

**KT2 Terminals
for use with KBX3 & 6**

**TMC
Limited**

**Installation/
Operating Instructions**



PHILIPS

INSTALLATION

(a) Using BT Master Line Jack Unit

Connect line jack units to central unit as per table, using 3 pair cable.

Central Control Unit Extension Connections

A
B
C
D
E

LJU Connections

2
5
4
1
6

* (b) Using Western Electric Sockets

Connect Western Electric Sockets to central unit as per table, using 3 pair cable.

Central Control Unit Extension Connections

A
B
C
D
E

Western Electric Socket Connections

4
3
5
1
6

NOTE:

1. FACILITIES MARKED WITH A “*” ARE NOT YET APPROVED BY D.T.I.
2. CENTRAL CONTROL UNIT TO TERMINAL INSTRUMENT LINE LOOP RESISTANCE (SPEECH PAIR ONLY) 50 OHMS (MAX).

OPERATING INSTRUCTIONS

Except for the additional exchange line and terminals available, these instructions apply equally to both KBX3 and KBX6 installations.

Extension Buttons— Used to call another extension

Exchange Button(s)— Used to connect a terminal to an Exchange line

'F' Button— Used to set up conference calls and to program the divert and exchange ringing facilities.

* 'R' Button— Provides a recall function when connected to a PBX

Exchange Line Lamp— Has five states:

OFF (At all terminals)—exchange line free

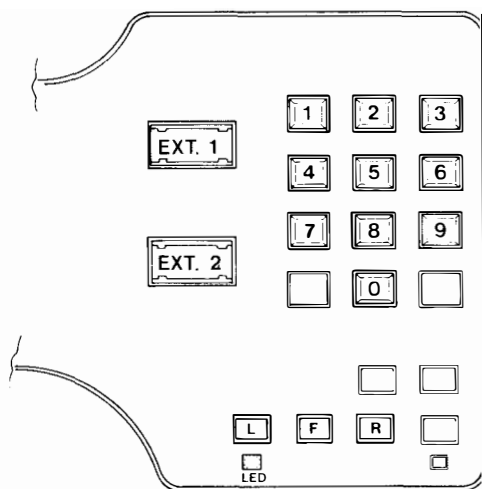
ON (At all terminals)—exchange line engaged

Fast Flash (one terminal only)—exchange line being held by that terminal

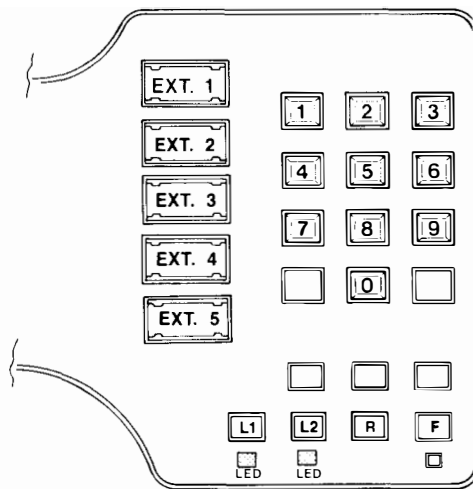
Slow Flash (two terminals)—terminal is being called while connected to an exchange line

Flashing in time with exchange ringing—incoming exchange call

Internal Calling Device—Exchange ringing if programmed. Even ringing indicates an intercom call



KBX 3 LD BASIC
NB. FOR MF VERSION * & □
BUTTONS ARE FITTED.



KBX6 LD BASIC
NB. FOR MF VERSION * & □
BUTTONS ARE FITTED.

MAKING AND RECEIVING INTERCOM CALLS

Lift the handset and press the extension button for required extension. (If the intercom is in use speech will be heard as the handset is lifted.) The internal calling device in the called extension will ring on an even cadence.

Lifting the handset at the called terminal connects the call. The call is cleared by both parties replacing their handsets.

MAKING AN EXCHANGE CALL

Lift handset and press a free line button (lamp not lit). The lamp for that exchange line will light on all terminals, indicating that the line is engaged. The call can now be set up by direct dialling or connection through the operator.

- * The hook switch (cradle switch) can be flashed to obtain the exchange operator's attention, or the 'F' button flashed to obtain PBX operator's attention. The call is cleared by both parties replacing their handsets.

RECEIVING AN EXCHANGE CALL

An incoming call (exchange ringing) causes the associated exchange line lamp on every terminal to flash and the calling device to ring at those terminals programmed to receive exchange ringing (see exchange ringing).

The call may be answered from any terminal by lifting the handset and pressing the associated exchange line button.

The exchange line lamps on all terminals will change to lit steady, indicating that the exchange line is engaged, and the ringing will cease.

When the only terminal programmed to receive exchange ringing is engaged, an incoming call on that line will ring all other free terminals.

The call is cleared by both parties replacing their handsets.

HOLDING AN EXCHANGE CALL

Press the associated exchange line button once. This holds the exchange call and connects the terminal to the intercom; the associated exchange line lamp flashes rapidly. The holding terminal can now make or receive an intercom call or, on the KBX6 system, make or receive another exchange call if the other exchange line is free. Alternatively the required extension button may be pressed to hold the exchange line and ring the extension.

In either case, if the handset is replaced without reconnecting the held call, the holding terminal's calling device will ring at a fast rate until the call is reconnected.

The held exchange call is reconnected by pressing the associated exchange line button again, when the exchange line lamp returns to its steady-on state.

There is no limit to the number of calls which may be made or extensions rung to obtain an answer while holding an exchange call. In the KBX6 system, a terminal can hold both exchange lines simultaneously.

TRANSFERRING AN EXCHANGE CALL

Press the required extension button, or the connected exchange line button followed by the required extension button: the exchange line is held and the extension rung. When the extension answers, the call may be transferred by replacing the handset at the transferring station or pressing the associated exchange line button at the called terminal. In the latter case, the transferring terminal will remain connected to the intercom and may make a follow-on call.

An exchange line may be transferred as many times as required.

CONFERENCE CALLS

This facility enables any two terminals to be connected to an exchange call.

With an exchange call in progress, press the required extension button (this holds the exchange call). When the called extension answers, press the 'F' button to connect both terminals to the held exchange line and to free the intercom.

The conference call set up is cleared when both terminals have replaced their handsets.

POWER FAIL OPERATION

Terminal 1 (and terminal 4 for exchange line 2 in a KBX6 system) is the power fail terminal. Exchange calls to or from these terminals remain connected at power failure. During power failure, a power fail terminal can make and receive exchange calls. Calls in progress at power restoration are not interrupted.

All other terminals and facilities are inoperative and any calls in progress at power failure are lost.

NIGHT SERVICE

Night Service (Power off) is provided as follows:—

- Terminal 1 in a KBX3 or terminals 1 and 4 in a KBX6. This is similar to the power fail operation.
- An external extension connected in place of terminal 1. (Refer to external extension option).

- Incoming exchange calls (exchange line 1 only in a KBX6) ring the sounder of the external extension. The call is answered by lifting the handset.
- Outgoing calls are made by lifting the handset of the external extension and waiting approximately 10-15 secs. for exchange dial tone or the local exchange operator to answer.

PROGRAMMABLE FACILITIES

The divert and exchange ringing facilities can be programmed into or out of a terminal at any time.

It should be noted that facilities programmed in are lost if the power to the central unit is switched off or fails. They must therefore be reprogrammed at restoration of power.

DIVERT

Any terminal can divert all incoming calls to another terminal as shown below:—

- * Terminal 1 to Terminal 2
- * Terminal 2 to Terminal 1
- Terminal 3 to Terminal 1
- Terminal 4 to Terminal 2
- * Terminal 5 to Terminal 6
- * Terminal 6 to Terminal 5

* Where a pair of terminals can only divert to each other, only one terminal at a time can use the divert facility.

To initiate a divert, lift the handset, press the 'F' button, followed by extension 1 button and replace handset. All calls will now be diverted to the terminal as above.

The divert facility is cancelled by lifting the handset on the diverting terminal, pressing the 'F' button, followed by extension 2 button, and replacing the handset.

EXCHANGE RINGING

Any terminal may be programmed to receive incoming exchange ringing on its calling device, in addition to flashing exchange line lamp signalling.

Lift handset, press the 'F' button, followed by the exchange line button for which ringing is required and replace handset. Repeat the procedure for the second exchange line on the KBX6 system if ringing is required from both exchange lines.

Programmed exchange ringing is cancelled by lifting the handset, pressing the 'F' button twice and replacing the handset. Under power fail conditions exchange line 1 is connected to terminal 1 and exchange line 2 to terminal 4 automatically.

OPTIONS

The various options available on the KBX3 and KBX6 may be implemented or cancelled at any time by the local service engineer.

EXCLUSIVE LINE (KBX6 ONLY)

This option allows exclusive use of exchange line 2 by terminal 4 or its diverted terminal. Once an external call has been set up to terminal 4, it can be transferred to any other terminal in the normal way.

When the exclusive line option is operative, diversion from terminal 4 is possible in two modes and is controlled from terminal 4:

DIVERT

All calls are diverted to terminal 1, not terminal 2 as described under 'Divert'.

A diversion is implemented by lifting handset, pressing 'F' button, followed by extension 1 and replacing handset. All calls will be diverted to terminal 1 until the divert is cancelled.

EXCLUSIVE DIVERT

All calls are diverted to terminal 1 except incoming calls on exchange line 2.

An exclusive divert is implemented by lifting handset, pressing the 'F' button, followed by extension 3 button and replacing handset. All calls except those on exchange line 2 will be diverted to terminal 1 until divert is cancelled.

The divert or exclude divert facilities are cancelled by lifting the handset, pressing the 'F' button, followed by the extension 2 button, and replacing the handset.

The exclusive divert may be changed to non exclusive divert by lifting handset, pressing the 'F' button, followed by the extension 1 button, and replacing the handset. All calls will now be diverted to terminal 1.

*** EXTERNAL EXTENSIONS**

External (2 wire) extensions with limited facilities may be fitted in place of terminals 1 and/or 3.

During normal (daytime) use, lifting the handset connects the external extension to terminal 2. The call can then be connected to another KBX terminal (terminal 2 rings the wanted terminal and then replaces handset when the call is answered or transfers the external extension to an exchange line—presses a free exchange line button and replaces the handset when the exchange line is connected).

If terminal 2 fails to answer within 15 seconds, an external extension connected in place of terminal 1 will be automatically connected to exchange line 1 if free.

APPROVED for use
with telecommunication systems
run by British Telecommunications
in accordance with the conditions
in the instructions for use



PHILIPS

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