

**CHARACTER GENERATION AND ON-AIR  
PLAYBACK AUTOMATION SOFTWARE**



**VERSION 2.1**

**User Manual**

**2006**

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NB! Not all functions described in the present manual are available in the basic supply TELE 2.1. To get access to these functions it is necessary to have extra modules – TELE 2.1 Infochannel, TELE 2.1 DVB and TELE 2.1 Voting. You may specify all the details from your dealer.

# Chapter1. Creation of folders with clips and blocks

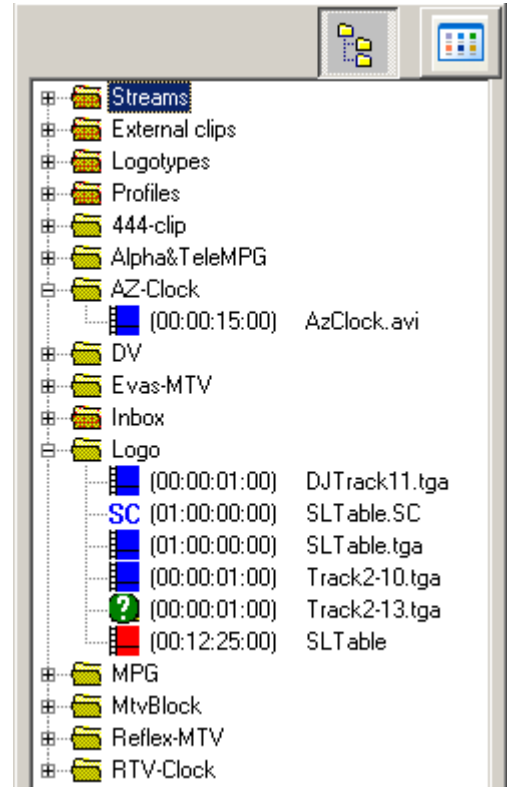
## General description

### Media tree



In the right part of the TELE software window there is the media tree, which is used for organizing all initial material in replayed schedules. **Clips** and **Blocks** which unite several clips are registered in the folders.

In the media tree there are always several special folders where compositions of the foreground are registered – **Logotypes**, **Profiles** of directing the video cards and external equipment. There are also folders in which streams are registered where in real time of its output according to schedule the current digital stream from the set external source is entered, for instance from a satellite antenna or digital video camera. There are also external clips kept on DVB video server.



Clip and block registration in the system enables to check the adequacy of references to the corresponding files, for instance that they exist on an indicated path.

Changing of path and file name of any clip enables to make this “substitution” immediately in all blocks and schedules where this clip is used. This allows to restore the schedule for instance if this clip file has moved from one place to another or if it is necessary to substitute one display file for another. However, this file substitution also bears in itself the danger if for example the duration of a new file will be different from the duration of an old one etc.

Dividing clips and blocks into folders is not essential and serves for the convenience of their search, adding and deletion. It is possible to create separate folders, for instance, according to the types of clips and blocks, their destination, time of output and period of validity during the replay of schedules.

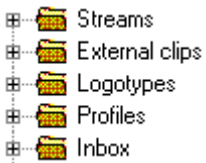
Media tree is one-level, nested folders are not supported.

Clips and blocks can be easily moved from one folder into another with the help of dragging over the mouse cursor just like in *Windows Explorer*. These changes do not influence on the contents of the schedules and blocks. On the whole the method of dragging may be used practically everywhere when it is necessary to add blocks and clips. This may be a

folder, a schedule, a list of clips while editing a block etc. it is possible to create clips by dragging the shortcuts of the files from the *Windows Explorer* window into the folders. In this case it will be automatically created under the name "**Inbox**" if there has not been created any folder before. In this folder there will also be created clips corresponding to the files which are dragged directly into the schedule passing by the media tree.

**Special folders**

Several folders having fixed names are reserved for special cases. They always exist in the media tree and cannot be deleted:



**Streams** – special clips into which in time of their output according to schedule the current digital stream from the set external source is entered;

**External clips** – detained clips where broadcasting signal is first digitized live, and then is output at necessary time;

**Logotypes** – compositions of foreground (logotypes);

**Profiles** – profiles of directing the video cards and external equipment;

**Inbox** – a default folder for placing clips and blocks in it if there have not been created other folders for it.

Other folders are ordinary; they may have arbitrary names and be used for registration of clips and blocks in them.

**Presentation of media tree in the form of opening folders.**

The folders in the media tree open and close in an ordinary way by clicking the mouse left button when the cursor is above it (or above the symbol "+" / "-" respectively).

In the open folder its contents are displayed under the folder's name. Thus the symbol of the clip, block, logotype or profile is shown first. Then goes the duration of the clips or blocks in brackets and after that (and it is for everything this time) – the *name*.

**Presentation of the folder contents with the help of icons.**

*Icon View*



The contents of the current (chosen) folder may be presented in the form of various icon images with names. Thus for video clips as an image on an icon their first frame is used. To move on to such overview it is necessary to press [**Icon View**] button. To change the current folder there is a folding list located under this button.

To return to the general overview of the folders it is necessary to press [**Tree View**] button.



**Clips**

**Clips** in the system are shortcuts referring to video files, animation files with alpha-channel or Alpha Pro software scripts. The files physically

**And their general parameters:**

unnecessary must be on a computer with Tele System, they can be on a remote computer in network neighborhood.

*Name, Duration and Description*

During the registration the system gives a clip a certain name by default (**Name**) which later may be changed. Different clips referring to one and the same file (and even having one and the same name but located in different folders) are different clips. Every such clip may have its own extra parameters and attributes.





Other compulsory parameter of the clip is its duration (**Duration**). Duration is usually taken directly from the file but sometime it is required to set it or define it on purpose. Special clips may be an exception, their duration is not defined properly (thus in a video block they have duration of one hour by default and in the schedule they occupy all maximum available free space between neighbouring elements).


**Description** is an optional parameter of the clip and serves to remember extra information and use it in search through the menu in **Schedule/Search for Clips & Blocks** software.

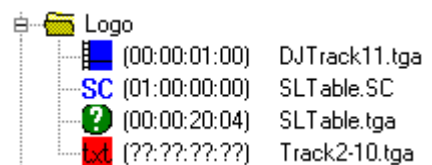
Besides, depending on the type of the clip there could be remembered extra parameters, for instance, cuts, settings of color transmission etc. the system enables to modify the clip immediately in several places of its entry in the schedules simultaneously.

**Types of clips**

Clips can be of several types depending on what files they refer to:

- |   |   |
|---|---|
|  (00:00:28:22) BOL.AVI       | <b>Video</b> ( <i>video clips</i> ) – refer to video files.   |
|  (00:04:56:18) DJTrack11.wav | <b>Special Clip</b> ( <i>detained</i> ) are in fact the same video clips but they refer to the video files which may not exist yet, the signal from external sources has not been entered (the proper time has not come). |
|  (00:00:20:04) kodak.444     | <b>Animation</b> - refer to the animation files with Alpha channel.   |
| <b>SC</b> (00:00:08:24) COST.SC   | <b>SC</b> (script-clips) – refer to the files of <i>Alpha Pro</i> software.   |
|  (00:04:56:18) DJTrack11.wav | <b>Stream</b> ( <i>special</i> ) – refer to the digital stream from external sources which in real time is entered directly in time of the output of these clips in the schedule.   |

If the clip refers to a non-existent or unavailable at the moment file, a green symbol with a question mark appears - . If the duration of the clip due to some other reason is not defines then questions marks appear instead of it "??:??:??:??".



The availability of several types of clips is dictated by the fact that they have different extra parameters (see below) and are used only in definite types of blocks during the replay of which the mix of the passing video signal and sound is differently realized.




## Block

Clips are those elements of which blocks are composed (**Blocks**). A block means a sequence of clips reproduced one after another without pauses. The clips in the block may be reproduced partly in the form of fragments, duration and the starting position concerning the beginning of the clip are indicated. It means that the block may be composed of different fragments of various clips located one after another in an arbitrary order.

The system enables to modify the block immediately in several places of its entry into the schedules simultaneously. For instance, to shorten or completely substitute inside it one clip by another. It is important that after block editing, its total duration is recounted and appropriate changes in all schedules where this block is used are made.

## Types of blocks

Blocks can be of different types depending on their destination and on what clips they unite. All blocks have a red color of the symbol:

- |   |                              |  |
|---|------------------------------|--|
|  | (00:01:18:22) Video Block    | type <b>Video</b> – video blocks unite video detained or special clips.                            |
|  | (00:00:58:00) SC/Audio Block | type <b>SC/Audio</b> – unite script clips of Alpha Pro software with sound files.                  |
|  | (00:01:24:04) Text Block     | type <b>Text</b> – text-banner blocks unite animation clips (by alpha channel) and creeping lines. |

*Videoblocks* (type **Video**) on the whole are intended for uniting and output of video files during the advertising of windows in broadcasting grid.

Blocks **SC/Audio** enable having united script-clips of Alpha Pro software's with sound files to create advertising blocks of the TeleInform type both with a general sound accompaniment and with individual announcements.

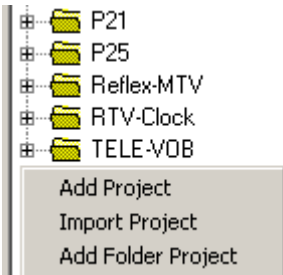
*Text-banner blocks* (type **Text**) enable to set the output of the creeping lines copying them from the *Clipboard* or importing them from text files. The duration of the output of every line is calculated taking into account the length of its text and speed of output. The design style of crawl line text and its lines on the screen is set with the help of a pattern in a special script *TELE.SC* (about patterns see "**Description of an extended version of Alpha Pro**").

During the output of clips and blocks of type **Video, Delayed, Special**, passing video and audio signals are completely replaced, i.e. the sound and video row come from the computer. During the output of animation clips with alpha-channel, of clips and blocks type **SC/Audio, Text** the output of computer graphics mixed with passing video signal takes place with preserving the original sound or if necessary with its substitution for a computerized one.

## Description of the menu and dialogue windows

### Add a new folder Add Project

To create a new folder it is required to click the mouse right button on an empty space above window of media tree and to choose the item of the menu "**Add Project**". After that an empty folder will be created with a name by default (the name of the folder may be changed through item "**Edit**" of its context menu). The folder tree is one-level, i.e. you can not create other folders inside one folder.



### Project import from the text file

#### Import Project

It is possible to create a new folder in a similar way by importing its contents from the text file having chosen for it the "**Import Project**" option. Below in the description of "**File/Import Project**" menu command the format of the text file for the import and export of the media tree is indicated.

## Context menu of the folder

---

To call the context menu of the folder it is necessary to click the mouse right button above its name. All or only part of the following functions (depending on the type of the folder) will be available from this menu:

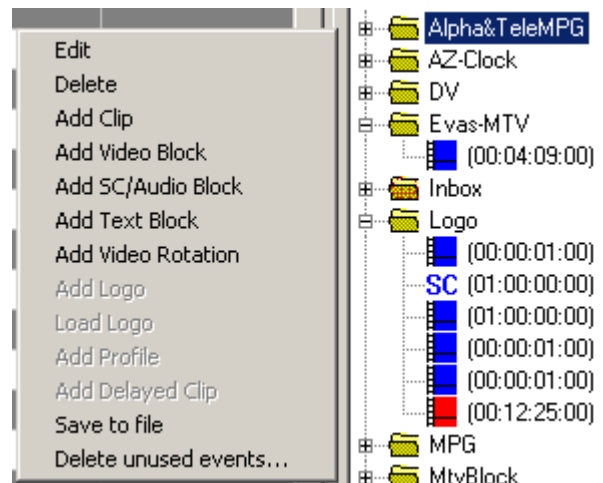
- **Edit** – rename of the folder;
- **Delete** – delete the folder and all incoming clips and blocks;
- **Add Clip** – add a clip into a folder;
- **Add Video Block** – create a video block in a folder;
- **Add SC/Audio Block** – create a block type "**SC/Audio**";
- **Add Text Block** – create a block type "**Text**";
- **Add Logo** - create (in **Logotypes** folder) foreground composition (logotype);
- **Copy Logo** – copy (in **Logotypes** folder) a chosen foreground composition into a logotype under a different name;
- **Add Profile** - create (in **Profiles** folder) a profile of video card and external equipment direction;
- **Add Special** - create (in **Special clips** folder) a special clip;
- **Save to file** – export the folder contents into a text file.

### Rename folders

#### Edit



Renaming of the folder is realized with the help of "**Edit**" option of context menu. After changing the folder's name it is necessary to click the mouse left button somewhere on an empty space in media tree or to press **[Enter]** key to exit. It is possible to call out the renaming of a current folder by holding the mouse pointer with pressed left button for several seconds





above the name of the folder. All above mentioned is similar to the way how the renaming of the folders in *Windows Explorer* is realized.

You can not rename special folders.

## Delete folders

### Delete

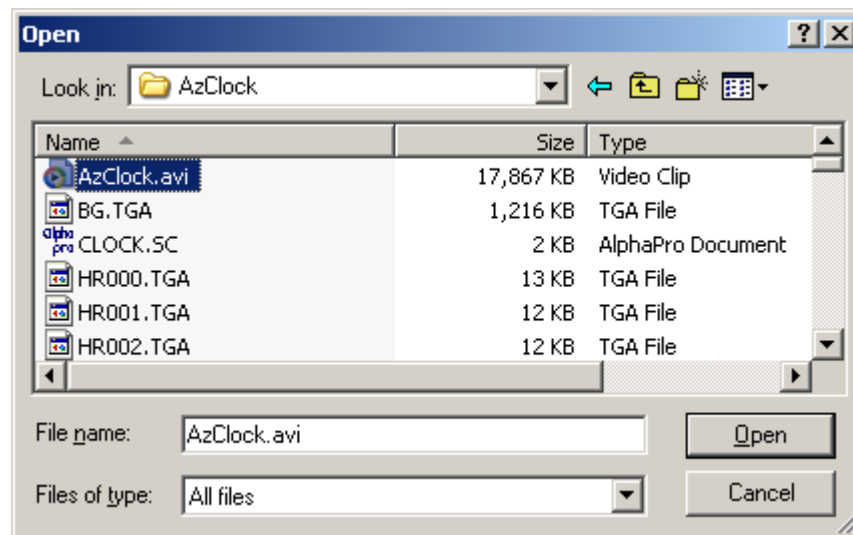
By choosing "**Delete**" option of context menu of the folder it is deleted together with all incoming clips and blocks. Clips and blocks are excluded from the schedules where they were used but files they referred to are not deleted from the disk. To free the disk space they will have to be deleted manually.

With the help of this item it is possible to delete from the system several clips and blocks in one go.

You cannot delete special folders.

### Add Clip

Choosing "**Add Clip**" item for any admissible folder except "**Special clips**" folder a standard dialogue appears where it is possible to choose one or several files for their registration in the system as clips and for adding them to an appropriate folder.



Clips of "SC" type can be entered if the dialogue window "**File Type: Alpha Pro SC files**" is chosen. Choosing video files, and animation files - "**File Type: Video Files**", and when a static image is used as a clip then "**File Type: Still pictures**". If the type of files is "**All Files**", then all admissible files are output in the form of a general list. The type of clip is defined according to **extension** in the file name. Thus type "SC" is given if *Alpha Pro* software scripts with names of "\*.SC" types are chosen. Video files must have extensions "AVI", "MPG", "M2V", "VOB", "DV", "MJPEG", "422", animation files - "444", static images - "TGA".

It is possible to create clips by dragging shortcuts of the files directly from the *Windows Explorer's* window into the folders or schedule. In the last case the corresponding clips are automatically registered in the "**Inbox**" folder.

After entering the name of the file of 1 clip there immediately appears the window for editing its parameters (see below "**Editing of clips and blocks parameters**"). If several names have been entered and/or they



are created automatically, then the parameters are set by default and they can be edited later through the "**Edit**" item of context menu of every such clip.

<b>Video files</b>	<p>The support of the following video file formats is built in the TELE system (i.e. the an appropriate codec in the <i>Windows</i> area may not be installed):</p> <p>The maximum quality of replay is guaranteed during the reproduction.</p>
<b>*.AVI files, created by system of non-linear cutting modules</b>	<ul style="list-style-type: none"> <li>• <b>DV</b> (720x576), 4:2:0, compression 1:5, 32/44/48KHz audio stereo. No 4 GB limit, produced by most non-linear editing cards supporting <i>DV-format</i>. Audio channel may be in a separate WAV-file.</li> <li>• <b>MJPEG</b> (720x576, 768x576), 4:2:2, bandwidth up to 7Mb/ps, 32/44/48KHz stereo audio. File produced by <i>miroVideo DC30/DC50, Matrox DigiSuite/LE, Fast AV Master</i> cards.</li> <li>• <b>MPEG-2 I-frame</b> (720x576), 4:2:2, 32/44/48KHz stereo audio (or in a separate WAV-file). File produced by <i>Matrox</i> cards series <i>RT-xxxx</i> (2 GB limit for files of <i>RT-2000</i> and <i>RT-2500</i>) or Pinnacle <i>DC-1000/DC-2000</i> cards.</li> </ul>
<b>MPEG-2 files *.MPG, *.M2V, *.VOB</b>	<p><b>MPEG-2</b> (720x576, 704x576, 512x576), 4:2:0, bandwidth up to 10 Mb/ps, 48KHz stereo audio (or in a separate WAV-file for *.M2V). File <i>MPEG-2 Main Profile</i>, compatible with <i>DVB, DVD</i> standards and most hardware coding devices in MPEG-2. The PAL and NTSC formats are supported.</p>
<b>Files in Windows Media (ASF, WMV) format</b>	<p>For reproduction of Windows Media files it is required to have DirectX at least version 9 and Microsoft Windows Media Format Pack.</p>
<b>422/MJPEG/ MJPG5 files</b>	<p><b>422</b> – it is an own format for uncompressed video files is produced from AVI format by a converter <b>Conv422</b>, enclosed in <i>TELE</i> system or by Video capture s/w (if the grabber is part of the system). It provides excellent <i>D-1</i> quality for video (720x576), 4:2:2, 48KHz stereo audio. Besides format <b>422</b> has no 4 GB size limit of NTFS file system. Approximate recording time is 60 minutes for disc capacity of 2 x 80 GB size. Similar formats <b>MJPEG</b> and <b>MJPG5</b> with JPEG compression exist.</p>
<b>QuickTime (MOV, DV) files</b>	<p>If the support of <b>QuickTime</b> is installed in the system, not lower than 6.5 version, the reproduction of files of this format is possible on condition of codec availability. There is no size or frame rate limit.</p>
<b>Arbitrary AVI-files</b>	

**DivX**, 4:2:0, bandwidth up to 10 Mb/ps, 32/44/48KHz stereo audio. No 4 GB limit file produced by *DivX 5*, *Xvid* codec or its analogues in compliance with the *MPEG-4* specification.

The reproduction of AVI-files is possible in arbitrary format if the corresponding *Video for Windows* or *DirectShow* codec is available in the system, for instance *Indeo* or *Microsoft MP42*. If *Canopus* codec is installed in the system (recommended version 2.8) the reproduction of *Canopus DVStorm*, *DVRaptor RT* files is possible. The maximum configuration is not required from the computer. Frame rate of AVI-files may be arbitrary – the recount of frame rate is done.

If there is no audio channel in AVI-file, WAV-file automatically opens with the same name from the same catalogue which enables to use files from the systems with a separate audio recording, for instance, produced by *Matrox* company.

### Animation files with alpha-channel



File converter

\*.**444 Files** - animation files type **444** do not contain sound and are produced by converter **Conv422** from the sequence of files type TGA 32-bit. The duration is not limited, files are reproduced non-stop from the hard disc. They can be used for animation logotypes, presentations and advertisement banners taking up half of screen. Bandwidth speed limitation per one shortcut should not be updated more than 1/2 of the screen (in area)\*. Resolution is 720 x 576 x 32.

\* - no limitation in infochannel system.

### Static images files (clips)

\*.**TGA Files** - Files of **TGA** type 24-bite are used for static picture between blocks and soft wares. File resolution must be 720x576 pixels.

### Audio files

*TELE* system in clips type "**SC**" and blocks type "**SC/Audio**" supports *WAV*-audio files *PCM* format, 32/44/48KHz 16 bites, stereo.

### Block creation in the folder

*Add Video Block,*  
*Add Text Block,*  
*Add SC/Audio Block*

Choosing an item for creation a block of a required type the corresponding editing window appears from the context menu. Thus to create a video block (**Add Video Block**) - "**Video Block Editor**", text-banner block (**Add Text Block**) - "**Text Block Editor**", **Add SC/Audio Block** - "**SC/Audio Block Editor**". The interface of these windows and the whole process of block creation will be described below in more detail.

### Logotypes, profiles and special clips creation

These items of context menu are available only for the appropriate folder of the project tree. Window interface and the process of creation and editing will be described later.

**Logotype copying under a different name***Copy Logo*

This item of context menu is available only after choosing the logotype in **Logotypes** folder. After performing this command, a logotype is created which is similar to the chosen one but different only by its name (to the old name "**\_copy**" is added on the right).

**Project export in the form of a text file***Save to file*

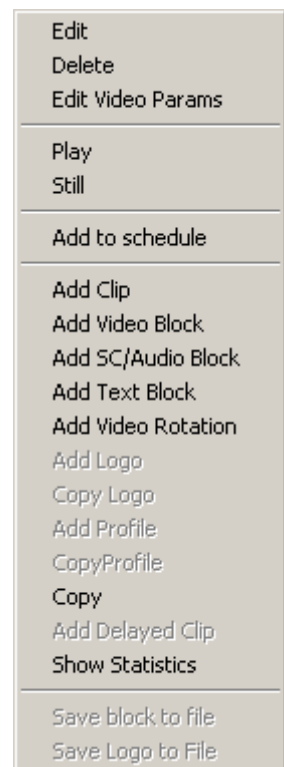
By choosing the item "**Save to file**" of context menu of the project it is exported in the form of a text file in the format suitable for a similar import through the **File/Import Project** command. Below in the description of this command the format of the text file both for the import and export of the project is indicated.

**Clip or block context menu**

To call the context menu of a clip or block it is necessary to click the mouse right button above its name. The following functions are available from this menu:

- **Edit** – to edit clip or block parameters;
- **Delete** – to delete a clip or a block;
- **Edit Video Parameters** – to enter the parameters of correction of the sound level, brightness and color transmission of a clip;
- **Play** – the command launches manual (test) replay of current clip or block through the video card;
- **Add to schedule** – add a clip or block into edited schedule (before the chosen there element);
- **Show Statistics** – information output on the clip replay on air through the video card;
- **Save to file** – block export in the form of a text file.

Other items from the context menu of the folder containing this clip or block have also been added to the menu (see above).

**Editing clip or block parameters***Edit*

Editing clip or block parameter is realized through the "**Edit**" item of context menu. Depending on the type of a clip or a block the dialogue windows with different sets of fields and keys are used for editing its parameters. (see below "**Editing clips and blocks parameters**").

The system enables to work simultaneously with several windows of clip and block editors.

**Delete a clip or a file***Delete*

If the item "**Delete**" is chosen from the context menu of the clip or block it is deleted from the system. It is excluded from the schedules where it was used but the file itself which the clip referred to it not deleted from

the disk. To empty the disc space the file will have to be deleted manually.

**Editing video parameters**

This item of context menu calls the dialogue window "**Edit Video Params**" to enter parameters of sound level correction, brightness and color transmission which will be realized in real time during the clip replay (parameters are described below in more detail).

C1

**Manual clip or block replay through the video card - Play**

A clip or a block is replayed through the video card in the manual (test) mode on "**Play**" command.

The manual replay of clips and blocks is used for testing the process of output of the material through the video card. The last frame of the clip or block is left on the screen.

**Add clip or block to an edited schedule or to block**

Choosing "**Add to schedule**" option of context menu of the clip or block it is added to an edited schedule before a chosen element there.

*Add to schedule*

This option in the project tree folder inside the block editor is called "**Add to block**" and used for inserting the clip before a similar clip of the (element) block chosen in the appropriate window.

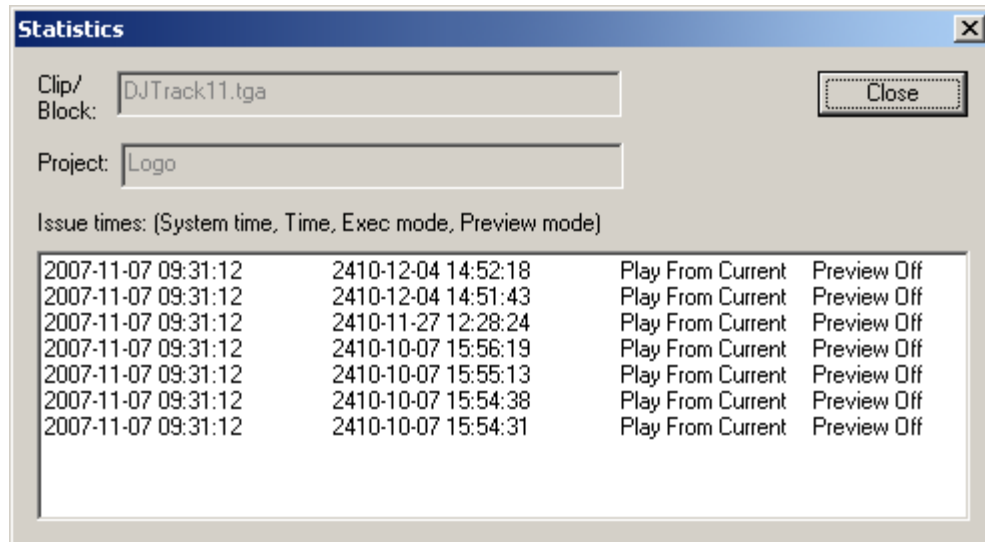
*Add to block*

The method of dragging clips and blocks (*Drag & Drop*) with the help of the mouse to the necessary place of the schedule or to the position inside the block can be used.

**Information output on clip replay**

"**Show Statistics**" provides information on clip replay on air through the video card.

*Show Statistics*



At the top of the window the name of the clip – **Clip**, the name of the project folder – **Project**, and below in the form of the table the information on every case of the output of this clip are shown. This information can be copied through *Clipboard* into a text file and turned into a table for the following analysis and calculation of real air time used for the output of this clip.

In the table in every line there is a date and time of the beginning of the output of the clip according to the schedule in the format "YYYY-MM-DD HH:MM:SS" – **System time**. After it in the same format there is a real date and time output according to internal clock of the computer – **Time**. If the clip was output not during the schedule replay but directly on the "**Play**" command from project tree folder then the value is entered in the field **System time** from **Time**. In this case the meaning of the next field in line **Exec mode** equals "**None**".

After it comes the **Exec mode** column, in which it is indicated whether the schedule was replayed and in what mode (see below "**Modes of schedule replay**") during the clip output.

In the last **Preview mode** column the information on whether it was the output in "**Preview On**" mode, i.e. in test trial mode or not – "**Preview Off**" is shown.

### Block export in the form of a text file

*Save to file*

### Video import

### Import of the video block from the text file

*File/Import Video Block*

If you choose the "**Save to file**" item of the contextual menu of the block it exports in the form of the text file in the format used for a similar import through the "**File/Import Video Block**" command.

The command of the menu software "**File/Import Video Block**" imports the definition of the video block from the text file. This command enables importing the videoblocks created by softwares of advertising output of the schedules generation, taking into account for instance the order of clip sequence and other demands of clients.

Video block is created in the current folder of the project tree and the name of the block coincides with the name of the text file.

In the text file a line corresponds to every clip of the video block. In the line a full name of the clip file is shown in inverted commas and then if necessary a point of input and output in "HH:MM:SS:FF" format can be noted. (here and after *FF* are the frames at 25 frames/ps). If the points of input and output are not indicated then the clip corresponds to its video file from the beginning to the end:

```
"G:\TeleSampl\Dv\WASA.AVI" 00:00:03:22 00:00:25:16
```

```
"G:\TeleSampl\Dv\ZEWA.AVI"
```

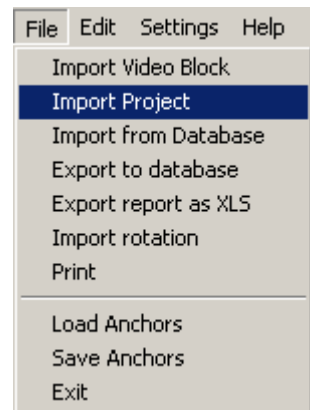
During the import if the clip with a file already exists in the database it will not be created again but already existing will be used. If there is no clip in the database then it will be automatically created in the folder with the parameters by default.

### Import of the file from a banner block

*File/Import Video Block*

The same command "**File/Import Video Block**" enables to import the definition of the banner block from the text file. The block is created in the current folder of the project tree and the name of the block coincides with the name of the text file.

A line corresponds every animation clip type **444**. In the line a full name of the file is indicated in inverted commas, points of input and output are not indicated – the clip corresponds to the whole animation file from the beginning to the end.



"G:\TeleSampl\444\lukomor.444"

"G:\TeleSampl\444\kodak.444"

During the import if a clip with a file already exists in the database then it is not created anew but an already existing will be used. If there is not clip in the database it will be created automatically in the same folder with the parameters set as default.

### Import of the project files from the text file

Menu command "**File/Import Project**" enables to create the folder in the media tree with several video blocks and clips according to their description in the text file. Let's see how such text file is arranged on the example below:

24.06, wdn - evening

№ 15 - 18:39:00 - Prime 2	00:06:25	
Ladies man - 35 clip Start	00:00:06	d:\otbivki\ugodnik0.avi
Master Bill - clip Gnats	00:00:15	d:\roliki\master_bill.avi
Taxi Escort - clip 52 Love	00:00:16	d:\roliki\taxi.avi
35 channel - clip new	00:00:08	d:\otbivki\NEW.avi
dessert	00:00:23	d:\promo\DESERT.avi
Blue planet - clip to	00:00:26	d:\promo\PLANETA.avi
Ladies man - 35 clip end	00:00:06	d:\otbivki\ugodnik1.avi
Total:	00:03:48	
Remaining:	00:02:37	
№ 18 - 19:41:00 - Complete ascent1	00:03:00	
Comfort - clip 6	00:00:13	\\Base\roliki\komfort6.avi
Taxi Argo - 06	00:00:06	\\Base\roliki\taxi_argo.avi
Windows of Sakhalin - scroll Decor	00:00:11	\\Base\scroll\okna.avi
Shop 16 - clip Valentine	00:00:16	\\Base\roliki\Magazin16.avi
TVworld - scroll Announcement	00:00:30	\\Base\scroll\telemir.avi
Rosneft - clip 01	00:00:12	\\Base\roliki\ROSNEFT.avi
Autoradio - already -2	00:00:09	\\Base\roliki\Avtorario.avi
35 channel - clip Comfort	00:00:06	\\Base\otbivki\KOMFORT.avi
Drawing a Fairy tale	00:00:16	\\Base\promo\RISUEM.avi
Such profession	00:00:29	\\Base\promo\TAKAYA.avi
Total:	00:02:34	
Remaining:	00:00:26	

The first line in the text file must contain the name of media tree. Thus in the given example the folder with the name "**24.06, Wdn - evening**" will be created.

Empty lines in the text file divide into the blocks. In the next full line after them the first two symbols are skipped and from the end the times is omitted (if it is indicated) and gaps. All the other symbols create the name of the block.

Clips are included into the block, the following lines with full file names at the end correspond to them (the first two symbols in the line are skipped). The files themselves must not be located only on the local computer, the network names can be used as well just like it is done in the second part of the example.

The time between the path and file name means its duration which may be shorter. In this case the clip will be shortened.

Other information in lines is ignored. If there is no name of the file the line is also ignored.

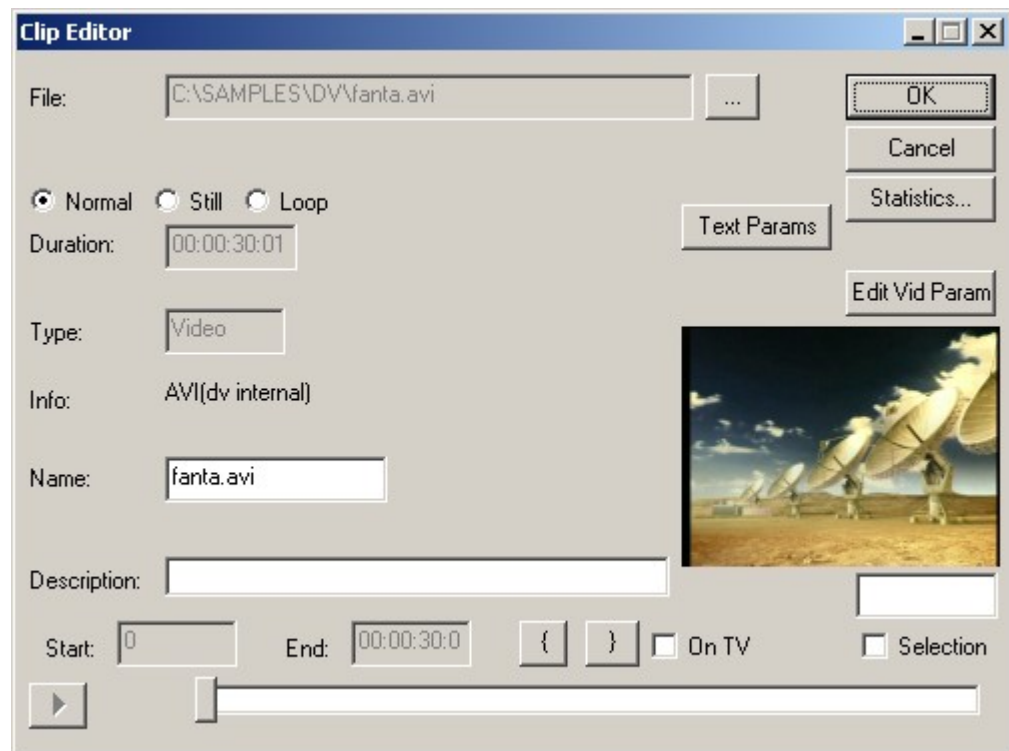
During the import process if a clip with a file already exists in the database it is not created anew but already existing one will be used. If there is no clip in the database then it will be automatically created in the same folder with parameters set by default.

## Editing of clip and block parameters

### Dialogue window of clip parameters edit

The dialogue window for editing the parameters of the clip appears immediately after adding it to the folder in the project tree or through the "**Edit**" item of the context menu.

Different dialogue windows are used depending on the type of the clip for editing its parameters:



### General parameters

Let's examine general fields of these windows.

**File & Path** - In this window a whole path and name of the file with extension which this clip refers to appears. The reference may be changed with the help of [**Browse**] key. The entry of a new file name saves all the parameters of the clip except its **Duration**. You should not change the reference for the file of other type.

**Type** - Unedited field of clip type.



**Project** - Unedited field, in which the name of the folder appears where the clips is located.

**Duration** - The duration of the clip is shown in "HH:MM:SS:FF" format. The clip duration is generally extracted from the corresponding video file or animation file and is not edited (for scripts of *Alpha Pro* software there is a special key [**Find SC Duration**] to define the duration of its replay on the computer).

Video clips with replay modes are an exception: "**Still**" – "freezing" of the last frame, or "**Loop**" – loop (for more detail see below) in these cases the duration is set clearly. Duration can be changed by setting points of input/output for a clip.

**Name** - The name of the clip is set by default. This field contains "**name of the file**", but can be changed for any other later.

**Description** - Description is an optional clip parameter and serves to remember extra information and to use it during search by **Schedule/Search for Clips & Blocks** command.

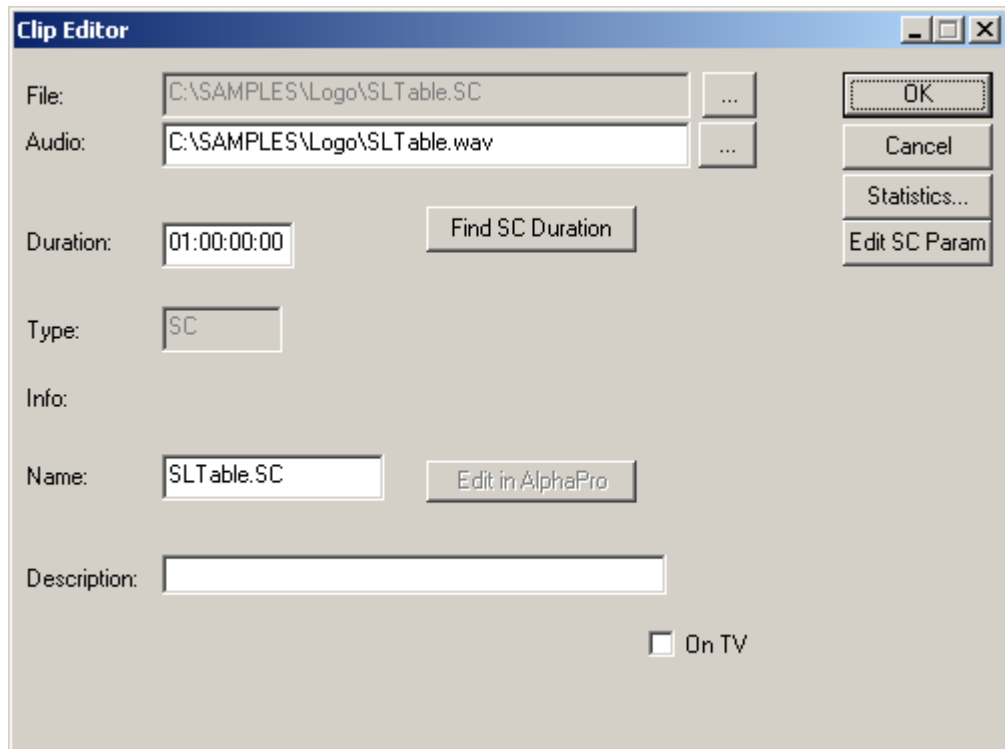
The name and the description are reflected in the schedule into which this clip will be inserted.

**OK** - Clicking [**OK**] key ends editing, entered clip parameters will be saved.

**Cancel** - Editing ends by clicking [**Cancel**] key, all included changes will be cancelled.

## Clip parameters type SC

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**Audio** - The name of a sound file which will be played only once together with the script can be entered into this field. For the convenience of choosing the sound file to the right of the field there is a [**Browse**] key. WAV-audio files PCM format, 32/44/48KHz 16 bite, stereo are supported.

If the duration of the sound file is longer than the duration of the script then the sound is cut off. If it is shorter then the script is put out to the end but already without the sound.

**First page, Last page** - By default these fields of first and last pages contain numbers 1 and 1000, respectively, which means that the script will be replayed from the beginning to the end. Setting other parameters of the pages will enable replaying not the whole script but only its part. In this case it will be required to repeat defining the duration of replay of such script once again – [**Find SC Duration**] key.

**Find SC Duration** - With the help of this button the replay duration of the corresponding script of *Alpha Pro* software on the computer. Without making this operation such clip can be created but can't be used in the schedules and blocks of **SC/Audio** type. Clip duration may be set later having called the same window for editing its parameters with the help of context command "**Edit**".

If during clip editing its first and last pages (**First page, Last page**) are changed, then it is necessary to set the duration of replay again.

Set in this way duration is still not absolute and can vary a little from time to time. It is recommended to use the value, which is shown by the system at the first test replay. The second replay made immediately after the first one usually gives a smaller value of duration

**On TV** - A set flag **On TV** means that the clip when setting its duration will be replayed on a TV screen connected to a software output of the video card.

NB! Even if the pin is not set and the clip duration is defined without the output on a TV screen, video and sound card will nevertheless be working in the mode of a "pass-through" channel.

**Edit in Alpha Pro** - This button enables to edit a script in *Alpha Pro* software. Having changed the script it must be saved (it is better to shut it too to empty the memory) and with the help of a [**Find SC Duration**] button to set its duration again.

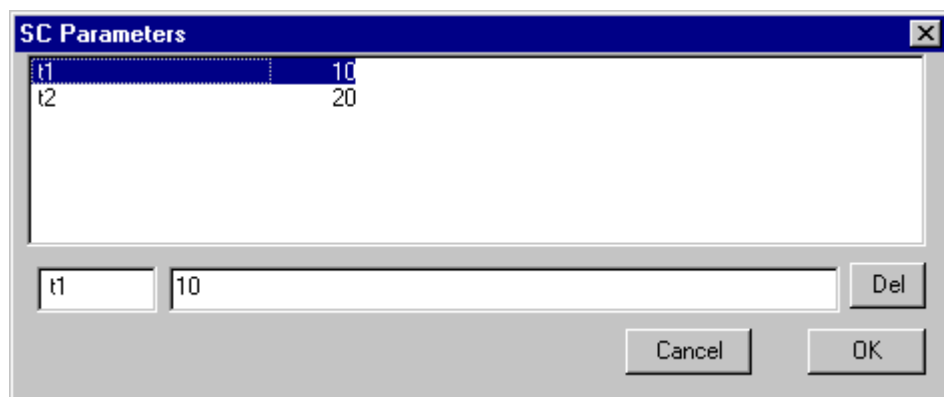
NB! You must not launch the replay of a script which is being edited straight from *Alpha Pro* software. This can lead to malfunctioning of the whole *TELE* system.

**Edit SC Param** - This button calls out the dialogue window "**SC Parameters**" to define environment variables of *Alpha Pro* software. They can be used in the templates of clip script (see "**Description of an extended version of Alpha Pro software**").

Variable quantities enable using the script of *Alpha Pro* as a template into which data will be sent during the process of output. This allows having only one script not several for every value of the variables.

Window of the output of environment variables *Alpha Pro*

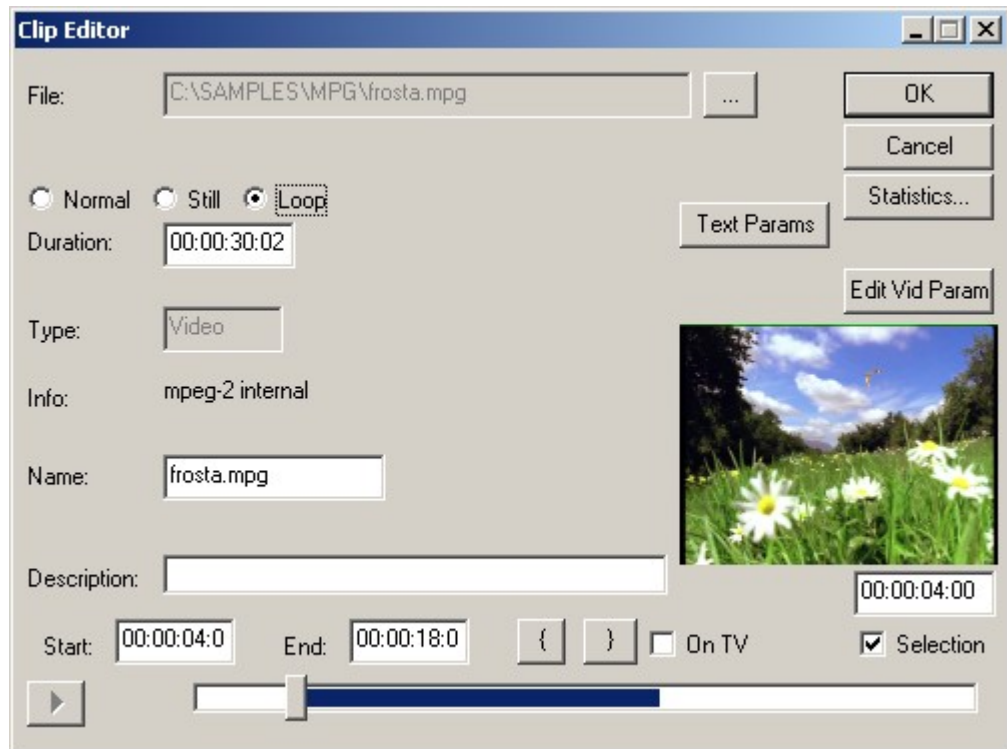
*SC Parameters*



To enter and edit parameters of environment variables in the upper window a necessary line (empty for entering) is chosen by the mouse pointer. Then below on the left the name of the variables of is entered and on the right its text meaning. "**Del**" key deletes the selected definition of the variable.

## Video clip parameters

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**Selection** - by default the clip corresponds to the whole video file but only its fragment can be used after setting the points of input/output. To fulfill this it is necessary to set the flag Selection and enter the corresponding parameters on the fields Start and End, or with the help of keys.

Thus can be realized the cutting of a clip, for instance, in order it fits the window left for it on air.

**Start, End** - The time-code of the input and output point position inside the clip file is reflected in these fields and can be set manually. The values are shown and edited in "HH:MM:SS:FF" format.



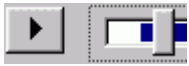
**Buttons for point entry of a clip input/ output on a current position in a video file** - points of input and output may be set using the current position on a timeline of clip replay (see below). This enables choosing a proper frame changing its time-code in Preview time window and looking cards through at the output. After clicking the button for choosing the point, its time-code is copied into the corresponding field Start or End.



**Normal / Still / Loop Modes** - after video file output its last frame will remain on the screen till the total duration of the clip shown in the field **Duration** expires if **Still** mode is chosen.

To create a repeating display picture it is necessary to choose **Loop** mode. In this case the video file will be replayed recurrently at a set in the field **Duration** time.

In both cases provided that the value in the field **Duration** is smaller than the duration of the video file together with the points of input and output, then only its beginning is replayed.

**Preview window** - on the right of the **Description** comment a tiny image of a current stop frame of the video clip is displayed if the on TV flag is not set. (if the flag is set then such output is realized through the video card).



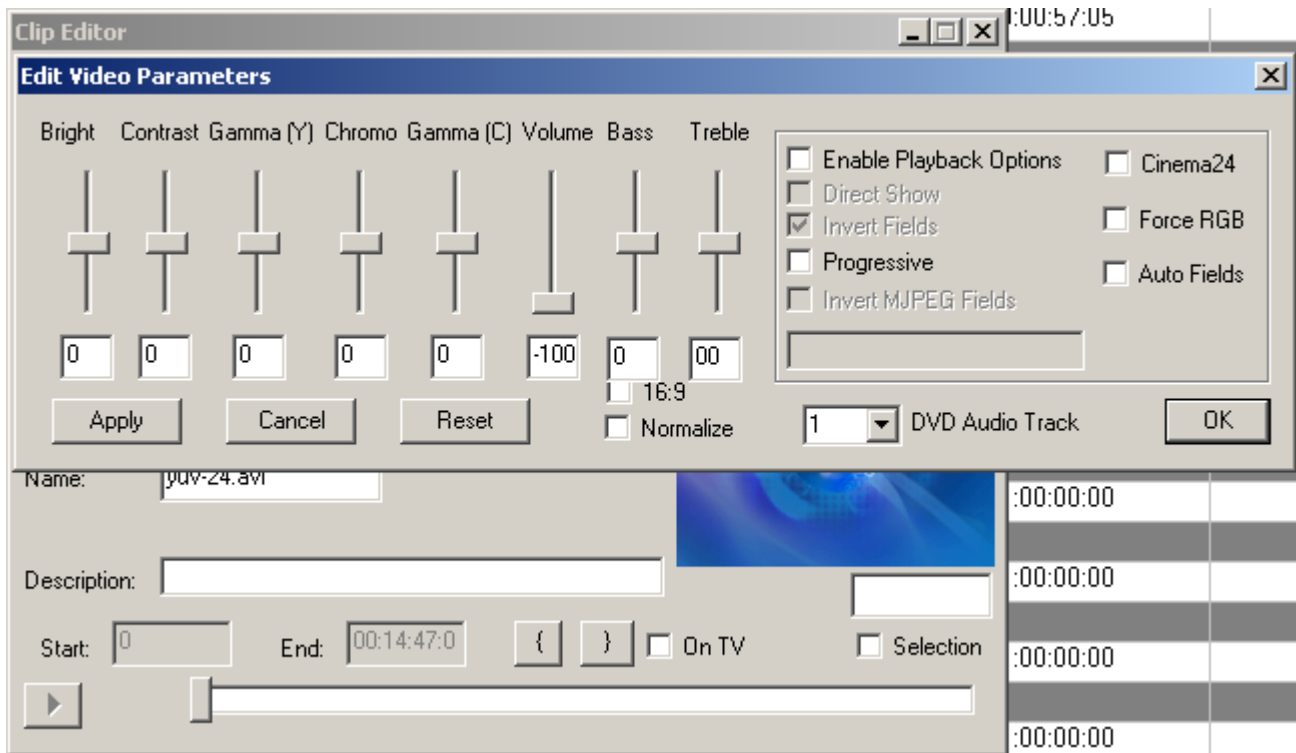
**Key** , **"engine" and timeline for Preview-replay** -  key launches or stops the replay of the clip video file through the video card as long as the flag **On TV** is set. To the right of the button there is a "engine" corresponding to the current frame of the file output in the window. During the replay the engine is moving along the timeline of replaying. Inside the timeline in blue color area corresponding to the real used part of the file can be highlighted (from the point of input to the point of output).

"Engine" on the timeline of replay is moving also with the help of the scroll. During the chosen engine the pressing of the buttons of horizontal arrows enables moving to the neighbouring frames of the video clip. [Home] and [End] buttons move the current position to the beginning and the end of the clip respectively.

**Preview time** - time-code of the current frame is displayed in this field in "HH:MM:SS:FF" format. It is possible to change the parameters of the field directly by making the corresponding frame current.

**On TV** - set flag **On TV** makes the clip being replayed on a TV screen connected to the software output of the video card.

**Edit Vid Param** - this key calls out the **"Edit Video Parameters"** dialogue window for the input of the parameters for the correction of the sound level, brightness and color transmission which will be realized in real time during the clip replay.



**Window for entry of parameters for correction of the sound level, brightness and colour transmission**

*Edit Video Parameters*

The value of correction parameters may be changed by a corresponding "engine" or in a numeric value below. The values are changed there from "100" to "-100". "0" corresponds to the lack of change of this parameter, "100" – a maximum permissible value, and "-100" – minimal permissible. The following video clip parameters are available for changing:

- **Brightness**
- **Contrast**
- **Chromo** – color richness;
- **Gamma (Y)** - gamma-correction of brightness;
- **Gamma (C)** – gamma-correction of color;
- **Volume** – sound level;
- **Normalize** – flag sets the normalization of sound level when the level of its reinforcement is calculated automatically (it is possible to achieve this way the leveling of the sound level in various clips).

**Parameters of video clip replay by the system**

*Playback Options*

Parameters of replay for different video clips can vary from each other as the system supports different video file formats. These parameters refer to a definite clip and prevail over similar ones set for the whole system in the options of *VideoPlayer* software (see below).

After setting the flag **Enable Playback Options** the following parameters are available for the change:

**Direct Show** - this flag enables to use an external codec *Direct Show* for this clip if the built-in support of decoding its format in the system does

not satisfy. In particular, this enables the use of external codec while reproducing the files in *MPEG-2* or *DV type 1* format;

***Invert Fields*** - this flag enables to change the sequence order of neighbouring field in time. The flag should be set if the image on the video output is not smooth - "jitters";

***Invert MJPEG field*** - various video cards working in *MJPEG* format store information in *AVI*-files differently. If at the output the fields are mixed between themselves (neighbouring lines of different parity go in the wrong order), it is necessary to set this flag. In this case the movements are smooth, but on slanting lines of static frames there could be seen reversed jaggiest lines.

***16:9*** - this flag makes a scale and trimming on the sides of frames of the video clip, meant for the screen with aspect correlation of sides 16:9. It is important to remember that the video clip must be created for progressive not interlaced.

***Apply*** - this key sets the video clip entered parameters of correction; the result of their change may be immediately seen during the ***Preview***-replay through the video card.

***Reset*** - the key resets the correction of parameters of video clip output (value "0").

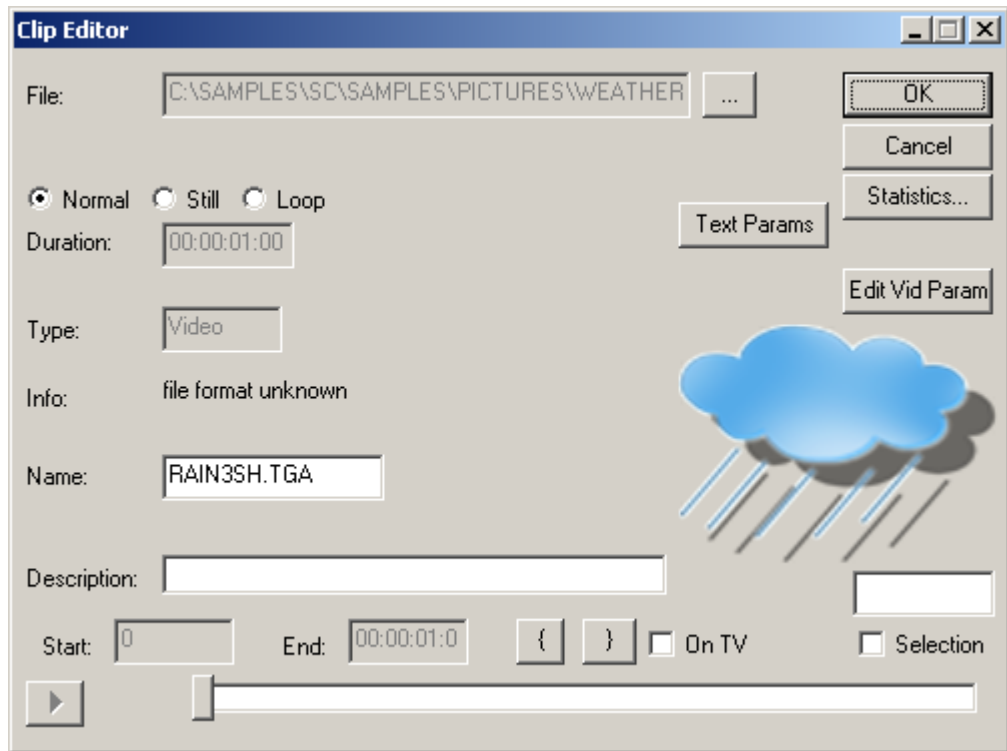
## Video clip – a static image

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If a 24-bite TGA-file is chosen for the clip then the static image with duration in 1 second is set by default is created (this duration can be changed having set ***Still*** mode for a clip). Created clip has type ***Video***, and in particular it is possible to edit its parameters – key [***Edit Vid Param***]. 32-bite TGA files as clips are supported only in TELE Infochannel package.



## Options



C1

## Video streams

*Video streams (Streams)* are an exception, their parameters are fixed and set during the system installation depending on available means of input of video signal digital stream (reception from the satellite, digital video camera etc.).

The duration of such clips is not defined exactly (thus in a video block they have duration of 1 hour set by default, and in the schedule they occupy all maximum available free space between neighbouring elements).

## Creation of blocks and editing their parameters

### Dialogue window for editing block parameters

The dialogue window for editing block parameters appears immediately after its editing into the media tree or through the "**Edit**" item of context menu.

Depending on the type of block, the window of its parameters looks differently.

Let's first examine general fields of these windows.

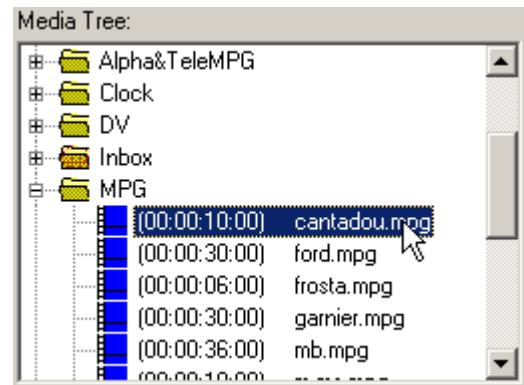
### General parameters

**Media tree** - in the left hand corner of the windows for block editing there is a media tree which has been described in detail above. This tree is used for choosing the clips and drag (*Drag & Drop*) them with the help of a mouse into the corresponding fields in the window for editing.

Only clips used for the usage in a given block type are reflected in the media tree. They can be edited, renamed and replayed from there. Adding clip into a block is realized with the help of "**Add to block**" command from the context menu, but it can be done by *Drag & Drop* method.

A clip is inserted before the chosen in a corresponding window similar clip (element) of a block. If the clip in the window (on a timeline) has not been chosen then it is added to the end of the list.

**Project** - an unedited field in which there is the name of the field or the block is located, is output.



**Name** - the name of the block may be changed in an arbitrary way.

**Comment** - a comment is an arbitrary parameter of the block and serves to record extra information for its later use during the search on **Schedule/Search for Clips & Blocks** command.

The name and the comment will be later indicated in the schedule when the block will be entered there.

**Duration (Total Duration)** - unedited field of block duration is output in "HH:MM:SS:FF" format.

Planning to use the block in a definite empty window in a schedule, it is necessary to watch that the duration of the block does not exceed the size of the window (otherwise such block will not be replayed).

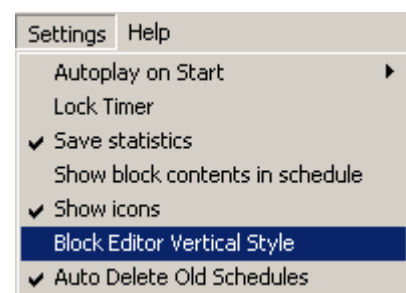
**OK** - clicking [OK] key, editing finishes, all entered parameters of the block will be saved.

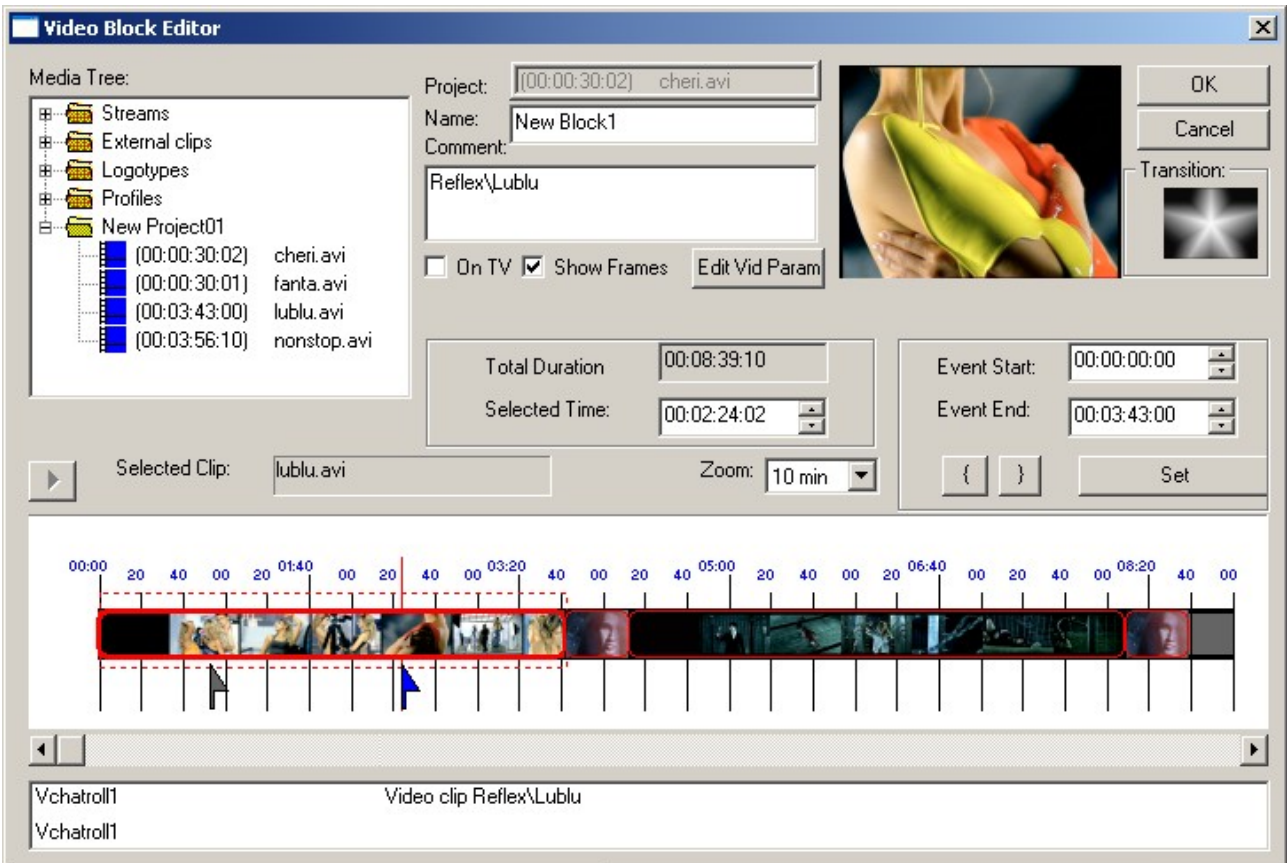
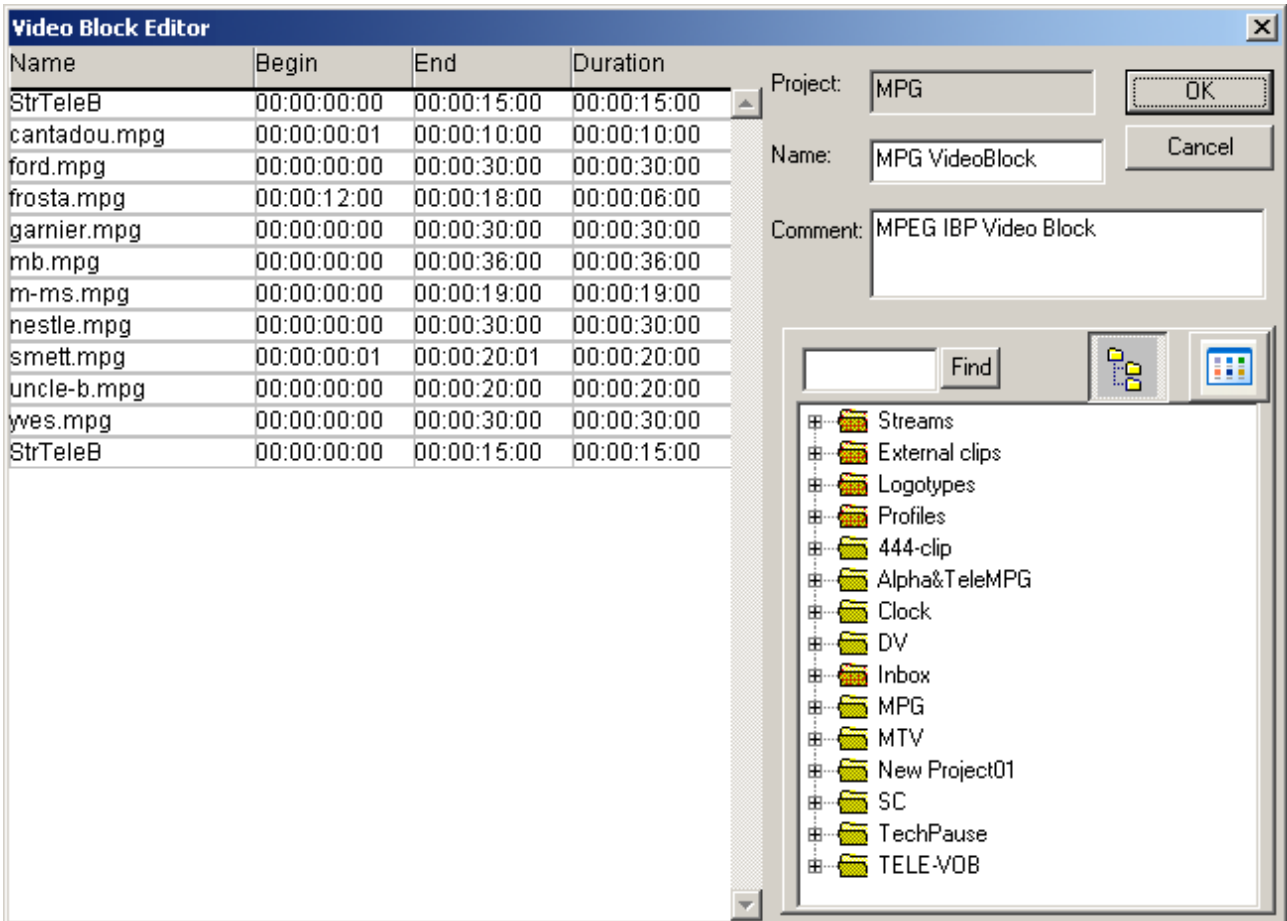
**Cancel** - clicking [Cancel] key, editing finishes, all entered parameters will be cancelled.

## Video block editing

Two modes of video block's composing - standard and extended are available. TELE makes it possible to use on default extended interface that provides different possibilities to organize video block: clip cutting, setting of graphic design for branching between video clips, setting of derived events, etc. The second standard mode of video block's compilation allows only to specify a sequence of video clips, and that is all.

This mode is useful when you need to operate with big quantity of video clips and it is not required to change them. The switching between the modes is exercised from the menu.





<b>Clips timeline</b>	<p>In the middle part of the dialogue window of <b>Video Block Editor</b> there is an area where the clip sequence of the block is indicated in the form of a graphic line.</p> <p>Video block clips are presented in the form of a sequence of rectangles filled by their frames (during the set flag <b>Show Frames</b>). Above the line a temporary net is shown. The duration of the visible fragment of the block seen in the window is set in the field <b>Zoom</b> in order to show the rest of the block on the line at the bottom of the editor window there is a line of the scroll.</p> <p>The current clip (<b>Selected Clip</b>) on the line is chosen by the mouse cursor and around it there is a red dotted line. This line shows the full duration of the clip even if it has points of input and output differing from its beginning and end, respectively.</p> <p>The place of the current position in the block is shown by a red vertical bar.</p> <p><b>Selected Time</b> - it is possible to drag the clips from the media tree of the window onto the line. They will be inserted in front of the clip, above which you clicked the mouse left button or after the last one if the cursor pointed at the area of the line to the right of the clips. The clips are inserted in the same way (in front of the current or in the end) on the command "<b>Add to block</b>" of its context menu in the media tree.</p>
<b>Context menu of the clip line</b>	<p>By clicking the right button in the window of the clip line appears a context menu containing the commands:</p> <ul style="list-style-type: none"> <li>• <b>Delete Clip</b> – to delete the current clip from the block;</li> </ul> <p>Other commands refer to the secondary events of the video block (described in more detail in chapter 2):</p> <ul style="list-style-type: none"> <li>• <b>Add Secondary Event</b> – to add a secondary event into the current position inside the video block – <b>Selected Time</b>;</li> <li>• <b>Delete Secondary Event</b> – to delete a current secondary event;</li> <li>• <b>Edit time</b> – to change the time of the beginning of the current secondary event.</li> </ul>
<b>Current clip Selected Clip</b>	Unedited field with the name of the current clip chosen on the line. At the right area of the current clip there is a button [ <b>Delete</b> ] with the help of which deleting operation can be proceeded.
<b>and button to delete it Delete</b>	At the beginning of block editing the current clip is not chosen, to choose the clip it is necessary to click on it by the mouse left button.
<b>Current position in the block</b>	The field where the current position in the block is indicated and may be set in " <b>HH:MM:SS:FF</b> " format.
<b>Selected Time</b>	The current position in the block and the current clip are not connected between themselves automatically. The current position of the block will

be changed while the current clip is not being changed if you click the mouse left button on the line outside the clip.

**Key for Preview-replay**



key launches or stops the replay of the video block from the current position through the video card if the **On TV** flag is set.

**Flag On TV**

Set flag **On TV** leads to the fact that the video block will be output while editing through the video card.

**Flag Show Frames**

Flag **Show Frames** sets the reflection of the clips on the line with the output of its frames. If the flag is not set then the name of the clip is shown inside the rectangle of the clip and the current clip will also be colored in pink.



**Effect of transition between clips in the block**



In the combo box **Transition** the effect of transition may be chosen (alpha wipe – *Alpha Wipe*, or mixing – *Cross Fade*) between the current and previous clip in a block. During the production of this effect the video image of the end of one clip in a definite way gradually changes into the starting frames of the following clip (the same happens with the sound – it is gradually replaced by the sound row of the following clip).

Value "**None**" in the list corresponds to the lack of transition effect (it happens momentarily). The parameters of the transfer effect refer only to the current clip in the block and may vary in different clips.

The list of alpha wipe is formed according to the contents of sub-catalogue **Wipe** in the catalogue where *Alpha Pro* software and *TELE* system are set. In this -sub catalogue there must be alpha files of wipes of size 720x576 pixels, 256 colors, which are used for similar effects in *Alpha Pro* itself (see the description of *Alpha Pro* software).

**Time of implementation of alpha wipes or mixing between the clips in a block**

Time of implementation of alpha wipes or mixing between the clips in the block in frames in the combo box situated below the **Transition** field.

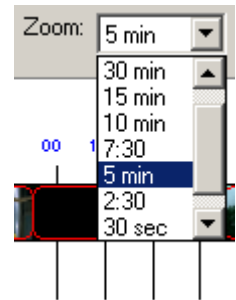


Value "0" means lack of transition effect. During nonzero value the current clip is shifted on the corresponding number of frames to the side of the previous one.

**The scale of block output in the window of clip timeline**

*Zoom*

The duration of the block fragment is set through the field **Zoom** corresponding the duration of the line in the editing window. By choosing a relatively short duration (a bigger scale) from the list of possible values it is possible to achieve a more correct positioning with the help of the mouse cursor inside the block. To show on the line the rest part of the block, there is a line of scroll under it.



Opening the block for editing, the scale is chosen automatically according to the block's duration.

**Margins of current clip start and end**

*Clip Start*  
*Clip End*

The fields in which the positions of clip start and end are shown and may be entered digitally positions of the current clip start and end respectively. Values are entered and edited in "HH:MM:SS:FF" format.

This way shortening of the clips can be realized, for instance, to make it fit in the window left for it on air.

To add the clip into the block, the primary values of these parameters are taken from the settings of the clip. Later while editing the block they may be altered for other and this will refer only the clip entry into the block, settings of the clip parameters in the media tree will remain unchanged.

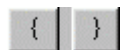
**Button for setting the current clip start and end**

*Set*

Changes of clip start and end, entered in a digital form in the margins **Clip Start** and **Clip End**, are finally set by clicking the [**Set**] button. If it cannot be done and it is easier simply to move to another clip then the changes will not come into effect.

Clip start and end may be set using the current position on the line of the clips. This enables choosing the corresponding frame changing its time-code in the window **Selected Time** and looking through the cards at the output. After pressing the key of the point selection its time-code is indicated in the corresponding field

**Keys for clip start and end in the current position in a block**



**Clip Start** or **Clip End** - pressing the keys, the points' output is finalized, it is not necessary to set them with the help of [**Set**] key is not required.

This way the clip fragment used in the block can be reduced. If it is necessary to increase it, this can be done both manually through the fields **Clip Start** and **Clip End** and through the current position inside the block - **Selected Time**. It is **obligatory** to

Highlight the required clip on the line and the current position move out of it but inside the rectangle of dotted lines. Pressing the button of the input/output point sets its new value.

**Key for entry of parameters for color correction of the current clip**

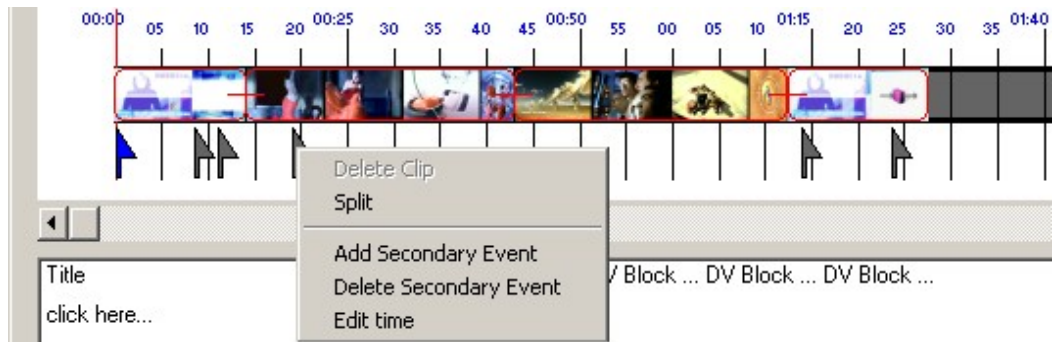
*Edit Vid Param*

This key calls the dialogue window "**Edit Video Parameters**", to edit the parameters for the correction of sound level, brightness and color

transmission which will be fulfilled in real time during the replay of the current clip in a block, the parameters themselves and the method of their editing has been described above.

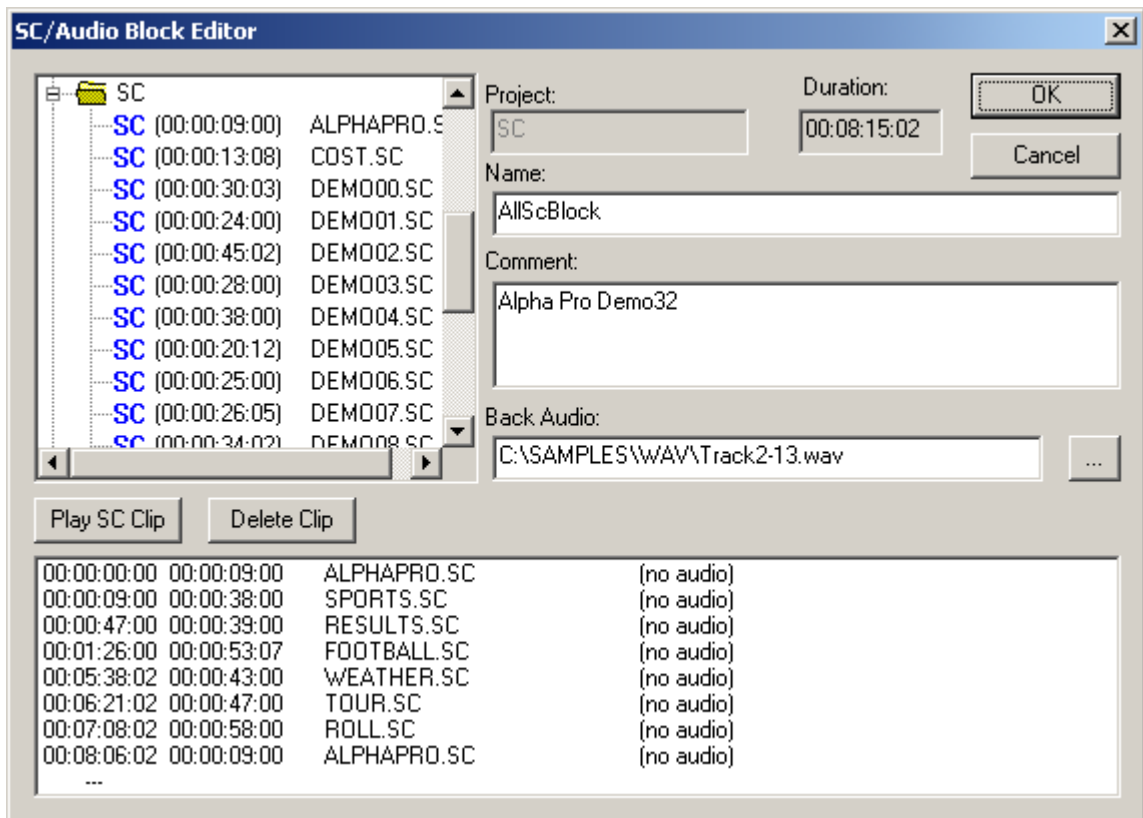
The key is added on purpose for the convenience of correction of sound level and color transmission during the setting of the shifts from one block clip to the other to avoid sharp jerks. Changed parameters are set for the clip globally and are used during all other entries of this clip in the schedules and blocks.

**Timeline of secondary events and the window of objects connected with them**



Under the line of clips there is connected with it a timeline of secondary events and the window of objects. It is described in more detail below in Chapter 2.

### Block editing type SC/Audio





**Clip line of SC type**

There is a line which is filled with clips of type SC (scripts of *Alpha Pro* software probably having their own accompaniment) at the bottom of the dialogue window of block editing parameters of type **SC/Audio** (**SC/Audio Block Editor**).

Clips are also inserted on to the line with the help of dragging from the project folder tree (*Drag&Drop* method). A clip is placed in front of the highlighted clip on the line or after the last one if there line "---" is chosen. Clips are also inserted on "**Add to block**" command of its context menu in the media tree.

Clips are chosen by clicking the mouse left button when its cursor is pointing at it.

The following parameters of the block clip are indicated on the line:

- Time of clip start in "HH:MM:SS:FF" format;
- Duration of the clip in a block in "HH:MM:SS:FF" format. If the duration of the clip is not defined then it is indicated as "?:?:?:??.", and it is necessary to define it with the help of [**Play SC Clip**] key;
- Name of the clip;
- Full name of the sound file of clip accompaniment if such exists.

**Delete Clip from the block**

Clip deletion is realized by clicking [**Delete Clip**] key.

**Defining of the duration of the clip of type SC**  
*Play SC Clip*

If the duration of clip replay of type SC has not been defined during its creation then if it is added on to a line the whole duration of the block will also not be defined (indicated as "?:?:?:??."). In this case it is necessary to highlight the clip on the line and click [**Play SC Clip**] key.

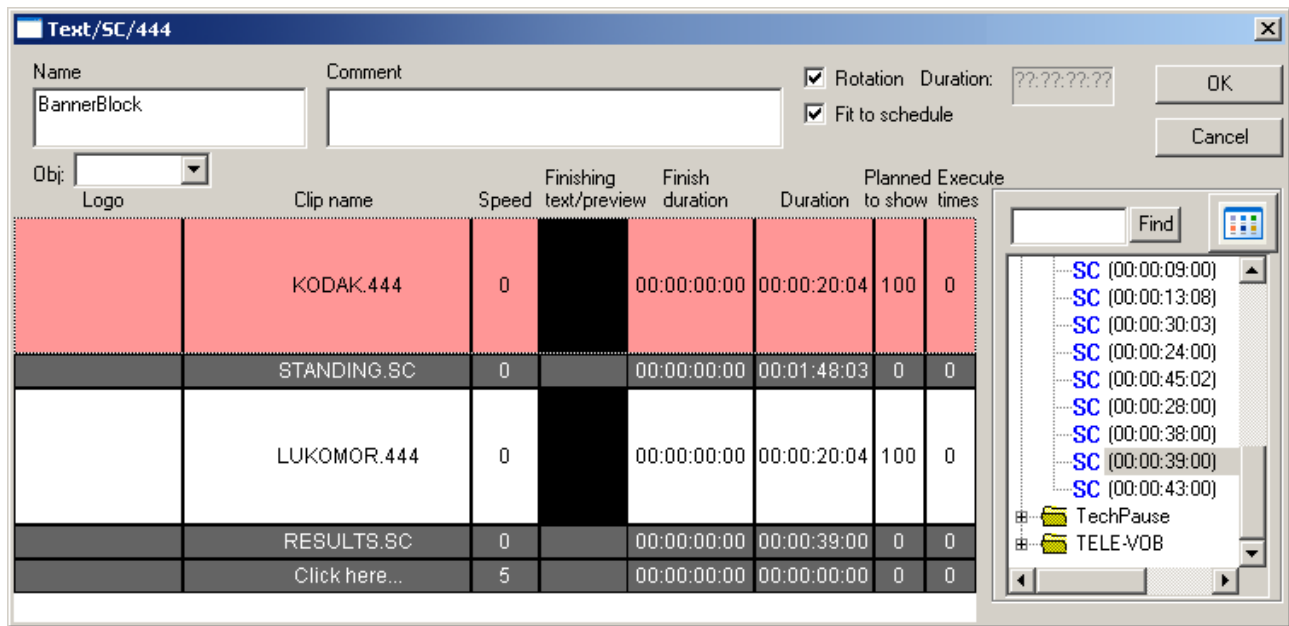
**NB!** Defining the duration of the clip type SC video and audio card work in the "pass-through" channel.

**Background sound accompaniment***Back Audio*

In **Back Audio** field it is possible to enter the name of the sound file which will be replayed together with the block created general uninterrupted sound accompaniment of all its clips. For convenience of the choice of the sound file to the right of the field there is a [...] button. WAV – audio files of PCM format, 32/44/48KHz, 16-bite stereo are supported. If the duration of the sound file is longer than the duration of the block then the sound is broken. If shorter then the block is output up to the end but already without the sound.

If the clip in the block has its own sound accompaniment then during the output the sound from both files will be mixed.

## Text-banner block editing



### Table for description of animation elements (banners) and crawl lines of the block

The left part of the dialogue window for editing of text-banner block parameters occupies the table for the texts of crawl lines and animation with alpha-channel (banners). The line in the table, where parameters of this element output are set by the system, corresponds to every element of the block.

The table has the following columns:

- **Text/Clip** – a sign that the element of the block is a banner, i.e. for animation clips with alpha-channel of format 444"**Clip**" is output in this column;
- **Logo** – in this field the value of the variable of the system **%LOGO** is set. Through it, it is possible to transmit the reference to an animation or static logotype for the foreground composition which is output above the block during its replay in the schedule;
- **Clip name/Text** – field for the text input of the creeping line. In case of banner the name of the clip and its commentary are indicated there.
- **Speed** – field for speedy entry of the crawl line. In case of banner the value of speed equals "0" and is ignored;
- **Finishing text/preview** – field for the text entry which will be output after the end of creeping line or icon-images of the first frame of the banner;
- **Finish duration** – field for entry in "HH:MM:SS:FF" format the duration of the text demonstration after the output of the crawl line. If there is no text but the duration is indicated it means that the time of pause is set when the output of the line on the screen is finished;
- **Duration** – general duration of the output of the element of the block in "HH:MM:SS:FF" format;

- **Planned to show** – field for entry of the planned number of demonstrations of the given element in a block in rotation mode (see below);
- **Execute times** – field for the number of executed demonstrations of a given element in a block in the rotation mode (see below). If this number exceeds **Planned to show**, then this element will not be output.

The last in the table is always a special empty line of zero duration - "00:00:00:00".

Lines of the table are chosen with the help of the mouse left button when the cursor is pointing at it. If the creeping line is chosen then the text cursor appears and it is possible to edit the text which has been entered before.

Clicking the mouse right button above the line in the table calls the contextual menu which contains the following commands:

- **Delete** – delete the current line;
- **Insert** – create a new element of the block in front of the current one and enter the text of its creeping line with the help of the keyboard (while entering and editing it is possible to use standard *Windows* operations of copying the text through the *Clipboard*)

**Load** – create a new element of the block in front of the current and enter the text of its crawl line from the text file.

Clicking the mouse right button above the line in the table calls the contextual menu which contains the following commands:

- **Delete** – delete the current line;
- **Insert** – create a new element of the block in front of the current one and enter the text of its creeping line with the help of the keyboard (while entering and editing it is possible to use standard *Windows* operations of copying the text through the *Clipboard*)

**Load** – create a new element of the block in front of the current and enter the text of its crawl line from the text file.

Animation clip is entered in the table the same way of dragging it from the project folder tree (*Drag&Drop* method), it will be located in front of a highlighted line.

Clips can also be inserted on "**Add to block**" command of its contextual menu in the media tree situated in the right part of the dialogue window.

#### *Logo for block element*

Its own dynamic or static logotype can be set for every element of the block (creeping line or banner). It will be output by the system in the foreground composition (see below) set for this block in the schedule. The reference to *TGA*-files or image file is transmitted to the composition via the variable of the **%LOGO** system which can be used as the value of parameter **Picture** of composition layer with class object **Logo**.

Button [...] on the right in the field which calls the standard window of name of the file selection is used to enter the name of TGA-file of logo image.

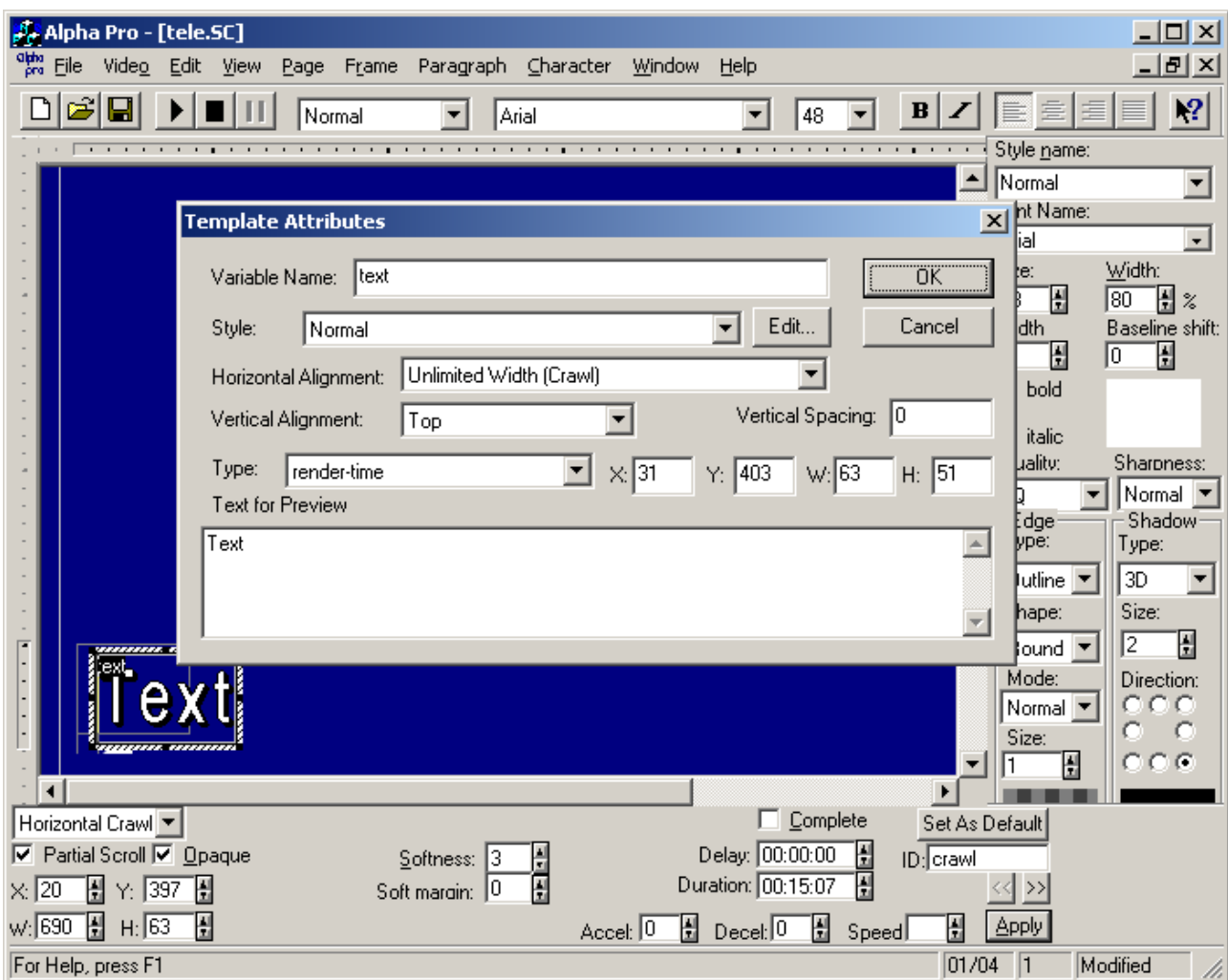
If the name of the file ends in numbers and in the same catalogue there are files which names have the same beginning and the numbers at the end of the name compose a number sequence, then all these files are considered as an animation logotype and will be replayed in cycles.

### Text of the crawl line

The text is entered in one line and can be edited in a general for *Windows* way.

### Text and Finishing text

The style of the text output on the screen (by default) is set in the parameters of templates of *TELE.SC* script connected with *render-time* variable with **text** which is located in the catalogue where *Alpha Pro* software is installed.



If separate parts of the text of crawl line requires to have its own style set then at the beginning of the part the "**Style\_of the part**" sequence is entered and at the end "**Old\_style**" (the name of the style must not contain gap symbols). With all these the styles kept in *TELE.SC* script are used.

**Duration of crawl line output**

During the input and editing the text of the crawl line in the column **Duration** the exact duration of its output on air considering following delay is immediately seen- **Finish duration**.

*Duration*

In the field **Duration** (above the table) the total duration of the output of the whole block is indicated. This enables controlling the duration of the block so that it does not exceed the time given to it on air.

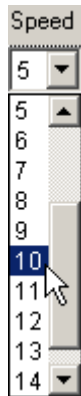
**and its speed**

*Speed*

The duration of the output is counted from the time of appearance of the first symbol of the line on the screen till the moment of its disappearance considering the gaps in line's beginning and end.

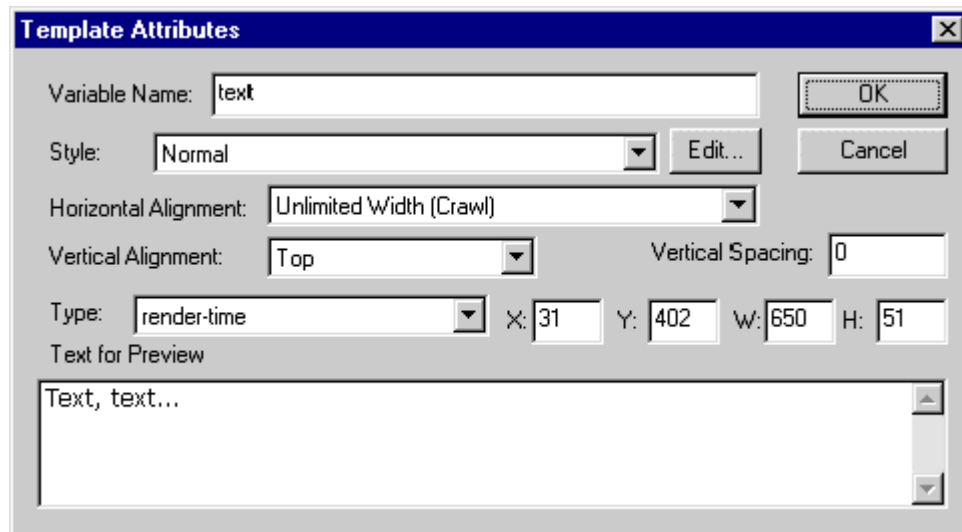
The speed of movement of crawl line **Speed** is set by a conditional number ("1" – the slowest movement). The real movement speed of the line on the screen depends not only upon the **Speed** parameter but also upon the width of the area of its movement.

In any case during the output the system produces the output of the crawl line on the screen in such a way so that it fits into the time left for it. Changing the speed parameter value it is possible to achieve the output of a very long text within a set time.



**The change of output area location of block crawl lines of and the style of formatting of their text**

The location of the output area of crawl lines of text-banner blocks is set in the *TELE.SC* script on the page with *ID=crawl1* identification. On this page it is possible to change in a required way the location of the margins of the area of effect output and move inside it a template connected with render-time by the variable **text** of this script in *Alpha Pro* software environment (for more details see **“The description of an extended version of Alpha Pro software”**)



In the same template it is possible to choose and edit a different style with the help of which text symbols of crawl lines will be indicated on the screen. It is also possible to vary the values of the fields **Vertical Alignment**, **X**, **Y**, **W** and **H**. The most important thing is that the template must be fully arranged on the page inside the area of its effect - *Partial Horizontal Crawl*.

*Style text*

**Style** option of **Template Attributes** window sets the style for the text of the crawl line. The style is taken from the *TELE.SC* script.

## Rotation inside text-banner blocks

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To switch on the mode of rotation of elements of text banner block it is necessary to set flag **Rotation**. In this mode all elements of the block are output in cycles in turn filling in all the time left for the block in the schedule.

In rotation mode the calculation of the quantity of the demonstration of every element is made (**Execute times**) and if it exceeded the planned (**Planned to show**) then the next output of this element is skipped.

Planned number of demonstrations of every element is output during the block editing, the number of fulfilled shows is changed automatically but can be modified.

**Duration of text-banner block in rotation mode**

Duration of text-banner block in rotation mode is defined by an unusual method as a sum of duration of its elements, in other words, block elements maybe output in cycle not only once during rotation mode.

Thus it is set in the **Duration** field above the table of elements if the flag **Auto** is not set.

If the flag **Auto** is set, then such block in the schedule tends to complete by itself all empty space left for it, i.e. the gap is completed fully.

If the end time of block in the schedule during rotation mode happens not at the end of demonstration of some of its element, then the output finished in the middle and such a demonstration is not shown in the report.

## Chapter2. Foreground compositions (logotypes)

### General description

*Foreground compositions (logotypes)* consist of static and dynamic images, digital or analogue clocks etc. these compositions are output above the clips and pass through video signal by an extra layer.

Foreground compositions are registered in a special media tree – **Logotypes**. Every such composition has its unique name which during the creation is set by default but can be later changed for any other during the editing parameters of the composition.

Compositions registered in the system are used in the schedules and video blocks. Their names are selected from the list.

*Objects* of definite types are included in the composition. Every object has its unique name, occupies a rectangular *area* on the screen and has also a set of extra *parameters* of the *object* which depend upon its type. One and the same object cannot be included twice in one and the same composition.

The name during the creation of the object is set by default but can be later changed for any other. Adding the objects to the composition is realized according to the names considering their type.

Rectangular areas of the objects may cross but cannot go beyond the limits of the screen.

Every object in a composition occupies a definite layer the order of which can be changed. Because of the fact that the objects on the screen can cross (their areas) and that some objects modify the contents of the clips and layers of the composition located below, the order of the layers is very important.

An object exists only if it enters at least one composition. Such entry of the object has its independent from other compositions *layer parameters* (this is besides the parameters of the object itself). The system during the change of schedules of one composition for another containing one and the same object provides a quality transition between them on the screen considering the changes (or lack of changes) of parameters of corresponding layers. i.e. if the object in both compositions similar parameters then the change of compositions in the schedule will go imperceptibly for it.

Duration	Logo	Profile
00:00:05:00	Alph	Edit AlphaProOn Add Logo Populate Logo
00:00:01:00	Alph	(default:) (no logo) MTV_Logo StrTeleB VSS2005Ov AlphaProOff
00:04:31:00		AlphaProOn
00:08:15:02		TXT Logo Time BG_logo VSS2005ClockOv RTV-Clock ATV my_group
00:00:05:00	Alph	
00:00:01:00	Alph	
00:00:15:00	StrT	
00:00:15:00	Az-C	

#### Objects of the composition

#### Composition layers

#### Objects and change of compositions in the schedule



### Classes of composition objects

Objects in a composition may be of several classes: **Static**, **Logo**, **Clock**, **Crawl**, **Window** and **3D Text**. Every class is responsible for its type of images in the composition:

- **Static** – indication of static and dynamic text;
- **Logo** – indication of static and dynamic logotype;
- **Clock** – analogue clock;
- **Roll\*** - output of vertical «roll»;
- **Crawl\*** – output of crawl line in the area of object rectangular;
- **Window\*** – scaling and entry of the image achieved in lying below layers (clips and objects) into the size of object rectangular;
- **Overlay** – output of the signal from external source in the window

\*- only in Infochannel version

Such elements as digital clock or temperature readings etc can be realized through the objects of **Static** type.

### Static and dynamic images in the foreground composition

It is often necessary to create this or that image while creating a composition. This image can be either static or dynamic – an animation logotype, clock hands etc.

An image is created with the help of combo box **Picture**. If it is empty and / or a new image must be added to it, then the button [...] to the right of the list which calls the standard window for the selection of file name is used for it.

If the name of the file ends in numbers and the same catalogue has files the names of which have the same beginning and the numbers at the end of the name compose numeric sequence then all these files are regarded as an animation logotype and will be replayed in cycles.

When it is not required to enter the image then from the list it is necessary to choose an empty line. All the input images before are remembered in the system and are entered into the combo box later on.

File format must be *TGA*, 24 bytes for opaque images and 32 bytes with alpha-channel if it is required to set a definite extent of transparency for some areas of the image.

Dynamic images are replayed with the speed of succession of 50 files per second. Every such file must have full but not half vertical size and must be created by the software for the output in the progressive scan and not in interlaced.

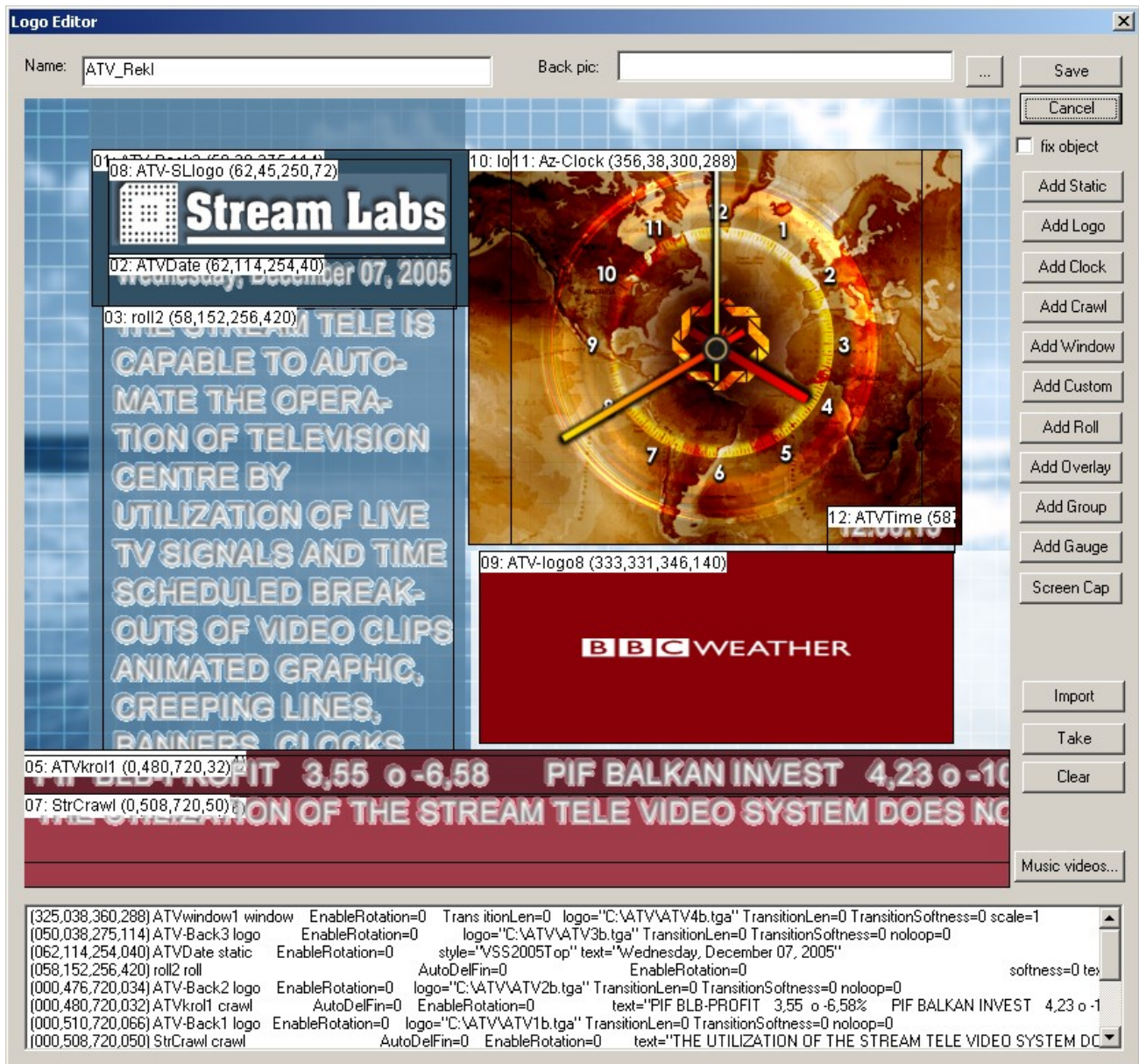
You should remember that dynamic images are replayed by the system from the operating memory that is why its volume restricts the number of used files and their size.

Generation software of dynamic images often doubles the first and last frame of succession thus during its use the effect of «dying away» during the cycle replay appears. To avoid this it is necessary to delete one of the two files.

## Creation and editing of foreground compositions

### Creation of foreground compositions

Adding the foreground composition into **Logotypes** folder of the project tree is realized with the help of "**Add Logo**" option of context menu of this folder. After choosing this item of the menu the dialogue window for editing compositions "**Logo Editor**" immediately opens. The name of the composition is given by default at the beginning but can be changed at any time for another. This same window is called for editing the parameters of already existing composition while choosing "**Edit**" option of its context menu.



**Name** - Unique name of the composition –may be changed arbitrarily.

**Save** - Pressing [**Save**] key finishes editing and all input parameters of the composition will be saved.

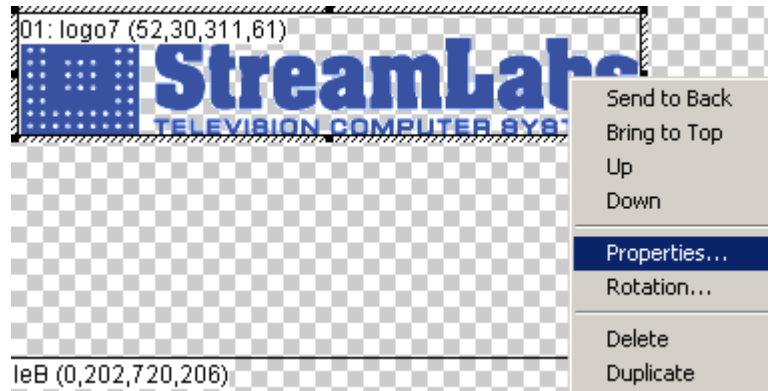
**Cancel** - Pressing [**Cancel**] key finishes editing and all input parameters will be cancelled.

### Screen area with rectangles of objects

Below the name of the composition in a dialogue window there is an area corresponding to the screen where in the form of frames its objects are located.

It is possible to make the object current by clicking inside its rectangle by the mouse left button.

The current (chosen) object is surrounded by a special frame with six boxes. It is possible to change the size of the rectangle of the object by moving the boxes with the help of the mouse.



It is possible to move the object in the area in a usual way by clicking the mouse left button when its cursor is inside the corresponding rectangle and then moving it into the right place.

Rectangles of objects may cross but cannot go beyond the limits of the screen.

Inside the rectangle of the object "**number or layer: name of object**" is output. Layer "**01**" corresponds to the closest to the spectator objects; the other layers with objects are located in the order of increase of its numbers below it.

By clicking twice the mouse left button inside the rectangle of the object or through the **Properties** command of the contextual menu called by the mouse right button, it is possible to call the editing window of parameters of object and layer.

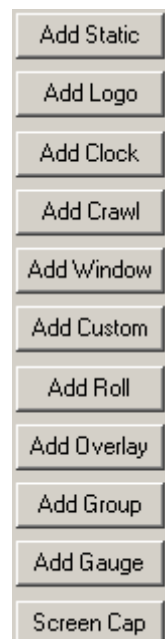
### Insert layers with objects into a composition

To enter the layer with an object of a definite class, the following keys are used:

- **Add Static;**
- **Add Logo;**
- **Add Clock;**
- **Add Crawl;**
- **Add Window;**
- **Add Overlay.**

If the objects of a definite class have not been created yet, it is possible to do during its adding into a composition.

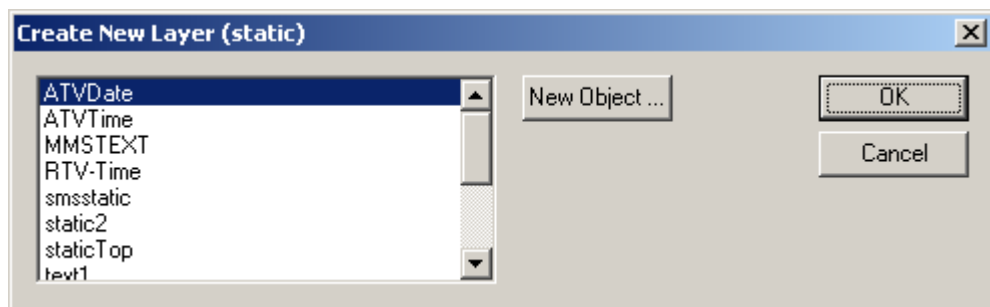
A layer with an object is inserted in front of the current layer chosen at a given moment in a composition. Later on it is



possible to change the sequence of layers with the help of **Bring to Top**, **Send to Back**, **Up** and **Down** commands (see below).

### Dialogue window of entry of the layer with an object into a composition

After clicking the key for entry of the layer with an object into a composition, a "**Create New Layer (...)**" dialogue window appears with a list of objects of **corresponding** class already created in the system and not used in edited composition. It is necessary to choose an object in the list and click **[OK]** key. If there is no required object in the list or it is empty then it is necessary to click **[New]** key and after that there will appear the "**New Logo object editor**" window for the input of a name of a new object. In the field for the name there will be suggested a new standard unique name which can be immediately altered in an arbitrary way. A new object with parameters chosen by default is added to the corresponding list of "**Create New Layer (...)**" window after the name input and pressing **[OK]** key. It can now be selected and added to a composition.

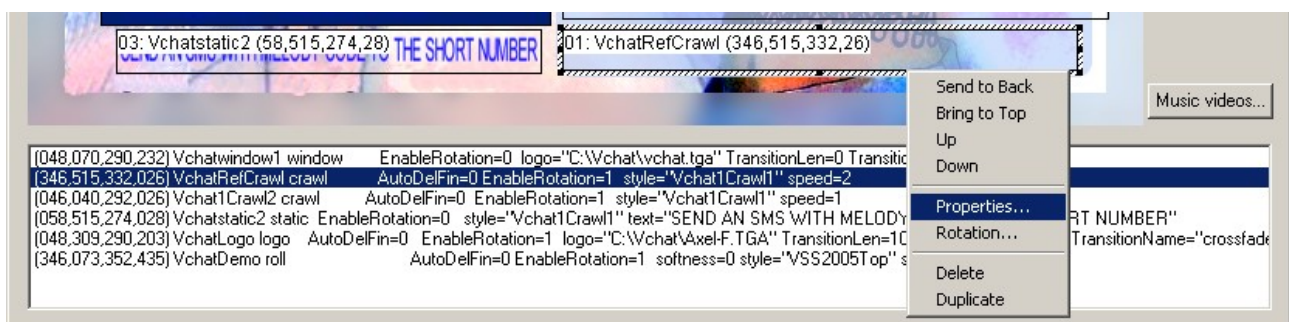


Editing the parameters of a created this way object should be done later in the editing window of the composition layer "**Logo Layer Editor**".

### Window with composition layers

In the **Layers** compositions all layers of a composition in the order of increase of their numbers (moving away from the spectator) are presented.

In the field a line corresponds every layer where at the beginning in brackets parameters of the object rectangle (**X, Y, W, H**) are output. Then **name, class, parameters** of the object and layer. Parameters are output in name of the **parameter = value** format. If the **value is** a text then it is put in double inverted commas ("**...**").



### Context menu of the object and layer in a composition

To call the context menu for the current object (layer) of the composition selected in the form of a rectangle or in the **Layers** window with the help of the mouse right button. The menu contains the following commands:

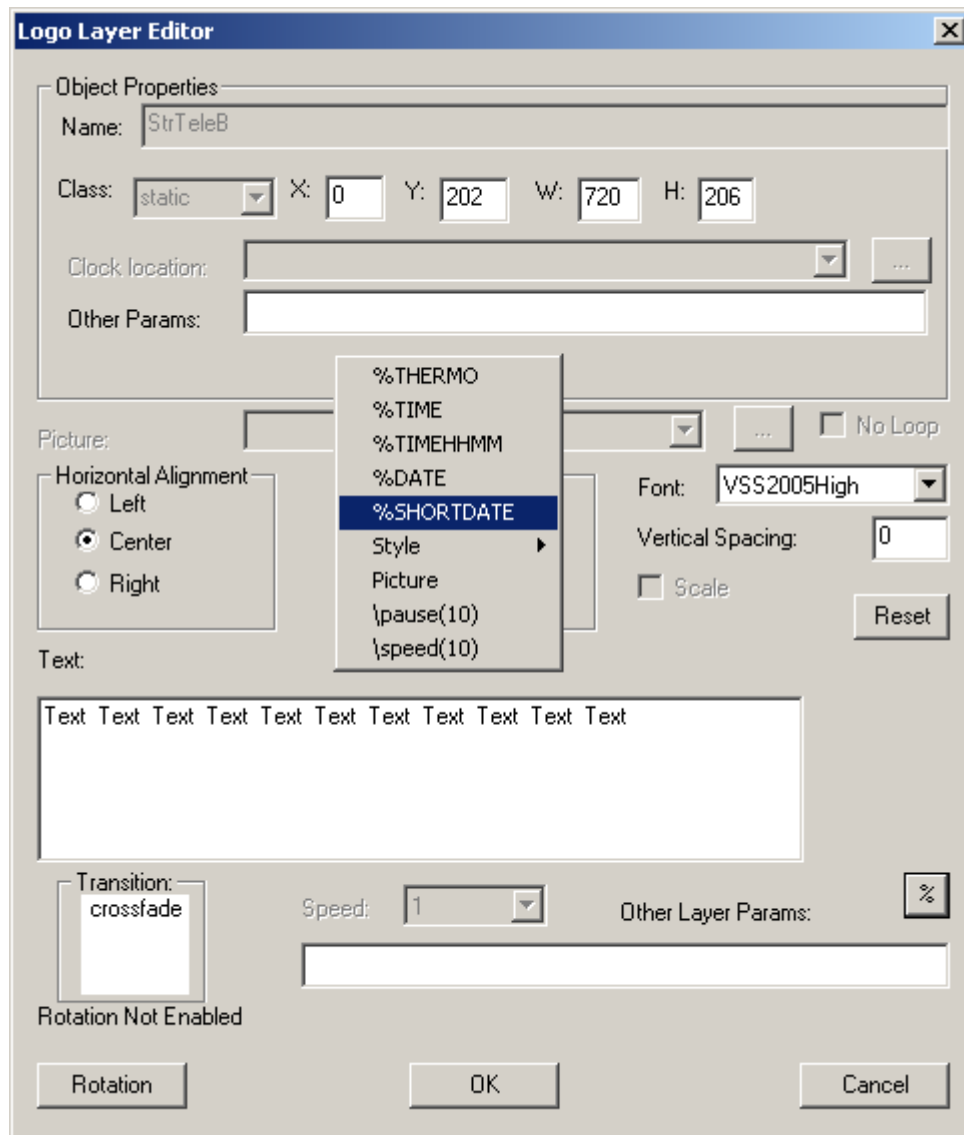
- **Bring to Top** – raises the current layer to the very top, i.e. it seems as if the layer approaches the spectator in a maximum way;

- **Send to Back** – lowers the current layer to the very bottom, i.e. it seems as if the layer distances from the spectator;
- **Up** – raises the current layer one level up;
- **Down** – lowers the current layer one level down;
- **Properties** – parameter editing of the object and the layer;
- **Rotation** – parameter editing of object rotation;
- **Delete** – delete the layer with an object from the composition.

If a deleted object is not used in any composition any more then it is completely deleted from the system. If you want to avoid this, then it is possible to create a working composition where all objects which can be used in foreground compositions are placed.

## Dialogue window for editing properties of an object and layer

Editing properties of the current object and layer of the composition are realized in the dialogue window **Logo Layer Editor**.



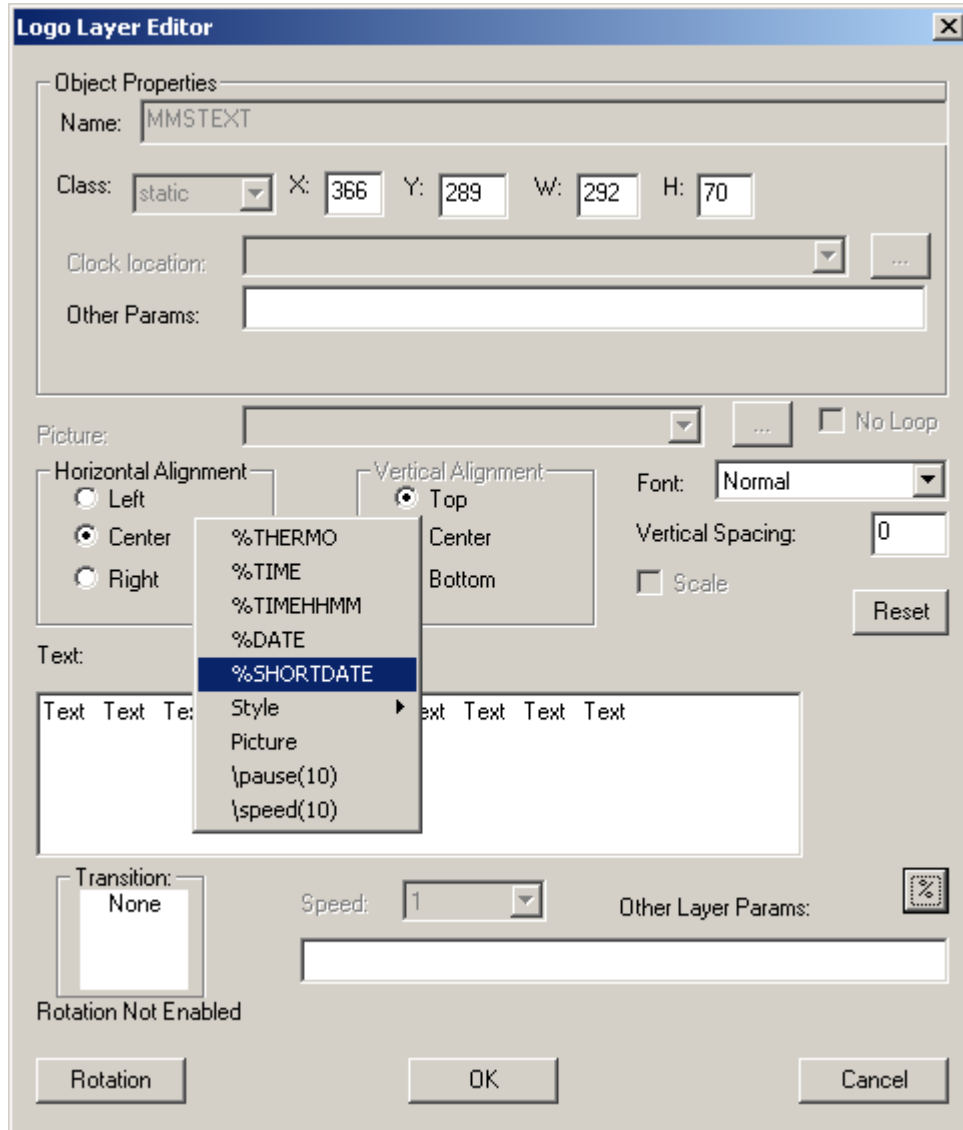


<i>Object Properties</i>	<p>Object properties of an editing layer are located inside the frame <b>Object Properties</b>.</p> <p>These properties correspond to the entry of the object into any other composition of the foreground of the system. They are global and the change of properties of one composition will automatically do the same thing in the other one, this should be kept in mind.</p> <p>Let's examine these object properties in detail:</p> <p><b>Name</b> - Name of an object – unedited parameter, set during the creation of an object.</p> <p><b>Class</b> - Class of an object – non-editable parameter set during the creation of an object.</p> <p><b>X, Y, W, H</b> - Coordinates on the screen of the top left hand corner, width and height of the object rectangle in pixels. These parameters can be changed in arbitrary way but it should be kept in mind that the object rectangle must not exceed the limits of the screen.</p> <p><b>Clock location</b> - Location of the hands files for analogue clock. This parameter is available only if the class of the object is - <b>Clock</b>. This parameter will be described in more detail in the parameters of the corresponding layer of the composition.</p> <p><b>Rotation</b> - Value of the main object property is a text or name of the file can automatically change during its use in any layer (see below) – be liable to rotation. The rules of this rotation for the object are set in the dialogue window <b>Rotation</b> called with the help of the key of the same name.</p> <p><b>Other Params</b> - Objects of different classes may need their own specific parameters which are output in this field in <b>parameter name = value</b> format. If the value is a text then it is put in double inverted commas ("...").</p>
<b>Layer parameters</b>	<p>Layer parameters themselves are located below the object parameters. The list of available layer parameters for editing depends on the class of object. These parameters will be considered below during the description of every class.</p> <p><b>Other Layer Params</b> - Their own specific parameters may be set for every layer with an object. They are called in this field in <b>parameter name= value</b> format. If the value is a text then it is put in double inverted commas ("...").</p>
<b>Finishing of editing the object and layer parameters</b>	<p><b>OK</b> - Editing finishes by clicking [<b>OK</b>] key, all input object and layer parameters will be saved.</p> <p><b>Cancel</b> - Editing finishes by clicking [<b>Cancel</b>] key, all input changes will be cancelled.</p>

Add Clock

## Layer parameters with a text (*Static* class object)

A layer with **Static** class object sets an image of a static or dynamic text.



**Parameters of text formatting in an object rectangle** *Horizontal Alignment* - This parameter sets the way of text formatting in the object rectangle in horizontal alignment:

- **Left** – the lines of text are aligned to the left edge of the rectangle;
- **Center** – the lines of text inside the rectangle are centered;
- **Right** – the lines of text are aligned to the right edge of the rectangle.

*Vertical Alignment* - Parameter sets the way of text formatting in the object rectangle in vertical alignment:

- **Top** –text aligns to the upper edge of the rectangle;
- **Center** – text inside the rectangle centers in vertical alignment;
- **Bottom** –text aligns to the lower edge of the rectangle.

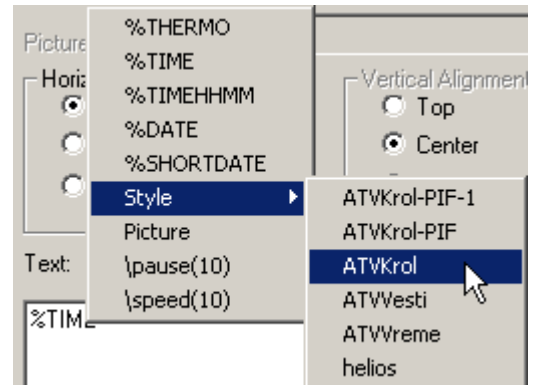
**Text:** - In this field the text itself which will be output in the layer of the composition is set. But if the object of the layer is liable to rotation then this value of the text is ignored and its contents are defined automatically by the system according to the rules of rotation.

Text of the layer with an object of class **Static** or class **Crawl** (see below) on a par with ordinary symbols may contain variables of the media of *TELE* system, sequence of style switching, references inserted directly into the text as symbols, static and dynamic images.

### Use of special sequences in the text

These sequences may be inserted in an ordinary way from the keyboard but for the convenience there is a special sub-menu which is called by [%] key. The inset of the sequence is realized into the current position inside the text.

The commands of insertion of variables of *TELE* media, images and changes of text style are listed in the sub-menu:



- **%THERMO** – readings of temperature data unit;
- **%TIME** – computer system digital clock with seconds;
- **%TIMEHHMM** – computer system clock without seconds;
- **%DATE** – current date in the format set in the settings of *Windows* media;
- **Style** – changes of the style (see below) of the following symbols in the text. This item contains a sub-menu where all available styles in the system are listed (just like in **Font** parameter);
- **Picture** – inset of the symbol of static or dynamic image in the text (then a general window for selection of file name or the name of the first file in succession is called).
- **\pause (10)** - this command enables to stop displaying “crawling line” for the specific amount of time.
- **\speed (10)** - command allows to change speed of the “crawling line”.

Variables are inserted in the text in the form of "**%Name\_variable**", the name of style - "**Style\_text**", name of image file – "**\picture(Full\_name\_file)**" (names of variables, styles and files must not contain gap symbols).

Text:  
 \picture(C:\VSS2005\StreamTele.tga) THE STREAM TELE IS CAPABLE TO AUTOMATE THE

### Output of the text with variables by the system

A text containing variables which have analogy to *Run-Time* templates in *Alpha Pro* software (see description "**An extended version of Alpha Pro software**"). i.e. as soon as the value of at least one of the variables



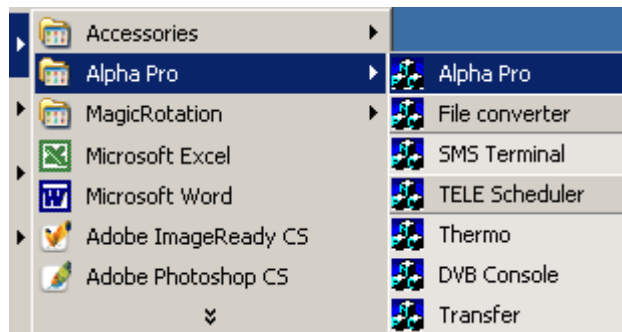
which is part of the text is changed, then it is formatted again in the object rectangle and is output as part of the composition onto the screen. However, if such variable is included into the middle of the text of a crawl line then the alteration of its values during the process of its output will lead to the repetition of the output of the whole line from its beginning.

**Output of the text with switched on images by the system**

A special symbol which refers to the static and dynamic image can be entered into the text in foreground compositions output by *TELE* system. To insert such a symbol it is necessary to include "**\picture(full\_name\_file)**" into the text (the name of the first file of animation sequence). This can be done with the help of [%] key and **Picture** command which shows the window of the input of file name.

**Style of the text: Font**

The parameter sets the style of the text formatting which is chosen from the combo box. Every style in the list has been exported in the *Alpha Pro* software with the help of **Character/Export Style** command. Such styles are kept in the **Fonts** sub-catalogue where *Alpha Pro* software and *TELE* system are set.



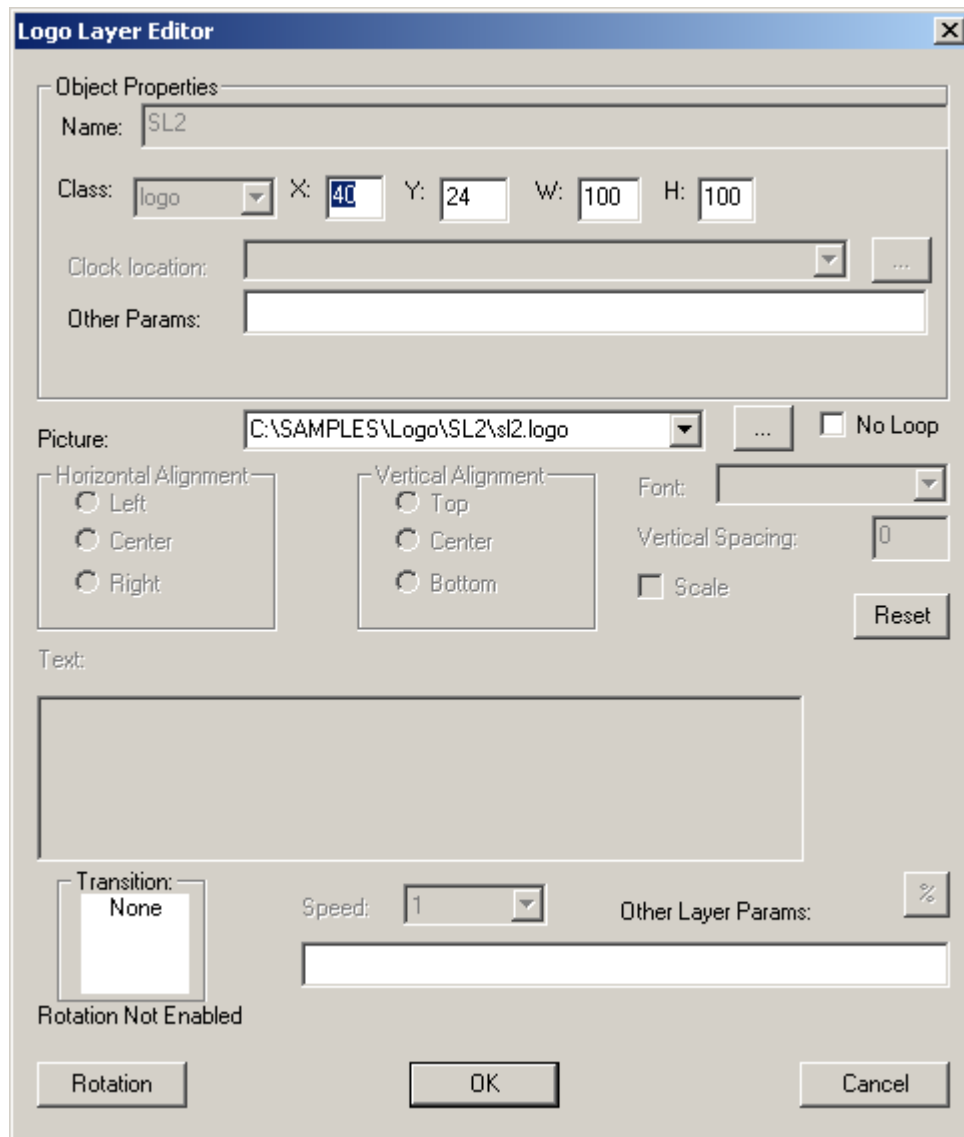
This parameter sets the style to the whole text even if some separate parts inside the text require their own style, it is done in a standard way – in front of the corresponding text the "**\Style\_part**" sequence is inserted, and "**\Old\_style**" at the end. These styles must also be exported in *Alpha Pro* software and it is possible to insert them in the text through **Style** sub-option of the menu called by [%] key.

**Speed of gradual output of the text: Fade**

A text in a composition may appear not at once but gradually like in *Fade* effect for the script pages of *Alpha Pro* software. For setting the speed of this display serves a combo box **Fade**.

Value "**0**" corresponds to an immediate appearance of the text; other values set the speed of its display, just like in the parameters for the effect output of the page script.

## Layer parameters with a logotype (class object *Logo*)



A layer with a class object **Logo** sets an image of static or dynamic logotype.

### Image(s) of static/dynamic logotype:

#### Picture

An image is set with the help of a combo box **Picture**. If it is empty and/or it is required to add into it a new image, then the [...] key to the right of the list, which calls the standard window for selection of the file name, is used for it.

If the name of the file ends in numbers and there are files in the same catalogue, the names of which have the same beginning and numbers at the end of the name compose a number sequence then all these files are regarded as an animation logotype and will be replayed in cycles.

One more value of the field **Picture** can be the variable of the %**LOGO** system media. The reference is transmitted to the logo-image (static or dynamic) which must be output in this layer when the given composition is output above the text-banner block. Every element of such block may

define its logo-image which must vary during the transmission to the following element.

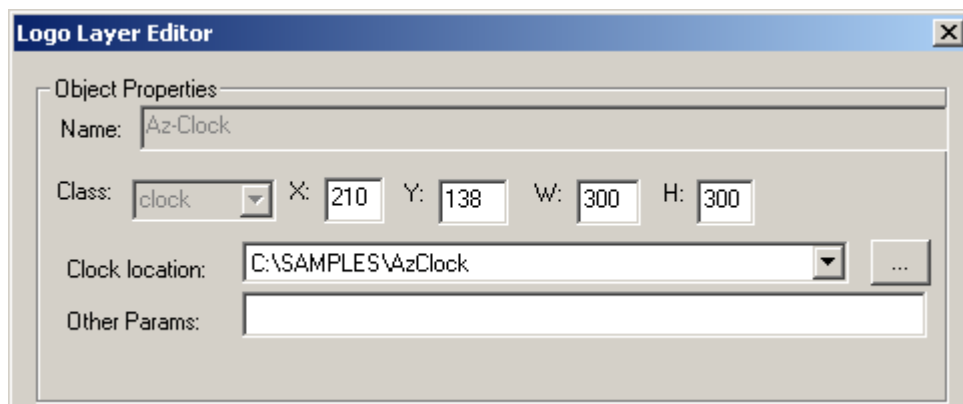
If the size of the images does not correspond to the object rectangle then they are scaled in a proper way.

**Speed of gradual output of the logo:** A logo in a composition may appear not at once but gradually like in *Fade* effect for the script pages of *Alpha Pro* software. For setting the speed of this display serves a combo box **Fade**.

*Fade*

Value "0" corresponds to an immediate appearance of the logo; other values set the speed of its display, just like in the parameters for the effect output of the page script.

## Parameters of the layer with analogue clock (class object *Clock*)



A layer with class object **Clock** sets the indication in the composition of analogue clock. This layer does not have its separate parameters, only parameters of the object set analogue clock.

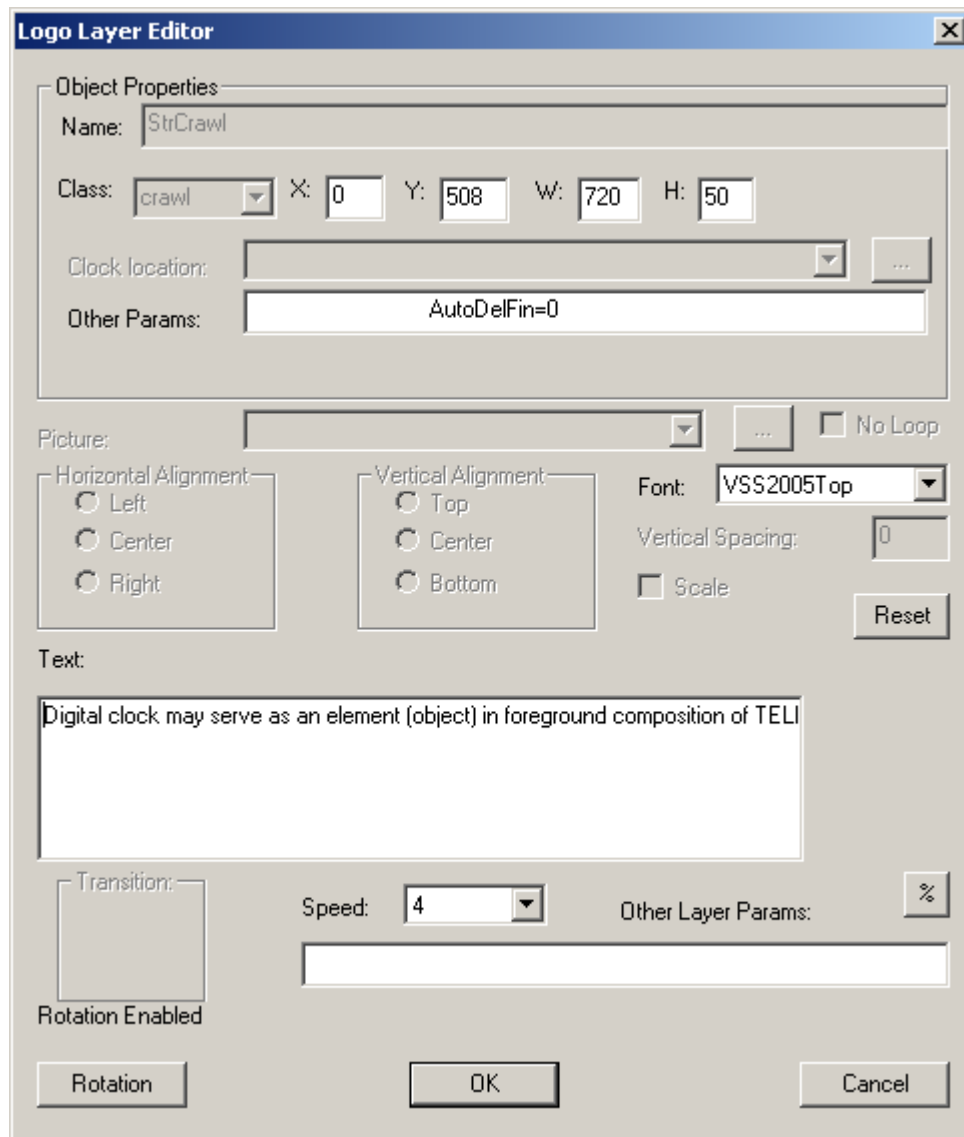
For clocks 240 images of minute and hour hands are required and 60 images of second hand in TGA 32 byte RLE Compressed format. It is better if the files are created in Adobe After Effects. All files in the directory must have one size (resolution). Format TGA 32 byte with RLE compression. The use of uncompressed files is not permitted.

**Location of the files of images of hands on a clock**

Location of the files of hands on a clock is set with the help of combo box **Clock location**. If it is empty and/or a new clock should be added into it, then the [...] key to the right of the list is used for this. The button calls the standard window of selection of the catalogue name containing files of hands location.

All output catalogues with files of hands on a clock are remembered in the system and are later included in this combo box.

## Parameters of the layer with crawl line (class object *Crawl*)



A layer with class object **Crawl** sets the output of the composition of a crawl line. The crawl line is output inside the rectangle of an object above all layers of the composition lying below. The speed of the output is set by **Speed** option.

### Text style: Font

The parameter sets the style of text decoration which is selected from the combo box. Every style has been exported in *Alpha Pro* software with the help of **Character/Export Style** command.

This parameter sets the style to the whole text even if some separate parts inside the text require their own style, it is done in a standard way – in front of the corresponding text the "**\Style\_part**" sequence is inserted, and "**\Old\_style**" at the end. These styles must also be exported in *Alpha Pro* software and the name of the style must not contain gap symbols.

### Text

In this field the text proper which will be output in the form of a crawl line is set. The text on a par with ordinary symbols may contain the variables of *Alpha Pro* software media which are defined as "**%Name\_variable**" in it (the name of a variable must not contain gap symbols).

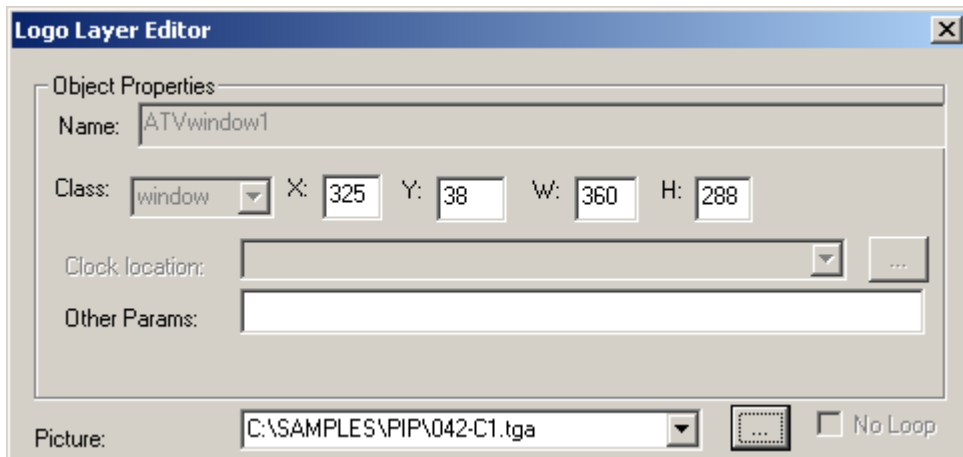
**Use of variables of Alpha Pro media in the text** As soon as the value of at least one of the variables being part of the text changes then the output of a new line on the screen starts anew. A new text is output in continuation of the previous not waiting for the end of the output of the first one.

This enables output of the text in sentences, words and even separate letters. For this in the field **Text** it is possible to enter the name of one variable and then all depends on what values will be given to this variable and how often this will happen.

**Speed of output of crawl line** Combo box **Speed** serves to set the speed of output of a crawl line. Speed of movement is set by a conditional number ("1" is the slowest movement).

### Layer parameters with a window of scaling **Picture-in-Picture (class object Window)**

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A layer with a class object **Window** sets scaling for all lying below layers of the composition together with a video row from the replayed clips into the object rectangle. i.e. the *Picture-in-Picture* effect is produced and a static image from **Picture** field is used as the background (size must be 720x576).

**Image(s) of static/dynamic background**

An image is set with the help of a combo box **Picture**. If it is empty and/or it is required to add into it a new image, then the [...] key to the right of the list, which calls the standard window for selection of the file name, is used for it.

If the name of the file ends in numbers and there are files in the same catalogue, the names of which have the same beginning and numbers at the end of the name compose a number sequence then all these files are regarded as an animation background and will be replayed in cycles.

All earlier input images are remembered in the system and included later in the combo box.

For background images 24-byte *TGA* files of 720x576 pixels size or animations of *LOGO* format are used for background images. Part of the

image of the background corresponding the rectangle of the object is replaced with a scaled image of layers lying below.

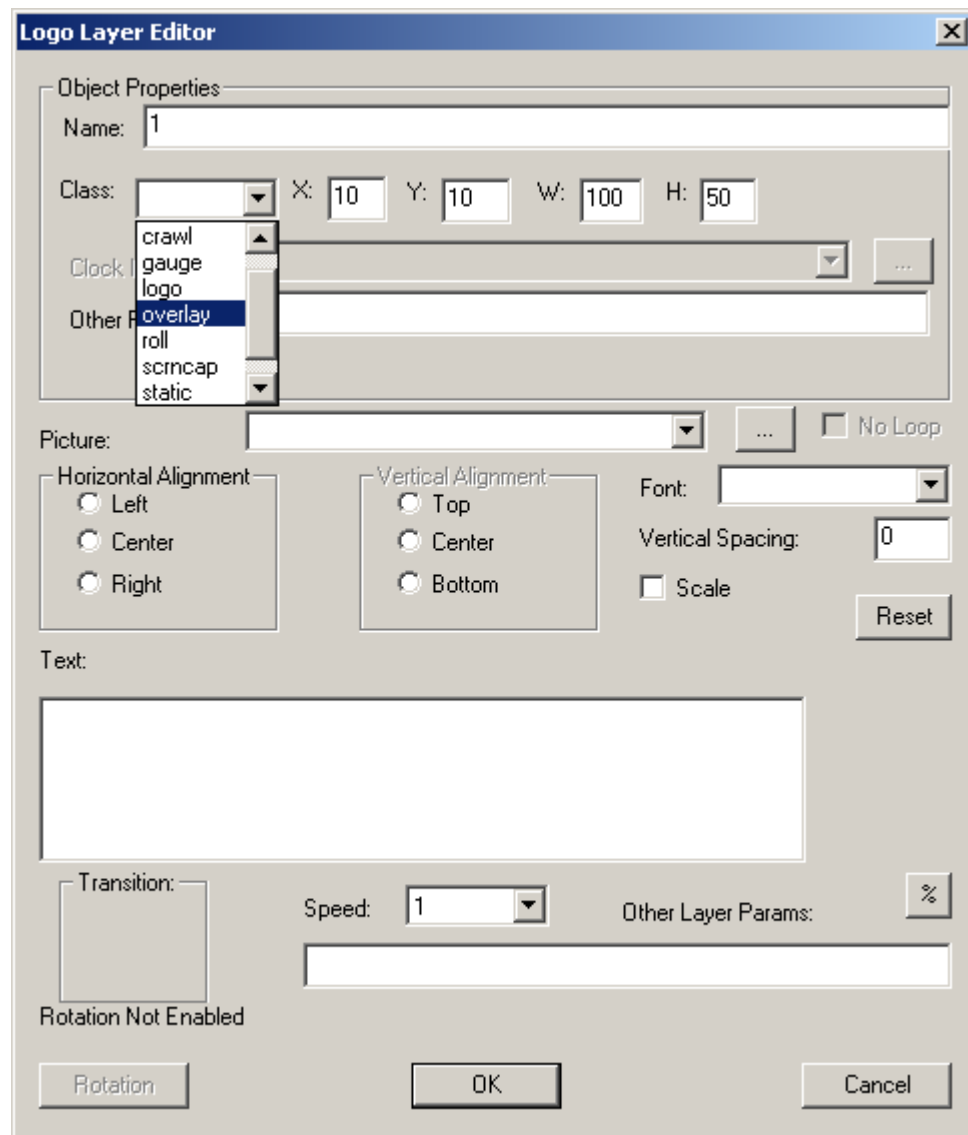
**A flag for switching on scaling:**  
*Scale*

This flag is generally switched on and the scaling of lying below layers together with the video row is produced. But if the video row is created in the way that it is output strictly in the definite part of the screen and scaling is already made then it is simply required to cut off unnecessary edges and place them above the required background. In this case **Scale** flag should be dropped.

Besides, *special* and *delayed* clips (see below) are scaled under a required size on the stage of their receipt and record on the hard disk. In this case the value of **Scale** flag is ignored and scaling is always switched on.

**Layer parameters with arbitrary options (custom)**

---



A later with class object **Text3D** sets the output into the compositions a crawl line with 3D letters every one of which is also turning round its axis.

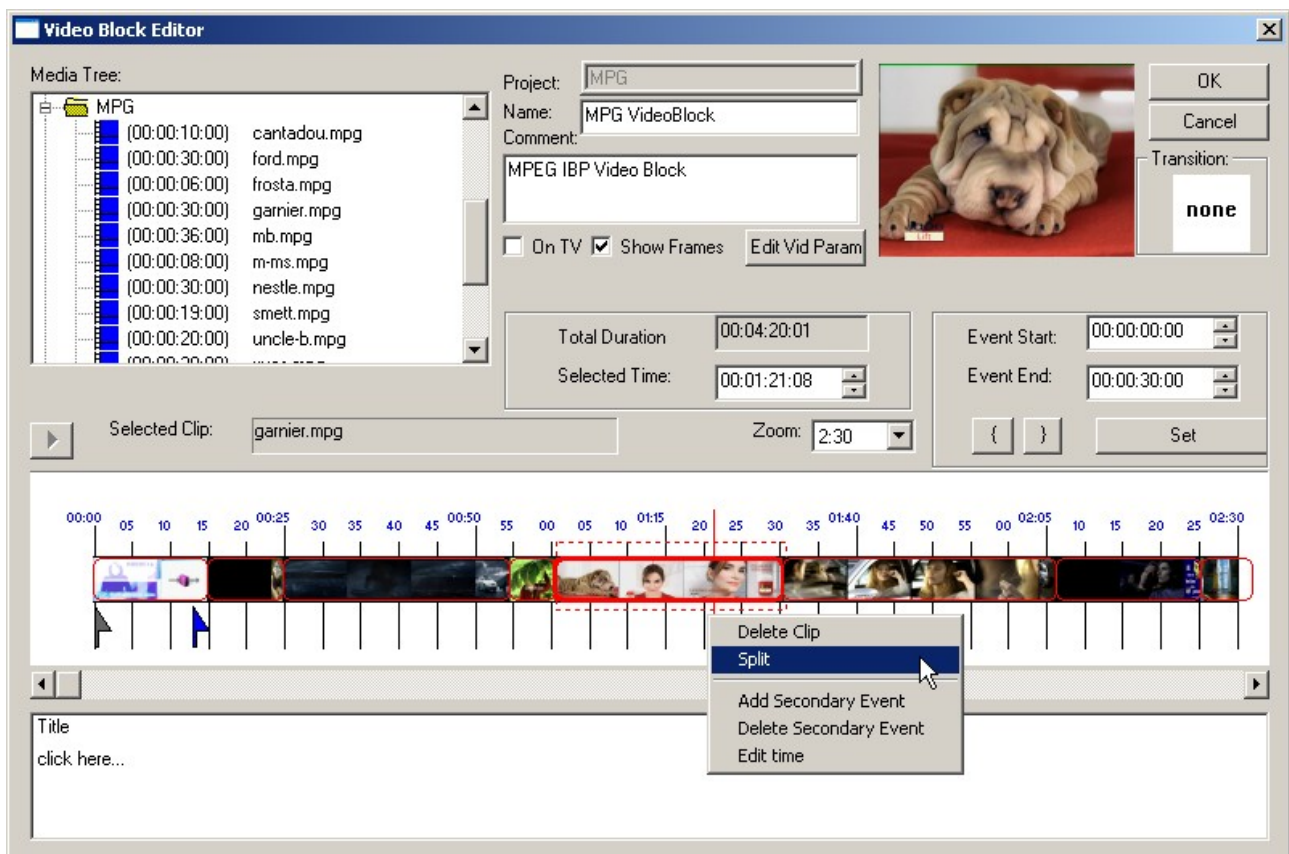
This serves an example of extra objects built in system and added by demand of the customer. In the future in the system there may appear other build in objects.

### Object and layer parameters

General parameters of this layer are similar to the ones that the layer with **Crawl** class object has. Specific parameters are set on the fields **Other Params** and **Other Layer Params**.

## Secondary events

The change of object parameters of the current foreground composition indicated in the schedule for the video block during the process of its output on air is understood by a *secondary event* in *TELE* system. The change of the object parameters leads in its turn to the secondary output of the foreground composition. i.e. on a par with the primary output of the video block at a definite time a secondary output of altered objects of the composition above the clips of the video block takes place.



### A line of secondary events

A line of secondary events is located under a line of clips in the editor of video blocks and is connected with it. Secondary events are presented in the form of flags, the left edge of which corresponds to the time of the beginning of an event from the beginning of the whole block. The current (selected) secondary event is marked by a flag in blue color.



**Context menu of the line of secondary events**

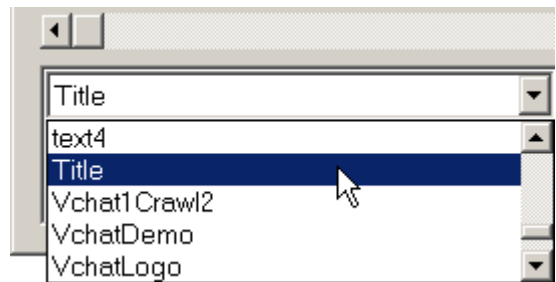
The context menu appears in the window of the line of secondary events by clicking the mouse right button. It contains the following commands:

- **Delete Clip** – delete the current clip from the block;
- **Add Secondary Event** – add a secondary event in the current position inside a video block – **Selected Time**;
- **Delete Secondary Event** – delete a current secondary event;
- **Edit time** – change the time of start of the current secondary event.

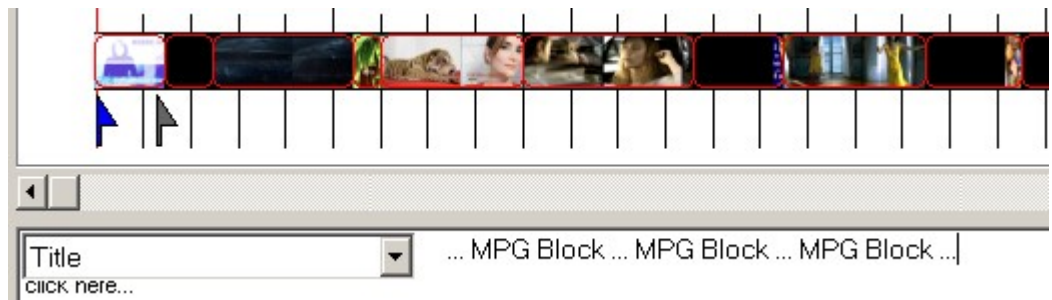
**List of objects of secondary event**

Every secondary event has its list of objects of *TELE* system, the value of the main variable of which changes during its start. Under the line of secondary events in the window of video block editing there is a window in which the list of such objects for the current event is shown.

The list consists of lines where in the left part a combo box of available at the given moment objects of the *TELE* system used at least in one foreground composition is located. The first element in the combo box is an empty value which corresponds to the lack of change in any object.



The field is located to the right of the name of the object in the line. It is possible to insert a new text value of the main object parameter (without commas). This is generally a value of the line of object text but can be a name of the file as well just like for **Logo** class etc.



**How it works during the schedule replay**

During the adding of the video block in the schedule; a definite foreground composition containing some objects with their primary parameters may be assigned to it in **Logo** column.

During the process of the output of the video block at the time of the secondary event the change of the main parameter of every of its object takes place. If these objects are part of the composition then it is retaken in correspondence with new values of the parameters.

**If there are objects with rotation in a composition**

If there are objects subject to rotation in a composition then the change of such parameters in secondary events created on a line are ignored but they create themselves extra secondary events which are not reflected on a line. During such invisible events mixed with a definite interval an automatic change of parameters of objects with rotation takes place.



## Rotation

Object name: roll2      Class: roll       Enable rotation     Auto Delete Finished    [OK] [Cancel]

Text:	Secondary	How many times:	Displayed:	Duration:	StartTime	EndTime
\\picture(C:\WSS2005\StreamTele.tga) THE STREAM TELE IS CAPABLE TO AUTOMATE THE OPERATION OF TELEVISION CENTRE BY UTILIZATION OF LIVE TV SIGNALS AND TIME SCHEDULED BREAKOUTS OF VIDEO CLIPS, ANIMATED GRAPHIC, CREEPING LINES, BANNERS, CLOCKS, LOGOS, ETC. APPLICATIONS FOR:		200001	623	-1	00:00:00	23:59:59
\\picture(C:\WSS2005\StreamTeleInfo.tga)		INFINITE	80	Auto	00:00:00	23:59:59

Number of displays:      Always     Infinity    [Load text...]    %

Picture:  ...    Duration:      Auto    How many times:     [Import]

Start date:     End date:     Start time:     End time:     [Clear finished]    [Take]    [Apply]

Secondary object:     Text:     Picture:  ...    [Load text...]    %

Objects of the foreground composition except the ones which have class **Clock** and **Window** may be subject to rotation. This means that during their output according to definite rules the system will substitute itself the values of definite variables in it. In object of **Logo** class the reference to a file or logo files is altered, in the rest – this is an output text. The value of these parameters set for the object in a definite layer of the composition during the switched on rotation is ignored.

During the process of rotation its all possible values and rules for its demonstration are enumerated:

- **How many times** – a maximum number of demonstration of a given value of the object (may be infinitely);
- **Number of displays** – the number of times the given value of the object was put on air;
- **Duration** – the duration of performance of a given value of the object.
- **Start, End Date** – dates of start and end of the output of a given value of the object;
- **Start, End Time** – admissible time of output of a given value of the object (one for all days).

During the output of the foreground composition of an object with rotation the system sorts out in turn all possible values of the object, starting with the first in the order they are set in the description of rotation. If the value can be output then it is output, if not then the system moves on to the next etc. if there are no admissible values left then the output is not realized.

The value of the object may not be output due to the following reasons:

- The number of displays of a given value of the object - **Number of displays**, has already got to the maximum (**How many times**);
- Current time and date of the output in *TELE* system (this is not necessarily the current computer time) does not get into the interval set by **Start/End Date** and **Start/End Time** parameters.

As far as the last limitation is concerned it is necessary to say that it is used as an addition to the selection of foreground composition (logotype) which is realized in the timetable. It is the location of the element in the schedule that sets the system time for its output. And if some of the object values must not be output at that time then in this case it is possible to create a different composition and include a different object in it, in the rotation of which other values are not included. However it may be inconvenient to create many similar compositions and objects, then it is better to use the condition of the value output in its time.

An object with rotation may be compared to a *secondary object* to which it is compulsory to set the values depending on what will be output in the main object.

As a secondary object it is possible to use any object with a type but not **Window** or **Clock**. A secondary object must not be subject to rotation.

Indication of a secondary object enables to compare, for instance, every text value to its logotype and vice versa. And their output on the screen will be realized simultaneously.

The dialogue window **Rotation** consists of three parts – at the top there is a general part below the window of input and editing parameters for rotation, at the bottom in a separate frame – an input of connected values for secondary object.

This is output at the top of a dialogue window:

- **Object name** – the name of object in reference order;
- **Class** – class of object in reference order;
- **Enable rotation** – flag of switching on/off of rotation for the object;
- **Update** – the key to update of data on the number of output of rotation values of object variable on air;
- **OK** – button to finish editing and save the input rotation parameters;

- **Cancel** – key to finish editing without saving changes in rotation parameters

**Text** window is located below, all input values of rotation parameter with their attributes are output by the line (**How many times, Number of displays, Duration, Start/End Date/Time**).

In the window with the help of the cursor and the mouse left button it is possible to select the value to edit its text and parameters. The chosen line is highlighted in the window by an inverted background.

**Take** - The key [**Take**] above the window to display on the screen a selected value, the way it will be output in an edited foreground composition.

**Add** - Addition of a new rotation value for the object (to the bottom of the list) is realized with the help of [**Add**] key. A new created line has an empty value of a variable, and other attributes set by default, the line is immediately chosen for editing.

**Delete** - [**Delete**] key deletes selected value from the list.

**Apply** - [**Apply**] key sets entered rotation parameters to a selected element in the list.

This happens automatically during the selection of another line in the list of values with the help of a mouse.

**Import** - [**Import**] key installs several rotation values of the object at a time from a text file giving them some values of attributes by default.

**Clear finished** - [**Clear finished**] key deletes those lines from the list, the number of displays of which has already reached the maximum valid value.

**Text** - Under **Text** window there is one more window with a similar name for the input and editing of a selected value of the object. This window is available for editing only if the object has a corresponding class– **Static**, **Crawl** or **3D Text**. During the process of editing it is possible to use general operations with *Clipboard* of *Windows* media.

**%** - [%] key enables to enter the text in special sequences setting the value of variables of *TELE* system changes of the symbol style and image insets.

**Picture** - If rotation is set for the object of class **Logo**, then the rotation

value is the name of the image file (or name of the first file of images for the dynamic logo) is set with the help of the flow list **Picture**.

If the list is empty and/or it is necessary to add a new image to it, then for this [...] button to the right of the list which calls the standard window for the selection of file name is used.

If the name of the file ends in numbers and there are files in the same catalogue, the names of which have the same beginning and numbers at the end of the name compose a number sequence then all these files are regarded as dynamic logotype.

All earlier input images are remembered in the system and later included in the flow list.

**Number of displays** - The field in which the number of displays on air of this rotation value is shown. This parameter on every case of display of a given object value on the screen automatically increases by one. The field is available for editing which enables editing the number of displays manually.

**Auto** - The flag which sets the mode of automatic definition of output duration of a given rotation value of the object judging from the length of a line in the text and other object parameters. If the flag is not on then the duration is taken from the field **Duration**.

**Duration** - Field for the manual input of the duration of display of a given object value. Thus, having indicated a relatively long time of the output it is possible to achieve the fact that the messages will be output not more often that required.

**Infinity** - The flag which sets the mode of infinite display of a given rotation value of the object, i.e. there are no restrictions on **Number of displays** parameters. If the flag is not on, then the maximum number of display is taken from **How many times** field.

**How many times** - The field for the input of a maximum number of displays of a given object value.

**Always** - The flag which sets which sets the mode of display of a given rotation value of the object without the account of a current system time in **TELE** system. If the flag is not on then the admissible time of the output on air is defined by **Start/End Date/Time** fields.

**Start/End Date/Time** - Fields which set an admissible time of output of a given object value on air. The principle of restriction is that at a given calendar interval may be output only at a set time interval.

If something more complicated is required then it is possible to double

the rotation value of the object by giving it a different interval etc.

At the lower part of **Rotation** window there are fields for the selection of a secondary object and indication of its values connected with every line of **Text** field.

**Secondary object** - A flow list where it is possible to select one of the already registered objects in the system of class **Static**, **Crawl**, **3D Text** or **Logo** as a secondary object. A selected object must not be subject to rotation.

Depending on the class of a selected secondary object fields **Text** or **Picture** located below become available for input and editing.

**Text** - The window for the input and editing of a text value of the secondary object connected with a highlighted rotation line is located below. This window is available for editing only if the secondary object has a corresponding class – **Static**, **Crawl** or **3D Text**. During the process of editing it is possible to use general operations with **Clipboard** of **Window** media.

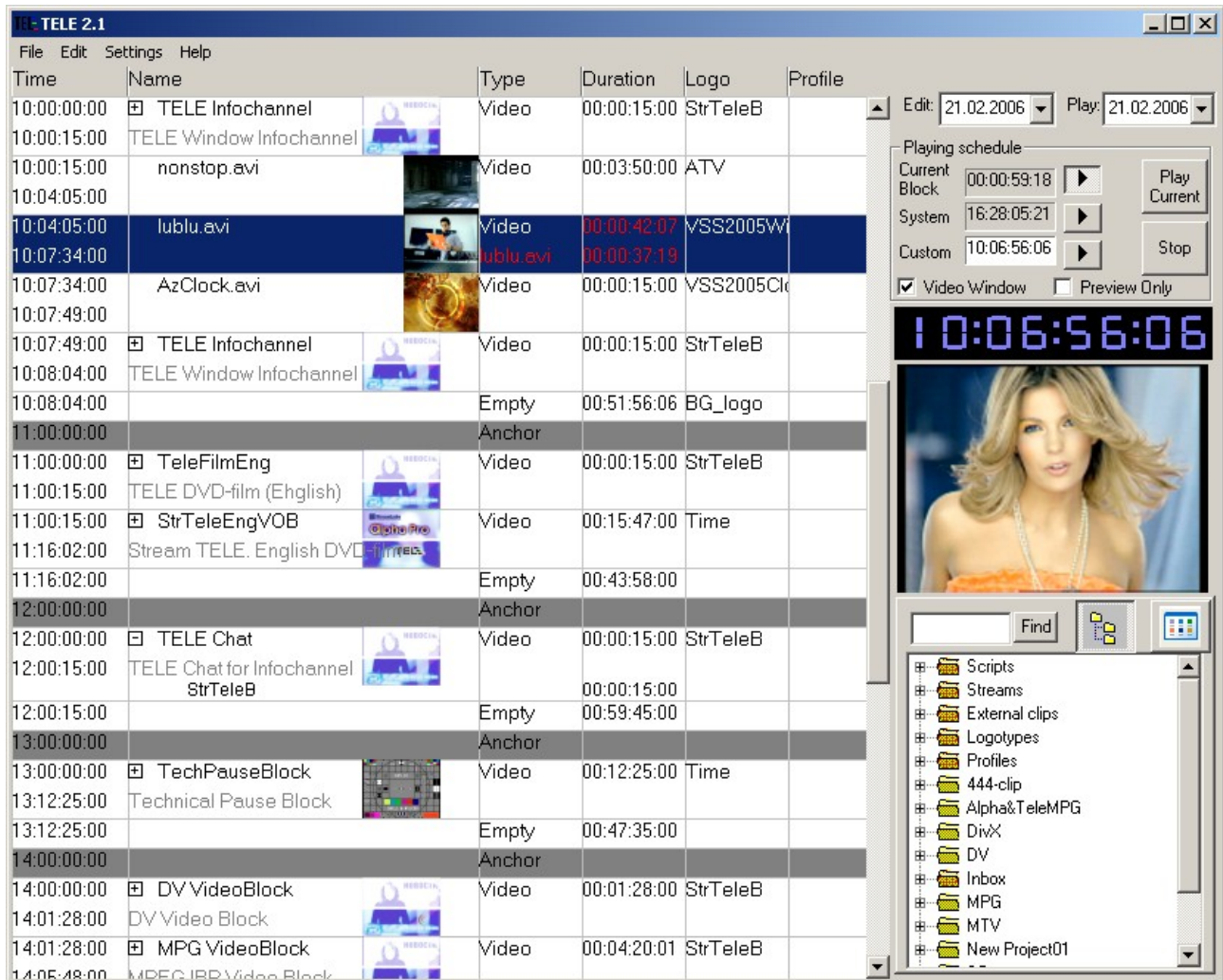
**Load text...** - It is possible to input the value in the editing window **Text** not only from the keyboard but also from their text file by choosing key [**Load text...**].

**% - [%]** button enables to input into the text special sequences setting the values of **TELE** system variables, changes of symbol styles and image insets.

**Picture** - If a secondary object has class **Logo**, then its connected value - the name of image file (or the name of the first image file for the dynamic logo) is set with the help of the flow list **Picture**.

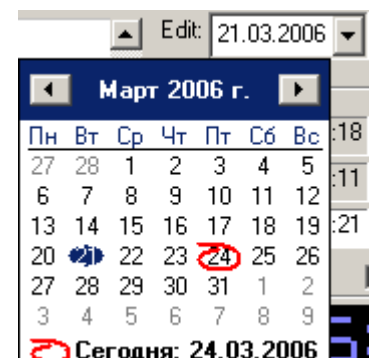
## Chapter 3. Composition and editing of schedules

### General description



Schedules of clips and blocks output on air on the current day and any other day either before or after today's date are kept in the database used by TELE system. Every schedule may be selected for editing and/or replay in the system independently of the current date on a computer. Schedule editing may be realized simultaneously with replay.

In the right hand corner of the software window the data of an edited schedule – **Edit** and replayed - **Play** is indicated. During the software launch the schedule sets open for the current date, a standard calendar of Windows media is used to move to the schedule of another date. It is possible to call it by pressing the button with an arrow down to the right of the value of a corresponding field.



The schedule in the *TELE* system is a table, the lines of which may contain clips, blocks and also special elements: **Anchor**, **Stop Anchor** and **Empty Block**.

**An empty block** corresponds to the time when the input video signal is sent at the output with an extra ability to place a foreground composition (logotypes, clock etc.) above it. During the replay of an empty block, a sound signal sent at the input *Line In* of a sound card is sent to its output *Line Out* without alterations.

For an empty block its profile of video signal switching can be set (see below the description of **Profile** field), which is realized at the moment of its start of replay.

**Anchors** – are lines in the schedule which are strictly stuck to its time and it is impossible to move them in the schedule during the process of their editing. Anchor is used so that not all elements of the schedule but only closest to the added or remote one will shift during the input or deletion of lines. I.e. anchor does not permit shifting in time lines of the schedule located in table below it or if editing is superimposed. Anchors are used as restrictors of advertising and other windows on air.

In front of the anchor there is always an empty block, possibly even of a zero duration. It cannot be deleted by substituting by a clip or a block.

The purpose of stop anchor is that at its achievement the replay of the schedule is stopped.

Schedule table contains the following columns:

- **Time** – start time (of replay) of a table line in "HH:MM:SS:FF" format. For clips and blocks the end time is indicated directly under the start time.
- **Name** – name of a clip or a block, its commentary. For a block and clip type **Video** an icon of its first frame can be output on the right in a column if the mode of their display in schedules **Schedule/Show icons** is on. For stop anchor value "Stop" is used.
- **Type** – type of a table line. Besides special values: **Empty Block** – for an empty block, and **Anchor** – for anchor and stop-anchor, the type of clip or block located in this line is output there. During the replay of a given schedule line the inscription "**playing**" is displayed in red under the type.
- **Duration** – duration of a time period corresponding to the line in "HH:MM:SS:FF" format. Here the duration of a clip or a block is displayed, duration of the anchor always equals zero. During the replay of a given line of the schedule time is displayed under duration in "HH:MM:SS:FF" format in red color saying how long is left till the end.
- **Logo** – field for selection the foreground composition used during the replay of this line of the table.

- **Profile** – field for selection the profile defining the state of external switchers, mixers or transcoders.

**Insert clips and blocks in the schedule**

Clips and blocks may be inserted in any place of the schedule thus shifting the time of start of the following lines (it increases by the duration of an added element) up to the nearest anchor. The time of anchor start and following it elements of the schedule does not change. The element of the schedule, end time of which turns out to be later than of the one following it, cannot be replayed and is displayed in light grey color, whereas the sign "**Doesn't fit!**" is displayed on the place of the commentary in red colour.

Clips and blocks may be dragged with the help of *Drag&Drop* method and they may be inserted in the schedule directly from the media tree. They are inserted in front of the schedule line above which the mouse left button was clicked. A bold vertical bar pointing at the place of insertion appears between the lines in the table. Clips and blocks are inserted in the same way in front of the current line of the schedule producing "**Add to schedule**" command of the context menu in the media tree.

**Display of blocks in the schedule in an unfold form**

Blocks in the schedule may be displayed as one whole or in an unfolded form with indication of clips or elements incoming in it and their duration. In the last case during the replay in the schedule of such block it will be seen what clip is output at the moment and how much time is left before its end.

In order to change the format of presentation a box with "+" or "-" sign is output to the left of the block name in the schedule. By clicking the mouse left button while pointing the cursor at it, it is possible to unfold or collapse the contents of the block.

**Duration of special clips in the schedule**

During the insertion of **special clips** in the schedule their length is set in the way to be able to "fill" the whole following empty block.

**Highlighting lines of the schedule, copying them into Clipboard**

To highlight a line in the schedule and make it current it is possible in a general way by pressing the mouse left button when the mouse cursor is pointing at it. The background of the highlighted line is colored in blue. Choosing the lines in the table with a pressed "Ctrl" button it is possible to highlight several lines of the schedule and the current line will be the last of the selected lines. In a similar way to select several lines at once it is possible by using the arrow buttons on the keyboard during the pressed "Shift" button.

It is possible for instance to delete (**Remove** command) or copy into *Clipboard* (**Copy** command) several lines at once.

**Context menu of schedule lines**

The context menu belonging to the current line is called by clicking the mouse right button. The context menu contains the following commands:

- **Clear** – means substitution of a current line of the schedule with a clip or a block into an empty block of the same duration.



- **Remove** – removes a line from the schedule and moves the following elements to an earlier time taking into consideration an emptied place in the schedule. All the following elements are moved up to the first anchor. Instead of moving the anchor, an empty block is created in front of it.

These commands do not influence empty block but the application of **Remove** command to the anchor removes it from the schedule. If during the performance of these commands there are two following each other empty blocks then the first of them in the schedule will "fill" the second increasing its duration. The latter means that if it is necessary to create two following each other empty blocks, for instance, with different foreground compositions or with profiles of external equipment, then they must be separated by an anchor.

- **Insert Empty Block** – an empty block with duration indicated by the user is created. A newly created block is transferred to positions former to the current schedule line.

One must be attentive because the insertion of an empty blocks shifts all the following elements up to the nearest anchor. If in front of an anchor there is no empty block of a sufficient duration then elements of the schedule in front of it cannot fit in and will stop replaying.

- **Insert Anchor** – an element type "anchor" is inserted, it is necessary to indicate its time in edited schedule.
- **Insert Stop Anchor** – command is similar to the previous only stop – anchor is inserted.

One should be attentive because the anchor insertion may lead to the fact that a clip or a block may stop replaying in the schedule if the anchor gets inside of the corresponding time interval.

- **Edit** – command is applicable to blocks, clips and anchors. For clips and blocks it calls a corresponding dialogue window enabling to edit them efficiently. The duration of empty blocks is edited; as far as anchors are concerned it is their time that is edited.
- **Copy** – command of copying of highlighted lines of the schedule in *Clipboard*.
- **Paste** – command of insertion of lines of the schedule from *Clipboard* to a position in front of the current element of the table.
- **Play current** – command launches the replay of the current element of the schedule (of only one element).
- **Start playing from current** – command launches the replay of the schedule starting with its current line. The command may be called by clicking the button "space".

The modes of schedule replay are described in more detail below in Chapter 4.

- **Set Logo to ...** – command of setting the foreground composition (logotype) to a group of highlighted lines in the schedule. The logo of the first selected line is set to all of them.
- **Set Profile to ...** – command of setting the profile to a group of highlighted lines of the schedule. The profile of the first selected line is set to all of them.

**Change of duration of an empty block:**  
*Edit*

It is possible to change the duration of an already existing empty block in the schedule. To do this it is necessary to click the mouse left button in the field of its duration (column **Duration**). After this the field will be colored white and the duration of the block will become available for editing. To finish editing and entering all the changes it is necessary to click the mouse outside the field of duration. The change of duration is fully equivalent to the deletion of an empty block and insertion in the same position of a new one (of a different duration).

To change the duration of an empty block it is possible with the help of **Edit** command of context menu of schedule element.

**Time change of the anchor:**  
*Edit*

It is possible to vary the time of an already existing anchor in the schedule. To do this it is necessary to click the mouse left button in the field of its time (column **Time**). After this the field will color white and the time of anchor will become available for editing. To finish editing and making alteration it is necessary to click the mouse outside the time field.

11:00:00:00		Anchor	
11:00:00:00		Empty	01:00:00:00
12:00:00:00		Anchor	
12:00:00:00		Empty	01:00:00:00
13:00:00:00		Anchor	

Time change of the anchor leads to the replacing as one single entity in the schedule of not only an anchor but of the following it elements of the schedule up to the first empty block. This can lead to the fact that these elements of the schedule on a new place will not fit into the corresponding empty block and thus will not be output by the system on air.

To change the time of the anchor it is possible with the help of **Edit** command of the contextual menu of the schedule element.

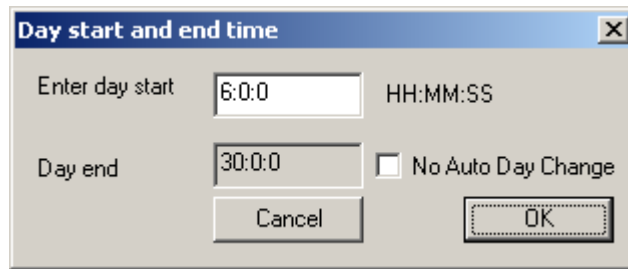
**Setting schedule start time:**

*Settings/Edit day start and end time*

Every schedule lasts exactly 24 hours, however the time of its start may not coincide with the start of 24 hours– 0 hours. It is important to set the time of switching to the following schedule (**Day Start**) correctly so that the replay of a clip or a block does not start in one schedule and finish already in the next.

The time of switching to a new schedule is set through the item of the menu **Settings/Edit day start and end time**, and the time of night break for maintenance is used for it. The time of switching is entered in the field

**Enter day start** to within seconds in "HH:MM:SS" format. In the field **Day end** the time of the start of schedule is output + 24 hours.



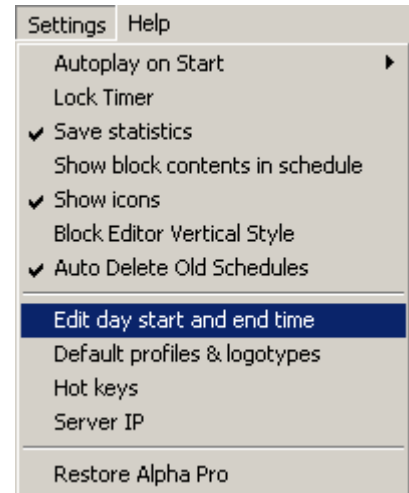
After the time change of switching to a new schedule it is required to restart *TELE* system and carry out the command of clearing the editing schedules through the menu item **Schedule/Clear**.

**Commands to clear schedules in the base:**  
*Schedule/Clear,*  
*Clear old schedules*

**Schedule/Clear** command deletes all the elements of the schedules and cuts it into 24 empty time blocks interchanging them with anchors which correspond to the start of every hour in the twenty-four hours (the way it happens at the start of editing).

Besides this command must be executed after the time change of the day start - **Settings/Edit day start and end time**, and the following restart of the system.

The purpose of **Schedule/Clear old schedules** command is to optimize the schedule base in order to shorten its size and avoid extra check ups of correct entry of blocks and clips in the schedules. Everything that goes before the date both replayed or edited schedule is cleared at this command.



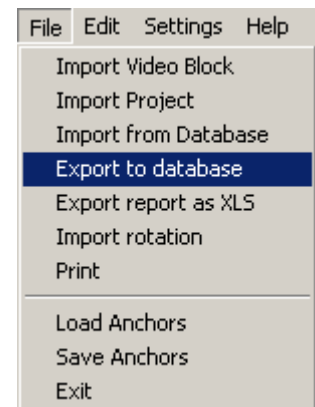
**Schedule/Save Anchors** command saves the anchors of edited schedules in the form of a text file. With the help of **Schedule/Load Anchors** command it is possible to download the saved anchors in the schedule (before this the schedule is automatically cleared by the system).

**Schedule/Auto Delete Old Schedules** option includes the automatic deletion of all elements in the old schedules. It enables not to perform the **Schedule/Clear old schedules** command each time manually.

**Schedule/Show icons** option switches on the output in the lines of icon schedules (of first frames of video clips and video blocks).

**Commands of saving and downloading the schedule**

**File/Export schedule** command saves the edited schedule in the file with the help of **File/Import schedule** command it can be downloaded. While



download the correctness of references in the schedules to clips and video blocks, logotypes and profiles in the project tree is checked. To move the whole schedule to the other day it is necessary to use **Copy/Paste entire schedule.**

**Command of  
loading anchors  
in the schedule  
from the file  
format**

**Microsoft Excel:**

*Schedule/Load*

*Anchors from*

*Excel*

### Setting compositions-logotypes to the schedule elements

One of the foreground compositions created and registered in folder of project tree can be set for every element of the schedule (except anchor) in **Logo** column.

Primarily, according to the rules, set through the **Settings/Default profiles & logotypes** menu item and depending on the type of the clip or block and the element of the schedule, a logotype is set to it by default. A dialogue window for defining the profiles and logotypes by default is described below.

The choice of a logo is realized with the help of context menu which is called by clicking the mouse **left** button in **Logo** column of schedule element. In the bottom part of this menu the names of all registered compositions-logotypes are listed. The absence of a logotype in the list is defined (**no logo**) and the value of the logo by default - (**default:<name of logo>**).

After selecting the logo its name is indicated in the **Logo** column, if it is not there then the corresponding square is empty. The name of the logo by default in grey color in the column.

There are other commands in the contextual menu apart from the list of the logotypes:

- **Edit Logo** – command of editing the logotype of a schedule element;
- **Add Logo** – command of creation a new foreground composition and setting it to the element of the schedule;
- **Populate Logo** – command of "reproduction" of a logo into highlighted elements of the schedule. The logo is taken from the first element of the highlighted segment.

If one and the same logo is set to the following in row elements of the schedule then the shift between them during the replay happens absolutely smoothly and inconspicuously as if these elements compose one whole. I.e. the elements of the schedules are replayed in their own turn and the logo is output by the system independently of that.

A special case is the output of the foreground composition above the clips and blocks of type *SC*. It is required here that the triangles of composition objects do not cross the activity area of the line effects of *Alpha Pro* software script

There is also a restriction that the clips and blocks of type *SC* cannot have simultaneously both their own accompaniment and the output of logotypes above them.

### **Setting the profiles directing the equipment of schedule elements**

For every element of the schedule (except anchor) in **Profile** column one of the profiles directing the equipment created and registered in **Profiles** folder may be set. The choice is realized with the help of context menu which is called by clicking the mouse left button in **Profile** column of the element of the schedule. In the bottom part of this menu the names of all registered profiles are listed there, the absence of the profile in the list is indicated as **(no profile)** and the value of the profile by default - **(default:<name of profile>)**

After the selection of the profile its name is output in the **Profile** column, if it is not there then the corresponding square is empty.

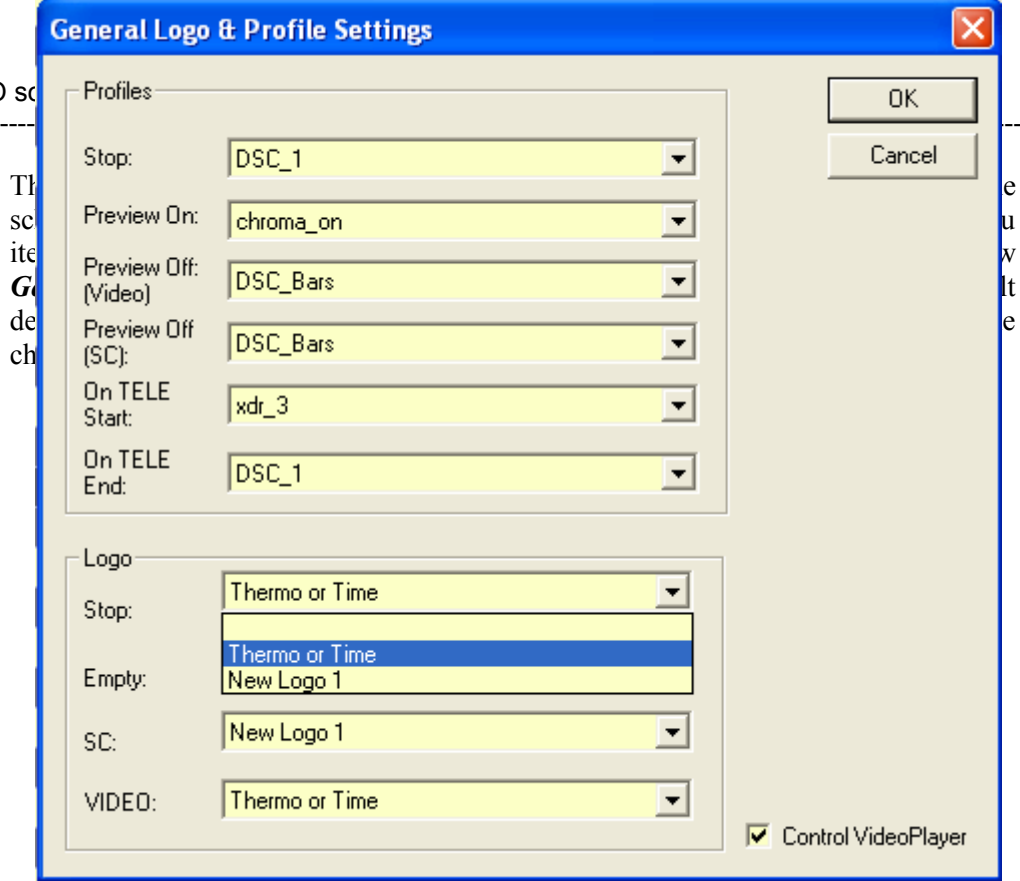
There are other commands in the context menu apart from the list of the profiles:

- **Edit Profile** – command of editing the profile of schedule element;
- **Add Profile** – command of creation of a new profile and setting the schedule to its element.

Actions assigned by the profile are performed before the replay of the corresponding element of the schedule. If the profile for the element is not indicated then no actions will be carried out and the external equipment of the video board will remain in its old condition. This means that it is not necessary to set a proper profile for every element in the schedule. But if replay of part of the schedule from the middle is required then it is necessary to set the corresponding profiles to all replayed elements from which the start can be realized.

**Setting profiles and logotypes by default**





The media tree for the selection of a profile or a logotype, respectively in **Logotypes** and **Profiles** folders is output on the right in the dialogue window. Having chosen a profile or a logotype in the folder tree with the help of a mouse it is necessary to press [**<-Set**] key to the right of that field which has to be defined. [**Clear**] key clears the value of the corresponding field.

The change of the logotype value by default leads to its substitution in all elements of the schedules, of corresponding type or clip (block) type in them.

### **OK**

By clicking [**OK**] key, editing ends, all input profiles and logotypes will be set to the corresponding elements of the schedules.

### **Cancel**

By clicking [**Cancel**] key, editing ends, changes are not input.

### **group -profiles:** *Profiles*

Indicating the profile in the fields of this group, the system instead of standard actions of video signal commutation on the output board performs actions assigned by the profile.

### **Stop**

The profile used during the performing **Stop** command in the system

### **Preview On**

The profile used for the setting **Preview Only** mode or resetting **On TV** mode

### **Preview Off (Video)**

The profile used for switching on **On TV** mode to look through the video files of clips and blocks during editing.

**Creation and editing the profiles of directing the equipment**

**name and the class of profile objects**

A profile may direct not one device but several – to do this there is a possibility of creating objects both of one and of different classes. Every object of the profile has a unique name and its class defines the type of directed by it equipment and is supported by a special software module included in the package of *TELE* system. This module processes the change of object parameters only of its class and thus set the name of this class.

It is possible to create objects and own classes, it is important that new names do not coincide with already existing names of classes and objects of the profiles and foreground compositions.

**Own parameters of profile objects:**  
*Object*

Every object of the profile is usually connected with a definite video equipment, video card or their functional block. This equipment of the definite type (model) is connected to a computer through a port (*COM*, *USB* etc), and all this is set in the own parameters of the object- **Params**. The parameters are output in **name of parameter = value** format. If the value is the text then it is placed in double inverted commas ("...").

Moreover, because of a different performance of computers it is necessary to select the quantity of delay between the commands to the equipment in microseconds – **Delay**.

An object can be used in several profiles or several times in one profile but everywhere its own parameters are the same, they are global and their change in one place influences on all entries of the object in the profiles.

**Parameters of profile elements**

During each definite entry of the object in the profile (this is **Item – profile element**) in addition to the own parameters of the object those parameters which are responsible for the change of the equipment condition - **Params**. Parameters are entered in **name of parameter = value** format. If the value is text then it is placed in double inverted commas ("...").

The number of the input varies very often during the entries of the object into the profile, that is why this parameter is placed in a separate field - **Input**.

These parameters are local and may differ during each entry of the given object in different system profiles.

**Objects of profile classes**

Already existing objects of profile classes are used in the profile. If there are no proper objects then during the editing of a profile it is possible to create them by pressing [*New*] key in an **Add Item** dialogue window. An object usually corresponds



**Some tips on creation of schedules**

At first the software cuts the schedule into 24 hour empty blocks by default, interchanging them with anchors which correspond to the beginning of every hour in a day. But in reality it will not correspond to the real time marks of start and end of advertising blocks, static pictures etc.

At first it is necessary to delete all extra anchors which do not correspond to the schedule of the broadcast. This must be done as in the future they may prevent creation and replay of the schedule because the clips and blocks will come upon them and simply will not be output by the system.

But this effect suggests that anchors should be placed not only at the beginning of the advertising blocks, static pictures but also at the end. This enables to control during the creation of the schedule that an advertising block or static picture do not exceed the set time limits on the air. Since the element of the schedule, the end time of which happens to be later than the time of the following it anchor, is indicated in light grey color, on the place of the commentary a sign "**Doesn't fit!**" is shown in red.

This schedule with arranged anchors may be copied in the Clipboard with the help of the menu command *Edit/Copy Entire Schedule or Schedule/Save Anchors*, and use it as a template for the use on other days. Though after the reset the times of some anchors may have to be edited.

Having created and downloaded a template with anchors into the schedule with the help of *Edit/Paste entire schedule or Schedule/Load Anchors* command, it is possible to insert after them starting static pictures and the clips which are usually known and approved beforehand.

It is necessary to pay attention during the input that if the duration of one and the same static pictures may vary (for instance, the duration of the whole block must be set), then it is better to create its own clip or block for every use of such static picture. This will enable to select the durations of such displays independently because it may happen so that its change in one place will lead to similar changes in other places where same display is used.

The same refers to the case when the schedules are made for several days ahead. Displays, clips and blocks for every day are better to be located in a separate folder in a project tree.

To the starting displays and empty blocks it is possible to set corresponding values in columns *Logo*, *Profile* and save this schedule again as a different template, for instance, when on different days the schedule of advertising blocks and displays coincides.

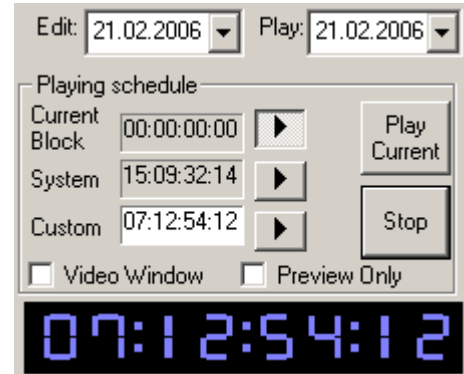
As has been mentioned above, the system works either in the mode of "insert", i.e. full substitution of a passing video signal by graphics of clips and blocks, or in the mode of laying graphics on it. In the first case a passing sound is substituted as well, in the second case there can be variants (the sound is substituted only during the output of *SC/Audio* blocks). The move from one mode to the other requires the change of video card condition, which in time may last during several frames. That is why it is undesirable to place clips and object which are output by the system in different modes one after the other. Empty blocks with duration up to a second should be inserted between them. It is done by adding into the schedule anchors with time shifted, for instance, on 1 second after the end of the previous element of the schedule.



## Chapter 4. Replay of schedules

### General description

In the top right-hand corner of the window of *TELE* software there are elements of controlling the schedule replay. The date of the replayed schedule is the field **Play**. During the launch of the software the schedule of the current date is selected, it is possible to choose a different schedule for replay in the window of the standard calendar of *Windows* media by pressing the button with an arrow down, to the right of the value of the corresponding field.



#### Window output of preliminary preview on the screen

Flag **Video Window** switches on the mode of preliminary display of the contents of video clips and video blocks (together with the logotypes) in the window on the screen 1-2 seconds before their real output on air.

#### Flag of preliminary output of the schedule

Flag **Preview Only** switches on the mode of preliminary preview when all clips and blocks are reproduced at the output of the preliminary preview of the video card (if this is foreseen) and the signal in an unchanged form sent to the entry is output to the software exit. In a similar way, at the output of *Line Out* sound card there is a signal from the *Line In* input. The playback of the files containing the sound (*422*, *AVI*, *MPG*, *WAV* etc) is not shown in any way at the output of the sound card.

If the mode of a preliminary preview is switched on, then the full output of the video signal and sound through corresponding outputs of the video and sound card is realized.

#### Modes and keys for schedule playback launch




To launch schedule playback it is possible to select one of the three options:

- **Current Block** – playback starting with the line of the schedule which is highlighted at the moment;
- **System** – playback of the schedule judging from the evidence of computer system clock;
- **Custom** – launch playback according time set by the user. In this case it is necessary to enter the time in "*HH:MM:SS:FF*" format.

Playback in **Current Block** mode enables to select manually a required line of the schedule and to launch the playback starting with it. This is equivalent to the launch of the schedule in **Custom** mode when the start time of the corresponding line is set manually. These both modes launch the playback in their 'own' time different from the system's. This



possibility is indispensable when the schedule of the output is shifted in time due to this or that reason.

The choice of options and launch of playback of the schedule in the corresponding mode is realized by pressing  button located in the line to the right of the name of the option. After pressing the key it "sticks" and above the key instead of sign "**Stopped**" "**Playing schedule**" is played back.


**Auto launch of schedule replay during the download of TELE system**

**Settings\Play Schedule on program execution** option controls the automatic launch of playback of the current date schedule in **System** mode after the software launch (i.e. judging from the readings of computer system clock).

**Time output which corresponds to the moment of schedule playback**

Time corresponding (depending on the mode) either to the current moment in played back schedule or the readings of a computer system clock is output below in big figures in "*HH:MM:SS:FF*" format. The colour of figures of this time corresponds to the condition of the playback. Thus:

- **Red colour** – schedule is not replayed;
- **Blue colour** – schedule is replayed in **Current Block** or **Custom** mode;
- **Green colour** – schedule is replayed in **System** mode.

Besides, its own time is output for each mode in front of  buttons on the panel of the player. Thus the time corresponding to the current element of the schedule, with which the playback was started, is output in the line **Current Block**. In the line **System** - the time according to a computer system clock, in line **Custom** – internal time in the system corresponding to the current moment in the played back schedule.

**Playback of the current schedule or clip (block) element from media tree**

**Play Current** key plays back only **one** highlighted element of the schedule, i.e. the launch of the playback of the whole schedule is not realized.

The key is equivalent to the corresponding **Play** command of the context menu of the schedule element.

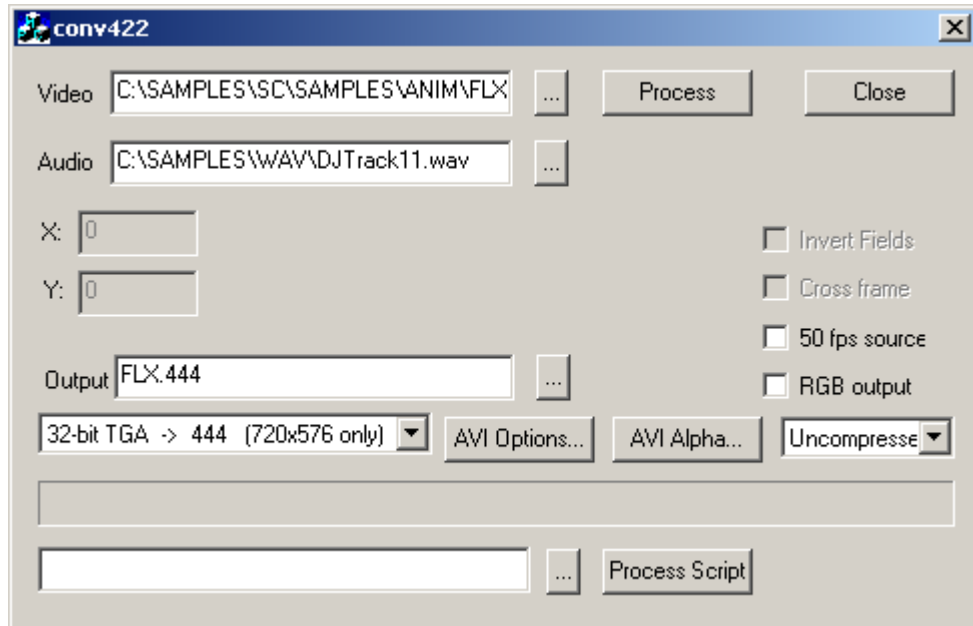
**Playback stop**

**Stop** key stops any playback in the system and transfers video and sound card in the pass-through channel mode.

## Appendix 1. Software of conversion the formats of files

*TELE* system on a par with widely spread video file formats uses special formats for the graphics output without compression with sound - **422** (or without), graphics with alpha-channel - **444**, or with own *MJPEG*-coding – **MJPEG/MJPG5**.

Conversion is realized with the help of software *CONV422.EXE*.



**Video** - The name of the initial video file is set in the field **Video**. If in the transformation a whole chain of graphic files participates then the name of the first of them ending in numbers is entered in the field. In addition other files located in the same catalogue and having numbers at the end of the name bigger than the specified form a video sequence which is transformed in a video file.

For convenience of the input of the file name there is the key [...] to the right of the field which calls the standard window of name selection with extension depending on the type of transformation (see below).

**Audio** - The name of the initial audio file, if it is required, is set in the field **Audio**.

For convenience of the input of the file name there is the key [...] to the right of the field which calls the standard window of name selection with extension *WAV*.

**Output** - The name of the created video file is set in the field **Output**.

For convenience of the input of the file name there is the key [...] to the right of the field which calls the standard window of name selection with extension depending on the type of transformation (see below).

**Type of transformation**

There is a combo box with a possible option of the transformation type below the field **Output**:

**all -> DV, MJPEG, MJPG5, 422**

Any initial video file or video sequence having the extension 24 bit 720x576 is transformed in the output file (with or without the sound), the format is defined by extension format. This is - *Uncompressed* (\*.422), *MJPEG* 6.5MB/sec (\*.mjp), *MJPG5* 3.6MB/sec (\*.mj5) or *DV* (\*.dv).

**24-bit TGA -> 422/MJPEG**

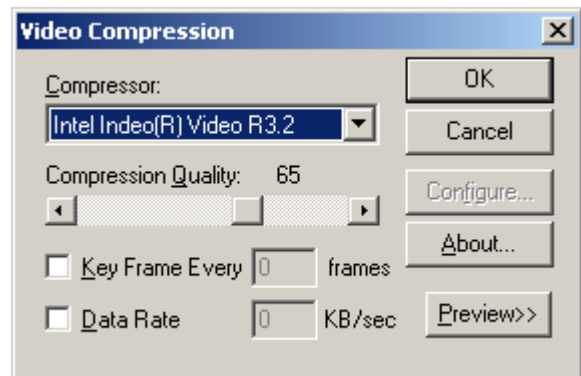
TGA-file sequence, having extension 24 bit 720x576 the output file (with or without the sound) the format of which is defined by extension as shown above is transformed.

**24-bit AVI -> 422/MJPEG**

Similarly to the previous variant only as an initial one any AVI-file can act.

**422/MJPEG -> RGB AVI (24-bit)**

Any initial file of formats *Uncompressed* (\*.422), *MJPEG* 6.5MB/sec (\*.mjp) or *MJPG5* 3.6MB/sec (\*.mj5) with or without sound, having extension 24 bit 720x576, is transformed in the output AVI-file. In the output AVI-file compression may be used which is set by [AVI Options...] button. This transformation enables files which are digitalized with the help of **Record** function in *VideoPlayer* software, to be turned into more compact and available for editing.

**422 -> DV**

An initial file of *Uncompressed* (\*.422) format with sound having extension 24 bit 720x576 is transformed in the output file (\*.dv) with compression *Native DV* and stream 3.6MB/sec, which can be used directly in the system.

**32-bit TGA -> 444**

The sequence of 32-byte TGA-files with alpha-channel is transformed into a video file without the sound with extension (\*.444). This file may be played back by the system on video cards of *Stream Alpha* series.

**32-bit TGA -> 32-bit AVI**

The sequence of 32-byte TGA-files with alpha-channel is transformed into AVI-file (without the sound). In the output AVI-file (for imagine and

alpha-channel) compression may be used which is set by buttons [**AVI Options...**] and [**AVI Alpha...**] respectively.

### **AVI+AVI -> 444**

Two 24-byte AVI-files, which names are set in the fields **Video** and **Audio**, are transformed in a video file without the sound with extension (\*.444). The first AVI-file defines the imaging, the second – alpha-channel.

### **32-bit TGA + audio -> \_422 (lumakey)**

The sequence of 32-byte TGA-files is transformed in the file (\*. \_422) with sound but without alpha-channel. The transparency in \_422-files is set with the help of rear-projection built on the brightness channel in *LumaKey* image– transparent are the dots of black color.

### **Width and height of used images**

If in transformation images of *DV*, *MJPEG*, *MJPEG5* or *422* formats are used then they cover the whole screen and the frames of the input files must have resolution 720x576 pixels. In other cases the size of initial frames may be smaller, the result is that they often will not cover the whole screen during their output.

### **Transformation options**

#### ***Invert Fields***

The given flag switches on the mode of fields inversion if images of *MJPEG*, *MJPEG5* or *422* formats are used in transformation. In resulting frames odd and even lines change places.

#### ***Cross Frame***

This flag switches on the mode of **422/MJPEG -> RGB AVI (24-bit)** frame rearrangement in file AVI-during the transformation – odd and even frames change places.

### **50 fps TGA**

The given flag during the transformation from TGA-files or creation of 444-files indicates, that the output images were created in the progressive scanning with frequency of 50 frames per second. I.e. every TGA-file contains twice more lines and in time corresponds to one field in the video signal.

### **Compression of 444- files**

During the compression of 444-files it is possible to indicated the type of their compression below in the flow list: **Uncompressed**, **High Quality** and **High Compression**. The first variant does not presume any compression and the output file will save only the original quality but at the expense of bigger size. The last variant compresses the output file in a maximum way but there can be some worsening of the result compared to the original image. The second variant is a compromise

between the first and the third – compression is used but the quality of the image is not getting worse.

Any variant of compression increases the loading on the processor during the playback of such files by the system but decreases the requirements to the hard disk.

**Launch of transformation process**

**[Process]** key launches the implementation of file transformation in the process of which a horizontal indicator is output by which it is possible to speak about the level of task implementation.

**Launch of the transformation process in package mode**

**[Process Script]** key launches the implementation of a group of files in a package mode. The list of input and output files is set in a text file to the left of the button.

For convenience of input of the name of file there is a [...] key, to the right of the field which calls the standard window of name selection with extension *TXT*.

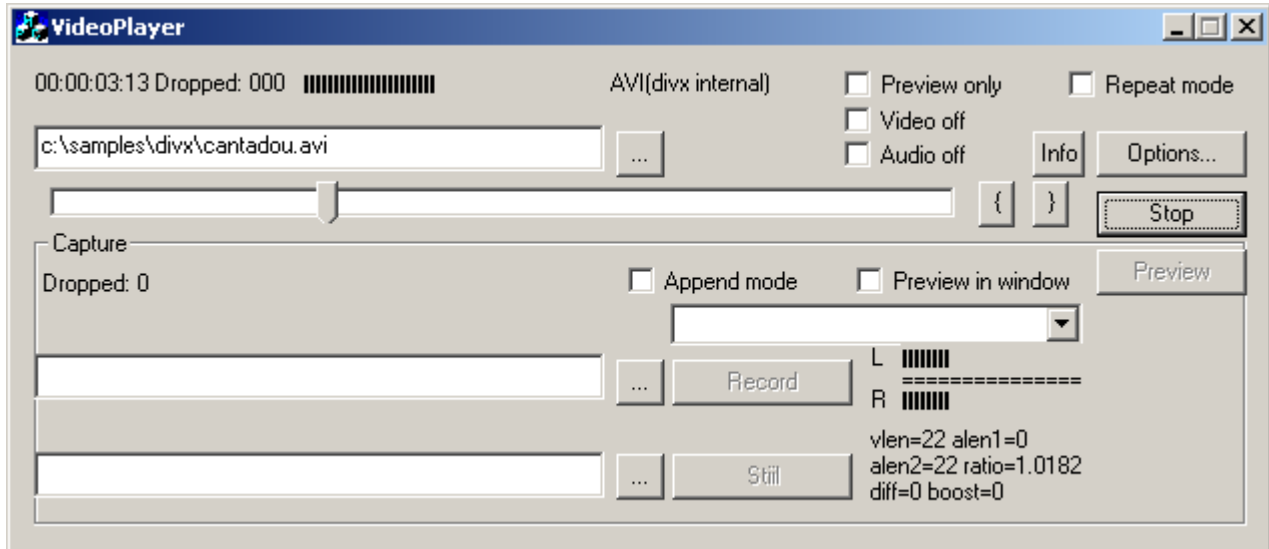
As transformation parameters their current values before its launch are used.

**Exit from the software**

**[Close]** key closes the window of the software. The type of transformation which will be immediately restored at a new call of the software is saved.

## Appendix 2. Software of clip reproduction of VideoPlayer clips

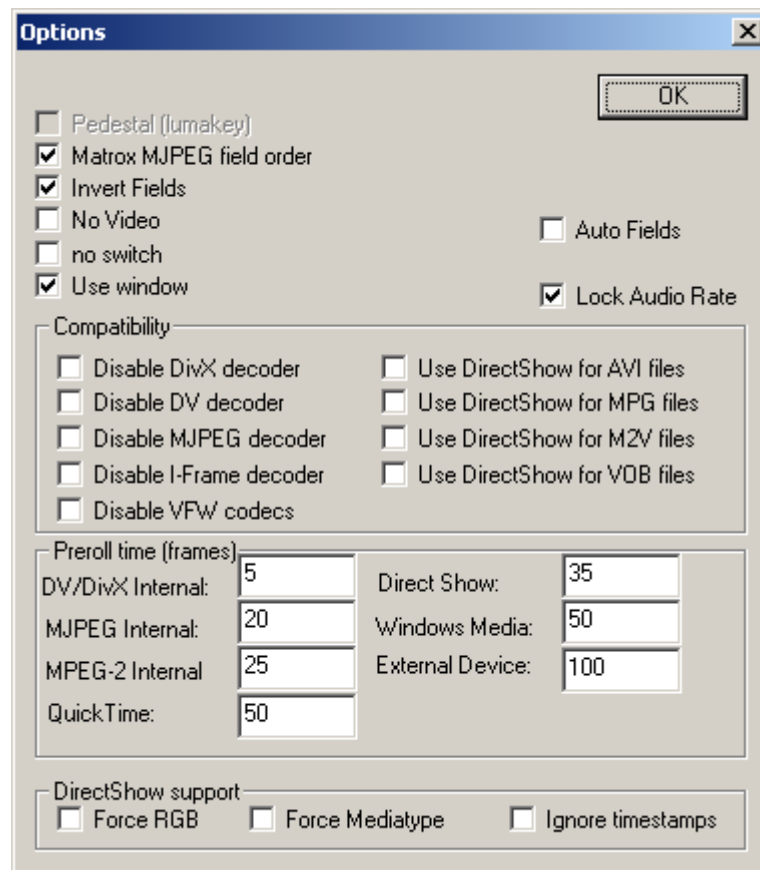
During separate download of *TELE* system, the software of clip reproduction is downloaded if the video card is installed – *VideoPlayer*.



The direction of the software during the playback of the schedule is realized from *TELE* system directly and does not require any interference. Only options of video clip reproduction may be changed by pressing [**Options...**] keys.

### Options of video clip reproduction

Pressing [**Options...**] keys a dialogue window *Video player options* appears.



**Matrox MJPEG field order** - various video cards, working in the *MJPEG* format store information in *AVI*- files differently. If at the output the fields are not mixed together (the neighbouring lines of different parity are in the wrong order) then it is necessary to set this flag. In this case the movements are smooth, but on the slanted lines of static frames jaggy backwards are seen.

**Invert Fields** - this flag enables to shift the order of sequence of neighbouring fields in time. The flag should be switched on if the imaging at the output is not smooth - "jitters".

**Auto Fields** - in some most difficult cases there are files which order of the fields' changes from scene to scene. As a rule, this is the result of mixing files of various origins in one project during the work on editing systems on Matrox card. The given flag does not guarantee anything but gives the chance that the order of the fields will be correct at least in the scenes with noticeable moving objects.

**Use window** - drop of the flag may help during the problems with video adapter. In this case a preliminary (test) preview of clips and video blocks in the window on the screen will be impossible.

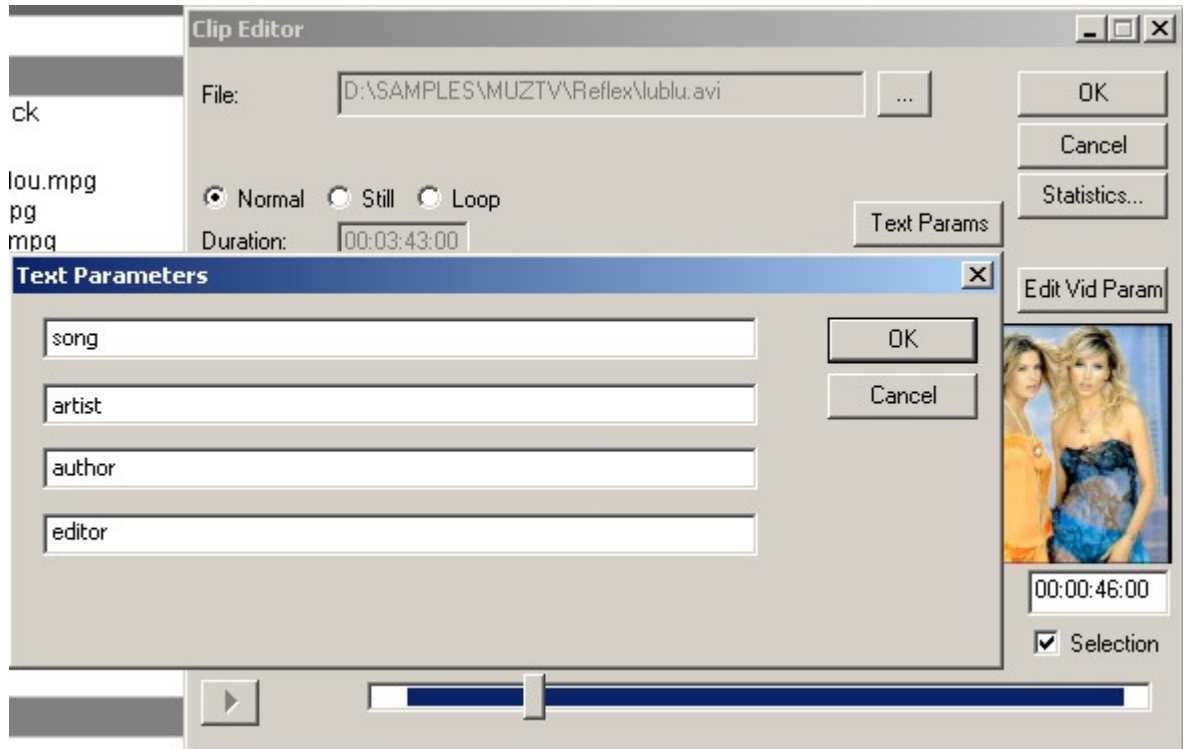
**Disable DivX/DV/MJPEG/I-Frame decoder** - the support of these file formats is built in the *VideoPlayer* software. If these files are played back incorrectly due to some reason, then it is possible to drop the flag and switch off the corresponding built-in decoder in order to use an external codec *Video for Windows*.

**Use DirectShow for AVI/MPG/M2V files** - this flag enables the use of external codecs *Direct Show* for specified formats, if the in-built support in *VideoPlayer* software does not satisfy. In particular, this enables the use of external codecs during the reproduction of files *MPEG-2* or *DV type 1* format.

## **Appendix 3. How to organize a music channel**

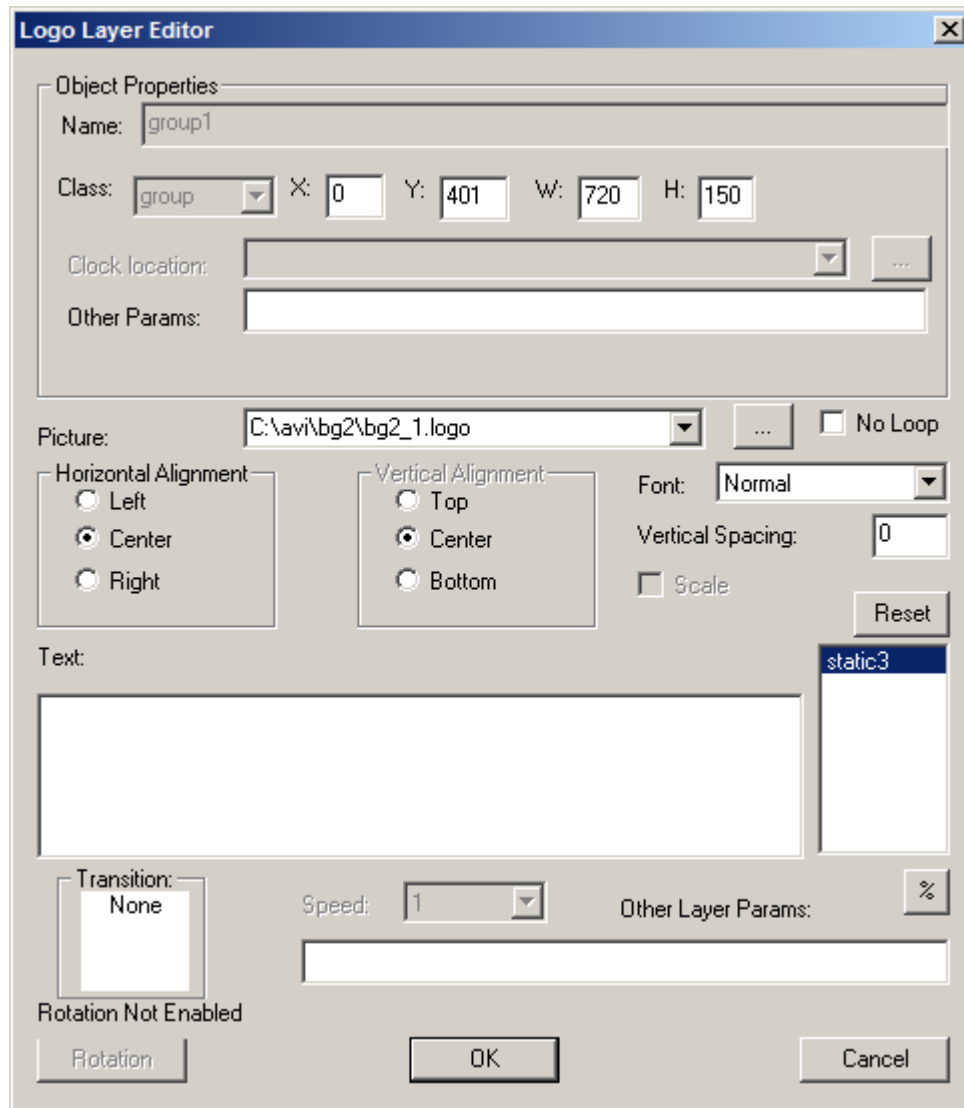
By means of TELE Infochannel you can organize a 24-hour broadcast of your own music channel.

In the properties of every clip, with the help of Text Params button in the window of clip editor go to text parameters of the clip for further display.



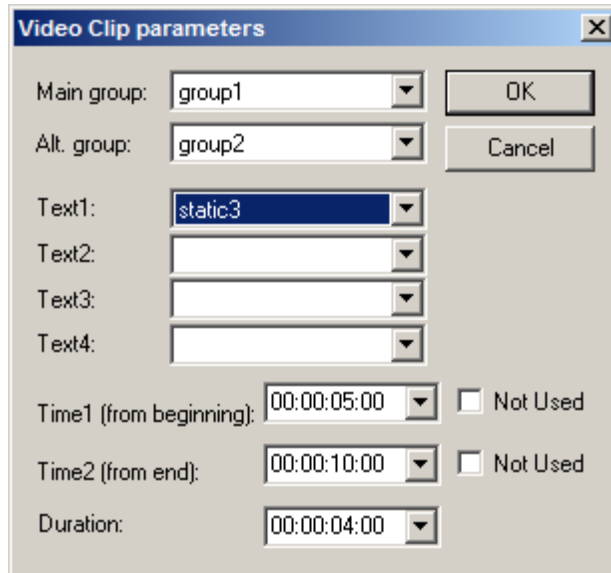
For the use with clips prepare a foreground composition, the most important is that it must have an object of type group and one or several objects of type static, included into the group. For the group in the field «Picture» indicate a file with a «caption card» (a background for the title of the song's name). A caption card may be animated. It is also possible to create an effect of appearance.





Then, in foreground composition settings we show what group will be used for the subtitles, what objects will indicate the name of the song and other parameters of the clip. In our case only the object static3 for the name of the song is set. An alternative group (group2) – is a group which is removed from the screen during the subtitle, it can, for instance, contain an SMS–chat or audience voting.

A subtitle is indicated twice – in 5 seconds after the start of the song and 10 seconds before its end. The duration of the subtitle itself is 4 seconds.



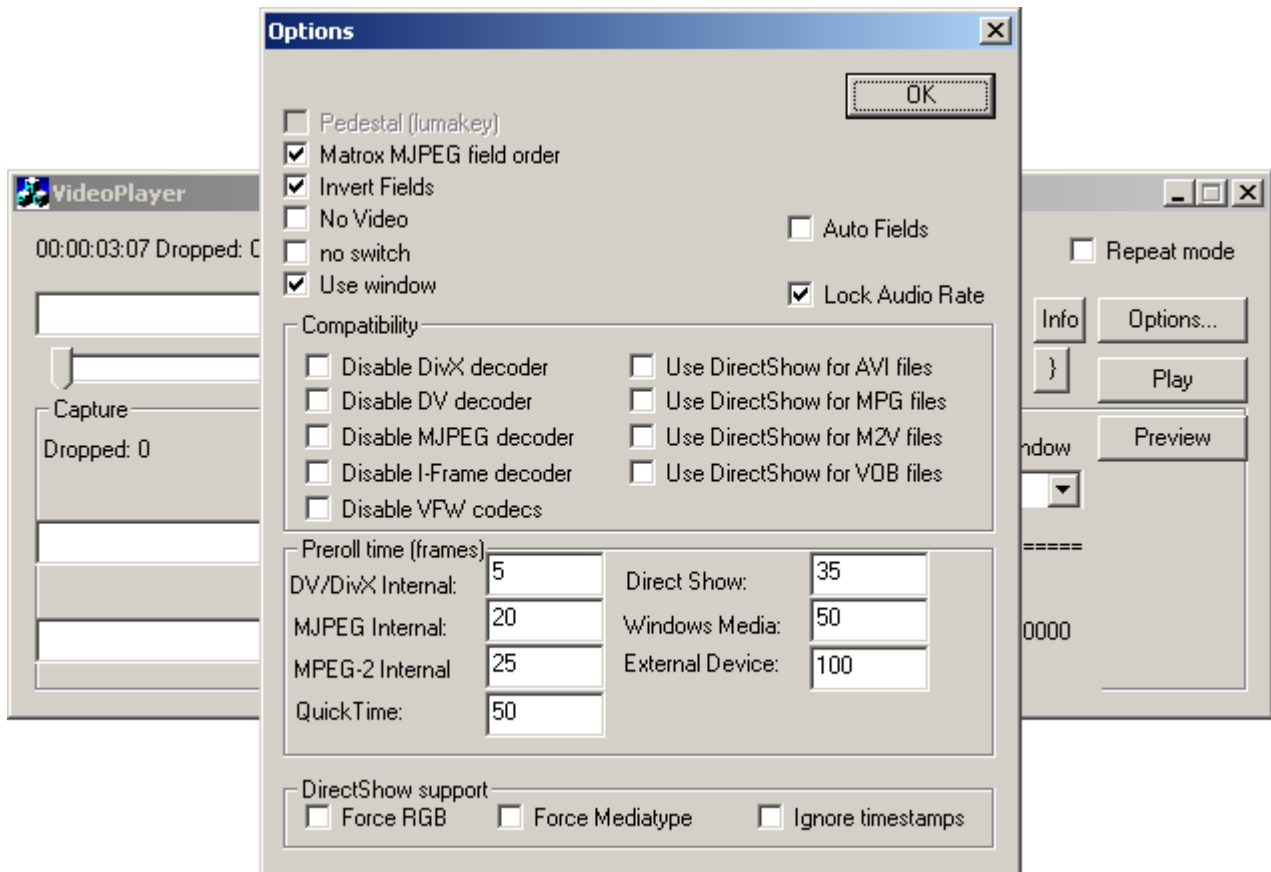
A caption card with a subtitle is not output on the clips on which none of the text parameters is set. Thus, the system automatically detects the clips with the songs from other, for instance, advertising ones.

## Appendix 4. Frequently asked questions

### Video files during reproduction "jitter"

There are two reasons for jerks during the reproduction of the video files: not good enough performance of the hard disk (mode Ultra DMA is not switched on) and an incorrect order of the margins.

The first reason is not very actual for modern computers. More over during the installation Windows XP as a rule switches on DMA mode.



An incorrect order of the fields often happens if the DV file was transformed by the software into any other format, or vice versa, a file in a format was transformed into DV format. The matter is that the order of the fields for most of video file formats, and for MPEG-2 as well, must be "The upper field – the first" according to the standards. DV format has the standard "lower field – the first". However, no one prevents creating a DV file with a top field having transformed it from MPEG-2 or M-JPEG. Such file will be reproduced with jerks. In TELE system there are both global (in options of VideoPlayer software) and individual (video parameters of the clip) for every file settings enabling to change the order of the fields into the opposite during the reproduction. Having selected them it is possible to achieve the disappearance of jerks.

### What computer configuration is recommended for normal work of TELE?



For file reproduction in DV, MPEG-2, MPEG-4 format with small streams Intel Pentium IV with CPU clock speed 1.4Ghz is enough but for good work 2.0 GHz is required. Minimum disk memory is 512 Mb. There are no special requirements to speed of hard disk but it is advisable that a separate disk is used for the video files.

During work with MJPEG files or without compression (422) the requirements are higher. Processor at least 1.8 Ghz. Hard disk must be 7200 RPM, and during work with files without compression or with stream higher than 7.0 Mb/sec. RAID massive (stripe) by means Windows 2000/XP (hardware controller is not required).

During work with scaling in Infochannel module, the requirements to processor are even higher - 2.4 GHz, and during work with module DVB - 2.8 GHz

### Volume is not switched in TELE. What is the problem?

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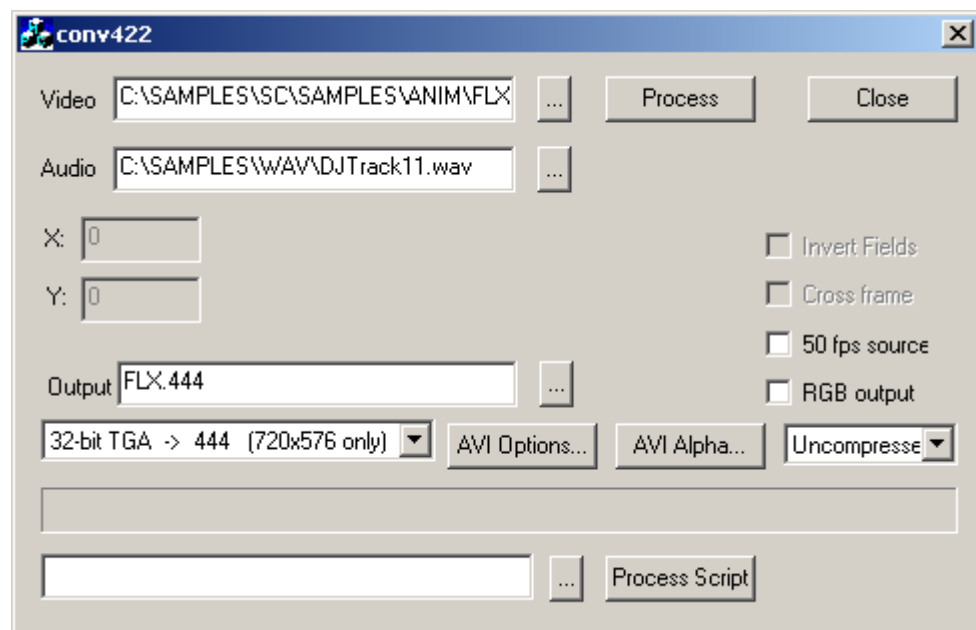
#### Sound Blaster



Sound cards Creative Labs Sound Blaster Live!, Sound Blaster Audigy, Sound Blaster Audigy2 are recommended for normal work of TELE. Work with other models of sound cards is possible but not guaranteed. It is strongly forbidden to use several sound cards in the system. If in your motherboard there is an in-built sound controller, switch it off in BIOS, in other case the commutation of the sound signal will not be realized. Moreover, the situation, when in there system some time ago a driver of a strange sound device was installed, may lead to a potential problem. Make sure that the incoming audio signal is sent to the Line In input (and not Microphone or any other).

### How to output animation with alpha-channel (banners) in TELE software?

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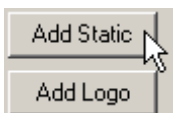
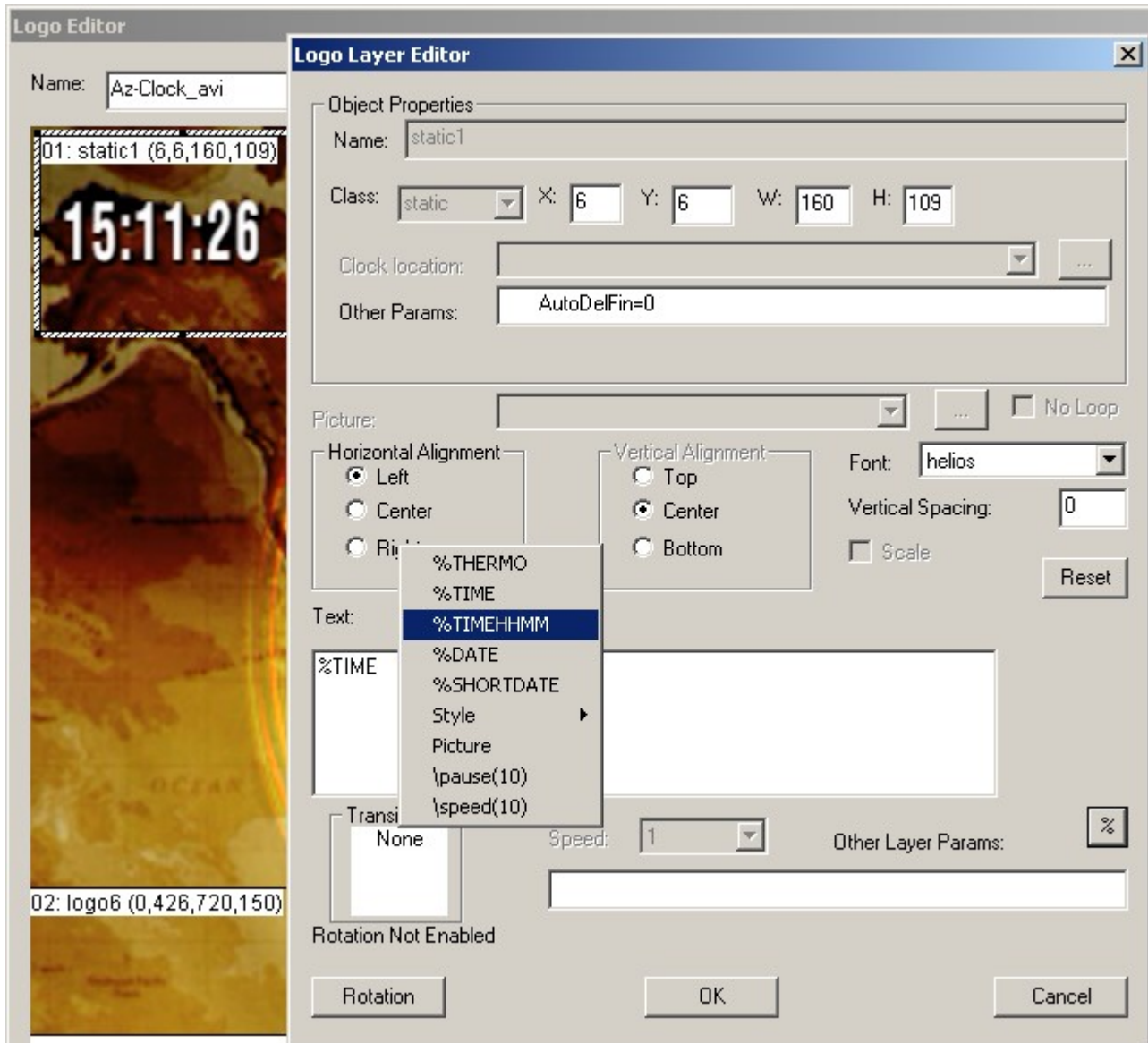
To display animation with alpha-channel in TELE system there are two principal features. First of all, it is possible to convert the sequence of files TGA 720x576x32 bytes in a special 444 format with the help of Conv 422 software. There are restrictions – in every frame of this file not less

than 50% of screen square must be transparent. Files in this format may be included in the schedule as clips. They can also be used in Text/SC/444blocks. If such clip appears in the schedule together with a logotype then it serves as a background for this logotype.

The second variant is the use animation logotype as an object (element) of a foreground composition (logotype). It is necessary to convert the sequence of TGA files with alpha-channel in a special format LOGO. The size of file can be smaller than 720x576, for instance 100x100 pixels. In the logotype editor it is necessary to add an object of type Logo and indicate as a picture LOGO-file created by a converter. It is also possible to show the path to the first file of TGA-sequence but the use of LOGO format saves memory and gives advantage during production.



### How to show digital clock with the help of TELE?

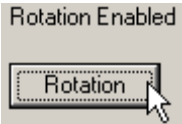


Digital clock may serve as an element (object) in foreground composition of TELE system. For this add an object of type Static (with the help of "Add Static" button in logotype editor, indicate as a text %TIME or

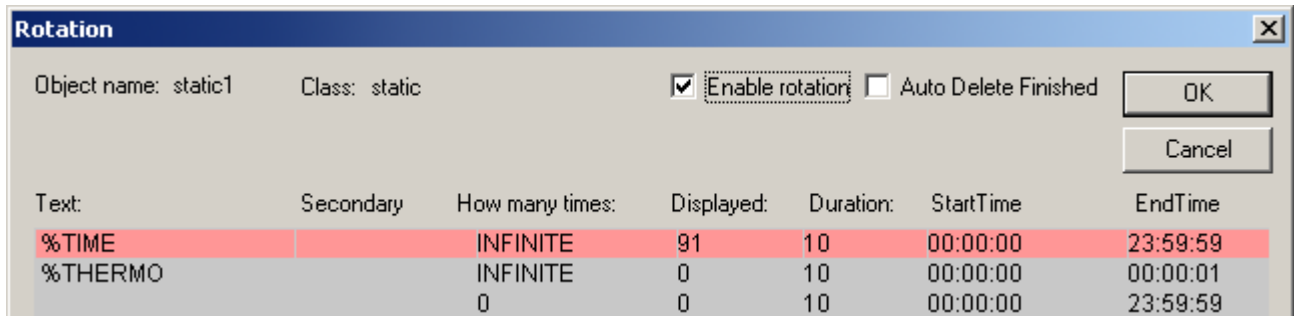
%TIMEHHMM depending on what view you want to display the clock readings.)

### How to alternate readings of a digital clock and temperature?

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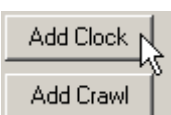
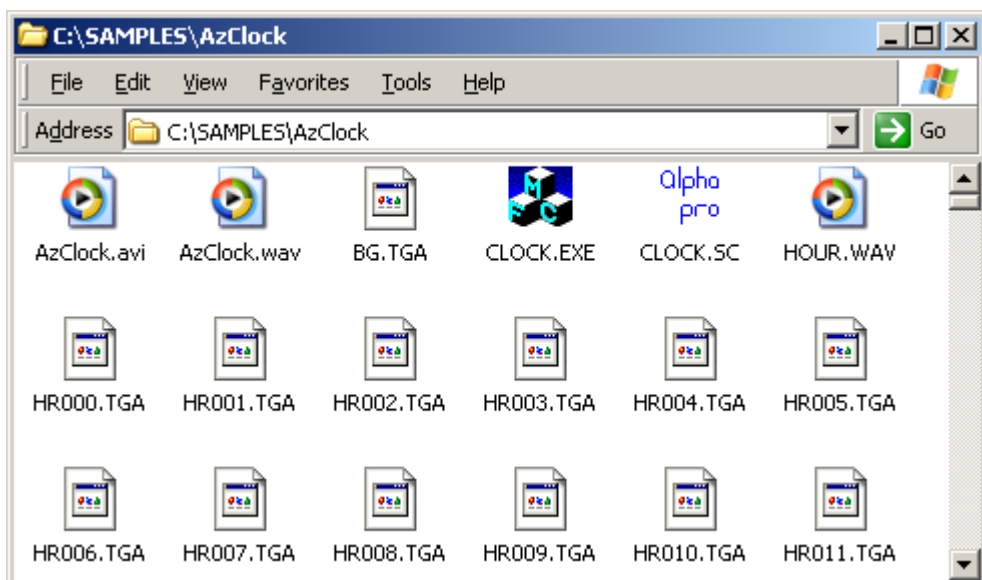
Use the mechanism of rotation which enables to change the values of the logotypes in cycle recurrence. Set the alternation with the period of let's say 5 seconds at which the value %TIMEHHMM will change by the value %THERMO.



### How to display hand clock?

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Models of hands for clocks are in the directory CLOCK on CD-ROM. For clocks 240 images of minute and hour hands are required and 60 images of second hand in TGA 32 byte RLE Compressed format. It is better if the files are created in Adobe After Effects. The clock is created for a long time so it is better to invite your designers so that the hands are of good quality. To display the clock it is possible to use CLOCK.EXE software which works only with extended version Alpha Pro.



In TELE system, hand clock may serve as one of the objects (elements) used in foreground compositions (logotypes). To display hand clock in TELE system, create a new logotype (New Logo) or use an already existing, open it in the logotype editor and press "Add Clock" button to add an object into it of clock type. For the object indicate the location of a

directory where the images of hands are kept. All files in the directory must have one size (resolution). Format TGA 32 byte with RLE compression. The use of uncompressed files is not permitted.

### **Video files in Canopus DV Storm format are not reproduced. What shall I do?**

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To reproduce these files it is necessary to have Canopus Software DV Codec.codec.

It is possible to download it from the website of the company-producer and install it in the system.

### **Files in MPEG-2 format are not reproduced and are displayed incorrectly.**

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An in-built codec MPEG-2 decodes not all possible variants of MPEG-2 format. If files MPEG2-I-Frame are reproduced incorrectly then it is necessary to switch on Disable I-Frame Decoder option and install Matrox Vfw codec Pack (MPEG2-I-Frame is part of it) in the system.

If we speak about files in MPEG-2 IPB format, then it is necessary to switch on a global option Use DirectShow for MPG files or switch on option Use DirectShow individually for the given file. Files will be reproduced only if an external software codec MPEG-2 like Ligos or Elecard, is available in the system. If the files are reproduced correctly by an in-built codec of TELE system (option Use DirectShow is switched off), then it is better to use an in-built codec which loads the central processor less.

### **All operations with the database take up a long time.**

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If option Gather Statistics is switched on, then all the information about the launch to playback of every clip and block in the TELE system is saved in the database. With time the size of the database increases and the access to it slows down. The decision is the following: the file TELE2.MDB where the database is located opens in the MS Access software and by means of Access all extra information is deleted from Statistics table. After that the database must be optimized with the help of function Service/ Utility softwares/Compress and restore the database. If saving of statistics is not required then it is enough just to switch off Gather Statistics option, so that the database does not increase so quickly.

### **Is it possible to send on air a recording from DV/DVCAM tape?**

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In TELE 2.1 Infochannel package there exists a module of data reproduction which is received in the form of a digital stream through port 1394 both with scaling and without it. Before reproduction of a pseudo-clip from such source, a command is sent to the tape recorder connected to the port to end the pause which provides a clear sound without interruption. Synchronization of the tape recorder from an external

analogue source is not required – the data are received along the digital stream. An immediate switching without the synchronization on to the main analogue input of the video card is possible.