

Dolby Game Audio Plug-in API Release Notes

Version 1.0.1.0

Release Date: November 4, 2013

This document provides information about the Dolby game audio plug-in API v.1.0.1.0 release.

For updates and additional information on the use of this API, and information about the Dolby developer program, please visit <u>developer.dolby.com</u>.

If you have questions about the Dolby game audio plug-in API, email <u>dolby.developer@dolby.com</u>.

1 Product Overview

This Unity plug-in enables Android™ developers to use Dolby technology when present in a mobile device. Dolby technology optimizes audio quality, enhancing the experience for anyone listening to music, watching movies, playing video games, or using voice focused applications.

The APIs exposed in the Unity plug-in enable a developer to set one of four predefined profiles: Music, Movie, Game, and Voice. Each of these profiles is tuned to achieve the best audio quality for its particular use case.

2 Contents

This package consists of the Unity plug-in, API description, quick start guide, and sample code.

Documents

- DlbyGmAudUnityPlugin_sys_QSGuide.pdf
 Provides the API structure, usage and best practices
- DlbyGmAudUnityPlugin_sys_IFSpec.pdf
 Contains detailed descriptions of the APIs exposed in the plugin

Library

Contains the Unity plug-in (libDSPlugin.so and DSJavaPlugin.jar) that the games using Unity engine can leverage the APIs in it and control the Dolby audio technology present on licensed devices.

Dolby and the double-D symbol are registered trademarks of Dolby Laboratories. All other trademarks remain the property of their respective owners. © 2013 Dolby Laboratories, Inc. All rights reserved. S13/27434/27640

Dolby Laboratories, Inc. 100 Potrero Avenue San Francisco, CA 94103-4813 USA

Sample

Contains the C# and JavaScript source code that use the API to control Dolby audio technology

3 What's New in This Release

Library

Updated libDSPlugin.so and DSJavaPlugin.jar

4 Technical Notes

- When a game exits and re-enters the foreground, the plug-in provides a
 suspendSession() and restartSession() API. If audio playback is not required while
 your application is in the background, restore the Dolby audio processing system
 configuration to its original state by calling suspendSession(). This ensures that the
 use of the system-wide audio processing is sandboxed to your application.
- Avoid using Dolby audio processing and other track-based audio effect at the same time.

Android supports both global and track-based effects. Running two types of audio processing at the same time may lead to unpredictable consequences. Dolby audio processing is designed to be used as the global effect on a device. Android built-in audio effect, for example Equalizer and Visualizer, can be effective as the track-based. Mostly, with the Android double processing protection mechanism, creating track-based effect and attaching it to an audio session by MediaPlayer or AudioTrack suspend the global audio effect which is only able to resume after the track effect is released. However some device manufactures may have modified the policy to keep Dolby audio processing always active, which results in that audio would be double processed on their devices. To avoid double processing and Dolby effect being suspended, start an application with invoking getDolbyAudioProcessing() API to get Dolby audio processing instance, and do not enable any other audio track effects later, including Android built-in audio effects.

5 Known Issues

 On Samsung Galaxy Tab3 8"(SM-T310) and 10.1"(GT-P5210) devices, the current status and selected profile of Dolby audio processing can be inquired, but the plug-in does not allow the Dolby audio processing to be enabled.