Technology Leadership
for Digital Cinema

Dolby 3D Calibration Procedure

For Doremi Labs IMS1000

Version 1.0

The English version of this document is the only legally binding version.
Translated versions are not legally binding and are for convenience only.

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1 Introduction

1.1 Purpose

When installing a Dolby 3D system, the installer needs to perform a calibration procedure. This calibration procedure involves the IMS1000, and the adjustment will be done by the PC.

This document provides the information on how to configure the Dolby 3D equipment on the IMS1000 and on how to perform the calibration adjustment.

1.2 Contact Information

If in need of help or assistance, please contact Doremi Labs Technical Services:

USA
24/7 Technical Services line: + **1-866-484-4004**
Technical Services Email: cinemasupport@doremilabs.com

Europe
24/7 Technical Services line: + **33 (0) 492-952-847**
Technical Services Link: http://support.doremitechno.org/ticketing

Japan
Technical Services line: + **044-966-4855**
Technical Services Email: support@doremilabs.co.jp

Australia ~ China ~ India ~ Indonesia ~ Korea ~ Malaysia ~ New Zealand ~ Philippines ~ Singapore ~ Taiwan ~ Thailand
Technical Services Email: supportasia@doremilabs.com

2 Preliminary Phase

2.1 Server Requirements

Only a server with proper firmware and software versions can support the Dolby 3D system. To support this Dolby 3D system, the IMS1000 shall be fitted with the following:

- SM version 6.0.12 and higher
- Firmware version 4.2.0 and higher
- Software version 2.4.4 and higher

2.2 Required Tools

The following tools are required:

1. Dolby calibration update package for IMS1000 (Dolby3D Calibration Wizard-1.0.2)
2. Calibration Digital Cinema Packages
3. File for the Unity matrix (unity.txt)
4. Personal Computer (PC)
5. Spectroradiometer/Colorimeter (Photo Research Model PR655 Recommended)

The first three items are provided by Doremi Labs via email at cinemasupport@doremilabs.com. For new units, these three items are pre-installed. The unity.txt file can be found in the /opt directory. For units to upgrade in the field, these three items should be put on a USB stick.

Note: The colorimeter and personal computer are not provided by Doremi Labs.

3 Dolby 3D Configuration

The server must establish communication with the DFC100 from Dolby to enable the Dolby 3D system. This DFC100 must, therefore, be configured on the server, using the following steps:

1. Open a web browser and log in to the IMS1000.
2. Ingest the Dolby Colors package on the IMS1000.
3. Scroll over to the Device Manager page and click on the New button to add the Dolby 3D device (Figure 1).
4. Once the Dolby 3D device has been selected, it will appear in the Identifier field (Figure 1).
5. Click Save.
6. Proceed to Section 4.

Figure 1: Device Manager – New Device

4 Calibration

You need to install the packages provided by Doremi Labs for the calibration.

The wizard window will appear as illustrated in the section below. Follow the wizard's steps.

4.1 Wizard - First Step

The first step is a reminder of the configuration of the DFC100 described above (Figure 2) – see Section 3.

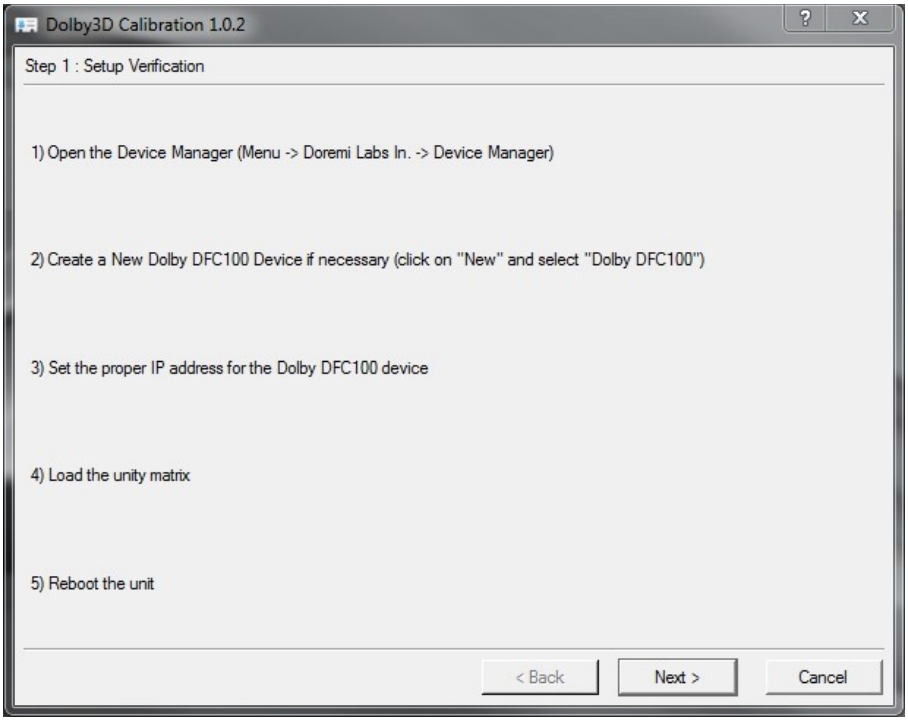

Figure 2: Wizard Window - First Step

- Click on Next to proceed with the matrix configuration.

4.2 Wizard - Second Step

The second wizard window is illustrated in Figure 3:

1. Go to the Cinelister screen.
2. In the Editor screen, click on the New button to make a new playlist.
3. Select the clip “FS Red 3D” to be your only clip in the playlist.
4. Go to the Playback screen, ensure it is in Manual mode and click on the pause button to have the clip played and paused on the first frame.
5. With your Spectroradiometer/Colorimeter, make the measurements for both the left and right eyes and enter them in the red row of the wizard (see Figure 3).
6. After all the measurements have been made, click on the Stop button to stop the playback on CineLister.
7. Repeat Steps 2 to 6 for the other clips:
    - FS Green 3D
    - FS Blue 3D
    - FS Peak White 3D
8. Once all the measurements have been entered, the wizard enables the Next button.

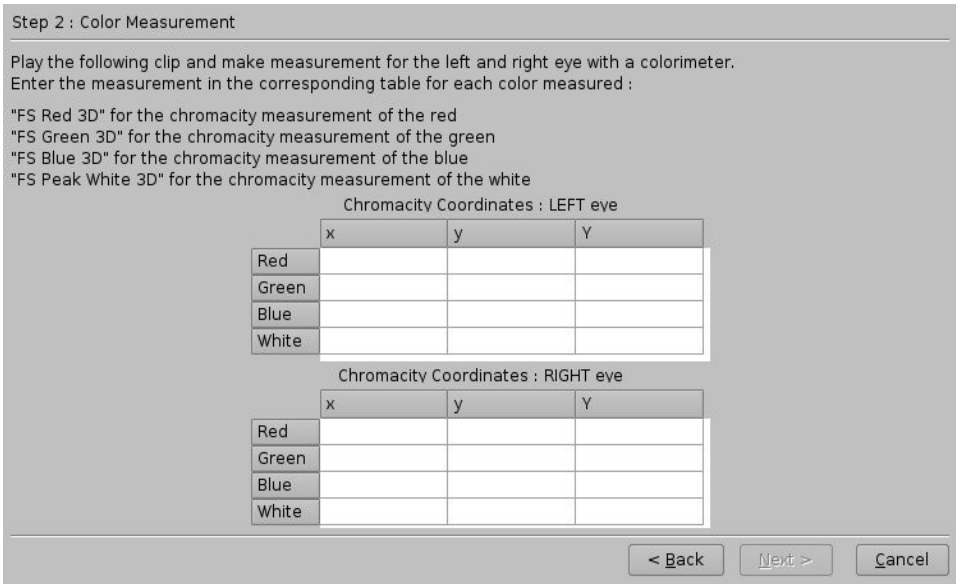

Figure 3: Wizard Window - Second Step

9. You will be asked to save the configuration (Figure 4).

Note: Remember where you saved your file.

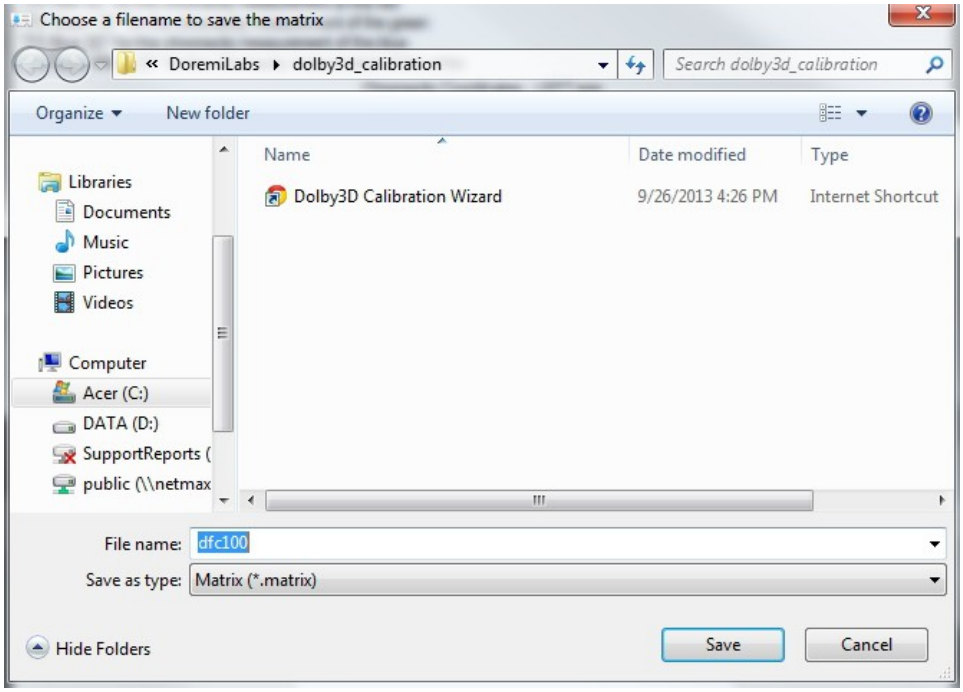

Figure 4: Saving the File

Figure 5: File Upload

- In the Device Manager, click the Browse button to upload the matrix (Figure 5 and Figure 6).

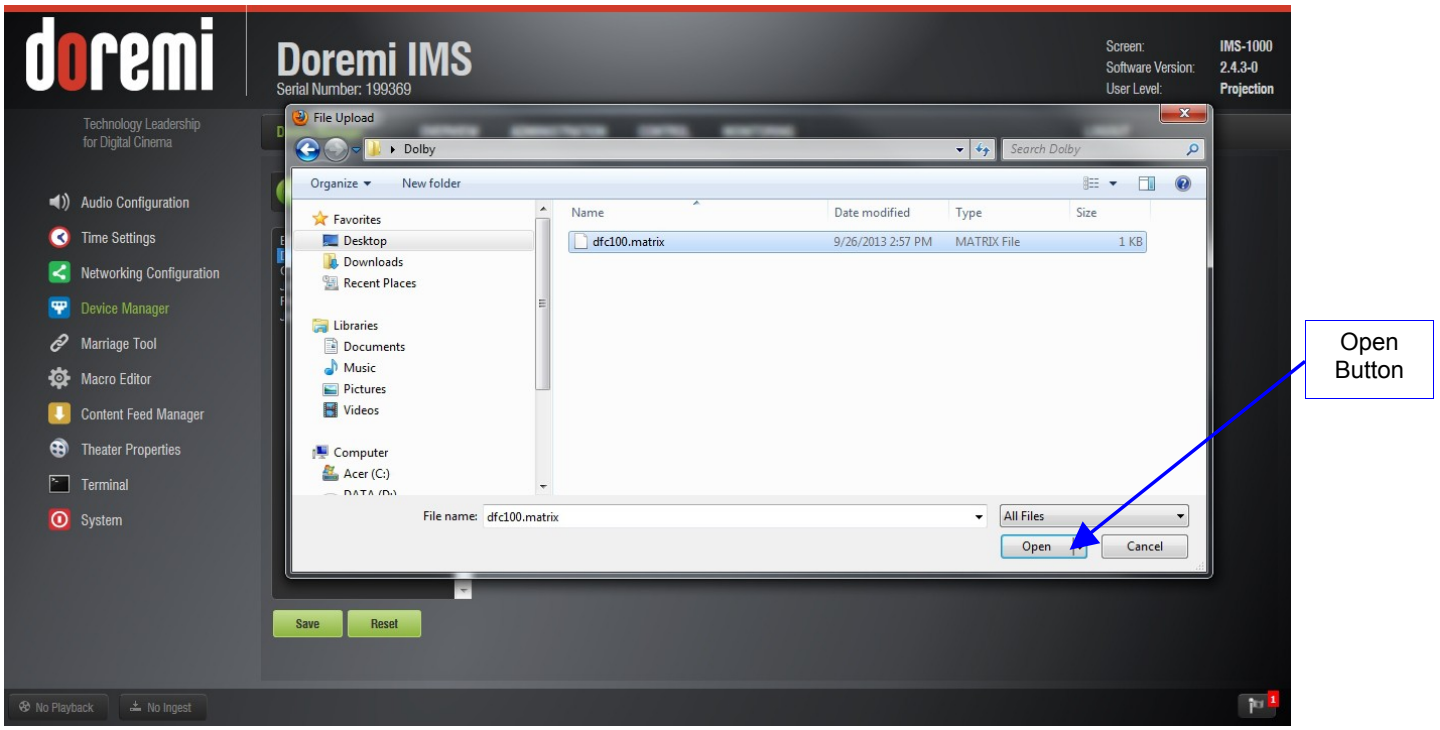

Figure 6: File Upload

- Click the Upload button. If the file was successfully uploaded, the IMS1000 Web GUI will return the following message: “File successfully uploaded.” See Figure 7.

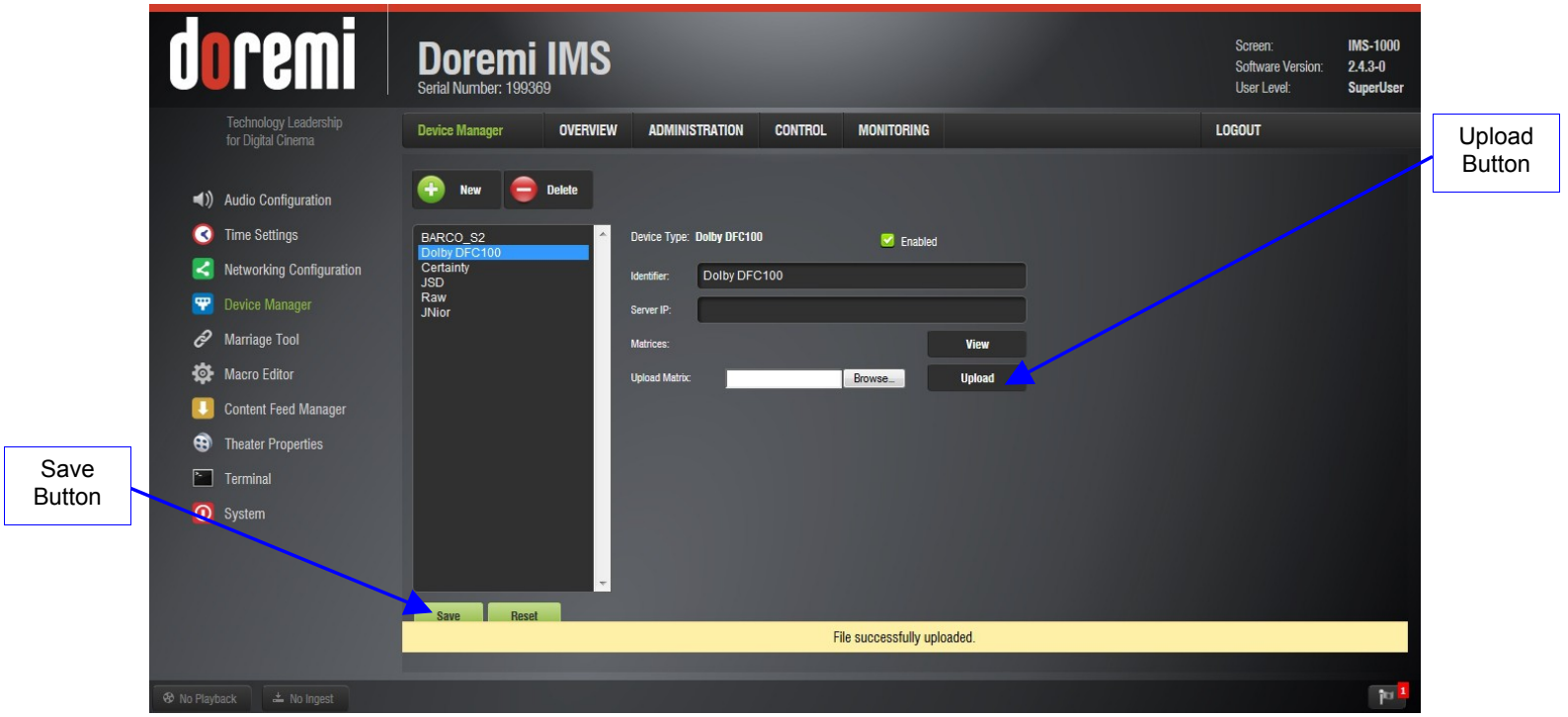

Figure 7: File Successfully Uploaded

- Click the Save button.

4.3 Wizard - Third Step

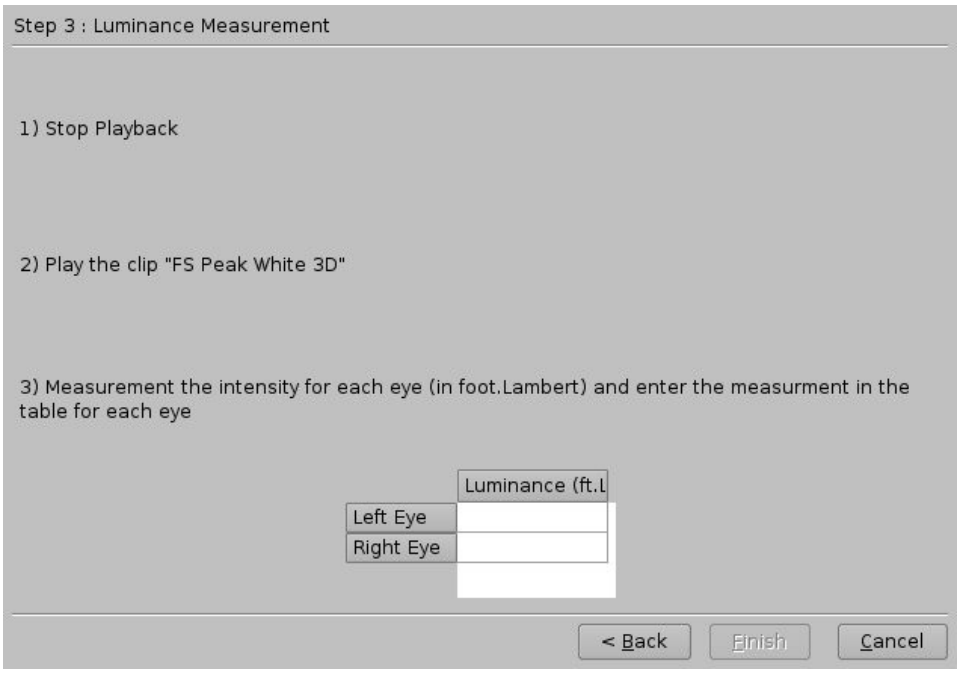

Figure 8: Wizard Window - Third Step

1. Make sure to stop the last clip played.
2. Load and play the clip “FS Peak White 3D” again (see instructions above on how to play it).
3. With your Spectroradiometer/Colorimeter, measure the luminance of the white for both the left and right eye and enter them in the wizard (Figure 8).
4. Once both measurements have been entered, the wizard enables the Finish button. Click the Finish button to save the matrix and proceed.

5. You will be asked to save the configuration (Figure 9).

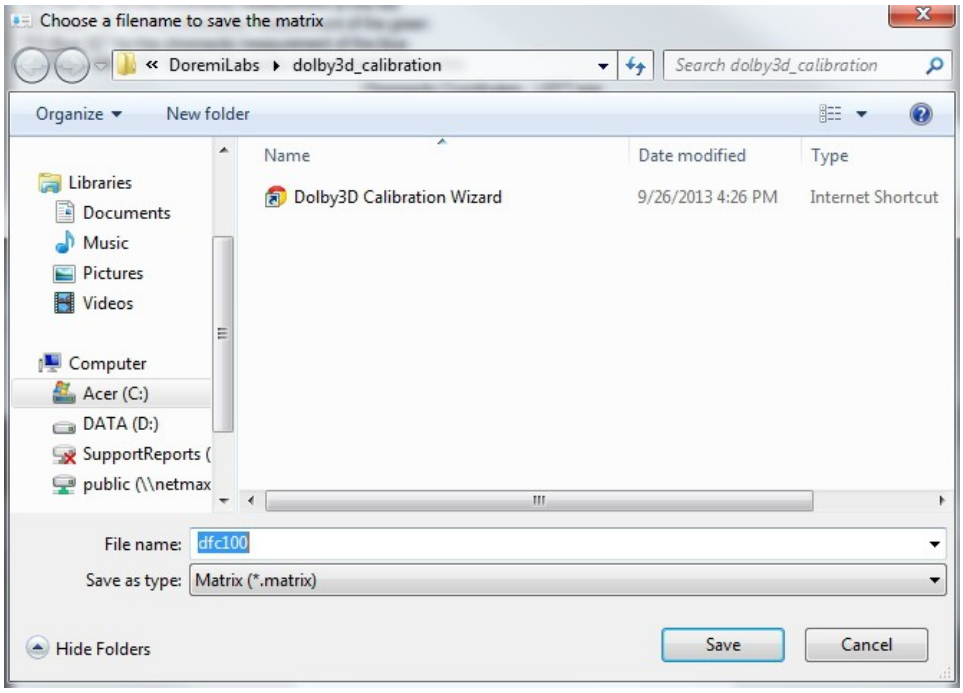

Figure 9: Save

- In the Device Manager, click the Browse button to upload the matrix (Figure 10).

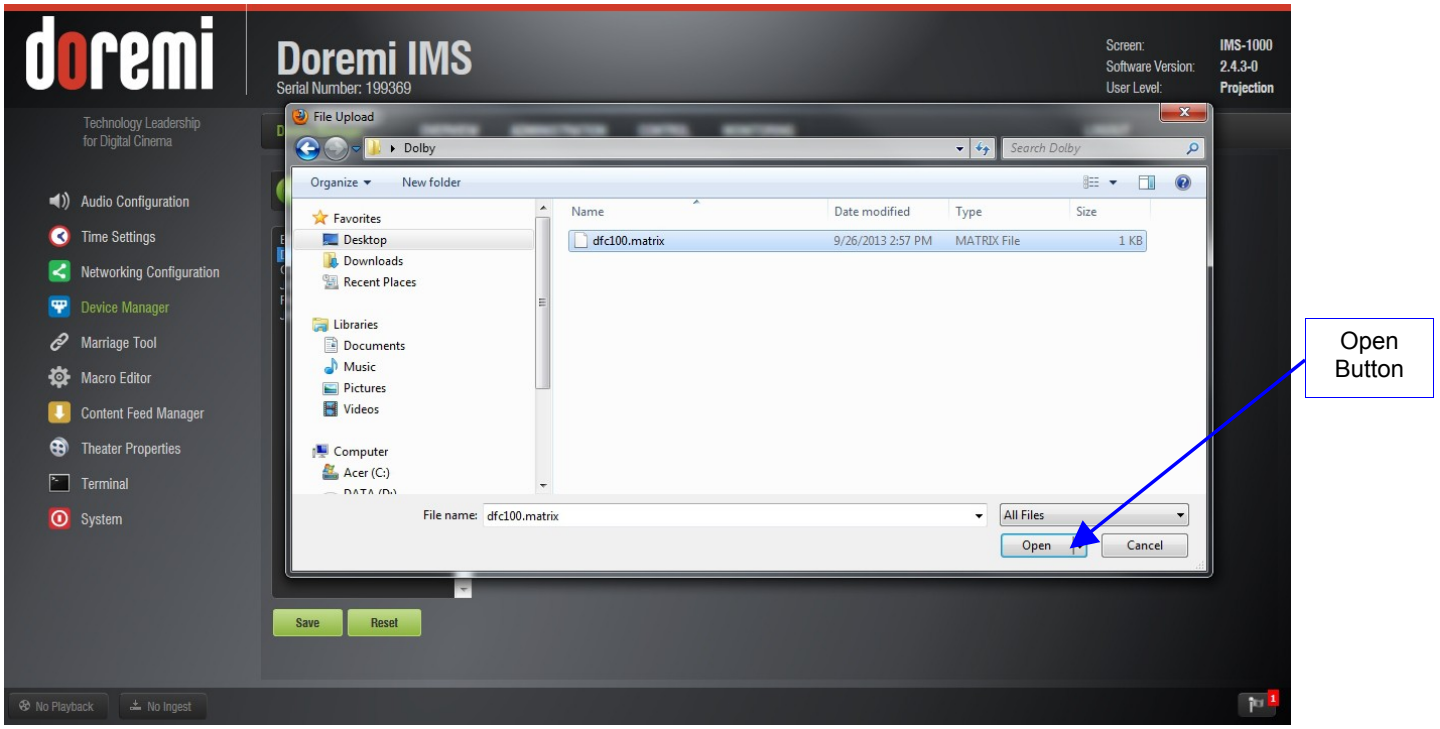

Figure 10: File Upload

- Click the Upload button. If the file was successfully uploaded, the IMS1000 Web GUI will return the following message: “File successfully uploaded.” See Figure 11.

Figure 11: File Successfully Uploaded

6. Click the Save button.
7. The calibration procedure is now complete.

5 Definitions

The following terms are key definitions for performing the Dolby 3D calibration process.

Luminance: The measured value of brightness; reflected light measure on motion picture screens as footlamberts or candelas per square meter.

Colorimeter: A light-sensitive instrument that measures how much color is absorbed by an object or substance.

6 Document Revision History

Date	Version	Description
09/27/2013	1	First version of document.