

FDPreview



Program for Previewing of Audio and
Video on Boards Inputs/Outputs

*Revision as of
June 20, 2011*

User's Guide



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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

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Table of Content

Introduction.....	4
Program Launch	5
1. Ways of Program Launch.....	5
2. Format of Command Line.....	5
Program Interface.....	6
1. Main Program Window	6
2. System Menu of the Main Program Window.....	7
3. Audiometer Settings Window	11
Working with Program	12
1. Using of the Program with FDO nAir	12
2. Copying of Frame to Clipboard	16
3. Customizing and Using of Application Shortcuts	16
Additional Information	18



Introduction

The FDPreview program is used to view on computer's monitor audio and video from FD300/FD422 input/output. Video is displayed in the main program window. Also, audio meter can be displayed there if necessary.

The program provides with additional option of copying of a current frame (full/half frame) to clipboard.

Several program instances with different settings can be launched simultaneously. It allows simultaneously controlling work of different devices, for example, viewing video on input and output of one board or outputs of different boards.

The FDPreview program is included into the ForwardT Software set.

Note: To control audio and video on Videoprocessor output (in products used ForwardTS set) the SLTitleMonitor program is used. For more details on this issue see corresponding user's guide.



Program Launch

1. Ways of Program Launch

The FDPReview program is launched at opening of the ~\FDPReview\FDPReview.exe file, where ~ denotes a full path to the folder where ForwardT Software set is installed.

In the case of a standard installation a full path to the file is the following:

C:\Program Files\ForwardT Software\FDPReview\FDPReview.exe

Also, you can launch the program via:

- the Start menu command: Programs > ForwardT Software > Tools > FDPReview;
- command line;
- program shortcut located on the desktop



2. Format of Command Line

You can launch the program using the following command:

"full path to the program file" [#N] [-show]

where:

- [...] denotes that this parameter is an optional one, it can be absent;
- #N denotes index of program instance. If index is not specified, then instance #1 is launched:
 - # is obligatory symbol;
 - N is required index;
- -show – the Auto Show on Program Launch flag. If this flag is absent, then the mode that were in use when you last quit the program is active.

Note: This format is also used at customizing of program shortcuts located on the desktop.

For example, to launch program instance #2 where video displaying is enabled the following command must be executed:

"C:\Program Files\ForwardT Software\FDPReview\FDPReview.exe" #2 -show



Program Interface

1. Main Program Window

When launching the program, its main window opens with the same settings that were in use when you last quit the program.

Title bar of the main program window (1) displays source of audio and video and playback mode.

Working area (2) is used to display video. Also, an audiometer can be displayed in this area (3).

You can change window size:

- manually – by dragging window borders with a mouse;
- fitting standard values – using menu commands: 1/4, 2/3, 1/2, 1/1 of the frame size;
- completely fitting a full screen size.

Content fills the window's work area completely. When changing size of the window, image is automatically scaled to fit to the new size.

The commands for setting and controlling audio/video are located in system menu. The system menu is opened by left-clicking program icon (4) located in window title bar or using the Alt+Space hotkeys.



2. System Menu of the Main Program Window

System menu of the main program window is opened by left-clicking program icon located in window title bar or using the Alt+Space hotkeys.

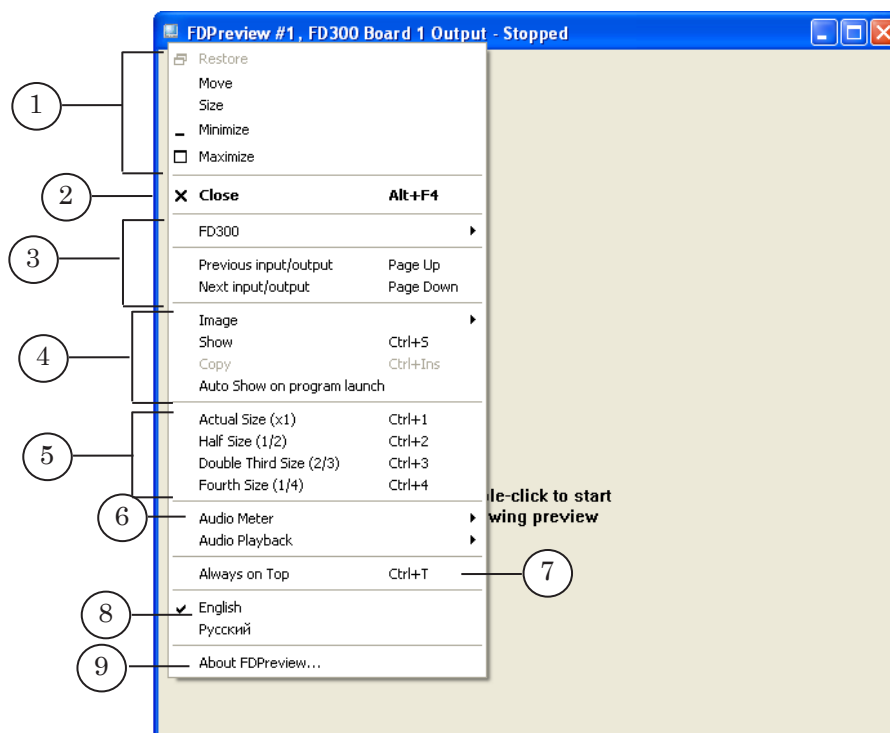


Table. Program Commands

Index	Submenu/ Command (Hot keys)	Function
1, 7	Control over location and size of window	
	Move	Is used to move window to another position on the desktop.
	Size	Is used to change window size by moving its borders manually.
	Minimize	Is used to minimize window to the system tray icon.
	Maximize	Is used to maximize window to fit a full screen size.
	Always on Top (Ctrl+T)	Is used to enable/disable displaying of program window always on top of other windows.
2	Program Exit	
	Close (Alt+F4)	Is used to close window and exit the program.



Index	Submenu/ Command (Hot keys)	Function
3	Specifying of monitoring video device	
	FD300	Is a submenu with a list of FD300 board devices. Is displayed if at least one such board is plugged.
	FD300 Board 1 Current Input FD300 Board 1 Input Line A FD300 Board 1 Input Line B FD300 Board 1 Output	If more than one FD300 board is plugged, then the submenu has several groups of such commands. If either the FDO nAir application or the FDCapture program is opened then previewing of the video from the Input Line A and Input Line B devices is impossible. In this case select only the Current Input device to control audio/video on the board input.
	FD422	Is a submenu with a list of FD422 board devices. Is displayed if at least one such board is plugged.
	FD422 Board 1 Input 1 FD422 Board 1 Input 2 FD422 Board 1 Output	If more than one FD422 board is plugged then the submenu has several groups of such commands that correspond to number of boards.
	Previous Input/Output (Page Up)	Is used to select the previous item in the list of available video devices).
	Next Input/Output (Page Down)	Is used to select the next item in the list of available video devices).
4	Control over display of video in the main program window and over copying of frames	
	Image	This is a submenu used to specify a mode of video capture from video device: full frame or half-frame. In the half-frame capture mode only half the video is processed and image in the preview window is displayed as a full frame. Frame size depends on used standard: 720x576 or 720x480 pixels.
	Full Frame	Is used to capture and display both fields (half-frames). Is used by default.
	Top Filed	Is used to capture and display top (even) field only.
	Bottom Filed	Is used to capture and display the bottom (odd) field only.
	Show (Ctrl+S)	Is used to enable/disable video display.



Index	Submenu/ Command (Hot keys)	Function
	Copy (Ctrl+Ins)	Is used to copy current image (full frame or half-frame depending, on the mode) to clipboard.
	Auto Show on program launch	If the mark is put then displaying of video is automatically enabled at the following program launch.
5	Selecting size of program window from standard variants The size is specified relatively a full frame size (considering used standard). The image in window is always scaled to fit completely working area of the window.	
	Actual Size (x1) (Ctrl+1)	Is an actual full size of video frame.
	Half Size (1/2) (Ctrl+2)	Is 1/2 of full frame size.
	Double Third Size (2/3) (Ctrl+3)	Is 2/3 of full frame size.
	Fourth Size (1/4) (Ctrl+4)	Is 1/4 of full frame size.
6	Customizing and controlling over audiometer (sound volume indicator)	
	Audio Meter	
	Show Audio Meter (Ctrl+A)	Is used to enable/disable displaying of audiometer.
	Show dB Scale (Ctrl+D)	Is used to enable/disable displaying of additional scale (in dB) on audiometer.
	Audio Meter Settings... (Ctrl+M)	Is used to open window with audiometer settings where you can adjust location of audiometer and its appearance.
	Commands to select audio channel information about which is displayed on audiometer	
	Next Stereo Channel	Is used to select channel that follows the current channel according to the main list. The list has all audio channels available on the selected video device. You may search channels one by one via this command
	Show All Channels	Is used to enable displaying of all channels on audio meter.
	Commands used to select a concrete audio channel according to its name, information about which is displayed on audio meter (possible variants of commands are given generally). Set of commands in this group depends on what video device is selected for monitoring (see # 3).	

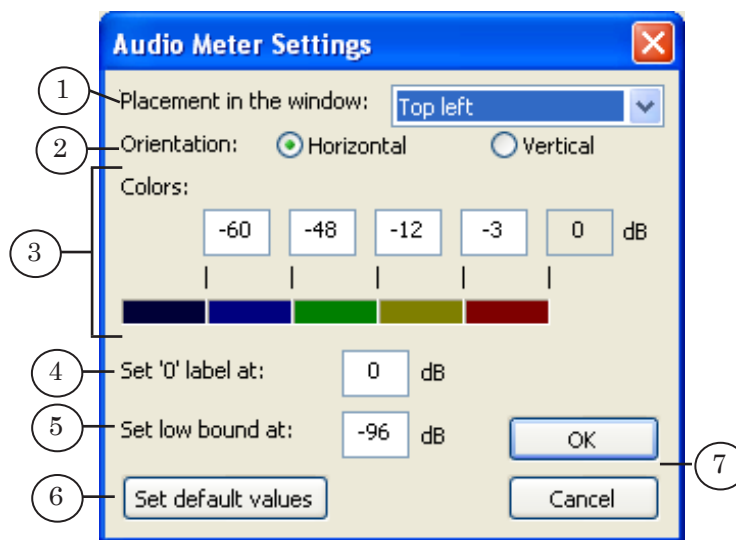


Index	Submenu/ Command (Hot keys)	Function
	FD300 Board N Input Stereo K	Notations: N denotes logical index of the selected board; K denotes index of channel (1–3); M denotes index of the selected FD422 board input (1 or 2).
	FD300 Board N Output Stereo K	
	FD422 Board N Input M Stereo K	
	FD422 Board N Output Stereo K	
8	Selection of the program interface language	
	English	
	Русский	
9	Opening of the program information window	
	About FDPreview...	The window displays software version, registration data, etc.

3. Audio Meter Settings Window

Audio meter appearance and its properties are customized in the Audio Meter Settings window.

Command of the system menu of the main program window is used to open this window: Audio Meter > Audio Meter Settings (Ctrl+M). This command can be also called from the context menu that is opened by right-clicking audiometer (if audio meter is displayed in the main program window).



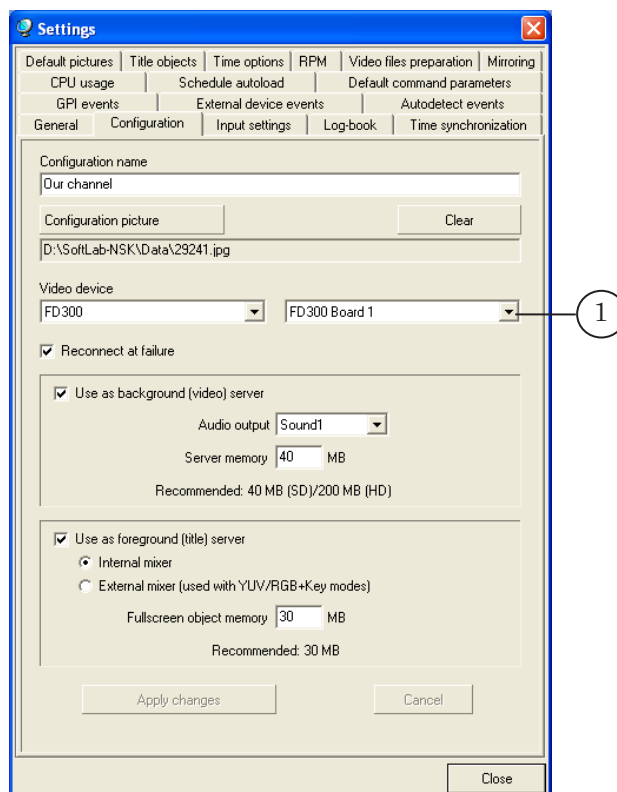
The Audio Meter Settings window has the following control elements:

- Placement in the window (1) is a list used to select placement of audiometer in the main program window;
- Orientation (2) are radio buttons used to select type of audiometer, it has 2 types – horizontal or vertical orientation;
- Colors (3) is a group of elements for setting of a correspondence between sound level and color indications – fields for entering values and fields with colors;
- Set “0” label at (4) is a field used to enter sound level value that must correspond to 0 dB level on audiometer (maximum sound level);
- Set low bound at (5) is a field used to enter sound level value that must correspond to low bound of audiometer (determines indicator range);
- Set default values (6) is the button used to return to default settings of audiometer;
- OK and Cancel (7) are the buttons used to close the settings window with or without applying of the new settings respectively.

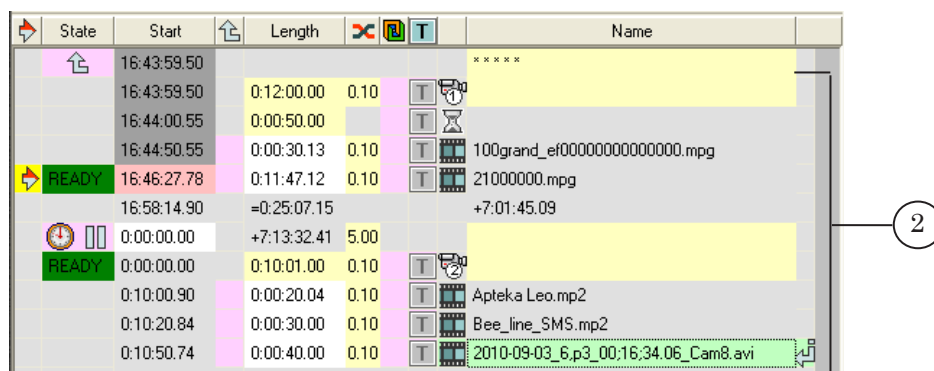
Working with Program

1. Using of the Program with FDO nAir

1. Let FDO nAir is customized for working with the FD300 Board #1.



2. Schedule created in FDO nAir contains commands for broadcasting of a passthrough video and clips (2).

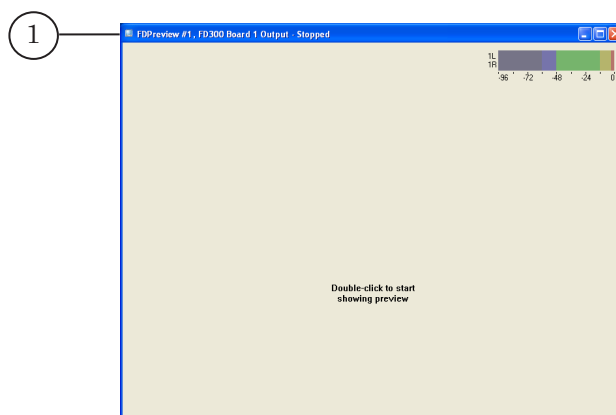


Complete the following to control over audio and video output on air by means of FDO nAir, i. e. on the FD300 Board #1 output:

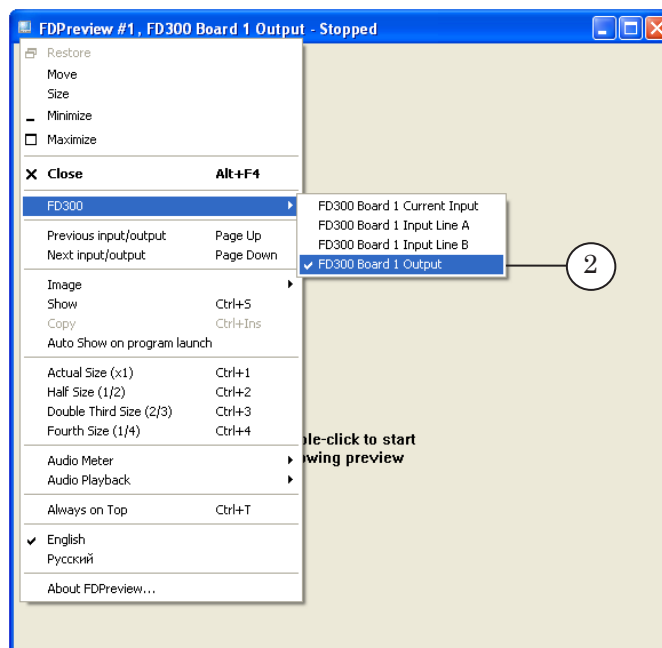
1. Launch the FDPreview program, for example, using program shortcut located on the desktop.



2. Open the system menu by clicking program icon located on the program window title bar (1).

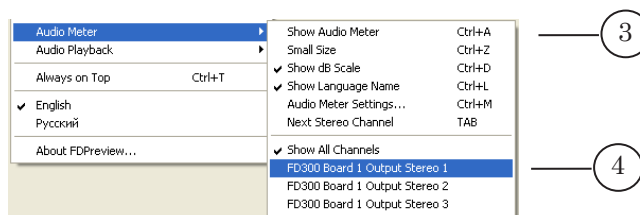


3. Select video device for monitoring, in our case this is FD300 > FD300 Board 1 Output (2).

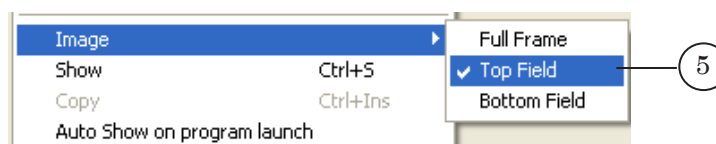


✓ **Important:** To change video device, stop displaying video in the window.

4. Open the Audio Meter submenu.
Put the Show Audio Meter mark (3).
Select an audio channel information about which must be displayed on audiometer, in our case this is FD300 Board 1 Output Stereo 1 (4).



- Using the Image submenu, select the required mode of video capture from the board and its display in the preview window. For example: Top field (5).



- Start displaying video by double clicking window working area or use for starting the Show command in the system menu. Previewing of video broadcasted by FDO nAir on air is started in preview area.



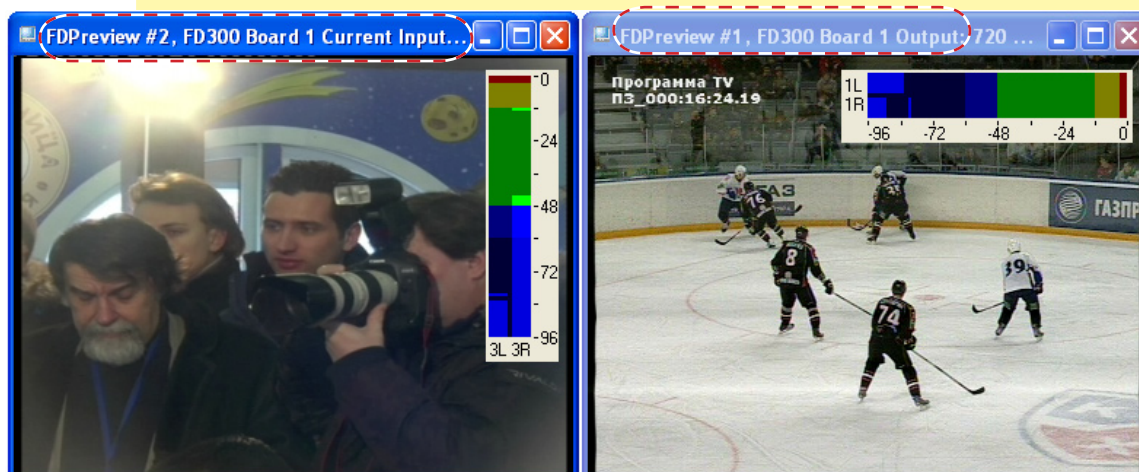
Complete the following to control audio and video on board input:

- Stop displaying the video in the window. To do so, double click in the working area of the window or open the system menu and deselect the Show check box.
- Open system menu and select the FD300 > FD300 Board 1 Current Input video device for monitoring.

Then double click any place of window working area to start viewing of video and audio.

✓ **Important:** When working with the FDO nAir application select only the Current Input device to preview video and audio on board input. It is impossible to preview video and audio on the Input Line A and Input Line B devices when working with FDO nAir. It is possible when FDO nAir is closed and can be necessary, for example, when dealing with the FDO ReplayVideoIn program or with the Video title element.

☀ **Tip:** We recommend launching two FDPreview program instances and customizing each of them correspondingly if it is necessary to monitor video and audio on board input and output simultaneously.





2. Copying of Frame to Clipboard

The program provides with a function of copying of video frame displayed in window to system clipboard. For this purposes the Copy command or the Ctrl+Ins hotkeys are used. Image is copied depending on current capture video mode – either is corresponds to a full or to a half frame.

The image can be pasted from the clipboard into the document opened in any graphics editor, for example, Paint, Photoshop, etc.

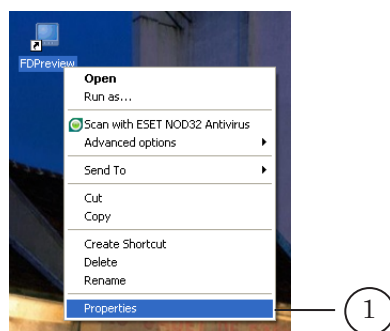
✓ **Important:** Size of image copied to clipboard depends on used standard and current mode of video capture (full frame or half-frame) and does not depend on current size of application window.

3. Customizing and Using of Application Shortcuts

Several instances of the FDPReview program with different settings can be launched simultaneously. It allows monitoring different devices simultaneously.

You can use program shortcuts to launch different instances. Complete the following to customize a shortcut for a concrete instance:

1. Create new shortcut of the FDPReview program.
2. Right click the shortcut and select the Properties item in the appeared menu (1).

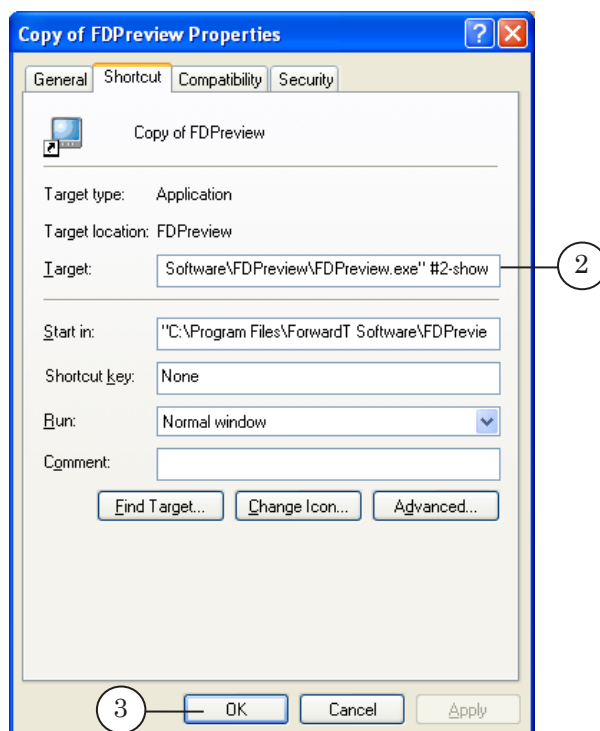




3. The FDPReview Properties window opens. Edit program launch command located in the Target field (2) by adding index of instance for which shortcut is being created and specifying the -show flag if it is necessary to switch on previewing at program launch.

For example, to launch program instance #2 with Auto Show mode specify the following:

"C:\Program Files\ForwardT Software\FDPReview\FDPReview.exe" #2 -show



4. Click the OK button to close the window.
5. Launch the program by double clicking customized shortcut.
6. Using the system menu, specify operation parameters for this instance of the program. Select the device (board, input/output) and the required mode of video and audio displaying.
7. When closing the program window, all settings of the instance are saved and restored the next time the application is launched.



Additional Information

FDPreview in Software Sets for the Forward T and Forward TS Product Lines

Product Name	Purpose	FDPreview
Forward T	Video and audio input/output, nonlinear editing.	✓
Forward TA	TV broadcast automation according to schedule with real time control.	✓
Forward TP	TV signal delay server with a possibility of rebroadcasting rearranging.	✓
Forward TP2	TV signal delay server with a possibility of rebroadcasting rearranging (2 channels for data input).	✓
Forward TK	Color substitution (rear projection) of professional quality and nonlinear editing.	✓
Forward TT	Overlaying of multilayer titles on passthrough video according to schedule with real time control.	–
Forward Goal-keeper	System for multichannel recording and slow motion replay on air system.	✓
Without Board	Possibility of working of the program without installed FD300 board.	–
Forward TS	TV broadcasting in digital format using different channels of audio and video data streaming (via the ASI/IP interfaces).	available in solutions based on the FD300/FD422 boards



Useful Links

ForwardT software set: description, download, documentation, solutions

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

Forward TS: description, download, documentation

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

Support

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

forward@softlab-nsk.com

forward@softlab.tv

Forum

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

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