

A black and white photograph showing a close-up of a person's hand touching a document with Braille. The hand is positioned over the Braille, with fingers slightly spread. The document is a sheet of paper with a perforated edge on the right side. The background is dark and out of focus.

Product Design for Photographic Documentation of Blind Families

Design Changes the World

2025/11/20

CONTENT

01

Background

02

Design Research

03

Design Concept

04

Design Presentation

Background

China has millions of blind parents. They form a resilient and remarkable community, overcoming unimaginable challenges in raising the next generation.



A Blind Parent's Childcare Diary

Parents always capture countless precious moments while raising their children. For blind parents, however, the act of taking photos and the subsequent act of revisiting them are disconnected. They cannot relive those moments through the photos themselves, rendering those cherished visual memories irretrievable fragments of the past.

Without effective non-visual access methods, the countless snapshots documenting a child's growth ultimately become silent, useless data stored on a phone.



Design Research

Automatic Album Categorization

智能分类



人物
15



食物
548



自然风光
744

User Behavior Analysis



Blind individuals often rely on AI to analyze image content and convert it into text.



We experience the world through touch, but photographs are flat.

Design Concept

User Profile: Families with visually impaired parents raising children, capturing daily moments

1. Primary categories of family photo documentation: portraits, landscapes, and cuisine.
2. Individuals with visual impairments often rely on AI to analyze image content and convert it into text, limiting their imagination. We aim to enhance user experience through multi-sensory approaches.
3. Portable and easy to operate.

Solve problems through auditory and tactile means

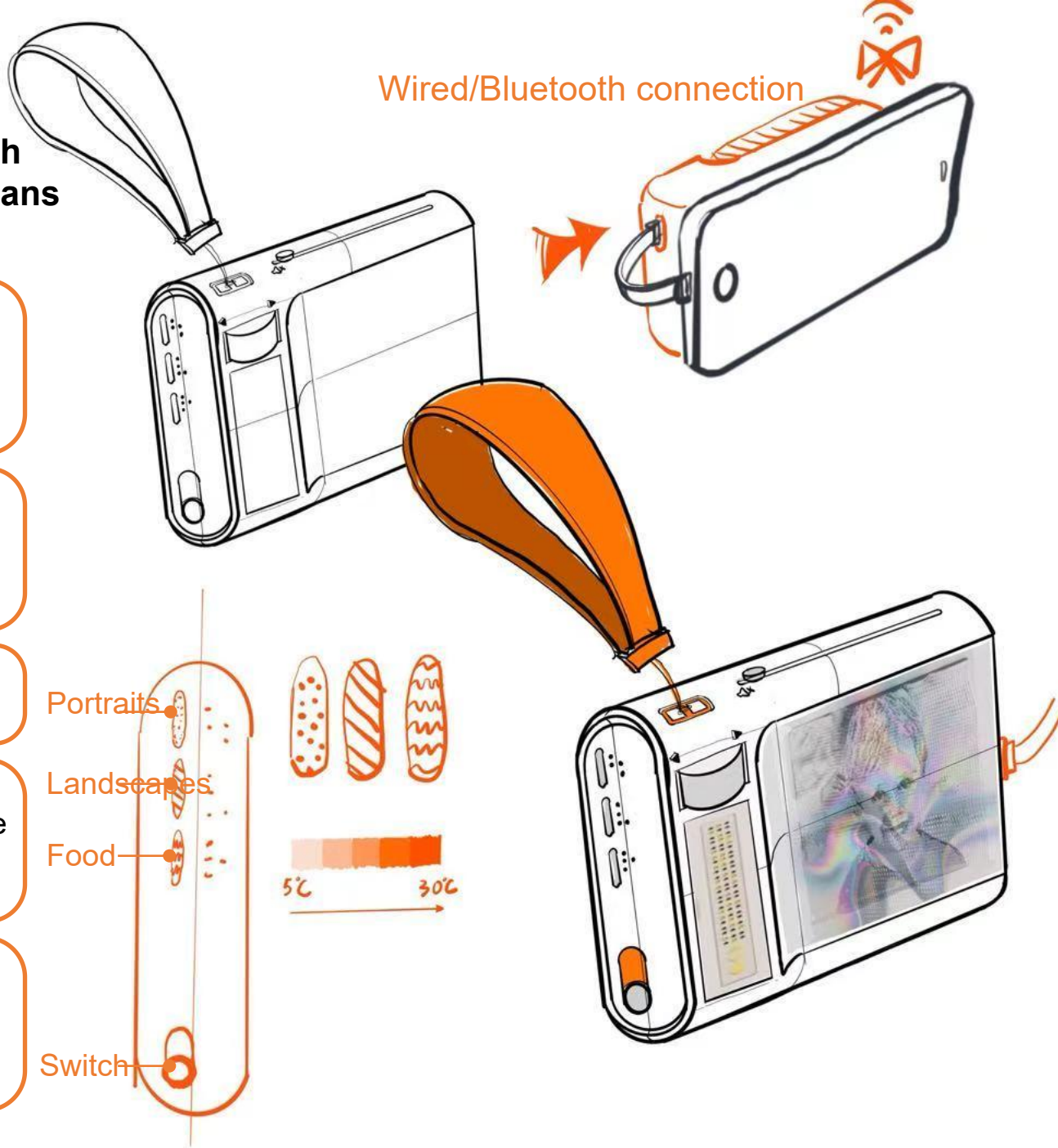
Intelligently categorize photos into three types: portraits, landscapes, and food

Create varying degrees of protrusion based on the distance of elements from the lens for users to touch

Can be attached to a phone for use

Generate different temperatures based on the brightness of the image's colors

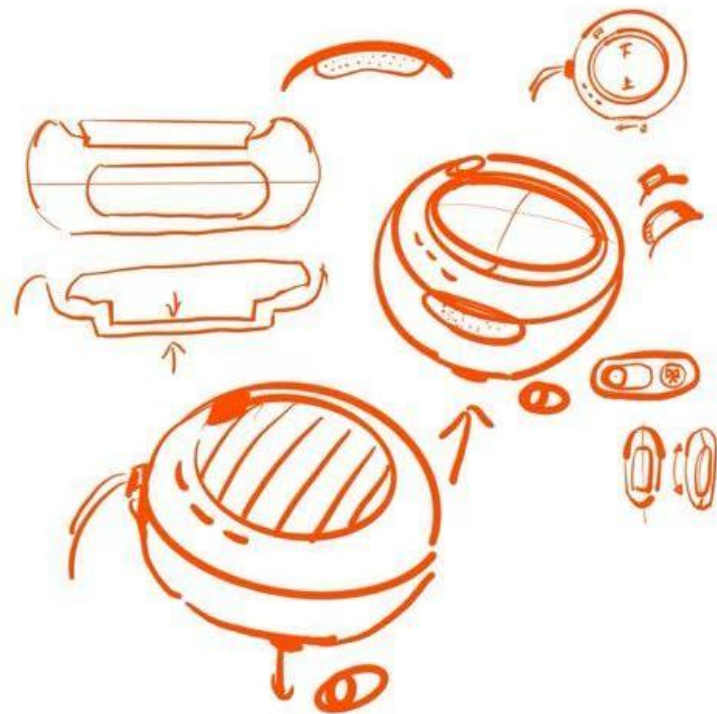
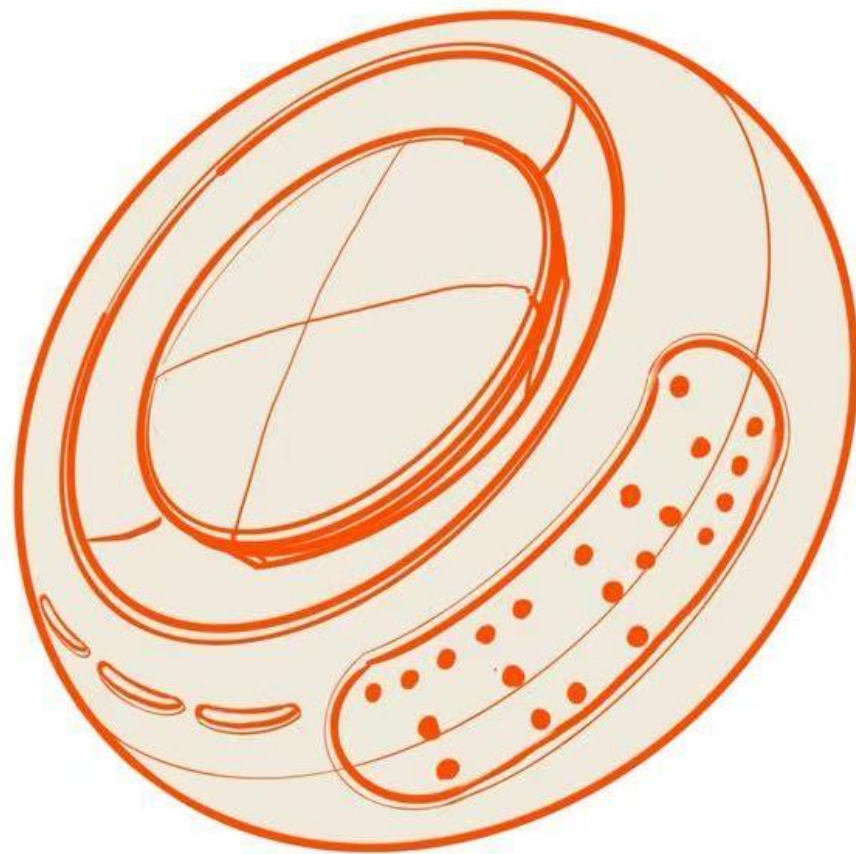
Automatically display image information, including capture time and location



意向图



Sketch



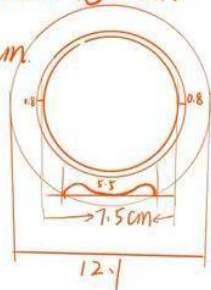
① 3个照片分类按钮

② 开关 — 外国长 3.7cm 宽 1.5cm 内按钮

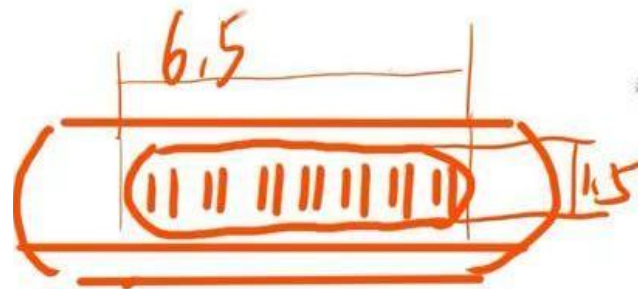
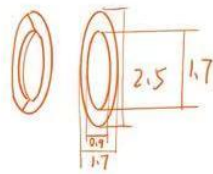
③ 拨动相机按钮 — 外国长 2.5cm 宽 1.5cm 内围长 1.7cm 宽 0.9cm

④ 文字说明部分 — 宽幅 5.5cm

⑤ 触摸部分 — 直径 7.5cm



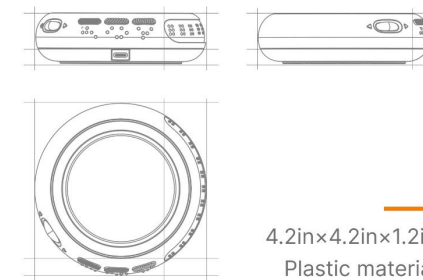
背面按钮



TOUCH-FRAME

Designed for parents with acquired blindness.

Design Description: This smart product is designed for parents with acquired blindness. The brightness and color tones of images and photographs are conveyed through the touch panel, allowing users to perceive the content of photos and transform family pictures into tangible memories.



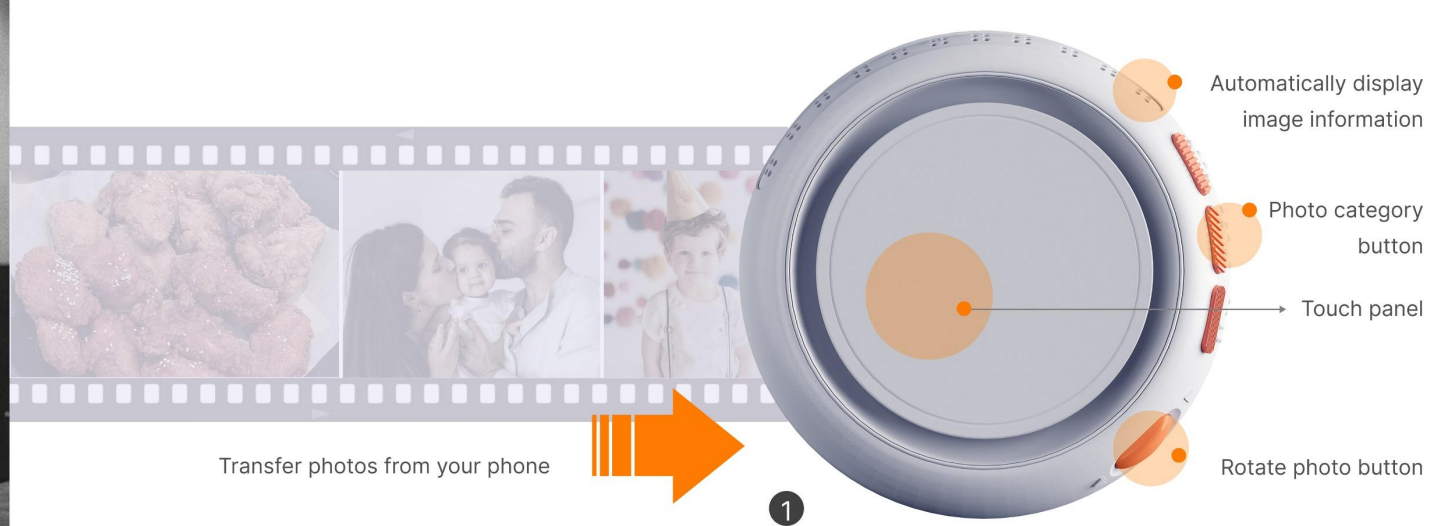
4.2in×4.2in×1.2in
Plastic material



Problem

For blind parents, the moment of taking a photo and the subsequent recollection are disconnected. They cannot relive the moment through the photograph itself.

Blind individuals often rely on AI to analyze image content and translate it into text, limiting their imagination. They hope to enhance user experience through multi-sensory approaches.



- ① Automatically displays photo metadata, including capture time and location information.
- ② Based on the photo content, the panel will provide raised feedback for users to touch.

As one of the key elements in photography, color enables the product to generate different temperature sensations based on the brightness of the image, offering visually impaired users a richer experience.

L-value



Temp





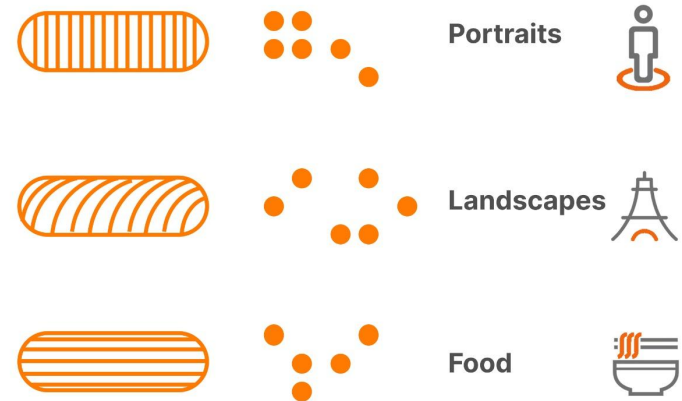
TOUCH-FRAME

Designed for parents with acquired blindness.

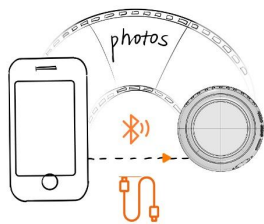
Design Description: This smart product is designed for parents with acquired blindness. The brightness and color tones of images and photographs are conveyed through the touch panel, allowing users to perceive the content of photos and transform family pictures into tangible memories.



Primary types of family photo documentation: portraits, landscapes, and food photography.



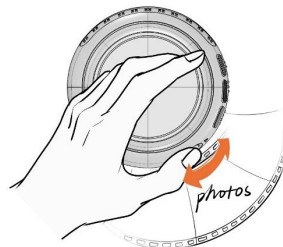
How to use



① Transfer photos from your phone



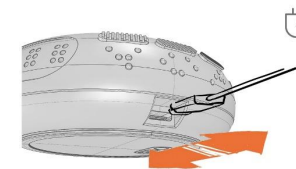
② Select the type of photos you want to view



③ Rotate to switch between photos



④ Touch panel feedback and top Braille information



⑤ Charging



TOUCH-FRAME

Designed for parents with acquired blindness.



Thanks