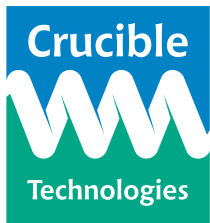


# PC-PBX

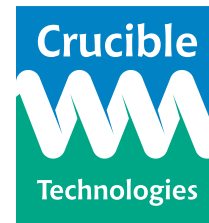
## 2 Line 6 Extension Telephone System

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Installation and User Manual

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Issue 1.0



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## SAFETY

**Read this manual completely before using the product.**

1. PC-PBX does not have any user serviceable parts. Under no circumstances should the user attempt to open the main unit. If opened, the warranty will be invalidated.
2. PC-PBX is designed for indoor use only.

## GUARANTEE

Your Crucible Technologies product is guaranteed for one year from the date of purchase. Please keep your invoice as proof of purchase.

## TECHNICAL SUPPORT

At Crucible Technologies we pride ourselves in providing excellent technical support. Having supplied CTI products for more than 5 years, we know this makes us stand out from other suppliers.

Due to the increasing amount of our products in the market and the number of support issues that relate to people changing and upgrading computers rather than problems with our products, we are introducing the following support policy.

We will provide unlimited telephone support for 30 days following purchase of the product. Following this period, we will provide unlimited e-mail support for the life of the product. This will allow us to keep the cost of the product competitive.

When contacting us for support, please have the following information to hand (or include in e-mail)

- Serial number of unit (usually on base of product)
- Software version
- Where purchased from? (ie directly from us or a reseller)
- Windows Operating System (Windows 98, 2000, ME, XP etc)
- Your contact details including tel, fax and e-mail address
- Description of the problem.

## Call logging

All external calls, both incoming and outgoing are logged. This can be viewed at any time by clicking on the Call Logging pull-down menu.

For incoming calls, the following information is provided:

- Date & Time that call was received
- Whether the call was received on line 1 or 2
- Was the call answered
- The duration of the call
- The number of the caller
- The name of the caller (if name look-up used)

For outgoing calls, the following information is provided:

- Which extension made the call
- Date & Time that call was made
- Whether the call was made on line 1 or 2
- The duration of the call
- The number dialled
- The name of the person called (if name look-up used)

This information is kept in an Access database and can be analysed later if required.

answer, the caller on-hold will be connected to your extension. Press Recall again to put the caller on-hold and try another extension.

Having talked to a person on another extension, you want to get back to the caller, just hang up your telephone. PC-PBX will ring your telephone. When you answer, the caller on-hold will be connected to your extension.

### Picking up a ringing extension

If you are at an extension that is not ringing, but you wish to pick up an external call that is ringing another extension, simply pick up your extension and press 0. This will connect you directly to the external caller.

### Accessing Line 1 or Line 2

If you want to access a particular outside line, then this is possible.

- Dial 81 to access Line 1
- Dial 82 to access Line 2

## INTRODUCTION

The PC-PBX is a simple to use telephone system that is controlled by a PC. It has many CTI features (indicated in bold below) that normally cost extra on other telephone systems. The software to operate the PC-PBX and provide all the features below is supplied free with the system.

### Features

- 2 outside lines
- 6 extensions
- Can use normal telephones.
- **Extra features if Caller ID telephones are used\***
  - **Incoming Caller ID to all extension telephones.**
  - **Caller ID on extension to extension calls.**
  - **"Unlimited" Directory held on PC.**
  - **Incoming Caller ID will look up name in Directory and pass to telephone.**
- Can select which telephones ring for incoming calls.
- Call Diversion on Busy, No Answer, both or all calls.
- 3 levels of Call Barring.
- Day & Night modes.
- **Call Logging of both incoming and outgoing calls.**
- Internal Music-on-hold.
- Connector for external Music-on-hold.
- **Receptionist/Manager's Interface on PC showing status of outside lines, extensions and calls.**
- **Use of a PC for ease of programming.**
- Easy installation with BT sockets built-in or screw terminals for professional installation.
- Power fail operation via extensions 1 & 2.

\* Subscription to BT Caller Display Service required

## INSTALLATION

The installation of the PC-PBX is a very simple process. You will need the following items if you are wall mounting the unit:

- A drill with a suitable bit
- A pozi-drive screwdriver

Depending on how you wire the extensions, you may also require the following:

- Telephone extension leads
- A length of suitable telephone cabling
- Up to 6 master sockets
- Cable clips
- A hammer

### Positioning of the PC-PBX

**Note:** For safety reasons please make sure you check for internal electrical wiring in the wall, before you decide on the position of the PC-PBX.

1. The PC-PBX needs to be located near the 2 outside telephone sockets, a mains supply socket and a PC.
2. Check that there is enough cable for connecting the telephone plug and the mains supply, ensuring that both cables are not over-stretched.
3. Using the drilling template provided, drill two holes and tap in the rawlplugs provided until they are flush with the wall. The screws need to be put in, so that the head is showing by 5 mm.
4. Hang the PC-PBX on the 2 screws.

**Alternatively the unit can be left resting on a suitable surface. There are some rubber feet supplied for this purpose.**

## USING PC-PBX

### Making external calls

Lift the handset and wait for the PC-PBX dial tone. Dial a 9 and wait for the exchange dial tone. Dial the required telephone number.

### Answering incoming calls

If an extension is not in use, then it will ring if it is programmed for incoming calls. If it is a Caller ID telephone and Caller ID is available, then the caller's number will be displayed. If the caller's details are in the Phone Book, then the name will also be displayed.

### Making extension to extension calls

The 6 extensions are numbered 1 to 6. To call say extension 5 from extension 2, just pick up the telephone connected to extension 2 and dial 5. If extension 5 is not in use then it will ring. If extension 5 is in use, then a busy tone will be heard.

If a Caller ID telephone is connected to extension 5, then it will say "Tel 2 calling". If say "Louise" has been assigned as a friendly name to extension 2, then "Louise calling" will be displayed on the telephone connected to extension 5.

### Transferring an incoming call to another extension

Having answered an incoming call, it can be transferred to another extension if required. Pressing the Recall (R) button on the telephone will place the caller on-hold. Music will be played to callers on-hold. Now dial the number of the extension required and wait for an answer. Having talked to the person on this extension, just hang-up to connect the caller to the required extension.

If the person on that extension is busy and you want to try another one, just hang up your telephone. PC-PBX will ring your telephone. When you

## Phone Book

This can be used to enter the telephone number and name of frequent callers. It is then used by the software to do "name look-up" on incoming calls, ie if a call is received from someone whose details are in the Phone Book, then the name of that contact is also shown on the display of a Caller ID telephone and on the PC screen.

### Assigning friendly names

For the outside lines and the extensions, the user can assign friendly names. For example, for the extensions the users name can be used. Just position the mouse over the appropriate extension box and type in the required friendly name.

Similarly, this can also be done for the outside lines. These can be assigned the actual telephone numbers or an appropriate friendly name.

## Connecting the extension sockets

1. Remove the lower flap by undoing the 2 screws at each side.
2. If the telephones are plugging straight into the sockets on the PC-PBX or into telephone extensions leads then this is quite straightforward. All one has to do is to use cable clips to tidy up the wiring. (5m, 10m and 15m leads are available)
3. If the extensions are over a wide range, then a tidier installation will require round telephone cable.
4. Locate where the extensions are to be placed and fit sockets to the wall. These have to be master sockets.
5. From each extension, run a pair of connections to the relevant screw terminals on the PC-PBX. The wires connect to Pin 2 and Pin 5 of the Master Socket.

### Connecting the mains

Use the supplied power lead to connect the PC-PBX to the mains supply. When switched ON, the green POWER LED should come on.

### Connecting the outside lines

Use the 2 telephone cables provided to connect the PC-PBX to the 2 telephone sockets provided.

### Connecting to the PC

Use the supplied lead; connect the PC-PBX to a spare COM port on the PC. If a spare COM port is not available, then a USB port can be used with the help of a USB to COM port converter.

## Music-on-hold

The PC-PBX uses an internal music source for callers placed on-hold. If the user wants to replace this with an external music source, such as a CD player, then use the Stereo Lead provided to connect this. Make sure that the link on CN2 is moved to the EXT MOH position.

## Software

Load the application provided on to the PC, following the on-screen instructions. Launch the application. Use the SETTINGS pull down menu and the PORTS option to select the COM port. If the COM port has been selected correctly and the application is running, then the green POWER LED should be ON and the red PC-OK LED should also be ON.

If the red PC-OK LED is not ON, then please check the following:

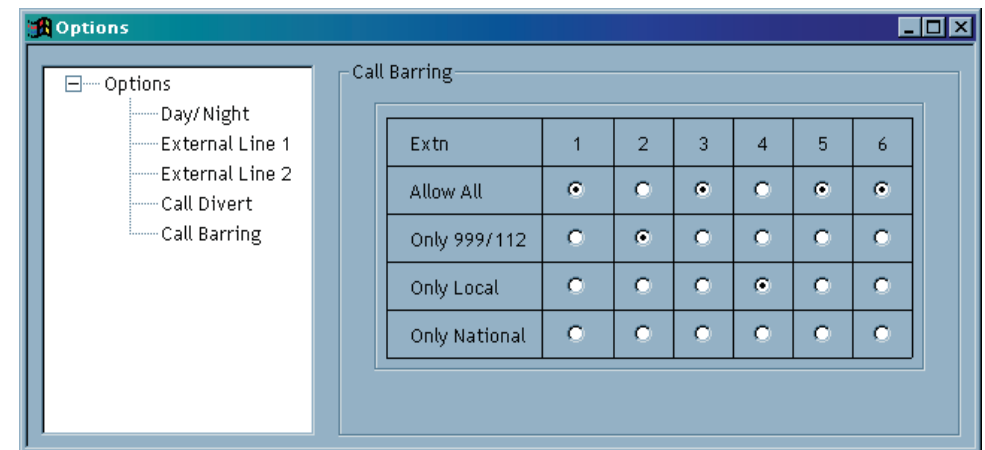
- That the COM port used and that selected on the application are the same.
- That the COM port is not used by any other application.
- That there are no COM port conflicts (normally COM1 and COM3 share the same IRQ)

## Call barring options

This option can be used to restrict the external calls that can be made from extensions. The choices available are presented below:

- Allow All: This is the default option and allows extensions to call any number.
- Only 999/112: Only allow internal calls and calls to the emergency services.
- Only Local: Block any National calls, ie numbers starting with a 0
- Only National: Block any International calls, ie numbers starting with 00.

Note that if an attempt is made to dial a restricted number, then after the 9 and the first three digits, a continuous tone is given.

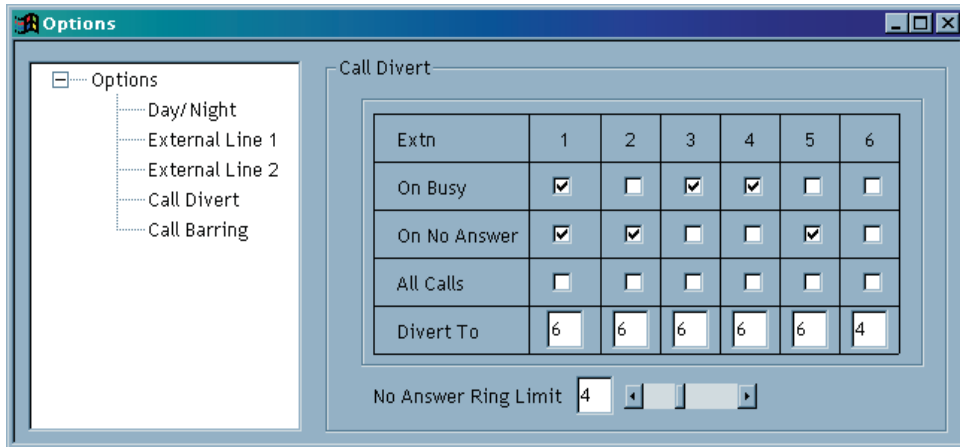


## Call divert options

If users are busy on the telephone, or are away from their desk it is possible to pass these calls to others or to the answering machine. Use the SETTINGS drop-down menu and choose OPTIONS and then CALL DIVERT sub-menu to select the best options for you.

If calls need to be diverted On Busy or On No Answer, then tick both these boxes. The number of rings before which calls are transferred can also be selected.

A user who is going to be away from their desk can also select the All Calls option.



## Testing the installation

You will need at least 2 telephones for this. Plug one of these into extension 1 and the other into extension 2. When you pick up extension 1, you should hear dial tone. Dial 2 on the keypad. Extension 2 should ring. When you pick this up, you should be able to have a conversation.

At the same time as making the calls, you should be able to see the telephone icons on the PC showing the status of the extensions. If this works OK, then repeat for extensions 3,4 and 5,6.

If the call from 1 to 2 does not work then check the following:

- Are both POWER LED and PC-OK LED ON?
- Are Master sockets being used for the extension wiring?
- Is the PC application running?
- Is the connection good from the PC-PBX to the PC COM port?

If all the above are OK, and you still cannot make a test call, then contact the supplier.

Once the extension-to-extension tests are complete, then test the outside lines by dialling a 9 on a telephone. You should now get the BT dial tone. This will allow you to make calls normally.

The final test will be an incoming call. Please ask a friend to dial in, or use your mobile to call in. All the extensions that are plugged-in should ring. Answer on any extension and then press recall (the R button). The caller should get music and you should get a dial tone. Dial the number of one of the other plugged-in extensions and this will ring. Wait for the person to answer and then hang up. The caller will now be connected to the new extension. When this person hangs up, the call will be terminated.

If all this works OK, then you are ready to program the system for use. Remember to fasten the lower flap back on.

## PROGRAMMING PC-PBX

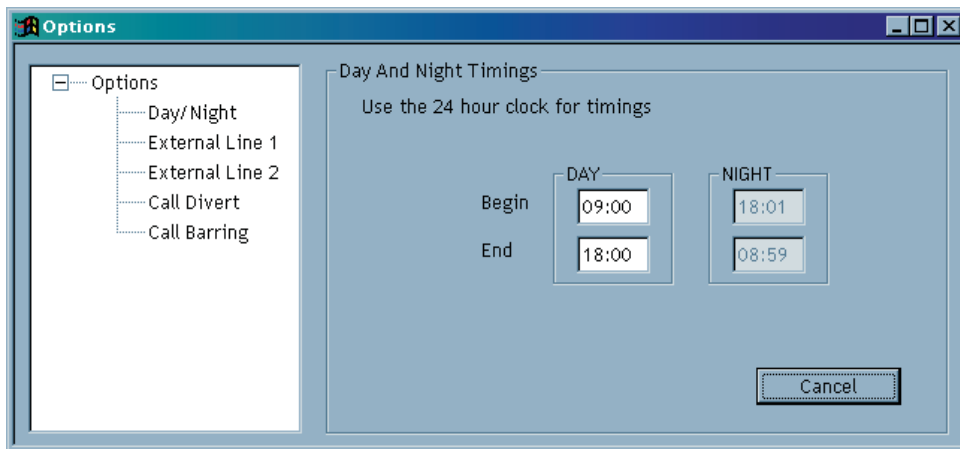
A few minutes spent thinking about how the PC-PBX is going to be used and programming it suitably will result in a telephone system that is easy to use. You will also be sure to get the best out of the system.

### Day & Night mode setting

The first thing to consider is to decide whether you want the system to operate differently during office hours (DAY mode) compared to when the office is closed (NIGHT mode). For example, you may want incoming calls to ring extensions 1,2 & 3 during office hours, but ring the answering machine on extension 6 after hours.

If this is the case, then PC-PBX can be set to automatically switch from Day to Night mode of operation. Use the SETTINGS drop-down menu and choose OPTIONS and then DAY/NIGHT sub-menu to set the times at which the system switches over from DAY to NIGHT and back.

The time for the PC-PBX operation is derived from the PC.



## Handling incoming calls

One has now to consider how incoming calls are to be handled. For example, calls coming in on line 1 may be required to ring extensions 1 & 2, but calls coming in on line 2 may be required to ring extensions 3 & 4. After hours, there may be a requirement for all calls, say to be routed through to extension 6, where an answering machine can be used to take messages.

Once a decision has been made on how the system is to operate, use the SETTINGS drop-down menu and choose OPTIONS and then EXTERNAL LINE 1 and EXTERNAL LINE 2 sub-menu to select your required mode of operation.

If the telecom lines are provided with Caller ID, then make sure the appropriate boxes are ticked to ensure correct operation.

It is also possible to customise the names used to refer to the outside lines and the extension. Just click on the text and enter the new text.

