

FDBleepOut



Program for Interactive Live Broadcasting
Using Censoring of Intolerable Content

*Revision as of
May 13, 2010*

Quick Start

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Table of Contents

Introduction.....	4
Program Use Requirements.....	5
General Information	6
1. Working with the Program	6
2. Bleep	7
Program Launch	8
Program Interface	9
1. Main Window	9
2. Mode of Work.....	9
3. Bleep Indicator	9
Configuration and Control of Broadcasting Using Bleeping. General Workflow	10
Plugging of Devices and Configuring of the FD300 Board.....	11
1. General Workflow	11
2. Configuration of Input Video Line	12
3. Configuration of Video Output.....	12
4. Configuration of Sound.....	13
Configuration of the FDBleepOut Program Settings	14
1. Program Launch	14
2. Configuration of Settings	15
Work with Files of the Project	17
Control Over Broadcasting and Bleeping	18



Introduction

The FDBleepOut program is designed for censoring intolerable content from TV programs when broadcasting is being implemented. The program requires the FD300 board.

This document contains information on program use, program interface and general workflow with it.



Program Use Requirements

The FDBleepOut program is included in the ForwardTx Plugins Software. Complete the following steps to use the program:

1. Install the ForwardT Software of a current version with available updates.
2. Install the ForwardTx Plugins Software of a current version with available updates.
3. Register the FDBleepOut plugin for a corresponding FD300 board.

Note:

1. For more information on the ForwardT Software installation, see the «ForwardT Software Setup. User's Guide».
2. For more information on the ForwardTx Plugins registration, see the «Plugins Setup. User's Guide».
3. Software components can be downloaded at:
<http://www.softlab-nsk.com/forward/download.html>

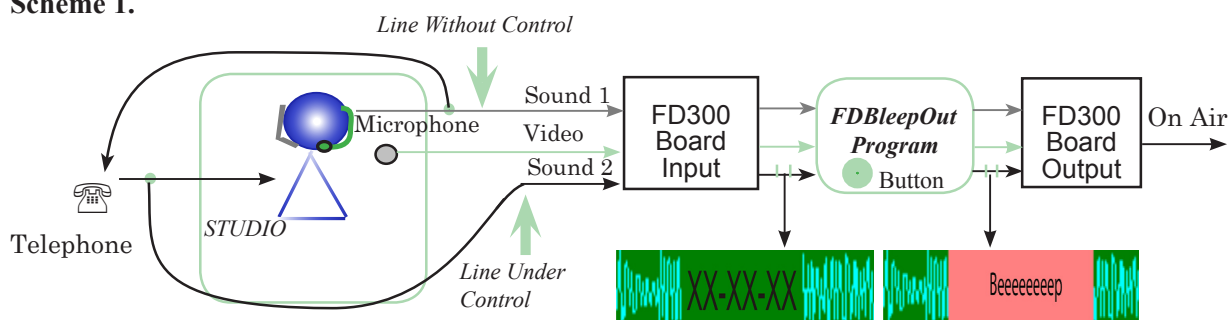


General Information

1. Working with the Program

The FDBleepOut program can be used for broadcasting of any TV program where communication with TV viewers via the telephone in real time occurs (see picture below). In this case there is a necessity to control audio line in order to prevent intolerable words from being appeared on air.

Scheme 1.



The program allows:

- to broadcast audio and video data from input lines on air. Data may be received from one video and two audio lines. Lines are selected when the program is configuring. Data input/output is made via the FD300 board;
- to bleep out the sound on a specified audio line and substitute it by another sound from the specified file under operator command.

Broadcast is implemented with a not big time delay (a split of second) that can be configured. It allows to bleep out intolerable words more precisely. The delay is configured considering a time of operator reaction, i.e. the time necessary for the operator to recognize intolerable words and bleep them out.

Bleeping can be implemented by:

- the button located in the main program window (the Bleep Out button);
- the external device plugged to the PC via COM port assigned when the program is being configured.

Note: The choice of the FD300 board and audio/video lines, configuration of video/audio delay and selection of the way of bleeping implementation are implemented in the configuration window.



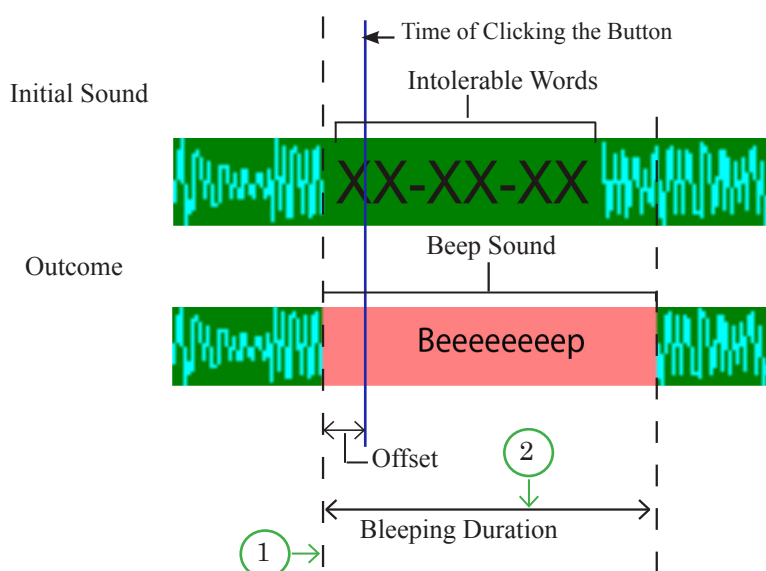
2. Bleep

Beep sound is a sound from the specified WAV file. Audio clip must meet the following requirements:

1. The sound at the beginning and at the end of the clip must be organized in such way that there won't be any troubles on joints when the clip is cycled.
2. The duration of the clip must be not less than 10 sec.

When the operator clicks the Bleep out button a beep sound replaces audio signal on the line that is under control (see the picture below).

Scheme 2.



The start of the bleeping (1) depends on the time of clicking the Bleep out button and on the Start offset parameter value. The bleep out duration (2) depends on the time of pressing the Bleep out button and on the Bleep out duration parameter value. The bleep out duration value is equal to the value that is the highest among the time of pressing the Bleep out button and the Bleep out duration parameter value.

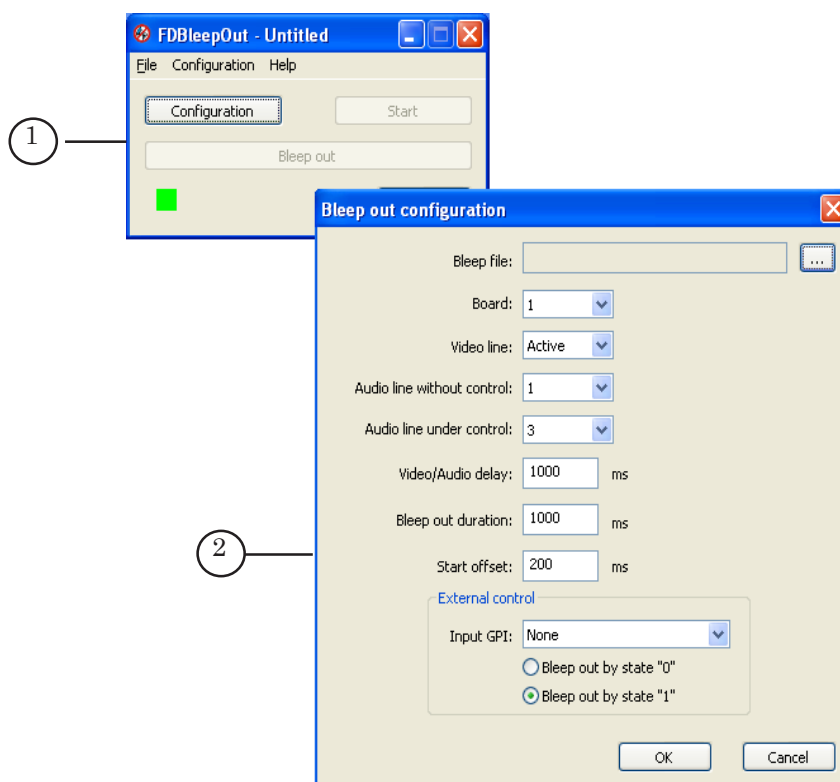


Program Launch

The program can be launched by `~\Plugins\FDBleepOut\FDBleepOut.exe`, where `~` denotes a full path to the folder where the ForwardT Software is installed.

The program can be also launched via the Start menu command: Programs > ForwardT Software > Plugins > FDBleepOut.

Main (1) and configuration (2) program windows appear when the program is launched for the first time. Configure bleep out parameters in the Bleep out configuration window.



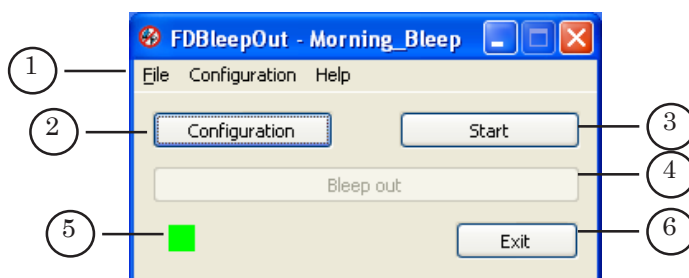
When the program is launched again only the main program window appears. The program will be configured as it was done during previous program session.



Program Interface

1. Main Window

When the program is launched main program window appears. The title of the window contains the name of the program and the name of the project. The project is a set of settings necessary for work.



Main window. Control elements:

1 – main program menu; 2 – settings; 3 – start of broadcasting; 4 – bleep; 5 – bleep indicator; 6 – exit button.

2. Mode of Work

There are 2 modes of program work:

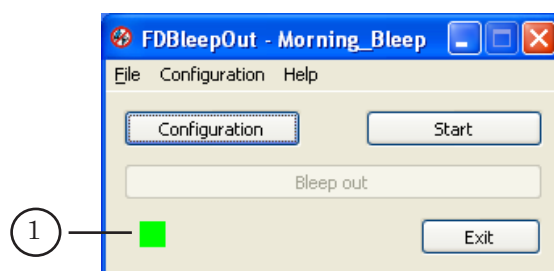
- the mode of configuring parameters for work. Bleeping is disabled in this mode, i.e. the Bleep out button is disabled;
- the mode of broadcasting. Bleeping is enabled in this mode, i.e. the Bleep out button is enabled. There is no possibility to configure parameters in this mode, the Configuration button is disabled.

The program is always launched in configuration mode. The Start/Stop button is used to toggle between modes.

3. Bleep Indicator

The indicator (1) located in the main program window displays current state of bleeping, i.e. either it is being implemented or not:

- green denotes that the Bleep out button is not clicked;
- red denotes that the Bleep out button is pressed.





Configuration and Control of Broadcasting Using Bleeping. General Workflow

General workflow of broadcasting using bleeping is the following:

1. Plug audio and video devices to the FD300 board and configure their parameters in the FDConfiguration program.

✓ **Important:** Mute passthrough sound.

2. Plug the external device to the computer if bleeping is implemented via the external device.
3. Launch the FDBleepOut program and configure its parameters. Select the FD300 board, specify WAV file, audio line under control and audio line without control. Also define bleep out duration, video/audio delay and start offset.
4. Implement testing broadcasting using bleeping and check it.
5. Start broadcasting when needed. Bleep intolerable words out on the line that is under control by clicking the Bleep Out button.

The following chapters explain the workflow in more detail.

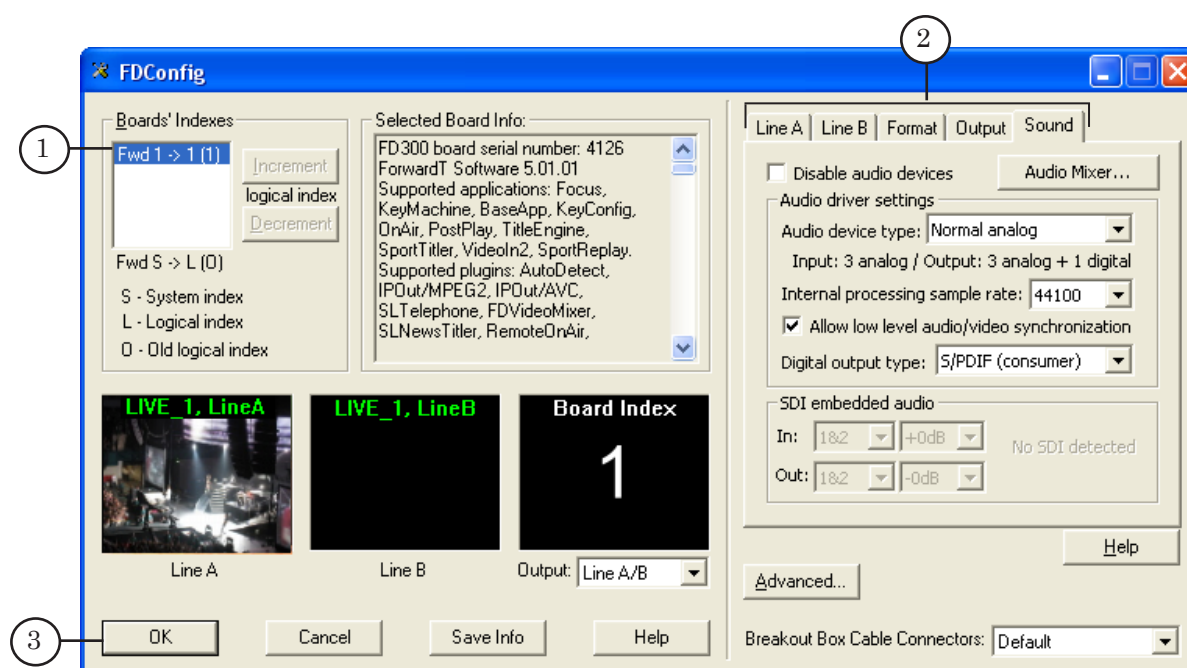


Plugging of Devices and Configuring of the FD300 Board

1. General Workflow

Use the FDConfiguration program to configure and to check plugging of audio and video devices.

1. Launch the FDConfiguration application, either via the program shortcut or the Start menu command:
Programs > ForwardT Software > Board Setup > FD300Configuration
2. Select the FD300 board according to its index (1) from the Boards' Indexes list.
3. Configure input video line, video output and audio lines via the tabs (2).



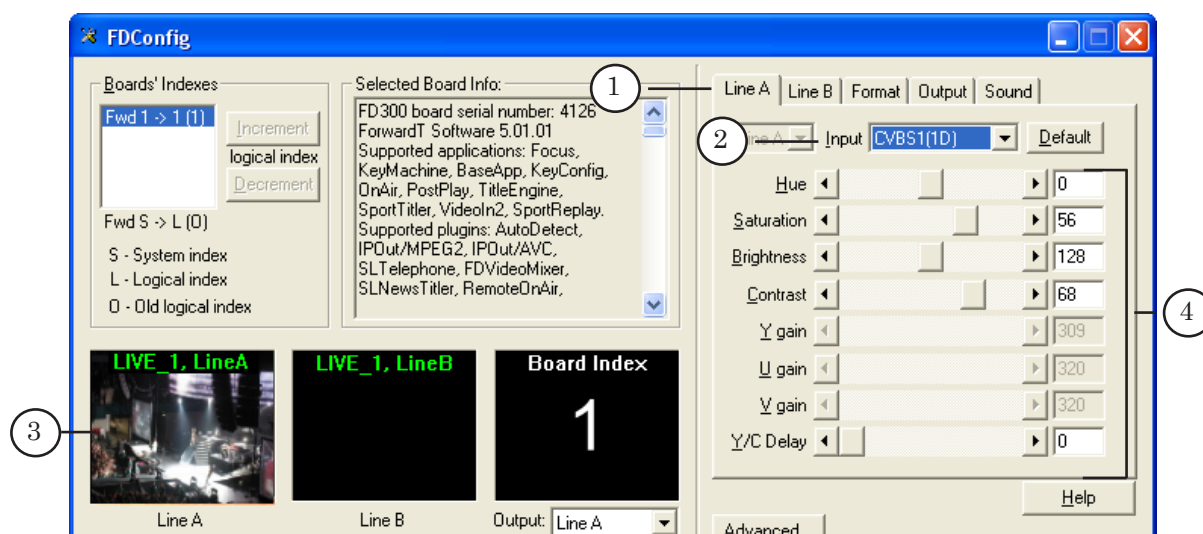
4. Click OK (3) to apply the settings and to quit the program.



2. Configuration of Input Video Line

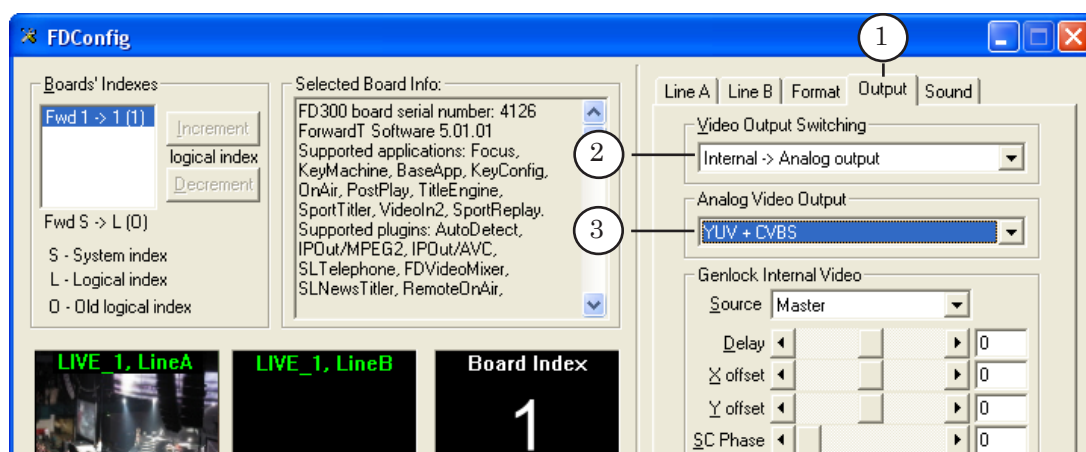
Complete the following steps to select video source and to configure input video line:

1. Click the Line A tab (1).
2. Select from the Input drop-down list (2) the line where the source of video signal is plugged.
3. Be sure that a picture is correctly displayed in the Line A view area (3). If the picture is displayed correctly then the plugging is implemented properly.
4. Configure parameters of the video image by moving the sliders (4) when needed.



3. Configuration of Video Output

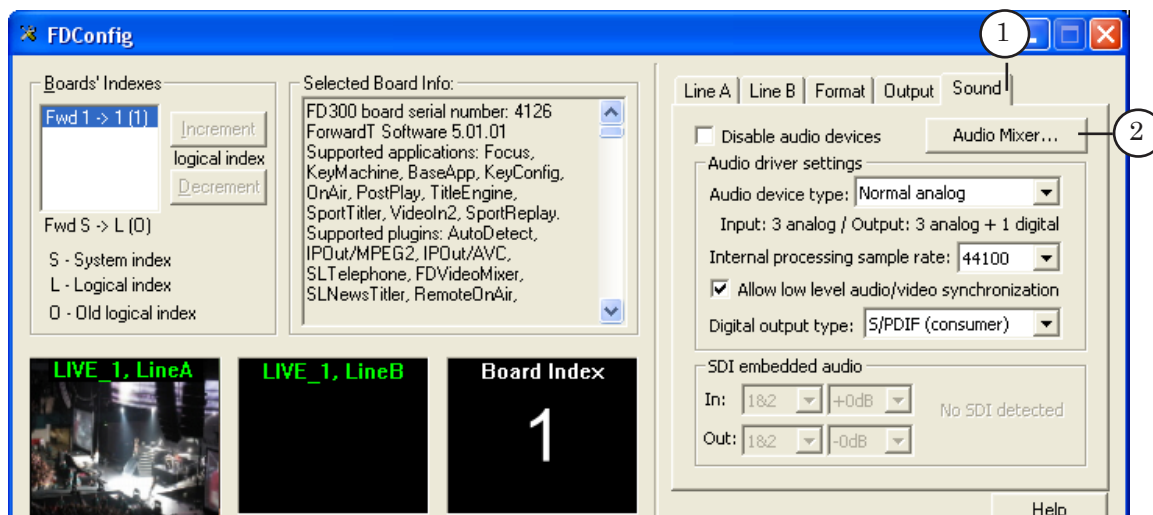
1. Click the Output tab (1) to configure video output.
2. Select necessary mode of video output via the drop-down lists (2, 3). The analog video output and the YUV+CVBS output signal type in our example.



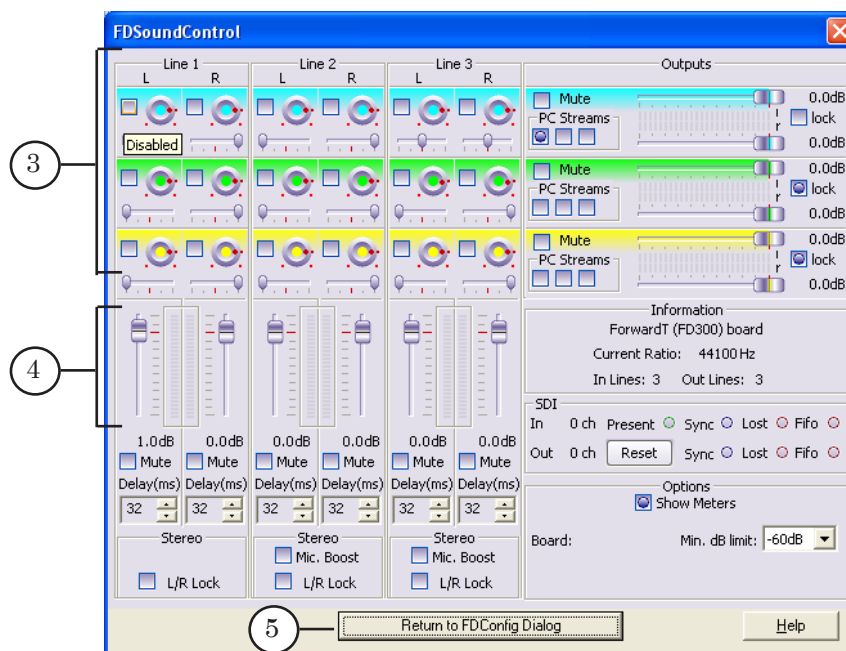


4. Configuration of Sound

1. Click the Sound tab (1).
2. Then click the Audio Mixer... button (2) to open the window to configure audio mixer.



3. Mute the passthrough sound in the FDSoundControl window by completing the following steps:
 1. Tick off all marks (3) enabling input audio lines in the group of control over input lines.
 2. Check that audio signal is disabled, i.e. the indicators (4) should not display the level of the sound.



4. Click the Return to FD Config Dialog button (5) to close the FDSoundControl window.

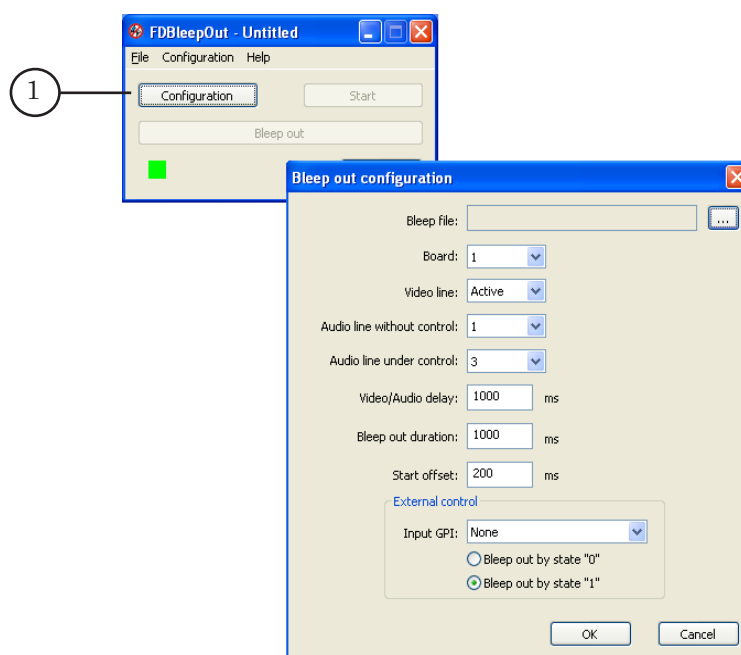


Configuration of the FDBleepOut Program Settings

1. Program Launch

Launch the FDBleepOut program, e.g. via the Start menu command: Programs > ForwardT Software > Plugins > FDBleepOut

The configuration window appears automatically when the program is launched for the first time. Click Configuration (1) to open the Bleep out configuration window when the program will be launched again.



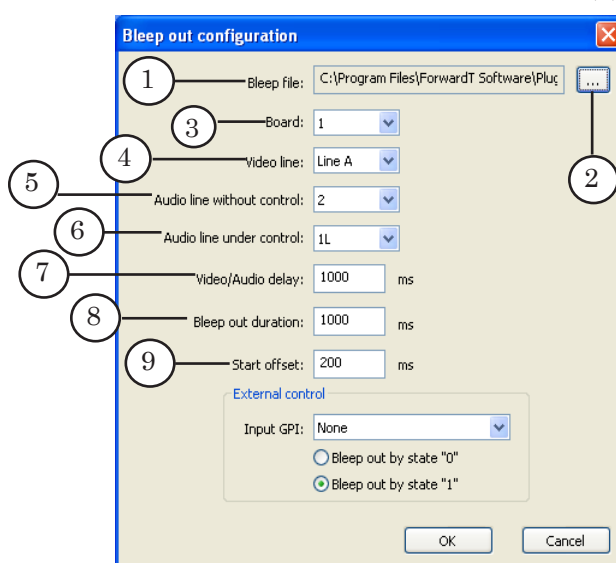
Note: The Configuration button is enabled only in the configuration mode.



2. Configuration of Settings

Configure program settings in the Bleep Out Configuration window:

1. Specify a full path to the file with a beep sound (1) by clicking the ... button (2). Select necessary file in the appeared window.
2. Select the FD300 board considering its index from the drop-down list (3). №1 in our example.
3. Select video line (4). Line A in our example.
4. Select audio line without control (5). Line №2 in our example.
5. Select audio line under control (6). Line 1L in our example.



6. Specify the value of audio/video delay in ms considering real time (7), e.g. 1000 ms. This value must be 100 ms high as a minimum than the value of the Start Offset parameter.
7. Specify the minimal bleep duration (8), e.g. 1000 ms. In this case the duration of the beep sound that enters the output signal will be at least 1000 ms.
8. Specify start offset (9), e.g. 200 ms. In this case the start of bleeping the output signal will be shifted back for 200 ms from the moment of clicking the button. This value is assigned by the user.



Tip: It is recommended to use default values for the Video/audio Delay and Start Offset parameters.

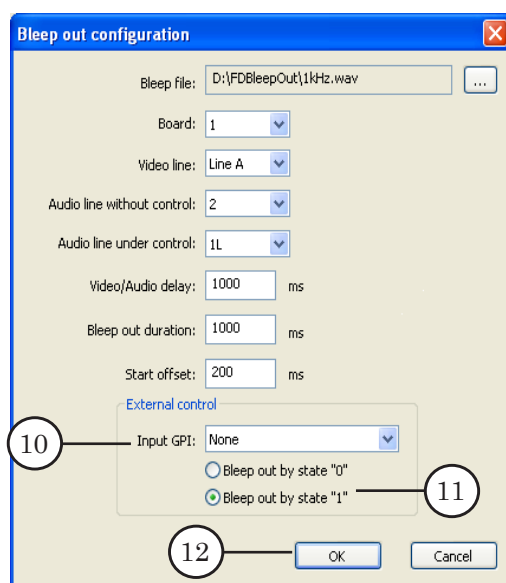
Complete steps 9 and 10 additionally if the external device is used for bleeping. If not, pass to the step 11.



9. Select identifier of GPI signal from the Input GPI drop-down list (10).

The identifier of the GPI signal is the following:
GPI_On_COMN_0_Input or GPI_On_COMN_1_Input, N denotes COM port where the external device is plugged. The port with the index 1: GPI_On_COM1_0_Input in our example.

10. Select required mode of bleep start selecting among Bleep out by state "1" or Bleep out by state "0" (11).



11. Click OK (12) to apply settings.

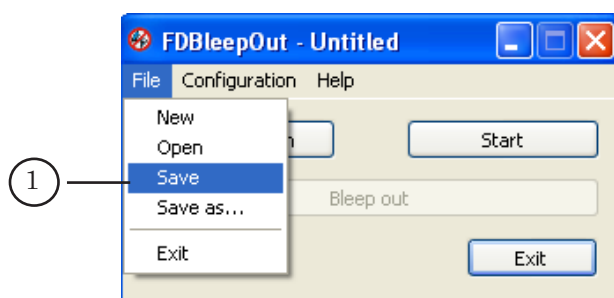


Work with Files of the Project

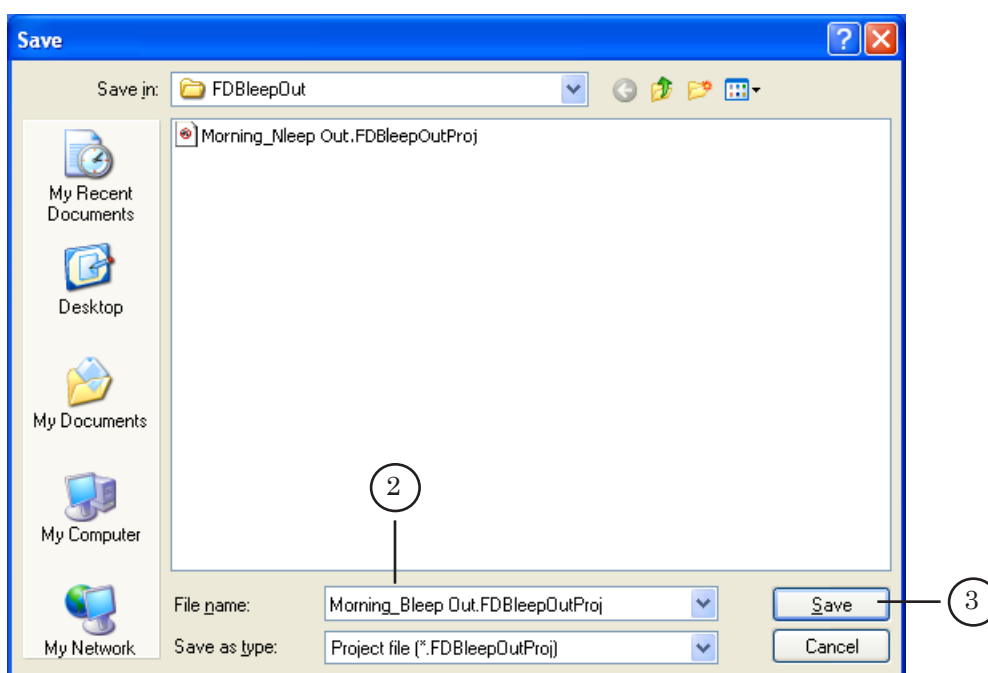
The program provides a possibility to work with projects, files with program settings. The commands that allow to control files of configurations are located in the File menu. The names of the files with configurations have the FDBleepOutProj extension.

Complete the following steps to save current configurations:

1. Open the File > Save window (1) in the main program window.



2. Select necessary folder and type the name of the file (2) in the appeared window. Then click Save (3).

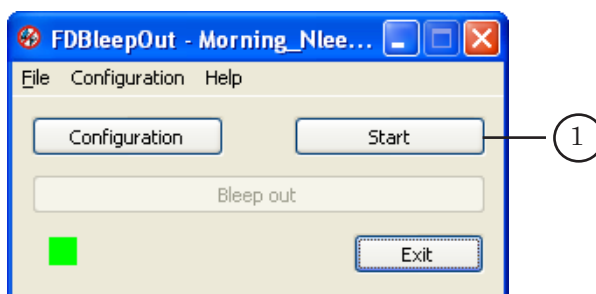




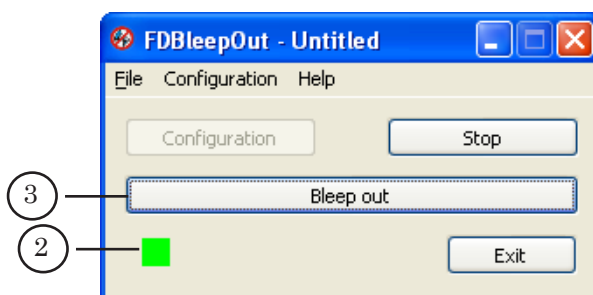
Control Over Broadcasting and Bleeping

It is recommended to check the work of the beep sound with defined settings before the start of broadcasting.

1. Click Start (1) in the main program window to toggle from the configuration mode into the broadcasting one.

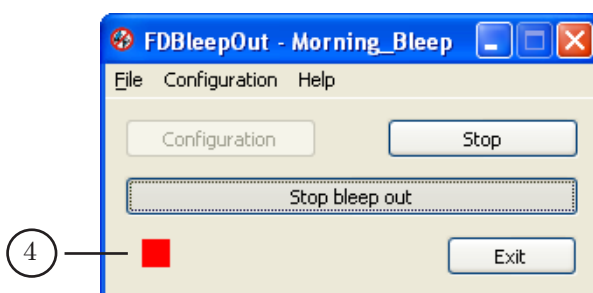


2. Audio and video data are received on the output on selected video and audio lines in broadcast mode. In this mode bleeping is enabled, i.e. the indicator (2) is green.



Use the Bleep out button (3) to bleep out the sound. This button is located in the main program window. Or use the external device plugged to the PC via COM port.

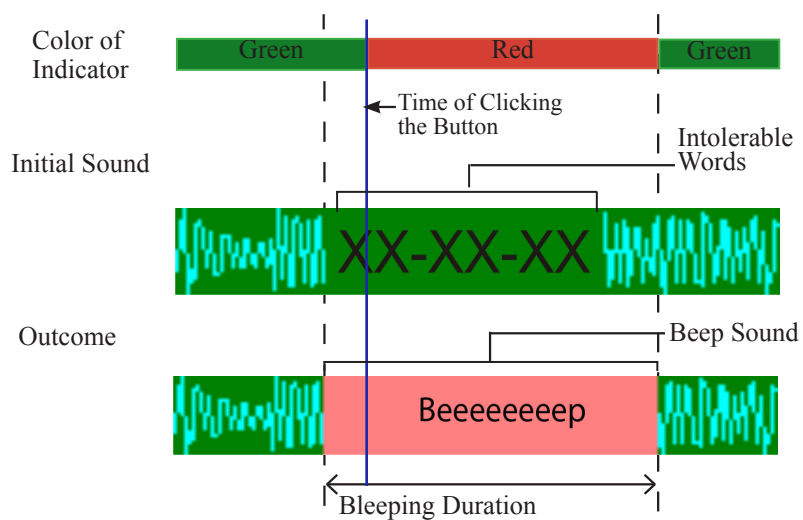
3. Click the Bleep out button to bleep out the sound on the line that is under control. In this case the duration of the audio clip will be equal the duration specified for the Bleep out duration parameter. In our example 1 s. When bleeping is being implemented the indicator (4) is red.





Note: If the button is pressed for some time the duration of beep sound will be equal to the duration when the button is pressed.

✓ **Important:** The duration of the beep sound is not less than the duration of the Bleep out parameter.





Useful Links

ForwardT Software set: description, download, documentation, solutions

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

Support

e-mail: forward@softlab.tv

forward@sl.iae.nsk.su

forward@softlab-nsk.com

Forums

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

Documentation containing additional information:

[ForwardT Software Setup](#);

[Plugins Seup](#);

[FDConfiguration: FD300 Board Settings. User's Guide](#);

[FD300Sound Control: Sound Settings](#).

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