

ID250

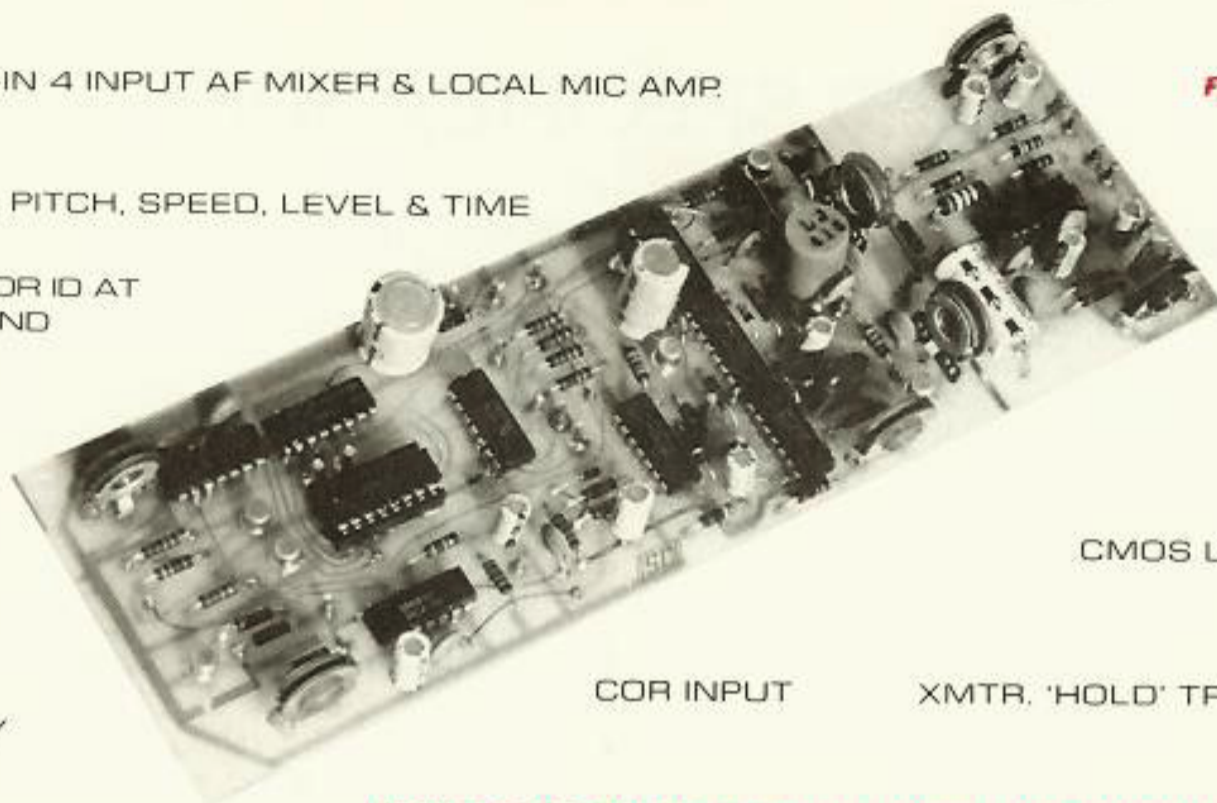
AUTOMATIC CW IDENTIFIER & AUDIO MIXER BOARD

BUILT-IN 4 INPUT AF MIXER & LOCAL MIC AMP.

FOR REPEATER OR
BASE STATION
APPLICATIONS

ADJUSTABLE ID PITCH, SPEED, LEVEL & TIME

JUMPER WIRE FOR ID AT
BEGINNING OR END
OF ACTIVITY



CMOS LOGIC

COR INPUT

XMTR. 'HOLD' TR. SWITCH

PROM MEMORY

FOUR 250 BIT PROGRAMMABLE MEMORY CHANNELS!

Automatic CW Identifier & Audio Mixer Board

The Spec Comm ID250 automatic morse CW identifier is a *multi-channel* stored program unit featuring all the necessary timers, drivers, and audio processing necessary to facilitate its use in practically any radio repeater system. A powerful computer-like **PROM** (programmable read only memory) stores 4 separate morse code messages, each up to 250 "code bits" long, and a remote logic level can be used to change message channels at any time. The unit is shipped factory programmed with 1 message channel, but another PROM, with more or different messages, can be ordered from Spec Comm and easily installed in the socket at any future time.

A unique combination of **timers** and **activity detection circuitry** assures that the repeater will be identified immediately upon the first COR activation after any period of inactivity exceeding approximately two minutes, and will continue to identify at preset time intervals during repeater activity. The unit will not bring up the repeater for an ID cycle unless repeater activity has been detected. In addition, inputs have been provided to key the tone oscillator independently of the code generator. One input will simply key the oscillator while the other will key it and interrupt it at an approximately 20 Hz rate (This sound approximates the sound of a telephone ringing signal). These two inputs are intended for **signaling applications**.

Provisions have been made to trigger the unit from either active high or active low COR inputs, and an open collector transistor switch, (which can be jumper wire configured for either ON or OFF during ID), has been included to hold the repeater transmitter on for the duration of the ID cycle—and, if desired, light a front panel 'ID Indicator' lamp. **Variable controls** have been provided (on board) to facilitate initial set-up and routine adjustments of all ID and Audio parameters. An input has been provided to **manually trigger** the ID generator at any time without affecting the status of the system timers.

A four input **Audio Mixer** is incorporated on board, which includes a preamplified local mic input, as well as repeat audio input (from receiver), ID input, and a variable level auxiliary AF input.

The exclusive Spec Comm **low current IC design**, in conjunction with **temperature stable components**, assures maximum stability of the various oscillators and timers. It's unusually low standby power consumption will assure many years of trouble-free operation even in the most severe environments (*and, be very beneficial when operating on battery power!*) As with all Spec Comm equipment, *only the finest quality components and workmanship* are used throughout. The unit is 100% solid state—no relays are used for switching or timing—for maximum reliability, (although the "transmitter hold" transistor switch can directly pull-in a relay, if desired).



SPECTRUM COMMUNICATIONS

Specialists in Repeater Systems

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