

# OPOS Dual Test Application



USER GUIDE

 **DATALOGIC**

**Datalogic USA, Inc.**

959 Terry Street

Eugene, OR 97402

U.S.A.

Telephone: (541) 683-5700

Fax: (541) 345-7140

**© 2025 Datalogic S.p.A. and /or its affiliates**

All rights reserved. Without limiting the rights under copyright, no part of this documentation may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means, or for any purpose, without the express written permission of Datalogic S.p.A. and/or its affiliates.

Owners of Datalogic products are hereby granted a non-exclusive, revocable license to reproduce and transmit this documentation for the purchaser's own internal business purposes. Purchaser shall not remove or alter any proprietary notices, including copyright notices, contained in this documentation and shall ensure that all notices appear on any reproductions of the documentation.

Electronic versions of this document may be downloaded from the Datalogic website ([www.datalogic.com](http://www.datalogic.com)). If you visit our website and would like to make comments or suggestions about this or other Datalogic publications, please let us know via the "Contact" page.

**Disclaimer**

Datalogic has taken reasonable measures to provide information in this manual that is complete and accurate, however, Datalogic shall not be liable for technical or editorial errors or omissions contained herein, nor for incidental or consequential damages resulting from the use of this material. Datalogic reserves the right to change any specification at any time without prior notice.

**Trademarks**

Datalogic and the Datalogic logo are registered trademarks of Datalogic S.p.A. in many countries, including the U.S.A. and the E.U.

Gryphon is a trademark of Datalogic S.p.A. and/or its affiliates, registered in the U.S. The Bluetooth word mark and logos are owned by Bluetooth SIG, Inc. and any use of such marks by Datalogic Group companies is under license. All other trademarks and brands are property of their respective owners.

**Patents**

See [www.patents.datalogic.com](http://www.patents.datalogic.com) for patent list.

---

# TABLE OF CONTENTS

---

- OPOS DUALTEST APPLICATION ..... 1**
- Overview ..... 1**
- Configurable Logging ..... 1**
- The DualTest User Interface ..... 2**
- Testing a Scanner ..... 3**
- Label Scanning Test .....4
- Power Notify Test .....5
- Testing a Scale .....5
- User GuideRead Weight Testing .....5
- Live Weight Testing .....6
- Updating Device Firmware ..... 7**
- Understanding DualTest Errors ..... 8**



---

# OPOS DUALTEST APPLICATION

---

## OVERVIEW

This manual describes the basic features provided by the DualTest application and the steps required to use each feature.

The basic features are:

- Test a scanner
- Test a scale
- Update device firmware
- Configurable logging

## CONFIGURABLE LOGGING

A very important aspect of Datalogic's OPOS is its logging capability. Whether you are using DualTest, or another application like a POS system, a variety of event data can be recorded in text files when Datalogic Service Objects are being used. The type of data recorded and where it is recorded is, by default, determined by the OPOS Installer. You can, however, change many of these settings using the OPOS Properties Editor<sup>1</sup>.

By default, logging records:

- Scanning events
- Scale events
- Error events
- Operating System events (particularly bus-related events)
- Information, Health and Status (IHS).

The OPOS log files are very useful when troubleshooting problems because they capture and present event data in a linear fashion down to millisecond accuracy. You can often use these data to determine the source of a problem (e.g. bus, configuration, device, OPOS, POS system). Log file interpretation is a topic unto itself and is discussed elsewhere<sup>2</sup>.

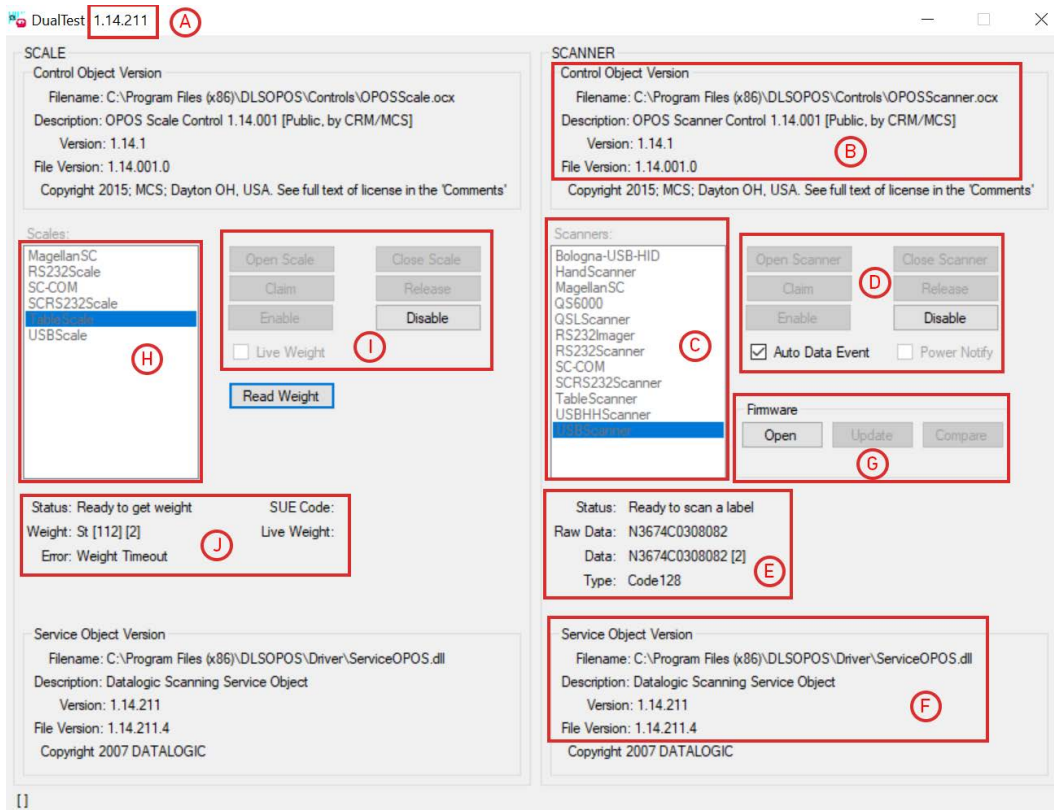
---

1. The OPOS Properties Editor is described in the Datalogic document OPOSPropertiesEditor.

2. Log file interpretation is discussed in the Datalogic document OPOSLogFileInterpretation.pdf

# THE DUALTEST USER INTERFACE

Launch the DualTest application by double-clicking on its application icon. The DualTest user interface has several areas of interest. Related controls are generally grouped together. A table describing these areas appears below the image.



<b>A</b>	OPOS version number. This number appears other places too.	<b>F</b>	Displays Service Objects being used and where they are installed. This image shows the default from the OPOS Installer.
<b>B</b>	Displays the Common Control Objects being used and where they are installed. This image shows the default from the OPOS Installer	<b>G</b>	Firmware Updating buttons

<b>C</b>	<p>A list of the default Scanner Profiles supplied by the OPOS Installer. You can add new device profiles using the OPOS Properties<sup>a</sup>. Each item is a scanner profile which represents a certain interface. The profile and interface pairs are as follows:</p> <ul style="list-style-type: none"> <li>• USBHHSscanner:USB-OEM Handheld Scanner</li> <li>• USBScanner:USB-OEM Fixed Retail Scanner</li> <li>• RS232Imager:USB-COM Scanner</li> <li>• RS232Scanner:RS232 Scanner</li> <li>• SCRS232Scanner:RS232 Single-cable Scanner</li> <li>• SC-COM: Single-cable COM Scanner</li> <li>• TableScanner: USB-OEM Fixed Retail Scanner</li> </ul>	<b>H</b>	<p>List of the default Scale Profiles supplied by the OPOS Installer. You can add new device profiles using the OPOS Properties Editor. Each item is a scale profile which represents a certain interface. The profile and interface pairs are as follows:</p> <ul style="list-style-type: none"> <li>• RS232Scale:RS232 Scale</li> <li>• SC-COM: Single-cable COM Scale</li> <li>• SCRS232Scale: Single-cable RS232 Scale</li> <li>• TableScale: USB-OEM Scale</li> <li>• USBScale:USB-OEM Scale</li> </ul>
<b>D</b>	Scanner Testing buttons.	<b>I</b>	Scale Testing buttons.
<b>E</b>	Scanner Feedback area. In scanning mode, displays label information as configured. When updating firmware, displays progress information. Regardless of mode, this area is also used to display error information.	<b>J</b>	Displays Scale Feedback.

a. The OPOS Installer is discussed in the Datalogic document “OPOS Getting Started”.

## TESTING A SCANNER

The task of testing a scanner is broken into two categories: 1) label scanning and 2) power notification. There is significant overlap between the execution steps of these categories and so there is common user-interface behavior. For simplification purposes, the common user-interface behavior will be described.

The availability of a control, such as a button, indicates an action you are allowed to perform. When you select a button, you will often notice it becomes disabled and other controls become enabled. The DualTest user-interface guides you down a linear path, but you can stray from the path at times.

The following table shows the relationship between how other controls are affected as you select a given button. The ordering of Selected Buttons depicts the normal progression through buttons as you use DualTest.

SELECTED BUTTON	ENABLED CONTROLS	DISABLED CONTROLS
Open Scanner	Claim / Close Scanner	
Claim	Enable / Release	Close Scanner
Enable	Auto Data Event / Disable	Release
Disable	Enable / Release	Auto Data Event / Disable
Release	Claim / Close Scanner	Enable / Release
Close	Open Scanner	Claim / Close

As an example of deviation from the standard progression, assume you've selected **Open Scanner** followed by **Claim**. You might then decide you're not ready to **Enable** the scanner so can then select **Release**, thereby backing one step out of the process.

## Label Scanning Test

The following scenario describes a scanning situation where everything is properly configured and you make no mistakes in your execution of the following steps. However, you may encounter error messages; see “[Understanding DualTest Errors](#)” on page 8 for more information.

To test the label scanning feature, perform these steps:

1. Select the relevant scanner profile from the list of available scanner profiles.
2. Click **Open Scanner**. The Status field will show "Done opening scanner".
3. Click **Claim**. The Status field will show "Scanner claimed".
4. Click **Enable**. Both the **Auto Data Event** check box and the **Disable** button become available, and the **Status** field shows "Success". Depending on the physical device you're testing, you may also notice some state change in its LEDs.
5. Select the **Auto Data Event** check box. The Status field shows "Ready to scan a label."

Your Scanner Feedback area should now look something like:

```
Status: Ready to scan a label
Raw Data: 9RW58P6S.
Data: 9RW58P6S. [10]
Type: Code128
```

The **Status** field indicates DualTest is ready to scan another label, the **Data** field displays the parsed label data and the **Type** field shows the label type. Adjacent to the label data is a number, in brackets, indicating the number of labels processed.

To complete the testing process:

6. Click **Disable**. The **Status** field shows "Scanned disabled".
7. Click **Release**. The **Status** field shows "Released".
8. Click **Close Scanner**. The **Status** field shows "Closed".



**NOTE:** The previous example was explained as a linear process. In reality, you may choose to operate differently. The availability of controls (buttons, check boxes) at each stage indicates the options available.

## Power Notify Test

The steps for testing the scanner **Power Notify** feature are very similar to those for testing label scanning.

To test the **Power Notify** feature, perform these steps:

1. Select the relevant scanner profile from the list of available scanner profiles.
2. Click **Open Scanner**.
3. Click **Claim**.
4. Select the **Power Notify** check box.
5. Click **Enable**. The **Status** field shows "Device is now Online"
6. Disconnect the device's USB cable from your computer. The **Status** field shows "Device is Off/Offline".
7. Reconnect the device's USB cable to your computer. The **Status** field shows "Device is now Online", indicating device re-enumeration and detection properly occurred. You should now be able to scan labels again by simply selecting the **Auto Data Enable** check box.

## Testing a Scale

Testing a scale is broken into two categories i) static testing and ii) dynamic testing.

During static testing you deliberately place an item on the scale and then weigh it as a discrete operation; this exercises the Read Weight feature of DualTest.

During dynamic testing, you set up DualTest to automatically detect weight changes at the scale; this tests the Live Weight feature of DualTest.

## User Guide Read Weight Testing

The **Read Weight** feature is designed to test deliberate weighing of items. To test the **Read Weight** feature, perform these steps:

1. Select the relevant scale profile from the list of available scale profiles.
2. Click **Open Scale**.
3. Click **Claim**.
4. Click **Enable**. The **Status** field shows "Scale enabled".
5. Place an item on the table and then select **Read Weight**.
6. Your Scale Feedback area should look something like:

```
Status: Ready to get weight
Weight: 0.360 lb. [3]
Error:
```

The **Status** field indicates DualTest is ready to weigh another item and the **Weight** field displays the item weight. Adjacent to the weight is a number, in brackets, indicating the number of items weighed.

A common error is a difference between the alignment of the scale (in metric or imperial) and the configuration of OPOS (in metric or imperial).

Ensure that the configuration of the scanner and OPOS match.

## Live Weight Testing

To test the **Live Weight** feature, perform these steps:

1. Ensure no object is on the scale.
2. Select the relevant scale profile from the list of available scale profiles.
3. Click **Open Scale**.
4. Click **Claim**.
5. Select the **Status Notify** check box.

6. Click **Enable**.

Your Scale Feedback area should look something like:

Status: Scale enabled	SUE Code: WEIGHT_ZERO
Weight:	Live Weight: 0.000 lb.
Error:	



**NOTE: If instead the SUE Code shows WEIGHT\_UNDER\_ZERO then you will need to physically zero-out the scale. See your device manual regarding the use of Scale Zero.**

7. Place an item on the scale. The SUE Code should briefly show WEIGHT\_UNSTABLE and then your Scale Feedback area should look something like:

Status: Scale enabled	SUE Code: STABLE_WEIGHT
Weight:	Live Weight: 0.760 lb.
Error:	



**NOTE: The scale is a very sensitive instrument. If the SUE Code continuously shows WEIGHT\_UNSTABLE, then your scale might be encountering some vibration. Verify that no one is touching the scale.**

To complete the testing process:

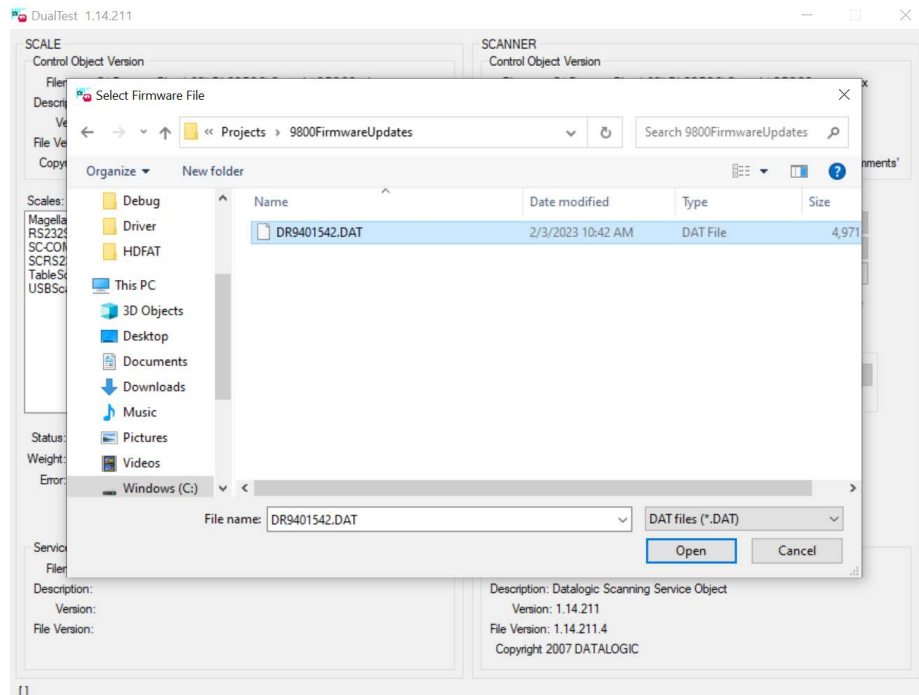
8. Click **Disable**.
9. Click **Release**.
10. Click **Close Scale**.

# UPDATING DEVICE FIRMWARE

DualTest can be used to update device firmware on select scanners, in accordance with the UPOS specification (v1.9 and above).

To test the label scanning feature, perform these steps:

1. Select the relevant scanner profile from the list of available scanner profiles.
2. Click **Open Scanner**. The **Status** field shows "Done opening scanner".
3. Click **Claim**. The **Status** field shows "Scanner claimed".
4. Click **Enable**.
5. Click **Open File**. When the **Open** dialog appears, navigate to the folder containing your firmware file, select the file and then click **Open**.



**NOTE: Firmware files are interface- and scanner-specific and must be obtained from Datalogic Technical Support. USB-OEM interface always uses DAT files and all other interfaces use S37 files.**

**If the customers update Firmware themselves they are responsible for performing the update correctly.**

6. Click **Update Firmware** and then **OK** in the subsequent Firmware Update Confirmation dialog.



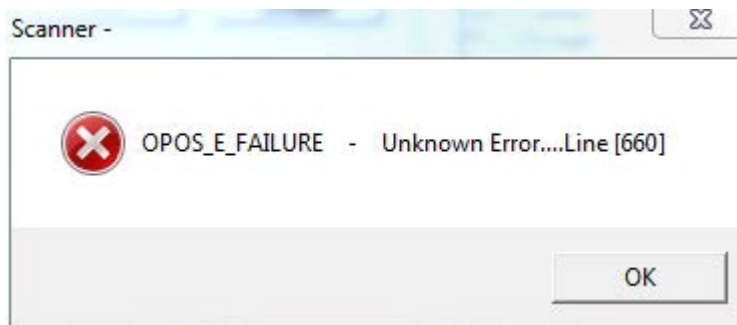
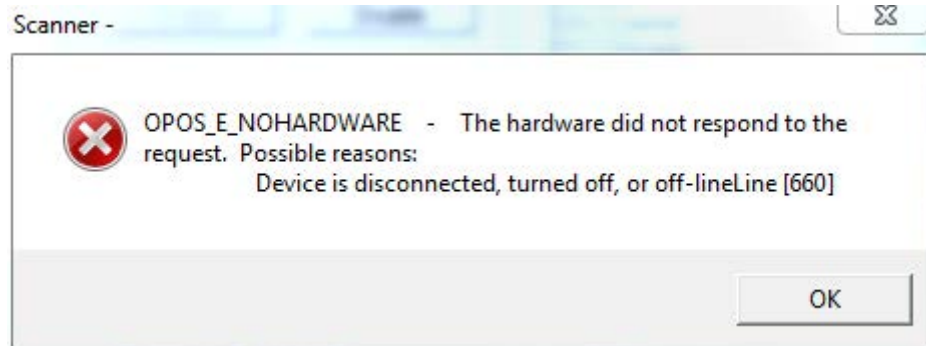
**NOTE: Do not disconnect the interface cable or power cable from the scanner during the update.**

A DLRMUS window will pop up that displays the Firmware update progress. When it is completed, the window will automatically close.

You can now move on to other tasks.

## UNDERSTANDING DUALTEST ERRORS

The two most commonly encountered error messages occur when attempting to Claim a device.



These are rather generic error messages because OPOS doesn't know the actual source of the failure. Following is a list of things you should verify.

1. Does the device have power?
  2. Is the device connected to the computer? Using the correct cable?
  3. Did you select the correct device profile before trying to Claim?
  4. For USB devices, has the device enumerated? Is it staying on the bus? This can be problematic for handheld scanners under Windows 10.
  5. For RS232 devices, do the device profile settings match the device configuration?
- More detailed error code information can be found in the UPOS specification.







© 2025 Datalogic S.p.A. and /or its affiliates • All rights reserved • Without limiting the rights under copyright, no part of this documentation may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means, or for any purpose, without the express written permission of Datalogic S.p.A. and/or its affiliates • Datalogic and the Datalogic logo are registered trademarks of Datalogic S.p.A. in many countries, including the U.S. and the E.U.

 **DATALOGIC**  
[www.datalogic.com](http://www.datalogic.com)

**Datalogic S.r.l.**

Via S. Vitalino, 13 | 40012 Calderara di Reno | Bologna - Italy  
Tel. +39 051 3147011 | Fax +39 051 3147205



800000520

(Rev A)

April 2025