Software Information Sheet

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General Information

Model Name:	WBA-12/13/14/15-SS/SU/SH/UH/ SS2/SH2/SU2/SS3/SH3/SU3				SW.Req. No.		C18-048		A4139-01
SW. Name:	WBA-12/13(USA)-SS ID-0C3				**Date:** (mm,dd,yyyy)		06.26.2006		**Rev:** C1
SW. Version:	V3.63-09i				**Note:**				
Country (Code):	United States of America (USA)				**Guide:**		Type 1: 66mm		
Currency:	Dollar				**Check Sum:**		F37F		
					Kobetron ID:		FU17		
Direction:	4-Way				**CRC (seed= 0000):**		467F		

Denomination: Years & MRI Ident #	Denomi.	Printed	Issued	MRI#	Denomi.	Printed	Issued	MRI#
	1	-	-	#443	20	'96~'01	-	#501
	5	-	-	#444	20	'04	'03	#515
	5	'93~	-	#491	50	-	-	#447
	5	'99~	'00	#499	50	'90~'93	-	#488
	10	-	-	#445	50	'96~	-	#502
	10	'90~'95		#486	50	'04	'04	#516
	10	'99~	'00	#500	100	-	-	#448
	10	'04	'06	#514	100	'90~'93	-	#495
	20	-	-	#446	100	'96~	-	#503
	20	'90~'95	-	#487				

ICB:	ICB feature is enabled or disabled using an ICB Enable / Disable barcode ticket.
Barcode Ticket:	Accepts JCM specified barcode tickets.
EPROM (WBA-13/15):	4 Mbit, 90 nano-second data access, or faster. ST Part M27C4001-90 or equivalent
Modifications:	

(Version 3.60-09i → 3.63-09i)
- **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).
- **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).
- **Banknote Recognition:** Improved recognition, all denominations.
- **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 routine. Acceptor recognizes a custom cleaning card and enters a cleaning mode. (Card is drawn 3 times).

(Version 3.38-09i → 3.60-09i)
- **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 magnetic detection for $1 banknotes in the reverse directions.
- **Banknote Recognition:** Improved the security for $5 and $10 banknotes by improving the optical detection features.

Modifications Cont:	• **Machine Operation:** Improved countermeaseures against stacked barcode tickets. (Changed the software so that it rejects tickets when more than one is inserted at the same time.) • **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:** During test mode, (Dip Switch 8 "on"), communication is disabled. • **Interface:** WBA checks for ICB components; if the ICB components are detected but ICB is disabled, then the WBA will report a hardware failure. • **ICB:** Added ICB feature check. (If ICB modules are installed and determined to be disabled, then report an error. (Failure 03). (Led will flash with a repeated error code). • **ICB:** Added banknote reject codes to ICB memory. • **ICB:** Added currency assignment table to ICB memory. • **ICB:** Modified ICB Cash Box Remove DATA/TIME to update every 30 minutes. **(Version 3.35-09i → 3.38-09i)** • **Banknote Recognition:** Counterfeit countermeasures: $10. (Variation of the counterfeit addressed in version 3.35-29i 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 3.34-09i → 3.35-09i)** • **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. **(Version 3.09-09i → 3.34-09i)** • **Banknote Recognition:** Added Next Generation $50 banknote recognition. • **Banknote Recognition:** Improved $50 recognition. (2001 series). • **Banknote Recognition:** Added $5 counterfeit countermeasures. • **Banknote Recognition:** Improved $10 counterfeit detection. • **Banknote Recognition:** Counterfeit countermeasures: $100 (Found in Japan and Taiwan). • **Machine Operation:** Improved WBA-CPU runaway detection. A CPU run-away event will be detected within 200 ms and corrected. • **Machine Operation:** During ticket transactions, the Stacked bit is set when the ticket has passed the solenoid levers in the transport. In previous version 3.09-09i, the Stacked bit was set while the ticket was still in the escrow position. • **Machine Operation:** During barcode ticket transactions, the "Stacked bit" is set when the ticket has passed the solenoid-activated stacker levers. **(Version 3.02-09i → 3.09-09i)** • **Banknote Recognition:** Counterfeit countermeasures: $5. • **Machine Operation:** Barcode ticket transactions are completed while the ticket is still in the "escrow" position. Once the ticket transaction is completed, it will be stacked in the cashbox. If anything goes wrong during the transaction, the ticket will be returned to the patron. • **Machine Operation:** Improved barcode ticket read method. • **Machine Operation:** Improved error checking. Software was changed to examine transport related errors more closely. The error must exist for at least 100 ms to be considered valid.

Modifications Cont:	(Modifications since previous version 2.15-08i)
	• **Banknote Recognition:** Added Next Generation $20 recognition.
	• **Banknote Recognition:** Added more 2001 series $50 data.
	• **Banknote Recognition:** Counterfeit countermeasures: $1 found in California.
	• **Banknote Recognition:** Counterfeit countermeasures: $5 found in Reno.
	• **Machine Operation:** If a banknote is found in the path at power-up, it will be stored in the cashbox during initialization; the WBA unit will report "Stacked" when communication with the game resumes.
	• **Machine Operation:** DIP-switch assignment change. $50 / $100 are no longer combined on DIP-switch #7. ICB enable / disable via DIP switch is no longer available.
	• **Interface:** Escrow timeout changed from 10 seconds to 30 seconds.
	• **Interface:** Vend message is now sent after a bill completely passes the feed-out sensor.
	• **ICB:** ICB memory now includes data for acceptance rate calculation.
	• **ICB:** ICB functions and features are now included as standard in the software. ICB is enabled / disabled via set ticket method. (Enable / Disable via DIP switch is no longer available).
	• **ICB:** ICB cashbox counter allows for multiple insertion / removal events.
Memo:	

Dip Switch Settings

#	Dip Switch		
1	OFF	Barcode Ticket	ENABLE
	ON	Barcode Ticket	DISABLE
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	ENABLE
	ON	50	DISABLE
7	OFF	100	ENABLE
	ON	100	DISABLE
8	OFF	OFF	
	ON	TEST MODE	

VERSION DATA

SW. Version	V3.60-09i
Boot Version	B11 or B12

DIRECTION DATA

Sample demonination:100

Front 100
A ← (FA)   → B (FB)

Back
D ← (BB) 100   → C (BA)