

User Manual for BA-08 Test Tool

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1 Overview about Use of Test Tool

User Manual for BA-08 Test Tool is applicable to the bill acceptor BA-08 of GRG, and is an operation and use instruction manual for maintenance personnel to quickly and accurately remove the trouble of BA-08 and do daily maintenance work.

2 PC Configuration Requirements

Operating platform: windows xp or windows 7 operating system

Hardware requirements: P4, above 256M, at least one serial port or a general USB port, mouse and keyboard.

3 Program Startup

Before starting the test tool BA08TestTol, firstly confirm that the acceptor has been electrified normally and communication is connected correctly, and then proceed to the next test work. Opening of test tool: Double click "BA08TestTool.exe" to open the test tool. Enter the user name "GRGYUNTONG" (default) in the popped up user login window, and then enter the password in the password field (get the password from relevant personnel). See the figure below, and then click for confirmation to open the test tool. At this time, "Communication setting failed" may be reported, which is ignorable, directly click for confirmation so as to enter the test tool.

	Terrarian sector and the sector and
UserName:	GRGYUNTONG
Permut	*xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

There are two communication connection methods as follows:

Method 1: Directly connect the serial port line or serial port extending line of the BA-08 itself to



the serial port of a computer.

Method 2: Connect the USB port of a computer without serial port to the serial port of the BA-08 through a USB-serial cable. Before connection, install the drive (provided when USB is purchased) of the USB.

Run the BA08TestTool.exe under the given file directory, and click the button "Setting (S)". Select the command "Communication (C)" in the pull-down menu, and choose the correct serial port No. in the dialog popped up. Select 19200 as the BAUD (baud rate), and then click "OK" to complete setting. "Serial port opening failed" (if any) indicates that no serial port exists or the serial port is being occupied by other programs. Execute the serial port setting operation once again after closing other programs occupying the serial port.



Serial port setting is shown in figure below:

Remarks: As different PC may have different COM numbers, the Com number shall be selected according to the actually used PC.

If no error hint occurs, the program interface of the test tool will be started successfully. The current connection will be displayed in the title bar of the test tool. See figure below:



4 Instructions

4.1General test

Click the general test button shown in figure below to enter the general test interface. General test includes "transaction" test and "command" test. The "transaction" part is used for testing the functions in the whole acceptor transaction flow for abnormality, while the "command" part is used for sending commands to get the status of the acceptor.



4.1.1 Transaction part

The command execution result in the top right corner is used for displaying the execution result of command. See figure below:



The transaction part displays various information of note, mainly including serial No., time, denomination, length and orientation.



The "acceptance rate" part in the bottom right corner is used for counting and displaying the acceptance rate of transaction test, and the button "Zero acceptance rate reset" can be used to reset the current acceptance rate so as to count again. See figure below:

obabi	lity o	r	
	0		
Rese	tProba	bilit	y

After the button "Ready to accept" is clicked, the acceptor will enter the status of receiving notes, and the green lamp in the input slot will be on. At this time, if the check box "Deposit" is selected, genuine notes will enter the cassette, while counterfeit notes or unsuccessfully identified notes will be returned. If the check box "Cancel" is selected, both genuine notes and counterfeit notes or unidentified notes will be returned and will not enter the cassette. If the button "Quit from preparing reception" is clicked, the acceptor will quit from the status of receiving notes. If the button "Quit from the status preparing reception, and the indicator in the input slot will be off. See figure below:

	UploadOC
PreDeposit) ODeposit
ExitPreDeposit	Cancel

4.1.2 Command test part

1. Initialization command is used for sending initialization commands to the acceptor, completing initialization self-detection of all parts, removing error codes and recovering the



acceptor back to the normal idle status.

Note: The initialization command is generally used for removing troubles (if any) of the acceptor. If the structural member of the acceptor is damaged or it has other serious faults, and these faults cannot be removed through initialization, the faulty parts shall be handled manually, and then an initialization command is sent to recover the acceptor.

 GetStatus command is used for getting the acceptor status and displaying the execution results in the left textbox and sensor figure.

When the acceptor recovers to normal status, all sensors become green, and the execution result displayed in the text box is as follows:



In case of acceptor status error, the sensor having status error will become red. The execution result displayed in the textbox is as follows:



Error code: exxxx error code explanation

Acceptor error status

Example as shown in figure: At this time, the front sensor of CIS tube in the acceptor is blocked (becomes red), and there may be jammed notes or foreign matters in the transport.

 GetVersion command is used for getting acceptor's firmware version and algorithm version, with execution result displayed in the left textbox.

For example, after the command is executed, the textbox in the bottom left corner will display:

Version of main board:

BA_08V1.02b12DS (note: Different acceptors will have different firmware versions)

Algorithm version:

M520010N21 (note: Different acceptors will have different algorithm versions)

 ClearForeignMatterOut is used for clearing foreign matter (if any) from the input slot of the acceptor.

The command is used mainly when notes are jammed in the acceptor and at other times when notes are to be cleared out of the acceptor.

5. ClearForeignMatterIn is used for pressing foreign matter (if any) in the acceptor into the



The command is used mainly when notes are jammed in the acceptor and at other times when notes are to be pressed into the cassette.

4.2Identification-related

Click the general test button shown in figure below to enter identification-related interface which is mainly used for uploading images. Use the function when you want to observe the image of notes inserted during operation.



4.2.1 Identification configuration

When the acceptor is connected to start test, the acceptor shall be subject to denomination identification configuration, and the required denomination is selected according to the actualities (all denominations are supported by default, and the step can be ignored if no change is required).

The specific steps are as follows:

1. Click the button "Read supported denomination" to display the following interface. The result showed is the denomination supported by the current algorithm. If reading is successfully, the

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execution result will display "Read successful!".

eralTest Recognise UploadDownload						
ImageData	Read succe	ssfull				2
	Refer					
	RecConfig				UploadImage	
	RecConfig	Denomination	ID		UploadImage	Name
	RecConfig option	Denomination IDR 100000 A;	ID D7		UploadImage VRED VIRF	Name
	- RecConfig option V	Denomination IDR 100000 A; IDR 50000 A;	ID D7 D6		UploadImage VRED VIRF VIRT	Name
	RecConfig option	Denomination IDR 100000 A; IDR 50000 A; IDR 20000 A;	ID D7 D6 D5		UploadImage VRED VIRF VIRT VMAG	Name
	RecConfig option V V	Denomination IDR 100000 A; IDR 50000 A; IDR 20000 A; IDR 10000 A; IDR 10000 A;	ID D7 D6 D5 D4 D2		UploadImage VRED VIRF VIRT VMAG VSelectAll	Name
	RecConfig option V V V	Denomination IDR 100000 A; IDR 50000 A; IDR 20000 A; IDR 10000 A; IDR 5000 A; IDR 5000 A;	ID D7 D6 D5 D4 D3 D2		VploadImage V RED V IRF V IRF V MAG V SelectAll	Name
	RecConfig option V V V V	Denomination IDR 100000 A; IDR 50000 A; IDR 20000 A; IDR 10000 A; IDR 5000 A; IDR 5000 A; IDR 2000 A; IDR 1000 A;	ID D7 D6 D5 D4 D3 D2 D1		VploadImage V RED V IRF V IRF V MAG V SelectAll VploadI	Name
	RecConfig option V V V V	Denomination IDR 100000 A; IDR 50000 A; IDR 20000 A; IDR 10000 A; IDR 5000 A; IDR 2000 A; IDR 1000 A;	ID D7 D6 D5 D4 D3 D2 D1		VploadImage V RED V IRF V IRF V MAG V SelectAll UploadI	Name
	 RecConfig option V V V V V 	Denomination IDR 100000 A; IDR 50000 A; IDR 20000 A; IDR 10000 A; IDR 5000 A; IDR 2000 A; IDR 1000 A;	TD D7 D6 D5 D4 D3 D2 D1		UploadImage V RED V IRF V IRF V MAG V SelectAll UploadI AdjVoltage	Name

2. Select the required denomination, tick the box corresponding to the denomination you want only, and click the button "Write configured denomination". After operation, the following interface is displayed, and execution result displays "Set successful !".

BA08 connect with PC by COL:COL 7						
le <u>S</u> etting <u>Connect</u> <u>B</u> isConnect <u>H</u> elp						
GeneralTest Recognise UploadDownload						
ImageData						
	result					
	Set succes	sful!				~
	\sim					
						~
	6.0.0		-			
	KecLonfig				UploadImage	
	option	Denomination	ID		🔽 RED	Name
	~	IDR 100000 A;	D7		IRF	
		IDR 50000 A;	D6		TRT	
		IDR 20000 A;	D5			
	V	IDR 10000 A;	D4		I mAG	
		IDR 5000 A;	D3		SelectAll	
		IDR 2000 A;	D2		-	
	¥	IDR 1000 Å;	D1		Upload	ing
					AdiVoltero	
	and the second se	1		and the second s	Maliorcage	
	<			>	AdjBlackV	oltage
						or cafe
	ReadConf	Reclin		SetConfig	Ad i White all	oltaga



3. Click the button "Read configured denomination" to confirm whether the read denomination is consistent with the written denomination, with interface shown in figure below. If reading is successful, "Read successful!" will be displayed.

BA08 connect with PC by COM:COM 7		
<u>File Setting Connect D</u> isConnect <u>H</u> elp		
GeneralTest Recognise UploadDownload		
ImageData		
	Result	
	Read successful!	^
		~
	RecConfig	UploadImage
	op Denomination ID	RED Name
	IDR 1000 A; D1	I RF
	IDR 2000 A; D2	⊡ IRT
	✓ IDR 10000 A; D4	MAG
	IDR 20000 A; D5	SelectAll
	IDR 50000 A; D6	UploadImg
		Adjvoltage
		AdjBlackVoltage
	ReadConfig RecList SetConfig	AdjWhiteVoltage

4.2.2 Upload Image

The command is used to upload the current image and totally 4 images can be uploaded. You can select to upload all images as shown in Figure below or select to upload one or several images Check or cancel image uploading through the check box at the front of each image. After clicking the image uploading command, wait for several seconds till it is prompted that image uploading is finished. The following information will be displayed in the textbox in the top right corner:

GRG Banking We Move Faster		
BAOS connect with PC by CON:CON 7		
<u>File Setting Connect DisConnect Help</u>		
GeneralTest Recognise UploadDownload		
ImageData	Result	
	Read successful!	<u>×</u>
		<u></u>
	op Denomination ID	VploadImage V RED V IRF V IRF V IRT MAG V SelectAll
		UploadImg AdjVoltage AdjBlackVoltage
	ReadConfig RecList SetConfig	AdjWhiteVoltage

After uploading, images will be stored in the folder "ImageData" in the test tool folder. The folder will be named with computer's system time displayed at the time of uploading.

neralTest Recognise VploadDownload		
ImageData	Result UploadImage>>> 11:55:46 SetBaud(115200) Elapsed time: 31ms 11:55:54 Upload RED Elapsed time: 8015ms 11:55:02 Upload IRF Elapsed time: 8000ms 11:55:10 Upload IRF Elapsed time: 8016ms 11:55:11 Upload Mag Elapsed time: 1094ms All images upload complete. Totle time:25.140s 11:56:11 SetBaud(19600) Elapsed time: Oms	
	RecConfig UploadIm	age
	RecConfig UploadIm op Denomination ID VRED IRF VIRT MAG VSelec	Age Path RED IRF IRT MAG
	RecConfig UploadIm op Denomination ID VRP VIRP VIR AdjVolta	Age Name Path RED IRF IRT MAG tAll



4.3 Upload & Download

The Upload & Download includes "File Download" and "Log Upload" that are respectively used for upgrading firmware downloading and acceptor log uploading.

4.3.1 File Download

 Click "Open File", find the path of the firmware to be downloaded, and then select and open the file.

2. Click "Download" to start 60s countdown in the text box, and the program will automatically start downloading. As the program starts downloading, the progress bar starts moving. If the countdown time is less than 50s and the progress bar does not move, please keep communication connection and manually turn off and electrify the acceptor. The interface when downloading is started is shown in figure below: (Remarks: Only serial port can be used to upgrade program, and USB cannot be used to upgrade)

ADB connect with PC by COI:COI 7	
<u>File Setting Connect DisConnect Help</u>	
GeneralTest Recognise UploadDownload	
File Download	-
C.(1)	
BownLoad WriteTing To	
Cancle 59	
BreakUpload UploadUneLog	
	ור
Result	
Dowmload main board program.	
13:25:33 Download begin>>>	
	21

3.Upon program downloading, the program will be updated by the acceptor, with interface shown in figure below. This step does not need action of human and only needs to keep the acceptor free from outage and disconnected communication.

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GRG Banking We Move Faster	
BA08 connect with PC by COM:COM 7	
File Setting Connect DisConnect Help	
GeneralTest Recognise UploadDownload	
File Download OpenFile C:\Documents and Settings\lwlong\桌面\最新测试工具\BA08\过往\BA-08N21算法升级\BA-08N21.ais Download Cancle WaitTime: 59	
UploadLog 0 UploadAllLog 0 BreakUpload UploadOneLog	
Result Dowmload main board program. If dowmload do not begin in 10 second, it may be completed with power off and power on. 13:26:01 Download begin>>> 13:27:13 Download complete, being updated.	3

4.After program downloading, a warning window will be popped out to prompt "Update Finished".

Click [OK] in the warning box, then program downloading is finished.

BAOS connect with PC b	y COM:COM 7	
File Setting Connect DisConne GeneralTest Recognise Upload	ct Help Download	
File Download OpenFile DownLoad Cancle	C:\Documents and Settings\lwlong\桌面\最新测试工具\BAO8\过往\BA-08N21算法升级\BA-08N21.ais WaitTime: 55	
UploadLog UploadAllLog BreakUpload Result Dowmload main board program 13:22:05 Dowmload be 13:24:20 Dowmload co 13:24:57 Update comp	Upload Upload Upload Update complete! 确定 im定 information it may be completed with power off and power on. gin>Ne splete, being updated lete!	



4.3.2 Log File Upload

It is used for uploading log files and is divided into uploading of whole log and uploading of individual log.

A The time spent in uploading the whole log will vary depending on the log volume. Calculating by the maximum memory space, it will take about 12 minutes to upload by using the serial port, and less than 1 minute to upload by using the USB port. After uploading, a window will pop up to prompt. The uploaded files are stored in the test tool directory as txt files titled "BA-08LOGY-YYYYMMDDhhmm".

The Upload Single Log is used to upload the log input in the right textbox and display it in the textbox below it. For example, if 10 is entered in the right textbox, the 10th log will be uploaded and displayed in the textbox below it.

BAO8 connect with PC by COII:COI 7	
<u>File Setting Connect DisConnect Help</u>	
GeneralTest Recognise UploadDownload File Download C:\Documents and Settings\lwlong\桌面\最新测试工具\BAO8\过往\BA-08N21算法升级\BA-08N21.ais DownLoad WaitTime: 59	
UploadAllLog O BreakUpload UploadOneLog	
Result 13:39:02 SetBaud(115200) Elapsed time: 15ms 13:39:02 Upload begin.	3
	3