XP User Guide

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1. About this guide

This is a user guide for XP, the software used to program channel and setup information in the following Codan transceivers:

- X-2 SSB Transceiver (the X-2)
- 9313 SSB Transceiver (the 9313)
- 9480 SSB Transceiver (the 9480)
- 9323 HF SSB Transceiver (the 9323)
- 9360 HF SSB Transceiver (the 9360)
- 9390 Marine Transceiver (the 9390).

This issue of the user guide covers XP software version 4.00.

This user guide explains how to:

- set up the computer, the transceiver and XP software
- run the XP software and program the transceiver
- program an X-2, 9323, 9360 or 9390 transceiver directly from another transceiver of the same type by cloning.

Who should use it

This user guide is written for:

- Codan agents and dealers
- users of Codan transceivers who have access to a computer running the XP software.

No knowledge of computers is assumed but basic keyboard skills are an advantage. If you have experience with computers, you can use the shortcuts that are described in this guide.

How to use it

This guide contains 16 chapters. You should read Chapters 2 and 3 before you start to use XP.

Chapter 2 provides an overview of XP.

Chapter 3 describes how to install XP.

Chapter 4 shows you how to start XP.

Chapter 5 tells you what to do if something goes wrong.

Chapter 6 shows you how to use XP to program an X-2 transceiver.

Chapter 7 describes the menu options available when programming an X-2 transceiver.

Chapter 8 describes how to program one X-2 transceiver directly from another by the process of cloning.

Chapter 9 lists the cable pin connections for the X-2 transceiver.

Chapter 10 shows you how to use XP to program a 9313 or 9480 transceiver.

Chapter 11 describes the menu options available when programming a 9313 or 9480 transceiver.

Chapter 12 lists the cable pin connections for the 9313 and 9480 transceivers.

Chapter 13 shows you how to use XP to program a 9323, 9360 or 9390 transceiver.

Chapter 14 describes the menu options available when programming a 9323, 9360 or 9390 transceiver.

Chapter 15 describes how to program one 9323, 9360 or 9390 transceiver directly from another by the process of cloning.

Chapter 16 lists the cable pin connections for the 9323, 9360 and 9390 transceivers.

Standards and icons

In this guide the following standards and icons are used:

- Press Enter—press the Enter or Return key.
- Press Alt-Q—hold down the Alt key and press the Q key.
- Type **EXIT**—type the word exit in upper or lower case.
- Words in *italics* are messages, prompts and fields that are displayed on the screen.
- Select *File n**a**me*—select the field called ‘File n**a**me’ (where the ‘**a**’ is shown in bold underlined) by typing **a** or **A**.

This icon…	**Means…**
	a reference to other sections within the user guide or related documentation.
	a note or reminder.
	a warning. If you do not observe the warning, you may damage yourself or the equipment.
	the end of a section.

Other documentation

For more information, refer to the:

- Operating Instructions X-2 SSB Transceiver
  (Codan Part No. 06-01594)
- HF SSB transceiver type 9313—Operators handbook
  (Codan Part No. 15-04048)
- HF SSB transceiver type 9480—Operators handbook
  (Codan Part No. 15-04047)
- HF SSB transceiver type 9323—Operators handbook
  (Codan Part No. 15-04039)
- HF SSB transceiver type 9323—Reference manual
  (Codan Part No. 15-04040)
- HF SSB transceiver type 9360—Operators handbook
  (Codan Part No. 15-04053)
- HF SSB transceiver type 9360—Reference manual
  (Codan Part No. 15-04054)
- 9390 Marine transceiver—User guide
  (Codan Part No. 15-04068)
- 9390 Marine transceiver—Reference manual
  (Codan Part No. 15-04069).

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2. Overview

This chapter provides an overview of XP. It covers:

- the Codan transceivers used with XP
- what XP does
- the main ways in which you can use XP.

Codan transceivers used with XP

You use XP to program the Codan transceivers described below with channel and setup information. These transceivers allow you to change channel and setup information without having to modify circuitry.

The X-2 transceiver

The X-2 is a 10-channel single sideband high frequency transceiver. It operates over a 2–18MHz range.

The 9313 and 9480 transceivers

The 9313 and 9480 are 15-channel single sideband high frequency transceivers. They operate over a 2–24MHz transmit range and a 250kHz–30MHz receive range. They have selective call (selcall) capability.

The 9323, 9360 and 9390 transceivers

The 9323, 9360 and 9390 are 400-channel single sideband high frequency transceivers. Their transmit frequency range depends on which power amplifier (PA) is fitted. Their receive frequency range is 250kHz–30MHz. They have selective call and two-tone call capability.

The 9323 is used with the 9330 control head. The 9360 is used with the 9366 control head. The 9390 is used with the 9391 control head.

What XP does

XP is the computer program used to set up and modify channel and setup information stored in transceiver memory.

The channel information you enter, such as transmit frequencies, is called the channel list.

You can save channel and setup information in a file on the computer.

To store channel and setup information in the transceiver, you connect the computer to the transceiver. You use XP to pass this information from the computer to the transceiver. This is called programming the transceiver. When you disconnect the computer, the transceiver is ready for use.

The X-2, 9323, 9360 and 9390 transceivers allow you to copy channel and setup information from one transceiver to another without using XP. This is called cloning.

Ways in which XP is used

You can use XP in a number of different ways to suit your requirements. You can:

- enter channel and setup information, and program a transceiver in one operation
- create a number of files ready for programming transceivers later
- modify channel settings by reading from a transceiver, changing values and re-programming
- verify channel and option settings in a transceiver.

3. Before starting XP

This chapter describes how to:

- make sure that you have the hardware and software you need
- set up the system
- install XP
- control XP.

What you will need

The computer

You need:

- an IBM compatible personal computer
- a monochrome or colour monitor
- MS-DOS operating system version 3.1 or later
- 524KB of available memory (may vary slightly for future versions of XP)
- 1MB of hard disk space if installing XP on hard disk.

If your computer has a hard disk, install and run XP from the hard disk. If your computer does not have a hard disk, run XP directly from floppy disk.

Optional printer

You do not need a printer when running XP. We recommend that you use one to keep a printed record of the channel list programmed into each transceiver. This makes it easy to check or modify settings.

Optional mouse

You do not need a mouse to run XP. If you have used a mouse before, you may find you can work faster using one.

XP

XP is supplied with the following parts:

Part	Part No.
XP Quick reference card	06-01577
3.5 inch ‘Install & Program’ 720KB floppy disk	90-20514-001
3.5 inch ‘Program’ 720KB floppy disk	90-20514-001
X-2 programming cable with a 7-pin socket at the transceiver end	08-04925
9313/9480 programming cable with a 3.5mm jack plug at the transceiver end	08-05123-001
9323/9360/9390 programming cable with a 7-pin plug at the transceiver end	08-05137-001
X-2 cloning cable with 7-pin sockets at both ends	08-04926

Part	Part No.
9323/9360/9390 cloning cable with 7-pin plugs at both ends	08-05138-001
9–25 pin adaptor	60-00098-590

You use 3.5 inch floppy disks to install and run XP on your computer.

The programming cables connect the different types of transceiver to the computer. The cloning cables connect two transceivers of the same type together. The adaptor allows you to connect a programming cable to a computer which has a 25-pin serial port.

The transceiver needs its own power supply.

Setting up the system

Connecting the computer and printer

To connect the printer to the computer:

1. Plug in the computer and printer to the power supply.
2. Connect the printer to the printer port on the computer using the printer cable.

XP is set up to use the *LPT1* printer port and the *COM1* serial port. If you need to switch to the *LPT2* or *COM2* port, change the XP setting after you have installed XP.

To select the *LPT2* port:

1. Select ***P****rinter Options* from the ***O****ptions* menu.
2. Change the *Printer* ***D****evice* field setting to *LPT2*.

To select the *COM2* port:

1. Select ***S****erial Port Options* from the ***O****ptions* menu.
2. Change the ***S****erial Port* field setting to *COM2*.

Connecting an X-2 transceiver

To connect an X-2 transceiver:

1. Connect the transceiver to its power supply.
2. Use the X-2 programming cable to connect the microphone socket of the transceiver to the serial port on the computer. Use the adaptor supplied with XP if the computer has a 25-pin serial port.
3. Hold up the Tune switch and turn on the power. Release the Tune switch when the transceiver beeps once. If you do not hear a beep, check the cable connection and repeat this step.

Connecting a 9313 or 9480 transceiver

To connect a 9313 or 9480 transceiver:

1. Connect the transceiver to its power supply.
2. Use the 9313/9480 programming cable to connect the 3.5mm ‘RS-232’ socket at the back of the transceiver to the serial port on the computer. Use the adaptor supplied with XP if the computer has a 25-pin serial port.

Connecting a 9323, 9360 or 9390 transceiver

To connect a 9323, 9360 or 9390 transceiver:

1. Connect the transceiver to its power supply.
2. Use the 9323/9360/9390 programming cable to connect the microphone socket on the transceiver control head to the serial port on the computer. Use the adaptor supplied with XP if the computer has a 25-pin serial port.

   The message *This transceiver is presently being programmed via RS232* is displayed on the control head screen. This indicates that the transceiver is ready for programming. If this message is not displayed, check the cable connection.

Installing XP

Usually, you install XP on a hard disk and run it from there.

You can run XP directly from floppy disk without having to install XP. If you are going to run XP this way, you do not need to follow the installation procedure below.

To install XP on the hard disk:

1. Insert the 3.5 inch ‘Install & Program’ disk in the A drive (or B drive).
2. Type **A:\INSTALL** (or **B:\INSTALL**) then press Enter.

   The installation Welcome screen is displayed after the install program has loaded.
3. Press Enter. The Directory screen is displayed.
4. Press Enter (unless you have a special reason for specifying a directory different to C:\XP).
5. Follow the displayed instructions.

   When XP has been installed on the hard disk, a message is displayed. Remove the floppy disk.

Controlling XP

Menus

You control XP by selecting the operation you want from a menu.

Special keys

Keys that have a special function in controlling XP are called special keys. Select ***S**pecial Keys* from the ***H**elp* menu for a list of these keys.

Key	Description
Alt-<character>	Select menu option or move to a field (for example, Alt-F displays the ***F**ile* menu, Alt-G goes to the specified channel in the channel list).
Arrow (left, right)	Move within fields, between fields or between options in the arrow direction.
Arrow (up, down)	Move between fields or options in the arrow direction.
Back Space	Delete the character immediately to the left of the cursor.
Ctrl-<character>	Used with character keys to edit a channel list (for example, Ctrl-C copies a channel entry).
Ctrl-Enter	Display information about this version of XP including such information as the number of channels.
Delete	Delete the current character.
End	Move to the last channel in the channel list.

Key	Description
Enter	Move to the next channel in the Channel Information area, or start current menu operation.
ESCape	Abort the current process and return to the Main screen.
F1	Display general help information.
F10	Select menus.
Home	Move to the first channel in the channel list.
Insert	Switch between insert and overwrite mode when editing settings. In insert mode, an underbar (_) displays your screen position. In overwrite mode, a block (■) displays your screen position. You cannot use overwrite mode when entering channel frequencies.
Num Lock	Switch between keypad numbers and keypad functions on the keyboard.
Page Down	Move to the next page of channels in the channel list.
Page Up	Move to the previous page of channels in the channel list.
Space bar	Display next possible channel field setting, or type a space.
Tab	Move to the next field.

Getting around XP

When you select menu options, XP often displays a screen containing several fields where you can enter or change settings.

There are two ways you can move to a field:

- press Tab until you reach the field
- while holding down the Alt key, type the highlighted character in the field name.

For example, if you select ***P**rinter Options* from the ***O**ptions* menu, you can move directly to the *Print when **P**rogramming?* field by pressing Alt-P. You do not have to match the case of the character (for example, pressing Alt-p is also OK).

When all settings are correct, you can press Enter in any field to return to the Main screen. If you want to abort what you are doing and return to the Main screen without saving any changes to the settings, press ESCape.

Using a mouse

You can use a mouse instead of using special keys. For example, you can use a mouse to move between fields in the Channel Information area instead of using the Tab and Shift-Tab keys.

A choice of methods

XP often lets you press different combinations of keys to achieve the same result. For example, you can use either arrow or character keys to select menu options.

☞ See ‘Selecting menu options’ on page 4-5.

This feature of XP is useful since it lets you choose the method you prefer. You do not have to learn all the methods. Choose whichever is easiest for you to use.

Help

XP provides help in two ways:

- information displayed automatically in the bottom half of the screen to guide you as you move around XP
- information available on demand by pressing F1 for general help, or by selecting a ***H**elp* menu option for specific information.

☞ See ‘Main screen’ on page 4-2.

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4. Starting XP

This chapter describes how to:

- turn on the computer
- start the XP program
- use the Main screen
- select menu options
- use the alternative channel list.

Turning on the computer

If you have already installed XP on the computer's hard disk:

1. Turn on your computer.
2. Type **CD \XP** and press Enter.

   The directory changes to 'XP'. The prompt changes to 'C:\XP'.

   If you specified a different directory or drive when you installed XP, specify the directory name you used instead of XP.

If you are running XP directly from floppy disk:

1. Turn on your computer.
2. Choose the 3.5 inch floppy disk that includes the name of your transceiver on its label. Insert this disk into drive A.
3. Type **A:** then press Enter to change to drive A. The prompt changes to 'A:\>'.

Starting the XP program

To start the XP program running:

1. Type **XP** then press Enter.

   The Codan copyright message is displayed. Wait for a few seconds until this is replaced by the Startup screen. (Press Enter if you do not want to wait.)

   The Startup screen displays a list of all the transceivers models that your version of software is capable of programming.

   If characters on the screen are dim or unreadable, you may need to start XP again. Instead of typing **XP**, type **XP /M** to select monochrome mode.

2. Use the down arrow key to select the transceiver you want to program.
3. Press Enter to move to the Main screen.

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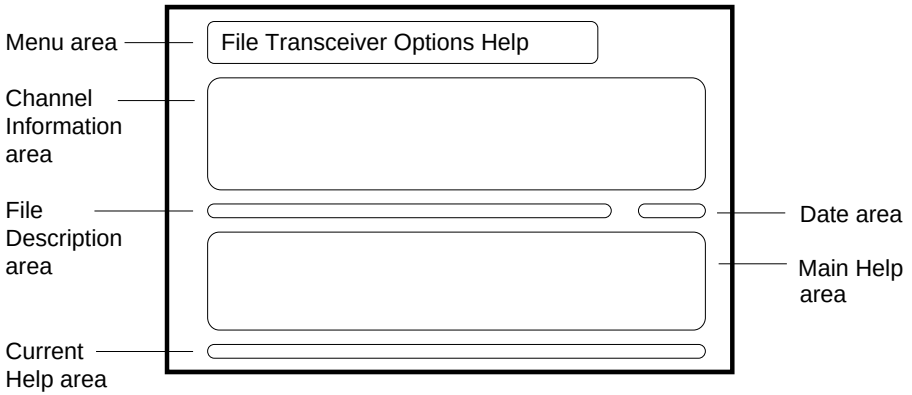
Main screen

The Main screen is where you do most of your work. In this screen you do two basic operations:

- enter channel information by typing in values directly
- perform operations (for example, programming the transceiver) by selecting menu options.



Main screen layout

The Main screen has six areas:

- Menu area
- Channel Information area
- File Description area
- Date area
- Main Help area
- Current Help area.

Menu area

This area displays the four menus. When you select a menu, the options for that menu are displayed.

☞ Selecting menu options is explained later on page 4-5.

Channel Information area

This area displays a channel list. It is the only area where you can type information in the Main screen.

To enter channel information in this area you can:

- type values directly
- load previously stored information from a file by selecting ***L**oad* from the ***F**ile* menu
- read in information from a programmed transceiver by selecting ***R**ead* from the ***T**ransceiver* menu.

File Description area

This area displays the file name and the comment for the current file you are working with. No file name is displayed until you select ***L**oad*, ***S**ave* or *Save **A**s* from the ***F**ile* menu. You can enter the file comment using ***C**omment* from the ***F**ile* menu.

Date area

This area displays the current date and time.

Main Help area

This area shows you the main steps for entering channel and setup information, programming the transceiver, saving channel and setup information, and printing a channel list.

Current Help area

This area tells you about your current operation (for example, what information to enter at the current field in the Channel Information area). This area changes as you move around in XP.

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Selecting menu options

You can select a menu option three different ways:

Using the arrow keys

1. Press F10. One of the menu titles becomes highlighted.
2. Press the left or right arrow key to highlight the menu title you want.
3. Press the down arrow key. The menu options are displayed with one of the options highlighted.
4. Press the up or down arrow key to highlight the menu option you want.
5. Press Enter to select the option.

Using the character keys

1. Press Alt-F, Alt-T, Alt-O or Alt-H for the ***F****ile*, ***T****ransceiver*, ***O****ptions* or ***H****elp* menu respectively. The menu options are displayed.
2. Press the key shown highlighted in the menu option you want.

You can select some commonly used menu options without displaying them first. For example, to save channel and setup information you can press Alt-S instead of Alt-F then S.

Using the mouse

1. Hold down the left mouse button over the menu you want. The menu options are displayed.
2. Drag the mouse to the menu option you want.
3. Release the mouse button to select the option.

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Using the main and alternative channel lists

XP supports two channel lists:

- the main channel list which is displayed in the Channel Information area
- the alternative channel list which is not displayed.

You can switch the main and alternative channel lists by selecting *Change L**i**sts* from the ***F**ile* menu.

Being able to work on two channel lists is helpful when you are creating new lists which are similar to existing lists. You can copy parts of one list to the other by selecting ***M**erge* from the ***F**ile* menu.

You can also copy parts of one list to the other using Ctrl-C (copy) and Ctrl-P (paste). A typical sequence might be:

1. Enter channel information for the first channel list.
2. Move the cursor to any field of the channel that you want to copy.
3. Press Ctrl-C to copy the channel from this channel list.
4. Press Alt-I to switch to the second channel list.
5. Move the cursor to any field of the channel where you want to paste the channel information.

6. Press Ctrl-P to paste the channel information into this channel list.
7. If necessary, press Alt-I to switch back to the first channel list. Repeat steps 2 to 6.
8. Select ***S**ave* from the ***F**ile* menu to save the second channel list.

For some transceivers, XP allows you to program setup as well as channel information. XP does not support alternative versions of setup information.

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Reprogramming a transceiver

If you are programming a transceiver that has been programmed before, select ***R**ead* from the ***T**ransceiver* menu to display the current channel settings on the Main screen.

Displaying the current channel settings:

- allows you to double check that you are reprogramming the right transceiver
- saves you from having to enter information that does not change in reprogramming.

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5. Troubleshooting

This chapter tells you what to do if you have problems while using XP.

Problem	Cause	Action
Printing fails.	Printer connected to the wrong printer port (*LPT1* or *LPT2*) on the computer.	Connect the printer to the other printer port, or select ***P**rinter Options* from the ***O**ptions* menu and switch the *LPT1*/*LPT2* setting in the *Printer **D**evice* field.
XP cannot communicate with transceiver.	Transceiver is not correctly connected to the computer.	Follow the procedure described in 'Connecting the transceiver' on page 3-4.
	Transceiver is connected to the wrong serial port (*COM1* or *COM2*) on the computer.	Connect the transceiver to the other serial port, or select ***S**erial Port Options* from the ***O**ptions* menu and switch the *COM1*/*COM2* setting in the ***S**erial Port* field.
	The power supplied to the transceiver is not in the range 12–14 volts.	Check the power supply to the transceiver.

Problem	Cause	Action
When you try to start XP, the computer displays: *Program too big to fit in memory*.	There is insufficient memory to run XP because there are too many programs loaded in your computer (for example, programs running networks and faxes).	Increase available memory by unloading programs or remove programs from the autoexec.bat file. Reboot the computer.
When you try to start XP, the computer displays: *Bad command or file name*.	You are not in the XP directory. The DOS prompt is not 'C:\XP'.	Either use CD (change directory command) to change to the XP directory, or add the XP directory to your PATH. (Refer to your DOS manual.)
	You have not installed XP.	Install XP (see 'Installing XP' on page 3-6).

❑

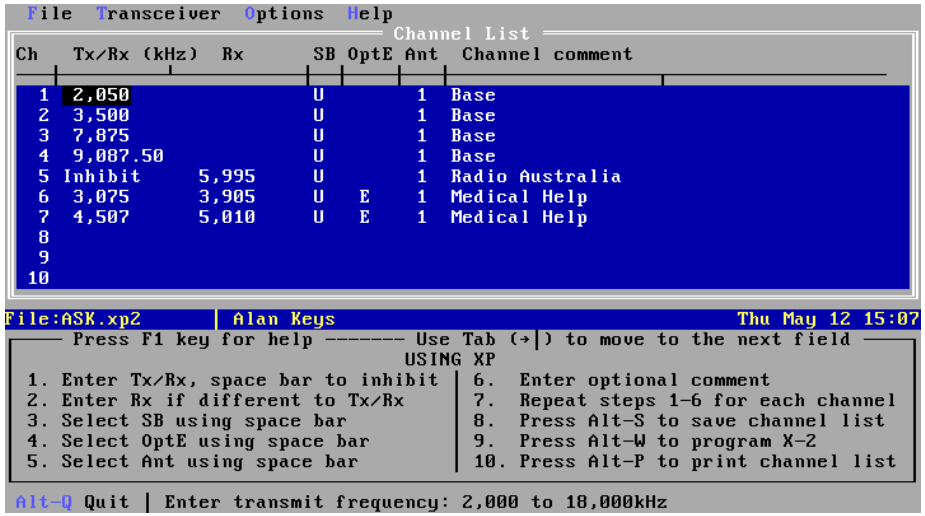
6. Programming the X-2

This chapter explains step by step how you use XP to program an X-2 transceiver.

It shows you how to:

- create channel information (the channel list)
- save channel information in a file
- program the transceiver
- print the channel list.

You should already have connected the transceiver to the computer. The computer should be displaying the Main screen shown below.



The Main screen

Creating the channel list

XP clears all existing channels in the transceiver when you program the transceiver. The channel list you create must contain all the channels that you want programmed into the transceiver.

The channel items

For each channel you can set the:

- transmit frequency (2–18MHz to nearest 10Hz)
- receive frequency (2–18MHz to nearest 10Hz)
- sideband (*L* for lower, *U* for upper, or *LU* for sideband control from front panel of transceiver)
- emergency call option (*E* or blank)
- antenna number (*1* or *2*)
- channel comment (optional description of the channel).

Entering the channel frequencies

To enter the channel frequencies for a channel:

1. Press the up or down arrow key to move to the *Tx/Rx* field of the channel where you want to enter information.

2. Type the frequency. Either omit the decimal point or specify the decimal point with up to two decimal places (to nearest 10Hz). XP adds the comma after the thousand.

   If this channel is a blank line, XP enters the standard settings for the channel options.

   If you want to change the standard settings that XP uses each time, select *Standard **C**hannel Settings* from the ***O**ptions* menu.

   If you want to inhibit transmission on this channel, press the space bar at the *Tx/Rx* field. *Inhibit* is displayed.

   If you try and enter a frequency outside the range allowed for the transceiver, XP displays an error message. Press Enter to return to the Channel Information area. The invalid frequency highlights. Type the frequency again.

3. If the transmit and receive frequencies are the same, go to the 'Entering the channel options' section below. If the frequencies are different, press Tab to move to the *Rx* field.

4. Type the receive frequency as described in step 2 above.

   If you type the same frequency as in the *Tx/Rx* field, XP erases your *Rx* field entry as soon as you move to another field. Having a blank field here makes it easier to recognise when a channel uses the same transmit and receive frequencies.

Entering the channel options

To enter the channel options for this channel:

1. Press Tab to move to the *SB* field.
2. Press the space bar until you see the sideband setting you want (*L*, *U* or *LU*).
3. Press Tab to move to the *OptE* field for the emergency call setting. Selecting this option allows you to transmit a two-tone emergency call on the channel.
4. Press the space bar until you see the emergency call setting you want (*E* or blank).
5. Press Tab to move to the *Ant* field.
6. Press the space bar until you see the antenna number you want (*1* or *2*).

Entering the optional channel comment

To enter a channel comment:

1. Press Tab to move to the *Channel comment* field.
2. Type a comment to describe this channel. You can enter up to 20 characters.

   This comment is saved when you save the channel information. You can print it when you print the channel list. It is not passed to the transceiver when you program the transceiver.

   If you are going to print the channel list on an operator's card, do not type past the vertical bar shown above the field.
3. Press Tab to move to the start of the next channel.

Changing channel information

While you are in the Channel Information area, you can change any channel setting at any time.

To move to a setting and replace it:

1. Move to the channel you want by:
   - using the up arrow or down arrow keys, or
   - pressing Alt-G, typing the channel number and pressing Enter.
2. Press Tab or Shift-Tab to move forwards or backwards and highlight the setting you want to change.
3. Enter the new setting.

You can edit settings. For example, you can change one digit of a frequency.

Select ***E****diting* from the ***H****elp* menu for details about other editing features.

Saving the channel information

When you have typed in and checked all the channel information, you are ready to save this information to a file. You can recover this information at any time after you have saved it.

To save the channel information:

1. Select ***S**ave* from the ***F**ile* menu (for example, press Alt-F then S). The Save screen is displayed.
2. Type the name of the file.
3. Press Tab to move to the comment field.
4. Type a description of the file (up to 39 characters) that will help you to remember what it contains.
5. Press Enter to start the save. If you want to abort the save, press ESCape. The Main screen is displayed.

The file name and comment are displayed in the File Description area.

XP adds the extension '.xp2' to the file name. This indicates that the file is for an X-2 transceiver.

Programming the transceiver

You now need to program the transceiver. This will set up the channel information in the transceiver.

To program the transceiver:

1. Select ***P**rogram* from the ***T**ransceiver* menu (for example, press Alt-T then P).

   After a short interval, the transceiver beeps three times. If programming was successful, the first two beeps are shorter and higher in tone than the third. *Programmed successfully* is displayed on the computer screen.

   If programming failed, the first two beeps are longer and lower in tone than the third. *Programming failure* is displayed on the computer screen. Check that the system is set up correctly and try programming again.

☛ See ‘Setting up the system’ on page 3-4.

2. Disconnect the transceiver from the computer. The transceiver is now ready for use.

❑

Printing the channel list

To print the channel list:

1. Select ***P**rint* from the ***F**ile* menu (for example, press Alt-F then P).
2. Enter any information that XP asks you for about the transceiver if you want to print this information.

☛ See ‘Printer Options’ on page 7-12 for details.

❑

7. Menus for the X-2

This chapter is for user reference. It describes the menu options of the four menus:

***F**ile*

***T**ransceiver*

***O**ptions*

***H**elp*

The File menu

The following menu options are displayed in the ***F**ile* menu:

***N**ew*

***L**oad*

***S**ave*

*Save **A**s*

***D**elete*

***R**ename*

***P**rint*

***M**erge*

*P**e**rmissions*

*Change L**i**sts*

***C**omment*

*D**o**s Shell*

***Q**uit*

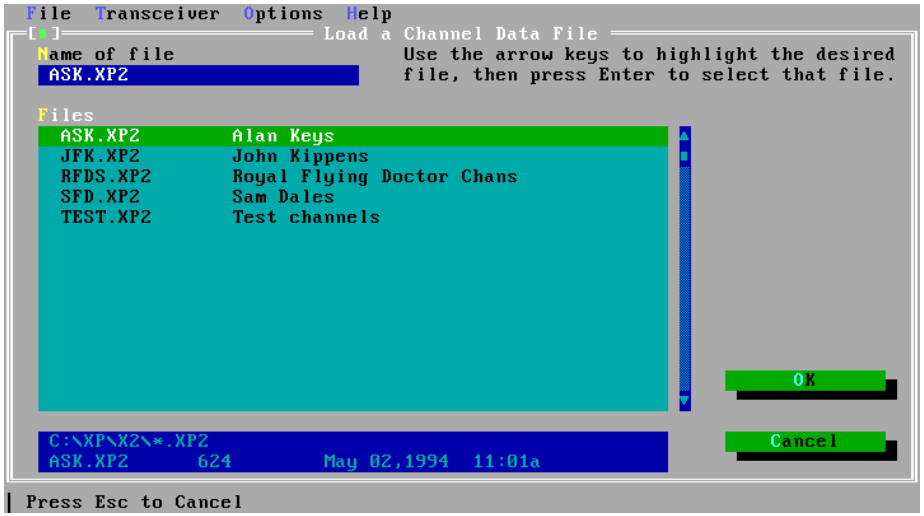
New

This option clears the main channel list. Use ***N**ew* when you want to start entering a new channel list.

If the main channel list has not been saved, XP asks you whether you want to save it first.

Load

Use this option to load the channel list from a file into the XP Channel Information area.



The Load screen

***L**oad* overwrites the main channel list. If this information has not been saved, XP asks you whether you want to save it first.

In the ***F**iles* field of the Load screen, highlight the file you want to load by using the arrow keys or typing the file name. As you type each letter of the file name, XP highlights the first file in the ***F**iles* field which matches what you have typed so far.

You can reduce the number of files shown in the ***F**iles* field by using wildcards. If you type a file name containing wildcards in the ***N**ame of File* field, XP only displays the file names that match the wildcards. Use '*' to match any number of characters. Use '?' to match a single character.

For example, to display file names of any length that begin with 'M', type **M***. To display file names of four characters that begin with S and end with E, type **S??E**.

XP ignores any drive name, directory or extension name included with the file name. To select a different directory see 'Location of Files' on page 7-15.

Save

Use this option to save the main channel list. XP saves information to the file whose name is displayed in the File Description area of the Main screen.

If you have not yet specified a file name, XP displays the Save As screen. Enter the file name and a comment to describe the file.

XP adds the extension '.xp2' to the file name. This indicates that the file is for an X-2 transceiver.

You know that you have saved the information when XP displays ...*saved successfully*.

Save As

Use this option to save the current XP information in a different file to that displayed in the File Description area of the Main screen.

☞ See ‘Save’ on page 7-3 for details.

Delete

Use this option to delete a file. After you have selected the file name to delete, XP asks you to confirm that you want to delete it.

☞ Select the file name in the same way as for ‘Load’ on page 7-2.

Rename

Use this option to rename a file. After you have selected and confirmed the name of the file that you want to rename, XP asks you to type the new file name.

☞ Select the file name in the same way as for ‘Load’ on page 7-2.

Print

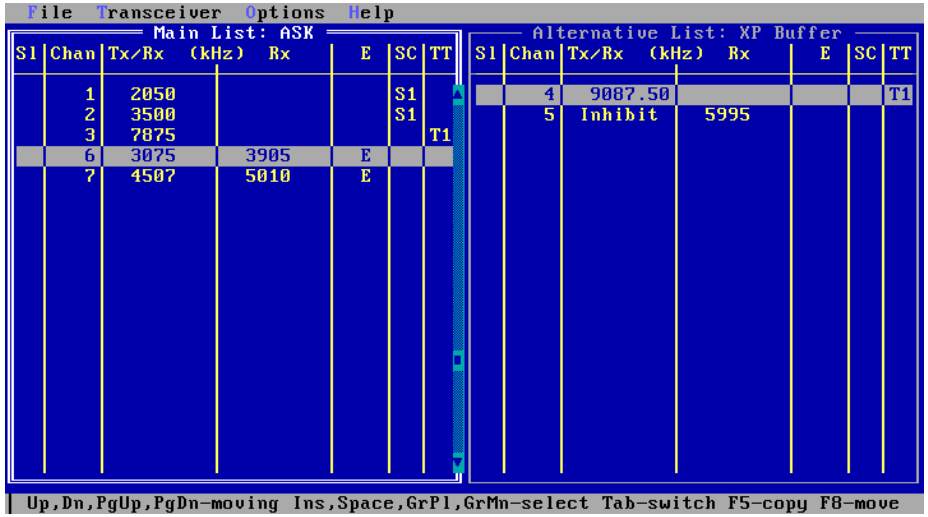
Use this option to print the channel list. XP prints the list according to the settings made in the Printer Options screen.

☛ See ‘Printer Options’ on page 7-12.

If you have set printer options that request information at print time, XP now asks you for this information before printing starts.

Merge

Use this option to copy or move channels between the main and alternative channel lists.



Example of the Merge screen

To copy or move channels from one channel list to the other:

1. Use Tab to select the channel list you want to copy or move from.

   XP displays this channel list with a bold border.

2. Use up arrow, down arrow, Page Up, Page Down, Home and End to highlight the channel you want to copy or move.

3. Press the space bar to select this channel.

   XP displays an asterisk in the *Sl* field for this channel. Pressing the space bar again deselects the channel. Use Insert instead of space bar if you want to move to the next channel after selecting or deselecting a channel.

4. Repeat steps 2 and 3 for other channels that you want to copy or move.

If you want to select all channels, press grey plus (the plus key on the keypad). To deselect all channels, press grey minus (the minus key on the keypad).

5. To copy the selected channels to the other channel list, press F5. To move the selected channels to the other channel list, press F8.

   XP warns you if some of these channels already exist in the other channel list. You can overwrite or skip each channel in turn, or select ***A**ll* to overwrite all these channels.

   If you have not selected any channels, XP copies or moves just the highlighted channel.

You can also copy parts of one list to the other using Ctrl-C (copy) and Ctrl-P (paste). See ‘Using the main and alternative channel lists’ on page 4-6.

Permissions

Use this option to change the permission for a file. The file permission feature lets you protect files from being accidentally changed.

☞ Select the file name in the same way as for ‘Load’ on page 7-2.

File permission is either read-write or read-only. When a file is read-only, XP does not let you delete it or change it by saving a modified version.

File permission switches every time you select this option. Files are read-write when you create them.

Select ***L****oad* from the ***F****ile* menu to check whether files are read-only. Read-only files are displayed with the prefix ‘*’ in the Load screen.

If you select ***S****ave* for a read-only file, the Save As screen is displayed for you to enter a different file name.

Change Lists

Use this option to change to the alternative channel list.

☞ See ‘Using the main and alternative channel lists’ on page 4-6.

Comment

Use this option to set up a comment which describes the main channel list. This comment can be printed out with the channel list.

☞ See ‘Printer Options’ on page 7-12.

Dos Shell

Use this option to jump to MS-DOS (enter a DOS shell) without quitting XP. To return to XP from MS-DOS, type **EXIT** then press Enter.

Quit

Use this option to return to the Startup screen. If the current channel information has not been saved, XP asks you whether you want to save it before quitting.

From the Startup screen you can quit from the XP program.

❑

The Transceiver menu

The following menu options are displayed in the ***T**ransceiver* menu:

***R**ead*

***P**rogram*

***V**erify*

***C**lear All Channels*

***M**emory Test*

You must connect the transceiver to the computer before using ***T**ransceiver* menu options.

Read

Use this option to read into XP the channel list stored in the transceiver.

XP displays transceiver part and version information, and the transceiver serial number. Press Enter to clear this display.

The transceiver channel list is displayed in the Channel Information area. Channel comment fields are blank since the transceiver cannot store channel comment information.

***R**ead* overwrites the main channel list. If this information has not been saved, XP asks you whether you want to save it first.

Program

Use this option to program the transceiver with the main channel list.

XP clears all existing channels in the transceiver when you program the transceiver.

XP ignores channel comments since the transceiver cannot store channel comment information.

You know that you have programmed the transceiver when *Programmed successfully* is displayed on the computer screen.

If programming fails, *Programming failure* is displayed on the computer screen. Check that the system is set up correctly and try programming again.

☞ See ‘Setting up the system’ on page 3-4.

Verify

Use this option to verify that the main channel list is the same as the channel list stored in the transceiver. XP ignores channel comments since the transceiver cannot store channel comment information.

XP either displays *Channels verified OK* or indicates the first channel that is different.

Clear All Channels

Use this option to clear all channel information in the transceiver. This option also clears the main channel list. It does not clear the alternative channel list.

XP asks you to confirm that you want to clear channels.

Memory Test

Use this option to check that the transceiver memory is functioning correctly.

This test is also useful in checking that the computer is able to communicate with the transceiver.

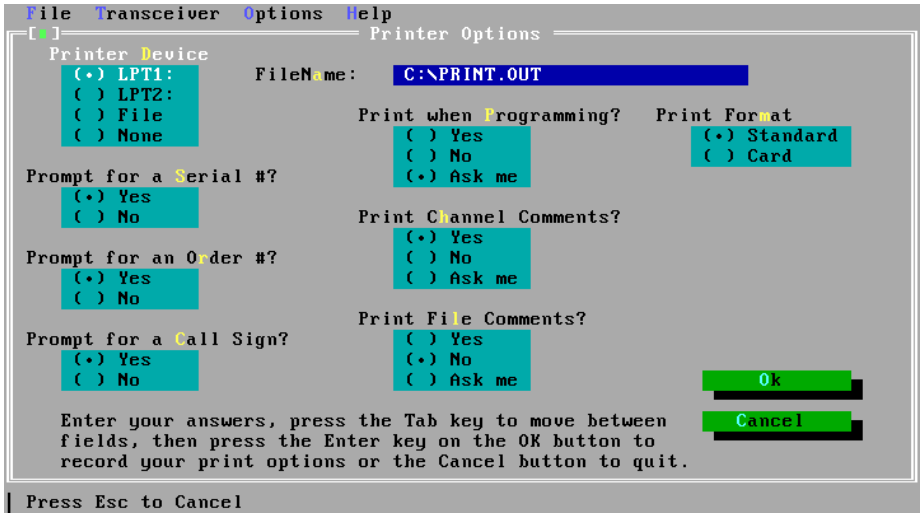
The Options menu

The following menu options are displayed in the ***O**ptions* menu:

- ***P**rinter Options*
- ***S**erial Port Options*
- ***L**ocation of Files*
- *Standard **C**hannel Settings*

Printer Options

This option controls how the printer works when you select ***P**rint* from the ***F**ile* menu. There are nine printer fields that you can change in the Printer Options screen.



The Printer Options screen

Use *Printer **D**evice* to select where to send the printer output.

You can select:

- the *LPT1* or *LPT2* printer port on the computer
- ***F**ile* to output printing to a file which you can print later from MS-DOS
- ***N**one* to disallow printing. XP will now warn you if you select ***P**rint* from the ***F**ile* menu.

Use *File N**a**me* to specify the name of the file if you selected ***F**ile* in *Printer **D**evice*.

Use *Prompt for a **S**erial #* to specify whether XP should ask you for the transceiver serial number when you print.

Use *Prompt for an O**r**der #* to specify whether XP should ask you for the transceiver order number when you print.

Use *Prompt for a **C**all Sign* to specify whether XP should ask you for the call sign of the transceiver operator when you print.

Use *Print when **P**rogramming* to specify whether to print the channel information when you program the transceiver (select ***P**rogram* from the ***T**ransceiver* menu). If you select *Ask me*, XP allows you to answer this question when you program the transceiver.

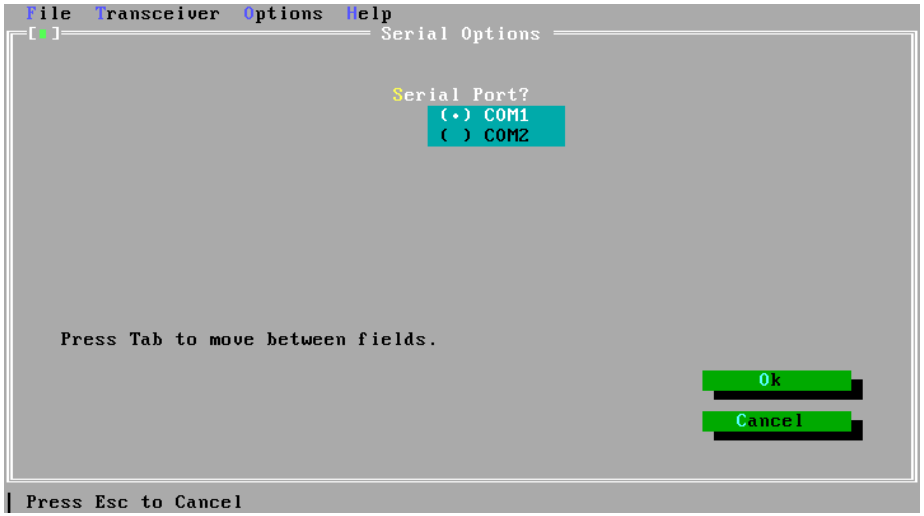
Use *Print C**h**annel Comments* to specify whether to include channel comments when you print. If you select *Ask me*, XP allows you to answer this question when you print.

Use *Print Fi**l**e Comments* to specify whether to include file comments when you print. If you select *Ask me*, XP allows you to answer this question when you print.

Use *Print For**m**at* to specify whether to format the print output for standard paper or for an operator's card.

Serial Port Options

This option specifies which serial port on the computer is used to connect the transceiver.

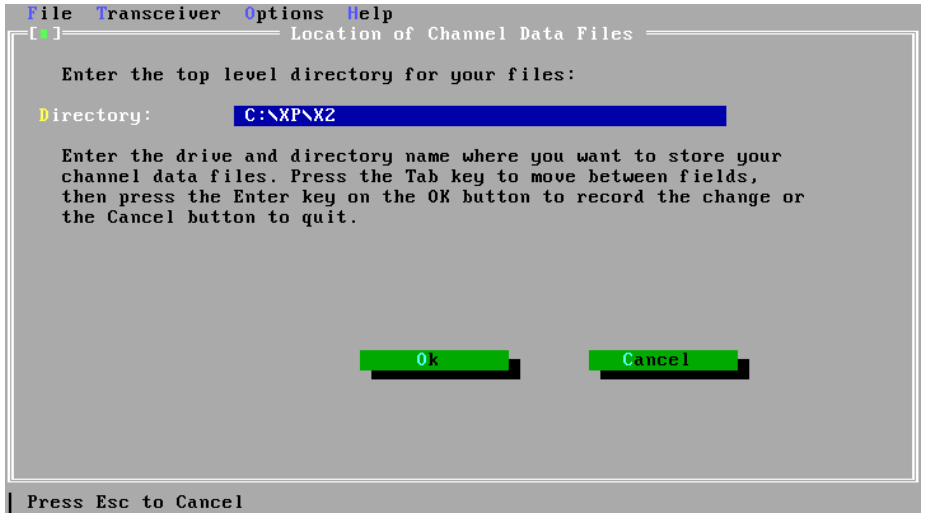


The Serial Port Options screen

Use ***S****erial Port* to select either the *COM1* or *COM2* serial port.

Location of Files

Use this option to specify the directory under which the files are stored on the computer. The directory C:\XP\X2 is already set up for you. You only need to change this if you want to save files under a different directory.

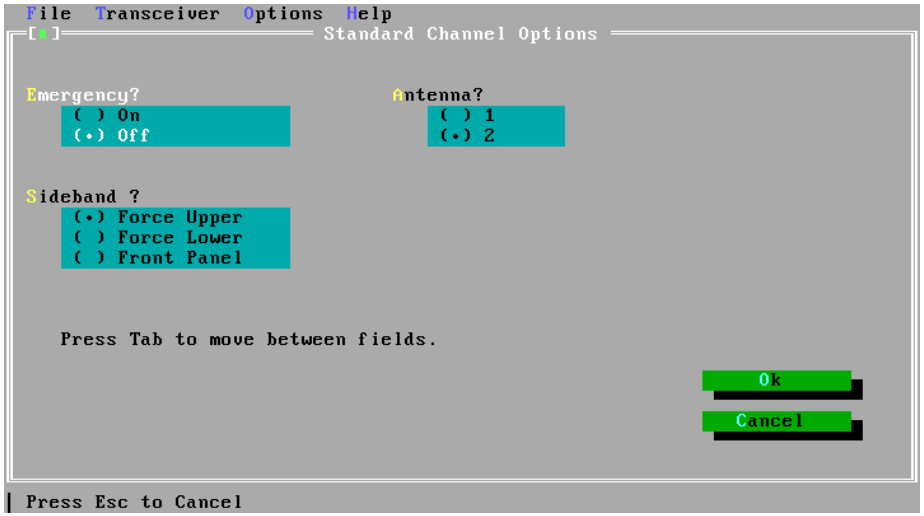


The Location of Files screen

If you specify a directory that does not exist, XP asks you if you want to create the directory.

Standard Channel Settings

Use this option to view or change standard settings for the channel options available for the transceiver.



Example of the Standard Channel Settings screen

These settings are displayed in the channel list for the current channel whenever you enter a frequency at a blank *Tx/Rx* or *Rx* field.

❑

The Help menu

The following menu options are displayed in the ***H****elp* menu:

- ***A****bout XP*
- ***L****ayout*
- ***C****hannel Information*
- ***S****pecial Keys*
- ***O****n Standard Settings*
- ***T****wo Channel Lists*
- ***E****diting*
- ***M****ouse Usage*

About XP

This option gives an overview of XP.

Layout

This option describes the six areas of the Main screen where you do most of your work.

Channel Information

This option lists the channel items and the range of values you can enter in the Channel Information area.

Special Keys

This option lists all the special keys and what they do.

On Standard Settings

This option describes the standard settings which XP automatically enters for the channel options in the channel list.

Two Channel Lists

This option describes how you can use the two channel lists in XP to simplify creation of channel information.

Editing

This option describes quick ways of editing channel information in the Channel Information area.

Mouse Usage

Use this option to find out how to use the mouse if your computer has one.

8. Cloning the X-2

This chapter explains how you can program a transceiver by copying channel information from a transceiver that has already been programmed. This process is called cloning. You do not need to use XP or a computer to clone transceivers.

The cloning process

Connecting the transceivers

To connect the two transceivers together:

1. Connect each transceiver to a power supply.
2. Connect the microphone socket of one transceiver to the microphone socket of the other transceiver using the X-2 cloning cable (Codan Part No. 08-04926).

It does not matter which end of the cable you plug into which transceiver.

Transceiver cloning

To set up two transceivers for cloning:

1. On the transceiver you are copying from, hold up both the Tune and Emgcy Call switches and turn on the power. Release the two switches when the transceiver starts beeping. If you do not hear beeping, check the cloning cable and repeat this step.

2. On the transceiver you are copying to, hold up the Tune switch and turn on the power. Release the switch when the transceiver beeps once. If you do not hear a beep, check the cloning cable and repeat this step.
3. To start programming, lift and release the Tune switch on the transceiver you are copying from.

   After about 10 seconds, you hear three beeps. If programming was successful, the first two beeps are shorter and higher in tone than the third.

   If programming failed, the first two beeps are longer and lower in tone than the third. Check the cloning cable and repeat from step 1.

Cloning another transceiver

To clone another transceiver:

1. Turn off the transceiver that you have just programmed.
2. Unplug the cloning cable from the microphone socket of this transceiver and plug in its microphone.
3. Plug the cloning cable into the microphone socket of the next transceiver.
4. Start the cloning process again. Repeat from step 2 of ‘Transceiver cloning’.

After cloning

When there are no more transceivers to clone:

1. Turn off both transceivers.
2. Unplug the cloning cable from the microphone sockets of both transceivers and plug in their microphones.

❑

9. Cable pins for the X-2

This chapter shows how the programming cable pins and cloning cable pins are used for the X-2 transceiver.

Programming cable pins

9-pin computer serial port socket	7-pin transceiver microphone socket	Pin function
2	1	Data from transceiver
3	2	Data to transceiver
5	3	Ground
	5/7 link	Speaker link

Cloning cable pins

7-pin transceiver microphone socket	7-pin transceiver microphone socket	Pin function
1	2	Data I/O
2	1	Data I/O
3	3	Ground
5/7 link	5/7 link	Speaker link

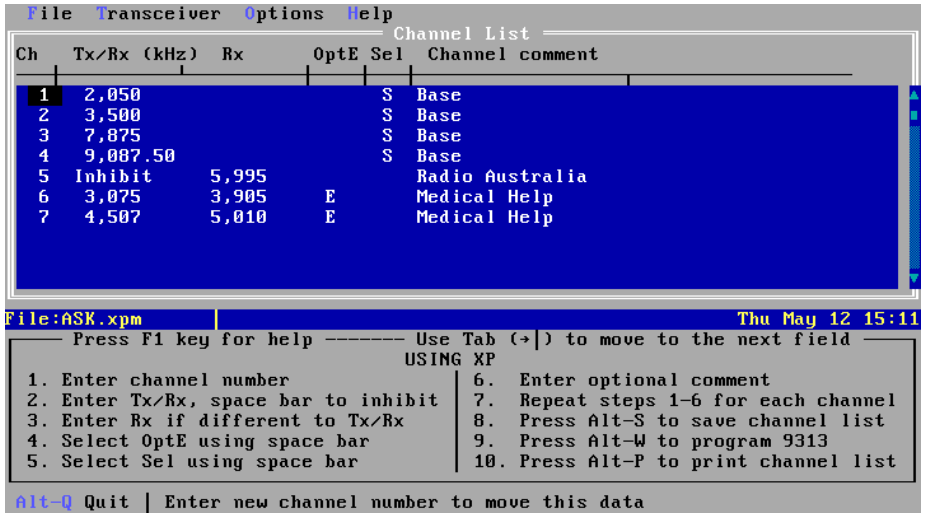
10. Programming the 9313 & 9480

This chapter explains step by step how you use XP to program a 9313 or 9480 transceiver.

It shows you how to:

- create channel information (the channel list)
- save channel information in a file
- program the transceiver
- print the channel list.

You should already have connected the transceiver to the computer. The computer should be displaying the Main screen shown below.



Example of the Main screen

Creating the channel list

XP clears all existing channels in the transceiver when you program the transceiver. The channel list you create must contain all the channels that you want programmed into the transceiver.

Channel items for a 9313 transceiver

For each channel you can set the:

- transmit frequency (2–24MHz to nearest 10Hz)
- receive frequency (250kHz–30MHz to nearest 10Hz)
- emergency call option (*E* or blank)
- selcall enable (*S* or blank)
- channel comment (optional description of the channel).

Channel items for a 9480 transceiver

For each channel you can set the:

- transmit frequency (2–24MHz to nearest 10Hz)
- receive frequency (250kHz–30MHz to nearest 10Hz)
- sideband (*L* for lower, *U* for upper, or *LU* for sideband control from front panel of transceiver)
- selcall enable (*S* or blank)
- channel comment (optional description of the channel).

Entering the channel number

Type the channel number in the range 1–15. You can add up to 15 channels to the channel list.

You do not have to type channel numbers in number sequence. When you move to another channel, XP sorts the channel list.

Entering the channel frequencies

To enter the channel frequencies for this channel:

1. Type the frequency. Either omit the decimal point or specify the decimal point with up to two decimal places (to nearest 10Hz). XP adds the comma after the thousand.

   If this channel is a blank line, XP enters the standard settings for the channel options.

   If you want to change the standard settings that XP uses each time, select *Standard **C**hannel Settings* from the ***O**ptions* menu.

   If you want to inhibit transmission on this channel, press the space bar at the *Tx/Rx* field. *Inhibit* is displayed.

   If you try and enter a frequency outside the range allowed for the transceiver, XP displays an error message. Press Enter to return to the Channel Information area. The invalid frequency highlights. Type the frequency again.

2. If the transmit and receive frequencies are the same, go to the ‘Entering the channel options’ section below. If the frequencies are different, press Tab to move to the *Rx* field.

3. Type the receive frequency as described in step 1 above.

If you type the same frequency as in the *Tx/Rx* field, XP erases your *Rx* field entry as soon as you move to another field. Having a blank field here makes it easier to recognise when a channel uses the same transmit and receive frequencies.

Entering channel options for a 9313 transceiver

To enter the channel options for this channel:

1. Press Tab to move to the *OptE* field for the emergency call setting. Selecting this option allows you to transmit a two-tone emergency call on the channel.
2. Press the space bar until you see the emergency call setting you want (*E* or blank).
3. Press Tab to move to the *Sel* field for selcall enable. Selecting this option allows you to send and receive selective calls on this channel.
4. Press the space bar until you see the selcall enable setting you want (*S* or blank).

Entering channel options for a 9480 transceiver

To enter the channel options for this channel:

1. Press Tab to move to the *SB* field.
2. Press the space bar until you see the sideband setting you want (*L*, *U* or *LU*).
3. Press Tab to move to the *Sel* field for selcall enable. Selecting this option allows you to send and receive selective calls on this channel.
4. Press the space bar until you see the selcall enable setting you want (*S* or blank).

Entering the optional channel comment

To enter a channel comment:

1. Press Tab to move to the *Channel comment* field.
2. Type a comment to describe this channel. You can enter up to 20 characters.

   This comment is saved when you save the channel information. You can print it when you print the channel list. It is not passed to the transceiver when you program the transceiver.
3. Press Enter to complete this channel.

Changing channel information

While you are in the Channel Information area, you can change any channel setting at any time.

To move to a setting and replace it:

1. Move to the channel you want by:
   - using the up arrow or down arrow keys, or
   - pressing Alt-G, typing the channel number and pressing Enter.
2. Press Tab or Shift-Tab to move forwards or backwards and highlight the setting you want to change.
3. Enter the new setting.

You can edit settings. For example, you can change one digit of a frequency.

Select ***E**diting* from the ***H**elp* menu for details about other editing features.

Saving the channel information

When you have typed in and checked all the channel information, you are ready to save this information to a file. You can recover this information at any time after you have saved it.

To save the channel information:

1. Select ***S**ave* from the ***F**ile* menu (for example, press Alt-F then S). The Save screen is displayed.
2. Type the name of the file.
3. Press Tab to move to the comment field.
4. Type a description of the file (up to 39 characters) that will help you to remember what it contains.
5. Press Enter to start the save. If you want to abort the save, press ESCape. The Main screen is displayed.

The file name and comment are displayed in the File Description area.

XP adds the extension '.xpm' to the file name. This indicates that the file is for a 9313 or 9480 transceiver.

Programming the transceiver

You now need to program the transceiver. This will set up the channel information in the transceiver.

Before you program the transceiver, make sure that the transceiver is not scanning. Do not use the transceiver during programming.

To program the transceiver:

1. Select ***P****rogram* from the ***T****ransceiver* menu (for example, press Alt-T then P).

   Channel numbers are displayed on the transceiver screen as each channel is programmed.

   If programming was successful, *Programmed successfully* is displayed on the computer screen.

   If programming failed, *Programming failure* is displayed on the computer screen. Check that the system is set up correctly and try programming again.

☛ See ‘Setting up the system’ on page 3-4.

2. Disconnect the transceiver from the computer. The transceiver is now ready for use.

❑

Printing the channel list

To print the channel list:

1. Select ***P****rint* from the ***F****ile* menu (for example, press Alt-F then P).
2. Enter any information that XP asks you for about the transceiver if you want to print this information.

☞ See ‘Printer Options’ on page 11-12 for details.

❑

11. Menus for the 9313 & 9480

This chapter is for user reference. It describes the menu options of the four menus:

***F**ile*

***T**ransceiver*

***O**ptions*

***H**elp*

The File menu

The following menu options are displayed in the ***F**ile* menu:

***N**ew*

***L**oad*

***S**ave*

*Save **A**s*

***D**elete*

***R**ename*

***P**rint*

***M**erge*

*P**e**rmissions*

*Change L**i**sts*

***C**omment*

*D**o**s Shell*

***Q**uit*

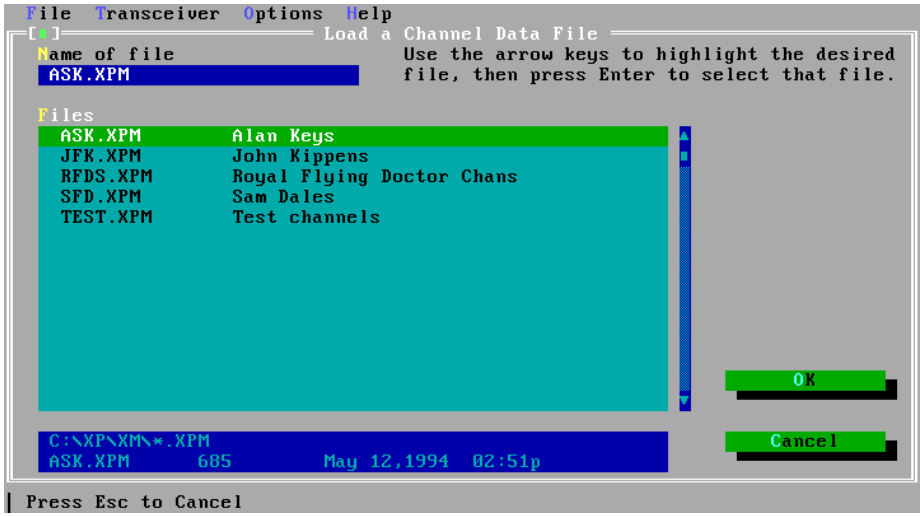
New

This option clears the main channel list. Use ***N**ew* when you want to start entering a new channel list.

If the main channel list has not been saved, XP asks you whether you want to save it first.

Load

Use this option to load the channel list from a file into the XP Channel Information area.



The Load screen

***L**oad* overwrites the main channel list. If this information has not been saved, XP asks you whether you want to save it first.

In the ***F**iles* field of the Load screen, highlight the file you want to load by using the arrow keys or typing the file name. As you type each letter of the file name, XP highlights the first file in the ***F**iles* field which matches what you have typed so far.

You can reduce the number of files shown in the ***F**iles* field by using wildcards. If you type a file name containing wildcards in the ***N**ame of File* field, XP only displays the file names that match the wildcards. Use '*' to match any number of characters. Use '?' to match a single character.

For example, to display file names of any length that begin with 'M', type **M***. To display file names of four characters that begin with S and end with E, type **S??E**.

XP ignores any drive name, directory or extension name included with the file name. To select a different directory see 'Location of Files' on page 11-15.

Save

Use this option to save the main channel list. XP saves information to the file whose name is displayed in the File Description area of the Main screen.

If you have not yet specified a file name, XP displays the Save As screen. Enter the file name and a comment to describe the file.

XP adds the extension '.xpm' to the file name. This indicates that the file is for a 9313 or 9480 transceiver.

You know that you have saved the information when XP displays ...*saved successfully*.

Save As

Use this option to save the current XP information in a different file to that displayed in the File Description area of the Main screen.

☞ See ‘Save’ on page 11-3 for details.

Delete

Use this option to delete a file. After you have selected the file name to delete, XP asks you to confirm that you want to delete it.

☞ Select the file name in the same way as for ‘Load’ on page 11-2.

Rename

Use this option to rename a file. After you have selected and confirmed the name of the file that you want to rename, XP asks you to type the new file name.

☞ Select the file name in the same way as for ‘Load’ on page 11-2.

Print

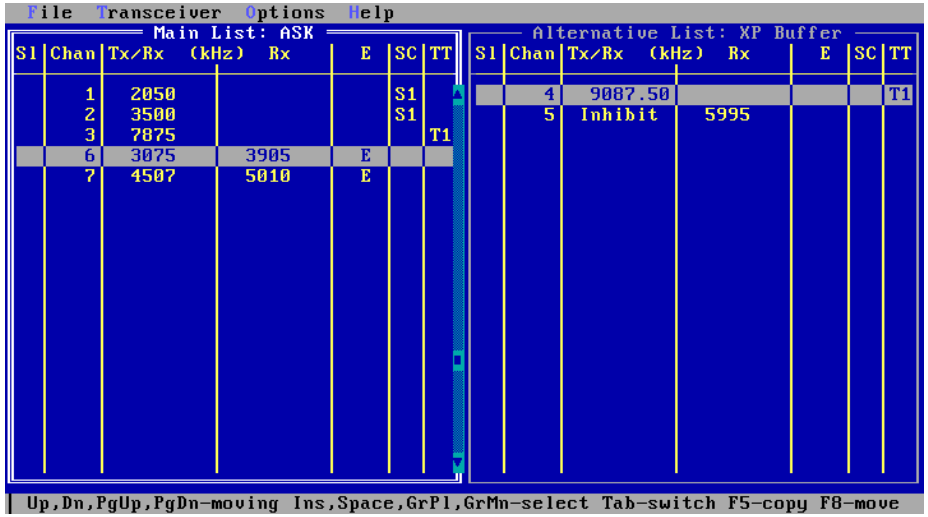
Use this option to print the channel list. XP prints the list according to the settings made in the Printer Options screen.

☞ See ‘Printer Options’ on page 11-12.

If you have set printer options that request information at print time, XP now asks you for this information before printing starts.

Merge

Use this option to copy or move channels between the main and alternative channel lists.



Example of the Merge screen

To copy or move channels from one channel list to the other:

1. Use Tab to select the channel list you want to copy or move from.

   XP displays this channel list with a bold border.

2. Use up arrow, down arrow, Page Up, Page Down, Home and End to highlight the channel you want to copy or move.

3. Press the space bar to select this channel.

   XP displays an asterisk in the *Sl* field for this channel. Pressing the space bar again deselects the channel. Use Insert instead of space bar if you want to move to the next channel after selecting or deselecting a channel.

4. Repeat steps 2 and 3 for other channels that you want to copy or move.

If you want to select all channels, press grey plus (the plus key on the keypad). To deselect all channels, press grey minus (the minus key on the keypad).

5. To copy the selected channels to the other channel list, press F5. To move the selected channels to the other channel list, press F8.

   XP warns you if some of these channels already exist in the other channel list. You can overwrite or skip each channel in turn, or select ***A**ll* to overwrite all these channels.

   If you have not selected any channels, XP copies or moves just the highlighted channel.

You can also copy parts of one list to the other using Ctrl-C (copy) and Ctrl-P (paste). See ‘Using the main and alternative channel lists’ on page 4-6.

Permissions

Use this option to change the permission for a file. The file permission feature lets you protect files from being accidentally changed.

☞ Select the file name in the same way as for ‘Load’ on page 11-2.

File permission is either read-write or read-only. When a file is read-only, XP does not let you delete it or change it by saving a modified version.

File permission switches every time you select this option. Files are read-write when you create them.

Select ***L****oad* from the ***F****ile* menu to check whether files are read-only. Read-only files are displayed with the prefix ‘*’ in the Load screen.

If you select ***S****ave* for a read-only file, the Save As screen is displayed for you to enter a different file name.

Change Lists

Use this option to change to the alternative channel list.

☞ See ‘Using the main and alternative channel lists’ on page 4-6.

Comment

Use this option to set up a comment which describes the main channel list. This comment can be printed out with the channel list.

☞ See ‘Printer Options’ on page 11-12.

Dos Shell

Use this option to jump to MS-DOS (enter a DOS shell) without quitting XP. To return to XP from MS-DOS, type **EXIT** then press Enter.

Quit

Use this option to return to the Startup screen. If the current channel information has not been saved, XP asks you whether you want to save it before quitting.

From the Startup screen you can quit from the XP program.

❑

The Transceiver menu

The following menu options are displayed in the ***T**ransceiver* menu:

***R**ead*

***P**rogram*

***V**erify*

***C**lear All Channels*

You must connect the transceiver to the computer before using ***T**ransceiver* menu options.

Read

Use this option to read into XP the channel list stored in the transceiver.

The transceiver channel list is displayed in the Channel Information area. Channel comment fields are blank since the transceiver cannot store channel comment information.

***R**ead* overwrites the main channel list. If this information has not been saved, XP asks you whether you want to save it first.

Program

Use this option to program the transceiver with the main channel list.

Before you program the transceiver, make sure that the transceiver is not scanning. Do not use the transceiver during programming.

XP clears all existing channels in the transceiver when you program the transceiver.

XP ignores channel comments since the transceiver cannot store channel comment information.

You know that you have programmed the transceiver when *Programmed successfully* is displayed on the computer screen.

If programming fails, *Programming failure* is displayed on the computer screen. Check that the system is set up correctly and try programming again.

☞ See ‘Setting up the system’ on page 3-4.

Verify

Use this option to verify that the main channel list is the same as the channel list stored in the transceiver. XP ignores channel comments since the transceiver cannot store channel comment information.

XP either displays *Channels verified OK* or indicates the first channel that is different.

Clear All Channels

Use this option to clear all channel information in the transceiver. This option also clears the main channel list. It does not clear the alternative channel list.

XP asks you to confirm that you want to clear channels.

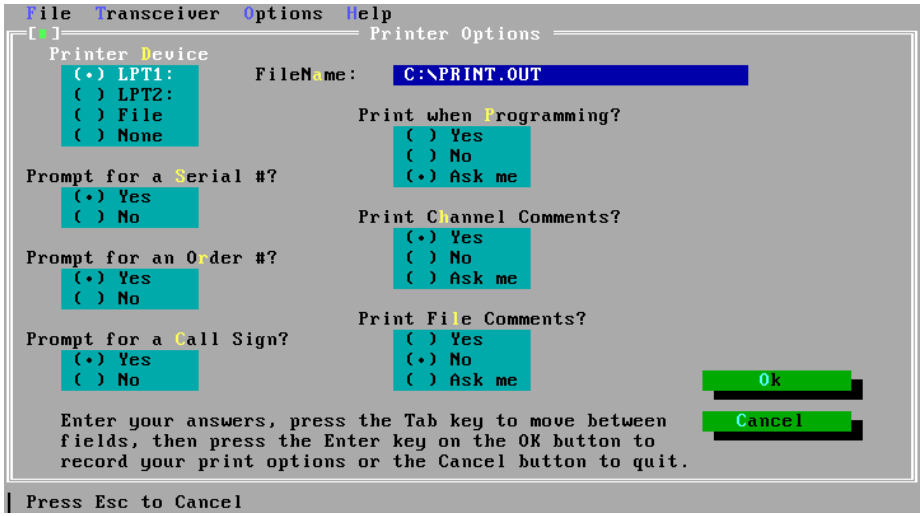
The Options menu

The following menu options are displayed in the ***O**ptions* menu:

- ***P**rinter Options*
- ***S**erial Port Options*
- ***L**ocation of Files*
- *Standard **C**hannel Settings*

Printer Options

This option controls how the printer works when you select ***P**rint* from the ***F**ile* menu. There are eight printer fields that you can change in the Printer Options screen.



The Printer Options screen

Use *Printer **D**evice* to select where to send the printer output.

You can select:

- the *LPT1* or *LPT2* printer port on the computer
- ***F**ile* to output printing to a file which you can print later from MS-DOS
- ***N**one* to disallow printing. XP will now warn you if you select ***P**rint* from the ***F**ile* menu.

Use *File N**a**me* to specify the name of the file if you selected ***F**ile* in *Printer **D**evice*.

Use *Prompt for a **S**erial #* to specify whether XP should ask you for the transceiver serial number when you print.

Use *Prompt for an O**r**der #* to specify whether XP should ask you for the transceiver order number when you print.

Use *Prompt for a **C**all Sign* to specify whether XP should ask you for the call sign of the transceiver operator when you print.

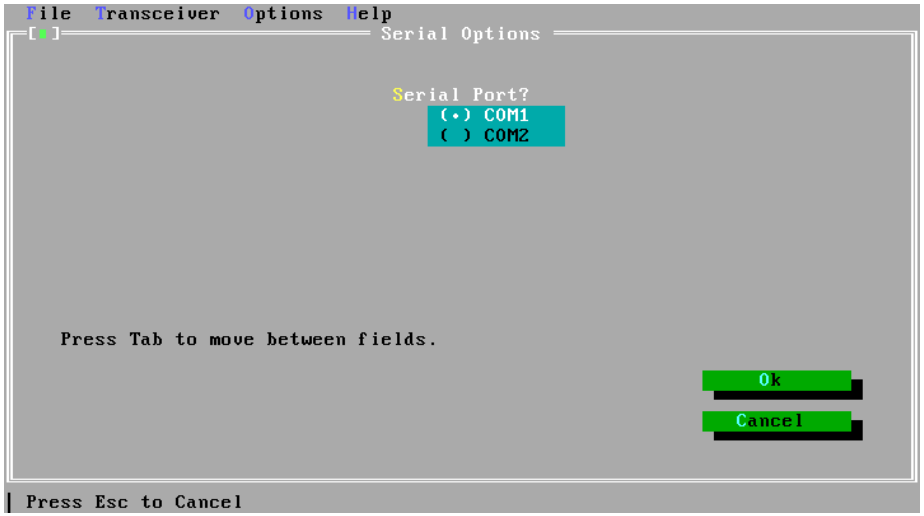
Use *Print when **P**rogramming* to specify whether to print the channel information when you program the transceiver (select ***P**rogram* from the ***T**ransceiver* menu). If you select *Ask me*, XP allows you to answer this question when you program the transceiver.

Use *Print C**h**annel Comments* to specify whether to include channel comments when you print. If you select *Ask me*, XP allows you to answer this question when you print.

Use *Print Fi**l**e Comments* to specify whether to include file comments when you print. If you select *Ask me*, XP allows you to answer this question when you print.

Serial Port Options

This option specifies which serial port on the computer is used to connect the transceiver.

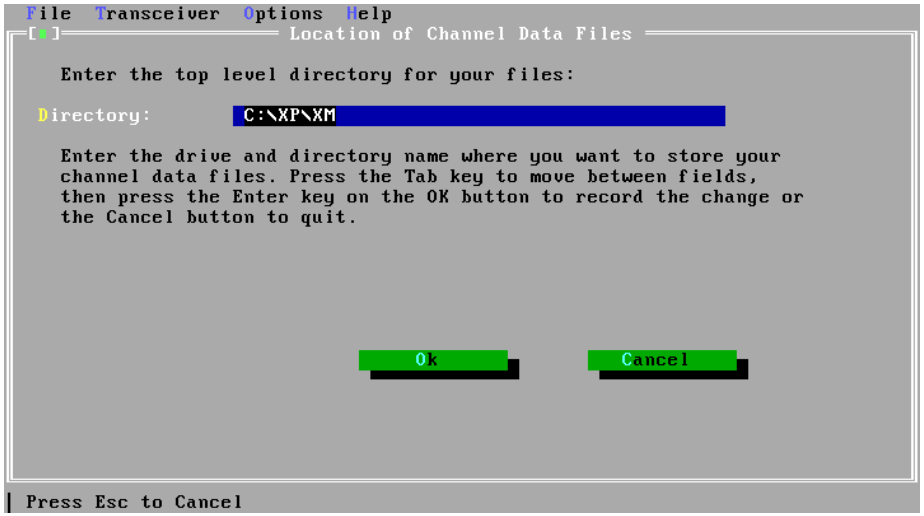


The Serial Port Options screen

Use ***S****erial Port* to select either the *COM1* or *COM2* serial port.

Location of Files

Use this option to specify the directory under which the files are stored on the computer. The directory C:\XP\XM is already set up for you. You only need to change this if you want to save files under a different directory.

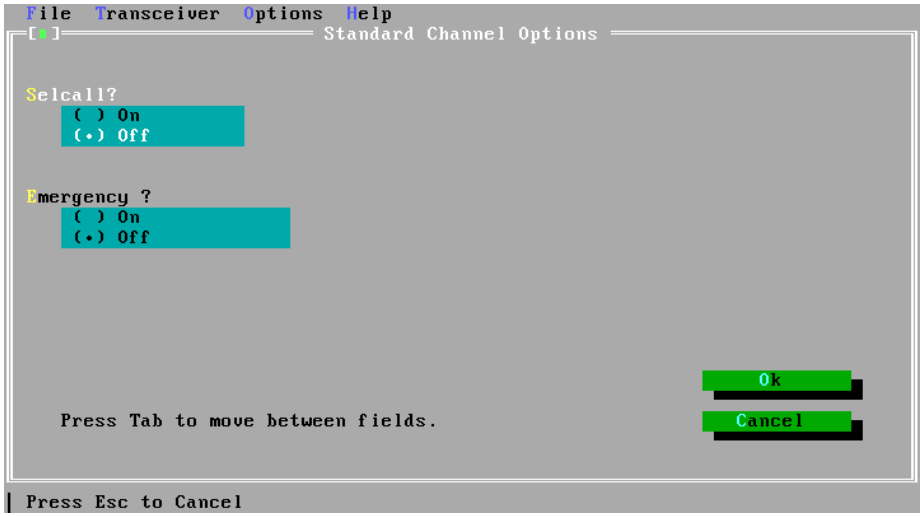


The Location of Files screen

If you specify a directory that does not exist, XP asks you if you want to create the directory.

Standard Channel Settings

Use this option to view or change standard settings for the channel options available for the transceiver.



Example of the Standard Channel Settings screen

These settings are displayed in the channel list for the current channel whenever you enter a frequency at a blank *Tx/Rx* or *Rx* field.

❑

The Help menu

The following menu options are displayed in the ***H**elp* menu:

- ***A**bout XP*
- ***L**ayout*
- ***C**hannel Information*
- ***S**pecial Keys*
- ***O**n Standard Settings*
- ***T**wo Channel Lists*
- ***E**diting*
- ***M**ouse Usage*

About XP

This option gives an overview of XP.

Layout

This option describes the six areas of the Main screen where you do most of your work.

Channel Information

This option lists the channel items and the range of values you can enter in the Channel Information area.

Special Keys

This option lists all the special keys and what they do.

On Standard Settings

This option describes the standard settings which XP automatically enters for the channel options in the channel list.

Two Channel Lists

This option describes how you can use the two channel lists in XP to simplify creation of channel information.

Editing

This option describes quick ways of editing channel information in the Channel Information area.

Mouse Usage

Use this option to find out how to use the mouse if your computer has one.

12. Cable pins for the 9313 & 9480

This chapter shows how the programming cable pins are used for the 9313 and 9480 transceivers.

Programming cable pins

9-pin computer serial port socket	3-pin transceiver 3.5mm RS232 jack plug	Pin function
3	tip	Data to transceiver
2	ring	Data from transceiver
5	sleeve	Ground

13. Programming the 9323, 9360 & 9390

This chapter explains step by step how you use XP to program a 9323, 9360 or 9390 transceiver.

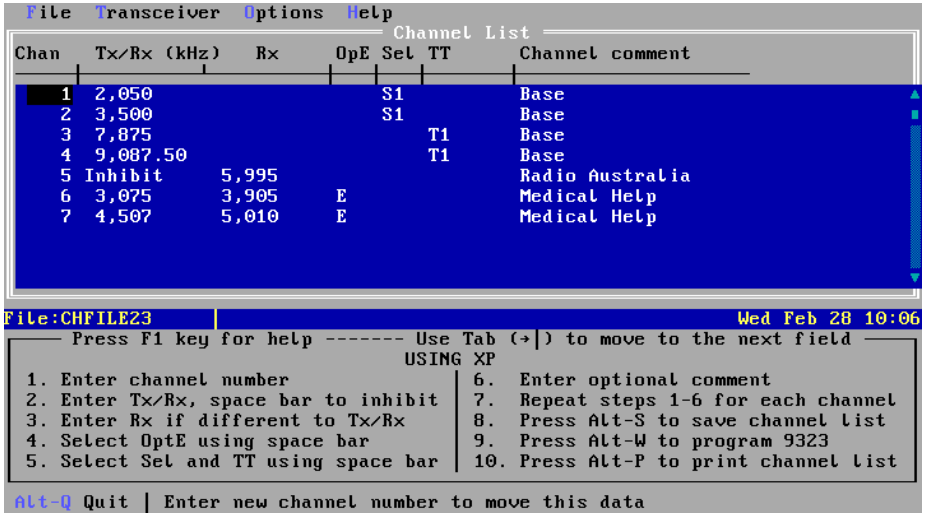
It shows you how to:

- create channel information for the 9323 channel list
- create channel information for the 9360 channel list
- create channel information for the 9390 channel list
- change setup information (selcall group settings, two-tone frequency settings and scan table settings)
- save channel and setup information in a file
- program the transceiver
- print the channel list.

☞ For details on setup information, see ‘Selcall Groups’ on page 14-22, ‘Two Tone Frequencies’ on page 14-24 and ‘Scan Tables’ on page 14-25.

Creating the channel list for a 9323 transceiver

You should already have connected the transceiver to the computer. The computer should be displaying the Main screen shown below.



The Main screen

Channel items

For each channel you can set the:

- transmit frequency (selected bandwidth to nearest 10Hz)
- receive frequency (250kHz–30MHz to nearest 10Hz)
- emergency call option (*E* or blank)
- selcall group (*S1–S5* or blank)
- two-tone frequency pair (*T1–T4* or blank)
- channel comment (optional description of the channel).

Setting the bandwidth

You need to set XP's bandwidth (transmit frequency range) to suit the transceiver you are going to program.

There are two ways to do this automatically:

- read in the transceiver's channel list by selecting ***R**ead* from the ***T**ransceiver* menu (for example, press Alt-T then R)
- load in any channel list file set up for the transceiver by selecting ***L**oad* from the ***F**ile* menu (for example, press Alt-F then L).

If you have to start from a new, empty channel list, you may need to change XP's bandwidth setting manually by selecting *PA **B**andwidth* from the ***O**ptions* menu (for example, press Alt-O then B). When you start XP, the bandwidth is set to 2–26.5MHz that suits most transceivers.

☛ For details, see 'PA Bandwidth' on page 14-27.

If XP's bandwidth is greater that the transceiver's, XP will output a warning when you program the transceiver.

Entering the channel number

Type the channel number in the range 1–9999.

You can create up to 400 channels each with a channel number in the range 1–9999. You do not have to type channel numbers in number sequence. When you move to another channel, XP sorts the channel list.

Entering the channel frequencies

To enter the channel frequencies for this channel:

1. Type the frequency. Either omit the decimal point or specify the decimal point with up to two decimal places (to nearest 10Hz). XP adds the comma after the thousand.

   If this channel is a blank line, XP enters the standard settings for the channel options.

   If you want to change the standard settings that XP uses each time, select *Standard **C**hannel Settings* from the ***O**ptions* menu.

   If you want to inhibit transmission on this channel, press the space bar at the *Tx/Rx* field. *Inhibit* is displayed.

   If you try and enter a frequency outside the selected bandwidth, XP displays an error message. Press Enter to return to the Channel Information area. The invalid frequency highlights. Type the frequency again.

2. If the transmit and receive frequencies are the same, go to the 'Entering the channel options' section below. If the frequencies are different, press Tab to move to the *Rx* field.

3. Type the receive frequency as described in step 1 above.

   If you type the same frequency as in the *Tx/Rx* field, XP erases your *Rx* field entry as soon as you move to another field. Having a blank field here makes it easier to recognise when a channel uses the same transmit and receive frequencies.

Entering channel options

To enter the channel option for this channel:

1. Press Tab to move to the *OptE* field for the emergency call setting. Selecting this option allows you to transmit a two-tone emergency call on the channel.
2. Press the space bar until you see the emergency call setting you want (*E* or blank).
3. Press Tab to move to the *Sel* field.
4. Press the space bar until you see the selcall group name you want (*S1–S5* or blank).

   These selcall group names refer to the current selcall group settings (setup information) stored in the transceiver. You can change these settings using *Selcall **G**roups* from the ***O**ptions* menu. The values you enter will overwrite the current settings stored in the transceiver when you program the transceiver.

☛ See ‘Selcall Groups’ on page 14-22.

5. Press Tab to move to the *TT* field.
6. Press the space bar until you see the two-tone name you want (*T1–T4* or blank).

   These two-tone names refer to the current two-tone frequency settings (setup information) stored in the transceiver. You can change these settings using ***T**wo Tone Frequencies* from the ***O**ptions* menu. The values you enter will overwrite the current settings stored in the transceiver when you program the transceiver.

☛ See ‘Two Tone Frequencies’ on page 14-24.

Entering the optional channel comment

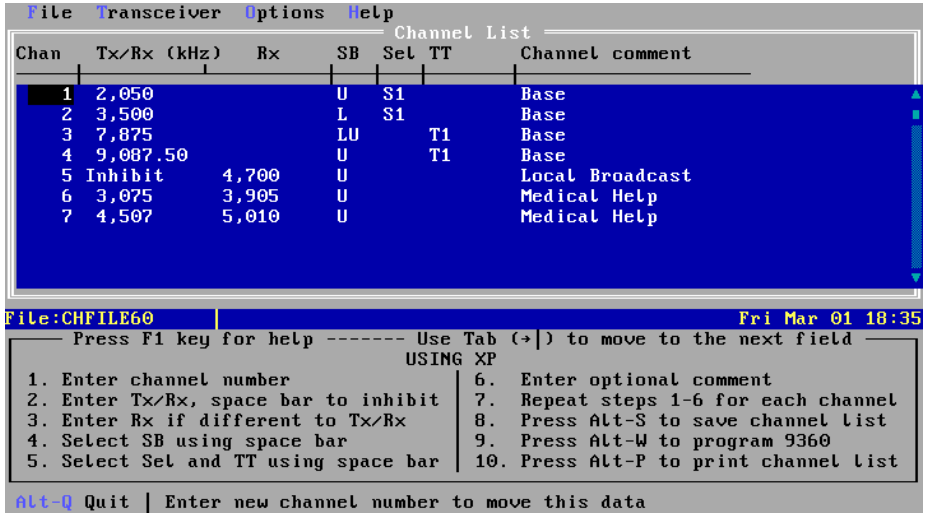
To enter a channel comment:

1. Press Tab to move to the *Channel comment* field.
2. Type a comment to describe this channel. You can enter up to 20 characters.

   This comment is saved when you save the channel and setup information. You can print it when you print the channel list. It is passed to the transceiver when you program the transceiver.
3. Press Enter to complete this channel.

Creating the channel list for a 9360 transceiver

You should already have connected the transceiver to the computer. The computer should be displaying the Main screen shown below.



The Main screen

Channel items

For each channel you can set the:

- transmit frequency (selected bandwidth to nearest 10Hz)
- receive frequency (250kHz–30MHz to nearest 10Hz)
- sideband (*L* for lower, *U* for upper, or *LU* for sideband control from front panel of transceiver)
- selcall group (*S1–S5* or blank)
- two-tone frequency pair (*T1–T4* or blank)
- channel comment (optional description of the channel).

Setting the bandwidth

You need to set XP's bandwidth (transmit frequency range) to suit the transceiver you are going to program.

There are two ways to do this automatically:

- read in the transceiver's channel list by selecting ***R**ead* from the ***T**ransceiver* menu (for example, press Alt-T then R)
- load in any channel list file set up for the transceiver by selecting ***L**oad* from the ***F**ile* menu (for example, press Alt-F then L).

If you have to start from a new, empty channel list, you may need to change XP's bandwidth setting manually by selecting *PA **B**andwidth* from the ***O**ptions* menu (for example, press Alt-O then B). When you start XP, the bandwidth is set to 2.25–30MHz that suits most transceivers.

☞ For details, see 'PA Bandwidth' on page 14-27.

If XP's bandwidth is greater that the transceiver's, XP will output a warning when you program the transceiver.

Entering the channel number

Type the channel number in the range 1–9999.

You can create up to 400 channels each with a channel number in the range 1–9999. You do not have to type channel numbers in number sequence. When you move to another channel, XP sorts the channel list.

Entering the channel frequencies

To enter the channel frequencies for this channel:

1. Type the frequency. Either omit the decimal point or specify the decimal point with up to two decimal places (to nearest 10Hz). XP adds the comma after the thousand.

   If this channel is a blank line, XP enters the standard settings for the channel options.

   If you want to change the standard settings that XP uses each time, select *Standard **C**hannel Settings* from the ***O**ptions* menu.

   If you want to inhibit transmission on this channel, press the space bar at the *Tx/Rx* field. *Inhibit* is displayed.

   If you try and enter a frequency outside the selected bandwidth, XP displays an error message. Press Enter to return to the Channel Information area. The invalid frequency highlights. Type the frequency again.

2. If the transmit and receive frequencies are the same, go to the 'Entering the channel options' section below. If the frequencies are different, press Tab to move to the *Rx* field.

3. Type the receive frequency as described in step 1 above.

   If you type the same frequency as in the *Tx/Rx* field, XP erases your *Rx* field entry as soon as you move to another field. Having a blank field here makes it easier to recognise when a channel uses the same transmit and receive frequencies.

Entering channel options

To enter the channel options for this channel:

1. Press Tab to move to the *SB* field.
2. Press the space bar until you see the sideband setting you want (*L*, *U* or *LU*).
3. Press Tab to move to the *Sel* field.
4. Press the space bar until you see the selcall group name you want (*S1–S5* or blank).

   These selcall group names refer to the current selcall group settings (setup information) stored in the transceiver. You can change these settings using *Selcall **G**roups* from the ***O**ptions* menu. The values you enter will overwrite the current settings stored in the transceiver when you program the transceiver.

☞ See ‘Selcall Groups’ on page 14-22.

5. Press Tab to move to the *TT* field.
6. Press the space bar until you see the two-tone name you want (*T1–T4* or blank).

   These two-tone names refer to the current two-tone frequency settings (setup information) stored in the transceiver. You can change these settings using ***T**wo Tone Frequencies* from the ***O**ptions* menu. The values you enter will overwrite the current settings stored in the transceiver when you program the transceiver.

☞ See ‘Two Tone Frequencies’ on page 14-24.

Entering the optional channel comment

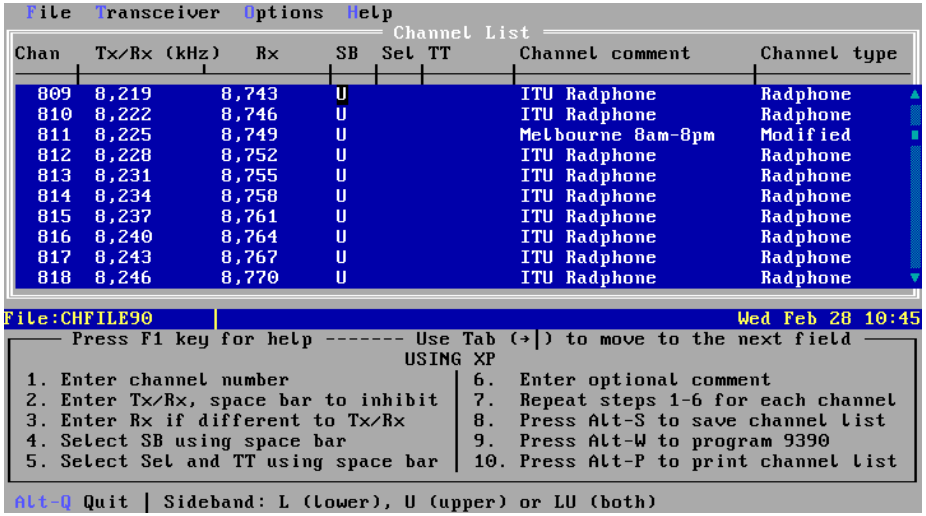
To enter a channel comment:

1. Press Tab to move to the *Channel comment* field.
2. Type a comment to describe this channel. You can enter up to 20 characters.

   This comment is saved when you save the channel and setup information. You can print it when you print the channel list. It is passed to the transceiver when you program the transceiver.
3. Press Enter to complete this channel.

Creating the channel list for a 9390 transceiver

You should already have connected the transceiver to the computer. The computer should be displaying the Main screen shown below.



The Main screen

The channel list:

- contains all the standard frequencies of the ITU marine channels (indicated by *Radphone* displayed in the *Channel type* field)
- may contain user programmed channels (indicated by *User* displayed in the *Channel type* field).

You can change *Radphone* channel options but not their frequencies. Modified *Radphone* channels display *Modified* in their *Channel type* fields.

You cannot delete *Radphone* channels from the channel list. If you delete a *Modified* channel, the unmodified *Radphone* channel reappears.

Channel items

For each *User* channel you can set the:

- transmit frequency (selected bandwidth to nearest 10Hz)
- receive frequency (250kHz–30MHz to nearest 10Hz)
- sideband (*L* for lower, *U* for upper, or *LU* for sideband control from front panel of transceiver)
- selcall group (*S1–S5* or blank)
- two-tone frequency pair (*T1–T4* or blank)
- channel comment (optional description of the channel).

For each *Radphone* or *Modified* channel you can set the:

- sideband (*L* for lower, *U* for upper, or *LU* for sideband control from front panel of transceiver)
- selcall group (*S1–S5* or blank)
- two-tone frequency pair (*T1–T4* or blank)
- channel comment (optional description of the channel).

Setting the bandwidth

You need to set XP's bandwidth (transmit frequency range) to suit the transceiver you are going to program.

There are two ways to do this automatically:

- read in the transceiver's channel list by selecting ***R**ead* from the ***T**ransceiver* menu (for example, press Alt-T then R)
- load in any channel list file set up for the transceiver by selecting ***L**oad* from the ***F**ile* menu (for example, press Alt-F then L).

If you have to start from a new, empty channel list, you may need to change XP's bandwidth setting manually by selecting *PA **B**andwidth* from the ***O**ptions* menu (for example, press Alt-O then B). When you start XP, the bandwidth is set to 2–26.5MHz that suits most transceivers.

☞ For details, see 'PA Bandwidth' on page 14-27.

If XP's bandwidth is greater that the transceiver's, XP will output a warning when you program the transceiver.

Entering the *User* channel number

To enter the channel number of a new *User* channel:

1. Press End to move past all the *Radphone* channels to the bottom of the channel list.
2. Press Enter to move to the *Chan* field.
3. Type the new channel number in the range 1–9999.

You can create up to 400 *User* channels each with a channel number in the range 1–9999. You do not have to type channel numbers in number sequence. When you move to another channel, XP sorts the channel list.

Entering *User* channel frequencies

To enter the channel frequencies for this channel:

1. Type the frequency. Either omit the decimal point or specify the decimal point with up to two decimal places (to nearest 10Hz). XP adds the comma after the thousand.

   If this channel is a blank line, XP enters the standard settings for the channel options.

   If you want to change the standard settings that XP uses each time, select *Standard **C**hannel Settings* from the ***O**ptions* menu.

   If you want to inhibit transmission on this channel, press the space bar at the *Tx/Rx* field. *Inhibit* is displayed.

   If you try and enter a frequency outside the selected bandwidth, XP displays an error message. Press Enter to return to the Channel Information area. The invalid frequency highlights. Type the frequency again.

2. If the transmit and receive frequencies are the same, go to the 'Entering the channel options' section below. If the frequencies are different, press Tab to move to the *Rx* field.

3. Type the receive frequency as described in step 1 above.

   If you type the same frequency as in the *Tx/Rx* field, XP erases your *Rx* field entry as soon as you move to another field. Having a blank field here makes it easier to recognise when a channel uses the same transmit and receive frequencies.

Entering channel options

To enter the channel option for this channel:

1. Press Tab to move to the *SB* field.
2. Press the space bar until you see the sideband setting you want (*L*, *U* or *LU*).
3. Press Tab to move to the *Sel* field.
4. Press the space bar until you see the selcall group name you want (*S1–S5* or blank).

   These selcall group names refer to the current selcall group settings (setup information) stored in the transceiver. You can change these settings using *Selcall **G**roups* from the ***O**ptions* menu. The values you enter will overwrite the current settings stored in the transceiver when you program the transceiver.

☞ See ‘Selcall Groups’ on page 14-22.

5. Press Tab to move to the *TT* field.
6. Press the space bar until you see the two-tone name you want (T1–T4 or blank).

   These two-tone names refer to the current two-tone frequency settings (setup information) stored in the transceiver. You can change these settings using ***T**wo Tone Frequencies* from the ***O**ptions* menu. The values you enter will overwrite the current settings stored in the transceiver when you program the transceiver.

☞ See ‘Two Tone Frequencies’ on page 14-24.

Entering the optional channel comment

To enter a channel comment:

1. Press Tab to move to the *Channel comment* field.
2. Type a comment to describe this channel. You can enter up to 20 characters.

   This comment is saved when you save the channel and setup information. You can print it when you print the channel list. It is passed to the transceiver when you program the transceiver.
3. Press Enter to complete this channel.

XP now sorts the channel list by channel number. If the new channel is high up the list with a low number, it may no longer be displayed. To display the channel, use Home, Page Up and Page Down to reach the part of the channel list containing the new channel.

❑

Changing channel information

While you are in the Channel Information area, you can change channel settings at any time. You cannot change the frequencies of *Radphone* channels.

To move to a setting and replace it:

1. Move to the channel you want by:
   - using the up arrow or down arrow keys, or
   - pressing Alt-G, typing the channel number and pressing Enter.
2. Press Tab or Shift-Tab to move forwards or backwards and highlight the setting you want to change.
3. Enter the new setting.

You can edit settings. For example, you can change one digit of a frequency.

Select ***E****diting* from the ***H****elp* menu for details about other editing features.

Saving the channel and setup information

When you have typed in and checked all the channel and setup information, you are ready to save this information to a file. You can recover this information at any time after you have saved it.

To save the channel and setup information:

1. Select ***S**ave* from the ***F**ile* menu (for example, press Alt-F then S). The Save screen is displayed.
2. Type the name of the file.
3. Press Tab to move to the comment field.
4. Type a description of the file (up to 39 characters) that will help you to remember what it contains.
5. Press Enter to start the save. If you want to abort the save, press ESCape. The Main screen is displayed.

The file name and comment are displayed in the File Description area.

XP adds the extension '.xp3' to the file name. This indicates that the file is for a 9323, 9360 or 9390 transceiver.

Programming the transceiver

You now need to program the transceiver. This will set up the channel and setup information in the transceiver.

To program the transceiver:

1. Select ***P**rogram* from the ***T**ransceiver* menu (for example, press Alt-T then P). The message *Do you wish to replace all channels in the transceiver or add to them?* is displayed.
2. Select:
   - ***A**dd to* if you want to add the channels from the channel list to the channels already in the transceiver
   - ***R**eplace* if you want to clear all existing channels in the transceiver before adding the channels from the channel list.

☞ For details, see 'Program' on page 14-12.

Symbols are displayed along the bottom of the control head screen as channels are programmed.

If programming was successful, *Programmed successfully* is displayed on the computer screen.

If programming failed, *Programming failure* is displayed on the computer screen. Check that the system is set up correctly and try programming again.

☞ If programming failed, see 'Setting up the system' on page 3-4.

If the warning *PA range selected...Do you wish to program these channels?* is displayed, see 'Program' on page 14-12.

3. Disconnect the transceiver from the computer. The transceiver is now ready for use.

❑

Printing the channel list

To print the channel list:

1. Select ***P**rint* from the ***F**ile* menu (for example, press Alt-F then P).
2. Enter any information that XP asks you for about the transceiver if you want to print this information.

☞ See ‘Printer Options’ on page 14-17 for details.

❑

14. Menus for the 9323, 9360 & 9390

This chapter is for user reference. It describes the menu options of the four menus:

***F**ile*

***T**ransceiver*

***O**ptions*

***H**elp*

The File menu

The following menu options are displayed in the ***F**ile* menu:

***N**ew*

***L**oad*

***S**ave*

*Save **A**s*

***D**elete*

***R**ename*

***P**rint*

***M**erge*

*P**e**rmissions*

*Change L**i**sts*

***C**omment*

*D**o**s Shell*

***Q**uit*

New

This option clears the main channel list. Use ***N****ew* when you want to start entering a new channel list.

This option also clears setup information:

- selcall group settings (displayed when you select *Selcall* ***G****roups* from the ***O****ptions* menu)
- two-tone frequency settings (displayed when you select ***T****wo Tone Frequencies* from the ***O****ptions* menu)
- scan table settings (displayed when you select *Sca****n*** *Tables* from the ***O****ptions* menu).

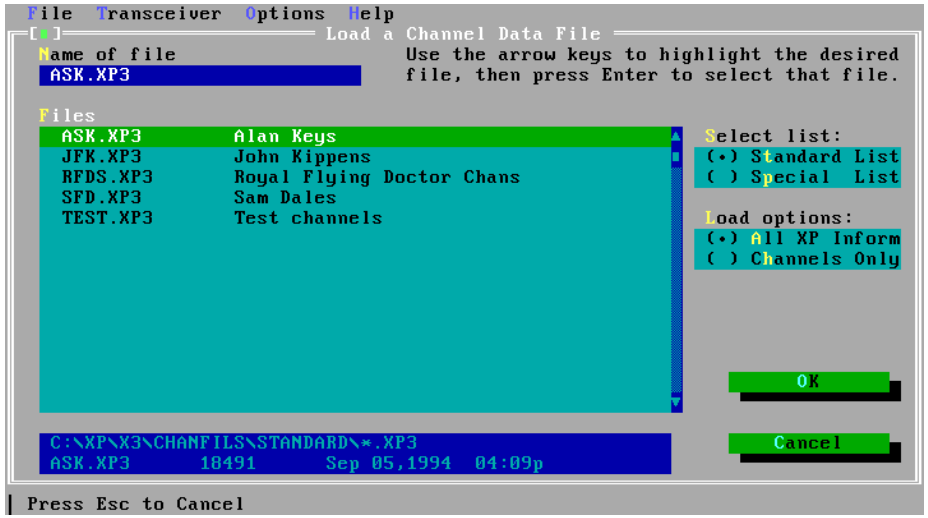
If any of this information has not been saved, XP asks you whether you want to save it first.

Load

Use this option to load the channel list from a file into the XP Channel Information area.

This option also loads setup information:

- selcall group settings (displayed when you select *Selcall* ***G****roups* from the ***O****ptions* menu)
- two-tone frequency settings (displayed when you select ***T****wo Tone Frequencies* from the ***O****ptions* menu)
- scan table settings (displayed when you select *Sca****n*** *Tables* from the ***O****ptions* menu).



The Load screen

If you do not want to load setup information, select *Channels Only* instead of ***All XP Inform*** in the ***Load Options*** field.

Load overwrites the main channel list. Load also overwrites XP selcall group settings, two-tone frequency settings and scan table settings. If any of this information has not been saved, XP asks you whether you want to save it first.

In the ***Files*** field of the Load screen, highlight the file you want to load by using the arrow keys or typing the file name. As you type each letter of the file name, XP highlights the first file in the ***Files*** field which matches what you have typed so far.

You can reduce the number of files shown in the ***Files*** field by using wildcards. If you type a file name containing wildcards in the ***Name of File*** field, XP only displays the file names that match the wildcards. Use '*' to match any number of characters. Use '?' to match a single character.

For example, to display file names of any length that begin with ‘M’, type **M***. To display file names of four characters that begin with S and end with E, type **S??E**.

XP ignores any drive name, directory or extension name included with the file name. To select a different directory see ‘Location of Files’ on page 14-20.

The ***S**elect List* field selects which list of files to display. The files you create using XP are saved in the standard list. The special list contains protected files which you cannot delete or change using XP.

To display protected files, select *S**p**ecial List* instead of *S**t**andard List*. If you want to protect a file, you will need to exit XP and use an MS-DOS command to move the file between directories.

Save

Use this option to save the main channel list. XP saves information to the file whose name is displayed in the File Description area of the Main screen.

This option also saves setup information:

- selcall group settings (displayed when you select *Selcall **G**roups* from the ***O**ptions* menu)
- two-tone frequency settings (displayed when you select ***T**wo Tone Frequencies* from the ***O**ptions* menu)
- scan table settings (displayed when you select *Sca**n** Tables* from the ***O**ptions* menu).

If you do not want to save setup information, select *C**h**annels Only* instead of ***A**ll XP Information* in the ***S**ave Configuration* field.

If you have not yet specified a file name, XP displays the Save As screen. Enter the file name and a comment to describe the file.

XP adds the extension '.xp3' to the file name. This indicates that the file is for a 9323, 9360 or 9390 transceiver.

You know that you have saved the information when XP displays ...*saved successfully*.

Save As

Use this option to save the current XP information in a different file to that displayed in the File Description area of the Main screen.

☞ See 'Save' on page 14-4 for details.

Delete

Use this option to delete a file. After you have selected the file name to delete, XP asks you to confirm that you want to delete it.

☞ Select the file name in the same way as for 'Load' on page 14-2.

Rename

Use this option to rename a file. After you have selected and confirmed the name of the file that you want to rename, XP asks you to type the new file name.

☞ Select the file name in the same way as for ‘Load’ on page 14-2.

Print

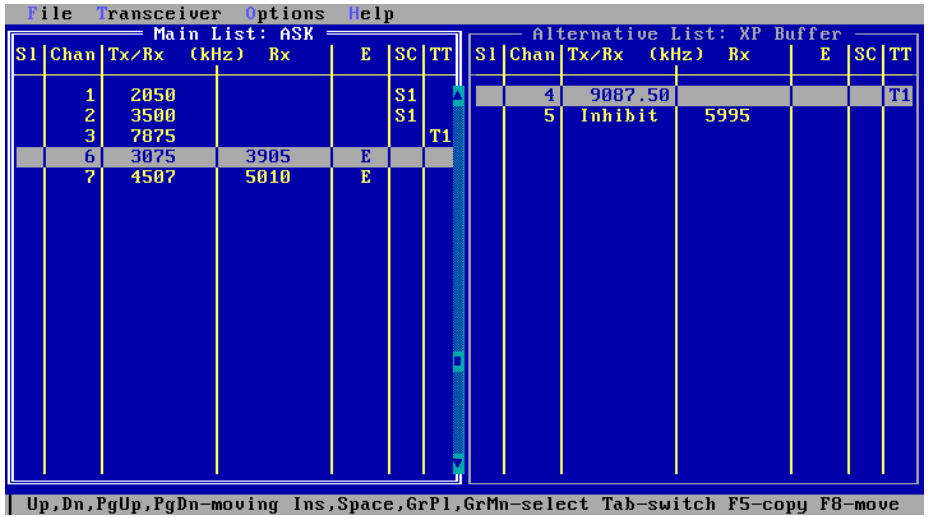
Use this option to print the channel list. XP prints the list according to the settings made in the Printer Options screen.

☞ See ‘Printer Options’ on page 14-17.

If you have set printer options that request information at print time, XP now asks you for this information before printing starts.

Merge

Use this option to copy or move channels between the main and alternative channel lists.



Example of the Merge screen

To copy or move channels from one channel list to the other:

1. Use Tab to select the channel list you want to copy or move from.

   XP displays this channel list with a bold border.

2. Use up arrow, down arrow, Page Up, Page Down, Home and End to highlight the channel you want to copy or move.

3. Press the space bar to select this channel.

   XP displays an asterisk in the *Sl* field for this channel. Pressing the space bar again deselects the channel. Use Insert instead of space bar if you want to move to the next channel after selecting or deselecting a channel.

4. Repeat steps 2 and 3 for other channels that you want to copy or move.

If you want to select all channels, press grey plus (the plus key on the keypad). To deselect all channels, press grey minus (the minus key on the keypad).

5. To copy the selected channels to the other channel list, press F5. To move the selected channels to the other channel list, press F8.

   XP warns you if some of these channels already exist in the other channel list. You can overwrite or skip each channel in turn, or select ***A**ll* to overwrite all these channels.

   If you have not selected any channels, XP copies or moves just the highlighted channel.

You can also copy parts of one list to the other using Ctrl-C (copy) and Ctrl-P (paste). See ‘Using the main and alternative channel lists’ on page 4-6.

Permissions

Use this option to change the permission for a file. The file permission feature lets you protect files from being accidentally changed.

Select the file name in the same way as for ‘Load’ on page 14-2.

File permission is either read-write or read-only. When a file is read-only, XP does not let you delete it or change it by saving a modified version.

File permission switches every time you select this option. Files are read-write when you create them.

Select ***L**oad* from the ***F**ile* menu to check whether files are read-only. Read-only files are displayed with the prefix '*' in the Load screen.

If you select ***S**ave* for a read-only file, the Save As screen is displayed for you to enter a different file name.

Change Lists

Use this option to change to the alternative channel list.

☞ See 'Using the main and alternative channel lists' on page 4-6.

Comment

Use this option to set up a comment which describes the main channel list. This comment can be printed out with the channel list.

☞ See 'Printer Options' on page 14-17.

Dos Shell

Use this option to jump to MS-DOS (enter a DOS shell) without quitting XP. To return to XP from MS-DOS, type **EXIT** then press Enter.

Quit

Use this option to return to the Startup screen. If the current channel and setup information has not been saved, XP asks you whether you want to save it before quitting.

From the Startup screen you can quit from the XP program.

The Transceiver menu

The following menu options are displayed in the ***T**ransceiver* menu:

***R**ead*

***P**rogram*

***V**erify*

***C**lear All Channels*

*Clear **U**nprotected Channels*

You must connect the transceiver to the computer before using ***T**ransceiver* menu options.

Read

Use this option to read into XP the channel list stored in the transceiver.

This option also reads:

- selcall group settings (displayed when you select *Selcall **G**roups* from the ***O**ptions* menu)
- two-tone frequency settings (displayed when you select ***T**wo Tone Frequencies* from the ***O**ptions* menu)
- scan table settings (displayed when you select *Sca**n** Tables* from the ***O**ptions* menu)
- the PA bandwidth (displayed when you select *PA **B**andwidth* from the ***O**ptions* menu).

See ‘Selcall Groups’ on page 14-22, ‘Two Tone Frequencies’ on page 14-24, ‘Scan Tables’ on page 14-25 and ‘PA Bandwidth’ on page 14-27 if you want to change selcall, two-tone, scan table and bandwidth information.

XP displays transceiver part and version information, and the transceiver serial number. Press Enter to clear this display.

The transceiver channel list is displayed in the Channel Information area.

***R**ead* overwrites the main channel list. It also overwrites XP selcall group settings, two-tone frequency settings and scan table settings. If any of this information has not been saved, XP asks you whether you want to save it first.

Program

Use this option to program the transceiver with the main channel list.

XP displays the message *Do you wish to replace all channels in the transceiver or add to them?* You can select:

***A**dd to*

***R**eplace*

***A**dd to* does not clear any existing setting in the transceiver. If a channel in the channel list already exists in the transceiver, XP updates the channel in the transceiver. If a channel in the channel list does not exist in the transceiver, XP adds the new channel to the transceiver.

***R**eplace* clears all existing channel and scan table settings in the transceiver before transferring information from XP to the transceiver.

Using ***A**dd to* minimises the time taken by ***R**ead* and ***P**rogram* to transfer information between XP and the transceiver. Using ***R**eplace* guarantees the shortest transceiver startup time (the delay before the transceiver is ready for normal operation after switch on).

If there is insufficient memory in the transceiver to hold all new channels, XP displays an error message. No changes are made to any information already programmed in the transceiver.

XP compares the transceiver's bandwidth with XP's setting in *PA **B**andwidth* from the ***O**ptions* menu. If XP's bandwidth is greater that the transceiver's, XP displays the warning *PA range selected...Do you wish to program these channels?* If you continue to program the transceiver, you risk programming the transceiver with out-of-range frequencies that will generate error messages when you try to transmit.

This option can also program the transceiver with setup information:

- selcall group settings (displayed when you select *Selcall **G**roups* from the ***O**ptions* menu)
- two-tone frequency settings (displayed when you select ***T**wo Tone Frequencies* from the ***O**ptions* menu)
- scan table settings (displayed when you select *Sca**n** Tables* from the ***O**ptions* menu).

☛ See 'Selcall Groups' on page 14-22, 'Two Tone Frequencies' on page 14-24 and 'Scan Tables' on page 14-25 if you want to program selcall, two-tone and scan table information.

You know that you have programmed the transceiver when *Programmed successfully* is displayed on the computer screen.

If programming fails, *Programming failure* is displayed on the computer screen. Check that the system is set up correctly and try programming again.

☛ See 'Setting up the system' on page 3-4.

Verify

Use this option to verify that the main channel list is the same as the channel list stored in the transceiver.

XP either displays *Channels verified OK* or indicates the first channel that is different.

This option verifies selcall group settings if the ***P****rogram these settings into transceiver* field in *Selcall* ***G****roups* from the ***O****ptions* menu is set to *Yes*.

This option verifies two-tone frequency settings if the ***P****rogram these settings into transceiver* field in ***T****wo Tone Frequencies* from the ***O****ptions* menu is set to *Yes*.

This option verifies scan table settings if the ***P****rogram these settings into transceiver* field in *Sca****n*** *Tables* from the ***O****ptions* menu is set to *Yes*.

☞ See ‘Selcall Groups’ on page 14-22, ‘Two Tone Frequencies’ on page 14-24 and ‘Scan Tables’ on page 14-25.

Clear All Channels

Use this option to clear all channel information in the transceiver. This option also clears the main channel list. It does not clear the alternative channel list.

XP asks you to confirm that you want to clear channels.

Clear Unprotected Channels

Use this option to clear unprotected channel information in the transceiver. This option does not affect any settings in XP.

☛ For more information, refer to the Operators and Reference handbooks for your transceiver.

XP asks you to confirm that you want to clear unprotected channels.

❑

The Options menu

The following menu options are displayed in the ***O**ptions* menu:

***P**rinter Options*

***S**erial Port Options*

***L**ocation of Files*

*Standard **C**hannel Settings*

*Selcall **G**roups*

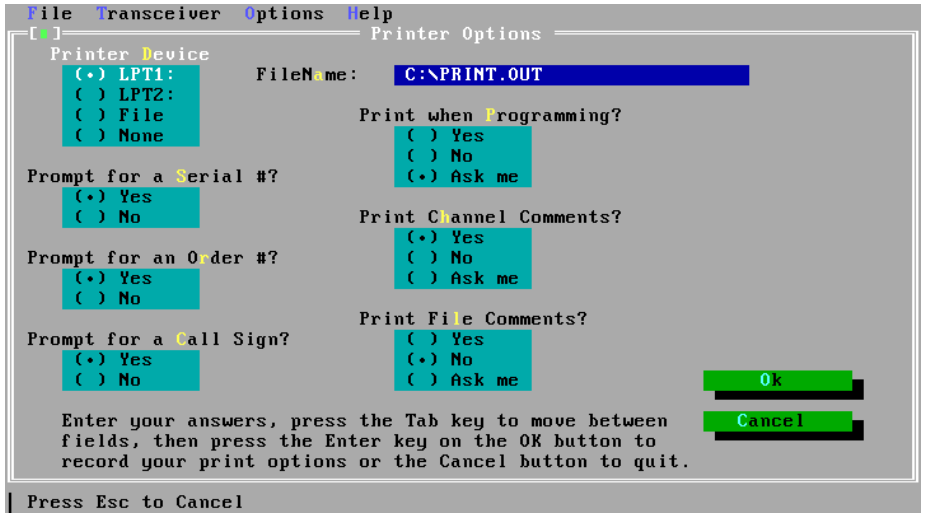
***T**wo Tone Frequencies*

*Sca**n** Tables*

*PA **B**andwidth*

Printer Options

This option controls how the printer works when you select ***P**rint* from the ***F**ile* menu. There are eight printer fields that you can change in the Printer Options screen.



The Printer Options screen

Use *Printer **D**evice* to select where to send the printer output.

You can select:

- the *LPT1* or *LPT2* printer port on the computer
- ***F**ile* to output printing to a file which you can print later from MS-DOS
- ***N**one* to disallow printing. XP will now warn you if you select ***P**rint* from the ***F**ile* menu.

Use *File N**a**me* to specify the name of the file if you selected ***F**ile* in *Printer **D**evice*.

Use *Prompt for a **S**erial #* to specify whether XP should ask you for the transceiver serial number when you print.

Use *Prompt for an O**r**der #* to specify whether XP should ask you for the transceiver order number when you print.

Use *Prompt for a **C**all Sign* to specify whether XP should ask you for the call sign of the transceiver operator when you print.

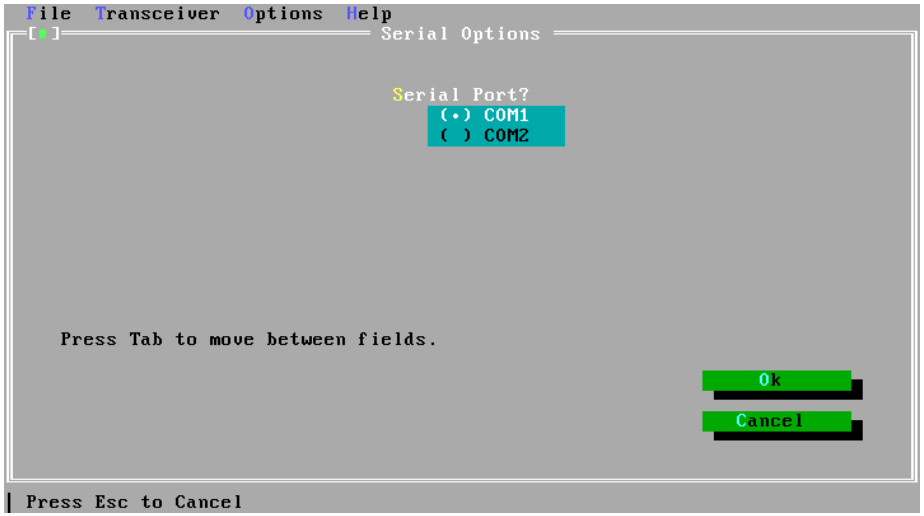
Use *Print when **P**rogramming* to specify whether to print the channel information when you program the transceiver (select ***P**rogram* from the ***T**ransceiver* menu). If you select *Ask me*, XP allows you to answer this question when you program the transceiver.

Use *Print C**h**annel Comments* to specify whether to include channel comments when you print. If you select *Ask me*, XP allows you to answer this question when you print.

Use *Print Fi**l**e Comments* to specify whether to include file comments when you print. If you select *Ask me*, XP allows you to answer this question when you print.

Serial Port Options

This option specifies which serial port on the computer is used to connect the transceiver.

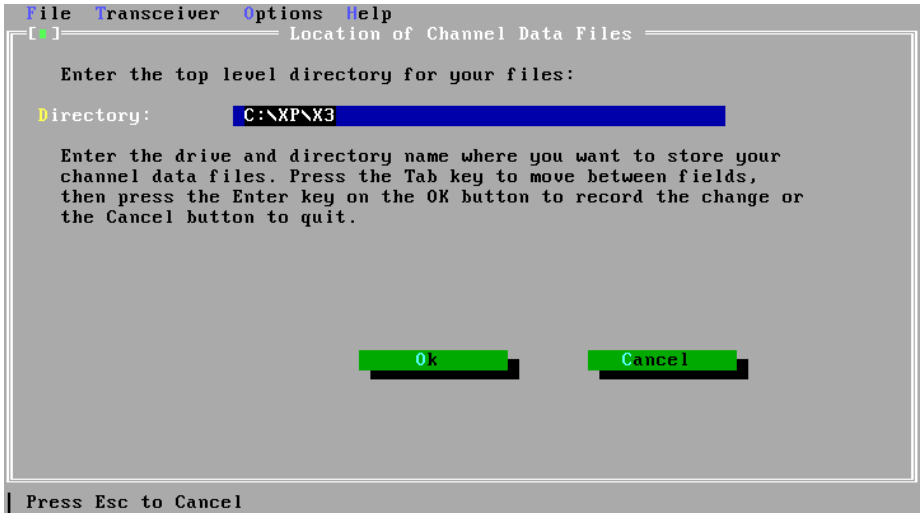


The Serial Port Options screen

Use ***S****erial Port* to select either the *COM1* or *COM2* serial port.

Location of Files

Use this option to specify the directory under which the files are stored on the computer. The directory C:\XP\X3 is already set up for you. You only need to change this if you want to save files under a different directory.

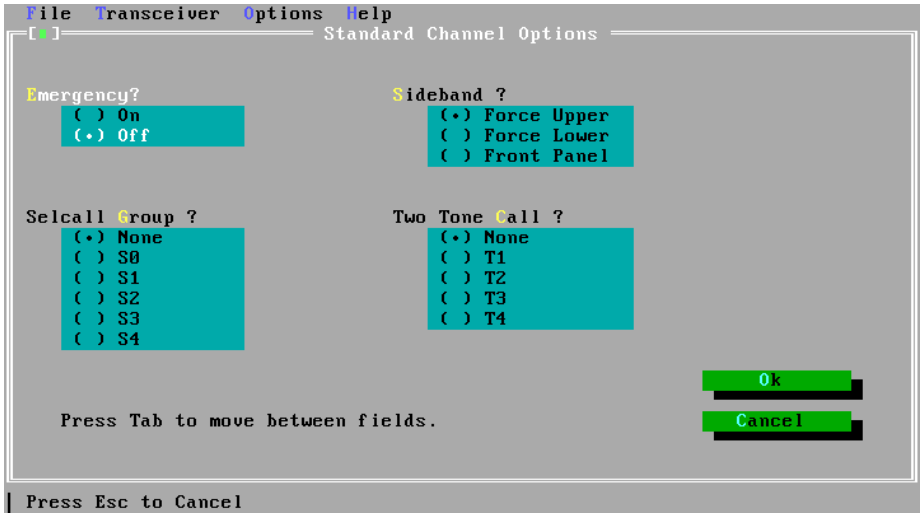


The Location of Files screen

If you specify a directory that does not exist, XP asks you if you want to create the directory.

Standard Channel Settings

Use this option to view or change standard settings for the channel options available for the transceiver.



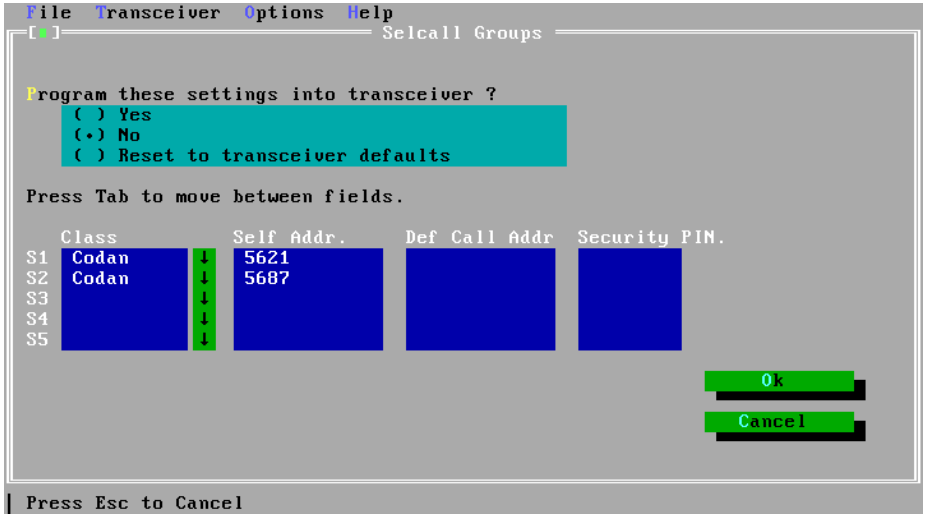
Example of the Standard Channel Settings screen

These settings are displayed in the channel list for the current channel whenever you enter a frequency at a blank *Tx/Rx* or *Rx* field.

Selcall Groups

This option controls how XP changes the five selcall group settings stored in the transceiver. The changes are made when you program the transceiver by selecting ***P****rogram* from the ***T****ransceiver* menu.

☞ See ‘Program’ on page 14-12.



The Selcall Groups screen

Transceivers with selcall capability allow selective calls to be made between stations tuned to the same channel frequency. The receiving station responds to a call when the selcall class (or protocol) and station address match that of the transmitting station’s call.

In the ***P**rogram these settings into transceiver* field select:

- *Yes* to overwrite the selcall groups in the transceiver with the values you specify in the *Class, Self Addr* and *Def Call Addr* fields
- *No* to make no changes to the selcall groups in the transceiver
- *Reset to transceiver defaults* to reset the selcall groups in the transceiver to their factory settings.

There are five selcall groups (*S1–S5*). You only need to specify those you want to use.

For each selcall group that you want to change:

1. Set the type of station you want to call in the *Class* field. Either type the class name or use arrow down to select one of the displayed names.

   The transceiver is only able to use the selcall classes factory set within the transceiver memory. If these factory settings do not include the class you specify here, XP warns you when you select *Program* from the ***T**ransceiver* menu.
2. Set the self address, the 6-digit number of your station, in the *Self Addr* field.
3. Set the call address, the 6-digit number of the station you want to call, in the *Def Call Addr* field.
4. Leave the *Security PIN* field blank. This field is reserved for future use.

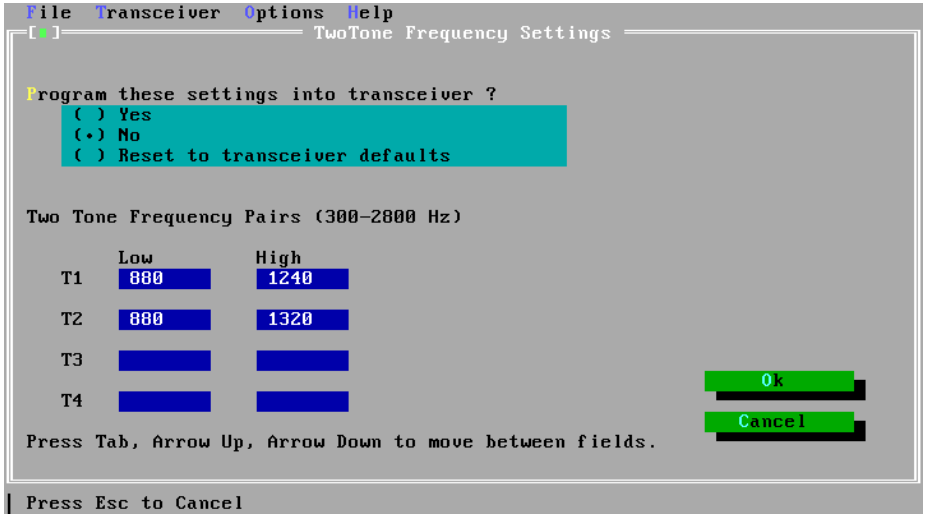
If you want to be able to call different addresses for this selcall group, leave the *Def Call Addr* field blank. The transceiver will then ask you to input the call address when you make the call.

If you leave all three fields of a selcall group blank, no changes will be made to that selcall group in the transceiver.

Two Tone Frequencies

This option controls how XP changes the four two-tone frequency settings stored in the transceiver. The changes are made when you program the transceiver by selecting ***P****rogram* from the ***T****ransceiver* menu.

☞ See ‘Program’ on page 14-12.



The Two Tone Frequencies screen

In the ***P****rogram these settings into transceiver* field select:

- *Yes* to overwrite the two-tone frequencies in the transceiver with the values you specify in the *Two Tone Frequency Pairs* field
- *No* to make no changes to the two-tone frequencies in the transceiver
- *Reset to transceiver defaults* to reset the two-tone frequencies in the transceiver to their factory settings.

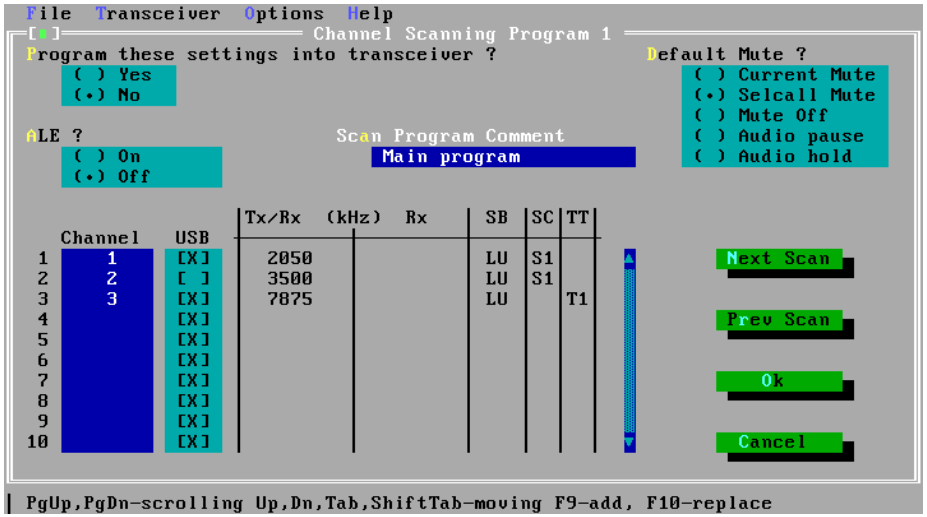
In the *Two Tone Frequency Pairs* fields specify values in the range 300–2,800Hz for each two-tone frequency pair (*T1–T4*) that you want to change. You do not need to specify all four pairs. If you leave a pair blank, no changes will be made to that two-tone frequency in the transceiver.

Scan Tables

This option controls how XP changes any of the three scan tables (channel scanning programs) stored in the transceiver. Each scan table contains a list of channels that the transceiver scans for receiving incoming calls.

The changes are made when you program the transceiver by selecting ***P****rogram* from the ***T****ransceiver* menu.

☞ See ‘Program’ on page 14-12.



Example of the Scan Tables screen

In the ***P**rogram these settings into transceiver* field select:

- *Yes* to overwrite this scan table in the transceiver with the values you specify in the *Channel* field
- *No* to make no changes to this scan table in the transceiver.

In the ***D**efault Mute* field select the mute setting. The transceiver changes to this mute setting when it starts scanning for incoming calls using this scan table.

Set the ***A**LE* field to *On* if you want the transceiver to perform ALE scanning.

In the *Sc**a**n Program Comment* field type a comment to describe this scan table. You can enter up to 20 characters.

***N**ext Scan* displays information for the next of the three scan tables. *P**r**ev Scan* displays information for the previous scan table.

In the *Channel* field enter the channel numbers from the main channel list that you want to include in this scan table. After you have entered a channel number, XP displays the channel frequencies and options for the channel.

To add a channel to the scan table, you can:

- type the channel number in the *Channel* field
- press F9 to display the main channel list, highlight the channel number you want and press Enter.

To replace a channel in the scan table, you can:

- type over the existing channel number in the *Channel* field
- press F10 to display the main channel list, highlight the channel number you want and press Enter.

You can add or replace more than one channel each time you use F9 or F10. To select several channels in the displayed channel list:

1. Use up arrow, down arrow, Page Up, Page Down, Home and End to highlight the channel you want to select.
2. Press the space bar to select this channel.

   XP displays an asterisk in the *Sl* field for this channel. Pressing the space bar again deselects the channel. Use Insert instead of space bar if you want to move to the next channel after selecting or deselecting a channel.
3. Repeat steps 1 and 2 for other channels that you want to select.

If you want to select all channels, press grey plus (the plus key on the keypad). To deselect all channels, press grey minus (the minus key on the keypad).

If the sideband setting displayed in the *SB* field for this channel is *LU*, you can use the space bar in the *USB* field to select upper sideband ('X' is displayed) or lower sideband (blank).

PA Bandwidth

The bandwidth is the transmit frequency range of the transceiver. It depends on the transceiver's power amplifier (PA).

Use this option to select the bandwidth of the transceiver you are going to program. This setting will stop you from entering transmit frequencies in the channel list that are beyond the transmitting capability of the transceiver.

The PA Bandwidth screen

You can select one of four bandwidths:

- 1.6–30MHz
- 2–23MHz
- 2–26.5MHz.
- 2.25–30MHz.

When you select ***Read*** from the ***Transceiver*** menu, XP automatically sets the bandwidth to suit the connected transceiver.

❑

The Help menu

The following menu options are displayed in the ***H**elp* menu:

- ***A**bout XP*
- ***L**ayout*
- ***C**hannel Information*
- ***S**pecial Keys*
- ***O**n Standard Settings*
- *Selcall **G**roups*
- ***T**wo Tone Frequencies*
- *Sca**n** Tables*
- *PA **B**andwidth*
- *T**w**o Channel Lists*
- ***E**diting*
- **M**ouse Usage

About XP

This option gives an overview of XP.

Layout

This option describes the six areas of the Main screen where you do most of your work.

Channel Information

This option lists the channel items and the range of values you can enter in the Channel Information area.

Special Keys

This option lists all the special keys and what they do.

On Standard Settings

This option describes the standard settings which XP automatically enters for the channel options in the channel list.

Selcall Groups

This option describes how to use selcall group settings with channels and change these settings in the transceiver.

Two Tone Frequencies

This option describes how to use two-tone settings with channels and change these settings in the transceiver.

Scan Tables

This option describes how to set up channel scanning programs for three scan tables and change these settings in the transceiver.

PA Bandwidth

This option describes the PA bandwidth settings. The PA bandwidth sets the transmit frequency range for channels in the channel list.

Two Channel Lists

This option describes how you can use the two channel lists in XP to simplify creation of channel information.

Editing

This option describes quick ways of editing channel information in the Channel Information area.

Mouse Usage

Use this option to find out how to use the mouse if your computer has one.

15. Cloning the 9323, 9360 & 9390

This chapter explains how you can program a transceiver by copying channel and setup information from a transceiver that has already been programmed. This process is called cloning. You do not need to use XP or a computer to clone transceivers.

Setup information copied across in cloning includes:

- selcall group settings
- two-tone frequency settings.
- scan table settings.

Setup information not copied across in cloning includes:

- PIN and selcall self addresses
- selcall group text
- power-up message enable and hide/show
- LCD brightness and contrast.

The cloning process

Connecting the transceivers

To connect the two transceivers together:

1. Connect each transceiver to a power supply.
2. Connect the microphone socket of one transceiver to the microphone socket of the other transceiver using the 9323/9360/9390 cloning cable (Codan Part No. 08-05138-001).

It does not matter which end of the cable you plug into which transceiver.

Transceiver cloning

To set up two transceivers for cloning:

1. Turn on both transceivers.
2. On the transceiver you are copying from, press the Mode button on the control head until the Setup menu is displayed.

If you cannot display the Setup menu, you will need to enable setup mode. Refer to the Operators and Reference handbooks for your transceiver.

3. Select the cloning option.

   The message *Clone transceiver. Connect cable and press F2 to begin* is displayed on the control head screen.

4. To start programming, press the F2 button on the control head.

   Programming runs for up to two minutes indicated by the symbols displayed at the bottom of both control head screens.

If programming was successful, you hear two high-tone beeps from the transceiver you copied. *Cloning completed* is displayed on the control head screen of this transceiver.

If programming failed, you hear two low-tone beeps from the transceiver you copied. *Cloning failed* is displayed on the control head screen of this transceiver. Check the cloning cable and repeat from step 1.

Cloning another transceiver

To clone another transceiver:

1. Turn off the transceiver that you have just programmed.
2. Unplug the cloning cable from the microphone socket of this transceiver and plug in its microphone.
3. Plug the cloning cable into the microphone socket of the next transceiver.
4. Start the cloning process again. Repeat from step 4 of ‘Transceiver cloning’.

After cloning

When there are no more transceivers to clone:

1. Turn off both transceivers.
2. Unplug the cloning cable from the microphone sockets of both transceivers and plug in their microphones.

❑

16. Cable pins for the 9323, 9360 & 9390

This chapter shows how the programming cable pins and cloning cable pins are used for the 9323, 9360 and 9390 transceivers.

Programming cable pins

9-pin computer serial port socket	7-pin transceiver microphone plug	Pin function
2	5	Data from transceiver
3	4	Data to transceiver
5	3	Ground

Cloning cable pins

7-pin transceiver microphone plug	7-pin transceiver microphone plug	Pin function
4	5	Data I/O
5	4	Data I/O
3	3	Ground