TELEPHONE EQUIPMENT

Systems 1, 2, 3 and 15 described in the following pages represent simple exchange-connected extension plans providing low-cost dependable telephone service. They are particularly suitable for small organisations and fulfil all main requirements for extension plans covering secretarial, parallel-extension, external-extension and dual exchange-line working. Connection can be made to any type of automatic or c.b. exchange, public or private.

The Plan Etelphone

The Plan Etelphone is the basic instrument for all extension plans and is a variant of the Etelphone (see data sheet No. 7099). Desk and wall-mounted versions are available.

The instrument case and the handset are moulded in high-impact plastic and produced in black, ivory and two-tone grey. Colours are virtually light-fast, ensuring a close colour match of replacement parts.

The handset cord is the coiled extensible type, sheathed in p.v.c. and coloured to match the telephone. Instrument colour matching also applies to the desk block and its associated line cord, provided the number of line-cord leads does not exceed six. In excess of this number the desk block and line cord are provided in elephant-grey.

A carrying handle and performance regulator unit are included in the instrument.

The dial (when fitted) has a clear-plastic finger plate, standard numbering (i.e. 1 to 0) and transmits 10 p.p.s. with 2:1 break/make pulse ratio. Alternatively, dials can be supplied with any desired numbering, pulse speed and ratio.

Main Features

Pressbuttons arranged in line above the dial are locking and/or non-locking and up to four in number.

Locking pressbuttons are arranged to provide:

- (a) Automatic release after depression of the switch-hook or another inline locking pressbutton
- (b) Manual release by means of an integral sliding cap. (Note: a pressbutton with this action provides simple on/off switching for such purposes as instrument-bell control.)

A fifth pressbutton is incorporated to the right above the dial when transfer or recall facilities are required.

In-line pressbuttons are forest-green on ivory telephones and elephant-grey on black and two-tone-grey instruments. Dummy pressbuttons, when fitted, are the same colour as the handset.

Visual signalling can be provided, the lamp lens being accommodated in the left-hand area of the case above the dial. Audible signalling is by a.c. bell and d.c. buzzer. Either or both units can be incorporated in the telephone according to the extension-plan requirements and can be supplemented by similar wall-mounted units.

The a.c. bell signals incoming calls from the main exchange. In-built transistor ringing generators provide a.c. ringing current for external-extension signalling. The d.c. buzzer signals calls between internal extensions situated in or nearby the same building.

Line limits between internal extensions with 6V local signalling allow for loop resistances of up to 10Ω , this being equivalent, for example, to approximately 200ft (61m) of $6\frac{1}{2}$ lb/mile (0.5mm) conductor.

Plan-Etelphone Systems

Between an external extension and the main exchange the loop resistance may be up to 1000Ω .

Additional Features

Tropical finish with coils suitably impregnated and metal parts specially finished.

Instrument-bell control permitting immediate bell-volume adjustment.

Handset amplifier for users with impaired hearing. Gives finger-tip control of the level of reception (see data sheet No. 7056).

Operator recall enabling the user engaged on an exchange call to recall the PBX operator for enquiry or call-transfer purposes.

Key-operated dial lock preventing unauthorised calls. Fitted on table instruments only.

Conversion parts to equip c.b. instruments for auto working and table instruments for wall mounting.

Power Requirements

When required, local power supplies for signalling and transmission can be derived from a 6V dry battery, or a 6V 1A power unit connected to the mains supply (100 to 110V or 200 to 250V a.c.).

Power-unit dimensions: $6\frac{1}{2}$ in. $\times 4\frac{5}{8}$ in. $(165 \times 117 \times 117$ mm).



BUTTON MARKINGS ENG OFF DESK BLOCK DESK BLOCK DESK BLOCK DESK BLOCK OFF DESK BLOCK DESK BLOCK DESK BLOCK DESK BLOCK

Plan-Etelphone Type 1

Internal System

AN INTERMEDIATE TELEPHONE WITH EXTENSION SWITCHING AND INTERNAL EXTENSIONS HAVING DIRECT EXCHANGE-LINE ACCESS.

This Plan system is suitable for up to two executives served by one exchange line and requiring incoming calls to be filtered at an intermediate (secretarial) point. Basically similar to BPO plans 105 and 105A it provides two significant service features: (a) the automatic holding of exchange calls at the secretary's intermediate telephone and (b) direct access to the exchange line from the executives' extension telephones, dispensing with the need for secretarial assistance.

The intermediate (secretary's) telephone is simple to operate. It incorporates four pressbuttons. The outer two, designated RING 1 and RING 2, are used for selective calling of extensions; the inner two, designated EXCH and EXTN, are for switching functions. Exchange calls are answered by pressing the EXCH button and then offered to either extension as required by first pressing the EXTN button, followed by the appropriate RING button. The exchange call is held automatically while the call is offered and is trans-

ferred automatically when the handset at the intermediate telephone is replaced. Should the extension user not accept the call, the EXCH button is re-pressed to permit return to the exchange line.

If the intermediate instrument is temporarily unattended, an exchange call can be signalled at either extension on manual release of the bell on/off pressbutton, and the call accepted. During exchange calls at either extension, the 'engaged' lamp glows at the intermediate.

Main Facilities

Intermediate to exchange with buzzer available for extension calls. Extensions cannot overhear.

Intermediate to extension with bell across the exchange line. The secretary at the intermediate can ring and speak to either extension.

Information call from intermediate to extension while the exchange line is held. The exchange caller cannot overhear.

Transfer of exchange calls from the holding circuit to the wanted extension. Direct access to the exchange line at both extensions when all buttons at the intermediate are normal.

Additional Facilities

Secrecy on extension-to-exchange calls by simple strap adjustment. If nonsecret working is imposed, the intermediate (secretary) may join the conversation.

Intermediate recall permits either extension user to recall the intermediate during an exchange call. The 'engaged' lamp glows at the intermediate when either extension engages the exchange line.

Selective calling from the intermediate to either extension, if there are two.

Direct calling from either extension to the intermediate.

Extension - to - exchange calls made direct without switching through at the intermediate

Exchange calls received at either extension when the intermediate is unattended.

Power and cabling A 6V battery or power unit is required at the intermediate instrument.

Cable supplied as required; 6-way for installations with one extension and 7-way for installations with two extensions.

BUTTON MARKINGS RING1 RING2 RING3 RING4 — 4 PRESSBUTTONS Extra bell DESK With exchange bell and pressbuttons TO EXCHANGE 3 Wires plus 1 per extension TO OTHER EXTENSIONS

Plan-Etelphone Type 2

Internal System

A MAIN TELEPHONE AND PARAL-LEL EXTENSIONS.

This is a simple system suitable where one exchange line is required to serve several internal extensions, possibly in separate rooms. Exchange calls are answered at the main telephone and passed to the wanted extension.

The main telephone is equipped with four pressbuttons and an a.c. bell. Extension instruments include a d.c. bell but are not equipped with pressbuttons. Neither secrecy nor inter-

communication between extensions is provided. Power for local signalling is not required since exchange-line potential is used for extension ringing.

Facilities

Exchange calls signalled by a.c. bell at the main telephone.

Up to four extensions connected in parallel with the main telephone.

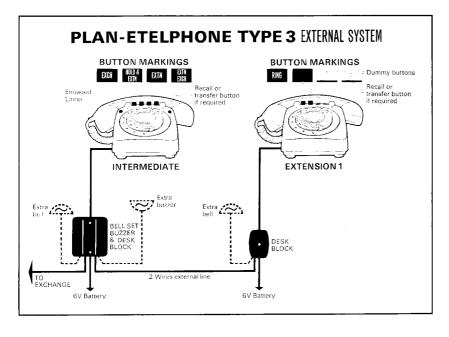
Selective ringing by the main-telephone user of any one or more extensions.

Exchange calls made direct from any telephone.

Auto or c.b. exchange-line working.

Bell-tinkle suppression at the main telephone when dialling is in progress at an extension.

Cabling supplied as required. The basic requirement is for three conductors, with one additional conductor per extension.



Plan-Etelphone Type 3

External System

AN INTERMEDIATE TELEPHONE WITH EXTENSION SWITCHING AND AN EXTERNAL EXTENSION.

This Plan system is suitable for users with one exchange line serving two locations some distance apart, for example, a shop and associated warehouse. It consists of an intermediate and an external-extension telephone connected by a 2-wire line. Bothway signalling between intermediate and extension is by in-built transistor ringing units.

The loop resistance between the external extension and the main exchange can be up to 1000Ω .

At the intermediate telephone, four locking pressbuttons are provided for the following switching and signalling functions:

Intermediate to exchange with a.c. buzzer across the extension line. Extension cannot overhear.

Intermediate to extension with a.c. bell across the exchange line.

Information call with the exchange line held. The exchange caller cannot overhear.

Extension to exchange direct. Calls can be secret or non-secret from the intermediate.

Incoming exchange calls are normally answered at the intermediate, and are held when offered to the extension. The call is transferred automatically when the EXTN–EXCH button at the intermediate telephone is operated. Should the extension user not accept the call, the intermediate user may return to the exchange line by pressing the EXCH button. During extension-to-exchange calls the 'engaged' lamp glows at the intermediate.

Facilities

Intermediate to exchange with a.c. buzzer across the extension line. The extension cannot overhear.

Intermediate to extension with a.c. bell across the exchange line.

Information call from intermediate to extension, with the exchange line held. Extension to exchange direct. When

the extension handset is in position, the bell is connected across the exchange line to signal incoming exchange or extension calls.

Transfer of exchange calls from the intermediate to the extension.

Return to the exchange line if it is not required to transfer an exchange call after an information call.

Secrecy on extension - to - exchange calls by strapping adjustments.

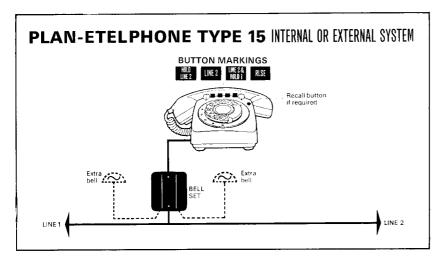
Engaged lamp signal given at the intermediate during extension-to-exchange calls.

Ring extension condition applied by overpressing the EXTN switching button, thus avoiding the need for a separate button.

PBX recall or transfer button provided if required.

Power and cabling A 6V battery or power unit is required at the intermediate and extension instruments.

A 2-wire cable is necessary between the intermediate and extension telephone.



Plan-Etelphone Type 15

Internal or External System

ONE TELEPHONE CONNECTED TO TWO LINES WITH HOLDING FACILITIES ON EACH LINE.

This Plan system is suitable when access to two exchange or extension lines is required from a single telephone. Incoming calls received on either line may be held during an enquiry call made on the other line.

Facilities

Calls can be originated and received on both lines.

Incoming calls signalled on separate bells with discriminating tones.

Calls held on either line during an enquiry call on the other, after which the user can return to the initial call.

PBX recall provided if required.

Ordering Information

When ordering, please state the equipment item and corresponding code number (where applicable) from the adjacent table, together with quantities required.

Also supply information (a) to (g) as appropriate.

- (a) Colour of telephones.
- (b) Any additional features required.
- (c) Amount of interconnecting cable (if required).
- (d) Whether one or two extensions required for plan type 1.
- (e) Number of extensions required for plan type 2.
- (f) Whether for auto or c.b. working.
- (g) Details of local mains voltage and frequency if power unit required.

Code No.	Additional features (applicable to all Plan Etelphones)
N1906	
N1906	Tropical finish Instrument-bell control
N1906	Handset amplifier 4. Operator recall/transfer
N1906	Key-operated dial lock
— N23801B1T	6. Conversion parts
	N1906 N1906 N1906 N1906

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