Modifying the Webradio URL in the firmware using a hex-editor. (Revision 1)

People who own a KiSS DP-500 DVD player and are using the Webradio option know that they can only listen to the radio stations that are provided on the KiSS Webradio internet site (webradio.kiss-technology.com). When you want to have more stations (like we all do), there is a solution. In short the way how this is done:

- Compile your own playlist and place it on a website.
- Modify the firmware (the ISO file) and update your DVD player. When modifying the ISO file it is important not to change the length of the ISO file. One way to accomplish this is by using a hex-editor. In this case you must have a hex-editor and also know what rules to follow. This document describes how to do it. In the following description I used "UltraEdit-32 Professional version 9.20+".

Start the hex-editor and open the ISO file that you want to modify. Search for "get http". Click on 'Find Next'.



The hex-editor will find the search-string and will highlight it.

```
6F 6F 6D ; Zoom 300%...Zoom
48 54 00 ; 400%.....SHT.
69 6D 67 ; WEBRADIO..../img
00 00 00 ; /logontsc.jpg...
2D 74 65; webradio.kiss-te
00 00 00 ; chnology.com....
6E 65 63; Failed to connec
2D 74 65 ; t to www.kiss-te
00 00 00 ; chnology.com....
          GET http://webra
   72 61 ;
6E 6F 6C; dio.kiss-technol
70 68 70 ; ogy.com/host.php
50 6C 61 ; ?PlayerID=%s&Pla
6C 61 79 ; yerBrand=%s&Play
61 79 65 ; erModel=%s&Playe
50 6C 61 ; rVersion=100&Pla
64 26 50 ; yerLanguage=%d&P
3D 25 64 ; layerFirmware=%d
3A 43 6C; ..Connection:Cl
00 00 00 ; ose.....KiSS....
```

First we change the domain. Look a few lines above the found search-string. There will be a line like the following picture.

```
00286680h: 57 45 42 52 41 44 49 4F 00 00 00 00 2F 69 6D 67; WEBRADIO..../img
00286690h: 2F 6C 6F 67 6F 6E 74 73 63 2E 6A 70 67 00 00 00; /logontsc.jpg...
002866a0h: 77 65 62 72 61 64 69 6F 2E 6B 69 73 73 2D 74 65; webradio.kiss-te
002866b0h: 63 68 6E 6F 6C 6F 67 79 2E 63 6F 6D 00 00 00 00; chnology.com...
002866c0h: 46 61 69 6C 65 64 20 74 6F 20 63 6F 6E 6E 65 63; Failed to connec
002866d0h: 74 20 74 6F 20 77 77 77 2E 6B 69 73 73 2D 74 65; t to www.kiss-te
```

Now change the highlighted part in the picture above to your own domain. Do not insert text, but only override the default domain. Do not enter a domain name longer then the default domain. In most cases the domain you've entered will be shorter then the default domain. In this case you have to enter extra "null" characters. A "null" character is not the same as a dot. In the picture below I have to override the text "hnology.com" with "null" characters.

```
00286690h: 2F 6C 6F 67 6F 6E 74 73 63 2E 6A 70 67 00 00 00; /logontsc.jpg...
002866a0h: 77 77 77 2E 6D 79 77 65 62 73 69 74 65 2E 63 6F; www.mywebsite.co
002866b0h: 6D 68 6E 6F 6C 6F 67 79 2E 63 6F 6D 00 00 00 ; mhnology.com....
002866c0h: 46 61 69 6C 65 64 20 74 6F 20 63 6F 6E 6E 65 63; Failed to connec
002866d0h: 74 20 74 6F 20 77 77 77 2E 6B 69 73 73 2D 74 65; t to www.kiss-te
```

You can enter the "null" characters in the middle part of the screen. After modification it should look like this. Notice the highlighted zero's in the picture below.

The next part to change is the path to the playlist. The highlighted part in the picture below shows this (default) path. The easiest way to do this is to enter a path of exact length as the default path.

```
002866e0h: 63 68 6E 6F 6C 6F 67 79 2E 63 6F 6D 0A 00 00 00; chnology.com....
002866f0h: 47 45 54 20 68 74 74 70 3A 2F 2F 77 65 62 72 61; GET http://webra
00286700h: 64 69 6F 2E 6B 69 73 73 2D 74 65 63 68 6E 6F 6C; dio.kiss-technol
00286710h: 6F 67 79 2E 63 6F 6D 2F 68 6F 73 74 2E 70 68 70; ogy.com/host.php
00286720h: 3F 50 6C 61 79 65 72 49 44 3D 25 73 26 50 6C 61; ?PlayerID=%s&Pla
```

When you enter a path of less length, like I did in the picture below you have to move the part behind the **default** path to the end of the command line. The highlighted x'es are now only for explanation purpose (just to show you the gap).

When starting Webradio on your KiSS DP-500 your player executes a 'GET' command to obtain the playlist. Default this command line is:

"GET http://webradio.kiss-technology.com/host.php?PlayerID=%s&PlayerBrand=%s &PlayerModel=%s&PlayerVersion=100&PlayerLanguage=%d&PlayerFirmware=%d" "

So when you change the path with one of less length (like in the picture above)....

"GET http://www.mywebsite.com/host.phpxxxxxxxxxx?PlayerID=%s&PlayerBrand=%s&PlayerModel=%s&PlayerVersion=100&PlayerLanguage=%d&PlayerFirmware=%d"

... you have got a gap (the red x'es). In green the new path. In red the gap. The gap must go to the end of the command line. Like this:

"GET http://www.mywebsite.com/host.php?PlayerID=%s&PlayerBrand=%s&PlayerModel =%s&PlayerVersion=100&PlayerLanguage=%d&PlayerFirmware=%d xxxxxxxxxxx"

Notice also the space at the end of the command line.

```
00286760h: 79 65 72 4C 61 6E 67 75 61 67 65 3D 25 64 26 50; yerLanguage=%d&P 00286770h: 6C 61 79 65 72 46 69 72 6D 77 61 72 65 3D 25 64; layerFirmware=%d 00286780h: 20 0D 0A 43 6F 6E 6E 65 63 74 69 6F 6E 3A 43 6C; ...Connection:Cl 00286790h: 6F 73 65 0D 0A 0D 0A 00 4B 69 53 53 00 00 00 00; ose....KiSS.... 002867a0h: 44 50 2D 35 30 30 00 00 53 65 6E 64 69 6E 67 20; DP-500.Sending
```

In the next picture I entered the (example) x'es behind the command line (and after the space).

The gap, now behind the command line, must be filled with "space" characters. See picture below.

```
00286750h: 30 26 50 6C 61 79 65 72 4C 61 6E 67 75 61 67 65; O&PlayerLanguage 00286760h: 3D 25 64 26 50 6C 61 79 65 72 46 69 72 6D 77 61; =%d&PlayerFirmwa 00286770h: 72 65 3D 25 64 20 20 20 20 20 20 20 20 20 20; re=%d 00286780h: 20 0D 0A 43 6F 6E 6E 65 63 74 69 6F 6E 3A 43 6C; ...Connection:Cl 00286790h: 6F 73 65 0D 0A 0D 0A 00 4B 69 53 53 00 00 00 00; ose....Kiss... 002867a0h: 44 50 2D 35 30 30 00 00 53 65 6E 64 69 6E 67 20; DP-500.Sending
```

Notice the two characters after the gap and before the next line. These are **not** "null" characters. So don't alter them.

```
O0286760h: 3D 25 64 26 50 6C 61 79 65 72 46 69 72 6D 77 61; =%d&PlayerFirmwa
O0286770h: 72 65 3D 25 64 20 20 20 20 20 20 20 20 20 20 ; re=%d
O0286780h: 20 OD OA 43 6F 6E 6E 65 63 74 69 6F 6E 3A 43 6C; ...Connection:Cl
O0286790h: 6F 73 65 0D 0A 0D 0A 00 4B 69 53 53 00 00 00 00; ose....Kiss...
O02867a0h: 44 50 2D 35 30 30 00 00 53 65 6E 64 69 6E 67 20; DF-500..Sending
```

Here you have the modified command line (and path to the playlist).

```
002866d0h: 74 20 74 6F 20 77 77 77 2E 6B 69 73 73 2D 74 65 ; t to www.kiss-te
002866eOh: 63 68 6E 6F 6C 6F 67 79 2E 63 6F 6D 0A 00 00 00; chnology.com....
002866f0h: 47 45 54 20 68 74 74 70 3A 2F 2F 77 77 77 2E 6D; GET http://www.m
00286700h: 79 77 65 62 73 69 74 65 2E 63 6F 6D 2F 68 6F 73; ywebsite.com/hos
00286710h: 74 2E 70 68 70 3F 50 6C 61 79 65 72 49 44 3D 25; t.php?PlayerID=%
                                                                      ; s&PlayerBrand=%s
00286720h: 73 26 50 6C 61 79 65 72 42 72 61 6E 64 3D 25 73
00286730h: 26 50 6C 61 79 65 72 4D 6F 64 65 6C 3D 25 73 26 : &PlayerModel=%s&
00286740h: 50 6C 61 79 65 72 56 65 72 73 69 6F 6E 3D 31 30 ; PlayerVersion=10
00286750h: 30 26 50 6C 61 79 65 72 4C 61 6E 67 75 61 67 65 : 0&PlayerLanguage
00286760h: 3D 25 64 26 50 6C 61 79 65 72 46 69 72 6D 77 61 : =%d&PlayerFirmwa
00286770h: 72 65 3D 25 64 <mark>20 20 20</mark>
                                                           20 20 20 ; re=%d
                                         20
                                             20
                                                20
                                                    20 20
00286780h: 20 0D 0A 43 6F 6E 6E 65 63 74 69 6F 6E 3A 43 6C ; ..Connection:Cl
00286790h: 6F 73 65 0D 0A 0D 0A 00 4B 69 53 53 00 00 00 00; ose.....KiSS....
```

Just a last thing to mention. I know you have noticed also the another URL...

... but that is only part of a message. So don't needed to alter with.

Now you can save the changes, burn the ISO on a cd-rom and update your KiSS player.

Smile 2003.