



Introducing EasyWatch™ technology



Do you like watching movies?
How about TV shows, talk shows, or debates?

Have you ever felt that you were **missing** some of the dialogue because people were **speaking too quickly**?

Alango EasyWatch™ technology can help!



Download EasyWatch Player

to experience and test EasyWatch processing on your own video clips

- Plays any MP4 video file
- 64MB download (.exe installer)

[Download EasyWatch Player](#)

About EasyWatch™

[EasyWatch](#) is a technology that personalizes the TV watching experience to enhance intelligibility of dialogue: the video is slowed to match the pace of the audio, maintaining synchronization of the audio and video streams.

Alango EasyWatch technology has been developed to address a common complaint among television watchers: **difficulty understanding speech in TV programs**. Several factors may contribute to this, including hearing ability, speech-to-noise ratio, overwhelming sound effects, TV-room acoustics, TV audio set-up, and muddled or accented speech. This is further complicated by the fact that different programs or movies have distinct acoustic profiles or are in a foreign language, which results in fluctuating intelligibility. With so many variables it befits TV manufacturers to offer features allowing TV viewers to personalize the audio to enhance cognition.

EasyWatch is designed to **improve intelligibility of speech for all viewers**, and especially those with impaired auditory or cognitive function. In general, problems of understanding speech occur more frequently while viewing movies, television series, and talk shows (versus newscasts and documentaries, which place a priority on speech cadence and enunciation). Hence, EasyWatch may be especially beneficial for comprehending movies, dramatic and comedic series, and talk shows.

EasyWatch Technology

You have probably experienced the slowing or speeding of video playback since many on-line streaming services allow the user to change the playback speed relative to the original video speed. Such a feature slows down the video and then correspondingly slows the audio. In other words, video is the master and audio the slave.

The downside with this approach is that audio content is not analyzed and processed according to its individual constituents; silence, noise, and music are treated with equal merit to voice. Slowing down the video/audio stream using this method does not improve intelligibility. In fact, it might harm auditory comprehension. For instance, an arbitrary speed adjustment in the music and other non-speech segments might produce artifacts or annoying distortions.

EasyWatch treats audio as the master and video as the slave. As a result, the speech itself can be slowed without slowing irrelevant audio segments, such as silence or noise. Humans are more sensitive to audio artifacts than video artifacts. With EasyWatch audio is the master, allowing for several possible modifications of the audio/video stream:

1. Only segments of the audio/video stream containing speech will be slowed down.
2. Non-speech segments of the video will be sped up while speech will remain unaltered for instances when one desires to speed up a program without compromising dialog clarity.
3. Speech segments of the audio/video can be slowed down while non-speech segments can be sped up to compensate for the delay accumulated during the speech segments. This enables improved intelligibility of real time video streaming without accumulating large delays.

Furthermore, the algorithm will only slow down audio and voice segments where there is no danger of producing artifacts. This real-time analysis and processing technology performs sophisticated speech analysis and stretches only those parts that are important for auditory comprehension.

We invite you to experience EasyWatch for yourself by downloading and installing the **EasyWatch Player** , a hands-on technology demo that enables EasyWatch processing on your own video files.



Screenshot of Alango EasyWatch Player v1.0

[Download EasyWatch Player v1.0](#) (64 MB download, .EXE Installer)

[Download EasyWatch Player User Guide \(PDF\)](#)

More information about EasyWatch can be found [on the Alango website: alango.com/easywatch](http://alango.com/easywatch).

But wait, there's more. . .

Alango Sound Effect Normalization (SEN) Technology

Excessively fast speech is not the only culprit spoiling TV dialog intelligibility. Extreme sound effects are an ominous villain dead set on fatiguing the viewer and undermining comprehension of movies, shows, and sporting events.

Alango **Sound Effect Normalization (SEN)** technology has been developed to improve speech intelligibility by de-emphasizing background sounds and music. Learn more about SEN here:

<http://www.alango.com/sound-effect-normalization.php>

People have recently been compelled to spend a lot of time at home for work and leisure. Screen time is increasing. TV OEMs should see increased demand for their products. Alango hopes these OEMs consider the value of offering advanced features to **improve the auditory comprehension of their customers** , leading to increased enjoyment of the TV watching experience overall.