



Professional Call Recording Software



INSTALLATION AND OPERATING INSTRUCTIONS

(Model 957 Lite and Pro)

Important:

These operating instructions cover both the Pro and Lite versions. If you have purchased the Lite version then please note that the following features are not available and are in italics throughout the instructions: Password protection, Automatic recording and altering the compression of recordings. *Should you wish to upgrade to the Pro version then please call Sales on +44 (0)1932 779755.*

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Installation instructions

System requirements

- Pentium 120MHz or greater
- At least 32MB of RAM
- At least 500MB of free hard disc space (this may be more depending on how many calls you record)
- Sound Blaster 16 compatible soundcard
- Operating system: Windows 95, 98, ME, NT, 2000 and XP
- Computer speakers – if you require these then please order Retell part number 218 from your supplier

In your box

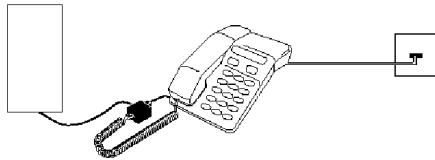
- Software disc
- Record and play telephone handset connector (part 157)
- This instruction book

If you want to record from a cordless telephone or from the line side of the telephone (analogue telephone lines or analogue extensions only) you will need to purchase an additional connector (part 142).

Installation of the hardware

Record or play telephone handset connector

This connector can either record telephone conversations or play them back down the telephone line.



It connects via the telephone handset,
not the telephone line

To record:

- Switch the connector to 'Record' and unplug the telephone's handset (or headset) from the phone - you may need something sharp to press down the little lever that holds the plug in.
- Plug the telephone handset connector in instead.
- Plug the handset into the telephone handset connector (note that it is not designed to go between the phone and the wall socket- you will need to buy the optional part 142 to do this).
- Plug the jack plug from the telephone handset connector into the mic socket on your computer (marked mic, or microphone or the socket with a symbol of a microphone.)

To playback a call down the telephone line to someone at the other end:

- This section only applies if you want to someone at the other end of the line to hear what you are playing back. If you just want to listen to a recording yourself, play back through your computer speakers or headset as you would any other sound on your PC.
- Unplug the connector from the mic socket
- Plug it into the speaker socket (if you have speakers attached to your PC you will have to unplug them).
- Switch the connector to 'Play', select the recording you want to playback and click on play.
- The person receiving the call will now hear the playback.

If you experience recordings where only your voice is recorded then your handset is wired in reverse. To overcome this problem you just switch the connector to 'Play' and it will reverse the wiring for you.

Optional connector (part 142) for recording from the telephone wall socket.



- Unplug a telephone from the extension that you want to record from the wall socket.
- Plug the 142 connector into the BT wall socket and the telephone line cord into the socket on the 142 connector.
- Plug the clear plug from the 142 connector into the socket on the 157 connector and the jack plug from the 157 connector into the mic socket on your computer.
- The lead with a clear plug from the 157 lead is not used

Installation of the software

THERE IS ONLY ONE DISC SUPPLIED WITH THE 957PRO. IT CONTAINS BOTH THE TRIAL VERSION AND THE FULLY LICENSED VERSION. IF YOU HAVE PREVIOUSLY INSTALLED THE 30 DAY DEMO VERSION YOU CAN ONLY INSTALL THE FULL VERSION AND YOU WILL HAVE TO SEND A REQUEST CODE TO RETELL TO HAVE YOUR PROGRAM UNLOCKED. ONCE YOU HAVE SENT A REQUEST CODE AND A RESPONSE CODE HAS BEEN SUPPLIED BY RETELL YOU ARE ACCEPTING THE LICENSING CONDITIONS OF THE SOFTWARE AND A REFUND FOR THE COST OF THE SOFTWARE IS NOT POSSIBLE.

PLEASE FOLLOW THE INSTRUCTIONS BELOW TO INSTALL THE SOFTWARE ON YOUR COMPUTER.

- Close all other applications that are currently running. If you are running your PC with Windows 2000 or Windows XP then you must install the software under Administrator user. If you are running Windows NT then you cannot install version 1.63 and you must contact Retell for a copy of version 1.61.
- Create a folder to store your recordings in. If you are not sure where to create the folder, try creating it in C:\MyDocuments (where C is the letter of your hard disc). For example : \MyDocuments\Recordings. To do this, start Windows Explorer, select 'My Documents' directory in the C:\ tree, choose File=>New=>Folder in the Explorer menu, and rename the 'New Folder' to 'Recordings'.
- Insert the 957 installation floppy disk.
- Press the Start button on the Windows task bar and choose 'Run'. Enter A:\Setup.exe .
- The installation program will now ask you if you would like to install the 30-day demo version or the full working version. We suggest installing the 30-day demo version first as when the full version is installed and the license code is confirmed we cannot accept the software for refund.
- Follow the on screen instructions to complete the installation process.
- After the installation is complete you will be asked to 'launch the program file'. Check the box and press the 'Finish' button.
- Now you have to select the directory where you want to store the recordings, this is the directory that you have created under step 2. All future recordings will be stored there.
- If you chose the option to install the full version you will be asked to confirm the license code. The program will produce a request code that you can either e-mail to Retell or you can call us (Monday – Friday between 9am – 5.30pm). When you receive the response code the program will be unlocked so you can use it.

Configuring the software

Before you use the software for the first time you must configure the software and soundcard by following these simple procedures.

- Double-click on the handset icon on the status panel of the Windows taskbar (near to the system time). The software window will be opened.
- Choose the 'Hardware' tab and check the following settings. Note: The software window floats on the top over all other applications; you may close it every time you want if it is not needed and open it again by double-clicking the icon.



Sampling rate - This is the frequency (Hz) that the soundcard uses to digitise the signal that arrives at the line in or microphone socket. 44100Hz is CD quality. For telephone recordings, the default of 8000 Hz is perfectly adequate. Note: Increasing the sampling rate will increase the disk storage that is used for recordings and will affect the system performance when recording depending on the CODEC used (see later).

Device - Make sure that the soundcard from which you want to record is selected. Even if your computer possesses only one soundcard, other devices like voice modems may appear here. Some soundcards (like the Creative SoundBlaster 128 PCI) appear twice in the list. In this case, consult the soundcards manual.

Line – This selects what the volume control adjusts on the record tab. If blank it does not matter, it just means that you will have to go into the Windows volume control to adjust it.

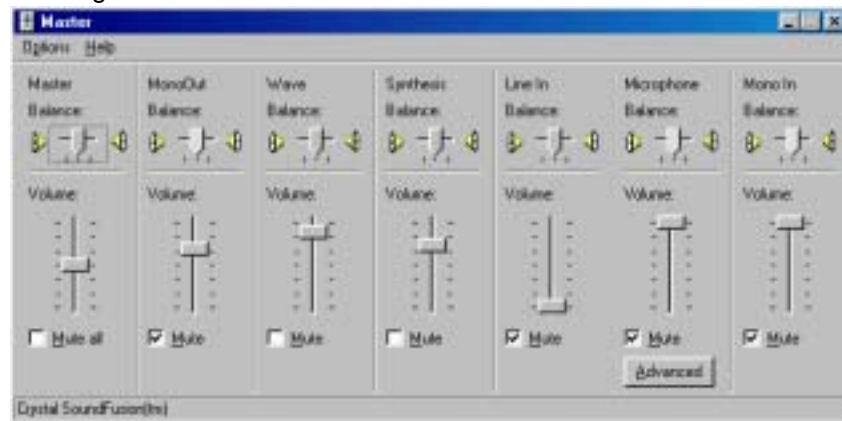
Start recording - Choose whether you want to have the hardware dedicated to listen to the input all the time and record when a signal comes (via line level) or if you want to start and stop the recording manually.

Intelligent Recording Interface® - Only select 'active' if you are using the Intelligent Recording Interface® connector. If you are using the Retell 157 connector then select not 'active'.

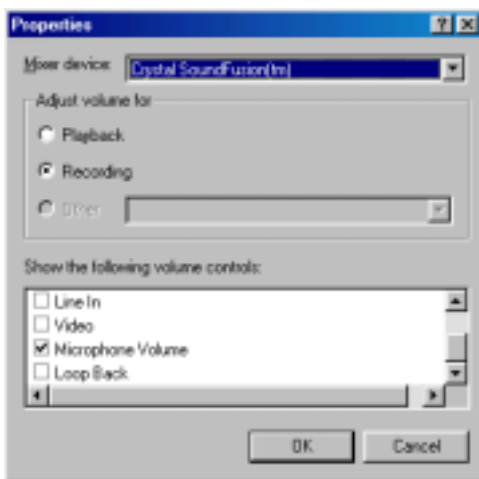
Configuring your sound card

The Retell 957 software will set up your soundcard automatically but should you experience recording problems then please check the following soundcard settings:

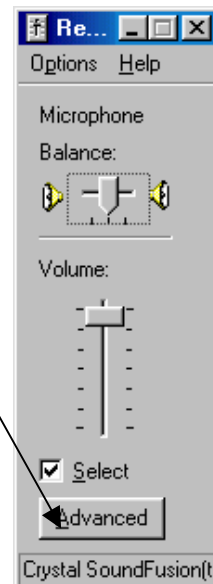
- Click 'Start' => Programs => Accessories => Entertainment => Volume control.



- You will now see this screen. Click on 'Options' and 'Properties' and you will be taken to the screen below.



- Make sure 'Recording' is selected and that 'Microphone volume' is selected. Click on OK.
- If your soundcard has the advanced button under the Microphone settings then it is likely that you have a MIC boost facility. Click on the button and you will be taken to the screen on the left.
- Make sure that there is not a tick in the Mic Boost box and click close. Sometimes Mic boost is labelled '+20Db'.



We recommend that you should make a few test recordings before you use the software. If you have any difficulties then test your system by using a computer microphone plugged into the mic socket as the software should be able to record from that for recording meetings in the same way that it can record from the telephone. If you have any difficulties then please contact Retell on 0871 872 4257 and we can help you.

Recording

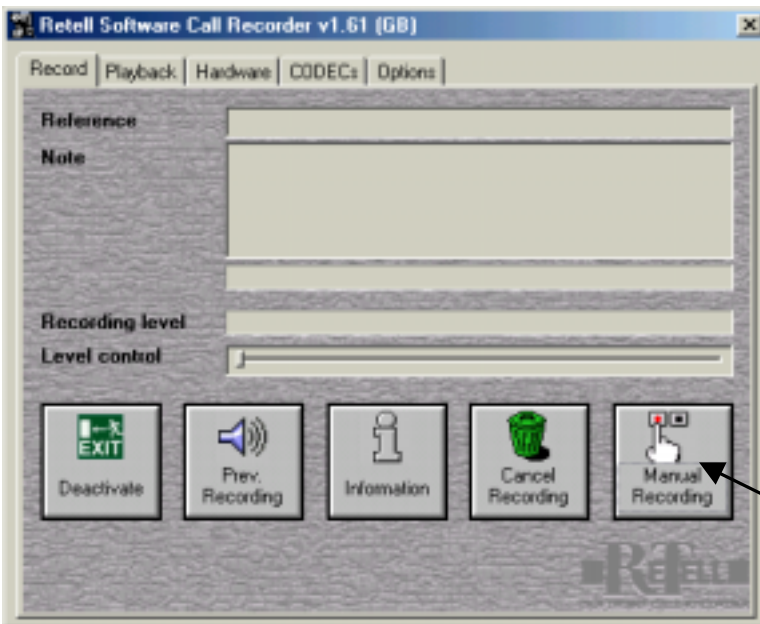
Whenever the program is started *automatically and the function 'Maximize on line signal' has been activated* or it is started manually, the following will appear onscreen:



- **Reference and Note** – You are now able to enter references (name of conversation partner) and make notes on the conversation.
- **Prev. Recording** – this button has a special function allowing you to replay the last recorded conversation. eg. you have just hung up the telephone receiver and would like the conversation repeated. With a click of the button the software plays back the last entry.
- **Level control** – allows the user to alter the level of recording. Attention should be paid to maintaining an even signal in the level display in the '**Recording level**' meter. An average balance or 2/3 to 3/4 is a good setting. If the slider does not move then please refer to 'Configuring your soundcard' section and adjust it manually.
- **Deactivate** - allows the program to be shut down. To reactivate, the program must be

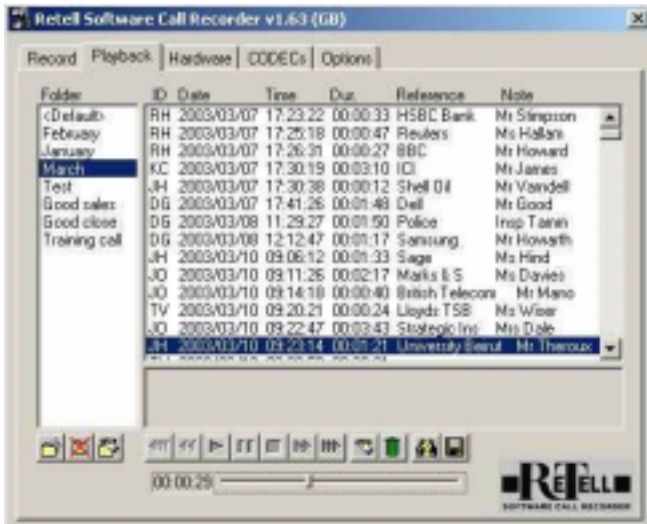
started again. (Start => Programs => Retell Software Call Recorder). Note: The software is automatically started with each Windows session. Double-clicking the software icon in the system tray area of the task-bar can open the software window.

- **Stop Recording**- this ends the recording of the current conversation and saves it to the default folder. If you don't want to save the conversation, click '**Cancel Recording**'. Note: If the program is running in auto recording mode, pressing the '**Stop Auto Recording**' button will suspend the auto mode. The program will no longer listen to the signals coming in until the '**Start auto recording**' button is pressed.



Manual Recording - this will start and stop the manual recording.

Playback



By clicking the 'Playback' tab, the contents of the selected recording folder are shown. All recordings are listed with date, time, length and further information (reference, notes and ID – the person who made the call).

To play back a recording you can either double-click on it or highlight the recording and click the play button. If you double-click on a recording, the chosen conversation will be played back and any notes saved with the recording is displayed in the area beneath the list.

During playback, you can navigate (fast forward, rewind, pause and stop) using the main button bar. The four buttons next to the main button bar are explained below.

Adding a reference and note to a recording

Highlight the recording that you want to add a reference and a note and click on the add note button (a hand holding a pencil). The add reference and note screen will open.

Type in the reference for the call and the note you want to add in the Notes section and click OK. The reference and note will now appear next to the recording and if you double click on the recording the note will be displayed in the section below the recordings.



Deleting Calls

To delete a call you must always delete it through the software. Simply highlight the call you wish to delete and click on the green dustbin icon.

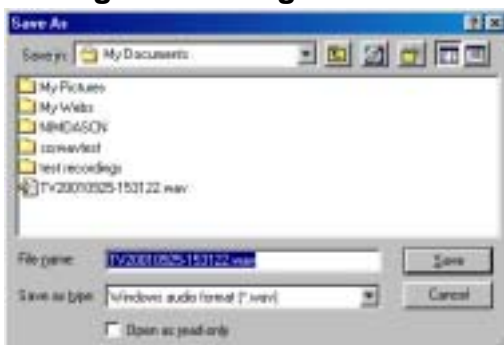
Searching for a Recording

You can search by five different methods: Identification, Reference, Note, and date of call and duration of call. Only click on 'Close search window' when you have finished listening to the recordings – this will bring back all of the stored recordings.

- To search by the identification you type in the initials of the user whose calls you want to search for.
- Type in the note or reference you wish to search for and the recordings will be brought up on the list.
- If you know the date you had the call on and the time of day the call was made then type the date in the 'date after' field and the following day's date in the 'date before' and the time to show the results for all the selected day. Eg: you want to see all the calls for 2002/05/02 you would type in 2002/05/02 in the Date after field and 2002/07/02 in the date before field, at this point no calls will be shown as you have not specified the time of day. You must enter the earliest and latest possible times eg 09:00 is the earliest and 17:30 the latest - this will now show the search result for 2002/05/02. If you want to search over a range of dates then just enter the earliest date in 'Date after' and the latest date in 'Date before'.
- Enter the minimum duration and the maximum duration for the call and all the possible results will be shown.



Saving a recording in WAV format

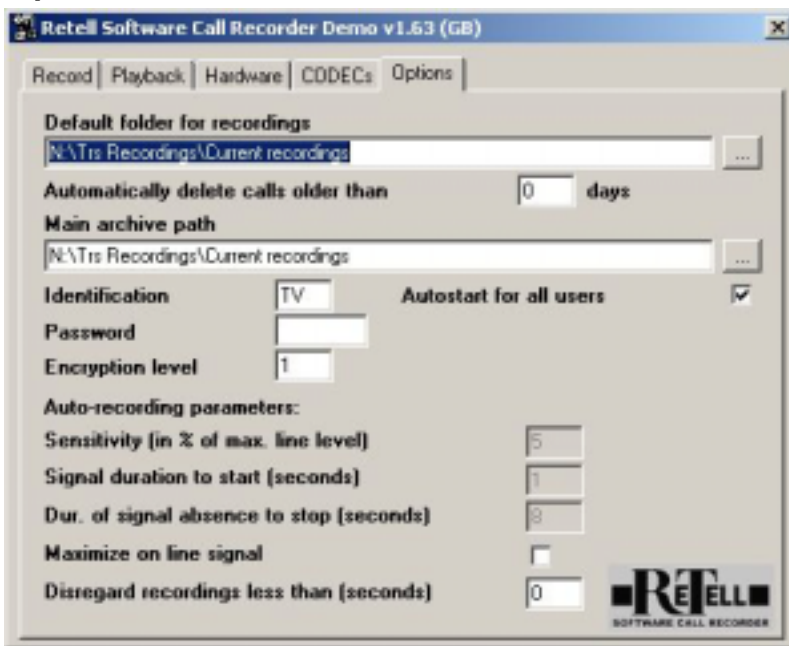


This is useful for when you want to e-mail people recordings. To save a recording in WAV format you highlight the recording and click on the disc icon. It will bring up the 'save' screen:

You can select where you wish to save the recording to and when you happy with where it will save it to just click save. It will automatically change it to WAV format. To test the recording you can just double click on the saved file and it will automatically play it back through Windows media player.

Advanced Settings

Options screen



Default folder for recordings – this is where you will find the directory you have previously selected during the installation. You can change the path to another directory anytime you want.

Identification - is used in LANs. For example, by the initials of the user's name. This can then be used as search criteria to find calls. **Password** - if you want to secure your recordings enter it in this space. If you give a password, all subsequent recordings are encrypted with it. Before you can playback those recordings, you have to enter the password that was used when the recording was done. Note that if you forget the password, the recording can never be played again.

Autostart for all users- If you are using the software on a computer that is running Windows 2000 or XP you must put a tick in 'Autostart for all users' to ensure that

the software automatically starts for each user.

Encryption level – this sets the number of passes for the encryption algorithm to run over the recorded file. Due to the Waasenaer agreement, which restricts export of strong encryption algorithms, the encryption key is 56 bits only. To improve encryption against code analysis and brute force attacks, raise the encryption level according to the performance of your computer system.

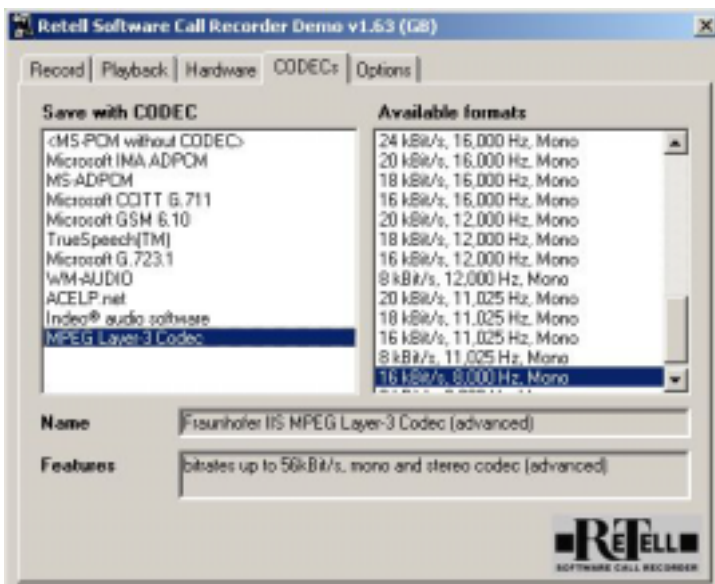
Sensitivity - determines the signal strength (in percent of the maximal signal the hardware is able to process) that triggers recording (default setting is 5). If in auto mode and the software is recording all the time, you probably have too much line noise. In this case, raise the value to either 6 or 7. On the other hand, if the recording stops (for example because of quiet speech) lower the value to either 4 or 3 until the recording stops only after the conversation has ended.

Signal duration to start - determines the call length in seconds before the program will commence recording. This can be useful to prevent recordings due to clicks on the line rather than actual calls.

Duration of signal absence to stop - determines the length of time a signal must fail to sound before the program ends recording.

Maximize on line signal - determines whether the program will automatically pop-up on the desktop screen as soon as the conversation starts; when the box is ticked, the user may enter references and notes on the conversation immediately.

CODECs



These are available in the Pro version only. CODEC stands for Coder/Decoder. The program uses the CODECs that are in the Windows multimedia system to store audio data efficiently. Compared to uncompressed audio (.wav) files, using a CODEC reduces storage consumption radically. By default, the program uses the Microsoft CCITT G.711 provided that audio compression Codecs are already available in the system. **When modifying CODECs on the CODECs tab, it is important to note that the CODECs recording frequencies must correspond with the recording rate (sampling rate) of the sound card on the hardware tab.** Note: To play with codecs may be rather tricky; if you are not technically skilled, you may decide to be happy with the G.711.

CHOOSE A CODEC

Check to ascertain which CODEC your system uses to function with the program and chose the appropriate CODEC most suited to your needs in recording quality and space effectiveness. The following table shows the characteristics of some common CODECs. Mass storage consumption has been measured in kilobytes per minute at a sampling rate of 8,000 Hz.

WINDOWS CODEC PERFORMANCE CHART

CODEC	~KB/min	h/GB	Speech quality	Overall speech performance	Music quality	Overall music performance
Creative ADPCM	235	74	high	medium	high	medium
Lernot&Hauspie	35	500	medium	high	medium	high
Lucent Technologies SX8300P	63	277	high	high	medium	medium
MPEG layer3, 8000 bps	59	296	high	high	high	BEST
Microsoft CCITT G.711	468	37	high	low	high	low
Microsoft GSM 6.10	95	184	medium	low	medium	low
Microsoft IMA ADPCM 4bit	229	76	high	medium	high	medium
MS-ADPCM 4bit	240	72	high	medium	high	medium
MSN, 8200 bps	61	286	medium	medium	medium	medium
Voxware RT29 bitstream	20	873	low	medium	low	medium

Conclusion: Depending on quality requirements, usually the MPEG layer3 CODEC is the best.

How to install CODECs

By default the following codecs are installed together with Windows:

- DSP Group TrueSpeech Software Audio Codec
- Microsoft Adaptive Delta Pulse Code Modulation (ADPCM)
- Microsoft Interactive Multimedia Association (IMA) ADPCM
- DSP Group Truespeech Software
- Microsoft Groupe Special Mobile (GSM) 6.10
- Microsoft CCITT (Consultative Committee for International Telephone and Telegraph) G.711
- Microsoft PCM-converter

You may gain access to more CODECs by clicking on the update button on your Windows Media Player. This will automatically connect to the internet and check to see if you already have the latest update.

In case no CODECs are available for your system, they may be installed from the Windows CD-ROM following this procedure:

Use the Start menu => Settings => System Control. Double click the software symbol in the system control window.

Next, click the 'Software Characteristics' in the 'Windows Set-up' tab.

Choose 'Multimedia' and click the 'Details' button.

Be sure to check off the 'Audio Compression' box.

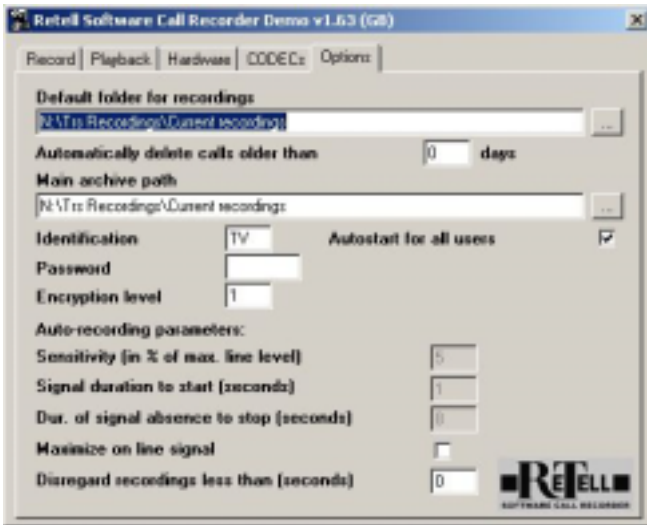
Click 'OK' and follow the instructions for installing the Windows features required.

File Management in the 957 Software

We recommend that you have previous knowledge of file management in Windows before you attempt the functions below.

The program has the ability to save calls to any folder you wish. This is useful for several reasons. You could keep a folder for each month of the year or a folder for each person in a call centre.

It also has the facility to move calls between the folders and to also delete calls.



Creating a new folder for recordings

Firstly you must create the new folder through Windows Explorer. Make sure that you note down the exact path for the folder eg C:\recordings\January 2001. Go into the software screen (usually by double clicking on the software icon on the taskbar) and click on the 'Options' tab.

In the Default folder for recordings type in the path for the folder you created.

This will now save calls to the path specified.

Selecting the folder for playback

You also have the ability to playback or move recordings in any folders. For the software to be able to do this you must first find the exact path of the folder if already created or create it through Windows Explorer.

In the Playback screen click on the new folder icon.

This will open the screen below to allow you to enter the name for the folder and the exact path of the folder.



The folder name will appear and if you highlight that folder name then any recordings in the folder will show. Repeat the above for every folder that you want to view.

Moving calls

If you have created a folder to move recordings into then you must move the recordings through the software rather than Windows Explorer. If you try to move recordings through Windows Explorer the software will not be able to playback these calls. To move the call first highlight the folder that the recording is in that you want to move. Select the recording and drag and drop the recording into the folder you want to move it into. If you only want to copy the recording hold the CTRL button whilst dragging.

Deleting folders

You can delete the folder from the folder list by highlighting it and clicking on the delete folder icon (the folder with a red cross through it). This does not delete all of the calls from this folder it only stops you from viewing them. You can always view the contents again by using the new folder icon and the method above.

Auto delete function of the software

The software has the ability to automatically delete the old recordings to save space on your hard disc. You have the option to select the time limit in the Options tab of the software under the 'Automatically delete calls older than x days' box. This function will only delete calls in the standard recording folder and it is limited to delete one call per minute. This function is disabled when the value is left at zero.



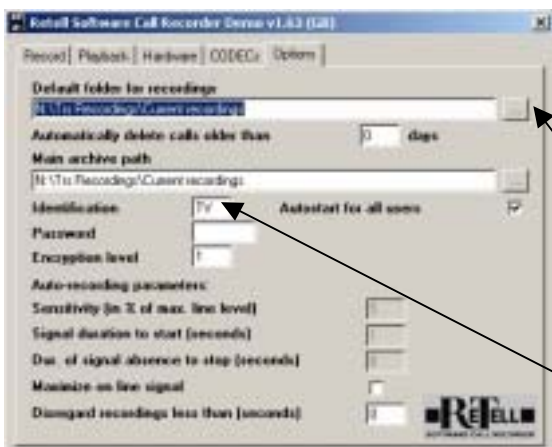
Networking the 957 Software

The software has the ability to store calls in a central server for both archiving purposes and call monitoring by a supervisor.

Setting-up the recordings folder

Before you start to store your calls you must decide on how long a period of calls you wish to store in each folder such as a month, a week etc. On the server that you wish to store the calls on you must create a folder for the current period of recordings ie 'Current Recordings'. This is the folder that will always have the latest calls stored in it. At the end of each archive period you re-name the folder eg January 2001. You can then copy the calls to CDR for archiving or keep them on the hard disc. You then must create a new 'Current Recordings' folder for the next archive period.

Setting-up the users



If you are using the software on a computer that is running Windows 2000 or XP you must put a tick in 'Autostart for all users' to ensure that the software automatically starts for each user.

You can either type the exact path of the folder or click the grey button and select the path manually.

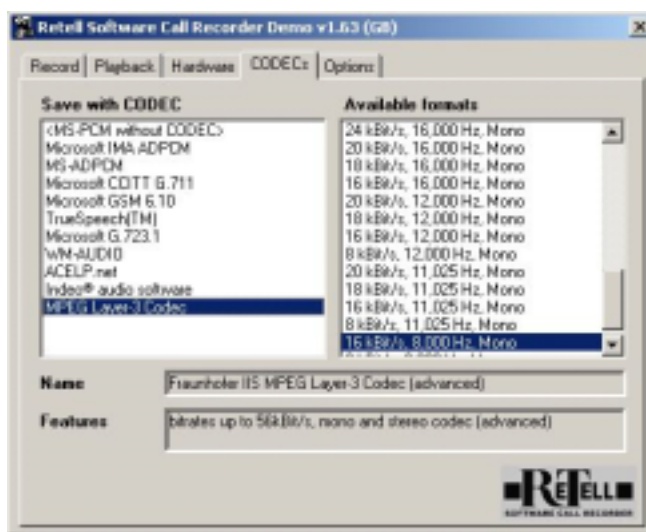
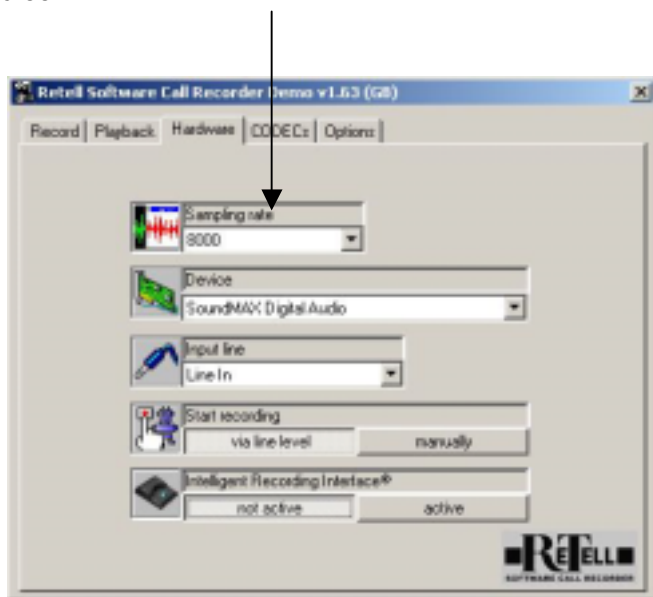
For the user to be able to view the current recordings the '<default>' folder must be highlighted under the Playback screen

Each user must type their initials in the 'Identification' box. This will help when searching for an individual user's calls.

CODECS and Sampling Rates

To enable the supervisor to playback any of the calls each user must be using the same CODEC and sampling rate. The most common CODECS are found in the table on page 4.

It is important that the sampling rate that is chosen is also selected in 'sampling rate', which is in the Hardware screen.



Software Licence for the professional call recording software without permission for resale.

Read the following licence conditions through carefully prior to installing the software on your computer. By installing and /or opening the software packaging, the user agrees to the following licence conditions. In case the user is not in agreement with the licence conditions, the software may not be used. In this case the user must return the programme package to the manufacturer immediately after the receipt or purchase in order to receive a full refund of the purchase price. The software is not sold to the user, but licensed to the user for the sole purpose of use. The user receives ownership of the diskette or CD and instructions as well as any other accompanying written documentation.

Licensing Permission

This licence will allow the user to use a copy of the software on a computer under the condition that the software is at all times exclusively used on one computer. The use of the software is defined as storing the software on a computer in temporary memory form (e.g. RAM) or in the permanent memory (e.g. hard drive, CD-ROM). If a multiple licence has been purchased, the use may only use as many copies of the software as has been agreed to. The user can also make a copy of the software as a back up.

Copyright

The software is copyright protected by the respective copyright holders. The software contains copyright protected material as well as confidential corporate information which must be protected by the user. It is forbidden to decompile, reassemble or alter the software or any parts thereof or related software products in any readable form, or furthermore to alter, modify, translate, rent, lease, lend, resell or produce the software or any of its parts. The copyright includes in particular the programme code, documentation, exterior appearance, structure, organisation or programme data, programme names, logos or any other forms of presentation with respect to the software. It is not permitted to reproduce, use, lend or alter the software contents unless explicit permission has been granted.

Length of Licence

Licensing permission is granted for an unlimited time, except in the case of demonstration versions, in which case the software will cease to function at some time. The licence automatically loses validity without explicit cancellation should any of the conditions contained within this agreement be infringed. In this case, the user is obliged to destroy all copies of the software in possession. The user may cancel the licence agreement at any time by destroying the software and all copies thereof.

Limited Guarantee

The supplier guarantees for a period of 12 months, beginning with the user's receipt of the software, that the software will function in a manner corresponding to the program description in the accompanying written material.

The supplier gives no guarantee that the software will be suitable for the user's purposes or that the software is compatible with the user's existing software or hardware. The supplier cannot accept liability for any consequential loss or any loss of data. The supplier's maximum remedy for any and all issues is the refund of the cost of the software up to the normal retail price of the software. No liability can be accepted for any consequences of any unsatisfactory data backup or security.

Response Codes

There is only one disc supplied with the 957Pro. It contains both the trial version and the fully licensed version. If you have previously installed the 30 day demo version you can only install the full version and you will have to send a request code to Retell to have your program unlocked. Once you have sent a request code and a response code has been supplied by Retell you are accepting the licensing conditions of the software and any request for a refund for the cost of the software will not be accepted.

Self Help Guide for the 957 Program

Please consult the following self help guide below before contacting Retell. If you still have difficulties then please contact our technical team on 0871 872 4257 (UK only) or +44(0) 1932 730893.

Problem	Possible Cause	Solution
There is a window on my screen asking for a response code	You have reached the end of your 30-days trial or you have chosen to license the software as you installed it	Either e-mail Retell the request code or call us on 01932 779755 and select option 1 between 9am-5.30pm Monday –Friday. We will give you a response code that will allow you carry on using the software
Near party recordings are quiet whilst using a headset with a voice tube	The voice tube is blocked	If the voice tube on your headset is blocked then try cleaning/replacing it.
I cannot get the software to record or there is no record level.	Soundcard has not been set-up correctly	Please refer to the 'Configuring your soundcard' section – if this does not help then please refer to the advanced FAQ section.
I cannot get the software to auto record.	The auto record has not been enabled.	Under the Hardware tab the section marked "Start recording" make sure the "Via line level" has been selected, then click on the Record tab and make sure the right hand button (along the bottom) says Stop Auto Recording.
The error message 'Couldn't open an ACM stream for pcm-to-driver conversion'	The Sampling Rate is not set correctly	Make sure the sampling rate under the hardware tab matches the available format under the CODECS tab. Also make sure you have not selected a stereo CODEC as these are not available for the software.
Every time I pick-up the telephone the software screen pops-up in front of my other programs	'Maximise on Line signal' under the Options tab has been ticked	Select the options tab and remove the tick from 'Maximise on Line Signal'
I want to link my database with the Software (eg to insert a contact number with the relevant telephone call)		If you are using the Pro or Adv version of the software you can buy Retell part number 957LINC. This has the possibility to insert various items from your database into the notes and reference field of the 957 Software.
When using the 157 connector only my voice is recorded – the far party is quiet	Your handset may have reverse wiring	Try the 157 in the play position or call Retell to ask about the Intelligent Recording Interface

Advanced Frequently Asked Questions (FAQs) on the 957 Program.

Q. I get a buzzing/humming sound on my recordings. What is it?

A. How old is your computer monitor? If your monitor is very old and does not comply with MPR2 emissions standards it may be sending hum into the telephone connector. Move the phone and telephone connector further away from the monitor.

Q. I have it on auto recording but it never switches off.

A. Check the question about getting buzzing/humming on the recording. Also turn up your speakers while on hook, and tap your handset or headset. If you can hear the tapping through the speakers, then the microphone in your handset or headset is live all the time even when the phone is on hook. Ask your phone maintainer to turn off the microphones when on hook through the software if this is possible, or reduce the record level through Windows volume control slightly.

Q. My recordings are quiet with a lot of hiss. On another computer I can hardly get a recording at all.

A. With your soundcard there may be a setting to amplify or increase the level of the MIC in source. If so, try clicking this option.

Q. I cannot get the product to record. What shall I do?

A. There could be a connection problem with or a sound problem or a CODEC problem. Try using the Sound Recorder that comes with Windows to record from the Telephone handset connector (deactivate the 957 first in case they conflict with each other). If that works, then there cannot be any fault with the Telephone handset connector, connection and input etc.

Most reasons why the 957 do not record are to do with the soundcard settings. Go carefully through the 'Configuring your soundcard' section.

Try experimenting with different CODECS and different sampling rates. There is a big difference in sound quality between different CODECS, and some will not work at all. Make sure that the sampling rate on the CODEC tab is the same as the sampling rate on the hardware tab.

Go to the Options tab. Try changing the Sensitivity (in % of max. line level) value and decrease it to say around 3 or 4.

Pay attention as some sound cards have different settings for recording and for playback. The 957 records from the output of the soundcard, so it is important for the soundcard to be set correctly, although it is difficult for us to advise on any particular soundcard as there are so many variations and it is not supplied by us.

Some soundcards have a "microphone boost" or similar that can be selected. Try selecting this. If the recording level bar moves that is a good sign.

Sometimes there are two volume controls, one in Windows and one for the soundcard. You would need to make sure that both of them are up.

Q. On play back I just get a second or two of recording and then it stops.

A. It sounds like a CODEC issue. Experiment with different CODECS and different sampling rates and try again.

Q. I have got ISDN. Can I still use it?

A. Yes. The Telephone handset connector (model 157) is designed to fit between the handset and the base of the telephone so it will not be affected by ISDN.

Q. It won't play back any calls I have made.

A. There are two possible causes. Either the program is still recording - in this case on the record screen click the bottom right key 'STOP AUTO RECORDING' (Pro version only) to enable you to play back your recordings. Remember to click on START AUTO RECORD (Pro version Only) after you have finished playing your calls. Or you do not have a Duplex soundcard - please refer to the System Requirements for a suitable soundcard.

Q. The recordings seem to be very quiet. Is it the fault of the 957?

A. The software only affects the recording quality to the extent that different sampling rates and CODECs are selected. There are many different soundcards all with different characteristics of level and sockets. Start by checking that the levels are up on the controls in your soundcard. If there is a MIC boost option in the Windows volume control (you will find it under the advanced section) then please select it.

Q. Does the size of the file go up as the encryption level goes down?

A. No. The encryption level is just the number of times the algorithm passes over the file. This will increase the protection against brute-force/code analysis attacks against encrypted files.

Q. How can you reduce the Encryption Time?

A. There are three strategies to get it faster:

- The encryption of the audio data is done in the main memory. Generally, the more main memory the system has, the better performance it shows when preparing the data. If there is not enough free main memory, the system begins swapping it on hard disk. 32-64 MB should be suitable for the most needs - depending on the operating system.
- Reduction of the time needed to encrypt the data is possible if you decrease the encryption level settings in the 'general preferences' tab. The relation is a linear one.
- Using compression codecs with higher ratio will decrease the amount of data to be encrypted, thus the encryption time. Reducing the sampling rate will have the same effect. A rate of 8,000 samples per second (Hz) will match the bandwidth of the telephone quite good.

Q. A customer phoned us to say that they uninstalled the 957 using the control panel, but now, every time they boot up their computer they receive a message saying something about "Cannot find the file C:\program\retell957 archiver\telar.exe or some of its components.

A. You have to manually remove the program through the regedit screen:

From the start menu choose RUN. Type regedit. Choose key HKEY_CURRENT_USER\ Software\ Microsoft\ Windows\ CurrentVersion\Run

Delete the TELAR value of this key.

Q. My computer also runs DOS windows. Will this upset the working of the program?

A. No, it should not.

Q. The program cannot record and playback at the same time, can it?

A. No. This is necessary because running a soundcard in duplex mode can interfere with the CODEC architecture. In fact, the soundcard runs in duplex mode if you play back while the application is in auto recording mode and listens to the line signal.

Q. If the hard disk becomes full I presume that the software would just stop. It would not overwrite the oldest file like a loop would it?

A. No. It will simply give an error message. You can set the software to overwrite old recordings if you select it through the Options tab.

Q. One customer has the following error message: "MMSYSTEM004 The specified device is already in use. Wait until it is free, and then try again. Is this issue to do with CODECs?

A. No. It has to do with the soundcard device driver. Some other program seems to access the driver before the software can. It could also be that you have started two copies of the software by mistake.

Q. What sort of recording time can I expect per Gb

A. An example of one of my calls was as follows - MS-ADPCM Codec, 8000 Hz, 4 bit, mono, Encryption level 1, 26 min 11 sec call, 6.276 Mb file size. I believe this works out at roughly 13 Mb per hour with that codec, etc., which gives around 1.3 Gb per 100 hours, which is 12.5 days for one line constantly in use for 8 hours per day. Depending upon the codec and sampling rate you can get any ratio of recording quality to disk space used that you want. For example up to around 873 hours per Gb! We have a separate table available of some of these values.

Q: What is Sampling rate?

A: Sampling rate under the hardware tab is used to set the frequency in which the sound card hardware grabs the line signal. 44100 is CD quality. 8000 is a good choice for phone calls. Make sure that the CODEC is set to the same sampling rate or you will not be able to record.

Q: What is the purpose of the 'password' option that is available - does it protect individual recordings?

A: It will protect all subsequent recordings but it is available on the Pro version only.

Q. I can create a folder in the software then copy files into it within the software but it does not seem to be there at all in Windows Explorer. I have reinstalled the demo but it does not make any difference.

A. Please refer to the section 'File Management in the 957 Program ' where creating new folders is explained in full.

Q. The option to 'lock users out of the program' is important as once the program is loaded as we do not want the users to gain access to the program. Only the supervisors should have access.

A. This would require a short individual adaptation. Remember though that the user could disconnect the telephone handset connector the phone line or from the socket on the sound card if they did not want to record a call.

Q. What installation would a supervisor need on their PC to playback the various recordings?

A. An installation of the program will allow the supervisor to playback the files or the TelAr_Index.DAT file but it needs to be installed on every remote PC. We have an emergency tool to recreate the index file in case it is lost but some information cannot be recovered.

Q. We're copying the recordings from the agent PC to a supervisor PC for playback. These are stored in different sub-directories and the supervisor cannot navigate in or out of these sub-directories when in the 'Playback' tab.

A. You should be able to access these sub directories by pressing the new folder button on the playback screen and entering the path. Then you can switch between the folders simply by clicking the folders list box.

Q. What is the admissibility of a software recording into a court of law? In the past I have looked at some recorders that used wav files, but obviously they can be tampered with easily using widely available software. With this in mind, how bullet proof would a 957 recording be once it has been made and encoded? i.e. could the encoded file be tampered with, or could the date and time stamp be tampered with? We want to guarantee the security of the file once it has been encoded.

A. First, nobody can give a guarantee. It is easy to just set the system clock to another date, if someone wants to deceive. Another thing is that if an employee has to make a statement as a witness or for circumstantial evidence or to prove a statement, such a file could be useful. As I stated, on default, the *.957 files are encrypted using the filename and will not be played without the correct name, which has the start time in it. A code analysis attack would take some effort even for a sophisticated hacker. To simply try out some common encrypting algorithms will not work, since the algorithm is not a standard one.

If you are still experiencing problems with the software then please call Retell's technical department on 0871 872 4257 or e-mail technical.helpdesk@retell.co.uk .

Optional Extras

Connector to Record from Cordless Telephones and Analogue Telephone Wall Sockets (BT Style) – Retell part number 142

If you want to record from a cordless telephone or from the BT telephone wall socket then you will need to purchase this additional connector. It is only suitable for recording from UK BT style analogue telephone sockets.



Computer Loudspeakers – Retell part number 218

These are essential for the playback of recorded telephone conversations.

Specification:

- Mains Powered
- Magnetically shielded for safe use near computer monitors
- P.M.P.O: 120W
- Power Lamp
- Volume Control
- Ear Jack Socket – for private listening
- Dimensions: 75(W)x185(H)x120(D) mm



Stereo Headphones – Retell part 216

Ideal for private listening of recorded calls and comfortable for long term use.

Can be plugged direct into the 'speaker-out' socket on your soundcard or into the headphone jack of computer loudspeakers.

Specification:

- Impedance: 22-32 Ohm
- Sensitivity: 101dB S.P.L. at 1KHz +/- 2%
- Length of cord: 1.2m +/- 3%



Recommended Soundcard - Retell part 959

If your computer does not have a duplex soundcard then Retell recommend this product.

Specification:

- Full Duplex play and recording
- Mic in, Line in and Line out
- Compatible with Windows 95, 98, 2000, ME and NT 4
- Minimum System requirements: 233MHz CPU, 16MB RAM, CR-ROM drive, spare PCI slot

Data Integration Linc Software (Retell part 957LINC)

Allows the Pro and Adv Recording software to be integrated with the users' database. It inserts the selected data to either the reference or notes field of the Pro Software. Examples of applications are:

- Inserting Customer contract number to the relevant telephone conversation
- Inserting the telephone number and name of the person spoken to

The software is supplied with installation guide and example applications and requires installation by your IT manager.

Legality of Recording

Legality of Call Recording

Oftel says that you should make every reasonable effort to inform all parties that they may or will be recorded, silently monitored or intruded into. They say that it is up to you how you do this and that acceptable options depending on circumstances might include warning tones, pre recorded messages, spoken warnings by the operator, or written warnings included in publicity material, telephone directories, contracts, terms of business, staff notices etc. Oftel says that it may not be possible to warn first time callers with whom you have had no previous contact but what is important is that you have a systematic procedure in place that provides the necessary information where it is a realistic possibility. For further information please contact Oftel, 50 Ludgate Hill, London, EC4M 7JJ, Tel 0345 145 000. Additional information can be obtained in relation to the Data Protection Act and call recording from Communications and Information Industries Directorate, Department of Trade and Industry, 151 Buckingham Palace Road, London, SW1W 9SS

Legality of Connection to the Line

Retell products carry a CE mark and are subject to an EMC Declaration of Conformity and EC safety regulations. A copy is available on request. Old BABT green circle logos are now superseded by these new regulations. Retell products in most cases do not require connection into the Public Switched Telephone Network.

Guarantee

Retell undertakes to repair or replace (at Retell's option) equipment supplied that develops a fault within 1 year of the date of purchase subject to the following conditions:

1. The equipment has not been subject to misuse, liquid damage, accidental breakage, neglect or any other use other than for the purposes of recording conversations or memo's. The guarantee does not cover any batteries or cassette tapes supplied by Retell or any damage caused by leaking batteries. (We advise that batteries are taken out of the battery compartment where long periods without using the equipment are envisaged. e.g. holidays etc).
2. The equipment has not been tampered with or adjusted internally by anyone other than Retell or their appointed agents.

If a defect occurs the equipment should be returned to your supplier in the first instance. Alternatively you can return it pre-paid to Retell in protective packaging containing a full explanation of the fault and proof of purchase. Retell does not accept liability for damage in transit and we strongly suggest using Recorded Delivery to prove receipt.

This guarantee does not affect your statutory rights.

Retell's full terms and conditions are available upon request.

Liability

Retell expressly excludes to the extent permitted by law liability for any consequential loss, damage or injury arising from or in connection with any Retell product. No liability can be accepted for any loss of data or recordings or failure to record or consequences of such loss.

R&TTE Directive

We hereby declare that this product complies with the essential requirements of directive 99/05 (the R&TTE directive).

To obtain a full copy of the declaration associated with this product then please contact Retell at the address below

Retell, 53 Thames Street, Sunbury on Thames, Middlesex, TW16 5QH

Tel 01932 779755

Fax 01932 780383

E-mail admin.buying@retell.co.uk

Website www.retellrecorders.co.uk

Support

If you should require help setting up or operating your equipment then you can contact Retell by any of the following ways:

E-mail: technical.helpdesk@retell.co.uk

Phone: 0871 872 4257

Fax: +44(0) 1932 780 383

Post: Retell, 53 Thames Street, Sunbury on Thames, Middlesex TW16 5QH ENGLAND

Customer Comments

Retell aims to continually improve instructions. Please e-mail your comments to sales@retell.co.uk



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