



# User Manual

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## Mobile DTV

ATSC-M/H  
DVB-H  
1Seg

## Digital TV

ATSC  
DVB-T, DVB-T2  
ISDB-T


# Mobile DTV Viewer

V 3.0

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<b>1</b>	<b>Introduction .....</b>	<b>5</b>
<b>2</b>	<b>System Requirements .....</b>	<b>6</b>
<b>3</b>	<b>Installation .....</b>	<b>6</b>
<b>4</b>	<b>Operation.....</b>	<b>7</b>
4.1	Start.....	7
4.2	Controller.....	9
4.2.1	Overview .....	9
4.2.2	Tuning .....	11
4.2.3	Watching TV .....	15
4.2.4	EPG / ESG .....	16
4.2.5	Closed Captioning [only ATSC and ATSC-M/H] .....	18
4.2.6	Scanning .....	19
4.2.7	Recording .....	20
4.2.8	Options .....	22
4.2.9	Log.....	25
4.2.10	Emergency Alerts (only ATSC-M/H).....	26
4.3	Monitor.....	28
4.3.1	Start.....	28
4.3.2	Overview .....	29
4.3.3	Operation .....	30
4.3.4	Settings.....	32
<b>5</b>	<b>Error Messages .....</b>	<b>37</b>
5.1	Controller.....	37
<b>6</b>	<b>Copyright.....</b>	<b>38</b>

Figure 1 : Overview - Mobile DTV Viewer .....	5
Figure 2 : Desktop Icon .....	6
Figure 3 : Windows Start Menu.....	6
Figure 4 : Registration Window .....	7
Figure 5 : License Information .....	7
Figure 6 : Controller Main Window .....	9
Figure 7 : Controller Main Window .....	11
Figure 8 : Settings Dialog – Tuning .....	11
Figure 9 : New channel added.....	14
Figure 10 : TV Program Selection .....	15
Figure 11 : Monitor Tool Buttons .....	15
Figure 12 : EPG display .....	16
Figure 13 : ESG display .....	17
Figure 14 : ESG info dialog.....	18
Figure 15 : waiting for ESG .....	18
Figure 16 : Controller Main Window .....	18
Figure 17 : Controller Main Window .....	19
Figure 18 : Settings Dialog – Scanning .....	19
Figure 19 : Scanning Results .....	20
Figure 20 : Controller Main Window .....	21
Figure 21 : Setup Recording .....	21
Figure 22 : Controller Main Window .....	22
Figure 23 : Options .....	22
Figure 24 : System Tray Icon.....	22
Figure 25 : Menu-Bar minimized .....	22
Figure 26 : ATSC M/H specific settings.....	23
Figure 27 : ISDB specific settings .....	23
Figure 28 : Japanese character set.....	24
Figure 29 : TS specific options .....	24
Figure 30 : Streaming Options .....	24
Figure 31 : Controller Main Window .....	25
Figure 32 : Log.....	25
Figure 33 : Emergency Alert Window .....	26
Figure 34 Emergency Alert History .....	26
Figure 35 : Emergency Alert – Additional Info.....	27
Figure 36 : File-View .....	27
Figure 37 : Monitor Status - Buffering.....	28
Figure 38 : Monitor Status - Play-back .....	28
Figure 39 : Monitor Status - Error .....	28
Figure 40 : Monitor Log .....	28
Figure 41 : Monitor Application .....	29
Figure 42 : Monitor – Closed Captioning Display.....	30
Figure 43 : Monitor – Closed Captioning Display.....	30
Figure 44 : Monitor – Closed Captioning Display.....	31
Figure 45 : Monitor - Settings Dialog .....	32
Figure 46 : General Options .....	33
Figure 47 : Monitor Frame .....	33
Figure 48 : using Unicode .....	33
Figure 49 : Monitor - Settings Dialog .....	35

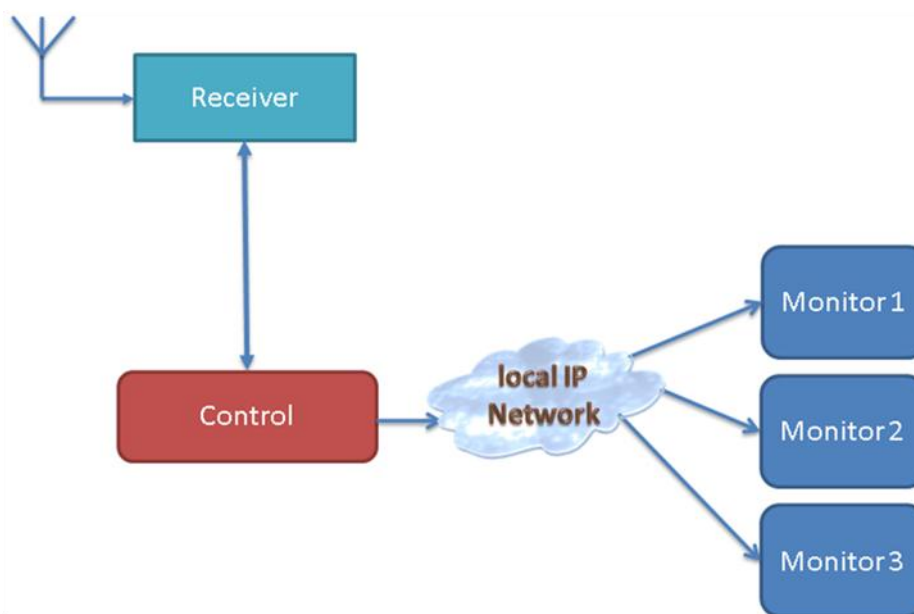
**Table 1 : Tuning Process..... 14**  
**Table 2 : Program Entry Icons..... 14**

## 1 Introduction

**Mobile DTV Viewer** is an easy to use software for simultaneous playback of up to 3 Mobile DTV and/or Digital TV services. It is available in two variants:

- (1) **ATSC**  
watching up to **3 ATSC M/H** and/or **ATSC** TV programs received via a legacy ATSC receiver. No special ATSC-M/H RF receiver hardware is required!
- (2) **DVB**  
watching up to **3 DVB-H** and/or **DVB-T/-T2** TV programs received via a legacy DVB-T receiver. No special DVB-H RF receiver hardware is required!
- (3) **ISDB**  
watching up to **3 ISDB** and/or **1Seg** TV programs received via a legacy ISDB-T receiver.

**Mobile DTV Viewer** will fascinate you with its straight forward use, its ability of watching a program while 2 further programs run in background and its ability to display also the mobile TV programs beside the legacy digital TV programs.



**Figure 1 : Overview - Mobile DTV Viewer**

Figure 1 illustrates the principle work as well as the components of the Mobile DTV Viewer. The Control application controls the tuning of the receiver and after successful tuning the receiver sends the received data to the Control application. The Control application does de-multiplex the incoming data and sends the Audio/Video content via IP to the Monitor application. Up to 3 Monitor application instances can be opened simultaneously. The Monitor application does playback the Audio/Video content.

**!!! Note !!!**

**Mobile DTV Viewer does not support watching of encrypted Mobile DTV or Digital TV programs!**

## 2 System Requirements

- Windows XP, Windows Vista, Windows 7, Windows 8/8.1
- DirectX 9 or higher
- ATSC or DVB-T or ISDB-T receiver with BDA driver

## 3 Installation

(1) Download Mobile DTV Viewer:

ATSC - <http://www.mobile-dtv-viewer.com/DownloadATSC.html>

DVB - <http://www.mobile-dtv-viewer.com/DownloadDVB.html>

ISDB - <http://www.mobile-dtv-viewer.com/DownloadISDB.html>

(2) Start the appropriate 'setup\_Mobile\_TV\_Viewer\_xxx.exe' and follow the instructions.

After successful installation a desktop icon appears as shown in Figure 2.



**Figure 2 : Desktop Icon**

Additionally there is an entry in the Windows Start Menu.



**Figure 3 : Windows Start Menu**

## 4 Operation

### 4.1 Start

**Before starting the Mobile DTV Viewer application ensure that:**

- **an appropriate TV receiver is connected**
- **the BDA drivers are installed properly**
- **the device is currently not used by another application**

Start Mobile DTV Viewer from Windows Start Menu or by double click the desktop icon. As long as the software is not registered the registration window opens at first.



**Figure 4 : Registration Window**

If you have already purchased a license, then enter the license key. If the license key is valid, the registration window will no longer appear after starting the software.

If the license key is not valid for the current version then the following dialog appear. A trial period of 7 days starts for the new version.



**Figure 5 : License Information**

If you don't want upgrade the software then you have to reinstall your last licensed version.

If no license key has been entered then click 'Continue' to proceed. The software starts after a delay of 5 seconds.

**Note:**

**Mobile DTV Viewer is shareware and must be licensed if being used beyond the trial period of 30 days. During the trial period there are no further restrictions.**

In order to purchase a license click 'Purchase' to open the Mobile DTV Viewer purchase portal.

**Note:**

**An Internet connection is necessary.**



## 4.2 Controller

### 4.2.1 Overview



Figure 6 : Controller Main Window

#### (1) Caption bar

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##### Settings+Tools

click to open the dialog 'Settings + Tools' which provides following functions:



- Tuning
- Scanning
- Recording
- Options
- Log



##### Help

Click to open the online help.



##### About

Click to open the 'About' box which provides version and license information. If Mobile DTV Viewer is not licensed there is a button to open the registration dialog.



##### Minimize

click to minimize the Controller









##### Exit

Click to exit the controller. All open Monitors are closed automatically.

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## (2) Tool bar

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	<b>Monitor</b> Click to assign a Monitor to a selected program entry.
	<b>Show/Hide Service Guide</b> Click to show or hide the service guide (EPG or ESG) for the selected program entry. Note, it does only work if an appropriate service guide is available, indicated in the status bar.
	<b>Reset Channel</b> Click to reset the program information for the selected channel.
	<b>Reset All</b> Click to reset all channels, i.e. the channel/program list will be cleared.
	<b>Tuning</b> Click to open the tuning tool.
	<b>Scanning</b> Click to open the scanning tool.






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## (3) Channel / Program List

Panel for showing the current channel and program list

## (4) Status bar

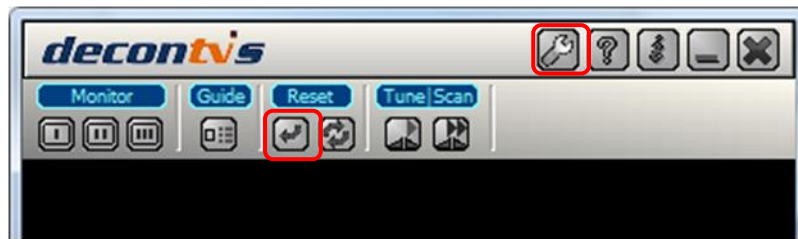
---

	<b>Tuner</b> The tuner LED lights if the tuner has been tuned successfully on the selected frequency.
	<b>Data</b> The data LED flashes if data are received and processed by the Controller.
	<b>Signal</b> Indicates the signal level of the input signal. <i>Note: Some receivers do not provide proper values for the signal level or it takes a few seconds before the level gets displayed. That means that in case of no signal level indication not automatically no data are received. Check the 'Data' LED whether data are received and processed.</i>
	<b>EPG / ESG</b> EPG : indicates that an EPG is available ESG : indicates that an ESG (ATSC-M/H or DVB-H) is available.
	<b>ON / OFF</b> Switch the Controller ON or OFF.

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## 4.2.2 Tuning

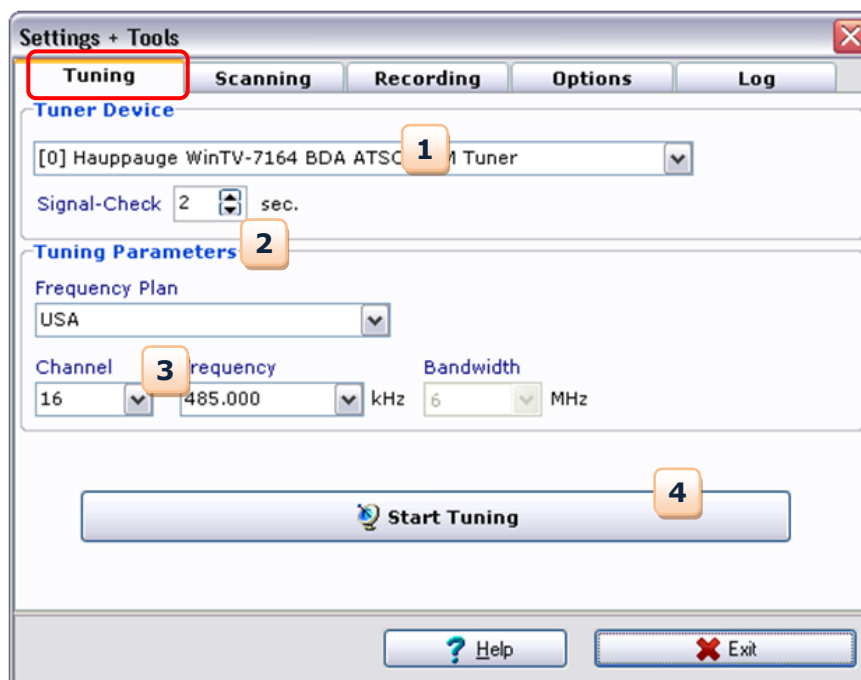
After starting the Mobile DTV Viewer, the main window of the Controller gets shown.



**Figure 7 : Controller Main Window**

Click the button 'Settings + Tools' or click the button 'Tuning' in the tool-bar to open the appropriate dialog window and select the 'Tuning' tab to prepare the tuning as follows:

- (1) Select the Tuner Device
  - setup a time for checking a valid signal  
*Note: this parameter strongly dependent on the used tuning device. i.e. how long it can take before the tuner recognizes a valid signal after it has been tuned*
- (2) Select a frequency plan
- (3) Enter the tuning parameters or select a channel or frequency
- (4) Click 'Start Tuning' to start the tuning process



**Figure 8 : Settings Dialog – Tuning**

In the following the tuning process gets described by the example ATSC. For the DVB variant the tuning process is quite similar.

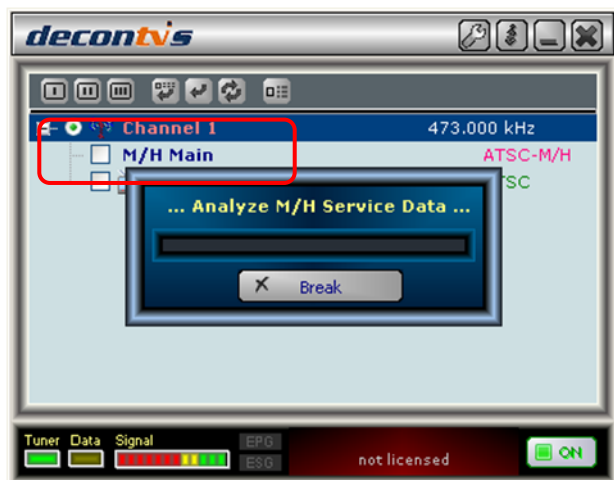
- the tuning process starts



- the receiver has been tuned successfully, the green LED 'Tuner' lights
- flashing the yellow LED indicates that data are received
- the LED bar 'signal' indicates the current signal level  
*Note: some receivers do not provide a proper signal level or provide it only after few seconds, i.e. no signal level does not automatically mean that no data are available!*



- beside legacy ATSC services the controller has recognized an ATSC Mobile DTV service and starts the analysis



- all Mobile DTV programs are listed
- the controller recognizes that an Electronic Service Guide (ESG) is available
- ATSC M/H : dependent on the setting 'ESG Auto Start' the ESG analysis gets started automatically or not

*Note: the reception of the ESG is not essential for watching MH services*



- DVB-H : the ESG analysis starts automatically

*Note: a proper ESG reception is essential for watching DVB-H services*

- ESG Analysis

*Note: the ESG analysis can take several seconds, sometimes more than a minute, it is dependant on how the ESG has been setup by the provider*



- the ESG analysis has been finished successfully, all legacy and mobile TV programs are listed

digital TV program

mobile TV program with proper ESG entry

mobile TV program without ESG reference



*Note: no ESG reference does not mean that the program cannot be watched!*

**Table 1 : Tuning Process**

The tuning process can be started again for a new frequency/channel as already described above. The new channel is added to the Channel/Program list.



**Figure 9 : New channel added**

In case there are several channels in the list, just select the appropriate entry to switch to another channel. The tuning process starts automatically.

	Mobile DTV - TV program with ESG reference / free to air
	Mobile DTV - Radio program with ESG reference / free to air
	Mobile DTV - program without ESG reference
	Digital TV - TV program
	Digital TV - Radio program
	Encrypted service - NOTE: cannot be decoded!

**Table 2 : Program Entry Icons**

### 4.2.3 Watching TV

To watch a TV program select it in the program list by click with the left mouse button on the corresponding checkbox.



Figure 10 : TV Program Selection

Up to 3 TV programs can be watched simultaneously, i.e. up to 3 program entries can be selected in the program list.

The Mobile DTV Viewer Monitor application gets started automatically. The little icon behind the program entry indicates which monitor instance gets opened for the selected program.

To stop the watching of a particular program, click with left mouse button on the appropriate checkbox. The program entry gets de-selected and the corresponding Monitor gets closed automatically.

**Note: In case the Monitor application gets closed manually, i.e. not via de-selection the program entry in the list, the program entry remains selected.**



Figure 11 : Monitor Tool Buttons

Use the monitor tool buttons to change the Monitor which has been assigned to a particular program. E.g. select the program entry assigned to Monitor I and click the tool button 'II', so the selected program can be watched in Monitor II thereby the program which was assigned to Monitor II can be watched now in Monitor I. This feature can be

used for a convenient switch-over from a small preview window to a large main playback window, if the small preview window shows suddenly interesting content you want to see immediately in a big playback window.

## DVB-H

For play-back of DVB-H programs the Monitor application does not work, instead a third party player is required. It is recommended to use the VLC Media Player. If the VLC Media Player is not installed on the current system the get a copy of it from

<http://www.videolan.org>

## 4.2.4 EPG / ESG

### EPG – Electronic Program Guide

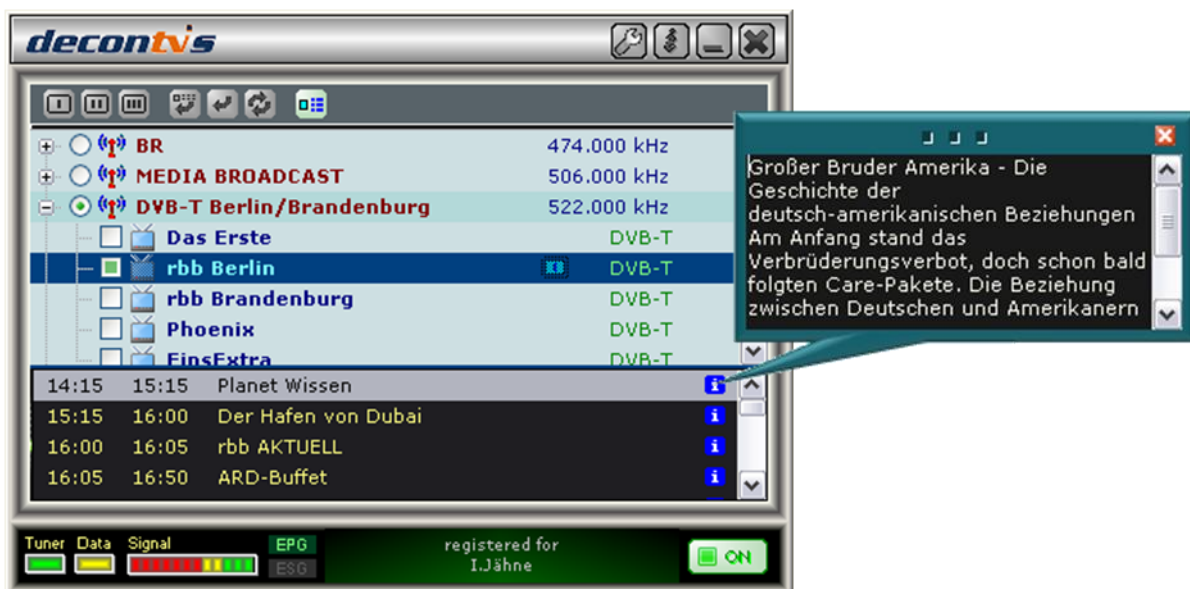


Figure 12 : EPG display

The EPG is the service guide provided with Digital TV programs. It offers a preview as well as additional information to a program.

The EPG analysis starts automatically after successful tuning a channel. If an EPG is available, the 'EPG' indication in the status bar lights. Click the 'Service Guide' button in the toolbar to open the preview. The availability of additional information to a specific program gets indicated by the blue 'Info' icon. Double click the appropriate entry to open the additional information. Press 'Esc' to close this window.

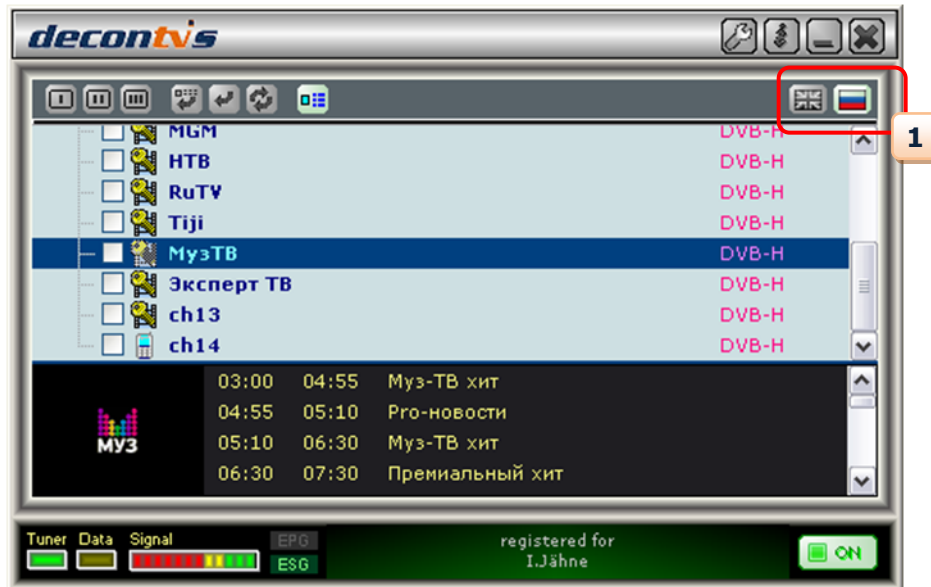
### ESG – Electronic Service Guide

The ESG is the service guide provided with Mobile DTV programs. Beside a preview and additional information to a program it provides also important information for the Audio/Video decoding.



**Note:**

**Especially for watching of DVB-H programs the ESG is essential. For the watching of ATSC M/H programs an ESG is mostly not necessary.**



**Figure 13 : ESG display**

The ESG analysis starts automatically after successfully tuning a channel. Note: The reception of an ESG can take more than a minute. During the ESG analysis the Controller gets blocked.

If an ESG is available, the 'ESG' indication in the status bar lights. Click the 'Service Guide' button in the toolbar to open the preview. The availability of additional information to a specific program gets indicated by the blue 'Info' icon. Double click the appropriate entry to open the additional information. Press 'Esc' to close this window.

- (1) In case the ESG gets provided in several languages, tool buttons for each language appear in the toolbar. The preferred language can be selected by click on the appropriate tool button.

**Note:**

**EPG and ESG data are not saved after closing the Controller.**

If no ESG has been received for the current channel then the following dialog appears after click the 'Service Guide' button.



**Figure 14 : ESG info dialog**

Click 'OK' to start the ESG receiving process or click 'Cancel' to proceed without ESG.

**Note: The ESG receiving process can take longer than a minute.**

During the ESG reception and analysis process the following dialog appears. Click the 'Break' button to interrupt the process, the Controller will try to process all the ESG data which have been received so far.



**Figure 15 : waiting for ESG**

In order to update the current ESG, the channel has to be re-tuned.

#### **4.2.5 Closed Captioning [only ATSC and ATSC-M/H]**

Closed Captioning is the subtitle service for ATSC digital TV and ATSC-M/H MDTV. The Controller of the Mobile DTV Viewer supports both the CEA-708 standard and the CEA-608 standard.



**Figure 16 : Controller Main Window**

In the EPG for a specific service the availability of a CC service gets indicated by a small icon. Click on this icon to get the information which CC services are announced for the selected program entry.

For more information especially about the viewing of the CC service, see the appropriate section in the Monitor part.

## 4.2.6 Scanning

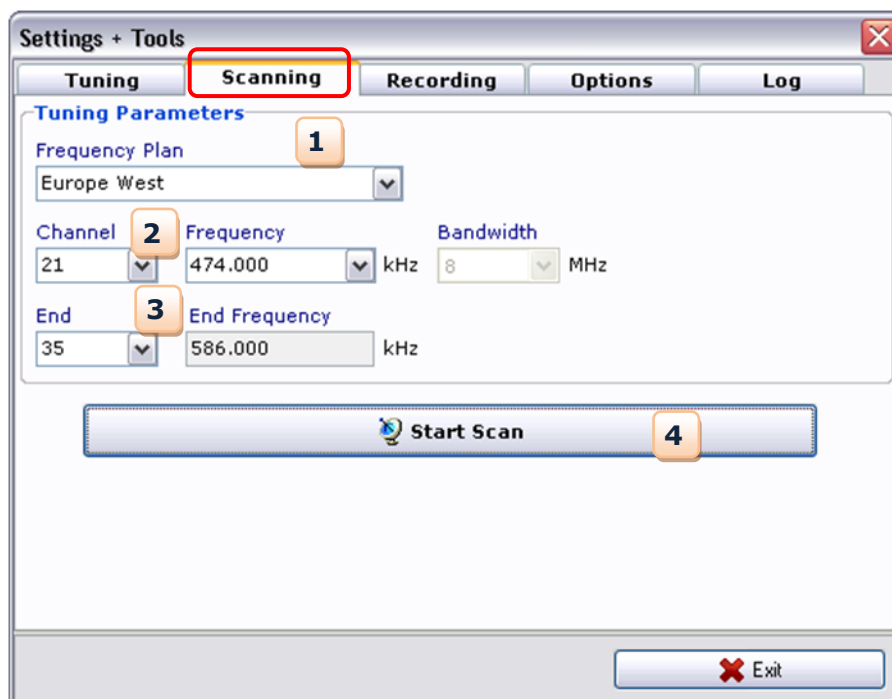
The Controller of the Mobile DTV Viewer provides a scanning function; this is the simplest way to detect all active channels and their programs which are available in the local area.



**Figure 17 : Controller Main Window**

Click the button 'Settings + Tools' or click the button 'scanning' in the tool-bar to open the appropriate dialog window and select the 'Scanning' tab and prepare the scanning as follows:

- (1) Select a frequency plan
- (2) Select the start frequency or channel
- (3) Select the end channel
- (4) Click 'Start Scan' to start the scanning process



**Figure 18 : Settings Dialog – Scanning**

After the scanning gets finished, the results are listed in the 'Scanning Results'. Beside the channel descriptor little icons indicate whether Mobile DTV and/or Digital TV programs are contained.

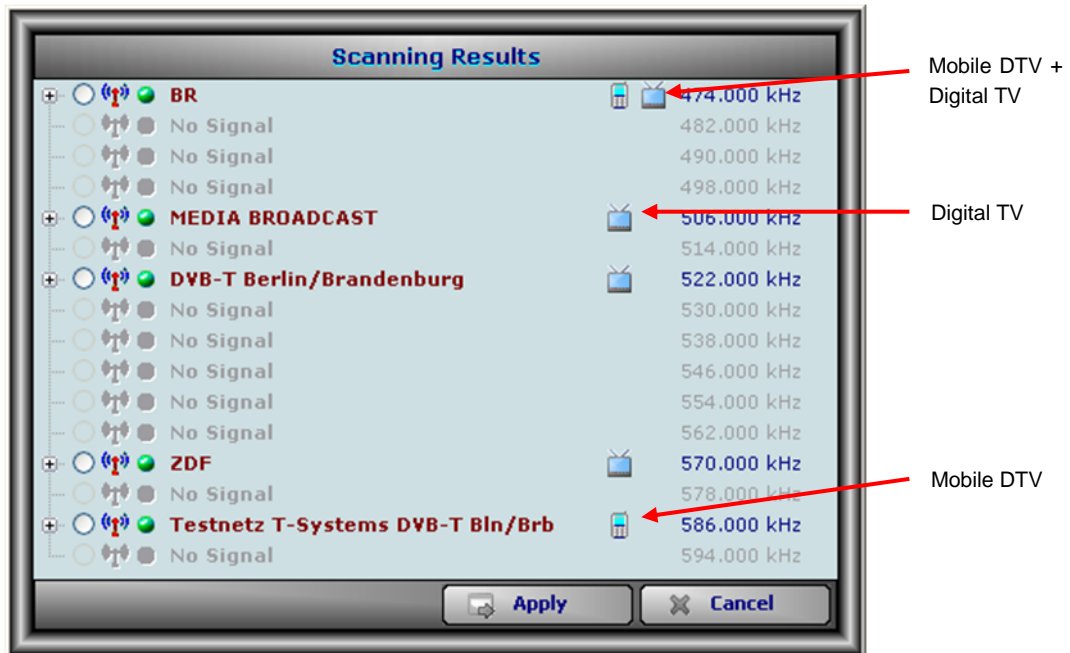


Figure 19 : Scanning Results

**Note:**

**In order to speed up the entire scanning process, no EPG or ESG data get received and analysed in that step. That will be done by the Controller at a later time.**

Click 'Apply' to take over the entire list into the channel/program list of the Controller. A channel can be selected before, i.e. this channel is the active channel. If no channel is selected the first one becomes active automatically.

Click 'Cancel' to discard the scanning results, i.e. the current channel/program list of the Controller remains active.

### 4.2.7 Recording

**Note:**

**The recording tool does not record the Audio/Video content of a single TV program but it records always the entire Transport Stream of the selected channel.**

The recording tool shall be used for capturing a Transport Stream in case that something seems to be wrong in the operation of the Mobile DTV Viewer. The captured Transport

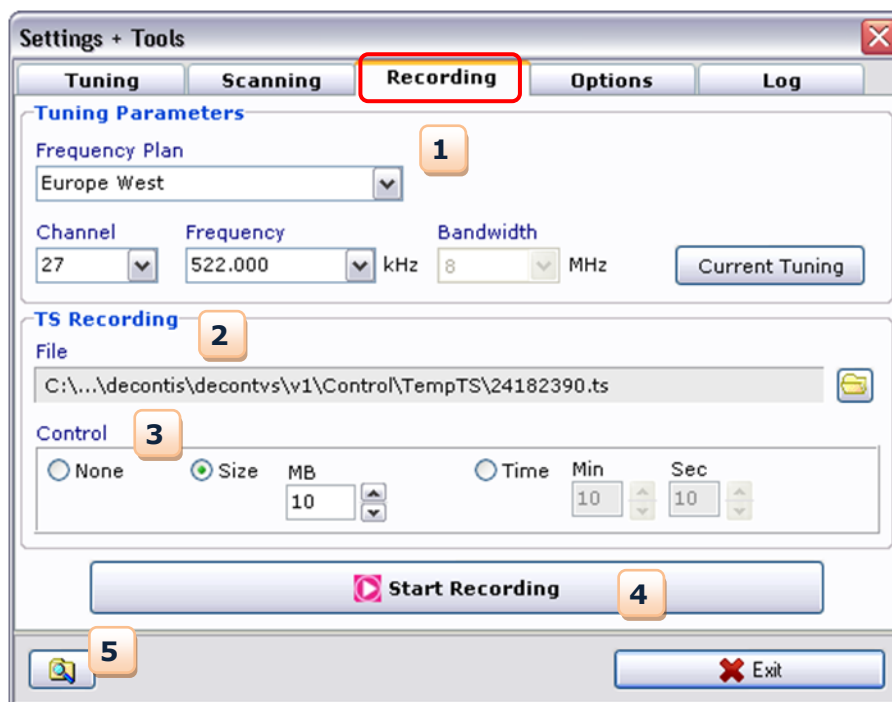
Stream can be sent to the Mobile DTV Viewer developer team, together with a detailed description of the problem, for further analysis.



**Figure 20 : Controller Main Window**

Click the button 'Settings + Tools' to open the appropriate dialog window and select the 'Recording' tab and prepare the scanning as follows:

- (1) Enter the tuning parameters for the channel where the TS shall be captured
- (2) Check the destination where the TS gets saved
- (3) Select how the capturing process shall be controlled:
  - None** the capturing process has to be closed manually by click the 'Break' button
  - Size** enter the maximum size of the TS file
  - Time** enter a time for the capturing process
- (4) Click 'Start Recording' to start the recording process



**Figure 21 : Setup Recording**

- (5) Click the button 'Explorer' to open an Explorer window which shows the content of TS file directory.

## 4.2.8 Options



Figure 22 : Controller Main Window

Click the button 'Settings + Tools' to open the appropriate dialog window and select the 'Options' tab.

### 4.2.8.1 General Options

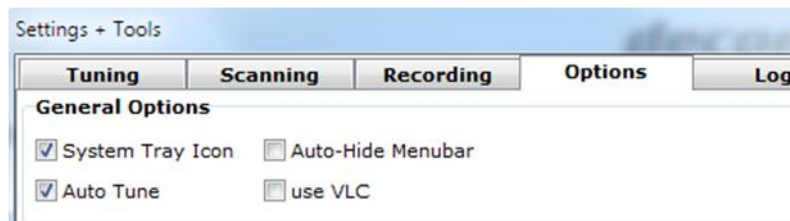


Figure 23 : Options

#### **System Tray Icon**

If checked then an icon gets displayed in the notification area of the Windows taskbar.



Figure 24 : System Tray Icon

Double click on the icon brings the Controller window to foreground.

Click with right mouse button to open a pop-up menu.

#### **Auto Tune**

If checked then the tuning process gets started automatically with starting the application.

#### **Auto-Hide Menubar**

If checked then the menu-bar in the main window gets minimized automatically.

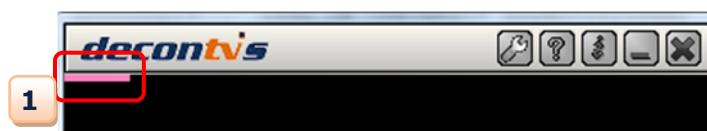


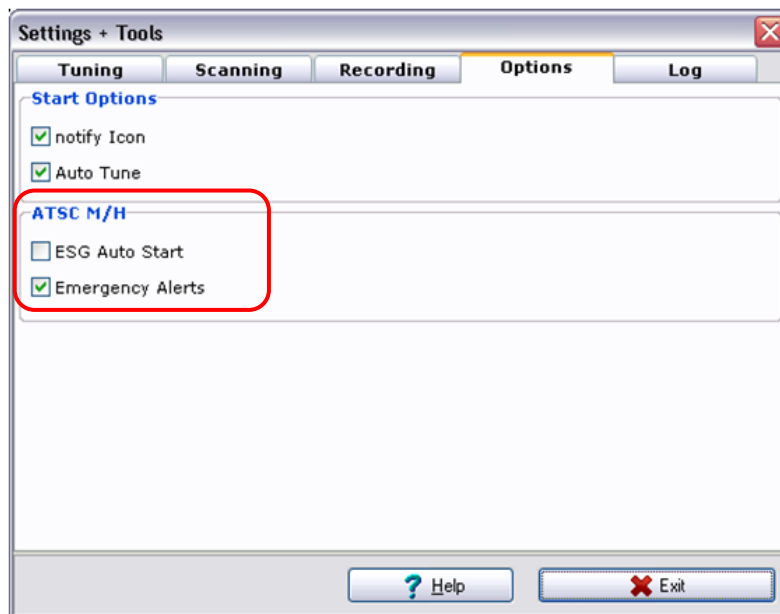
Figure 25 : Menu-Bar minimized

- (1) - if the mouse cursor enter the colored panel then the menu-bar gets maximized
- if the mouse cursor leave the menu-bar then after few seconds it gets minimized automatically

**use VLC**

If checked then the VLC Media Player gets used as Monitor. If VLC is not available then this setting is disabled.

### 4.2.8.2 ATSC-M/H Options



**Figure 26 : ATSC M/H specific settings**

**ESG Auto Start**

If checked then the ESG reception and analysis gets started automatically.

Note: In contrast to DVB-H for ATSC-M/H the reception of the ESG is not mandatory.

**Emergency Alerts**

If checked then emergency alerts are displayed in a separate window.

### 4.2.8.3 ISDB Options



**Figure 27 : ISDB specific settings**

### **support Japanese character sets**

If checked then Japanese characters are supported.



Figure 28 : Japanese character set

### 4.2.8.4 TS Options



Figure 29 : TS specific options

### **process error TS**

If checked then Transport Stream packets which are marked as 'faulty' are processed.

### 4.2.8.5 Streaming Options



Figure 30 : Streaming Options

### **Port**

Defines the Port number which is used as identification. Normally it should not be changed.

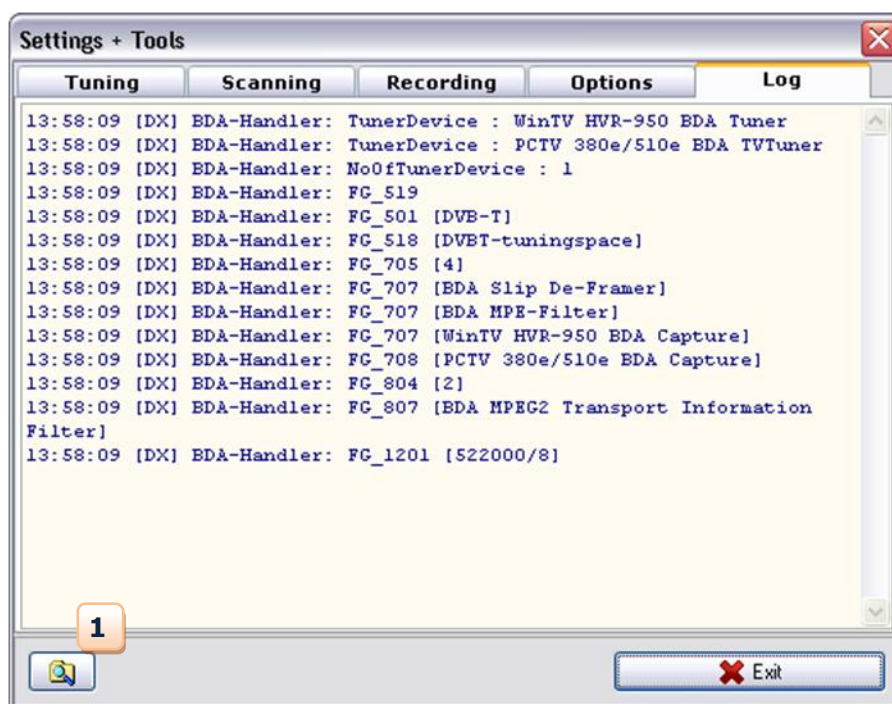


## 4.2.9 Log



**Figure 31 : Controller Main Window**

Click the button 'Settings + Tools' to open the appropriate dialog window and select the 'Log' tab.



**Figure 32 : Log**

(1) Click the button 'Explorer' to open an Explorer window which shows the content of directory where the log files are saved.

All log entries are written into a file:

***decontvs\_control.log***

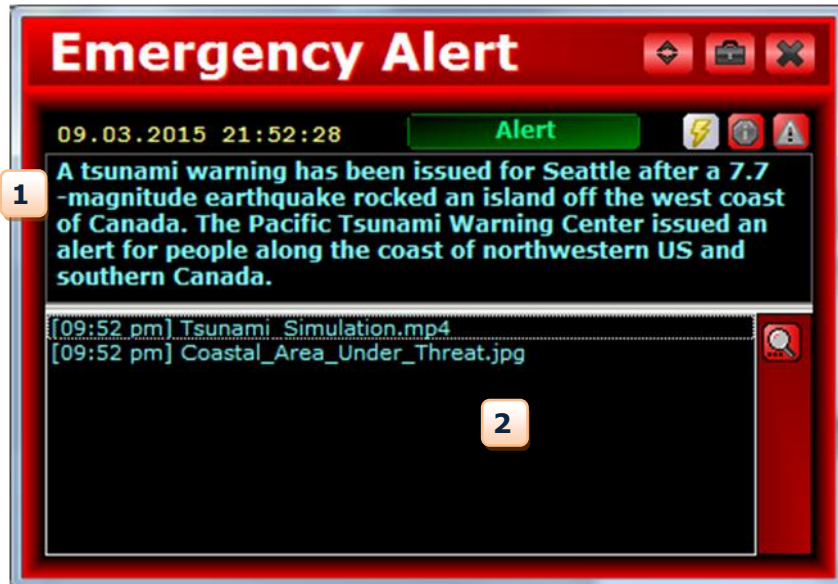
Furthermore the log file of the last Mobile DTV Viewer session gets saved as:

***decontvs\_control\_log.bak***

In case you want to report a problem or an error then you should always send these log files together with your detailed error report.

### 4.2.10 Emergency Alerts (only ATSC-M/H)

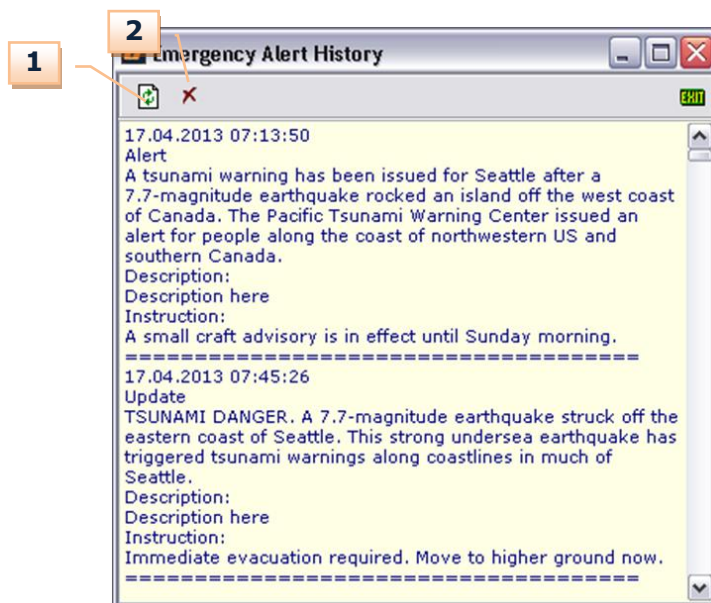
If 'Emergency Alerts' gets activated then all alerts are displayed in a separate window. The alert window gets opened automatically if an Alert or Update message has been received. If a 'Cancel' message has been received then the window gets closed automatically after few seconds. The whole history, i.e. all messages and all additional information files are still accessible.



**Figure 33 : Emergency Alert Window**

- (1) current alarm
- (2) list of additional info-files

#### 4.2.10.1 History

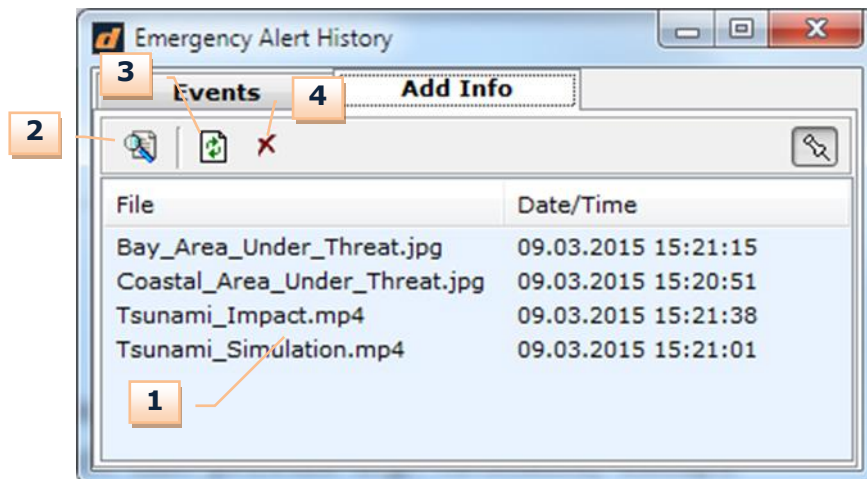


**Figure 34 Emergency Alert History**

- (1) Click to refresh the display
- (2) Click to delete the entire history

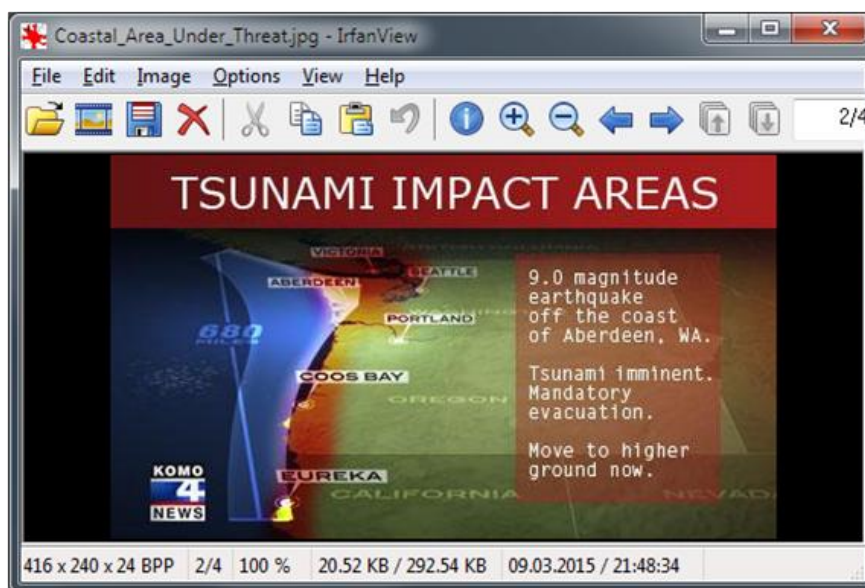
### 4.2.10.2 Additional Info

Together with emergency alerts additional information in form of file can be transmitted. Possible are images, HTML sites or video clips which can provide e.g. forecasts, escape routes or contact information. All received files are listed in a separate window and can be displayed with an integrated file-viewer.



**Figure 35 : Emergency Alert – Additional Info**

- (1) List of additional files  
- double click to open the file-viewer
- (2) Click to refresh the list
- (3) Click to delete all files
- (4) Click to open the file



**Figure 36 : File-View**

## 4.3 Monitor

### 4.3.1 Start

The Mobile DTV Viewer Monitor application gets started automatically via selection a program entry in the Controller application as described in chapter 4.2.3.



**Figure 37 : Monitor Status - Buffering**

(1) After the Monitor has been started the Yellow LED indicates the Audio/Video Data buffering. After few seconds the Video play-back starts.

**Note: Especially for Mobile DTV programs it may take several seconds before the play-back starts.**



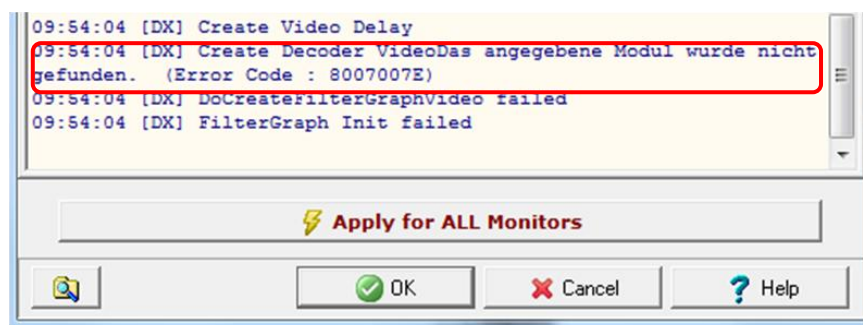
**Figure 38 : Monitor Status - Play-back**

(1) After the Video play-back has been started the Green LED gets switched on, the Yellow LED gets switched off.



**Figure 39 : Monitor Status - Error**

(1) The Red LED gets on if an error occurs - please check the Log for the reason.



**Figure 40 : Monitor Log**

## 4.3.2 Overview



Figure 41 : Monitor Application

### (1) Caption bar



#### Settings

click to open the 'Settings' dialog



#### About

Click to open the 'About' box which provides version and license information.



#### Minimize

click to minimize the Monitor



#### Exit

Click to exit the Monitor.

### (2) Video Window

- displays the current video

### (3) Tool bar



#### Start/Stop

click to start/stop the playback



#### Audio On/Off

Click to switch On/Off the audio playback.



#### CC On/Off

Click to switch On/Off Closed Captioning. (only ATSC)

**Note: The tool-button is only visible if CC data for the selected CC service are received. (see 4.3.4.3)**



#### Volume

Setup the volume of audio playback



**Yellow LED** - indicates that A/V data gets received (only before video display)  
**Green/RED LED** - indicates the current status

### 4.3.3 Operation

Normally the Monitor should be started and stopped via selection an appropriate program entry in the Controller but it can also be started manually. In this case the Monitor uses the last MRL and settings.

#### Closed Captioning

Closed Captioning is the subtitle service in ATSC DTV and ATSC-M/H MDTV broadcasts, i.e. this feature is only available in the ATSC variant of Mobile DTV Viewer.

The display of the CC service can be configured individually, see chapter 4.3.4.3.

Generally Closed Captions are displayed in a separate panel on the bottom of the monitor window, i.e. they are not embedded in the video. There are two possibilities to display Closed Captions:

- horizontal scrolling

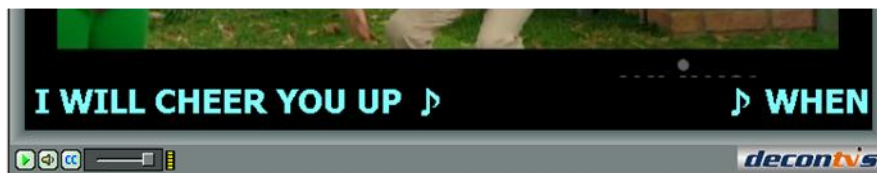


Figure 42 : Monitor – Closed Captioning Display

- vertical scrolling

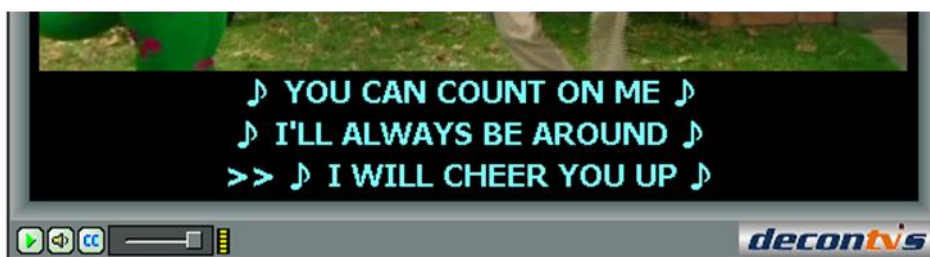


Figure 43 : Monitor – Closed Captioning Display

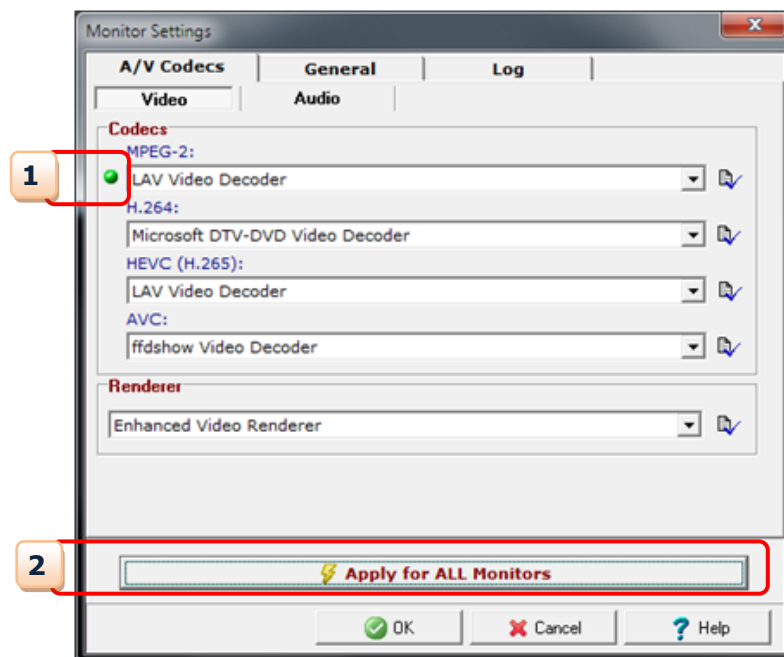
The speed of scrolling can be changed on the fly. Click with the right mouse button on the CC display to open a little pop-up menu. Now it can be selected whether speed the CC scrolling shall be increased or decreased.



**Figure 44 : Monitor – Closed Captioning Display**

## 4.3.4 Settings

### 4.3.4.1 A/V Codec's



**Figure 45 : Monitor - Settings Dialog**

- (1) the green bubble indicates the current applied Audio / Video standard
- (2) click to apply all current settings for ALL **decontvs** monitors

The **decontvs** monitor application is based on Microsoft DirectX technology, i.e. for the decoding of audio and video content the appropriate codec's are used which are currently installed on the system. The monitor application checks the availability of codec's automatically and lists them for the specific audio video standards.

Select a preferred codec for each standard. If no codec is available for an specific standard then 'none' gets displayed in the corresponding box.

**Note: The Mobile TV Viewer does not provide and install Audio/Video codec's!**

The user itself is responsible to provide codec's for an specific standard.

**Note: If there are problems with the current A/V play-back then it can be that the current selected codec does not work properly. It should always be checked whether another codec works better.**



### 4.3.4.2 General

#### Options

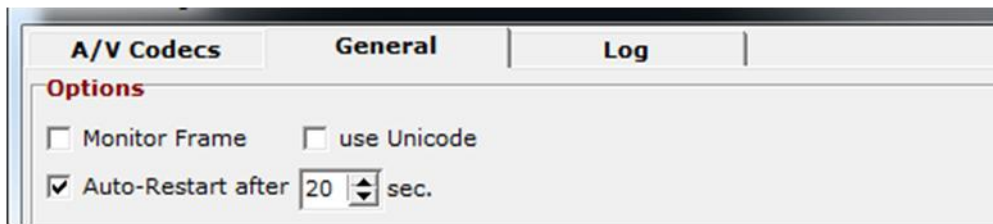


Figure 46 : General Options

#### Monitor Frame

If checked then an additional 3D frame gets displayed around the video.



Figure 47 : Monitor Frame

#### use Unicode

If checked then the Monitor caption gets displayed by using of Unicode characters.

Note: if Unicode is used then this part of the window caption cannot be used to move the window



Figure 48 : using Unicode

#### Auto-Restart

If checked then the Monitor application gets re-started automatically after the specified time in case the play-back stops or freezes due to errors.

## Play-back Options (only for Experts)

### Note:

- the following settings should only be used if there are any problems with the Audio/Video play-back even though the reception signal is o.k.
- normally these settings must not be changed

**Play-back Options**

Audio Sync

**Delay**

DTV: 500 msec      MDTV: 5000 msec

**Buffer Time**

DTV: 500 msec      MDTV: 5000 msec

**No. of Buffers**

Auto      DTV: 10      MDTV: 1

Reset Defaults

### Audio-Sync

If checked then the Audio Renderer gets used to synchronize Audio and Video otherwise the De-Multiplexer gets used.

### Delay

Delay means the manipulation Audio/Video sample timestamps. The delay is important - especially for MDTV - to reach Audio-Video synchronization (lip-sync).

### Buffer Time

The buffer time gets used to pre-buffer Audio/Video data, i.e. for this time the play-back gets delayed

### No. of Buffers

Defines the number of buffers. If 'Auto' is checked then it will be tried to determine the number of buffers automatically.

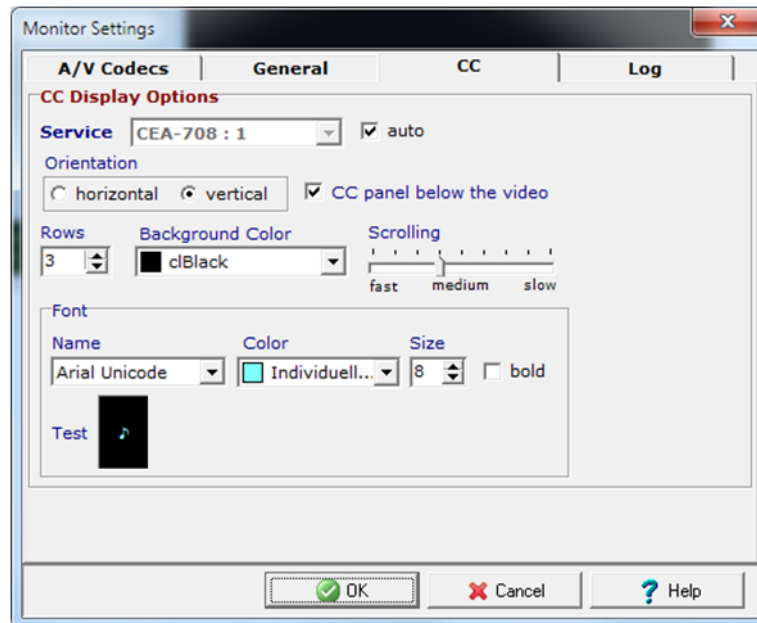
#### Note:

- if the No. of Buffers is too high then Audio/Video synchronization can be lost
- if the No. of Buffers is too low then samples can be lost

Use the button 'Reset Defaults' to get the default values.

### 4.3.4.3 Closed Captioning Settings

The tab 'CC' provides several settings to configure the display of the closed captioning service. Generally Closed Captions are displayed in a separate panel on the bottom of the monitor window, i.e. they are not embedded in the video.



**Figure 49 : Monitor - Settings Dialog**

#### **Service**

The CC services which are currently available are listed. Select a service to activate the appropriate CC service.

**Note: If a service was selected which currently does not provide proper CC data then the CC tool-button in the Monitor window remains invisible, see also the 'Auto' setting below.**

#### **Auto**

If checked then the first CC service gets used which has been detected.

#### **Orientation**

Setup the scrolling orientation.

#### **CC panel below the video**

If checked then the display panel gets displayed below the video, i.e. the size of the video gets decreased according to the size of the panel.

If not checked then the display panel gets set over the video, i.e. a part of video gets covered by the display panel.

#### **Rows**

Setup the number of rows of the display panel, which are displayed simultaneously. This setting has only effect if a vertical orientation was selected.

### **Background Color**

Setup the background color of the display panel.

### **Scrolling**

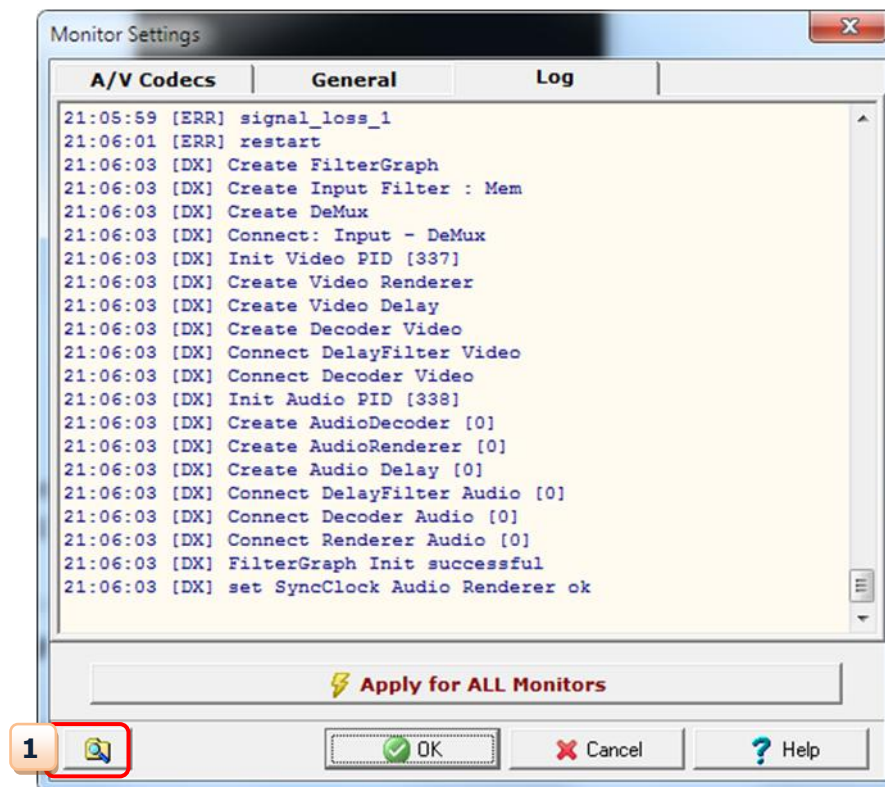
Setup the speed of scrolling the captions.

### **Font**

Setup the name, size, style and color of the caption font.

**Note: If the test-field does not show an 'eight note', then the selected font does not support special characters. In that case another font has to be selected.**

## **4.3.4.4 Log**



(1) Click the button 'Explorer' to open an Explorer window which shows the content of directory where the log files are saved.

Each Monitor instance writes an own Log-File.

All log entries are written into a file:

***decontvs\_mon\_0.log***

Furthermore the log file of the last Monitor session gets saved as:

***decontvs\_mon\_0.bak***

In case you want to report a problem or an error then you should always send these log files together with your detailed error report.

## 5 Error Messages

### 5.1 Controller

No proper DirectX version installed!  
DirectX 9 or higher is required!

Check the DirectX version installed on the current system. Get a proper DirectX version from the Microsoft download portal.

No BDA Tuner device found!

No proper receiver connected or the connected receiver does not support BDA (Microsoft Broadcast Driver Architecture).

You need Administrator rights for the first start of this application!

Ensure that administration rights are available.

BDA Initialization Error!

General BDA Error!

Try to update the BDA drivers for the current receiver.

It seems there is no active network adapter available.  
For playback of Mobile DTV and Digital TV services you need an active network adapter, at least the Loop adapter.

See chapter 4.3.1

Your trial period is expired!  
You must purchase a license to continue the use of this program!

You must purchase a license to continue the use of this program!

Register the Mobile DTV Viewer.

Monitor could not be created!

The Mobile DTV Viewer Monitor application could not be started. Check the installation of Mobile DTV Viewer.

ESG Error! BIM encoded ESGs not supported!

An ESG entry was detected which has been encoded via BIM (binary interchange format for meta-data). BIM decoding is not supported because it is protected by patents.

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