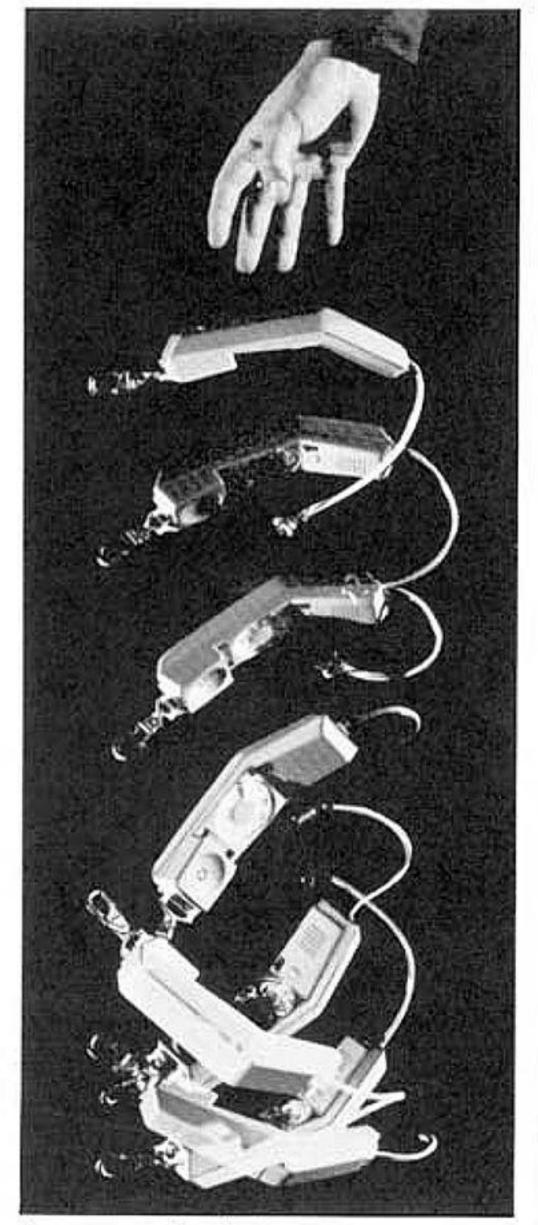
The fat-free testers – a pleasure to use, a breeze to carry. Slim. Neat. Light. Rugged, rugged, rugged. Library: www.telephonecollectors.info

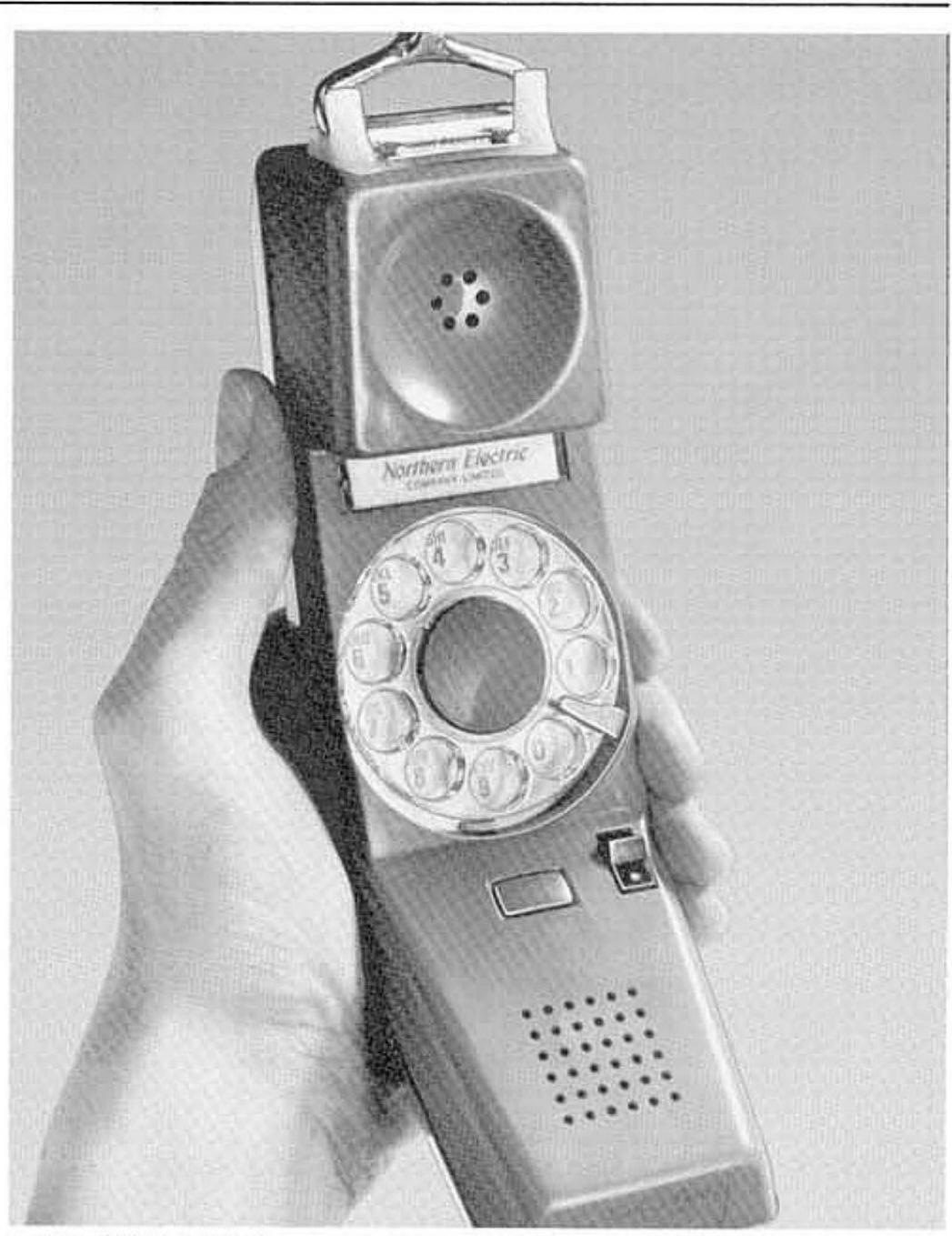
Northern Electric company limited

These rugged yet easy-tohandle instruments are used by linemen, installers, and central office craftsmen to monitor telephone circuits and to originate calls to test dial system switching, continuity and talking performance. They are also used extensively in troubleshooting routines.

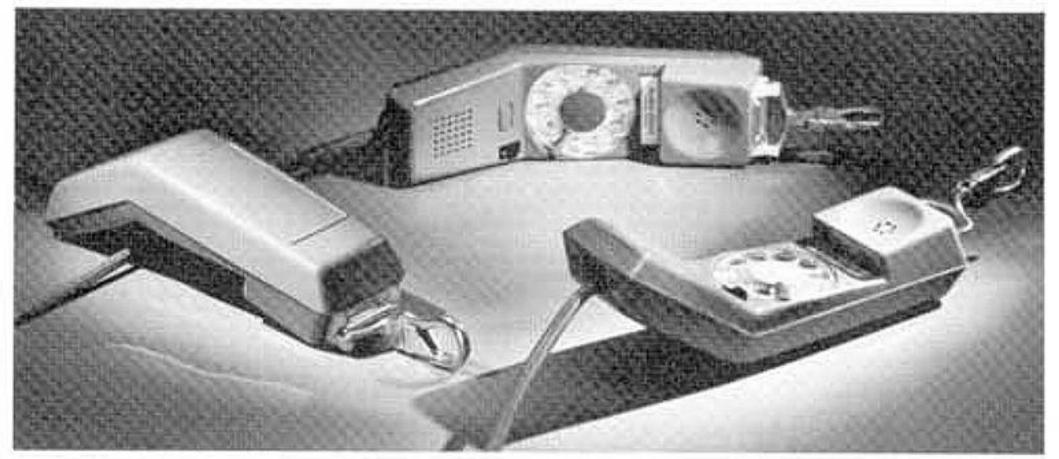
Four models of the handset are available so that the different needs of outside plant and central office craftsmen in both large and small operating companies can be met in the most economical way.



A very rugged handset



A very handsome handset



The dial is completely protected from damage; even if the handset is dropped, the dial cannot come in direct contact with the ground.

TCI Library: www.telephonecollectors.info

#### Data models

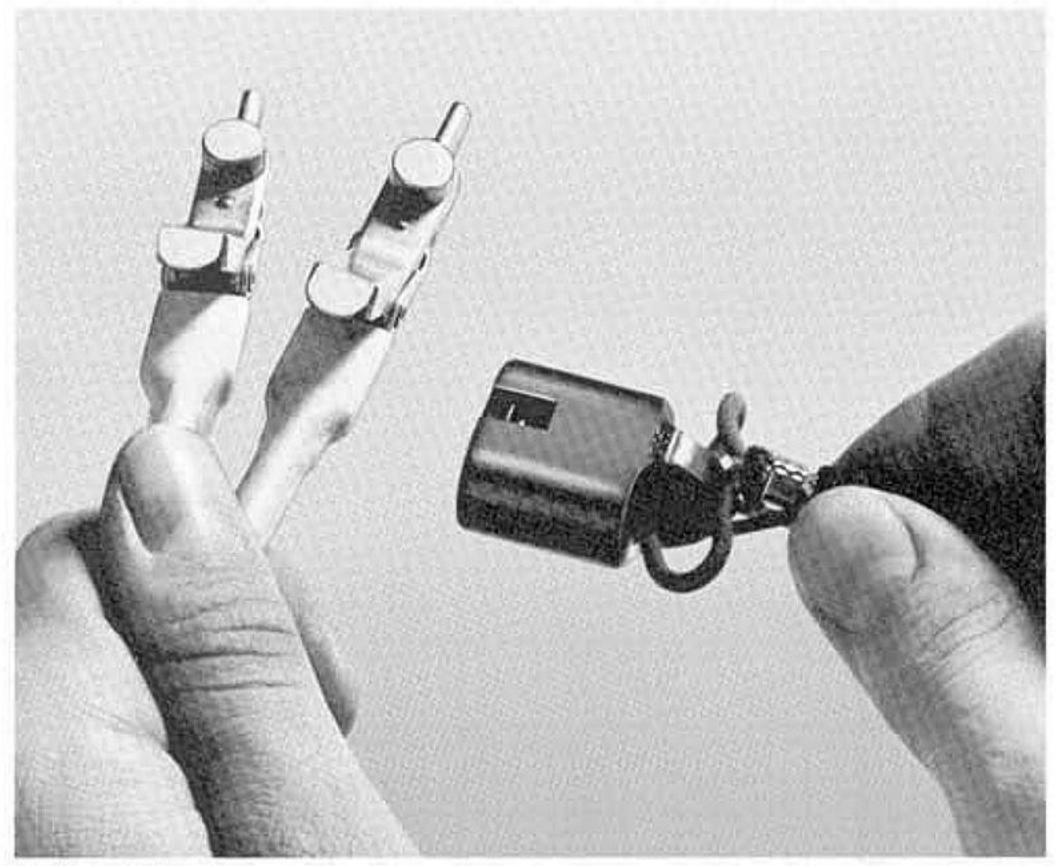
The two "data" models of the handset, one for outside plant, the other for central office use, are intended for operating companies whose telephone lines may be carrying business machine data. These handsets incorporate special circuitry which provides protection against disruption of a data transmission by the handset when it is connected to a telephone line for routine monitoring. The special circuitry simply transforms the low impedance of the handset receiver to a high impedance when the handset is switched to the monitor mode. Thus the handset presents a high impedance to the line and connecting it will not cause any interference with data transmission.

#### Non-data models

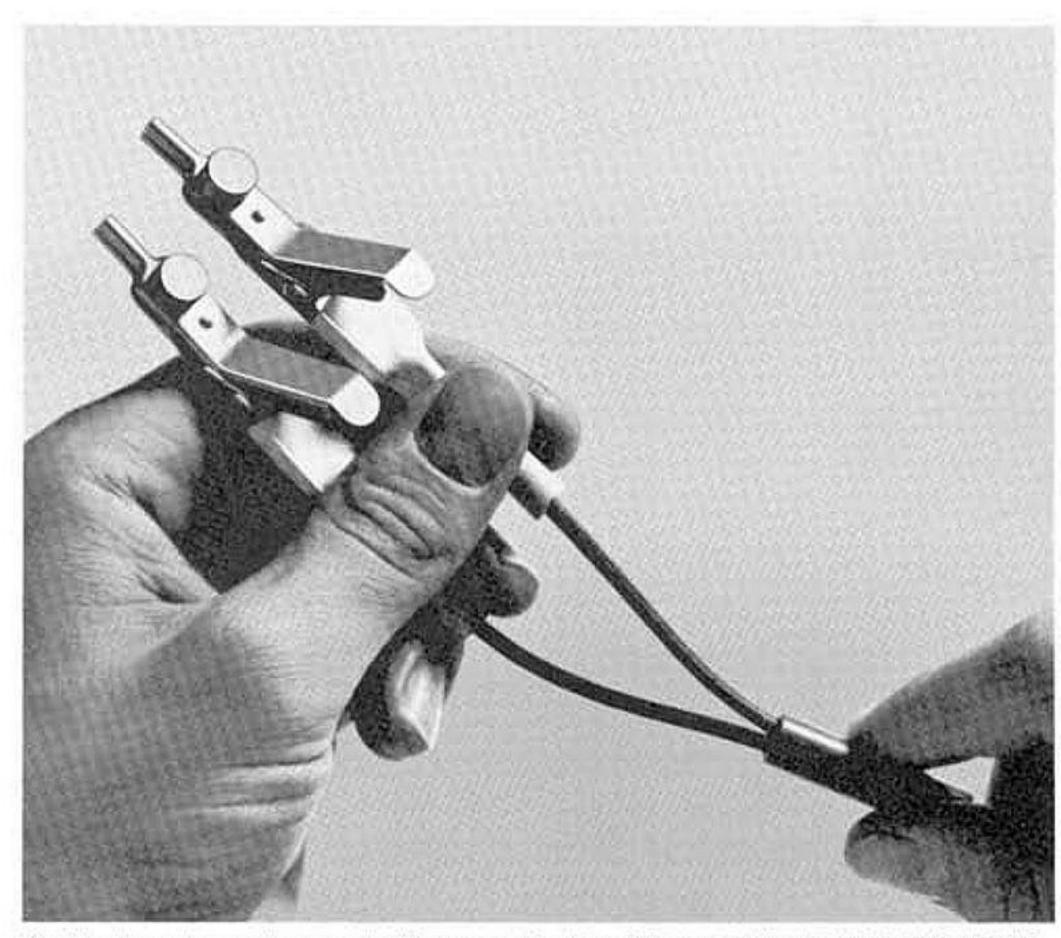
The two "non-data" models of the handset (again, one for outside plant and the other for central office use) are intended for applications where telephone lines carrying data are not encountered. In this case, high impedance bridging of lines for monitoring is not required so the special circuitry is eliminated in order to achieve the most economical handset for this application.

#### Two cord terminations

Both handset models are available with a plug cord termination for central office use, or with test clips for outside plant use. The two leads of the test-clip-ended cords are separated for most of their length so that connections to points several feet apart are possible. Tubular sliders on the leads hold them together during normal use.



Cord terminations



Cord leads can be easily separated for connection to points several feet apart by sliding back the tubular holder

TCI Library: www.telephonecollectors.info



## **Accessory cords**

A number of accessory cords are available for use with the plug-ended central office handset models. These accessory cords terminate on one end with a jack which mates with the handset plug, and on the other end with various connectors which enable the handset to be used in central office tests. Complete details on the accessory cords are provided on a separate sheet.

### Conversion kit

The non-data models are designed so that they may be easily converted to data models by the addition of a separately ordered conversion kit. This means that the least expensive handsets can be ordered for use on voice-only circuits with the assurance that they won't become obsolete when data circuits are introduced into the area. The conversion is made using standard hand tools and without soldering.

## Long loop dialing

All models of the handset are equipped with a pushbutton switch which can be depressed when dialing on very long loops to extend the range of the handset. With the pushbutton switch depressed, the handset will operate on any loop length which permits operation of a 500 series telephone set.



Easy-to-use even in adverse weather conditions

### Easy to operate

The handsets are easy to use in all weather conditions. Fingerwheel holes in the dial are the same size as those in standard telephone dials. And the dial, receiver, and transmitter are all on the same side of the instrument, so the user can dial, speak and listen without rotating the handset (as is necessary with most linemen's handsets). The monitor rocker switch and the long loop dialing pushbutton switch are readily accessible.

### Convenient belt hook

All handsets are equipped with a belt hook for easy attachment to the user's tool belt.



Long loop dialing is accomplished by holding the pushbutton switch depressed

### Standard parts

All models are designed around major components (NE-10QA dial, NE-T1 transmitter unit, NE-U1 receiver unit) that are used extensively in standard telephone sets. Special replacement parts inventory is minimized. All models are housed in the same green (-51) two-piece case.

#### Identification

Data and non-data models are readily distinguished by the colour of the insert in the centre of the dial; data models have a yellow insert, non-data models a red insert.

Choosing a set

The main features of each model are summarized in the following table to simplify selection.

Handset code	Primary application	Cord code	Termination	Dial insert
QSE4A1-51	Outside plant non- data monitoring	NE-W2QK	NSQ4100 test clips	Red
QSE4A2-51	Central office non- data monitoring	NE-H2QB	NE-346A plug	Red
QSE4B1-51	Outside plant data monitoring	NE-W2QK	NSQ4100 test clips	Yellow
QSE4B2-51	Central office data monitoring	NE-H2QB	NE-346A plug	Yellow

#### **Technical data**

Maximum loop resistance Loop switch not depressed Loop switch depressed

Operating temperature range Handset length (including

belt hook) Weight

Cord length

Outside plant models Central office models 2200 ohms (including feeding bridge) 2300 ohms (including feeding bridge)

-40°F to 120°F (-40°C to 49°C)

111/4 in. (286 mm) 1 lb. (450 gm)

60 in. (1524 mm) 12 in. (305 mm)

## Ordering information

To order, specify quantity, product code number and product name. Product code numbers and correct names are as follows. All remarks in parentheses are for your guidance only.

QSE4A1-51 Handset (outside plant, non-data monitoring)

QSE4A2-51 Handset (central office, non-data monitoring)

QSE4B1-51 Handset (outside plant, data monitoring)

QSE4B2-51 Handset (central office, data monitoring) P0500406 Conversion Kit (for converting handsets from non-data to data models)

Shipping information

Each set is packed in an individual carton measuring 11% in. (298 mm) x 31/8 in. (79 mm) x 33/16 in. (81 mm). Twenty-four individual cartons are packed in one master shipping carton.

Shipping carton dimensions (24 sets)

201/8 in. (511 mm) x 131/2 in. (343 mm) x 15 in. (381 mm)

Shipping weight (24 sets) 33 lb. (15 kg)

Northern Electric COMPANY LIMITED