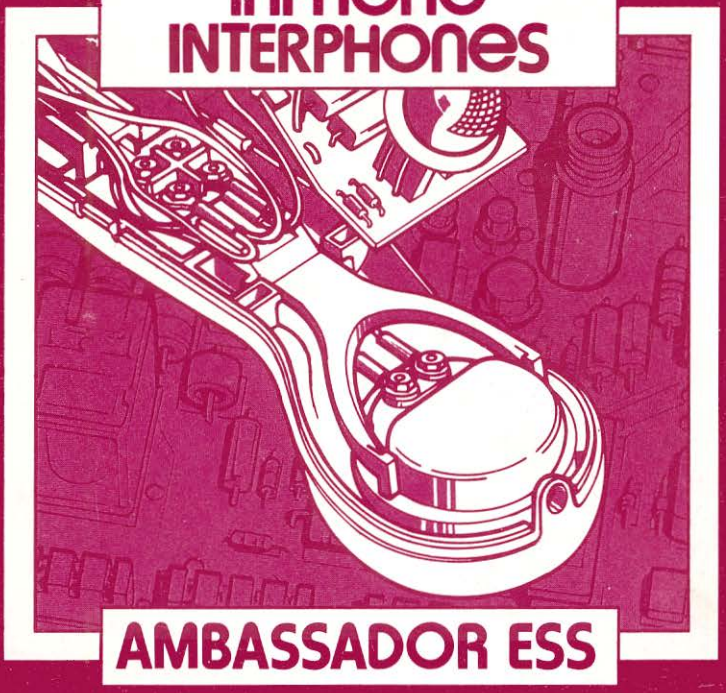
THE NEW AMBASSADOR ESS

INPHONE INTERPHONES



AMBASSADOR ESS

INSTALLATION INSTRUCTIONS

British TELECOM

AMBASSADOR ESS
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The Ambassador ESS is suitable for connection to both direct exchange lines and PBX extension lines in accordance with DTI document 84/011i: These instructions cover the installation of the Ambassador ESS control unit and the wiring and connection of the extension telephones.

IT IS THE EXCLUSIVE RIGHT OF BRITISH TELECOM TO CONNECT THE INSTALLED SYSTEM TO THE BRITISH TELECOM NETWORK AND TO TEST AND INSPECT THE INSTALLATION BEFORE DOING SO. A FEE WILL BE PAYABLE FOR THIS WORK.

All equipment and cabling must be in accordance with the relevant sections of **"BS6506 THE CODE OF PRACTICE FOR THE INSTALLATION OF PRIVATE BRANCH EXCHANGES FOR CONNECTION TO THE BRITISH TELECOMMUNICATIONS PUBLIC SWITCHED TELEPHONE NETWORK".**

REQUIREMENTS

The Ambassador Electronic Switching System may be equipped with one or two exchange lines and up to four terminals (extensions). It is not necessary to have four terminals from the beginning, a customer may start with one and increase up to a maximum of four later.

To install the Ambassador system you will require,

1 Ambassador Control Unit.

1 Extension telephone and socket for each extension to be fitted.

1 Terminating tool and sufficient cable for wiring the extensions) see important note below.

A length of 5 amp 3 core mains cable. (3 metres maximum).

A 3 pin mains plug fitted with a 3 amp fuse.

Note

To avoid damage to the terminals on the control unit and sockets, and to ensure the reliability of the necessary connections, **it is essential that the correct type of cable and terminating tool are used to install Ambassador.** Both of these items are available from your supplier.

Should you have any queries concerning these requirements it is suggested that you contact your supplier

The following pages outline the work necessary to install the Ambassador ESS. It is recommended that the sequence shown be adhered to.

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Siting the Ambassador Control Unit and Planning the Cable Runs to the Extension Telephones

Strict codes of practice exist that cover the installation of all telecommunications equipment and associated cabling. These codes of practice have been drawn up to protect not only the users of the equipment, but also the environment that houses it.

The Ambassador ESS has been designed to conform to these codes of practice, and will do so providing it is correctly installed. Careless installation will not only affect its performance and reliability but may also endanger others.

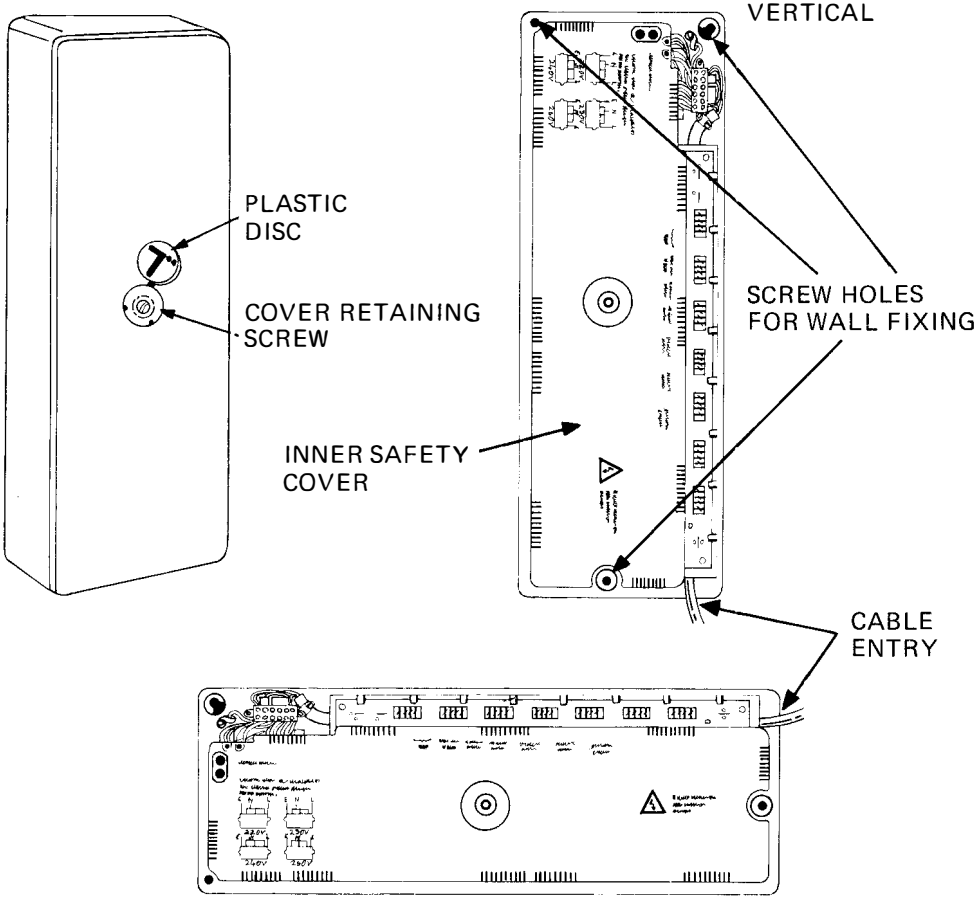
When installing Ambassador ESS the following points must be observed,

1. **The site chosen for the Control Unit must be such that,**
   a. it is not subject to damp or high humidity, otherwise the mains voltages used to power the control unit may be conducted beyond its casing, or to other parts of its circuitry causing damage.
   b. it is not subject to excessive heat or dust. Do not site for example in positions receiving direct sunlight, or above radiators. To allow for heat dissipation from the control unit the casing should be surrounded by at least 50mm of free space.
   c. the atmosphere surrounding the control unit, cabling and extension telephones must be free from explosive risk. If you are unsure whether such a risk exists then you should seek advice.
   d. there is a mains socket outlet within 3 metres of the control unit.
   e. the pick up point for the British Telecom exchange lines is within 15 cable metres of the ccu, and that the position chosen is accessable for maintenance. The cable for connection to the Network Connection Point should be clearly marked ''For connection to NCP''
2. **The route chosen for the extension cabling must be such that,**
   a. cables are not drawn into the same conduits or ducts as electricity supply cables. This is because telephone cables are not required to be insulated to the same standard as electricity supply cables, and consequently any chafing of the cables insulation which results from the drawing in process, could lead to dangerous voltages being present on them.
   b. cables are not run or fixed adjacent to electricity supply cables. Where this is unavoidable, a clear separating distance of at least 50mm should be left between them in the case of low voltage supply cables, and a proportionally greater gap in the case of higher voltages. Failure to observe this separation will lead at the least, to an annoying 'hum' on the circuits.
   c. the length of cable between the control unit and any extension telephone must not exceed 1.5 kilometres. This may be restricted in some instances due to the remoteness of the nearest British Telecom telephone exchange. (See Page 11 Appendix 1)

1. Installing the Control Unit

a. Start by removing the control unit cover. To do this carefully prise out the dark grey disc from the cover centre to expose the cover retaining screw. Slacken the retaining screw and remove the cover.

b. The control unit may be fixed to the wall in a horizontal or vertical position, using 3 No. 8 roundhead screws. Make certain that the entry point for the cables is correctly positioned as shown below. The grey disc in the cover can be re-positioned to suit either method.

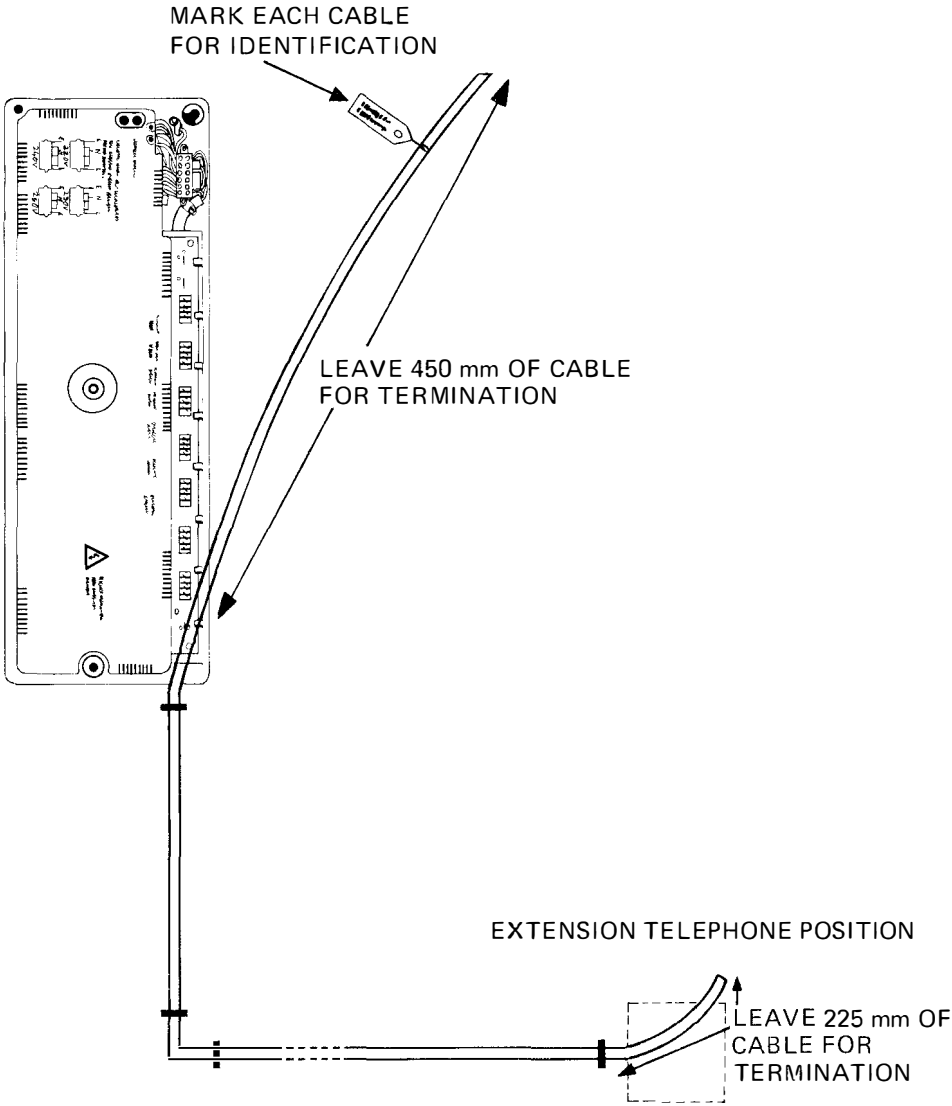


Warning

The inner safety cover (if fitted) should not be removed at this stage. Do not touch any of the control unit components as they are likely to be damaged by the static electricity that you discharge when doing so.

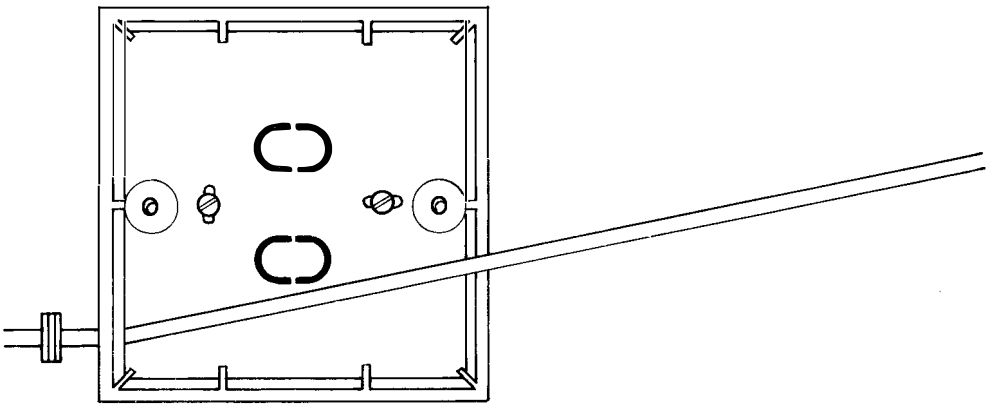
2. Run the Cabling for the Extension Telephones

Taking into account the points in para. 2 on page 1, run the extension cables leaving the required amount of spare cable at each end as shown below. Mark each cable with the extension number so that you can identify them later.

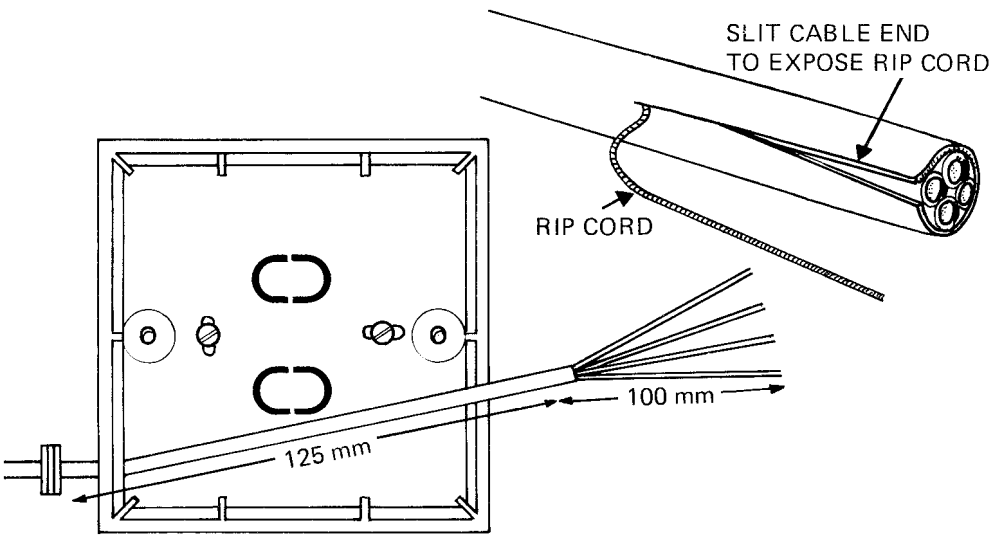


3. Fixing and Terminating the Extension Telephone Sockets

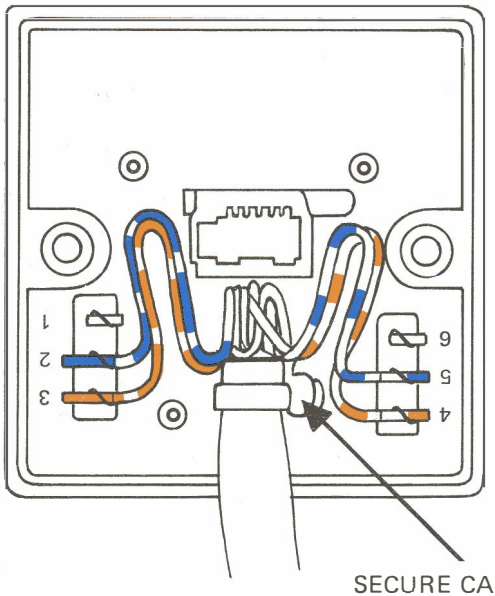
a. Before screwing the socket back box to the wall, carefully pierce one of the access points so as to provide an entry point for the cable. Thread the cable into the back box and then screw the back box to the wall so that the two threaded holes are horizontal.

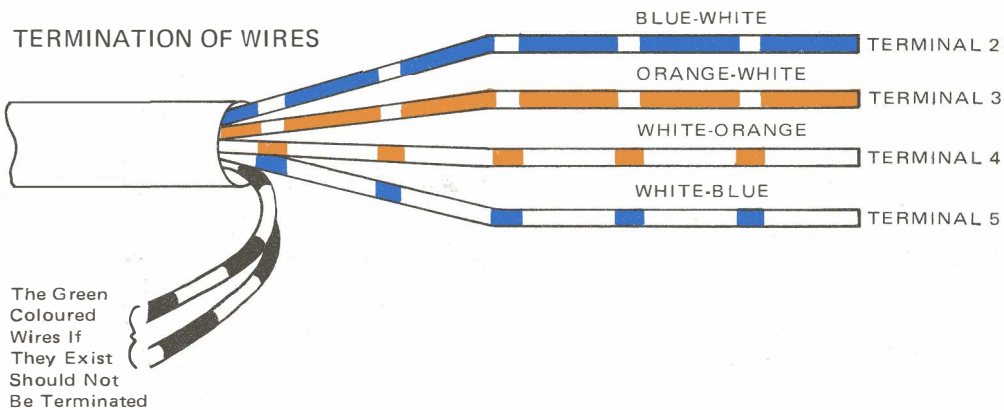


b. Carefully remove the outer sheathing of the cable to expose 100mm of the conductors, a rip cord is included within the cable to assist you with this task as shown below.



c. Anchor the cable to the socket using the strap provided, and then use the special terminating tool to terminate the coloured conductors to their correct terminals as shown below. Instructions for using the terminating tool are enclosed in its packaging.



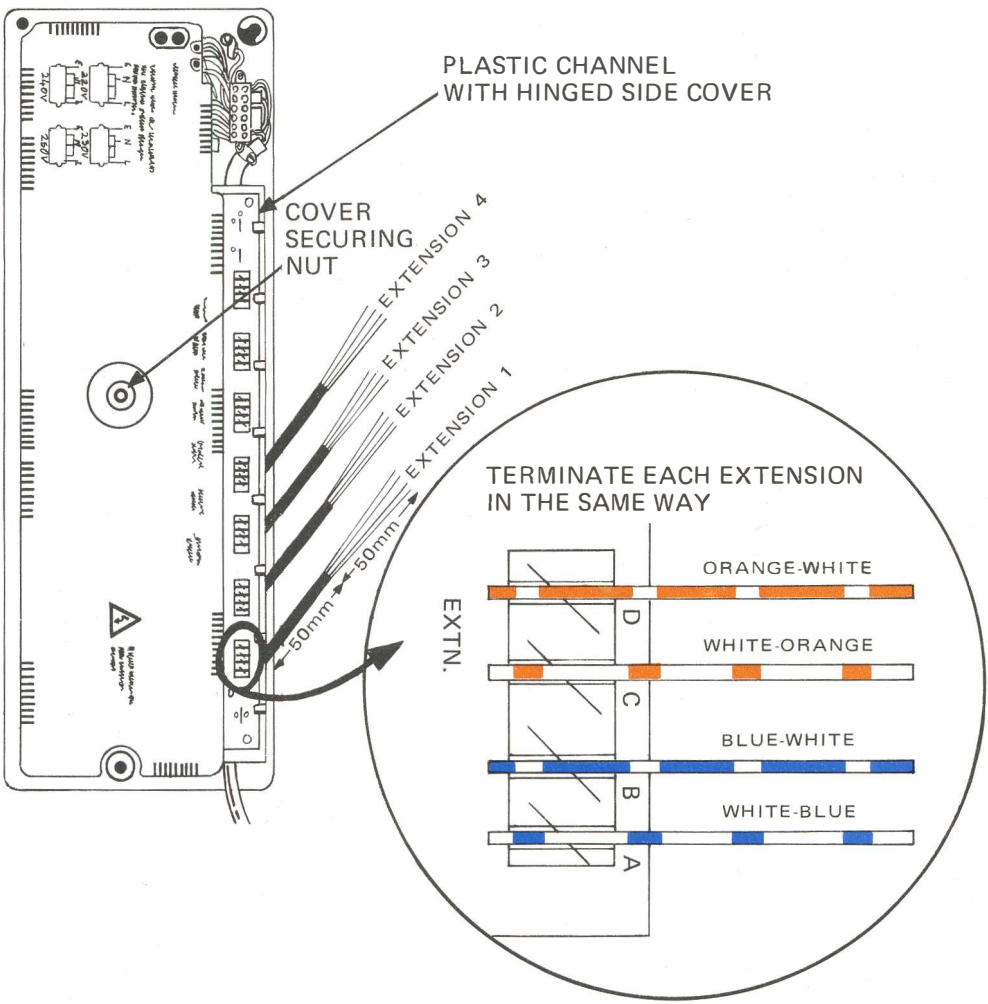


d. Repeat the above procedure for each extension telephone, screwing each socket to its back box as termination is completed. Finally plug in all the extension telephones.

4. Terminating the Extension Cables on the Control Unit

a. Position the cables in the plastic channel beneath the terminal strips, so that approx. 100mm of each cable leaves the channel opposite to its own numbered terminals.

b. Study the illustration below and then terminate the extension cables after removing 50mm of cable sheathing. If an inner safety cover has been fitted on the Control unit, it may be necessary to remove it so that the terminating tool can be used. DO NOT touch any of the components beneath the cover otherwise they may be damaged by static electricity. Replace the cover immediately after termination is complete.



5. Providing the Mains Supply

The control unit is factory wired for working to 240v AC. Before connection however this should be checked against the illustration below, since the mains input settings are adjustable within the range 220V ac. to 250V ac by repositioning the straps on the connection block. Any resetting of the mains supply will be carried out during commissioning.

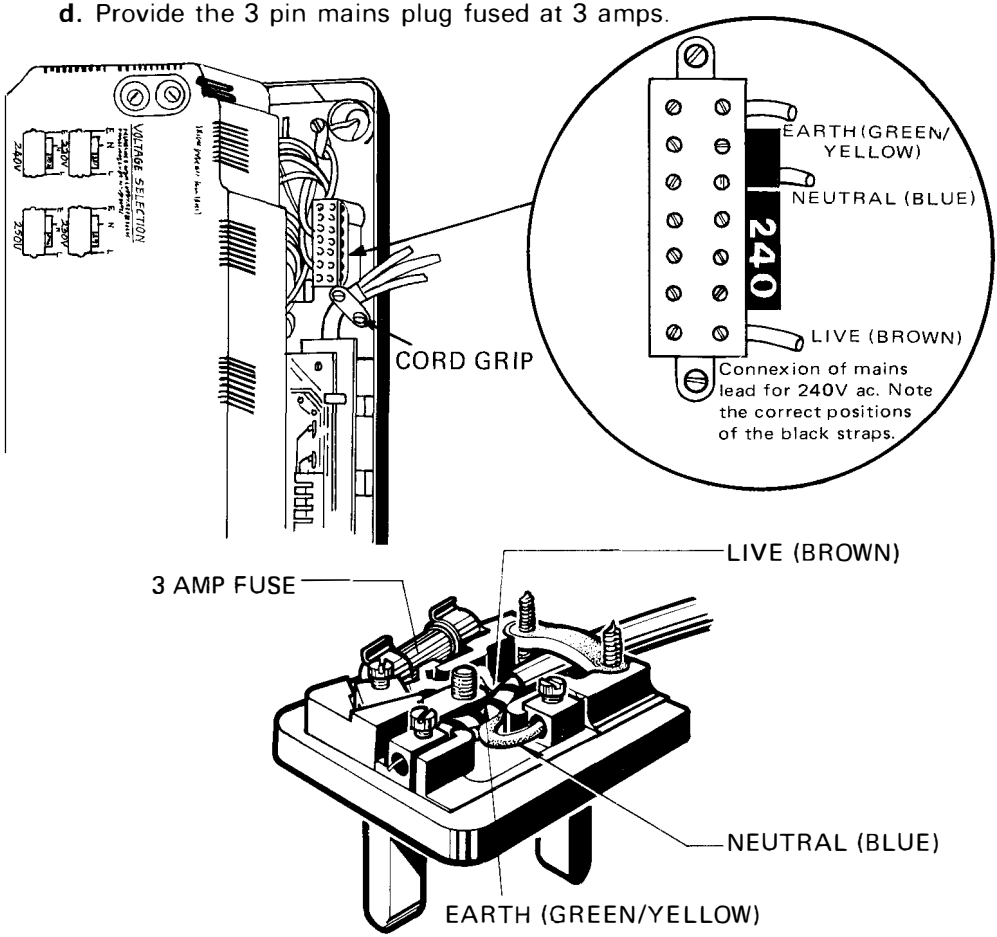
Study the illustration below and then:-

a. Feed the 3 core mains lead up the plastic channel and anchor using the cord grip. Snap the channel cover into place so as to enclose both mains lead and extension cables.

b. Carefully remove the outer sheathing of the mains lead and terminate the conductors in accordance with the illustration, after checking that the 240 volt setting is being used.

c. Replace the control unit cover.

d. Provide the 3 pin mains plug fused at 3 amps.



Apart from connection to the British Telecom Network, or the Main Private Branch Exchange the installation of the AESS is now complete.

Arranging for Commissioning and Connection to the British Telecom Network

The customer is responsible for contacting the local British Telecom office, who will arrange for an engineer to visit in order to test and inspect the installation, and then connect it to the network. A charge will be made for this work.

Arranging for Commissioning and Connection to the Main Private Branch Exchange

The customer is responsible for contacting the approved maintainer of the Main Private Branch Exchange who will arrange for an inspection of the installation and connection if the requirements are met. A charge may be made for this work.

Maintenance

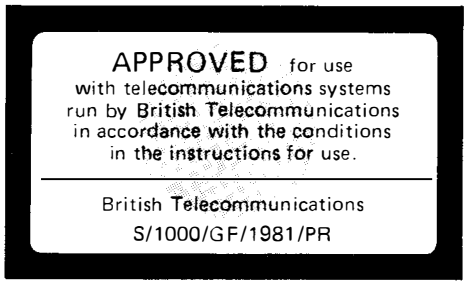
In order to permit connection to the network/main PBX the customer must be in possession of a maintenance agreement. This may be with BT or with any independent maintainer authorised by BSI to maintain the Ambassador ESS system. The supplier of this equipment will be able to tell the customer who is/are the approved maintainer(s).

Information for the approved maintainer of the Main PBX

The Ambassador C.C.U. is factory set for connection to a Main Private Branch Exchange with Earth loop recall facility. Should this facility be required, then an earth from the Main PBX, will be required to be connected the the ''E'' terminal on both Exchange line ports of the Ambassador CCU.

Appendix 1

Should your Ambassador be connected to a Main Private Branch Exchange (Main PBX) then there may be additional restrictions. For information consult the Approved Maintainer of the Main PBX.



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