



About the Client:

The Client is a Wireless Headphone OEM manufacturer from Singapore.

Client Requirements:

The Client wanted Robosoft to port the existing user interface application and device driver of the *wireless headphone device* from Windows 98 to Mac OS X.

Solutions Provided by Robosoft:

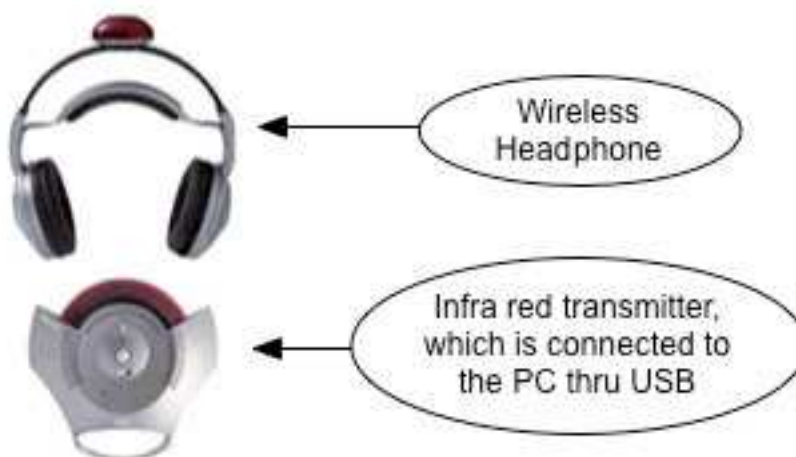
Robosoft developed an equalizer, which is the center for equalizing and balancing music playback on the computer. The equalizer provides customization option that was previously not available for audio product. The headphones incorporate a receiver that collects crystal clear sound across the full dynamic spectrum. It uses a patented technology to equalize the frequency response of the left and right ears. It has the ability to interface with any standard Macintosh multimedia software.

The device driver is based on the AppleUSB Audio driver and the sound data is intercepted and the custom filters are applied on the sound data. The equalizer settings are obtained from the user through the application. After filtering the sound is redirected to the output device. This strategy affected all the sound data that is played by the system irrespective of whether the media is played from a media player or a game.

Environment Used:

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|----------------------------|---|
| 1. Development Environment | Metrowerks CodeWarrior Pro 7, PowerPlant framework, Project Builder, Mac OS X |
| 2. Tools and technologies | I/O Kit, Core Audio SDK |
| 3. Duration of the Project | 5 months |

Snapshot of the product:





UIs Designed for the Equalizer Application:



Figure 1: Effect Equalizer Settings Interface