

## Optional Enhancement Products for the 4102 USB AuxBox



### 1825P Duet Plus

Multi-application loud ringer and paging amplifier for business telephone systems in an office or industrial environment.



### 1185 Horn Speaker

Weatherproof, 8 Ohm horn speaker can be used to significantly increase the volume of the 1825P Duet Plus Ringer above.



### 1127P Visual Indicator

A desktop or mountable visual indicator for message waiting, in-use, or ring. Designed to be visible from all angles. Available in red, green, or blue.



### 1126P Strobe Light

A highly visible indicator available with clear, red, amber, or blue lens.

#### Ordering Information

tel: (604) 454-3790  
fax: (604) 437-5726  
email: sales@algosolutions.com

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DirectX, Windows Media Encoder, Window 98 SE, Windows 2000, Windows ME and  
Windows XP are trademarks of Microsoft Corporation.

USB AuxBox, Algo, Duet Plus, and AuxBox are trademarks of Algo Communication Products Ltd.

## USB 4102 AuxBox User Guide



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Fax: (604) 437-5726  
Email: sales@algosolutions.com

#### Customer Support

Toll free: (877) 884-2546  
Email: support@algosolutions.com

## Features

- ✎ Calls can be recorded automatically or by hot key function.
- ✎ Software displays call file, duration of call, time and date, caller ID, and user added comments.
- ✎ Detects message waiting, ringing, in-use, and more.

## The 4102 USB AuxBox includes:

- ✎ 4102 USB AuxBox
- ✎ User Guide
- ✎ Software CD
- ✎ Telephone line cord
- ✎ USB cable
- ✎ Relay cord
- ✎ Power supply

### Note:

The legality of recording conversations varies by location. It is the responsibility of the user to ensure compliance with local regulations concerning the recording of telephone conversations.

The 4102 USB AuxBox does not provide tones to indicate that a conversation is being recorded.

The 4102 USB AuxBox monitors the activity of your digital Norstar or Meridian 1 telephone including the voice channel. This information is sent to a PC using a USB (Universal Serial Bus) connection. The AuxBox Recorder Software allows you to record and playback telephone conversations (with call display information) using the hard drive of your PC or server.

The 4102 USB AuxBox also provides an analog output for recording with a separate audio recorder or PC sound card and provides relay outputs to indicate ringing, in-use, message waiting, and other events. These relay outputs may be used for audible and visual alerting or activation of analog recording equipment.

## Warranty and Repair

The 4102 USB AuxBox is warranted to be free of defects in material and workmanship for a period of 18 months from the date of manufacture. A label on the bottom of the 4102 USB AuxBox identifies the manufacturing code in the year and week format (0103xYYXXXX for the third week of 2001).

If you need to return the product for repair, please contact Algo Communication Products Ltd for a (RMA) Return Merchandise Authorization number and instruction prior to shipment. All products returned for repair should be shipped freight prepaid with the RMA# clearly visible on the package. Products will be returned freight collect for out-of-warranty repairs or returned prepaid for warranty repairs in Canada or the USA.

In Canada, ship product for repair with RMA# to:

**Algo Communication Products Ltd.**  
**Repair Center**  
4500 Beedie Street  
Burnaby, BC  
CANADA, V5J 5L2

**Tel** (604) 454-3790  
**Fax** (604) 437-5726

Outside of Canada, please contact Algo for the name of the nearest repair center.

# Specifications

## TELEPHONE CONNECTION

**Compatibility** M7100, M7208, M7310, M7324  
T7100, T7208, T7316, T7406  
M2006, M2008, M2216, M2616  
M3901, M3902, M3903, M3904, M3905, M2250

**Loop Limit** 4000 feet (1200m) M1  
2600 feet (800m) Norstar/BCM

**Connection** Line in/line out in series or bridge  
tap < 7 feet (2.1m)

## PC REQUIREMENTS (digital audio output)

**Hardware** CD Rom drive, USB Port  
**Operating System** Windows 98SE, ME, 2000, XP

## POWER SUPPLY

**North America** 117V 60Hz to 24Vdc 200mA adapter ced  
**UK** 230V 50Hz to 24 Vdc 200mA adapter ded  
**Europe/Australia** Contact Algo or your distributor

## ANALOG AUDIO OUTPUT

**Connection** 3.5mm audio jack  
**Level** 0 dBm or -12 dBm output 600 Ohms

## RELAY OUTPUTS (2 provided)

**Connection** 2.5mm audio jack  
**Voltage** Max 30V SELV  
**Current** Max 1A non-inductive  
**Function** Ring, In-Use (Off Hook), Message Waiting,  
or Page (depending on SW1 Settings)

## CABLES INCLUDED

**USB** 6 feet (1.8m) USB Cable A-B  
**Relay** 6 feet (1.8m) 2.5mm plug to 2.5mm plug  
**Telephone** 7 feet (2.1m) 6 conductor telephone line cord

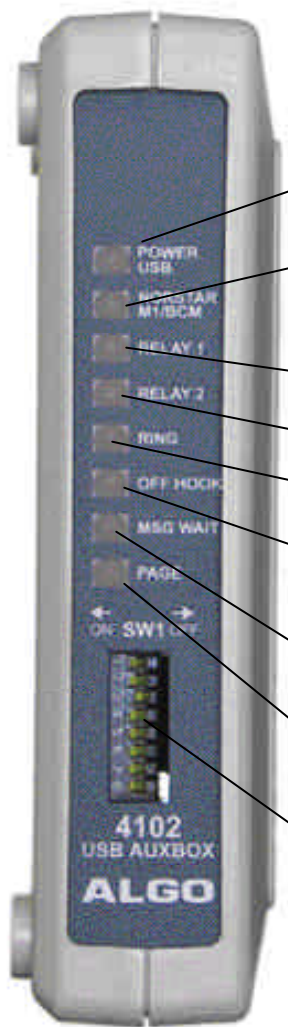
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# Components



## Front Panel

### Power/USB Indication

Winking indicates USB connection

### Norstar/M1/BCM Status

Winking once indicates connection to M1; winking twice indicates connection to Norstar

Relay 1 activated

Relay 2 activated

Detected Ringing on telephone

Detected Off-hook or In-use (on handset, headset, or hands-free)

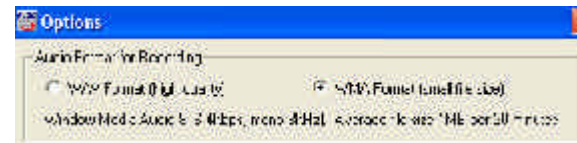
Detected Message Waiting indication

Detected Voice Call/Paging in progress

### SW1 Option Switch

Leave at default settings or set switches for desired output options

## Call Management



**Note:** It is important to prevent the possible deletion of files due to Automatic limits. Select the disable feature to prevent deletion when moving from folder to folder. This check box is also located in the **Options** window under **Setup**.

### Selecting WAV/WMA Format

Click on **Setup>Options**. Select **WAV Format** (high quality) or **WMA Format** (small file size).

#### Window Media Audio 8 (6.4 kbps, mono 8 kHz).

It is recommended to select WMA Format to save harddrive space and make the recorded call files smaller and easier to email. The average file size is 1MB/20 minutes.

#### WAV Audio (uncompressed, mono 8kHz).

When you select WAV Format the average file size is 1MB per minute.

### M2250 Console Support

This software, along with firmware release 8515-16, allows for compatibility with the M2250 Console. The USB AuxBox should be connected on TN1, and will provide all standard functionality except caller ID. A second USB AuxBox may be connected on TN2 and connected to the same PC in order to provide caller ID information seamlessly to the software.

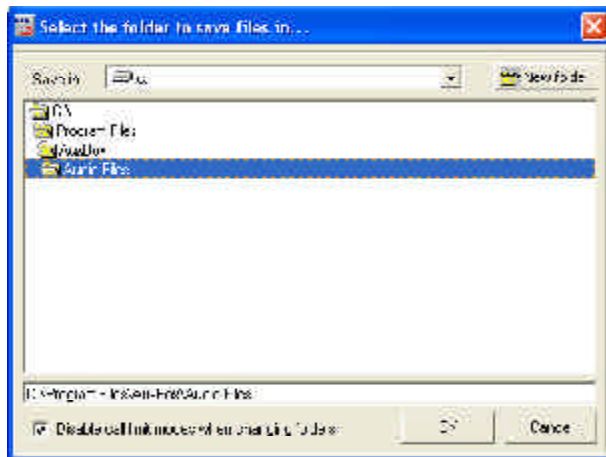
# Software Features

## Setting the File Directory

The AuxBox Recorder Software can read audio files from different locations on your hard drive eg. multiple projects, customers.

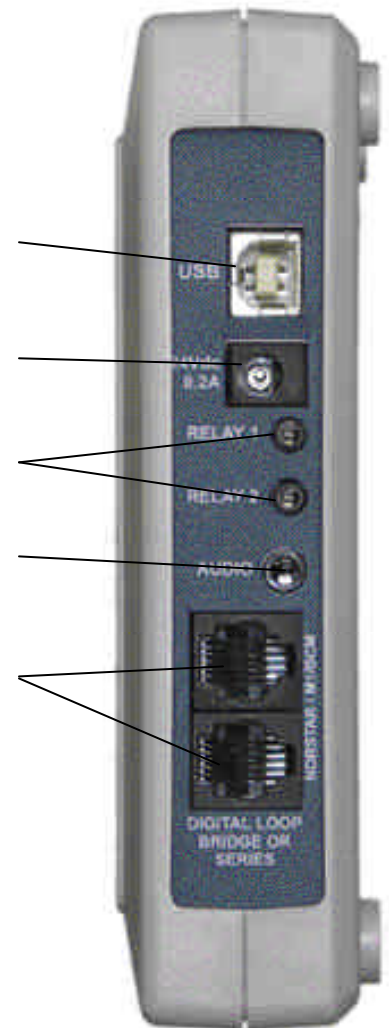
To move to a different location to view recorded calls, click on **Browse**.

**Note:** The directory you select will determine which calls are listed and where new calls will be saved.

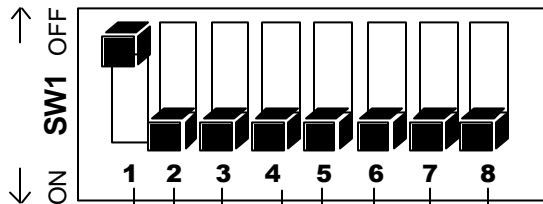


## Back Panel

- USB Output**  
Connect to USB port of PC Recorder Software connectivity
- Power**  
Connect power adapter supplied with unit
- Relay Outputs**  
2.5mm mono jack  
(Dry contact closure output)
- Analog Audio Output**  
3.5mm mono jack
- RJ12 Jacks**  
Connect digital telephone in series using line in/line out configuration **OR** connect either jack to wire pair carrying digital signal



# Switch Settings



**Position 1**  
 off = Audio level high  
 on = Audio level low  
*(Analog Only. Does not affect USB digital level)*

**Position 5 & 6**  
 unused

**Relay Options**  
 (Position 2, 3 & 4)

**Position 7**  
 off = 1 way audio (rx only)  
 on = 2 way audio

**Position 8**  
 off = aLAW Speech encoding  
 (Europe, Australia)  
 on = uLAW Speech encoding  
 (North America)

Relay 1	Relay2
Ring	Off-Hook
Ring	Page
Ring	Msg Waiting
Off-Hook	Page
Off-Hook	Msg Waiting
Page	Msg Waiting
Off-Hook	Off-Hook
Unused	Unused

Two relays provide dry-contact outputs to interface with external devices, such as those listed on the back cover.

Their functionality may be configured using SW2-4, as illustrated in the diagram to the left.

## Playback Recorded Calls



- 1 Select the file to play back.
- 2 To begin the playback, double click on the file or press the play button on the playback toolbar shown above. You can also press **<enter>** to play or stop.

The sidebar will start shifting left to right. The cursor can be used to drag the sidebar to the desired location in the recorded call.

## Software Updates

The latest software version can be downloaded from our website at [www.algosolutions.com](http://www.algosolutions.com)

Your current software version is printed on the software CD label or available by clicking **Help>About** in the AuxBox Recorder Software.

## To Save by No Limit



Click on **Setup>Options**.

To Adjust for No Limit: Check the box for No Limit.

Click **OK**.

The Software will now have no limits placed on the file resources.  
All calls will be recorded and saved.

## To Restore Default Settings

The AuxBox Recorder Software can be restored to a default setting. Select **Setup>Restore Defaults**.

Automatic Mode enabled  
Number of Days = 7 Days  
Disable Auto Deletion  
Audio file directory :  
**C:\Program Files\AuxBox\Audio Files**  
Hot Key = F2  
Date stamp ascending order.

## Hardware Installation

### Connecting the 4102 USB AuxBox to your Meridian Telephone

- 1 Disconnect your telephone line cord from the wall jack and connect to either one of the RJ12 telephone jacks on the rear of the 4102 USB AuxBox. Using the supplied telephone line cord, connect the second RJ12 telephone jack on the AuxBox to your telephone wall jack.
- 2 Ensure that your Meridian 1 telephone is operational. This may take a few minutes depending on your telephone system.
- 3 Connect the supplied power supply to the power jack at the back of the 4102 USB AuxBox and plug into a power outlet.

The LEDs (light emitting diodes) on the front panel indicate whether the hardware installation was successful. The Power/USB LED will be winking to indicate communication with the PC USB port. The Norstar/M1 LED will be winking twice for Norstar, once for Meridian 1. Allow approximately 5 to 8 seconds for this to begin.

Lift the telephone handset (or go off-hook with the speakerphone or headset) to turn on the "Off-Hook" LED on the front panel of the 4102 USB AuxBox. This indicates that the unit is working properly.

# Installation

## Connecting to your PC USB Port

- 1 Connect the USB cable to your PC and to the 4102 USB AuxBox. Connect the power supply to the 4102 USB AuxBox.

The first time you connect the 4102 USB AuxBox, Windows should advise "New Hardware Found" and proceed to load the necessary drivers. Windows should install up to 3 sets of drivers: **USB Composite Device, USB Audio Device, and Human Interface Device (HID).**



- 2 For each, select the recommended driver by clicking the **Next** and **Finish** buttons as appropriate. You may be prompted for your Windows CD during this process. Note that on many computers these files are also stored in **C:\WINDOWS\OPTIONS\CABS**. Ask your System Administrator if you have any difficulties.

**If you experience any difficulties, please refer to the Trouble Shooting insert.**

## To Save by Number of Calls



Click on **Setup>Options**.

Check the box for Number of Calls. Set the desired number of non-**KEEP** calls.

Click **OK**.

The AuxBox Recorder Software will now limit the number of calls to the most recent non-**KEEP** calls.

## To Save by Disk Space



Click on **Setup>Options**.

To adjust the limit of Disk Space:

Check the box for Amount of Disk Space. Set the desired amount to allocate for Audio files.

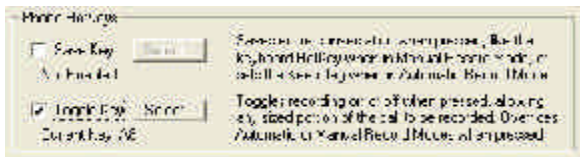
Click **OK**.

The AuxBox Recorder Software will now limit the disk space to the adjusted limit of disk space used and will discard the oldest non-**KEEP** files.



# Software Features

## Phone HotKeys

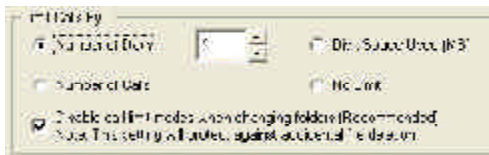


The software gives you the ability to record a key on the phone, and use this phone key to trigger recording in the software. Two keys may be configured - the first to function like the Toggle feature, and the second to function as the Manual Record HotKey.

## Toggle Record Feature

By pressing Ctrl+F2 in the software at any time during a call, you may manually start or stop recording. This allows partial conversations to be recorded.

## To Save by Number of Days



Click on **Setup>Options**.

To adjust limit for number of days: Check the box for Number of Days. Set the desired number of days. Click **OK**.

The AuxBox Recorder Software will now limit all non-**KEEP** calls to the period set.

## Minimum PC Requirements

Applies only to the AuxBox Recorder Software.

- ✍ Pentium 133 MHz
- ✍ Windows 98SE, ME, 2000, or Windows XP
- ✍ 64MB RAM
- ✍ USB Port
- ✍ 100 MB available hard drive space
- ✍ CD ROM Drive
- ✍ Soundcard

The AuxBox Recorder Software requires approximately 15MB of hard drive space depending on your system configuration. A significant amount of additional hard drive space may be required depending on the number of calls recorded.



# Installation

## Software Installation

- 1 After Windows has completed loading the drivers, ensure that all open programs and windows are closed. If you have already installed a version of the AuxBox Recorder Software, remove the program before you install the new version.

**Note:** If installing on Windows 2000 or XP, you must first log on with Administrator rights.

- 2 Insert the AuxBox Recorder Software CD into your drive. The install program should begin automatically after a few seconds. If this feature is disabled on your system, and the install program does not start, run **Setup.exe** found on the CD. If prompted to reboot your PC during the install process, do not remove the CD; the installation program will continue automatically upon rebooting. Proceed until the **Installation Complete** box appears, and click **Finish**.

**Note:** If installing on Windows 2000, your system may be unable to overwrite certain files during installation. If an error message occurs, select "*Ignore*" to continue, and the installation will complete successfully.

You may now remove the CD from the drive.

- 3 Once installation is complete, start the software by double clicking on the AuxBox Recorder Desktop icon. The first time the software runs, it will prompt you to install Windows Media Encoder if this is not currently installed on your system. You will need to accept the Microsoft License agreement in order for the AuxBox Recorder Software to be installed and to function correctly.

**Note:** During this installation, Windows may prompt you to install the latest DirectX drivers. These are also provided on the software CD: **dx81eng.exe** from the **DirectX8.1** folder.

## Recording Calls

Calls can be recorded automatically or manually.

Click on **Setup>Options**.



### Automatic Mode

The AuxBox Recorder Software can manage automatically recorded calls in one of four ways:

- ☒ ☒ ☒ Save all calls indefinitely. (Not recommended as this option will eventually fill your hard drive).
- ☒ ☒ ☒ Save calls only for specified number of days.
  - ☒ Save only the last specified number of calls.
- ☒ ☒ ☒ Save only the most recent calls up to a specified amount of hard drive space.

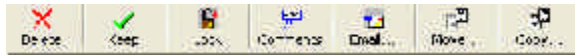
### Manual Mode

In Manual Mode, the call in progress will be saved only if a hot key is pressed during the call. The purpose of Manual Mode is to save disk space, allowing the user to only record selected calls.

To select a keyboard hot key, go to **Setup>HotKey** and select a function key.

# Software Features

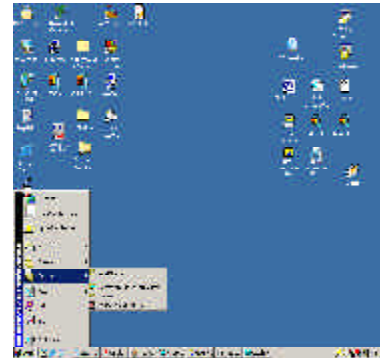
## Toolbar



- Delete Will delete selected audio files. The DEL key on the keyboard can be used as well.
- Keep Selected files marked as **Keep** will not be deleted in AutoMode. To set file as **Keep**, click on the **Keep icon** or press **<Ctrl+K>** while the file is highlighted to toggle on/off. If an attempt is made to delete a **Keep** file, a warning will appear asking to **Delete** or **Cancel**.
- Lock Recorded audio files may now be locked to help protect privacy. This prevents other users from being able to listen to your recorded calls.
- Comments Text comments can be added to selected files to a maximum character length of 40. To add text comments, select the file and press the **Comments** icon or press **<Ctrl+T>**.
- Email Use your default Email program to send a selected file as an attachment. (**Note:** In order to use this feature you must have a MAPI compliant email program installed. Microsoft Outlook and Outlook Express are configured correctly by default, however if you use Netscape you must select the MAPI option in your email program setup.)
- Move You can select files to move to a different location.
- Copy You can select files to copy to a different location.
- Search Under the Edit menu, you can search the comments field of recorded calls. The search feature will find the first match, and highlight the call in blue. If there is no match, the currently blue highlighted call will remain highlighted.

## Configuring Your PC

**Note:** Close the Auxbox Recorder Software before you configure your PC or your selection will not take effect.



After Windows has successfully restarted, for Windows 98SE/ME, left click on:

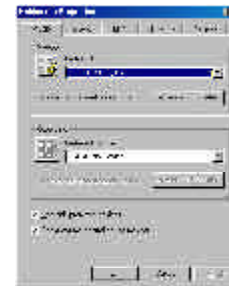
**Start>Settings>Control Panel>Multimedia.**

For Windows 2000, left click on:

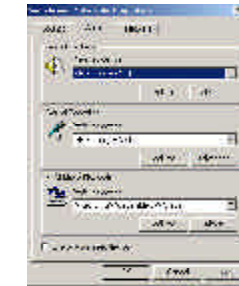
**Start>Settings>Control Panel>Sounds and Multimedia.**

For Windows XP, left click on:

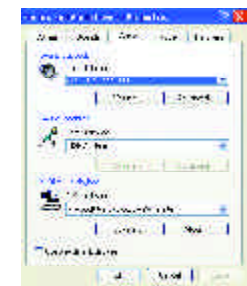
**Start>Settings>Control Panel>Sounds and Audio Devices.**



(Windows 98SE/ME)



(Windows 2000)



(Windows XP)

Open **Multimedia** or **Sounds and Multimedia**. Under the audio tab, select **USB Audio Device** for Recording Device.

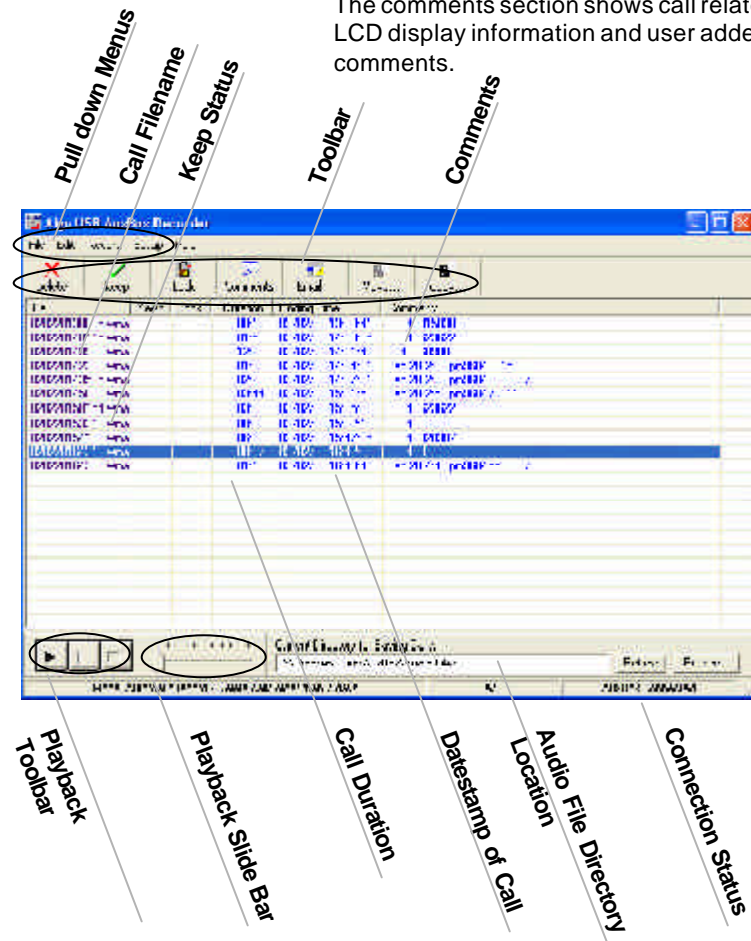
Select your **sound card** to play back recorded calls. You should not need to change this setting.

# Software Features

## Application Window

This window will log all calls recorded, keep status, duration of call, ending time, and comments.

The comments section shows call related LCD display information and user added comments.



## Sorting Audio Files

All the columns in the Application Window can be sorted by ascending or descending order by clicking on the column header.

## Running the Application in the Background

Pressing the minimize icon will place the minimized application window into the Windows Taskbar. Pressing the close icon will hide the application window and will run the program from the System Tool Tray.



The AuxBox Recorder Software icon in the System Tray will flash indicating that a call in-progress is being recorded.



**Application Minimized in idle state**

To shut down the application, right click on the icon in the System Tray or in **File>Shutdown AuxBox Recorder**.



**Application Minimized during recording**