



## **JCM Products Quick Reference Guide**

### **DBV™ 200 Units**

**Note:** Some of the information in this guide may change over time, depending on the software and possible modifications with advancements in technology.

For further detailed information pertaining to procedures and troubleshooting methods, please contact our Technical Support Division of Customer Service.

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# DBV™ 200 Units

## Quick Reference Troubleshooting Guide

Description	Probable Cause	Possible Solutions
<b>Bill Rejection</b>	Dip switches not set properly	Set Dip switches
	Roller and/or belts are excessively dirty	Clean head and rollers with mild soap and water solution
	Credit limit not set properly on game	Set credit limit for proper acceptance
	Cashbox is full, or not installed properly	Check and verify cashbox's condition
	Sensors out of calibration, unit not calibrated after software change	<ul style="list-style-type: none"><li>• Calibrate unit using proper procedures</li><li>• Check for proper software/ID protocol</li></ul>
<b>No Activity</b>	No power to the unit/ No LEDs visible	Check power source, pins, wires and connector
	Will not start acceptance procedure/ cycle	Check for proper software usage/ID protocol
	Cycles, but will not accept bills	Check for proper Dip switch settings and game settings
	Validator in an error status	Run stand-alone test to verify
	Bad CPU board	Replace CPU board, or change out unit
	Unit out of calibration	Calibrate unit using proper procedures

# DBV™ 200 Units

## Abnormal Initialization Codes

# of Blinks	Description	Possible Cause
1	Cashbox Full	<ul style="list-style-type: none"> <li>• Cashbox may be FULL</li> <li>• Motor not functioning</li> <li>• Sensor not working</li> <li>• Encoder gear cracked or split</li> </ul>
2	Jam in Cashbox	<ul style="list-style-type: none"> <li>• Pusher mechanism may be jammed</li> <li>• Stacker Encoder sensor not functioning</li> </ul>
3	Jam in Transport Unit	<ul style="list-style-type: none"> <li>• Cover open</li> <li>• Stacker lever problem</li> <li>• Bill remains in the carrying path</li> </ul>
4	Jam in Acceptor Head	<ul style="list-style-type: none"> <li>• An object blocking sensors</li> <li>• Sensor problem</li> </ul>
5	Motor Speed Error	<ul style="list-style-type: none"> <li>• No signal from the Validator's encoder sensor</li> </ul>
6	Motor Stop Error	<ul style="list-style-type: none"> <li>• Motor not functioning</li> <li>• Encoder gear cracked or split</li> <li>• Encoder sensor not functioning</li> </ul>
8	Solenoid Error	<ul style="list-style-type: none"> <li>• Solenoid not functioning</li> <li>• The Stacker lever not at home position</li> </ul>
10	Cashbox Removed	<ul style="list-style-type: none"> <li>• No cashbox (SS units only)</li> <li>• Cashbox not seated properly</li> </ul>
12	Cheat Condition Detected	<ul style="list-style-type: none"> <li>• Sensors indicate possible sensor manipulation</li> </ul>
15	D/A Adjustment Error	<ul style="list-style-type: none"> <li>• Possible calibration sensor error</li> </ul>

# DBV™ 200 Units

## Bill Return Codes

Use with Stand-Alone Test w/Rejections, or Host Simulator

# of Blinks	Description	Possible Cause
1	Crooked insertion	<ul style="list-style-type: none"><li>• Bill was inserted crooked</li><li>• Entrance sensor malfunction</li></ul>
2	Magnetic pattern error	<ul style="list-style-type: none"><li>• Error detecting magnetic pattern on a bill/note</li></ul>
3	Acceptor detected a bill while in stand-by	<ul style="list-style-type: none"><li>• Detected the presence of a bill/note while in stand-by</li></ul>
4	Dark/Light ratio of bill is below fixed Value	<ul style="list-style-type: none"><li>• Reflective sensors may not be working properly</li></ul>
5	Transport feed error	<ul style="list-style-type: none"><li>• Bill/note not detected by the Transport feed sensor within a specified period</li></ul>
7	Photo pattern error	<ul style="list-style-type: none"><li>• Bill/note may have a pattern not programmed in memory</li><li>• Sensor may not be working properly</li></ul>
8	Photo level error	<ul style="list-style-type: none"><li>• Dirty belts and/or rollers</li><li>• Double/overlapping bill detected</li><li>• The bill/note may be dirty</li></ul>
9	Return by inhibit settings	<ul style="list-style-type: none"><li>• Bill/note does not fall into range of acceptable bills/notes, or denomination direction</li></ul>
10	Returned by host	<ul style="list-style-type: none"><li>• Game program/settings will not accept inserted bill/note</li></ul>
12	Detected another bill while a bill was still in stack mode	<ul style="list-style-type: none"><li>• Entrance sensor malfunction</li><li>• Object blocking entrance sensor</li></ul>
13	Bill length error	<ul style="list-style-type: none"><li>• Length of bill/note not within programmed specification</li></ul>
14	Color pattern error	<ul style="list-style-type: none"><li>• Irregular color/shade/markings</li></ul>
15	Return by other reasons (Magnetic error)	<ul style="list-style-type: none"><li>• A combination error with magnetic sensors</li></ul>

# **“DBV™ 200 Units”**

## **QR - Preventive Maintenance**

**DBV™ 200:** Unit and Transport Unit

- Replace belts if frayed, slick, and/or worn.
- It is important to keep the bill path, rollers, and belts clean. The sensor lenses are transparent, and made of a polymer material. Handle them with care.

To clean the lenses, use a lint-free cloth and a mild non-abrasive detergent, such as liquid dish soap mixed with water.

### **Do not use alcohol for cleaning**

**Important Note:** After wiping, inspect the lenses to ensure that none of the lenses have been moved out of position, or are not flush with the bill path.

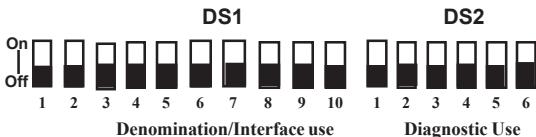
**Note:** JCM does not recommend cleaning cards, cleaning pads, or cleaning solutions of any kind

### **CASHBOX PREVENTIVE MAINTENANCE (P/M)**

Do periodic PM on the cashboxes to ensure proper operation. Use compressed air via can or air compressor to blow out the paper fibers, and any other debris that builds up over time. Check the belts and all moving parts for wear and proper positioning. If this unit does not operate properly, it can cause bill jams.

**After completing the PM, we recommend calibration.**

# DBV™ 200: DIP Switch Settings for Basic Operations U.S. “\$” Dollar



1	2	3	4	5	6	7	8	9	10
\$1	\$5	\$10	\$20	\$50	\$100	*	*	*	I/F

\* Not Applicable

**NOTE:** When Dip switches are in the “ON” position, it disables the acceptance of that bill denomination.

## DBV-200 ID-004/Bar

(I/F) “On”: Accept Coupons & Currency

“Off”: Default Accept Currency Only

## DBV-200 ID-011/015

(I/F) “On”: for I/F ID-015

“Off”: Default for I/F ID-011

## DBV-200 ID-022/023

(I/F) “On”: for I/F ID-022

“Off”: Default for I/F ID-023

## DBV-200 ID-044P/045P

(I/F) “On”: for I/F ID-045P

“Off”: Default for I/F ID-044P

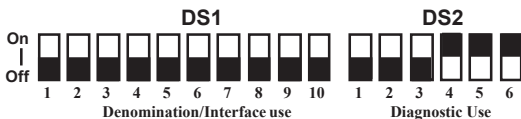
## DBV-200 ID-044/045W

(I/F) “On”: for I/F ID-045W

“Off”: Default for I/F ID-044

## DBV™ 200: Auto-Calibration

1. Power Off
2. Set DIP Switch DS2: 4,5, and 6 “On.”



3. Power-on Unit (plug in the 6-pin connector)
4. Head motor will cycle and stop - Ready to Calibrate
5. Insert the DBV-200 calibration paper, black side first (Part No. 057619).

After inserting the calibration paper, the unit will carry the paper forward/reverse several times. When the process is complete, the unit will return the paper.

Look at the indicator for proper signals: 14-pin Test LED, or the bezel light, if used. Fast Blinks indicate acceptable calibration, and Blinks from 1-11 at intervals of 1/2 second indicate an error as described below.

# of Blinks	Error Found During Calibration
1	Entrance Level Error
3	Entrance Sensor Error
5	Gain Error White Level Adjustments
6	Digital/Analog Error White Level Adjustments
7	Barcode Sensor Error
9	Magnetic Setting Error
10	Write-in Error
11	Black Level Error

## **DBV™ 200: In-Field Stand-Alone Test Mode**

**Set the Dip switches then apply power to the unit to  
accomplish this function**

**Note: Perform this test outside the game using the game power (6-pin) connector, or power supply hook-up**

- Before applying power, turn Dip switch “6” to “On”.
- Apply power, then turn Dip switch “6” to Off. The unit should cycle.
- The unit is ready for stand-alone testing
- Insert a Bill/Note. It will either be accepted and go completely through the bill head, or be rejected.
- If the unit rejects the Bill/Note, refer to the “Bill Return Codes” table.
- If the unit will not take the Bill/Note in, check the “Abnormal Initialization Codes” table.
- When the unit cycles on power up, this indicates power and forward motor operation.
- When you insert a plain piece of paper and it is rejected, this indicates reverse motor operation.
- When you insert various denominations of currency and they are accepted, this indicates the Bill/Note was accurately matched against the characteristics of the software version.



## **DBV™ 200: DT-004 Downloading**

### **Downloading - Using the JCM DT-004 Download Tool**

**DO NOT USE the 2-pin connector for power input.  
This is output power and can damage the DT-004.**

1. Make sure power is applied to the DT-004 via a 3-pin connector from the PS15-007 power supply with the adaptive harness, Part No. 400-100067, or the power supply harness connection in the game.
2. With the power off, be sure the 4MEG Program EPROM is installed properly.
3. Dip switches: On DBV-200 units, set Dip Switches:  
DS1 - #1 to the "On" position, and all others to the "Off" position.  
DS2 - All to the "On" position.  
DT-004 - All to the "Off" position.
4. Harnessing
  - For standard DBV-200 SS/SH/SU units, use the following JCM parts:
  - PS15-007 Power Supply, Part No. 550-100040, with adaptive harness Part No. 400-100067.
  - Harnesses Part No. 400-100065 and 400-100066 for data and power to the DBV-200 unit.
  - For the B424 model DBV-200, use harness Part No. 400-100042 in conjunction with harness Part No. 400-100069 to complete the connection.
5. Turn the power switch on the DT-004 to the "ON" position. The Power LED should light.
6. Verify the LEDs on the DBV-200 CPU board are illuminated, and are blinking back and forth. This indicates download mode.
7. To begin the download process, press the "START" button. The "RDY" LED should begin to blink.

**(Cont'd)**

## **DBV™ 200: DT-004 Downloading (Cont'd.)**

8. While downloading, the download status LEDs on the DT-004 will illuminate, indicating status of the download.
9. When the downloading is complete, the “OK” LED will light and a buzzer will sound for about a second.
10. Press the “RESET” button once, then press the “VERIFY” button once. After approximately 10 seconds, a buzzer will sound for about a second, and the “OK” LED will illuminate.
11. Turn power on the DT-004 to the “OFF” position, remove the harness connectors from the unit, and return the Dip switches to their normal operating positions.
12. To repeat the process with other units, follow these instructions from #3 through #10.

**NOTE:** After downloading/upgrading the units, re-calibrate the units.

## **DBV™ 200: DT-004**

### **Examples of ID Interface Usage**

This is an example of the various usages for JCM interfaces

#### **DBV - I/F**

<b>ID Interface</b>	<b>OEM (Gaming Manufacturer)</b>
ID-004/Bar	JCM Standard: CDS and VLC
ID-011/015	Sigma and Videotronic
ID-022/023	IGT: S-Slots, P.E., P.E. Plus
ID-024	IGT: Game King, I-Game, and Vision Series
ID-044P/-45P	Bally
ID-044/045W	WMS

#### **WBA - I/F**

<b>ID Interface</b>	<b>OEM (Gaming Manufacturer)</b>
ID-003	JCM Standard: Aristocrat, Atronics, Bally, CDS, Sigma, VLC, and WMS
ID-022/-23	IGT: S-Slots, P.E., P.E. Plus
ID-024	IGT: Game King, I-Game, and Vision Series
ID-044C/0C3	Aristocrat

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