

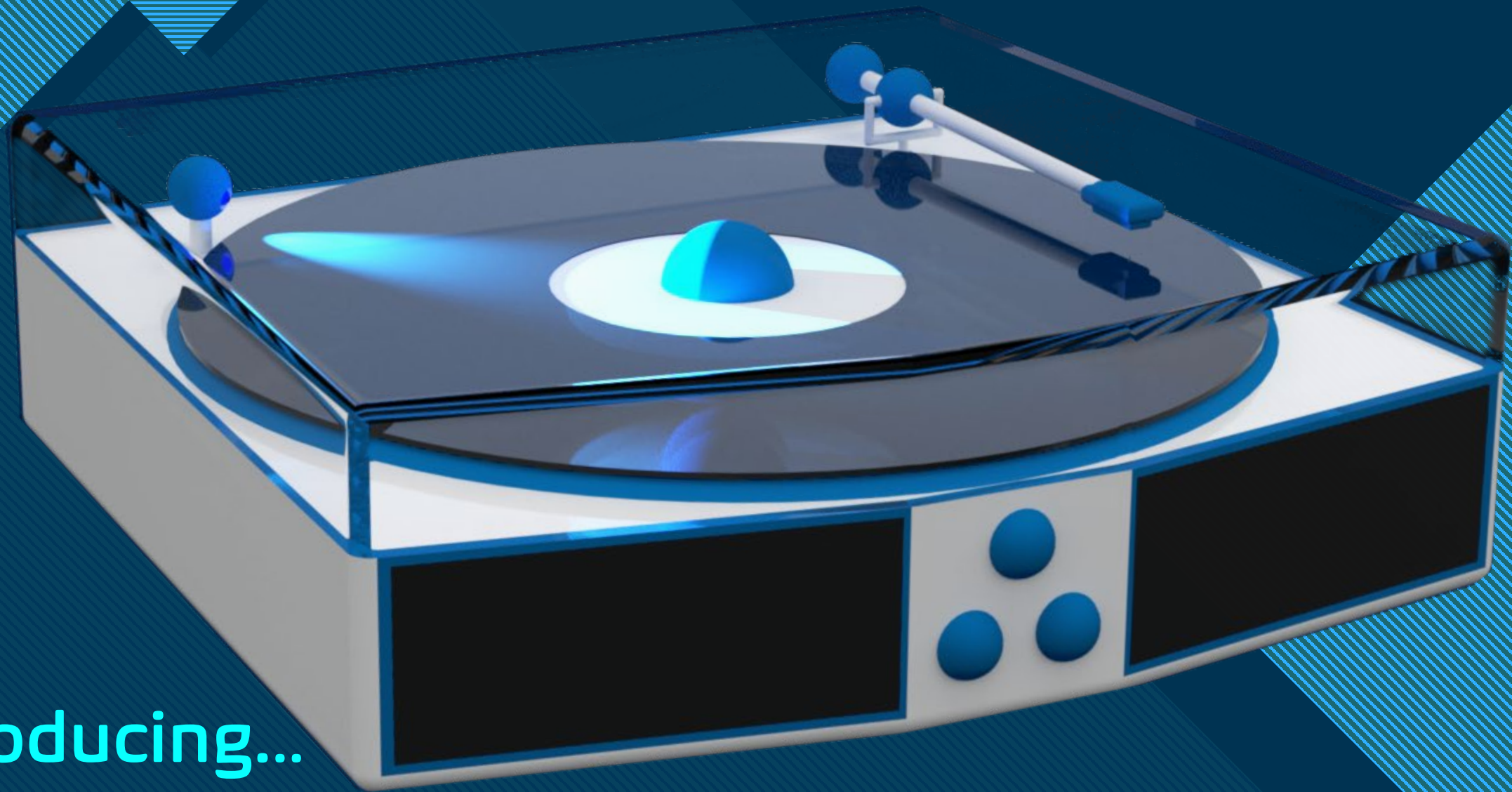
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Design Project-Record Player

CADD-245

Portland Community College





Introducing...

The "*Spin-Wave*" Record Player

KEY DESIGN AND MARKETING VALUES

Versatility and Accessibility:

The “SpinWave” is more than just a record player. Its built-in speakers and Bluetooth capabilities redefine how users experience their favorite vinyl and digital music.

Sleek Design with Superior Performance:

Aesthetically pleasing, the minimalist design of the “SpinWave” seamlessly blends with any decor while delivering great sound quality, making it a statement piece in any room.

Nostalgic Appeal, Modern Convenience:

Capitalize on the resurgence of vinyl with a product that combines the nostalgic charm and look of record players with a contemporary feel with features like Bluetooth connectivity and speed control.



Spin-Wave

BILL OF MATERIALS

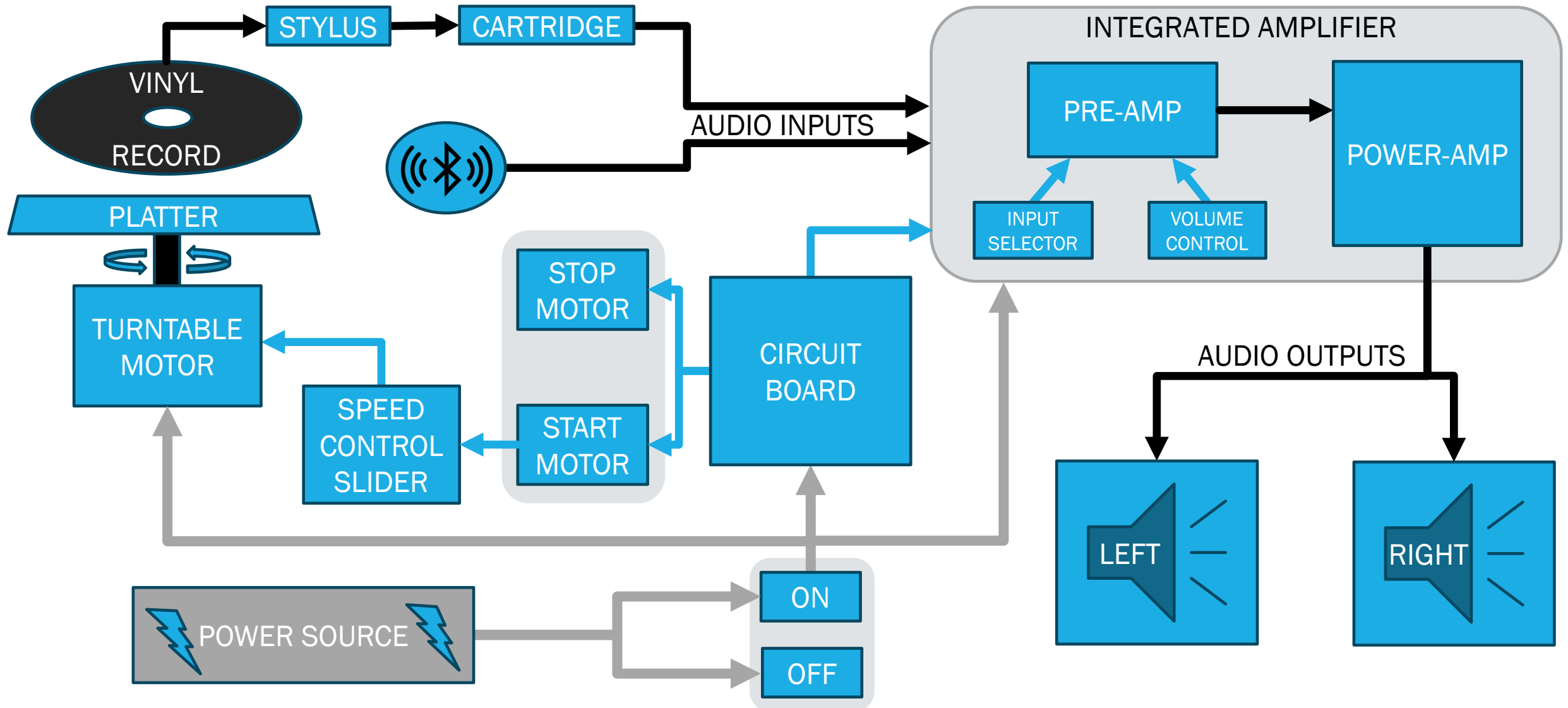


OUTSIDE DESIGN	INSIDE DESIGN
MAIN HOUSING	TURNTABLE MOTOR
TOP PANEL AND PLATTER	PREAMP/AMP
DUST COVER WITH HINGES	TONEARM INPUT BOARD
TONEARM WITH COUNTERWEIGHT	LED LIGHT
CARTRIDGE/STYLUS	CONROL/INPUT CIRCUIT BOARD
POWER/VOLUME & SPEED KNOBS	WIRING
RUBBER FEET X3	PREAMP/AMP
INPUT SELECTION KNOB	RIGHT SPEAKER UNIT (WOOFER, TWEETER, ETC)
RIGHT/LEFT SPEAKER COVER	LEFT SPEAKER UNIT (WOOFER, TWEETER, ETC)
POWER CORD	A/C POWER SUPPLY BOARD

BLOCK DIAGRAM

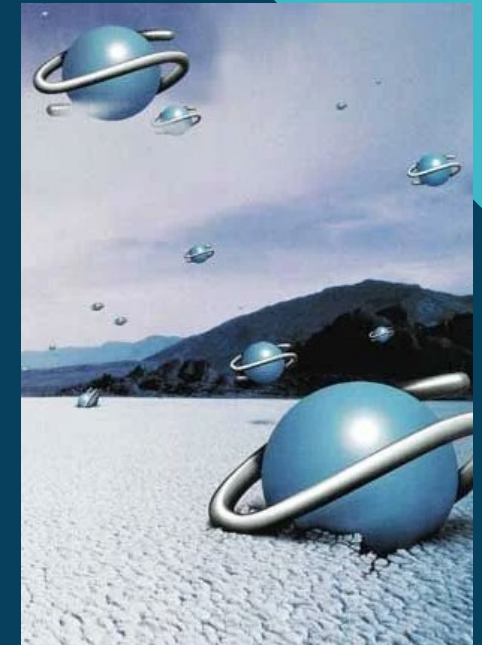
SPINWAVE

RECORD PLAYER



RELATED PRODUCTS AND INSPIRATION PHOTOS

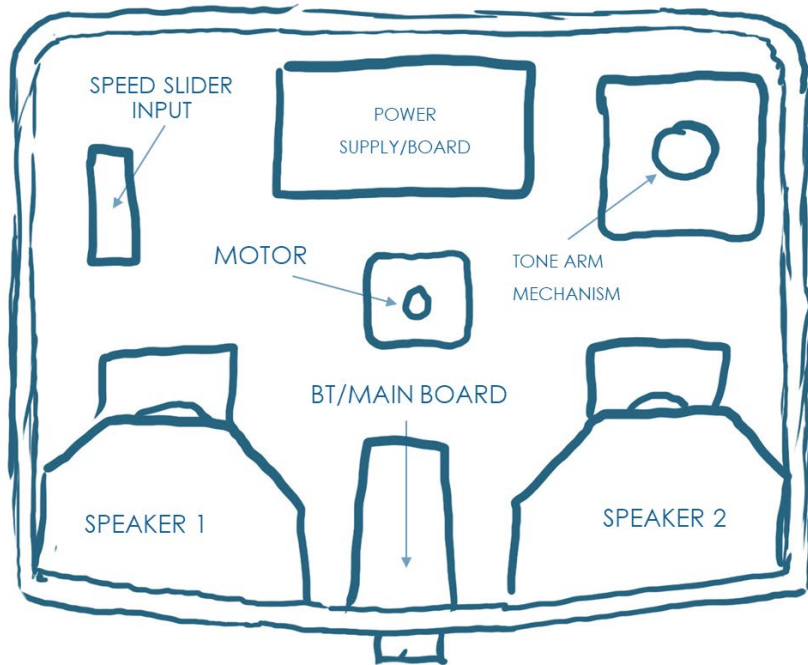
Spin-Wave



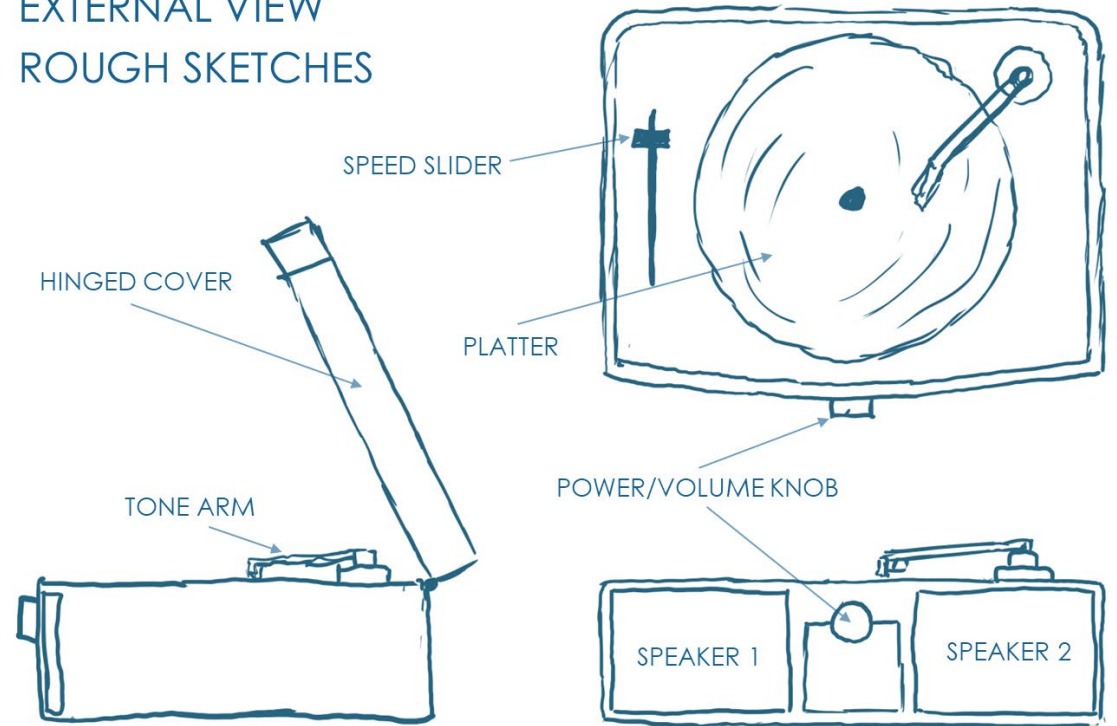
PRELIMINARY SKETCHES

Spin-Wave

INTERNAL
VIEW
ROUGH
SKETCHES



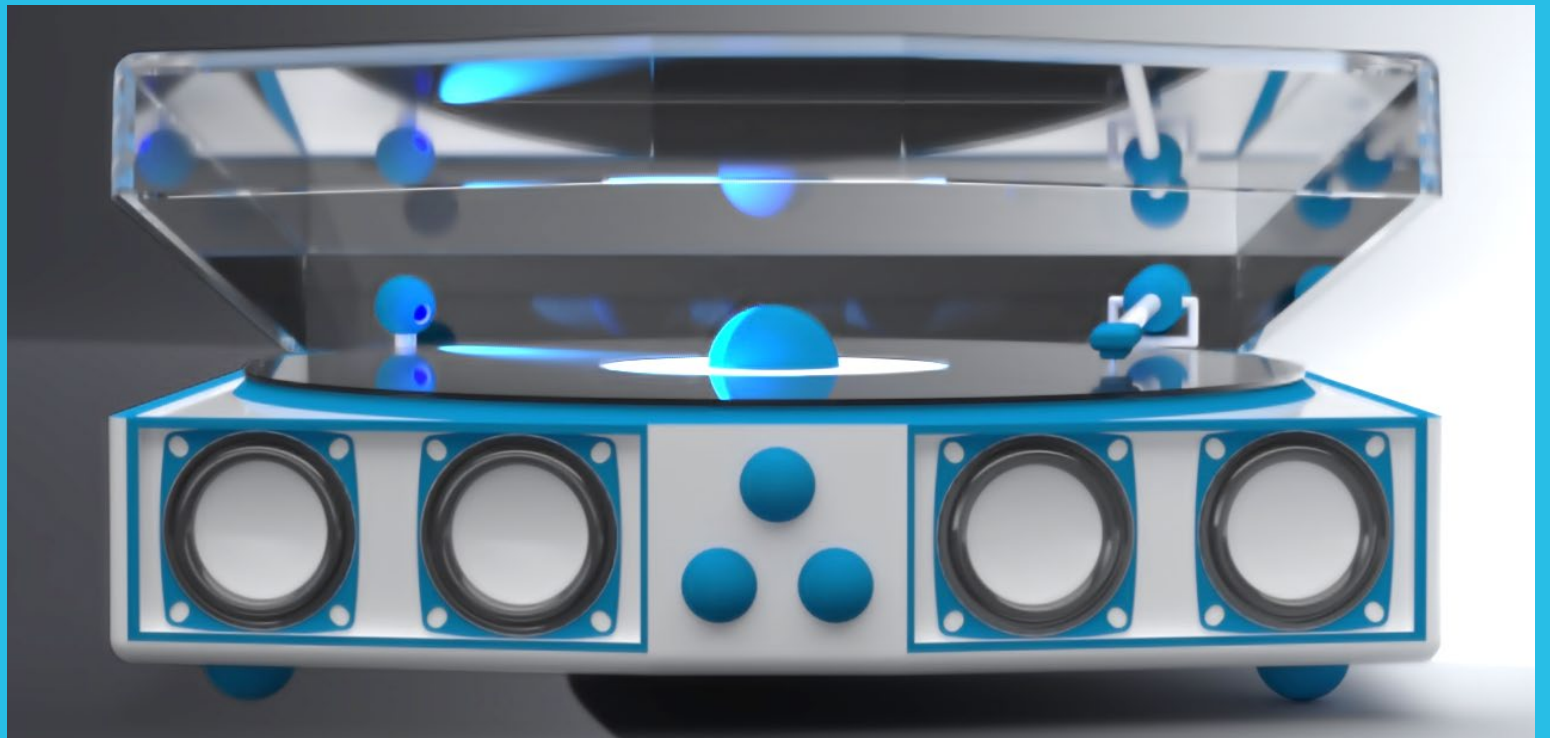
EXTERNAL VIEW
ROUGH SKETCHES



Spin-Wave

FRONT VIEW

(SPEAKER COVERS REMOVED)



BACK VIEW

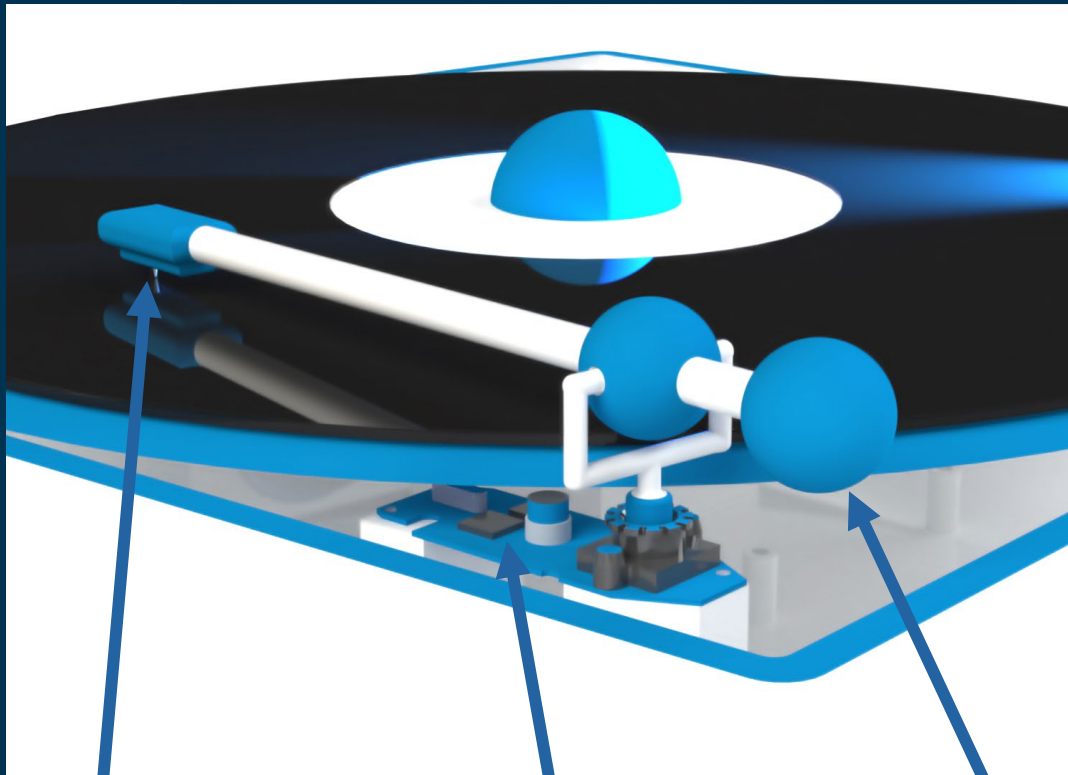
(POWER INPUT SHOWN)



INPUT DETAIL VIEWS

Spin-Wave

TONEARM

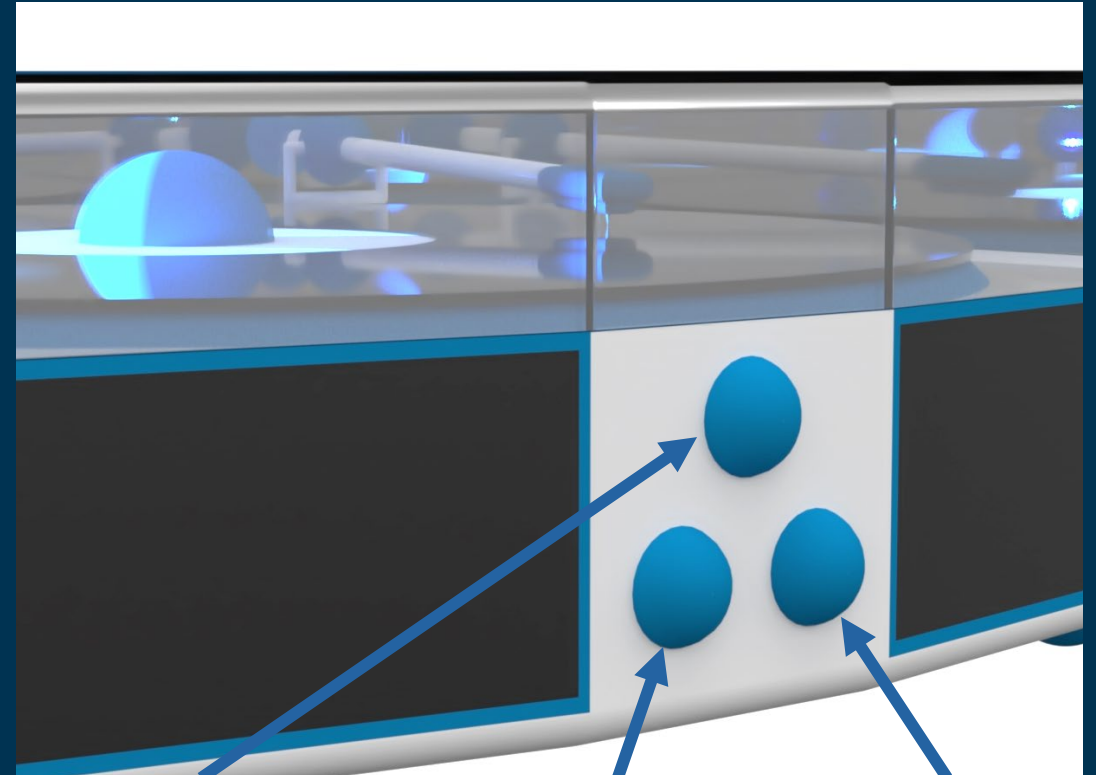


CARTRIDGE
AND STYLUS

TONEARM
INPUT BOARD

COUNTER
WEIGHT

INPUT KNOBS



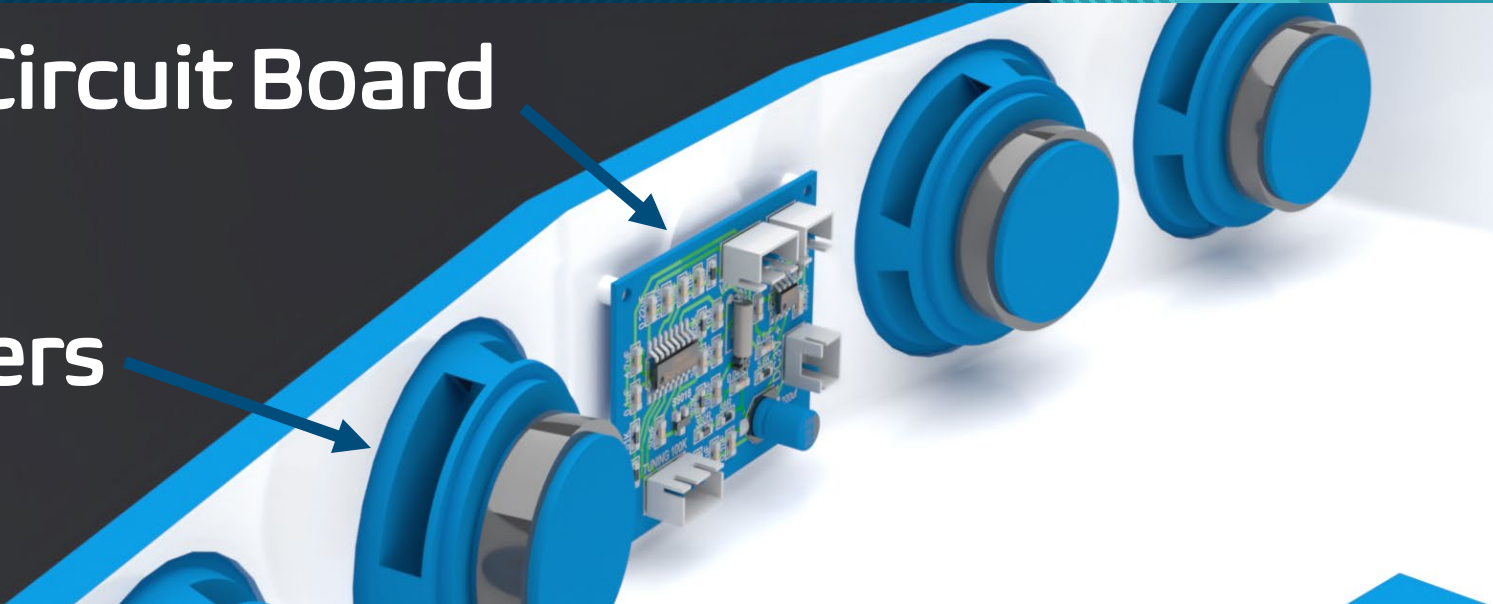
POWER/VOLUME
CONTROL

MOTOR/SPEED
CONTROL

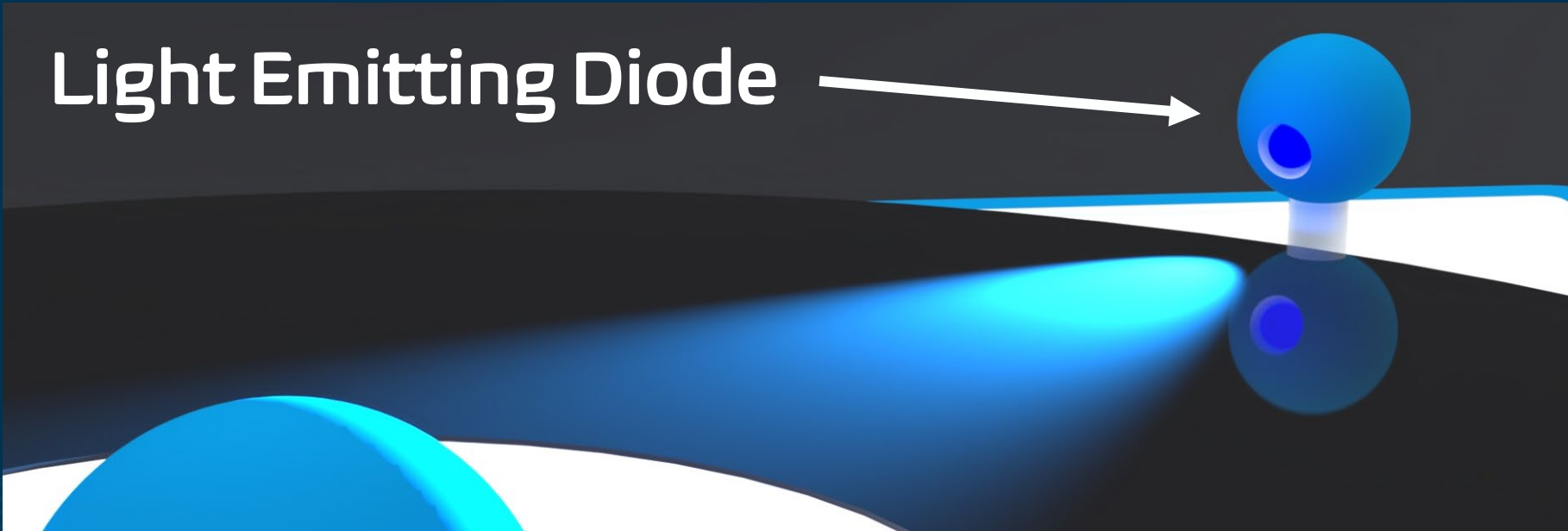
INPUT
CONTROL

Input Circuit Board

Speakers



Light Emitting Diode



Spin-Wave

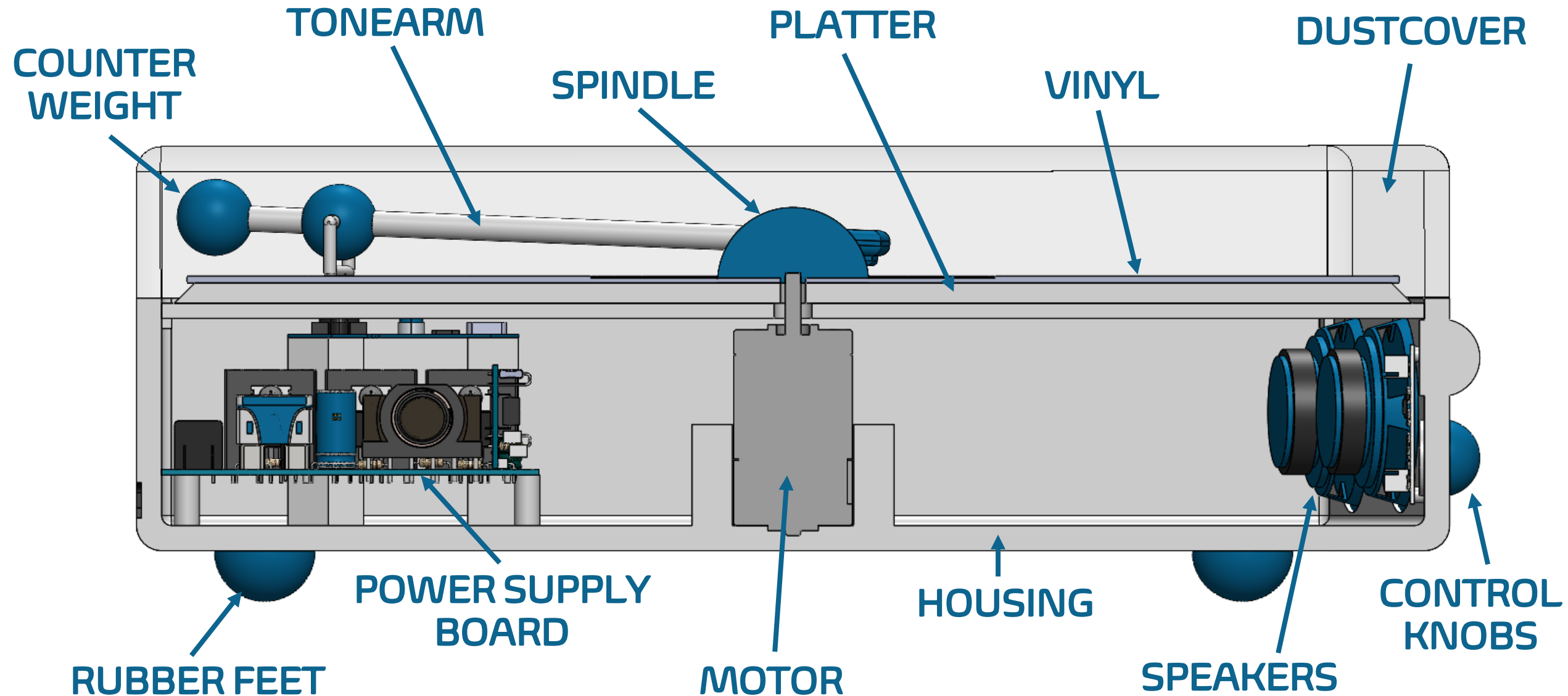
Additional
Detail
Views



Logo

INTERNAL ARCHITECTURE

Spin-Wave



USER JOURNEY

SPINWAVE

RECORD PLAYER

	PHASE 1: RESEARCHING RECORD PLAYERS	PHASE 2: PURCHASING RECORD PLAYER	PHASE 3: ENGAGING WITH RECORD PLAYER	PHASE 4: DISPOSAL OF RECORD PLAYER
CUSTOMER WANTS AND NEEDS	<ul style="list-style-type: none"> Discover different types of record players that are available (online research, friends, ads). Find a record player that is easy to use and looks especially good sitting on the shelf. Not an audiophile. 	<ul style="list-style-type: none"> Doesn't want to use bulky receiver and doesn't want to wire a speaker system. Wants a quality design with user friendly features at a reasonable price point. 	<ul style="list-style-type: none"> Easy to use. Easy to connect to Bluetooth. Sound is as good as any high-quality portable Bluetooth speaker. Wants to show it off in house or apartment. 	<ul style="list-style-type: none"> Wants to be able to find replacement parts if needed. Wants it to last a long time. Should be able to recycle or upcycle at end of product life.
CUSTOMER THOUGHTS AND EMOTIONS	<p>Wow, lots of good record players and reviews online!</p> <p>Why do all these players need external receivers and speakers?</p> <p>What is a pre-amp??</p> <p>Is it worth it? I listen to most music on my phone anyway.</p> <p>This one has built in speakers and Bluetooth!</p> <p>This is easy to use! I love that I can connect my phone!</p> <p>I can't wait to show this off to my friends!</p> <p>It no longer works. Now what?</p> <p>I can convert this into an awesome planter box!</p>			
CUSTOMER PAIN POINTS	<ul style="list-style-type: none"> So many options, many look very complex to use. Many require additional hardware which means additional research and money spent. 	<ul style="list-style-type: none"> Doesn't only listen to vinyl records. Enjoys listening to playlists on Spotify and Apple music. 	<ul style="list-style-type: none"> Happy with the product but would enjoy a few more features to show off to friends. Uses it mostly for streaming music from phone through the Bluetooth feature. 	<ul style="list-style-type: none"> Fixability, finding parts. How to dispose of system? Electronics can be difficult to recycle.
PRODUCT IMPROVEMENT OPPORTUNITY	<ul style="list-style-type: none"> Make it user friendly with a design that is very pleasant looking. Make it an all-in-one player. No additional hardware decisions and purchases necessary. 	<ul style="list-style-type: none"> Incorporate a Bluetooth receiver into the product. Low cost but adds immense value to the product. Vinyl is expensive and music streaming is still the most popular way to listen. 	<ul style="list-style-type: none"> Add some features that stand out to friends that also encourage listening to vinyl over Bluetooth. Incorporate a motor speed control slider. Have a way to display the record sleeve so the user can show off the album artwork. 	<ul style="list-style-type: none"> Have good customer service and develop a fair warranty. Provide replacement parts. Have resources that give solutions for recycling and ideas for upcycling.



Thank
You For
Viewing!

