user can key-in up to 100 words for generating the QRCODE. It can set up the location as below:

Location	Example
Left	
Center	
Right	
TWO-QRCODE	

2. UPC-A

Need to key-in 11 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode.



3. UPC-E

Need to key-in 6 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode.



4. EAN-8

Need to key-in 7 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode.



## 5. EAN-13

Need to key-in 12 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode.

## 6. CODE39

Need to key-in up to 12 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode. And Click [ Check Digit ] icon, one “digit” would be followed by the code you key-in.

Note: Code39 could support the following characters, like 「A~Z」, 「0~9」, 「+」, 「-」, 「\*」, 「/」, 「space」, 「\$」, 「%」, etc.



## 7. CODE128

Need to key-in up to 12 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode. Note: Code128 could support the following characters, capital letters, small letters, digits, ASCII, etc.

## 8. ITF-25

Need to key-in up to 24 digits number to generate the barcode. The user can click [ Contents Label ] to show the digits on the bottom side of barcode. And Click [ Check Digit ] icon, one “digit” would be followed by the code you key-in.

### 2-3-2. Printer Settings

Profile(USB Stick)	Settings & View(Connection)	Audit File	Single Transaction File	AutoTest
DAB-E	 			
Encryption Key	KEY1: 0	KEY2: 0	KEY3: 0	KEY4: 0
Tax Rate	0,0 %			
Product Name	Set			
Print Settings	Set			
Print Script	Set			




Click [ Set ] icon of Print Script, the screen is as below.

The screenshot shows the 'Printer Settings Ver1.3' dialog box. It has a title bar with a close button (X). The main area contains several settings:

- Printer Model:** A dropdown menu showing 'DAB-E'.
- Low paper warning:** A numeric input field set to '10' with a unit dropdown set to 'm'.
- Print gradation:** A numeric input field set to '3' with up/down arrows.
- Minimum paper length:** A numeric input field set to '70' with a unit dropdown set to 'mm'.
- Wait time of Button:** A numeric input field set to '10' with a unit dropdown set to 'Sec'.
- Date format:** A dropdown menu showing 'YYYY/MM/DD HH:mm:ss'.






Callouts with arrows point to the following elements:

- Low paper Length threshold setting:** Points to the 'Low paper warning' field.
- Min paper length to print out:** Points to the 'Minimum paper length' field.
- Printing Gradation in strong or light:** Points to the 'Print gradation' field.
- Press the print button within the wait time setting values:** Points to the 'Wait time of Button' field.
- Date format on the print-out paper:** Points to the 'Date format' dropdown.

Icon	Function	Description
	Machine Model	Sow the machine Model you are now operating/ settings.
	Save	Save the parameters to USB Stick. *Before to save data, please plug USB Stick into your PC.
	Read	Save the parameters to USB Stick. *Before to save data, please plug USB Stick into your PC.

### 2-3-3. Product Name

The screenshot shows a Windows application window titled "Product Name Tool Ver1.0". The window's title bar includes standard minimize, maximize, and close buttons. Below the title bar is a toolbar with four icons: a green plus sign, a red X, a blue floppy disk, and a yellow folder with a green arrow. The main content area features a table with two columns, "No." and "Product Name", and 15 empty rows.

Icon	Function	Description
	Add	Click and then automatically open [goods name edit window]. Click [  ] after finished the data input.
	Delete	Delete the data you choose on [goods name edit window].
	Save	Save the parameters to USB Stick . *Before to save data, please plug USB Stick into your PC
	Read	Save the parameters to USB Stick . *Before to save data, please plug USB Stick into your PC

## 2-4. Settings & View (connection)

Before the settings, please connect your DAB to PC (please refer to section 1-10). The setting screen is as below:



**Time Icon:**

Function Screen	Function	Description
Device time: <input type="button" value="Set"/> <input type="button" value="Obtain"/>	Setup DAB time	Press [ Set ] and DAB would copy your PC time to DAB.
	Get DAB time	Press [ Obtain ] to obtain the current time of DAB.

**Message Screen:**

No.	Information	Result
5	Device time=2015/05/22 13:49:44	✓
5	Set device time 2015/05/22 13:49:44	✓



**Version Icon:**

Function Screen	Function	Description
Program Version: <input type="button" value="Obtain"/>	To acquire program version	Press [ Obtain ] to acquire program version.
Boot Loader1 Version: <input type="button" value="Obtain"/>	To acquire Boot Loader 1 & Boot loader 2 version	Press [ Obtain ] to acquire Boot Loader version.
Boot Loader2 Version: <input type="button" value="Obtain"/>		

**Message Screen:**

No.	Information	Result
1	Boot loader2 version=DABVC0001	✓
1	Boot loader1 version=EM00100010000	✓
0	Program version=DABVCS0006i0007#####	✓



**DAB Serial Number Icon:**

Function Screen	Function	Description
DAB Serial Number: <input type="button" value="Obtain"/>	Read Serial Number	Press [ Obtain ] to read DAB's Serial Number

**Message Screen:**

No.	Information	Result
10	DAB serial number=012345678901	✓



**Device ID Icon:**

Function Screen	Function	Description
Device ID: <input type="text"/> <input type="button" value="Set"/> <input type="button" value="Obtain"/>	Set Device ID	Press [ Set ] button to input DAB's Device ID, total five codes input.
	Obtain Device ID	Press [ Obtain ] button to obtain DAB's Device ID.

**Message Screen:**

No.	Information	Result
18	Device ID=A123456789-0123	✓
18	Device ID set successful.	✓

**Checksum Icon:**

Function Screen	Function	Description
Program Checksum: <input type="button" value="Obtain"/>	To acquire program Checksum	Press [ Obtain ] to acquire system operation Checksum.
Default Checksum: <input type="button" value="Obtain"/>	To acquire default Checksum	Press [ Obtain ] to acquire system default Checksum.

**Message Screen:**

No.	Information	Result
2	Default Checksum=0x3F25	✓
2	Program Checksum=0x3F25	✓

**Data Clear Icon**

Function Screen	Function	Description
Log Clear: <input type="button" value="Clear"/>	Log Clear	Press [ Clear ] button to clear all log data record on DAB.
Audit Clear: <input type="button" value="Clear"/>	Audit Clear	Press [ Clear ] button to clear all audit data record on DAB, including EVA/DTS data、EVA/DTS backup data、single transaction data.

**Message Screen:**

No.	Information	Result
11	Audit clear successful	✓
11	Clearing audit	
12	Log clear successful	✓
12	Clearing log	

**2-5. Audit File**

To make the EVA/DTS file in decryption. Please note that the DAB doesn't need to be connected to PC to operating this function.

Decryption Audit File

KEY1  KEY2  KEY3  KEY4

**To read Encryption Audit File**

Select the EVA/DTS encryption file (\*.eneva) or DEX encryption file (\*.endex)

**Decryption Key**

Input the numbers in KEY1~KEY4 for decryption.

If your encryption setting is 0,0,0,0 then the decryption would also be 0,0,0,0



### Audit file decryption

Click [Decryption] for audit file decryption.

When the “\*.eneva” file be decrypted successful, you would see a summary transaction report in \*.jpg as below.

System Identifiers:			
Communication ID	ICT DAB_12345678		
Bill Validator Serial Number	000000000000		
Bill Validator Model Number	V7-TWD400000		
Coin Mechanism Serial Number	333333333333		
Coin Mechanism Model Number	CCM6-KZT MDB		
Date Of Read Out	2015/03/10 14:09 ~ 2015/03/16 13:24		
Value Of Cash:			
Value Of Coins(In)	81.5		
Value Of Coins(Out)	-1.5		
Value Of Bills(In)	300.0		
Value Of Cash	380.0		
Number Of Bill(Only In):			
10.0	8		
20.0	1		
50.0	2		
100.0	1		
Number Of Coin:			
	In	Out	Total
0.5	3	-3	0
1.0	10	0	10
2.0	20	0	20
5.0	6	0	6
Signature:		Signature:	

### Message Screen

	Information	Result
▶	B9876543210-C98_20150316140933.jpg Created	✓
	File decryption successful. 	✓

### Note:

It would automatically output the transaction summary in .jpg format. The transaction summary is a kind of period data from the last time you “audit” (means you plug USB Pen Drive to get the audit data) to this moment you “audit”. It can assist the customer to manage the account for each vending machine in period.)

## 2-6. Single Transaction File

To decrypt the single transaction data (\*.enbin file) and export the decrypted (\*.bin file) to readable Excel file.

Please note that the DAB doesn't need to be connected to PC to operating this function.

Setting Screen is as below:

Decryption Single Transaction File

KEY1  
0

KEY2  
0

KEY3  
0

KEY4  
0

Decryption

Single Transaction File

I:\Pay\123456789012\_PAY\_20140717180946\_20140101054241.bin

Single transaction data is the total number of 13638

13638

2014/01/01 00:00:03~2014/07/17 18:17:02

2014/01/01 00:00:03 ~ 2014/07/17 18:17:02

Export

### Single transaction data decryption

Decryption Single Transaction File

KEY1  
0

KEY2  
0

KEY3  
0

KEY4  
0

Decryption

### Reading Single transaction encryption file

Select the single transaction encryption file (\*.enbin)

I:\Pay\123456789012\_PAY\_20140717180946\_20140725090014.enbin

### Decryption KEY

Input the numbers in KEY1~KEY4 for decryption.

### Decrypt the single transaction file

Click [Decryption] button for the file decryption

Information	Result
File decryption was successful.	✓

### Single transaction data export to Excel File

The screen would be shown as below

Single Transaction File

I:\Pay\123456789012\_PAY\_20140717180946\_20140722150540.bin

Single transaction data is the total number of 18764

2014/01/01 00:00:03~2014/07/22 15:05:40

Export

### The first step: Select single transaction file

Single Transaction File

I:\Pay\123456789012\_PAY\_20140717180946\_20140722150540.bin

Select the single transaction data file (\*.bin).

Read the single transaction data file.

File Load:

73%

Message

Information	Result
Single transaction file read successful	✓

### The second step: Select Transfer Excel file

Single transaction data is the total number of 18767

2014/01/01 00:00:03~2014/07/22 15:06:56

Export

Select the latest transaction (numbers) you would like to or time range to transfer to Excel file.

### The third step: Export to Excel file

Click [Export] button to transfer the Excel file .

Exporting:

100%

Message

Information	Result
Single transaction file export successful	✓
PAY_20140717180946_20140722150540.xls Created	✓
Single transaction file read successful	✓

The Excel file will be stored on the file folder [Single Transaction Excel]

**Note1.** System will delete [Single Transaction Excel] while in process of transfer, please backup the files existed on this folder if needed. And close the [Single Transaction Excel] files while system show up following dialog:



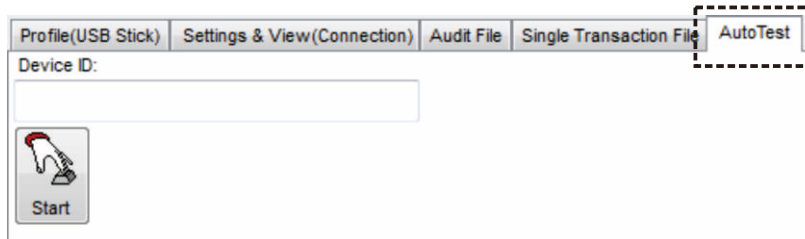
**Note2.** The limitation of transaction numbers for Excel is 65535, if over the number, system will build up a new Excel file.

**Note3.** If you see below message, then please contact ICT FAE to get the latest Audit/General Utility tool.

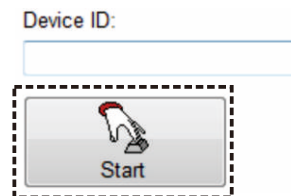


## 2-7. Auto Test

The user can execute a basic testing on DAB via AutoTest function.  
Note: Before this operation, please connect your DAB to PC.



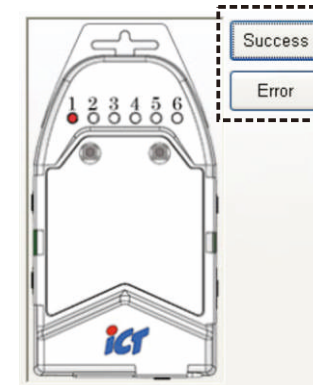
The user can input Device ID (total 15-code) if it has already set up at the beginning.  
The user also can ignore it, jump to click “Start” icon.



Press [Start] to test the DAB automatically as below.

**To check internal Flash & FRAM.**

**To check the time setting on DAB.**



### To check LED Indicator

According to LED color on menu screen, please press [ Success ] if correction or press [ Error ] if wrong.

### To check DIP Switch

To operate the DIP switch to be “ON” position as below, then press [ Check ].

Then to operate the DIP switch to be “OFF” position as below, then press [ Check ].



### To check the button

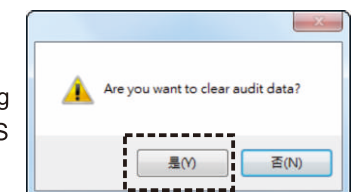
To press DAB’s “Select Button” then press [ Check ].

To press DAB’s “Enter Button” then press [ Check ].









### To clear Audit data (if the DAB is set up the Device ID at the beginning)

To press “Yes” then clear Audit data(including EVA/DTS data、single transaction、EVA/DTS backup data); press “No” then no data be cleared.



## Error Status & Troubleshooting

Status	LED	Troubleshooting
Program Error	 LED1 LED2 LED3 LED4 LED5 LED6	Plug-in USB Drive to re-upload program again.
DAB Oscillation Error	 LED1 LED2 LED3 LED4 LED5 LED6	Please send back to ICT for the repair.
DAB Checksum Error	 LED1 LED2 LED3 LED4 LED5 LED6	Please send back to ICT for the repair.
DAB start-code Error	 LED1 LED2 LED3 LED4 LED5 LED6	Please send back to ICT for the repair.
Time re-set in abnormal	 LED1 LED2 LED3 LED4 LED5 LED6	Change to the new coin battery in DAB. Reset the time in General Utility. Power-on DAB.
DAB Hardware Error	 LED1 LED2 LED3 LED4 LED5 LED6	Please send back to ICT for the repair.

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