



# *eircom* advantage 1200

## System Installation



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This documentation refers to CCU software version 361.302, Applications card 5.37.  
DM 851

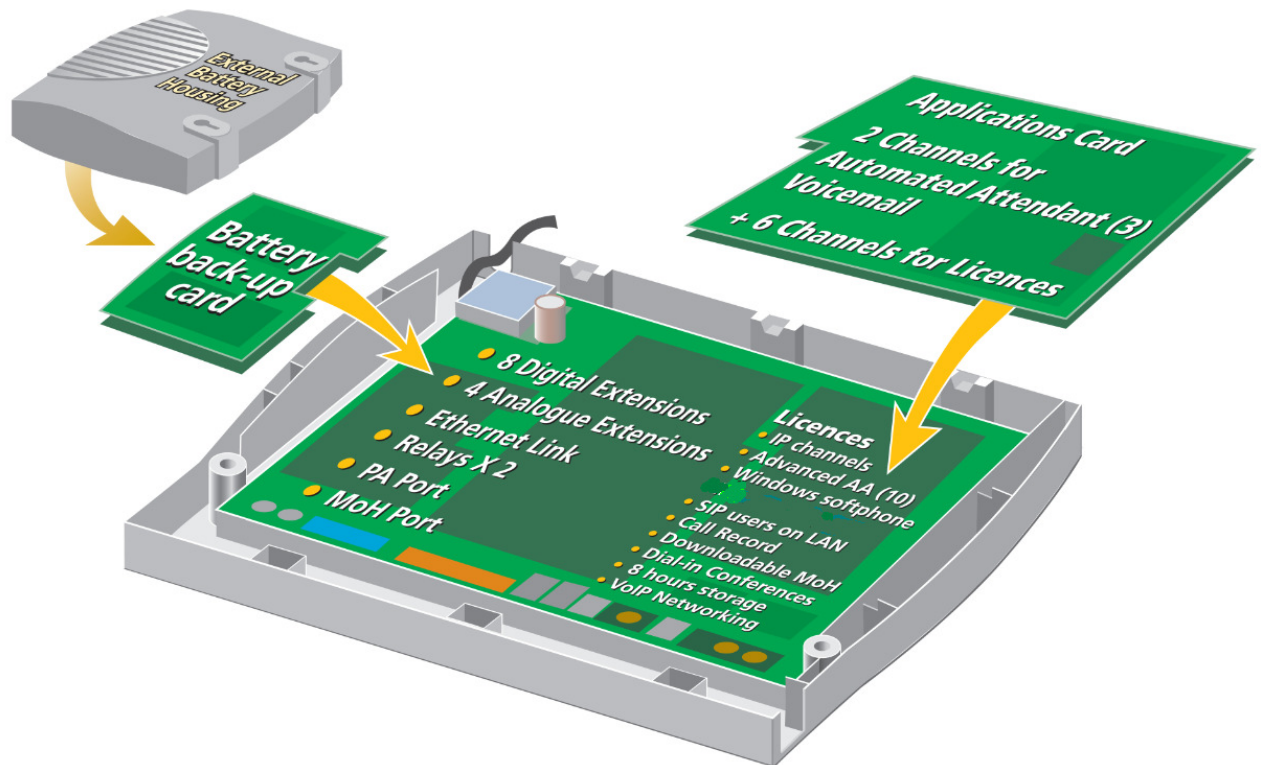
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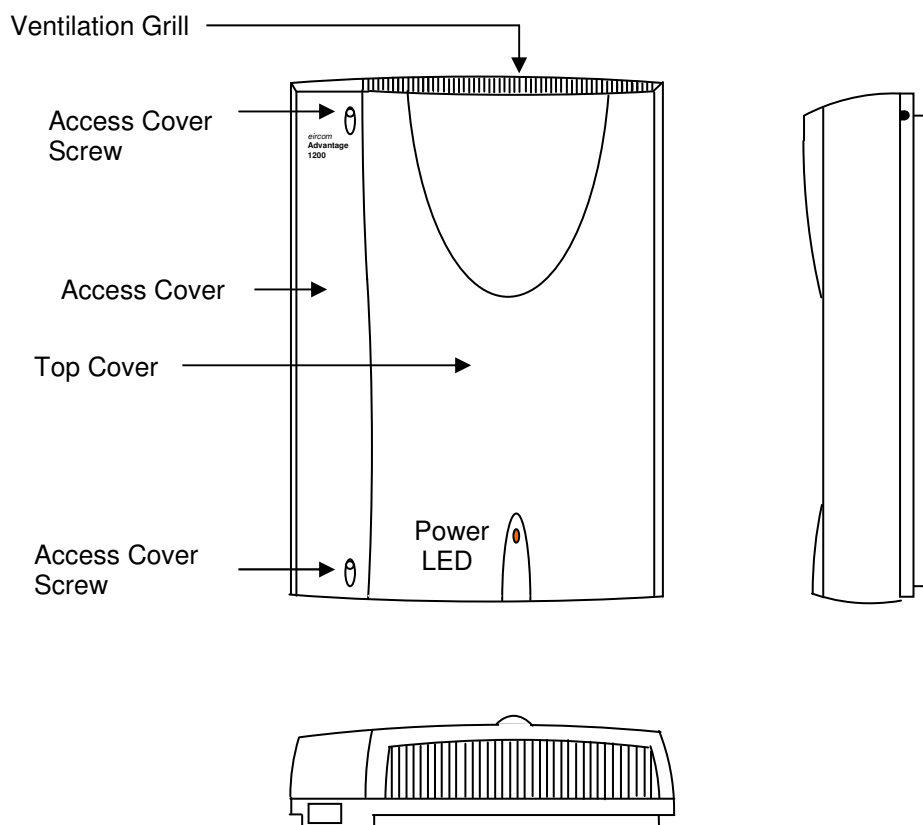
## 2. *eircom advantage* 1200 System Installation

**Important:** Only qualified service personnel should carry out installation of the system  
Please refer to the Safety notices in the Powering Up system section.



## 2.1 Control Unit Specification

The control unit comprises a printed circuit board (PCB) housed within a 3-part enclosure which is constructed from robust ABS plastic. The three enclosure parts consist of the Access Cover, Top Cover and Base. The access cover may not be opened without the use of a tool. The access cover encloses the connection terminals to which the user has to have access for the installation of the system.



### 2.1.1 Physical Dimensions

The physical dimensions of the *eircom advantage 1200* control unit are as follows:

354mm (H) x 262mm (W) x 85mm (D)

### 2.1.2 Weight

The weight of the *eircom advantage 1200* control unit is approximately **3.0 Kg**.

### 2.1.3 Operating Voltage

The operating voltage and maximum power consumption of the *eircom advantage 1200* control unit is as follows:

<b>Mains voltage</b>	220 ± 10%
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Max power consumption

33W

## 2.1.4 Environmental Specification

Specification	Value
Operating temperature	- 5C to +40C
Humidity	10% to 90% Non-condensing
Maximum AC V/A	46 VA
Maximum input power	33 W
Maximum input current at 230 VAC	0.2 A
Maximum input current at 180 VAC	0.25 A
Power Factor	0.7
Extreme working conditions	- 5C to +50C
Storage temperature	-20C to + 70C
Storage Humidity	10% to 90% Non-condensing

## 2.1.5 Feature dialling codes

Feature	Code
Any trunk line	9
Any SIP trunk line	*00
Trunk lines 1 to 8	* 9 1 or * 9 8
SIP trunk lines 1 to 10	* 901 to * 910
Call User	User number
Groups 80 to 88	80 to 88
Operator Group	0
Auto-Attendant	100 - 109
Forward all calls for user	* 2 1 * < destination > # destination examples: User number (e.g. 11 – 34), Voicemail (*99), External number on any trunk (9 xxxxxxxxxxxx) External number using a trunk (*91 xxxxxxxxxxxx) Group (e.g. 80 – 88), Operator Group (0), Common address book number (*4000 - *4199), Personal address number (*800 - *849), Auto-Attendant (100 -109) Networked user (network user number)
Cancel forwarding of all calls for user	# 2 1 #
Forward all calls for Group	If leader: * 2 1 * < group number > * < destination > # If not leader * 2 1 * < group number > * < destination > * < group PIN > #
Cancel forwarding of all calls for Group	If leader: # 21 * < group number > # If not leader: # 21 * < group number > * < group PIN > #
Forward on No Answer for user	* 6 1 * < destination > #
Forward on No Answer for user with timer	* 6 1 * < destination > * <timer> #
Cancel Forward on No Answer for user	# 6 1 #
Forward on No Answer for group	If leader: * 6 1 * < group number > * < destination > * # If not leader * 6 1 * < group number > * < destination > * * < group PIN > #
Forward on No Answer for group with timer	If leader: *6 1 * < group number > * < destination > * < timer > # If not leader * 6 1 * < group number > * < destination > * < timer > * < group PIN > #
Cancel Forward on No Answer for group	If leader: # 61 * < group number > # If not leader: # 61 * < group number > * < group PIN > #
Forward on Busy for user	* 6 7 * < destination > #
Cancel Forward on Busy for user	# 6 7 #
Forward on Busy for group	If leader: * 6 7 * <group number > * < destination > # If not leader * 6 7 * <group number > * < destination > * < group PIN > #



Cancel Forward on Busy for group	If leader: # 6 7 * < group number > # If not leader: # 6 7 * < group number > * < group PIN > #
Restrict your outgoing CLI	* 30 #
Send your outgoing CLI	* 31 #
Common address book short codes	* 4 0 0 0 to * 4 1 9 9
Personal address book short codes	* 8 0 0 to * 8 4 9
Redial Last external number	* 5
Camp On (Call Back on busy) internal	5
Do Not Disturb	* 6 2 #
Cancel Do Not Disturb	# 6 2 #
Opt out of a group	* 6 2 * <group number(80 – 88)> #
Opt into a group	# 6 2 * <group number(80 – 88)> #
Set Alarm Call	* 641 * HHMM #
Clear Alarm Cal	# 641 #
Activate Roaming PIN	* 6 8 <Roaming Account> <Roaming PIN> #
Deactivate Roaming PIN	# 6 8 #
CallPickUp/CallPickOff	* 7 1 < user number >
Universal pickup	* 7 1 0
Call Transfer Explicit (at dial tone with two calls on hold)	* 7 2
Conference (at dial tone with two calls on hold)	* 7 3
Conference bridge (Meet-me conference room)	700 - 701
Park/Unpark a call	* 7 4
Retrieve a parked call from an internal user	* 7 5 < user number >
Answer a page at another user	* 76 < user number >
Answer a universal page	* 7 6 *
Directed page	* 7 7 < user number >
Universal page	* 7 7 *
Force handsfree answer to system phone user (Intercom)	#77 < user number >
Door opening code	* 7 8
Intrude (at busy tone)	* 7 9
Access voicemail	* 9 9
Connect to a user's Mailbox	# 9 9 <user number >
Connect to a users Mailbox (without hearing welcome message)	# 9 8 <user number >
Transfer call to Mailbox (While ringing the User)	# 9 9
Direct access to a user when answered by the Auto Attendant	* < user number >
Direct access to a user voicemail when answered by the Auto Attendant	# < user number >
Access voicemail settings (when pressed while listening to voicemail welcome message)	#
<b>Programming</b>	<b>Code</b>
Program an external number in your personal address book.	* * < 8 0 0 to 8 1 9 > * < external number > #
Erase a number from your personal address book.	# < 8 0 0 to 8 1 9 > #
Implement Ringing mode (Modes 1 to 5)	* 0 7 * <Ringing Mode > #
Set user PIN (for voice mail and browser programming)	* 70 * * NEW PIN * NEW PIN #
Clear user PIN	* 70 * CURRENT PIN #
Change user PIN	* 70 * CURRENT PIN * NEW PIN * NEW PIN #
Enter System Programming from an Executive system phone	* * * * # # # #

## 2.2 Installing the Control Unit

### 2.1.1 Location

Find a location which is:

- easily accessible, sufficiently spacious and well lit to allow you to wire the system.
- isolated from plumbing or electrical wiring
- within 2m of the nearest power point
- within convenient reach of the NTU (ISDN line socket)
- not exposed to extremes of temperature, humidity, dust, chemicals or direct sunlight.
- it is especially important that you allow at least 300mm clearance from the left side of the mounted unit to allow for unhinging the access cover.

### 2.1.2 Equipment

Make sure you have the correct tools:

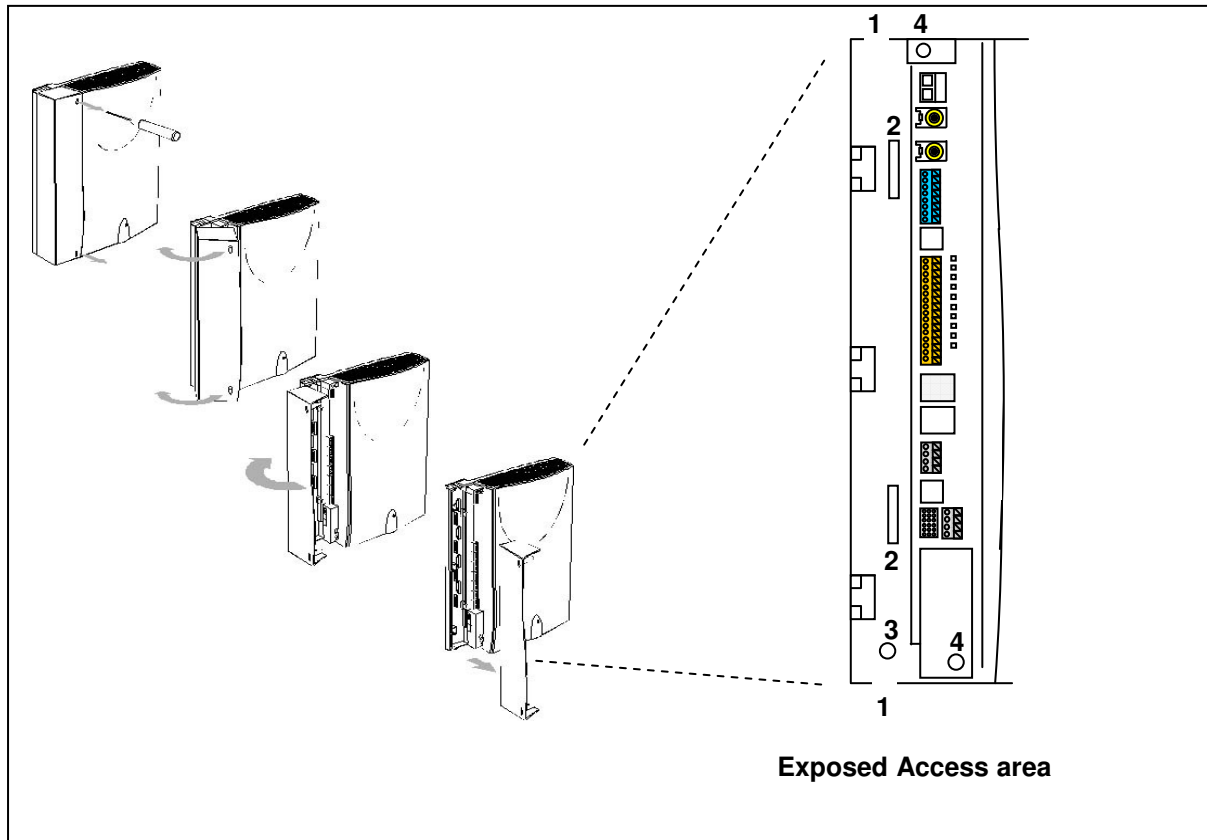
- Wall-mounting template (supplied)
- 2 support screws, 1 fixing screw and rawl plugs (they are supplied in the access area)
- Drill and chuck-key
- 6mm drill bit
- Flat head screwdriver
- Wire stripper
- Snips and Cable Cleats
- 1.5m Male-Male RJ45 ISDN Line Cords (supplied)

### 2.1.3 Removing the Access cover

Removal of the access cover exposes the Access Area. This houses the terminals for the connection of all the devices supported by the *eircom advantage* 1200.

To remove the cover:

1. Unscrew the top and bottom screws.
2. Rotate the cover through 90° in the direction shown in the above picture.
3. Lift the cover away from the unit.



### 2.1.4 Exposed Access Area

#### 1. Plastic Breakouts.

Plastic breakout points are provided on the edge of the access area as shown. These areas are indicated by indents in the plastic and provide space for the wires to enter the control unit. To create the breakout points simply grip the indented area with a pliers and bend firmly until the plastic gives way.

#### 2. Cable Ties supports.

There are 2 cable tie supports provided in the access area. All exposed wiring can be neatly bundled using cable ties attached to the cable tie supports to help secure and consolidate the wiring connections.

#### 3. Control Unit fixing screw position.

The control unit fixing screw position provides space for the fixing screw to fix the control unit to the wall for wall mounting.

#### 4. Top cover screws.

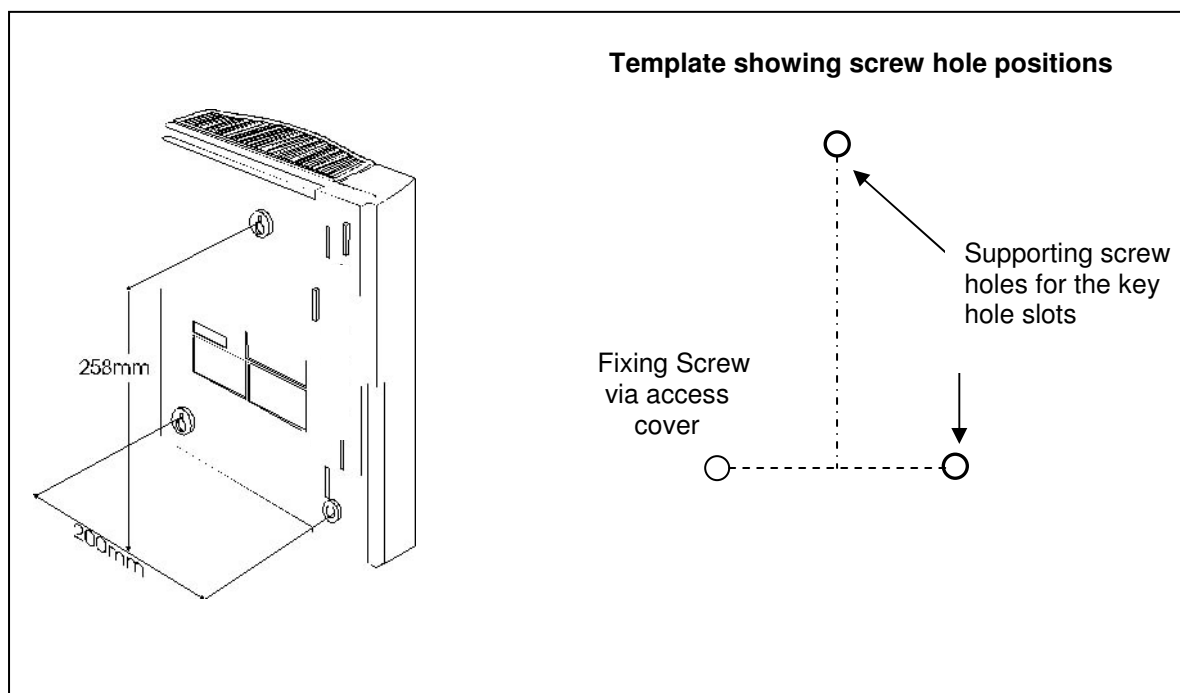
These 2 screws if removed will allow access to the main control board.

## 2.1.4 Wall mounting the unit

Follow the steps below to mount the *eircom advantage 1200* on the wall. Note that the mounting screws and rawl plugs are located inside the access area.

1. Mark on the wall the location of the three screw holes using the supplied template.
2. Drill holes and insert rawl plugs.
3. With the Access Cover removed (see previous section), the supporting and the fixing screw holes are exposed.
4. Insert the two support screws into the support holes and screw down, leaving a 5mm clearance from the surface of the wall.
5. Place the keyhole slots of the system over the supporting screws.
6. Insert the remaining screw into the fixing hole, via the access area and screw down. **DO NOT OVER-TIGHTEN** as this may damage the plastic housing!

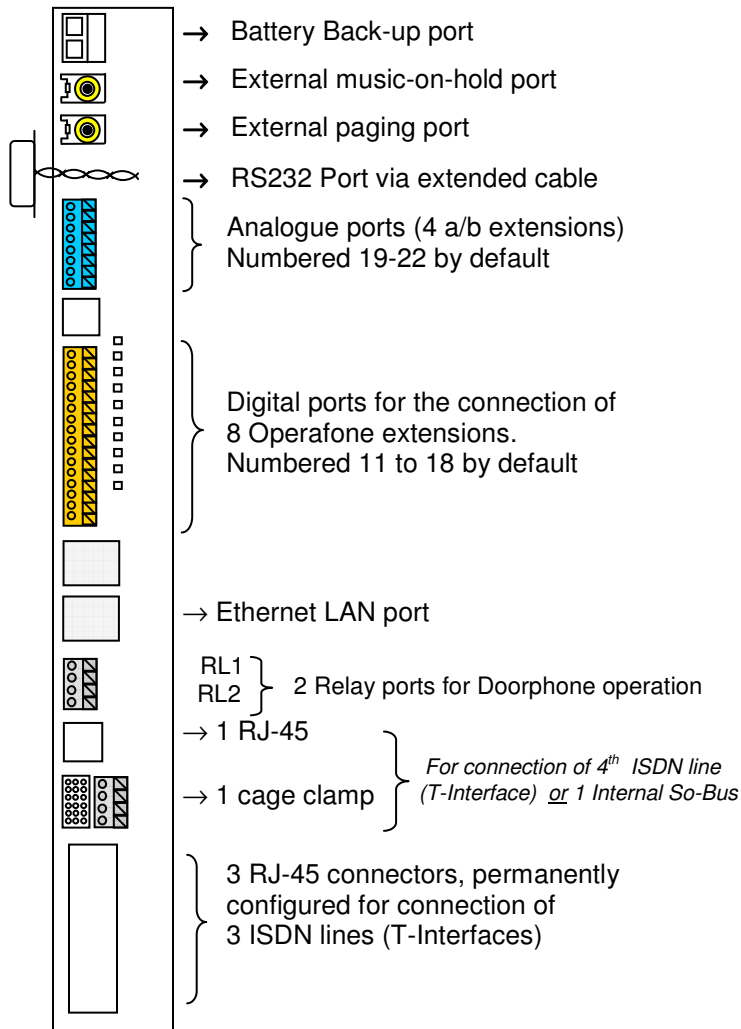
The system is now ready for wiring.



## 2.2 Wiring Connections

### 2.2.1 Terminal Connectors in the Access Area

The following diagram illustrates the terminal layout of the *eircom advantage 1200*. All terminal connectors are located within the Access Area.



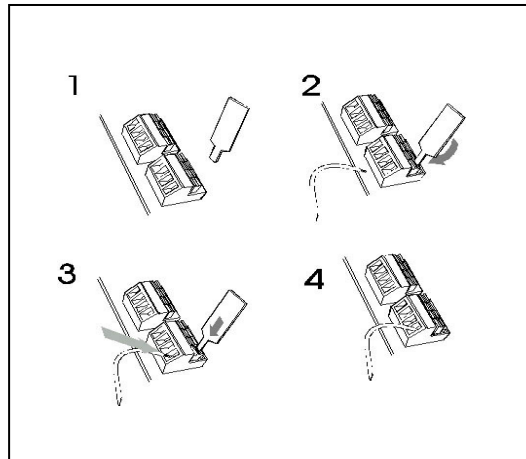
The terminal blocks consist of the following type of connectors:

- **Cage clamp connectors** are used for the connection of back-up battery, relay driven devices, analogue and Operafone D1 extensions and optional So-Bus Interface.
- **RJ-45 connectors** are used for the connection of the ISDN Lines, So-Bus Interface and Ethernet LAN/WAN ports.
- **Phono-Jack connectors** are used for the connection of the external Music-on-Hold and Paging units.
- **RS232 Connector** ( 9 pin female ) is provided via an extended cable from the main board and is used for call logging equipment requiring a serial interface.

## 2.2.2 Cage clamp connectors

To connect the wires to the cage clamp connectors, follow the steps below:

1. Insert a non-conducting tool into the groove of cantilever (note that no tool is supplied with the system)
2. Push cantilever in the direction shown Insert bared wire into the aperture
3. Release cantilever.

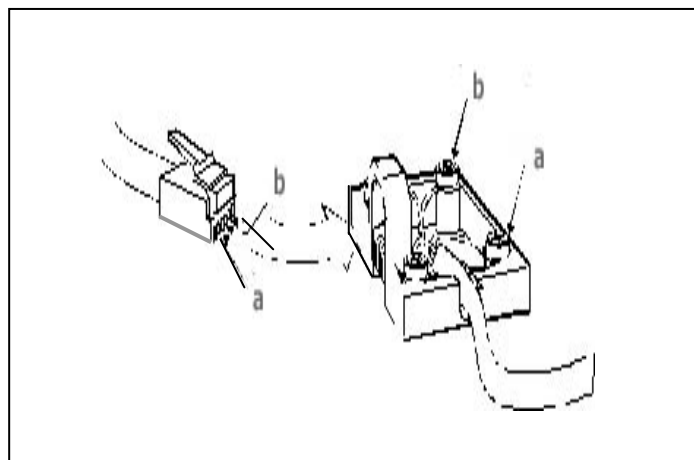


## 2.2.3 Wiring the Extensions

Prepare the wires of the cables and connect them to the appropriate extension terminal blocks as described above.

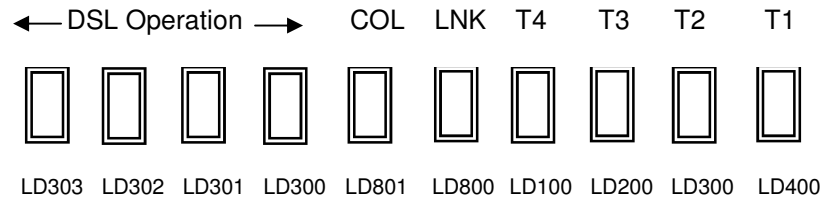
Wall-mount the extension telephone sockets. Route the extension cable to the *eircom advantage* system observing good building wiring practice by maintaining at least 50mm clearance between the extension cable and mains power cable, line or other building cable.

System phones and analogue telephones are connected to the system using 2 wires which should be connected to the a and b terminals.



## 2.2.4 Function LED's in the access area

There are 10 function LED's located in the access area which provide visual indications of the state of the T interfaces, the ethernet connectivity and the ADSL functionality.



LED No.	Name	Function
LD400	T1	This LED will light if the system detects the presence of a T interface connected to the T1 socket.
LD300	T2	This LED will light if the system detects the presence of a T interface connected to the T2 socket.
LD200	T3	This LED will light if the system detects the presence of a T interface connected to the T3 socket.
LD100	T4	This LED will light if the system detects the presence of a T interface connected to the T4 socket.
LD800	LNK	This LED will light if the system detects the presence of an ethernet connection to the LAN port when no DSL module is connected
LD801	COL	This LED indicates a data collision on the data link between the LAN port and the system
LD300		This LED is now redundant
LD301		This LED is now redundant
LD302		This LED is now redundant
LD303		This LED is now redundant

## 2.3 Installing the System Phones and DSS Module

The *eircom advantage* digital key sets, either the Executive or the Standard version, may be connected to the digital extension ports using single pair cabling. The *eircom advantage* system phone line cord is terminated with a male RJ11 plug with pin-out designations as illustrated in the above diagram.

The *eircom advantage* Executive and Standard phones can be desk or wall mounted. For desk mounting the plinth can be fixed to the base in two ways to give high or low viewing angle. The plinth is fixed to the base of the phone by sliding the tabs on the plinth into the slots on the phone base.

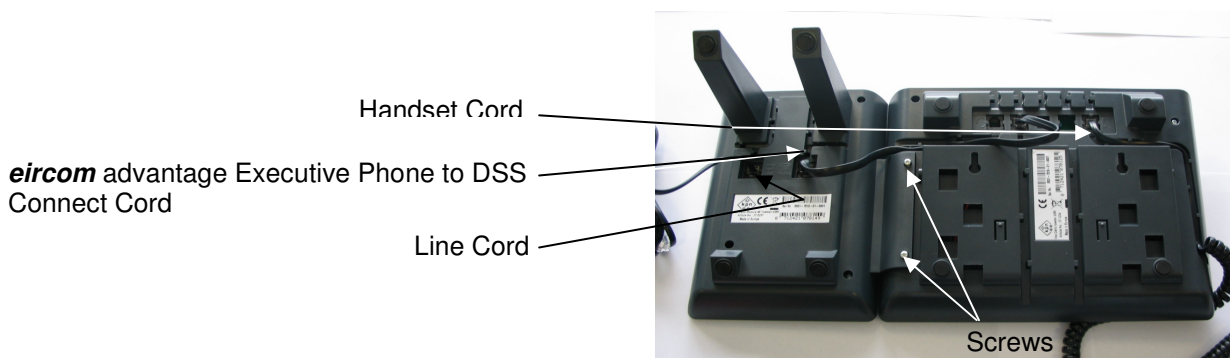
The Executive and the Standard phone can be wall mounted. To wall mount either system phone, the plinth is discarded and the phone is fixed using the two screw slots on the base. Fix the two wall mounting screws 104 mm apart for the Executive phone, 70 mm for the Standard phone, using the rawl plugs provided.

### 2.3.1 Connecting the DSS Module

The desktop *eircom advantage* Executive key set may be equipped with a DSS module for display of the status of up to 48 system extensions.



To install the DSS module, position the DSS module to the right of the *eircom advantage* Executive and turn both upside down. Use the screws supplied with the DSS module to attach the flange on the DSS module to the lip beneath the cover of the *eircom advantage* Executive.



Plug the short cable with an RJ11 plug at each end (Executive phone to DSS connect cord), supplied with the DSS module, into the “phone” socket on the DSS and then plug the other end of this cable into the *eircom advantage* Executive “line” socket. Connect the RJ11 plug on the line cord coming from the Advantage control unit into the “line” socket on the bottom of the DSS module.



The DSS keys, numbered 11 to 34 and 41 to 64, automatically act as direct station select keys for all extensions connected to the control unit.

### **2.3.2 Programming the Function Keys**

Keys associated with unavailable extensions may be programmed for other functions using the “Redefine Keys” option on the associated *eircor advantage* Executive key set. Select “Menus”, “Phone Settings”, “Define Function Key”, “Redefine Keys” and scroll down to, or press, the key to be defined; its associated led flashes. Select the function to be associated with the key from the list of options available. Alternatively, the user can program the function keys from Browser based programming.

## 2.4 Analogue extensions

The *eircom advantage 1200* provides 4 analogue ports in the access area numbered 19 – 22. Plain, ordinary telephones (Pots) and other approved analogue devices may be connected to the a/b ports using single pair cabling. Each port is overload and short circuit protected which provides an additional level of protection when connecting the analogue devices.

### 2.4.1 Connecting Analogue Phones

The single a, b pair is connected to the analogue terminals ( 19 – 22 ) of the system. All wires should be inserted securely into the cage clamp terminals ensuring that no exposed copper wire is visible in the access area. Cable ties on the access area can be used to secure the wiring cables.

### 2.4.2 Calling Line Identity (CLI)

The *eircom advantage 1200* supports the transmission of CLI (Calling Line Identification) information to all four analogue extensions.

### 2.4.3 Recall recognition

Most analogue telephones will have a Recall button ( R ) included on the telephone. This button is used to generate a hold signal which must be correctly interpreted by the PBX. The *eircom advantage 1200* recognises the Recall signal timings on most commercially available analogue telephones and by default supports a range from 90 to 120 msec (approx)

### 2.4.4 Analogue Extension electrical characteristics

The electrical characteristics of the analogue extensions on the *eircom advantage 1200* are listed below.

Analogue extension electrical characteristics	
On-Hook Voltage	48 Volts
Off-Hook Voltage	8 Volts
Ringing Voltage	64 V (RMS)
Ringing frequency	25 Hz
Busy Tone Timing	500 ms ON 500 ms OFF

The *eircom advantage 1200* supports high impedance connections to the analogue extension ports allowing substantially long cable lengths to be used. To provide for an extra long cable connection on one of the ports, extension 19 accommodates almost five times the impedance of the other ports as shown in the table below.

Extension	Impedance	Extension Cable Length (*)
19	1000 Ohms	5.95 Km
20	204 Ohms	1.2 Km
21	204 Ohms	1.2 Km
22	204 Ohms	1.2 Km

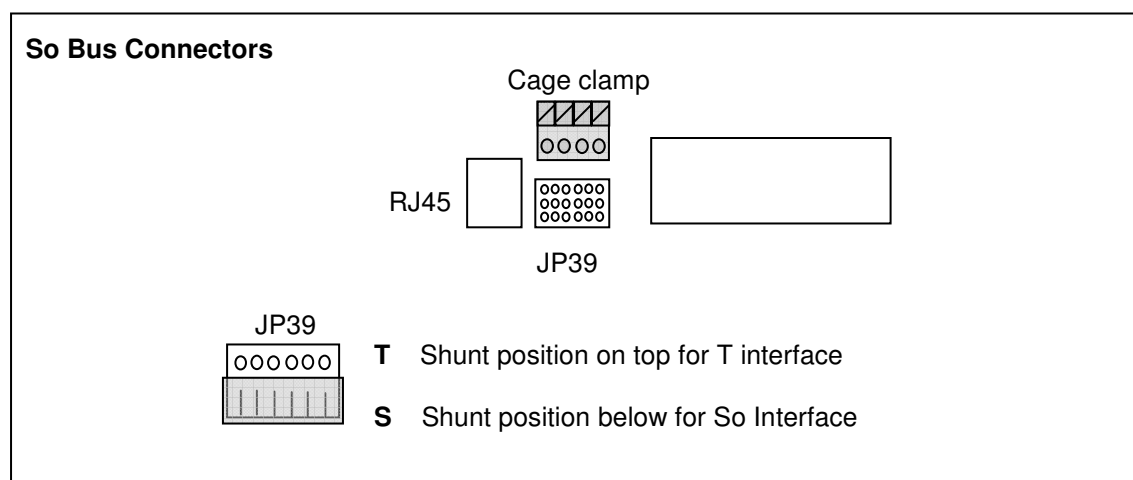
(\*) These figures assume that 0.5 mm copper conductor cable is being used to connect the analogue extensions.

## 2.5 Internal/External (S/T) ISDN basic access Interface

The *eircom advantage 1200* offers 3 RJ-45 connectors permanently configured as T (Line) interfaces, while the fourth can be configured by the user as either a T or an internal So Bus (S Interface).

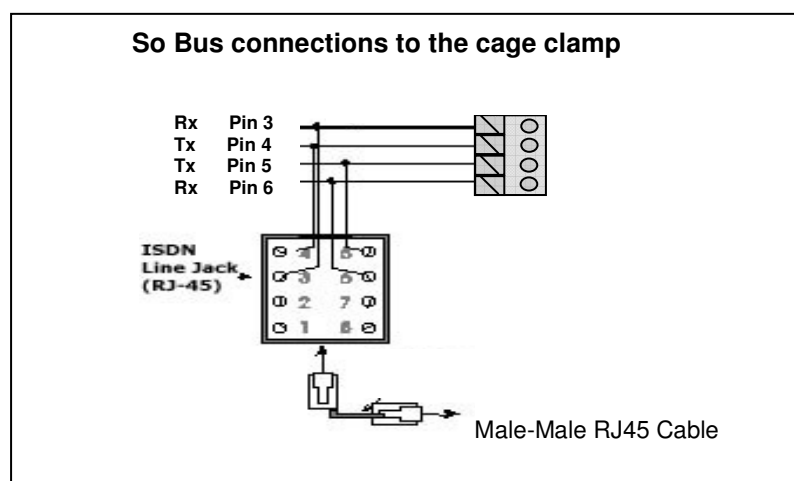
For your convenience, the system provides two connectors that allow the connection of the So-Bus: an RJ-45 connector and a cage clamp connector. You may connect to one or the other depending on the type of cabling you wish to route.

Configuration of the So-Bus takes place by moving the plastic shunt on the JP39 Jumper to the lower position on the pins as shown below. (This switches the Transmit and Receive pair positions on the connector as well as inserting/disinserting the 40 Volts DC Power Feed for the Terminals on the S-Bus).



The S-bus option, if required, must be enabled in Browser Based Programming.

The So-Bus is a 4-wire bus to which up to 8 ISDN terminals may be connected and operates only in **Point to Multipoint** mode.

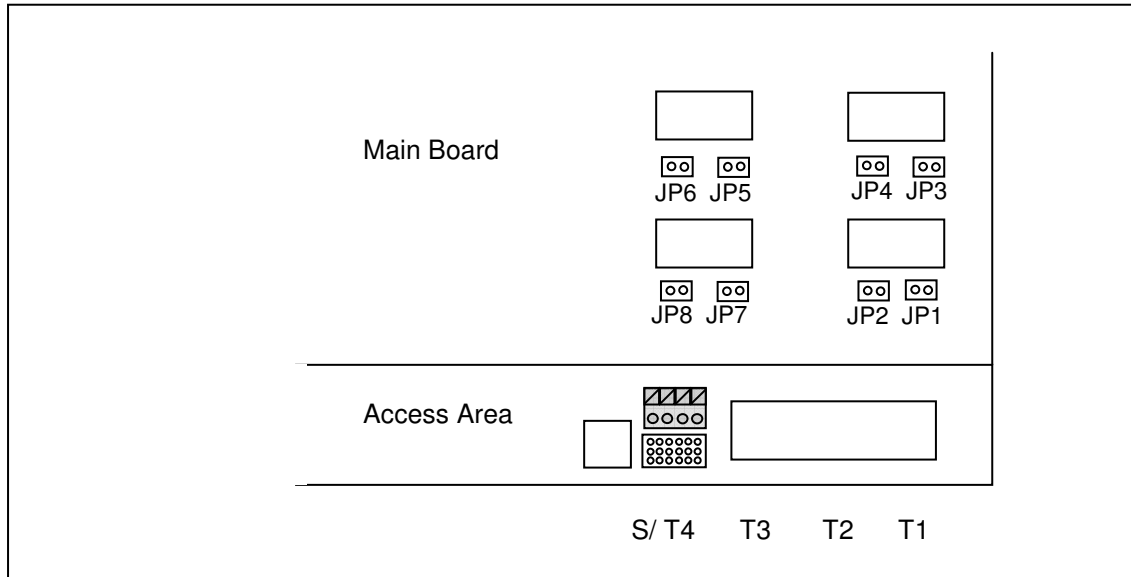


To connect the So-Bus, just plug the male RJ-45 cable connector into the RJ-45 terminal connector of the access area. If you are connecting the So-Bus to the **cage clamp** connector, then check the diagram above for pin connections.

## 2.6 Connecting ISDN lines

The system allows the connection of up to 4 ISDN lines (T-Interfaces), one of them being configurable as an internal So-Bus as explained above. A Male-Male RJ45 cable is needed to connect each ISDN line. The system may be configured to operate in either Point to Point mode or in Point to Multipoint mode.

An *eircom* Business systems technician may change the line mode to Point to Point or Point to multipoint from Browser based programming.



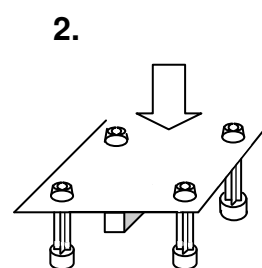
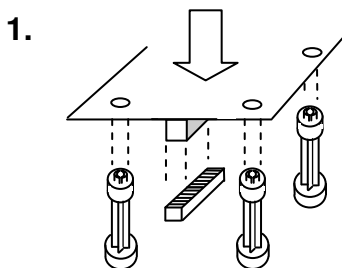
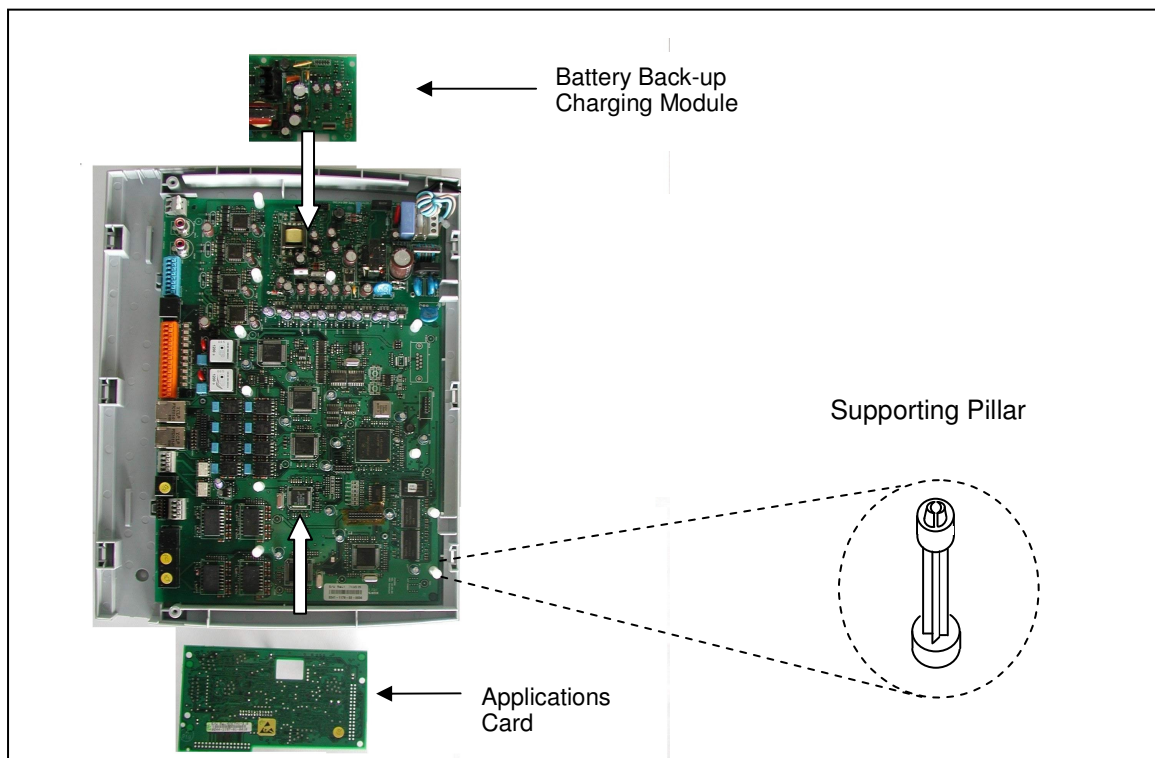
**Note:** If the *eircom advantage 1200* is to be connected in a Point to Multipoint configuration, it MUST be installed as the last terminal on the bus. If the system is connected in a Point to Multipoint configuration and is NOT installed as the last terminal on the bus then the jumpers associated with the line ( shown below ) must be removed.

T Interface	Jumpers
T1	JP1 & JP2
T2	JP3 & JP4
T3	JP5 & JP6
T4	JP7 & JP8

## 2.7 Plugging in Modules and Ancillary Equipment

The *eircom advantage 1200* provides for up to 3 plug-in modules to be connected to the motherboard. These plug-in modules interface to the mother board via edge pin connectors. Each connector slots into corresponding sockets on the motherboard and is secured by mounting pillars that insert into holes located on each daughter card.

Module	Supporting Pillars	Pin Connector
Battery Back-up (BBU) charging Module	3	12 Pin
Applications Card	4	24 Pin



### Inserting the plug-in Modules

1. Ensure that the unit is unplugged from the power socket and observe the anti-static precautions.
2. Align the holes on the plug-in module over the support pillars making sure that the pin connectors match up with the slots on the main board (1).
3. Press slowly and firmly into place until the module is secured (2).

## 2.7.1 Applications Card

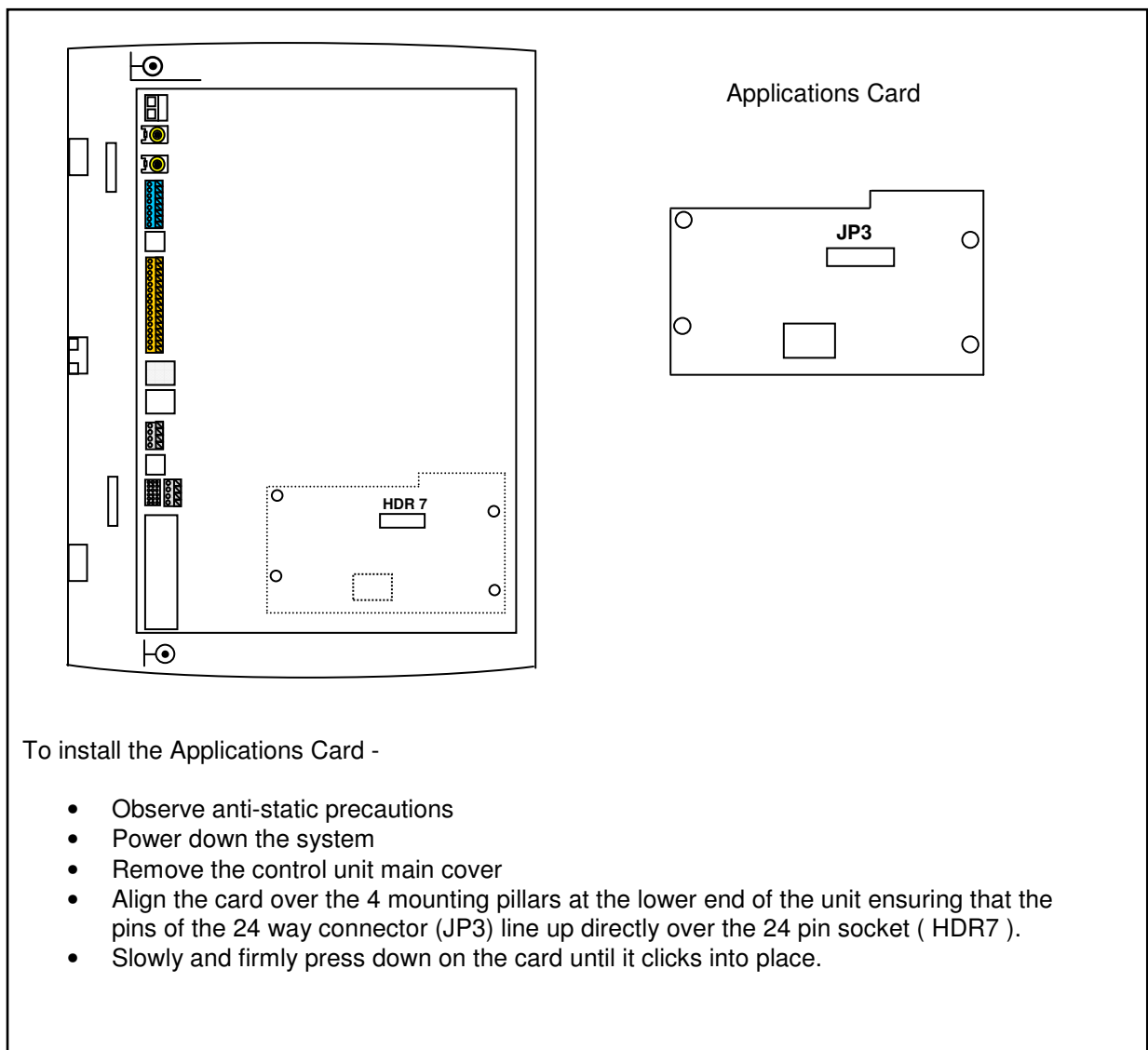
The *eircom advantage 1200* may be equipped with an Applications Card module for an integrated Voice Mail, auto attendant and IP applications solution. The default, out of box, configuration provides up to 22 mailboxes, on 2 Voice channels so that 2 messages may be recorded or played simultaneously, with email forwarding of voicemails as WAV attachments and basic auto attendant (3 messages).

The Applications Card software is downloadable just like the *eircom advantage 1200* system code, allowing the user to upgrade the software remotely if required.

The card can be remotely downloaded with *eircom Advantage* software licences, as follow.

- Advanced Multi-layer Auto Attendant with 10 layers of interactive messages
- Pre-recorded Music on Hold, with downloadable WAV capability, up to 45 minutes
- Recording and email forwarding of voice calls on a global or individual call basis with voice storage
- Voice over IP user licences, VoIP compression and echo cancellation
- Secure (AES encrypted) remote IP system phones over Internet
- Dial-in meet-me conference room for up to seven participants
- Windows softphone registration (also requires an IP compression channel)
- SIP users on the LAN
- Additional 8 hours voice storage
- VoIP networking of multiple *eircom Advantage* systems

The card has up to eight channels, up to six of which, for example, may be deployed for simultaneous VoIP calls, or all eight may be used for voice mail/auto-attendant calls.

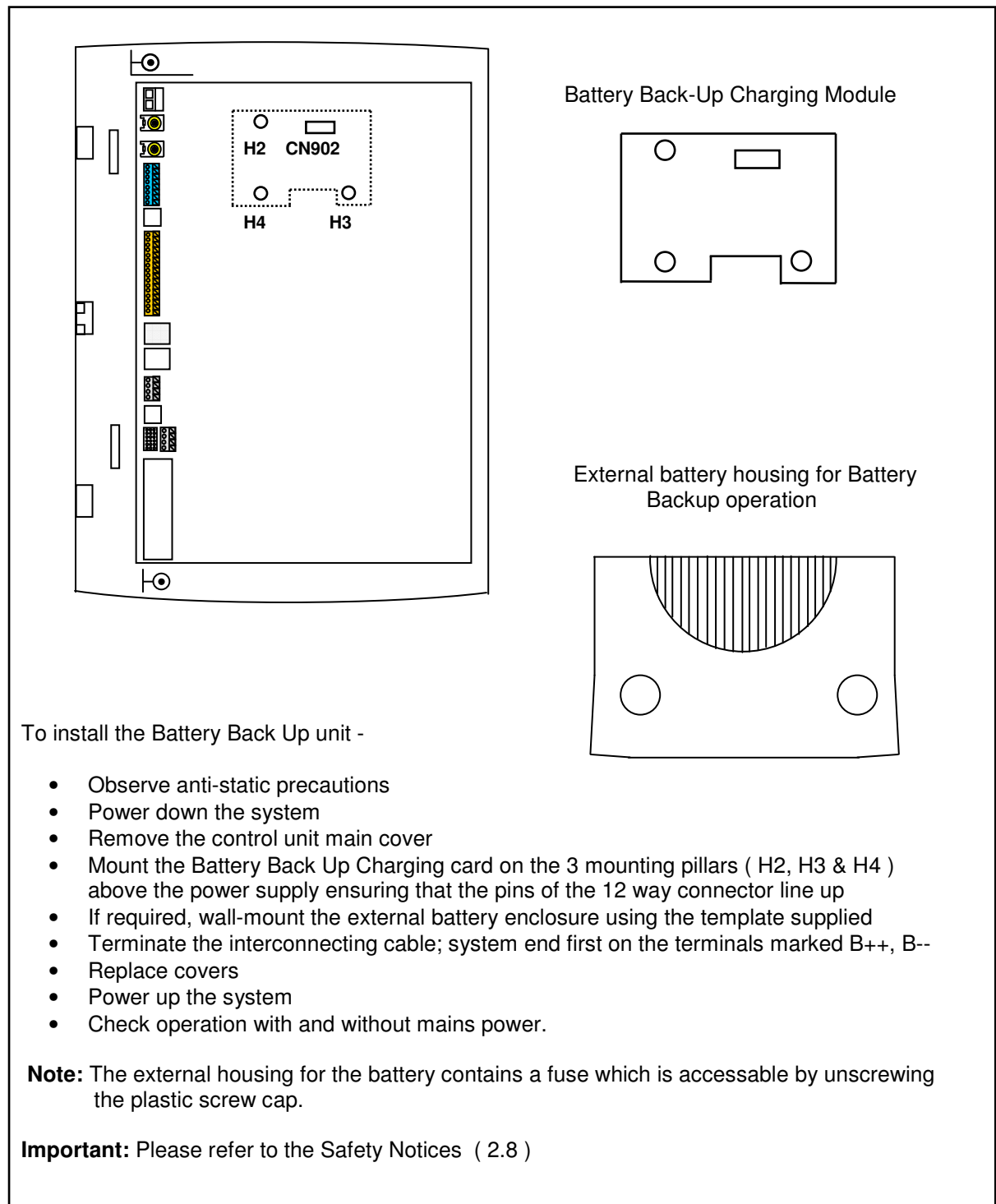


To install the Applications Card -

- Observe anti-static precautions
- Power down the system
- Remove the control unit main cover
- Align the card over the 4 mounting pillars at the lower end of the unit ensuring that the pins of the 24 way connector (JP3) line up directly over the 24 pin socket ( HDR7 ).
- Slowly and firmly press down on the card until it clicks into place.

### 2.7.3 Battery Back-Up

For battery backup operation during power cuts, the system may be equipped with an optional Battery Back-up module (BBU). This comprises a plug-in Battery Back Up Charging module and an external 12 V battery. During normal operation the BBU module will trickle charge the battery ensuring that the optimal voltage will be available if the main power supply gets cut. The system can operate under full load conditions on battery back-up mode for approximately 2 hours.



To install the Battery Back Up unit -

- Observe anti-static precautions
- Power down the system
- Remove the control unit main cover
- Mount the Battery Back Up Charging card on the 3 mounting pillars ( H2, H3 & H4 ) above the power supply ensuring that the pins of the 12 way connector line up
- If required, wall-mount the external battery enclosure using the template supplied
- Terminate the interconnecting cable; system end first on the terminals marked B++, B--
- Replace covers
- Power up the system
- Check operation with and without mains power.

**Note:** The external housing for the battery contains a fuse which is accessible by unscrewing the plastic screw cap.

**Important:** Please refer to the Safety Notices ( 2.8 )

## 2.7.4 Music-on-Hold

External Music-on-Hold Sources (for example, from a CD Player) can be plugged into the *eircom advantage 1200* Phono Jack marked "**Music on Hold**". This will allow calls placed on hold to hear the music from the external source instead of internally generated hold tones. (\*)

The Music On Hold connection uses a standard RCA type phono Jack with an input impedance of **600 Ohms** and a maximum input voltage of **4 V** ( Peak to Peak).

When making a connection to the Music On Hold phono jack, please ensure that the phono plug is fully inserted and tightly secured.

(\*) - This feature needs to be enabled in browser based programming.

## 2.7.5 Paging unit

An external Paging unit may be connected to the Phono Jack port of the *eircom advantage 1200* marked "**Paging**". This will allow users to perform a paging operation using the external paging unit.

The Paging connection uses a standard RCA type phono Jack with an input impedance of **600 Ohms** and a maximum input voltage of **4 V** ( Peak to Peak)

When making a connection to the Paging phono jack, please ensure that the phono plug is fully inserted and tightly secured.

**Note:** Two separate cables are supplied with each *eircom advantage 1200* that can be used to interface external Music on hold or Paging modules to the system.

1. A 1.2 meter long Phono-jack to Phono-jack cable
2. A 1.2 meter long Phono-jack to 3.5 mm cable



## 2.7.6 Door Phone

A Door Phone can be connected to the Opera system using one of the analogue extensions. Door Phones can generally be divided into the following 2 categories as listed below:

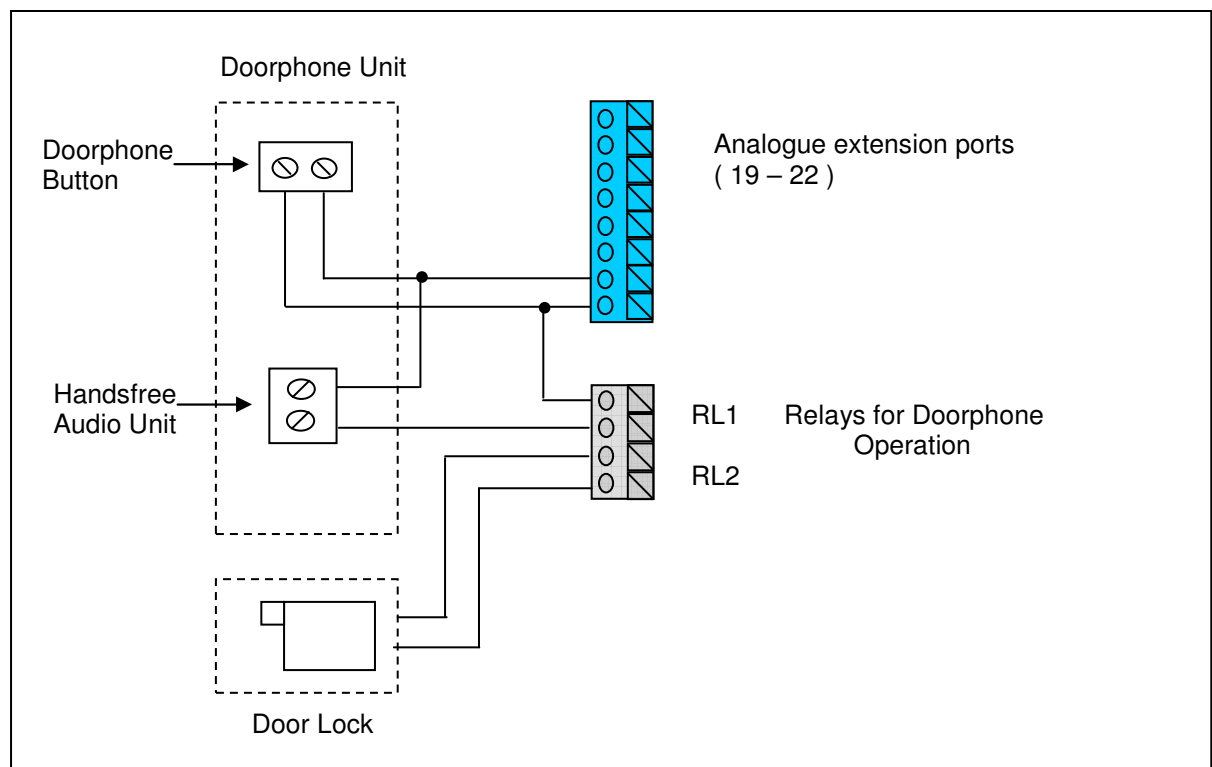
### 2.7.6.1. Basic Door Phone

This type of Door phone contains 2 separate connections for the door phone button and the handsfree audio unit thus requiring the use of the 2 relays provided by the *eircom advantage 1200*. The first relay is used to ensure a speech path is provided between the Door Phone and the internal extension to which it is connected. The second relay is used to activate the firing mechanism of the door lock.

When someone presses the button, the *eircom advantage 1200* will fire Relay 1, connecting the handsfree audio unit to the extension port and initiating the ringing at the extensions that are programmed to ring for the Door Phone. When one of these extensions answers, it gets connected to the Door Phone, and the user has the option to open the door by dialling a code (or by pressing a key in case of an operafone executive).

#### Wiring of a Basic Door Phone Unit

The two contacts of the Door Phone button have to be wired to the A and B contacts of the analogue extension port being used as Door Phone (see diagram below).



#### Wiring the Audio unit

One of the contacts of the handsfree unit needs to be wired to the A contact of the Door Phone Extension. The other contact needs to be wired to one of the contacts of Relay 1.

Finally a link wire needs to be wired between the other contact of Relay 1 and the B contact of the Door phone extension as shown above.

### 2.7.6.2 Programmable Door Phone

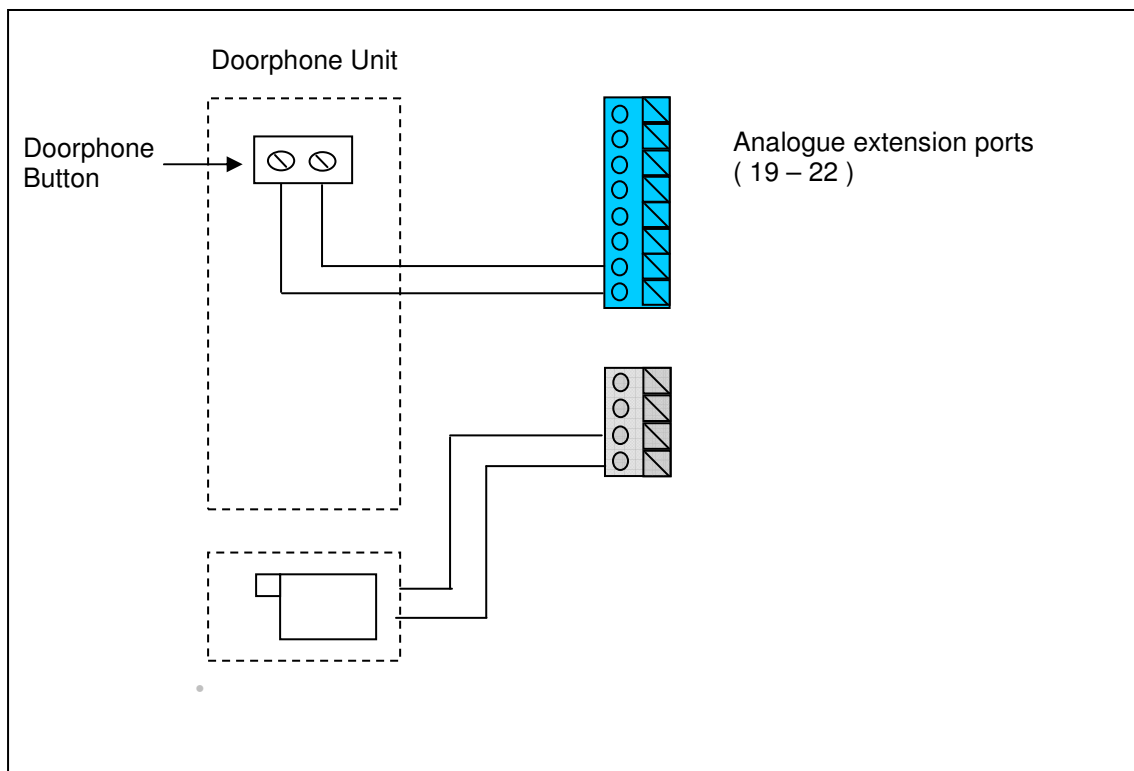
This type of door phone contains additional functionality allowing it to operate without the use of the relays on the *eircom advantage 1200*. The range of functions available on this type of door phone (listed below) may vary depending on the door phone model and type.

#### Typical Functions available on a programmable Door phone

DTMF Receiver / Generator  
Busy Tone Detector  
Hotline Operation  
Integrated Locking Relay  
Speaker Volume control

#### Wiring of a programmable doorphone Unit

The two contacts of the Door Phone button have to be wired to the A and B contacts of the analogue extension port being used as Door Phone (see diagram below). In this configuration, the extension connected to the door phone unit should be programmed for hotline operation in browser based programming.



As soon as the door phone button is pressed, the extension/group or external number programmed in the hotline feature will ring and on answering the call, the user simply needs to dial the door opening code to fire Relay 2 and open the door lock.

(\*) If a relay on the doorphone is being used to open the lock, then the code for opening the relay will be supplied by the doorphone technical manual.

**Note:** When the called party programmed to ring for hotline operation clears down, busy tone will be given to the doorphone. Some doorphones must be programmed in this case to detect busy tone and return to the idle condition. ( See 2.4.4 for busy tone timing )

## 2.8 Powering Up the System

Prior to plugging the *eircom advantage 1200* into the mains, **ensure that:**

1. All wiring is properly connected.
2. The access cover has been replaced.
3. The Line cords have been plugged into the telephone wall sockets.

The system powers up when plugged into the mains. The LED on the front of the Control Unit will light up full on for about 45 seconds, after which it will remain in a flashing mode to confirm that the system is operating.

### **IMPORTANT SAFETY NOTICES**

**The mains power point to which the system is connected should remain easily accessible in case the system needs to be powered down.**

**Note: To power down the system when a Battery Backup module and Battery are connected, both the mains power and the battery must be disconnected! Even if the mains power is switched off, hazardous voltages are still present if the battery remains connected!**

**After installation of the system or changes to the wiring configuration, the access cover should always be replaced for safety reasons.**

**The battery recommended for use with the system is as follows;**

- Sealed Lead Acid type,
- 12 Volt,
- 6 or 7 Ampere hour,
- "Faston Tab 187" Terminals.

**If the battery is to be housed in the plastic battery enclosure, it should be no larger than 151 mm (L) x 65 mm (W) x 97.5 mm (H).**

**The Battery Housing is supplied with a 5 Amp fuse in the Positive (Red) cable. If any alternative housing arrangement is used, a 5 Amp fuse should be inserted in series with the positive cable.**

## 2.9 Ethernet LAN Communication and IP addresses

The system can be used as a router for Internet access from any PCs connected to the Ethernet Port. Browser Based System Programming can also be carried out from any PC connected to this port.

### 2.9.1 Connecting to the Ethernet Port -

The Ethernet LAN port on the system is an RJ45 socket, located as indicated in the Terminal Connectoers diagram at the start of this section. Two different types of cable can be used to connect to this port -

- An Ethernet cable if connecting to a company LAN or Hub. Connect one end of the Ethernet cable to the **LAN** port in the control unit access area and the other to the Hub.

**Note:** Most Hubs have a LED at each Ethernet port. If the LED lights, it is a good indication that the cable has been connected correctly. If not, try another port and/or check the cable is not damaged.

- A crossover cable if connecting to a single PC. Connect one side of the crossover cable to the **LAN** port in the system access area and the other side to the Ethernet network interface card installed in the computer.

**Note:** When installing an Ethernet Network card, make sure the driver software indicates that the device is functioning properly.

### 2.9.2 IP Configuration -

In order for the connected computer(s) and the system to communicate, there must be an IP connection established between them. For the connection to be established, the PCs and the system must have IP addresses within the same range.

The IP configuration of the system can be viewed and changed from a system phone logged in to System Maintenance. (See section 3).

**Note:** The IP configuration of the system can also be viewed and changed from Browser Based Programming once an IP connection has been established between the PC and the system.

The default IP configuration of the system is –

IP Address:	<b>192.168.0.100</b>
Subnet Mask:	<b>255.255.255.0</b>
HTTP Port:	<b>80</b>

**Note:** Each system has a unique MAC address that can also be viewed from System Maintenance.

In order to give the PC and the system an IP address in the same range, either the IP address of the system or the PC can be changed.

Change the IP address of the system to be within the same range as the IP address of the PC, e.g. if the IP address of the PC is 192.163.0.31, from system maintenance change the IP address of the system to 192.163.0.120

Alternatively, change the IP address of the PC so that it is in the same range as the system.

**Note:** If the PC is on a local area network (LAN), it will be necessary to change the IP address of all the computers on the LAN or change the IP address of the system.

### 2.9.3 IP Connection Testing -

To check that the IP configuration is correct and both the PC and the system are on the same network -

At the PC, from Windows -

- go to <**Start**>
- select <**Run**>

A window prompting the user to open a program will appear -

- type "**command**" (or "**cmd**" in some cases for Windows 2000) in the white field. The MS-DOS window opens with the following prompt - **C:\\_**
- Type "**ipconfig**" at the cursor.

The details of the IP configuration of the PC will appear on the window - e.g.

Windows IP Configuration -

```
IP Address ..... 192.168.0.200
Subnet Mask ..... 255.255.255.0
Default Gateway ..... 192.168.0.100
```

Make sure that the configuration that appears on your PC is correct.

In order to test the IP connection between the PC and the system, type "**ping**" followed by the IP address of the system. To test for the example shown above, type -

```
ping 192.168.0.100
```

The PC will ping the system with 32 bytes of data and report the results. If the IP connection is correct, the results should state -

```
Packets: Sent=4, Received=4, Lost=0 (0% Lost).
```

If the IP connection is incorrect, check again that the system and the PC are in the same IP address range and that the cabling connections are correct.

## 2.16 Call Logging

The system outputs Call Logging Records for all external calls, both incoming and outgoing. The Call Logging Report can be generated using HyperTerminal over the Ethernet Connection using a TCP/IP port or an RS232 port.

In order to make it easier to read the output, each field is right justified (i.e. padded with spaces) and separated from the next field with a comma. This output may be extracted and used by external applications (for example, Microsoft Excel) to generate reports and accumulate statistics. (It is beyond the scope of this guide to describe how to use this output with external applications).

### 2.16.1 Call Logging over the ethernet port

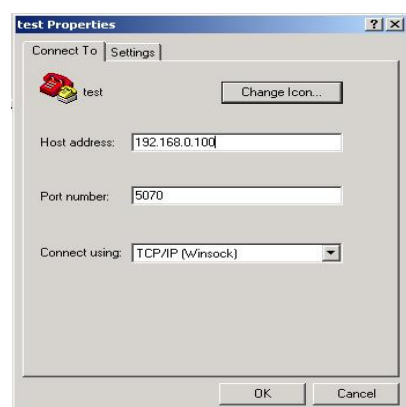
With a PC (Windows operating system ) connected to the system LAN Port -



- Open the <Start> menu
- Click On <Programs>
- Click On <Accessories>
- Click On <Communications>
- Click on <HyperTerminal>

The window alongside will be shown

Enter a name to identify the connection  
e.g. Call Logging



- In the **Connect Using** field, select the TCP/IP (Winsock) setting
- Enter the IP address of the system in the **Host Address** field (by default, **192.168.0.100**)
- Enter the **Port number**. This is always **5070**
- Click OK when ready

The HyperTerminal window appears. When an incoming/outgoing call is detected on the system, a Call Logging Record will be generated at the end of the call.

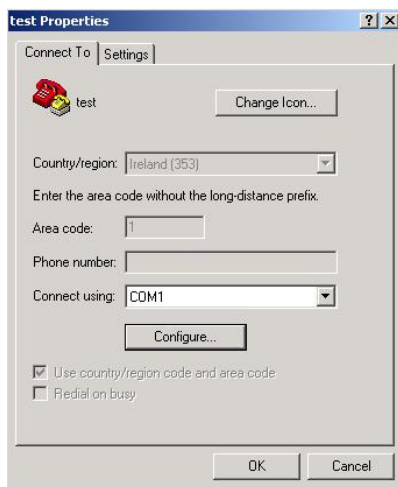
## 2.16.2 Call Logging over the serial port

Use a standard serial cable to connect the system to a PC or a printer. In case of a non-standard interface, the following is the pin-out.

Signal Name	System port ( 9pin D )	Printer Port ( 25pin D )	Function
RS-TXD	2	3	Received Data
RS-RXD	3	2	Transmitted Data
RS-DTR	4	20	Data Terminal Ready
RS-0V	5	7	Signal Ground

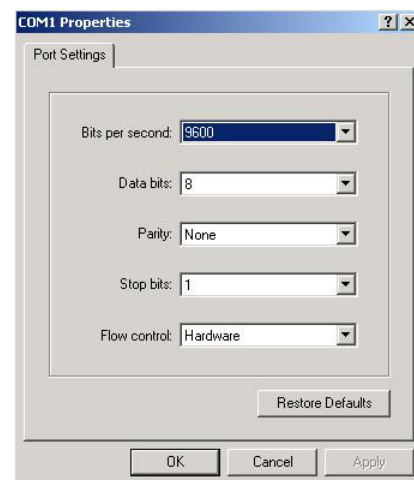
Signal Name	System Port (9pin D)	PC Port (9pin D)	Function
RS-TXD	2	2	Transmitted Data
RS-RXD	3	3	Received Data
RS-DTR	4	4	Data Terminal Ready
RS-0V	5	5	Signal Ground

### 1. Select the COM Port



- Select the **COM** port on you PC that is connected to the serial port on the system

### 2. Program the COM port settings



- In Port Settings fill in the data as follows:
  - Bits per second **9600**
  - Data bits **8**
  - Parity **None**
  - Stop bit **1**

Click **OK** twice when ready

The HyperTerminal window then appears. When an incoming/outgoing call is detected on the system, a call logging record will be generated at the end of the call. Each field of the call logging output is separated by a comma for clarity.

## Example of the call logging output to hyperterminal

```

199000,
315,12/08/04,14:20:54,      Line 01,      654,      John Lawler,O,Y, 00:00:
      199000,
316,12/08/04,14:21:04,      Line 03,      623,      Gary Nolan,I,Y, 00:02:
      8160000,
317,12/08/04,14:23:21,      Line 06,      623,      Gary Nolan,O,N, 00:00:
      05288669,
319,12/08/04,14:23:54,      Line 01,      676,      Courtney Murphy,O,Y, 00:01:
      2800395,
318,12/08/04,14:23:36,      Line 05,      623,      Gary Nolan,I,Y, 00:01:
      8160000,
318,12/08/04,14:24:57,      Line 05,      674,      Andrew Bradley,I,Y, 00:02:
      8160000,
320,12/08/04,14:25:43,      Line 01,      676,      Courtney Murphy,O,Y, 00:03:
      0866052444,
321,12/08/04,14:29:06,      Line 01,      676,      Courtney Murphy,O,Y, 00:03:
      05280669,
322,12/08/04,14:34:42,      Line 05,      627,      Declan Gibbons,I,Y, 00:00:
      8160000,
323,12/08/04,14:35:15,      Line 01,      612,      Kevin Kenny,I,Y, 00:04:
      8160002,
325,12/08/04,14:45:26,      Line 03,      616,      Dave Victory,I,Y, 00:00:
      8160009,

```

### 2.16.3 Call Logging format table

The format of the call logging data that is sent to the PC consists of 17 distinct fields of variable length that provide a comprehensive list of attributes for each call as listed below.

Field ID	Description	Size (Bytes)	Details
01.	Call ID	5	Numeric index to reference the call record.
02.	Date	8	Date of call in the format DD/MM/YY.
03.	Time	8	Time of call in the format HH:MM:SS.
04.	Line Number	20	Alphanumeric representation of Line number (e.g. Line 01)
05.	Extension number	20	Numeric representation of extension number ( e.g. 623 )
06.	Extension Name	20	Alphanumeric representation of extension name (e.g. Joe Bloggs )
07.	Call Type	1	I= Incoming (Voice) O= Outgoing (Voice) T= Transferred N= Internet (Data) R= Remote Access C= Time Retrieval D= Software Download
08.	Connection	1	Y = Yes N = No
09.	Voice Card	1	V = Voice Mail A = Auto-Attendant
10.	Call Duration	8	Duration of call in the format HH:MM:SS (connected time)
11.	Ring Time	5	Duration of ringing in the format MM:SS
12.	Calling Number	20	Alphanumeric (CLI or "Unknown" if CLI not provided)
13.	Calling Name	20	Alphanumeric (if there is a match found in the Common Address Book)
14.	Called Number	20	Alphanumeric (Called Number/MSN of Called Party)
15.	Called Name	20	Alphanumeric
16.	Roaming PIN	2	Numeric representation of a roaming PIN User No. ( e.g 02 ) for Roaming PIN user 02
17.	Call Cost	8	Numeric representation of the cost of the call in Euros



## 2.16.4 Logging Incoming Calls

When an incoming call is answered by an extension, the “Call Type” (field 7) and “Connection” (field 8) fields are updated to “I” and “Y” respectively in the HyperTerminal window at the end of the call :

*Example of a call record for an incoming call that is answered*

1, 12/08/04, 17:30:02, Line 03, 654, John Lawler, I, Y, , 00:00:44, 00:05, 0872979676, , 8160058, .....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	.....
---	---	---	---	---	---	---	---	---	----	----	----	----	----	-------

## 2.16.5 Logging Outgoing Calls

When an outgoing call is made by an extension, the “Call Type” (field 7) and “Connection” (field 8) fields are updated to “O” and “Y” respectively in the HyperTerminal window at the end of the call :

2, 12/08/04, 17:12:01, Line 01, 676, Joe Bloggs, O, Y, , 00:00:03, 00:24, 8160016, , 05280669, .....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	.....
---	---	---	---	---	---	---	---	---	----	----	----	----	----	-------

## 2.16.6 Logging Voice Mail Calls

An incoming call that is directed to a user’s Voice Mail will generate a call record as described for incoming calls. The “Voice Card” field (field 9) is updated to ‘V’ when the line is connected to a voice channel on the voice card. The “Connection” field (field 8) will be “Y” or “N” depending on whether the calling party left a message on the extension’s mailbox. Connection = ‘Y’ (“message left”)

*Example of a call record for an incoming call that was answered by the voicemail and then left a message.*

3, 12/08/04, 17:16:02, Line 02, 8160058, , I, Y, V, 00:00:39, 00:00, 8160058, .....

1	2	3	4	5	6	7	8	9	10	11	12	.....
---	---	---	---	---	---	---	---	---	----	----	----	-------

## 2.16.7 Logging Transfer Calls

Two call logging records are generated when an incoming call is answered by an extension and then transferred to another extension on the system. The “Call Type” (field 7) is updated to ‘T’ on the transferred call to indicate that it is a ‘Transfer’ type of call. The “Call ID” (field 1) remains the same for both records.

*Example of a call record for an incoming call that was answered by Joe Bloggs and transferred to Jane Doe.*

4, 12/08/04, 17:16:02, Line 02, 627, Joe Bloggs, I, Y, , 00:00:20, 00:03, 8160058, .....

4, 12/08/04, 17:16:22, Line 02, 628, Jane Doe, T, Y, , 00:00:39, 00:05, 8160058, .....

1	2	3	4	5	6	7	8	9	10	11	12	.....
---	---	---	---	---	---	---	---	---	----	----	----	-------

## 2.16.8 Logging Externally Diverted Calls

If a user has externally diverted his/her extension, there will be **2 separate** Call records (i.e. there are 2 separate Call IDs) for an incoming call that is externally diverted. In both of these records the Extension Number, Extension Name & the Calling Number of the diverting extension are stored.

### 2.16.9 Logging Auto-attendant Calls

If an incoming call is answered by the Auto-attendant then the "Voice card" field ( field 9 ) is updated to "A". If the call is then answered by an extension, there is a separate Call Logging record ( with the same Call ID ) created for the answering extension as if the call had been transferred to the user

*Example of a call record for an incoming call that is answered by the Auto-attendant and subsequently answered by an extension.*

5 , 12/08/04, 18:26:02, Line 04, 600 , Reception , I, Y, A , 00:00:10, 00:05, 0871738729, .....  
5 , 12/08/04, 18:26:12, Line 04, 627 , Joe Bloggs , I, Y , , 00:00:25, 00:03, 0871738729, .....

1	2	3	4	5	6	7	8	9	10	11	12	.....
---	---	---	---	---	---	---	---	---	----	----	----	-------

### 2.16.10 Logging Internet Calls

Outgoing calls to an ISP are automatically started by the *eircom advantage* 1200 system when it detects TCP/IP packets with an external IP Address and there isn't a current connection to an ISP. When a call to an ISP is made the "Call Type" ( field 7 ) is updated to "N".

*Example of a call record for an automatically generated call to an ISP*

6 , 12/08/04, 17:12:01, Line 01, , , N, Y , , 00:24:03 , 00:04, , , 18501234567, ISP Company , ....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	....
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	------

### 2.16.11 Logging Time From Network Calls

The *eircom advantage* 1200 system can be programmed to automatically make a call on power-up in order to extract the time provided by the ISDN network. This call will immediately be cleared down as soon as the connection is established and the time information has been extracted from the connect message. When a "retrieve time from network" call is made the "Call Type" ( field 7 ) is updated to "C"

*Example of a call record for an automatically generated call on power-up to extract the time from the ISDN network.*

7 , 12/08/04, 18:12:01, Line 01, , , C, Y , , 00:00:01, 00:02, , , 1191, Network Time , .....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	.....
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	-------

### 2.16.12 Logging Remote Access Calls

The *eircom advantage* 1200 provides users with the ability to ring into the system to access the System Browser Programming or the LAN to which the system is connected. When a remote access call is made the "Call Type" ( field 7 ) is updated to "R"

*Example of a call record for a Remote Access call.*

8 , 12/08/04, 18:12:01, Line 01, , , R, Y , , 00:35:17, 00:02, 8160433 , Home Office, , , .....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	.....
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	-------

### 2.16.13 Logging Software Download Calls

The *eircom advantage* 1200 system can receive software upgrades by connecting to a download server over an ISDN line. These calls are initiated by a user on the system. When a software download call is made the "Call Type" ( field 7 ) is updated to "D"

*Example of a call record for a software download call.*

9 , 12/08/04, 18:52:01, Line 01, , , **D**, **Y**, , 00:03:47, 00:02, 8160410 , Administrator , , , .....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----

### 2.16.14 Logging 3-Party Conference Calls

A 3-Party conference consists of 2 calls being on the same line at the same time, therefore there will be 2 active Call Logging Records with the same line number. There is no separate field on the Call logging record to indicate that a 3Pty conference has occurred.

### 2.16.15 Roaming PIN

If the Call is made from a **roaming pin enabled** extension using a roaming pin profile defined in browser based programming then the roaming pin field is filled in with the user number that enabled it at that extension.

*Example of a call record for a call made from Joe Blogg's extension using the roaming PIN profile defined for User 03. .*

10 , 13/08/04, 16:12:01, Line 01, 676, Joe Bloggs, **O**, **Y**, , 00:01:03, 00:24, , , 05281169, , **03**,

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----

### 2.16.16 Advice Of Charge (AOC)

This feature if enabled by the Network will present to the *eircom advantage* 1200 system the cost of the call. The system will then provide this information at the end of the call ( In euros ) in the "Call Cost" field ( Field 17 ) of the call logging output.

*Example of a call record for an AOC enabled line showing the cost of the Call.*

11 , 15/08/04, 18:07:05, Line 04, 676, Joe Bloggs, **O**, **Y**, , 00:25:03, 00:04, , , 05281169, , , **1.20**

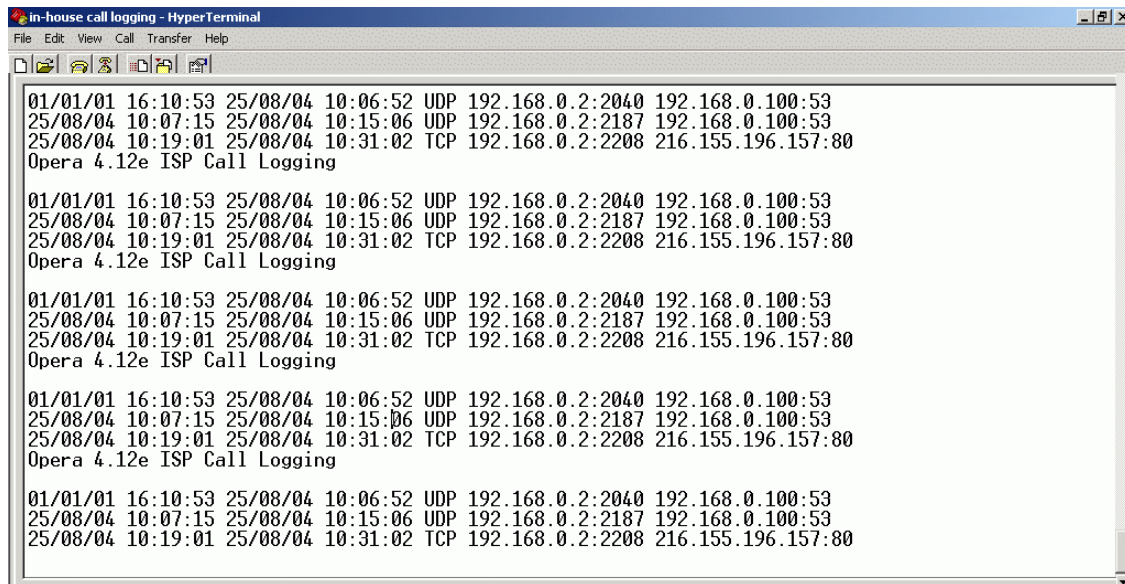
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----

## 2.17 Data Call and Diagnostic Logging

In addition to providing the call logging information for voice calls on the system, the *eircom advantage* 1200 also has the ability to record details on data type calls ( calls made to the internet ) and provide system diagnostic logs for debug purposes on the ethernet port of the system.

### 2.17.1 ISP Call logging

The *eircom advantage* 1200 can provide a log of data calls made to an Internet Service Provider (ISP). This log will show each of the dial-up connections that were made from the system as shown below. This data output is sent on port **5051**.



```
in-house call logging - HyperTerminal
File Edit View Call Transfer Help

Opera 4.12e ISP Call Logging
01/01/01 16:10:53 25/08/04 10:06:52 UDP 192.168.0.2:2040 192.168.0.100:53
25/08/04 10:07:15 25/08/04 10:15:06 UDP 192.168.0.2:2187 192.168.0.100:53
25/08/04 10:19:01 25/08/04 10:31:02 TCP 192.168.0.2:2208 216.155.196.157:80

Opera 4.12e ISP Call Logging
01/01/01 16:10:53 25/08/04 10:06:52 UDP 192.168.0.2:2040 192.168.0.100:53
25/08/04 10:07:15 25/08/04 10:15:06 UDP 192.168.0.2:2187 192.168.0.100:53
25/08/04 10:19:01 25/08/04 10:31:02 TCP 192.168.0.2:2208 216.155.196.157:80

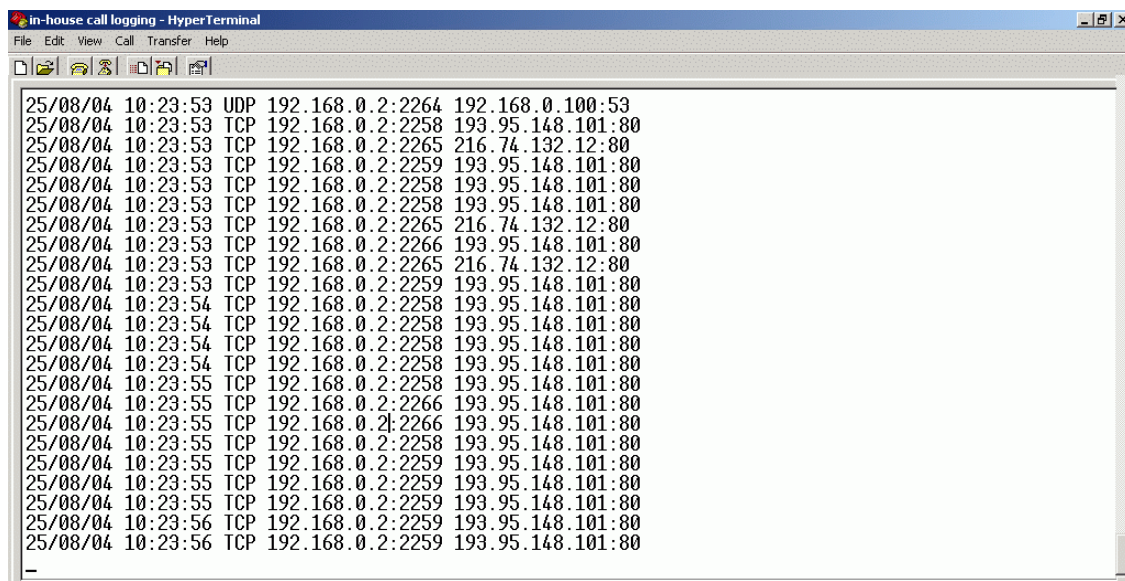
Opera 4.12e ISP Call Logging
01/01/01 16:10:53 25/08/04 10:06:52 UDP 192.168.0.2:2040 192.168.0.100:53
25/08/04 10:07:15 25/08/04 10:15:06 UDP 192.168.0.2:2187 192.168.0.100:53
25/08/04 10:19:01 25/08/04 10:31:02 TCP 192.168.0.2:2208 216.155.196.157:80

Opera 4.12e ISP Call Logging
01/01/01 16:10:53 25/08/04 10:06:52 UDP 192.168.0.2:2040 192.168.0.100:53
25/08/04 10:07:15 25/08/04 10:15:06 UDP 192.168.0.2:2187 192.168.0.100:53
25/08/04 10:19:01 25/08/04 10:31:02 TCP 192.168.0.2:2208 216.155.196.157:80

Opera 4.12e ISP Call Logging
01/01/01 16:10:53 25/08/04 10:06:52 UDP 192.168.0.2:2040 192.168.0.100:53
25/08/04 10:07:15 25/08/04 10:15:06 UDP 192.168.0.2:2187 192.168.0.100:53
25/08/04 10:19:01 25/08/04 10:31:02 TCP 192.168.0.2:2208 216.155.196.157:80
```

### 2.17.2 Website Access logging

The *eircom advantage* 1200 system also gives a log of individual website accesses made by users of the system. The output provides the source IP address & port number for the initial access to the website ( destination IP address & port no: ). This data output is sent on port **5050**

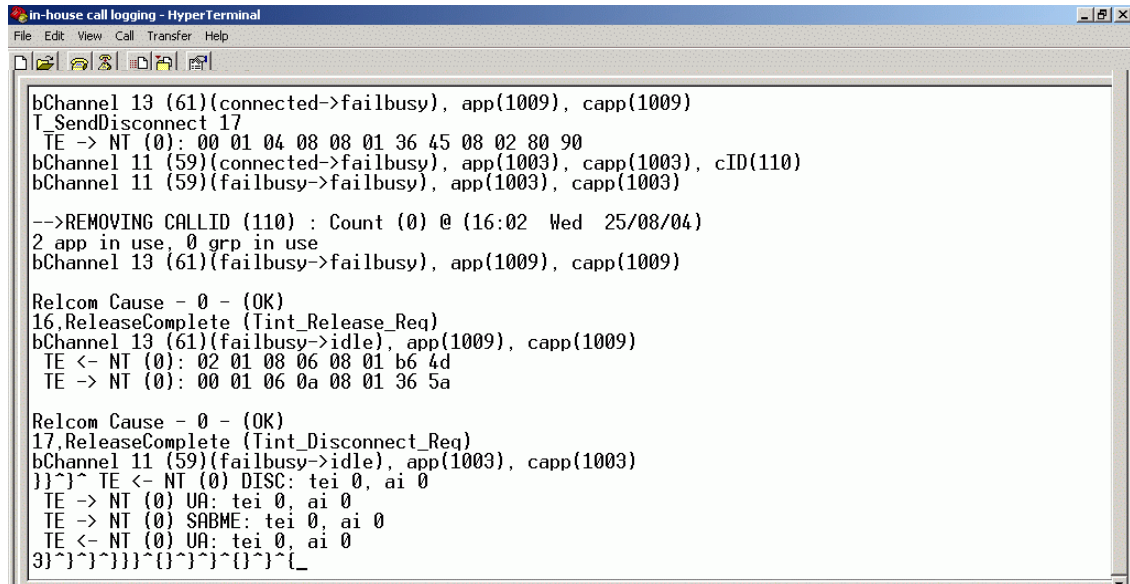


```
in-house call logging - HyperTerminal
File Edit View Call Transfer Help

25/08/04 10:23:53 UDP 192.168.0.2:2264 192.168.0.100:53
25/08/04 10:23:53 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:53 TCP 192.168.0.2:2265 216.74.132.12:80
25/08/04 10:23:53 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:53 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:53 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:53 TCP 192.168.0.2:2265 216.74.132.12:80
25/08/04 10:23:53 TCP 192.168.0.2:2266 193.95.148.101:80
25/08/04 10:23:53 TCP 192.168.0.2:2265 216.74.132.12:80
25/08/04 10:23:53 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:54 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:54 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:54 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:54 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2266 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2258 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:55 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:56 TCP 192.168.0.2:2259 193.95.148.101:80
25/08/04 10:23:56 TCP 192.168.0.2:2259 193.95.148.101:80
```

## 2.17.3 Streaming Diagnostic Logging

The *eircom advantage* 1200 system provides diagnostic information which may be used to aid an installer to debug any potential technical problems that might arise at a particular site. This information is a detailed technical synopsis of the state of the system. The streaming diagnostic information is a real-time debug facility which shows the state of the system as actions are being performed. This data output is sent on port **5061**



```
in-house call logging - HyperTerminal
File Edit View Call Transfer Help

bChannel 13 (61)(connected->failbusy), app(1009), capp(1009)
T_SendDisconnect 17
TE -> NT (0): 00 01 04 08 08 01 36 45 08 02 80 90
bChannel 11 (59)(connected->failbusy), app(1003), capp(1003), cID(110)
bChannel 11 (59)(failbusy->failbusy), app(1003), capp(1003)

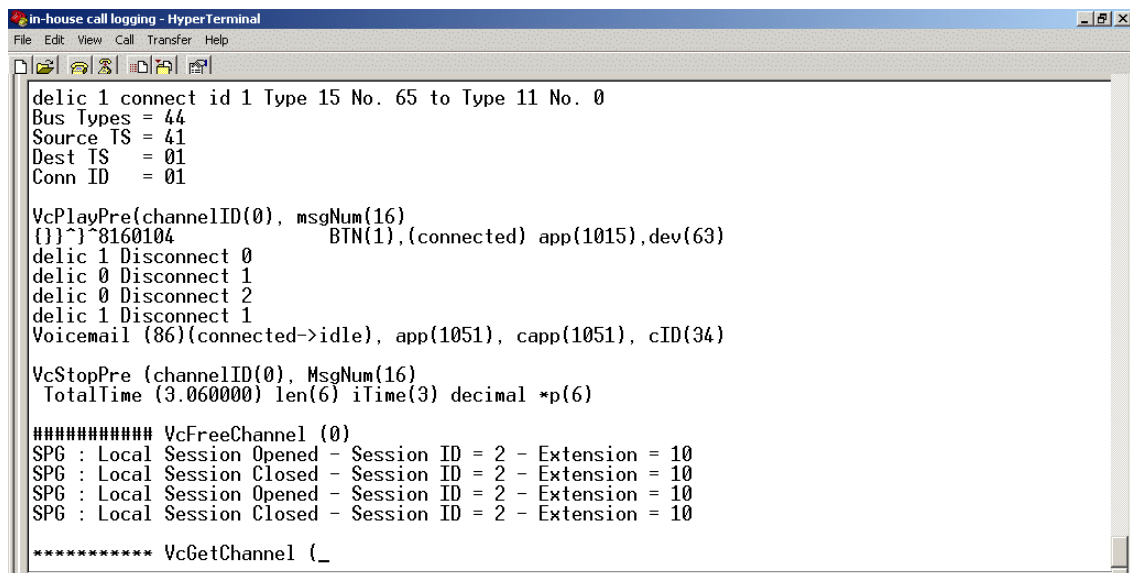
-->REMOVING CALLID (110) : Count (0) @ (16:02 Wed 25/08/04)
2 app in use, 0 grp in use
bChannel 13 (61)(failbusy->failbusy), app(1009), capp(1009)

Relcom Cause - 0 - (OK)
16.ReleaseComplete (Tint_Release_Req)
bChannel 13 (61)(failbusy->idle), app(1009), capp(1009)
TE <- NT (0): 02 01 08 06 08 01 b6 4d
TE -> NT (0): 00 01 06 0a 08 01 36 5a

Relcom Cause - 0 - (OK)
17.ReleaseComplete (Tint_Disconnect_Req)
bChannel 11 (59)(failbusy->idle), app(1003), capp(1003)
}})^ TE <- NT (0) DISC: tei 0, ai 0
TE -> NT (0) UA: tei 0, ai 0
TE -> NT (0) SABME: tei 0, ai 0
TE <- NT (0) UA: tei 0, ai 0
3)^)^}}^{}^)^{}^){_
```

## 2.17.4 Buffered Diagnostic Logging

The *eircom advantage* 1200 system contains a buffer containing a record of the most recent actions performed on the system. This buffered information is dumped out en-bloc to provide a history of the most recent actions of the system. This data output is sent on port **5060**



```
in-house call logging - HyperTerminal
File Edit View Call Transfer Help

delic 1 connect id 1 Type 15 No. 65 to Type 11 No. 0
Bus Types = 44
Source IS = 41
Dest IS = 01
Conn ID = 01

VcPlayPre(channelID(0), msgNum(16)
{}})^8160104 BTN(1),(connected) app(1015),dev(63)
delic 1 Disconnect 0
delic 0 Disconnect 1
delic 0 Disconnect 2
delic 1 Disconnect 1
Voicemail (86)(connected->idle), app(1051), capp(1051), cID(34)

VcStopPre (channelID(0), MsgNum(16)
TotalTime (3.060000) len(6) iTime(3) decimal *p(6)

##### VcFreeChannel (0)
SPG : Local Session Opened - Session ID = 2 - Extension = 10
SPG : Local Session Closed - Session ID = 2 - Extension = 10
SPG : Local Session Opened - Session ID = 2 - Extension = 10
SPG : Local Session Closed - Session ID = 2 - Extension = 10

***** VcGetChannel (_
```