Vidar
Digitizer Tools Version 2.0

Digitizer Diagnostics
Firmware Download
Passcode Editor

VIDAR Part Number 18210-001 Rev C

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- Installation and modifications are made by qualified personnel,
- The equipment is used in accordance with the instructions in this manual.
- No other software or hardware other than those sanctioned by VIDAR or distributed by VIDAR with Clinical Express are used on the Clinical Express workstation.

Contents

About this manual

This manual provides step-by-step instructions for installing and using these setup programs for Vidar film digitizers using **Windows XP, and Windows 7 (32 and 64 Bit)**:

- **Digitizer Diagnostics** comprehensively tests an attached digitizer.

- **Firmware Download** displays an attached digitizer's current firmware versions and assists in updating firmware.

- **Passcode Editor** enables a new passcode to be assigned to a digitizer.

Digitizer Diagnostics

Digitizer Diagnostics performs comprehensive testing of an attached film digitizer. When testing is complete, you can send the results to Vidar Technical Support for analysis.

Installing Digitizer Diagnostics

1. Download *DigitizerDiagnostic.exe* from the Vidar Web site. www.filmdigitizer.com . Browse to the Support page and then browse to the Troubleshooting page. Save the file in a convenient location on the local computer.

2. Double-click *DigitizerDiagnostic.exe* to launch the installation. This process can take up to 30 seconds before you see any indication that the installation has started.

3. Follow the instructions provided by the installation shield. It may be necessary to install other prerequisite programs as part of the installation. These will automatically be installed as part of the installation process.

4. Follow the on screen instructions to complete the installation.

Using Digitizer Diagnostics

Note: The film digitizer must be powered on for at least 30 minutes before running diagnostic tests.

1. From the Desktop double click **> Digitizer Diagnostics**.

2. You will see the warning below. Click **OK** to continue.
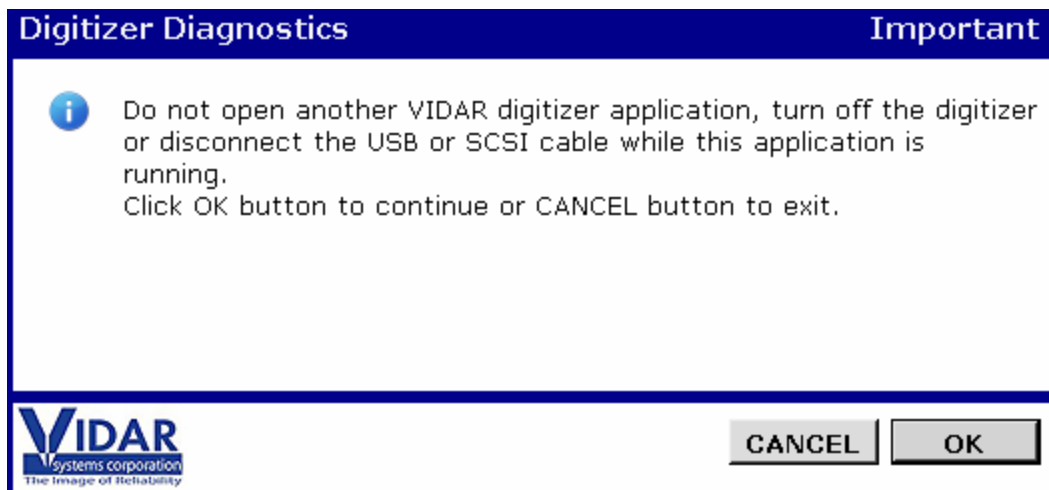
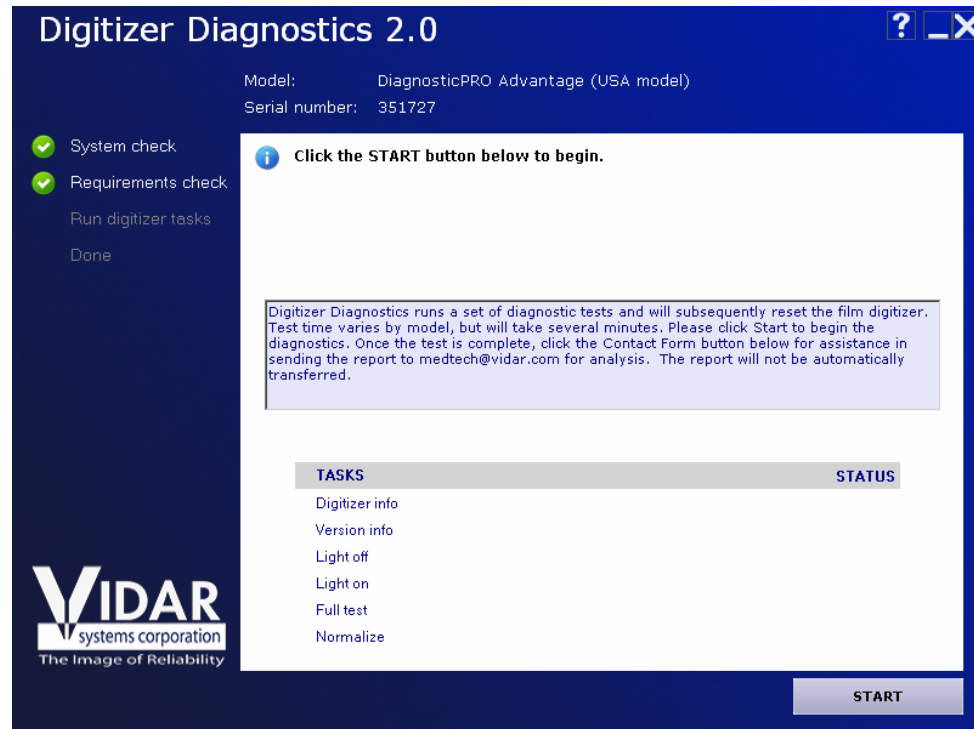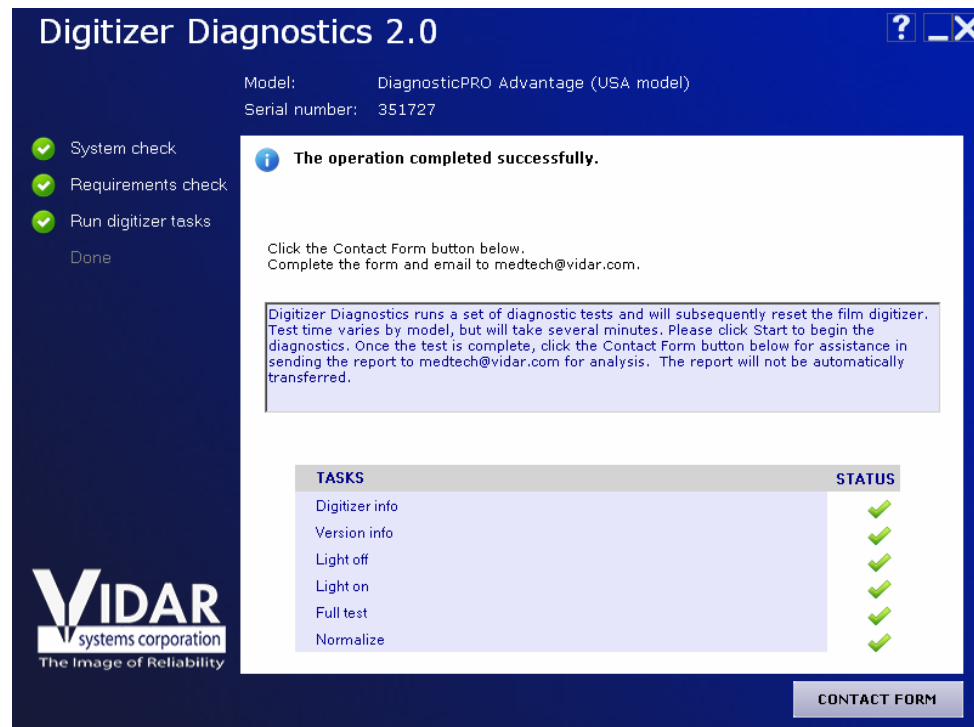3. Wait while the application loads.

Note: The program will notify you if it cannot communicate with the digitizer. In this case, go to the "Troubleshooting" chapter.

5. Click the **Start** button in the lower right corner to start the diagnostics.

6. Wait while the diagnostic tests are performed.

7. When the tests are complete, click the **Contact Form** button in the lower right corner.

8. Fill in the fields in the **Contact** form, then click **Next >>**.

Digitizer Diagnostics generates a report of its findings. The report is located in the *My Documents\Film Digitizer\Report* folder. (A typical report is reproduced in the Appendix.)

9. Send the diagnostic report to Vidar using one of the following methods:

   ■ If Digitizer Diagnostics detects e-mail capability on the computer, a new message window automatically appears with the diagnostic report attached. Send the message.
       or

   ■ If Digitizer Diagnostics does not detect e-mail capability on the computer, you can copy the report file to a computer that has e-mail capability, then send the report as an attachment to medtech@vidar.com.
       or

   ■ Print the report and fax it to 1.703.471.7665.

10. *To reset the digitizer:* Click **OK** in the dialog shown below. Digitizer Diagnostics will automatically close when the reset is complete. or
To exit the application without resetting the digitizer: Click **Cancel**.
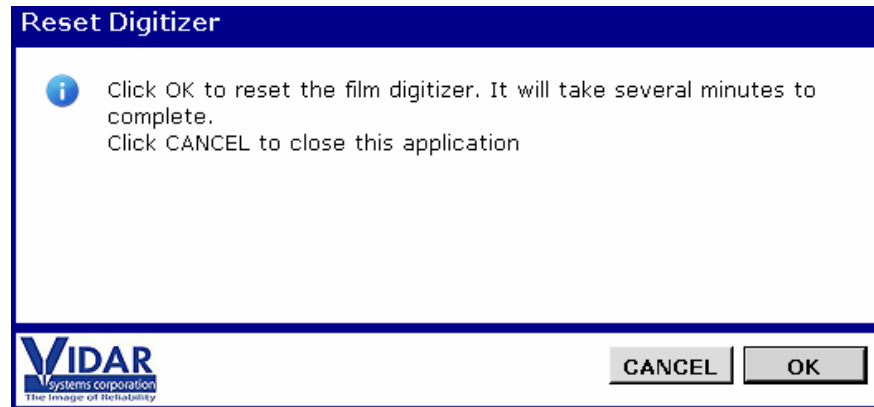
> **Note:** You must reset the film digitizer before attempting to digitize films.
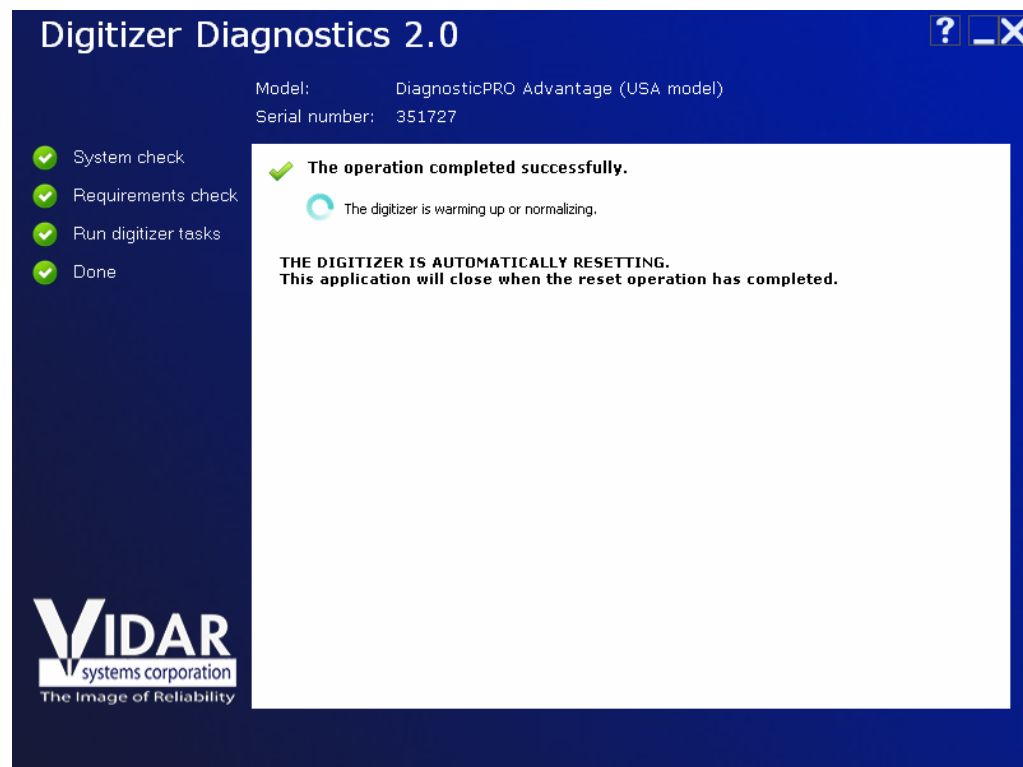
Firmware Download

Firmware Download determines a film digitizers current firmware versions, and enables you to update firmware if newer versions are available.

NOTE: This should never run unless instructed to do so by a VIDAR authorized agent.

Installing Firmware Download

1. Download *FirmwareDownload.exe* from the Vidar FTP or PartnerNet sites. Save the file in a convenient location on the local computer.

2. Double-click *FirmwareDownload.exe* to launch the installation. This process can take up to 30 seconds before you see any indication that the installation has started.

3. Follow the instructions provided by the installation shield. It may be necessary to install other prerequisite programs as part of the installation. These will automatically be installed as part of the installation process.

4. Follow the on screen instructions to complete the installation.

Using Firmware Download

1. From the Desktop double click on **> Firmware Download**.

2. You will see the warning below. Click **OK** to continue.
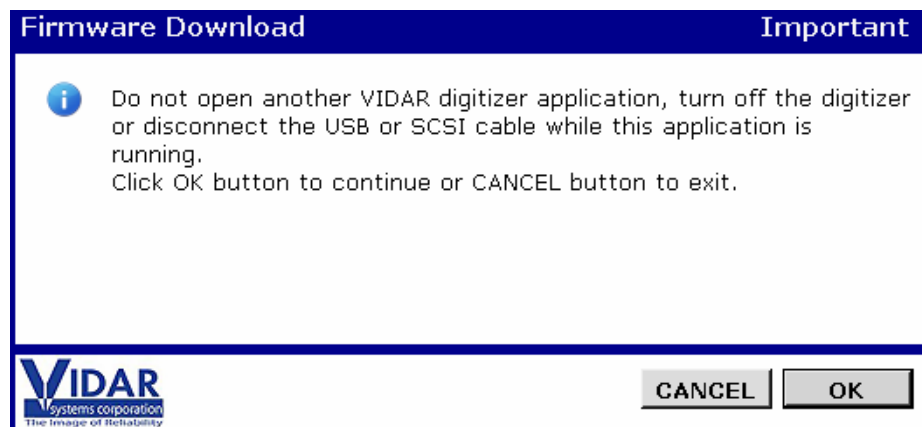
3. Wait while the application loads.

Note: The program will notify you if it cannot communicate with the digitizer. In this case, go to the "Troubleshooting" chapter.

4. Firmware Download first reads and displays the digitizer's firmware versions.

■ If the **Status** column shows "valid" for all firmware versions, then no further action is required. Exit Firmware Download.

■ If firmware updates recommended:
   a. Open the drop-down list and select the desired firmware package to install.
   b. Click the **Start** button in the lower right corner.
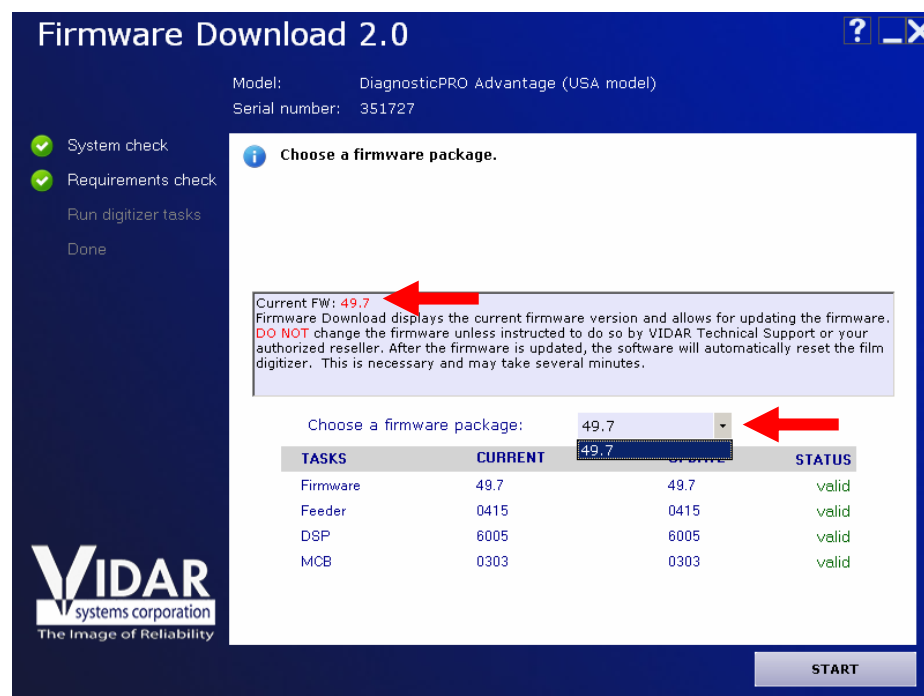
5. Wait while the firmware is updated.

> **CAUTION:** Do not turn off the digitizer or computer during the firmware updating process.
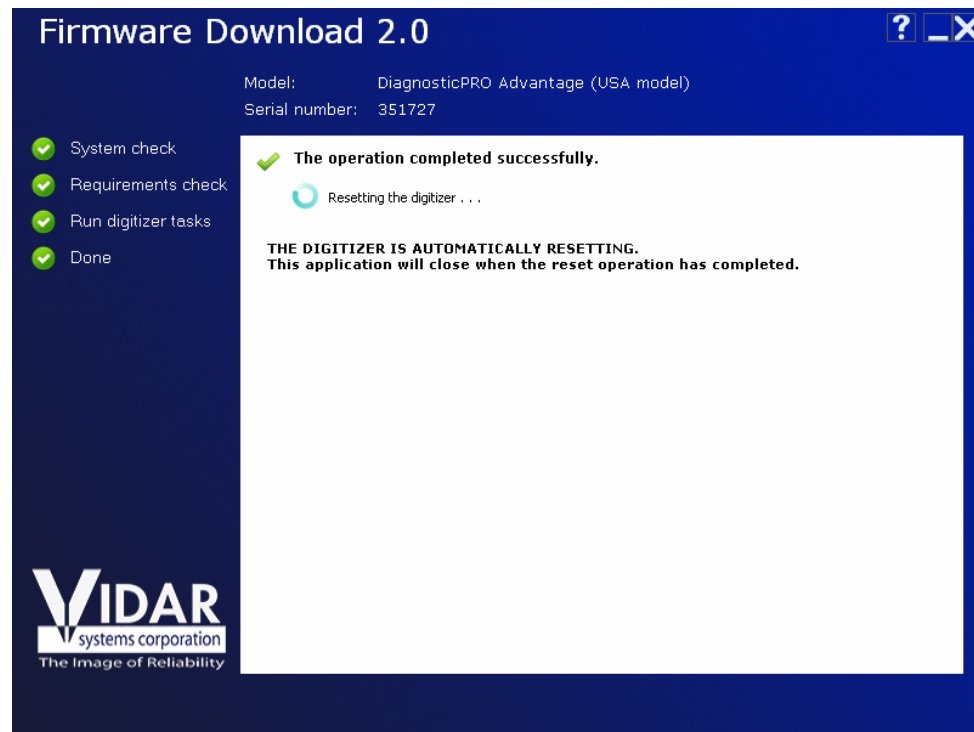
6. When firmware updating is complete, the digitizer will be automatically reset. When resetting is complete, Firmware Download will automatically close.

Passcode Editor

Passcode Editor enables you to assign a new passcode to a film digitizer.

NOTE: This should never run unless instructed to do so by a VIDAR authorized agent.

Installing Passcode Editor

1. Download *PasscodeEditor.exe* from the Vidar FTP or PartnerNet sites. Save the file in a convenient location on the local computer.

2. Double-click *PasscodeEditor.exe* to launch the installation. This process can take up to 30 seconds before you see any indication that the installation has started.

3. Follow the instructions provided by the installation shield. It may be necessary to install other prerequisite programs as part of the installation. These will automatically be installed as part of the installation process.

4. Follow the onscreen instructions to complete the installation

Using Passcode Editor

1. **Start > All Programs > Vidar > Passcode Editor**.

2. You will see the warning below. Click **OK** to continue.
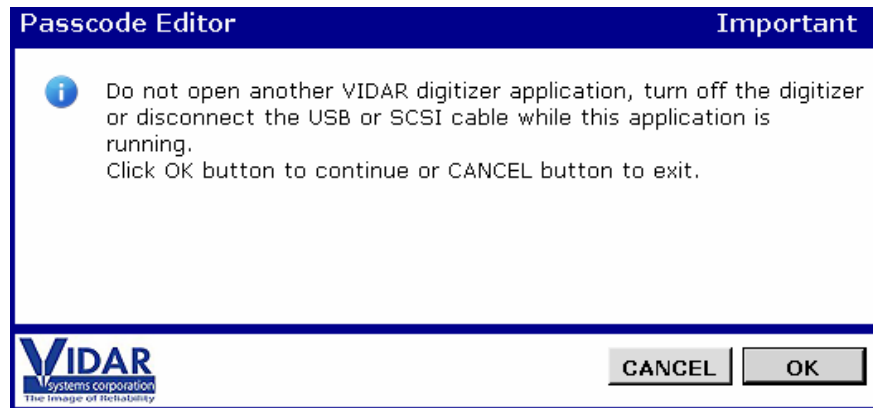
3. Wait while the application loads.

> **Note:** The program will notify you if it cannot communicate with the digitizer. In this case, go to the "Troubleshooting" chapter.

4. In the **New password** field, enter the new password.
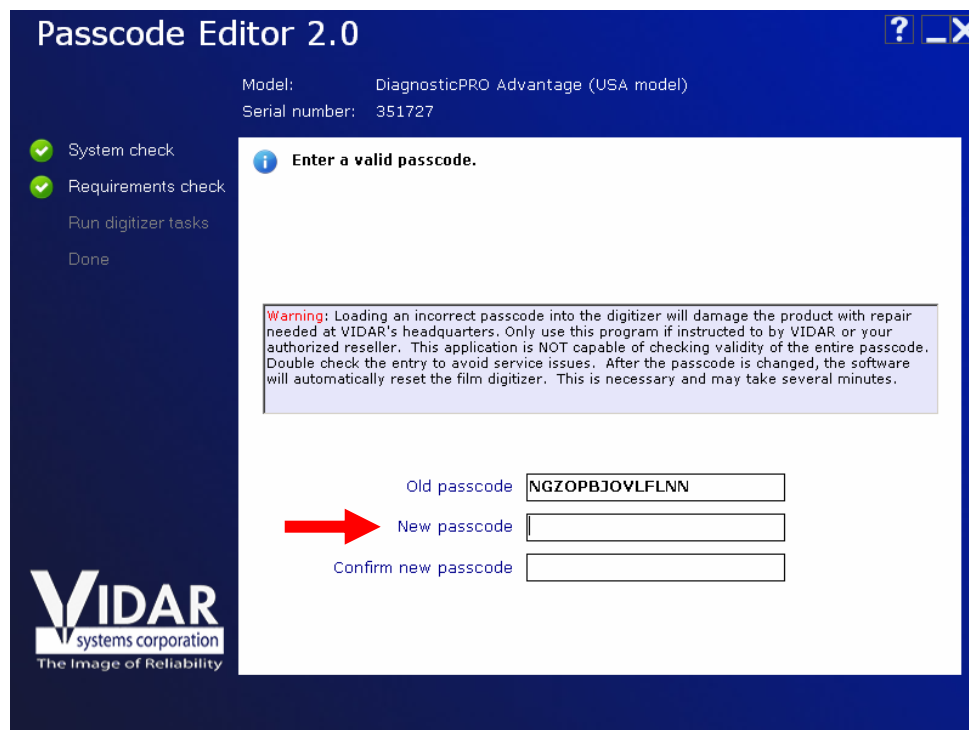
The word "invalid" will appear if you enter an unacceptable passcode.

Old password MKLIZAMBVLFLBN

New password RAB901BNTW0291   invalid ←

Confirm new password [   ]

5. Enter the new passcode again in the **Confirm new password** field. If the contents of the **Confirm new password** field match the contents of the **New password** field, the word "matched" will appear.

Passcode Editor 2.0

Model: DiagnosticPRO Advantage (USA model)
Serial number: 351727

✔ System check
✔ Requirements check
Run digitizer tasks
Done

ⓘ **Click the UPDATE button below to continue.**

Warning: Loading an incorrect passcode into the digitizer will damage the product with repair needed at VIDAR's headquarters. Only use this program if instructed to by VIDAR or your authorized reseller. This application is NOT capable of checking validity of the entire passcode. Double check the entry to avoid service issues. After the passcode is changed, the software will automatically reset the film digitizer. This is necessary and may take several minutes.

Old passcode   NGZOPBJOVLFLNN

New passcode   NGZOPBJOVLFLNN   valid

Confirm new passcode NGZOPBJOVLFLNN   matched

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The Image of Reliability

UPDATE

The word "unmatched" will appear if the contents of the **Confirm new password** field do not exactly match the contents of the **New password** field. If this happens, correct the passcode confirmation.

Old password MKLIZAMBVLFLBN

New password MKLIZAMBVLFLBN   valid

Confirm new password MKLIZAMBVLXYZA   unmatch ←

6. Click the **Update** button in the lower right corner. Wait while the passcode is updated.
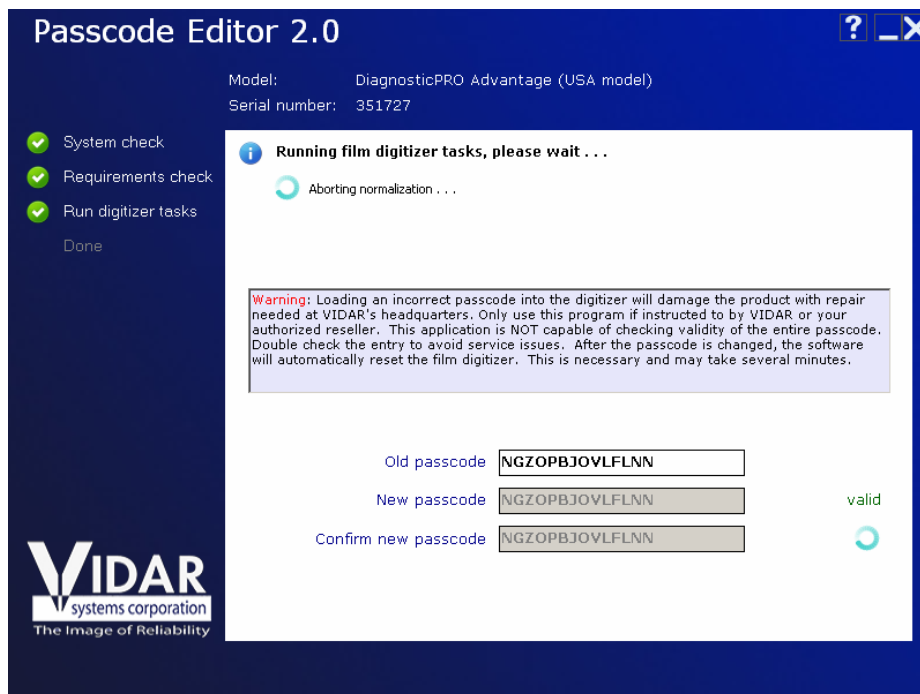
7. When passcode updating is complete, the digitizer will be automatically reset. When resetting is complete, Passcode Editor will automatically close.
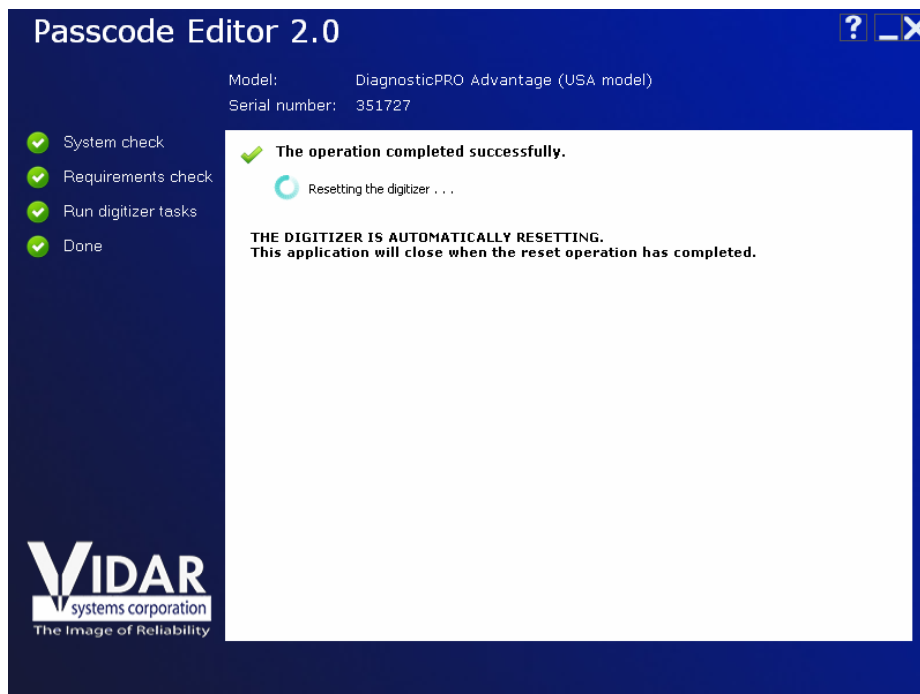
Troubleshooting

Digitizer Diagnostics, Firmware Download and Passcode Editor have built-in problem detection and troubleshooting help. After launching, each program first determines whether it can communicate with the digitizer. If communication is not possible, the program provides a checklist to help you identify and correct problems. As you complete each step, click its checkbox.

After each step, the program again attempts to communicate with the digitizer. If communication is established, you will be able to start normal program operations. If communication is not established, the next step in the troubleshooting process will be displayed.

1. Make sure the digitizer is connected to the computer with the appropriate USB or SCSI cable.
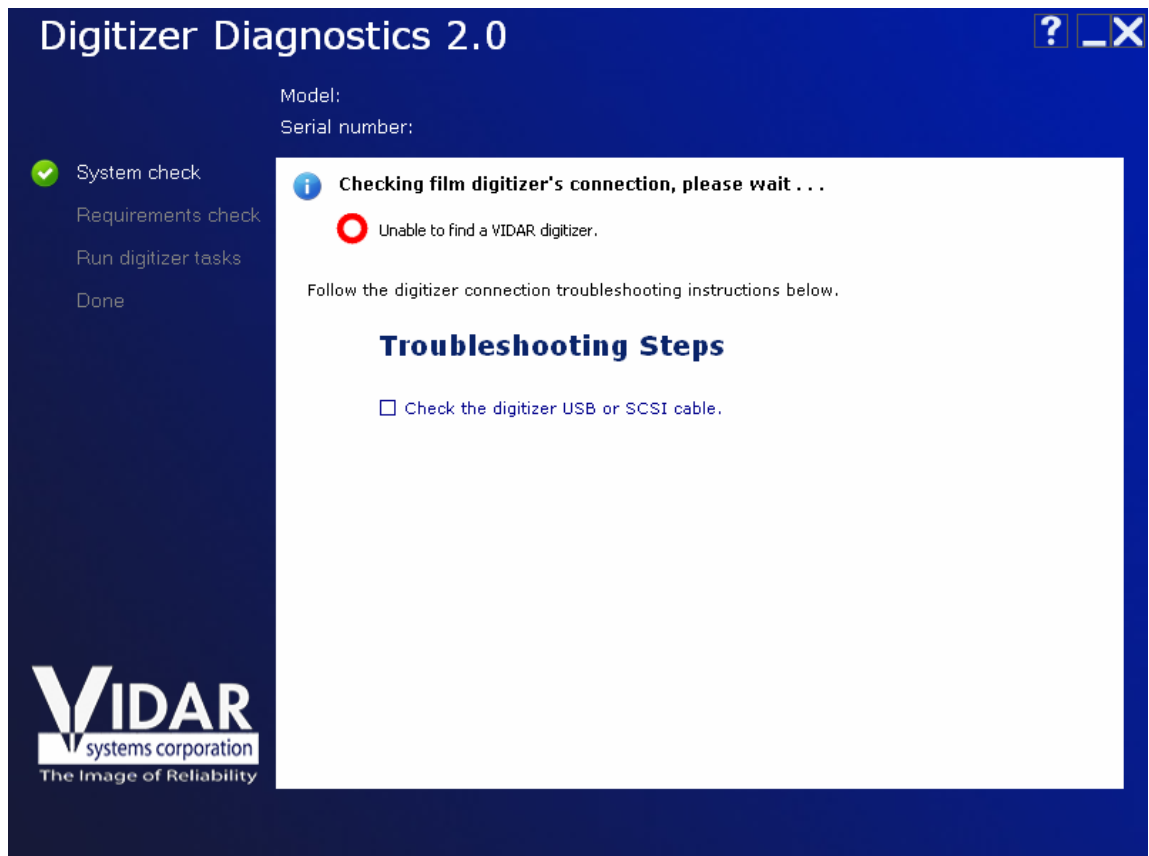
2. Turn off the digitizer, then turn it on.
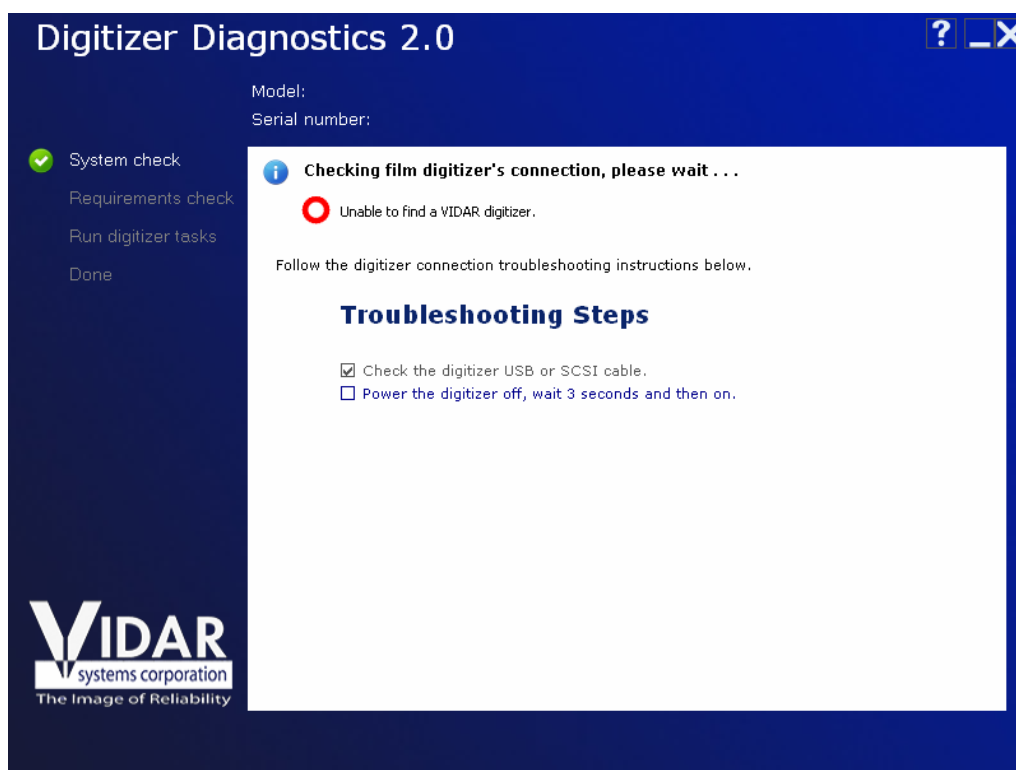
3.   Wait three seconds.
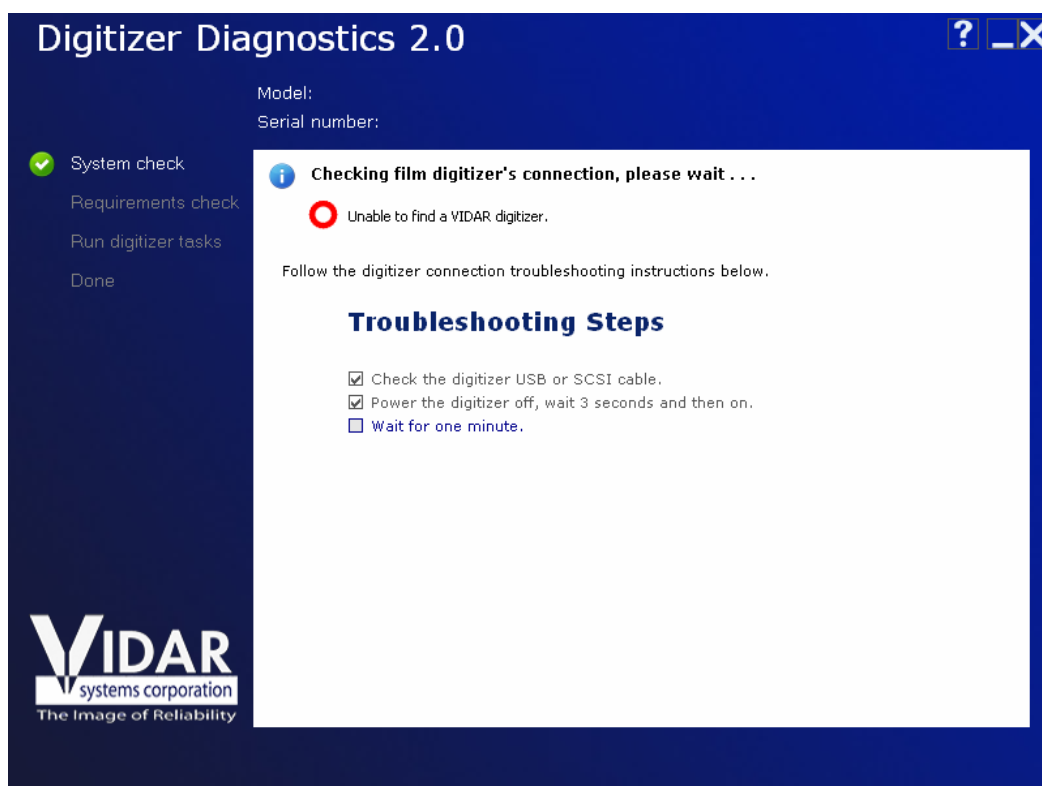
4. Scan for hardware changes:

   a. Right-click **My Computer**, then click **Manage** in the pop-up menu.

   b. In the **Computer Management** window's left tree, click **Device Manager**.

   c. In the right tree, click the computer's name (at the top of the tree).

   d. In the toolbar, click **Scan for hardware changes** button.
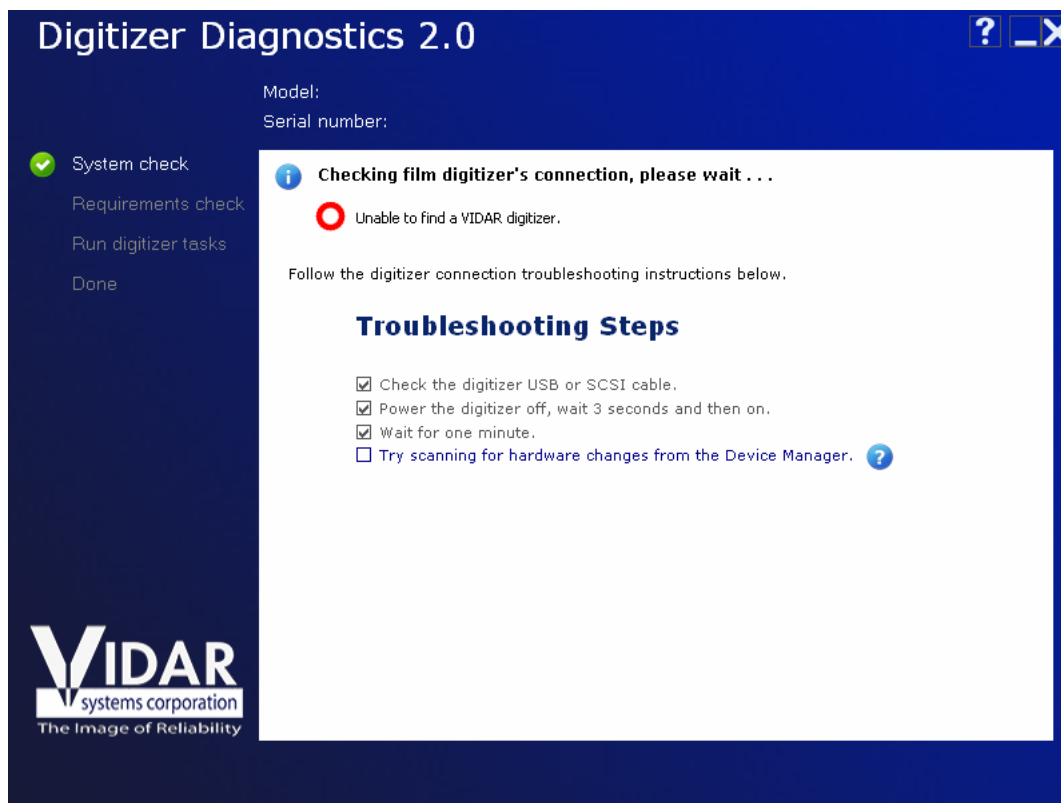
4. In the **Computer Management** window, look for **Vidar Film Digitizer**, then click the corresponding checkbox in Digitizer Diagnostics.

5. To refresh this screen click on the icon the **Red Arrow** shown below.

6. You will find the digitizer listed either under Imaging Devices or Jungo depending on your operating system.
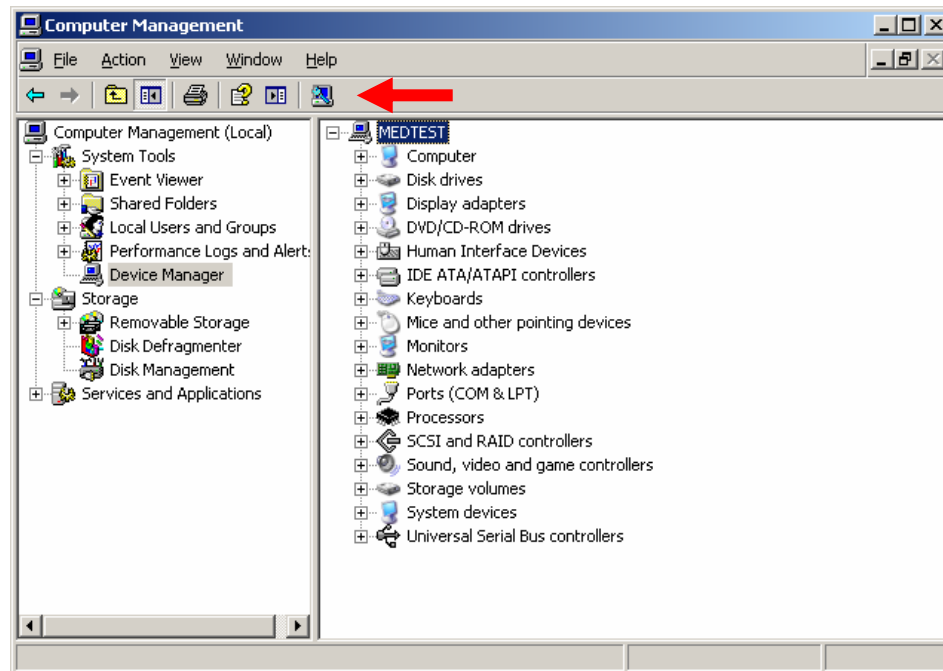
7. If you reach this point and do not find the Digitizer, no further troubleshooting suggestions are available. You can:

    ■ Cancel the operation and Restart both the computer and digitizer (recommended).

    ■ Click the **Contact form** button in the lower right corner to send a report to Vidar Technical Support. Continue at step 7 in the "Digitizer Diagnostics" chapter of this manual. See Screen Shots below

Adobe Acrobat Professional - [340016 - 1.pdf]

File   Edit   View   Document   Comments   Tools   Advanced   Window   Help

Search   Create PDF   Comment & Markup   Send for Review   Secure   Sign   Forms

Select   150%   Help

Digitizer SN: 340016

Film Digitizer Report - 3/1/2011 3:34:24 PM

NOTE: Please forward this report to VIDAR's Technical Support Group using one of the following options.
1. Email the report to medtech@vidar.com
2. Fax the report to the attention of Medtech at 703-471-7665.

Attn: Medical Technical Support
365 Herndon Parkway
Herndon, VA 20170
+1.703.471.7070 (Phone)
+1.703.471.7665 (Fax)
MedTech@vidar.com

Digitizer Diagnostics 2.0   ? _ X

Model:
Serial number:

System check

Requirements check

Run digitizer tasks

Done

Checking film digitizer's connection, please wait . . .

Unable to find a VIDAR digitizer.

Exhausted digitizer connection troubleshooting options.

Troubleshooting Steps

☑ Check the digitizer USB or SCSI cable.
☑ Power the digitizer off, wait 3 seconds and then on.
☑ Wait for one minute.
☑ Try scanning for hardware changes from the Device Manager.

Do you see a VIDAR Film Digitizer ?
☐ YES
☑ NO   Try options 1 or 2 below.

1. Cycle power on the computer and digitizer and try again (recommended).
2. Click contact form button above to fill out contact form.
Send the report to MedTech for assistance.

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CONTACT FORM

Film Digitizer Information
Hardware driver config
Driver version   5, 5, 2, 0
Toolkit version
Model name
Password
Limited use device
Maximum bit depth
Maximum resolution
Hardware version
Kernel
Firmware version
DSP version
MCB version
Lamp type
Lamp module
Ballast time
Feeder sn
Feeder version
Camera board

Film Digitizer USB Information

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Appendix

This appendix reproduces a typical report generated by Digitizer Diagnostics.

Reports are initially created in the *My Documents\Film Digitizer\Report* folder. You can move or copy them to any other location. Note that if an email application is detected on the host pc the program will attempt to generate an email automatically for the report to be emailed to VIDAR. You do not have to use this feature and can cancel it if you desire.

Report names have the following syntax:

serial number – the number of times the report was run .pdf

For example, a report created for digitizer serial number 350282 would have this name:

350282 - 1.pdf

If additional reports are run the – number will change:

For example

350282 – 2.pdf
350282 – 3.pdr etc.

See example report below on the next few pages.

Digitizer SN: 351727

Film Digitizer Report - 3/2/2011 8:38:39 AM

NOTE: Please forward this report to VIDAR's Technical Support Group using one of the following options.
1. Email the report to medtech@vidar.com
2. Fax the report to the attention of Medtech at 703-471-7665.

Attn: Medical Technical Support
365 Herndon Parkway
Herndon, VA 20170
+1.703.471.7070 (Phone)
+1.703.471.7665 (Fax)
MedTech@vidar.com
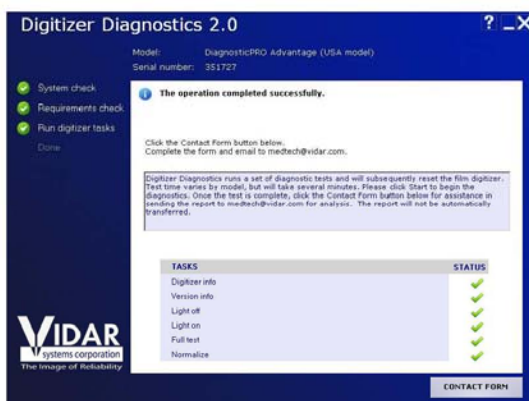
Film Digitizer Information

Hardware driver config	USB STI
Driver version	5, 5, 2, 0
Toolkit version	5.1.51.0
Model name	DiagnosticPRO Advantage (USA model)
Password	NGZOPBJOVLFLNN
Limited use device	False
Maximum bit depth	12
Maximum resolution	570
Hardware version	112
Kernel	9300
Firmware version	49.7
DSP version	6005
MCB version	0303
Lamp type	LED
Lamp module	White LED, full width, no rollers
Ballast time	Month: 2, Day: 8, Hour: 1
Feeder sn	193451
Feeder version	0415
Camera board	N1

Film Digitizer USB Information

Device description	Not found
Device bus speed	N/A

Contact Information

Contact name	John Customer
Company name	
Address	
Phone	703-471-7070
Email	john.customer@hospital.com

Film Digitizer Messages

Main task	Digitizer Diagnostics
Main message	The operation completed successfully.
Status	Completed

Operating System

OS name	Windows XP Service Pack 3 (Build 2600) 32-bit

COMMENTS:

SUMMARY:
DIGITIZER INFO :Digitizer Info Passed
VERSION INFO :Version Information Passed
LIGHT OFF : 86 65 41
LIGHT ON :65535 65535 65535
FULL TEST :Full Test Passed
NORMALIZE :Normalize Passed

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Digitizer Info
0000000002 Feeder Type (Can not be set)
0000000000 No error - Error String
0000000000 - Mode
0000000000 - No Vacuum
0000000000 - Lost Vacuum
0000000000 - Can't Home Cups
0000000000 - Slow Feed Error
0000000641 - Stage 1 Count
0000000000 - Stage 2 Count
0000000000 - Stage 3 Count
0000000000 - Vacuum Not Lost
193451 - Serial Number (Feeder)
0000000086 - Life Time Scan
0000000086 - Scan count1
0000000086 - Scan count2
0000000008 - Bad DSP Boots
000 - XML Support
0000000033 Ballast Type (Can not be set)
001 - Ballast (0, 1)
140 - Ballast Level (0-255)
This is a space filling diagnostic and should not be run.
This is a space filling diagnostic and should not be run.
This is a space filling diagnostic and should not be run.
0000098010 Ballast Time (Can not be set)
0000000033 Ballast Type (Can not be set)
0000000843 Delayed Start (Can not be set)
0000000247 Power Cycle (Can not be set)
0000000030 Power Cycle Failed (Can not be set)
0000000254 NVR Version (Can not be set)
0000000100 Bank 0 % (Can not be set)
0000000090 Bank 1 % (Can not be set)
0000000090 Bank 2 % (Can not be set)
0000000090 Bank 3 % (Can not be set)
0000034400 Strobe Count (Can not be set)
Errors since power up:
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
Life Time Errors:
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
4 Error: Lamp Start
1 Error: Lamp Type
6 Error: Lamp vs. Feeder
7 Error: Array Bit Error
5 Error: Video LUT
Digitizer Info Passed

Version Info
0415 - FeederBoard
32773 - Video Path FPGA
0303 - Control Board
00006005 - DSP
0415 - FeederBoard
00254 - HW Version
00251 - NVR Version
002 - Switch Type
0033 - Lamp Module
0303 - Control Board
00253 - HW Version
00254 - NVR Version

00 - CPLD
00002 - DMA Cpld
N1 - Array
49.7 - Elan Version
Nov 1 2007 - Compile Date
12:46:24 - Compile Time
0701 - Compiler
00112 - HW Revision
Version Information Passed

Digitizer SN: 351727

Full Test
System Control Passed
System RAM Passed
System Low ROM Passed
System Hi ROM Passed
System ROM Passed
Non-Volatile RAM Passed
ADC LUT RAM Passed
Norm RAM Passed
Video LUT RAM Passed
Offset RAM Passed
Line Buffer RAM Passed
Output FIFO Passed
Memory Passed
Camera Selection (FPGA) None Passed
Camera Selection (FPGA) C1 Passed
Camera Selection (FPGA) C2 Passed
Camera Selection (FPGA) C3 Passed
Camera Selection (FPGA) C12 Passed
Camera Selection (FPGA) C13 Passed
Camera Selection (FPGA) C23 Passed
Camera Selection (FPGA) C123 Passed
Camera Selection (FPGA) C123 Passed
Camera Selection (FPGA) Passed
Camera Selection (LB) C1 Passed
Camera Selection (LB) C2 Passed
Camera Selection (LB) C3 Passed
Camera Selection (LB) Passed
Camera Selection Passed
Test Pattern C1 Passed
Test Pattern C2 Passed
Test Pattern C3 Passed
Test Pattern Passed
ADC LUT Test C1 Passed
ADC LUT Test C2 Passed
ADC LUT Test C3 Passed
ADC LUT Test Passed
Offset Path C1 Passed
Offset Path C2 Passed
Offset Path C3 Passed
Offset Path Passed
Video LUT C1 Passed
Video LUT C2 Passed
Video LUT C3 Passed
Video LUT Path Passed
Gain Path C1 Passed
Gain Path C2 Passed
Gain Path C3 Passed
Gain Path Passed
Normalize Path Passed
Clipper LE=4096 W= 3 Passed
Clipper LE=1024 W= 4 Passed
Clipper LE=2048 W= 6 Passed
Clipper LE= 512 W= 8 Passed
Clipper LE= 256 W= 16 Passed
Clipper LE= 128 W= 32 Passed
Clipper LE= 64 W= 64 Passed
Clipper LE= 32 W= 128 Passed
Clipper LE= 16 W= 256 Passed
Clipper LE= 8 W= 512 Passed
Clipper LE= 4 W=1024 Passed
Clipper LE= 2 W=2048 Passed
Clipper LE= 1 W=4096 Passed
Clipper LE= 0 W=8192 Passed
Clipper Passed
Data Path Passed
Byte Counter Passed
Scaler 570 Passed
Scaler 285 Passed
Scaler 142 Passed
Scaler 71 Passed
Scaler 300 Passed
Scaler 150 Passed
Scaler 75 Passed

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Scaler Passed
DSP Communication Passed
DSP Memory Passed
DSP Tests Passed
Full Test Passed

Light On
0000065415 - Ballast Level at Check
0000065415 - Ballast Level at Check
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535

Light Off
87 65 45
86 65 45
85 65 46
88 65 45
96 65 45
86 65 48
87 65 45
85 65 39
87 65 40
86 65 41

Normalize
Channel 1 Zero Check 0
Channel 2 Zero Check 0
Channel 3 Zero Check 0
Stabilize Array Offset (495) Avg: 0
Stabilize Array Offset (479) Avg: 0
Stabilize Array Offset (463) Avg: 0
Stabilize Array Offset (447) Avg: 0
Stabilize Array Offset (431) Avg: 0
Stabilize Array Offset (415) Avg: 0
Stabilize Array Offset (399) Avg: 0
Stabilize Array Offset (383) Avg: 0
Stabilize Array Offset (367) Avg: 0
Stabilize Array Offset (351) Avg: 0
Stabilize Array Offset (335) Avg: 0
Stabilize Array Offset (319) Avg: 0
Stabilize Array Offset (303) Avg: 0
Stabilize Array Offset (287) Avg: 0
Stabilize Array Offset (271) Avg: 0
Stabilize Array Offset (255) Avg: 0
Stabilize Array Offset (239) Avg: 320
Stabilize Array Offset (223) Avg: 718
Stabilize Array Offset (223) Avg: 1116
Stabilize Array Offset (223) Avg: 1115
Array Offset Ch 1 (255) Min: 0, Max: 0
Array Offset Ch 1 (495) Min: 283, Max: 382
Array Offset Ch 1 (479) Min: 0, Max: 0
Array Offset Ch 1 (463) Min: 0, Max: 0
Array Offset Ch 1 (447) Min: 0, Max: 0
Array Offset Ch 1 (431) Min: 0, Max: 0
Array Offset Ch 1 (415) Min: 0, Max: 0
Array Offset Ch 1 (399) Min: 0, Max: 0
Array Offset Ch 1 (383) Min: 0, Max: 0
Array Offset Ch 1 (367) Min: 0, Max: 0
Array Offset Ch 1 (351) Min: 0, Max: 0
Array Offset Ch 1 (335) Min: 0, Max: 0
Array Offset Ch 1 (319) Min: 0, Max: 0
Array Offset Ch 1 (303) Min: 0, Max: 0
Array Offset Ch 1 (287) Min: 0, Max: 0
Array Offset Ch 1 (271) Min: 0, Max: 0
Array Offset Ch 1 (270) Min: 0, Max: 25
Array Offset Ch 1 (269) Min: 0, Max: 47
Array Offset Ch 1 (268) Min: 0, Max: 66
Array Offset Ch 1 (267) Min: 0, Max: 88
Array Offset Ch 1 (266) Min: 21, Max: 114
Array Offset Ch 1 (265) Min: 40, Max: 137
Array Offset Ch 1 (264) Min: 67, Max: 172
Array Offset Ch 1 (263) Min: 88, Max: 184
Array Offset Ch 1 (262) Min: 121, Max: 221
Array Offset Ch 1 (262) Min: 145, Max: 239

Array Offset Ch 2 (255) Min: 0, Max: 0
Array Offset Ch 2 (495) Min: 147, Max: 240
Array Offset Ch 2 (479) Min: 0, Max: 0
Array Offset Ch 2 (463) Min: 0, Max: 0
Array Offset Ch 2 (447) Min: 0, Max: 0
Array Offset Ch 2 (431) Min: 0, Max: 0
Array Offset Ch 2 (415) Min: 0, Max: 0
Array Offset Ch 2 (399) Min: 0, Max: 0
Array Offset Ch 2 (383) Min: 0, Max: 0
Array Offset Ch 2 (367) Min: 0, Max: 0
Array Offset Ch 2 (351) Min: 0, Max: 0
Array Offset Ch 2 (335) Min: 0, Max: 0
Array Offset Ch 2 (319) Min: 0, Max: 0
Array Offset Ch 2 (303) Min: 0, Max: 0
Array Offset Ch 2 (287) Min: 0, Max: 0
Array Offset Ch 2 (271) Min: 0, Max: 0
Array Offset Ch 2 (270) Min: 0, Max: 0
Array Offset Ch 2 (269) Min: 0, Max: 0
Array Offset Ch 2 (268) Min: 0, Max: 0
Array Offset Ch 2 (267) Min: 0, Max: 0
Array Offset Ch 2 (266) Min: 0, Max: 0
Array Offset Ch 2 (265) Min: 0, Max: 6
Array Offset Ch 2 (264) Min: 0, Max: 23
Array Offset Ch 2 (263) Min: 0, Max: 47
Array Offset Ch 2 (262) Min: 0, Max: 76
Array Offset Ch 2 (261) Min: 4, Max: 98
Array Offset Ch 2 (260) Min: 28, Max: 124
Array Offset Ch 2 (259) Min: 49, Max: 151
Array Offset Ch 2 (258) Min: 82, Max: 175
Array Offset Ch 2 (257) Min: 101, Max: 205
Array Offset Ch 2 (256) Min: 128, Max: 227
Array Offset Ch 2 (256) Min: 144, Max: 237
Array Offset Ch 3 (255) Min: 0, Max: 0
Array Offset Ch 3 (495) Min: 174, Max: 255
Array Offset Ch 3 (479) Min: 0, Max: 0
Array Offset Ch 3 (463) Min: 0, Max: 0
Array Offset Ch 3 (447) Min: 0, Max: 0
Array Offset Ch 3 (431) Min: 0, Max: 0
Array Offset Ch 3 (415) Min: 0, Max: 0
Array Offset Ch 3 (399) Min: 0, Max: 0
Array Offset Ch 3 (383) Min: 0, Max: 0
Array Offset Ch 3 (367) Min: 0, Max: 0
Array Offset Ch 3 (351) Min: 0, Max: 0
Array Offset Ch 3 (335) Min: 0, Max: 0
Array Offset Ch 3 (319) Min: 0, Max: 0
Array Offset Ch 3 (303) Min: 0, Max: 0
Array Offset Ch 3 (287) Min: 0, Max: 0
Array Offset Ch 3 (271) Min: 0, Max: 0
Array Offset Ch 3 (270) Min: 0, Max: 0
Array Offset Ch 3 (269) Min: 0, Max: 0
Array Offset Ch 3 (268) Min: 0, Max: 0
Array Offset Ch 3 (267) Min: 0, Max: 0
Array Offset Ch 3 (266) Min: 0, Max: 0
Array Offset Ch 3 (265) Min: 0, Max: 16
Array Offset Ch 3 (264) Min: 0, Max: 55
Array Offset Ch 3 (263) Min: 0, Max: 63
Array Offset Ch 3 (262) Min: 11, Max: 102
Array Offset Ch 3 (261) Min: 32, Max: 116
Array Offset Ch 3 (260) Min: 55, Max: 145
Array Offset Ch 3 (259) Min: 78, Max: 162
Array Offset Ch 3 (258) Min: 108, Max: 193
Array Offset Ch 3 (257) Min: 126, Max: 212
Array Offset Ch 3 (257) Min: 153, Max: 237
Pixel Offset (Ch 1) (Target 1) Min: 174, Avg: 179, Max: 223
Pixel Offset (Ch 2) (Target 1) Min: 178, Avg: 182, Max: 225
Pixel Offset (Ch 3) (Target 1) Min: 184, Avg: 188, Max: 222
Elapsed Time 62.730
Pixel Offset Check (Ch 1) Min: 2, Avg: 3, Max: 5
Pixel Offset Check (Ch 2) Min: 2, Avg: 3, Max: 5
Pixel Offset Check (Ch 3) Min: 2, Avg: 3, Max: 5
Elapsed Time 67.350
Channel 1 Ones Check 65535
Channel 2 Ones Check 65535
Channel 3 Ones Check 65535
Ballast Find High Channel 1 65362
Ballast Find High Channel 2 65358
Ballast Find High Channel 3 65352
Channel Selected 1
Elapsed Time 72.590
Ballast Adjust (230) Min: 61372, Max: 65362
Video LUT Factor 00001.0000
Elapsed Time 72.845
Ballast Adjust (229) Ch 1 Min: 61384, Max: 65362
Ballast Adjust (228) Ch 1 Min: 61114, Max: 65362
Ballast Adjust (227) Ch 1 Min: 60701, Max: 65362

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Ballast Adjust (226) Ch 1 Min: 60648, Max: 65362
Ballast Adjust (225) Ch 1 Min: 60314, Max: 65362
Ballast Adjust (224) Ch 1 Min: 60070, Max: 65362
Ballast Adjust (223) Ch 1 Min: 59895, Max: 65362
Ballast Adjust (222) Ch 1 Min: 59735, Max: 65362
Ballast Adjust (221) Ch 1 Min: 59382, Max: 65362
Ballast Adjust (220) Ch 1 Min: 59025, Max: 65362
Ballast Adjust (219) Ch 1 Min: 58900, Max: 65362
Ballast Adjust (218) Ch 1 Min: 58605, Max: 65362
Ballast Adjust (217) Ch 1 Min: 58327, Max: 65362
Ballast Adjust (216) Ch 1 Min: 58023, Max: 65362
Ballast Adjust (215) Ch 1 Min: 57861, Max: 65362
Ballast Adjust (214) Ch 1 Min: 57592, Max: 65362
Ballast Adjust (213) Ch 1 Min: 57342, Max: 65362
Ballast Adjust (212) Ch 1 Min: 57008, Max: 65362
Ballast Adjust (211) Ch 1 Min: 56729, Max: 65362
Ballast Adjust (210) Ch 1 Min: 56567, Max: 65362
Ballast Adjust (209) Ch 1 Min: 56271, Max: 65362
Ballast Adjust (208) Ch 1 Min: 55994, Max: 65362
Ballast Adjust (207) Ch 1 Min: 55686, Max: 65362
Ballast Adjust (206) Ch 1 Min: 55586, Max: 65362
Ballast Adjust (205) Ch 1 Min: 55151, Max: 65362
Ballast Adjust (204) Ch 1 Min: 54831, Max: 65362
Ballast Adjust (203) Ch 1 Min: 54717, Max: 65362
Ballast Adjust (202) Ch 1 Min: 54529, Max: 65362
Ballast Adjust (201) Ch 1 Min: 54239, Max: 65362
Ballast Adjust (200) Ch 1 Min: 53839, Max: 65362
Ballast Adjust (199) Ch 1 Min: 53812, Max: 65362
Ballast Adjust (198) Ch 1 Min: 53349, Max: 65362
Ballast Adjust (197) Ch 1 Min: 53083, Max: 65362
Ballast Adjust (196) Ch 1 Min: 52859, Max: 65362
Ballast Adjust (195) Ch 1 Min: 52588, Max: 65362
Ballast Adjust (194) Ch 1 Min: 52364, Max: 65362
Ballast Adjust (193) Ch 1 Min: 52154, Max: 65362
Ballast Adjust (192) Ch 1 Min: 51728, Max: 65362
Ballast Adjust (191) Ch 1 Min: 51561, Max: 65362
Ballast Adjust (190) Ch 1 Min: 51381, Max: 65362
Ballast Adjust (189) Ch 1 Min: 51134, Max: 65362
Ballast Adjust (188) Ch 1 Min: 50887, Max: 65362
Ballast Adjust (187) Ch 1 Min: 50457, Max: 65362
Ballast Adjust (186) Ch 1 Min: 50255, Max: 65362
Ballast Adjust (185) Ch 1 Min: 49908, Max: 65362
Ballast Adjust (184) Ch 1 Min: 49795, Max: 65362
Ballast Adjust (183) Ch 1 Min: 49547, Max: 65362
Ballast Adjust (182) Ch 1 Min: 49287, Max: 65362
Ballast Adjust (181) Ch 1 Min: 49044, Max: 65362
Ballast Adjust (180) Ch 1 Min: 48672, Max: 65362
Ballast Adjust (179) Ch 1 Min: 48529, Max: 65362
Ballast Adjust (178) Ch 1 Min: 48221, Max: 65362
Ballast Adjust (177) Ch 1 Min: 47966, Max: 65362
Ballast Adjust (176) Ch 1 Min: 47612, Max: 65362
Ballast Adjust (175) Ch 1 Min: 47329, Max: 65362
Ballast Adjust (174) Ch 1 Min: 47058, Max: 65362
Ballast Adjust (173) Ch 1 Min: 46881, Max: 65362
Ballast Adjust (172) Ch 1 Min: 46586, Max: 65362
Ballast Adjust (171) Ch 1 Min: 46381, Max: 65362
Ballast Adjust (170) Ch 1 Min: 46035, Max: 65362
Ballast Adjust (169) Ch 1 Min: 45912, Max: 65362
Ballast Adjust (168) Ch 1 Min: 45591, Max: 65362
Ballast Adjust (167) Ch 1 Min: 45399, Max: 65362
Ballast Adjust (166) Ch 1 Min: 44994, Max: 65362
Ballast Adjust (165) Ch 1 Min: 44704, Max: 65362
Ballast Adjust (164) Ch 1 Min: 44534, Max: 65362
Ballast Adjust (163) Ch 1 Min: 44223, Max: 65362
Ballast Adjust (162) Ch 1 Min: 44057, Max: 65362
Ballast Adjust (161) Ch 1 Min: 43744, Max: 65362
Ballast Adjust (160) Ch 1 Min: 43433, Max: 65362
Ballast Adjust (159) Ch 1 Min: 43285, Max: 65362
Ballast Adjust (158) Ch 1 Min: 42915, Max: 65362
Ballast Adjust (157) Ch 1 Min: 42663, Max: 65362
Ballast Adjust (156) Ch 1 Min: 42379, Max: 65361
Ballast Adjust (155) Ch 1 Min: 42114, Max: 65361
Ballast Adjust (154) Ch 1 Min: 41908, Max: 65361
Ballast Adjust (153) Ch 1 Min: 41655, Max: 65361
Ballast Adjust (152) Ch 1 Min: 41337, Max: 65361
Ballast Adjust (151) Ch 1 Min: 40986, Max: 65361
Ballast Adjust (150) Ch 1 Min: 40753, Max: 65360
Ballast Adjust (149) Ch 1 Min: 40550, Max: 65359
Ballast Adjust (148) Ch 1 Min: 40222, Max: 64921
Ballast Adjust (147) Ch 1 Min: 39893, Max: 64521
Ballast Adjust (146) Ch 1 Min: 39646, Max: 64113
Ballast Adjust (145) Ch 1 Min: 39425, Max: 63725
Ballast Adjust (144) Ch 1 Min: 39091, Max: 63238
Ballast Adjust (143) Ch 1 Min: 38884, Max: 62909
Ballast Adjust (142) Ch 1 Min: 38630, Max: 62485

Ballast Adjust (141) Ch 1 Min: 38333, Max: 62080
Ballast Adjust (140) Ch 1 Min: 38092, Max: 61760
Ballast Adjust (140) Ch 1 Min: 37861, Max: 61304
Ballast Adjust (140) Ch 2 Min: 42450, Max: 61154
Ballast Adjust (140) Ch 3 Min: 37962, Max: 59547
Elapsed Time 96.485
Pixel limited Left 0 Right 1 on Ch 1
Pixel Gain (Ch 1) Min (Gain): 37964 (41492), Max (Gain): 61091 (974)
Pixel Gain (Limited) Min (Gain): 37964 (41492), Max (Gain): 61091 (974)
Pixel Gain (Ch 1) Low Count (Min): 0 (61959), High Count (Max): 0 (62037) of 7780
Pixel limited Left 0 Right 1 on Ch 2
Pixel Gain (Ch 2) Min (Gain): 42620 (29800), Max (Gain): 60974 (1102)
Pixel Gain (Limited) Min (Gain): 42961 (29042), Max (Gain): 60974 (1102)
Pixel Gain (Ch 2) Low Count (Min): 0 (61953), High Count (Max): 0 (62040) of 7780
Pixel limited Left 0 Right 1 on Ch 3
Pixel Gain (Ch 3) Min (Gain): 38064 (41211), Max (Gain): 59377 (2895)
Pixel Gain (Limited) Min (Gain): 38064 (41211), Max (Gain): 59377 (2895)
Pixel Gain (Ch 3) Low Count (Min): 0 (61957), High Count (Max): 0 (62042) of 7780
Elapsed Time 105.235
Second Offset Correction
Elapsed Time 105.430
Summary Information
Channel Offset 00262 00256 00257
Pixel Offset Min 00174 00178 00184
Pixel Offset Ave 00179 00182 00188
Pixel Offset Max 00223 00225 00222
Ballast Level 140
Video LUT Factor 00001.0000
Pixel Gain Min 61959 61953 61957
Pixel Gain Max 62037 62040 62042
Elapsed Time 105.445
Normalize Passed

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