



Data Audit Box

DAB-V

Installation Guide



International Currency Technologies Corp.

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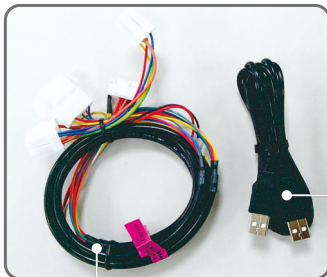
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DAB-V

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 is receiving power from VMC while DAB it is installed on the vending machine.
4. You need to prepare a power supply for DAB while DAB is 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 time-setting is Taiwan time. (GMT+8).
7. You would find below items on DAB Product:
 - a. DAB-V
 - b. USB-to-USB type-A cable
 - c. VCCS Communication cable



VCC Communication Cable

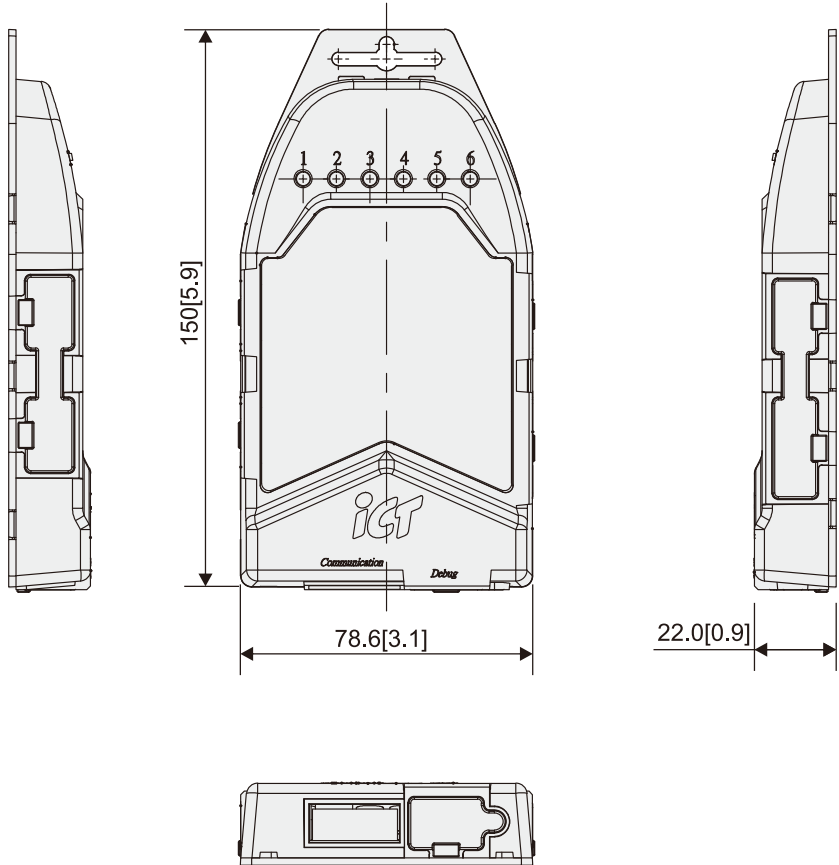
USB-to-USB Cable



DAB-V

1. DAB-V Operating Mode

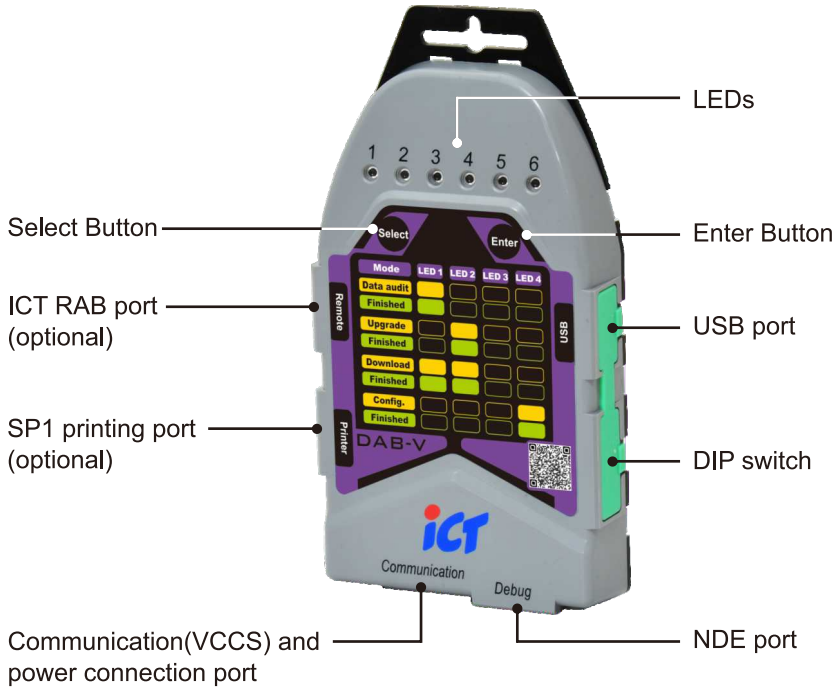
1-1. Dimension



Unit : mm [inch]

DAB-V

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 1-10, page 17.

Stand-by-mode Indicator

1. LED6 flash in green means the DAB is in stand-by-mode ready for use.
2. LED6 flash in red means the DAB is in stand-by-mode, but time setting is back to default value of [2019/01/01 00:00:00] due to no button battery attached or low battery power. You need to power-off DAB and replace the button battery, reset the time setting and then power-on to show you LED6 flash in green again.
3. LED6 flashes in orange means the DAB is in 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 from 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/NDE) Status Indicator

In stand-by-mode (LED6 flash in green), and without to press “select” button, the LED1, LED2, LED3, LED4 and LED5 would show the status of the devices connected to the DAB. Below are the LED Indicators description.

LED#	Communication in normal	No Communication
LED1	Green light, VMC communication normally	No light, VMC does not communication or device does not exist.
LED2	Green light, coin change communication normally	No light, coin change does not communication or device does not exist.
LED3	Green light, bill acceptor communication normally	No light, bill acceptor does not communication or device does not exist.
LED4	Green light, cashless communication normally	No light, cashless does not communication or device does not exist.
LED5	Green light, NDE communication normally	No light, NDE does communication or device does not exist.

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

First step

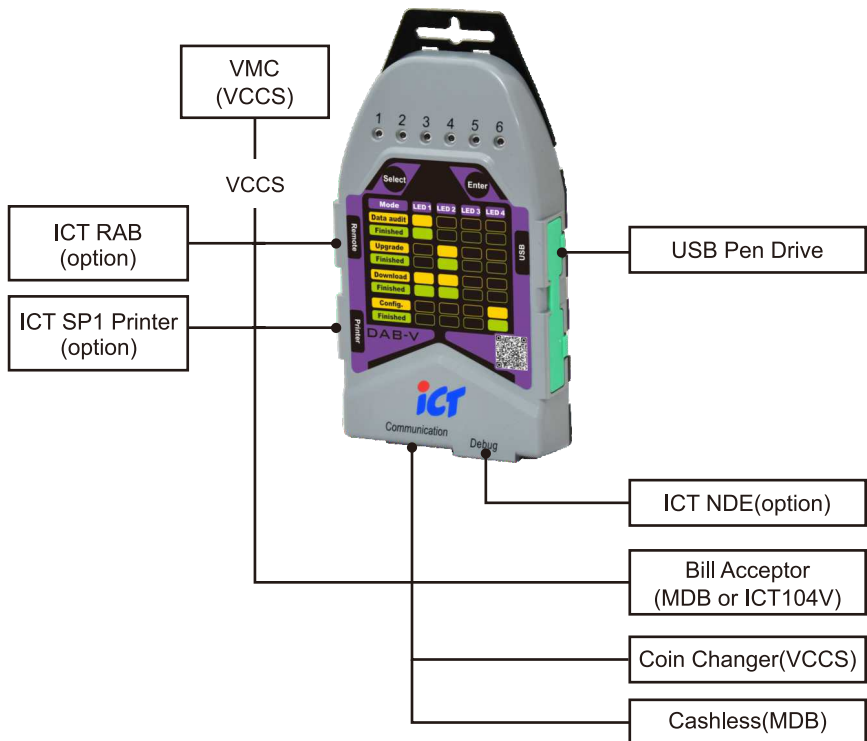
- a. Power-off the vending machine
- b. Connect DAB's VCCS (female) connector to VMC's VCCS connector (Male).

Second step

Connect DAB's MDB (female) or VCCS (male) connector to ICT Bill Acceptor's MDB (male) or VCCS (female) connector.

Connect DAB's VCCS (male) connector to ICT Coin change's VCCS (female) connector.

Please refer to below configuration



1-4. Dip Switch Function Description

SP1 Printer abnormally disabled periphery:

Operation method	Function
DIP Switch#2 set up to ON	When the SP1 printer abnormality occurs, the DAB disables the transaction, including when the SP1 printer is not connected.
DIP Switch#2 set up to OFF	When the SP1 printer abnormality occurs, the vending machine can continue to trade, DAB doesn't disabled periphery.

Escrow settings:

User can set up whether the ESCROW needs or not. The setting is as below.

Escrow	DIP Switch Setting	Remark
ON	DIP Switch#6 set up to OFF	Would accept one bank note only while the currency less than or equal to the value the user set up and the coin change has enough coins, at least the same value as the bank note's, inside. If exceed the values or no enough coins, then BA would return this bank note.
OFF	DIP Switch#6 set up to ON	Would keep accepting the bank note until the currency exceed to the value the user set up or exceed the coin total value in the coin change.

Diverse Interface Supported:

Please note that the DAB-V can be used only on VMC with VCCS interface. For Bill Acceptor, it can support as below table:

Interface	Support Devices	Remark
VCCS	Coin Change & Bill Acceptor	Would ignore DIP Switch#7 settings
MDB	Bill Acceptor	Please setup DIP Switch#7 "OFF"
ICT 104V	Bill Acceptor	Please setup DIP Switch#7 "ON"

Bill Acceptor returns error code switching :

Function	Operation method	Remark
NoReturn Error Code	DIP Switch#8 "OFF"	Bill Acceptor will not return error code when there is error.
Return Error Code	DIP Switch#8 "ON"	Bill Acceptor will return error code when there is error.

Cashless deduction peripheral disable setting :

Function	Operation method	Remark
Deduction successful disable peripheral equipment	DIP Switch#5 "OFF"	<ol style="list-style-type: none"> 1. The Cashless device is disabled after the successful deduction; otherwise, if the cash is first input, the Disable Cashless device. 2. All peripheral devices will be enabled after the transaction is completed.
Deduction successful will not disable peripheral equipment	DIP Switch#5 "OFF"	The Cashless device deducts the success and does not disable the peripheral device. If the cash is first put in, it is not a Disable Cashless device.

Cashless device restore settings :

Function	Operation method	Remark
Return the change amount to Cashless	DIP Switch#4 "ON"	<ol style="list-style-type: none"> 1. When the card exists, the change amount will be directly returned to the card after the transaction is completed. 2. When the card does not exist, the change amount will be changed by Coin Changer after the transaction is completed. The amount that cannot be changed will be restored to VMC.
Use cash to change	DIP Switch#4 "OFF"	After the transaction is completed, the amount of change will be changed by Coin Changer. If the amount cannot be changed, the amount will be restored to VMC.

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1-5. DAB Initialized (boot up for self-testing)

DAB will automatically process a self-test while the power feeds. 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.



If show other LEDs in red. For that, please contact ICT’s Sales/FAE for the support.

1-6. 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 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 transaction data	Record each transaction data while VMC machine operating	1. record EVA/DTS data 2. record each transaction data

1-7. 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.

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

LED Indicator

 <p>LED1 LED2 LED3 LED4</p>	LED1 would light in yellow means the system in “Transaction export mode” .
 <p>LED1 LED2 LED3 LED4</p>	LED1 would flash in yellow means the system in process of transaction data exporting.
 <p>LED1 LED2 LED3 LED4</p>	LED1 would light in green means the transaction data export completed.
 <p>LED1 LED2 LED3 LED4</p>	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 “ EVADTS ” of USB Pen Drive (the folder would be created automatically).	Output filename: “ Version_read time.eneva ”
Audit Data backup output	Those EVA/DTS data would be backup to Pen Drive as well.	Please refer to [Audit's Backup Data export mode]
Single Transaction data output	Single transaction data that has not been exported will be the folder “ PAY ” of USB Pen Drive (the folder would be created automatically)	Output file name: “ Serial number_1st record time_the last record time.enbin ”





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.
3. The method to decrypt backup file, please refer the chapter Audit Box Tool

1-8. 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

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

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 [ecf] folder existed in Pen Drive, if yes, then go to this folder to get the file for upgrading DAB firmware. If no [ecf] folder, then go to root older to find the ecf file for upgrading DAB firmware.	<ol style="list-style-type: none">1. [ecf] 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 " .bin " 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 " .bin " 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.

1-9. Upgrade Peripherals Device Firmware

Upon above DAB firmware upgrade finished, DAB would automatically check if the firmware of BA/CC/SP1 Printer existed then go to BA/CC/SP1 Printer firmware update process. The LEDs would be shown as below. When both LED1 & LED2 are in green, it means the BA/CC/SP1 Printer firmware upgrade finished and the user can un-plug the USB Pen Drive. Please make sure the BA/CC/SP1 Printer devices should be FTL protocol supported.

LED Indicator

 <p>LED1 LED2 LED3 LED4</p>	<p>LED1 & LED2 in amber light, it means system in “update BA/CC/SP1 Printer firmware mode”.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED1 & LED2 flash in amber, it means system searching the file or firmware upgrading.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED1 & LED2 in green light, it means Device firmware upgrade completed.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED1 & LED2 in red light, it means Device firmware upgrade failed.</p>

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 [ecf] folder existed in Pen Drive, if yes, then go to this folder to get the file for upgrading. If no [ecf] folder, then go to root folder to find the ecf file for upgrading.	1. [ecf] 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 " .ecf " 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 " .bin " file.	DAB would run this new firmware once the upgrade finished.

Note:

1. Please make sure the firmware of BA/CC or ICT SP1 Printer 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 times
Bill Acceptor firmware upgrade failed	 Flash three times
CL firmware upgrade failed	 Flash four times
Document Check (DC) firmware upgrade failed	 Flash five times
ICT SP1 Printer firmware upgrade failed (in the future)	 Flash six times

1-10. 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

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

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”. “Serial number_LOG_NDE_read time.bin”.
Device Error Status Data output	Device error status file data would upload to the folder “DEVICE_STATUS” of USB Pen Drive.	Output file name: “Serial number_DEVICE_STATUS_read time.bin”.

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
AUDIT_BACKUP_OUT	EVAIDTS backup export
DOWNLOAD	Devices firmware upgrade(USB Pen Drive)
UPGRADE	DAB firmware upgrade
RETURN FACTORY	Recovery Factory
CONFIG	DEX Config
PRINT_START	The printer starts printing
PRINT_END	The printer end printing
SETTINGS	DAB setting mode execution (USB Pen Drive)
SETTINGS_SERVER	DAB setting mode execution (Server)
DOWNLOAD_SERVER	Devices firmware upgrade(Server)
RESTART	DAB reboot
REPEATING	Log records repeat, will not record.
UPGRADE(USB)=	DAB upgrade record of the USB pen drive (content is Model Name: Checksum)
UPGRADE(SERVER)=	DAB upgrade record of the server (content is Model Name: Checksum)




Device Error Status records

Record error status codes for DAB, BA, CC, VMC and Printer peripherals.

1-11. 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

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

Setup and testing mode function

Function	Description	Note
<p>Communication to Audit Box Tool</p>	<ol style="list-style-type: none"> 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.

1-12. 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

 <p>LED1 LED2 LED3 LED4</p>	LED2 & LED3 shine in amber , it means system in "EVA/DTS export mode" .
 <p>LED1 LED2 LED3 LED4</p>	LED2 & LED3 flash in amber, it means the EVA/DTS file in exporting.
 <p>LED1 LED2 LED3 LED4</p>	LED2 & LED3 shine in green, it means the EVA/DTS file export complete.
 <p>LED1 LED2 LED3 LED4</p>	LED2 & LED3 shine in red, it means the EVA/DTS file export fail.

EVA/DTS export mode function

Function	Description	Note
EVA/DTS file export	EVA/DTS file save to the "EVA DTS Backup" folder of USB driver.	Export filename: [Serial number_BACKUP_read time.eneva]
Single Transaction file export	All Single transaction save to the "PAY_Backup" folder of USB driver.	Export filename: [Serial number_PAY_BACKUP_read time.enbin]



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] [enbin] means the file is encryption file.
3. The method to decrypt backup file, please refer the chapter Audit Box Tool .

1-13. DAB Recovery Factory 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 for 3 seconds to entry to **“DAB recovery factory mode”**, system will recovery factory. When all the LED1, LED2 & LED3 are in green, it means DAB recovery factory finished, and the DAB would be returned to stand by mode.

LED Indicator

 <p>LED1 LED2 LED3 LED4</p>	<p>LED1, LED2 & LED3 shine in amber , it means system in “DAB Recovery Factory mode”.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED1, LED2 & LED3 shine in green, it means the recovery Factory complete.</p>

DAB Recovery Factory function

Function	Description
Peripheral device update record	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.
Log Data	DAB Log data clearing .
Device Error Status Data	Device Error Status data clear
EVA/DTS Data	EVA/DTS data clear
Single Transaction Data	Single transaction data clear
EVA/DTS Backup Data	EVA/DTS backup data clear





Note:

The user must press **“Enter”** button within 10 seconds. Otherwise, DAB will be returned to **“Stand by mode”** automatically.

1-14. 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

 <p>LED1 LED2 LED3 LED4</p>	<p>LED4 in amber light means system in “Parameter Setting Mode”.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED4 in flash means system in process of the Parameter Setting.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED4 in green light means the Parameter Setting finished and success.</p>
 <p>LED1 LED2 LED3 LED4</p>	<p>LED4 in red light means the Parameter Setting failed.</p>

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

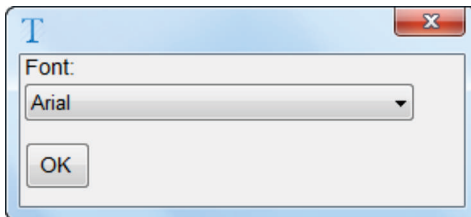
DAB Audit Box Tool is designed with English version. The user can change it to what language you want. To achieve this, please, after tool installed on your PC, find out the **Global.ini** on the folder of **My Documents\ICT\Audit Box Tool\Language** and open it as below screen:

```
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.

Font initialized settings



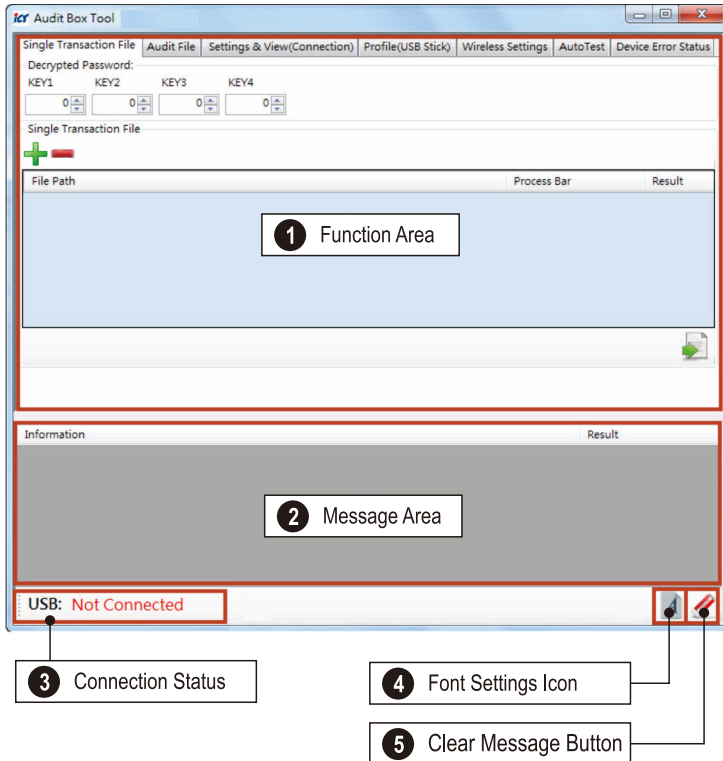
2-1 FIG.01

Please note:

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

2-2. Audit Box Tool Introduction

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 1-12). When DAB connected successful, the screen “3” will be changed to below:

USB: Connect



2-3. Profile (USB Stick)

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



Encryption Key	KEY1: 0 <input type="button" value="▲"/> <input type="button" value="▼"/> KEY2: 0 <input type="button" value="▲"/> <input type="button" value="▼"/> KEY3: 0 <input type="button" value="▲"/> <input type="button" value="▼"/> KEY4: 0 <input type="button" value="▲"/> <input type="button" value="▼"/>
Decimal Places	0 <input type="button" value="▲"/> <input type="button" value="▼"/>
Magnification	1 <input type="button" value="▲"/> <input type="button" value="▼"/>
Maximum deduction amount of cashless	1 <input type="button" value="▲"/> <input type="button" value="▼"/> <input type="checkbox"/> Full deduction
Maximum bill of bill acceptor(0 means no limit)	0 <input type="button" value="▲"/> <input type="button" value="▼"/>
Pressing into bill fail when bill acceptor in escrow state:	Non-refundable coin <input type="button" value="▼"/>
Does the bill acceptor stop bill's transaction after being fished?	No <input type="button" value="▼"/>
Print Script	<input type="button" value="Set"/>
Print Settings	<input type="button" value="Set"/>
Goods Name and Tax Rate	<input type="button" value="Set"/>

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

The screenshot shows the DAB-V configuration window with the following settings:

1	Encryption Key	KEY1: 0 KEY2: 0 KEY3: 0 KEY4: 0
2	Decimal Places	0
3	Magnification	1
4	Maximum deduction amount of cashless	1 <input type="checkbox"/> Full deduction 5
6	Maximum bill of bill acceptor(0 means no limit)	0
7	Pressing into bill fail when bill acceptor in escrow state:	Non-refundable coin
8	Does the bill acceptor stop bill's transaction after being fished?	No

1. 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. Decimal Places:

Set the decimal point, you can set it to be 0, 1, 2.

3. Magnification:

You can set this magnification to be 1, 10, 100, 1000 while decimal set to 0.

4. Maximum deduction amount of cashless:

The maximum deduction amount of the cashless device is automatically adjusted to the minimum value according to the user's set magnification and decimal point. The maximum value is 100000.

5. Full deduction:

When this option is checked, the amount transferred by the cashless device will be deducted in full.

6. Maximum bill of bill acceptor:

Set up the max. bank note currency that your BA would accept to. If set up to 0 means the currency is unlimited. The range would be 0~10000000.

Note: This setting is available only for BA with MDB interface and ICT104V interface.

7. Pressing into bill fail when bill acceptor in escrow state:

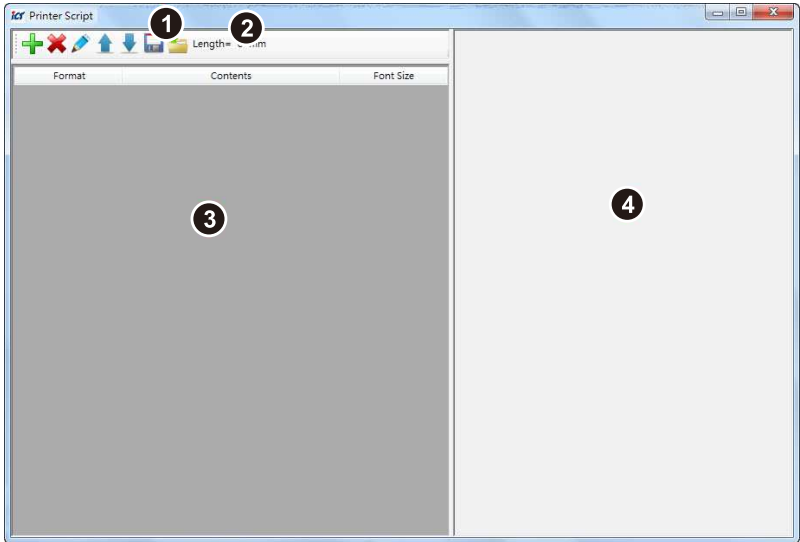
You can choose "Non-refundable coin" or "Refund coin".

8. Does the bill acceptor stop bill's transaction after being fished:

Choosing Yes will stop trading. Choosing No will not stop trading.

2-3-1. Printer Scripe










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



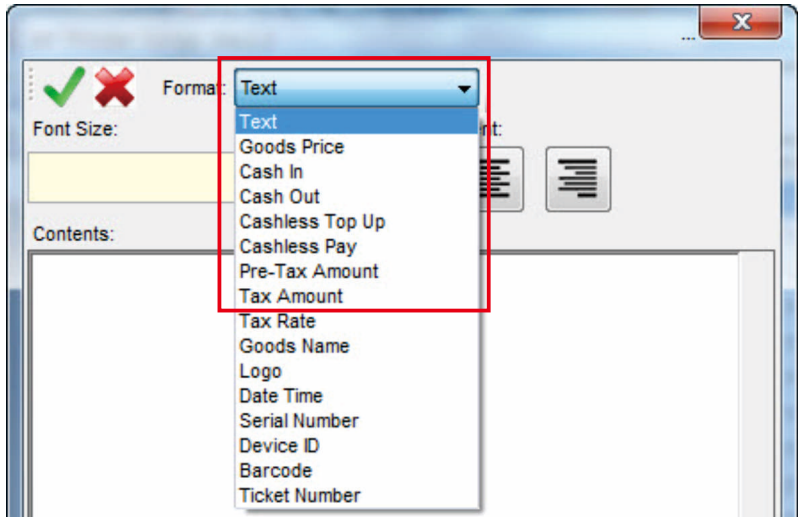
Zone	Function Name	Function Description
1	Printing Function Icon	Click icon for the print parameter settings
2	Print length (mm)	Set up the paper length to print out
3	Printing setting/edit window	A list for the Items you choose
4	Pre-view window	Pre-view for the printing script you edited



Zone 2: Printing Function Icon

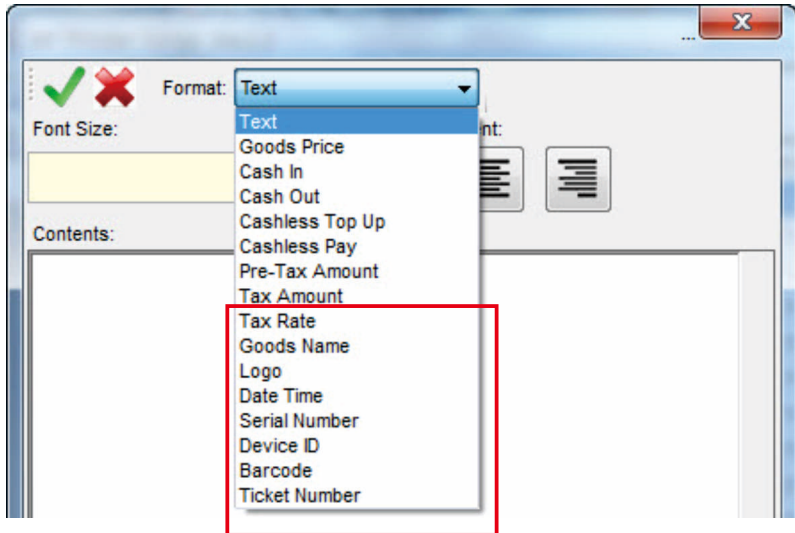
Icon	Function	Description
	Add	Click and then automatically open [printing edit window]. Click [] after finished the data input.
	Delete	Delete the data you choose on [printing edit window].
	Edit	To edit what the printing function you choose. Click and then open [printing setting/edit window]. After 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

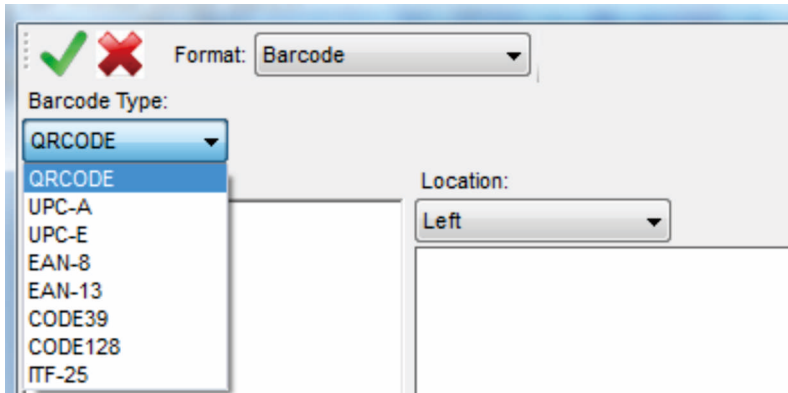
Print edit window is as below-2



Name	Description
Tax Rate	The item would show the tax rate you setup
Goods 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
Ticket Number	The item would show the ticket number





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.

Barcode Type:
 UPC-A

Contents Label

Contents:
 12345678901



1 23456 78901 2

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.

Barcode Type:
 UPC-E

Contents Label

Contents:
 123456



0 123456 5

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.

Barcode Type:
 EAN-8

Contents Label

Contents:
 1234567



1234 5670

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.

Barcode Type:
EAN-13
 Contents Label
Contents:
123456789012
1 234567 890128

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.

Barcode Type:
CODE39
 Contents Label Check Digit
Contents:
ABCDEFGHUK
ABCDEFGHUK-

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.

Barcode Type:
CODE128

Contents Label

Contents:
123456789abcde

123456789abcde

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.

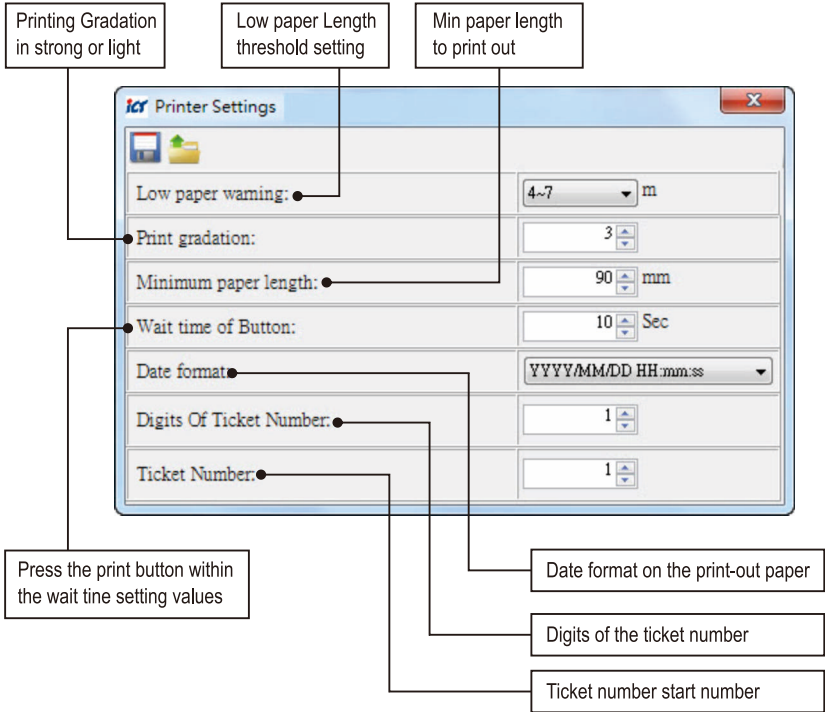
Barcode Type:
ITF-25

Contents Label Check Digit

Contents:
12345678901234567890123

123456789012345678901230

2-3-2. Printer Settings

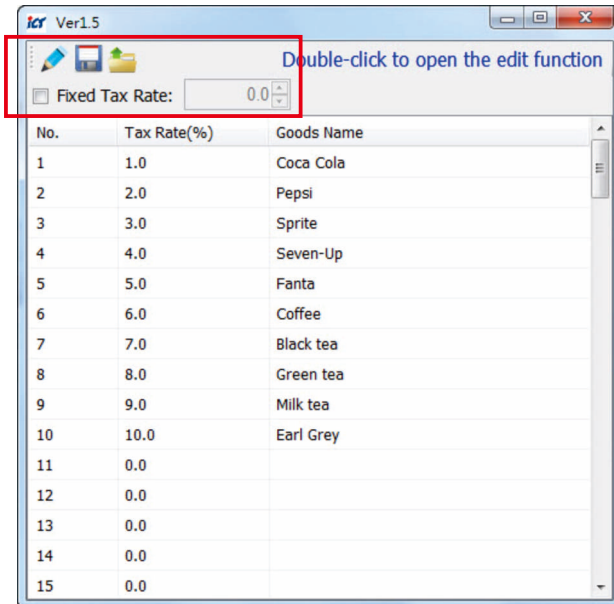





Function Icon

Icon	Function	Description
	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 & Tax Rate Edit Tool

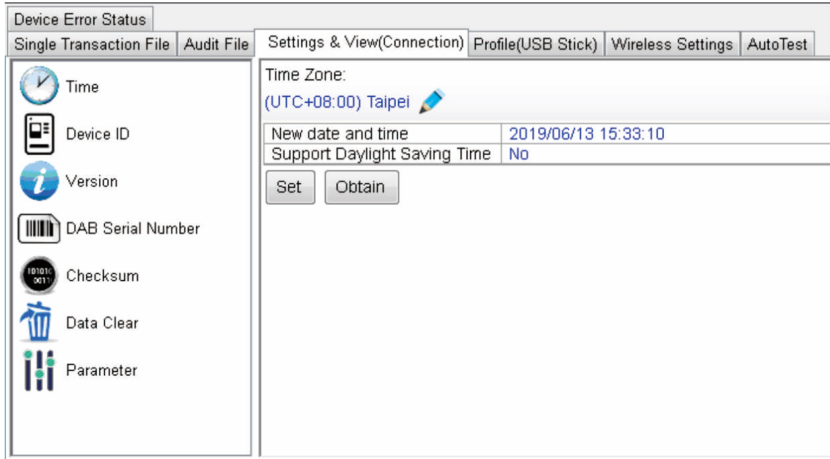
Click [Set] icon of Goods Name and Tax Rate



Icon	Function	Description
	Edit	Open edit window.
	Save	Save the tax rata and goods name to USB Stick *Before to save data, please plug USB Stick into your PC.
	Read	Read the tax rata and goods name from USB Stick *Before to save data, please plug USB Stick into your PC.
<input type="checkbox"/> Fixed Tax Rate: <input type="text" value="0.0"/>	Fixed Tax Rate	All channel tax rate fixed.

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:


Function Screen:



Function	Description
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.

Time Zone Choose

Function Screen:

Standard Time Zone  New date and time: 2019/06/13 09:04:40

Time Zone:
 (UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna

Daylight Saving Time
 Support daylight saving time Daylight Saving Time Begin: Yes

Daylight Saving Time Start Rule		Daylight Saving Time End Rule	
Month:	March	Month:	October
Week:	Last Week	Week:	Last Week
Day Of Week:	Sunday	Day Of Week:	Sunday
Time:	02:00	Time:	03:00

Message Screen:

Information	Result
Daylight Saving Time End Rule=>March/First Week/Tuesday/15:00	✓
Daylight Saving Time Start Rule=>January/Last Week/Sunday/02:00	✓
Daylight saving time is over	✓
Daylight saving time is supported in this area	✓
Set device time 2018/03/06 14:18:35 Tuesday	✓



Version Icon:

Function Program Version:
Screen:

Obtain

Boot Loader1 Version:

Obtain

Boot Loader2 Version:

Obtain

Function	Description
To acquire program version	Press [Obtain] to acquire program version.
To acquire Boot Loader 1 & Boot loader 2 version	Press [Obtain] to acquire Boot Loader version.

Message Screen:

Information	Result
Boot loader2 version=DABEX0003	✓
Boot loader1 version=EM00100030000	✓
Program version=DABEXS000910012#####	✓



DAB Serial Number Icon:

Function DAB Serial Number:
Screen:

Obtain

Function	Description
Read Serial Number	Press [Obtain] to read DAB's Serial Number

Message Screen:

Information	Result
DAB serial number=012345678912	✓



Device ID Icon:

Function **Device ID:**
 Screen:

Function	Description
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.

Note: This column is for customer to set up.

Message Screen:

Information	Result
Device ID=A123456789-0123	✓
Device ID set successful.	✓



Checksum Icon:

Function **Program Checksum:**
 Screen:
Default Checksum:

Function	Description
To acquire program Checksum	Press [Obtain] to acquire system operation Checksum
To acquire default Checksum	Press [Obtain] to acquire system default Checksum

Message Screen:

Information	Result
Default Checksum=D99E	✓
Program Checksum=D99E	✓



Data Clear Icon

Function
Screen:

Log Clear:



Audit Clear:



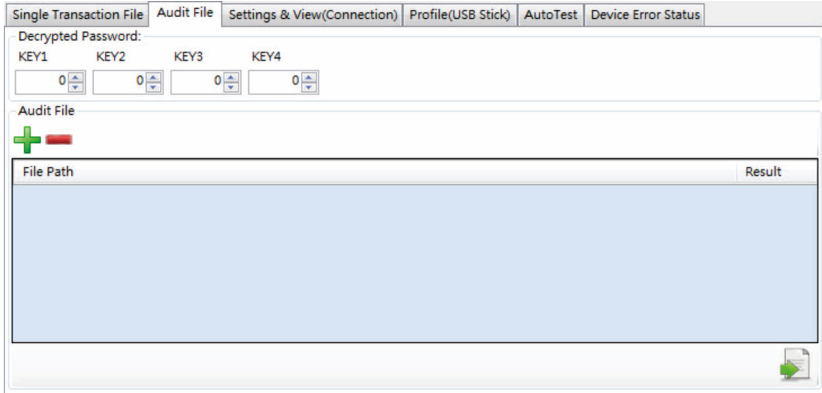
Function	Description
Log Clear	Press [Clear] button to clear all log data record on DAB
Audit Clear	Press [Clear] button to clear all audit data record on DAB, including EVA/DTS data,EVA/DTS backup data,single transaction data

Message Screen:




Information	Result
Audit clear successful	✓
Clearing audit	
Log clear successful	✓
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.



Function Description:

Function	Description
Decrypted Password	<p>Decrypted Password:</p> <p>KEY1 KEY2 KEY3 KEY4</p> <p><input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/></p> <p>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</p>
Add audit file	Press [] to add audit file
Delete audit file	Press [] to delete selected audit file
Export audit file	Press [] to export audit file

Export Audit File

File Path	Result
G:\EVADTS\22222222220_20170620164559.eneva	✓
G:\EVADTS\22222222220_20170620164915.eneva	✓
G:\EVADTS\22222222221_20170620163355.eneva	✓
G:\EVADTS\22222222221_20170620163428.eneva	✓




No.	Information	Result
-	22222222221_20170620163428.jpg Created	✓
-	22222222221_20170620163355.jpg Created	✓
-	22222222220_20170620164915.jpg Created	✓
-	22222222220_20170620164559.jpg Created	✓

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:

Function	Description
Decrypted Password	<p>Decrypted Password:</p> <p>KEY1 KEY2 KEY3 KEY4</p> <p><input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/></p> <p>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</p>
Add single transaction file	Press [] to add single transaction file
Delete single transaction file	Press [] to delete selected single transaction file
Export single transaction file	Press [] to export single transaction file

Export Single Transaction File

File Path	Process Bar	Result
F:\Pay\999999999002_PAY_20170629004635_20170629005216.enbin	100%	✓

No.	Information	Result
-	999999999002_PAY_20170629004635_20170629005216.pdf Created	
-	999999999002_PAY_20170629004635_20170629005216.xls Created	

The decrypted file will be stored on the file folder ["Select Path"\Pay\Decrypted Files\ "serial number"]

The Excel file will be stored on the file folder ["Select Path"\Pay\ Excel \ "serial number"]

The Single file will be stored on the file folder ["Select Path"\Pay\ Single \ "serial number"]

The PDF file will be stored on the file folder ["Select Path"\Pay\ PDF \ "serial number"]

Note: 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.

Device ID:

Time Zone: (UTC+08:00) Taipei 

New date and time	2019/06/13 15:32:35 35
Support Daylight Saving Time	No

 Start

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.

Choose time zone

Time Zone: (UTC+08:00) Taipei 

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

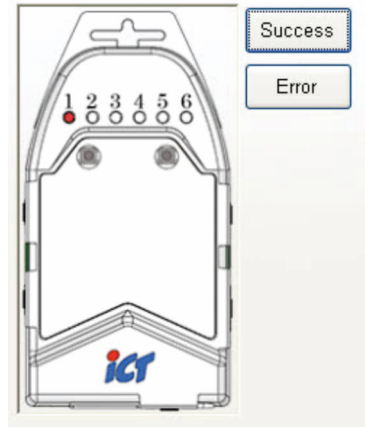
To check internal Flash & FRAM

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

Operate the DIP switch to the corresponding state as shown, then press [Check]



To check the button

To press DAB's "Select Button" then press [Check].

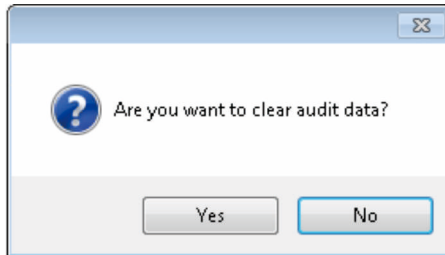
To press DAB's "Enter Button" then press [Check].



Check

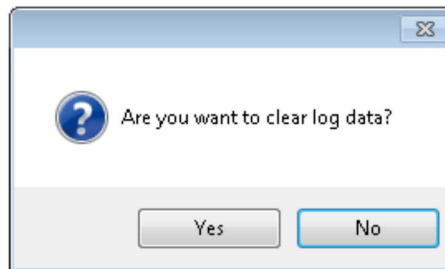
To clear Audit data (if the DAB is set up the Device ID at the beginning)

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



To clear Log data

To press **"Yes"** then clear Log 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 repair.
DAB Checksum Error	 LED1 LED2 LED3 LED4 LED5 LED6	Please send back to ICT for repair.
DAB start-code Error	 LED1 LED2 LED3 LED4 LED5 LED6	Please send back to ICT for 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 repair.

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