

# GETTING STARTED

With FMOD Ex Programmer's API for Linux

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## Introduction

Welcome to the FMOD Ex Programmer's API for Linux, the quickest and easiest way to get great sound and music into your Linux games. This document will show you how to get started implementing FMOD Ex in your game by pointing you in the direction of detailed API documentation and support resources. While the FMOD Ex Programmer's API presents the same interface on all platforms, each platform does have its own unique features and limitations - Linux-specific features/limitations will be listed here along with any hints and tips for getting the most out of FMOD Ex on Linux.

Have fun implementing great audio and drop us a line some time,

The FMOD Team  
Melbourne, Australia  
[www.fmod.org](http://www.fmod.org)

## Support Resources

### API documentation

Detailed API documentation can be found in the “documentation” directory/folder of your FMOD Ex Programmer’s API installation. This documentation is your main reference for information on FMOD Ex API classes and functions.

### Forums

<http://www.fmod.org/forum>

This should be your first port of call for further FMOD information and questions on implementation. If you have a question related to FMOD, chances are someone else has already asked it. The FMOD forums are free for all FMOD users and are monitored by the FMOD team as well as being home to a strong community of FMOD developers, from student first-timers to top-level professionals working on games that are household names.

### Email

[support@fmod.org](mailto:support@fmod.org)

This is our main technical support line. It’s monitored directly by the FMOD team and we aim to answer all emails within 24 hours. It’s free for all FMOD users and your issues will be addressed directly by the guys who wrote the code. If you can’t find an answer to your problem on the FMOD forums, shoot us an email and we’ll get right onto it.

### Wiki

<http://www.fmod.org/wiki>

The FMOD Wiki contains a wealth of reference material related to FMOD. It includes common issues and solutions, a how-to section for cool techniques and also a package of learning materials that educators can use to teach FMOD to students.

## Installation

Link the following library into your project:

- Use **api/lib/libfmodex.so** to use FMOD Ex with all plugins statically compiled into the library. This means you can use all the features of FMOD without needing extra plugins accompanying your application. The plugins version of FMOD has now been deprecated, all FMOD plugins are always available, customizing this requires licensing FMOD to get source access.

## Formats not supported

WMA is the only common PC file format not supported in FMOD Ex for Linux. This is because FMOD uses a Windows codec to be able to decode WMA. This codec is proprietary and owned by Microsoft, it is not cross platform.

## ALSA driver arguments

If a particular device needs arguments, for instance you wish to target device "hw:1:0" (the second sound card, first device). You can do this by selecting the "hw" device via **System::setDriver**, then set the appropriate argument via the **FMOD\_LINUX\_EXTRADRIVERDATA** structure.

Arguments can be passed in with the **System::init** 'extradriverdata' parameter. This **extradriverdata** parameter is a pointer to a **FMOD\_LINUX\_EXTRADRIVERDATA** structure found in fmodlinux.h. You can use this structure to specify the arguments for both output and record drivers.

## Output mode selection

By default if you do not specify the output mode via **System::setOutputType** FMOD will try to determine the best choice for your system. The order of selection is as follows, note that ESD can only be selected manually:

1. **PulseAudio**, detected via "pulseaudio --check".
2. **ALSA**, detected via checking for the existence of "libasound.so.2".
3. **OSS**, fallback if neither PulseAudio nor ALSA is available.