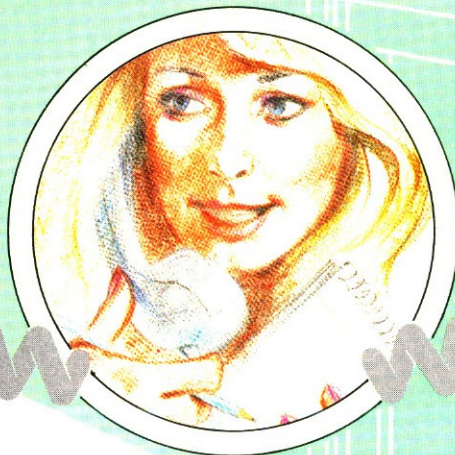
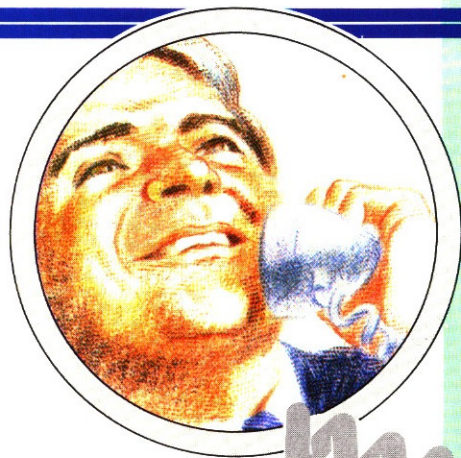


**HIGH *S&C*
LIGHT**

for Smooth Operators



***interline* 3**

INSTALLATION MANUAL

CONTENTS**1. Introduction**

The Interline 3 is a small plan system which allows the connection of two or three extension telephones to one exchange line.

The system is designed to plug into the new telephone sockets adopted within the UK enabling you to install the entire system yourself.

The document gives a step by step explanation of the installation procedure. Please read it carefully before beginning to connect your system. Should you experience any problems, please contact your supplier.

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2. Components Required

Your Interline 3 pack contains:-

- Two GEC Highlight table units, each fitted with a buzzer, indicator lamp and two dialling keys marked 'E' and 'B'.
- One Control Unit complete with a 300 mm, 4-way cord which terminates in a plug suitable for insertion into your telephone socket.
- One small Power Supply Unit (PSU) complete with two power leads.
- Two Dual 'Secondary' sockets.
- One 20m length of 8-way cable to BT specification CW. 1308.
- An Interline 3 User Guide.

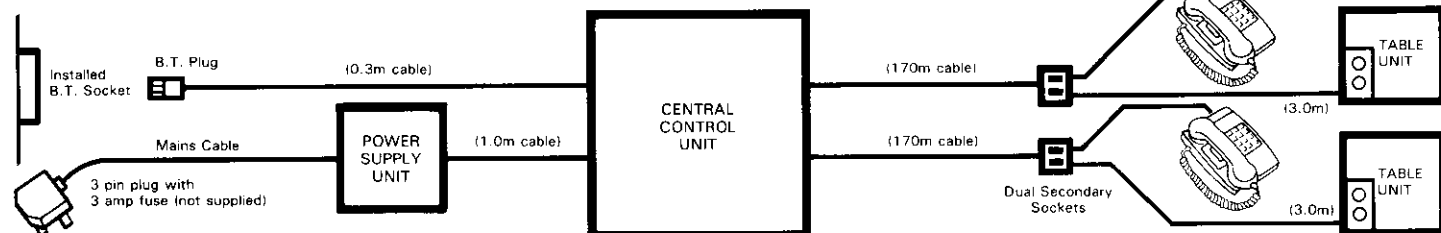
In addition to the above, you will have to provide:-

- Two approved telephones, Tone or Pulse signalling can be used. Please ensure the telephones you are using are of a signalling type that are compatible with your type of exchange line. Most domestic exchange lines accept loop disconnect (pulse) signalling so Loop disconnect telephones should be used in this case. PABX lines mainly use multifrequency (tone) signalling so multifrequency telephones must be used for this kind of installation.

Your telephone user guide will state the type of exchange line the telephone must be connected to.

- One 3 pin plug fitted with a 3 amp fuse.
- The usual range of tools and accessories for small assembly installations i.e. small hammer, screw driver and wall plugs.
- Three small lengths of wire to link the terminal connectors within the dual socket (see table 1).

Fig.1 Layout of the Interline 3 table unit system.



3. Control Unit Location and Installation

Before installation can begin, you must decide on the following points:-

- a) The position of the CCU.

Bear in mind the position of your chosen exchange line socket and mains supply in relation to the length of the power supply lead and line cord. You can plug into a main or extension socket.

The chosen location should be as free from dust and humidity as possible and not in the vicinity of steam pipes or vents. It should be readily accessible and isolated from heavy electrical switchgear. It should not receive direct sunlight.

- b) The position of the two extensions.

Remember to consider the routing of the Telephone cable in each case. Avoid laying cable under floor covering where it may be stepped on. Take precautions if you run the cable through a doorway to ensure it is not damaged when the door is closed.

3.1 REMOVING THE FRONT COVER OF THE CONTROL UNIT

WARNING: Before removing the front cover, ensure that **BOTH** mains supply plug **AND** the line jack are disconnected.

Use a small screwdriver to release the retaining screw in the centre of the Control Unit. Remove the cover.

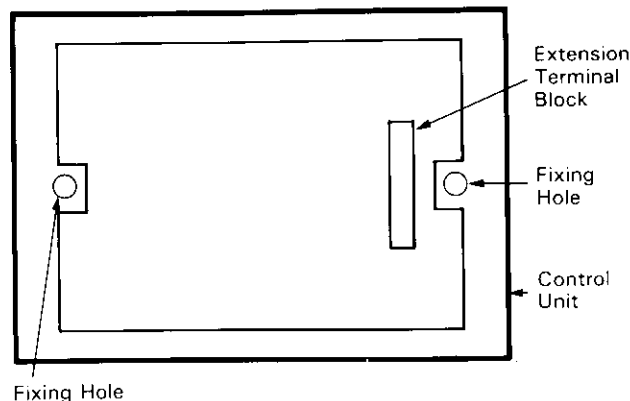
3.2 SECURING THE CONTROL UNIT

N.B. The Control Unit should be horizontally mounted on the wall as in Fig. 2. Ensure that the position selected allows an uninterrupted air flow around the unit.

Mark the position of the two fixing holes onto the mounting surface. The two fixing holes are found in the base plate at either end. See Fig. 2.

Drill and plug (if necessary) the fixing holes and securely fasten the CCU to the mounting surface.

Fig. 2. Position of Fixing Holes



4. Dual Sockets

The Dual Sockets provided are simply two telephone sockets built into one. The circuitry and connectors for each single socket, within the dual socket are completely separate. For ease of installation, Fig. 3, the diagram of the socket has been divided into its two single sockets. Each part has been labelled socket part A (for the table unit) and socket part B (the telephone extension).

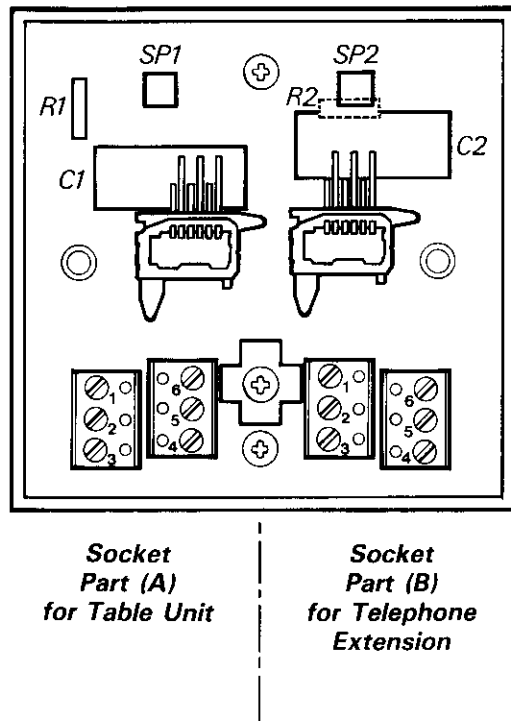
N.B. Whenever a screw terminal from the 'EXTN' block, within the control unit, is to be connected to a terminal in both part A and part B of the dual socket, a wire link must be connected between the two terminals within the socket, i.e. terminal 5 from the control unit must go to terminal 5 on both socket part A and socket part B. Therefore terminal 5 on socket part A must be wire linked to terminal 5 on socket part B.

4.1 SHUTTERS

Each of the two socket apertures, found on a dual socket, is covered by a small shutter to protect it from dust etc. Use the end of the telephone or table unit plug to lift the shutter when plugging in. The plug is designed so that it will only fit the correct way round.

To remove a plug from a socket, squeeze the small locking lever on the side of the plug and carefully pull the plug away from the socket.

Fig. 3 Dual secondary socket terminating positions.



5. Laying the Telephone Cable

The telephone cable is used to connect the sockets provided, to the central control unit. The cables must not be run or fixed within the vicinity of electricity supply cables or passed overhead between buildings.

- Lay the telephone cable for the first extension over the chosen route and secure it about every 450mm. Cut the cable to the required length allowing a small amount extra incase of error. Please note that the maximum distance between the central unit and a socket is 170 metres.
- Carefully remove the outer sheathing from each end of the cable to expose about 50mm of the eight coloured wires within.
- Remove about 6mm of insulation from each end of the following coloured wires.

Blue white	(BL - WH)
White blue	(WH - BL)
Green white	(GN - WH)
White green	(WH - GN)
Orange white	(OR - WH)
White orange	(WH - OR)

Connect the wires from the terminal block labelled 'EXT' within the control unit, to the socket connectors.

See Table 1 and Fig. 4 for details.

Table 1

Wire Colour	Central Unit	Dual Socket	
	Terminal Block Number	Connector Number on Socket Part A for table unit (see fig. 3)	Connector Number on Socket B for telephone ext. (see fig. 3)
BL WH	1	1	not connected
WH BL	2	2	2
GN WH	3	3	3
WH GN	4	4	not connected
OR WH	5	5	5
WH OR	6	6	not connected

Note: Wire links are required between terminal 2 of socket A and terminal 2 of socket B, terminal 3 of socket A and terminal 3 of socket B and terminal 5 of socket A and terminal 5 of socket B.

Repeat this procedure for the second and third dual sockets as necessary. See Fig. 4.

5.1 PABX WORKING

If the system is to be connected to a PABX where a recall function is required, a seventh wire must be connected as stated in Table 2.

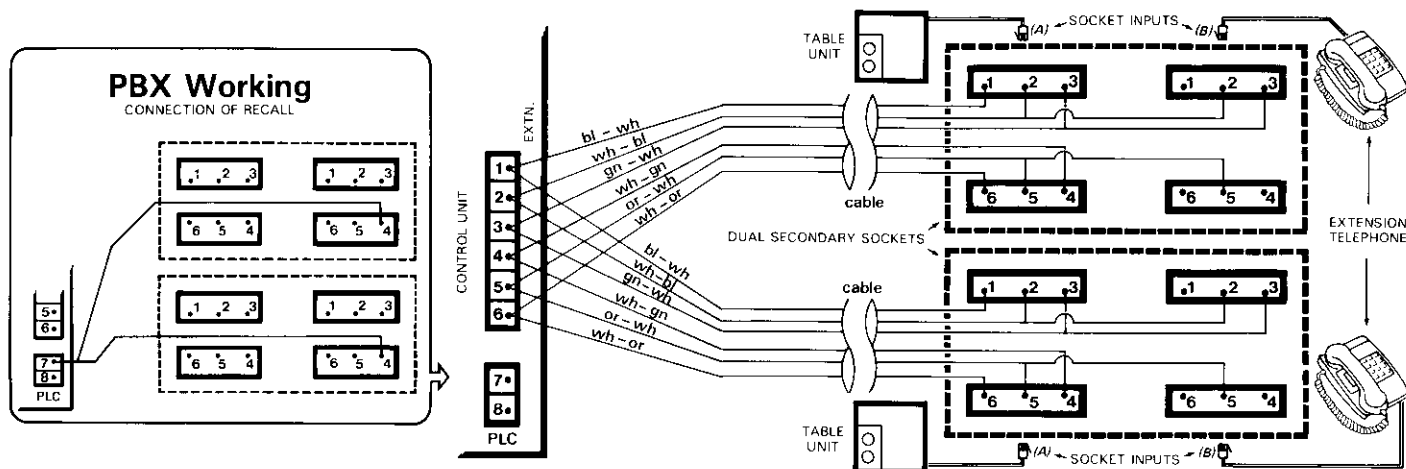
See also Fig. 4.

Table 2

Wire Colour	Central Unit	Dual Socket	
	Terminal Block Number	Connector Number on Socket Part A for table unit	Connector Number on Socket B for telephone ext.
Brown-White (BR-WH)	7		4

A telephone with Earth loop Recall must be used as an extension.

Fig. 4 Interline 3 Table Unit connection diagram



6. Power Supply Unit

WARNING:- DO NOT CONNECT THE MAINS SUPPLY UNTIL INSTALLATION IS COMPLETE.

The Interline 3 requires a 240v 50 Hz power supply.

The brown and blue leads from the PSU should be terminated to the live and neutral pins respectively of a 3 amp fused plug. (See Fig. 5).

The black and black/white leads from the PSU should be terminated on the terminal block marked 'PLA' at the bottom left hand side of the Control Unit. The connection of these leads is not polarity conscious therefore it does not matter which wire goes to which ac terminal.

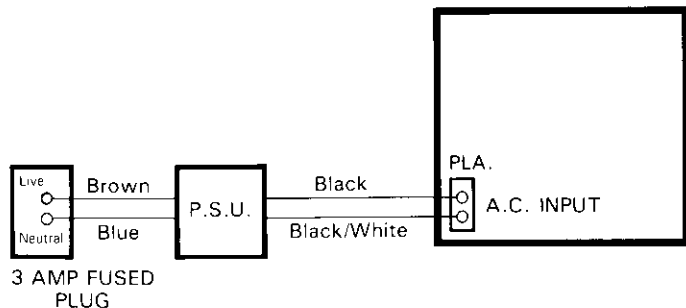
The output characteristics of the power supply unit are as follows:-

Output voltage: 25 volts A.C.

Output current: 0.5 amps

The PSU meets the requirements of BS6301

Fig. 5 P.S.U. Connexion Diagram



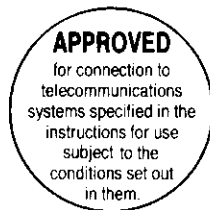
7. Completion

When all wiring is complete:-

- Replace the cover on the central unit, ensuring all cables pass through the correct entry point. (You will experience difficulty in replacing the cover if this is not done).
- Replace the covers on the secondary sockets.
- Plug an Interline 3 table unit and a telephone of your choice into each socket. Please ensure the table unit plugs into part A of the socket or you will be unable to use the facilities of the Interline 3. See Fig. 3.

8. System Testing

- a) Do NOT plug in the central unit into the exchange line socket at this stage.
- b) Plug in the system to the mains supply and switch on the power.
- c) Follow the User Guide instructions and make an internal call from one telephone to another. Make sure the buzzer is working correctly and you can talk clearly between the two telephones.
- d) If the system is working correctly, plug the central control unit into the exchange line socket.



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