CHANGING MESSAGES

There are 8 message channels in the memory chip. Each message is available at a terminal pad under the ID-2 board, as shown in the drawings. To select a channel, connect point E to the channel desired. For manual selection, you can use a simple multiposition switch. A method of doing the switching electronically is shown in fig. 3. The input required for the 4051 is a binary (or BCD) code as shown.

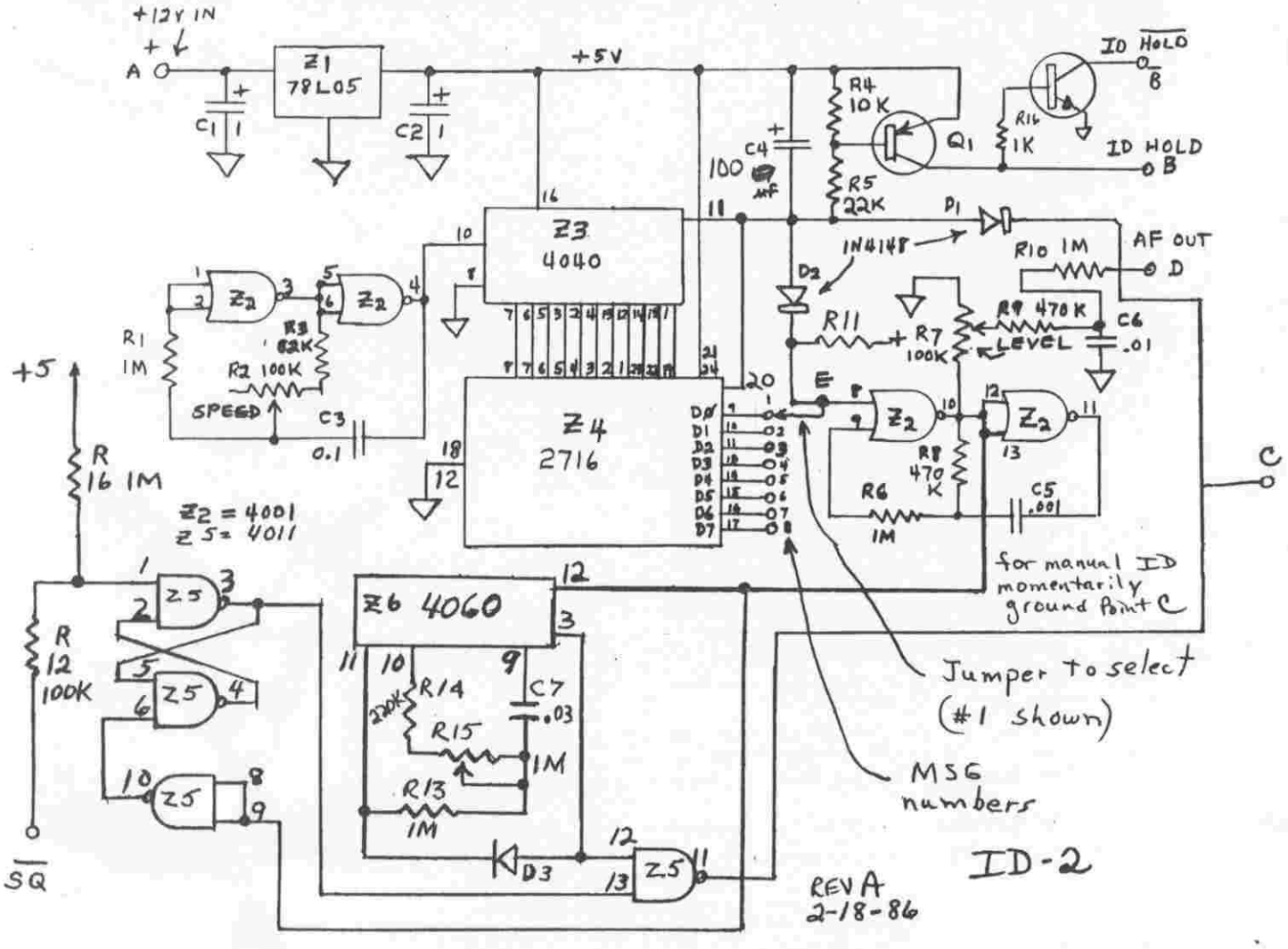
REPROGRAMMING

The original price of the ID-2 includes a custom-programmed memory.

GLB offers a programming service; the cost is the same for one short message as it is for 8 long ones, so use foresight to get the most out of the chip when you have it programmed.

If you can program 2716's, each bit line from the chip is used as a message. Bit 0 is message 1, bit 1 is message 2, etc. When a memory bit is set to 0 the tone goes on; a CW message is built up by setting a bit low for a dit or 3 bits in a row (at successive address locations) low for a dah. Spaces timing occur where bits are set to 1 (the erased condition of the ROM). One 0 separates dits and dahs within a character and three 0's separate characters. Six zeros separate words.

The message terminates when no zeros are detected for a second or more. Be sure to start each message with a space (three 1's) for a starting pause.



GLB ELECTRONICS MODEL ID-2 AUTOMATIC IDENTIFIER
Description

The model ID-2 is intended for use with repeater or automatic stations requiring transmitter keying and a longer time interval than the model ID-1. Since the message ROM and format in the ID-1 and the ID-2 are the same, the ROM's are interchangeable. The standard time interval is 10 minutes, but it's adjustable from 5 to 15 minutes, and intervals from 30 seconds to 1 hour can be supplied on special order. The following description assumes the interval to be 10 minutes:

Station activity is determined by an input line, normally connected to the receiver squelch. The station is identified every 10 minutes as long as the squelch breaks at least once during the past 10 minutues. The ID-2 keys and holds the transmitter carrier as necessary. A final ID is sent within 10 minutes of the last squelch break. The next time the 10-minute interval expires, no ID occurs but the ID-2 "arms" itself such that an ID occurs immediately the next squelch break. Until then it remains dormant.

If the squelch input to the ID-2 is grounded, identification is sent every 10 minutes regardless of activity.

The ID-2 retains these features of the ID-1:

1. Reprogrammable messages. (We provide programming service, but if you have an EPROM programmer you can do it yourself!)

2. Enormous capacity. You can have up to 8 messages in each memory chip, and each message can be 2000 bits long - that's continuous sending for almost 2.5 minutes at 20 WPM! *
3. Built-in pots for adjustment of audio output level, sending speed and interval timing.

4. Simple installation (the ID-2 is different here); Connect continuous power, a squelch line and microphone audio input.

5. Non-critical power requirements. The only supply needed is +7 to +15 volts DC, unregulated.

REPEATER OPERATION

The ID-2 is easy to install. You need a squelch signal from the receiver that is between 3.5 and 15 volts positive when the squelch is closed and drops to less than 2 volts when the squelch opens.

The ID HOLD output is used to key the repeater transmitter. If your transmitter can be keyed with a +5 volt 10ma signal, connect the HOLD (point B) output to that point. Don't draw more than 10 ma from the HOLD terminal. If your transmitter requires a negative-going keying signal, use the ID /HOLD (POINT /B). Don't draw more than 100 ma from the /HOLD terminal.

ADJUSTMENT

R2 is the speed adjustment.
R15 is the timing adjustment.

The amplitude of the ID tone is adjustable at R7. We suggest that you set the tone to a background level so that it doesn't compete with your voice. For repeater installations the high output impedance (1 meg) of the ID-2 may not provide the audio level required, since repeater audio channels are often low-impedance. In this case an op-amp or an FET follower is suggested to provide a low-impedance conversion.

An alternative is to take the audio output from the arm of the amplitude control pot. The waveform at this point is a square wave (as opposed to the filtered low-level output) but it has a much higher amplitude.

[* Many more messages can be accommodated of shorter length.
write or call with your special requirements]