

Volume Control for MediaPortal

Version 1.9.1

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1. Summary

VolumeControl is a MediaPortal plugin to display information and to configure your default audio devices.

The plugin can configure for 2 display modes: Background and Menu Mode.

Background Mode: This type does not have a menu entry. This is useful, when you only include some specific properties into your existing skin files.

Menu Mode: This type shows a menu in your home or plugin menu and opens a new window to display specific properties.

2. Requirements

This plugin requires MediaPortal v1.3.0 or higher (for more information see the homepage <http://www.team-mediaportal.com>) and at least Microsoft Windows Vista.

3. Installation

To install the VolumeControl plugin, please run the installer "VolumeControl.mpe1" or, if you want to manually install the plugin, follow the described steps:

- Step 1: unzip the file "VolumeControl.zip" to a temporary directory and open this directory
- Step 2: navigate to folder "*VolumeControl\Release\Plugins\Windows*"
- Step 3: copy all files to the MediaPortal plugin directory, e.g. "*c:\program files\team mediaportal\plugins\windows*"
- Step 4: navigate to folder "*VolumeControl\Release\Skin\Defgult*"
- Step 5: copy all files and directories to your MediaPortal skin folder, e.g. "*c:\programdata\team mediaportal\mediaportal\skin\default*"
- Step 6: navigate to folder "*VolumeControl\Release\Skin\Default\Media*"
- Step 7: copy all files and directories to your MediaPortal skin folder, e.g. "*c:\programdata\team mediaportal\mediaportal\skin\default\media*"
- Step 8: navigate to folder "*VolumeControl\Release\Language\VolumeControl*"
- Step 9: copy all files to your MediaPortal language folder, e.g. "*c:\programdata\team mediaportal\mediaportal\language\VolumeControl*"

3.1. Preparation for Menu Mode version

If you want to use the Menu Mode version, please open your MediaPortal Configuration Utility, go to “Plugins”, select “VolumeControl” in the list of plugins and press button “In Home” or “In Plugins” for your desired location. Now you can start MediaPortal and open the VolumeControl window using a menu entry.

3.2. Preparation for Background Mode version

If you want to use the Background Mode version, open your MediaPortal Configuration Utility, go to “Plugins” and open the VolumeControl configuration dialog. Navigate to tab “Settings” and check the option “Enable background mode”. To display properties inside MediaPortal, it is required to edit your skin file(s). There are different ways:

First possibility (add properties directly to your skin file)

- Step 1: go to your skin directory and find the window, where you want to include the information, e.g. myhome.xml
Step 2: open it with a text editor
Step 3: to include a value, include a control section in the following form:

```
<control>
<description>Value</description>
<type>label</type>
<id>1</id>
<posX>10</posX>
<posY>10</posY>
<font>font10</font>
<label> #VolumeControl.LevelChannel0</label>
</control>
```

to include a image, include a control section in the following form:

```
<control>
<description>Image</description>
<type>image</type>
<id>1</id>
<posX>10</posX>
<posY>10</posY>
<keepaspectratio>yes</keepaspectratio>
<texture>#VolumeControl.ImageChannel0</texture>
</control>
```

- Step 4: edit the label attribute and enter your selected property (see chapter “Properties”)
Step 5: repeat the steps 3 and 4 until all desired properties are included in your skin file
Step 6: save the file and refresh/reload the window

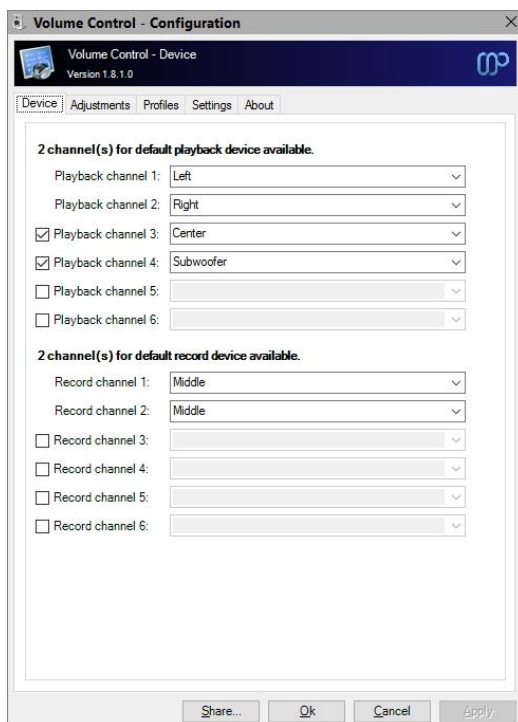
Second possibility (add a button to your skin file to open the VolumeControl window)

- Step 1: go to your skin directory and find the window, where you want to include the information, e.g. myhome.xml
- Step 2: open it with a text editor
- Step 3: include a control section in the following form:
- ```
<control>
<description>VolumeControl</description>
<type>button</type>
<id>2</id>
<label>VolumeControl</label>
<hyperlink>7971</hyperlink>
</control>
```
- Step 4: save the file and refresh/reload the window
- Step 5: after pressing the button, the window volumecontrol.xml opens

## 4. Configuration

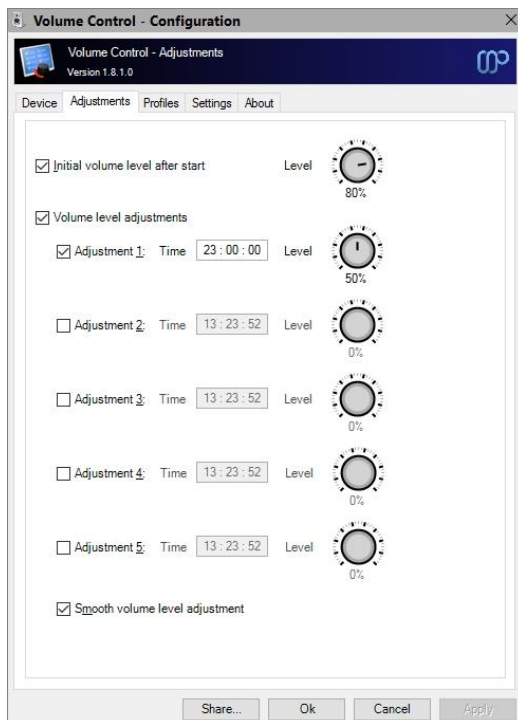
VolumeControl has specific configuration options.

### 4.1. Device



**Playback Channel /Record channel 1-6:** Enable and describe the output / input channels of your default playback and record device here.

## 4.2. Adjustments

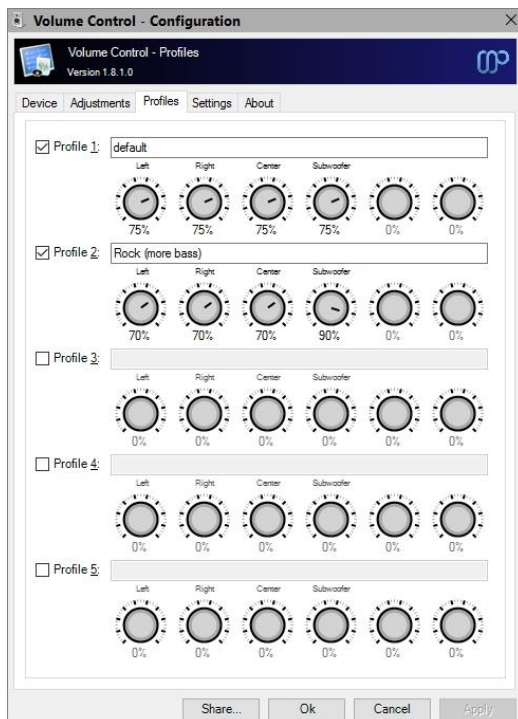


**Initial volume level after start:** Here you can enter a volume level, which will be set after start. If you want to use this, check the box and enter a valid level between 0 and 100.

**Volume level adjustments:** Here you can enter up to 5 different volume adjustment levels. If you want to use this, check the box, enter a valid time and a level between 0 and 100.

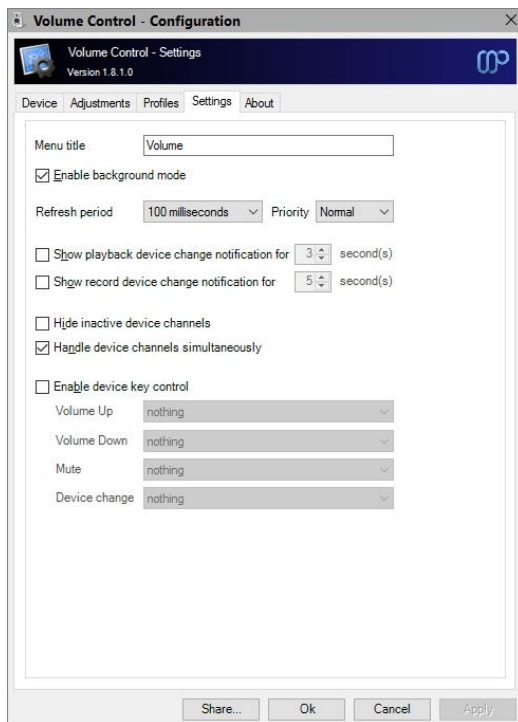
**Smooth volume level adjustment:** By default, the volume adjustment sets the volume immediately to the defined level. If you want to have a “smooth” effect, check this option.

## 4.3. Profiles



**Playback profiles:** Here you can define up to 5 playback profiles. If you want to use a profile, please click the checkbox, enter a valid name and specify channel volume levels between 0 and 100 for each audio channel.

## 4.4. Settings



**Menu Title:** Enter the menu title here.

**Enable background mode:** Switch between the background and menu mode.

**Refresh period/priority:** Select the refresh period and priority here.

**Show playback / record device change notification:** Select this to display a notification for volume/mute changes.

**Hide inactive device channels:** If this option is switched on, all inactive device channels will not be displayed.

**Handle device channels simultaneously:** This options allows to switch between Master and Independent Channel Mode. If Master Mode is switched on, selected volume level will be set to each available audio channel, otherwise volume levels for channel can be handled independently.

**Enable device key control:** If this option is turned on, specific keys can be mapped to the Volume Up, Volume Down Or Mute function.

## 5. Settings and Profile Sharing

By default, all plugin related settings will be saved locally inside the pre-configured client data directory of MediaPortal. In addition to that, VolumeControl allows sharing settings and profile information among clients. This way you have to define your various plugin settings, credentials, etc. only once and accordingly every client can access this data. Before starting with settings and profiles sharing, please observe the following hints and requirements.

- In principle all local and network storages or cloud services (e.g. OneDrive, Dropbox, SugarSync) can be used for sharing. Before using this feature, possible device or service specific configurations should be checked to prevent access or synchronization problems later.
- The current implementation does not support concurrent read or write operations. Also, the synchronization or latency behavior of a device or service cannot be influenced.
- When using a shared network folder, the device must be available and the operating system must know the credentials to access the device.
- When using an OneDrive folder, an internet connection must be established and the synchronization tool must be installed and running across all devices. Additionally the selected OneDrive folder must be available offline (Windows 8 and below only) or enabled as a sync folder.
- When using a Dropbox folder, an internet connection must be established and the synchronization tool must be installed and running across all devices. Additionally the selected Dropbox folder must be enabled as a selective sync folder.
- To share passwords or keys correctly, all synchronized devices must be in the same network domain or workgroup.

The button “Share” inside the dialog allows the definition of the central configuration storage path. Enter this path information in every client’s setup to ensure, that each clients will use the same settings.

Depending on the selection, the button “Ok” will use the central file storage as defined (when sharing is enabled) or the pre-configured client data directory (when sharing is disabled). The button “Apply” acts in the same way without closing the configuration dialog itself.

## 6. Properties

This plugin offers some properties, which can be used in your skin files. See the following table for more information.

Property Name	Description
#VolumeControl.DeviceType	Indicator for current device type (can be "Playback" or "Record")
#VolumeControl.DeviceStateNotificationVisible	Indicator for device state notification (can be "true" or "false")
#VolumeControl.MasterChannelMode	Indicator for master channel mode (can be "true" or "false")
#VolumeControl.PlaybackDeviceDefaultName	Name of default playback device
#VolumeControl.PlaybackDeviceCount	Count of playback devices
#VolumeControl.PlaybackDeviceDefaultState	Current state of default playback device
#VolumeControl.PlaybackDeviceChannelCount	Channel count of default playback device
#VolumeControl.PlaybackDeviceMinimumDecibel	Minimum decibel level of default playback device
#VolumeControl.PlaybackDeviceMaximumDecibel	Maximum decibel level of default playback device
#VolumeControl.RecordDeviceDefaultName	Name of default record device
#VolumeControl.RecordDeviceCount	Count of record devices
#VolumeControl.RecordDeviceDefaultState	Current state of default record device
#VolumeControl.RecordDeviceChannelCount	Channel count of default record device
#VolumeControl.RecordDeviceMinimumDecibel	Minimum decibel level of default record device
#VolumeControl.RecordDeviceMaximumDecibel	Maximum decibel level of default record device
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> Enabled	Channel indicator of default playback device (can be "true" or "false")
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> State	Channel state of default playback device
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> Level	Channel level of default playback device
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> Label	Channel label of default playback device
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> Image	Channel level bitmap <sup>3</sup> of default playback device
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> ImageLR	Channel level bitmap <sup>4</sup> (left-to-right) of default playback device
#VolumeControl.PlaybackDeviceChannel<digit> <sup>1</sup> ImageRL	Channel level bitmap <sup>4</sup> (right-to-left) of default playback device

#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> Enabled	Channel indicator of default record device (can be “true” or “false”)
#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> State	Channel state of default record device
#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> Level	Channel level of default record device
#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> Label	Channel label of default record device
#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> Image	Channel level bitmap <sup>3</sup> of default record device
#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> ImageLR	Channel level bitmap <sup>4</sup> (left-to-right) of default record device
#VolumeControl.RecordDeviceChannel<digit> <sup>1</sup> ImageRL	Channel level bitmap <sup>4</sup> (right-to-left) of default record device
#VolumeControl.PlaybackDevicePeakChannel<digit> <sup>2</sup> Level	Peak channel level of default playback device
#VolumeControl.PlaybackDevicePeakChannel<digit> <sup>2</sup> Label	Peak channel label of default playback device
#VolumeControl.PlaybackDevicePeakChannel<digit> <sup>2</sup> Image	Peak channel level bitmap <sup>6</sup> of default playback device
#VolumeControl.PlaybackDevicePeakChannel<digit> <sup>2</sup> ImageLR	Peak channel level bitmap <sup>7</sup> (left-to-right) of default playback device
#VolumeControl.PlaybackDevicePeakChannel<digit> <sup>2</sup> ImageRL	Peak channel level bitmap <sup>8</sup> (right-to-left) of default playback device
#VolumeControl.RecordDevicePeakChannel<digit> <sup>2</sup> Level	Peak channel level of default record device
#VolumeControl.RecordDevicePeakChannel<digit> <sup>2</sup> Label	Peak channel label of default record device
#VolumeControl.RecordDevicePeakChannel<digit> <sup>2</sup> Image	Peak channel level bitmap <sup>6</sup> of default record device
#VolumeControl.RecordDevicePeakChannel<digit> <sup>2</sup> ImageLR	Peak channel level bitmap <sup>7</sup> (left-to-right) of default record device
#VolumeControl.RecordDevicePeakChannel<digit> <sup>2</sup> ImageRL	Peak channel level bitmap <sup>8</sup> (right-to-left) of default record device
#VolumeControl.DeviceStateNotification	Device state notification text
#VolumeControl.DeviceStateNotificationImage	Device state notification image

<sup>1</sup> <digit> is a number between 0 and 5

<sup>2</sup> <digit> is a number between 0 and 1

<sup>3</sup> volumecontrol\_level\_<digit>.png (<digit> is a number between 0 and 20)

<sup>4</sup> volumecontrol\_level\_lr\_<digit>.png (<digit> is a number between 0 and 20)

<sup>5</sup> volumecontrol\_level\_rl\_<digit>.png (<digit> is a number between 0 and 20)

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<sup>6</sup> volumecontrol\_peak\_<digit>.png (<digit> is a number between 0 and 20)

<sup>7</sup> volumecontrol\_peak\_lr\_<digit>.png (<digit> is a number between 0 and 20)

<sup>8</sup> volumecontrol\_peak\_rl\_<digit>.png (<digit> is a number between 0 and 20)

## 7. Translation Properties

Property Name	Return value
#VolumeControl.TranslationDeviceCount #VolumeControl.TranslationDeviceRange #VolumeControl.TranslationDeviceDefault	Appropriate translations

## 8. Button Functions

**Show...:** Switch between device types “Playback” and “Record”.

**Devices:** Allows you to activate your default audio or record device.

**Profile:** Shows and activate defined playback profiles.

**Adjustments:** Enable or disable defined playback device adjustments.

**Notifications:** Enable or disable device state change notifications.

**Channel Master Mode:** Switch between independently or simultaneously audio channel handling.

## 9. Skinning Options

To add a property to existing skin files, please follow these steps.

- Step 1: open the skin file in a text editor  
Step 2: place the cursor to a valid position in this xml-file and insert the following code for a text based property:

```
<control>
 <description>description</description>
 <type>label</type>
 <id>1</id>
 <posX>100</posX>
 <posY>100</posY>
 <label>label</label>
 font10
</control>
```

or this code for an image based property:

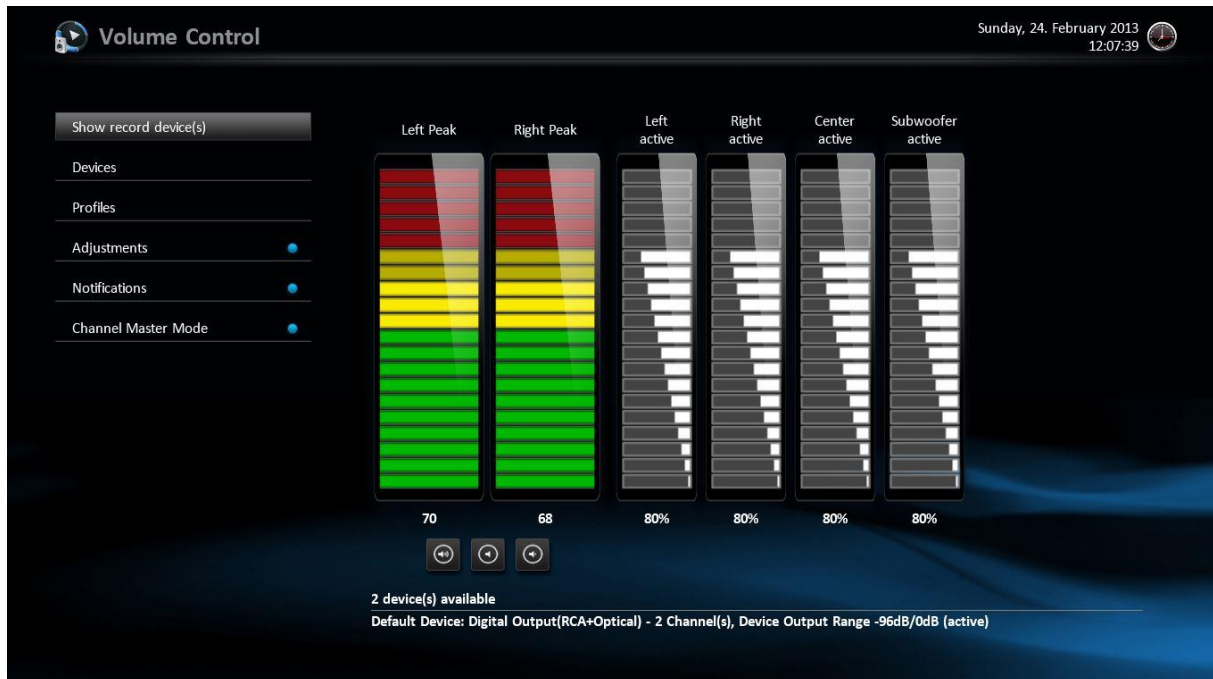
```
<control>
 <description>description</description>
 <type>image</type>
 <id>1</id>
 <posX>100</posX>
 <posY>100</posY>
 <texture>image</texture>
</control>
```

- Step 3: change all entries in ***bold-italic*** to your desired settings  
Step 4: replace the bold entry **label** or **image** with the desired property (e.g. #VolumeControl.LevelChannel0, #VolumeControl.ImageChannel0), for more settings see chapter "Properties"  
Step 5: save the skin file and start or restart MediaPortal

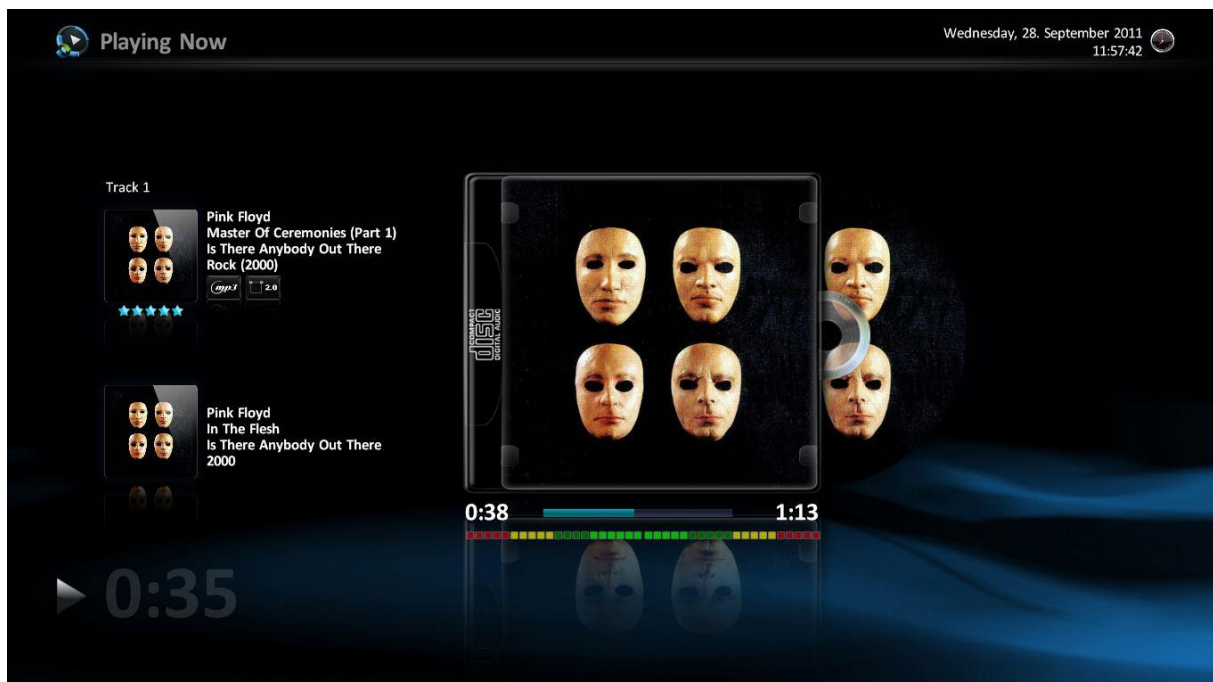
If your preferred skin doesn't support VolumeControl, please follow these steps to display the volume notification information.

- Step 1: open each skin file(s) or a top window skin file in a text editor  
Step 2: place the cursor to a valid position in this xml-file and insert the following code for a text based property:
- ```
<import>VolumeControlNotification.xml</import>
```
- Step 3: save the skin file and start or restart MediaPortal

10. Screenshots



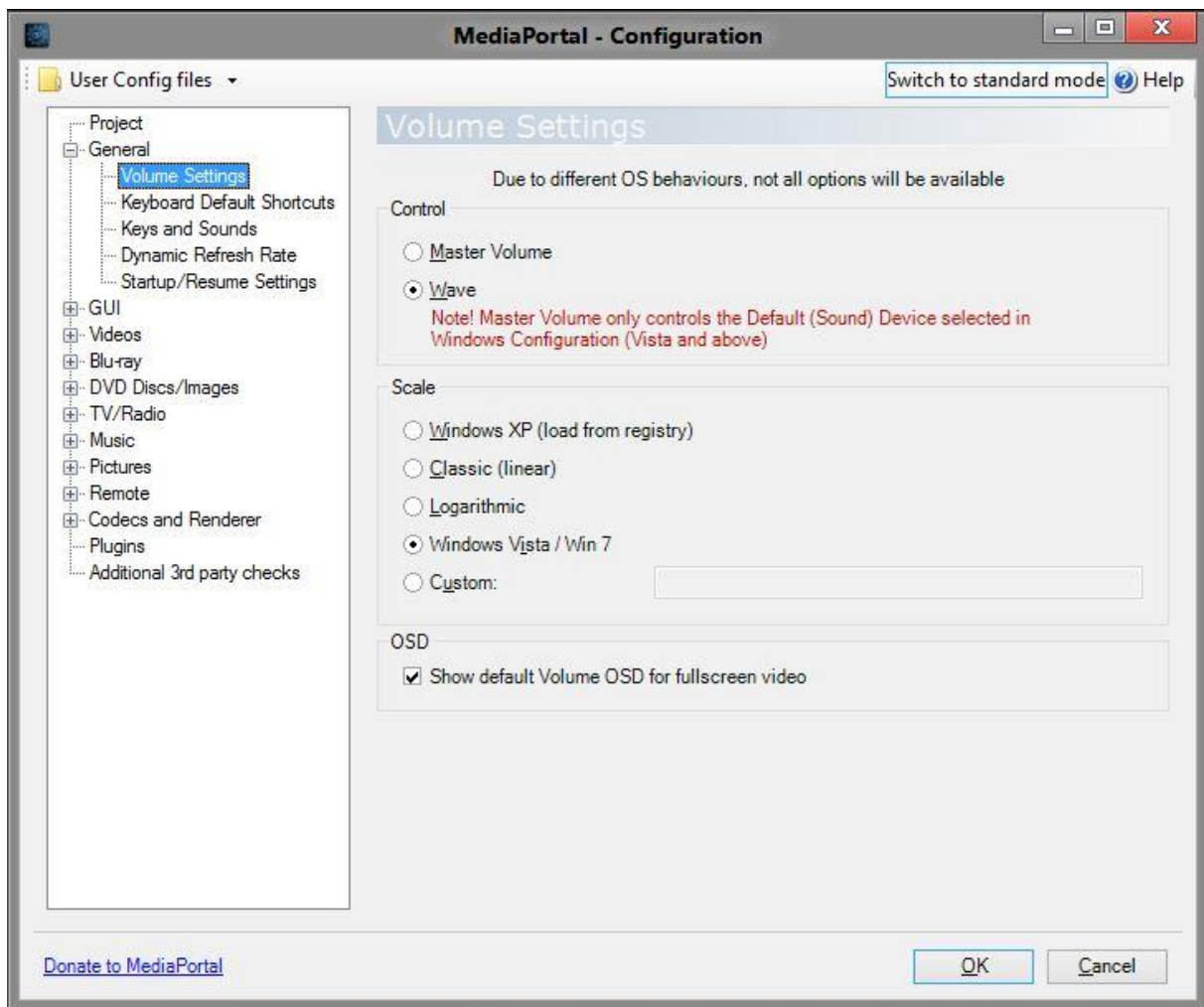
VolumeControl main screen example



Playing Now screen example

11. Troubleshooting

Under Windows Vista and higher, MediaPortal tries to get exclusive access to the Windows internal multimedia subsystem. In case you experience startup problems, please configure the volume settings as seen below.



12. Version History

- 0.1.0 – Initial Release
- 0.2.0 – About dialog added
- 0.2.5 – release directory contains now a background and menu mode plugin
- 0.2.6 – Bugfixing OnPageLoad()
- 0.3.0 – Volume Adjustment functionality
- 0.4.0 – Multilanguage Support
- 0.4.1 – Initial Volume functionality, Support for sound cards with lower adjustment granularity
- 0.4.2 – Bugfixing for timer functions
- 0.5.0 –Independent /simultaneous Channel Level Control, Channel Management functionality, Profile Management functionality, Key Control functionality, reworked and new properties
- 0.6.0 – Configuration option for menu title and background mode
- 0.6.1 – Bugfixing for volume adjustment routines
- 0.7.0 – Device switch functionality
- 0.7.1 – Version/Subsystem control functionalities added
- 0.7.2 – last improvements for MediaPortal v1.2.0
- 1.0.0 – final version
- 1.0.1 – additional level images added, optional translation labels added, support for volume/mute change notification added
- 1.0.2 – change compatibility flags to support MediaPortal v1.3.0, changes to configuration window
- 1.0.3 – source maintenance, cumulative updates
- 1.1.0 – major source maintenance, remove of VolumeControl.Core.dll dependencies
- 1.1.1 – minor improvements for MediaPortal v1.3.0, skin changes
- 1.2.0 – complete plugin refactoring, add recording device handling
- 1.2.1 – hotfix for device refresh in case DirectX device has been lost before
- 1.2.2 – fix for timer specific issues in case threaded plugin loading is enabled
- 1.2.3 – fix possible deadlock condition for background worker specific issues in case threaded plugin loading is enabled, update Bass libraries to v2.4.10.0, fix exception in device notification handler
- 1.2.4 – change compatibility flags to support MediaPortal v1.5.0
- 1.2.5 – refactoring of plugin startup code, code cleanup, internal maintenance/test release
- 1.3.0 – several performance improvements
- 1.3.1 – change compatibility flags to support MediaPortal v1.6.0
- 1.4.0 – rework to support updated plugin framework v1.1.0
- 1.5.0 – change target framework to .NET 4.0, change compatibility flags to support MediaPortal v1.7.0, support for updated plugin framework v1.2.0
- 1.5.1 – improvements to plugin initialization/OS detection feature
- 1.5.2 – change compatibility flags to support MediaPortal v1.8.0
- 1.5.3 – rework update mechanism, changes to support plugin framework 1.3.0
- 1.6.0 – change compatibility flags to support MediaPortal v1.9.0
- 1.6.1 – internal test release
- 1.6.2 – change compatibility flags to support MediaPortal v1.10.0
- 1.6.3 – architectural changes, configuration improvements
- 1.7.0 – rework of configuration dialog
- 1.8.0 – cryptographic routines updated, functionality to share settings and profiles added, support for MediaPortal v1.12.0

- 1.8.1 – rework of message management routines, improvements to sharing functionality, maintenance
- 1.9.0 – support for plugin framework v1.4.0, change compatibility flags to support MediaPortal v1.13.0
- 1.9.1 – bugfix for default endpoint detection, maintenance release, change compatibility flags to support MediaPortal v1.14.0

13. Skin Changes

- 0.3.0 – a new toggle button “Activate Adjustments” is included (ID 2), IDs for buttons “Volume up” (ID 3), “Volume down” (ID 4) and “Mute” (ID 5) changed
- 0.5.0 – Completely rework of property values (see chapter “Properties”), new buttons “Profiles” (ID 3) and “Channel Master Mode” are included (ID 4), IDs for buttons “Volume up” (ID 10), “Volume down” (ID 11) and “Mute” (ID 12) changed
old properties for channel 0 and channel 1 “VolumePeakLeft”, “VolumePeakImageLeft”, “VolumePeakImageLRLeft”, “VolumePeakImageRLLeft”, “VolumePeakRight”, “VolumePeakImageRight”, “VolumePeakImageLRRight”, “VolumePeakImageRLRight” are supported until next major update
- 0.7.0 – new button “Devices” (ID 5) added
- 1.1.1 – button type of ID 3 and 4 changed to checkbox
- 1.2.0 – new skin files, new properties

14. Known Limitations

- this plugin requires Microsoft Windows Vista, Microsoft Windows 7 or Microsoft Windows 8 / 8.1 and related server systems

15. Copyright Information

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