

# Telephone-call Signalling Devices



DESCRIPTIVE  
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TELEPHONE  
APPARATUS

A telephone installation needs some kind of signal to indicate that a call requires attention. The basic signalling device in a telephone instrument is a bell with two gongs. This leaflet describes a range of audible signalling devices and visible signalling devices that can be used to extend the audible signal given by a telephone. The devices can be provided at one or several points of a system, as required, to ensure that a call is dealt with quickly. Signals can be provided which can be heard above severe background noise conditions; over a wide area under normal noise conditions; and to meet special requirements.



# AUDIBLE SIGNALS

## FACILITIES

The ordinary telephone and the modern telephone each contain a bell with two gongs. Telephones on certain extension arrangements also contain a buzzer.

The volume of sound from the bell can be adjusted over a limited range by the Post Office engineer. The gongs of the bell can also be changed by the engineer so that calls on different telephones in the same room can be distinguished from one another.

Nine different types and sizes of bell, a buzzer, and a hooter can be provided. They produce a wide range of sounds to suit most background noise conditions.

The audible signalling devices are arranged as an extension to the main bell or buzzer. A switch can be provided so that the additional devices can be cut off, if required.

The devices can be provided indoors and outdoors to meet particular requirements.

On lines connected to a public automatic telephone exchange or a private automatic branch exchange (PABX), the signal is interrupted at regular intervals. It is usually in the form **sound, short pause, sound, long pause** repeated (Brr. Brr.—Brr. Brr.).

On lines connected to a public manual telephone exchange, private manual branch exchange (PMBX), and certain extension arrangements and press-button systems, the signal is intermittent. The sequence and duration of sounds depend on the way in which the key or press-button is operated.

Regularly interrupted or intermittent sounds produced by an extension signalling device will be of the same sequence and duration as those of the device from which it is extended.

Certain of the devices can be arranged to give a continuous audible signal. The original signal, regularly interrupted or intermittent, switches on a second source of power, mains or battery,

which operates a device continuously until it is switched off manually.

## GENERAL INFORMATION

The devices shown in photographs 1 and 3 are for indoor use only.

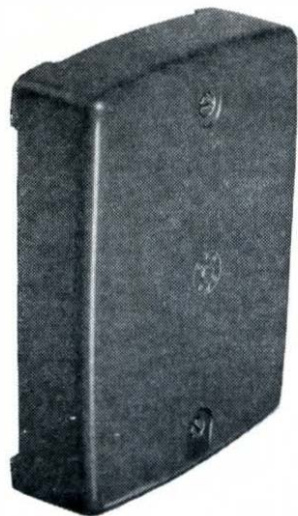
The battery-powered devices shown in photographs 3, 4, and 7, and the mains-powered devices in photographs 9 and 10 are used for intermittent signalling on internal press-button systems, and for continuous signalling.

The mains-powered hooter shown in photograph 11 can only be used for intermittent signalling.

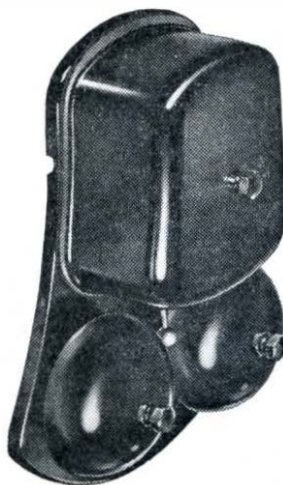
When mains-powered devices are used, the customer provides a 3-pin socket outlet of at least 2-amp rating, and the Post Office provides a relay switch and internal wiring between the two. The relay switch is wall-mounted in a grey metal box 9" by 9" by 3".

# Devices used under Normal Noise Conditions

(These produce sounds similar to that from a telephone)



**1**  
Bell with 2½" gongs  
(Plastic case in  
black, grey, or ivory)



**2**  
Bell with 2½" gongs



**3**  
Buzzer

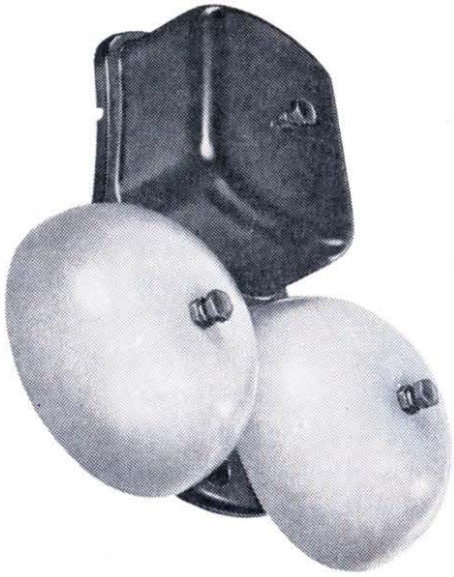


**4**  
Bell with 2½" gong

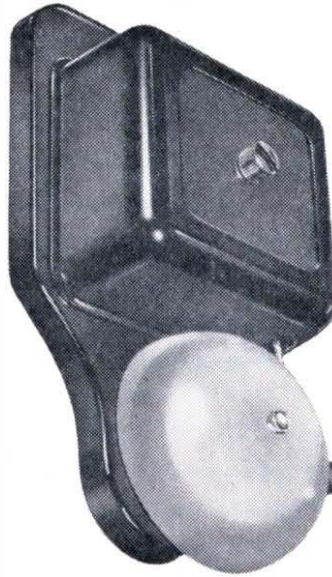


**5**  
Bell with 'cow' gongs  
(Distinctive mellow  
tone)

## Devices used under Slightly Noisy Conditions



**6**  
Bell with  
4" gongs



**7**  
Bell with  
4" gong

## Devices used under Noisy Conditions

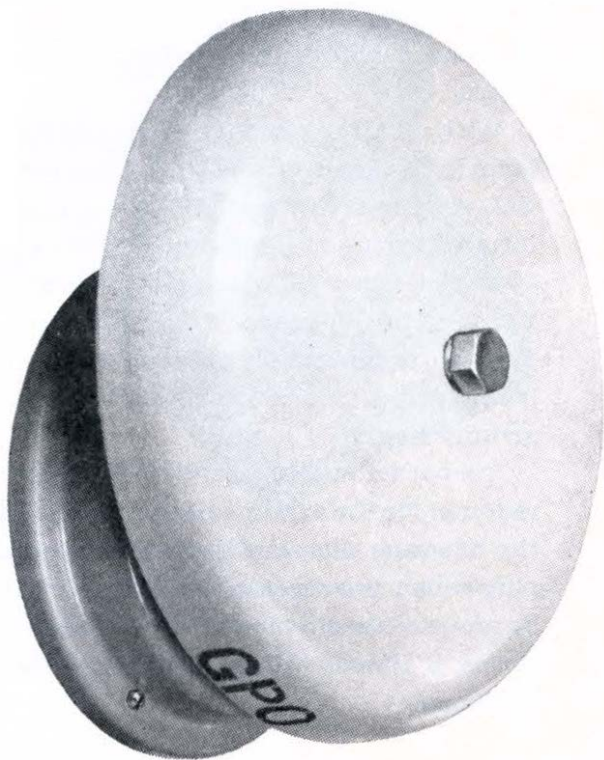


**8**  
Bell with  
6" gongs



**9**  
Mains-powered  
bell with  
6" gong

## Devices used under **Very Noisy Conditions**



**10**

**Mains-powered bell with 10" gong**



**11**

**Mains-powered hooter**

# VISIBLE SIGNALS

## FACILITIES

Visible signalling devices are used in extremely noisy situations, in places where silence is necessary, or as a means of identification if several telephones are close to one another.

Visible signals are provided as an addition to an audible signal. There are four devices which can be used.

Signals can be produced from lamps embodied in the handset or case of the telephone, or from lamps attached to the case, or by means of separate fittings. Additional lamps can be located so that the signal is visible from any direction.

A switch can be provided to cut off the visible signal, if required.

Visible signals occur in step with and during the time that a telephone bell is ringing. They can be arranged to flash at regular intervals with automatic ringing, or intermittently from manual ringing.

A visible signal can be arranged to light continuously. The original signal, regularly interrupted or intermittent, switches on a second source of power which lights a lamp until it is switched off manually.

## GENERAL INFORMATION

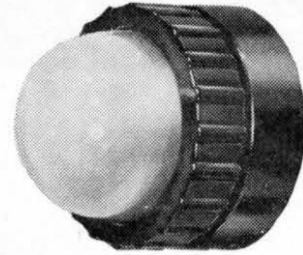
A mains transformer is used with low-voltage lamps.

With all arrangements, except that of the lamp in the handset, the Post Office provides a wall-mounted relay unit 9" by 9" by 3" and internal wiring to a 3-pin socket outlet provided by the customer. The socket outlet should be of 2-amp rating, or higher if the circuit requires it. The customer normally provides the mains wiring, lamp fittings, and lamps for mains voltage arrangements.

A separate transformer is sometimes required for the arrangement with the lamp in the handset; this is embodied in a special 3-pin plug which measures 2½" by 2½" by 2¼". It can be provided for a 3-pin outlet of either 13-amp rating or 15-amp rating, provided by the customer.



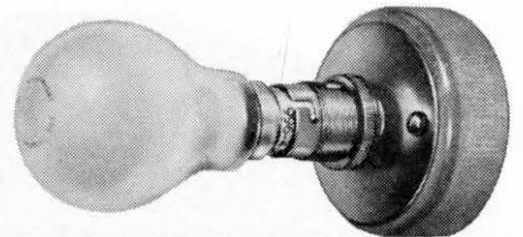
**Modern telephone with neon lamp under transparent plastic cover in handset**



**A low-voltage lamp fitting, separate from the telephone. The dome cover is of frosted glass and the bulbs can be clear, blue, yellow, or red**



**An ordinary telephone with low-voltage lamp attachment**



**A mains-voltage lamp separate from the telephone**

**Rental and connexion charges  
are quoted in the preface sheet**

THE TELEPHONE MANAGER  
WILL GLADLY SUPPLY  
ANY FURTHER INFORMATION