

PROGRAMMING USING PERSONAL COMPUTER

The MR8100 scanning receiver is PC programmable. This special feature is provided for your convenience, especially for the mass programming of the same data information to the large quantity of MR8100's. Also, it gives you more control over the area of usage, such as (if necessary) restricting the personal programming of the MR8100 from its own keyboard.

Using an IBM PC or IBM PC-compatible computer and separately supplied software in diskette, you can download information from the personal computer to the MR8100 or from the MR8100 to the personal computer.

By attaching the MR8100 to the personal computer's RS232 port, using an interconnect cable*, and entering the program on the personal computer, you are able to load the MR8100, modify the individual channels (such as entering or changing a frequency, or inserting the alpha/numeric identity of the channel), reassign the priority to a different bank and channel, modify the Lockout status for the channels, and much more**.

- * Interconnect cable: If you can not find one at your office, you may purchase one anywhere personal computers are sold (i.e., Radio Shack). Please refer to fig. 8 for cable connector wiring.
- ** One of the very special features is programmable 800 MHz Public frequencies accessible only by a confidential password. Since Federal law prohibits the monitoring of certain radio frequencies, this feature is provided specifically for authorized government use.

When first using the program, you may wish to save a copy of this disk in a safe place to protect your programs and data files. This program is in a compiled basic format and is saved as a ".frq" data file (e.g., TOM.frq). The following is an example of using the program to load the MR8100 from the computer.

- 1.) Connect the cable to the computer's RS232 port and to the MR8100 scanner loading port at bottom of unit.
- 2.) Turn on the personal computer and the MR8100.
- 3.) Mount the diskette containing the program and data files on the computer and run the program by typing the word "SCAN" and pressing ENTER.
- 4.) If you have been successful, the screen on the monitor should look similar to fig. 1.

At this point, the line across the bottom of the screen refers to the function keys, which will be used to access various modes in this program.

5.) The function keys in fig. 1 perform as follows:

- F1 - shows the user a directory of data files.
- F2 - clears a workspace for a new data file.
- F3 - opens previous data files.
- F4 - displays data and allows changes to be made.
- F5 - prints the contents of the data file to the printer.
- F6 - sends the data file contents to the memory in MR8100.

When the data file is transferred (it takes approximately 2 minutes) "TRANSMISSION COMPLETED" will appear on the screen. Disconnect the RS232 cable from the MR8100. Turn OFF the power switch. (You *must* turn off the power switch of the MR8100 to reactivate the keyboard.)

- F7 -receives the contents of the MR8100 memory and displays it.
- F8 -saves the current edited data file to disk.
- F9 -allows you to exit the program.
- F10 -Is not used here.

If F1 is pressed, a screen similar to fig. 2 appears. The screen will show the directory in the upper left-hand area. When F3 is pressed, fig. 3 will appear. By entering a file name, and pressing return, a screen similar to fig. 4 will appear.

6.) The function keys in fig. 4 perform as follows:

- F1 -allows the user to select another bank (fig. 5).
- F2 -allows the user to change the bank identity.
- F3 -allows the user to select and modify channel information (fig. 7).
- F4 -returns to the main menu.

7.) The function keys serve the following in fig. 7:

- F1 - allows the user to select another channel (fig. 6).
- F2 - allows the user to enter the identity of the selected channel.
- F3 - assigns the frequency to the identity of the selected channel.
- F4 - allows the user to input the frequency of the selected channel.
- F5 - toggles the "SECURE/PUBLIC" status of the selected channel. ("SECURE" disables this channel from further changes from the keyboard of the MR8100. "PUBLIC" means changes are allowed from the MR8100 keyboard.)
- F6 - toggles the "SCAN/SKIP" status of the selected channel. (Allows the user to remove this channel from the scan sequence. "SCAN" means NOT locked out. "SKIP" means LOCKED out of scan sequence.)
- F7 - assigns PRIORITY to this channel.
- F8 - allows the user to select another bank (fig. 5).
- F9 - returns to the main menu.

* PRIORITY BANK: 1 CHANNEL: 1

1FILES 2NEW 3OPEN 4EDIT 5PRINT 6SEND 7RECV 8SAVE 9QUIT 10

Fig. 1

* PRIORITY BANK: 1 CHANNEL: 1

A:\
TEST .FRQ
165888 Bytes free

1FILES 2NEW 3OPEN 4EDIT 5PRINT 6SEND 7RECV 8SAVE 9QUIT 10

Fig. 2

* PRIORITY BANK: 1 CHANNEL: 1

A:\
TEST .FRQ
165888 Bytes free

OPEN FILE (RETURN TO CANCEL): TEST

Fig. 3

test.FRQ

* PRIORITY BANK: 1 CHANNEL: 1

BANK 1:	BANK 1				
CHAN 1:	30.0500 MHZ	30.0500 MHZ	PUBLIC	SCAN	PRIORITY
CHAN 2:	40.8400 MHZ	40.8400 MHZ	PUBLIC	SCAN	
CHAN 3:	49.9000 MHZ	49.9000 MHZ	PUBLIC	SCAN	
CHAN 4:	138.1500 MHZ	138.1500 MHZ	PUBLIC	SCAN	
CHAN 5:	162.4000 MHZ	162.4000 MHZ	PUBLIC	SCAN	
CHAN 6:	173.2250 MHZ	173.2250 MHZ	PUBLIC	SCAN	
CHAN 7:	406.8750 MHZ	406.8750 MHZ	PUBLIC	SCAN	
CHAN 8:	453.2500 MHZ	453.2500 MHZ	PUBLIC	SCAN	
CHAN 9:	511.9125 MHZ	511.9125 MHZ	PUBLIC	SCAN	
CHAN 0:	118.8000 MHZ	118.8000 MHZ	PUBLIC	SCAN	

1BANK	2NAME	3CHAN	4MAIN	5	6	7	8	9	10
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Fig. 4

test.FRQ

* PRIORITY BANK: 1 CHANNEL: 1

BANK 1	BANK 1				PRIORITY
CHAN 1:	30.0500 MHZ	30.0500 MHZ	PUBLIC	SCAN	
CHAN 2:	40.8400 MHZ	40.8400 MHZ	PUBLIC	SCAN	
CHAN 3:	49.9000 MHZ	49.9000 MHZ	PUBLIC	SCAN	
CHAN 4:	138.1500 MHZ	138.1500 MHZ	PUBLIC	SCAN	
CHAN 5:	162.4000 MHZ	162.4000 MHZ	PUBLIC	SCAN	
CHAN 6:	173.2250 MHZ	173.2250 MHZ	PUBLIC	SCAN	
CHAN 7:	406.8750 MHZ	406.8750 MHZ	PUBLIC	SCAN	
CHAN 8:	453.2500 MHZ	453.2500 MHZ	PUBLIC	SCAN	
CHAN 9:	511.9125 MHZ	511.9125 MHZ	PUBLIC	SCAN	
CHAN 0:	118.8000 MHZ	118.8000 MHZ	PUBLIC	SCAN	

1BNK 1 2BNK 2 3BNK 3 4BNK 4 5BNK 5 6BNK 6 7BNK 7 8BNK 8 9BNK 9 10BNK 0

Fig. 5

test.FRQ

* PRIORITY BANK: 1 CHANNEL: 1

BANK 2:	BANK 2			
CHAN 1:	127.1750 MHZ	127.1750 MHZ	PUBLIC	SCAN
CHAN 2:	135.5000 MHZ	135.5000 MHZ	PUBLIC	SCAN
CHAN 3:	806.0000 MHZ	806.0000 MHZ	PUBLIC	SCAN
CHAN 4:	857.2000 MHZ	857.3200 MHZ	PUBLIC	SCAN
CHAN 5:	894.9875 MHZ	984.9875 MHZ	PUBLIC	SCAN
CHAN 6:	911.5000 MHZ	911.5000 MHZ	PUBLIC	SCAN
CHAN 7:	954.9125 MHZ	954.9125 MHZ	PUBLIC	SCAN
CHAN 8:	0.0000 MHZ	0.0000 MHZ	PUBLIC	SKIP
CHAN 9:	0.0000 MHZ	0.0000 MHZ	PUBLIC	SKIP
CHAN 0:	0.0000 MHZ	0.0000 MHZ	PUBLIC	SKIP

1CHN 1 2CHN 2 3CHN 3 4CHN 4 5CHN 5 6CHN 6 7CHN 7 8CHN 8 9CHN 9 10CHN 0

Fig. 6

test.FRQ

* PRIORITY BANK: 1 CHANNEL: 1

BANK 2:	BANK 2			
CHAN 1:	127.1750 MHZ	127.1750 MHZ	PUBLIC	SCAN
CHAN 2:	135.5000 MHZ	135.5000 MHZ	PUBLIC	SCAN
CHAN 3:	806.0000 MHZ	806.0000 MHZ	PUBLIC	SCAN
CHAN 4:	857.2000 MHZ	857.3200 MHZ	PUBLIC	SCAN
CHAN 5:	894.9875 MHZ	984.9875 MHZ	PUBLIC	SCAN
CHAN 6:	911.5000 MHZ	911.5000 MHZ	PUBLIC	SCAN
CHAN 7:	954.9125 MHZ	954.9125 MHZ	PUBLIC	SCAN
CHAN 8:	0.0000 MHZ	0.0000 MHZ	PUBLIC	SKIP
CHAN 9:	0.0000 MHZ	0.0000 MHZ	PUBLIC	SKIP
CHAN 0:	0.0000 MHZ	0.0000 MHZ	PUBLIC	SKIP

1CHN 2NAME 3NM=FRQ 4FREQ 4SECURE 6SCAN 7SET PR 8BANK 9MAIN 10

Fig. 7

CABLE CONNECTOR WIRING

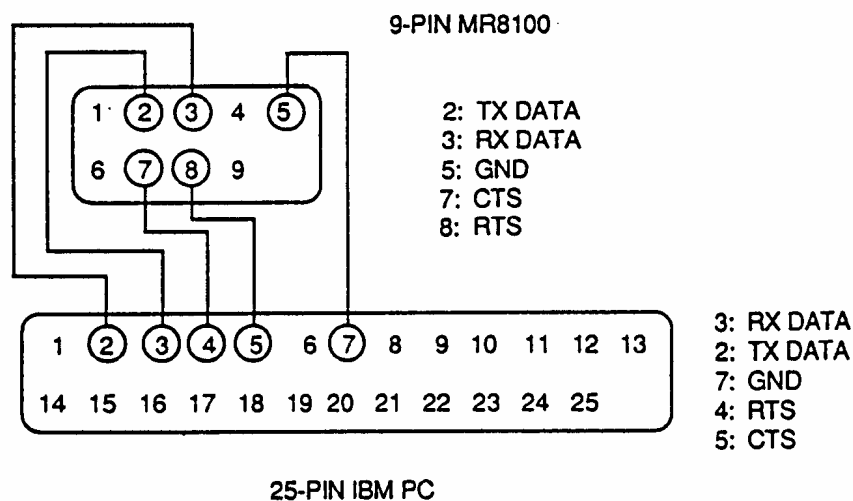


Fig. 8

NOTE: To delete a file, press F9[QUIT]. Then, at the DOS prompt, type "del.filename.FRQ" and enter. If you are uncertain about the file name at this point, go to the DOS prompt and type "dir."