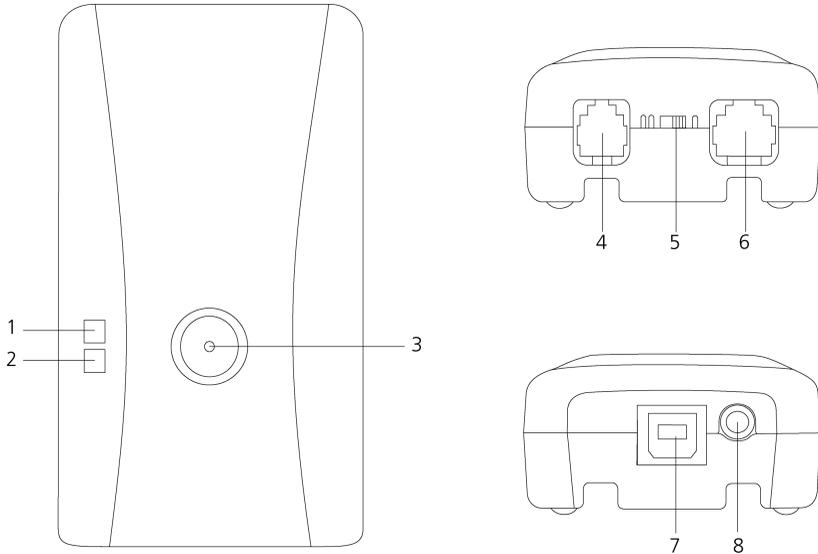


**Retell Call Recorder
Pico Manual**
Version 1.001.10





1. Green LED *
2. Red LED **
3. Record button
4. Handset out / Line out
5. I II Switch
6. Handset in / Line in
7. USB
8. Speaker / microphone ***

- *) The green LED indicates that the software on the computer has detected the Pico and its driver is running.
- ***) The red LED indicates a recording is being made.
- ****) Connect a microphone to record a conversation in the room, or connect speakers to play back a previously made recording.

Care and Maintenance

	<p>Keep the Call Recorder Pico dry. If it gets wet, wipe it dry immediately with a soft, clean cloth. Liquids might contain minerals that corrode the electronic circuits.</p>
	<p>Use and store the Call Recorder Pico only in temperature conditions between 0 and 40 degrees Celsius. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.</p>
	<p>Keep the Call Recorder Pico away from excessive dust and dirt.</p>
	<p>Do not use aggressive chemicals, cleaning solvents or strong detergents to clean the Call Recorder Pico.</p>

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1 Introduction

The Call Recorder Pico is a system to record and archive telephone calls on a PC. It consists of a PC application and one or more Call Recorders connecting the telephones to your PC. Depending on the number of USB ports and the capabilities of the PC, it is possible to record from up to any number of Call Recorders simultaneously (4 Call Recorders per 1Ghz).

Every gigabyte of free disk space allows you to record up to 180 hours of conversation on your hard disk.

The Call Recorder Pico can record from analogue and corded digital telephones, from Skype© and from a microphone.

Recordings are stored in a comprehensive archive. The archive is displayed on your computer screen as a list of recordings. In the list the recording properties like date and time of the recording are stored with the actual recording and can be viewed in the archive. Queries can be made to get a clear picture of the amount of recordings or to find a specific recording quickly.

NOTE The Pico stores all recordings on your PC. For it to make a recording it is necessary that the PC is on and the software is running.

Call Centre use

This call recorder can be used in small businesses where one telephone line is connected to one call recorder, but it is also possible to connect a Pico to every line in a Call centre.

For the use of Pico's in a Call centre an API can be installed through which the Pico and the Call Centre's software can work together.

Read Appendix A to find out more about this API.

2 Getting started

The Call recorder Pico is set up in a sequence of steps. The following paragraphs will describe the steps involved. They are:

- Connecting the Pico to the telephone
- Connecting the Pico to the PC
- Software installation
- Set up of the software

2.1 Hardware installation

Depending on the kind of telephone you want to record from, the Pico is connected to the telephone line or the telephone handset.

You will find instructions for recording from an analogue telephone line or recording from the handset of a digital telephone.

The Call Recorder Pico works best with a properly installed sound card or sound device in your PC. However, the Pico can also be connected to external speakers. The signal on the speakers is a mono signal.

2.2 Notification

When recording a conversation with the Pico it is possible to notify your conversation partner of the recording through a regularly returning beep or through a spoken message. See § Setup3.3.3 about recording and play back of the notification message.

2.3 Connecting the Call Recorder Pico

Determine the kind of telephone you want to connect the Pico to. This will either be a normal (analogue) or digital (e.g. Key System, PBX, ISDN) device. If you have an analogue telephone, use the "Record from telephone line" method. If

you have digital telephone, use the "Record from handset" method.

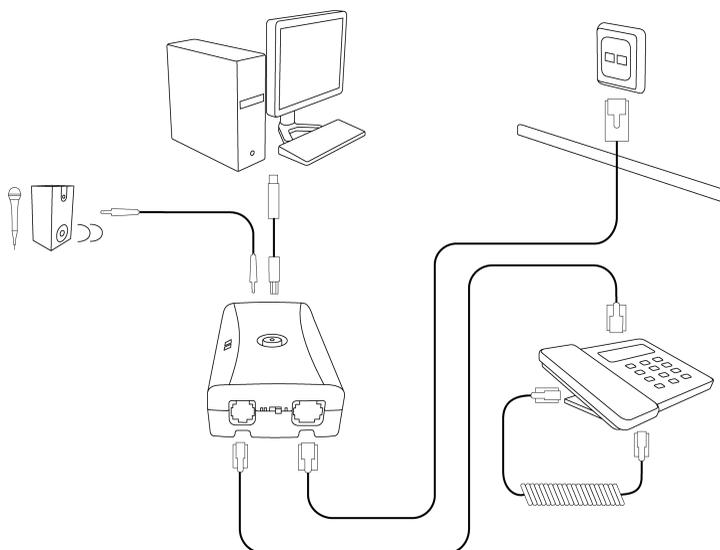
2.3.1 Record from telephone line

Record from telephone line can only be used if you have an analogue telephone. When "record from telephone line" is used the Pico can detect "on/off hook" straight from the telephone line.

The switch between the telephone sockets **must** be in position I.

If you have a cordless analogue telephone set, connect the Pico to the base unit.

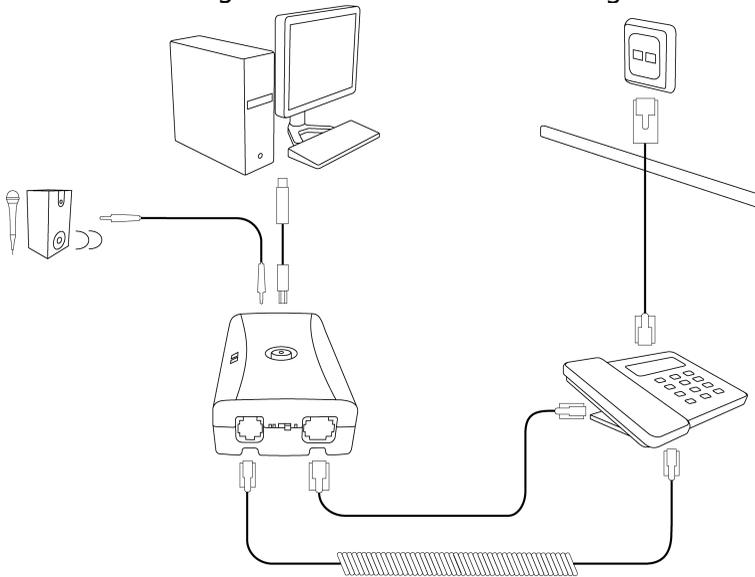
If you have ADSL, connect the Pico between the ADSL modem and the telephone. See the diagram below.



Record from telephone line

2.3.2 Record from handset

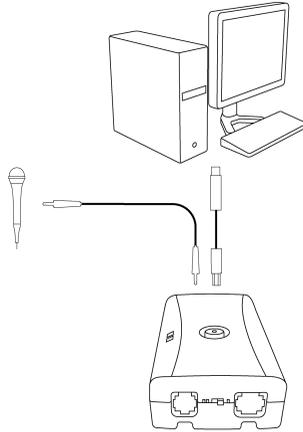
When "record from handset" is used the Pico needs to detect "on/off hook" by "listening" to the handset. The handset **must** be corded. The switch between the telephone sockets should be in position I. Depending on the wiring of your handset you may need to put it in position II if position I interferes with the normal working order of your telephone or the recordings are of poor quality. See also Problems with distorted audio § 6.5. See the connection diagram below.



Record from handset

2.3.3 Record from microphone

A third possibility is connecting the Pico to a microphone. Conversations in a conference room or office could be recorded with the Pico connected like this.



After connecting the Pico to the telephone line or microphone, it can be connected to the PC.

2.4 Connect the Pico to the PC

Once the Pico is connected to the telephone it can be connected to the computer using the USB cable.

2.4.1 Connecting the first Call Recorder Pico

The Pico can be connected to any free USB port or to a USB hub. If connected to a hub, this hub should have an external power supply.

For Windows, 2000, XP and Vista the Pico will show up in the device list after a couple of seconds.

Warning: Installing the Pico will make it the preferred sound device of your computer. If you have a soundcard in your system and you use it for other applications it is advised to restore your original sound device as preferred device. To restore your original sound device (your soundcard) as preferred, please follow these instructions:

- Click "Start" and select the Control Panel.

- Select "Multimedia" or "Sound and Multimedia"
- Select the Audio tab-page.
- Now select your preferred device for playback.

2.5 Software installation

Place the CD-ROM in your computer and the software installation starts automatically. If the installation is not started automatically, locate the file 'CRPicoInstaller.exe' on the CD and start it by double-clicking. Follow the instructions on the screen.

- Select your preferred language for the installation.
- You are prompted to accept the software license agreement.
- Now enter the user details and the installation key provided with your product

Setup - Call Recorder Pico

User Information
Please enter your information.

User Name:

Organization:

Installation Key:

< Back Next > Cancel

Only then you can proceed with the next steps of the installation:

You will be asked:

- to confirm the location on your hard drive where the software will be installed
- specify a location for the data files
- whether you want a desktop icon for the application

When the installation is finished you will be asked to register your Pico on line.

When the software starts for the first time you will be prompted to check for online updates. Please execute this check.

2.5.1 Software configuration

When you start the software for the first time, with the new Pico connected, the **Device list** will open.

Make the connection and recording settings there. See Device settings §3.2.

2.5.2 Connecting more Call Recorders Pico

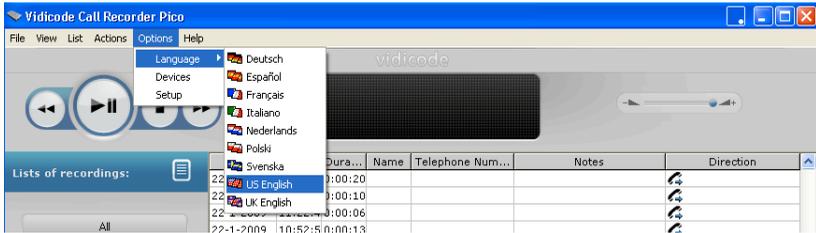
Once the first Pico has been connected, recognised by the PC and it shows up in your device list, the second Pico can be connected. Wait until this device has been recognised and installed before connecting consecutive devices. If you connect a number of Pico's, make sure to give them a 'device name' , to make identification easier.

3 Options

3.1 Language

The Pico software is translated into a number of languages. It is possible to change the display language at any time.

- Select your language and click.



3.2 Device settings

Following the description in the previous paragraph, start the software and open from the **Options** menu the **Devices** screen.

To the left you will see a list in a drop box of the available audio devices. All connected Pico's should show up in the list. Make the device settings for all Call Recorders separately. Select one of the audio devices, and then change its settings.

Icon

By default, the Serial number is used as the device name. An enabled Pico shows up as a button in the List tab.

3.2.1 Basic

Device name

Each Pico is identified by its serial number. For the individual user it is easier to address a name to the Pico to identify it. The name is referred to as the 'Device name'.

- Enter a name for the device in the 'Device name' field.

Input channel

The Call Recorder Pico can record from a telephone or a microphone. To record from a microphone, connect it to the Pico.

- Select 'microphone' as Input Channel.

It is not possible to record from a telephone and a microphone at the same time.

Device is connected to the:

- Select either the telephone Line or to the telephone Handset according to the way the Pico is connected.

Enable recording by this device

If you want the Pico to record, this checkbox should be checked (it is by default). At some point however, it could be necessary to disconnect one or more Pico's. Use this checkbox to disable recording from the device, without having to physically disconnect it.

- Check the "Enable recording by this device" checkbox

Once the device is enabled, other options can be set.

3.2.2 Start / Stop

Start / Stop a recording

There are four possibilities:

- **Automatic:** The software automatically starts recording when it detects that the telephone is off-hook, based on the audio level and on / off hook signals when available. It is necessary to adjust all settings in this dialogue.
- **Semi-automatic:** The software detects when the telephone is off-hook or on-hook, but it does not start a recording automatically. You can choose to start a recording when the telephone is off-hook, by clicking the Record button in the Pico application or press the Record button on the Pico itself. Only adjust the Pre-recording period in this dialogue

- Manual: You choose to start and stop a recording manually. Recording can be started and stopped from the Audio screen. Recording can also be started from the Active dialog or by using the Record button on the Pico itself. Only adjust the Pre-recording period in this dialogue.
- Automatic (on / off hook only) The software automatically starts recording when it detects that the telephone is off-hook, based on on-hook signals only, not on audio level. This option is not possible when the Pico is connected to the handset (digital telephone).

About Voice activated recording

Voice activated recording is used when recording from the Handset. This option is used when recording from a digital telephone.

The principle of voice activated recording is quite simple. The Pico software constantly monitors the connected devices for their audio level. When the telephone is not used the audio level is close to zero. When a telephone conversation is started the software will detect an elevated audio level on the Pico. The **Start/Stop level** setting is used to determine the audio level above which recording should be started. The recording will be stopped again when the audio level drops below the Start/Stop level.

However, the recording should not stop instantly. During telephone calls it is possible that the audio level drops below the Start/Stop level for a certain amount of time, for instance when the caller is put on hold or when the caller mutes the phone. Therefore, the recording needs to be stopped only after the audio level has dropped below the Start/Stop level for a certain amount of time. This amount of time is set by the **Stop time**. The settings of the Start/Stop level and the Stop time are crucial to the performance of reliable voice activated recording.

Note Voice activated recording is active simultaneously with the On and Off Hook detection when connected to the telephone line.

Automatic recording start/stop audio level

If the audio level is above the level specified here, a recording will be started.

Stop recording after audio is below stop level for ... seconds

Specify the number of seconds you want the Pico to go on recording after the audio level is below the automatic recording start/stop level.

Pre-recording period

When you manually start a recording it is possible to have the software start the recording a little earlier than you actually press the button by setting the 'Pre recording period' which defines the amount of time.

3.2.3 Volume

Recording Volume

Here is where you set the recording volume. It is dependent on the make of the telephone whether it should be high or low.

Automatic Gain Control (AGC)

AGC amplifies all audio signals to one specific level.

- Set the minimum level using the second (lower) slider.

The slider sets the Minimum level to boost, i.e. audio (background noise) that stays below this level will remain unaffected (not amplified) by the AGC. Audio that rises above this level will be amplified to the Maximum level.

Try to find a setting where both the local and remote voices are amplified without the background noise being amplified. If during playback the sound seems intermitted or contains gaps the Minimum level is probably set too high. If there is a lot of background noise during playback the Minimum level is probably set too low.

Add microphone channel

By default this option is not enabled. This option is only relevant when the device is connected to the telephone handset. The Pico software, by default, only records the headset speaker channel. Most telephone handset speakers contain both the local and the remote voice signal. Enable this option to add the local voice signal from the microphone to the recording. Enable this option only when the recording does not contain the local voice or when the audio level is too low.

3.2.4 Extra

Sound on speaker while recording

This is a Monitoring option.

When this option is enabled, the recorded sound is put on the PC speakers automatically when a recording starts, and is stopped automatically when the recording stops. This option allows for supervisors in an other room to listen in on the conversation that is taking place. As the sound is not real time it is not advised to enable this option when the telephone and the PC are in the same room. This option can also be activated on the 'Audio' tab and the Actions menu.

Record left channel

Background information:

When recording from the telephone Handset, the Pico receives two signals:

- 1) The signal of the microphone of the handset, this contains your own voice.

- 2) The signal of the speaker of the handset, this contains the voice of the remote caller, and often also your own voice.

The Pico software receives a stereo signal (left and right) from the Pico device. Normally the left channel is the microphone and the right channel is the speaker.

By default the Pico records only the right channel because this normally contains both the local and the remote voice. If this is not the case, change it by enabling the options:

- Add microphone channel
- Record left channel

3.3 Setup

3.3.1 Playback

To Playback any recording the **Device** and **channel** must be selected from the list. Commonly the computer's soundcard will be used as device and the channel can either be WAVE or PC Speakers. The play back **Volume** can be adjusted with the slider. Make sure that when you use the PC speakers for playback the PC volume is '**on**' as well.

Check the checkbox '**Disable automatic starting of recording during playback**' when the Pico is used as playback device. It prevents that the software records the played back sound that is sent to the Pico.

3.3.2 Recording

A number of recording settings is common for all the connected devices. These settings are displayed here. Settings specific for a connected device, are displayed in Device options.

Type

Type displays all Codecs available. One of the Codecs of your PC is used to encode recordings. The Microsoft GSM Codec is present on most PC's. It offers a good balance between

recording quality and required storage space. Therefore, if available, this Codec is selected as a standard.

Note: The Fraunhofer MPEG Codec (as available on Windows XP) should not be used when recording from multiple Pico devices, because this Codec supports only one recording at the time. The Microsoft GSM Codec does not have this limitation.

Frequency

Choose between a sampling frequency of 8 kHz (the default), or 16 kHz. A higher sampling frequency gives a higher quality recording, but uses more disk space.

Attributes

Attributes shows the various options of the selected Codec for the selected frequency. If it is empty, recording in the selected Codec at the selected frequency is not possible. Another Codec or frequency should be selected.

Minimum Duration

Minimum Duration refers to the minimum duration of a recording for it to be stored. A standard setting would be 5 seconds. Recordings shorter than the set Minimum duration will not be stored.

Ask to store

When "Ask to store" is enabled, you will have an option to cancel a recording when it is finished. The "Ask to store"-dialog has a field to add Notes to the recording.

Call Recording for Skype Software

By default this option is disabled. When it is enabled, and it is working, a button with the name "Uses Skype Software" is displayed in the List tab of the main screen.

Beep while recording

"Beep while recording" refers to the sounding of a beep during recording. In some countries, states, or areas the sounding of a beep during recording is required by law to notify the remote caller of the recording of the conversation.

- Check the checkbox to enable the beep while recording.
- The interval of the beep can be set below the checkbox.

Note It is possible the local caller hears the beep louder than it sounds on the remote side.

3.3.3 Notification message

At the start of a recording a notification message can be played automatically, or manually when the **F8** key is pressed (PC) or using the button in the **Audio** tab.

To find a recorded notification message, follow these steps.

- Click on Browse
- Fill in the filename of the .wav audio file,

or Record a new message

- Click on Record

The following screen displays:



- Choose the **Device** to use for recording the notification message.

On Windows XP and other older Windows versions it may be necessary to select the recording channel using the Windows Mixer. Check if your PC has a built in microphone. If not, use an external microphone or the microphone in the telephone handset.

If you chose to use telephone's handset as the microphone there are two options:

- 1) The Pico is connected on the handset of the telephone
 - 2) The Pico is connected to the telephone line.
- Choose 'L' for option 1), the dialling tone will be filtered out.
 - Choose 'R' for option 2) the dialling tone, if present, will also be recorded. An external microphone will give a better result.
 - Choose 'L + R' when using an external microphone or the built in PC microphone.

- Press the **Start** button to start recording the notification message.
- Press **Stop** when you are finished
- Press **OK** to save and use the newly recorded notification message.
- It is recommended to check if the notification message has a good audio level for both calling parties when played back on the telephone line.

Auto play notification

This option determines if the notification message is played automatically when a recording starts.

- **No** - To playback the notification message, you have to press the Play notification button in the Audio tab or press F8.
- **For incoming Calls** - The notification message will automatically be started on incoming calls only.
- **Yes** - When a recording of any call starts, the notification message is played automatically.

Note The software can only detect an incoming call if the Pico is connected to the telephone line (i.e. when the Pico is connected to the telephone handset it can not detect an incoming call): When a recording starts and the software has detected it is an incoming call, the notification message is played automatically.

3.3.4 Data storage

The database in which the recordings are stored has to be put in a logical place. This could either be on your PC or on the Network.

- Click Browse to select the storage location of the database.

3.3.5 Start -up

Because the Pico software needs to be running to store the recordings, it is advised to enable the option '**Start up with Windows**'. When the PC starts, it will automatically start the Pico software. The option 'Start in System tray' can be enabled if you do not want the software to be displayed on screen. The system tray on a PC is positioned at the lower right corner of the screen. On it all applications running in the background are visible as an icon.



It is possible to check both Start up **With Windows** and **In System Tray**. In that case the application will start at startup of your PC and will be moved to your system tray immediately.

When a recording is started, the application 'wakes up' and will show a red dot in the system tray. To get the application on screen when it is not recording

- Click the Icon in the System tray

3.3.6 Security

It is possible to protect the Pico application with a **password**. Deleting of recordings and settings of the program can be protected separately.

- Check the item you want to protect..
- Enter the password.
- Click 'Apply' to save the password.

Upon deleting a recording or entering the settings the user will be prompted to enter the password. Once entered the password remains active for 10 minutes.

3.3.7 Display

The recordings made with the Pico are stored in a database. The setting Visible Columns allows you to select which columns are displayed.

The option 'Auto size columns' can be checked if you want the columns in the list view to adjust to the screen size automatically.

'Restore out of the System tray when a recording starts' should be checked if you want the application to be on the screen the moment a recording starts.

The option 'Activate Audio tab when recording starts' can be checked if you want the application to automatically open the Audio tab the moment a recording starts. On the Audio tab you will find four buttons; Playback a file in a call', Playback a recording in a call', 'Play notification message' and 'Start monitoring'. See §4

After finishing the settings

- Click Apply to save all changes.

4 Playback and recording

In this section the functions of the Playback and recording controls will be explained.

4.1 Normal playback

Select a recording and click the Play button to play it back, or double-click on a recording to play it, or right-click on it and select Play.

4.2 Playback in a call

To playback a recording or another audio file on the telephone line, audible for the other party.

Playback File in call

To playback a file on the telephone line, audible for the other party select the recording and:

- Open the **Audio** tab and
- Click the button 'Playback File in call'
- Select the file you want to play back by double clicking it.

Or

- Open the Actions menu and select the option 'Playback File in call'.
- Select the file you want to play back by double clicking it.

Playback Recording in call

To playback a recording on the telephone line, audible for the other party:

- Open the **Audio** tab and
- Click the button 'Playback recording in call'
- Select the file you want to play back and
- Double click it.

Or

- Open the Actions menu and select the option 'Playback recording in call `.
- Select the file you want to play back and
- Double click it.

Playback the notification message,

- Open the **Audio** tab and
- Click the button 'Play notification message'

Or

- Open the Actions menu and
- Select the option 'Play notification message' .

Or

- Press F8 on your keyboard

4.2.1 Playback and recording control display

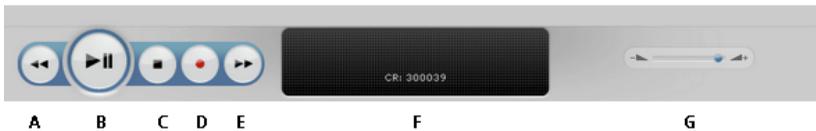
To play back a recording:

- Select a specific recording in the archive
- Use the recorder keys to start playback.

or

- Double-click the recording
- .

The recorder key functions resemble the ordinary recorder key functions.



- A: Moves the playback position **backward**. Keep the key pressed to repeat and increase speed.
- B: **Start or pause** the playback of the currently selected recording.
- C: **Stop** the playback or recording.

- D: **Start** the recording. This button is not visible when recording is automatic. When you have multiple Pico devices connected, the recording will start for the last Pico device you have selected in the List tab.
- E: Moves the playback position **forward**. Keep the key pressed to repeat and increase speed.
- F: **Information** about the current playback or recording is displayed here. Click on the progress bar to move to a specific position in the playback.
- G: Controls the playback **volume**.

4.2.2 Hotkeys

Key	Function
Ctrl + R	Start Recording
Ctrl + P or Spacebar	Play / Pause
Ctrl + L	Stop
Ctrl + U	Backward
Ctrl + I	Forward
F8	Play notification message

4.2.3 Playback by the Pico device

When your PC does not have a soundcard, The speakers can be connected directly to the Pico device. (with Mono sound from the right speaker only)

Note: When you use this configuration, audio that is played back might be audible for someone you are calling.

- Select a specific recording in the archive
- Use the recorder keys to start playback.

or

- Double-click the recording. .

4.3 Automatic recording.

If you have chosen to automatically record all calls, (see § 3.3.2) it is still possible to stop a recording by pressing the

Start/Stop button on the Pico device itself, or by clicking the Stop key on the recorder display.

4.4 Manual recording

If you have chosen to record manually or semi-automatic (see § 3.3.2)

you have to activate the Pico to start recording. This can be done on the Pico itself, or with the recorder keys in the software.

To record a call manually:

- click the record key on the recorder display, or
- press the Start/Stop button on the Pico device itself.

4.4.1 Adding notes to a recording

Once a recording is made, it is possible to add additional information like the caller's name, number and some text.

- Select the recording you want to add the information to
- Right click.
- Choose 'Edit'

A dialog opens like the one shown below:

Edit

Date/time 22-1-2009 10:52:51

Duration 0:00:13

Use existing entry

Add new entry

Name: Hodge

Telephone Number: +714-5360000

Note:

Regarding the accountants visit

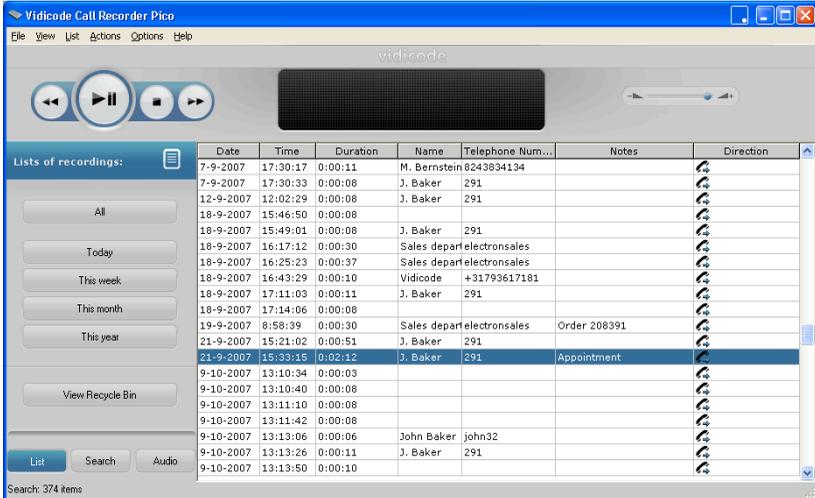
OK Cancel

- Choose 'Add new entry' if the information you want to add is new.
- Enter the new information
- Choose 'Use existing entry' if the information (like name and number) you want to add already exist in the database.
- Select from the drop down
- Click OK when finished.

The new information appears in the list instantaneously

5 Layout of the software

When the software is started the program looks like this:



These are the items on the main screen:

- The main Menu (at the top)
- The playback and recording controls (at the top)
- The buttons on the left
- The three tabs: List, Search, Audio at the bottom left
- The list of recordings (the large remaining area)

5.1 Main Menu

The main Menu gives access to File, View, List, Actions, Options and Help. In this chapter we will explain the menu options.

5.1.1 File

The menu item 'File' has three options. New, Open and Exit. '**New**' will start a new call archive. This means that the database will be created in which the recordings will be stored.

A dialogue opens in which you are asked to specify the location of the new database folder. The new Archive can be located on your PC or on the network.

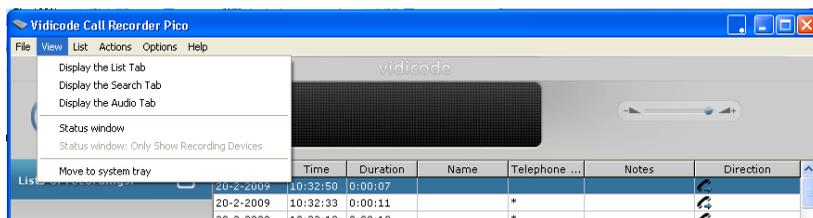
'Open' allows you to open an existing archive (database).

This can be an archive on the PC or on the network.

'Exit' closes the application.

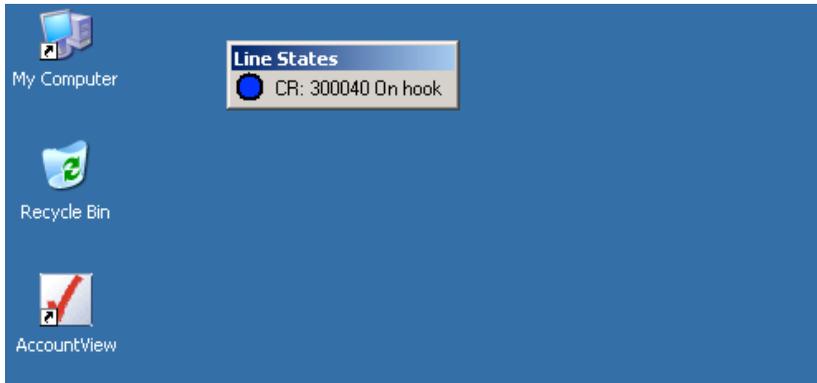
5.1.2 View

The View menu has six options: 'Display the List Tab', 'Display the Search Tab's, 'Display the Audio Tab', 'Status Window', 'Status window: Only show recording devices' and 'Move to system tray' (see also §3.3.5).



The 'Display...' options open the corresponding Tab to the left of the List view in the main screen.

The option 'Status Window' view puts a small status window on top of all other running applications in which the status of the connected device is shown.



'Status window: Only show recording devices' is an additional option to Status Window, where the active window will only be visible when the Pico is recording.

Note: Clicking the 'dot' in the status window either starts or stops a recording.

The option 'Move to system tray' puts the active application in the system tray. The system tray on a PC is positioned at the lower right corner of the screen. On it all applications running in the background are visible as an icon.



The application is activated and back on screen the moment a recording starts, if you chose Automatic recording and checked the checkbox 'Restore out of system tray...' in Options – Setup – Display. If you have chosen the Manual recording option, you will have to bring the application back on screen as described below.

To retrieve the application from the System tray

- Click the Icon once

Or

- Right click the icon in the System tray and

- Choose 'Show'.

5.1.3 List

Recordings are saved to a database. In the software this database is referred to as Archive and shows as a list in the main screen.

The List Tab shows the buttons with which you can select from what predefined timeframe you want to see the recordings in the List view.

'All', 'Today', 'This week', 'This month', 'This year' and 'View Recycle Bin')

The actual list of recordings on the right changes with the selection you choose. To view a list of the complete database, click the All-button in the List tab.

Clicking the Column headers will sort the list by that column. i.e. if you want to see all outbound calls, click the column header 'Direction'. The calls will be grouped by direction 'in' or 'out'.

5.1.4 The Recycle Bin

The Recycle Bin resembles the Windows Recycle Bin. To put recordings in the Recycle Bin:

- Select recordings in the archive and
- delete the recordings with the Delete key on your keyboard.

A dialogue opens asking you to confirm the deleting.

or

- right click and choose 'Delete'.

A dialogue opens asking you to confirm the deleting.

- Use the SHIFT + Delete keys to permanently delete a recording without moving it to the recycle bin first.

The deleted recordings end up in the Recycle Bin. They are still in an archive. To Permanently delete the recordings:

- Press 'View Recycle Bin'
- Select the recordings you want to delete permanently
- Right click and choose 'Delete'.

A dialogue opens asking you to confirm the deleting

To permanently delete all recordings in the Recycle Bin

- Open the Actions menu
- Go to Recycle Bin
- Choose ' Empty'

Recordings can be restored to the database

To restore recordings:

- Click 'View Recycle Bin' in the List view
- Select one or more recordings you want to restore
- Right click
- Choose restore.

Or

- Open the Actions menu
- Go to Recycle Bin
- Select one or more recordings you want to restore
- Choose ' Restore'

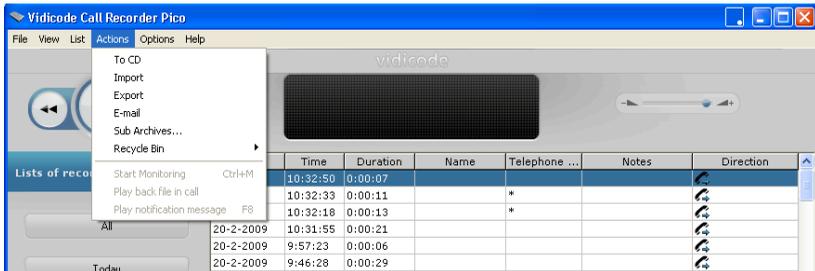
Or

- Open the Actions menu or click 'View Recycle Bin' in the List view
- Go to Recycle Bin
- Select one or more recordings you want to restore
- Right click
- Choose restore.

5.1.5 Action

In the Action tab, you can Back up the recordings to CD, Import a back up from CD or from the network, Export actual

recordings, Start / Stop the Monitor function, Play a notification message, Playback online and view Sub archives.



To CD

This function is used to back up an entire database or a selection of recordings on CD.

Note that you need to use a separate CD-writing application for actually writing the files to CD.

If you do not want to burn the entire database on CD

- Use the Search Tab to make a selection of the recordings you want to back up on CD.
- Go to the Actions menu and
- Choose To CD.

A dialogue opens. If you want to copy the entire database on CD the options 'Selection' and 'Active Query' are greyed out.

If you have made a selection of the database, the radio button 'Selection' will be active.

- Browse to the location where you want to store the Export directory, using the 'Browse...' button, this can either be on the PC or on the network.
- Adjust the maximum size if needed.
- Click OK

If you back up more data than the 'maximum' size, multiple directories will be created as needed for multiple CD's.

Import will also open a dialogue in which you can select the directory from which you want to import a back up.

- Select the database and click OK to import it.

Export

Using the radio buttons select if you want to export the current selection or the whole query.

The Export directory is the storage location. The location can be changed to your convenience.

Recording properties can be preserved in the filename of the recordings:

You can add 'placeholder' in the filename that will be automatically filled in. These placeholders start with a percent sign (%) followed by a character. The following placeholders are available:

%I is the number of the recording

%D is the date of the recording

%T is the time of the recording

%X is the duration of the recording

%N is the name associated with the recording

%P is the telephone number of the recording

- Press **OK** to execute the export.

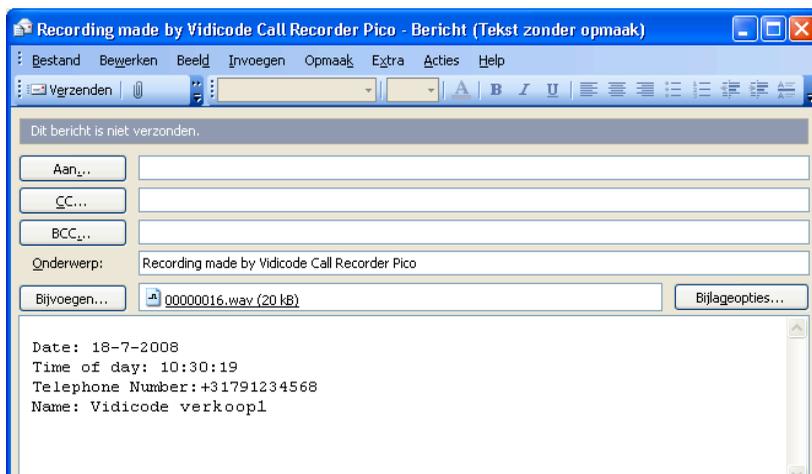
E-mail

It is possible to send a single or a selection of recordings using e-mail.

- First select the recording you want to send by e-mail.

There are two ways to start an e-mail.

- Open the Actions menu and choose 'e-mail'. An e-mail dialogue opens to which the recording is attached. The recording data is displayed in the e-mail.
- Enter the receivers name and send.
- The second possibility is to select a recording, then right click and choose 'e-mail'.



Sub archives

It is possible to combine separate Archives into one new Archive.

The new Archive will be the 'Current Archive' the archives filled by the different Pico's are referred to as Sub Archive.

For example, a Supervisor may have access to a set of Pico Archives. These Archives should be on an accessible location for the supervisor like a network drive. The combined Archive is created by copying new recordings from the 'Sub Archives' to the 'Current Archive'.

To define which Sub Archives you want to access,

- Select Add, and browse to the location of the Sub Archive.

- Choose whether you want to copy the recordings manually, (click "Copy new recordings from Sub Archive" or automatically (check the "Auto Copy" box) .

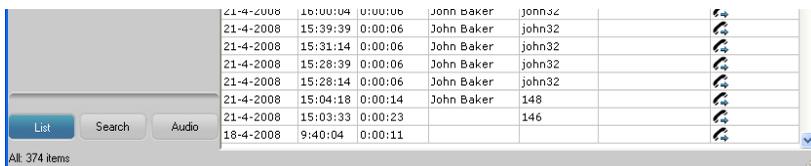
To delete a Sub Archive,

- Select Delete.

New recordings will no longer be copied from the deleted Sub Archive,.

Previously copied recordings stay in the Current Archive.

5.2 List, Search and Audio buttons



5.2.1 The List button

The List button displays the List view. To the left are the buttons with which a selection for the view can be made. To the right, the main screen, displays the (selection from) current archive.

5.2.2 The Search button

In the Search tab, you can define a Search. A Query based on a recording's date, week, time of day, duration, device, telephone number, name or notes.

- Click on the **+** in front of the properties you want to use in your query (one or more) and fill in the range or name, then click **Search**.

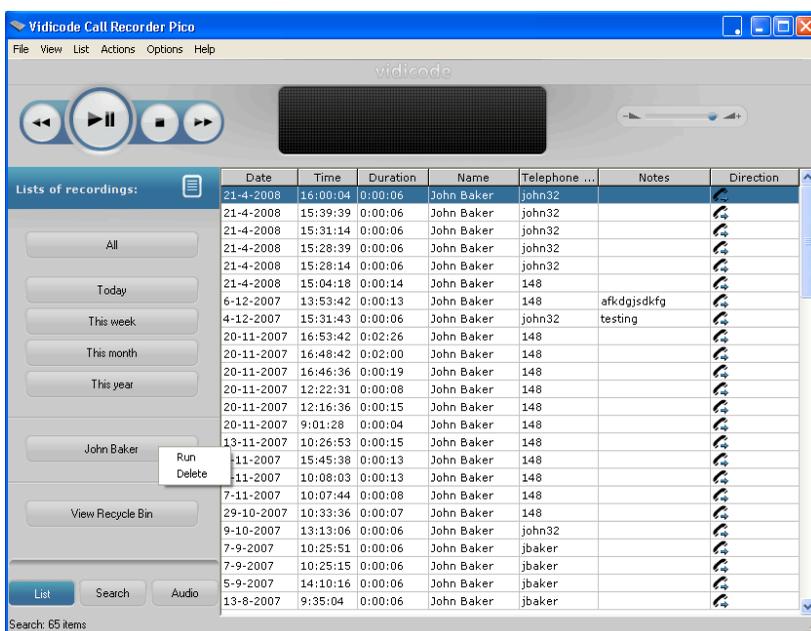
Save a query

Custom queries can be added to list for regular execution.

- Click on the property to expand it, fill in the required values or value range.

- Click Search to display the result of the search. An extra button has appeared on the menu to the left, the 'Save Search' button.
- Clicking this button will open a dialogue in which you can specify a name for the query. A shortcut to this query will be added to the List Tab.

The custom query can be removed by right clicking the button. Choose 'delete' to delete the query.



5.2.3 The Audio button

The Audio button is a shortcut to the Audio options. It is possible to set the software up to open the Audio Tab on receiving a telephone call.

The Audio tab has four options; Playback File in Call, Play back recording in call, Play notification message and Start Monitoring.

Playback File in call

To playback a file on the telephone line, audible for the other party select the recording and:

- Open the **Audio** tab and
- Click the button 'Playback File in call'

A dialogue opens with a tree view of all folders on your PC.

- Locate the file you want to play back
- Select the file you want to play back by double clicking it.

Or

- Open the Actions menu and select the option 'Playback File in call'.

A dialogue opens with a tree view of all folders on your PC.

- Locate the file you want to play back
- Select the file you want to play back by double clicking it.

Playback Recording in call

To playback a recording on the telephone line, audible for the other party:

- Open the **Audio** tab and
- Click the button 'Playback recording in call
- Select the file you want to play back by double clicking it.

Or

- Open the Actions menu and select the option 'Playback recording in call '.
- Select the file you want to play back by double clicking it.

Play notification message

To playback the notification message,

- Open the **Audio** tab and
- Click the button 'Play notification message'

Or open the Actions menu and select the option 'Play notification message'.

Start Monitoring

This option allows for supervisors in an other room to listen in on the conversation that is taking place. As the sound is not real time it is not advised to enable this option when the telephone and the PC are in the same room. This option can also be activated on the 'Audio' tab and the Actions menu.

6 Problem solving

6.1 Restoring your soundcard

The hardware installation of a Pico will make this device the preferred sound device of your computer because it is the last device added to your configuration. If you have a soundcard in your system and you use it for other applications it is advised to restore the original sound device as preferred device again.

This is done as follows:

- Click Windows **Start** in the lower left corner on the taskbar in your computer screen
- Select the "Control Panel".
- Select "Multimedia" or "Sound and Multimedia" / "Sound, speech and Audio Devices"
- Select the **Audio** tab.
- Select your preferred device for playing and recording.

WARNING: If you do not restore your soundcard as preferred audio device there is a chance the sound of games and other applications will no longer work. If you change the USB-port the Pico is plugged in to, you may need to repeat restoring your soundcard.

6.2 Problems setting the Start/Stop level

The following symptoms could occur when the Start/Stop level is not set properly.

When the level is set too low (to the left) it is possible that recording starts too early or the Pico is recording all the time, resulting in empty recordings.

When the level is set too high (to the right) recording will start too late resulting in calls not being recorded or calls being split up over two or more recordings.

6.3 Problems setting the Stop time

The following symptoms could occur when the Stop time is not set properly.

When the Stop time is set too low, recordings of calls are cut off prematurely, or calls are being split over two or more recordings.

When the Stop time is set too high, there is a chance that more calls, especially calls shortly after each other, are recorded as one recording.

6.4 Problem with playback volume slider

If you move the volume slider and nothing happens, it is possible the software chose the wrong channel for playback. This could occur if the name of the channel on your soundcard is not the same as the name of the channel chosen by the software.

- Go to **Options – Devices** and change the "**Recording Channel**".
- Choose a channel with a name similar to WAVE or Speaker or Master Volume

6.5 Problems with distorted audio

If you have a problem with your phone not working properly or the sound is distorted and you connected the Pico to the handset of the telephone, chances are the wiring of your telephone is not standard.

In that case, set the 'I II' switch to 'II'.

6.6 Problems with high Start level

(Handset or headset connection only)

In some digital telephones the handset is not switched off or muted after hanging up the telephone. When **ON** the handset

microphone might pick-up surrounding noises. As a result, the Pico would record all the time.

If this is the case, the only way to set up the Pico is to start a recording manually either from the software or on the actual Pico.

This problem also occurs with some headsets.

6.7 Problems with automatic start / stop

In some cases, only when you have a cordless telephone with its own power supply AND the Pico is connected to the telephone line, you may have a problem with starting or stopping a recording, although all device settings are made properly.

The symptoms are: The recording starts in Automatic mode, but does not stop (immediately) when the telephone is 'on hook' again. Or, in automatic mode (on/off hook only) and in semi-automatic mode, the Pico does not start recording when the telephone is 'off hook'

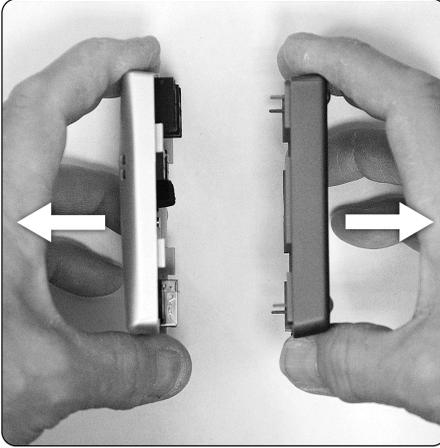
If this occurs, it may be a hardware problem. The Pico probably does not detect the telephone is on or off hook, because the line voltage detection level is too low. The line voltage detection level can be increased by removing the jumper from within the Pico.

This is what you should do:

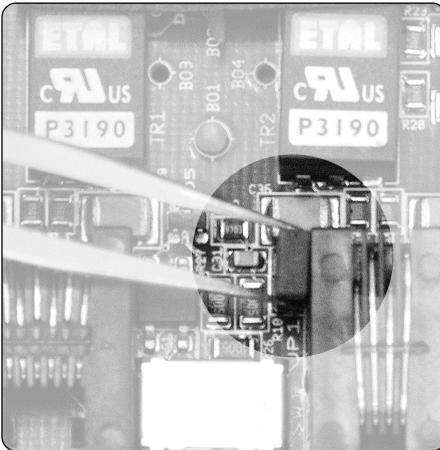


Disconnect the Pico from the Telephone (line) and from the PC.
You'll need a pair of tweezers (preferable plastic).

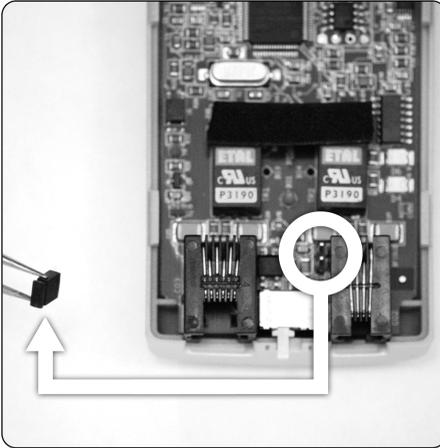
After that, follow the instructions below.



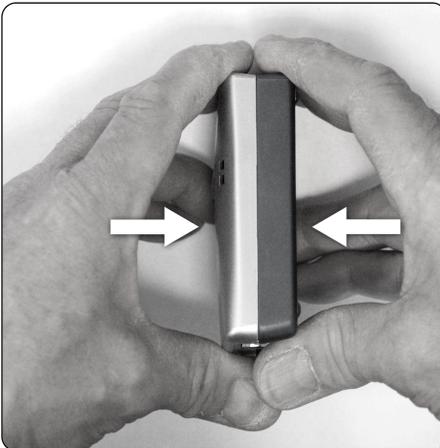
1 - Carefully open the Pico by disconnecting the blue and the gray parts, this should be easy.



2 - Now locate the jumper, (a small black plastic square), there is only one jumper inside the Pico. It is located against the side of the smaller of the two telephone line connectors and it is marked JP1



3 - Remove the jumper from the pins.



4 - Close the Pico's case.

Connect and re-install the Pico and try if it is working properly now.
It should now be able to detect whether the telephone is on or off hook.

6.8 Problems with PC start up after connecting Pico

If the Pico is connected to the PC via a USB-hub, even a USB-hub with its own power supply, **and** the PC does not start up after you have connected the Pico, we advise you to connect the Pico directly on the PC's USB port and start up the PC again. The problem should now be solved.

Software Update Online

The Pico software has the ability to check for software updates and to download them from the internet.

- Choose **Help** in the menu
- Select Check for update.
- Click Check Update

The fixes of the last update are displayed.

- Press **Download** to start downloading the update.
- When downloading is finished the new version will be installed.

For this function an Internet connection is required.

7 Acknowledgements

7.1 Privacy

When recording telephone conversations the privacy of your conversation partner must be considered.

In some countries there is an obligation to notify your conversation partner of the recording. Check your national legal obligations on this and other issues concerning the use of the Call Recorder.

In the United States, the Federal government requires that only one person involved in a conversation must know the call is being recorded. However, each state has legislation. The vast majority of states have laws complying with the Federal "one party" requirement. A few states do require that both parties are informed the call is being recorded.

The Call Recorder can comply with either one party or two party requirements. One party simply means the person with the Pico knows the call is being recorded. Compliance is made with two party requirements by either playing the beep while recording, or by playing an announcement at the beginning of the call.

Retell is not a source of official interpretation of laws of any country or state, and shall not be construed as a source for making decisions whether to provide notification or not. Retell assumes no liability regarding incorrect notification of call recording.

7.2 Liability

Correct functioning of the Pico cannot be guaranteed under all conditions and thus we do not accept any liability for loss of information or other damages due to the use of the Call Recorder Pico.

Appendix A

The Call Recorder Pico has an 'automation interface' with which developers of for instance Call centre software can control the Pico's software. This means that Start and Stop of recordings and Archive location can be controlled by external software.

The ActiveX automation server is called **SCR.Recording**. The following functions are available:

- | **SetPreStartPeriod(Seconds : int)**
Add a number of seconds before the StartRecording signal to the recording when available. Maximum is 30 seconds.
- | **StartRecording(DeviceId : int, FileName : string)**
DeviceId 1 is the first enabled Pico device, FileName is the file where the recording must be stored.
- | **StopRecording(DeviceId : int)**
Stops the recording.
- | **State(DeviceId : int)**
State returns:
0 when recording not active
1 when recording is active
-1 when device-id is invalid
- | **LastDuration(DeviceId : int)**
Returns the duration of the last recording.

One recording device must be enabled in the Pico software and set to *manual* recording (not automatic) in the Devices options.

Example Visual Basic Script: (example.vbs)

```
sub TestPico()  
    ' When the Pico software is not started, it will be started.  
    set obj = WScript.CreateObject("SCR.Recording")  
  
    ' wait until user clicks Ok  
    ' State returns 0 when recording not active,  
    '         1 when recording is active  
    '         and -1 when device-id is invalid  
    msgbox "Pico is started. State: " & obj.State(1)  
  
    ' Add a number of seconds before the StartRecording signal  
    ' to the recording when available.  
    ' Maximum is 30 seconds.  
    obj.SetPreStartPeriod 30  
  
    ' Start recording  
    ' The first parameter is the device id  
    ' 1 = the first enabled recording device  
    obj.StartRecording 1, "C:\test_pico_output.wav"  
  
    ' wait until user clicks Ok  
    msgbox "Pico started recording. State " & obj.State(1)  
  
    ' Stop the recording  
    obj.StopRecording 1  
  
    ' The output file is now created  
    ' (even if the duration is shorter than the minimum duration  
specified  
    ' in the settings)  
  
    ' wait until user clicks Ok  
    msgbox "Pico stopped recording. State " & obj.State(1)  
  
    ' Retrieve the duration of the last recording  
    msgbox "Duration: " & obj.LastDuration(1) & " seconds"  
  
    ' When the Pico was started by the script, it is closed at this point  
end sub  
  
' call sub TestPico (see above)  
TestPico()  
  
' wait until user clicks Ok  
msgbox "exiting"
```

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