

# *TGA2AVI*

*Image sequence to AVI file  
conversion*

## User Guide

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ForwardT Software 4.0.0

SoftLab-NSK, Ltd.

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## 1. Introduction

The *TGA2AVI* application from the *Forward T* software package is intended for creating an AVI file with transparency from a set of images (graphics files) with transparency.

Video files with transparency (complete or partial) can be used as TV titles, logotypes, full-screen captions, etc.

The *TGA2AVI* application uses the *Softlab-NSK Forward JPEG with Alpha* codec supporting transparency. This allows the generated video file to keep transparency of the initial graphics files.

Graphics files with full-color image and alpha channel can be created in the *Forward Titling* application also included in the *Forward T* software package. For details about such files creation, see the *ForwardTitling* User Guide.

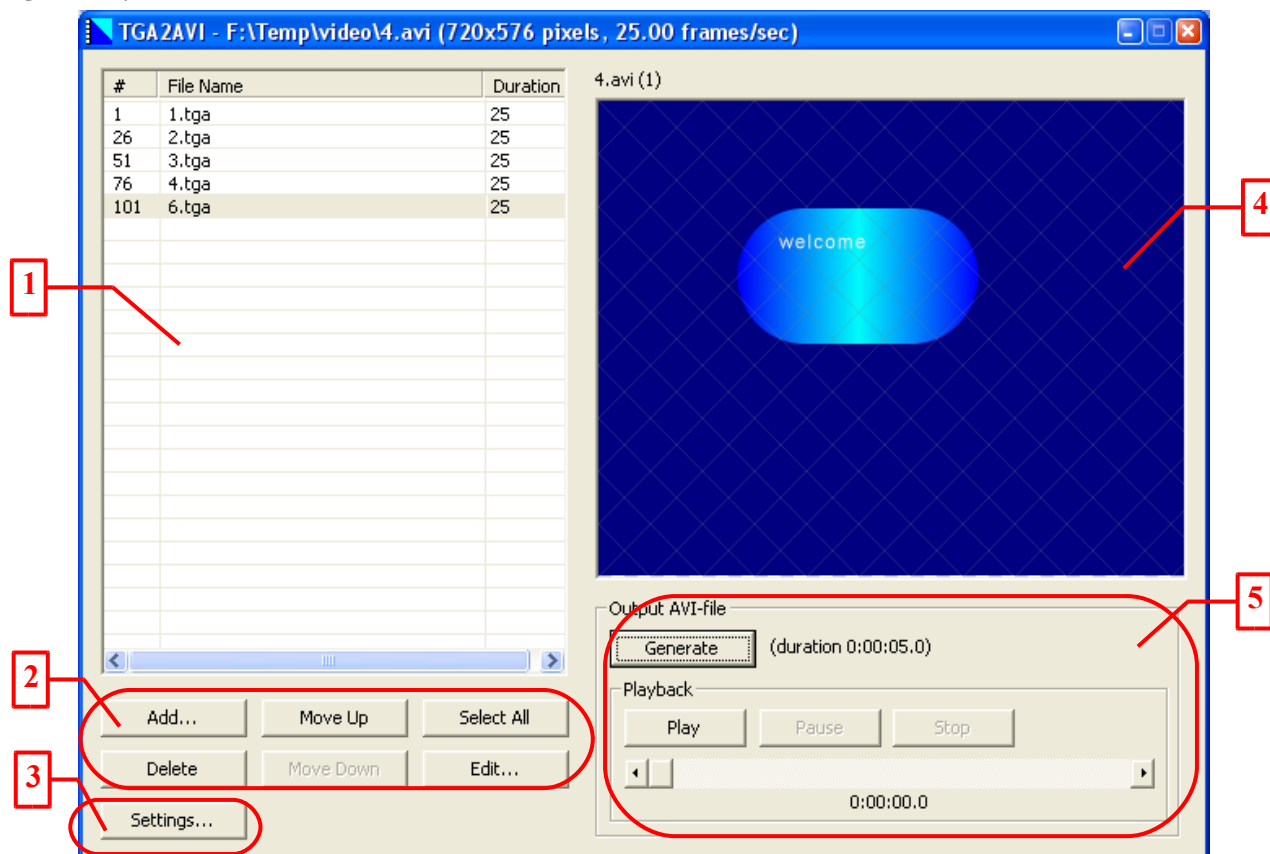
For the purpose of an AVI file creation the initial graphics files should be arranged in the required order. A sequence can be formed manually directly in the *TGA2AVI* application. Besides, it is possible to use existing image sequences created automatically. Most widespread editing systems (*3D Studio Max*, *Adobe After Effects*, *Adobe Premiere Pro*, *Pinnacle TitleDeko*, *Sony Vegas Video*) support creating such sequences of images with transparency.

The *TGA2AVI* application supports the following graphics files formats: TGA, PNG, BMP.

## 2. TGA2AVI application

The application allows the user to create a required sequence of graphics files with specified duration of each image display and then to convert it to an AVI file.

The application is started from the menu **Start > Programs > ForwardT Software > Tools > TGA2AVI**.



**Fig. 1. Main window of the TGA2AVI application**

The title bar of the application main window () displays the following information: name of the application, full path to the generated video file (if there is one) and video file parameters (in brackets). The main window includes the following control groups:

- 1) the table intended for files list;
- 2) buttons for list editing;
- 3) the **Settings...** button opening the corresponding dialog;
- 4) the preview window;
- 5) the group of controls for operations with video file (generation and navigation).

### 2.1 Files list

The table is intended for forming and editing a graphics files list that is used as the base for video creation, and for editing particular list items.

For the purpose of creating graphics files with transparency, it is recommended to use the *ForwardTiling* application included in the *Forward T* software package (see the *ForwardTiling* User Guide).

It is recommended to save the images in the same folder for your convenience at work with the *TGA2AVI* application.



*The images intended for the same video file must be of the same height and width.*

Every row of the table displays information about one graphics file. The table includes three columns:

- # – displays sequence number of the image first frame in the general frames sequence;
- File Name** – displays the graphics file name;
- Duration** – displays the number of frames for the current image in the output video file; a click on a highlighted row makes this field editable.

The order of items in the table determines the sequence of images in the output video. Under the table there are list control buttons with the following functions:

- Add...** – adding a list item to the table (opens a system file open dialog);
- Delete** – deleting an item from the list (deletes the selected row from the table);
- Move Up** and **Move Down** – moving a selected row (a line up or down, respectively);
- Select All** – selecting all list items (for the purpose of simultaneous editing/deletion);
- Edit...** – editing the duration of a selected list item (opens the *Edit Duration* dialog, Fig. 2).

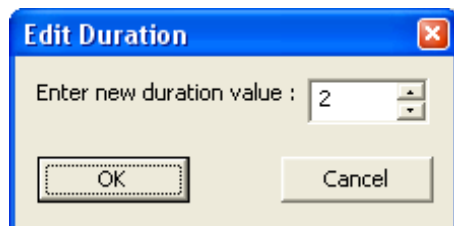


Fig. 2. *Edit Duration* dialog

If duration of all items should be the same, it is more convenient to specify it in the settings beforehand, or edit it having selected all list items with the **Select All** button. It is also possible to edit duration of several items selected simultaneously one after another or in random order at the same time.

The total duration of the output video file is specified on the right to the **Generate** button; at editing duration of one or several items the changes influence this field right away. The estimated video file duration is displayed in the "hours:minutes:seconds:frames" format. The new settings of frame rate are also displayed in this field immediately.

At editing the items list, the preview window displays the image corresponding to the selected table row.

## 2.2 Settings

The **Settings...** button opens the dialog of video file parameters settings (Fig. 3). In this dialog it is also possible to specify the default duration of images playback.

The **TV Standard** group is used for specifying image proportions and frame rate in the output video file. It is possible to select standard values with the **PAL** and **NTSC** radio buttons that specify parameters corresponding to the TV standards. The **User defined** radio button is intended for specifying non-standard values; it allows manually specifying the **Width**, **Height** and **Frame rate** parameters values in the group with the same name.

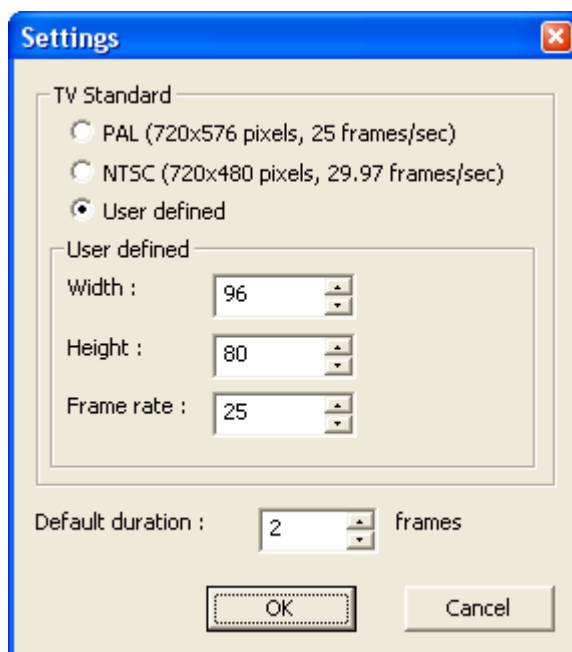


Fig. 3. Settings dialog

☞ The codec used by the application requires that height and width of image be divisible by 16 (in pixels).

At creating a full-screen clip it is possible to simply select the radio button of the required TV standard: **PAL** or **NTSC**. If it is necessary to create a video file occupying only a part of the screen (e. g. a logotype, banner), select the **User defined** radio button. In the parameters group that becomes available at this button selected set the image width, height and frame rate in the corresponding fields. For example, the values specified in Fig. 3 (96 by 80 pixels) assign a moderate rectangular area to the image, the frame rate (25 frames per second) corresponds with the PAL TV standard.

☞ The values specified in the **Width** and **Height** fields must agree with proportions of the prepared graphic images.

The **Default duration** combo box allows specifying default playback duration. This is the value that is specified automatically at adding graphics files to the list. The duration is specified in frames.

The **OK** button applies the settings and exits the *Settings* dialog.

## 2.3 Controls for operations with video file

The **Output AVI file** controls group (Fig. 4) is intended for AVI file generation and output file previewing.

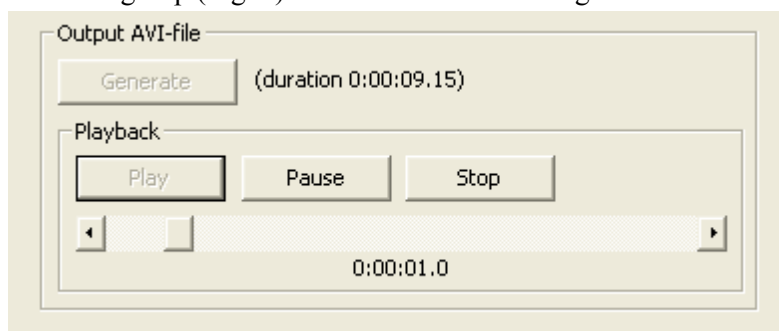


Fig. 4. Group of controls for operations with video file

The **Generate** button is used for AVI file creation on the basis of an images list. Pressing this button converts the image sequence specified in the list to a video file and opens a dialog for saving the AVI file. This dialog is standard, it requires to select a folder and specify the file name. Total video file duration in the

"hours:minutes:seconds:frames" format is specified to the right of the **Generate** button.

The **Playback** group is intended for the output file preview control. Buttons of the group have the following functions:

**Play** – starts playback;

**Pause** – stops playback with the current position fixed; a second click on the **Play** button continues playback from the fixed frame;

**Stop** – stops playback with the current position switched to the file beginning; a second click on the **Play** button starts playback from the file beginning.

The scroll bar under the buttons allows moving quickly to a required frame. The current position is displayed in the field below.

## 2.4 Preview window

The preview window is located in the application main window. At files list editing the preview window displays the image corresponding to the item selected in the list. The file name is displayed above the preview window. This window is also used for the generated video file previewing.



*All images are scaled to the preview window size.*

If the generated output file is not what you wanted, it is possible to return to image list editing and then to generate video once again.

Remember that at exiting the application the image list is lost and you will have to begin a next session with forming the list anew.

### 3. How to use the *TGA2AVI* application

1. Create graphics files in the *ForwardTitling* application.
2. Start the *TGA2AVI* application.  
You can do this from the menu **Start > Programs > ForwardT Software > Tools > TGA2AVI**.
3. Specify the application settings.
  - a) Press the **Settings...** button.
  - a) In the **TV Standard** group of the *Settings* dialog select the required image size and frame rate.
  - a) Specify the default image display duration in the **Default duration** field.
  - a) Press the **OK** button to apply the settings and exit the *Settings* dialog.
4. Create a graphics files list.
  - a) Press the **Add...** button.
  - a) In the *Add Image File* dialog select the folder with the required graphics file, specify its name and press the **Open** button.
  - a) Repeat these actions as many times as necessary to add all required files to the list.
5. Edit the list.
  - a) For moving list items up or down press the **Move Up** and **Move Down** buttons or drag them with the mouse.
  - a) Edit image display duration if necessary. Click a selected row and specify the required duration (in frames) in the edit field of the **Duration** column. The same operation can be performed in the *Edit Duration* dialog opened by pressing the **Edit...** button.
  - a) The unwanted table rows can be deleted by pressing the **Delete** button.
6. Create a video file.
  - a) Press the **Generate** button.
  - a) In the opened *Select \*.avi file* dialog select a required folder, specify the file name in the corresponding field and press the **Save** button.
7. Preview the generated video file.  
Use the **Playback** group of controls for this purpose.
8. The video file can be played back in the standard way with any player.