Software Information Sheet

General Information

Model Name:	WBA-12/13/14/15-SS/SU/SH /SS2/SH2/SU2/SS3/SH3/SU3				SW. Req. No.		C10-141-02	A2284-02
SW. Name:	WBA-12/13(USA)-SS ID-024				**Date:** (mm,dd,yyyy)		07.16.2010	**Rev:** C2
SW. Version:	V3.80-34				Note:			
Country (Code):	United States of America (USA)				Guide:		Type 1: 66mm	
Currency:	Dollar				Checksum:		D1F3	
Direction:	4-Way				Kobetron ID:		268P	
					CRC (Seed= 0000):		8923	

Denomination: Years & MRI Ident # *73rd Edition*	Denom.	Printed	Issued	MRI#	Denom.	Printed	Issued	MRI#
	1			USD1.1	20	90-95		USD20.1B
	5	88-		USD5.1A	20	96-01		USD20.2
	5	93-		USD5.1B	20	04	03	USD20.3
	5	99-	00	USD5.2	50	90-93		USD50.1B
	5	06	08	USD5.3	50	96-		USD50.2
	10	88-		USD10.1A	50	04	04	USD50.3
	10	90-95		USD10.1B	100	88-		USD100.1A
	10	99-	00	USD10.2	100	90-93		USD100.1B
	10	04	06	USD10.3	100	96-06		USD100.2
	20	88-		USD20.1A	100	09-		USD100.3

ACCLOAD Program:	New ACCLOAD V1.21
ICB Features:	Can be enabled or disabled by the ICB Enable / Disable Setting barcode ticket.
Barcode Ticket:	Accepts JCM specified barcode tickets.
EPROM:	4 Mbit, 90 nanosecond data access or faster. ST Part M27C4001-90 or equivalent.
Modifications:	

(Version 3.76-34 → 3.80-34) -08/2010
- **Banknote Recognition:** Added recognition of the Next generation (NexGen)100 Dollar notes.

(Version 3.75-34 → 3.76-34) – 08/2009
- **ICB:** WBA will check for presence of ICB more often. (Previously, ICB presence was only checked at power-up).

(Version 3.70-32 → 3.75-34) – 01/2008
- **Banknote Recognition:** Added the NexGen $5 (2006 Series) notes. (Being released March 2008).
- **Banknote Recognition:** Added more data to improve acceptance of the $10 (2003 series).
- **Machine Operation:** Improved sensor adjustment method to accommodate a wider range of sensor characteristics.
- **Interface:** Added the Bill Validator Hold command. Command specifies a temporary escrow timer (Timer applies to the current note only. Escrow timer reverts back to the previous escrow timer state).
- **ICB:** If the Reset Command is received while writing to the ICB, Reset operation will be performed after the data has been completely written.

(Version 3.65-32 → 3.70-32) – 06/2007
- **Banknote Recognition:** Added counterfeit countermeasures against $100('88), #448 and $100('90), #495 banknotes.

(Version 3.61-31 → 3.65-32) – 08/2006
- **Banknote Recognition:** Added counterfeit countermeasures against $100 "Supernotes".
- **Banknote Recognition:** Added High Security $100 DIP switch selection. High Security mode allows better rejection of "Super Note" type counterfeits. (Selecting High Security may affect the $100 acceptance rate)

Modifications Cont:	• **Banknote Recognition:** Improved recognition, all denominations. • **Banknote Recognition:** Improved recognition - $5 (1999 Series). • **Banknote Recognition:** Improved recognition - $10 (1999 Series). • **Banknote Recognition:** Improved recognition - NexGEN $10 (2004 Series). • **Banknote Recognition:** Improved recognition - NexGEN $20 (2004 Series). • **Machine Operation:** DIP switch assignment change. $50 / $100 are now combined on DIP switch 6. DIP switch 7 is assigned to $100 normal / high security. • **Machine Operation:** Added cleaning mode. WBA recognizes a custom cleaning card and enters a cleaning mode for a few moments. (Cleaning card is moved in and out of the path 3 times). **(Version 3.60-30 → 3.61-31) – 03/2006** • **Interface:** Before sending a bill in escrow message, the WBA will check the Disable signal. If active, then the WBA will return the banknote. **(Version 3.38-29 → 3.60-30) – 02/2006** • **Banknote Recognition:** Added next generation $10(Series 2004). • **Banknote Recognition:** Improved counterfeit $100 detection. (1996, 2001, 2003 series) • **Banknote Recognition:** Improved counterfeit $50 detection. (2001, 2003 series) • **Banknote Recognition:** Improved recognition of $50 banknotes (2004 Series). • **Banknote Recognition:** Improved $5 (1999, 2001, 2003 series) facedown recognition. • **Banknote Recognition:** Improved $5 recognition. (199, 2001, 2003 series). • **Banknote Recognition:** Improved $1 banknote recognition. • **Banknote Recognition:** Improved $5 / $10 fraud detection. • **Machine Operation:** The pusher home sensor is monitored more closely during the push operation. (WBA will enter an error state if any abnormality is detected during this operation.) • **Interface:** Added cashbox near full message. (Bill Validator Error / Status, bit 8). Send "near full" when counter is at 425 bills. • **Interface:** Changed default escrow timer. Bills – 8 seconds. Tickets – 32 seconds. • **Interface:** When a ticket is rejected, the reported denomination value is zero. • **Ticket Recognition:** If two barcoded tickets are inserted at the same time, both will be rejected. Previous software, it was possible to accept and stack two tickets at the same time. • **ICB:** Update cashbox remove timestamp every thirty minutes. • **ICB:** Added ICB feature check. (If ICB modules are installed and determined to be disabled, then report Hardware Error. (Led will flash with a repeated error code). • **ICB:** Added Banknote Reject codes to ICB memory. • **ICB:** Added currency assignment table to ICB memory. **(Version 3.35-29 → 3.38-29) – 04/2005** • **Banknote Recognition:** Counterfeit countermeasures: $10. (Variation of the counterfeit addressed in version 3.35-29 was still accepted in a few cases). • **Banknote Recognition:** Similar countermeasures implemented for the $10 bill were also implemented for $5, $20 and Next Generation $20. (Pre-emptive change). • **Banknote Recognition:** Countermeasures for high quality $50 and $100 counterfeit notes found during evaluation at the Federal Reserve Bank. • **Machine Operation:** A $5, $10, $20 banknote is drawn into the path. Following the usual inspection, if the banknote was inserted green seal first, the WBA will move the banknote about ¼ inch for a final check before sending the denomination message. **(Version 3.34-27 → 3.35-29) – 02/2005** • **Banknote Recognition:** Counterfeit countermeasures: $10. • **Banknote Recognition:** Improved $20 (2004) banknote recognition. (Added more data). • **Machine Operation:** Motor Speed check method was adjusted. • **Machine Operation:** During Auto-calibration, the WBA will not listen to communication from the Host.

Modifications Cont:	• **Machine Operation:** Added countermeasure: Case where WBA-CPU runaway occurs during a ticket transaction, after Stack Confirm / ACK messages; ticket was returned. If the Stack Confirm-ACK flag is found to be broken during recovery, then stop and report an error. • **Interface:** Following a Reset command, WBA status will be "Bill Validator Currently Disabled". (Both Global Reset and Addressed Reset commands). **(Version 3.19-27 → 3.34-27) – 08/2004** • **Banknote Recognition:** Added Next Generation $50 banknote recognition. • **Banknote Recognition:** Improved $10 counterfeit detection. • **Banknote Recognition:** Counterfeit countermeasures: $100 (Found in Japan and Taiwan). • **Banknote Recognition:** Improved $50 recognition. (2001 series). • **Machine Operation:** Improved CPU runaway detection. A CPU run-away event will be detected within 200 ms and corrected. • **Machine Operation:** Version 3.19-27 has a flaw; when using the "B" interface, the WBA would mistakenly report a "Tampering Detected" error during coupon transactions. The problem has been corrected. • **Machine Operation:** During power recovery with a ticket in the path, if the WBA receives a reset command, the ticket will still be stacked. (Version 3.19-27 had a flaw where the ticket could be returned, even though the game had already posted credit for the transaction).
Memo:	

Dip Switch Settings

#		Dip Switch
1	OFF	**Interface selection 024** - All barcode numbers will be transacted with the game machine via Netplex interface.
	ON	**Interface selection 024B** - ID-024B Interface – Barcodes beginning with 00 will be transacted with the game via Netplex. All other barcode numbers will be transacted directly with an SDS-GMU via second WBA serial port.
2	OFF	**1 ENABLE**
	ON	**1 DISABLE**
3	OFF	**5 ENABLE**
	ON	**5 DISABLE**
4	OFF	**10 ENABLE**
	ON	**10 DISABLE**
5	OFF	**20 ENABLE**
	ON	**20 DISABLE**
6	OFF	**50/100 ENABLE**
	ON	**50/100 DISABLE**
7	OFF	**100 Normal Security**
	ON	**100 High Security**
8	OFF	OFF
	ON	TEST MODE

ID-024 Software Specification

VERSION DATA

SW. Version	WBA-12/13 024 V3.80-34
Boot Version	B11 or B12

CONFIGURATION TABLE

Bit	Denomination
0	**1**
1	Reserved
2	**5**
3	**10**
4	**20**
5	**50**
6	**100**
7	Reserved

DIRECTION DATA

Sample demonination:100

A ← (FA) | Front 100 | → B (FB)

D ← (BB) | Back 100 | → C (BA)
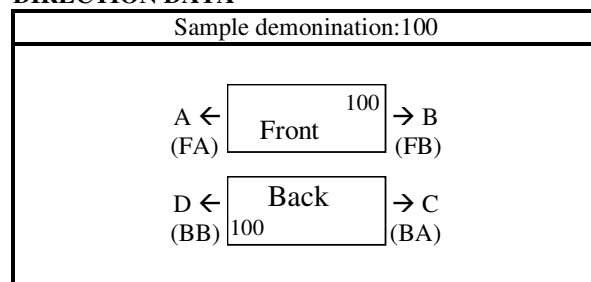
OPTIONS

Enable	Option
○	FORMATTED PROGRAM VERSION REQ. CMD
○	BARCODE Barcode type (interleaved 2 of 5), Character length (18 and 24 char)
○	BILL VALIDATOR HOLD COMMAND