

iVIZION-100 Parts List

Part Number - Description

- 701-000269R iVIZION/UBA Power Supply
- 701-100112R iVIZION/TBV UAC Kit (alternate power supply option)
- 302-000001R USB Male 'A' to USB Mini-B Cable, 6-foot
- 302-100011R USB Male 'A' to Mini-B Cable, 3-foot
- 201544 Reference Paper White KS-072 (without Guides)
- 211266 Reference Paper White KS-089 (with or without Guides)
- 214780 BlueWaveDX (DT-300) Unit

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JCM TRAINING OVERVIEW

iVIZION® Banknote Acceptor



iVIZION® Banknote Acceptor

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OPERATIONAL ERROR CODES

Operational Errors are associated with a malfunction within the iVIZION Unit itself. Operational Errors are indicated by a **RED** LED flashing. By counting the flashes in-between the pause states, the error can be determined and located in Table 10.

Table 10 Operational Malfunction LED Flash Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Red	1	Stacker Full	Detected a Cash Box Full condition
	2	CPU Comm Error (Processors)	Communications Error between Processor (CPU) Boards
	3	Sensor Adjustment Error	Abnormal Sensor Adjustment condition encountered
	4	Speed Error	Transport Motor Speed is incorrect
	5	EEPROM Error	No Initial Sensor Adjustment
	6	Transport Error	Transport or Stacker jam condition
	7	Reject Error	Jam condition during a Banknote Reject operation
	8	Stacker Pusher Movement Error	Jam in the Stacker Assembly
	9	Pusher Position Error	Pusher Plate Home Sensor Error
	10	No Cash Box	Cash Box not detected
	11	No Acceptor Head	Acceptor Head Cover is not closed
	12	Anti-String Error	Sensors detected irregular movement
	13	Reserved	N/A
	14	Damaged Processor (CPU) Board	Processor (CPU) component failure
	15	Memory Error	ROM/RAM Failure – CPU Board



NOTE: Refer to the iVIZION Operation and Maintenance Manual (P/N 960-100929R) for a full description of errors and corrective actions.

CALIBRATION ERROR CODES

Table 11 Calibration Error Codes


Sensor	Code	Cause and Solution
Validator Head, Entrance Sensor	0x21xx	Validator Head, Entrance Sensor Clean and inspect the Entrance Sensor
Validator Head, Exit Sensor	0x22xx	Validator Head, Exit Sensor Clean and inspect the Exit Sensor
Upper UV Sensor	0x23xx	UV Sensor; Clean and inspect the Upper UV Sensor
Lower UV Sensor	0x24xx	UV Sensor; Clean and inspect the Lower UV Sensor
Stacker Home	0x31xx	Clean and inspect the Stacker Home Sensor, check connections
Feed-Out Sensor, Transport	0x32xx	Transport Feed-out Sensor; Clean and inspect the Transport Feed-out Sensor
Feed-in, Transport	0x33xx	Clean and inspect the Transport Feed-in Sensor, check connections
Nearly Full, Cash Box	0x34xx	Clean and inspect the Cash Box Near Full Sensor, Transport Cash Box Lens
Cash Box Sensor	0x35xx	Box Sensor Present Sensor; Clean and inspect the Cash Box Sensor Lens
EEPROM	0x40xx	E2PROM Write Error; Inspect CPU Boards, connections
RFID	0x50xx	Inspect and check connections for RFID Module. Verify RFID Tag in the Cash Box
CIS	0x10xx	Contact Image Sensor, Upper or Lower Clean and inspect the CIS Sensors, check connections

ICB CODE ERRORS

ICB Errors indicate a Set-up or Configuration issue exists with an Intelligent Cash Box (ICB). ICB errors are indicated by a flashing **Blue** LED. By counting the flashes in-between the pause states, the error can be determined and located in Table 9.

Table 9 LED ICB Flash Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Blue	1	Reserved	N/A
	2	ICB Function Error	RFID Module in Cash Box not detected (Verify presence)
	3	ICB Read/Write Error	ICB Communications Failure
	4	ICB Data Error	Data is incorrect / Hardware Failure/Clear Cash Box
	5	ICB Number Error	Mismatch of Asset Number between Cash Box and iVIZION Unit
	6	ICB Initialization Error	Replace Cash Box with a cleared Box
	7	Reserved	N/A
	8	Reserved	N/A
	9	Reserved	N/A
	10	Reserved	N/A
	11	Reserved	N/A
	12	Reserved	N/A
	13	Reserved	N/A
	14	Reserved	N/A
	15	Reserved	N/A

 **NOTE:** Refer to the iVIZION Operation and Maintenance Manual (P/N 960-100929R) for a full description of errors and corrective actions.

Lecture Notes

LEARNING OUTCOMES

On completion of the iVIZION Training Course, the attendee will be able to:

- Evaluate iVIZION status indicators;
- Perform diagnostics tests;
- Explain the various applications used to support the iVIZION Unit;
- Perform a Preventive Maintenance procedure;
- Update iVIZION Firmware and identify Firmware protocols; and
- Complete a calibration of the iVIZION Unit.

OVERVIEW

This training course addresses the following JCM iVIZION® device versions:

Table 1 iVIZION Versions

Device	Capacity/Contents
iVIZION 100 SS	64 Mbits standard (expandable to 192 Mbits)
iVIZION LD	64 Mbits No Stacker
iVIZION SH	64 Mbits High Capacity Cash Box
iVIZION 100 SU*	64 Mbits standard Up-Stack (expandable to 192 Mbits)

*The Up-Stack (SU) Configuration is selected by a jumper at the rear of the iVIZION Frame (pins 24 to 15). Refer to the iVIZION Operation and Maintenance Manual (P/N 960-100929R) for details. The manual is available at www.jcmglobal.com.

iVIZION UNIT



Figure 1 iVIZION Unit

COMPONENT LOCATIONS

COMPONENTS

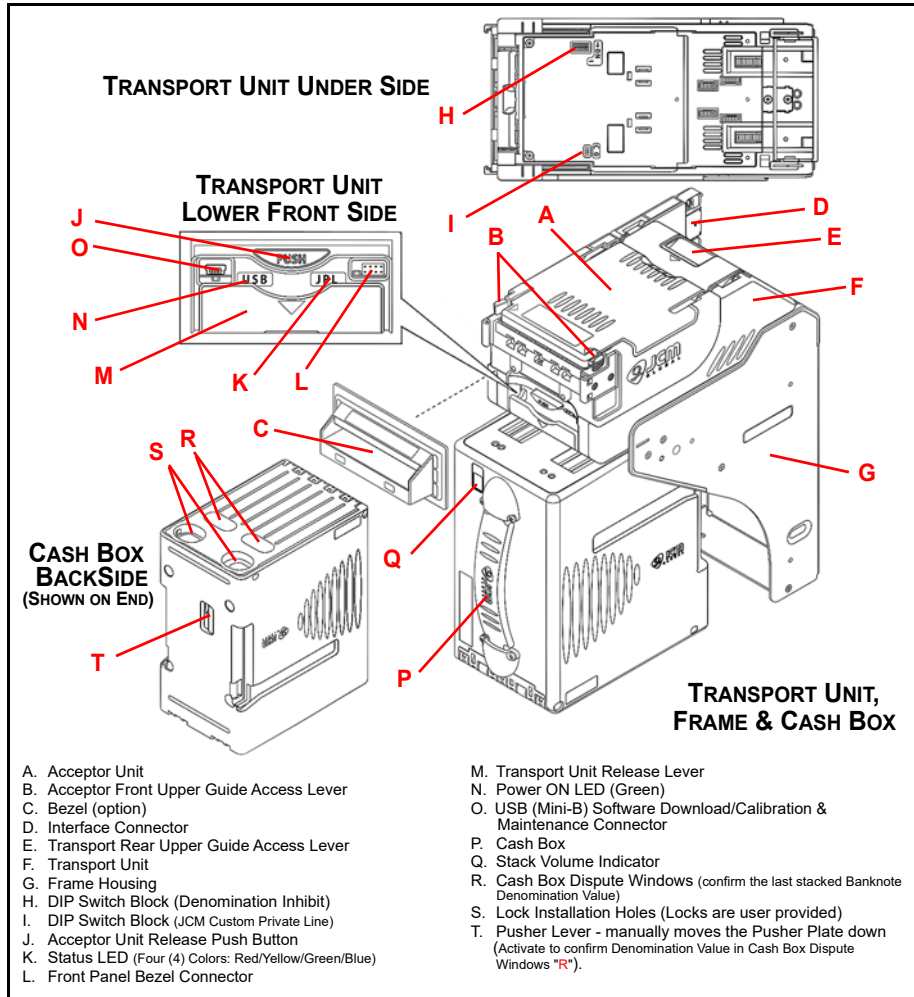


Figure 2 iVIZION Component Locations

Lecture Notes

LED REJECT ERRORS

Reject Errors indicate why a Banknote was not accepted. Reject Errors are represented by a flashing **Green** LED. By counting the flashes in-between the pause states, the error can be determined and located in Table 7.

Table 7 LED Reject Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Green	1	Banknote Insertion Error	Skewed Insertion
	2	UV Sensor Error	Check/Clean the UV Sensors
	3	Banknote Detected in Acceptor	Check/Clean Banknote Path
	4	Adjustment Error	Check/Clean the CIS/Transmissive Sensors/Calibrate
	5	Transport Timing Error	Check Motor Speed
	6	Denomination Error	Banknote not validated, Check/Clean all Sensors
	7	Photo Pattern Error 1	Banknote Pattern not recognized, Clean Path
	8	Photo Level Error	Check/Clean the Banknote Path
	9	INHIBIT Error	Banknote rejected due to DIP Switch setting condition
	10	Reject Command	Host commanded Banknote reject
	11	Ticket Error	Ticket inserted Upside Down
	12	Transport/Stacker Error	Sensors blocked in Stacker
	13	Banknote Length Error	Banknote length longer than specified, Check Banknote Type
	14	Photo Pattern Error 2	Banknote pattern not recognized, Clean Path
	15	Banknote Identity Error	Unidentified Banknote, Check Sensors, Clean Path

NOTE: Refer to the iVIZION Operation and Maintenance Manual (P/N 960-100929R) for a full description of errors and corrective actions.

iVIZION TICKET REJECT ERRORS

Table 8 iVIZION Ticket Reject Error Codes


LED Color	Status LED		Causes and Solutions
	Flash No.	Error Types	
Green	1	Unconfigured Barcode	Barcode could not be read; check damaged/dirty Ticket
	2	Format Error	Barcode Format incorrect; check Barcode printing
	3	Reserved	N/A
	4	Start/Stop Bit Error	Start or Stop Bit cannot be detected; check Ticket printing
	5	Character Detection Error	Barcode characters are not detected; check Ticket printing
	6	Reserved	N/A
	7	Reserved	N/A
	8	Double Insertion	Two or more Barcoded Tickets, insert a single Ticket
	9	Reserved	N/A
	10	Reserved	N/A
	11	Upside Down Insertion	Barcode Ticket inserted Upside Down; Insert Ticket with the Barcode up
	12	Reserved	N/A
	13	Reserved	N/A
	14	ICB Setting Error	ICB Setup Tickets are the incorrect format
	15	Reserved	N/A

LED BILL JAM ERRORS

Bill Jam Errors indicate bill movement issues through the iVIZION Unit. Jam Errors are indicated by a flashing **Yellow** LED. By counting the flashes in-between the pause states, the error can be determined and located in Table 6 below.

Table 6 LED Jam Error Codes

LED Color	Status LED		Causes and Solutions
	Flash No.	Error Type	
Yellow	1	Reserved	N/A
	2	Entrance Sensor Jam	Check/Clean the Entrance Sensor
	3	CIS Sensor Jam	Check/Clean the CIS Sensor
	4	Exit Sensor Jam	Check/Clean the Exit Sensor
	5	Feed-In Sensor Jam	Check/Clean the Feed-In Sensor
	6	Feed-Out Sensor Jam	Check/Clean the Feed-Out Sensor
	7	Cash Box Jam	Check for Jammed Note in Cash Box
	8	Reserved	N/A
	9	Reserved	N/A
	10	Reserved	N/A
	11	Reserved	N/A
	12	Reserved	N/A
	13	Reserved	N/A
	14	Reserved	N/A
	15	Reserved	N/A

 **NOTE:** Refer to the iVIZION Operation and Maintenance Manual (P/N 960-100929R) for a full description of errors and corrective actions.

Lecture Notes

SETTING COMMUNICATION STANDARDS

The following communication standards can be used with an iVIZION Unit:

- **USB Interface** – USB 2.0 Standard
- **Serial Interface** – Photo-coupler Isolation
- **Serial Interface** – RS232 Communications
- **Serial Interface** – cc-Talk Communications

SELECTING COMMUNICATIONS TYPES

RS232 or Photo-coupler Serial Communications Selection

The communication DIP Switch Blocks required for making these selections are located on the Transport Control CPU Board under the Validator Head.

To change these communications settings proceed as follows:

1. Remove the Validator Head from the Transport.
2. Remove the DIP Switch Block Cover from the Transport Unit.
3. Change the DIP Switches as required for selecting the related communication standard desired (See Table 2).





 **NOTE:** When changing the type of iVIZION Serial Communications, Switches JP2 and JP3 located on the Control CPU Board must be set to identical switch positions.

Table 2 Serial Communications DIP Switch Settings

Control CPU Board JP2 & JP3		
		
	R ↔ P	R ↔ P
Switch No.	Non-Marked (R)	Marked (P)
JP2	RS232C	Photo-Coupler Isolation (Standard)
JP3	RS232C	Photo-Coupler Isolation (Standard)

 **NOTE:** USB Interface and cc-Talk Standards are set by selecting and modifying the proper pins on the iVIZION's External 26-Pin Communications Connector identified in Section 2 of the iVIZION Operation and Maintenance Manual (P/N 960-100929R). The manual is available at www.jcmglobal.com.

Lecture Notes

JCM USB TOOL SUITE OVERVIEW

JCM TOOL SUITE FUNCTIONS - iVIZION

Functions Available

Figure 3 displays two (2) versions of a JCM Tool Suite Device Information Screen (Figure 3 a) with two (2) different Service Mode Pull-down Menus active (Figure 3 b).

When an iVIZION® Unit is connected, the following functions are available in the Operations Mode (Figure 3 c):

- Download
- Statistics
- Utility (Figure 3 e)

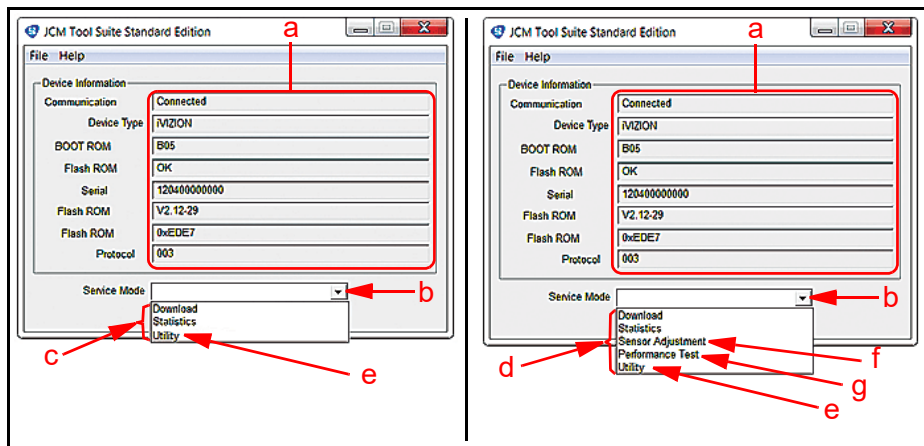


Figure 3 iVIZION Connected JCM Tool Suite Screens

If the iVIZION Unit is connected to the JCM Tool Suite while in Maintenance Mode, with DIP Switch No. 8 ON, the following additional functions (Figure 3 d) will be available as well:

- Sensor Adjustment (Figure 3 f)
- Performance Test (Figure 3 g)

For complete installation and operational instructions for loading the JCM Tool Suite Program onto your PC, refer to the JCM Tool Suite Installation Guide (P/N 960-100923R) available at www.jcmglobal.com.

Lecture Notes

ERROR TABLES

LED OPERATIONAL CONDITION INDICATORS

The iVIZION Unit's Multi-Color Front Panel LED always shows the current Operational Status of the iVIZION Unit. Table 5 lists the various color code indications.


Table 5 LED Operational Code Conditions

Symptoms	Power ON LED	Status LED	Causes and Solutions
Normal Condition	Lit Green	Extinguished (Out)	The iVIZION is set-up correctly (Stand-by).
Initializing		Blue Flashes	The iVIZION is initializing.
Downloading		Lit Red	The iVIZION is performing a download.
		Lit Green	
Near Full Detection		Lit Yellow	The iVIZION has detected a Nearly-full Cash Box Condition.
Test Mode		Lit Blue	The iVIZION status is in the "Performance Test Mode" (Stand-by).
Error		Red Flashes	The iVIZION has developed an error condition (See Table 10 Operational LED Error Codes).
Banknote Jam		Yellow Flashes	The iVIZION has a jammed Banknote (See Table 6 Jam LED Flash Error Codes).
Reject		Green Flashes	The iVIZION has an error condition (See Table 7 LED Reject Error Codes).
ICB		Blue Flashes	ICB settings need to be set for proper operation (See Table 9 LED ICB Flash Codes).
The iVIZION is not working	Green LED Extinguished (Out)	Extinguished (Out)	Power is not being supplied. [Solution] <ul style="list-style-type: none"> • Ensure all Harnesses are securely connected to their related Interfaces. • Ensure that the Power Supply working Voltage and range is appropriate. • Ensure the Interface Harnesses are not disconnected between the Transport Unit and the Frame Unit. • Ensure that the higher Interface Board Fuse (F1) is not blown. • Ensure that all Harnesses and/or Circuit Board Connectors are properly seated onto the Control CPU Board.

NOTE: Refer to the iVIZION Operation and Maintenance Manual (P/N 960-100929R) for a full description of errors and corrective actions.

Lecture Notes


DEVICE TEST

 **NOTE:** The iVIZION Unit must be in Maintenance Mode to access this selection.

1. Select "DEVICE TEST" from the BlueWaveDX display, then press the "OK" button.
2. Press the UP and DOWN Arrow keys to display a test function, then press "OK" to activate the test.
3. Press the "CLR" button to stop the test.
4. Press the "CLR" button to navigate back to the Main Menu.

ICB FUNCTION

1. Select "ICB Function" from the BlueWaveDX display, then press the "OK" button.
2. Press the UP and DOWN Arrow keys to select an ICB Setting.
3. Press "OK" to edit the ICB Setting.
4. Press the "CLR" button to navigate back to the Main Menu.

 **NOTE:** For additional information about the BlueWaveDX functions, refer to the BlueWave™DX Tool Operator Guide (P/N 960-100942R) available at www.jcmglobal.com.

Lecture Notes

BANKNOTE ACCEPTANCE TESTS

ENTERING PERFORMANCE MODE

The Banknote (Bill) Acceptance Test is performed by completing the following steps:

1. Remove power from the iVIZION Unit being tested.
2. Place the iVIZION Unit in Performance Mode by turning DIP Switch SW1 Switch 8 ON (Figure 4 a). DIP Switch SW1 is located on the Validation CPU Board found on the underside of the iVIZION Transport Assembly.
3. Apply power to the iVIZION Unit.
4. Connect the iVIZION Unit being tested to a PC USB Port (USB Male 'A' to Mini-B USB Cable).
5. Start the JCM Tool Suite Application.
6. Select the Performance Test Mode.
7. Select "Accept Test." The screen shown in Figure 5 will appear.
8. Click on "Start" to run the Acceptance Mode Test (Bill Acceptance).
9. Insert a bill (Banknote) into the iVIZION Unit's Banknote Insertion Slot.
 - If the bill was accepted and stacked, the iVIZION is operating properly.
 - If the "Bill Acceptance Test" indicates an error, refer to Table 3 on the following page to identify the error type being indicated.

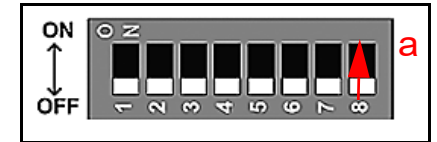


Figure 4 DIP Switch SW1

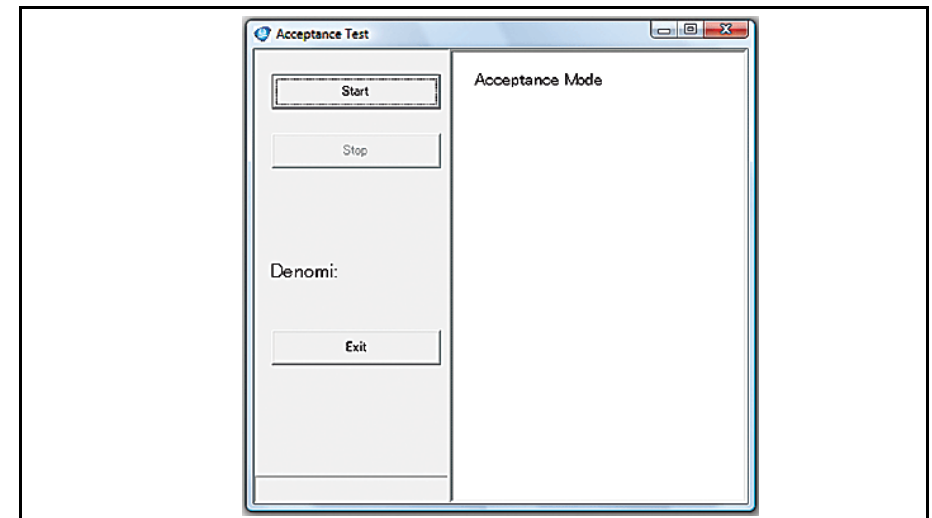


Figure 5 Typical Acceptance Test Screen

Count the number of flashes between pulses to determine the Error Code.


 **NOTE:** Refer to the Error Table on pages 20-23 to verify the Flashing LED Color, the Error Code and Causes and Solutions.

Table 3 Acceptance Test Error Indications

Note Condition	LED Color	Error Condition
Banknote was Stacked	None	The Bill was accepted, and the iVIZION is operating properly.
Banknote was not accepted	Green	The GREEN LED will blink a "Reject Code" set of flashes defined in the Reject Errors Table located in the iVIZION Maintenance Manual or in Table 7 of this Overview.
A mechanical failure occurred	Red	The RED LED will blink an "Operational Error Code" set of flashes defined in the Operational Errors Table located in the iVIZION Maintenance Manual or in Table 10 of this Overview.
A Bill jam occurred	Yellow	The YELLOW LED will blink a "Jam Error Code" set of flashes defined in the Bill Jam Error Table located in the iVIZION Maintenance Manual or in Table 6 of this Overview.
An Intelligent Cash Box (ICB) Error occurred	Blue	The BLUE LED will blink an "ICB Error Code" set of flashes defined in the ICB Error Code Table located in the iVIZION Maintenance Manual or in Table 9 of this Overview.

Lecture Notes

STATISTICS

1. Select "STATISTICS" from the BlueWaveDX display, then press the "OK" button.
2. Press the UP and DOWN Arrow keys to scroll through the statistics.
3. Press the "CLR" button to navigate back to the Main Menu.

ENABLED DENOMINATIONS

1. Select "ENABLE DENOMI." from the BlueWaveDX display, then press the "OK" button.
2. Press the UP and DOWN Arrow keys to display the Enabled Denominations.
3. Press the "CLR" button to navigate back to the Main Menu.

ERROR MESSAGE

1. Select "ERROR MESSAGE" from the BlueWaveDX display, then press the "OK" button.
2. The device status will be displayed ("No Errors" or "Errors").
3. Press the "CLR" button to navigate back to the Main Menu.

VERSION CHECK

1. Select "VERSION CHECK" from the BlueWaveDX display, then press the "OK" button.
2. The Firmware Version protocol information will scroll across the screen, with the Firmware Version displayed on the second line. The iVIZION Serial Number will be displayed on the bottom line.
3. Press the "CLR" button to navigate back to the Main Menu.

MAINTENANCE

1. Select "MAINTENANCE" from the BlueWaveDX display, then press the "OK" button.
2. The device status will be displayed ("Not Required" or "Required").
3. Press the "CLR" button to navigate back to the Main Menu.

ACCEPTANCE LOG

1. Select "ACCEPTANCE LOG" from the BlueWaveDX display, then press the "OK" button.
2. Press the UP and DOWN Arrow keys to display "Banknote Acceptance", "Ticket Acceptance" and "Banknote Denomination Acceptance".
3. Press the "CLR" button to navigate back to the Main Menu.

iVIZION Utility Tool

The iVIZION Utility Tool is used to view the CIS Image of the last Banknote or Ticket accepted, and also to Enable/Disable the ICB function.

To open the Utility Tool proceed as follows:

1. Connect the iVIZION to the PC using a USB Male 'A' to Mini-B USB cable.
2. Open the JCM Tool Suite.
3. Use the "Service Mode" drop-down Menu to Click-select "Utility" from the selections available (Figure 13).

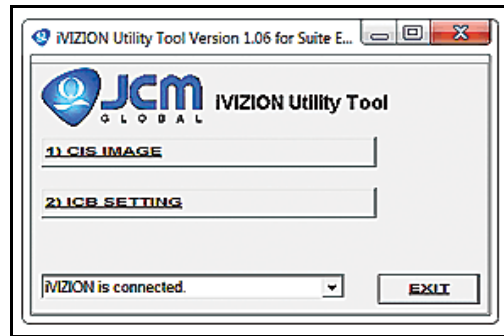


Figure 13 iVIZION Utility Tool Screen

CIS IMAGE

Select "1) CIS IMAGE" to read and display the image of the last Banknote or Ticket accepted.

ICB SETTING

Select "2) ICB SETTING" to Enable/Disable the ICB function on an iVIZION Unit, set the "M/C #" (Asset Number), or disable the ICB RFID Cash Box Module.


BlueWave™ DX Tool Functions

To use the BlueWaveDX Tool with the iVIZION Unit, proceed as follows:

1. Connect a USB cable between the BlueWaveDX Tool USB connector Type A and the iVIZION USB Mini-B Port.
2. Turn the BlueWaveDX Tool Power ON.
The Firmware Update screen will be displayed.

FIRMWARE UPDATE

1. Press the "OK" button to select the Firmware Update function.

 **NOTE:** The BlueWaveDX will identify the iVIZION and display the appropriate Firmware versions.

2. Press the UP and DOWN arrow keys to select the desired Firmware version.
3. Press the "OK" button to start the Firmware download.
The "DOWNLOAD COMPLETE" display appears when downloading is complete.
4. Press the "CLR" button to navigate back to the Main Menu.

PERFORMANCE TESTING PROCEDURES

JCM TOOL SUITE STANDARD EDITION

Performance Testing

The JCM Tool Suite will be used to complete functional and sensor testing of an iVIZION Unit. Figure 6 illustrates a typical connected iVIZION JCM Tool Suite Screen with the "Service Mode" drop-down Menu active. To begin a Performance Test proceed as follows:

1. Select "**Performance Test**" from the drop-down Menu (Figure 6 a).
The "**Test Item select**" Screen shown in Figure 7 will appear.
2. From the "**Test Item select**" Screen, choose the iVIZION functional test desired.

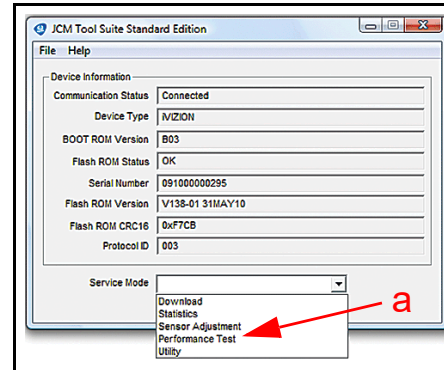


Figure 6 Typical Connected iVIZION JCM Tool Suite Screen

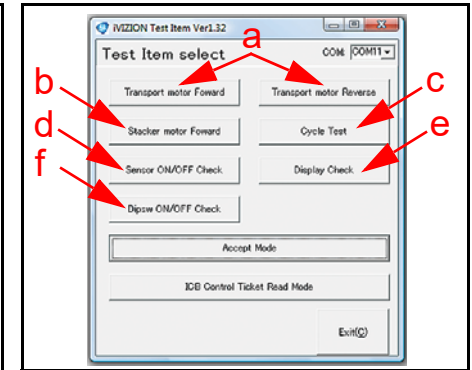


Figure 7 Typical iVIZION Test Item Select Screen

Lecture Notes

AVAILABLE TESTS

Figure 7 illustrates a typical iVIZION Test Screen.

Transport motor Forward / Transport motor Reverse

The following two (2) tests runs the Transport Motor in a forward or reverse direction (See Figure 7 a).

Figure 8 illustrates the typical Motor Test Screen that appears when the "Transport motor Forward" test Screen Button is selected.

- A **flashing Yellow** LED indicates a correct speed
- A **constantly lit Yellow** LED indicates an incorrect speed.

Stacker motor Forward

This test cycles the Stacker Motor (See Figure 7 b).

- A **flashing Yellow** LED indicates a correct Motor speed occurred.
- A **constantly lit Yellow** LED indicates an incorrect Stacker Motor speed occurring.

Cycle Test

This test performs a full transport/stacking cycle of the iVIZION Unit (See Figure 7 c).

- Normal operation is indicated when the Test LED remains **OFF**.
- An error condition is indicated by a **flashing Red** LED. If this condition occurs, refer to the **Operational Errors Table** to resolve the error (See Table 10 on Page 23).

Sensor ON/OFF Check

This test performs a functional test of each iVIZION Unit Sensor (See Figure 7 d and Figure 9).

- Block each Sensor to test it. The Display with show "ON" or "OFF" indicating the functional status of the specific Sensor blocked.

Display Check

This test cycles the LED Display on the right side of the iVIZION Unit (See Figure 7 e).

- The LEDs will continuously cycle through **Red, Green & Blue** colors.

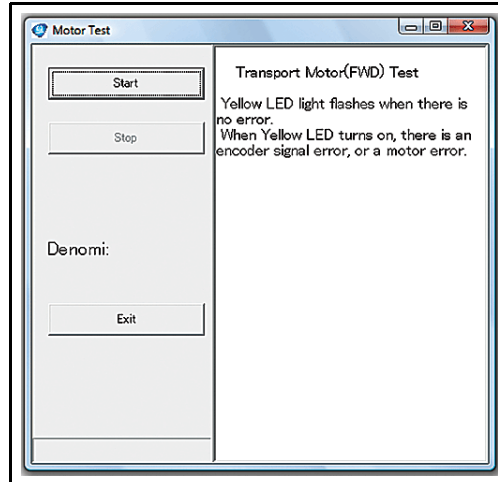


Figure 8 Typical iVIZION Transport Motor Test Screen

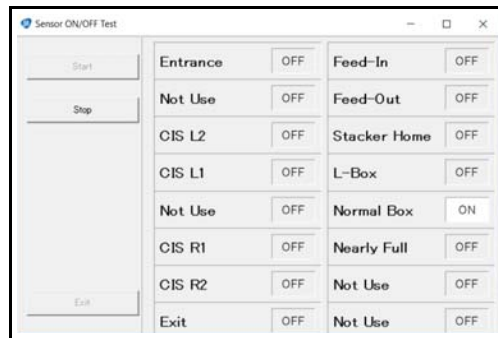



Figure 9 iVIZION Sensor ON/OFF Test Screen

CALIBRATION

WHEN TO CALIBRATE

Sensors in the iVIZION Unit are self-calibrating. However, JCM recommends that the iVIZION Sensors be calibrated as part of an Annual Preventive Maintenance Procedure.

 **NOTE:** If the Processor Board or any of the Sensors require replacement, the iVIZION will require re-calibration.

CALIBRATING THE iVIZION UNIT

To calibrate an iVIZION Unit, proceed as follows:

1. Place the iVIZION into Maintenance Mode (DIP Switch No. 8 ON).
2. Apply power to the iVIZION Unit.
3. Connect the iVIZION to the PC using a USB Male 'A' to Mini-B USB Cable.
4. Open the JCM Tool Suite Application.
5. Click the "Service Mode" drop-down Menu, then select "Sensor Adjustment" (Figure 12 a).
6. On the iVIZION Calibration Application, click on the "Start" Screen Button, and follow the screen instructions to complete the calibration process.

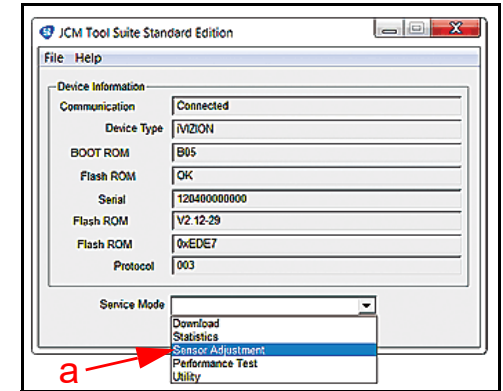




Figure 12 JCM Tool Suite iVIZION Calibration Screen

 **NOTE:** Two Calibration Reference Papers exist for use with an iVIZION Unit. The KS-072 Paper is for use with the iVIZION Head without Bill Guides installed; The KS-089 Paper is required if the iVIZION Head Bill Guides are installed; but will also work on Units without Bill Guides.

Refer to Section 6 of the iVIZION Operation and Maintenance Manual (JCM P/N 960-100929R) for details concerning additional calibration procedures.

 **NOTE:** If errors occur during calibration, refer to Table 11 on Page 23 for Calibration Error Codes.

SOFTWARE UPDATING

JCM TOOL SUITE APPLICATION

The JCM Tool Suite Application is used to update software in an iVIZION Unit.

To update software in an iVIZION Unit, proceed as follows:

1. Connect a USB Cable containing a Mini-B USB connector at one end to its mating receptacle located on the left front side of the iVIZION Unit being updated.
2. Then connect the opposite end containing a Standard USB connector to an open, unused USB Port on the PC containing the JCM Tool Suite Application.
3. Open the JCM Tool Suite Application.
4. Click on "Download" in the "Service Mode" drop-down Menu.

The screen shown in Figure 11 will appear.

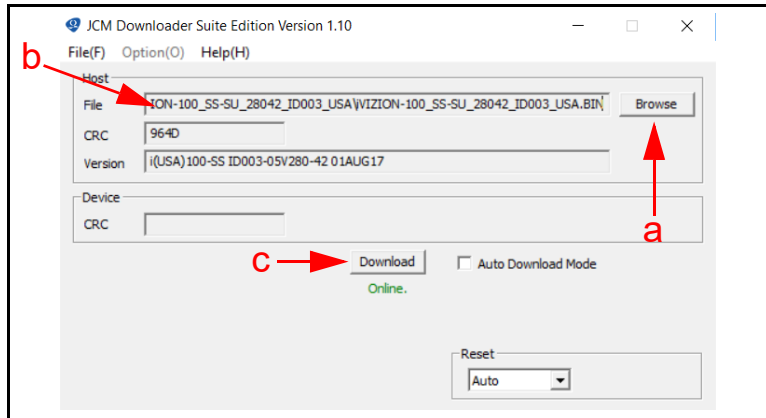


Figure 11 JCM Downloader Suite Edition

5. Click the "Browse" button (Figure 11 a) to locate the download file desired. Click on the file to be downloaded so it appears in the "File" field (Figure 11 b), then click on the "Download" Screen Button (Figure 11 c).

Lecture Notes

Dipsw ON/OFF Check

This selection tests the functional operation of each DIP Switch located on the Transport Assembly's 8-position DIP Switch Block (See Figure 7 f).

1. Turn all DIP Switches ON to perform the DIP Switch Test.
All DIP Switches should indicate "ON".
2. Remove the Transport.
3. Change the settings for DIP Switches 1 through 7 to "OFF".
Leave DIP Switch 8 "ON".
4. Restore the Transport.
5. Re-run the test.
DIP Switches 1 through 7 should indicate "OFF".

Lecture Notes

CLEANING AND PREVENTIVE MAINTENANCE

PREVENTIVE MAINTENANCE

Proper cleaning is critical to maintaining a high acceptance rate on an iVIZION Unit.

Clean all Sensors shown in Figure 10 using a dry, lint free cloth ONLY. The identity of each Sensor is listed in Table 4 on page 13 of this document.

NOTE: Do not use Alcohol, Solvents, Citrus Based Cleaners or Cleaning Cards on an iVIZION Unit. Use of these compounds will damage the Unit's Lens Surfaces. DO NOT use JCM Cleaning Cards intended for use with the UBA or WBA Units either, the cleaning solution on them is not compatible with the iVIZION Unit's Sensors.

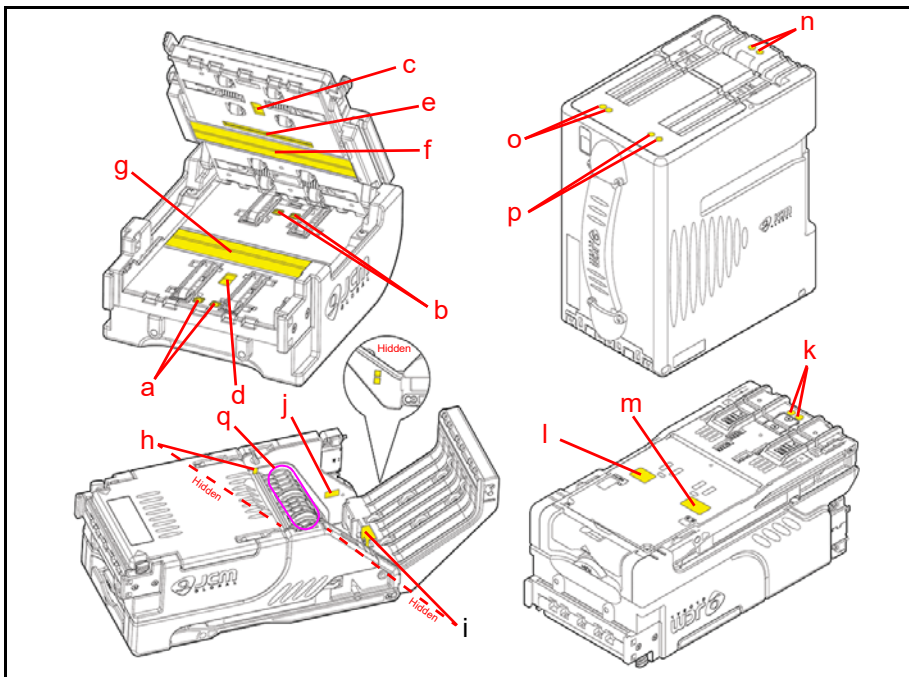


Figure 10 iVIZION Sensor Locations

Lecture Notes

SENSOR IDENTIFICATION

Table 4 identifies the purpose of each Sensor located in Figure 10 on page 12 of this document.

Table 4 iVIZION Sensor Cleaning Location Types

Sym.	Sensor	Cleaning Method
a	Acceptor Unit	Wipe area clean using a lint-free cloth such as a Micro-Fiber Cloth, or blow clean using Compressed Air.
b		
c		
d		
e		
f		
g	Transport Unit	Wipe area clean using a lint-free cloth such as a Micro-Fiber Cloth, or blow clean using Compressed Air.
h		
i		
j		
k		
l		
m	Cash Box	Wipe area clean using a lint-free cloth such as a Micro-Fiber Cloth, or blow clean using Compressed Air.
n		
o		
p	Anti-Stringing Mechanism	Wipe area clean using a lint-free cloth such as a Micro-Fiber Cloth, or blow clean using Compressed Air.
q		

NOTE: Refer to the iVIZION Preventive Maintenance Guide (P/N 960-100932R) for more information. The Guide is available at www.jcmglobal.com.

Lecture Notes
