

Comvurgent Universal Adapter Installation & Setup Guide



Thank you for choosing the Comvurgent Xtension Recorder Universal Adapter. This guide will walk you through:

- Ensuring your Xtension Recorder Universal Adapter is the latest version.
- Choosing the best method of connection to your telephone (Handset Mode or Line Mode).
- Installing and setting up your Xtension Recorder Universal Adapter.

Choose The Connectivity Method:

The Universal Adapter has a number of different modes of operation to deliver the best performance, according to your type of telephone.

To support the different modes of operation, the Universal Adapter has seven connections as follows:

Connector	Name	Description
USB	USB Connection to computer	Socket to connect the USB lead between the Universal Adapter and your computer.
Handset (two sockets)	Telephone handset in/out	Connects to telephone handset (curly cord) where 'Handset Mode' is used.
A & B	Line connections (pins 3 & 4)	Connects to telephone line cable using pins 3 & 4 – only used on analogue telephones.
C & D	Line connections (pins 2 & 5)	Connects to telephone line cable using pins 2 & 5 – only used on analogue telephones.

Line Mode vs. Handset Mode (and Mixed Mode)

The Universal Adapter allows you to connect to the telephone line (via connectors A & B or C & D) and/or the telephone handset (curly cord) via the 2 sockets marked 'Handset'.

There are different advantages to using Line Mode, Handset Mode & Mixed Mode according to the type of telephone you have. It is important you understand the benefits of the various modes to make the correct selection. Here is a summary of the advantages and disadvantages.

Mode	Advantage (+) Disadvantage (-)	Comment
Line Only Mode	(+) Accurate start and stop of call recordings using 'line current detect' (+) More accurate dialled digits detected (+) Record parallel extensions	Line current detect can only be used on analogue 'single line' telephones only. Voice Trigger mode must be used to start/stop recordings (see 'using voice trigger mode' below)
Handset Only Mode	(-) Local and remote speech levels are mixed. (+) Local (microphone) and remote (receiver) speech levels are independent and can be mixed. (-) Dialled digits may not be available. (-) Voice Trigger mode must be used to start/stop recordings. (+) Uses Line Current Detect for accurate start/stop of recordings.	Distant end speech may be quiet. Handset only mode is generally used on digital PBX telephones. See 'Using Voice Trigger Mode'
Mixed Mode	(+) Use handset connection for independent local and remote speech levels	The 'best of both worlds' solution for analogue single line telephones only.

General Rules for selecting the Mode are:

- For digital business PBX telephones, it is generally only possible to use Handset Only mode.
- For analogue single line telephones, Mixed Mode is generally best as it allows good dialled digit detection and independently mixed local and remote end speech levels.
- If you need to record parallel connected telephones (all phones on the same line), use Line Only mode with Voice Trigger enabled.

Line Connections A,B & C,D

The Universal Adapter has two pairs of line connections for Line Mode and Mixed Mode. You should only ever use one pair either A & B or C & D. Different analogue single line telephones sometimes use different connections within the cables for the telephone lines.

Most single line telephones use pins 3 & 4 (the centre pins) for the line connections. Use connectors A & B in this configuration.

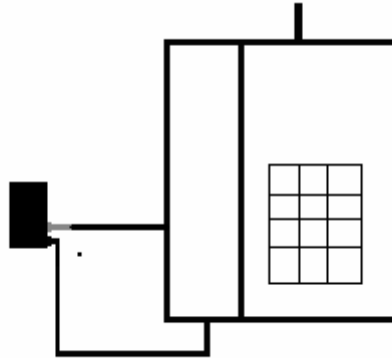
Some single line telephones in the UK and other related territories use pins 2 & 5 for the line connections. Use connections C & D in this configuration.

As a general rule, try line connections A & B first, if it does not appear to work, use connections C & D.

IMPORTANT NOTE – If you are using a fully digital telephone or a key telephone behind a telephone system (PBX) it is highly likely that you will not be able to benefit from any of the features available using Line Mode. Line Mode generally only works for analogue single Line telephones. If you are in doubt, consult your XtR Professional Universal Adapter supplier.

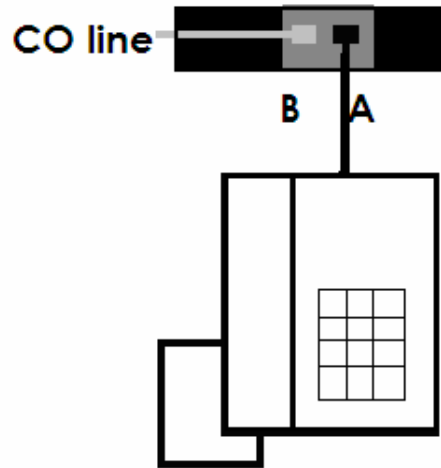
Handset Mode Connection

- **Remove the handset modular connector from your telephone base**
- Plug the provided handset line cord into the telephone base.
- Plug the removed handset connector into one of the handset sockets of the device.
- Connect the other end of the line cord into the second handset socket of the Universal Adapter..



Line Mode Connection

- Remove your telephone line connection from the base of your telephone.
- Plug the line into (in US) the 'A' socket of the device.
- Plug the line cord provided into the 'B' socket of the device and the other end into the telephone.



Completing the Installation

Locate the Setup.exe file on the CD (or if you have downloaded a later version, the file will be located in the downloaded folder as shown on right). Double-Click on the icon to begin the install.



Follow the installation procedure (it may vary according to your operation system). You will need to accept the License Agreement, choose the Location the Program will be Loaded and finally the location where your calls are stored (in default the program creates a 'My Calls' folder under 'My Documents' – note: this location can be changed at any time after install)

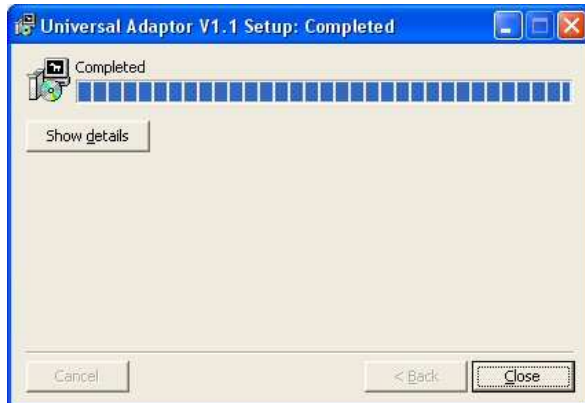
Once the Software installation is complete the screen below will appear. This screen will remain on your PC until the drivers have been installed and the Recorder Setup program is closed (see below).



At the same time the installation of the drivers will start automatically. The following screen will appear asking you to insert the USB cable of your hardware.



When you have plugged the USB cable into your PC click OK and the drivers will be loaded on your PC. Please be patient as this may take a few minutes (see image below).



Click the 'Close' button to finish the install process and start the Recorder Setup program (please note the "InstallShield Wizard Complete" will remain on your PC until the Recorder Setup program is closed).

If at anytime you receive a warning that the hardware has not passed 'Windows Logo Testing' please click Continue Anyway, the product and software have been tested to work with Windows products but have not been sent in for 'Logo Testing'.

Note: It is VERY important that you wait for the process during each stage of installation to be completed; failure to do so may result in an unsuccessful installation

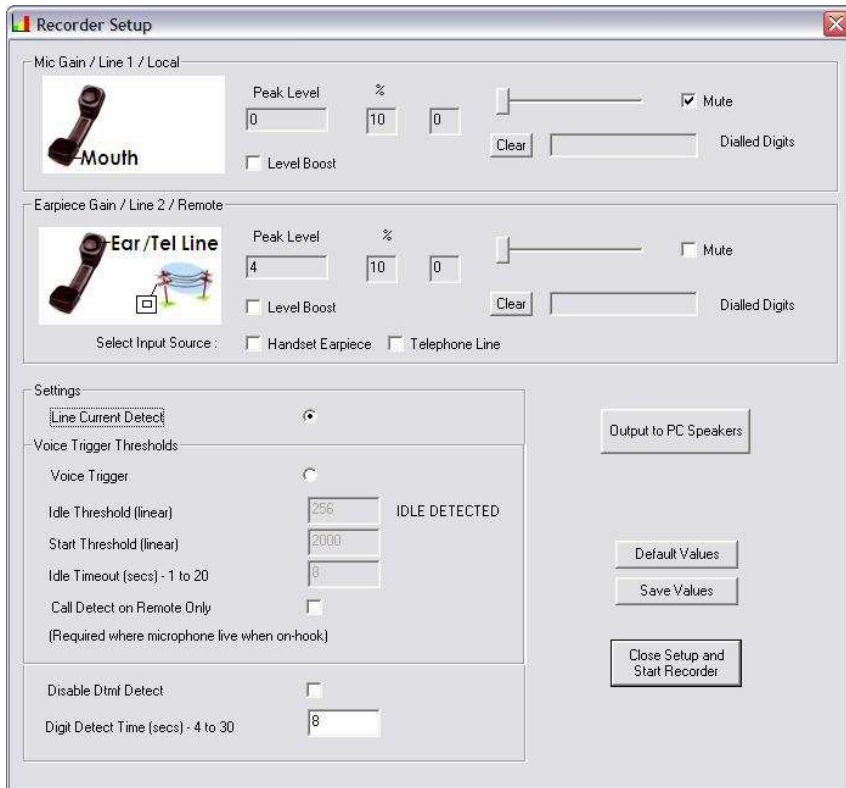
Setting Up Your Xtension Recorder

The Xtension Recorder Universal Adapter requires you to adjust certain settings for your telephone to allow correct operation. Because telephone line and handset level vary, we have included Recorder Setup program to allow you to easily configure the settings. These settings can be changed later by selecting the "Configuration" icon from your desktop or the Comvurgent program group.

Once you have installed the software and drivers, you will see the Recorder Setup screen.

The top half of the screen allows you to try levels, see digits dialled and listen to the signal from the line on your PC speakers. It also allows you to try the Universal Adapter in Line or Handset mode to get the correct signal levels.

The bottom half of the screen allows you to adjust and save any settings you have made.



Note, the **Save** button will save the settings you have chosen for the Xtension Recorder Desktop Software to use. How to set-up the various parameters:

Take your telephone off hook and make a call. As you and the distant end speak, adjust the **Mic/Line1 gain** and the **Earpiece/Line 2 gain** (Handset mode only) to ensure the levels only show red (above 20,000) on the louder parts of your conversation.

Make a note of the settings (in Line mode, you will not need to adjust the Earpiece/Line 2 gain). Put the phone back on-hook.

You should see the levels go down very low (300 or less). You will need to ensure that the Idle Threshold level is below the levels in the 'Linear' display at the top of the screen. This

allows your Xtension Recorder to detect when the phone is on-hook (it detects that the phone has gone quiet).

Start/Stop Recording Settings

The software uses different ways of determining when to start and stop recording. This varies if you are in 'Handset Mode' or 'Line Mode'

If Using Handset Mode:

The **Start Threshold** is a critical setting. It is set as an absolute value. You will notice that when you simply go off-hook the values will jump. The idea is to set the start threshold to a point that will trigger recording when this sound occurs. The default setting of 2000 should fit most applications.

Idle Threshold also needs to be set. This is the level of 'noise' that the system needs to drop below in order to determine that the telephone has gone 'idle'. Please note if this setting is set too high, your conversations may be cut into several sections, if set too low the recorder may never stop recording.

Finally, **Idle time-out** setting needs to be set. You will notice in level check that when a 'silence level' below your set idle level is detected, the application recognizes this immediately. For a recording to STOP the idle level needs to be maintained for the period noted in the idle time-out setting. In other words, in default, silence must be detected for 8 seconds for the call to be considered complete. You may choose to extend this timer if you tend to have long periods of silence on calls.

If Using Line Mode:

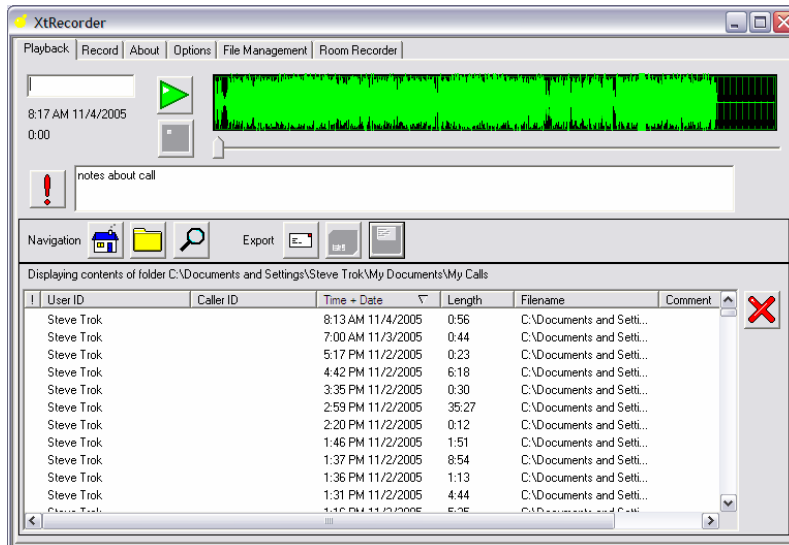
Set for Line Voltage detect, no other settings are needed.

Parameter	Recommendation	Comments
Start Threshold	The line signal must be higher than this level to start the recording from Idle.	2000 is typical, however some telephones have a live microphone so it may need to be set higher to avoid 'false starts'
Idle Threshold	The line signal must go below this level for a minimum number of seconds (Idle Timeout see below) to stop recording.	250 is typical. If you have a noisy line or telephone, this may need to be higher. Too low and it may merge calls. Too high and it may slice calls into several recordings if the conversation has silence pauses.
Idle Timeout	The line signal must go below the Idle Threshold (see above) for a minimum time.	4 – 8 seconds is typical. Note, if you finish one call and make or take another call within the Idle Timeout period, it will merge the two calls as one because sufficient Idle period has not been exceeded.
Voice Trigger On Mouth	Selects or mutes Voice Trigger from the Mouth input.	Turn off if you have a 'Live Microphone' (telephone Mic is on when phone is on hook).
Voice Trigger On Earpiece/Tel Line	Selects or mutes Voice Trigger from Earpiece/Line input	Generally On. If you wish to record other parallel connected telephones from the telephone line, you can use Voice Trigger from the telephone line to determine if other telephones are on a call.

Call Detect on Remote Only

Some phones and headsets remain in an off-hook state with a live local microphone, even when the phone is on-hook. In this case activating the Call Detect on Remote Only will direct the software to look for the start trigger only from the remote end. (note this only applies to handset mode connectivity)

You Are Now Recording Calls!



You are now ready to use the Xtension Recorder. You will find a number of pre-recorded messages that will take you through the use of the features of the product. Please select the Playback Tab and listen to the recorded user guide.

Problem Solving

Xtension Recorder relies on correct settings of the Gain Level controls for reliable and quality performance. Please ensure these are set correctly before attempting to adjust other parameters.

Problem	Solution
Xtension Recorder Continuously Records	The Idle threshold level is set too low . Increase and Save using LevelChk (located in the C:\program files\Comvurgent\XtRecorder Folder).
Several recordings are made for each call	The Idle threshold is set too high and/or the Idle Timeout is set too low. Adjust and Save using LevelChk.
Two calls are merged into one	This can happen when a call is finished and another answered quickly because Xtension Recorder needs to see silence on the line for a few seconds to know a call is finished (you can adjust the Idle Timeout using LevelChk but this may also result in multiple recordings for any one call).
Xtension Recorder will not start auto-recording	First, Make certain that 'record all calls' is checked on the option tab. If checked, and calls can be manually recorded by pressing the record button, you will need to adjust the start threshold in the LevelChk program. Enter LevelChk as described above and try cutting the start threshold in half. Then click Apply/Save and then restart your PC.
Distant End is too low	When using Line Mode, the local (Microphone) level is always higher than the distant end. In extreme cases, it may be wise to use Handset Mode which allows you to adjust the Microphone and Receiver levels separately.
DTMF digits not detected	Xtension Recorder uses advanced CPU processing techniques to detect digits dialed. This is not always perfect depending upon the method of connection and the levels and timing of the digits
I cannot play back my recordings	This may be because Xtension Recorder has changed your default playback device. Go to Control Panel, Sound Speech and Audio Devices and change the Sound Playback device to your sound card.