

INSTALLATION GUIDE

MINIMASTER 3

(2 +10)

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1 GENERAL DESCRIPTION

The MINIMASTER 3 is a mains powered microprocessor controlled switching system of 2+10 capacity. The system comprises a wall mounted Central Control Unit (CCU) with up to two exchange lines and up to ten two wire telephones.

The CCU measures approximately 385 mm x 280 mm x 80 mm and weighs 3.5 Kg.

The CCU contains

- (a) the circuit board which carries all the circuitry and terminal blocks for the system.
- (b) the power unit which is connected to a 3 metre long mains cable which is terminated in a mains plug fused at 3 amps.

The telephones which are star connected to the CCU may be any standard telephone using loop/dis pulsing.

(See page 8)

Fig 1 Minimaster 3 CCU

(See page 9)

Fig 2 GENERAL ARRANGEMENT OF CCU

2 INSTALLATION

Installing the CCU. Do not connect the mains supply to the CCU until all wiring and cabling is completed. First remove the cover by loosening the 4 captive screws recessed into the corners of the lid.

The CCU should be screwed to a suitable wall using the 4 fixing holes in the base.

Drill 4 holes into the wall to the dimensions as shown in Fig 3 to take No 8 x 25 mm counter sunk screws.

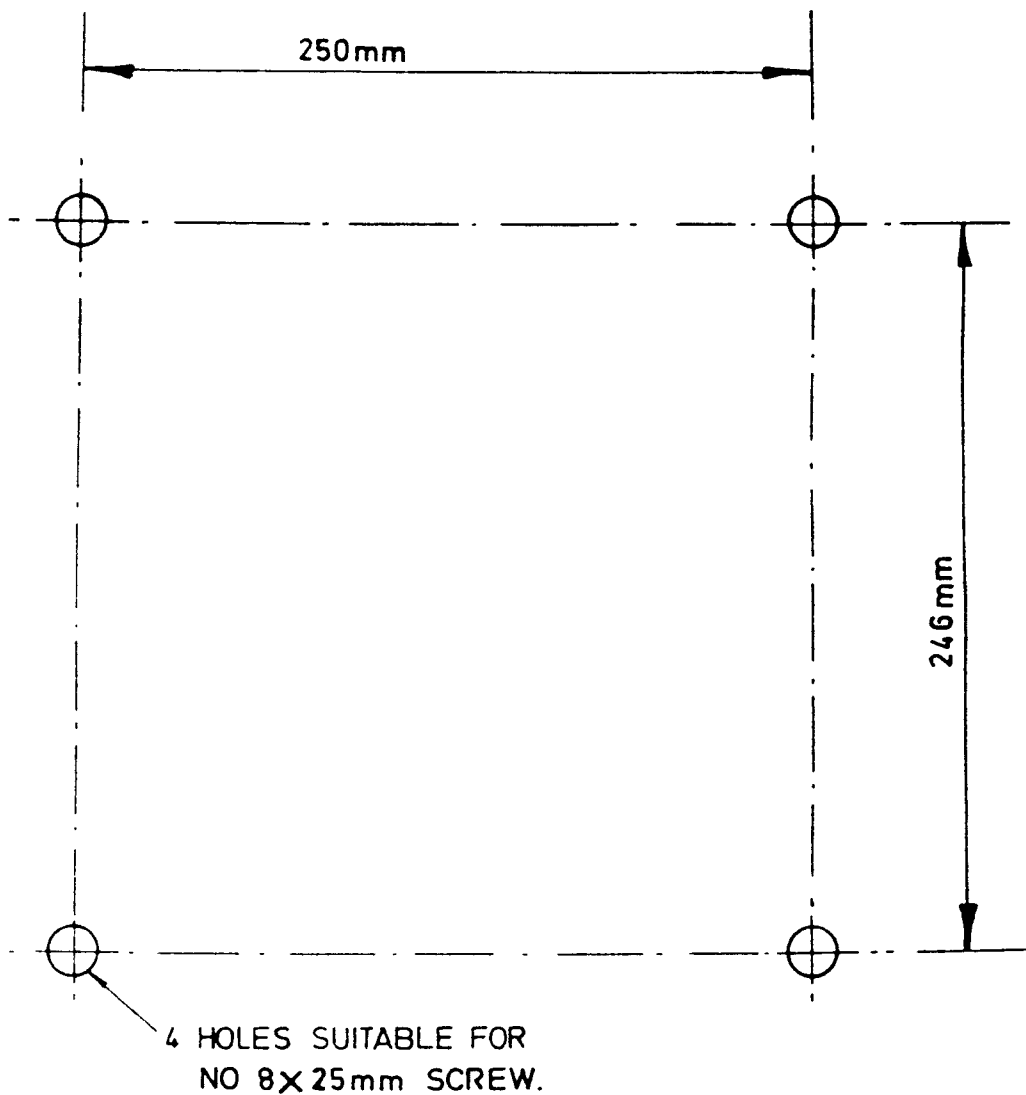


Fig 3

Screw two No 8 x 25 mm counter sunk screws into the top two holes to a depth of approximately 15 mm . Hang the base of the CCU on these 2 screws using the keyhole slots. Put two more No 8 x 25 mm counter sunk screws through the lower fixing holes and screw in until tight. Now screw the two top fixing screws in until they are tight.

After fixing the CCU and before cabling the system, remove the cover from the mains cable terminal block and check the mains cable is terminated correctly.

green/yellow conductor to the green/yellow of the system
the brown conductor to the red (or brown) terminal of the system
the blue conductor to the black (or blue) terminal of the system

After checking the terminations of the mains cable, replace the terminal block cover.

2.1 WIRING

All cables enter the CCU via 4 holes in the lower edge of the base. The cables terminate on Insulation Displacement Termination (IDT) except the earth which terminated under screw terminals.

2.1.1 TELECOM EARTH CONNECTION

A hard wired earth connection must be made from the earth terminal in the CCU to a proven building earth point using a 1.5mm sq insulated earth wire. The earth connection should be confirmed using a Line Earth Loop Impedance Test and not exceed 4 ohms. Do not bond to mains of plug.

2.1.2 EXTENSION WIRING

Extensions are radially wired as ordinary two wire telephones with the cables connected to A and B on the IDT blocks. At the extension, cables are connected to "Phonesocket" master line jacks as required. When 2 exchange lines are provided both extensions 21 & 22 must be equipped.

2.1.3 EXCHANGE LINES

Exchange Line cables are fed via the holes in the base of the CCU to the IDT connectors marked Exch 1, Exch 2. (See note 2 on page 6.)

2.2 CABLING DISTANCES

To ensure satisfactory operation of the system, the maximum loop resistance for extensions is 200 Ω . This is equal to a 1190 metre run of 0.5mm copper cable.

3. "SETTING UP" THE SYSTEM

When the installation wiring has been completed and before the CCU cover is replaced the system should be "Set-up". A block of 4 switches is mounted at the top left hand side of the PCB (See

fig.4) which have to be set to achieve the required facilities.

(See page 10)

FIG 4

Arrangements of SW1, SW2 and SW3 give a ringing option as follows:

SW1	SW2	SW3	RINGING SEQUENCE
OFF	OFF	OFF	Incoming calls ring extn 21 only. This option is barred for systems with 2 lines.
ON	OFF	OFF	Incoming calls ring extn 21 for 20 seconds, then rings extn 22 for a further 20 seconds. If the call is not answered the cycle is repeated.
ON	ON	OFF	Incoming calls ring extn 21 first, then after 20 seconds rings extn 22. After a further 20 seconds extn 23 is rung, if the call is not answered in a further 20 seconds the cycle is repeated.
ON	ON	ON	Incoming calls ring extn 21 first, then after 20 seconds, rings extn 22. After a further 20 seconds extn 23 is rung continually. Only select this option if a central bell is equipped at extn 23.

NOTE 1

Select option 4 if central bell is required.

NOTE 2

If only 1 exchange line is connected to the system it must be connected to the 'Exch 1' position and SW4 must be set to 'ON'.

Replace the cover on the CCU and screw in the 4 recessed screws until the cover is secure.

4 TESTING

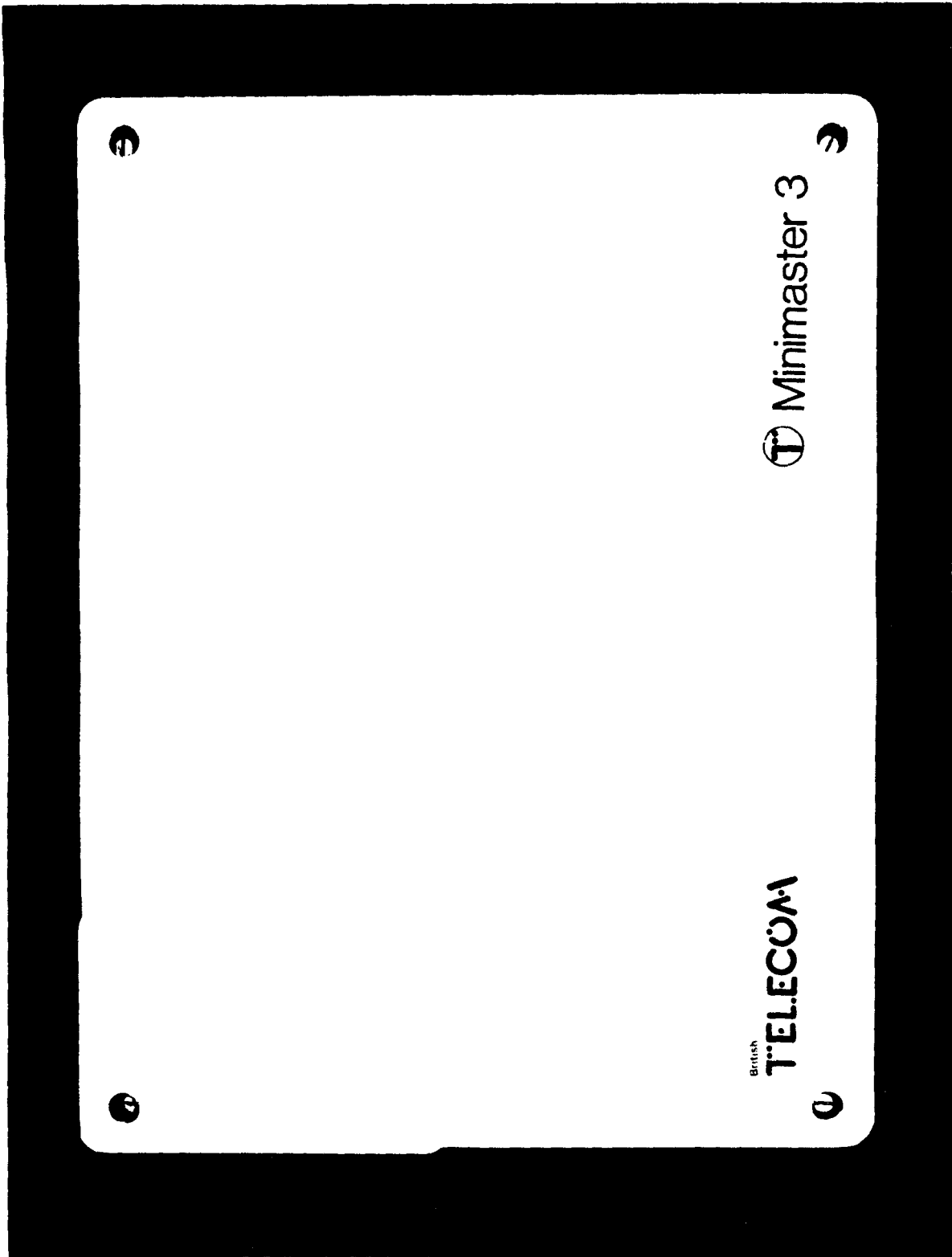
Before plugging in the mains lift off the handset of extension 21 and check that exchange dial tone is heard. Lift off the handset of extension 22 if 2nd exchange line is provided and check that exchange dial tone is heard.

Plug in the Minimaster 3 to the mains. Lift off the handset of each fitted extension, check that internal dial tone is heard, and make a call on each of the exchange lines by dialling 9. Dial '31' and '32' for exchange lines 1 and 2 respectively. Make internal calls to each fitted extension and check that the appropriate telephone rings.

Arrange to have an incoming call made on each fitted exchange line, and check that extensions 21, 22 and 23 ring in response as determined by Switch 1 and 2 settings.

5 FACILITIES

- 5.1 Internal calls from all extensions
- 5.2 Line access for external calls from all telephones
- 5.3 Selection of defined exchange line
- 5.4 Call hold/enquiry
- 5.5 Call transfer
- 5.6 Call diversion
- 5.7 3-party conferencing
 - 1 Exchange Line + 2 Extensions
 - or
 - 3 Extensions
- 5.8 Incoming exchange line calls may ring up to three extensions in sequence or may just ring one extension
- 5.9 Any extension may answer an incoming call
- 5.10 Night Service



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