

# Introduction

The AMX 791 and AMX 792 are distribution disks used with an AMX 501 Programmer Interface that attaches to a serial port of an IBM PC XT compatible personal computer. The AMX 791 is a 3 1/2" distribution disk and the AMX 792 is a 5 1/4" distribution disk.

The AMX 791/792 distribution disk contains the UNIPRO program and modules for 800 and 900 MHz trunking radios. UNIPRO allows you to do the following:

- Read data from a radio.
- Open an existing data file on a disk.
- Create a new data file.
- Edit a data file.
- Save a data file to a disk.
- Write a data file to a radio.
- Print radio programming data.
- Set and clear a radio's Test mode.
- Copy the same data to several radios

A distribution disk for conventional radios (AMX 793/794) is also available. You can install both the trunking and conventional versions of UNIPRO on the same disk or directory

You will need the following to use UNIPRO:

- An IBM PC-XT compatible personal computer with at least 512 KB of RAM.
- Any of the following combinations of disk drives for installation.
  - Two 360 KB floppy disk drives.
  - One 720 KB floppy disk drive.
  - One floppy disk drive and one hard disk drive.
- MS-DOS version 2.11 or higher.
- The AMX 501 Programmer Interface.
- AMX 791 for a 3 1/2" Floppy Disk Drive (720 KB or higher).  
— or —  
AMX 792 for a 5 1/4" Floppy Disk Drive (360 KB or higher)

# Installing UNIPRO

You can install the UNIPRO program on a floppy disk or on a hard disk. The program UNIPTRNK.EXE installs all necessary data and program files you need on the disk.

## Installing UNIPRO on a Floppy Disk

You can install UNIPRO on any formatted floppy disk. The formatted floppy disk can be a system disk if needed. If you are using AMX 791, you can install UNIPRO on the AMX 791 distribution disk.

**NOTE:** A system disk has all of the necessary MSDOS files to "boot-up" the personal computer.

You need a formatted floppy disk and two floppy disk drives to install UNIPRO on a floppy disk.

1. Place the AMX 791/792 distribution disk in drive A.
2. Place a formatted disk in drive B if you are not installing the program on the AMX 791 distribution disk.
3. Type **A :**
4. Press **Enter**.
5. Type **UNIPTRNK B :** to install the program on the formatted disk in drive B.  
—or—  
Type **UNIPTRNK** to install the program on the AMX 791 distribution disk.
6. Press **Enter**.
7. If you have already installed a version of UNIPRO, the prompt "Do you want to overwrite existing files (Y/N)" appears.
  - a. If the installed version is an earlier version, type **Y** and press **Enter**.
  - b. If the installed version is the current conventional version, type **N** and press **Enter**.

## Installing UNIPRO on a Hard Disk

You can install the UNIPRO program in a directory on a hard disk.

1. Place the AMX 791/792 distribution disk in drive A.
2. Type **MD \UNIPRO** and press **Enter** to make a UNIPRO directory on your hard disk.
3. Type **CD \UNIPRO** and press **Enter** to change to the UNIPRO directory.
4. Type **A : UNIPTRNK C :** and press **Enter** to install the program in the UNIPRO directory.
5. If you have already installed the conventional version of UNIPRO, the prompt "Do you want to overwrite existing files (Y/N)" appears.
  - a. If the installed version is an earlier version, type **Y** and press **Enter**.
  - b. If the installed version is the current conventional version, type **N** and press **Enter**.

# Connecting the AMX 501 Programmer Interface

Before you can use UNIPRO to read data from or write data to a radio, you must connect the AMX 501 Programmer Interface to your personal computer as follows:

1. Use a standard DB-25 connector cable (not included) to connect the AMX 501 to the chosen RS-232C port of the personal computer.
2. **For Portable Radios:**
  - a. Insert the power plug of the adaptor supplied with the AMX 501 into the socket labeled "12 VDC" on the back of the AMX 501. This adaptor has a non-standard polarity. You can use cigarette lighter adaptors with the proper polarity for field programming.
  - b. Plug the adaptor into an AC power outlet.
  - c. Plug the two-prong cord on the front of the programmer into the SP-MIC jack of the portable radio.
3. **For Mobile Radios,** connect the 5-pin DIN plug to the Microphone jack of the radio. If the radio is installed in a vehicle, power is supplied to the programmer from the radio through the 5-pin DIN cord. If the radio is not installed in a vehicle, use the AC adapter that came with the AMX 501. When you use the 5-pin adapter, the screw on the adapter should always point down.

**IMPORTANT:** *Make sure the radio is ON before you try to read data from it or write data to it. Portable radios must have enough battery power for normal use. If the radio has insufficient battery power, insert the radio and battery into the battery charger. For the SMS 815T, set the OFF/SET/ON control to the ON position.*

# Configuring UNIPRO

You **must** run SETUP to configure UNIPRO. SETUP creates the configuration file UNIDEN.CFG which contains information on the monitor type, the default band, and the COM Port in the computer. To run SETUP:

1. Insert the floppy disk that you installed UNIPRO on into drive A

—or—

Change to the UNIPRO directory on the hard disk.

When the DOS (>) prompt appears, type **SETUP**

2. Press **(Enter)** and the Setup menu appears with **Monitor Type** highlighted.

<b>Monitor Type</b>	Band	COM Port	Save
<b>Color</b> B&W Color Monochrome			

**NOTE:** Throughout this guide highlighted selections in menus are shown in boldface. If you have a color monitor, highlighted selections are shown in a different color. If you have a monochrome monitor, highlighted selections are underlined.

3. Press **(Enter)** to choose **Monitor Type**. The monitor type menu appears with **Color** highlighted.
4. Use the **(↑)** and **(↓)** keys to highlight the monitor choice that corresponds to the monitor attached to your personal computer.

<b>Color</b>	Use with CGA or EGA type monitors.
<b>B&amp;W Color</b>	Use with composite type monitors. These are typically monochrome monitors attached to an EGA or MVGA adapter.
<b>Monochrome</b>	Use with Hercules Graphic drivers (also called MDA or MGA).

5. Press **(Enter)**.
6. Use **(→)** to move the highlight to **Band**.
7. Press **(Enter)** to choose **Band**. The band selection menu appears with **Conventional** highlighted.

Monitor Type	<b>Band</b>	COM Port	Save
	<b>Conventional</b> Trunking 800 Trunking 900		

8. Use the **(↑)** and **(↓)** keys to highlight the band that you want UNIPRO to use as the default band.
9. Press **(Enter)** to choose the default band.
10. Use **(→)** to move the highlight to **COM Port**.

11. Press **Enter** to choose **COM Port**. The COM Port selection menu appears with **COM 1** highlighted. SETUP uses COM 1 as the default COM Port when it does not find the configuration file, UNIDEN.CFG.

Monitor Type	Band	COM Port	Save
		<div>COM 1 COM 2 COM 3 COM 4</div>	

12. Use the **↑** and **↓** keys to highlight the port where you are connecting the programmer.
13. Press **Enter**.
- NOTE:** If you want to exit SETUP without saving these parameters, press **Esc**.
14. Use the **→** key to highlight **Save**.
15. Press **Enter** to save the configuration file and exit SETUP.

# Using UNIPRO

Before you run the UNIPRO program, you should have run SETUP. SETUP creates the UNIPRO configuration file, UNIDEN.CFG. If UNIPRO does not find UNIDEN.CFG, it will use the following defaults:

- Monitor type = Color.
- Band = Conventional.
- COM Port = COM 1

To start the UNIPRO program, insert the floppy disk that contains the UNIPRO files into drive A or change to the UNIPRO directory on the hard disk.

1. Type **UNIPRO**
2. Press **Enter**. The start-up screen appears.
3. Press the spacebar or any key to continue to the next screen.

UNIPRO contains the programming information for conventional (if installed), 800 MHz trunking, and 900 MHz trunking bands. Once you have chosen one of these bands, you can choose the radio model you want to program.

## Choosing the Band

The main menu at the top of the screen shows menu choices of **BAND** and **QUIT**. The choice **BAND** is highlighted.

1. Press **Enter** to choose **BAND**.

<b>BAND</b>	<b>QUIT</b>
-------------	-------------

2. Use the **↑** and **↓** keys to highlight a radio band and press **Enter** to choose the band.

—or—

Press **C** for Conventional, **8** for 800 MHz, or **9** for 900 MHz.

<b>BAND</b>	<b>QUIT</b>
-------------	-------------

Conventional
800 MHz Trunking
900 MHz Trunking

3. If you want to exit UNIPRO, use **↓** to choose **QUIT** from the menu and press **Enter**.

—or—

Press **Q**.

**NOTE:** You can press **Esc** to exit from any menu.

Once you choose the band, UNIPRO executes the module for that band, if it is installed.

**NOTE:** If you choose **Conventional** and you have not installed the conventional modules from an AMX 793 or AMX 794 distribution disk, the message "Conventional module not installed" appears. Press the spacebar and the Band selection menu reappears.

## Choosing the Radio Model

The band you chose appears at the bottom of the screen. The choice **RADIO** is highlighted on the main menu at the top of the screen.

BAND	<b>RADIO</b>	QUIT
------	--------------	------

1. Press **Enter**.
2. If you chose the 800 MHz band the following menu appears:

BAND	<b>RADIO</b>	QUIT
<div>SMS 815 SMS 825 SMS 835 SPS 310 SPS 320</div>		

3. If you chose the 900 MHz band the following menu appears:

BAND	<b>RADIO</b>	QUIT
<div>SMS 925 SMS 930 SMS 935 SPS 920</div>		

4. Use the **↑** and **↓** keys to highlight the radio model you want to program.
5. Press **Enter** to choose the radio model.

The chosen radio name appears at the bottom of the screen and the full main menu appears at the top of the screen.

**NOTE:** The **EDIT** and **PROGRAM** options do not appear until you select a radio

## Loading an Existing Data File

Do the following to load an existing data file from a floppy disk or from a hard disk directory:

1. Use **→** to move the highlight to **EDIT** and press **Enter**.

—or—

Press **E**.

BAND	RADIO	<b>EDIT</b>	PROGRAM	QUIT
------	-------	-------------	---------	------

2. Use the **↑** and **↓** keys to highlight **Load Customer File** and press **Enter**.

—or—

Press **L**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Edit Data  
 New File  
**Load Customer File**  
 Save Customer File  
 Print Data  
 Quit to Top Menu

3. A pop-up entry box appears on the screen. Type the filename of the customer file you want to load and press **Enter**. If you do not know the filename you can type the wildcard entry "\*.\*" and a list of all files on the UNIPRO directory appears. If the files were saved using the filename extensions described in "Saving a Data File", you can type "\*.800" to see a list of 800 MHz data files. Type "\*.900" for a list of 900 MHz data files. Type "\*.CNV" for a list of conventional data files.
4. If radio data is already loaded into the memory of the personal computer, the message "Data is currently loaded. Erase current data? (y/n)" appears. Type **Y** or **N** and press **Enter**.
5. When the file is loaded, the message "Success" appears in the center of the screen and you can edit the data or write it to a radio.

## Creating A New Data File

Do the following to create a new data file:

1. Use **→** to move the highlight to **EDIT** and press **Enter**.  
 —or—  
 Press **E**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

2. Use the **↑** and **↓** keys to highlight **New File** and press **Enter**.  
 —or—  
 Press **N**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Edit Data  
**New File**  
 Load Customer File  
 Save Customer File  
 Print Data  
 Quit to Top Menu

3. If radio data is already loaded into the memory of the personal computer, the message "Data is currently loaded. Erase current data? (y/n)" appears. Type **Y** or **N** and press **Enter**.
4. If you type **Y**, all radio programming data in the memory of the personal computer clears and all radio variables are set to their default values. If you type **N**, the main menu reappears.
5. The System 1 editing screen appears.



## Reading Data From a Radio

Do the following to read data from a radio:

1. If you have not already done so, connect the AMX 501 Programmer Interface to the serial port of the personal computer that you chose during configuration.
2. Connect the radio to the AMX 501.
3. Turn the radio on.
4. Use **→** to move the highlight to **Program** and press **Enter**.

—or—

Press **P**.

BAND	RADIO	EDIT	<b>PROGRAM</b>	QUIT
------	-------	------	----------------	------

5. Use the **↑** and **↓** keys to highlight **Read Data from Radio** and press **Enter**.

—or—

Press **R**.

BAND	RADIO	EDIT	<b>PROGRAM</b>	QUIT
------	-------	------	----------------	------

Program Radio Verify Data in Radio <b>Read Data from Radio</b> Set Test Mode Clear Test Mode Quit to Top Menu
--

**NOTE:** If an error message appears or if the power LED on the AMX 501 does not light, see Appendix C.

6. UNIPRO reads the programming data from the radio into the memory of the personal computer.
7. UNIPRO verifies that the data was read correctly. After a successful read, you can edit the data, save it to a disk file, or write it to a radio.

## Editing a Data File

Do the following to edit a data file in the memory of the personal computer:

1. Use **→** to move the highlight to **EDIT** and press **Enter**.

—or—

Press **E**.

BAND	RADIO	<b>EDIT</b>	PROGRAM	QUIT
------	-------	-------------	---------	------

2. Use **↑** and **↓** to highlight **Edit Data** and press **Enter**.

—or—

Press **E**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Edit Data  
 New File  
 Load Customer File  
 Save Customer File  
 Print Data  
 Quit to Top Menu

There are edit screens that you can use to edit system data for a specific system, group data within a system, and system features for all systems. Each of these screens is broken into fields. Some of these fields require you to type in a value. Other fields require you to press the spacebar to toggle between two or more values.

When the correct value is in a field press the **Enter** key or the **→** key to advance to the next field. If you want to return to the previous field on the screen, press and hold the **Shift** key then press the **←** key.

The **→** and **←** keys move the cursor one character to the right or to the left within a field. The **↑** key moves the cursor to the same field on the previous line and the **↓** key moves the cursor to the same field in the next line.

If you position the cursor over existing data in a field and type new data, the original data is overwritten. The **Backspace** key deletes the character to the left of the current cursor position within a field. It also moves the characters to the right of the deleted character one space to the left in the field.

**NOTE:** The screens shown in this guide show all fields that may appear. Some of these fields may not appear for a specific radio. Fields that do not appear for specific radios are noted in the text.

**NOTE:** UNIPRO automatically saves all of the radio data in the memory of the personal computer each time you exit the program. However, it is a good idea to save all of your data to a file each time you run UNIPRO. The default files UNIPRO saves data to are:

- UNIDEN.800 for 800 MHz data.
- UNIDEN.900 for 900 MHz data.
- UNIDEN.CNV for conventional data.

# Editing System Data

When you first choose **Edit Data** or **New File**, the System 1 data screen appears. Press **(PgUp)** if you want to advance to the data screen for the next system. Press **(PgDn)** to return to the data screen for the previous system. There are up to 10 trunking system screens. You can program system 10 as either a trunking system or a conventional system. To program system 10 as a conventional system, press **(F2)** when the system 10 edit screen appears. After you edit the system screens you can advance to a special screen to edit system features. If you press **(F5)**, the group data screen for the current system appears.

**NOTE:** Only four system screens appear when you program the SMS 815.

System 1					
Area <u>0</u>	Base <u>05</u>		12.5 KHz Offset	<u>N</u>	
Repeater	Channel No	Phone	Repeater	Channel No	Phone
1	<u>1</u>	N	11		N
2		N	12		N
3		N	13	<u>120</u>	N
4		N	14		N
5	<u>40</u>	N	15		N
6		N	16		N
7		N	17	<u>140</u>	N
8		N	18		N
9	<u>80</u>	N	19		N
10		N	20		N
Talk Around: <u>05 - 001</u>			Emergency Call Tone: <u>Y</u>		
<b>&lt;Esc&gt; Exit   &lt;PgUp&gt; Last System   &lt;PgDn&gt; Next System</b> <b>F1                      F3 Clear System   F5 Group Screen   F7 GoTo System   F9</b> <b>F2                      F4 Copy System   F6                      F8                      F10</b>					

- When each system screen appears for the first time, the cursor is in the Area field. The area can be set to either **0** or **1**. Type in the area number that corresponds to the trunking system you are programming into the radio. You should normally set the area number to **0**. If you are programming a co-channel system, set the area number to the value used in the system you are programming. Type the Area number (0 or 1). Press **(Enter)** or **(→)** to continue.
- The Base (or Home ) Repeater number is the number of the repeater that the radio is assigned to. Type a number between 0 and 20. If you type **0**, the programmer will not program this system. Press **(Enter)** or **(→)** to continue.
- If the 12.5 kHz offset is set to **Y**, the channel frequency is shifted -12.5 kHz. This field is normally set to **N**. Press the space bar to toggle this field between **Y** and **N**. Press **(Enter)** or **(→)** to continue.
- Do the following to enter data about each repeater (1 - 20) in the system:
  - Enter the FCC channel number for the repeater. The FCC channel numbers for 800 MHz are listed in Appendix A. The FCC channel numbers for 900 MHz are listed in Appendix B. If a repeater is not in the system, press **(Enter)** or type **0** and press **(Enter)** or **(→)** to continue.  
  
**NOTE:** If you did not type **0** in the Base field, you must assign a channel number to the base repeater.
  - The Phone field tells the radio if the repeater is connected to a Repeater Interconnect Controller (RIC). Press the space bar to toggle this field between **Y** and **N**. Press **(Enter)** or **(→)** to continue.

**NOTE:** *A radio must have a Dual Tone Multiple Frequency (DTMF) keypad to effectively use the Telephone Interconnect option. If a radio does not have a DTMF keypad, it **can receive** an interconnect call, however, it **cannot hang up** from the call. If you are programming a mobile radio for telephone interconnect, make sure that the mobile radio has an AMX 101A Microphone (with DTMF keypad) attached to it.*

- c. Repeat steps "a" and "b" until you have entered all repeater channels in the system. Press **[↔]** until you are in the first Talk Around field. Use the arrow keys to move directly up or down a column.
5. Talk-Around Channel (TAC) allows one radio to talk directly to another radio without using a repeater. Type a repeater number (0-20) and press **[Enter]** or **[↔]** to continue.

**NOTE:** *The repeater number that is used for TAC must have an FCC channel number assigned to it on the current system screen. Also, the ID number must be defined on the group data screen for the current system. It is recommended that you use the home repeater number for the system as the TAC repeater number. It is also recommended that you use the dispatch code as the TAC code. This allows the operator to monitor TAC traffic without putting the radio in TAC mode. If the TAC repeater is active and the radio is within range of it, transmit is inhibited in TAC mode.*

6. Type the ID number (1-199) for TAC in the field on the right side of the dash and press **[Enter]** or **[↔]** to continue.
7. The Emergency Call Tone sounds to warn the operator of an incoming emergency call. Press the spacebar to toggle this field between **Y** and **N**. Press **[Enter]** or **[↔]** to continue.

**NOTE:** *The Emergency Call Tone Field only appears when you program the SMS 835.*

8. If you want to erase all the data you entered for a system, press **[F3]** to clear the data from the current system screen. A screen message will appear and ask if you are sure you want to delete the system information. Press **Y** to clear; press **N** to keep the data.
9. If you want to enter the same data for the current system that you entered for another system, press **[F4]**. **[F4]** will not copy Talk Around data or Group Scan data. The **[F4]** key will not copy data to the System 10 Conventional screen.
10. To enter group data for the current system, press **[F5]** to toggle between the group screen and the system screen.
11. Press **[PgUp]** to go to the previous system screen.

—or—

Press **[PgDn]** to go to the next system screen.

—or—

If you want to go to a specific system screen, press **[F7]** and type the system number. Press **[Enter]** to go to the system screen.

12. If you are in the screen for system 10 you can switch to a screen that allows you to enter data for a conventional system. "Editing Conventional (System 10) Data" describes this screen.

## Editing Group Data

The group data screen appears when you press **F5** while in a trunking system data screen. The group screen contains information on the groups in each trunking system.

**NOTE:** Only four rows of group data fields appear when you program the SMS 815.

System 1						
Group	TX-ID	RX-ID	Call	Queuing	RIC	Reply
1	250	250	Y	Y	Y	Y
2	001	001	N	N	N	N
3			N	N	N	N
4			N	N	N	N
5			N	N	N	N
6			N	N	N	N
7			N	N	N	N
8			N	N	N	N
9			N	N	N	N
10			N	N	N	N
TX Inhibit: <u>002 - 005</u> Group Code Search    Block: <u>Y</u> All: <u>N</u>						
Dispatch TOT: <u>3.0</u> (minutes)    Interconnect TOT: <u>3.0</u> (minutes)						
<Esc> Exit    <PgUp> Last System    <PgDn> Next System F1                      F3 Clear Group    F5 System Screen    F7                      F9 F2                      F4                      F6                      F8                      F10						

1. Enter the data for each group (1-10) as follows:
  - a. Type the transmit ID code (0-250) for this group position. Typing an ID code of zero (0) turns the ID code off. Press **Enter** or **→** to continue.
  - b. Type the receive ID code (0-250) for this group position. Typing an ID code of zero (0) turns the ID code off. Press **Enter** or **→** to continue.
  - c. Each group within a system can be set to turn on the call light if the radio receives a call on that group code. Press the space bar to toggle this field between Y and N. Press **Enter** or **→** to continue.
  - d. When you enable Busy System Queuing and attempt to access a busy channel, the radio tries to capture the system for 30 seconds. Press the spacebar to toggle this field between Y and N. Press **Enter** or **→** to continue.

**NOTE:** This column of fields does not appear when you program the SMS 815 radio. The Busy System Queuing option is not available with this radio.

- e. The RIC option identifies a group ID as a telephone interconnect ID. Press the space bar to toggle this field between Y and N. Press **Enter** or **→** to continue.

**NOTE:** A radio must have a Dual Tone Multiple Frequency (DTMF) keypad to effectively use the Telephone Interconnect option. If a radio does not have a DTMF keypad, it **can receive** an interconnect call, however, it **cannot hang up** from the call. If you are programming a mobile radio for telephone interconnect, make sure that the mobile radio has an AMX 101A Microphone (with DTMF keypad) attached to it.

- f. If a radio is set on one group and receives a call on a different group, the Reply ID feature automatically changes the radio to the calling group. This group number displays for the duration of the dwell time. This allows the radio operator to answer a call without changing the group setting. Press the spacebar to toggle this field between Y and N. Press **Enter** or **→** to continue.

**NOTE:** This column of fields does not appear when you are programming the SMS 815 or the SPS 310. The Reply ID feature is not available for these radios.

- g. Repeat steps "a" through "f" for each group in the system.
2. The TX Inhibit field defines a range of IDs that inhibit the transmitter of the radio when the radio receives them. The transmitter remains inhibited for 6 seconds after the ID dequeys. Type the lowest ID in the range and press **Enter** or **→** to continue.
3. Type the highest ID code in the range and press **Enter** or **→** to continue. Enter zeros (0) for both codes to disable the transmit inhibit feature.
4. There are two Group Code Search fields. If you set the Block field to Y the radio searches for codes that belong to the currently selected group or groups lower than the currently selected group. You cannot set the All field to Y unless you set the Block field to Y. If you set both the Block and All fields to Y, the radio searches for all group codes regardless of the currently selected group. Press the spacebar to toggle this field between Y and N. Press **Enter** or **→** to continue.

**NOTE:** This field appears only when you program the SPS 310, SPS 320, SMS 835, SPS 920, or SMS 935. Group code search is available only with these radios.

5. The Dispatch Time-Out Timer automatically shuts off the transmitter when the radio is "keyed" for the programmed time. This timer is for dispatch group IDs only. Press the spacebar to toggle this field between 0.5, 1, 2, and 3 minutes. Press **Enter** or **→** to continue.
6. The Interconnect Time-Out Timer automatically shuts off the transmitter when the radio is "keyed" for the programmed time. This timer is for interconnect group IDs only. Press the spacebar to toggle this field between 3, 4, 5, and 8 minutes. Press **Enter** or **→** to continue.
7. If you want to erase all the data you entered for a group, press **F3** to clear the data from the current group screen. A screen message will appear and ask if you are sure you want to delete the group information. Press Y to clear; press N to keep the data.
8. To return to the system screen for the defined groups, press **F5**.

—or—

Press **PgUp** to go to the previous system screen.

—or—

Press **PgDn** to go to the next system screen.

# Editing Conventional (System 10) Data

If you press **(F2)** when the System Trunking data screen displays, the System 10 Conventional data screen appears.

System 10 Conventional								
Channel	TAC	Shift	TX		RX		RX	
			Channel	Tone	Channel	Tone	Channel	Tone
1	Y	N	148	D	173		148	D
2	N	N	188	C	118.8		188	C
3	N	N		C				C
4	N	N		C				C
5	N	N		C				C
6	N	N		C				C
7	N	N		C				C
8	N	N		C				C
9	N	N		C				C
10	N	N		C				C
Call Y			TOT 3.0 (minutes)					
<Esc> Exit			<PgUp> Last System		<PgDn> Next System			
F1		F3 Clear System	F5 CTCSS		F7 GoTo System		F9	
F2 Trunking/Conv.		F4 Copy System	F6 DCS Tones		F8		F10	

1. Do the following to enter data about each channel (1-10) in the system:
  - a. The setting of the TAC field and the TX channel setting determines how the TAC Feature works. The following table should help you program the TAC Feature. The RX Channel is set to a non-zero value for the modes listed in the table

**NOTE:** The column of TAC fields appears only when you program the SPS 310, SPS 320, SPS 920, or SMS 935. TAC mode is available only with these radios.

TAC Field	TX Chan.	Mode
Y	non-zero	<b>Normal Operation:</b> The radio transmits on the programmed TX Frequency and receives on the programmed RX Frequency unless you press the TAC control in. When you press the TAC control in, the radio transmits and receives on the programmed RX Frequency.
Y	0	<b>TAC Mode:</b> The radio transmits and receives on the programmed RX frequency despite the TAC control position.
N	non-zero	<b>Disable TAC:</b> The radio transmits and receives on the programmed TX and RX Frequencies despite the TAC control position.
N	0	<b>Receive Only:</b> The radio receives on the programmed RX Frequency. The transmitter will not transmit on the chosen channel.

Press the spacebar to toggle this field between Y and N. Press **(Enter)** or **(→)** to continue.

- b. If the 12.5 kHz offset is set to Y, the channel frequency is shifted -12.5 kHz. Press the spacebar to toggle this field between Y and N. Press **(Enter)** or **(→)** to continue.

- c. The TX Channel is the FCC channel the radio uses to transmit. You can type a zero into this field or one of the FCC channel numbers listed in Appendixes A and B. The value you type into this field, and the value set in the corresponding TAC field determines how the TAC feature works. See step "a" for more information. Type in the channel number and press **Enter** or **→** to continue.
- d. You can set the Transmit Squelch field to **C** for a Continuous Tone Controlled Squelch System (CTCSS) or **D** for Digital Coded Squelch (DCS). If you type zero (0) in the TX Tone field, carrier squelch is used regardless of the value in the transmit squelch field. For CTCSS or DCS operation, type the appropriate EIA tone or 3-digit octal code in the TX Tone field. Press the spacebar to toggle the Transmit Squelch field between **C** and **D**. Press **Enter** or **→** to continue.
- e. If you type zero (0) in this field, the radio uses carrier squelch regardless of the value in the transmit squelch field. For CTCSS or DCS operation, type the appropriate EIA tone or 3-digit octal code into this field. Press **F5** to see a list of the EIA CTCSS Tone Frequencies. UNIPRO does not accept other code combinations. Press **F6** to see a list of the recommended DCS codes and their complements. Avoid using a code and its complement on the same radio channel.

Type in the tone or code and press **Enter** or **→** to continue.

- f. The RX Channel is the FCC channel the radio uses to receive. It is usually the same as the TX Channel number. You can type a zero into this field or one of the FCC channel numbers listed in Appendixes A and B. Type in the channel number and press **Enter** or **→** to continue.
- g. You can set the Receive Squelch field to **C** for a CTCSS or **D** for DCS. If you type zero (0) in the TX Tone field, carrier squelch is used despite the value in the Receive Squelch field. For CTCSS or DCS operation, type the appropriate EIA tone or 3-digit octal code in the RX Tone field. Press the spacebar to toggle the Receive Squelch field between **C** and **D**. Press **Enter** or **→** to continue.
- h. If you type zero (0) in this field, the radio uses carrier squelch regardless of the value in the Receive Squelch field. For CTCSS or DCS operation, type the appropriate EIA tone or 3-digit octal code into this field. Press **F5** to see a list of the EIA CTCSS Tone Frequencies. UNIPRO does not accept other code combinations. Press **F6** to see a list of the recommended DCS codes and their complements. Avoid using a code and its complement on the same radio channel.

Type in the tone or code and press **Enter** or **→** to continue.

- i. Repeat steps "a" through "h" for each channel in the system.
2. The system can be set to turn on the call light if the radio receives a call. Press the spacebar to toggle this field between **Y** and **N**. Press **Enter** or **→** to continue.
3. The Time-Out Timer automatically shuts off the transmitter when the radio has been "keyed" for the programmed time. Press the spacebar to toggle this field between **0**, **5**, **1**, **2**, and **3** minutes. Press **Enter** or **→** to continue.
4. Press **F2** to toggle between the System 10 Trunking and System 10 Conventional data screens. You can program only one System 10 mode (Trunking or Conventional) into a radio, although you can enter and save data in both modes. To program either mode into a radio, be sure you exit out of the System 10 mode of your choice. **The last System 10 data screen (either trunking or conventional) that appears is programmed into the radio.**
5. If you want to erase all the data you entered for a system, press **F3** to clear the data from the current system screen. A screen message will appear and ask if you are sure you want to delete the system information. Press **Y** to clear; press **N** to keep the data.



6. If you want to enter the same data for the current system that you entered for another system, press **(F4)**. **(F4)** will not copy Talk Around data or Group Scan data. The **(F4)** key will not copy data to the System 10 Conventional screen.
7. Press **(PgUp)** to go to the previous system screen.  
—or—  
Press **(PgDn)** to go to the next system screen.  
—or—  
If you want to go to a specific system screen, press **(F7)** and type the system number.  
Press **(Enter)** to go to the system screen

## Editing System Feature Data

Use the System Feature data screen to enter data that effects all of the systems you program into the radio.

System Feature					
Dropout Delay Time <u>1</u> (second)					
Dwell Time <u>8</u> (seconds)					
Connect Tone <u>On</u>			Group Priority Search: <u>Off</u>		
Scan Mode <u>All</u>					
Interval Scan <u>On</u>					
Priority Type <u>Fixed</u> - <u>Var</u>					
<div style="display: flex; justify-content: space-between;"> <span>&lt;Esc&gt; Exit</span> <span>&lt;PgUp&gt; Last System</span> <span>&lt;PgDn&gt; Next System</span> </div>					
F1		F3		F5	
F2		F4		F6	
				F7 GoTo System	
				F8	
				F9	
				F10	

1. The Dropout Delay Time is the time that radio waits to resume scanning after a call ends. Press the spacebar to toggle this field between 1, 2, 4, and 8 seconds. Press **(Enter)** or **(→)** to continue.
2. The Dwell Time is the time that the radio waits for a priority system to resume scanning after a call ends. Press the spacebar to toggle this field between 1, 2, 4, and 8 seconds. Press **(Enter)** or **(→)** to continue.
3. The Connect Tone is an audible beep that sounds when the radio successfully accesses a repeater. Press the spacebar to toggle this field between **On** and **Off**. Press **(Enter)** or **(→)** to continue.  
  
**NOTE:** This field appears only when you program the SPS 310, SPS 320, SPS 920, or SMS 935. Connect Tone is available only with these radios.
4. When you set the Group Priority Search field to **On**, the radio searches for the highest priority group code when the Scan switch is pushed in. Press the spacebar to toggle this field between **On** and **Off**. Press **(Enter)** or **(→)** to continue.
5. Set the Scan Mode to **All** if you want the radio to scan all the programmed systems (including conventional) that are not locked out. Set the Scan Mode to **First** if you want the radio to stop scanning and lock onto the first system with trunking activity. The radio always transmits on this system while it is in range of this system. If the radio moves out of the range of the system, scanning resumes. Set the Scan Mode to **Off** if you want

to turn system scan off. The default setting for Scan Mode is **A l l**. If you set Scan Mode to **O f f**, the Interval Scan and Priority Type fields are disabled. Press the spacebar to toggle this field between **A l l**, **F i r s t**, and **O f f**. Press **Enter** or **→** to continue.

6. You can set the Interval Scan field to **O n** or **O f f**. If you set this field to **O n**, the radio assigns priority to the last system called until the microphone is lifted off the hook and then replaced. At this time, priority reverts to the programmed priority system.

Press the spacebar to toggle this field between **O n** and **O f f**. Press **Enter** or **→** to continue.

7. Use the Priority Type field to choose from four possible priority channel settings. The radio can have single or dual levels of priority. With single level priority, the priority can be fixed or variable. With dual priority, the first level of priority can only be fixed, while the second level can be fixed or variable. The radio defaults to one level of variable priority. Press the spacebar to toggle this field between **V a r i a b l e**, **F i x e d**, **F i x e d - V a r i a b l e**, and **F i x e d - F i x e d**. Press **Enter** or **→** to continue.
8. Press **PgUp** to go to the previous system screen.

—or—

Press **PgDn** to go to the next system screen.

—or—

If you want to go to a specific system screen, press **F7** and type the system number. Press **Enter** to go to the system screen

## Saving a Data File

Do the following to save the data in the memory of the personal computer to a disk file:

1. Use **→** to move the highlight to **EDIT** and press **Enter**.

—or—

Press **E**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

2. Use the **↑** and **↓** keys to highlight **Save Customer File** and press **Enter**.

—or—

Press **S**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Edit Data New File Load Customer File <b>Save Customer File</b> Print Data Quit to Top Menu
--

3. A pop-up entry box appears on the screen. Type the filename of the file you want the data saved to and press **Enter**.

**NOTE:** Give the customer file an extension that describes the frequency band you are programming. For example:

800 for 800 MHz.

900 for 900 MHz.

.CNV for conventional.

4. If a file with the same filename already exists, a prompt appears and asks if you want to overwrite the existing file. Type **Y** to overwrite the existing file, and press **Enter**.

## Printing a Data File

You can print the radio programming data that is in the memory of the personal computer to provide a written record of how you programmed the radio. The radio data is printed to LPT1.

1. Make sure that you connect the printer to the personal computer, turn it on, and put it on-line.
2. Use **→** to move the highlight to **EDIT** and press **Enter**.

—or—

Press **E**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

3. Use the **↑** and **↓** keys to highlight **Print Data** and press **Enter**.

—or—

Press **P**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Edit Data  
New File  
Load Customer File  
Save Customer File  
**Print Data**  
Quit to Top Menu

## Writing Data to a Radio

Do the following to write the data in the memory of the personal computer to a radio:

1. If you have not already done so, connect the AMX 501 Programmer Interface to the serial port of the personal computer that you chose during configuration.
2. Connect the radio to the AMX 501.
3. Use **→** to move the highlight to **Program** and press **Enter**.

—or—

Press **P**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

4. Use the **↑** and **↓** keys to highlight **Program Radio** and press **Enter**.

—or—

Press **P**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

**Program Radio**  
Verify Data in Radio  
Read Data from Radio  
Set Test Mode  
Clear Test Mode  
Quit to Top Menu

**NOTE:** *If an error message appears or if the power LED on the AMX 501 Programmer Interface does not light, see Appendix C.*

5. UNIPRO writes the programming data from the memory of the personal computer into the radio.
6. After UNIPRO verifies that the data was written correctly, the message "Success" appears in the center of the screen.

## Verifying Radio Data

Do the following to verify that the data in the radio matches the data in the memory of the personal computer:

1. If you have not already done so, connect the AMX 501 Programmer Interface to the serial port of the personal computer that you chose during configuration.
2. Connect the radio to the AMX 501.
3. Use **→** to move the highlight to **Program** and press **Enter**.

—or—

Press **P**.

BAND	RADIO	EDIT	<b>PROGRAM</b>	QUIT
------	-------	------	----------------	------

4. Use the **↑** and **↓** keys to highlight **Verify Data in Radio** and press **Enter**.

—or—

Press **V**.

BAND	RADIO	EDIT	<b>PROGRAM</b>	QUIT
------	-------	------	----------------	------

<u>P</u> rogram Radio <b>V</b> erify Data in Radio <u>R</u> ead Data from Radio <u>S</u> et Test Mode <u>C</u> lear Test Mode <u>Q</u> uit to Top Menu
---

5. UNIPRO reads the programming data in the radio and compares it to the data in the memory of the personal computer. If the data in the radio is the same as the data in the memory of the personal computer, the message "Success" appears. If the data in the radio is not the same as the data in the memory of the personal computer, an error message appears. Verification does not change the data in the memory of the personal computer.

## Setting and Clearing the Test Mode

You can place the radio in a test mode that loads test data for specific systems and groups. This allows you to bench test the radio. When you are through testing you can return the radio to normal operating mode. The operating data programmed into the radio does not change.

Do the following to use the test mode to bench test:

1. If you have not already done so, connect the AMX 501 Programmer Interface to the serial port of the personal computer that you chose during configuration.
2. Connect the radio to the AMX 501.
3. Use **→** to move the highlight to **Program** and press **Enter**.

—or—

Press **(P)**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

4. Use the **(↑)** and **(↓)** keys to highlight **Set Test Mode** and press **(Enter)**

—or—

Press **(S)**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Program Radio Verify Data in Radio Read Data from Radio <b>Set Test Mode</b> Clear Test Mode Quit to Top Menu
---

5. Disconnect the radio from the AMX 501. Do not disconnect the AMX 501 from the personal computer.
6. Consult the service manual for specific information on how to test the radio.
7. Test the radio and make all necessary repairs or adjustments.
8. Reconnect the radio to the AMX 501.
9. Use **(→)** to move the highlight to **Program** and press **(Enter)**.

—or—

Press **(P)**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

10. Use the **(↑)** and **(↓)** keys to highlight **Clear Test Mode** and press **(Enter)**.

—or—

Press **(C)**.

BAND	RADIO	EDIT	PROGRAM	QUIT
------	-------	------	---------	------

Program Radio Verify Data in Radio Read Data from Radio Set Test Mode <b>Clear Test Mode</b> Quit to Top Menu
---

The radio returns to the normal operating mode.

## APPENDIX A CHANNEL / FREQUENCY LIST

NEW FCC	OLD FCC	Programming		NEW FCC	OLD FCC	Programming	
Channel		Transmit	Receive	Channel		Transmit	Receive
1	600	806.0125	851.0125	51	550	807.2625	852.2625
2	599	806.0375	851.0375	52	549	807.2875	852.2875
3	598	806.0625	851.0625	53	548	807.3125	852.3125
4	597	806.0875	851.0875	54	547	807.3375	852.3375
5	596	806.1125	851.1125	55	546	807.3625	852.3625
6	595	806.1375	851.1375	56	545	807.3875	852.3875
7	594	806.1625	851.1625	57	544	807.4125	852.4125
8	593	806.1875	851.1875	58	543	807.4375	852.4375
9	592	806.2125	851.2125	59	542	807.4625	852.4625
10	591	806.2375	851.2375	60	541	807.4875	852.4875
11	590	806.2625	851.2625	61	540	807.5125	852.5125
12	589	806.2875	851.2875	62	539	807.5375	852.5375
13	588	806.3125	851.3125	63	538	807.5625	852.5625
14	587	806.3375	851.3375	64	537	807.5875	852.5875
15	586	806.3625	851.3625	65	536	807.6125	852.6125
16	585	806.3875	851.3875	66	535	807.6375	852.6375
17	584	806.4125	851.4125	67	534	807.6625	852.6625
18	583	806.4375	851.4375	68	533	807.6875	852.6875
19	582	806.4625	851.4625	69	532	807.7125	852.7125
20	581	806.4875	851.4875	70	531	807.7375	852.7375
21	580	806.5125	851.5125	71	530	807.7625	852.7625
22	579	806.5375	851.5375	72	529	807.7875	852.7875
23	578	806.5625	851.5625	73	528	807.8125	852.8125
24	577	806.5875	851.5875	74	527	807.8375	852.8375
25	576	806.6125	851.6125	75	526	807.8625	852.8625
26	575	806.6375	851.6375	76	525	807.8875	852.8875
27	574	806.6625	851.6625	77	524	807.9125	852.9125
28	573	806.6875	851.6875	78	523	807.9375	852.9375
29	572	806.7125	851.7125	79	522	807.9625	852.9625
30	571	806.7375	851.7375	80	521	807.9875	852.9875
31	570	806.7625	851.7625	81	520	808.0125	853.0125
32	569	806.7875	851.7875	82	519	808.0375	853.0375
33	568	806.8125	851.8125	83	518	808.0625	853.0625
34	567	806.8375	851.8375	84	517	808.0875	853.0875
35	566	806.8625	851.8625	85	516	808.1125	853.1125
36	565	806.8875	851.8875	86	515	808.1375	853.1375
37	564	806.9125	851.9125	87	514	808.1625	853.1625
38	563	806.9375	851.9375	88	513	808.1875	853.1875
39	562	806.9625	851.9625	89	512	808.2125	853.2125
40	561	806.9875	851.9875	90	511	808.2375	853.2375
41	560	807.0125	852.0125	91	510	808.2625	853.2625
42	559	807.0375	852.0375	92	509	808.2875	853.2875
43	558	807.0625	852.0625	93	508	808.3125	853.3125
44	557	807.0875	852.0875	94	507	808.3375	853.3375
45	556	807.1125	852.1125	95	506	808.3625	853.3625
46	555	807.1375	852.1375	96	505	808.3875	853.3875
47	554	807.1625	852.1625	97	504	808.4125	853.4125
48	553	807.1875	852.1875	98	503	808.4375	853.4375
49	552	807.2125	852.2125	99	502	808.4625	853.4625
50	551	807.2375	852.2375	100	501	808.4875	853.4875

NOTE: Always use NEW FCC CHANNEL numbers with AMX 501 and AMX 791/792 systems.

NEW OLD				NEW OLD			
FCC FCC		Programming		FCC FCC		Programming	
Channel		Transmit	Receive	Channel		Transmit	Receive
101	500	808.5125	853.5125	151	450	809.7625	854.7625
102	499	808.5375	853.5375	152	449	809.7875	854.7875
103	498	808.5625	853.5625	153	448	809.8125	854.8125
104	497	808.5875	853.5875	154	447	809.8375	854.8375
105	496	808.6125	853.6125	155	446	809.8625	854.8625
106	495	808.6375	853.6375	156	445	809.8875	854.8875
107	494	808.6625	853.6625	157	444	809.9125	854.9125
108	493	808.6875	853.6875	158	443	809.9375	854.9375
109	492	808.7125	853.7125	159	442	809.9625	854.9625
110	491	808.7375	853.7375	160	441	809.9875	854.9875
111	490	808.7625	853.7625	161	440	810.0125	855.0125
112	489	808.7875	853.7875	162	439	810.0375	855.0375
113	488	808.8125	853.8125	163	438	810.0625	855.0625
114	487	808.8375	853.8375	164	437	810.0875	855.0875
115	486	808.8625	853.8625	165	436	810.1125	855.1125
116	485	808.8875	853.8875	166	435	810.1375	855.1375
117	484	808.9125	853.9125	167	434	810.1625	855.1625
118	483	808.9375	853.9375	168	433	810.1875	855.1875
119	482	808.9625	853.9625	169	432	810.2125	855.2125
120	481	808.9875	853.9875	170	431	810.2375	855.2375
121	480	809.0125	854.0125	171	430	810.2625	855.2625
122	479	809.0375	854.0375	172	429	810.2875	855.2875
123	478	809.0625	854.0625	173	428	810.3125	855.3125
124	477	809.0875	854.0875	174	427	810.3375	855.3375
125	476	809.1125	854.1125	175	426	810.3625	855.3625
126	475	809.1375	854.1375	176	425	810.3875	855.3875
127	474	809.1625	854.1625	177	424	810.4125	855.4125
128	473	809.1875	854.1875	178	423	810.4375	855.4375
129	472	809.2125	854.2125	179	422	810.4625	855.4625
130	471	809.2375	854.2375	180	421	810.4875	855.4875
131	470	809.2625	854.2625	181	420	810.5125	855.5125
132	469	809.2875	854.2875	182	419	810.5375	855.5375
133	468	809.3125	854.3125	183	418	810.5625	855.5625
134	467	809.3375	854.3375	184	417	810.5875	855.5875
135	466	809.3625	854.3625	185	416	810.6125	855.6125
136	465	809.3875	854.3875	186	415	810.6375	855.6375
137	464	809.4125	854.4125	187	414	810.6625	855.6625
138	463	809.4375	854.4375	188	413	810.6875	855.6875
139	462	809.4625	854.4625	189	412	810.7125	855.7125
140	461	809.4875	854.4875	190	411	810.7375	855.7375
141	460	809.5125	854.5125	191	410	810.7625	855.7625
142	459	809.5375	854.5375	192	409	810.7875	855.7875
143	458	809.5625	854.5625	193	408	810.8125	855.8125
144	457	809.5875	854.5875	194	407	810.8375	855.8375
145	456	809.6125	854.6125	195	406	810.8625	855.8625
146	455	809.6375	854.6375	196	405	810.8875	855.8875
147	454	809.6625	854.6625	197	404	810.9125	855.9125
148	453	809.6875	854.6875	198	403	810.9375	855.9375
149	452	809.7125	854.7125	199	402	810.9625	855.9625
150	451	809.7375	854.7375	200	401	810.9875	855.9875

NOTE: Always use NEW FCC CHANNEL numbers with AMX 501 and AMX 791/792 systems.



NEW OLD				NEW OLD			
FCC FCC		Programming		FCC FCC		Programming	
Channel		Transmit	Receive	Channel		Transmit	Receive
201	400	811.0125	856.0125	251	350	812.2625	857.2625
202	399	811.0375	856.0375	252	349	812.2875	857.2875
203	398	811.0625	856.0625	253	348	812.3125	857.3125
204	398	811.0875	856.0875	254	347	812.3375	857.3375
205	396	811.1125	856.1125	255	346	812.3625	857.3625
206	395	811.1375	856.1375	256	345	812.3875	857.3875
207	394	811.1625	856.1625	257	344	812.4125	857.4125
208	393	811.1875	856.1875	258	343	812.4375	857.4375
209	392	811.2125	856.2125	259	342	812.4625	857.4625
210	391	811.2375	856.2375	260	341	812.4875	857.4875
211	390	811.2625	856.2625	261	340	812.5125	857.5125
212	389	811.2875	856.2875	262	339	812.5375	857.5375
213	388	811.3125	856.3125	263	338	812.5625	857.5625
214	387	811.3375	856.3375	264	337	812.5875	857.5875
215	386	811.3625	856.3625	265	336	812.6125	857.6125
216	385	811.3875	856.3875	266	335	812.6375	857.6375
217	384	811.4125	856.4125	267	334	812.6625	857.6625
218	383	811.4375	856.4375	268	333	812.6875	857.6875
219	382	811.4625	856.4625	269	332	812.7125	857.7125
220	381	811.4875	856.4875	270	331	812.7375	857.7375
221	380	811.5125	856.5125	271	330	812.7625	857.7625
222	379	811.5375	856.5375	272	329	812.7875	857.7875
223	378	811.5625	856.5625	273	328	812.8125	857.8125
224	377	811.5875	856.5875	274	327	812.8375	857.8375
225	376	811.6125	856.6125	275	326	812.8625	857.8625
226	375	811.6375	856.6375	276	325	812.8875	857.8875
227	374	811.6625	856.6625	277	324	812.9125	857.9125
228	373	811.6875	856.6875	278	323	812.9375	857.9375
229	372	811.7125	856.7125	279	322	812.9625	857.9625
230	371	811.7375	856.7375	280	321	812.9875	857.9875
231	370	811.7625	856.7625	281	320	813.0125	858.0125
232	369	811.7875	856.7875	282	319	813.0375	858.0375
233	368	811.8125	856.8125	283	318	813.0625	858.0625
234	367	811.8375	856.8375	284	317	813.0875	858.0875
235	366	811.8625	856.8625	285	316	813.1125	858.1125
236	365	811.8875	856.8875	286	315	813.1375	858.1375
237	364	811.9125	856.9125	287	314	813.1625	858.1625
238	363	811.9375	856.9375	288	313	813.1875	858.1875
239	362	811.9625	856.9625	289	312	813.2125	858.2125
240	361	811.9875	856.9875	290	311	813.2375	858.2375
241	360	812.0125	857.0125	291	310	813.2625	858.2625
242	359	812.0375	857.0375	292	309	813.2875	858.2875
243	358	812.0625	857.0625	293	308	813.3125	858.3125
244	357	812.0875	857.0875	294	307	813.3375	858.3375
245	356	812.1125	857.1125	295	306	813.3625	858.3625
246	355	812.1375	857.1375	296	305	813.3875	858.3875
247	354	812.1625	857.1625	297	304	813.4125	858.4125
248	353	812.1875	857.1875	298	303	813.4375	858.4375
249	352	812.2125	857.2125	299	302	813.4625	858.4625
250	351	812.2375	857.2375	300	301	813.4875	858.4875

NOTE: Always use NEW FCC CHANNEL numbers with AMX 501 and AMX 791/792 systems.

NEW FCC	OLD FCC	Programming		NEW FCC	OLD FCC	Programming	
Channel		Transmit	Receive	Channel		Transmit	Receive
301	300	813.5125	858.5125	351	250	814.7625	859.7625
302	299	813.5375	858.5375	352	249	814.7875	859.7875
303	298	813.5625	858.5625	353	248	814.8125	859.8125
304	297	813.5875	858.5875	354	247	814.8375	859.8375
305	296	813.6125	858.6125	355	246	814.8625	859.8625
306	295	813.6375	858.6375	356	245	814.8875	859.8875
307	294	813.6625	858.6625	357	244	814.9125	859.9125
308	293	813.6875	858.6875	358	243	814.9375	859.9375
309	292	813.7125	858.7125	359	242	814.9625	859.9625
310	291	813.7375	858.7375	360	241	814.9875	859.9875
311	290	813.7625	858.7625	361	240	815.0125	860.0125
312	289	813.7875	858.7875	362	239	815.0375	860.0375
313	288	813.8125	858.8125	363	238	815.0625	860.0625
314	287	813.8375	858.8375	364	237	815.0875	860.0875
315	286	813.8625	858.8625	365	236	815.1125	860.1125
316	285	813.8875	858.8875	366	235	815.1375	860.1375
317	284	813.9125	858.9125	367	234	815.1625	860.1625
318	283	813.9375	858.9375	368	233	815.1875	860.1875
319	282	813.9625	858.9625	369	232	815.2125	860.2125
320	281	813.9875	858.9875	370	231	815.2375	860.2375
321	280	814.0125	859.0125	371	230	815.2625	860.2625
322	279	814.0375	859.0375	372	229	815.2875	860.2875
323	278	814.0625	859.0625	373	228	815.3125	860.3125
324	277	814.0875	859.0875	374	227	815.3375	860.3375
325	276	814.1125	859.1125	375	226	815.3625	860.3625
326	275	814.1375	859.1375	376	225	815.3875	860.3875
327	274	814.1625	859.1625	377	224	815.4125	860.4125
328	273	814.1875	859.1875	378	223	815.4375	860.4375
329	272	814.2125	859.2125	379	222	815.4625	860.4625
330	271	814.2375	859.2375	380	221	815.4875	860.4875
331	270	814.2625	859.2625	381	220	815.5125	860.5125
332	269	814.2875	859.2875	382	219	815.5375	860.5375
333	268	814.3125	859.3125	383	218	815.5625	860.5625
334	267	814.3375	859.3375	384	217	815.5875	860.5875
335	266	814.3625	859.3625	385	216	815.6125	860.6125
336	265	814.3875	859.3875	386	215	815.6375	860.6375
337	264	814.4125	859.4125	387	214	815.6625	860.6625
338	263	814.4375	859.4375	388	213	815.6875	860.6875
339	262	814.4625	859.4625	389	212	815.7125	860.7125
340	261	814.4875	859.4875	390	211	815.7375	860.7375
341	260	814.5125	859.5125	391	210	815.7625	860.7625
342	259	814.5375	859.5375	392	209	815.7875	860.7875
343	258	814.5625	859.5625	393	208	815.8125	860.8125
344	257	814.5875	859.5875	394	207	815.8375	860.8375
345	256	814.6125	859.6125	395	206	815.8625	860.8625
346	255	814.6375	859.6375	396	205	815.8875	860.8875
347	254	814.6625	859.6625	397	204	815.9125	860.9125
348	253	814.6875	859.6875	398	203	815.9375	860.9375
349	252	814.7125	859.7125	399	202	815.9625	860.9625
350	251	814.7375	859.7375	400	201	815.9875	860.9875

NOTE: Always use NEW FCC CHANNEL numbers with AMX 501 and AMX 791/792 systems.

NEW OLD				NEW OLD			
FCC FCC		Programming		FCC FCC		Programming	
Channel		Transmit	Receive	Channel		Transmit	Receive
501	100	818.5125	863.5125	551	50	819.7625	864.7625
502	99	818.5375	863.5375	552	49	819.7875	864.7875
503	98	818.5625	863.5625	553	48	819.8125	864.8125
504	97	818.5875	863.5875	554	47	819.8375	864.8375
505	96	818.6125	863.6125	555	46	819.8625	864.8625
506	95	818.6375	863.6375	556	45	819.8875	864.8875
507	94	818.6625	863.6625	557	44	819.9125	864.9125
508	93	818.6875	863.6875	558	43	819.9375	864.9375
509	92	818.7125	863.7125	559	42	819.9625	864.9625
510	91	818.7375	863.7375	560	41	819.9875	864.9875
511	90	818.7625	863.7625	561	40	820.0125	865.0125
512	89	818.7875	863.7875	562	39	820.0375	865.0375
513	88	818.8125	863.8125	563	38	820.0625	865.0625
514	87	818.8375	863.8375	564	37	820.0875	865.0875
515	86	818.8625	863.8625	565	36	820.1125	865.1125
516	85	818.8875	863.8875	566	35	820.1375	865.1375
517	84	818.9125	863.9125	567	34	820.1625	865.1625
518	83	818.9375	863.9375	568	33	820.1875	865.1875
519	82	818.9625	863.9625	569	32	820.2125	865.2125
520	81	818.9875	863.9875	570	31	820.2375	865.2375
521	80	819.0125	864.0125	571	30	820.2625	865.2625
522	79	819.0375	864.0375	572	29	820.2875	865.2875
523	78	819.0625	864.0625	573	28	820.3125	865.3125
524	77	819.0875	864.0875	574	27	820.3375	865.3375
525	76	819.1125	864.1125	575	26	820.3625	865.3625
526	75	819.1375	864.1375	576	25	820.3875	865.3875
527	74	819.1625	864.1625	577	24	820.4125	865.4125
528	73	819.1875	864.1875	578	23	820.4375	865.4375
529	72	819.2125	864.2125	579	22	820.4625	865.4625
530	71	819.2375	864.2375	580	21	820.4875	865.4875
531	70	819.2625	864.2625	581	20	820.5125	865.5125
532	69	819.2875	864.2875	582	19	820.5375	865.5375
533	68	819.3125	864.3125	583	18	820.5625	865.5625
534	67	819.3375	864.3375	584	17	820.5875	865.5875
535	66	819.3625	864.3625	585	16	820.6125	865.6125
536	65	819.3875	864.3875	586	15	820.6375	865.6375
537	64	819.4125	864.4125	587	14	820.6625	865.6625
538	63	819.4375	864.4375	588	13	820.6875	865.6875
539	62	819.4625	864.4625	589	12	820.7125	865.7125
540	61	819.4875	864.4875	590	11	820.7375	865.7375
541	60	819.5125	864.5125	591	10	820.7625	865.7625
542	59	819.5375	864.5375	592	9	820.7875	865.7875
543	58	819.5625	864.5625	593	8	820.8125	865.8125
544	57	819.5875	864.5875	594	7	820.8375	865.8375
545	56	819.6125	864.6125	595	6	820.8625	865.8625
546	55	819.6375	864.6375	596	5	820.8875	865.8875
547	54	819.6625	864.6625	597	4	820.9125	865.9125
548	53	819.6875	864.6875	598	3	820.9375	865.9375
549	52	819.7125	864.7125	599	2	820.9625	865.9625
550	51	819.7375	864.7375	600	1	820.9875	865.9875

NOTE: Always use NEW FCC CHANNEL numbers with AMX 501 and AMX 791/792 systems.

Channel	Programming	
	Transmit	Receive
601	821.0125	866.0125
602	821.0375	866.0375
603	821.0625	866.0625
604	821.0875	866.0875
605	821.1125	866.1125
606	821.1375	866.1375
607	821.1625	866.1625
608	821.1875	866.1875
609	821.2125	866.2125
610	821.2375	866.2375
611	821.2625	866.2625
612	821.2875	866.2875
613	821.3125	866.3125
614	821.3375	866.3375
615	821.3625	866.3625
616	821.3875	866.3875
617	821.4125	866.4125
618	821.4375	866.4375
619	821.4625	866.4625
620	821.4875	866.4875
621	821.5125	866.5125
622	821.5375	866.5375
623	821.5625	866.5625
624	821.5875	866.5875
625	821.6125	866.6125
626	821.6375	866.6375
627	821.6625	866.6625
628	821.6875	866.6875
629	821.7125	866.7125
630	821.7375	866.7375
631	821.7625	866.7625
632	821.7875	866.7875
633	821.8125	866.8125
634	821.8375	866.8375
635	821.8625	866.8625
636	821.8875	866.8875
637	821.9125	866.9125
638	821.9375	866.9375
639	821.9625	866.9625
640	821.9875	866.9875
641	822.0125	867.0125
642	822.0375	867.0375
643	822.0625	867.0625
644	822.0875	867.0875
645	822.1125	867.1125
646	822.1375	867.1375
647	822.1625	867.1625
648	822.1875	867.1875
649	822.2125	867.2125
650	822.2375	867.2375

Channel	Programming	
	Transmit	Receive
651	822.2625	867.2625
652	822.2875	867.2875
653	822.3125	867.3125
654	822.3375	867.3375
655	822.3625	867.3625
656	822.3875	867.3875
657	822.4125	867.4125
658	822.4375	867.4375
659	822.4625	867.4625
660	822.4875	867.4875
661	822.5125	867.5125
662	822.5375	867.5375
663	822.5625	867.5625
664	822.5875	867.5875
665	822.6125	867.6125
666	822.6375	867.6375
667	822.6625	867.6625
668	822.6875	867.6875
669	822.7125	867.7125
670	822.7375	867.7375
671	822.7625	867.7625
672	822.7875	867.7875
673	822.8125	867.8125
674	822.8375	867.8375
675	822.8625	867.8625
676	822.8875	867.8875
677	822.9125	867.9125
678	822.9375	867.9375
679	822.9625	867.9625
680	822.9875	867.9875
681	823.0125	868.0125
682	823.0375	868.0375
683	823.0625	868.0625
684	823.0875	868.0875
685	823.1125	868.1125
686	823.1375	868.1375
687	823.1625	868.1625
688	823.1875	868.1875
689	823.2125	868.2125
690	823.2375	868.2375
691	823.2625	868.2625
692	823.2875	868.2875
693	823.3125	868.3125
694	823.3375	868.3375
695	823.3625	868.3625
696	823.3875	868.3875
697	823.4125	868.4125
698	823.4375	868.4375
699	823.4625	868.4625
700	823.4875	868.4875

Programming			Programming		
Channel	Transmit	Receive	Channel	Transmit	Receive
701	823.5125	868.5125	751	824.7625	869.7625
702	823.5375	868.5375	752	824.7875	869.7875
703	823.5625	868.5625	753	824.8125	869.8125
704	823.5875	868.5875	754	824.8375	869.8375
705	823.6125	868.6125	755	824.8625	869.8625
706	823.6375	868.6375	756	824.8875	869.8875
707	823.6625	868.6625	757	824.9125	869.9125
708	823.6875	868.6875	758	824.9375	869.9375
709	823.7125	868.7125	759	824.9625	869.9625
710	823.7375	868.7375	760	824.9875	869.9875
711	823.7625	868.7625	761	825.0125	870.0125
712	823.7875	868.7875	762	825.0375	870.0375
713	823.8125	868.8125	763	825.0625	870.0625
714	823.8375	868.8375	764	825.0875	870.0875
715	823.8625	868.8625	765	825.1125	870.1125
716	823.8875	868.8875	766	825.1375	870.1375
717	823.9125	868.9125	767	825.1625	870.1625
718	823.9375	868.9375	768	825.1875	870.1875
719	823.9625	868.9625	769	825.2125	870.2125
720	823.9875	868.9875	770	825.2375	870.2375
721	824.0125	869.0125	771	825.2625	870.2625
722	824.0375	869.0375	772	825.2875	870.2875
723	824.0625	869.0625	773	825.3125	870.3125
724	824.0875	869.0875	774	825.3375	870.3375
725	824.1125	869.1125	775	825.3625	870.3625
726	824.1375	869.1375	776	825.3875	870.3875
727	824.1625	869.1625	777	825.4125	870.4125
728	824.1875	869.1875	778	825.4375	870.4375
729	824.2125	869.2125	779	825.4625	870.4625
730	824.2375	869.2375	780	825.4875	870.4875
731	824.2625	869.2625	781	825.5125	870.5125
732	824.2875	869.2875	782	825.5375	870.5375
733	824.3125	869.3125	783	825.5625	870.5625
734	824.3375	869.3375	784	825.5875	870.5875
735	824.3625	869.3625	785	825.6125	870.6125
736	824.3875	869.3875	786	825.6375	870.6375
737	824.4125	869.4125	787	825.6625	870.6625
738	824.4375	869.4375	788	825.6875	870.6875
739	824.4625	869.4625	789	825.7125	870.7125
740	824.4875	869.4875	790	825.7375	870.7375
741	824.5125	869.5125	791	825.7625	870.7625
742	824.5375	869.5375	792	825.7875	870.7875
743	824.5625	869.5625	793	825.8125	870.8125
744	824.5875	869.5875	794	825.8375	870.8375
745	824.6125	869.6125	795	825.8625	870.8625
746	824.6375	869.6375	796	825.8875	870.8875
747	824.6625	869.6625	797	825.9125	870.9125
748	824.6875	869.6875	798	825.9375	870.9375
749	824.7125	869.7125	799	825.9625	870.9625
750	824.7375	869.7375	800	825.9875	870.9875

NOTE: Channel numbers within the boxed area are not programmable in current 800 MHz models.