



HOCHSCHULE KONSTANZ TECHNIK, WIRTSCHAFT UND GESTALTUNG
UNIVERSITY OF APPLIED SCIENCES

System- und Software-Ergonomie, WS 06/07

4th Assignment

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1 Task 5

1.1 Part 5a

As an example of an embedded system, I want to present the “Creative Zen Touch” MP3 player. Its main purpose is, of course, playing music files. Additionally, you can use the player as a mobile storage device and put data files on it.

In figure 1 the device’s user interface is shown. As we can see, there are 7 control buttons in total, plus a touch pad interface. On the left side, there are 2 buttons which relate to menu navigation and one which controls random playback functions. In the middle there is a “OK”-button for selecting files and the touch pad for scrolling through menus and file lists. Finally, there are 3 playback control buttons on the right side: rewind, play/pause and fast forward.

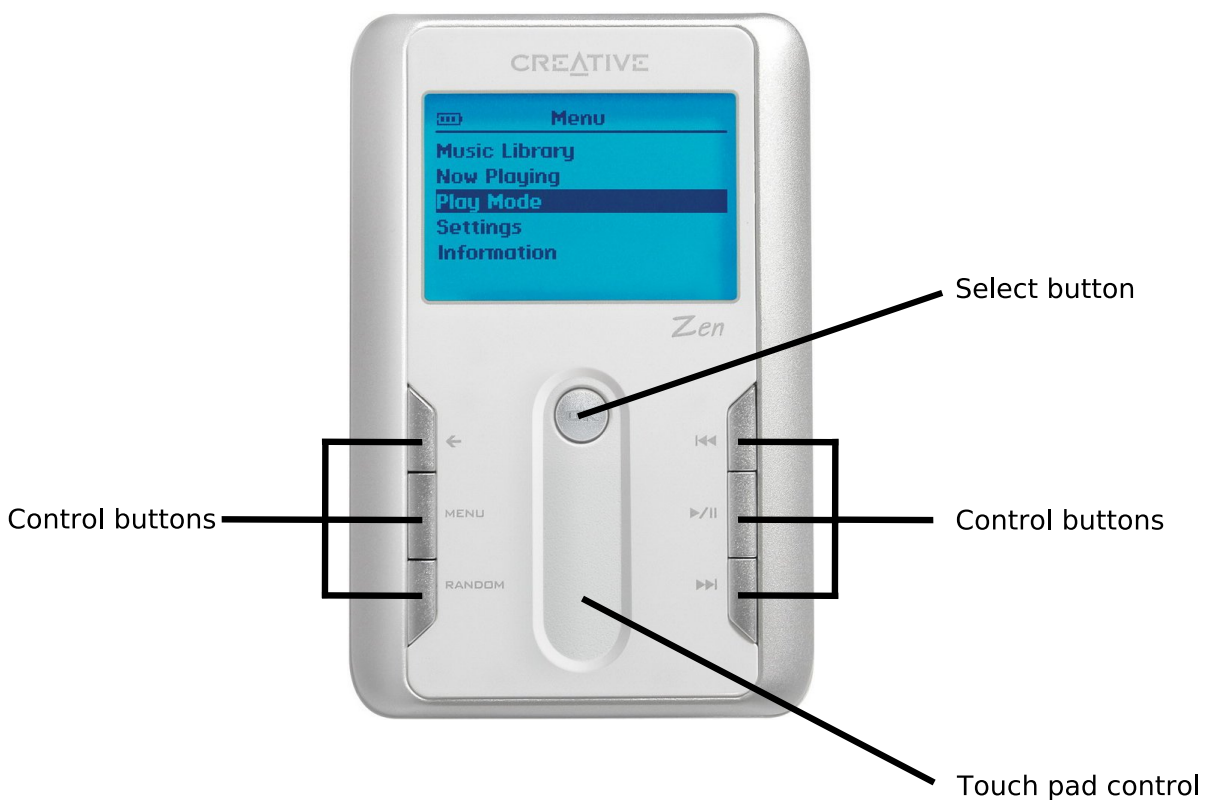


Figure 1: User interface of the “Creative Zen Touch”. Image: Creative Technology Ltd.

Furthermore, there are two volume control buttons and the power switch on the

player's left side, which is not shown here.

1.2 Part 5b

In the following sections I want to pick up three details of the player's user interface and value them in terms of usability.

1.2.1 Effectiveness

While playing a song from a certain playlist you might be interested in the other artist's songs. So the player should offer a functionality to show and play the songs of the current track's artist.

Unfortunately, there is no such function – if you want to play all songs of a specific artist, you have to leave your current playlist, go to the main menu and search for the artist manually.

1.2.2 Efficiency

If you have a very long list of songs in your player and you want to play a song whose title starts with a 'Z', you have to scroll all the way down the alphabetically sorted list until you find the song you are searching for. To shorten that search time, there is a 'search' included, which lets you choose the initial letter (from another list you have to scroll through) you want to jump to directly.

In my opinion this is a very inefficient way to find a specific song.

1.2.3 User Satisfaction

In order to navigate the playlists or menus you have to use the integrated touch pad device. The problem here is, that the touch pad is overly sensitive and that makes selecting a certain entry quite difficult, at least at the beginning when you are still "untrained". Although one can alter the pad's sensitivity, I think that even in the least sensitive mode you cannot navigate safely and select a specific list entry without "oscillating" between the entries above and below the target.

Another confusing aspect of the interaction controls is the fact that there is no "stop playback" button included, as figure 1 already showed. So that actually breaks the principle of recognition, because audio playing devices usually have four playback controls: fast-forward, rewind, play/pause and stop.

1.3 Part 5c

To sum up, I have to say that I would rate the user interface's usability rather bad. There are a lot of glitches in the player's handling – three of them mentioned in the sections above – and that makes using “special” functions quite annoying. As long as you just play music in random mode and don't want to find specific songs or navigate through menus and change the sound settings, everything works okay.