

Radio Shack Pro-92 and Pro-2067 Step-by-Step EDACS Programming Guide Written by David Cabatu, AH7E

INTRODUCTION

This white page will give you step-by-step instructions to program the Radio Shack Pro-92/Pro-2067 scanner to properly receive Ericsson EDACS type radio systems. Do keep in mind that your scanner can only decode non-digital (in order words, analog only) transmissions. Also, it is also important that you follow all instructions in order. If something doesn't go your way, you may have overlooked something in this list of instructions.

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If you have any questions, or would like to share any thoughts with me, please send me some e-mail.

Thank you and enjoy!

PROGRAMMING INSTRUCTIONS

In this practice programming example, we will program the five (5) channel Waikiki repeater into Bank 0 of your Radio Shack Pro-92 or Pro-2067 scanner.

First, here are the system frequencies that MUST be entered in LCN (Logical Channel Number) order:

- (1) 866.2500
- (2) 866.7500
- (3) 867.0625
- (4) 867.3125
- (5) 867.6125

PART A. CLEAR YOUR SCANNERS MEMORY BANKS.

1. Clear your scanners memory by turning your scanner **OFF**, then **ON**, and pressing **[0]** and **[1]** keys while the main greeting is showing.
2. After initialization, your scanner should now show a display that defaults to **M000**. (Bank 0, Channel 00)

PART B. PREPARING THE GROUP ID BANK TO TRACK EDACS

FAILURE TO PROPERLY SET GROUP ID BANK TO EDACS MODE MAY CAUSE YOUR SCANNER TO TRACK IMPROPERLY

1. Press **[PGM]**, **[TRUNK]**. The display changes to **I000**
2. Press **[MODE]** until 'ED' appears in the top-right corner of the display. The default trunking mode is now set to EDACS.
3. Press **[PGM]** button again. The top left corner of the display reads **P000**.

PART C. PROGRAMMING SYSTEM FREQUENCIES

IMPORTANT: ALL EDACS PROGRAMMING MUST BEGIN IN CHANNEL X01 IN A BANK "X".

Using the LCN frequencies above, follow steps 1-5.

1. Press the **[PGM]** button a second time. The top left of the display reads **P001**.
2. Enter the frequency for LCN-1. Press **[8] [6] [6] [.] [2] [5] [0] [0] [ENTER]**
3. Check to see if a 'T' and 'ED' appears after pressing **[ENTER]** in step 2.
4. Enter the rest of the frequencies in LCN order, checking the display in Step 3 before continuing.
5. Press **[SCAN]** to begin trunk tracking.

If your scanner is programming correctly, active talkgroup IDs will be displayed in decimal format until you assign a text tag to it.

If you don't hear anything after a few minutes of listening, the scanner just hasn't found the control channel. You can press **[SCAN]** to quicken the process. Also, make sure you do not lock out the control channel.

To program other banks, follow all steps in Parts B and C. The number of steps will vary depending how many channels need to be programmed in that bank.

PAGE 2 -- PRO-92/PRO-2067 EDACS PROGRAMMING

PART D. PROGRAMMING TALKGROUP IDS

Talkgroup IDs are programmed in numerical order from lowest to highest. All analog talkgroup IDs have been programmed with alpha tags so when moving into a new repeater area, you will only need to reprogram the frequencies in LCN order, rather than reprogramming frequencies and talkgroup IDs with their associated alpha tags.

This is a simplified version - the earlier version of this page had too much typing. If you need more help, please send me an e-mail.

1. Press [PGM], [TRUNK]. The display changes to I000. You are now in trunk ID mode.
2. Enter talkgroup IDs using the keypad. You can enter them using one, two, three, or four digits. I suggest entering them in four digit blocks since the display defaults to four digits.

Example: Enter the OSDIST1 talkgroup ID, 1073. Press [1] [0] [7] [3] [ENTER] then [PGM].

The display should now show I001. Enter the rest of the talkgroups as shown in the previous paragraph.

PART E. PROGRAMMING TEXT-TAGS TO BANKS

This mode only works in conventional scanning.

1. Press [PGM].
2. Select a channel within the desired bank by pressing and entering the bank number (000 for Bank 0, or 200 for Bank 2, for example). Press [MANUAL] again, then press [PGM].
3. Press [FUNC] then [6]. The cursor appears on the third line of the display. Enter the text using the keypad and press [ENTER] to accept.

NOTE: If this channel is programmed for P/L, DPL, LTR, MOT, or ED mode, the scanner displays mode information on Line 4.

PART F. PROGRAMMING TEXT-TAGS TO MEMORY CHANNELS

Also, programming text-tags to talkgroup IDs, see #7.

1. Press [MANUAL], enter the channel number where you want to enter the text, then press [MANUAL] again. M and the channel number appear in the upper left corner of the display, for example M100.
2. Press [PGM]. The display changes from an M to a P.
3. Press [TEXT]. The cursor appears on the 3rd line of the display.
4. Enter the text using the numeric keypad:
For example, input WAIKIKI-1 as follows:
W - Press 9 then 1
A - Press 2 then 1
I - Press 4 then 3
K - Press 5 then 2
I - Press 4 then 3
K - Press 5 then 2
I - Press 4 then 3
-- Press 0 then 2
1 - Press 1 then 1
5. Press [ENTER] to accept the text tag.
6. In general, repeat Step #3 to tag the other memory channels. That is, channels starting with Mxxx.

PAGE 3 -- PRO-92/PRO-2067 EDACS PROGRAMMING

7. To program text into [Talkgroup IDs](#), press [\[PGM\]](#) [\[TRUNK\]](#) [\[TEXT\]](#). The display will change to [I000](#), talkgroup ID mode. Follow the guidelines in steps 3 and 4 above.

PART G. EDACS FREQUENTLY ASKED QUESTIONS

Here are some important information regarding EDACS systems.

1. Ericsson system frequencies are arranged in a Logical Channel Number (LCN) order at each repeater location. What this means is that each system has its own set of frequencies per repeater arranged in a certain order. You must program your scanner in the LCN order given. Otherwise, your scanner may not trunk track properly.
2. Not all areas in the same district transmit on the same frequency. What this means is that each repeater covers a specific area on different frequencies. As you move into a different repeater area in the same district or even a different district, a stronger repeater covering that area will broadcast the same information, but on another frequency.
3. On EDACS capable scanners, only ONE EDACS system may be programmed in each bank. Programming multiple EDACS systems will confuse the scanner because:
 - a. The scanner can only monitor one control channel at a time.
 - b. The control channel you're listening to is associated with a particular LCN order.
 - c. Each channel has its own LCN order, the scanner will not know which LCN to switch to.
4. The Pro-92/Pro-2067 EDACS talkgroups are in decimal format as opposed to the Agency-Fleet-Subfleet (AFS) format found on many Uniden and other Radio Shack scanners. Talkgroup conversion tables can be found at <http://gtrac.ztn.net>.
5. All EDACS programming of LCN Channel 1 begins in Channel x01 of a Bank "X".
6. The control channel must NOT be locked out.
7. The scanner must be able to lock onto the control channel in order to trunk track properly. Trunked systems rely on the control channel to find the correct data for the radio system you're monitoring. When you lose reception of the control channel, the scanner loses the ability to track the system properly.
8. It is okay to program conventional frequencies in an EDACS trunking bank, but be sure that you DO NOT disturb the LCN order or otherwise program the scanner out of LCN order. Mixing a different type of trunking system with an EDACS system may cause your scanner to track improperly.

PART H. PRO-92 ADDENDUM

Things you should know about the Pro-92/Pro-2067 and EDACS systems...

Although the GTRAC website focuses primarily with the BC245XLT, Pro-94, and Pro-2052 scanners, it also gives you a good source of troubleshooting information.

As most of you already know, the Pro-92 (Firmware v1.00) displays all ANALOG and DIGITAL talkgroups that are active on the system. This has been the most powerful feature of this radio because...

Determining the LCN order on the Pro-92 is easier than ever! If you're having difficulty figuring out LCNs for a particular repeater, manually tune to a control channel, and if you're in [MANUAL](#) mode, the display will read [CTL-01](#) to [03-0375](#). Remember, the format is [LCN-Talkgroup](#). Therefore, [03-0375](#) corresponds to [LCN-3, TG-0375](#). From there, all you need to do is list all the active frequencies for your system on a sheet of paper, and determine the LCN position of the voice channel. If you have access to a second scanner that is 800 MHz capable, your job will be that much easier when it comes to figuring out your system. Good luck!