ALL ROOMS DISTORT SOUND. UNTIL NOW.
Personal Experience

- Research
- Idea
- Patent
- Product Development
- Secure rights to patents
- Financing
- Building a team
- Building a brand
Audyssey Background

- Chris Kyriakakis and Tom Holman (inventor of THX) founded the Immersive Audio Lab in 1996

- After years of research
  - Fully understand and solve the problem of sound and room acoustics
  - Several PhD students, and more than 100 technical papers and 4 books
What We Do

- Improve the quality of sound by developing proprietary audio signal processing technology

- Only deliver technologies that improve sound quality as never before possible

- Research, research, research followed by product development

- Expertise in acoustics, psychoacoustics, sound reproduction, audio signal processing, and software development
Sound quality is not very good and different in each seat because of interaction of loudspeakers with room acoustics.
Until Now.

- MultEQ Delivers Optimal Sound in Each Seat
  - Intelligibility is improved, voices are natural
  - Musical balance is restored
  - Seamless surround envelopment
  - Precise imaging and more accurate soundstage
Capturing Data with MultEQ - Fuzzy Clustering

MultEQ Filter

Cabin Representative Response

Cluster Representative Responses
MultEQ Improves Frequency Response in Every Seat

- Seat 1
- Seat 2
- Seat 3
- Seat 4

Original Sound (no EQ) vs. Audyssey

Graphs showing frequency response improvements with Audyssey.
Time Domain Problems

Loudspeaker problems

Dashboard Reflection

Window Reflection

Measured Response Seat 1

Measured Response Seat 2

Measured Response Seat 3

Measured Response Seat 4
MultEQ Improves Time Domain in All Seats

- First peak is narrower and larger: better speaker performance
- Signal after first peak is reduced: better cabin sound
The Result Is a Higher Quality Listening Experience

- Voices and dialog become focused and intelligible
- Musical balance is restored
- The soundstage is made seamless and enveloping
- Audyssey provides a tool set to make the process fast and easy
- Audyssey tuning tools and Audyssey MultEQ technology create a high quality sound experience
# Market and Competitive Environment

## Enabling Sound
- **Encode**
  - Dolby
  - DTS
  - MP3
- **Decode**
  - Dolby
  - DTS
  - MP3

## Improving Sound
### Audyssey products

## Changing Sound
- Special Effects
- Dolby Virtual
- SRS - WOW, Tru-surround
- BBE
- Others
Revenue Model

- In most of our markets Audyssey employs a pure licensing model
  - Manufacturers pay on a per unit basis quarterly to license products
  - No cost of goods

- In the Audyssey installer model, installers pay a license to install products
  - Audyssey provides an installer kit and PC software

- Standalone box - the Sound Equalizer is sold directly to high end installers and retailers
Building a Team

- Started with 1 Prof and two grad students
  - 2 years of doing everything from product development to sales and marketing
- Expanded to 10 people within 6 months of raising first round
  - Professional CEO, DSP engineers and Director of Operations
- Currently 31 people
  - DSP engineers, software development, research, business
The Branding Challenge
Awards for Products with Audyssey

- Best of CES 2006: Denon AVR-2807
- Product of the Year, Sound and Vision Magazine: Denon AVR-5805
- Best of CEDIA 2005: Loudspeakers
  - Phase Technologies dARTS system with Audyssey MultEQ XT
- Best High-End Component, European Imaging and Sound Association (EISA), 2005-2006
- Best AV Receiver, Home Cinema Choice 2005
  - Denon AVC-A1XV Receiver with Audyssey MultEQ XT
- Over 20 reviews and hundreds of articles about Audyssey to date, many available to see on our website
Audyssey Products in the Market Today

- Denon, Marantz, Onkyo, Creston and NAD in home theater, Alpine in aftermarket car audio, and Sharp AQUOS TV
- Audyssey Sound Equalizer for high end home theaters

- Over 1 million products shipped with Audyssey technology

- Our technology works and is proven in the home theater market and is now moving into car market
  - Volvo, Jaguar, Subaru