

Add-on Selective Calling Units

RC1500/1600

Features

Suitable for use with any mobile radio system

Audio and visual call indication

Sequential five-tone system

100,000 code capability

Attractive desk encoder unit

General, group and individual call capability

Compact easily installed mobile decoder

Description

The GEC RC1500 is an optimally designed selective calling scheme which has extensive capabilities and can be used in connexion with all mobile radiotelephones as simple add-on units.

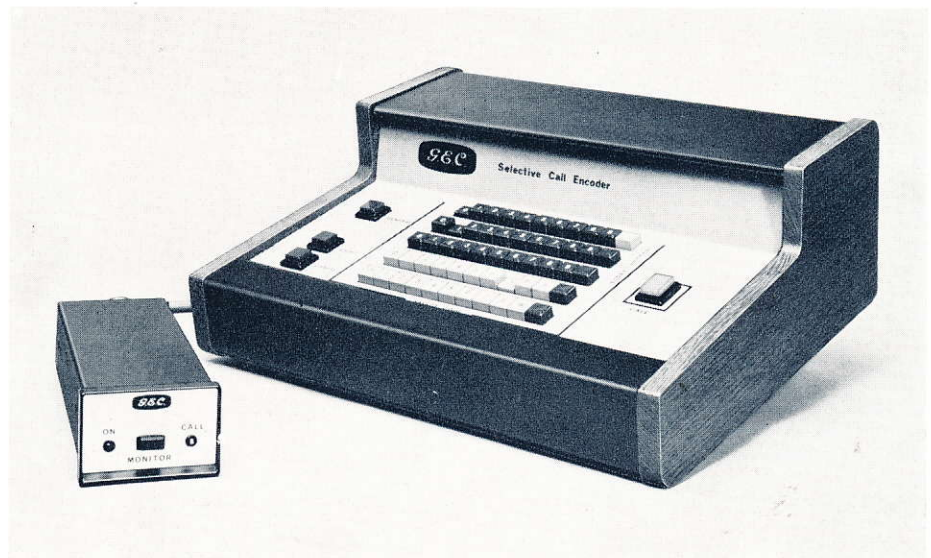
It consists of a five-tone sequential system whereby five tones from a possible ten are selected, giving a total capacity of 100,000 separate codes, and reducing the chance of false calls to a negligible minimum. The short duration of the code ensures that persons on the same channel, without selective call facilities, have the minimum amount of interference.

Equipments in the system include an attractive desk encoder type RC1600 which is normally connected to the base station either locally or remotely and operates from a mains power supply, and a compact mobile decoder unit type RC1500 which is associated with the mobile transceiver.

Visual indication is provided indicating that the mobile is suitably set for the reception of a call.

When a selective call is received the mobile operator has his attention attracted in three main ways:

- (i) Audio : the mobile radio speaker is energized.
- (ii) Visual : an indicator light is energized on the unit fascia.
- (iii) External : additional contacts can be made available to switch on external warning devices.



Desk encoder and compact mobile decoder of the selective calling system

The above remain 'on' until reset so that if the operator is not present at the time of the call he will be alerted when he returns. Group and general call facilities can be made available which have the added capability of base station cancellation.

The mobile unit can detect calls even in low signal-to-noise ratio conditions when normal voice communication would be extremely difficult thus alerting the mobile operator that an attempt has been made to call him.

The selective call can be manually overridden enabling the mobile operator to monitor the channel before initiating a call.

The mobile decoder unit is designed to interface with all mobile radio-telephones requiring little or no modifications to internal wiring of the mobile transceiver. A Patent has been applied for in connexion with GEC selective call equipment.

Data Summary

ENCODER

Occupied band : 1.124–2.11kHz.

Output impedance : Suitable for interfacing with any microphone circuit.

Tone duration : 40ms.

Call duration : 240ms – one extra tone length required to operate audio switch.

Types of code selection : Up to 100,000 addresses ; five banks of decode push buttons. Separate transmit button.

Power supply : 240V a.c. $\pm 10\%$, 40–60Hz.

Dimensions : Approx 330 × 290 × 140mm (13 × 11.5 × 5.5in).

DECODER

Tone input level range : A.G.C action incorporated to accommodate any input level from 50mV to 5V r.m.s.

Input impedance : 3 or 15 Ω .

Tone s/n ratio for 90% recognition of calls : 0dB in 3kHz bandwidth.

Power supply : 10V–16V d.c.

Current consumption : With ON lamp illuminated – 250mA. With CALL lamp illuminated – 400mA.

Dimensions : Approx 203 × 73 × 48mm (8 × 2.8 × 1.8in).

As we are always seeking to improve our products, the information in this document gives only general indications of product capacity, performance and suitability, none of which shall form part of any contract.

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