

HbbTV Advertising

Graphic design – Requirements

Basic rules

When creating graphic design for an HbbTV application, it is necessary to consider the fact that the distance between the user and the screen exceeds two metres. Individual elements (graphic elements, text, etc.) must be therefore designed for human sight to easily see and read the content. It is also essential to bear in mind that control of the application with a remote is limited to a certain extent. The application should be simple, easy to understand, and the navigation should be intuitive.

Resolution

For the graphic design of the application, fixed resolution of **1280 × 720 px** (fig. 1) is required. It is necessary to respect the size of the so-called **safe zone**, i.e. the resolution of **1024 × 648 px** (fig. 2). To guarantee that all essential features can be viewed easily, all the key elements of the application must be placed within the safe zone. The only element allowed to exceed the limits of the safe zone is the background, and possibly also any complementary graphic elements.

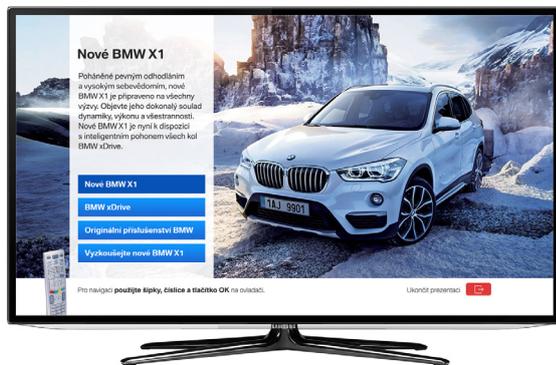


Figure 1
Full view of the application
(1280 × 720 px).



Figure 2
Safe zone (1024 × 648 px). The red shows the area
outside the safe zone.

Text elements

The text elements visible on the television screen are limited to subtitles, text in advertising spots, or teasers announcing upcoming programmes. Long stretches of texts are difficult to read on screen. Fit your text into the limited amount, with the number of words on a single screen not exceeding 90. The font size should be at least 16 pts.

Colours

Avoid colours of high saturation (the individual values of red, green and blue not reaching 235 in RGB). It is recommended to limit white to values under 240/240/240 in RGB, and keep values of black over 16/16/16 in RGB.

Navigation

For navigation, the following buttons are available on the remote control:

- arrow buttons (navigation within the screen, switching between menu items)
- "OK" button (confirmation button)
- colour buttons (the red button to start/quit the application, the green to confirm, matching the function of the "OK" button)
- numeric keys (for number input, e.g. telephone number dialling)

It is necessary to introduce the navigation options, for example through text and graphic elements in the navigation bar (fig. 3 and 4) or simple graphic presentation (fig. 5).

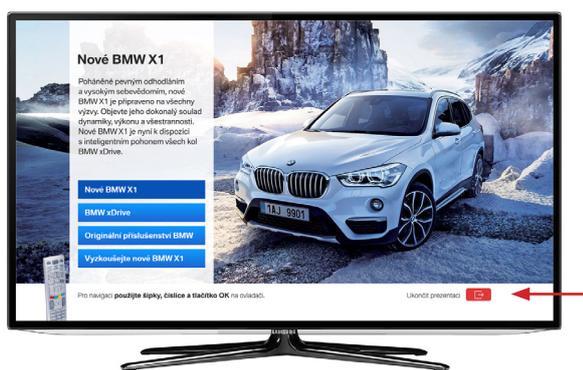


Figure 3
Example of the navigation bar.



Figure 4
Example of the navigation bar.



Figure 5

The green “OK” confirmation button. Input of the inserted phone number can be confirmed either by using the OK button on the screen or by pushing the green button on the remote control.

If the application consists of multiple pages, it is necessary to clearly distinguish active elements from inactive features in the menu (fig. 6), e.g. with a bold frame, change of colour, etc. It should be always easy to identify which page is being shown.

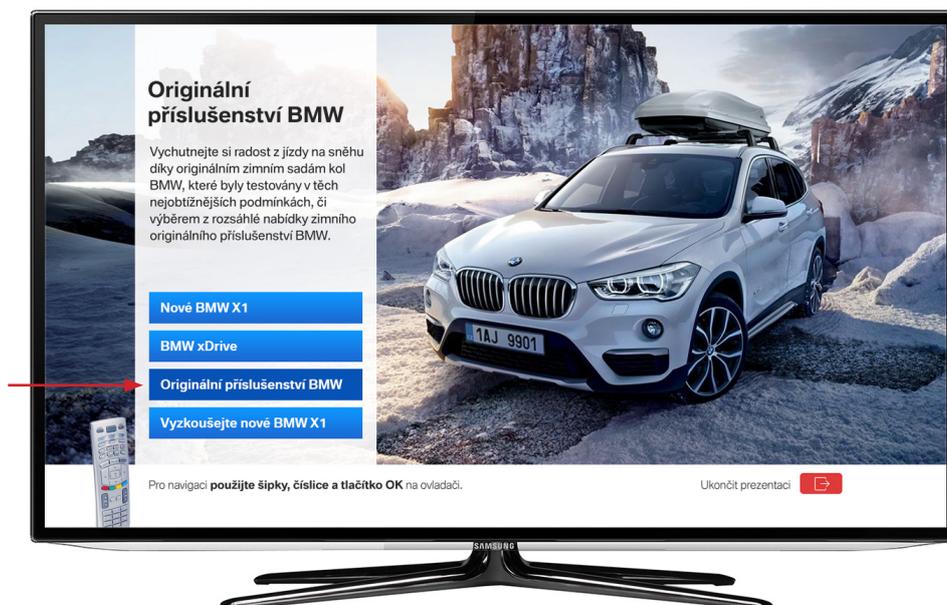


Figure 6

Active menu item highlight.

Video, audio

The graphic design of an HbbTV application can also include a video (*fig. 7*). Up to one video can be used in a single page.

Video format requirements:

- 16:9 resolution
- Sound: AAC, 48 kHz without artificially enhanced sound (approximately 16,5 dB). When mixed, the sound must meet EBU R128, the sound level of the programme must be normalised to -23 LUFS in the integrated measurement mode, with the maximum modulation value not exceeding -1 dBTP.
- Data size up to 100 MB



Figure 7

Example of a video used in an HbbTV advertising application.

Screen layout

In order to enable smooth functioning and viewing of the application, the data volume is restricted. This applies especially to applications consisting of multiple pages. When creating graphic design of your application, use a single graphic background, alternating only the content of the individual pages (screens).

Red button

The red button is used to open the application. The maximum and also recommended size of the red button is **300 × 300 px**, with semi-transparent icons allowed (*fig. 8 and 9*). The icon of the red button is placed **36 px** from the bottom and **128 px** from the right margin of the screen. Do not forget to keep the safe zone for the button elements.

The red button design may encourage the user to open the application or discourage them from running it. For this reason, the icon should be attractive enough to prompt users to open the application. When designing the red button, consider the fact that you never know the parameters of the background on which the icon will be shown.



Figure 8
Red button icon (300 × 300 px).



Figure 9
Red button icon (300 × 300 px).

Requirements for submitted graphic design data

Graphic design data created in Adobe Photoshop, with individual pages saved in separate layers. Follow the rules described above. For easier edits in case of necessity, it is recommended to attach information on the used font.

Requirements for visual design of tiles in HbbTV navigation

The tiles are used for starting an HbbTV application from the HbbTV navigation platform. Visual data for two modes of the tiles are required: “slide” (default mode) and “hover” (the mode in which the tile on the first level in the menu has been selected).

1. Size

Slide: 320 x 110 px (72 dpi)

Hover: 378 x 130 px (72 dpi)

18 px radius in the corners (round corners) must be kept for both formats.



Figure 10: Slide (320 × 110 px).



Figure 11: Hover (378 × 130 px).

2. Colours and other graphic requirements

Any RGB colours, including possible text.

3. Format

PNG with saved transparency.