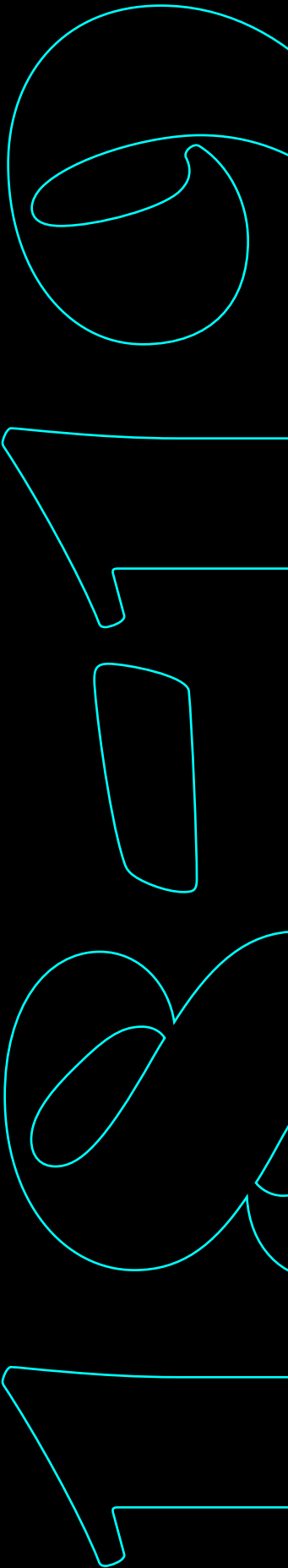


Home audio & vinyl

LOGAN HILLERNS



Everyone listens to music.

However, everyone has different taste and a preferred listening method. Audio quality is important in order to truly enjoy the songs we all love. So why do get stuck listening to most of our music on headphones or laptop speakers? For many home audio and vinyl is too expensive and is much more involved than connecting to a bluetooth speaker, or plugging in headphones. What if it wasn't? Through survey research I learned a majority of my audience were interested in listening to vinyl records and had considered buying a home audio system but had never installed audio equipment and felt the task was too difficult. The goal of this project is to make that process as accessible as possible. On average we listen to 32 hours of music every week. Wouldn't you enjoy those 32 hours a lot more if it sounded like the artist was right there in your living room? Through this project I aim to make home audio and vinyl cheaper and easier to get started with and more simple to understand. I plan to achieve this with an all in one home audio package where all the info you need to know is in an easy to use manual which makes the set-up and painless and fun, new records get delivered to your door each month, and where all the components can be controlled with your phone.

Brief

BACKGROUND

Home audio and vinyl has been a favorite hobby of mine for about 6 years now and I've noticed it's something that a lot of my friends and family are really interested in, however often times they're intimidated with getting started. A lot of research is involved and a many separate components that you can't buy together as a package deal. After completing research through surveys, market research, and visual research I have learned that Americans are listening to a rapidly increasing amount of music and almost all of them find audio quality to be an important factor in their daily listening routine. This information paired with the fact that vinyl is now outselling CDs and digital purchases to a point where vinyl sales have increased 260% since 2009, shows an obvious demand for a simpler solution to building an inexpensive, user friendly home audio kit.

AUDIENCE

My audience consists of both women and men anywhere from 18-24. Despite this specific generation's tech-savvy demeanor, 60.5% of my audience found instillation of speaker components to be an intimidating task. Nearly all of which had considered buying a home audio system, but were turned away due to expense, or lack of knowledge. My audience is primarily college students who are on a tight budget and frequently moving, so cost and portability are my main considerations for the production of these products.

OBJECTIVE

The objective is to create a home audio experience that appeals to those who love music and want to improve how they listen to music but don't want to do the research or spend thousands of dollars on premiere audio equipment. With the increasing demand and nostalgia for vinyl records I want to make the process of getting involved with a new hobby as painless and affordable as possible, yet unimaginably rewarding. In order to do this users must find the installation process simple, the instructional booklet easy to understand, and the most basic kit should not exceed \$500.

DELIVERABLES

This project will include a fair amount of deliverables. Branding for the product and company will include a cohesive set of brand guidelines along with a website and receiver compatible app. 3D renders of each product will be created with help from two product designers. I will create and construct the package design for each component. The package design will be simple and use color-based instruction for easy installation. I will also be designing and constructing a small instructional booklet with installation instructions along with everything you need to know about your equipment and the hobby as a whole. I will consider this project a success if it helps persuade those intimidated by the installation and research process to give home audio a try, and if it gets people motivated to improve the quality of those 32 hours they spend listening to music every week.

Methodology 1

SURVEY

WHAT I DID

I created this survey in order to understand exactly why so many people I know have considered buying home audio systems and love to listen to vinyl but are intimidated with getting started. I created a running list of question I had regarding preferred listening methods, streaming services, the importance of audio quality, etc. I used Google Forms to create my survey and gave users about 4 weeks to supply answers. A majority of the results came in within the first few days. By the time I was ready to close the survey I had received about 50 responses. While it isn't an extremely large audience, a majority of my research was created to understand opinion and habits, as opposed to trends and heavily number-based data.

MY GOALS

The goal of this survey is to learn about others music listening habits and understand why they prefer the methods they do. While I love listening to my music on a home audio system I know others may not listen to music as often or care about how their music sounds. On top of this I wanted to figure out the biggest reasons for avoiding home audio and vinyl. This was the primary method for learning about my target audience while my other methods focused more so on the design and material of the product itself.

RAW DATA

| AGE | GENDER | HOW OFTEN DO YOU LISTEN TO MUSIC? | HOW OFTEN DO YOU BUY VINYL? | HOW OFTEN DO YOU BUY DIGITAL MUSIC? |
|-------|--------|-----------------------------------|-----------------------------|-------------------------------------|
| 25-34 | Female | Often | Never | Sometimes |
| 18-24 | Female | Often | Never | Sometimes |
| 18-24 | Male | Sometimes | Sometimes | Never |
| 18-24 | Female | Sometimes | Never | Never |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Male | Often | Rarely | Rarely |
| 35-44 | Male | Often | Never | Sometimes |
| 18-24 | Female | Always | Never | Never |
| 18-24 | Male | Always | Often | Rarely |
| 18-24 | Male | Always | Often | Sometimes |
| 18-24 | Female | Always | Never | Rarely |
| 18-24 | Female | Always | Never | Never |
| 18-24 | Male | Always | Rarely | Rarely |
| 18-24 | Male | Always | Rarely | Often |
| 18-24 | Female | Always | Often | Rarely |
| 18-24 | Male | Often | Sometimes | Never |
| 18-24 | Male | Always | Rarely | Rarely |
| 18-24 | Female | Always | Often | Often |
| 18-24 | Female | Always | Never | Always |
| 18-24 | Female | Often | Never | Rarely |
| 18-24 | Male | Often | Rarely | Sometimes |
| 18-24 | Female | Sometimes | Never | Never |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Female | Sometimes | Often | Never |
| 18-24 | Male | Always | Sometimes | Never |
| 18-24 | Female | Always | Never | Always |
| 18-24 | Female | Always | Often | Never |
| 18-24 | Male | Often | Rarely | Rarely |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Female | Often | Never | Rarely |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Female | Often | Never | Rarely |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Female | Sometimes | Sometimes | Never |
| 18-24 | Female | Often | Never | Never |
| 18-24 | Female | Often | Never | Always |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Male | Always | Never | Rarely |
| 18-24 | Female | Always | Rarely | Never |
| 18-24 | Female | Always | Rarely | Never |
| 18-24 | Male | Always | Never | Never |
| 18-24 | Male | Often | Never | Rarely |

Methodology 1

SURVEY | *Raw Data*

| HOW OFTEN DO YOU BUY CDS? | PREFERRED LISTENING METHOD | PREFERRED STREAMING METHOD | AUDIO QUALITY IMPORTANCE (1-5) |
|---------------------------|---|--|--------------------------------|
| Never | Headphones | Spotify, Apple Music, Pandora, iTunes library | 5 |
| Never | Headphones, Bluetooth speaker, Live at events | Spotify | 4 |
| Never | Headphones, Bluetooth speaker, Home audio, Phone speaker, Laptop speaker, Radio | Spotify, Vinyl | 4 |
| Never | Bluetooth speaker | Spotify | 3 |
| Never | Headphones | Google Play Music | 2 |
| Never | Headphones, Bluetooth speaker | Spotify, Vinyl | 3 |
| Sometimes | Headphones, Bluetooth speaker, Laptop speaker, Radio | Apple Music, iTunes library, CDs, Downloads or ripped from CDs | 5 |
| Never | Headphones, Home audio | Spotify | 3 |
| Often | Headphones, Bluetooth speaker | Spotify, Vinyl, CDs | 5 |
| Rarely | Headphones, Bluetooth speaker, Home audio, Phone speaker, Laptop speaker, Radio | Spotify, Vinyl, Cassette, CDs | 5 |
| Rarely | Headphones | Spotify | 4 |
| Never | Headphones, Bluetooth speaker, Phone speaker, Laptop speaker, Radio | Spotify, Pandora | 4 |
| Never | Headphones | Spotify, Record player | 4 |
| Rarely | Bluetooth speaker, Home audio | Apple Music, iTunes library | 4 |
| Often | Headphones, Bluetooth speaker, Home audio, Radio | Apple Music, iTunes library, Vinyl, Cassette, CDs | 4 |
| Never | Headphones | Spotify | 3 |
| Sometimes | Headphones, Home audio, Radio | Vinyl, CDs, Music server | 5 |
| Sometimes | Headphones, Record player | Spotify, iTunes library, Vinyl | 5 |
| Never | Headphones, Bluetooth speaker | Spotify | 5 |
| Rarely | Headphones, Home audio | Spotify, iTunes library, CDs | 5 |
| Sometimes | Headphones, Home audio, Phone speaker, Laptop speaker | Cassette, CDs, Torrent | 4 |
| Never | Bluetooth speaker, Home audio | Spotify, iTunes library | 3 |
| Never | Headphones, Phone speaker | Spotify | 4 |
| Rarely | Bluetooth speaker, Home audio | Spotify, Vinyl | 4 |
| Never | Headphones, Home audio | Spotify, Vinyl | 4 |
| Rarely | Headphones, Bluetooth speaker, Phone speaker, Laptop speaker | Spotify | 4 |
| Rarely | Headphones, Home audio, Laptop speaker | Spotify, Vinyl | 5 |
| Rarely | Headphones, Bluetooth speaker, Home audio, Concerts/live | Spotify, Pandora, Vinyl, CDs, Instruments | 4 |
| Never | Headphones, Bluetooth speaker, Home audio, Radio | Spotify | 5 |
| Never | Headphones, Bluetooth speaker, Home audio | Spotify, CDs, Amazon Music | 5 |
| Sometimes | Headphones, Home audio, Radio, in my car | Apple Music, CDs | 5 |
| Sometimes | Headphones, Bluetooth speaker, Home audio | Spotify, Vinyl, CDs | 4 |
| Never | Headphones, Bluetooth speaker | Apple Music | 5 |
| Never | Headphones, Home audio | Spotify, Vinyl | 4 |
| Never | Headphones | Spotify | 2 |
| Rarely | Headphones, Bluetooth speaker | Spotify | 4 |
| Never | Headphones, Bluetooth speaker, Laptop speaker | Spotify, Pandora | 4 |
| Never | Headphones, Home audio | Spotify | 4 |
| Never | Headphones, Bluetooth speaker, Laptop speaker | Spotify, iTunes library | 4 |
| Never | Headphones, Bluetooth speaker, Radio | Spotify | 4 |
| Never | Headphones, Bluetooth speaker, Home audio, Phone speaker, Laptop speaker | Apple Music, Vinyl | 5 |
| Never | Headphones | Youtube | 4 |
| Never | Headphones | Spotify, iTunes library | 4 |

Methodology 1

SURVEY | *Raw Data*

RAW DATA

| AUDIO INSTALLATION EXPERIENCE | IS AUDIO INSTALLATION INTIMIDATING? | PREFERRED METHOD OF INSTRUCTION | INTEREST IN LISTENING TO VINYL | INTEREST IN COLLECTING VINYL | CONCERT ATTENDANCE FREQUENCY (YEAR) |
|-------------------------------|-------------------------------------|---------------------------------|--------------------------------|------------------------------|-------------------------------------|
| No | Yes | Visual | No | No | Never |
| No | Yes | Visual | Maybe | No | 7-9 times |
| Yes | No | Verbal | Yes | Yes | 1-3 times |
| No | Yes | Visual | Maybe | No | 1-3 times |
| No | Yes | Visual | Yes | Yes | 1-3 times |
| No | Yes | Verbal | Yes | Yes | 1-3 times |
| Yes | No | Visual | Maybe | Maybe | 1-3 times |
| No | No | Written | Maybe | Maybe | 1-3 times |
| No | No | Visual | Yes | Yes | 7-9 times |
| Yes | No | Visual | Yes | Maybe | 7-9 times |
| No | Yes | Visual | Yes | Yes | 1-3 times |
| No | Yes | Visual | No | No | 1-3 times |
| No | Yes | Visual | Yes | Yes | Never |
| Yes | No | Written | Yes | Yes | Never |
| Yes | Yes | Visual | Yes | Yes | 4-6 times |
| Yes | No | Visual | Yes | Yes | 1-3 times |
| Yes | No | Written | Yes | Yes | 1-3 times |
| No | Yes | Visual | Yes | Yes | 4-6 times |
| No | No | Visual | Yes | Yes | 1-3 times |
| No | Yes | Visual | Yes | No | 1-3 times |
| No | No | Visual | Yes | Maybe | 4-6 times |
| No | Yes | Visual | Yes | Maybe | 1-3 times |
| No | No | Visual | Maybe | No | 1-3 times |
| Yes | Yes | Visual | Yes | Yes | 1-3 times |
| Yes | Yes | Written | Yes | Yes | 7-9 times |
| No | Yes | Visual | Yes | Yes | 1-3 times |
| Yes | Yes | Visual | Yes | Yes | 4-6 times |
| Yes | Yes | Visual | Yes | Yes | 4-6 times |
| Yes | No | Visual | Yes | Yes | 4-6 times |
| No | Yes | Visual | Yes | Maybe | Never |
| No | Yes | Visual | Yes | Maybe | 1-3 times |
| No | Yes | Visual | Yes | Yes | 1-3 times |
| Yes | No | Visual | Yes | Yes | 10+ |
| No | Yes | Visual | Yes | Yes | 1-3 times |
| Yes | No | Visual | Yes | Yes | 4-6 times |
| No | Yes | Visual | Yes | No | 7-9 times |
| No | Yes | Visual | Yes | Yes | 4-6 times |
| No | Yes | Visual | Yes | Maybe | 4-6 times |
| Yes | No | Visual | Yes | Yes | 1-3 times |
| Yes | No | Visual | Maybe | Maybe | 1-3 times |
| No | Yes | Visual | Yes | Yes | 4-6 times |
| Yes | Yes | Visual | Yes | Yes | 4-6 times |
| No | Yes | Visual | Yes | Yes | Never |
| No | No | Verbal | Yes | No | Never |

Methodology 1

SURVEY | *Raw Data*

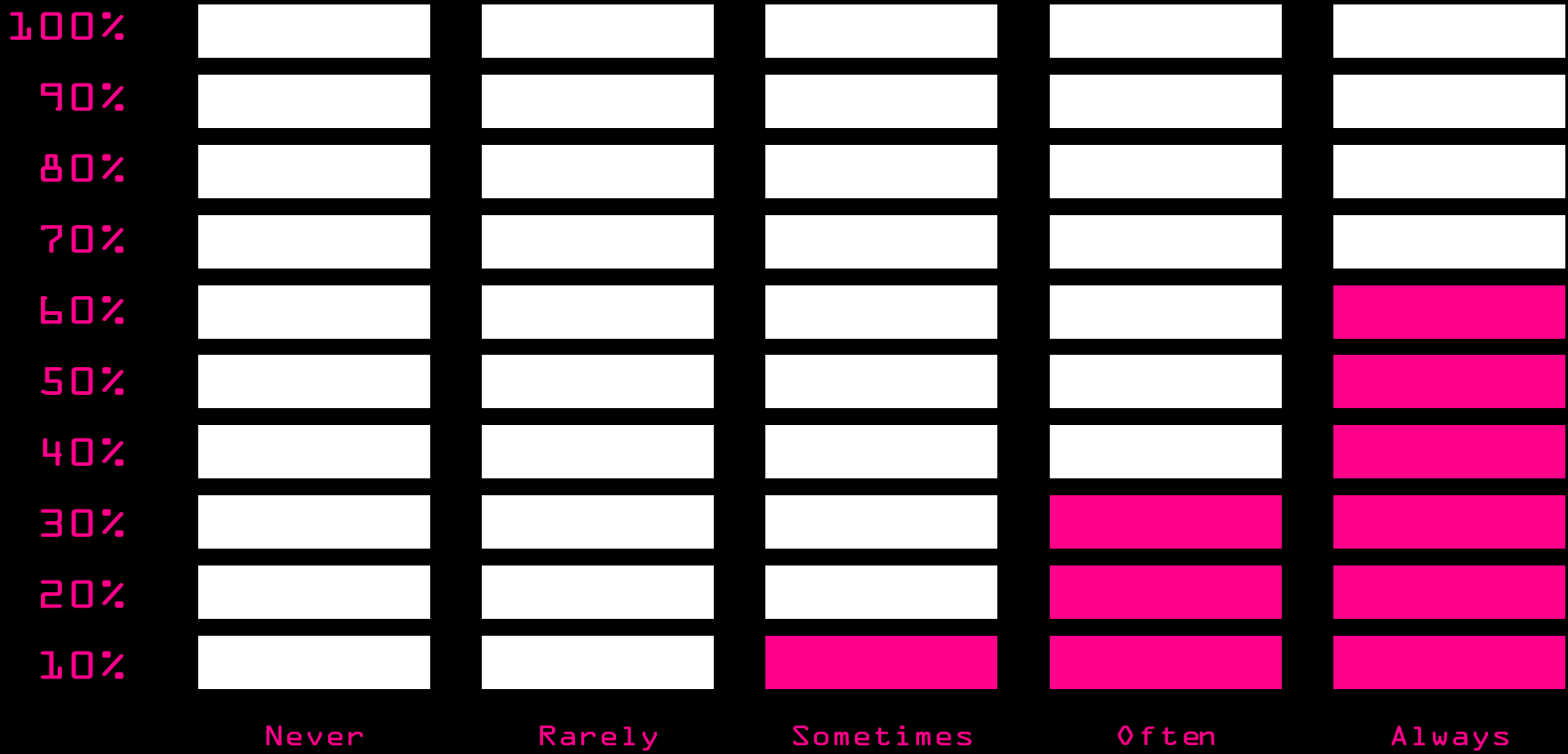
RAW DATA

| CONSIDERED BUYING HOME AUDIO | IF NOT, WHY? | FAVORITE ALBUM |
|------------------------------|--|---|
| No | I'm broke. | Red // Blue -adventure club Trench - TOP |
| Yes | | |
| Yes | | |
| Yes | | |
| No | Too expensive. | Straight Outta Compton by NWA |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| No | Cost and satisfied with my headphones. | Seoul - stay with us Currents - Tame Impala Be The Cowboy / Mitski |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| Yes | | |
| No | Out of my price range. | Amanecer, Bomba Estereo Any albums by Turnover Channel orange All Things Must Pass by George Harrison Clearing The Path To Ascend, by YOB Ah you ask hard questions |
| Yes | | |
| No | | |
| No | | |
| Yes | Too young, too much moving around. But sometime when I'm older! I don't see the need for one. | Best of Jim Croce Channel orange Currents by tame impala |
| No | | |
| Yes | | |
| Yes | | |
| No | It seems a bit intimidating/expensive. | I don't do albums, only individual songs ABBA Gold: Greatest Hits I like Jimmy Hendrix and Van Morrison Too many to choose from, but I'll try: tie between Lonerism by Tame Impala and OK Computer by Radiohead. Californication |
| Yes | | |
| Yes | | |
| Yes | | |
| No | Don't own a house. | watch the throne Who's That in the Fog- Tom Rosenthal Too many to answer GKMC What you're asking is impossible. There are too many albums. As of right now "Golden Hour" Graduation by Kanye West before he was fukt up in da head Revolver, The Beatles "When Life Gives You Lemons, You Paint That Shit Gold" by Atmosphere |
| Yes | | |
| Yes | | |
| Yes | | |
| No | Already have one! | |
| No | | |
| Yes | | |
| Yes | | |
| Yes | Price. College Student budget. I'm in college and doesn't seem reasonable. | |
| No | | |
| No | | |
| No | | |
| Yes | Expensive. The prices seem too high to justify for my level of interest. | |
| Yes | | |
| Yes | | |
| Yes | | |
| No | | |
| No | | |

Methodology 1

SURVEY | *Data Visualized*

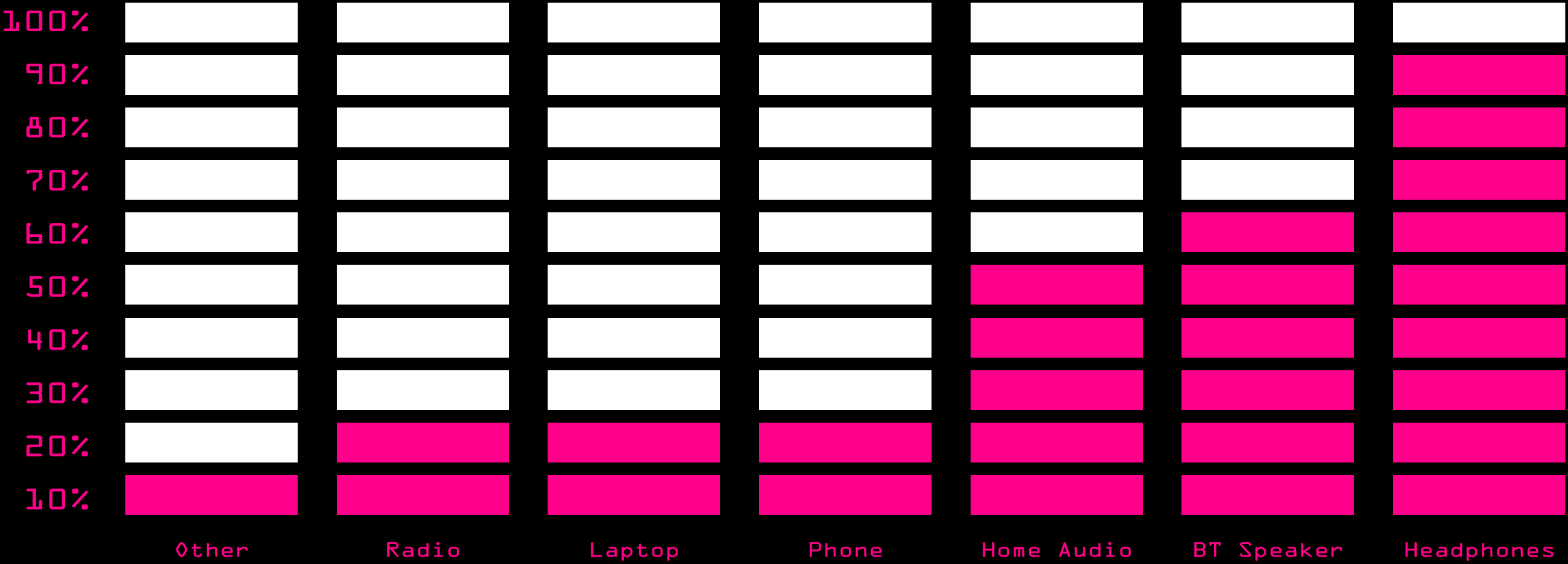
How often do you listen to music?



Methodology 1

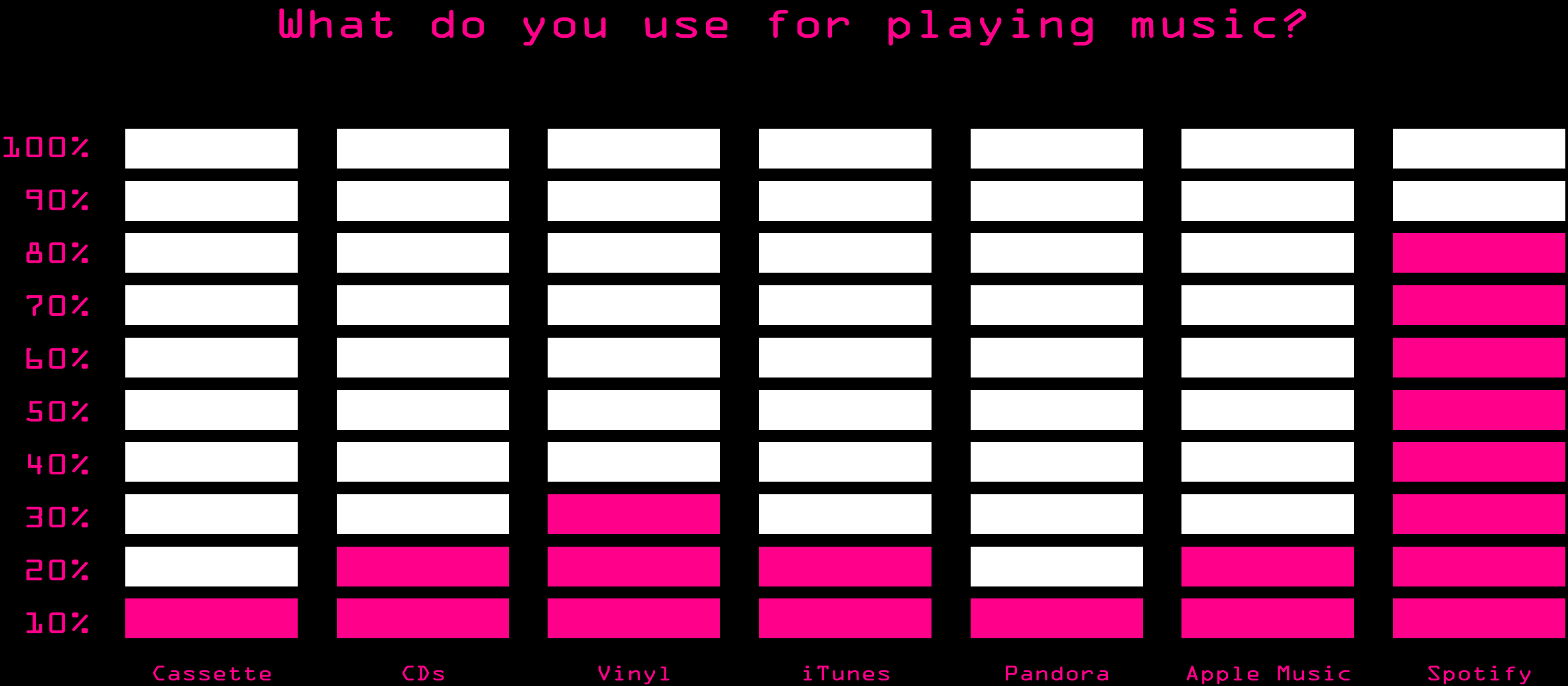
SURVEY | *Data Visualized*

What is your preferred listening method?



Methodology 1

SURVEY | *Data Visualized*

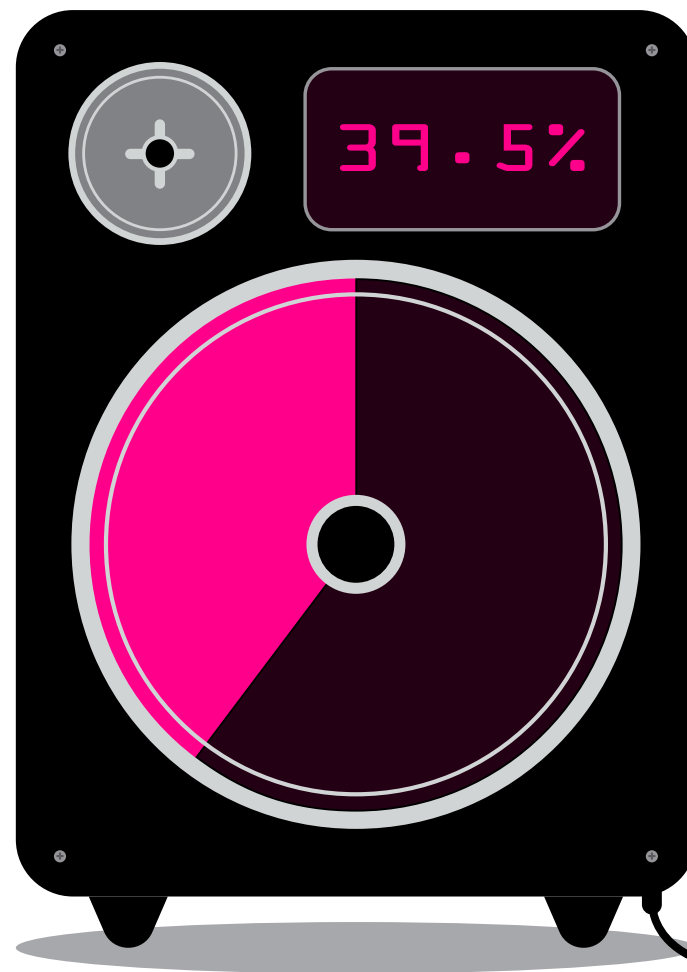


Methodology 1

SURVEY | *Data Visualized*

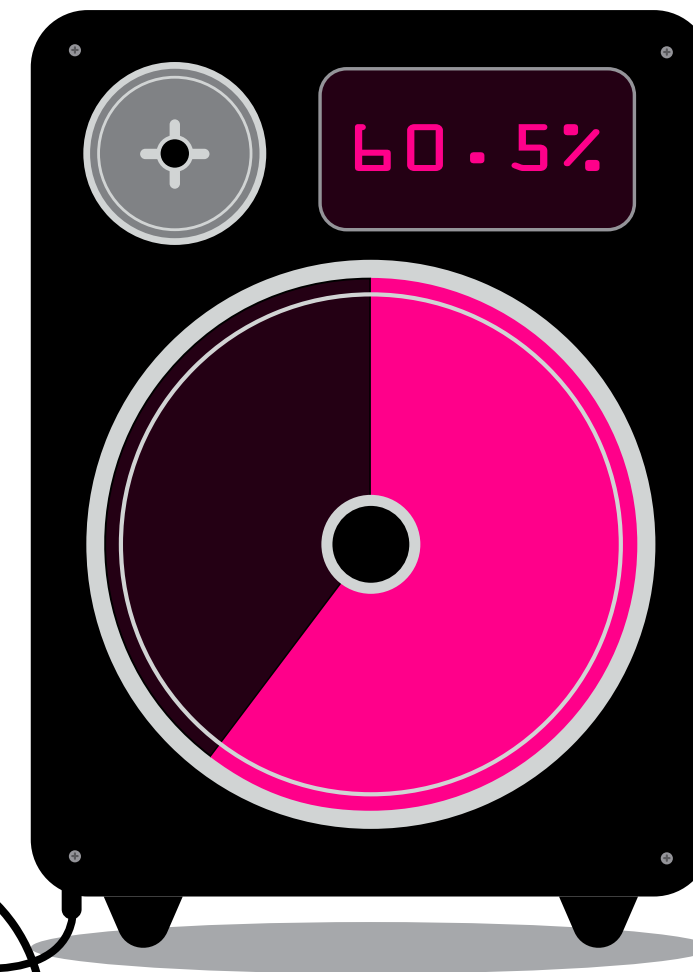
***Do you have any experience
Installing home audio?***

YES ●
NO ●



***Does installing audio components
seem like a difficult task?***

YES ●
NO ●

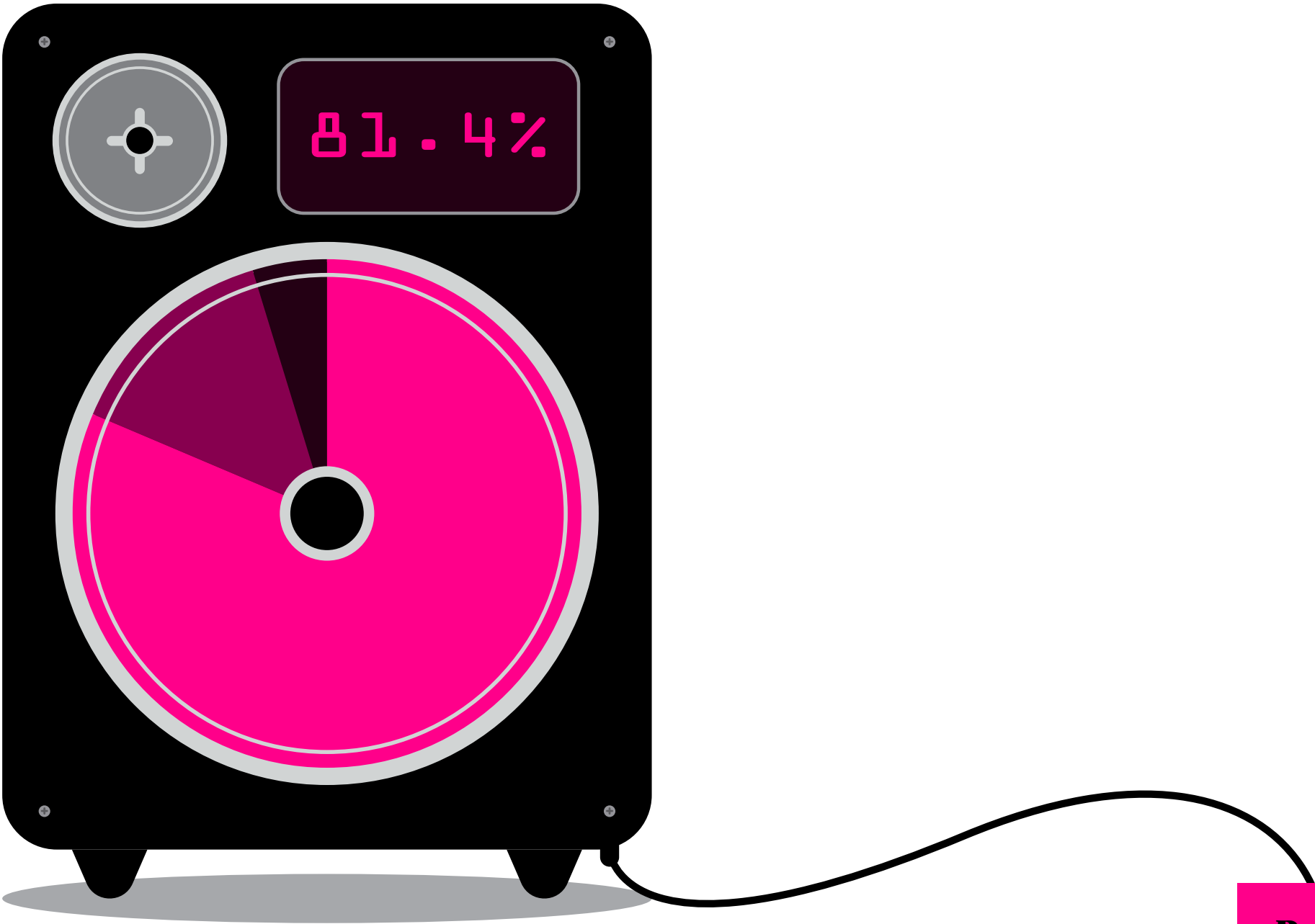


Methodology 1

SURVEY | *Data Visualized*

Are you interested in listening to vinyl?

- YES ● 81.4%
- MAYBE ● 14%
- NO ● 4.6%

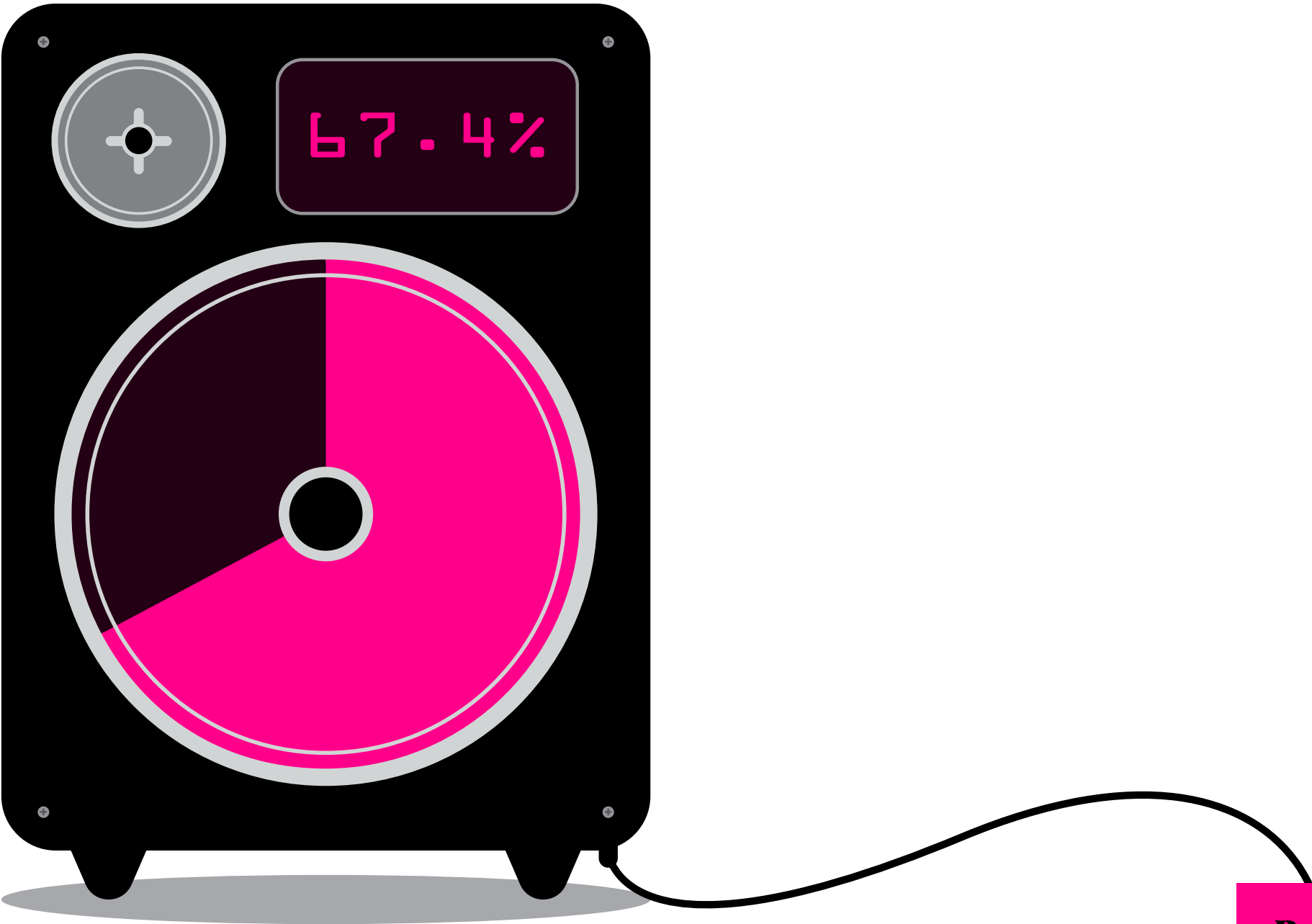


Methodology 1

SURVEY | *Data Visualized*

*Have you ever
considered buying a
home audio system?*

- YES ● 67.4%
- NO ● 32.6%



Methodology 1

SURVEY | *Analysis*

WHAT I LEARNED

I learned a lot about my target audience's listening habits and was pleasantly surprised with the data that I received. I learned that a majority of my audience had no experience installing speaker equipment and felt that the task was intimidating, however, they also had an interest in home audio and had considered buying a system before. My primary goal was to learn about the factor that was holding everyone back from getting started. As I assumed the most common answer was the cost. followed by move-ability and lack of knowledge.

Methodology 2

MARKET RESEARCH

WHAT I DID

For my market research I looked for other home audio kits offered online. I looked through different price points and determined where many kits are lacking. I checked common online retail sites like Amazon where most beginners would turn to, but I also looked at kits offered from reputable audio manufacturers like Klipsch, Polk, Bose, Yamaha, McIntosh, and more.

MY GOALS

The goal of my market research was to determine what's already on the market. Once I gathered various kits at different price points I broke down their individual features to determine where some home audio kits shine, and where others fall short. After these findings I plan to implement the strong points of the best home audio kits offered and learn from the shortcomings of those that don't quite fit the bill.

Methodology 2

MARKET RESEARCH

INNOVATIVE TECHNOLOGY STEREO SYSTEM

WHAT WORKS

Including a record player makes this kit really unique, as I found it extremely difficult to find home audio kits that included record players or the capability to connect an external record player. This is also extremely cheap for what you get.

WHAT DOESN'T

While this is one of the few home audio kits with a record player you can find on the market for less than \$200, its underwhelming power, cheap material use, and poor build quality leaves much to be desired. Because of the lack of power and two channel limit there is no way to upgrade components of the kit. Because the record player is attached to the top of the receiver there is less room for airflow and no way to connect it to different audio components.

THE SPECS

What you get: Receiver, record player, CD player, two speakers, 3.5mm AUX cord

50 Watts

2.1 Channels

\$150



CONVENIENCE

Attaching the record player to the receiver makes for less individual pieces. However, this blocks airflow to the receiver and limits receiver placement

VINTAGE INSPIRED

The receiver and record player take inspiration from vintage aluminum faced audio components. This creates a cool timeless look, without the hassle of old electronics. However the use of plastic imitating aluminum makes it look tacky and cheap.

BLUETOOTH

A bluetooth compatible receiver makes streaming music from your phone or laptop as easy as connecting to your favorite bluetooth speaker.

Methodology 2

MARKET RESEARCH

YAMAHA MCR 332

WHAT WORKS

Easy to install with minimal separate pieces. Dependable brand with superior build quality. Compact size.

WHAT DOESN'T

With no pre-amp or phono output this kit is not compatible with record players. Two channel limit inhibits expansion. attached phone jack is already outdated.

THE SPECS

What you get: Receiver, two speakers
20 Watts
2.1 Channels
\$350



PIANO BLACK FINISH

The gloss black finish makes for a low profile, sleek look.

COMPACT SIZE

This is one of the smaller audio kits offered. Its compact size allows for the entire system to be placed on the same surface.

AUX INPUT

The built in jack allows simple connectivity, however the jack is specific to older apple products and is not nearly as universal as a 3.5mm headphone jack.

Methodology 2

MARKET RESEARCH

YAMAHA 725W 5.1 SYSTEM

WHAT WORKS

This kit is more focused towards home theater as opposed to home audio and vinyl, however it has many similar components and offers good audio quality. The Yamaha 725W also includes everything you need to set up a full 5.1 system in the box. The 100 watt 5.1 channel receiver has plenty of power to support upgraded speakers or more audio focused components.

WHAT DOESN'T

While the Yamaha 725W does include everything you'd need for a full 5.1 home theater experience, the primary speakers are underwhelming and small compared to most audio focused speakers.

THE SPECS

What you get: Receiver, 4 speakers, center channel, 100watt powered sub, remote sound optimizer
100 Watts
5.1 Channels
\$460.00



5.1 OUT OF THE BOX

I like how everything for a 5.1 system is included in the box. There isn't a need to buy more components and research what will be compatible.

SUB INCLUDED

Subs are rarely included in home audio kits and can easily be a \$200+ addition to your system. Including the sub allows for a much more dynamic music experience and including a powered sub means no additional power is drawn from the receiver.

SOUND OPTIMIZATION

This is the only kit to include a sound optimizer which adjust the audio levels depending on the acoustic qualities of the room.

Methodology 2

MARKET RESEARCH

POLK SIGNATURE SERIES

WHAT WORKS

This is a ture home audio experience. Polk and Denon are well known for the quality of their products. At 200 watts and 7.1 channels the Denon reciever has plenty of power and room to expand your system if desired.

WHAT DOESN'T

At over \$1,100 it's the most expensive kit I reviewed. Although it's not unreasonably expensive for high fidelity audio equipment, for my target audience something like this is well out of the budget. The size of the speakers also present an issue as moveability and free space is compromised.

THE SPECS

What you get: Denon receiver, two polk tower speakers

200 Watts

7.1 Channels

\$1138.90



7.1 CH RECEIVER

A 7.1 channel reciever means more room to expand your system. While a typical 2.0 reciever will power two speakers, a 7.1 channel is capable of powering 7 speakers and a sub-woofer.

QUALITY

Polk and Denon both make excellent products that will continue to play clearly and reliably for years. This is a kit that will sound amazing right out of the box and give the listener a solid foundation to start the hobby.

BLUETOOTH

A bluetooth capable receiver means listening to music is even easier. Any music streaming from your phone or computer instantly connects and removes the hassle of cables and cords.

Methodology 2

MARKET RESEARCH

WHAT I LEARNED

After my market research I realized just how difficult it is to find a good home audio kit with vinyl capabilities. In fact, I didn't find a single kit that included a record player that I would consider worth buying. There are a lot more options for home theater kits than kits purely focused on music. After getting a range of price points I feel that my initial kit price of \$500 seems fair for what's included, and extremely affordable in comparison to what's already on the market.

The final kit will include a receiver, two bookshelf speakers, a record player, copper wire, an instructional booklet, and possibly a sub-woofer and speaker stands. Bluetooth capability is extremely important for ease of use, custom sound controls through an app will allow you to tune your system to perfection from your listening position. The system needs to be compact and easily move-able, yet the speakers must be large enough for superior audio quality.

Sources

INNOVATIVE TECHNOLOGY SYSTEM

“Innovative Technology Classic Retro Bluetooth Stereo System with CD Player, FM Radio, Aux-In, Headphone Jack, and Turntable, Silver and Black.” Amazon, Amazon, www.amazon.com/Innovative-Technology-Bluetooth-Headphone-Turntable/dp/B010OJ0DA8/ref=sr_1_1?ie=UTF8&qid=1543621901&sr=8-1&keywords=home%2Baudio%2Bsystem%2Bwith%2Breco rd%2Bplayer.

POLK SIGNATURE SERIES

“Stereo Set.” Polk Audio, 31 Mar. 2018, www.polkaudio.com/products/stereo-set#TechSpecs.

YAMAHA MCR 332

“Home.” YAMAHA, usa.yamaha.com/products/audio_visual/hifi_systems/mcr-332/specs.html#product-tabs.

YAMAHA 725W 5.1 SYSTEM

“Yamaha - 725W 5.1-Ch. 3D Home Theater System - Black.” Product Detail - Compare Page - Best Buy, Best Buy, www.bestbuy.com/site/yamaha-725w-5-1-ch-3d-home-theater-system-black/5787200.p?skuld=5787200.

Methodology 3

VISUAL RESEARCH

WHAT I DID

Due to the multiple deliverables I plan to create for this project, my visual research was broken up into a few different categories. I started by taking what I had learned from my market research to put together a list of qualities I wanted the physical products to have. I then shared these notes with the product designers in order for them to get started with sketching and creating 3D product mock-ups. Afterwards I looked at vintage speaker ad campaigns. These ads had some great qualities that I want to implement into my ad campaign in order to establish the voice of the brand. I then looked at examples of package design that I found interesting and successful. I will be creating the package design for each product and in order to create a cohesive easy to use design I looked at package design that had strong uses of color to identify different components. Afterwards I researched some audio brand logos in order to establish the direction of the brand. Finally I looked at multiple audio manufacturer websites to see how they implemented their visual identity

MY GOALS

Through my visual research I hope to gain a deeper understanding of what I want the physical products to look like, how I can make the package design a key part of this products usability, the direction I plan to take the brand in in terms of a logo or word mark, and how that brand is implemented through a website and ad campaign.

Methodology 3

VISUAL RESEARCH | *Products*

TAKEAWAYS

Minimal controls are ideal for a kit of this nature. Although buttons and knobs should not be extensive, lack of controls should not limit features. Speakers must feel solid and capable. Too small and they will not produce enough sound. Too big and they will be a burden to move.

HOW I PLAN TO USE THIS

I'm really inspired by vintage product design in relation to audio equipment. Although many of the products are older than I am, the solid use of material doesn't make it feel out of date. Buttons and knobs while fun to play with can be overwhelming and confusing. I still want the controls to have a familiar tactile response except the physical controls should be minimal. Most audio control will be through the app so only the most important functions like power, input, and volume should be physically present. All of this information has been shared with the product designers and product renders are already being created.



RECEIVER

Minimal knobs. Push in and they pop in and out. Clicking or tactile response for volume or input change, Screen for equalizer, Input Display, and Volume settings.

RECORD PLAYER

Belt driven. Minimal controls: Raise/lower control arm, stop, start, speed selection. Exposed belt drive. Low profile and sleek.

SPEAKERS

Bookshelf speaker sized. Small enough to be easily moved, large enough to create a respectable sound. combining vintage form with new technology.

Methodology 3

VISUAL RESEARCH | Advertisements

TAKEAWAYS

Simple use of photography making the product design the primary focal point. Playful language that is still informative. Clean and effective use of typography that correlates with audio brand word-marks.

HOW I PLAN TO USE THIS

I want the ad campaign to be a simple visual method to establish the language of the brand and showcase the design of the products. Rather than using ads designed for print medium I will create an ad campaign focused more towards online advertisement and possibly larger scale billboards. Bold headlines paired with captivating imagery will draw inspiration from these older advertisements but will be applied in a more modern application.

130 beautiful watts. No power crisis here.



No need to conserve your amp's power anymore. We upped the power handling ability of the CS-901A to an earth-moving 130 watts. And this is over the full sound spectrum of 30-20,000Hz. Five speakers, four ways, including a "let'er rip" 15-inch woofer. Today's sounds call for big power. Now there's a speaker system capable of not only handling these big power inputs, but reproducing rich, clear, distortion-free sound at these high volumes.

See the improved CS-901A. In these days of the energy crunch, at least here's one situation where you don't have to worry about conserving power. And that's got to be beautiful.

| | Maximum Total Output | Excitatory Range | Woofer | Midrange-Tweeter | Tweeter | Frequency Range |
|---------|-------------------------|------------------|-----------------|--------------------|-----------------|-----------------|
| CS-901A | 130W | 20-20,000 Hz | 15" inch woofer | 1.5" inch midrange | 1" inch tweeter | 20-20,000 Hz |
| CS-901B | 130W | 20-20,000 Hz | 15" inch woofer | 1.5" inch midrange | 1" inch tweeter | 20-20,000 Hz |

PIONEER
Pioneer Electronic Corporation
U.S. Headquarters: Long Beach, CA 90801

Yes, it's expensive...



AKAI's remarkable new GX-3700 Stereo Tape Deck is in a class by itself. Naturally, it costs more. Like in the neighborhood of \$700.00. Which is a high-class neighborhood. But then, this is a high-class tape recorder. With everything you want. Or need. And more. We engineered the GX-3700 with 3 GX (Gloss and Crystal) Ferrite Heads. For distortion-proof recording. And with the performance. Then we added some really professional features. Like Compute-O-Matic for automatic recording level control... Automatic and Manual Reverse Recording and Playback... Automatic Stop and Shut-Off... Direct Function Change Control System... 3 Motor-Operated a-tape transport... and a Tape Speed of 15 IPS. To name a few. When more, you get an unlimited variety of recording techniques. Because the GX-3700 is compatible with Stereo-On-Speed, Stereo-Drive Sound, and Multi-Line Mixing. Which all adds up to the fact that the GX-3700 isn't for the average guy. But who wants to be average?

AKAI
AKAI America, Ltd./P.O. Box 8800, Los Angeles, California 90008

When we make a \$279 speaker system, we don't fool around.



Nearly all of the higher-priced speakers on the market incorporate some kind of gimmick or technical overstatement. It may be something as simple as an enclosure of unusual shape or a slightly offbeat tweeter, or it may be a whole new engineering concept destined to revolutionize the speaker industry. In the un-biased opinion of the manufacturer, that is. The Rectilinear III is different. Because there's nothing especially different about it except its sound. In a legible box 13" by 18" by 12" are six superbly made but perfectly straightforward cone speakers. One massive 12" woofer, one 2" dual-core mid-range driver, two 2 1/2" tweeters and two 2" tweeters. They are connected to a properly designed dividing network, with carefully chosen crossover points, and the whole thing stands on the floor looking very simple, solid, worthy and unobtrusive. This lack of sensationalism, however, doesn't decrease mag-

you have the space and the \$279 for it. Music lovers keep telling us that the Rectilinear III sounds exactly as it looks, inside and outside. No hollow boxes, no phony mid-range presence, no toyed-up treble. Just completely natural, open sound, at any volume level, in any size room. Almost as if the speaker had turned into an open window on the concert hall or recording studio. Which, in our book, is what a high-fidelity speaker system is for: playing music. Not for playing games. For more information, including detailed literature, see your audio dealer or write to Rectilinear Research Corp., 107 Buckle Street, Bronx, N.Y. 10454, Canada: H. Ray Gray Co., Ltd., Montreal, Que., Canada: Royal Sound Co., 409 N. Main St., Trenton, N.Y. 12160.

Rectilinear III

ENTER IN THE CROSS-REFERENCE GUIDE

LANGUAGE

Headlines grab the attention of the viewer with casual and playful language that still speaks about the product itself.

IMAGERY

Let the product shine. Photography is simple and straightforward and allows for the design of the product to sell itself. Backgrounds are minimal and non-distractive.

TYPE

Bold beautiful headlines paired with informative copy. In order to update this design, copy should be shorter and direct readers to the website.

ACCURACY. JBL LAYS IT ON THE LINE.

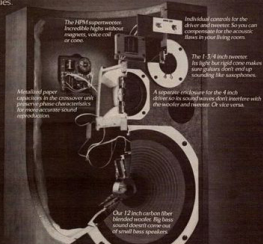


Why do so many stars and studios use JBL's? And more discs than any other speaker? Accuracy is the answer. The music is performed. That's the sound the pros insist on. No wonder 7 of the 10 top albums in R&B were recorded, mixed or mastered on JBL's. And that's the sound we demand in every speaker in our line. JBL speakers are designed to match the music as played. Clear and brilliant. We can state this with some pride since we create our speakers from the ground up. Concept, design, individual components—all are created at our plant and tested against stringent engineering specifications. Rigorous quality control is applied every step of the way. We could go into more technical detail, but we want to keep our message short and sweet. The reason so many stars, studios and professional installations pick our speakers is JBL accuracy. Their living depends on how good they sound. So let us question your own ears, trust theirs.

James H. Lansing Sound, Inc., 8540 Ballou Boulevard, Northridge, CA 91329.

FIRST WITH THE PROS.

WHEN YOU BUILD A SPEAKER TO SOUND GREAT ON EVERY PART OF THE MUSIC, YOU CAN'T CUT CORNERS ON ANY PART OF THE SPEAKER.



A single JBL 100 weighs almost 60 pounds. The fact it weighs more than a large A-frame speaker, Bose 901 or JBL 1100 is not an accident. You hear only the speaker's vibrating and never their frames. Our speakers are overbuilt to spare your ears needless distortion. And our cabinet is made out of special compressed wood that's denser and heavier than ordinary wood. So the sound is forced out of the cabinet instead of being absorbed by it. Of course, not everything that adds to the sound of an JBL 100 adds to its weight. Our super-tweeter uses nothing but a piece of High Polymer Molecular film to produce incredibly clear and crisp high frequencies. Our midrange-driver and tweeter have cones that are light enough to give sharp response, but rigid enough not to distort. And our 12-inch woofer has a long throw voice coil and unique carbon fiber blend cone laminated to the typical cardboard cone! This work to produce the kind of realistic bass you not only hear, but feel. Naturally, we could go on. About our 12-1/2 inch of damping material. Or about the aluminum screws that keep our speakers from falling out. They're ordinarily used to keep airplanes from falling apart. But we figure at this point you'd rather hear our speakers in person than hear any more about them from us.

JBL 100

dynaco



A-25 **A-20 (stand optional)** **Stereo 150** **Stereo 90**

Methodology 3

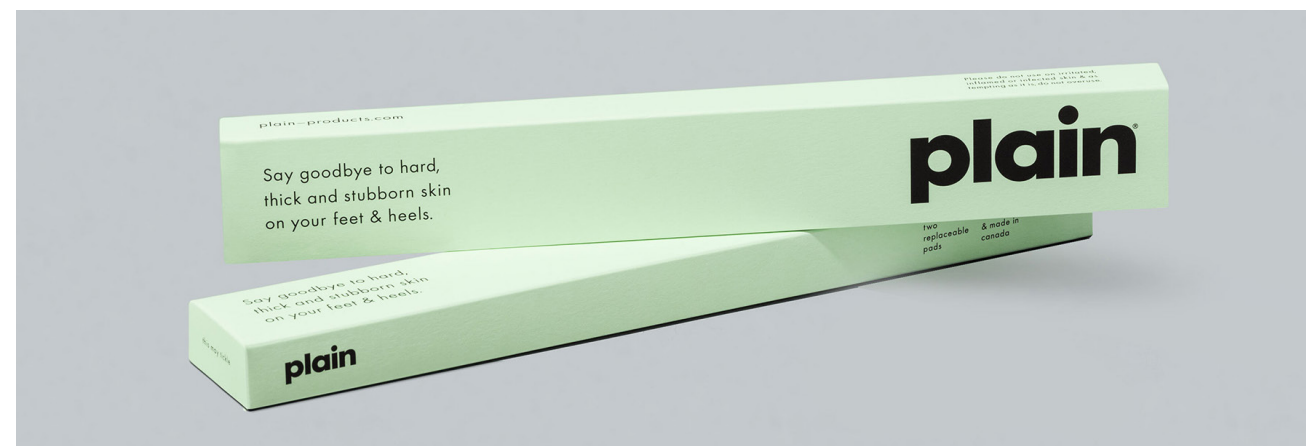
VISUAL RESEARCH | *Packaging*

TAKEAWAYS

Bold use of color to separate different products. Simple graphics, imagery, and text. Large numbers to clarify installation process.

HOW I PLAN TO USE THIS

I plan to create the packaging for each component of the kit. I want the packages to be simple and use color-based instruction to allow for simple installation. I know the kit will have a few different components, because of this I want to make sure its easy and intuitive as soon as you open it up and that the order of installation is understood with minimal instruction.



COLOR

Use bold colors with high contrast to differentiate objects even at a glance. Color base instructions could work with color-categorized packaging to improve ease of use.

NUMBERED STEPS

Large numbers to show hierarchy of products and create a natural understanding of order when installing kit.

GRAPHICS

Minimal graphics and type making the product the primary focus and reducing unnecessary information.

Methodology 3

VISUAL RESEARCH | *Logos*

TAKEAWAYS

Simple type driven word-marks. Minimal pictorial elements. Individuality expressed through typeface.

HOW I PLAN TO USE THIS

I plan on taking my brands logo in a similar direction by creating a type driven word mark. I want the type to be unique with vintage elements that perform successfully in the present. Use of color and additional graphic elements will be limited.

McIntosh®

marantz®

BOSE

ONKYO®

KENWOOD

WORD-MARK

Nearly all audio brand logos are word-marks with minimal or no pictorial elements. Badges or emblems are uncommon.

TYPE

Unique type that is decorative but readable. Each typeface has characteristics that reflect a quality of the brand, showcasing anything from history and tradition to innovation.

GRAPHICS

Extremely minimal graphics and pictorial elements. Little to no color.

Methodology 3

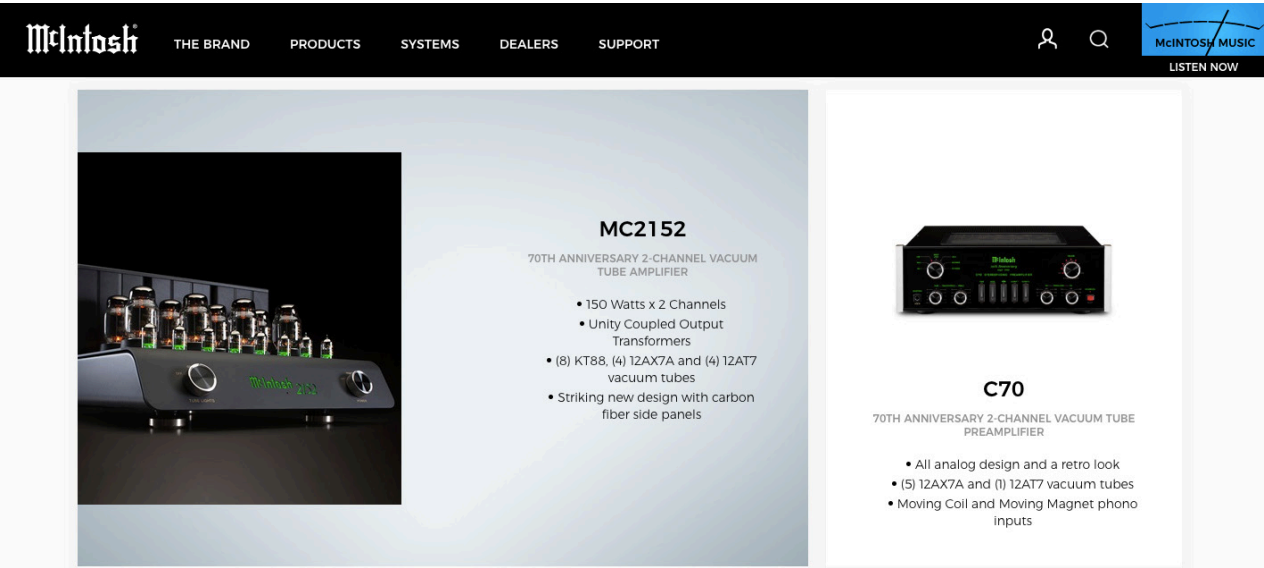
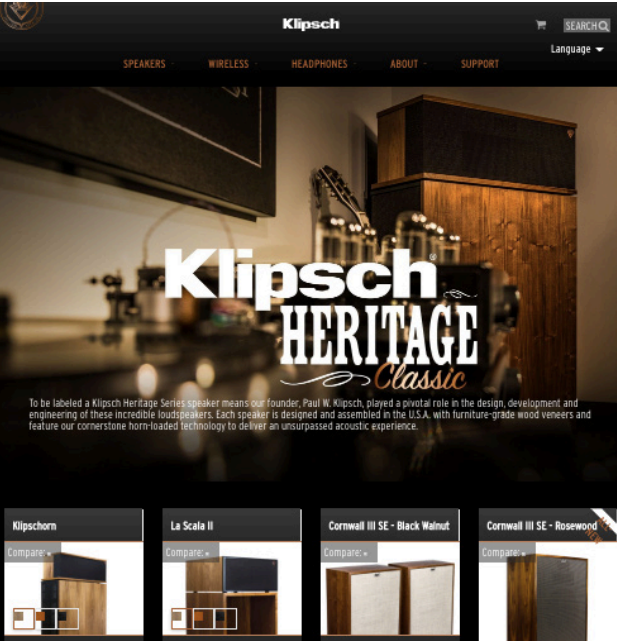
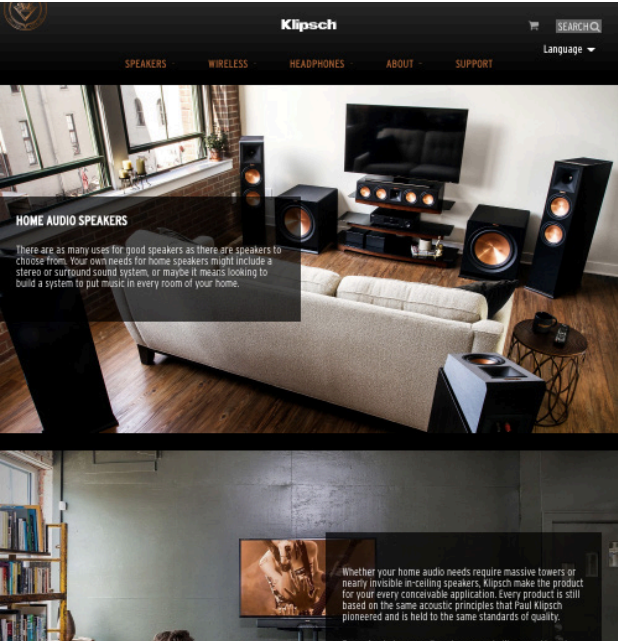
VISUAL RESEARCH | Website

TAKEAWAYS

Showcasing the product in it's intended environment. Making the audio equipment a focal point of the room. Minimal but effective use of color. Familiar structure similar to most online shopping websites. Large captivating imagery for home page, simple product photography for catalogue of items.

HOW I PLAN TO USE THIS

Most home audio websites I came across were lacking in terms of design. The three I was most fond of was Klipsch, McIntosh, and MartinLogan. These three sites had similar structures where the home page showcases the product in a space and as you scroll down each product is displayed in an easy to use grid of products. I plan on using a similar structure that makes the shopping experience simple, but I wold like it to be a little more visual and informative. I don't want to question where I need to click next, instead the website should guide the user through while staying informative and intriguing.



COLOR

Use of color is consistent and complementary with colors used in products. Use of color references elements from product without overbearing presence.

IMAGERY

Imagery is more focused towards products within a setting unlike package design and ad campaigns. Showcase the product as a focal point of the room.

LAYOUT

Simple, easy to use, grid structure. Similar to most online shopping catalogue.

Methodology 3

MARKET RESEARCH

WHAT I LEARNED

Through my visual research I was able to narrow down a lot of the visual elements I will be creating. I learned about the aspects of vintage audio equipment that inspire me and how I can take the experience of using vintage audio equipment and make it easier to use and more functional with todays technology. I gathered examples of package design that when applied to my brand will make installation easier to follow for anyone and cut back on the

Complication of installing audio equipment. I found Commonalities with audio logos and audio brands as a whole in order to create a product experience that is familiar and hopefully more user friendly than what already exists. Finally I discovered multiple applications for promoting the brand and how to establish the voice of my brand through advertisement and marketing.

Conclusion

REPEATED RESULTS

I didn't receive a lot of repeated results as I tried to make my questions specific and unique to different aspects of the project, however it was very clear that people had an interest in home audio but were turned away by cost, portability, and lack of knowledge. One of the more interesting results showed that 65% of people had never installed audio equipment and every single one of them thought it was a difficult task. I also learned that simplicity is really key in not just the product design, but in terms of the branding, marketing, and packaging design. While a lot of audio equipment may seem simple to hobbyists, simplicity regarding user experience is really important for those that just want to listen to their music and avoid fussing with the controls.

MOST IMPORTANT DATA

For the most part my data was relatively consistent with my initial assumptions. A big part of this project was to understand why people spend so much time listening to music, yet settle for sub-par headphones. As I received information the point that kept coming back was the cost and the intimidation of setting up was holding people back. I figured these would both be the biggest reasons for avoiding a home audio set up however the concern for cost was overwhelming. This is a perfectly reasonable concern, especially considering a large portion of my survey audience are college-age students. I learned that people were interested in listening to vinyl, collecting vinyl, and most had even considered buying a home audio set-up. However, it frequently came down to cost. Because of this I worked with the product designers to see how we could make this package more cost effective. I set my goal at around \$500 because this is about the same price most college students will spend on gaming systems. Something almost everyone student I know has in their room. The product designers worked with materials that are commonly used in current audio tech, and ditched the expensive materials like wood and brushed aluminum. I was concerned at first but after seeing some mock-ups the product still feels like a premium item.

WHERE TO NEXT?

Looking forward, I want to get started with the visual identity early. Because all of deliverables I plan to create I want to start designing early winter term. I plan to start with branding and compiling information for the manual. I have already started going over product renders with the two product designers. By mid to late winter term we should have those renders nearly completed and I will then start with the packaging design, around the same time I hope to get aspects of the ad campaign done. By spring term I'd like to have a large portion of the visual direction established to I can begin constructing the packaging and booklet, along with creating the website and app.

LOGAN HILLERNS

