

# LASSO

Allow consumers worldwide to more easily discover, manage, and enjoy their digital content

## Benefits to device manufacturers and online retailers:

- Improve customer satisfaction by enhancing the discovery and enjoyment of music and movies
- Differentiate and customize devices with highly descriptive, worldwide metadata from Rovi Data Solutions, powered by AMG
- Contribute to a cost-effective deployment, with a highly portable SDK and global availability
- Choose the implementation option that suits your needs: LASSO Networked Edition or LASSO Local Edition



LASSO Networked Edition provides digital media recognition and data via devices that are connected to the internet.

Manufacturers in the consumer and automotive electronics industries, as well as online retailers, must be selective when choosing a media recognition solution. The solution must embed identification and navigational capabilities into their devices and portals, and ensure streamlined and aesthetically pleasing experiences for customers. It must also offer deeply descriptive types of data – cover art, reviews, recommendations, samples, relational links and more.

## LASSO Media Recognition Solution

Rovi's LASSO™ media recognition solution helps CE device manufacturers and online retailers increase revenue and differentiate their offerings by enabling them to provide solutions that identify media collections and deliver descriptive, graphically rich content to devices, websites and applications.

At the core of LASSO is Rovi's global music and movie data, powered by AMG. With a robust image library, rich media content, as well as both editorial and user-submitted information, data is coupled with the application and can be customized by region or other unique characteristics.

## TOC Recognition

Rovi's patented technology leverages “fuzzy algorithms” that compensate for a wide range of possible variations of a Table of Contents (TOC). To recognize CDs, LASSO uses a database of high-quality TOCs that are cleansed using advanced quality filters and data mining. The solution also delivers matching accuracy by accounting for differences in pressings of discs and slight variations in recordings.

Rovi's LASSO also utilizes TOC recognition technology to recognize DVDs and Blu-ray® Discs. LASSO deliver titles, MPAA ratings, directors, artists, and a host of further information, helping customers more conveniently manage their movie collections.

## Acoustic Fingerprint Recognition

Acoustic fingerprint recognition identifies audio tracks and is based on a unique identifier created from acoustic analysis of each audio track. LASSO provides efficient and precise acoustic fingerprint recognition technology developed to identify audio tracks encoded at virtually any bit rate.

Additionally, the solution utilizes remarkably small fingerprints and an efficient data-retrieval engine for a highly scalable small-footprint deployment of the technology. Patented Rovi technology has more than 25 million unique fingerprints.

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### Technical Specifications

- **Highly Portable SDK** – Software code has been written in C language for maximum platform portability and compatibility
- **Straightforward Development and Implementation** – Products can be built around our technologies with just a few API calls
- **Extensive Data** – LASSO draws from a database of editorial, standardized, and normalized metadata
- **Unicode Compliant** – Unicode support via UTF8 character set encoding
- **Content Discovery** – Can be integrated with Rovi's Tapestry™ for automatic, intelligent playlist generation
- **Global Availability** – Product is licensed and deployed globally
- **Network Reliability** – Multiple server locations; fully redundant fiber connections, data centers, power and environmental controls; continuous monitoring

### Two Editions

#### *Rovi's LASSO Networked Edition*

The Networked Edition of LASSO provides digital media recognition and data via devices that are directly connected to the Internet. It supports the recognition of physical media in the form of commercial audio CDs, DVDs and Blu-ray Discs through TOC-based look-ups as well as individual audio tracks through Rovi's innovative acoustic fingerprint recognition technology. Information is pulled directly from Rovi's database and is constantly refreshed.

#### *Rovi's LASSO Local Edition*

When LASSO is implemented locally, a subset of the main database is stored on the CE device. The Local Edition is preferred when Internet access is prohibitive (e.g., in car entertainment or navigation systems). Designed for integration into consumer electronic devices, LASSO Local Edition features a custom-built database which is local, compact, and contained in a single file.

LASSO Local Edition is customizable by field, size or other characteristics, including by global region. Maximum data scope flexibility allows device manufacturers to include media recognition in a wide variety of devices. The Local Edition also accepts periodic database updates, in a variety of ways.

Rovi powers the discovery and enjoyment of digital entertainment through innovative, flexible solutions and metadata that captivate consumers. Core to the digital home ecosystem, Rovi enables service providers, consumer electronics manufacturers, content publishers and websites to connect with their customers. Learn more at [rovicorp.com](http://rovicorp.com).

Rovi. Join the entertainment.

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LASSO and our other solutions  
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