

TrimEditor



Information on Audio/Video Files,
Selecting Fragments,
Editing SLIni Files

*Revision as of
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User's Guide



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Introduction

The TrimEditor application is used when dealing with the FDO nAir program and other programs from software sets designed by SoftLab-NSK, for example, SLMovieListEditor, ReplayMachine Console, FDO nOfficeMovie, etc.

The application is used when there is a necessity to view audio and video files, get information on properties of clip in file operatively, select fragment for playback, customize parameters of separate clip playback or add some additional data to clip description. Later the data can be used, for example, by title scripts.

The present guide describes user interface of the TrimEditor application and features of working with it.

Note: The guide describes working with ForwardT software of the 5.06.150 version.



Functionality

The TrimEditor application is designed to preview audio/video clips, select clip fragments with frame accuracy and customize parameters of clips playback (creating/editing SLIni files).

Example: 1. Let it is necessary to insert 2 ads when broadcasting the reel_3.avi clip. In this case it is possible to split the clip to 3 fragments.

You may split the clip (1) via the TrimEditor application.

State	Start	Length	Name
	15:14:02.17		*****
	15:14:02.17	=0:00:00.00	+3:45:57.07
	19:00:00.00	+3:45:57.15 5.00	
READY	19:00:00.00	[0:07:32.09]	reel_3.avi
	19:07:32.09	0:00:10.14	commercial_1.avi
	19:07:42.23	0:00:16.02	commercial_2.avi
	19:07:59.00	0:00:35.20	commercial_gorod1.avi
	19:08:30.00	[0:07:43.24]	reel_3.avi
	19:16:16.19	[0:07:32.09 - 0:15:16.08]	commercial_2.avi
	19:16:34.21	0:00:16.14	commercial_3.avi
	19:16:51.10	[0:05:08.15]	reel_3.avi
	19:22:00.00	[0:03:01.12]	music_1.wav
	19:22:00.00	0:03:01.00 0.12	0189.bmp
	19:25:01.00	=0:25:01.00	*****

Round brackets in the Length field (2) denote that a certain fragment of clip is selected. If mouse cursor is pointed to this field a tooltip that displays start and finish of fragment appears.

2. Let it is necessary to playback image with sound from audio file during some period. You may select fragment of audio file of necessary duration and adjust its playback (3) via the TrimEditor program.

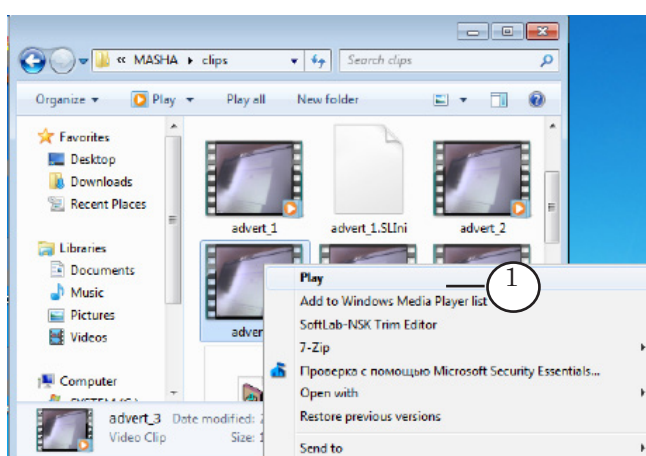


Launching the Application

The present section provides with instruction on launching the TrimEditor application from folder opened in Windows or via FDO nAir window. See other corresponding guides to get information on launching the application via other programs.

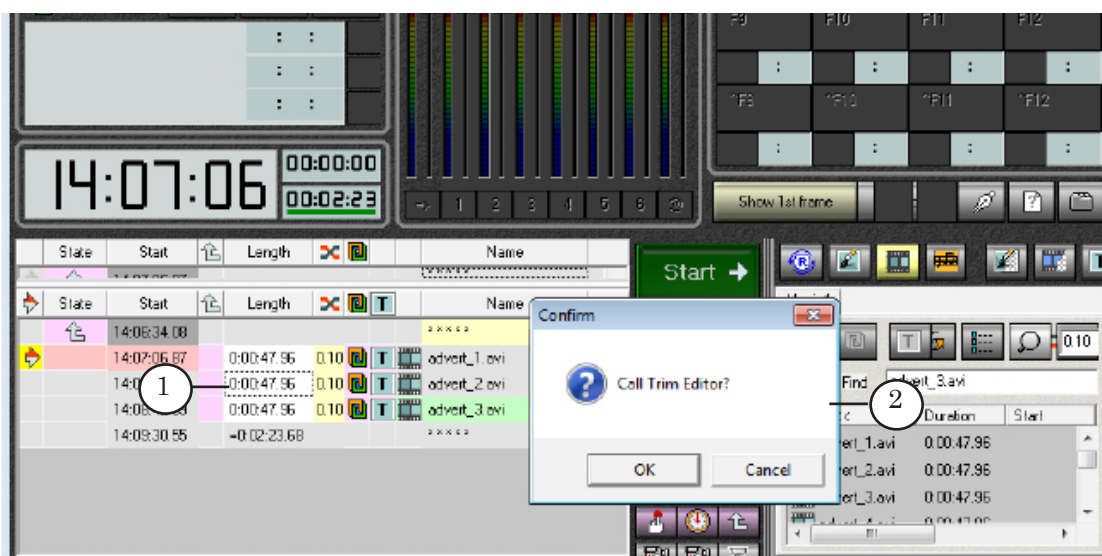
1. Launching From Windows Folder

Right-click name of audio/video file which parameters must be adjusted to open the TrimEditor application from folder with files opened via Windows. Select the SoftLab-NSK Trim Editor item (1) in the appeared context menu. In this case set of functions is limited – it is impossible to select clip fragment.



2. Launching From FDO nAir Window

1. Left-click line with command of audio/video clip playback (1) in the Length field in the table with schedule of the FDO nAir main program window to open TrimEditor.

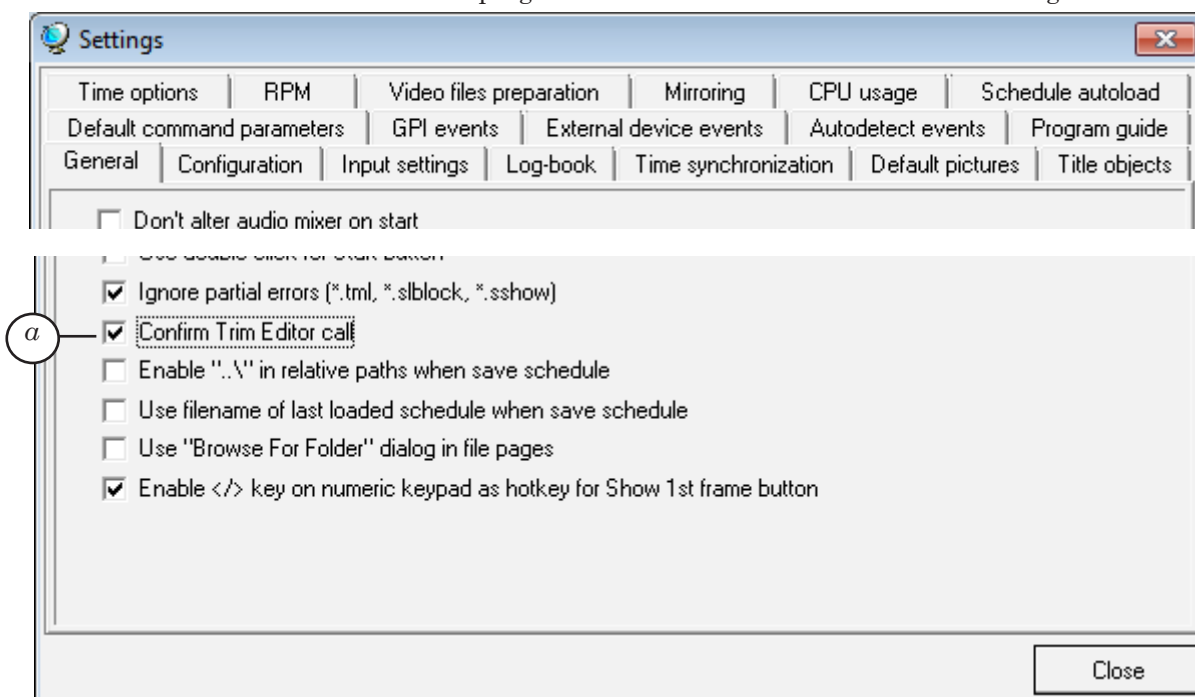




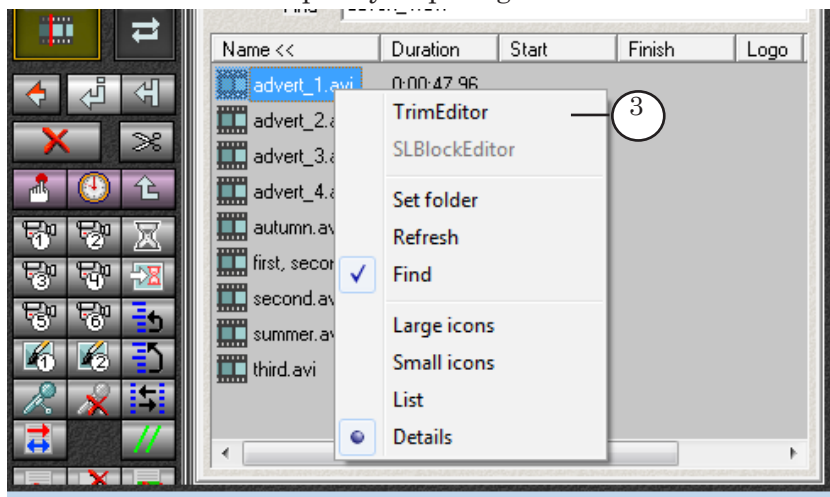
Important: We do not recommend launching TrimEditor in air FDO nAir program instance for large files during broadcasting as editing may take PC resources necessary for broadcasting.

If corresponding adjusting is implemented the (2) confirm message appears.

Note: Put/release the (a) mark in Settings window on the General tab of the FDO nAir program to enable/disable confirmation message.



2. Right-click name of audio/video file to open the editor from file page of the main FDO nAir program window. Then select the TrimEditor item (3) in appeared context menu. In this case set of functions is limited – it is impossible to specify clip fragment.





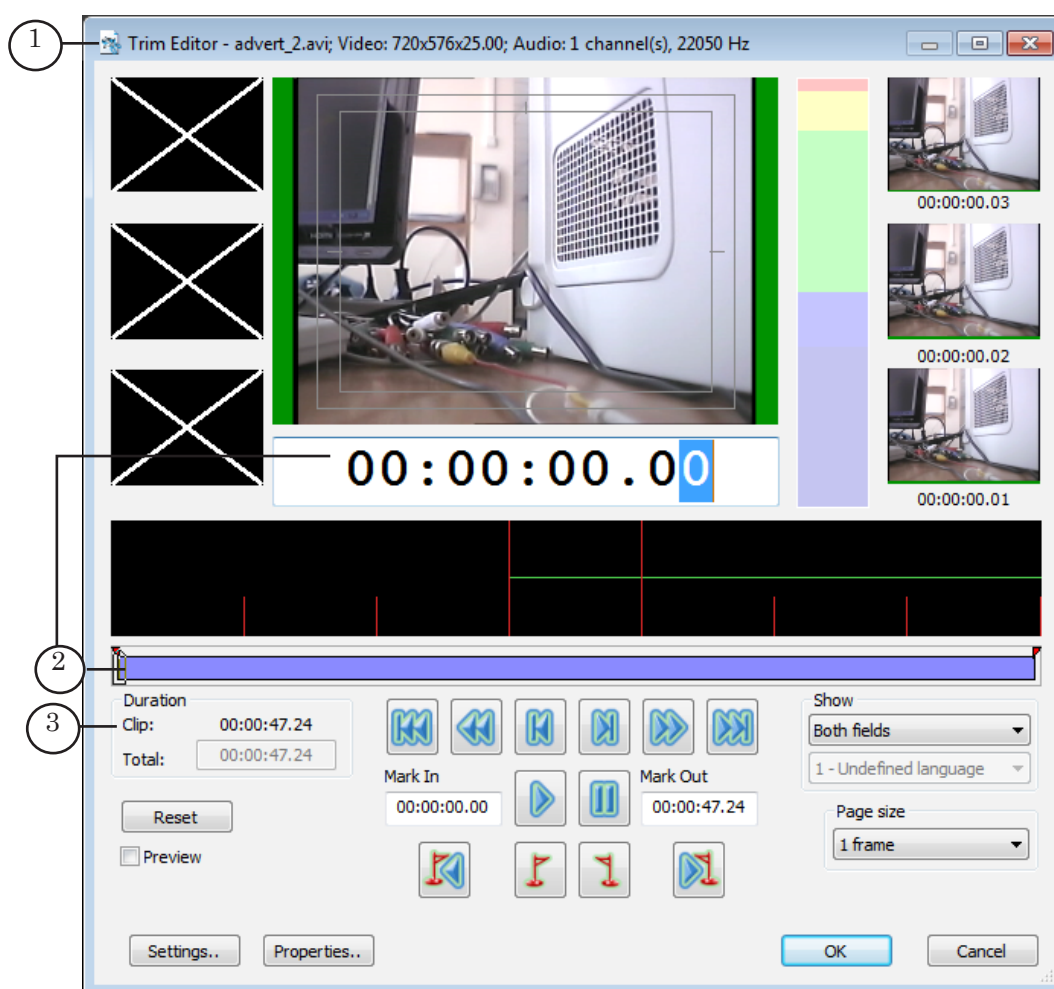
Main Application Window

1. General View

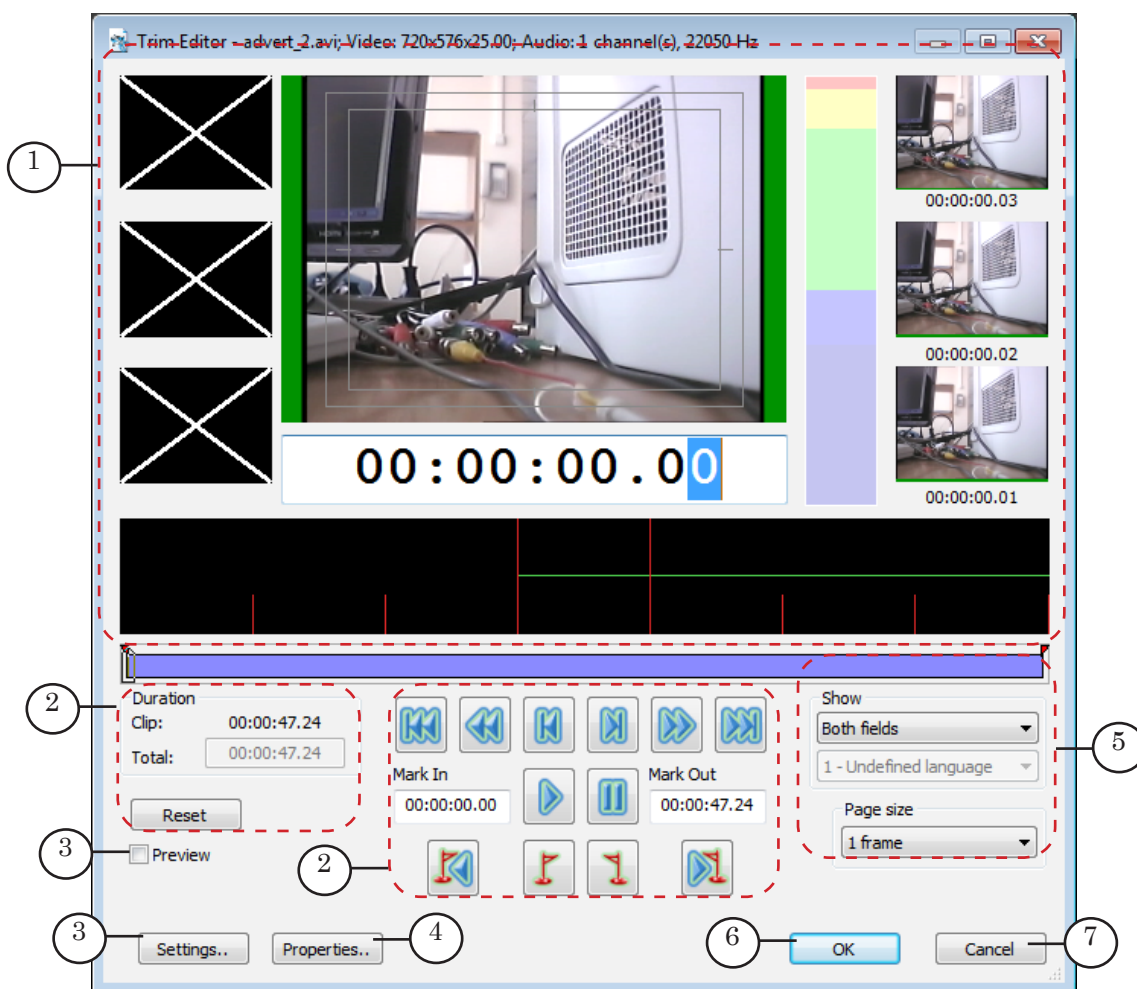
Language of interface in TrimEditor window corresponds to language selected for interface of program where the editor is launched.

You may find some useful information on the clip in the title bar (1): file name; frame size; frame rate; number of audio channels and sample rate.

Current position is clip start (2), i.e. 00:00:00.00.



You may view content of clip and select necessary fragment in the main application window. Duration of the selected fragment and full clip duration are displayed in the Duration group of elements (2) in the hh:mm:ss.frames format.



TrimEditor Main Window:

1 – preview panes; 2 – elements for scrolling clip and selecting fragment; 3, 5 – elements for customizing editor interface; 4 – button for opening the **Properties** window: detailed information on clip and editor of SLIni files; 6 – button for closing editor window with saving changes; 7 – button for closing editor window without saving changes.



2. Clip Scrolling

There are different ways of clip scrolling and passing to the necessary time mark:

1. Via the current position indicator (1). You may pass to any time mark with a frame accuracy via the indicator. Click indicator field and type necessary value. Passing is implemented on-the-fly.
2. By moving slider (2).
3. Via the (3, 5) buttons. Detailed information on the buttons is given in the table below.
4. By scrolling automatically via the Start/Stop and the Pause buttons (4). More information see in the table below.

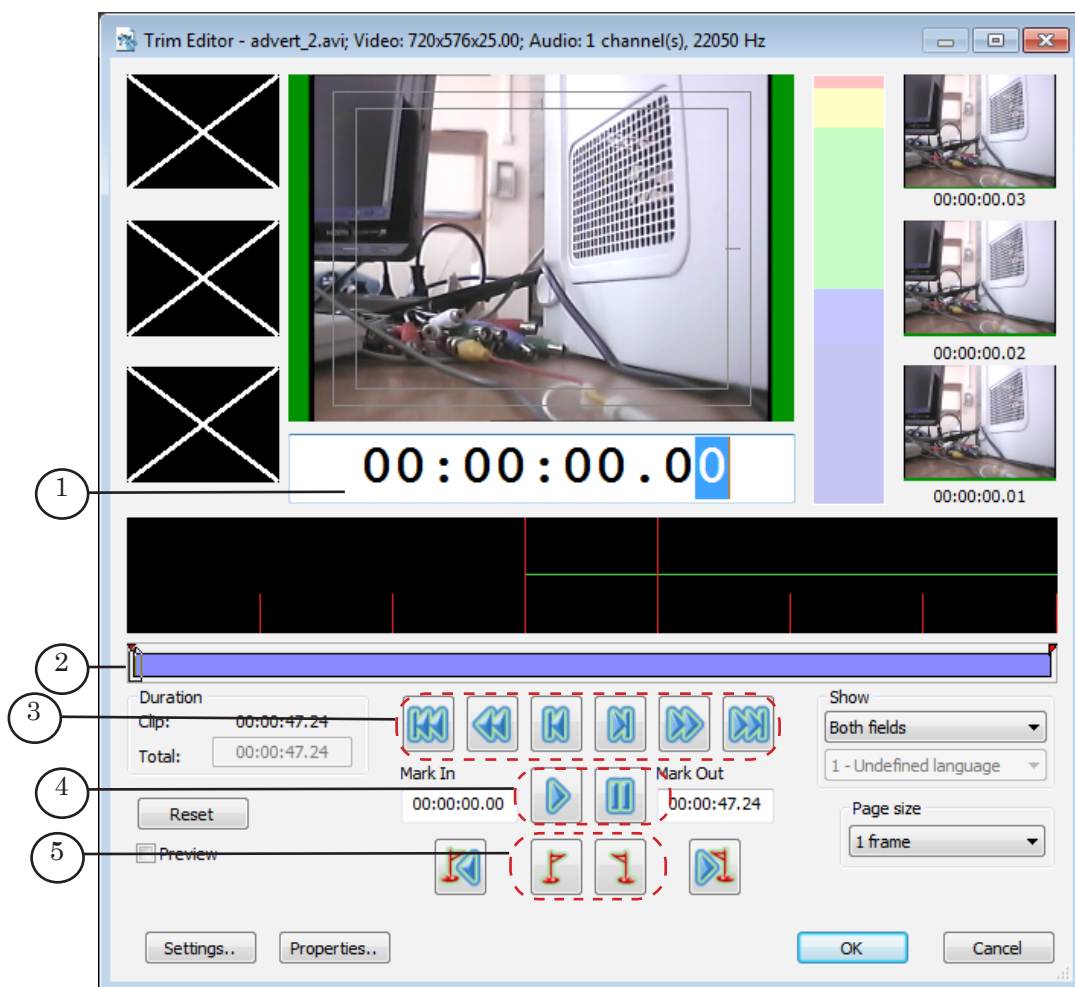










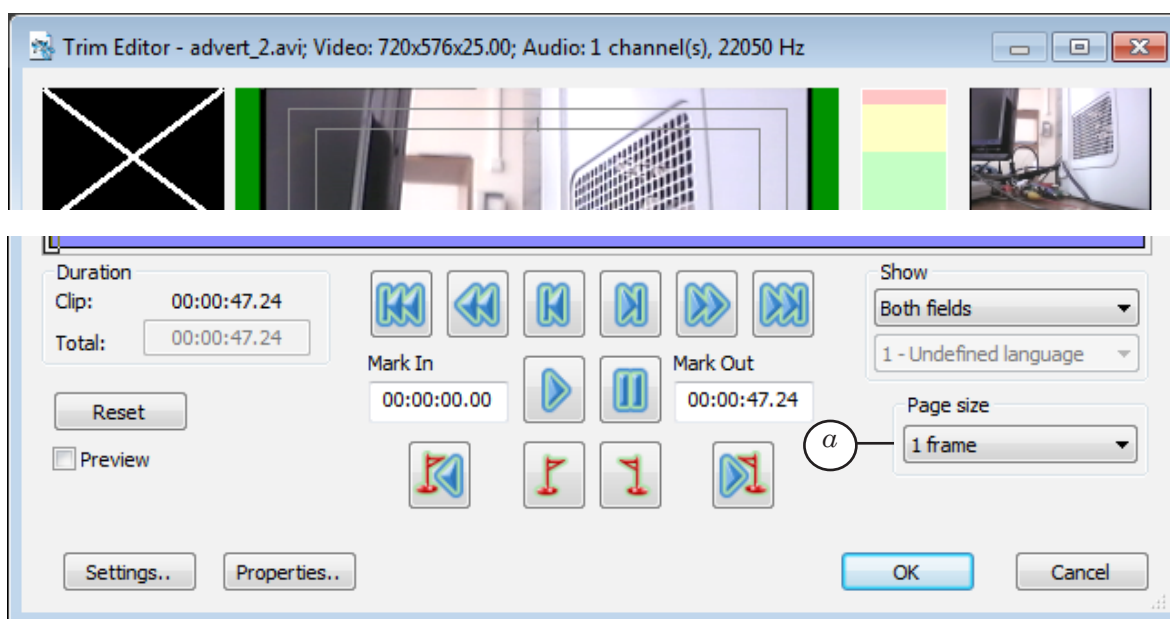




Table 1. Buttons for changing current position

Button	Purpose	Shortcuts (by default)
Buttons for step passing (see picture above – 3, 5)		
	Pass to start of clip.	Home
	Page down. Select page size the Page size drop-down list.	PageDown
	Pass 1 frame back.	-
	Pass 1 frame forward.	+
	Page up. Select page size the Page size drop-down list.	PageUp
	Pass to clip end.	End
	Pass to fragment start (Mark In).	Ctrl+Home
	Pass to fragment end (Mark Out).	Ctrl+End
Buttons for automatic scrolling control (see picture above – 4)		
	Start/stop of clip scrolling. The current position will be moved to clip start when stopping.	Enter
	Stop of clip scrolling. The current position is fixed.	P

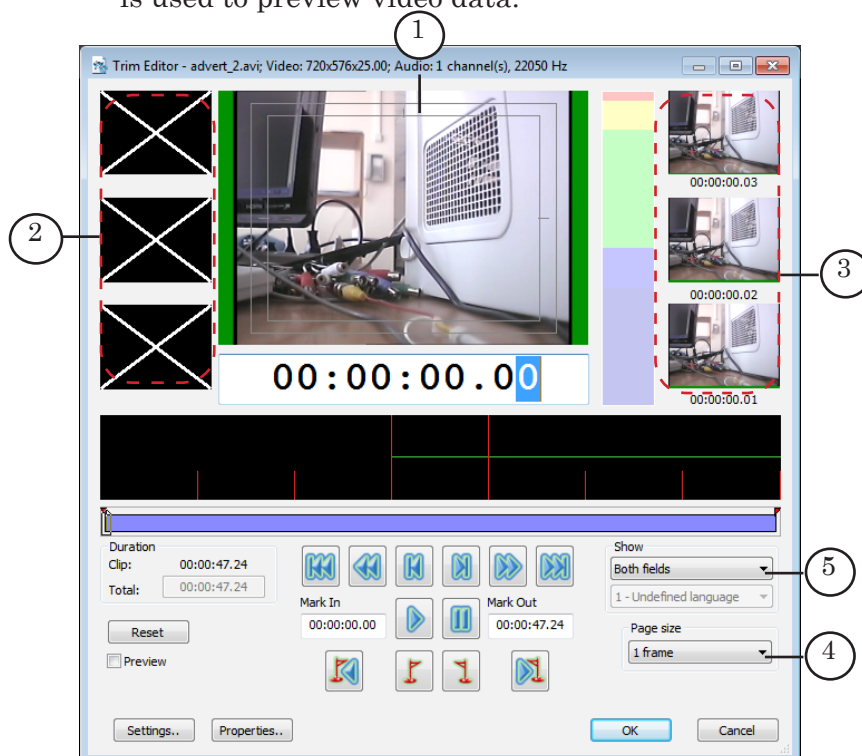
Note: Step size at page down/up depends on selected size of page. The size is 1 frame by default. Use the Page size drop-down-list (a) in the main editor window to specify necessary size.





3. Video Preview

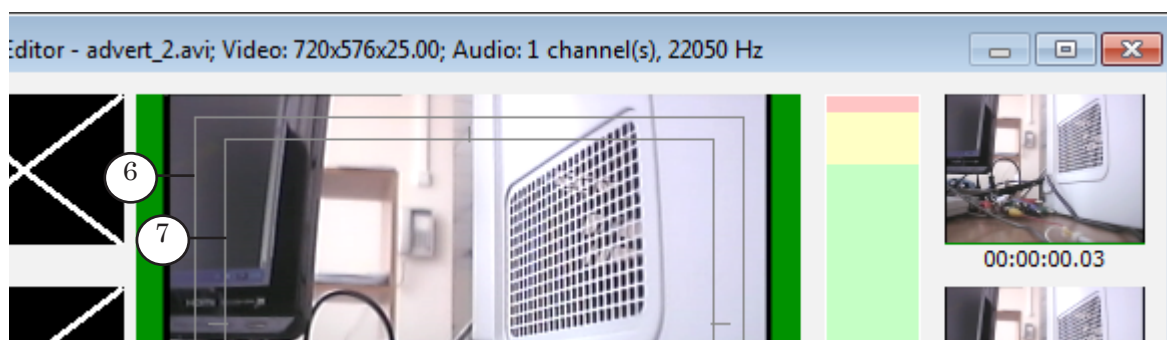
A group of panes located in the main application window (1–3) is used to preview video data.



Video frame corresponding to the current position is displayed in the central pane (1). Frames from pages up (2) and down (3) relatively the current position are displayed in the left and right panes. Indicators located under every pane display corresponding time marks (hh:mm:ss.frames). The interval between frames in adjacent panes equals to page size (4).

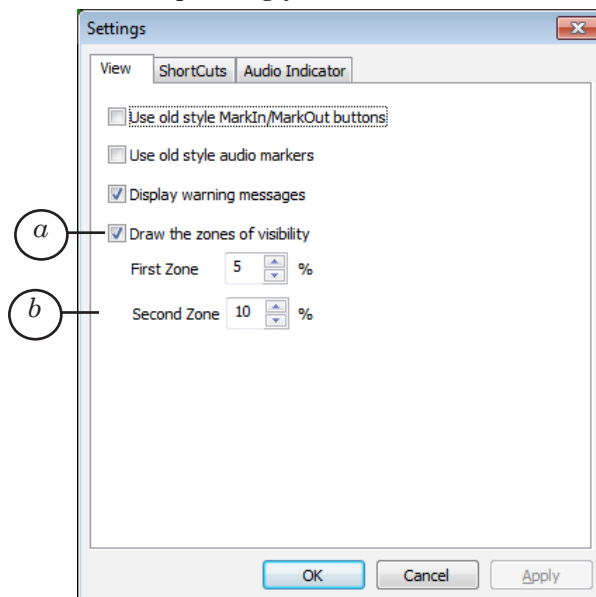
Deal with the Show drop-down list (5) to select mode of displaying video in preview windows: both fields, upper field first, lower field first.

Limits of preview zones in large preview window can be specified (*Screen safe areas*): (6) – the first zone (*Action safe area*), 7 – the second zone (*Title safe area*). User may specify necessary width of fields at frame border that must be marked as “invisible”.



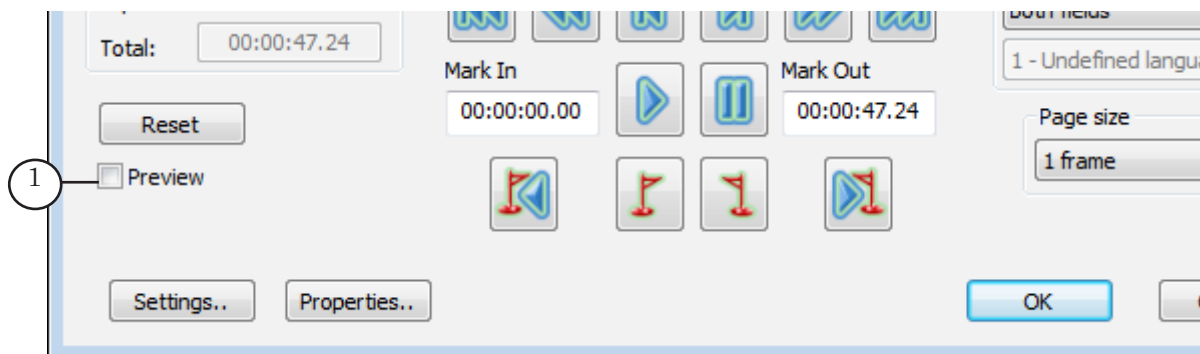


Note: Pass to the **View** tab in the **Settings TrimEditor** application window to adjust displaying zones. Put/release the **Draw the zones of visibility** mark (a) to switch displaying zones on/off. Use the **First Zone** and **Second Zone** elements (b) to specify size of “invisible” areas (fields on border of frame outside of visible field). Default values are 5% and 10% correspondingly.

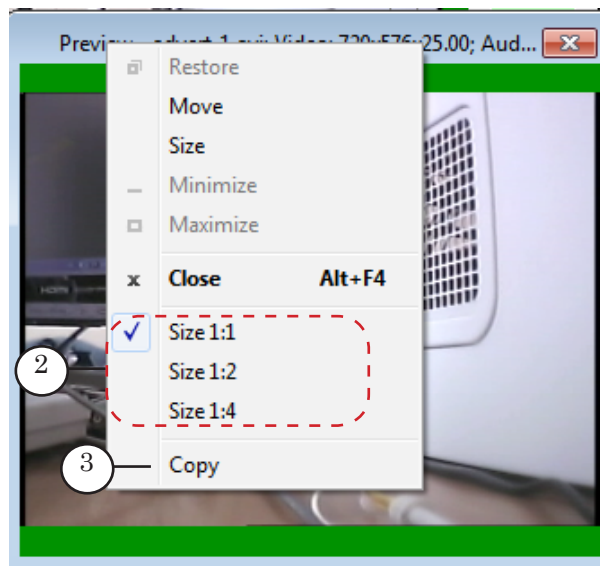


4. Additional Preview Window

You may use additional preview window to preview clip also. Put the **Preview** mark (1) in the main application window to open additional preview window.



Additional Preview window can be placed anywhere on the screen. You can specify any size of window by dragging it via mouse cursor or selecting a standard size in the (2) system menu. Size of the image is proportionally adjusted to the selected size.



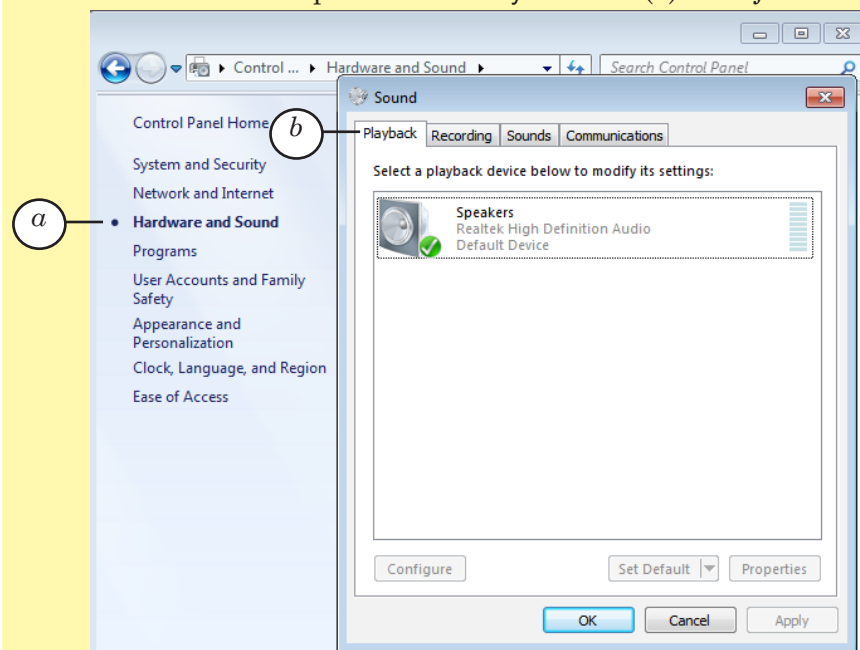
The Copy command (3) in the system menu is used to copy current frame to the clipboard. In this case image size corresponds to current size in preview window.

5. Audio Data Control

If the clip is scrolled automatically the sound is played via the audio device specified as default one.



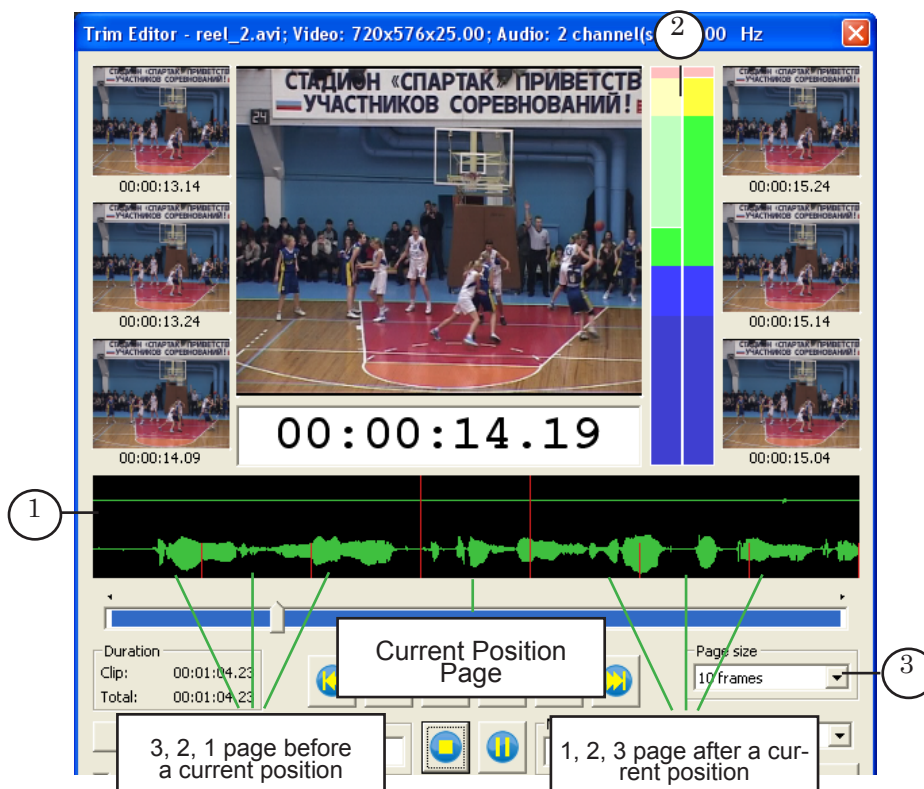
Tip: Complete the following to identify default audio device or to select another one as default (if necessary): double-click Hardware and Sound item located in Control Panel. Pass to the Hardware and Sound area (a) in the appeared window. Then pass to the Playback tab (b) to adjust the settings.





The following elements are used to control audio data visually:

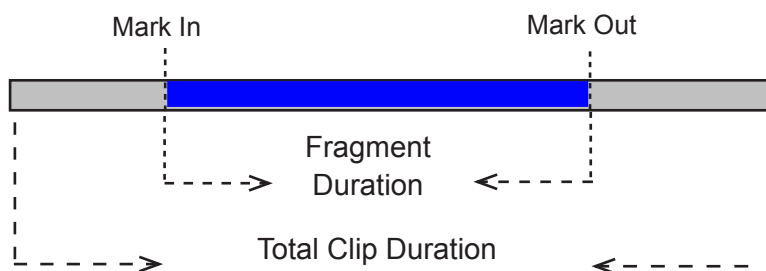
- audio track (1) that displays a waveform: fragment corresponding to the current position ± 3 pages. Page bounds are marked with red;
- audio indicator (2) that indicates audio level during automatic scrolling.



Scale of soundtrack data depends on the value specified in the Page size drop-down list (3).

6. Marking the Fragment

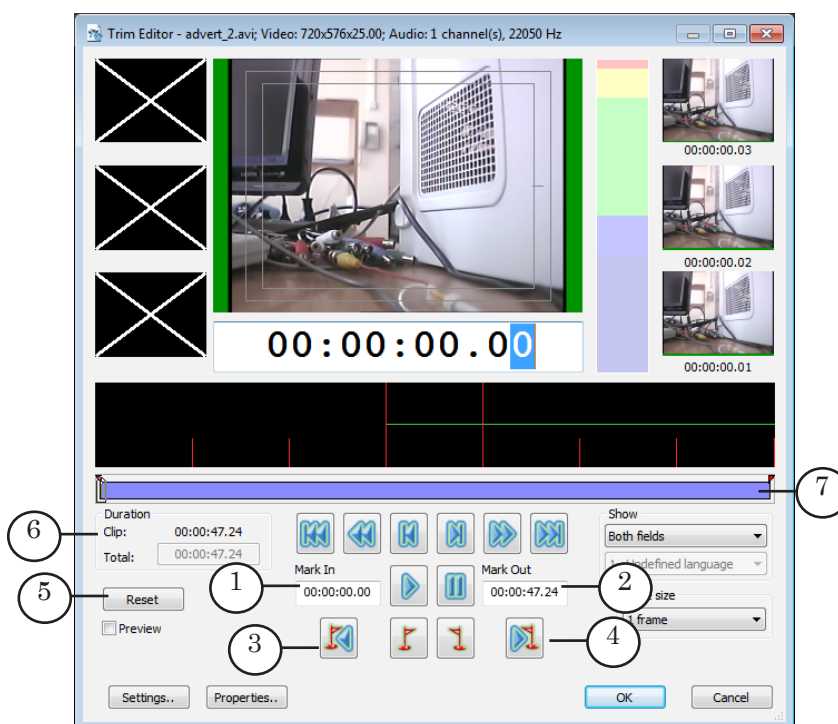
Specify duration of clip fragment by putting the Mark In and Mark Out marks.





Marks can be put in different ways:



1. By specifying Mark In (1) and Mark Out values (2) in corresponding fields if the exact time of fragment start and end are known.
2. If the exact values are unknown then pass to necessary position and click corresponding button when scrolling the clip and examining audio/video data (see picture below): (3) is used to mark start of the fragment, (4) is used to mark end of the fragment.



Click Reset (5) to reset mark values.

Current duration of the fragment is displayed in the Duration group of elements in the Clip field (6) and is marked by blue (7) on the slider.

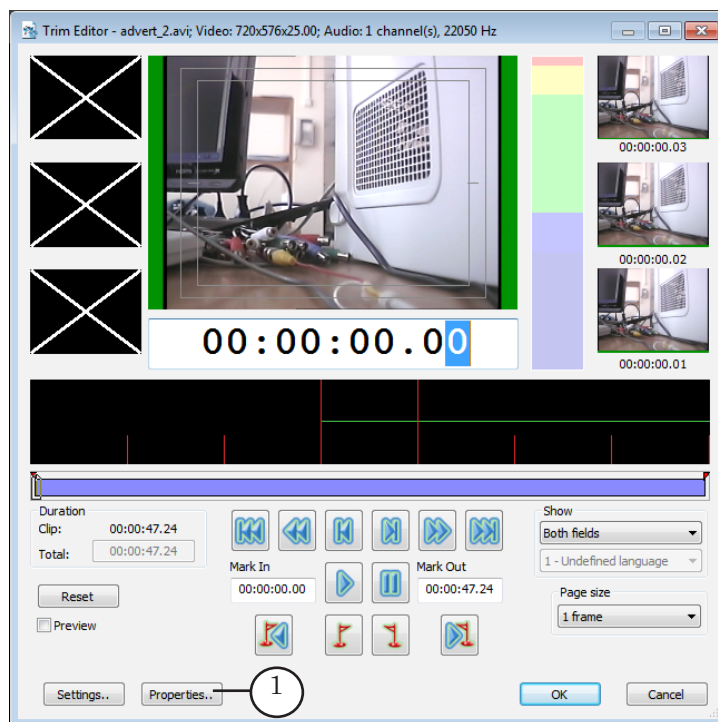
Table 2. Buttons for marking fragment

Button	Purpose	Hot Keys (by default)
	Mark fragment start.	I, Insert
	Mark fragment end.	O, Delete

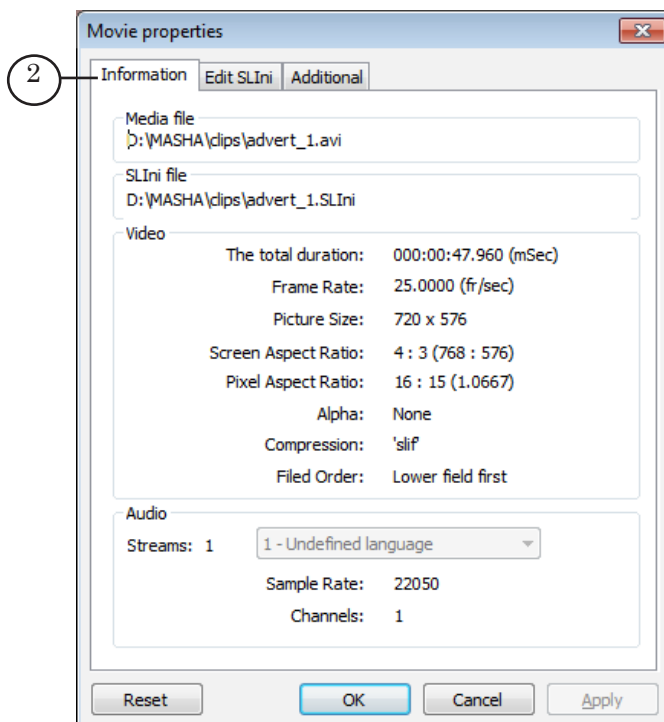


7. Information on Clip

Click the Properties... button (1) in the main application window to get information on parameters of audio/video clip.



Pass to the Information tab (2) in the appeared window.





SLIni File

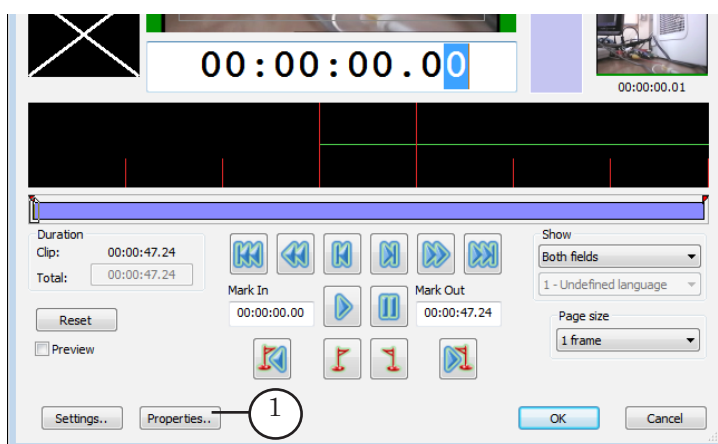
1. General Information

Sometimes it is necessary to change playback parameters for certain files, for example, to increase volume or intensity level. For this use special settings files – SLIni files (more information on this issue see in the [“FDO nAir. Additional Sections”](#) user’s guide).

The file may be created manually via any text editor or via the TrimEditor application automatically. In case with TrimEditor necessary name and file location are specified automatically. Definite format of recording is also followed here.

✓ **Important:** Remember that SLIni file created via TrimEditor is saved to the same folder where adjusted audio/video file is located automatically. Settings in file are active while both files are located in the same folder.

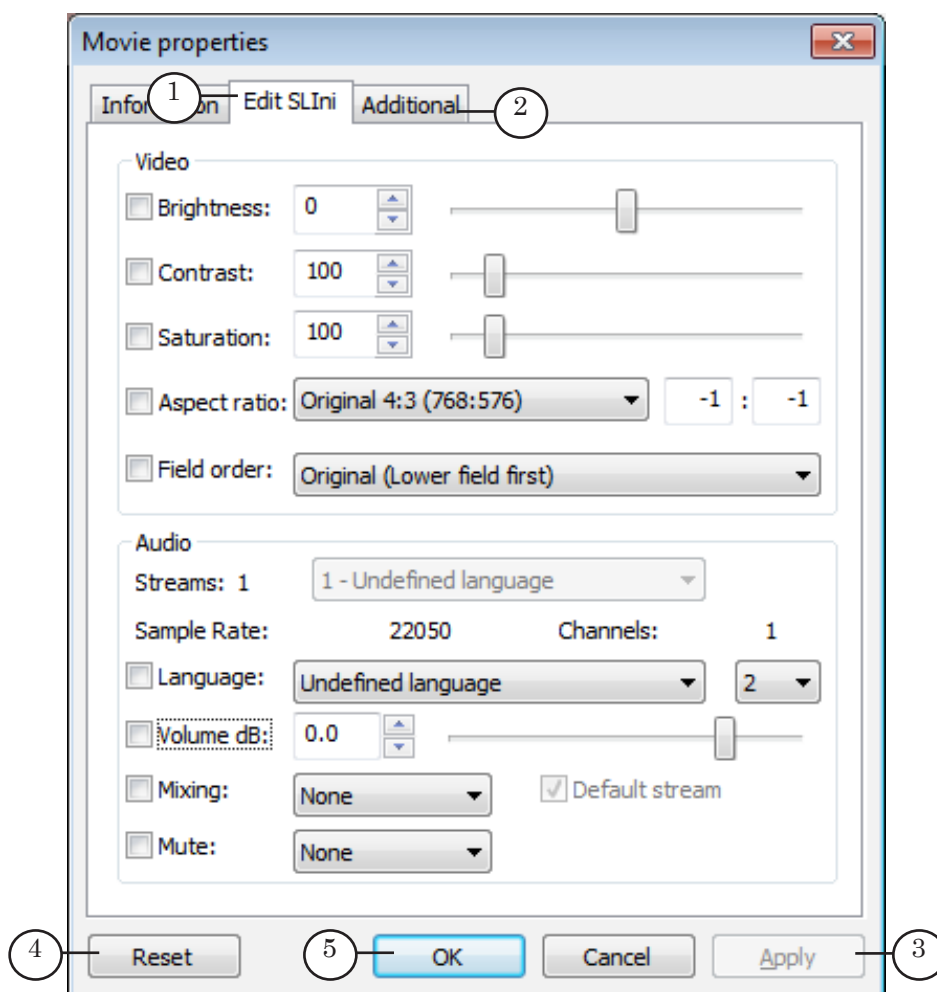
Click Properties... (1) in the main TrimEditor window to open window for adjusting settings.



2. Parameters of Clip Playback

The Edit SLIni (1) and Additional (2) tabs in the Movie properties window have control elements for specifying necessary values for parameters of audio/video playback from file.

1. Pass to necessary tab, put mark opposite parameter and specify value in order to add parameter to SLIni file. Detailed information see in the table below.
2. Click Apply (3). Specified settings are saved to corresponding SLIni file.



3. Click Reset (4) and then Apply (3) to return values of parameters configured on the Edit SLIni and Additional tabs to default ones. If no parameters is specified then SLIni file is deleted from folder with clip automatically.
4. Click OK (5) to close window by saving changes.

Note: The majority of control elements for adjusting parameters are located on the Edit SLIni tab. Elements located on the Additional tab are marked in the table specifically.

Table 3 Parameters of settings file

Name	Description	Possible Values
Video		
Contrast	Image contrast (in percent of the initial level).	An integer from 0 to 100. A value of 100 corresponds to the initial level.



Name	Description	Possible Values
Saturation	Color saturation (in percent of the initial level).	An integer from 0 to 1000. A value of 100 corresponds to the initial level.
Brightness	Image brightness (in conventional units).	An integer from -255 to 255. A value of 0 corresponds to the initial level.
FieldOrder	Field order.	0 – initial field order; 1 – top field first; -1 – bottom field first.
Ratio (AspectX, AspectY)	Frame ratio (Aspect Ratio= AspectX:AspectY).	– Original (–1:0–) – keep Aspect Ratio (AR) specified in file; – Do not scale – match frame AR to AR specified for board output. Image occupies the whole screen, without fields and cropping; – Square pixel – match AR so that Pixel Aspect Ratio is 1:1; – 4:3 – AR is 4:3; – 16:9 – AR is 16:9; – Custom – arbitrary ratio.
Crop Additional tab	Percent of black stripes cropped. This value determines frame scale on screen: the larger is value, the larger displayed image is (see example below).	An integer from 0 to 100. For example: 0 – scale the image so that the width fits the screen, black stripes are at the top and bottom; 100 – scale the image so that height fits screen completely (without black bars), part of image is cropped at the left and right.
BlackStripes	Is used if there are black stripes around frame (scaling frame with keeping ratio is implemented). It regulates width of black areas at the left–right (or above–below) of frame. Specified value (x) determines width of right (or upper) stripe in percent of the total width of two left stripes. Width of the second stripe is calculated automatically – (100 – x)%.	An integer from 0 to 100. Example: 0 – one stripe is on the left/above; 100 – one stripe is on the right/ below; 50 – two lines of the same width are on the right/above and below.
Audio		
Streams	Value denotes quantity of audio streams recorded in file (multichannel integrated sound in files is not supported currently). Drop-down list is used for selecting stream for playback.	



Name	Description	Possible Values
Channels	Quantity of audio channels in stream specified in the Channels list. Information field.	
Sample Rate	Rate of sound discretization. Information field.	
Language	Specify identifier of language for audio stream specified in the Language list. Is not used now.	Standard identifiers are: RUS, RUS2, ENG. Undefined language denotes the first audio track.
Volume (dB)	Value of varying initial sound level (in dB).	An integer from -96 to +24
Mixing	Selecting audio channel for playback.	None – playback audio channels without changes; Left+Left – output in both stereo channels left input channel only; Right+Right – output in both stereo channels right input channel only; Mean+Mean – convert stereo sound into mono and output in both channels.
Mute (ChMute)	Mute sound of selected channel (left/right).	None – nothing is muted, stereo output; Right – «mute» right channel, muted in right, output in left channel only; Left – «mute» left channel, muted in left, output in right channel only.



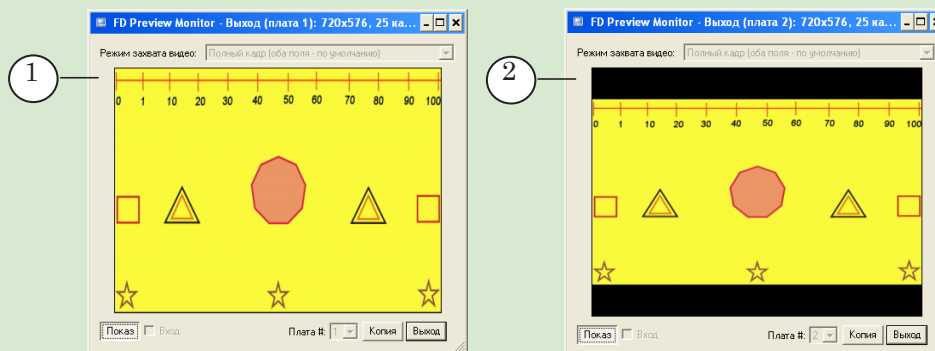
Example: Assume PAL is being used: frame size – 720x576 (that is, aspect ratio – 4:3). Let us consider the playback parameter settings of a wide-frame video file with a frame size of 1280x720 (16:9).

To scale the image to fit the screen, check the Scale images to screen size option on the General tab of the FDO nAir Settings window.

1. No other settings being specified, the screen image looks like shown in Figure (1).

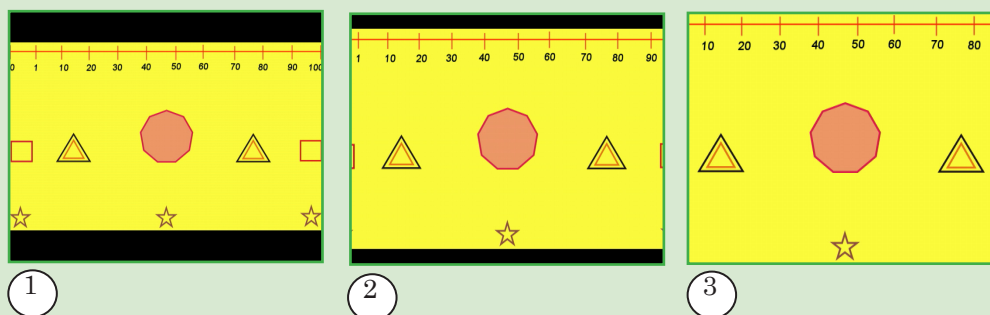
Figure (2) shows the screen image when the settings file containing the following lines is added to the folder with the video file:

```
...
AspectX=16
AspectY=9
Crop=0
```



2. The frame scale on the screen depends on the Crop parameter. The Figures show the screen image at different values of the parameter:

- Crop=0 (1);
- Crop=50 (2);
- Crop=100 (3).





3. Additional Parameters

You may record to the SLIni file additional parameters that can be used, for example, when dealing with title scripts. Information on additional parameters provided by default is given in the table below.

Note: User may add his own additional parameters to the given set. Available use of the following types of data: text line, list (enumerating), logical value (0, 1), timecode (*hh:mm:ss:frames*). Arbitrary parameters are recorded to SLIni files with the Custom prefix. Use of arbitrary parameters requires additional customizing. Appeal to SoftLab-NSK [Support](#) department to get instructions.

Pass to the Additional tab (1) in the Movie properties window to edit values of additional parameters.

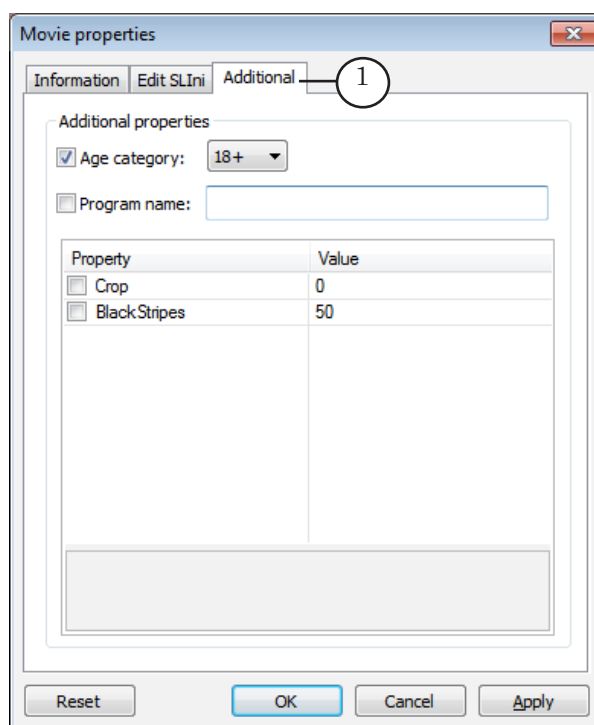


Table 4 Parameters of settings file

Name	Description	Possible Values
Age category	Information on age limitation.	0+; 6+; 12+; 16+; 18+
Program name	«External» name of program/film that can be shown to audience (for example, in program schedule, previewing, etc.).	Any symbols.



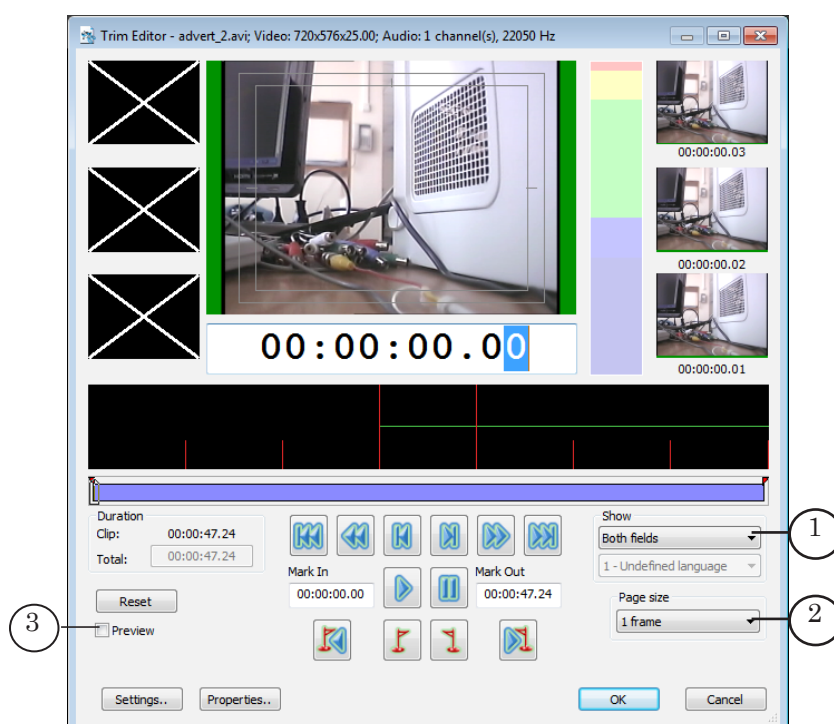
User Interface

At first launching TrimEditor default settings are active. At further launchings – settings specified during the last program session are active.

1. Previewing Mode

Elements for customizing parameters of previewing audio/video data are located in the main program window:

1. Select mode of displaying video in windows (full frame, upper field first, lower field first) via the Show drop-down list (1).



2. Scale of displaying audio/video data on audio track and the PageUp and PageDown buttons values depend on selected size of page.

Use the Page size drop-down list (2) to select size of page. Default value is one frame.

3. Put the Preview mark (3) to open additional preview window.

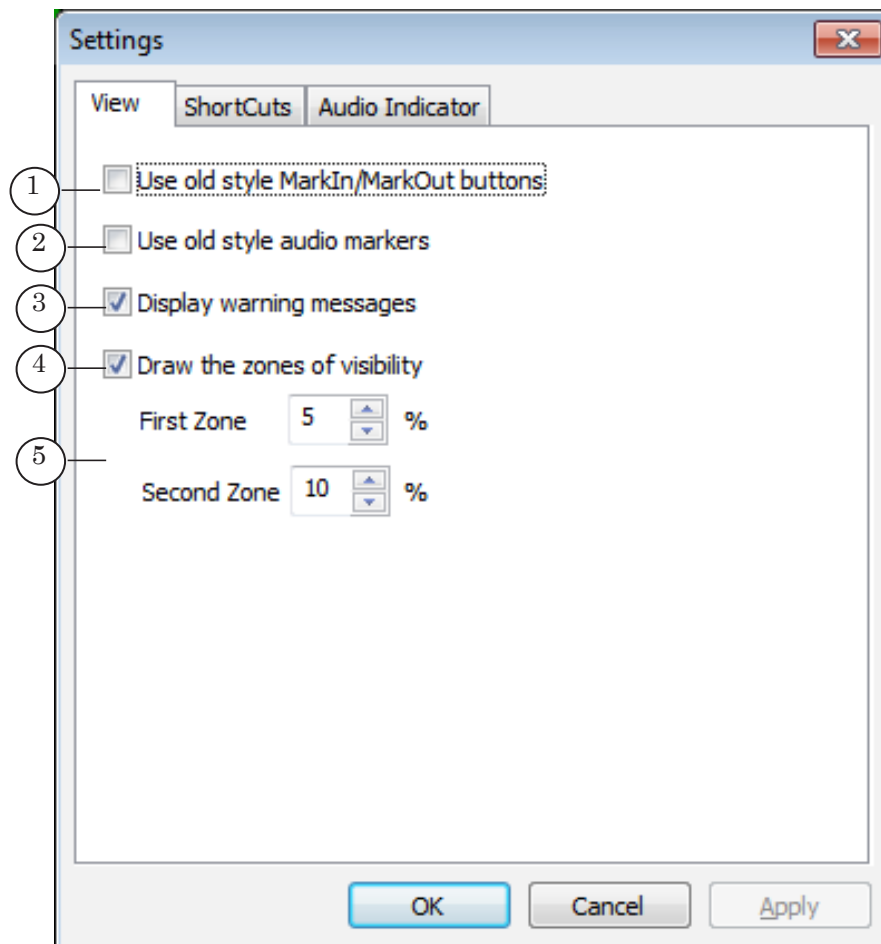


2. Types of Control Elements. Displaying Warning Messages

1. Click the Settings... button in the main program window to open window with settings.
2. Pass to the View tab in the appeared window.
3. Elements on the View tab are used to:
 - specify way of locating the Mark In and Mark Out buttons (1) in the main program window;
 - specify style of audio markers on audio track (2);
 - enable/disable displaying warning messages (3);
 - enable/disable drawing zones of visibility (4) and specifying zones sizes (5).

Put corresponding marks to enable option(s).

Release corresponding marks to disables option(s).

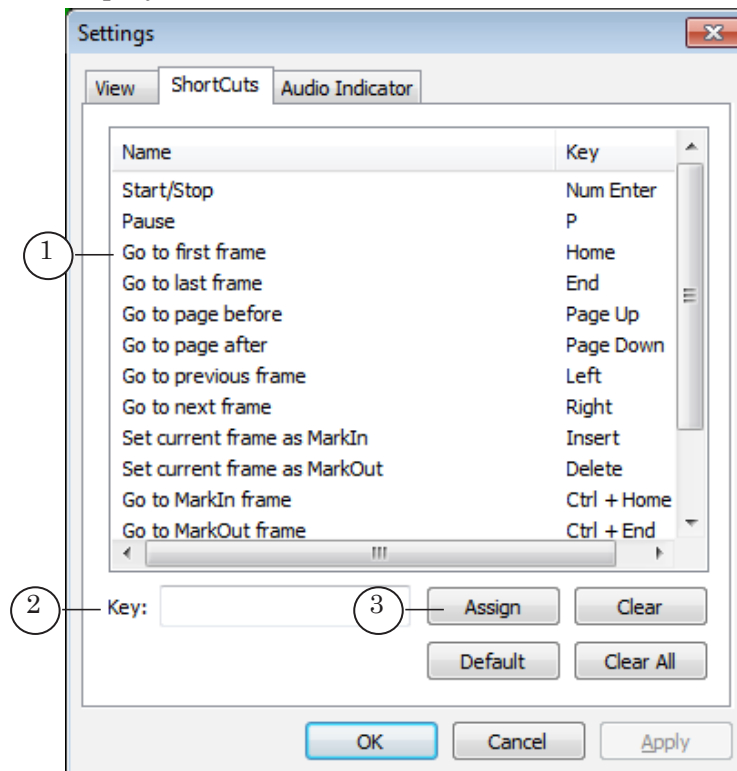




3. Hot Keys

The TrimEditor application provides with a possibility to change combination of hot keys used by default. Complete the following to view active settings and if necessary to change them:

1. Click the Settings... button in the main application window.
2. Pass to the ShortCuts tab in the appeared window.
3. List of commands and assigned to them hot keys (1) is displayed on the tab.



4. Complete the following to assign new combination of hot keys to command:
 1. Click line with adjusted command (1).
 2. Put cursor to text field (2), click it and press necessary buttons on keyboard.
 3. Click Assign (3).
 4. Assigned combination is displayed in the line with command.



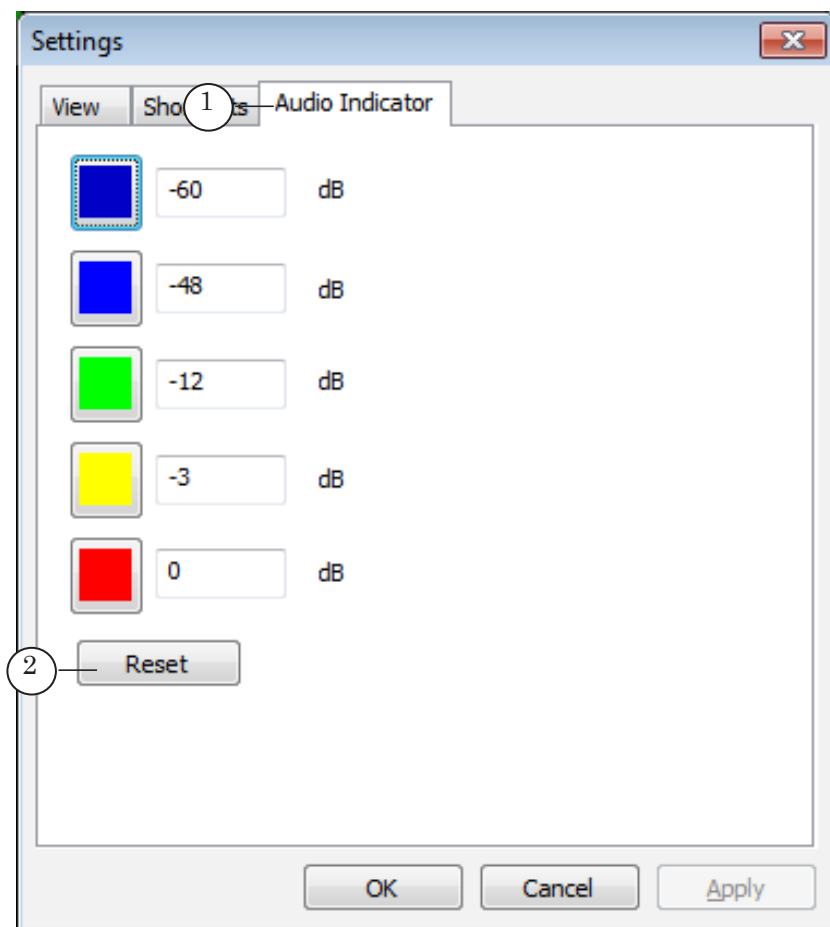
4. Audio Indicator

To customize appearance of audio indicator:

1. Click the Settings... button in the main application window.
2. Pass to the Audio Indicator tab in the appeared window (1).

You may adjust correspondence between numeric values and colours that indicate sound level via control elements.

The Reset button (2) is used to reset configured values and use default ones.





Useful Links

ForwardT software set: description, download, documentation, solutions

<http://www.softlab-nsk.com/forward/index.html>

Support

<http://www.softlab-nsk.com/forward/support.html>

e-mail: forward@sl.iae.nsk.su

forward@softlab-nsk.com

Forum

<http://www.softlab-nsk.com/forum> (currently available in Russian only)

Documentation for more information:

1. [FDO n Air. Broadcast Automation. Basic User's Guide.](#)
2. [FDO n Air. Additional Sections. User's Guide.](#)

Translation from
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