



Configuring Yamaha MIDI Instruments and Windows 2000

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I. MIDI Files vs. Audio Files ([Table of Contents](#))

MIDI Files:

Many owners of Yamaha MIDI instruments want the ability to record a song onto a floppy disk in the instrument, and then be able to take the disk out and play it in a computer. Yamaha MIDI instruments save recorded songs as 'MIDI data', usually in the Standard MIDI File format (SMF). This type of file has the extension '.mid' when viewed in a computer. A MIDI file only records the sequence of notes (commands) that were played by the user, not the actual sound (audio) of the instrument.

EXAMPLE: If the user records a MIDI file of himself playing the keys C - E - G on a MIDI keyboard, the MIDI file stores commands indicating when the C, E and G keys were played, but does not actually record the sound that the keys produced. When the MIDI file is played back in the keyboard, it sends these commands to trigger the C, E and G keys, and the instrument itself then produces the sound. This is sort of like a 'high tech' player piano.

The MIDI file will trigger the sounds of any device it is played in. For example, a MIDI file playing in a keyboard triggers the internal keyboard sounds; a MIDI file playing in a computer is usually set to trigger the sounds of the computer soundcard. The soundcard will normally sound inferior to the original keyboard.

There is no computer soundcard which contains all the sounds on every Yamaha MIDI instrument; the 'GM' sounds of the soundcard (and the Yamaha 'XG' sounds which some soundcards may also include) are only a part of the total sounds found on the instrument. The 'Grand Piano' sound, for example, is exclusive to many Yamaha Portable Keyboards and Clavinovas.

The only way to make the computer play back the Yamaha instrument MIDI data exactly as originally recorded, is to have the instrument physically connected to the computer with:

- A Yamaha TW6MC1 'Joystick to MIDI' cable, or similar third party cable.

(For instruments with MIDI IN and OUT connections hooked up to the 'Joystick Port' of a computer soundcard.)

— or —

- A Yamaha CCIBM cable.

(For instruments with a "To Host" connection hooked up to a serial port of a computer; usually 'COM1'. This connection is necessary when the computer does not have a soundcard with a 'Joystick Port'.)

— or —

- A Yamaha UX16 'USB-MIDI Interface', or similar USB interface such as a Yamaha UX96, UX256, or UW500.

(For instruments with MIDI IN and OUT connections hooked up to a USB port of a

computer. This connection is necessary when the computer does not have a serial port, or a soundcard with a 'Joystick Port'.)

The TW6MC1 and CCIBM cables may be purchased directly from Yamaha Parts Department at (888) 892-6242, or from an authorized Yamaha dealer. The UX16, UX96, UX256, or UW500 may be purchased through an authorized Yamaha dealer only.

See the following section, 'III. Using MIDI IN and OUT Connections for MIDI Control with Computer' for instructions in using the TW6MC1 or UX16.

See the following section, 'IV. Using Instrument To Host Connection for MIDI Control with Computer' for instructions in using the CCIBM cable.

Audio Files:

Many owners of Yamaha MIDI instruments also want to be able to 'turn a MIDI file into a CD'. Since the MIDI file contains only 'command' information, it cannot be 'turned into' an audio file or CD. However, the file can be played (triggering the original instrument or a computer soundcard) while simultaneously recording the sound source into a digital audio software application on a computer. Once this has been done, the digital audio recording (an audio file, not a MIDI file) can then be burned onto a CD. This procedure does not require the cables mentioned above, but it may require other 'audio' cables if connecting the audio output of the instrument to the audio input of the computer soundcard.

See the following section, 'II. Creating a CD from a Standard MIDI File' for general instructions in recording a CD.

II. Creating a CD from a Standard MIDI File ([Table of Contents](#))

A song recorded from a keyboard in Standard MIDI File format cannot actually be "turned into" a CD; however, the file can be played (using the original keyboard or a computer sound card) and recorded into a digital audio software program, after which the recording can be burned to a CD.

NOTE: A file playing a computer sound card will normally sound inferior to a file playing the original keyboard; it will only sound as good as the sound source it is using. This is due to the fact that a Standard MIDI File only records the sequence of keys that were pressed, not the actual sound (audio) of the keyboard.

In order to create (burn) a custom CD, the following items are needed:

- A computer with a sound card
- Digital audio/MIDI recording software such as Cakewalk Pro Audio
- A CD burner
- CD burning software such as 'Easy CD Creator' by Adaptec, 'Media Player 7' (or higher) by Microsoft (burns at 1x only), or 'MusicMatch Jukebox' (burns .mp3 files only, at 1x; deluxe version burns at maximum speed of burner)
- An audio cable to connect the audio output of the keyboard to the audio input of the sound card (if recording directly from the keyboard)
- An audio cable to connect the audio output of the sound card to its own audio

input (if recording using the sound card)

The Recording Process:

The following steps are generalized, because the procedures of different software programs vary.

1. Record the song with a MIDI sequencer (recorder); this can be done directly on a keyboard that can save Standard MIDI Files to disk, or with a computer (and MIDI recording software) connected to the keyboard via Serial or MIDI cables.
2. Save the song in Standard MIDI File (SMF) format (song title.mid).
3. Make the necessary connections for audio playback/recording:
4. If the file is using the keyboard as the sound source, connect the keyboard audio outputs to the Line In jack of the sound card.
5. If the file is using the computer sound card as the sound source, connect the Line Out jack of the sound card to its own Line In jack, using a cable with Compatible connectors.

(Check with the sound card manufacturer or computer store.)

NOTE: This step may not be necessary if the software allows connection between the sound card output and the digital audio tracks internally.

6. Play the file and record the audio into digital audio tracks within the digital audio program.
7. Open up the recorded audio file (usually a .wav file) from the CD burning program and follow the steps to burn it to a CD.

III. Using Instrument 'MIDI IN and OUT' Connections for MIDI Control with Computer

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IMPORTANT: *It is highly recommended that these steps be followed in chronological order.*

The MIDI 'IN' and 'OUT' connections of an instrument can interface with a Windows based PC. However, in order for successful MIDI communication to occur, the MIDI cabling, drivers and software application must be properly installed and configured.

CABLE CONNECTIONS

Connecting a Yamaha TW6MC1 'Joystick to MIDI' Cable:

1. Insert the 15-pin plug of the 'Joystick to MIDI' cable into the 15-pin MIDI/ Joystick port on the computer soundcard.
2. Connect the MIDI plug labeled 'MIDI IN' to the MIDI OUT connection of the Yamaha MIDI instrument.

3. Connect the MIDI plug labeled 'MIDI OUT' to the MIDI IN connection of the Yamaha MIDI instrument.

NOTE: The above connection procedures apply to the Yamaha TW6MC1 cable. Most third party 'Joystick to MIDI' cables use the same setup procedure as described above. However, some cables may have different connectivity requirements.

Connecting a Yamaha UX16 'USB-MIDI Interface':

1. Connect the MIDI plug labeled 'MIDI IN' to the MIDI OUT connection of the Yamaha MIDI instrument.
2. Connect the MIDI plug labeled 'MIDI OUT' to the MIDI IN connection of the Yamaha MIDI instrument.
3. The rectangular USB plug of the UX16 must be plugged into a USB port on the computer, however this step is performed during the USB Driver installation. See 'Installing the Yamaha USB Driver in Windows (for UX16 'USB-MIDI Interface')' below.

NOTE: The above connection procedures apply to the Yamaha UX16. Most other 'USB-MIDI Interfaces' use the same procedure as described above. However, some may have slightly different connectivity requirements.

MIDI INSTRUMENT SETTINGS

Check to make sure that these basic parameters are set:

1. MIDI Transmit Channel = 1
2. MIDI Receive Channel =

NOTE: If using a 'multi-timbral' MIDI instrument, capable of using multiple parts simultaneously, make sure that each part is set to receive on a different MIDI channel.

3. Local Control = OFF (This setting only applies to MIDI keyboards.)

NOTE: If using a third party MIDI software application, the MIDI keyboard should be set to 'Local Control = OFF', and the application should be set to 'MIDI Thru = ON'. (Some applications have different names for this, such as 'MIDI Echo = Auto', so check the owner's manual.) This allows the player to hear the different sounds for each track as they are being recorded. If the MIDI keyboard does NOT have the ability to turn Local Control OFF, turn the 'MIDI Thru' function OFF in the MIDI software application.

4. If the instrument has a **[HOST SELECT]** switch (usually found on the back, bottom, or side of the instrument), make sure it is set to 'MIDI'.

COMPUTER SETTINGS

Verifying the Soundcard Driver Installation in Windows (for a 'Joystick to MIDI')

Cable):

The driver originally installed with the soundcard must be installed correctly in order for the computer to use the Joystick port for MIDI transmission/reception.

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Double-click the 'Control Panel' icon.
3. Double-click the 'System' icon.
4. Click the 'Hardware' tab.
5. Click the **<Device Manager>** button.
6. Select the 'View' menu from the menu bar.
7. Select 'Devices by type'.
8. Under 'Sound, video and game controllers', there should be a list of drivers. Verify that the proper driver for the soundcard is in the list.

NOTE: A MIDI driver will normally be identified as 'MPU-401', or the word 'MIDI' will be somewhere in the name, as in the SoundBlaster 'SB MIDI' driver, for example. If neither 'MPU-401' nor 'MIDI' is listed, contact the sound card manufacturer or computer manufacturer to verify the MIDI compatibility of the sound card.

Installing the Yamaha USB Driver in Windows (for UX16 'USB-MIDI Interface'):

The UX16 comes with driver software which must be installed correctly in order for the computer to use the USB port for MIDI transmission/reception. The following procedures apply to the Yamaha UX16 'USB-MIDI Interface'. Most third party 'USB-MIDI Interfaces' use a similar setup procedure as described below. However, some may have slightly different software requirements.

***IMPORTANT:** Before continuing, make a note of the CD-ROM drive name (Example: D:). This can be found by double-clicking the 'My Computer' icon on the Windows Desktop.*

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Double-click the 'Control Panel' icon.
3. Double-click the 'System' icon.
4. Click the 'Hardware' tab.
5. Click the **<Driver Signing>** button.
6. In the 'File Signature verification' section, click the radio button to the left of 'Ignore - Install all files, regardless of file signature'.
7. Click the **<OK>** button.
8. Insert the supplied CD-ROM into the CD-ROM drive.
9. Plug the rectangular USB plug of the UX16 into a USB port on the computer. (The MIDI IN and OUT plugs should already be plugged into the instrument

MIDI OUT and IN connections respectively, as indicated in the 'CABLE CONNECTIONS' section above.)

10. The UX16 powers ON (LED illuminates), and the computer screen automatically displays the 'Found New Hardware Wizard'.
11. Click the **<NEXT>** button.
12. Click the radio button to the left of 'Search for a suitable driver for my device.'
13. Click the **<NEXT>** button.
14. Click the box to the left of 'CD-ROM drive'. Make sure all other boxes are unchecked.
15. Click the **<NEXT>** button.

NOTE: If a message appears saying to insert a Windows CD-ROM, specify the root directory of the CD-ROM drive (Example: D:\) and continue the installation.

16. Once 'Completing the Found New Hardware Wizard' is displayed in the screen, click the **<FINISH>** button.
17. Reboot the computer.

Verifying the USB Driver Installation in Windows:

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Double-click the 'Control Panel' icon.
3. Double-click the 'System' icon.
4. Click the 'Hardware' tab.
5. Click the **<Device Manager>** button.
6. Select the 'View' menu from the menu bar.
7. Select 'Devices by type'.
8. Under 'Sound, video and game controllers', there should be a list of drivers. Verify that the proper driver for the soundcard is in the list.

NOTE: A USB driver will normally be identified with the word 'USB' somewhere in the name. If a USB driver is not listed, even though it had been installed, contact the manufacturer of the USB interface.

Setting up Windows (Media Player) to use the Soundcard Joystick Port for MIDI Output (with a 'Joystick to MIDI' Cable):

A MIDI output driver for the soundcard Joystick port must be selected in Windows, in order for the computer to transmit MIDI data to the Yamaha MIDI instrument. This driver will normally be identified as 'MPU-401', or the word 'MIDI' will be somewhere in the name, as in the SoundBlaster 'SB MIDI' driver, for example.

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Double-click the 'Control Panel' icon.
3. Double-click the 'Sounds and Multimedia' icon.
4. Click the 'Audio' tab.
5. In the 'MIDI Music Playback' section, click the drop-down arrow button on the 'Preferred device' drop-down list box.
6. Select a MIDI driver for the soundcard Joystick port (Example: 'MPU-401' or 'SB MIDI'), listed in the white 'MIDI output' list box.
7. Click the <OK> button to enable the driver.

Setting up Windows (Media Player) to use a USB Port for MIDI Output (with a 'USB-MIDI Interface'):

A MIDI output driver for the soundcard Joystick port must be selected in Windows, in order for the computer to transmit MIDI data to the Yamaha MIDI instrument. This driver will normally be identified as 'MPU-401', or the word 'MIDI' will be somewhere in the name, as in the SoundBlaster 'SB MIDI' driver, for example.

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Double-click the 'Control Panel' icon.
3. Double-click the 'Sounds and Multimedia' icon.
4. Click the 'Audio' tab.
5. In the 'MIDI Music Playback' section, click the drop-down arrow button on the 'Preferred device' drop-down list box.
6. Click once on a MIDI driver for the USB port, (in the drop-down list box) to highlight it.
7. Click the <OK> button to enable the driver.

IV. Using Instrument 'To Host' Connection for MIDI Control with Computer

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IMPORTANT: *It is highly recommended that these steps be followed in chronological order.*

CABLE CONNECTIONS

Connecting a Yamaha CCIBM Cable:

1. Insert the rectangular 9-pin plug of the CCIBM cable into a 9-pin serial port on the back of the computer. As a general rule, 'COM 1' is usually the best choice.
2. Insert the round 8-pin plug of the CCIBM cable into the 'TO HOST' port of the Yamaha MIDI instrument. Make sure that the groove on the side of the plug lines up with the groove on the instrument 'TO HOST' port.

MIDI INSTRUMENT SETTINGS

Check to make sure that these basic parameters are set:

1. MIDI Transmit Channel = 1
2. MIDI Receive Channel = 1

NOTE: If using a 'multi-timbral' MIDI instrument, capable of using multiple parts simultaneously, make sure that each part is set to receive on a different MIDI channel.

3. Local Control = OFF (This setting only applies to MIDI keyboards.)

NOTE: If using a third party MIDI software application, the MIDI keyboard should be set to 'Local Control = OFF', and the application should be set to 'MIDI Thru = ON'. (Some applications have different names for this, such as 'MIDI Echo = Auto', so check the owner's manual.) This allows the player to hear the different sounds for each track as they are being recorded. If the MIDI keyboard does NOT have the ability to turn Local Control OFF, turn the 'MIDI Thru' function OFF in the MIDI software application.

4. If the instrument has a **[HOST SELECT]** switch (usually found on the back, bottom, or side of the instrument), make sure it is set to 'MIDI'.

COMPUTER SETTINGS

A special Yamaha 'CBX Driver' must be downloaded, extracted and then installed in the computer, in order to set up the computer serial port for MIDI use.

Setting Windows to Display File Extensions:

The default View settings in Windows are usually set to hide the 3-character file extensions at the end of file names (Example: 'setup.exe'). However, because many files may have the same name, but a different extension, it is often necessary to be able to view these extensions. Perform the following steps to display file extensions.

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Click 'Control Panel'.
3. Double-click on the 'Folder Options' icon.
4. Click the 'View' tab.
5. Clear (uncheck) the box next to 'Hide file extensions for known file types'.
6. Click the **<OK>** button.
7. Close the 'Control Panel' window.

Download Procedure:

1. Click [here](#) to download the CBX driver installation program. The 'File

Download' dialog box will appear.

- a. Select the 'Save this program to disk' radio button in the 'File Download' dialog box.
- b. Click the **<OK>** button. The 'Save As' dialog box will appear. 
- c. Select a destination folder in the 'Save As' dialog box.
- d. Click the **<Save>** button. The saving progress dialog box will appear until the download is complete. 

Extraction Procedure:

1. In Windows, navigate to the destination folder specified in the download procedure, i.e. 'C:\download.'
2. Double-click on the downloaded application file, 'CBX.exe.' The 'WinZip Self-Extractor' dialog box will appear. 
 - a. (optional) Select a destination folder in the 'Unzip to folder:' box.
 - b. Click the **<Unzip>** button. The files will be unzipped into the destination directory and the 'WinZip Self-Extractor' confirmation dialog box will appear with the message '23 file(s) unzipped successfully'.
 - c. Click the **<OK>** button.
 - d. Close the 'WinZip Self-Extractor' dialog box.

Installing the Yamaha CBX Driver:

NOTE: If an earlier version of the Yamaha CBX Driver already exists on the PC, it is a good idea to delete it before installing the later one, in order to avoid confusion.

1. Navigate to the folder where the downloaded and extracted CBX driver files are located.
2. Double-click the 'setup.exe' file to begin the installation process.
3. Click the **<Yes>** button when the 'Welcome' prompt window appears within the 'YAMAHA CBX Driver Setup' screen.
4. Select 'Install YAMAHA CBX Driver' when the 'Select Operation' dialog box appears.
5. Click the **<Next>** button.
6. Review the 'Software License Agreement' and click **<Yes>** to proceed or **<No>** to terminate the installation.

*NOTE: If **<No>** is selected, a dialog box will appear with the option of exiting from the installation process. Unless the 'Software License Agreement' is accepted by clicking **<Yes>**, it will not be possible to proceed with installation of the Yamaha CBX Driver.*

7. Select the COM port to be used by checking the appropriate radio button in the 'Select COM port' dialog box. 'COM 1' is usually used.

8. Click the **<Next>** button.
9. Select the appropriate radio button in the 'MIDI Output Ports' dialog box to choose either 'Use single MIDI output port' (if a single sound source, such as a Yamaha MIDI keyboard, needs to be triggered) or 'Use multiple MIDI output ports' (if multiple sound sources need to be triggered).
10. Click the **<Yes>** or **<No>** button in the 'MIDI Mapper Question' dialog box to select if the CBX A Driver will be the default MIDI device.

NOTE: If the CBX A Driver is selected as the default MIDI device, most MIDI software applications will be able to use it.

11. Click the **<OK>** button when the 'Information' prompt window appears.

NOTE: By clicking the <OK> button, the configuration of the CBX driver and the installation process is not altered. The 'Information' prompt window only offers instructions on setting up the 'HOST SELECT' switch and connecting the TO HOST terminal to a computer COM port.

12. Restart Windows to complete the installation process.

Setting up Windows (Media Player) to use a Serial Port for MIDI Output:

The CBX driver must be selected in Windows, in order for the computer to transmit MIDI data to the Yamaha MIDI instrument via the serial port.

NOTE: When first logging onto Windows 2000, use the 'Administrator' account.

1. Double-click the 'My Computer' icon on the Windows Desktop.
2. Double-click the 'Sounds and Multimedia' icon.
3. Click the 'Audio' tab.
4. In the 'MIDI Music Playback' section, click the drop-down arrow button on the 'Preferred device' drop-down list box.
5. Select 'CBX A Driver', in the white 'MIDI output' list box. (See options below.)

NOTE: CBX drivers A through E will be listed if the 'multiple MIDI output port' option was selected during installation. If the 'single MIDI output port' option was selected, then only the CBX A Driver will appear in the list box. If there are no CBX drivers listed, repeat the installation process using the 'YAMAHA CBX Driver Setup' application.

6. Click the **<OK>** button to enable the driver.

V. Setting up a MIDI Software Application with a Yamaha MIDI Instrument

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Selecting the correct MIDI Input and Output drivers within a MIDI application allows it to transmit and receive MIDI data using the desired port. The user may choose from the installed drivers in order to select the soundcard, or an external MIDI instrument via a Joystick Port, USB Port, or Serial Port.

1. Open the MIDI application.
2. Find and open the MIDI setup window.

NOTE: Most MIDI applications such as Cakewalk™ have a MIDI setup menu where the MIDI driver can be selected. The MIDI setup menu item may be named 'Setup', 'MIDI Devices', 'MIDI Settings', 'MIDI Preferences', 'Project Options', etc. Consult the application owner's manual for specific setup information.

3. Select the desired MIDI driver (Example: 'MPU-401' or 'SB MIDI') to be used for MIDI IN and also for MIDI OUT.
4. If using a third party MIDI software application, the MIDI keyboard should be set to 'Local Control = OFF', and the application should be set to 'MIDI Thru = ON'. (Some applications have different names for this, such as 'MIDI Echo = Auto', so check the owner's manual.) This allows the player to hear the different sounds for each track as they are being recorded.

NOTE: If the MIDI keyboard does NOT have the ability to turn Local Control OFF, turn the 'MIDI Thru' function OFF in the MIDI software application.

VI. Testing the MIDI Setup ([Table of Contents](#))

Since there are so many MIDI software applications, they cannot all be covered here. However, the two most popular types of MIDI applications are either MIDI 'sequencer / notation' applications, or MIDI 'music education' applications. The following is a basic procedure for testing the MIDI setup with a Yamaha MIDI instrument, using either of these application types.

MIDI Sequencer/Notation Applications Tests

MIDI Output Test:

1. Open the MIDI application.
2. Load a MIDI file.
3. Play the MIDI file.
4. Verify that the music can be heard from the speakers of the Yamaha MIDI instrument (not the computer speakers).

MIDI Input Test:

1. Open the MIDI application.
2. Select a 'Track' or 'Staff'.
3. Arm the Track or Staff for Recording.
4. Click the 'Record' button and play the Yamaha MIDI instrument.
5. Stop the recording.
6. Verify that the MIDI data is recorded to the Track or Staff. This is usually displayed in bars or notes on the screen.

MIDI Music Education Applications Test

MIDI Input / Output Test:

1. Open the MIDI application.
2. Start a 'Lesson'. (Most applications will play a musical piece and then prompt the student to play the same piece. The music played by the application should be heard from the speakers of the Yamaha MIDI instrument, and the notes played by the student on the Yamaha MIDI instrument should be recognized in the application.)

MIDI Troubleshooting

There are a number of things that may cause a communication problem between the computer and the connected Yamaha MIDI instrument. If problems are encountered, try the following procedures.

1. Reverse the Plugs ('Joystick to MIDI' or USB-MIDI' Cables):
 - a. Reverse the MIDI IN and MIDI OUT plugs in the ports of the connected Yamaha MIDI instrument. The plugs may be reversed, or the manufacturer of the cable may have designed it to be used the opposite way.
 - b. Re-test the MIDI connection.
 - c. If reversing the MIDI cables did not solve the problem, change the cables back and proceed to Step 2.
2. Perform a MIDI Loop Back Test (MIDI Keyboards Only):
 - a. Set the MIDI 'Local' parameter of the MIDI keyboard to 'OFF'. Consult the owner's manual for specific details on changing the 'Local' setting.

NOTE: Not all Yamaha MIDI keyboards have a 'Local' setting. If the Yamaha MIDI keyboard does not have a 'Local' setting, then the Loopback Test cannot be performed.
 - b. Turn up the MIDI keyboard volume control slightly, then play some notes. If no sound is heard, this will confirm that the Local parameter has been properly set to 'OFF'.
 - c. Plug one end of a regular MIDI cable (5-pins on each end) into the 'MIDI OUT' connection of the MIDI keyboard.

NOTE: Regular MIDI cables can be found at almost any music store selling electronic musical instruments.
 - d. Plug the other end of the same MIDI cable into the 'MIDI IN' connection of the MIDI keyboard.
 - e. Play some notes. In this configuration the Yamaha MIDI keyboard is transmitting MIDI data to itself. If sound is heard, then the MIDI

connections of the MIDI keyboard are working properly.

- f. If the MIDI connections of the keyboard are OK, the problem might be in the MIDI driver settings of the computer. (Proceed to Step 3.)
- g. If the MIDI Loopback Test was not successful, the MIDI connections of the keyboard may have failed. (Proceed to Step 6.)

3. Check the Settings in the Computer:

One of the most common computer-related problems is a technical issue involving interrupts. Interrupts 'call' or notify the computer processor when MIDI data is being sent to the soundcard joystick port. If an interrupt is not assigned to the proper driver, the computer processor will never 'know' that MIDI data is coming in. If a MIDI file or sequence can be played from the computer to the Yamaha MIDI instrument but MIDI data is not recorded to the MIDI sequencer application (or the MIDI music education application does not recognize MIDI input), the interrupt may not be set properly.

Many sound card manufacturers and computer manufacturers do not enable MIDI IN capabilities because many computer users do not need to use MIDI IN. Also, MIDI IN requires the use of a system resource (interrupt) and some manufacturers want to save resources. Contact the computer / soundcard manufacturer or a qualified computer technician to resolve this problem.

If the settings are correct, or it is inconvenient to contact a technician at this time, Steps 4 and 5 may also be tried.

4. Try an Alternate Instrument:

- a. Replace the Yamaha MIDI instrument with a different MIDI instrument that is known to work properly.
- b. Re-test the MIDI connection.
- c. If the replacement MIDI instrument works, the original instrument may have a problem.
- d. Check the MIDI parameter settings of the original instrument. See 'MIDI Instrument Settings', above.
- e. If any settings are wrong, correct them and re-test the original instrument.
- f. If the original instrument still does not work properly, proceed to Step 5.

5. Perform a Factory Reset or initialization:

IMPORTANT: This procedure usually clears any stored user data on the instrument.

- a. See the Yamaha MIDI instrument owner's manual for factory reset or initialization procedures.
- b. Re-test the MIDI connection.

c. If the instrument still does not work properly, proceed to Step 6.

6. Service Center:

If the settings are OK, the MIDI ports on the Yamaha MIDI instrument may have failed. Contact a local Yamaha dealer or Service Center.

Phone numbers and locations may be obtained by calling Yamaha Customer Support at (714) 522-9000.

[Configuring Yamaha MIDI Instruments and Windows 95](#)

[Configuring Yamaha MIDI Instruments and Windows 98](#)

[Configuring Yamaha MIDI Instruments and Windows ME](#)

[Configuring Yamaha MIDI Instruments and Windows XP](#)