



# Fraunhofer

IIS

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS

## JOURNALINE®





## BENEFITS

### HASSLE-FREE

Simply re-use your existing text content in RSS or XML format

### BROADCAST-OPTIMIZED

Journaline works at the lowest bit-rates and therefore does not affect audio quality

### OPEN INTERNATIONAL STANDARD

Be sure that receivers will be able to interpret Journaline today and tomorrow

### VALUE FOR MONEY

Make services more attractive to listeners and advertisers

### READY-TO-START

Use the reliable ContentServer encoder platforms from Fraunhofer IIS and get started instantly

### EASY TO IMPLEMENT

Fraunhofer IIS licenses ready-to-run decoder software for PC-based and embedded platforms

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### BROADCASTERS WHO ALREADY SUPPORT JOURNALINE:

Deutsche Welle, BBC, ROCK ANTENNE, Deutschland Radio, Radio Vaticana, RAI Way, ARD broadcasters, Bayern Digital Radio, RTL Group, Clear Channel Radio for the Total Traffic HD Plus data service and many more.

To this point in time, consumers of broadcast services have had little choice but to be relatively passive. Sometimes that has resulted in inconvenience for the user. For example, picture these everyday scenarios:

“What was that call-in number again?”

“Oh no, I missed the latest sports news update – how did my team get on?”

“I hope I am not too late to pick-up my sister from the airport. I wonder if the plane has already landed.”

Journaline means that these frustrating limitations are consigned to the past forever as the service allows users of digital radio to actively obtain the information they want, where they want, when they want.

Journaline is a text-based information service designed for digital broadcasting systems. It provides up-to-date text-based information similar to that offered by an electronic magazine or newspaper. The information is structured in the form of topics and sub-topics that are easily accessible via a menu structure. The type and amount of program-related and program-independent information is defined by the broadcaster. Journaline is designed to support all types of receivers, including a digital radio receiver with simple text screens or graphical screens, mobile devices, in-car receivers with connected navigation systems, etc.



## JOURNALINE FOR BROADCASTERS

Even in today's Internet-dominated world, people spend most of their everyday 'media time' listening to radio stations, for example via bed-side radios or in the car. Radio broadcast services are regarded as being both entertaining and a reliable source of information, including the latest developments in the news, sports results, weather reports, etc. But in this day and age, more and more users are accustomed to getting information on demand – they don't want to wait for the next news spot to come around. Rather, they want to stay updated even without a web browser to hand, so information needs to be available immediately and without the user having to switch to a new medium.

For businesses this represents an exciting and potentially lucrative opportunity. Thanks to Journaline, broadcasters can provide customers with pre-existing information that is sent along with the radio program to the receiver. Not only is this a cost-effective approach, it can also help to reinforce customer loyalty in the current, highly competitive media environment. But Journaline's benefits do not stop there as the service also provides new advertising possibilities – an important consideration as conventional on-air ad bookings become increasingly scarce. Journaline's Hot-Button functionality available in connected devices allows broadcasters and advertisement partners to trigger immediate listener backchannel-interactivity with the push of a button. Ensuing activity can include the visiting of web sites, calling designated phone numbers, sending SMS messages, etc.

Invaluably, Journaline also enables broadcasters to reach hearing-impaired audiences via the service's caption sub-title capability. In addition to enabling the delivery of ticker messages for multiple topics and in various languages simultaneously, this aspect of the service helps broadcasters to ensure that they are ready for any possible future regulation/legislation.

## JOURNALINE FOR RECEIVER MANUFACTURERS

Adding new and exciting consumer-oriented features to radio sets can be crucial to securing more sales. For manufacturers, incorporating Journaline enables the provision of a value added service that customers will appreciate now and in the future.

The advanced text information service is already part of the WorldDMB and DRM Digital Radio receiver profiles, and is shortly to be adopted by other digital broadcast systems. With Journaline, manufacturers have access to a future-proofed technology that guarantees compatibility today and tomorrow, and which paves the way for successful long-term operation. Thanks to the efficient design of the Journaline standard the service can be integrated even into basic kitchen/bathroom radios with very limited decoding and user interface capability, bringing a wealth of news and text information to consumers through easy, hassle-free navigation. More advanced devices can exploit the enhanced functionalities provided by Journaline, such as bookmarks, images, geo-referencing for location-based search or easy navigation to advertised locations, or the text-to-speech feature for in-car receivers. As a result, Journaline can be regarded as a fully scalable standard for all kinds of devices.

To speed-up implementation, limit the time-to-market, and reduce the need for in-house preparation, Fraunhofer IIS offers optimized Journaline decoder implementations, ready to run on an embedded or PC-based platform.

For more information please visit

**WWW.JOURNALINE.INFO**

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\* Fraunhofer USA Digital Media Technologies,  
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and supports the products of Fraunhofer IIS  
in the U. S.

*About Fraunhofer IIS*

*The Fraunhofer IIS Audio and Multimedia division, based in Erlangen, Germany, has been working in compressed audio technology for more than 20 years and remains a leading innovator of technologies for cutting-edge multimedia systems. Fraunhofer IIS is the main inventor of mp3 and universally credited with the co-development of AAC (Advanced Audio Coding) as well as technologies for the media world of tomorrow, including MPEG Surround and the Fraunhofer Audio Communication Engine.*

*Through the course of more than two decades, Fraunhofer IIS has licensed its audio codec software and application-specific customizations to at least 1,000 companies. Fraunhofer estimates that it has enabled more than 1 billion commercial products worldwide using its mp3, AAC and other media technologies.*

*The Fraunhofer IIS organization is part of Fraunhofer-Gesellschaft, based in Munich, Germany. Fraunhofer-Gesellschaft is Europe's largest applied research organization and is partly funded by the German government. With nearly 17,000 employees worldwide, Fraunhofer-Gesellschaft is composed of 60 Institutes conducting research in a broad range of research areas.*