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PRO-96 Preloaded Data Addendum

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ABOUT THE PRELOADED DATA

Your RadioShack PRO-96 Digital Trunking Handheld Scanner features Radio Shack's innovative V-Scanner feature, which makes it possible for you to store up to eleven complete scanner configuration data sets in V-Scanner "folders", in the scanner's internal memory. Ten of these folders (0-9) are intended for use as folder storage locations. The eleventh location (".") is intended for use as a temporary storage location, or scratchpad, so you can easily move V-Scanner data around in the scanner. The scratchpad folder is represented with a pound sign (#) in the PRO-96 display. For more information on V-Scanner operations, please refer to the "Working with V-Scanners" section of your PRO-96 Owner's Manual.

For your convenience, the ten folder storage locations (0-9) are preloaded with the frequencies, talkgroups and configuration data for the top 100 trunked radio systems in the United States. Radio Shack gratefully acknowledges the staff at The Trunked Radio Information Homepage for providing this trunked radio system configuration data. For more information on trunked radio systems worldwide, please visit <http://www.trunkedradio.net>. Additionally, conventional radio system information is included for certain major metropolitan areas that may not be using trunked radio systems yet. The scanner's working memory and the scratchpad folder (".") are not preloaded with any data. If you are just getting started in the exciting hobby of monitoring trunked public safety communications, this preloaded data will help you get up and running faster. If you are a seasoned expert, the preloaded data can save you time and effort. In either case, we hope you find the preloaded data to be useful and enjoyable.

There are literally thousands of trunked radio systems in use throughout the United States. Your PRO-96's V-Scanner storage system is capable of holding ten sets of scanner configuration data, with a maximum of ten trunked radio systems per set, for a total of 100 trunked radio systems. The preloaded top 100 systems were selected by analyzing the system page hit counters at The Trunked Radio System Information Homepage. Non-public safety systems, airport systems, transit systems, federal systems and military systems were not included in the selected data. By selecting the top 100 systems, it is our hope that systems in your area are loaded and ready for you to use.

However, it is not possible to include every system in the United States. If the systems in your area are not preloaded, you may find it useful to review the preloaded data to see how trunked radio systems are set up in the PRO-96. You may also wish to save selected preloaded data for those occasions when you travel.

It is also important to note that the accuracy of the preloaded talkgroup and system configuration data is subject to errors in the data reported to The Trunked Radio System Information Homepage, and system configuration changes that a system operator may make from time to time. Field-testing the preloaded data at every trunked radio system was not feasible. For corrected or updated data, be sure to visit The Trunked Radio System Information Homepage frequently. Neither RadioShack nor The Trunked Radio System Information Homepage can be held responsible for errors, omissions or outdated data.

USING THE PRELOADED DATA

Preloaded Data Basics

There are three basic steps that are required in order for you to use the preloaded data in your PRO-96 Digital Scanner.

- * Examine the list of preloaded systems to see if your system is included.
- * Identify the V-Scanner folder that contains the desired system.
- * Load the appropriate V-Scanner folder into your scanner's working memory.
- * Enable or disable scan banks as needed to select the systems you wish to monitor.

This section will take you through this process step by step. For the purpose of discussion, let's assume that you live in the Broward County, Florida area, and wish to monitor the trunked radio system used by Broward County.

First, review the directory of preloaded data. You will find that Broward County, Florida is included, and can be found in V-Scanner Folder #4, in Bank 0.

1. Press **PGM**, then press **FUNC PGM**. The scanner will display the V-Scanner menu:

```
V-Scanner
1-SAVE 3-DEL
2-LOAD 5-CLN
CLR to EXIT
```

Before proceeding, you may wish to save any work that you have already done in the scanner's working memory. You can save the contents of working memory to the scratchpad folder location ("."), or you can overwrite the preloaded data in any V-Scanner folder if you decide that you will not need it in the future. If you do not need to save your scanner's current working memory configuration, proceed to Step 2. To save the contents of working memory, press 1. The scanner will display:

```
Save to
V-Scanner:
ENTER if YES
CLR to EXIT
```

Press the key that corresponds with the V-Scanner folder you wish to save the working memory configuration to. Use the "." key to save to the scratchpad, or 0-9 to save to a storage folder. Your selected folder location and the name of any previously stored V-Scanner will appear in the display. The scanner will display **** BLANK **** if the folder location is empty. For example, assume you are saving to the scratchpad folder and have previously stored a V-Scanner configuration with the name "My V-Scanner" in that location. If you choose the V-Scanner Scratchpad folder ("."), the scanner will display:

```
Save to
V-Scanner: #
ENTER if YES
My V-Scanner
```

Press **ENTER** to accept the choice, another number key to change your selection, or **CLR** to abort and return to the V-Scanner menu. The scanner gives you one final opportunity to abort before proceeding:

```
Save to
V-Scanner: #
ENT= CONFIRM
My V-Scanner
```

Press **ENTER** to confirm your choice and proceed with the V-Scanner save operation.

While saving, the scanner will display:

```
Saving to
V-Scanner: #
Please Wait
>>>
```

When the save operation is complete, press **ENTER** to return to the V-Scanner main menu.

2. To load your selection (V-Scanner #4, with Broward County in Bank 0) into working memory, press 2. The scanner will display:

```
Load from
V-Scanner:
ENTER if YES
CLR to EXIT
```

Press the number **4** to select V-Scanner #4. The scanner will prompt you to verify your choice. The V-Scanner number is shown in the second line, and the name assigned to that V-Scanner is shown in the fourth line. In this example:

```
Load from
V-Scanner: 4
ENTER if YES
Florida
```

Press **ENTER** to accept the choice. The scanner gives you one final opportunity to abort before proceeding - press **ENTER** again to continue, or **CLR** to abort:

```
Load from
V-Scanner: 4
ENT= CONFIRM
Florida
```

While loading, the scanner will display:

```
Loading from
V-Scanner: 4
Please Wait
<<<
```

When the scanner has completed the V-Scanner load operation, press **ENTER**, then **CLR** to exit the V-Scanner menu. The scanner will reboot to get a clean start with the newly loaded data.

3. Congratulations! You have successfully loaded the contents of V-Scanner #4 into the working memory of your PRO-96 scanner. Now you are ready to begin monitoring the preloaded systems. In our example, we are interested in Broward County, which is stored in Bank 0. When you first press **SCAN** to start scan operation, all ten banks (0-9) are enabled by default. To isolate and scan Bank 0, press the number keys that correspond with the banks you wish to disable while the PRO-96 is scanning. In this example, you can press 1, 2, 3, 4, 5, 6, 7, 8, then 9 to disable all banks except for Bank 0. To enable banks, simply press the number key(s) again. Pressing a number key while scanning toggles enabled/disabled status for the corresponding bank. Of course, you don't have to scan just Broward County. You may wish to enable the bank for the Miami-Dade system to the south. This system is a part of V-Scanner #4, which you have already loaded - simply press the 5 key to toggle this bank on or off.

Monitoring Wide Area Multi-Site Motorola Systems

Some of the systems that are preloaded in your scanner are wide area, multi-site Motorola systems, such as Smartzone and OmniLink systems. These systems are designed to cover very large areas by using multiple networked transmitter sites, each with its own set of frequencies. An example of this type of system is the State of Louisiana system stored in Bank 1 of V-Scanner #1.

In order to save space in the scanner, we have programmed the frequencies that carry the system control channel data for each tower site in the network into a single bank. When monitoring these systems, your scanner will typically lock on to a single control channel frequency and track the system using that control channel, unless you happen to travel beyond its coverage area. In this case, the scanner will locate a new control channel and use it to track the system.

If the scanner is used in locations where it is possible to receive more than one control channel, you may find that it sometimes locks on to a more distant site, even when a closer one is available. You can force the scanner to ignore other sites by manually stepping through the channels in the bank where the networked system is stored, locking out any control channels for sites that you would like the scanner to ignore. Be sure to enable these channels again if you change your location and would like to be able to scan the locked out sites. For more information on locking and unlocking channels, refer to “Locking Out Channels or Frequencies” in your Owner’s Manual.

Monitoring Wide Area Multi-Site EDACS Systems

Your scanner is also preprogrammed with wide area, multi-site EDACS systems. An example of this type of system is the LCRA system which serves certain areas in Central Texas. This system can be found in V-Scanner #1, Bank 4. EDACS multi-site system programming requires a separate bank for each networked EDACS site, unlike Motorola system programming, where one bank can be used.

Programming every site for systems of this type could easily occupy every bank in a V-Scanner folder, and may require additional banks in multiple V-Scanners! This would use up space that could be assigned to other systems. In order to limit the amount of space these systems consume, we have selected one site to be preloaded in the scanner. This will typically be a site that is located in a large metropolitan area.

If you would like to monitor the other sites in large EDACS networks such as the LCRA system, we recommend that you visit The Trunked Radio System Information Homepage at <http://www.trunkedradio.net> to obtain the frequency assignments for the desired sites.

Using the Preloaded Conventional Data

Programming trunking systems normally does not require the use of all channels in a bank. Where appropriate, we have included programming for conventional, non-trunked systems in large metropolitan areas. Loading and using this data is similar to the process used to load and use the preloaded trunked radio system data. The PRO-96 will monitor trunked systems and conventional channels simultaneously if both are in range of the scanner. Optionally, if you do not wish to monitor the trunked radio system that shares the bank with the conventional channels, you should step through the bank manually and lock out the channels assigned to the trunked radio system. On a similar note, you may not wish to monitor the conventional channels that share a bank with a trunked radio system. These can be identified and locked out as well. For more information on locking and unlocking channels, refer to “Locking Out Channels or Frequencies” in your Owner’s Manual.

The majority of conventional radio systems use CTCSS subaudible squelch encoding. To help you take advantage of this, the preloaded conventional frequencies are configured for CTCSS mode with a squelch code setting of “Code Search.” If CTCSS is present on a conventional transmission, you will see it displayed on the bottom line of the LCD. The “S” next to the lightning bolt indicates a CTCSS search hit. You can press **ENTER** to automatically store the found code with the channel setting. This will lock in the found code so future transmissions on the frequency will not be heard unless the stored code is present with the transmission.

If you do not see a code displayed during a transmission, it is likely that a DCS code is in use, or the system is not using encoded squelch. Press the **MODE** key once during a transmission to step the mode setting to DCS, and follow the steps above for storing the code if a the Code Search identifies a found DCS code. If you do not see a search hit on either the CT or DC modes, it is likely that the transmission is using carrier squelch with no encoding. Refer to “Programming Channels for CTCSS and DCS Operation” in your Owner’s Manual for more information on CTCSS and DCS operation.

Using Open and Closed Modes

Where possible, the preloaded data includes talkgroup IDs and text labels for public safety talkgroups. Non-public safety talkgroups are not included, such as those used for local government services.

You can use your scanner's open and closed modes to determine which talkgroups the scanner will receive. All preloaded systems are programmed for open mode operation by default, so you can hear all of the traffic on the systems you monitor, including talkgroups that have not been entered into the ID list. If a bank is set to closed mode, the scanner will only receive talkgroups that are specifically programmed into the ID list.

You can lock out undesired talkgroups by pressing the **L/OUT** key while the talkgroup is active. This may be necessary to block the reception of talkgroups that carry data messages or traffic that is not of interest to you. When you lock out a talkgroup in this manner, the radio stores the undesired ID in the ID list and locks it out at the same time. This will block traffic on the locked out talkgroup in both open and closed modes.

Open and closed mode status for the current bank is toggled by pressing **FUNC**, then **5**. For more information on open and closed mode operation, see "Open and Closed Mode Operation" in your Owner's Manual.

When scanning trunked systems in open mode, you can press **TRUNK** to automatically store new talkgroup IDs in the ID list. This will allow you to scan the new talkgroups you find when operating in closed mode. When you store talkgroups IDs this way, the scanner assigns a text label automatically, consisting of the talkgroup ID. You can change this default talkgroup ID by pressing **PROG**, then **TRUNK**, then scroll to the ID you wish to label, then press **TEXT** and update the label using the keypad. Refer to "Storing Talkgroup IDs" and the "Text Input Chart" in your Owner's Manual for more information.

Encrypted Communications

It is possible that some of the preloaded data may include frequencies and trunking talkgroups that carry encrypted communications. Voice radio encryption is used to scramble the voice information so only the intended recipient can understand the message. In some cases, encrypted frequencies and talkgroups are encrypted all of the time, in others, encryption is activated as needed by the users, with most traffic transmitted in clear mode.

Voice radio encryption has different sounds. Encrypted digital traffic sounds like rapid random syllables. Other methods of encryption make a rushing sound, as if the squelch control was turned fully counterclockwise, or use frequency inversion, where you can hear but not understand the voice information.

Your PRO-96 is not capable of receiving encrypted communications. You may wish to lock out any frequencies or talkgroups that routinely carry encrypted traffic.

Recommended Reading

This addendum is intended as a basic introduction to the preloaded data in your PRO-96 scanner. Your Owner's Manual is the best source of detailed operating information for your PRO-96. Reading it will enhance your enjoyment of the preloaded systems. Specifically, we suggest that you become familiar with the following sections:

- * Operating Your Scanner
- * Working With V-Scanners
- * Trunking Special Features

PRELOADED DATA DIRECTORY

V-Scanner #0	N TEXAS (North TX)		Type	Bank Tag	Control Channel Tag
Bank 0	Arlington	TX	MO	Arlington TRS	Arlington TRS
Bank 1	Carrollton System	TX	MO	Carrolltn-TRS	Carrolltn-TRS
Bank 2	Denton City	TX	MO	Denton TX TRS	Denton TX TRS
Bank 3	FortWorth / Tarrant County	TX	MO	FortWorth-TRS	FortWorth-TRS
Bank 4	Garland	TX	MO	Garland TRS	Garland TRS
Bank 5	Grand Prairie	TX	MO	GDPrarieTRS	GDPrarieTRS
Bank 6	Irving	TX	ED	Irving TRS	IrvingTX TRS
Bank 7	Lewisville	TX	MO	Lewisvll-TRS	Lewisvll-TRS
Bank 8	Plano	TX	MO	Plano TX TRS	Plano TX TRS
Bank 9	Richardson	TX	ED	Richard-snTRS	Richard-snTRS

V-Scanner #1	S TX-LA (South TX-LA)		Type	Bank Tag	Control Channel Tag
Bank 0	New Orleans	LA	ED	NwOrleansTRS	NwOrleansTRS
Bank 1	State of Louisiana Smartzone	LA	MO	Louisiana-TRS	Louisiana-TRS
Bank 2	Austin	TX	MO	Austin TRS	Austin TRS
Bank 3	Bexar County	TX	MO	Bexar TX TRS	Bexar TX TRS
Bank 4	LCRA Wide Area, Austin site	TX	ED	LCRA Aus TRS	LCRA Aus TRS
Bank 5	San Antonio (Central)	TX	MO	SA TX CN TRS	SA TX CN TRS
Bank 6	San Antonio (Northeast)	TX	MO	SA TX NE TRS	SA TX NE TRS
Bank 7	San Antonio (Northwest)	TX	MO	SA TX NW TRS	SA TX NW TRS
Bank 8	Southeast Texas Area Radio Network (STARNET)	TX	MO	SE TX TRS	SE TX TRS
Bank 9	Williamson County	TX	MO	WlmsnTX TRS	WlmsnTX TRS

V-Scanner #2	S CA-AZ-NV (CA-AZ-NV-NM)		Type	Bank Tag	Control Channel Tag
Bank 0	Mesa	AZ	MO	Mesa AZ TRS	Mesa AZ TRS
Bank 1	State Fe, Public Safety System	AZ	MO	Santa Fe TRS	Santa Fe TRS
Bank 2	Phoenix City	AZ	MO	Phoenix TRS	Phoenix TRS
Bank 3	Maricopa County ASTRO Smartzone	AZ	MO	Maricopa TRS	Maricopa TRS
Bank 4	Orange County CCCS	CA	MO	OrangeCA TRS	OrangeCA TRS
Bank 5	Riverside County	CA	ED	Riverside-TRS	Riverside-TRS
Bank 6	San Bernardino County (6-7)	CA	MO	S Bernardino	S Bernardino
Bank 7	San Diego City	CA	MO	SDiego-CtyTRS	SDiego-CtyTRS
Bank 8	San Diego County RCS	CA	MO	SanDiego TRS	SanDiego TRS
Bank 9	Clark County NV	NV	MO	Clark NV TRS	Clark NV TRS

V-Scanner #3	N CA/NW (North CA/NW)		Type	Bank Tag	Control Channel Tag
Bank 0	Alameda County	CA	MO	Alameda TRS	Alameda TRS
Bank 1	San Francisco	CA	MO	San Fran TRS	San Fran TRS
Bank 2	Sacramento County	CA	MO	Scrmnto-CoTRS	Scrmnto-CoTRS
Bank 3	Sacramento City	CA	MO	Scrmnto-CyTRS	Scrmnto-CyTRS
Bank 4	Colorado Springs / El Paso Co	CO	MO	ColoSpgs TRS	ColoSpgs TRS
Bank 5	Denver	CO	ED	Denver TRS	Denver TRS
Bank 6	Oklahome State Smartzone	OK	MO	Oklahoma TRS	Oklahoma TRS
Bank 7	State of South Dakota	SD	MO	S Dakota TRS	S Dakota TRS
Bank 8	UCAN (Utah Communications Agency Network)	UT	MO	Utah TRS	Utah TRS
Bank 9	Seattle/King County	WA	MO	Sea/King TRS	Sea/King TRS

V-Scanner #4	FL (Florida)		Type	Bank Tag	Control Channel Tag
Bank 0	Broward County	FL	MO	Broward TRS	Broward TRS
Bank 1	Hillsborough County	FL	ED	Hillsbrgh-TRIS	Hillsbrgh-TRIS
Bank 2	Jacksonville City	FL	MO	Jcksnvll-TRIS	Jcksnvll-TRIS
Bank 3	Lee County (New)	FL	MO	LeeCo FL TRS	LeeCo FL TRS
Bank 4	Martin County ASTRO Smartzone	FL	MO	MartinFL TRS	MartinFL TRS
Bank 5	Miami-Dade County	FL	ED	Miami-DadeTRIS	Miami-DadeTRIS
Bank 6	Orlando / Orange County Smartzone	FL	MO	Orlando TRS	Orlando TRS
Bank 7	Palm Beach County	FL	MO	Palm-BeachTRIS	Palm-BeachTRIS
Bank 8	Pinellas County	FL	MO	Pinellas TRS	Pinellas TRS
Bank 9	West Palm Beach	FL	MO	WPalmBch TRS	WPalmBch TRS

V-Scanner #5	BAL-MD-DE-PA (BAL-MD-DE-PA)		Type	Bank Tag	Control Channel Tag
Bank 0	State of Delaware	DE	MO	Delaware TRS	Delaware TRS
Bank 1	Anne Arundel County	MD	MO	AACO TRS	AACO
Bank 2	Baltimore City ASTRO Smartzone	MD	MO	BaltCity TRS	Balt City
Bank 3	Baltimore County	MD	MO	Balt Co TRS	Balt Co TRS
Bank 4	Fredrick County	MD	MO	Fredrick TRS	Fredrick TRS
Bank 5	Howard County	MD	MO	Howard TRS	Howard TRS
Bank 6	Uper Maryland Eastern Shore Consortium	MD	MO	Eastern-Shore	Eastern-ShTRS
Bank 7	Worcester County	MD	ED	Ocean City	Ocean-CityTRS
Bank 8	Bucks County, PA	PA	MO	Bucks Co TRS	Bucks Co TRS
Bank 9	Philadelphia ASTRO	PA	MO	Phil PA TRS	Phil PA TRS

V-Scanner #6	WAS-VA-DC-M-D (VA-DC-MD)		Type	Bank Tag	Control Channel Tag
Bank 0	Washington DC Fire/EMS	DC	MO	DCFire MDP	DCFD Astro
Bank 1	Montgomery County (MD)	MD	MO	Montgomery-MD	Montgomery-Co
Bank 2	Alexandria	VA	MO	Alex Cnty VA	ALEXANDRIA
Bank 3	Arlington County	VA	MO	Arlington Co	ARLINGTON
Bank 4	Fairfax County	VA	MO	Fairfax Cnty	Fairfax
Bank 5	Loudoun County ASTRO	VA	MO	Loudoun TRS	Loudoun TRS
Bank 6	Prince William County	VA	MO	Prince-WillCo	PWC CC1
Bank 7	Richmond/Henrico/Chesterfield Regional	VA	MO	Richmond TRS	Richmond TRS
Bank 8	Spotsylvania County	VA	ED	Spots/Stfrd	SPOTSYLVANIA
Bank 9	Virginia Beach	VA	MO	VA Beach TRS	VA Beach TRS

V-Scanner #7	NY-NJ-CT-MA (NY-NJ-CT-MA)		Type	Bank Tag	Control Channel Tag
Bank 0	State of Connecticut ASTRO Smartzone	CT	MO	Conn State	CT State TRS
Bank 1	Massachusetts State Police Statewide	MA	MO	Mass State	MA SPD TRS
Bank 2	Atlantic City	NJ	MO	AtlCity/ SNJ	AtlCity TRS
Bank 3	Edison Township	NJ	MO	Edison NJ	Edison TRS
Bank 4	Ocean County	NJ	MO	Ocean County	Ocean Co TRS
Bank 5	State of New Jersey Troop A South	NJ	MO	NJSP Troop A	NJ Troop A
Bank 6	State of New Jersey Troop B North	NJ	MO	NJSP Troop B	NJ Troop B
Bank 7	State of New Jersey Troop C Central	NJ	MO	NJSP Troop C	NJ Troop C
Bank 8	New York City FDNY EMS Operations	NY	MO	FDNY/ NYC EMS	FDNY EMS TRS
Bank 9	Suffolk County	NY	MO	Suffolk/ NYPD	Suffolk TRS

V-Scanner #8	IL-MI-IN (IL-MI-IN)		Type	Bank Tag	Control Channel Tag
Bank 0	Chicago / Services	IL	MO	Chicago TRS	Chicago TRS
Bank 1	Northwest Central Dispatch (Digital)	IL	MO	NW Central	NW Dist TRS
Bank 2	Schaumburg	IL	MO	Schaumbg TRS	Schaumbg TRS
Bank 3	Indiana Project Hoosier SAFE-T (Statewide)	IN	MO	Indiana TRS	SAFE-T TRS
Bank 4	Ann Arbor / Washtenaw County	MI	MO	AnnArbor TRS	Ann Arbor Co
Bank 5	Downriver Mutual Aid	MI	MO	DwnRiver TRS	DwnRvr M-Aid
Bank 6	State of Michigan (Lower Peninsula)	MI	MO	Michigan SPD	MI SPD Lower
Bank 7	State of Michigan (Upper Peninsula)	MI	MO	Michigan SPD	MI SPD Upper
Bank 8	Wayne County (NEW)	MI	MO	Wayne Co TRS	Wayne County
Bank 9	Western Wayne County Mutual Aid	MI	MO	W. Wayne TRS	W. Wayne Co

V-Scanner #9	OH-SE (OH-SE)		Type	Bank Tag	Control Channel Tag
Bank 0	Arkansas Statewide Smartzone	AK	MO	AK State TRS	AK State TRS
Bank 1	Atlanta	GA	MO	Atlanta TRS	Atlanta TRS
Bank 2	Charlotte / Mecklenburg County	NC	MO	Charlotte NC	Charlotte-TR
Bank 3	Greensboro / Guilford County	NC	MO	GreensboroNC	GreensboroTR
Bank 4	Dayton	OH	MO	Dayton OH	Dayton TRS
Bank 5	Franklin County Communicati- ons Authority	OH	MO	Franklin OH	Franklin TRS
Bank 6	Miami County	OH	ED	Mialmi OH TRS	Mialmi OH TRS
Bank 7	State of Ohio MARCS ASTRO OmniLink	OH	MO	Ohio State	Ohio TRS
Bank 8	Palmetto 800 (Formerly SCANA)	SC	MO	Palmetto, SC	Palmetto TRS
Bank 9	Nashville Davidson County	TN	MO	Nashville-TR	Nashville-TR