



CRU4

USER GUIDE



**For Technical Assistance
Please Phone: (07) 5596 5128**

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REGULATORY INFORMATION

About Telephone Call Recording

It is an offence, under the Telecommunications (Interception) Act 1979, to record a telephone call without both parties knowledge.

There is also State and Territory legislation relating to the recording of communications over the Telecommunications network which should be adhered to by the user of this equipment.

A document entitled 'Telephone Recording Guidelines', written by the Australian Communications Industry Forum (ACIF) is saved to the enclosed CD. This document provides information and recommendations regarding telephone call recording and the acceptable methods of advising the other party. You should read this document to ensure that you comply with appropriate state and federal regulations. This document also provides contact details (Appendix A) for Federal, State and Territory departments responsible for Telephone Call Recording, should you require further clarification or assistance.

ACIF recommend that you provide ORAL notification by automatic or manual means BEFORE you commence recording. ACIF also advise that you should cease recording if requested by the other party.

CRU4 has the ability to provide Automatic ORAL notification using the 'Play Then Record' facility. A sample advisory message is saved to your supplied CD. This is the method recommended by ACIF.

CRU4 can also inject 'recording tones' into the telephone call, at intervals of 15 seconds, whenever calls are being recorded. However, ACIF advise that this method of advising that a call is being recorded is now considered obsolete. A small slide switch located next to the power input is used to Enable or Disable these recording tones.

To DISABLE the injection of call recording tones when recording calls, you should set your Slide Switch to the Left Hand side.



To ENABLE the injection of call recording tones when recording calls, you should set your Slide Switch to the Right Hand side.

PACKING LIST

Before commencing installation, please ensure the following items have been provided with your unit.

DESCRIPTION	QTY
CRU4 CALL RECORD Unit	1
CRS Voice Record Software CD	1
12VAC Plug Pack (Power supply)	1
Double adaptor unit	1

Handset Connection Cables 2

- 1) one cable has a straight through connection
- 2) this alternative cable has a crossed connection, with a white band on one end (is required for some handsets)



PC Connection Cable 1

This cable has AUDIO and COM port plugs.

This cable connects CRU4 to :

- 1) the PC 'Line In' or 'Mic' facility
- 2) the PC 'Speaker Output' facility
- 3) the PC Com Port



USB to Serial Adaptor 1

For PC's which do not have a spare PC Comm (Serial) Port

This cable connects to the PC Comm (Serial) Port connector of the above PC Connection Cable so that you can connect to a USB port instead of a Comm port. Note; you may need to load a device driver for this accessory from the supplied CD.



DESCRIPTION

Our **CRU4 CALL RECORD UNIT** is designed to provide powerful and cost effective PC BASED 'Personal Telephone Call Recording' facilities, for professional users, when used in conjunction with a PC.

CRU4 can be connected to ANY telephone handset including those used with ALL PABX, Commander, VOIP or Residential telephones. It can even connect to a headset.

It is also designed to connect to a PC fitted with a SOUND CARD and a SPARE Serial (COM) port or a SPARE USB port.

Telephone Call Recordings can be started and stopped, at any time, by selecting the RECORD and STOP icons on the supplied CRS software.

Recorded calls are saved in MP3 format, which minimises memory usage and facilitates easy replay, storage and email transfer. These 'files' can be individually named, auto-named or stored by time and date, in a nominated folder located on a local or networked drive. Previous recordings can be recalled and replayed to telephone callers as required, emailed or archived to a CD or other permanent storage medium.

You can play an 'advisory message', or inject 'recording tones' into the telephone call, to advise your callers that the call is to be recorded. Please refer to page 2 for further information about the use of these facilities.

WINDOWS 7 USERS

If you are using Windows 7, then you will need to CHANGE the folder that your call recordings are stored to after installation of the CRS4 software. Failure to do so will cause files to not be saved.

The default installation folder for your CRS4 software is :
c:\Program Files\RecordSoftware.

The default destination folder for your recordings is:
c:\Program Files\RecordSoftware\MP3Store

Please change your destination folder for your recordings to any folder outside of the "Program Files" folder (see page 15).
e.g., c:\CRU4 Recordings

If your recordings are of an important nature, we suggest that you make your destination folder on your server to guarantee that your files are backed up during your normal backup process.

PC REQUIREMENTS

OPERATING SYSTEM

The supplied CRS software is designed to operate on a Windows based PC, running Windows 95 or later. It is not designed for operation on Apple Macintosh based computers.

If you are using the Windows 7 operating system, please refer to page 4 for important information.

SOUND CARD

The PC must be fitted with a Sound Card, which is required for use with our CRS Call Recording Software. CRS has the ability to output call recordings and other MP3 based audio to your telephone handset. For this reason, your PC speakers should be disconnected. If audio is not required to be played back into your handset, you can leave your speakers connected and not connect the GREEN connector of the CRU4 cable. You can also install a second sound card to your PC, for use with CRU4 if you wish to maintain normal use of your original sound card.

SPARE COM PORT or USB PORT

The PC must be fitted with a spare COM port or USB port. If a spare COM port is not available, you should use the supplied USB to SERIAL (COM) Port adaptor, which will convert an existing USB port to a Serial COM port. Note : You may need to load a driver for this accessory from the CD supplied with this kit.

INSTALLATION OVERVIEW

- A) CONNECT TO YOUR TELEPHONE HANDSET
- B) CONNECT TO YOUR PC WITH SUPPLIED CABLE
- C) CONNECT POWER
- D) INSTALL THE CRS SOFTWARE

CRU4 MUST BE INSTALLED BEFORE THE CRS SOFTWARE

INSTALLATION PROCEDURE

A. TELEPHONE HANDSET CONNECTION

- 1) Disconnect the 'curly cord' telephone handset cable from the point where it connects to the telephone.
- 2) Connect this cable to the supplied Double Adaptor unit.
- 3) Connect the short cable of the Double Adaptor unit to your telephone, where the 'curly cord' was previously connected.
- 4) Locate the supplied telephone cable without the white band at one end, and connect it to the other outlet of the Double Adaptor unit. Note - depending on your handset curly cord configuration, you may need to use the alternative supplied cable with the white band. You will need to do this if you cannot hear the other party in a call recording. See details on page 17.
- 5) Connect the other end of this cable to the port labelled HANDSET CONNECTION on the CRU4.

B. PC CONNECTION

- 1) Connect the supplied PC cable to your PC as follows :

The **BLUE** audio connector should plug into the LINE IN port of your PC. This is often colour coded in blue. If there is no LINE IN port, connect it to the MIC port (usually pink). Note - If you have to use the MIC input, you should carefully implement the recommendations made on page 19.

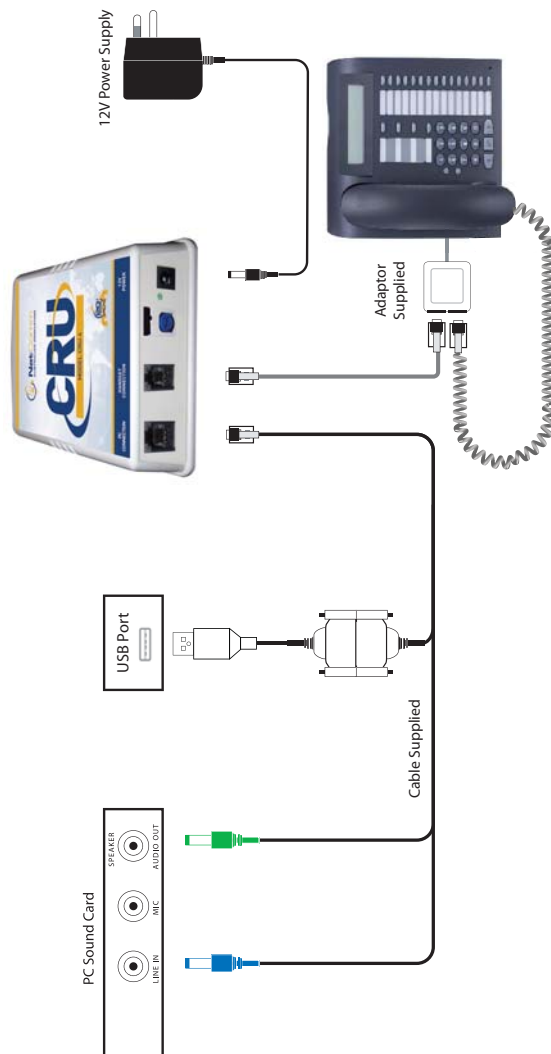
The **GREEN** audio connector should plug into the AUDIO OUT or SPEAKER port of your sound card (usually colour coded green). Note - If you currently have speakers connected in this socket, you should remove the speaker connection (refer to SOUND CARD page 5).

The **9 PIN COM** connector should connect to a spare COM (Serial) port of your PC, then tighten the 'locking screws'.

If your PC does not have a spare COM (Serial) port, then you should connect the supplied USB to Serial Adaptor (see page 3) to the PC Cable and also to a spare USB port of your PC. NB: The device driver is located on the supplied CD.

- 2) Connect the other end of this cable to the port labelled PC CONNECTION on the CRU4 unit.
- 3) Connect the supplied 12V power pack to CRU4 and turn it on.

INSTALLATION DIAGRAM



CRS SOFTWARE INSTALLATION

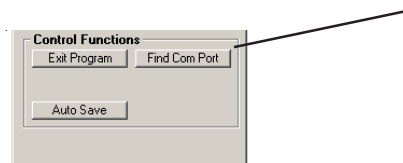
1. Insert the CD into your CD drive.
2. Open windows explorer and select your CD drive.
3. Double Click the file 'setup.exe'.
4. The CRS program will begin to load.

You can now select or deselect options to load the program into your start up folder and also your desktop.

It is recommended that you leave both options selected, as the program will then be loaded ready for use each time you start up your PC and also it will be available for opening from your desktop should you need to close it.

5. Follow the prompts until the installation is complete.
6. Run the CRS program clicking the CRS icon on your desk top. You will need to accept the licence agreement to continue and the program will now load.
7. With the software program loaded, and the supplied serial cable connected to both CRU4 and a PC Serial COM port, your CRS program should open and the COM port used to connect CRU4 should have been automatically detected and displayed.

If a COM port number is not displayed click, **Find Com Port**.



If a COM port number is still not displayed, you have a problem with your COM port and you should use the USB to Serial COM port adaptor instead, as described on page 6.

8. You must now advise the CRS software where the telephone call input is connected.

Select **Line In** from the drop down box
or
Select **Mic**
(if the Microphone Input has been used)



9. You are ready to **TEST** your Call Recording Software :

a) Pick up your handset and then press the RECORD icon.



b) Speak into your handset for a short period and then press the STOP icon.



c) Press the PLAY icon and you should now hear the recoding play back into your handset. If you can hear yourself and the telephone dial tone, and the volume is correct proceed to page 10.

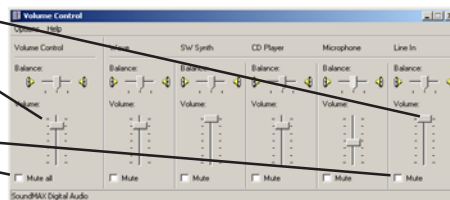
**If your cannot hear ANYTHING
Or the volume needs adjusting :**

i) OPEN 'Windows Mixer'.



ii) Adjust the slide bars for Volume and Line In (or Mic) until the correct level is achieved.

iii) Deselect any Mute settings that are ticked.



If you can only hear YOURSELF : Your curly cord handset uses a different wiring configuration. You should exchange the telephone cable connected to the handset port of your unit (use the cable with a white band on one end) Page 6 - Section A - point 4.

If you cannot hear yourself : please adjust the BLUE Volume Control. This facility will increase the volume of the local party only (ie it will increase the volume of your voice only).



Note - You can adjust the RECORD and PLAYBACK volumes by using the slide bar on either the CRS program or in Windows Mixer.



If you are still having problems :

- 1) Check that you have correctly followed all **HARDWARE INSTALLATION** instructions as detailed on page 6.
- 2) Check that you have correctly followed all **SOFTWARE INSTALLATION** instructions as detailed on page 8-9.
- 3) Check that your **SOUND CARD** is functioning **CORRECTLY** by removing the **GREEN** connector of the **CRU4** PC cable and connecting speakers to this output. If your sound card is set up correctly, you will be able to play music through your speakers.
- 4) In the event you are continuing to experience problems, please call National Communications for technical support on :

Ph : 07 5596 5128.

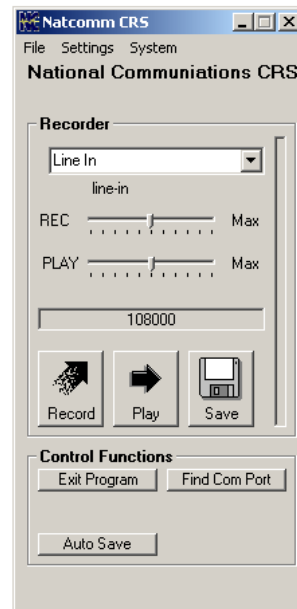
USING CRS SOFTWARE

IMPORTANT NOTE :

The CRS Program is loaded by default into your Start Up folder. If you elect to not have it installed in your Start Up folder, you will need to RUN the CRS program, each time you start your computer (ie; you will need to click the CRS icon on your desktop).

Recording of your telephone calls is STARTED by pressing the **Record** icon on the CRS software.

After recording, you can play back your recorded telephone call to the other party by pressing the **Play** icon on the CRS software.



Your recorded telephone calls are automatically converted to MP3 format. The default sampling rate is 'Telephone Line Quality'.

A selection of MP3 conversion sampling rates are provided, which will allow you to select the most appropriate balance between recording quality and memory used, for your application (see pages 14-15 for further details).

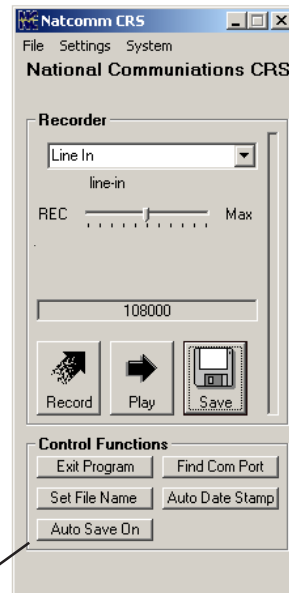
MP3 format is used, as this provides you with maximum flexibility and convenience when PLAYING files or FORWARDING files to other parties.

Your recorded calls are AUTOMATICALLY SAVED in the :

C:\Program Files\RecordSoftware\MP3Store

directory which was set up on your PC's hard drive during installation of this software.

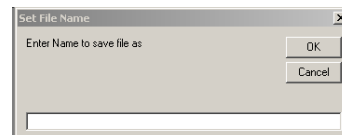
You can change this directory or you can select a Network hard drive for recorded file storage. (see page 15)



When selecting the **Auto Save** Facility, you have a choice of :

1) Using **Set File Name**

Once a file name is entered, your subsequent stored files will increment by 1.



ie:

C:\Recorded Telephone Calls\Jane Smith1.Mp3

C:\Recorded Telephone Calls\Jane Smith2.Mp3

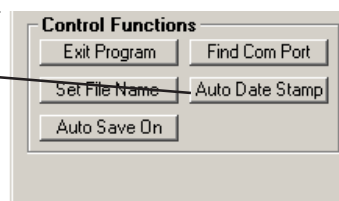
C:\Recorded Telephone Calls\Jane Smith3.Mp3

etc

2) Storing Files by **DATE and TIME** using :

Auto Date Stamp

The Time and Date file name relates to the time and date that the call was **SAVED**.



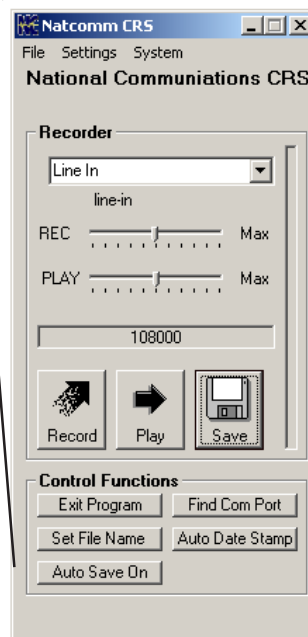
C:\Recorded Telephone Calls\5_08_2010_12_16_55_PM.Mp3
C:\Recorded Telephone Calls\5_08_2010_12_22_03_PM.Mp3
C:\Recorded Telephone Calls\5_08_2010_12_31_18_PM.Mp3

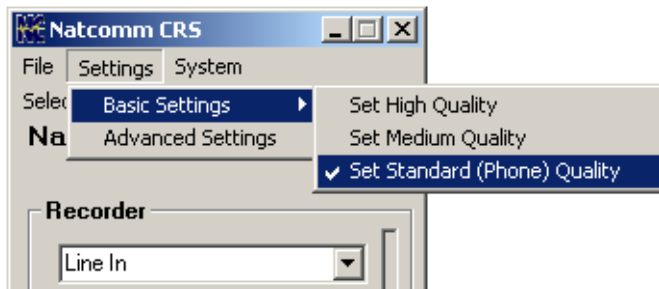
If you do not use the **Auto Save** facility, then files will **ONLY** be saved by 'clicking' the **Save Icon** displayed within the CRS menu.

You will then be prompted to save the file in a directory of your choice, which will be used for future Manual File Saves.

Files saved in this manner can be saved in .mp3 format or .wav format.

Important Note : In this mode, the current call is held in temporary memory and if you do not manually save a file, it will be overwritten by the next call you record and cannot be recovered.





You are provided with a choice of 3 pre-configured 'Sampling and Save' settings, for saving your recorded calls.

High Quality samples and saves files with the Highest audio quality, (not necessary for phone calls) and uses the most memory.

Medium Quality samples and saves files with very good quality, using a moderate amount of memory (usually not necessary for phone use)

Standard Quality samples and saves files with a sampling rate which produces GOOD quality for most TELEPHONE LINE applications and uses the least amount of memory.

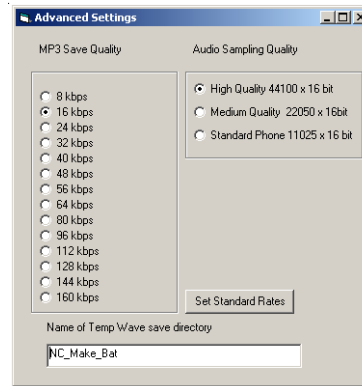
'Sampling Rate' is a term which describes the frequency that a sampling of audio is taken during the record period and saved. The more frequently this is done, the higher the quality of the recording, but the more memory used.

The DEFAULT SETTING for CRS is STANDARD QUALITY. You will only need to change this setting if the quality of the recorded file when played back is not adequate for your use.

You can change this setting by selecting :
Settings
Basic Settings
and then 'clicking' your required choice

For Advanced Users, settings are provided for separate selection of the actual AUDIO SAMPLING RATE of the telephone conversation and also the MP3 BIT RATE SAVE QUALITY that you wish to apply to the sampling.

Note - Files can also be saved in .wav format, when the Auto-Save facility is disabled (see p13).



CHANGE FILE SAVE PATH

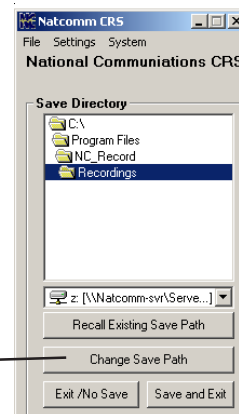
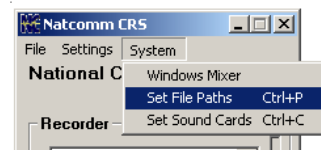
Your recorded calls are AUTOMATICALLY SAVED in

C:\Program Files\RecordSoftware\MP3Store

This directory has been set up on your PC's hard drive, during installation of this software.

You can change this directory or you can select a Network hard drive for recorded file storage, by navigating through to the required directory and then clicking :

'Change Save Path'



If you are using the Windows 7 operating system, please refer to page 4 for important information.

RECORDING PLAYBACK

CRU4 has the ability to PLAYBACK into the telephone handset :

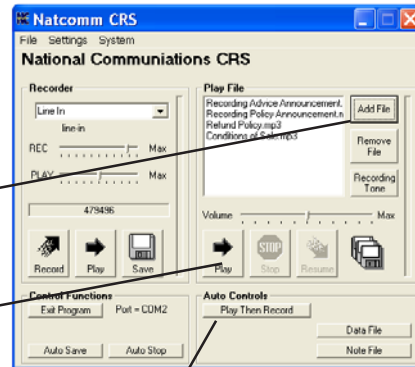
- 1) Recording Advisory Message
or
- 2) MP3 based Messages
or
- 3) Previous Telephone Call Recordings

1) Announcement Messages

MP3 based Messages can be played into the handset at any time.

Messages are loaded into CRS using the 'Add File' button.

To play a message, you need only click it once to highlight it and then simply click 'Play'.



If you wish to play a Recording Advisory Announcement and then start recording the telephone call, you should select 'Play Then Record'. CRS will play the highlighted message and then begin recording.

2) Previous Telephone Call Recordings

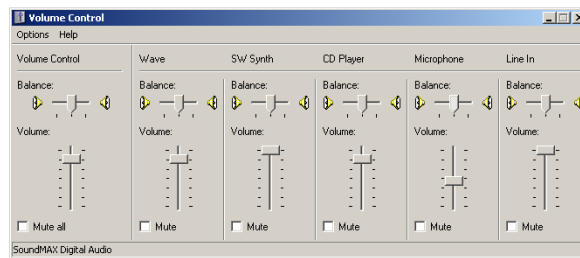
Previous Telephone Call Recordings can be played back into the handset at any time, by using the 'Add File' facility followed by 'Play'.

This file can then be removed by using the 'Remove File' facility.

TROUBLESHOOTING AUDIO PLAYBACK

If you cannot hear ANYTHING or the volume needs adjusting :

- i) OPEN 'Windows Mixer'.
- ii) Adjust the slide bars for Volume and Line In (or Mic) until the correct level is achieved.
- iii) Deselect any Mute settings that are ticked.



If you can only hear YOURSELF :

You need to exchange the telephone cable that connects into the HANDSET CONNECTION port of your CRU4.

This is because there are TWO different wiring configurations used in curly cord handsets and the handset you are using uses the less common configuration.

One cable has a white coded band on one end (this is the one you should have installed first). The other does not.

You should exchange your installed cable with the cable that does not have the small white band.

TROUBLESHOOTING AUDIO PLAYBACK Cont.

If you can only hear DIAL TONE :

If you cannot hear yourself, then you should adjust the BLUE knob in a clockwise position. Continue turning the knob until the correct volume for yourself is achieved.



Turn the BLUE KNOB in a clockwise direction until you can hear yourself clearly.

If you are still having problems :

- 1) Check that you have correctly followed all **HARDWARE INSTALLATION** instructions as detailed on page 6.
- 2) Check that you have correctly followed all **SOFTWARE INSTALLATION** instructions as detailed on pages 8-9.
- 3) Check that your **SOUND CARD** is functioning **CORRECTLY** by playing a normal MP3 music file through your speakers. You will need to temporarily disconnect the **GREEN** audio plug attached to the PC Cable and plug your speakers in direct to the green speaker output socket. Refit the cable when finished.
- 4) In the event you are continuing to experience problems, please call National Communications for technical support on ph 07 5596 5128.

GENERAL TROUBLESHOOTING

ENSURE YOUR SOUND CARD AND SPEAKERS ARE WORKING CORRECTLY BY TESTING WITH ANOTHER SOUND APPLICATION

The vast majority of PC based Recording installations take place without problem. On rare occasions, due to the wide range of sound cards available, problems can be experienced due to incompatible software settings within the sound card control software.

If you experience other problems with your sound card, that you are unable to rectify, we would recommend that you replace your sound card. A recommended, inexpensive and commonly available replacement sound card is the Soundblaster range from Creative Labs.

CRS SOFTWARE FAILS TO START RECORDING

- * Ensure that the supplied PC cable is correctly connected to your PC's SOUND CARD and COM port and that the other end of this cable is correctly connected to the PC port of your CRU4 device.
- * Ensure that your CRS software has detected the correct COM port and that it is displayed on your CRS menu (see page 8).

FILES ARE RECORDED BUT ARE SILENT

- * Ensure that you have correctly selected LINE IN or MIC as your input source (see page 9).
- * Move the REC slide bar on the CRS menu towards MAX until the required record level is obtained (see page 10).

USING the MIC input instead of the LINE IN input.

- * The MIC input provides a much higher input level to your sound card than the LINE IN input. As a result, the recorded volumes will be much higher.

You will need to REDUCE the input volume setting on the slide bar of your software (or the MIC setting in Windows Sound Mixer).



SPECIFICATIONS

Dimensions(all in mm)	:	106 (W) x 106 (D) x 43 (H)
Weight	:	225g
Power Supply	:	12VAC/500mA
Power Consumption	:	Idle - 0.5 Watts
Power Consumption	:	Call - 0.75 Watts
Handset Connector	:	RJ 4P4C 4 pin
PC output Connector	:	RJ 6P6C 6 pin
Power Connector	:	2.5mm barrel connector
ACMA COMPLIANT	:	Supplier Number N 782

WARRANTY

This device is guaranteed against defects from workmanship for a period of two years (24 months) from the date of purchase. In the event of failure, you should return the product, along with proof of purchase date, and a written statement about the nature of the problem.

This Warranty shall not apply to any unit which has been subject to alteration, modification, abuse, negligence, accident, external voltage/lightning surge or used in any manner contrary to these instructions.

The obligation is solely to repair or replace the product. The warrantor is not liable for any incidental or consequential damages due to such defects.

The user is responsible for freight costs to the repair point. The warrantor will be responsible for freight costs in returning this unit back to the user.

Damage caused to this device or attached equipment, by lightning strikes or over voltage surge is not covered under this warranty.

**CASE SEALED AT FACTORY
OPENING THE CASE VOIDS THE WARRANTY**