

MODIFI
M1



DESIGN SPECIFICATIONS





JONAS KAKAROTO AUDIOPHILE

Age	28-40
Occupation	Software Engineer
Income	\$220,000 a year
Status	Lives at home with partner and a dog
Motivator	Quality over quantity

KEY FEATURES

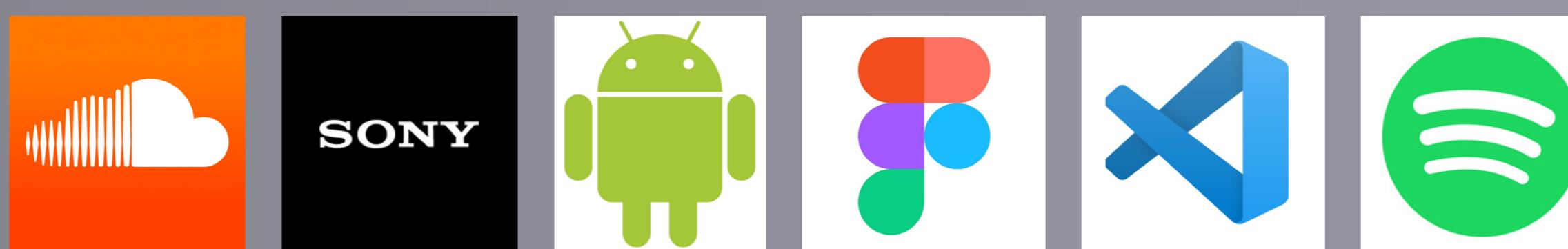
- Wired for Maximum Quality
- Something Unique and High Quality
- Customisable to the max
- Custom sound profiling
- Noise cancelling/Pass-through modes
- Good quality microphone

PAIN POINTS

- Find cable management really annoying
- When headphones lack adjustments for comfort
- Low quality fit and finish products
- When headphones don't have a storage case of similar quality

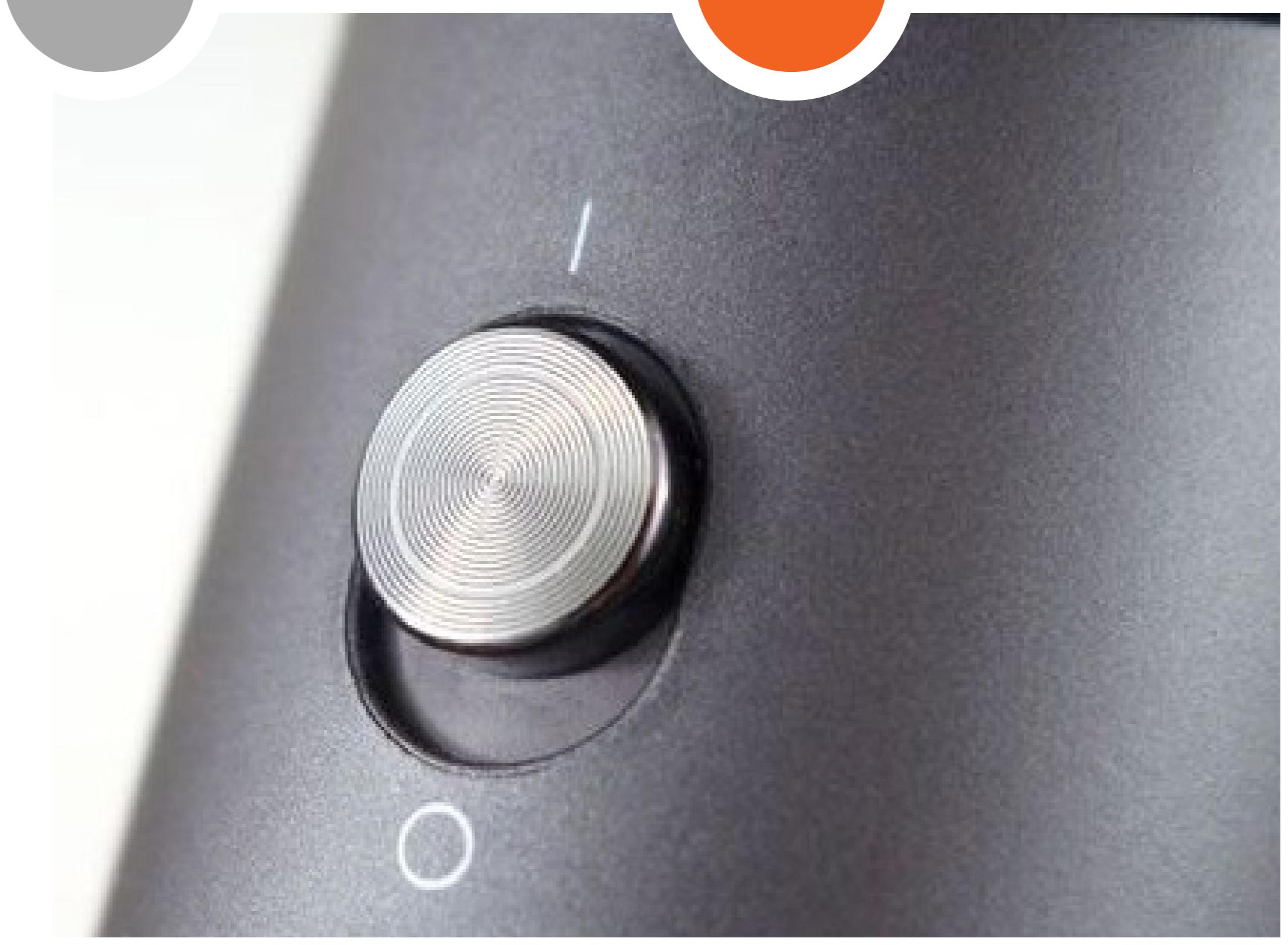
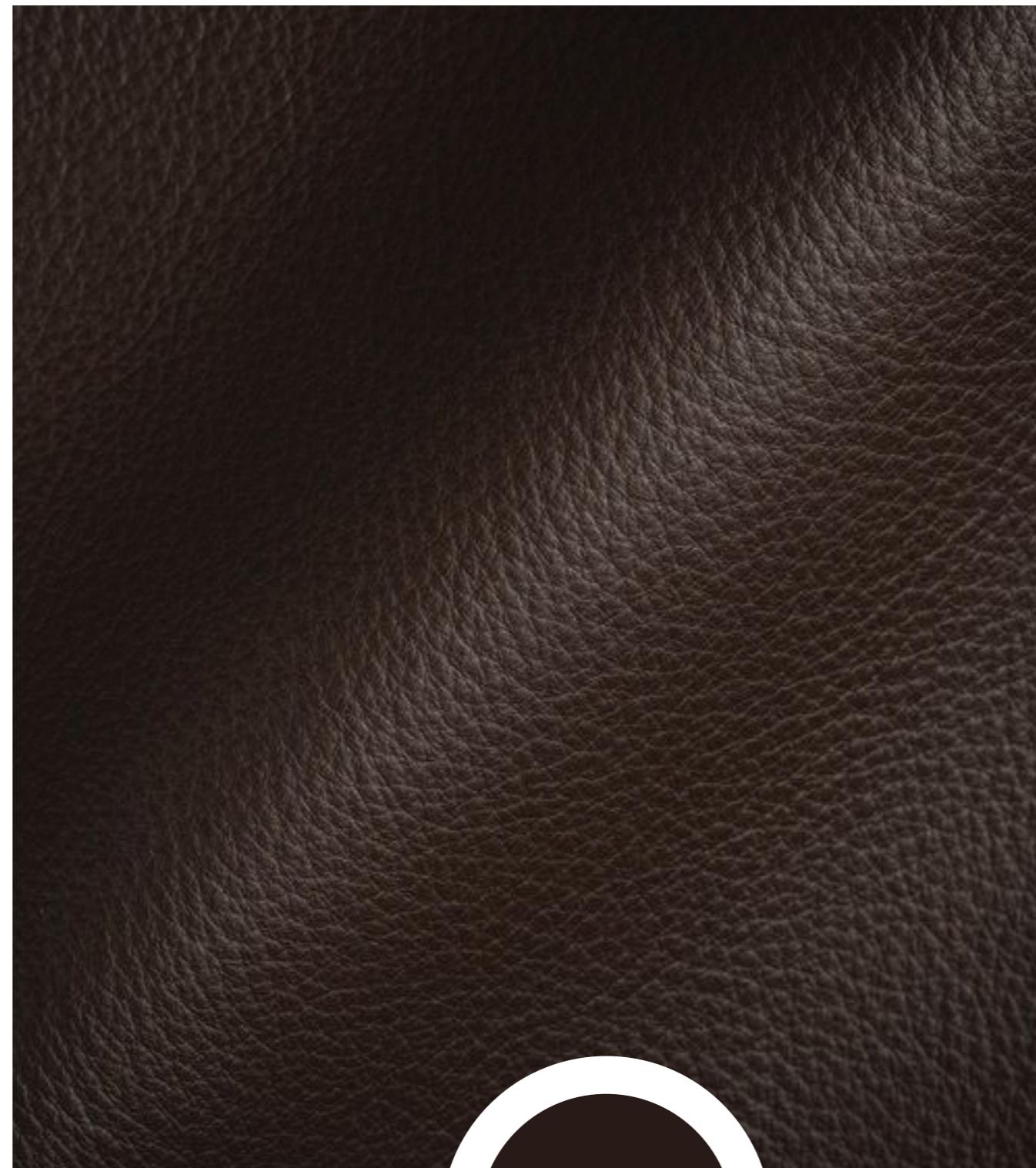
PRIORITIES

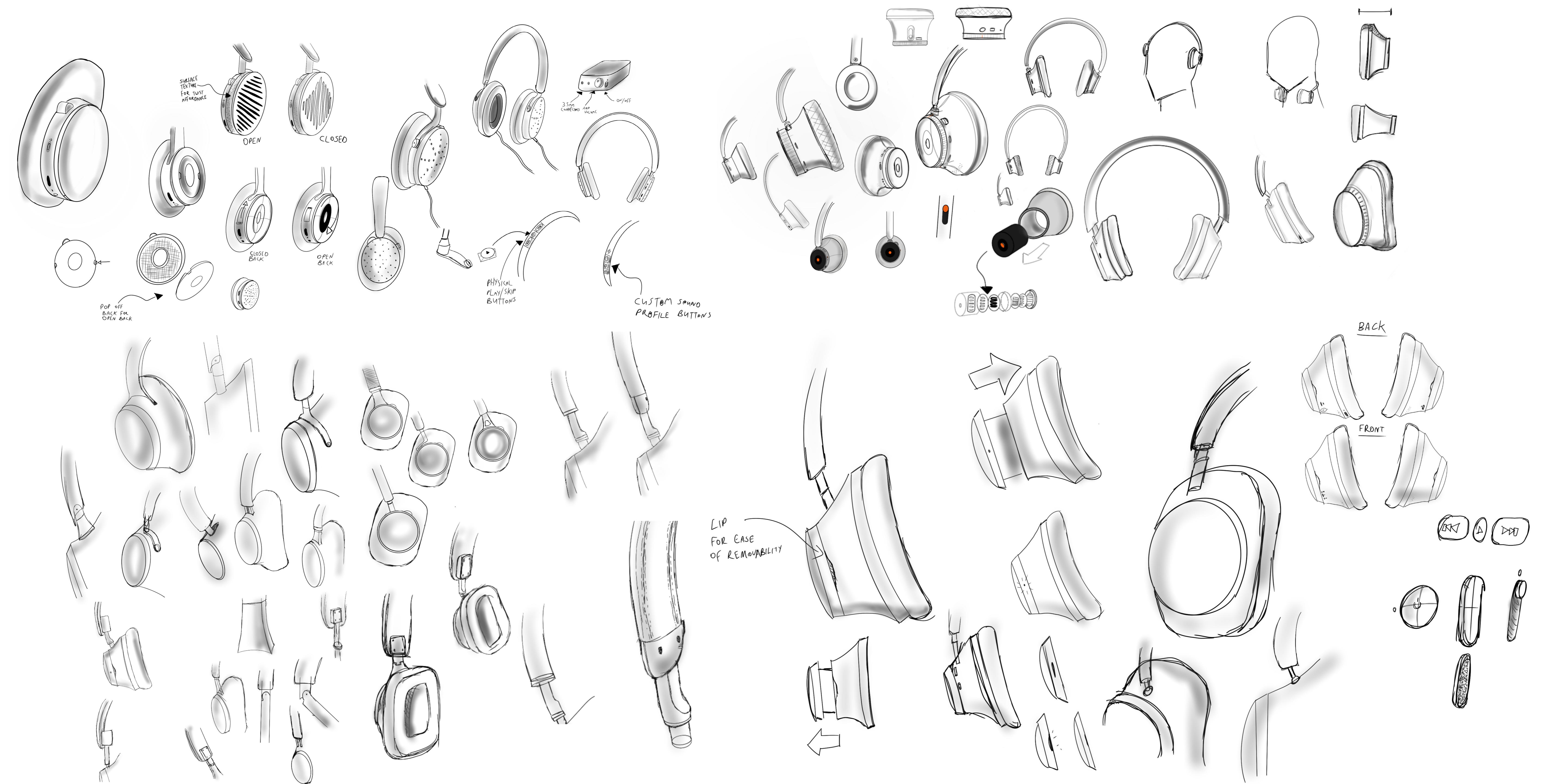
- High quality product
- Strong emphasis on sound quality
- Reliable, build to last - brand trust



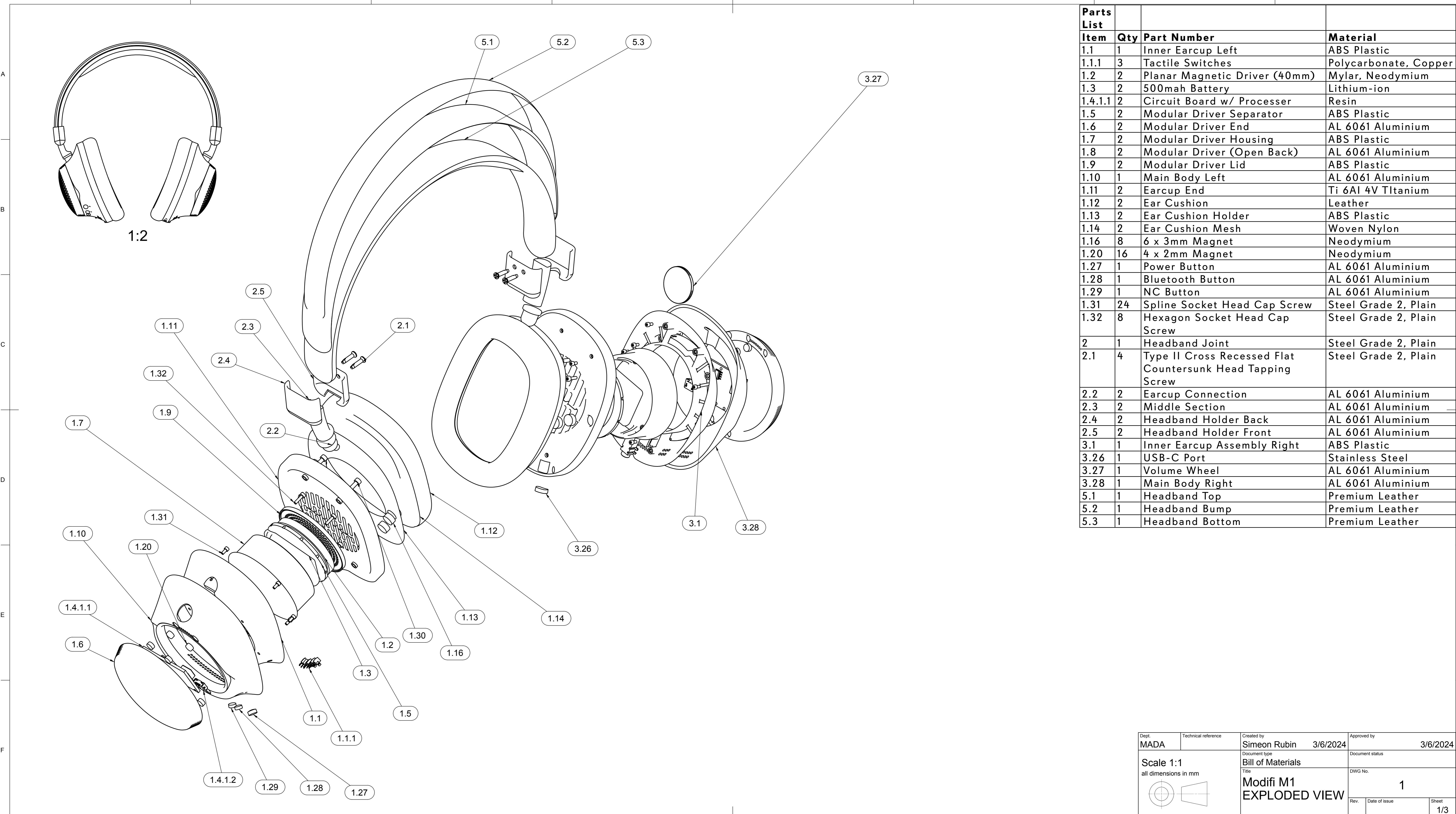
MOODBOARD

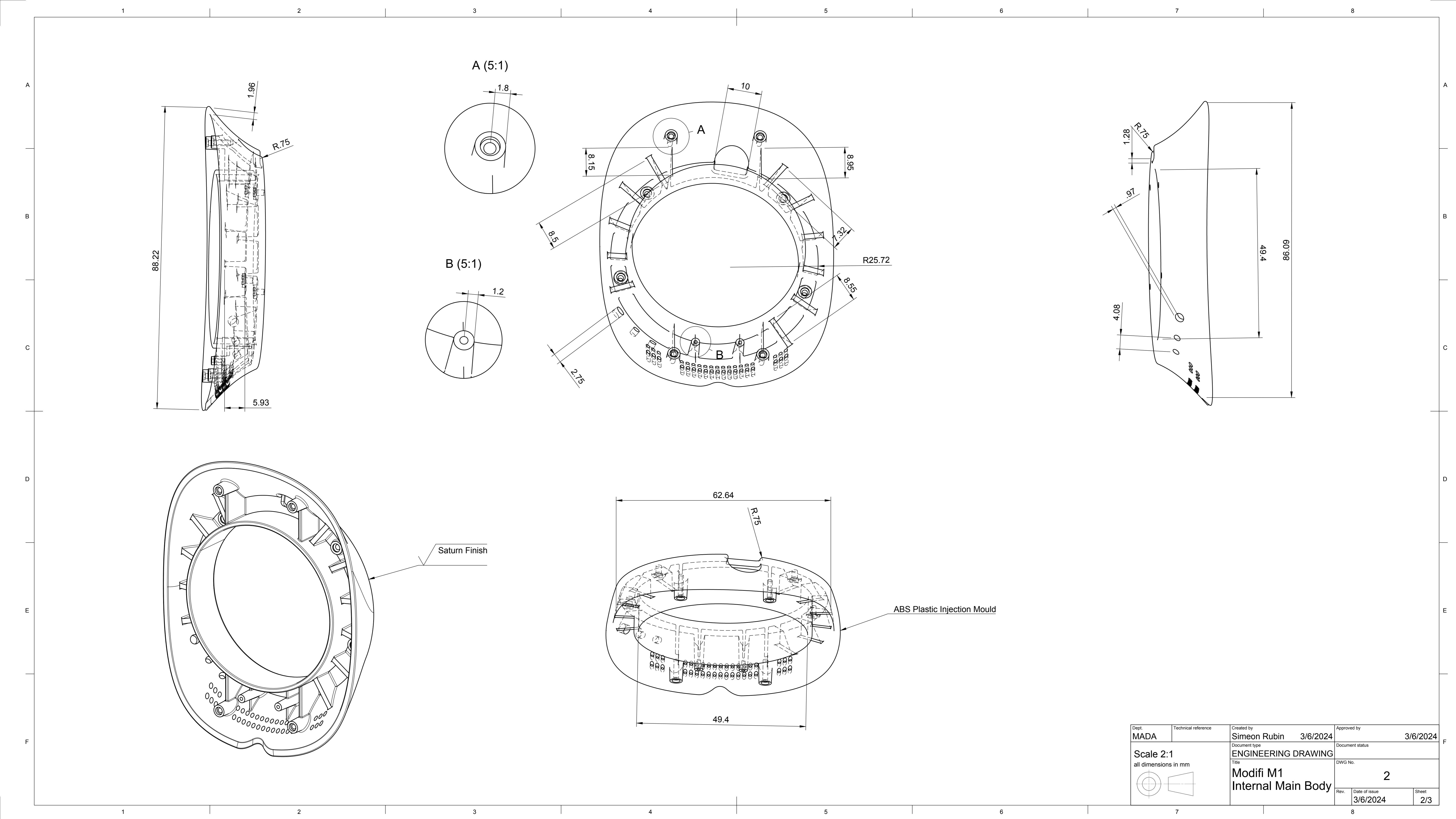
IDN3001

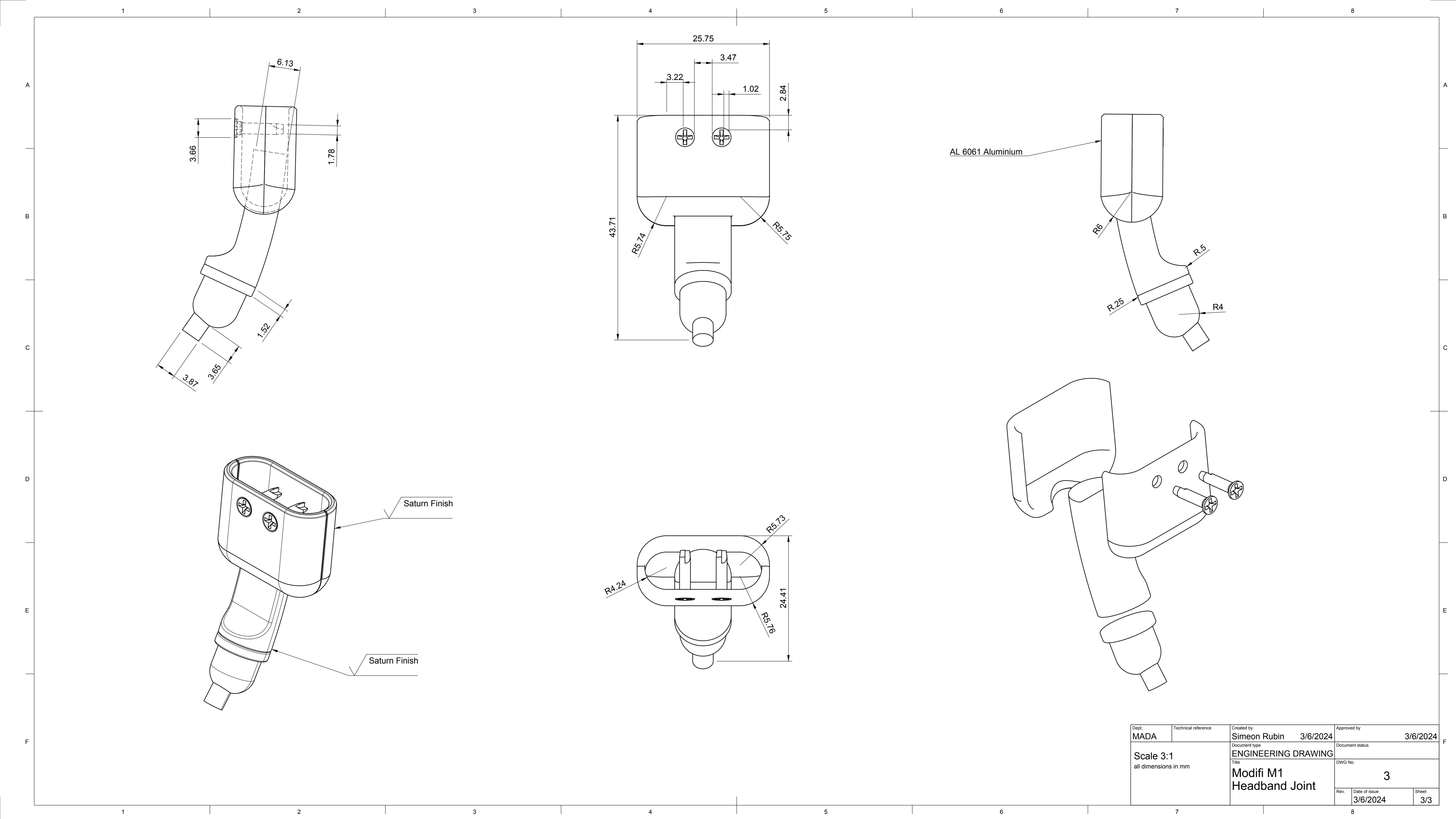




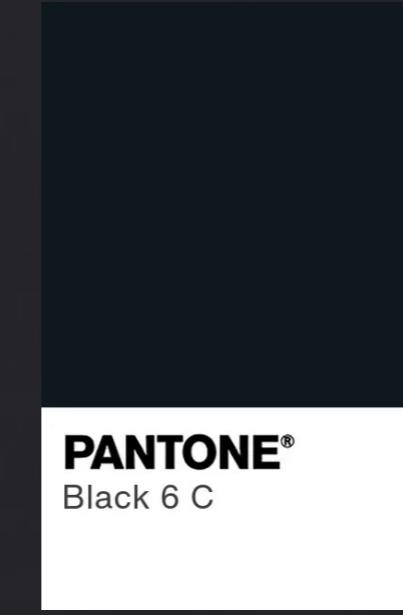






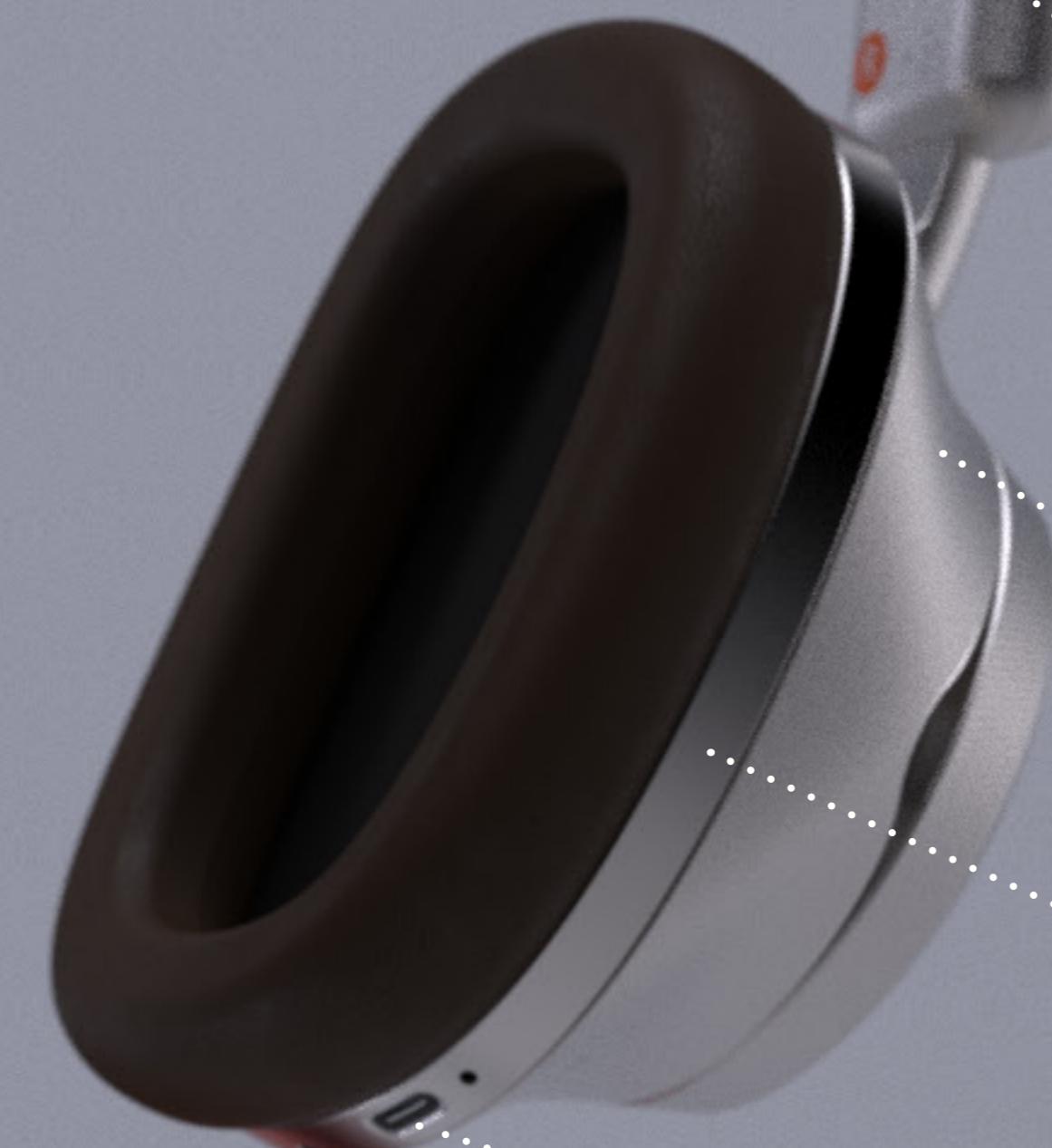








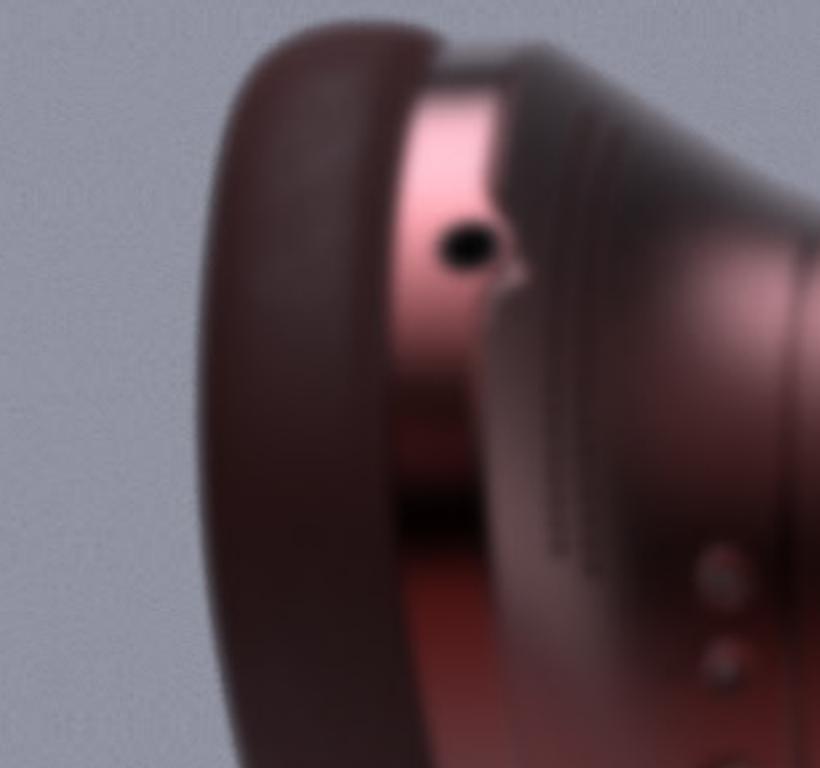
Grade 8.8 high tensile steel



Al 6061 aluminium



Ti 6Al 4V (Grade 5) Titanium

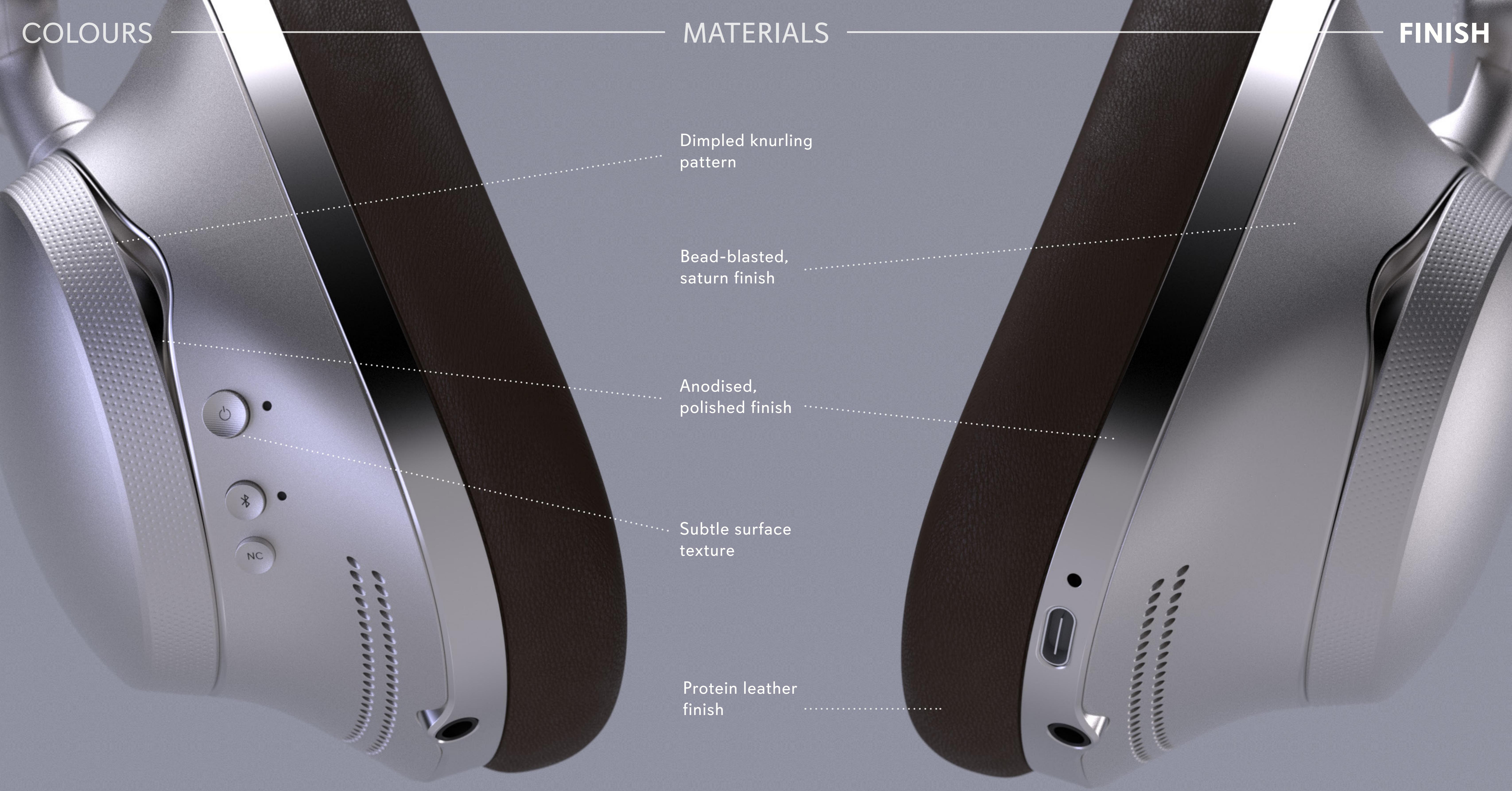


ABS 633 General-Purpose (Internal)

COLOURS

MATERIALS

FINISH



Dimpled knurling
pattern

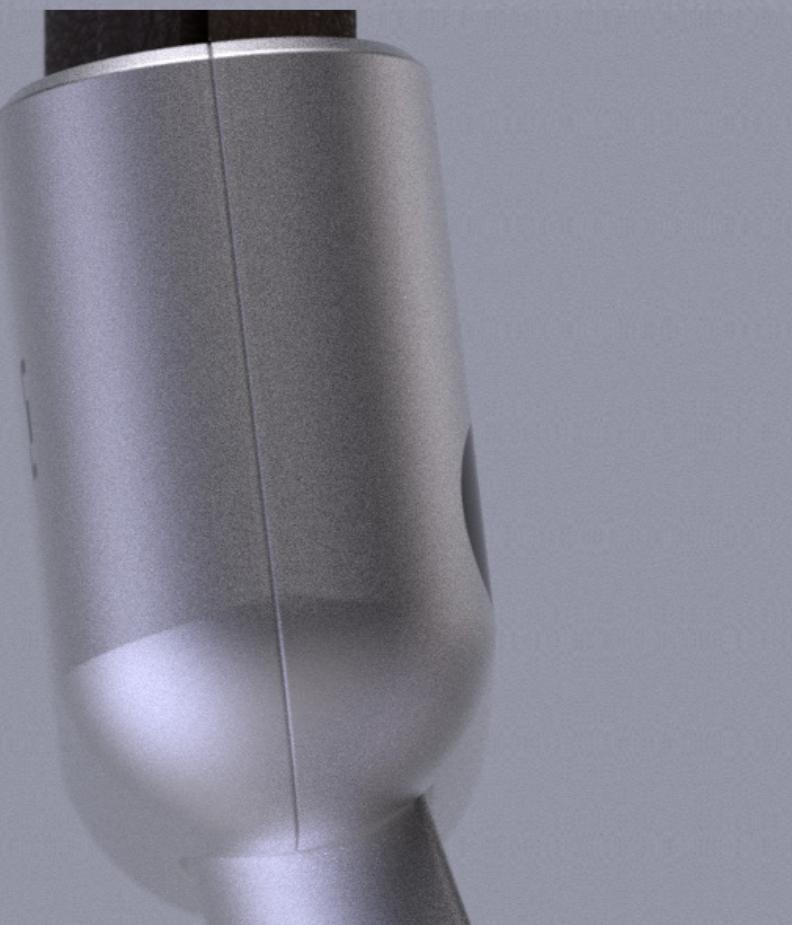
Bead-blasted,
saturn finish

Anodised,
polished finish

Subtle surface
texture

Protein leather
finish

MANUFACTURING STRATEGY



COST BREAKDOWN

IDN3001

Item	Qty	Part Number	Material	Part Cost (\$)	Total Part Cost (\$)	Tooling Cost (\$)
1	1	Inner Earcup Left	ABS Plastic	0.5	0.5	4500
2	3	Tactile Switches	Polycarbonate + Copper	0.6	1.8	30000
3	2	Planar Magnetic Driver (40mm)	Mylar + Neodymium	228.66	457.32	
4	2	500mah Battery	Lithium-ion	3.00	6	
5	2	Circuit Board w/ Processor	Resin	10.00	20	
6	2	Modular Driver Separator	ABS Plastic	0.5	1	3000
7	2	Modular Driver End	AL 6061 Aluminium	1.50	3	4500
8	2	Modular Driver Housing	ABS Plastic	1.00	2	3000
9	2	Modular Driver (Open Back)	AL 6061 Aluminium	2.00	4	6000
10	2	Modular Driver Lid	ABS Plastic	0.50	1	3000
11	1	Main Body Left	AL 6061 Aluminium	5.00	5	7500
12	2	Earcup End	Ti 6Al 4V Titanium	10.00	20	30000
13	2	Ear Cushion	Leather	5.00	10	15000
14	2	Ear Cushion Holder	ABS Plastic	0.50	1	3000
15	2	Ear Cushion Mesh	Woven Nylon	0.20	0.4	750
16	8	6 x 3mm Magnet	Neodymium	0.50	4	
17	16	4 x 2mm Magnet	Neodymium	0.30	4.8	
18	1	Power Button	AL 6061 Aluminium	0.50	0.5	1500
19	1	Bluetooth Button	AL 6061 Aluminium	0.50	0.5	1500
20	1	NC Button	AL 6061 Aluminium	0.50	0.5	1500
21	24	Spline Socket Head Cap Screw	Steel Grade 2 Plain	0.05	1.2	
22	8	Hexagon Socket Head Cap Screw	Steel Grade 2 Plain	0.05	0.4	
23	1	Headband Joint	Steel Grade 2 Plain	1.00	1	1500
24	4	Type II Cross Recessed Flat Countersunk Head Tapping Screw	Steel Grade 2 Plain	0.05	0.2	
25	2	Earcup Connection	AL 6061 Aluminium	1.00	2	3000
26	2	Middle Section	AL 6061 Aluminium	1.50	3	4500
27	2	Headband Holder Back	AL 6061 Aluminium	1.00	2	3000
28	2	Headband Holder Front	AL 6061 Aluminium	1.00	2	3000
29	1	Inner Earcup Assembly Right	ABS Plastic	0.50	0.5	4500
30	1	USB-C Port	Stainless Steel	2.00	2	
31	1	Volume Wheel	AL 6061 Aluminium	0.50	0.5	1500
32	1	Main Body Right	AL 6061 Aluminium	5.00	5	7500
33	1	Headband Top	Premium Leather	5.00	5	7500
34	1	Headband Bump	Premium Leather	2.00	2	3000
35	1	Headband Bottom	Premium Leather	5.00	5	7500
Total				296.91	575.12	161250
Amortised Tooling Cost (for 10000 units)						16.125
Total Manufacturing Cost per Unit						591.245
Retail Price (with markup of x4.5)						2660.6025
Retail Price (adjusted for market)						1300

MARKET JUSTIFICATION

IDN3001

Total Manufacturing Cost

\$591.245

Retail Price

\$1300

Markup

2.2x

MODIFI M1 Features

- 40mm modular drivers (dynamic and planar magnetic)
- Aluminum, Titanium, Premium Italian Leather.
- Noise Cancelling
- Bluetooth 5.2
- Dual 3.5mm headphone jacks

Competitors

B&O H95

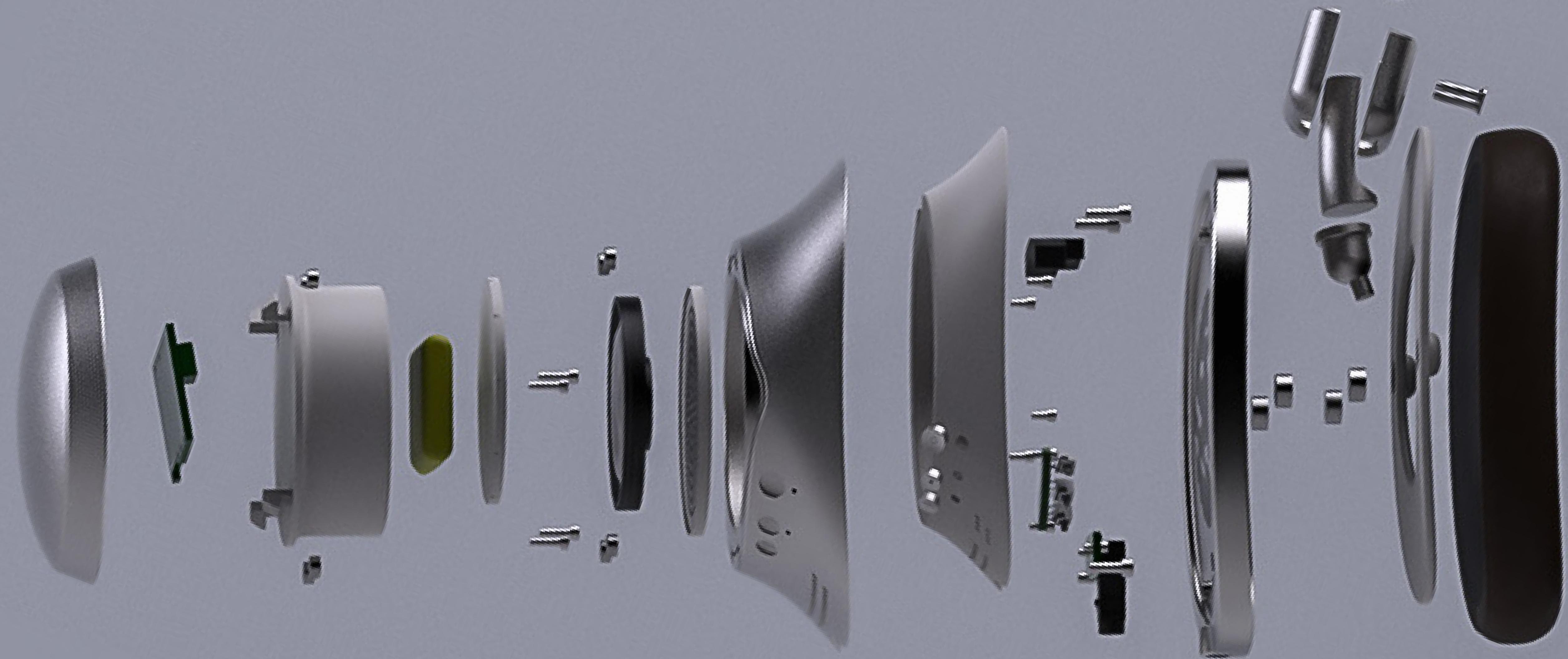
AUD\$1555

- 40mm dynamic drivers.
- Aluminum, polymer, silicone.
- Noise Cancelling
- Bluetooth 5.1

Bowers and Wilkins Px8

AUD\$1149

- 40mm dynamic driver.
- Aluminum, Nappa leather.
- Hybrid Noise Cancelling
- Bluetooth 5.2





Modular Drivers

for switching between closed-back drivers and open-back drivers for customisable audio



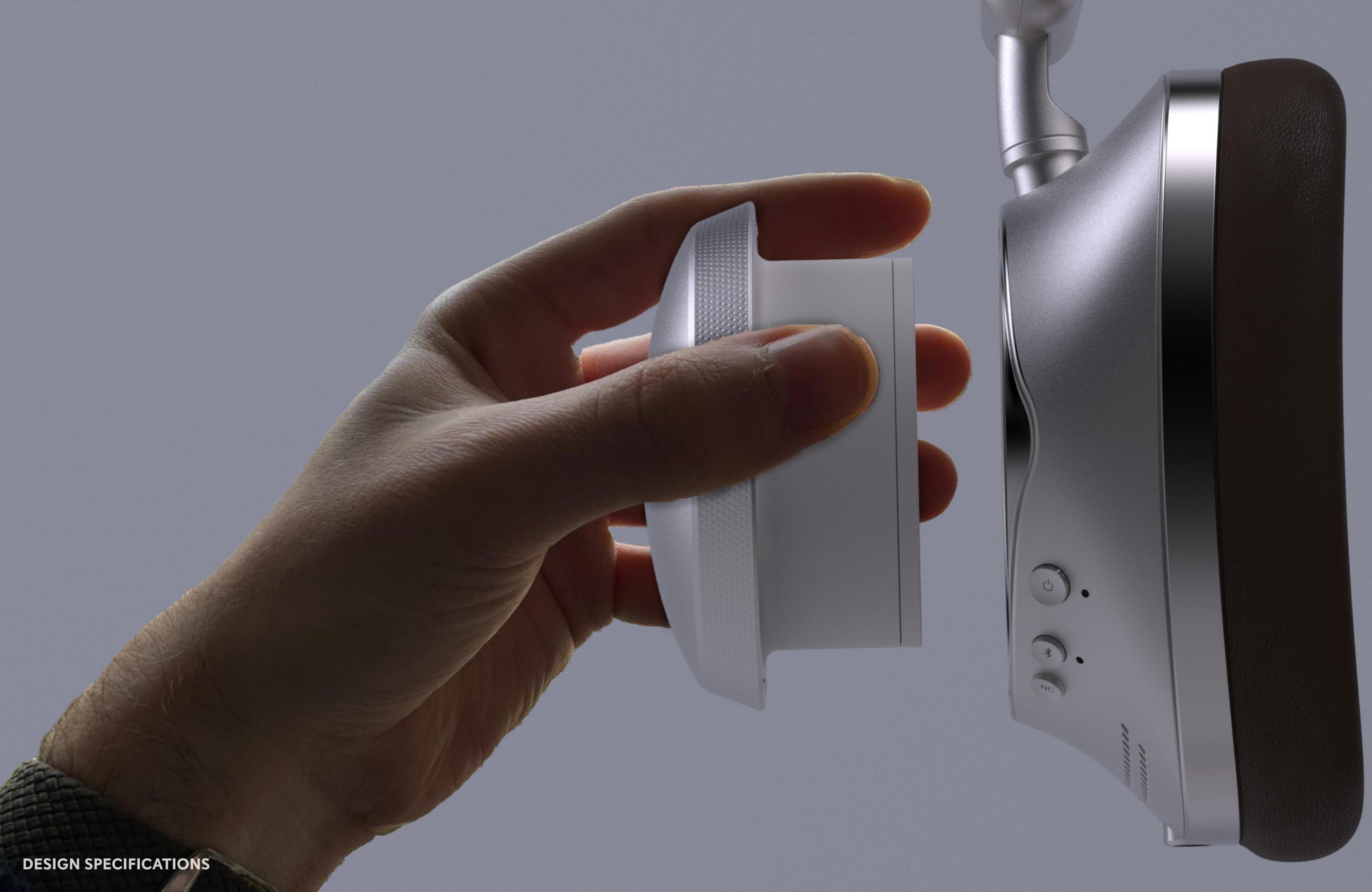
Bluetooth and Noise Cancelling

for an immersive listening experience



Designed for accessibility

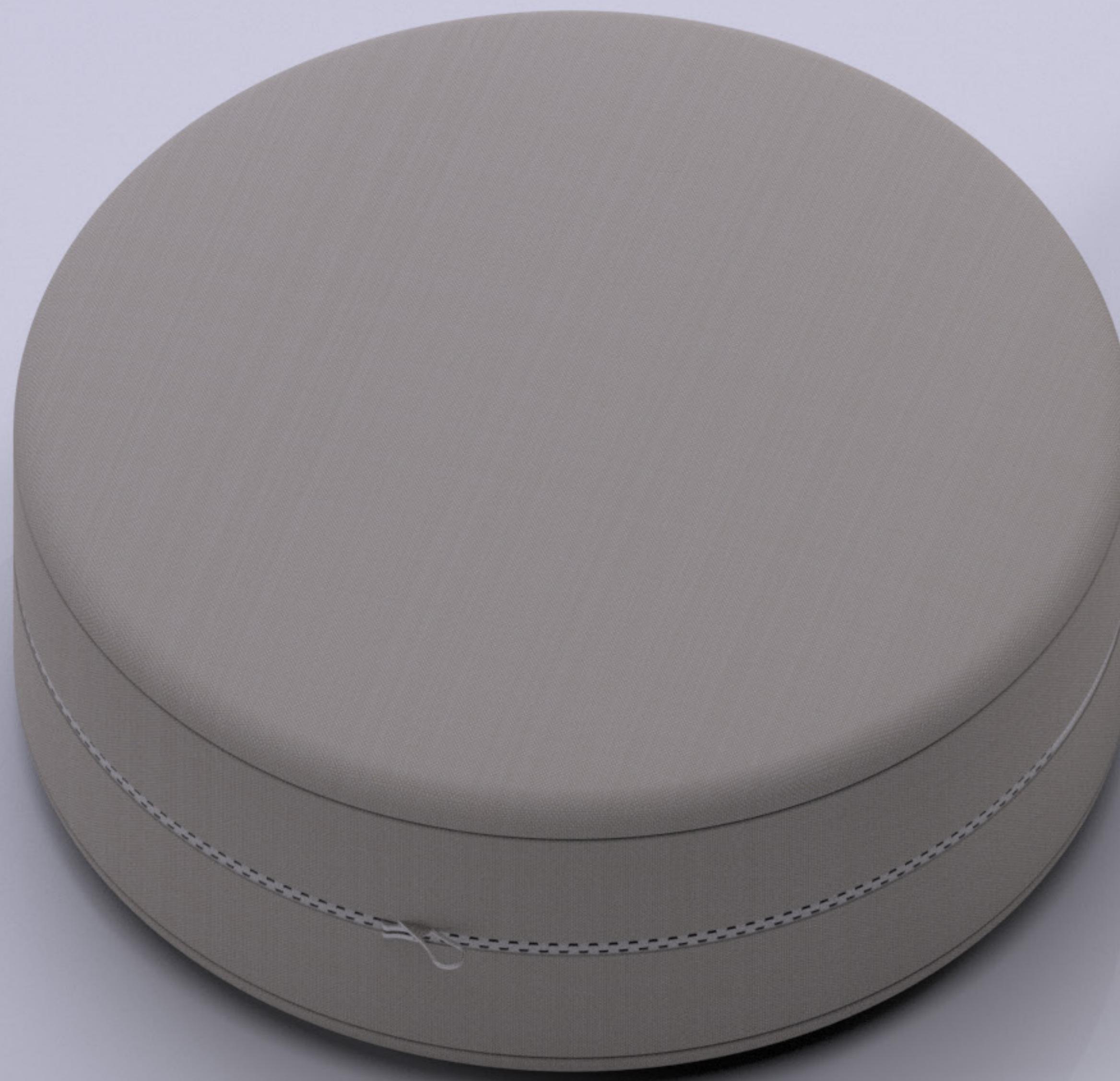
with braille details on headband joints











MODIFI

M1







PROTOTYPE

IDN3001





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Persona photo by Italo Melo: <https://www.pexels.com/photo/portrait-photo-of-smiling-man-with-his-arms-crossed-standing-in-front-of-a-wall-2379004/>

Bump map on power button from <https://www.pinterest.com.au/pin/455356212322505987/>

All colour swatches were acquired from <https://www.pantone.com/connect/>

Generative AI was used to create the flowing cloth backgrounds