

Continuous Tone Controlled Signalling System

RC1255 Series

Features

Primarily designed for:

Tone-coded talk through

Tone-coded mute

Installs integrally within any current GEC Mobile Radio mobile or base station

32 code capability



Description

The GEC RC1255 Series is an optimally designed continuous-tone controlled signalling system primarily for use in tone-coded mute and tone-coded talk-through applications.

A tone-coded talk-through system provides security of access to a base station operating in a talk-through mode. By using an RC1255 talk-through decoder at the base station, access is restricted to mobiles fitted with the appropriate encoders.

A tone-coded mute system enables many users to operate on a single frequency (which is becoming increasingly common due to the need for maximum use of the frequency spectrum) without the operator fatigue associated with shared channels. This is achieved by having the mute on the mobile and/or base station operated by a tone, encoded by the base station and/or mobile using the RC1255 series of equipment. Only messages transmitted for one user are heard

by the operator concerned – all others being excluded. An override switch is provided for channel monitoring prior to transmission.

The equipment comprises encoders, decoders, talk-through decoders and dencoders (decoders which can encode as well) which provide for all system requirements. Thirty-two different sub-audio tones are used and these are sent continuously beneath the audio. Additional filtering at the decoders reduces these tones to an acceptable level. The decoders operate the talk-through or mute at a signal-to-noise ratio where speech is just intelligible.

All equipments are installed integrally within the mobile or base station and are hinged to facilitate servicing of the CTCSS board and main unit.

Data Summary

Decoder (and encoders)

Frequency range: 67Hz to 250Hz.

Keying signal: 11V to 16V from p.t.t switch.

Output impedance: Suitable for interfacing with all GEC mobile radio equipment.

Capability: 33 codes (32Hz in 50Hz mains areas).

Decoder (and decoder)

Input level: 25mV–2.5V r.m.s.

S/N for decode: Better than 5dB s/n.

Power requirements: Approx. 20mA from 11V to 16V supply (additional integral power supply where this is not available).

Talk-through decoder

Additional output: Pair of relay contacts normally open, closed on decode.

The information contained herein is subject to confirmation at the time of ordering.

GEC mobile radio

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