

WSM

Wireless System Manager for Windows® 95



OWNERS MANUAL

SAMSON®

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Introduction

Congratulations on your purchase of the Samson Wireless System Manager! This remarkable accessory package for the Samson Synth Series 6 UHF Wireless System includes Windows 95-compatible software and all required hardware for complete computer control and remote monitoring of up to eight Samson UR6D (or UR6DX) dual receivers (for up to sixteen-channel operation). The WSM application also includes advanced features such as RF spectrum analysis and automated channel planning. WSM even allows you to record receiving conditions in real time (both RF and AF levels) and to log the results to disk or print them out.

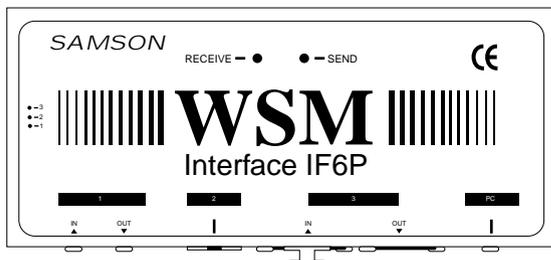
In these pages, you'll find full hardware interconnection and software installation instructions, as well as a guided tour through the various screens, menus and options of the Samson Wireless System Manager. You'll also find a warranty card enclosed—don't forget to fill it out and mail it! This will enable you to receive online technical support and will allow us to send you updated information about other Samson products in the future.

SPECIAL NOTE: Should any components in your Samson Wireless System Manager ever require servicing, a *Return Authorization* number (RA) is necessary. Without this number, the unit will not be accepted. Please call Samson at 1-800-372-6766 for a Return Authorization number prior to shipping your unit. Please retain the original packing material and, if possible, return the unit in its original carton and packing materials.

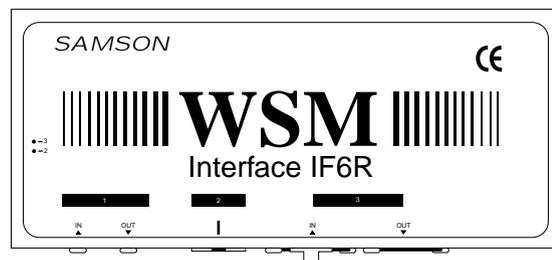
Hardware Interconnections

The Wireless System Manager will work with any Pentium computer (including laptop computers) that is running Windows 95 and has a Sound Blaster 16 sound card installed (note that WSM may not operate correctly with third-party sound cards). 5 megabytes of hard disk space is required for installation, and a minimum of 16 megabytes of RAM is recommended. A 21" color monitor or larger is also recommended, although the program will work on smaller monitors.

There are two hardware interface boxes provided with the Wireless System Manager: the IF6P and IF6R. As shown in the illustrations below, they are essentially identical, except for the "PC" connection on the IF6P (on the right-hand side). The IF6R interface box is required only when you need to remote your receivers 20 feet or more from the computer.



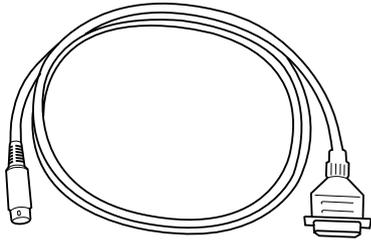
IF6P



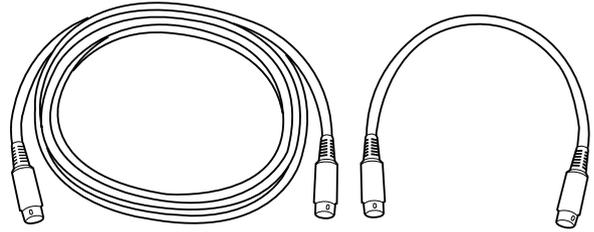
IF6R

Hardware Interconnections

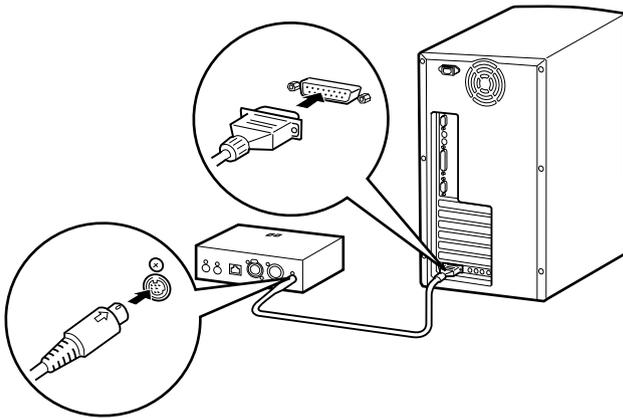
All required cabling is included in the WSM package: one PC connector cable, four long 8-pin mini-DIN connector cables, and seven short 8-pin mini-DIN connector cables:



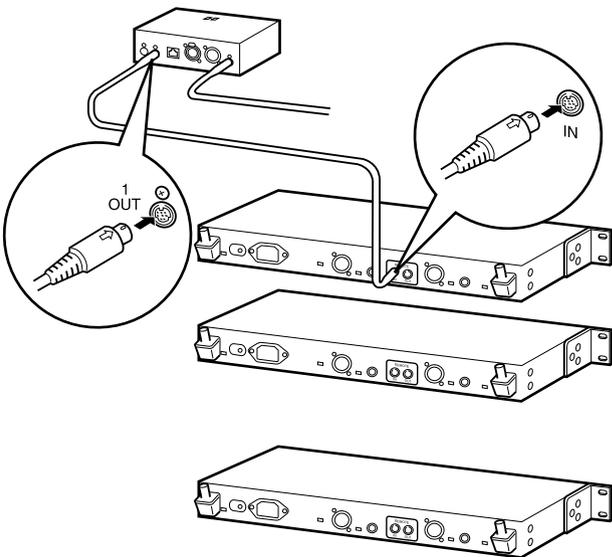
WSM PC connector cable



WSM 8 pin mini-DIN connector cables



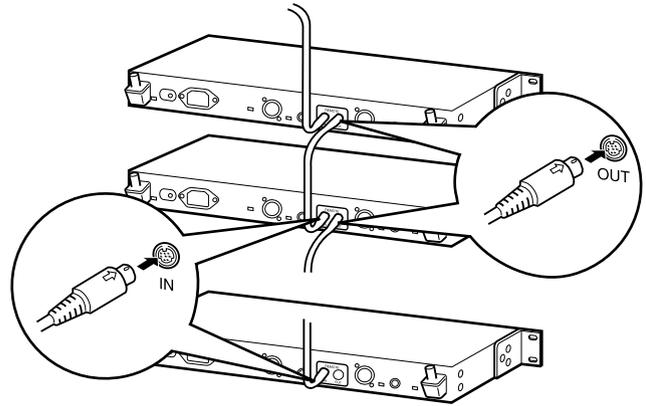
As shown in the illustration on the left, begin by connecting one end of the PC connector cable to the joystick/MIDI port of your computer's Sound Blaster 16 card and the other end to the "PC" connection on the IF6P.



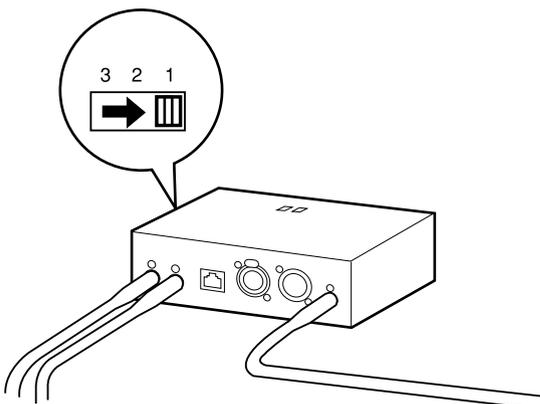
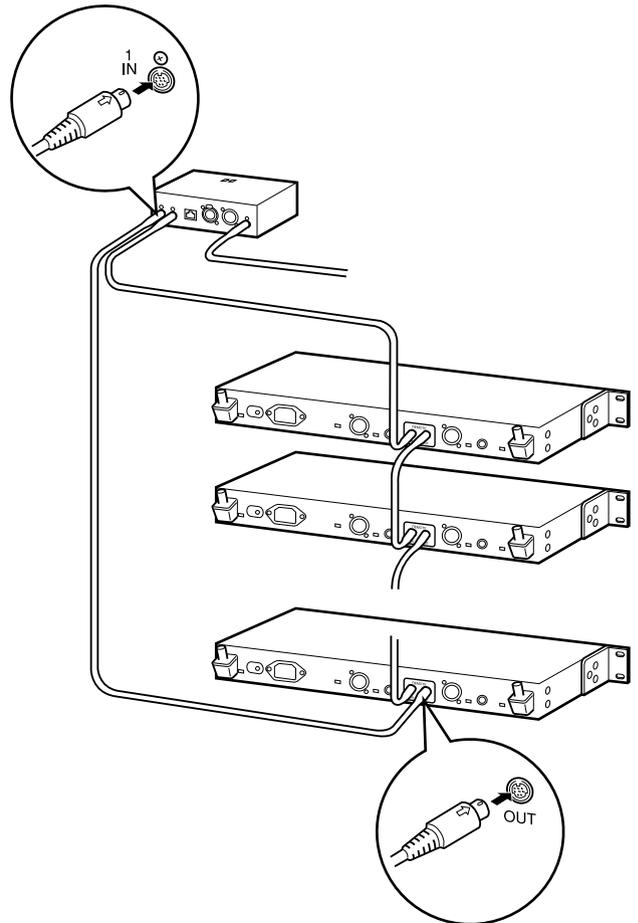
If you need to remote your receivers 20 feet or more from the computer, follow the instructions on page 4 of this manual. If not, take one of the long 8-pin mini-DIN connector cables and connect one end to the IF6P "1 Out" and the other end to the rear panel UR6D (or UR6DX) "Remote In."

Hardware Interconnections

As shown in the illustration on the right, if you are using multiple UR6D or UR6DX receivers (WSM can control up to eight of them), use short 8-pin mini-DIN cables to connect the "Remote Out" of the first receiver to the "Remote In" of the next one, daisy-chain fashion.



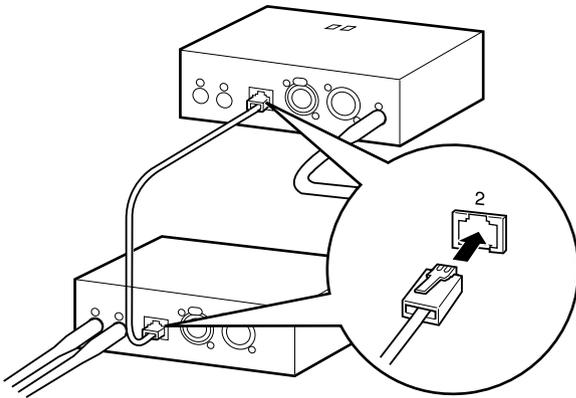
Then connect the "Remote Out" of the last UR6D or UR6DX receiver to the IF6P "1 In." If you are only using a single UR6D or UR6DX, connect its "Remote Out" to the IF6P "1 In."



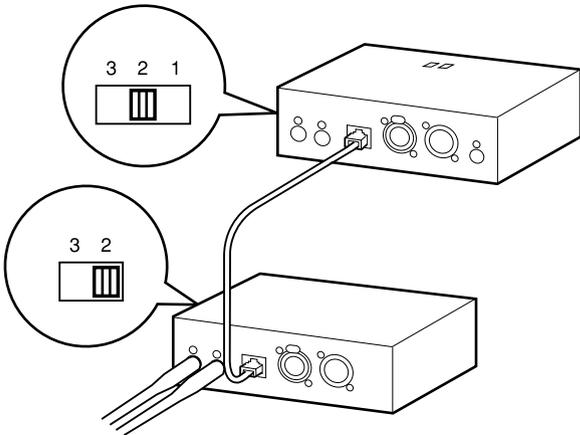
The last step in the process is to set the "1-2-3" switch on the side of the IF6P to "1."

Hardware Interconnections

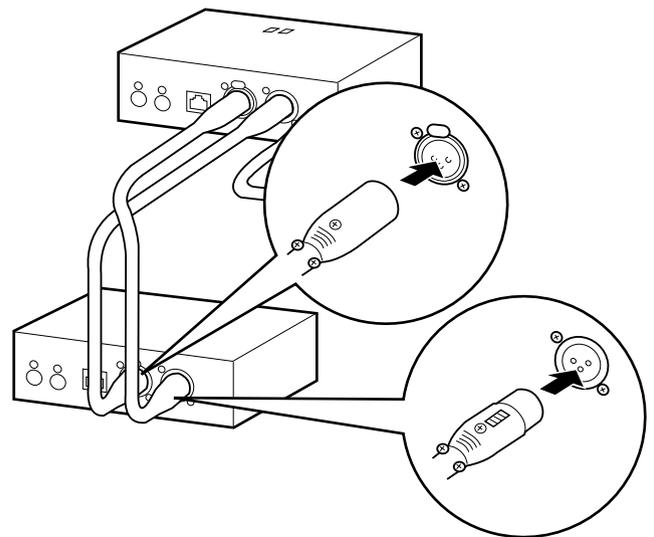
If you need to remote your receivers at a distance from the computer, you need to use the IF6R interface as well as the IF6P. There are two ways of interconnecting the IF6R and IF6P. The first option is to use a CAT5 cable (up to 200 meters in length), plugged into the “2” connection of both interface boxes. As shown in the illustrations on the left, use the “1 In” and “1 Out” connectors on the IF6R (*not* the IF6P) to interface with your UR6D or UR6DX receivers (as before, up to eight receivers can be daisy-chained together).



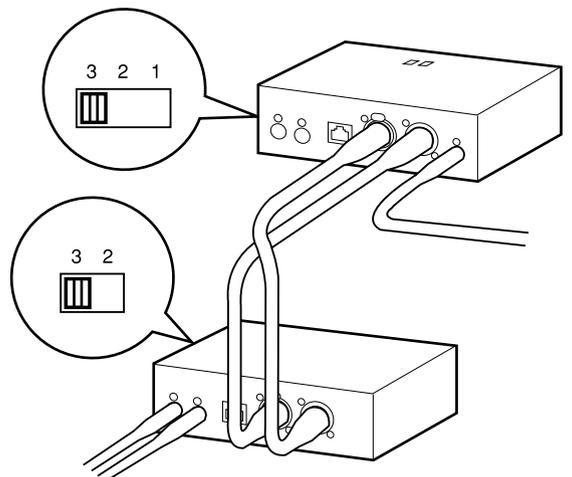
Then set the “1-2-3” switch on the side of *both* the IF6P and IF6R to “2.”



Alternatively, as shown in the illustrations on the right, you can use standard mic cable with XLR connectors (again, up to 200 meters in length). Plug the male end of one cable into the IF6P “In 3” and the female end into the IF6R “Out 3.” Plug the male end of the other cable into the IF6R “In 3” and the female end into the IF6P “Out 3.” Again, use the “1 In” and “1 Out” connectors on the IF6R (*not* the IF6P) to interface with your UR6D or UR6DX receivers.

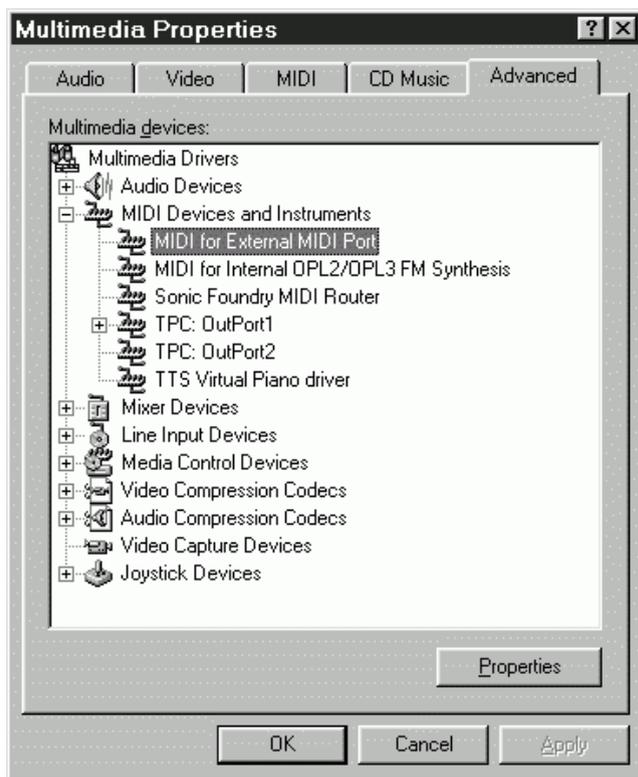


For this kind of connection, you’ll need to set the “1-2-3” switch on the side of *both* the IF6P and IF6R to “3.”



If you encounter difficulties with any aspect of setting up your Wireless System Manager, you can call Samson Technical Support at 1-800-372-6766) between 9 AM and 5 PM EST.

Before installing your WSM software, you need to make sure that the external MIDI port on your Sound Blaster 16 card is enabled. To do so, click on the Start button and go to Settings -> Control Panel. Once the Windows Control Panel is open, select the "Multimedia" option, as shown in the illustration on the right.



As shown in the illustration on the left, when the "Multimedia Properties" dialog opens, click on the "Advanced" tab. Open the "MIDI Devices and Instruments" folder and select "MIDI for External MIDI Port."

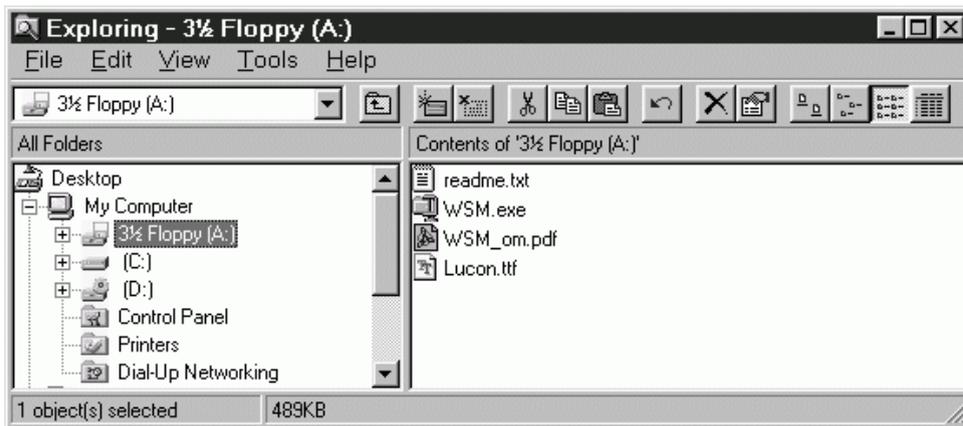


Click on "Properties" and the "MIDI For External MIDI Port Properties" dialog appears, as shown in the illustration on the right. Click on the "Use MIDI features on this device" button if it is not already selected and make sure that the Status is "Driver is enabled and active." If it is not, WSM will not operate correctly. Consult your Windows 95 and/or Sound Blaster 16 user manuals for information on how to solve conflicts that prevent the driver from being enabled.

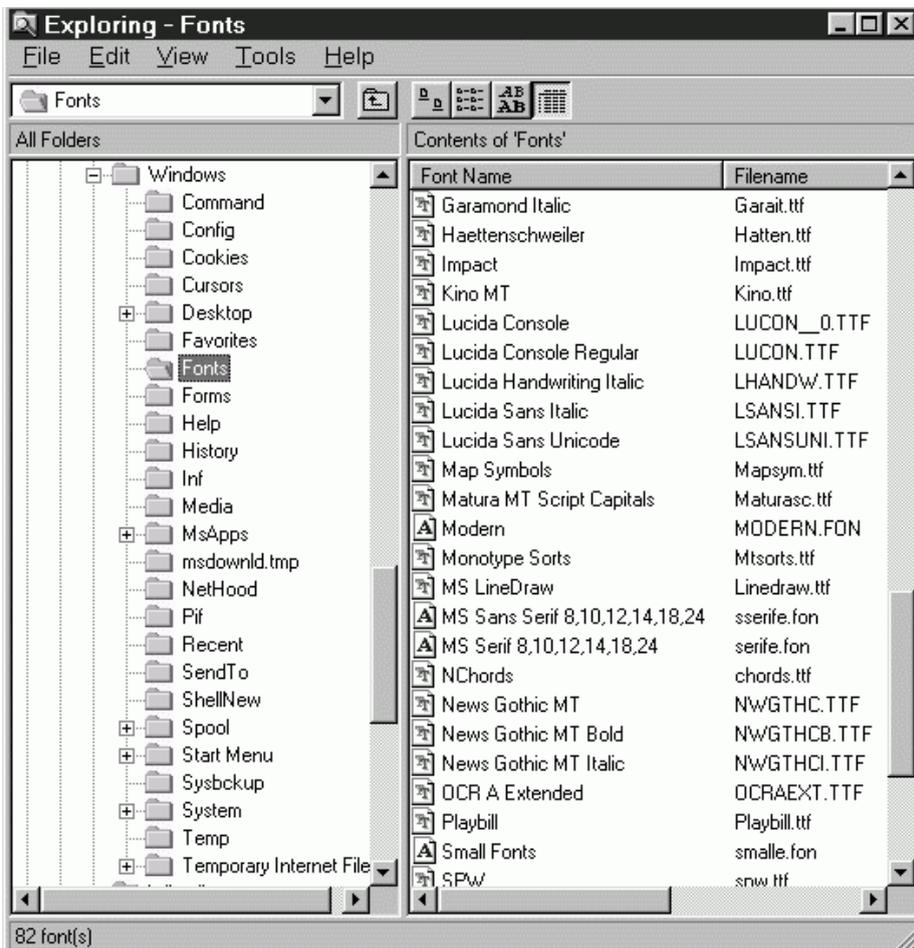
Software Installation



If all is working correctly, when you click on the “Settings” button, a dialog similar to the one shown on the left will appear. At this point, you have enabled the Joystick/MIDI port on your Sound Blaster 16 card and have verified that the required Creative Labs software driver is installed and operating correctly. Click OK in all open dialog boxes and close the Control Panel.



Now you’re ready to insert the WSM floppy disk! After doing so, start up the Windows Explorer and open your floppy drive (usually drive A). The display will look like the illustration on the left.



Before installing the WSM application, you need to first copy the font file named “Lucon” onto your hard disk. This file *must* be placed inside the Fonts folder in the Windows folder, as shown in the illustration on the left. From within Windows Explorer, you can simply mouse-drag the “Lucon” file from the floppy drive to the Fonts folder.

Once this is completed, simply double-click on the “WSM.exe” icon to begin the automatic installation procedure. Follow all on-screen instructions, and you’re done!

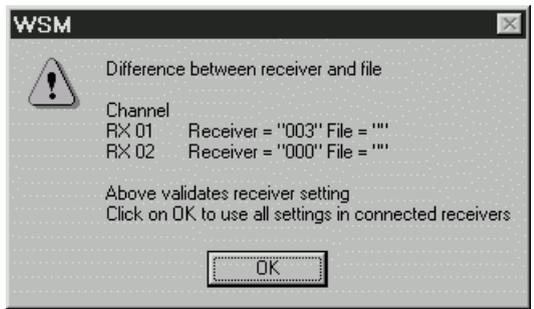
NOTE: In case you lose this manual, we’ve included an electronic copy of it on the WSM installation disk. This file (which can be viewed onscreen or printed out) is in Acrobat PDF format. To open it, you need the Adobe Acrobat Reader, which is available for free downloading from the Adobe website or from many other websites.

Launching WSM

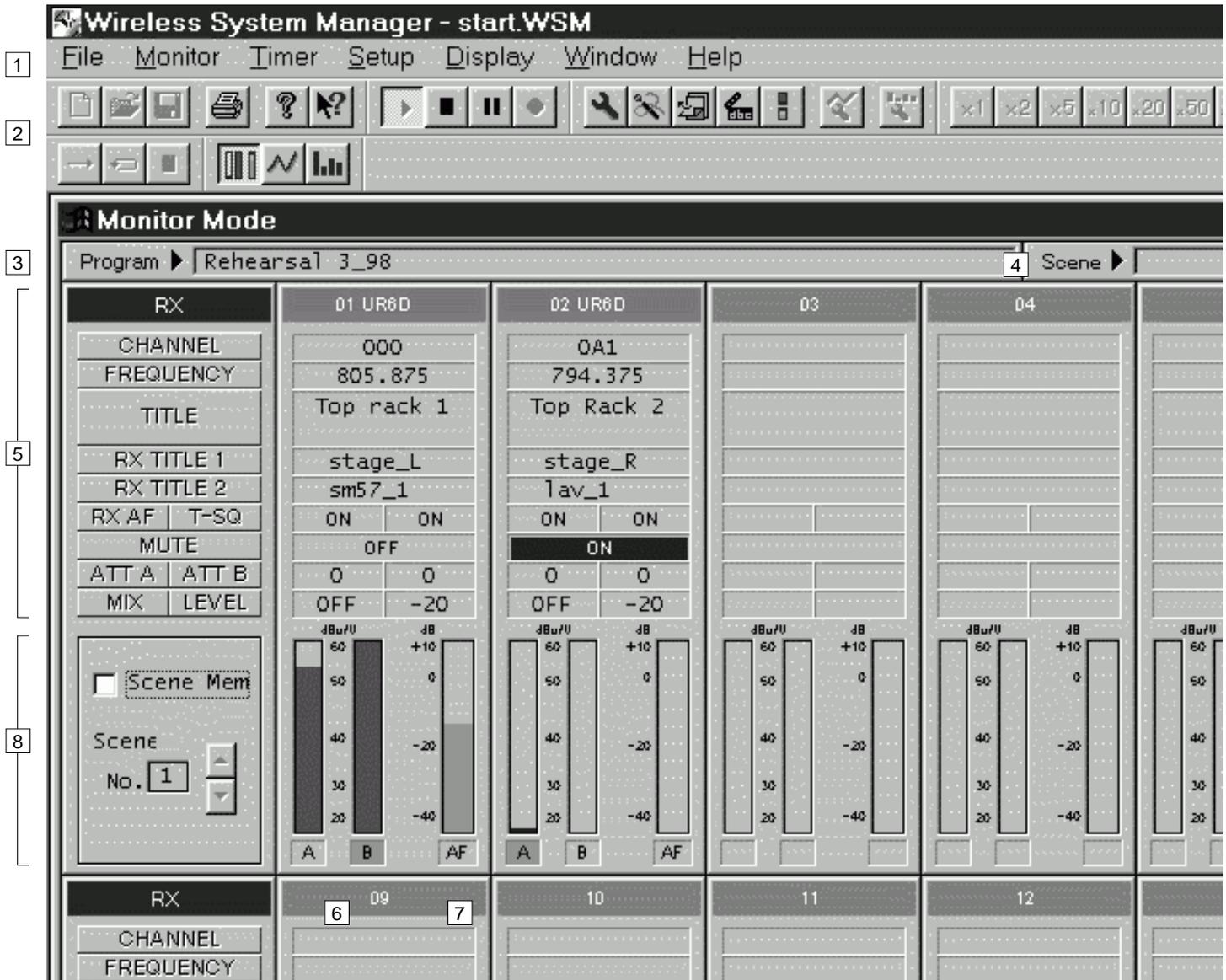


Before launching WSM, make sure all receivers are interconnected correctly (as per the instructions given on the preceding pages) and powered on. Then boot up your computer and double-click on the "Shortcut to WSM" icon to launch the program. Because WSM uses all driver resources of the Sound Blaster 16 card's Joystick/MIDI port, it is not possible to launch multiple instances of the program.

When launched, WSM will automatically load the most recently created ".WSM" file, if one exists. (.WSM files contain the current channel setup, all recorded data, and the contents of all Scene Memories). It then scans all connected receivers to check that all parameters in the receivers exactly match that of the data in the file. If the data does not match, the program will display a warning dialog similar to the one shown on the right. Click on OK to continue; WSM will automatically read in all changed parameters, always reflecting the current status of connected receivers.



WSM always begins in *Monitor* mode, displaying the screen shown below:



See page 10 in this manual for a description of the various numbered areas.

Quick Start

To Monitor Conditions In Connected Receivers



Transport Tool Bar icons

From Monitor Mode, click on the Play icon (the far left icon) in the Transport Tool Bar. All RF and AF Level meters in the Monitor screen are now active and show continuous changes in RF and AF levels.

To Change Conditions in Connected Receivers

Double-click on any parameter you wish to change, or use the Setup menu Channel option to open the Channel Setup dialog (see page 10 in this manual for more information). Select the appropriate receiver tab(s), then the field(s) you wish to change, then click on OK. WSM will instantly send all changed parameter(s) to your connected receivers.

To Record Data

Click on the Record icon (the far right icon) in the Transport Tool Bar. Changes in all RF and AF levels in all connected receivers are now being recorded by WSM. To momentarily pause recording, click on the Pause icon (the second from right icon) in the Transport Tool Bar. To conclude recording, click on the Stop icon (the second from left icon) in the Transport Tool Bar.

To View Recorded Data



Time Domain Mode icon

Go to Time Domain Mode, either by selecting it from the Window menu, or by clicking on the Time Domain icon in the Tool Bar. To determine which parameters you wish to see graphed out, select "Drawing Condition" from the Settings menu, or click on the Drawing Condition icon in the Tool Bar. In the resulting dialog, select the appropriate receiver tab(s), then check the data type(s) you wish to view (RF Level A, RF Level B, RF Level A+B, and/or AF Level), then click on OK. The selected data for the chosen receiver will be graphed onscreen. Each parameter is shown in a different color, as described in the onscreen legend at the upper right-hand corner of the screen.



Drawing Condition icon

To Save Recorded Data



Monitor Mode icon

Return to Monitor Mode, either by selecting it from the Window menu, or by clicking on the Monitor Mode icon in the Tool Bar. Click on the Save icon in the Tool Bar or, from the File menu, select the "Save" or "Save As" option (the latter allows you to assign a new filename). A standard Windows dialog follows, which allows you to save all recorded data to a file on disk (the suffix ".WSM" will automatically be appended to all such files).



Save icon

To Load A File



Load icon

From Monitor Mode, click on the Load icon in the Tool Bar or, from the File menu, select the "Load" option. A standard Windows dialog follows, which allows you to load any ".WSM" file from disk.

To Start A New WSM Session



New icon

From Monitor Mode, click on the New icon in the Tool Bar or, from the File menu, select the "New" option. Connected receivers will be unaffected, but all data in memory will be cleared.

To Perform An RF Spectrum Analysis

Go to Spectrum Analyze Mode, either by selecting it from the Window menu, or by clicking on the Spectrum Analyze icon in the Tool Bar. If you are using both UR6D and UR6DX receivers simultaneously, call up the Group Select dialog either by opening the Setting menu or by clicking on the Group Select icon in the Tool Bar, then choose the frequency range (standard UR6D frequencies or "X" UR6DX frequencies) you wish to analyze. You can opt to perform the analysis one time only or to loop it continuously. To perform the analysis once only, choose "1 Time" from the Analyze menu, or click on the Analyze Once icon (the left-most icon) in the Spectrum Analyze Tool Bar. To repeat the analysis continuously, choose "Loop" from the Analyze menu, or click on the Loop Analyze icon (the center icon) in the Spectrum Analyze Tool Bar. To stop a continuous analysis, choose "Stop" from the Analyze menu, or click on the Stop Analyze icon (the right-most icon) in the Spectrum Analyze Tool Bar. For more information, see pages 15 - 16 in this manual or refer to the online Help.



Spectrum Analyze Mode icon



Group Select icon



Spectrum Analyze Tool Bar

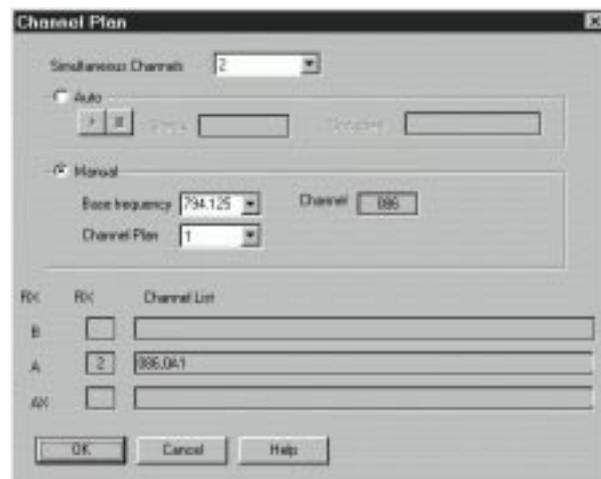
To Create A Channel Plan



Channel Plan icon

Whenever two or more transmitters are used, there is a chance of interference. This is because spurious emissions can spill over into adjacent channels and produce intermodulation distortion. In order to reduce this interference, it is good practice to carefully select the frequencies of each channel (that is, to create a good *channel plan*) so that the spurious emissions from one channel do not clash with another. One of WSM's most powerful features is its ability to create a channel plan.

Here's how to do so: From Monitor Mode, click on the Channel Plan icon in the Tool Bar (shown above) or, from the Setup menu, select the "Channel Plan" option. The Channel Plan dialog (shown at right) will appear. Begin by specifying the number of channels you want to have included in the plan. To have WSM generate a channel plan automatically, click on Auto and then click on the Start (left-hand) icon. The Status box will keep you apprised of WSM's progress, showing first that it is scanning, then planning. The Occupied box will show which channels are found to be currently in use by connected receivers. When the Status box shows "Finish," a suggested channel plan will appear in the appropriate "B," "A," or "AX" Channel List box on the bottom of the dialog. To have WSM generate a channel plan manually, click on Manual and then enter in the Base Frequency (the lowest frequency you wish to have included in the channel plan). A list of possible channel plans including that frequency will then appear in the Channel Plan drop-down box. As you select each one, the frequencies in that plan will appear in the appropriate "B," "A," or "AX" Channel List box on the bottom of the dialog and will be downloaded into all connected receivers when you click OK. For more information and tips on creating an effective channel plan, refer to WSM's online Help.



To Get Help

You can always get immediate online assistance (in any of WSM's screens or Modes of operation) in any of three ways: Either press the F1 key or open the Help menu (either technique allows you to search from a database of topics), or click on the Help icon in the Tool Bar, which automatically provides "pop-up" information about the next function you select.



Help icon

To Quit WSM

From Monitor Mode, choose "Exit" from the File menu (if you are currently in Play or Record mode, you'll have to Stop first). You cannot quit WSM from any other Mode. Be sure to save your data before quitting, or it will be permanently lost.

Monitor Mode

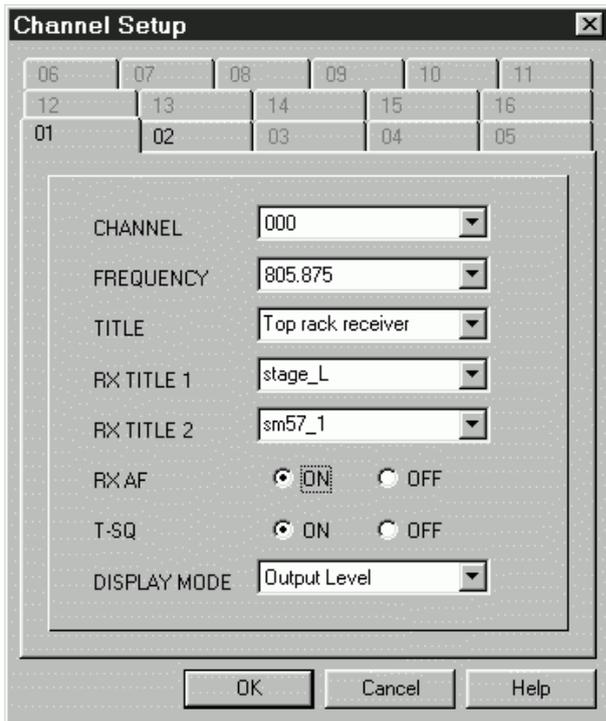
In Monitor mode, you can remotely monitor and control up to eight connected UR6D or UR6DX UHF wireless receivers. The main areas of the Monitor Mode screen (as shown on page 7 of this manual) are as follows:

1: Menus - The Monitor Mode screen provides seven menus (File, Monitor, Timer, Setup, Display, Window, and Help) that provide numerous options. See page 13 in this manual for more information about each menu item.

2: Tool Bar - Present in all modes and screens, the Tool Bar provides graphic icons that allow you to carry out various operations with a single mouse click. See page 12 in this manual for more information.

3: Program Name - You can give your WSM session a unique title (long filenames are supported). To enter a Program Name, either double-click on this field, or use the Program Title option in the Setup menu (see page 13 in this manual for more information).

4: Scene Name - Up to 20 scenes (each containing on-off status for each connected receiver) can be named, stored, and recalled freely. To enter a Scene Name, either double-click on this field, or use the Scene Memory option in the Setup menu (see page 13 in this manual for more information).



5: Status Display - Shows a wide variety of parameters for each connected receiver. Settings displayed include: Channel and Frequency, Receiver Title (a unique title applied by WSM), RX1 and RX2 Titles, Audio Frequency (RX AF) on/off, Tone Squelch (T-SQ) on/off (when off, the box is colored yellow), Mute on/off (when on, the box is colored red), Antenna A Attenuation (ATT A), Antenna B Attenuation (ATT B), Mix on/off, and audio output (Level) attenuation. For more information, refer to the Synth Series Six owners manual. Note that double-clicking on any of the parameters in the Status Display will bring up the *Channel Setup* dialog, as shown in the illustration on the left. You can then change any of the parameters in the selected receiver remotely from your computer—including naming the RX1 and RX2 titles from your QWERTY keyboard. The Channel Setup dialog can also be called up from the Setup menu (see page 13 for more information).

Note that you can freely rearrange the order of the sixteen Status Displays simply by clicking on the one you want to move and then mouse-dragging it to a new spot on the screen.

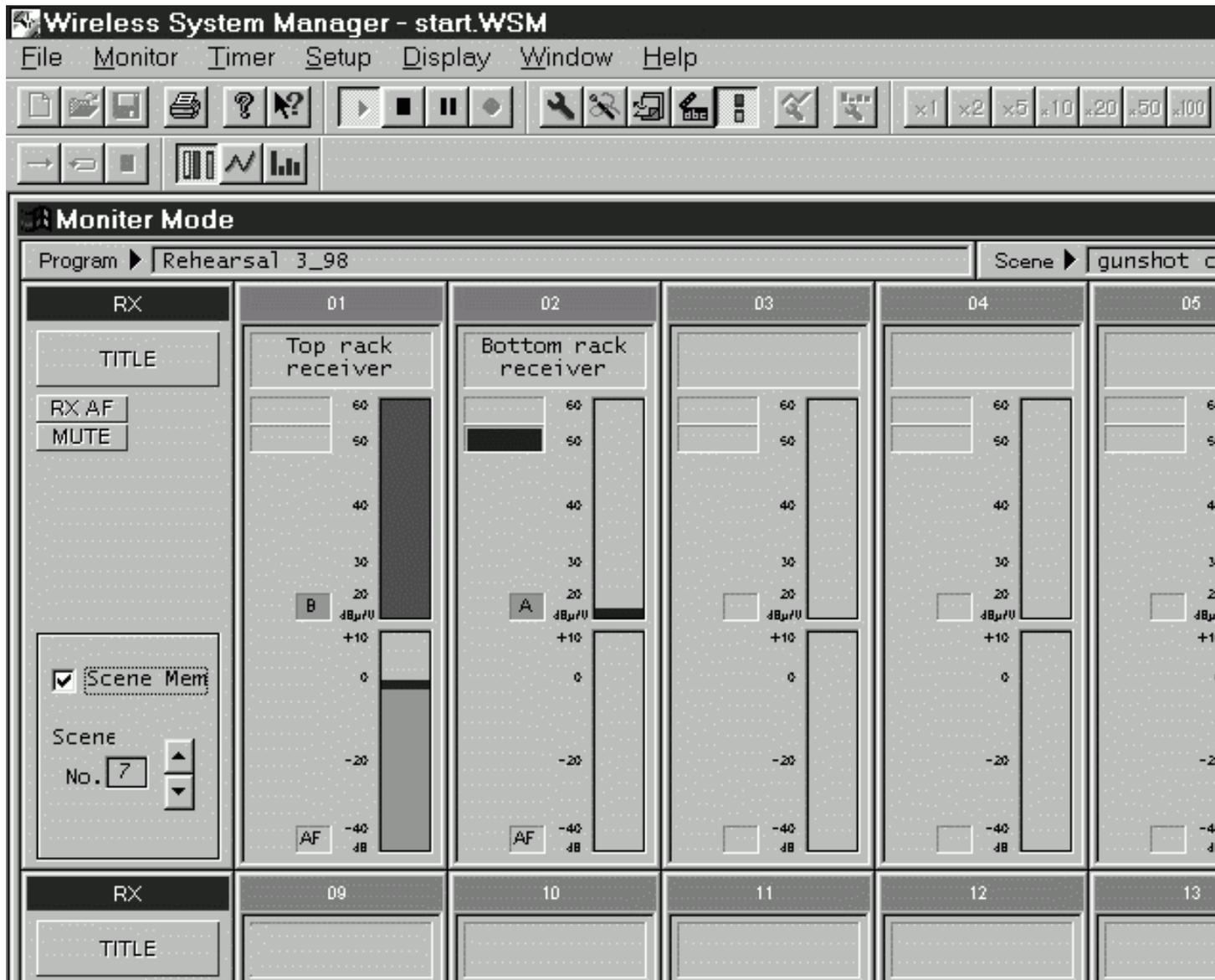
6: RF Level Meters - When in Play or Record mode (see page 12 in this manual for more information), these show the continuous strength of the RF signal being received by the selected receiver's "A" and "B" antennas. The antenna currently in use is lit green.

7: AF Level Meter - When in Play or Record mode (see page 12 in this manual for more information), these show the continuous strength of the AF signal being output by the selected receiver.

8: Scene Memory and Scene Number - Allows you to activate Scene Memory (by checking the "SCENE MEM" box) and to select the number of the Scene memory you wish to use.

The Simple Monitor Screen

When in Monitor Mode, the WSM screen shows a *lot* of information—so much, in fact, that there may be times when you want a simpler screen display with less data and larger meters (for example, when your computer monitor is a distance away from your working position). For this reason, WSM provides an alternative Monitor screen, called, appropriately enough, the *Simple Monitor* screen (shown below).



All screen functions are the same as in the Monitor screen, except that there is a single RF Level meter for each receiver. This meter shows the RF signal strength being received by the antenna currently in use, and the legend beside it shows whether the “A” or “B” antenna is the current one. In addition, there are fewer items in the Status Display; only Audio Frequency (Rx AF) on/off and Mute on/off are shown (as in the Monitor screen, when Mute is on, the box is colored red).

To call up this screen, either select the Simple Monitor Screen option from the Setup menu (see page 13 in this manual for more information), or click on the Simple Monitor Screen icon in the Tool Bar, shown in the illustration on the right. For more information on the WSM Tool Bar, see page 12 in this manual.



Simple Monitor icon

Monitor Mode Tool Bar



WSM's *Tool Bar* provides graphic icons that allow you to carry out various operations with a single mouse click. Though available in all screens and in all modes of operation, you can opt to turn it on or off by checking or unchecking the Tool Bar option in the Display menu (see page 13 for more information). Not all Tool Bar icons are functional in all modes, however. Those that cannot be used in a particular mode of operation will be grayed out. The illustration above shows the Tool Bar display when WSM is in Monitor mode.

As you can see, there are a *lot* of Tool Bar icons. Fortunately, there's no need to actually memorize all their functions (though you'll find yourself remembering them quickly after you've used WSM a few times), thanks to WSM's *Status Bar*. To turn on the Status Bar, simply check it in the Display menu. The bottom line of your screen (regardless of the mode you're in) will now always show you the function of each Tool Bar icon as you "roll over" it with your mouse.



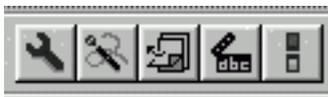
File Tools - These icons are available in all screens and all modes of operation. From left to right, they allow you to create a new file; open an existing file, save the current data to disk; and print the current screen. For more information, see "File Menu" on page 13 of this manual.



Help Tools - These icons are available in all screens. The left icon displays the WSM version number and copyright information. The right icon provides context-sensitive "pop-up" help information. See page 9 in this manual for more information about WSM online help.



Transport Tools - Available only in Monitor mode, these icons correspond to the options in the Monitor menu. They are, from left to right: Play, Stop, Pause, or Record data. When you click on Play, all onscreen meters become active although data is not recorded. To stop monitoring, click on Stop; to momentarily pause it, click on Pause. To record data (which can be saved to disk and/or displayed in Time Domain mode), click on Record Data will continue to accumulate until you click on Stop. For more information, see page 8 in this manual.



Setup Tools - Available only in Monitor mode, these icons correspond to the options in the Setup menu, each calling up a dialog box. They are, from left to right: Channel Setup, Channel Plan Setup, Scene Memory Setup, Program Setup, and Simple Monitor Screen. For more information, see "File Menu" on page 13 of this manual.

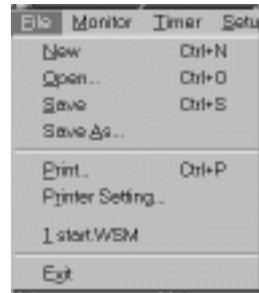


Window Tools - These icons are available in all screens. They correspond to options in the Window menu, each calling up a different mode of operation. From left to right, they allow you to select Monitor mode, Time Domain mode, and Spectrum Analyze mode. For more information, see "File Menu" on page 13 of this manual.

Monitor Mode Menus

Each screen and mode of operation also provides a number of menus. Here is a description of the various menu titles and options available when in Monitor Mode (the same menu items are available in both the main Monitor screen and the Simple Monitor screen):

File - Options here allow you to create a New file; Open an existing one; Save the data in memory to the current file; Save As (save the data in memory to a different file); Print the data in memory to a printer; set various printer options (Printer Settings); and Exit the program. For convenience, recently opened .WSM files will also be listed in the File menu. For more information, refer to the WSM online Help.



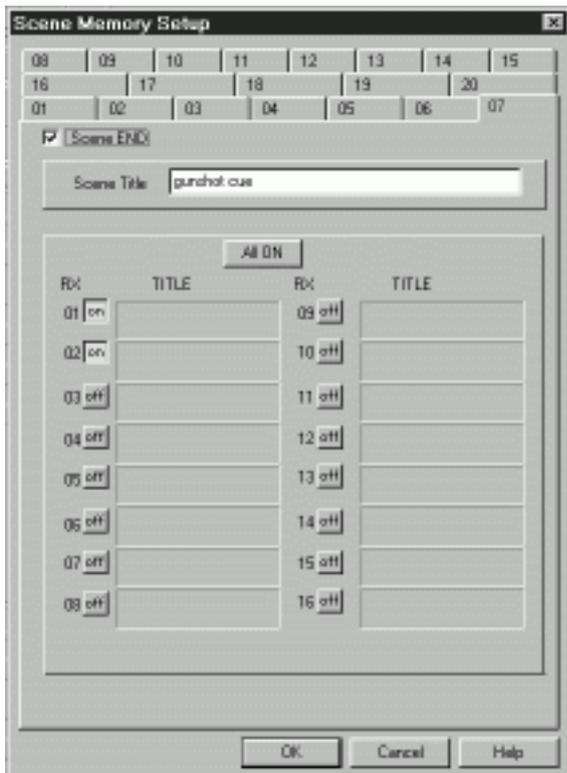
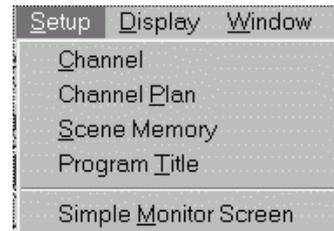
Monitor - The functions in the Monitor menu (Play, Stop, Pause and Record) are identical to those in the Transport Tools. See page 12 in this manual (and the WSM online Help) for more information.



Timer - WSM provides a handy timer, useful for keeping track of how long you've been recording or for calculating remaining transmitter battery life. The timer display is found in the bottom left-hand corner of the Monitor or Simple Monitor screen, as shown on the left. The options in the Timer menu are duplicated in the timer display. They allow you to Start the timer; Stop it; Reset it (to 00 hours, 00 minutes, 00 seconds); and Sync it, so that it only operates when in Monitor Play or Record mode and stops during Monitoring is Stopped or Paused. For more information, refer to the WSM online Help.



Setup - Options in this menu allow you to call up various dialogs, including Channel Setup (see page 10 in this manual for more information); Channel Plan (see page 9 in this manual for more information); Scene Memory; or Program Title. You can also switch to the Simple Monitor screen from this menu.

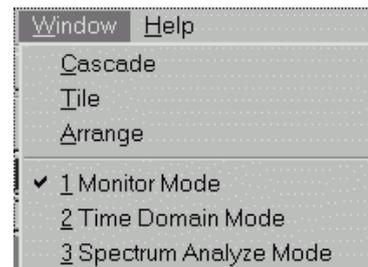


Scenes are one of WSM's most powerful features. The Scene Memory dialog (shown at left) allows you to name and store up to 20 scenes, each containing on-off status for each connected receiver. You can then activate any scene in the Scene Memory on/off box in the Monitor and Simple Monitor screen. For more information, refer to page 10 in this manual and to the WSM online Help.

Display - Options in this menu allow you to turn the Tool Bar and Status Bar on or off. See page 12 in this manual for more information.



Window - Standard Windows options in this menu allow you to cascade, tile, and arrange multiple windows in WSM. This menu also allows you to switch between WSM's three main Modes of operation: Monitor, Time Domain, and Spectrum Analyze.



Help - The functions in the Help menu (Search Topic and About WSM) are identical to those in the Help Tools. See page 12 in this manual for more information.



Time Domain Mode



Time Domain Mode icon

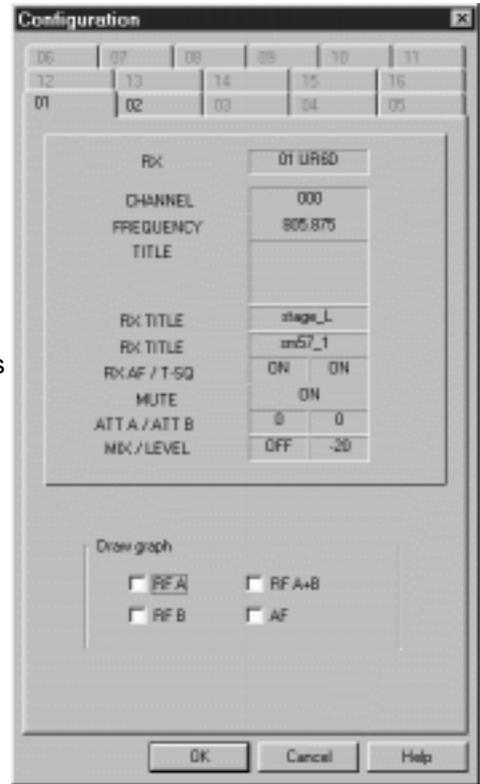
Time Domain Mode allows you to view data that has been recorded in Monitor Mode. To enter Time Domain Mode, either select it from the Window menu, or click on the Time Domain icon in the Tool Bar.



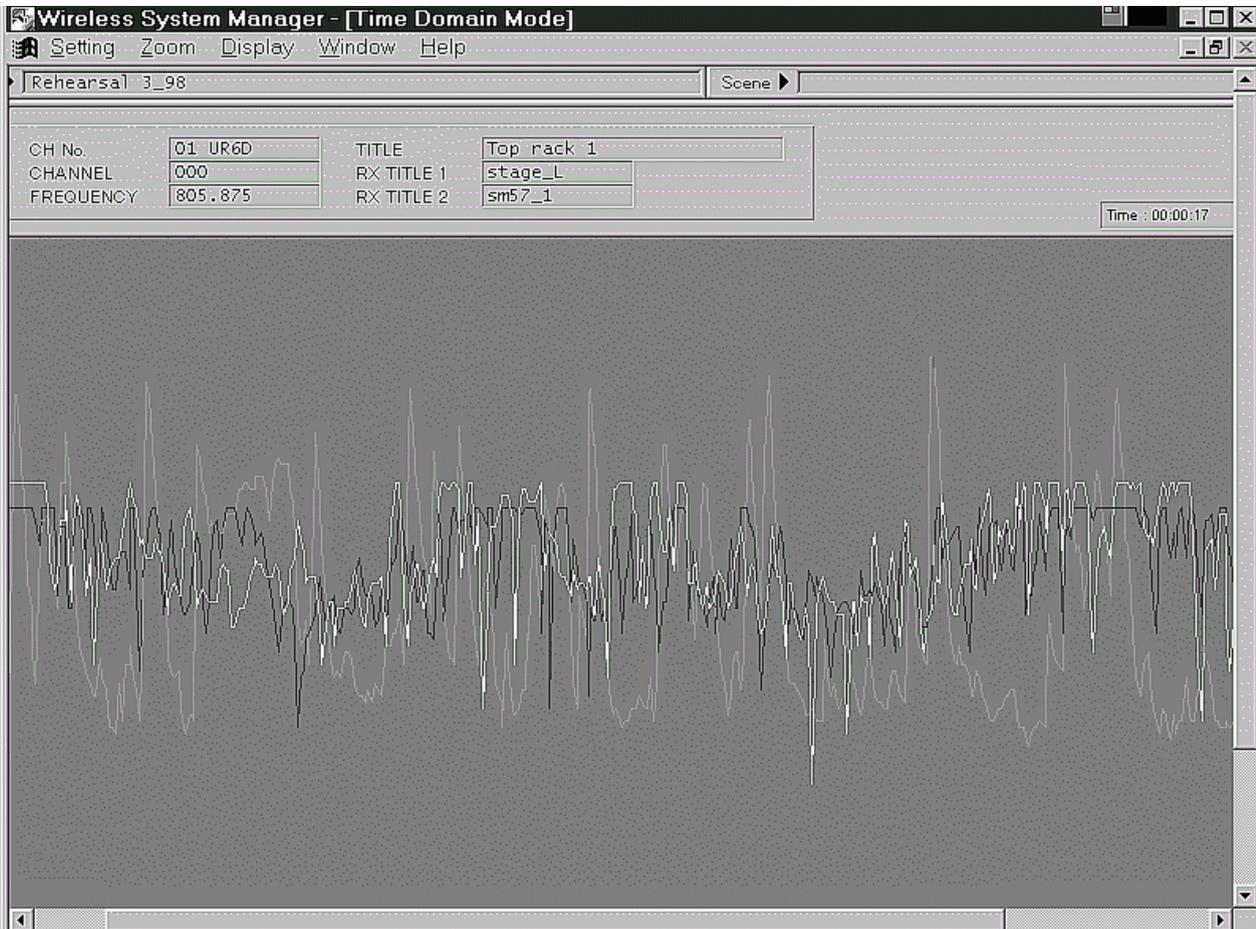
Drawing Condition icon

To determine which parameters you wish to see graphed out, select "Drawing Condition" from the Settings menu, or click on the Drawing Condition icon in the Tool Bar. You will then be shown the Time Domain Configuration dialog. This shows information about all connected receivers and allows you to select the data type(s) you wish to view (RF Level A, RF Level B, RF Level A+B, and/or AF Level). (Note: Receiver parameters cannot be changed in this dialog; to do so, return to Monitor Mode and use the Channel Setup dialog—see page 10 in this manual for more information.)

The selected data for the chosen receiver will then be graphed onscreen, as shown below. The horizontal axis shows time elapsed, while the vertical axis shows RF / AF level. Each parameter is shown in a different color (dark blue for RF A; light blue for RF B; yellow for RF A+B [the combined signal strength from both receivers]; green for AF, and red if Mute is on for the selected receiver). This color scheme is also described in the onscreen legend at the upper right-hand corner of the screen.



Time Domain Configuration dialog

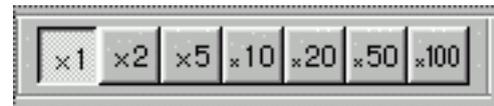
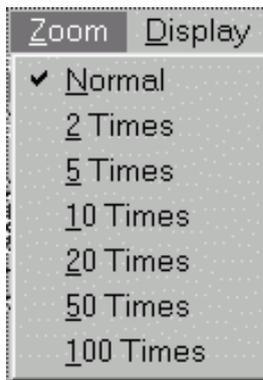


Time Domain Mode / Spectrum Analyze Mode

At any time, you can opt to graph different parameters for the selected receiver, or to view the data for a different receiver altogether, simply by calling up the Time Domain Configuration dialog again. To determine the actual time of any point in the graph, simply move the cursor to that point and click. A light gray vertical line will appear at that point and the time display in the upper right-hand corner of the screen will show the time (in hours/minutes/seconds) of the selected point.

You can also zoom the display in or out to view specific areas of the data. The simplest method of zooming in is to simply use the mouse to specify the data you want to view: Position the mouse at the start of the area you want to view, click and hold, then drag across the screen to the end of the area you want to view. When you then release the mouse, the specified area will zoom in to fill the entire screen. To restore the screen to its previous condition, simply right-click the mouse.

Alternatively, you can set various screen magnifications by using the Zoom Tools, available only in Time Domain Mode. These allow you to magnify the screen by factors of 2, 5, 10, 20, 50, or 100. To return the screen to standard magnification, simply click on the "x 1" box. You can make the same changes to screen magnification by opening the Zoom menu, available only in Time Domain Mode.



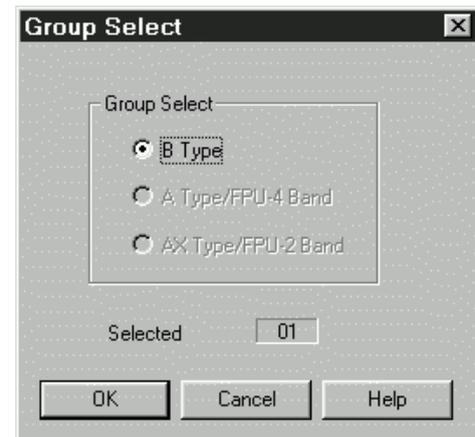
Zoom Tools

Spectrum Analyze Mode

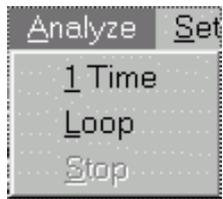
The third, and final main mode of operation offered by WSM is Spectrum Analyze Mode. In this mode, WSM uses your connected receivers to scan through all available frequencies and then graphs out the relative RF signal strengths onscreen. This allows you to make the best channel selections, based on actual RF conditions in the performance environment of your wireless system.

To enter Spectrum Analyze Mode, either select it from the Window menu, or click on the Spectrum Analyze icon in the Tool Bar.

In this mode, a scan and spectrum analysis can be run of all standard UR6D frequencies, of all "X" UR6DX frequencies, or both sets of frequencies. If all receivers in your wireless system use the same frequencies (that is, if the system contains *all* UR6D receivers or *all* UR6DX receivers), WSM will automatically scan only those frequencies. However, if your wireless system contains *both* UR6D and UR6DX receivers being used simultaneously, you need to let WSM know which frequencies you want scanned and analyzed. To do so, call up the Group Select dialog either by opening the Setting menu or by clicking on the Group Select icon in the Tool Bar. In this dialog (shown at left), you can choose the frequency range (standard "B Type" UR6D frequencies or "AX Type" UR6DX "X" frequencies) you wish to analyze and specify the receiver you wish to use for scanning purposes.



Spectrum Analyze Mode



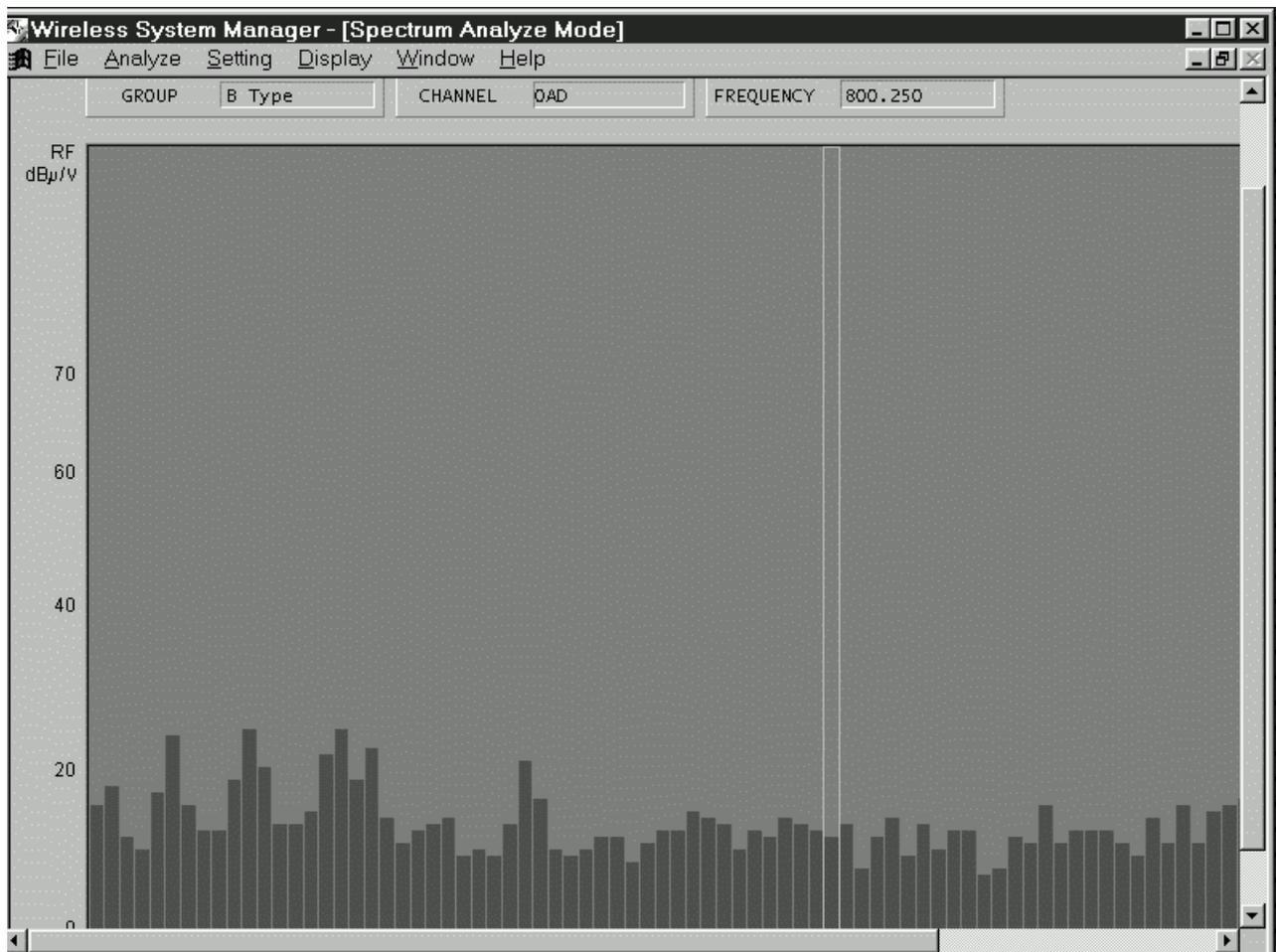
Spectrum Analyze Mode Analyze menu

You can opt to perform the analysis one time only or to loop it continuously. To perform the analysis once only, choose “1 Time” from the Analyze menu, or click on the Analyze Once icon (the left-most icon) in the Spectrum Analyze Tool Bar. To repeat the analysis continuously, choose “Loop” from the Analyze menu, or click on the Loop Analyze icon (the center icon) in the Spectrum Analyze Tool Bar. To stop a continuous analysis, choose “Stop” from the Analyze menu, or click on the Stop Analyze icon (the right-most icon) in the Spectrum Analyze Tool Bar.



Spectrum Analyze Tool Bar

The relative signal strengths will then be graphed onscreen, as shown below. The horizontal axis shows time elapsed, while the vertical axis shows RF level (in dB μ /V).



Note that RX1 in the receiver specified in the Group Select dialog (see previous page) is used for scanning purposes. As a result, its audio output is muted during scanning. For this reason, use caution when running a scan during a live performance!



Spectrum Analyze Mode File menu

After a scan is stopped, you can click on any band to view its channel and frequency. A gray line will appear around it and its channel and frequency will be displayed at the top of the screen. You can also save the scanned data to disk (as a Microsoft Excel comma-delimited spreadsheet “.csv” file) by using the “Save As” function in the Spectrum Analyze File menu.

FCC Rules and Regulations

**Samson wireless systems are type accepted under
FCC rules parts 90, 74 and 15.**

**Licensing of Samson equipment is the user's
responsibility and licensability depends on the user's
classification, application and frequency selected.**

**This device complies with RSS-210 of
Industry & Science Canada.**

Operation is subject to the following two conditions:

**(1) this device may not cause harmful interference
and (2) this device must accept any interference
received, including interference that may cause
undesired operation.**