

## 2c: Handheld Device : **Wireless headphones**

Wireless headphones are headphones that connect to a device, such as a smartphone, stereo speaker, television, gaming console, computer, or other electronic devices without using a wire or cable.



Overall characterization:

Pros: Wireless, good battery life, noise cancelling, extremely portable, clear sound, good for physical activity

Cons: Short distances for bluetooth, durability issues, lousy feedback

**User experience** characterization:

Based on personal user experience wireless headphones are much better than regular wired headphones. As they are wireless, they won't get in the way or get tangled as regular earphones. Headphones are easily controlled by a smartphone. The quality of sound doesn't depend on anything but distance to the connection device; whereas any damage of wire in regular earphones introduces undesired noise. Design diversity makes users choose/customize the device according to personal preferences.

- Enjoyable
- Easy to use
- Aesthetically pleasing
- Entertaining
- Adjustable/come in a variety of styles

**Usability** characterization:

Visibility:

- + All the buttons for basic functions (play, pause, volume, skip, go back) are visible and close to each other

Feedback:

- + Smartphone app gives all the necessary feedback for connection to earphones and playing music

- Response time can be high

Affordance:

- + Ease of use: minimalistic design with few buttons makes users learn quickly

Mapping:

- + Buttons perform straightforward functions (one each)

Constraints:

- Main limitation is distance to the connected device. Typically, accounts for several (~10) feet

Consistency:

- + Compatible with all types of smartphones
- + Connected device can be easily switched to another one