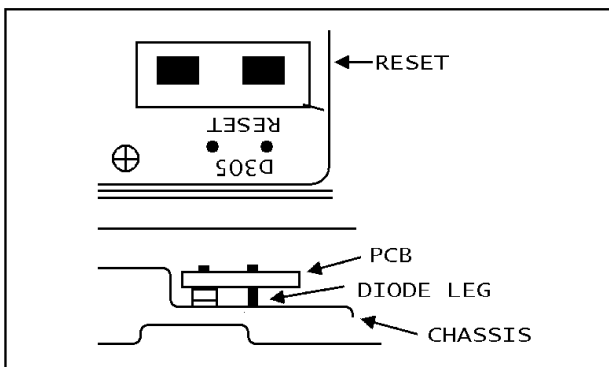# DEALER PROGRAMMING

Programming the TAD MD series of radios is a quick operation. Once in the programming mode, the programming takes place in a manner similar to setting a digital watch and progresses in a methodical manner by using the keys on the front of the radio.
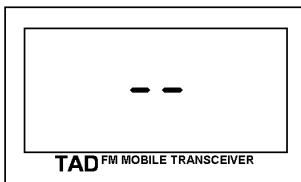
HOW TO CLEAR MEMORY

a) Remove the bottom cover. (The top cover is the speaker side.)
b) Look on the PCB behind the display. You will note there are 2 square pads at the right corner of the Control board, marked RESET.

c) Turn the radio on.
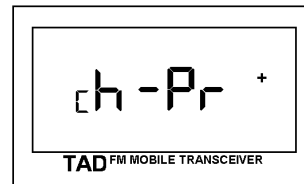d) Momentarily short between these foils with a metal material.

The display will read:

Memory has been cleared!

ENTERING DEALER PROGRAMMING MODE

a) You will note there is a diode at the right corner of the Control board (in the neighborhood of the above RESET pads).
b) Turn the radio on while shorting the diode to the front chassis with a metal screwdriver, etc.
c) The display will read:

You are now in the dealer-programming mode.

Note: If the "+" sign is displayed, this indicates that information has already been programmed into that channel.
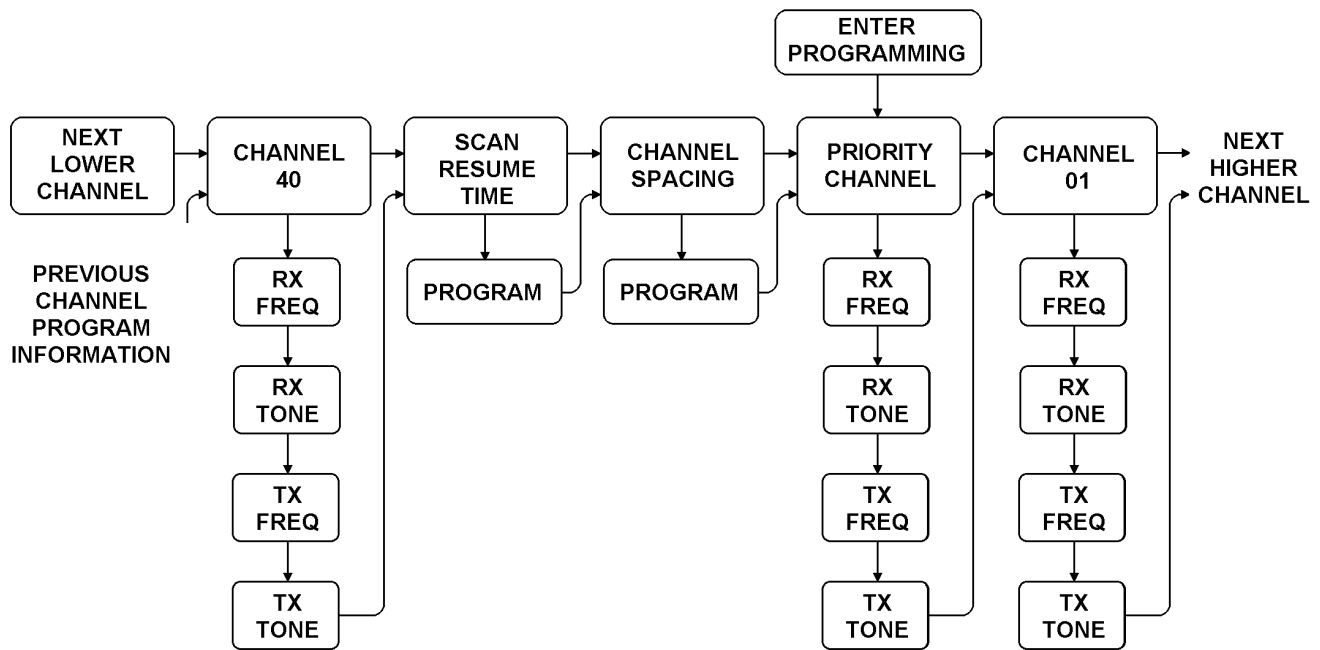
ENTERING OR CHANGING PROGRAMMING

Once the radio is in the dealer-programming mode, a qualified person can program each channel with the following information:

1. Priority channel with RX/TX frequency, RX/TX CTCSS tone.

NOTE: This priority channel must be programmed, **DO NOT SKIP IT!!**

2. Channel number.
3. RX frequency for each channel.
4. RX CTCSS tone for each channel.
5. TX frequency for each channel.
6. TX CTCSS tone for each channel.
7. Scan resume time.
8. Frequency step size.

Note: CTCSS operation requires an option to be installed.

```
                                    ENTER
                                  PROGRAMMING

 NEXT        CHANNEL      SCAN        CHANNEL     PRIORITY     CHANNEL      NEXT
 LOWER         40         RESUME      SPACING     CHANNEL        01         HIGHER
 CHANNEL                  TIME                                              CHANNEL

 PREVIOUS      RX                                   RX           RX
 CHANNEL       FREQ       PROGRAM     PROGRAM       FREQ         FREQ
 PROGRAM
 INFORMATION
               RX                                   RX           RX
               TONE                                 TONE         TONE

               TX                                   TX           TX
               FREQ                                 FREQ         FREQ

               TX                                   TX           TX
               TONE                                 TONE         TONE
```

PRESSING CH▼ OR CH▲ MOVES THE SELECTION ALONG THE MAIN MENU (TOP LINE)

PRESSING SCAN MOVES THE SELECTION THRU INFORMATION WITHIN EACH MAIN MENU
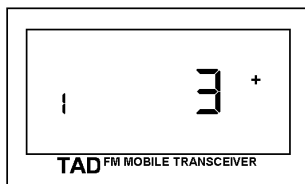
Fig. 15 - PROGRAMMING SELECTION SEQUENCE

The following is a step-by-step procedure for programming the radio.

Figure 15 summarizes the sequence used to select the information requiring programming. The radio's scan resume time is set at 3 seconds and the channel step size is set at 5KHz as initial values. If these values are satisfactory go directly to the Priority channel programming

SETTING THE SCAN RESUME TIME

a) Press the CH ▼ key twice. The display will show:

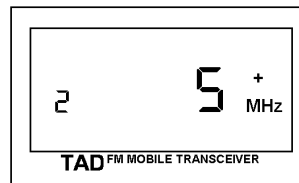

This means the scan resume time is now 3 seconds. This is the time the radio will remain on channel after the carrier disappears.

b) Press the SCAN key. The "3" will be flashing.
c) Press the CH ▲ or CH ▼ key to select the scan resume time, 3 or 6 seconds.
d) Press the SCAN key. The flashing will stop and the selection will change to the next menu.
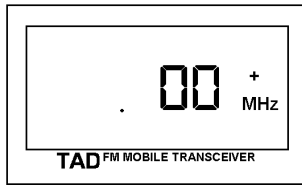
SETTING THE CHANNEL STEP SIZE

a) The display shows:

This means frequencies every 5KHz can be programmed.

b) Press the SCAN key, and the ". 5 MHz" will be flashing.
c) Press the CH ▲or CH ▼ key to select the "KHz" size of the frequency steps. Ex. 5KHz, 10KHz, 15KHz or 20KHz.
d) Press the SCAN key. The flashing will stop and the selection changes to the next menu.

PRIORITY CHANNEL PROGRAMMING

RX FREQUENCY

a) Press the SCAN key. The display will show:

```
        _____
       |   _   _   +  |
       | . |_| |_| MHz |
       |_____|
       | TAD FM MOBILE TRANSCEIVER |
       |_____|
```
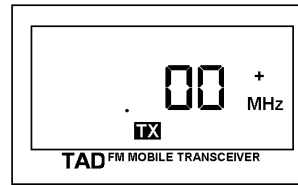
RX frequency entry, it will be flashing.

b) Press the CH ▲key, the flashing digits will advance in KHz steps (see SETTING THE CHANNEL STEP SIZE) each time you press the key. If the CH ▲key is pressed and held the digits will advance quickly. Select the KHz portion of the desired frequency in this manner.
c) If the PRIORITY key is pressed, "F" will be indicated on the left side of the LCD display, and now the MHz portion of the frequency can be selected by using the CH ▼ or CH ▲ key. This "F" will be indicated for a few seconds if no keys are pressed, then return to the KHz step mode.
The display now shows the RX frequency desired while flashing.

RX CTCSS TONE
(Requires optional CTCSS board to operate)

```
        _____
       |   _   _   +  |
       | . |_| |_| MHz |
       | TX          |
       |_____|
       | TAD FM MOBILE TRANSCEIVER |
       |_____|
```

d) Press the SCAN key. The display will read:

RX tone entry, it will be flashing.

e) Press the CH ▲ or CH ▼ key to program the RX CTCSS tone code.

Refer to Table 3, the TONE CODE TABLE, and select the number corresponding to the desired tone.
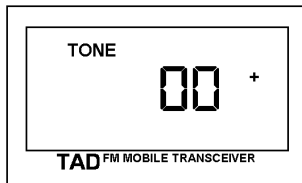
CODE	FREQ (Hz)	CODE	FREQ (Hz)
00		20	131.8
01	67.1	21	136.5
02	71.9	22	141.3
03	74.4	23	146.2
04	77.0	24	151.4
05	79.7	25	156.7
06	82.5	26	162.2
07	85.4	27	167.9
08	88.5	28	173.8
09	91.5	29	179.9
10	94.8	30	186.2
11	97.4	31	192.8
12	100.0	32	203.5
13	103.5	33	210.7
14	107.2	34	218.1
15	110.9	35	225.7
16	114.8	36	233.6
17	118.8	37	241.8
18	123.0	38	250.3
19	127.3		

TABLE 3 - TONE CODE TABLE

TX FREQUENCY

f)   Press the SCAN key. The display shows:

TX frequency entry, it will be flashing.
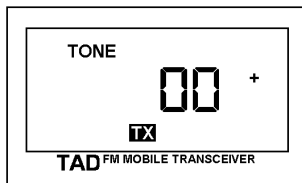
```
TONE
     00  +

TAD FM MOBILE TRANSCEIVER
```

g)   The same frequency as just programmed into the RX will be displayed. If semi-duplex operation is required, program the frequency in the same manner, otherwise continue.

TX CTCSS TONE
(Requires optional CTCSS board to operate)

h)   Press the SCAN key. The display shows:
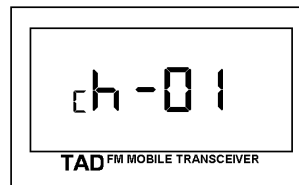
```
TONE
     00  +

  TX
TAD FM MOBILE TRANSCEIVER
```

TX tone entry, it will be flashing.

i)   The same tone code as the RX tone code just programmed in will be displayed. If a different tone code or no tone code is required, program the radio in the same manner. Programming the TX tone code to a value other than '00' will activate the TONE indicator on the display for that channel.

SELECTING THE CHANNEL NUMBER AND PROGRAMMING INFORMATION

a)   Having programmed the priority channel, press the SCAN key. The display will show:

```
  ch-01

TAD FM MOBILE TRANSCEIVER
```

b)   Press the CH ▲ or CH ▼ key to select a channel number from 1 to 40 that requires programming.

c)   Having selected a channel number, press the SCAN key and proceed to the frequency and CTCSS tone code setting in the same manner as the priority channel programming.

Once all the desired programming has been accomplished:

1.   Turn off the radio.
2.   Hang up the microphone.
3.   Turn on the radio.
4.   Press the CH ▲or CH ▼ key.

All information programmed will be retained in the radio's memory and the radio is ready to be placed in service as far as the dealer programming is concerned.

The radio programming may be selectively altered when only one channel requires programming. However, after making the change, be sure to press the SCAN key at least once, to enter the new information

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