



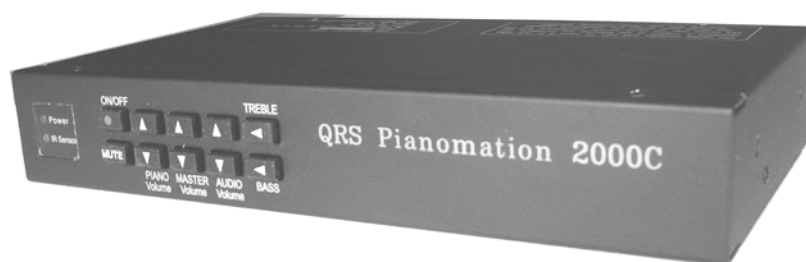
2000C - 2000CD+

OWNER'S MANUAL

Item # 75390 - 75395

Manual # OM75395

Rev. 1.01



QRS Music Technologies, Inc.

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QRS Music Center

*See piano rolls manufactured.
Ask for a demonstration of Pianomation MIDI.*



Two tours daily, at 10 a.m. and 2 p.m., Monday through Friday year 'round! We are closed weekends and the days surrounding major holidays. Any doubts as to "open" dates can be resolved by letter or phone.

QRS Music Technologies, Inc.
1026 Niagara Street
Buffalo, NY 14213-2099
1-716-885-4600
1-716-885-7510 Fax

QRS Business Center

Stop by any time to see and hear the vibrant sounds of Pianomation MIDI.



Our Naples, Florida location is devoted to the development of automated record and playback systems that can be installed in virtually any acoustic piano. All the various options are on display at this location.

QRS Pianomation Center
2011 Seward Avenue
Naples, FL 34109
1-239-597-5888
1-239-597-3936 Fax

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*See pianos manufactured.
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QRS is the only manufacturer of Roll Player Pianos in the world! In addition to producing player pianos, Story & Clark also manufactures a line of console pianos, and pianos equipped with Pianomation MIDI systems. Tours are available—You will see every phase of making a piano. Please call ahead for reservations.

Story & Clark Pianos
269 Quaker Drive
Seneca, PA 16346
1-814-676-6683
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West Coast Facility

Stop by any time to see and hear the vibrant sounds of Pianomation MIDI.



Our newest location in Las Vegas, NV services the west coast for all their Pianomation needs. In addition to a Pianomation warehouse and installation facility, there is a piano outlet, showcasing the entire Story & Clark piano line.

QRS West Coast Center
6410 Sunset Corporate Drive
Las Vegas, NV 89120
1-702-947-5888
1-702-947-3936 Fax

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Welcome

Congratulations on choosing the 2000C/2000CD+, one of our award-winning player piano systems.

The 2000C/2000CD+ retrofit kit was designed to turn an acoustic piano into a state-of-the-art player piano.

The system can be installed into almost any grand or upright piano, new or old.

Overview

2000C/2000CD+ ensures that your piano will retain its original beauty and sound. The moment you insert a special CD into the almost invisible controller, 2000C/2000CD+ brings your piano magically alive. Enjoying piano music at its best is as close as the touch of a button. The easy-to-use remote control gives you the convenience you are accustomed to with your audio devices. Familiar controls like Play, Stop, Preset Volume and Track Select make this sophisticated system as easy to operate as your CD player.

A 2000C/2000CD+ equipped player piano captures all the musical expressions of the original performing artist. Then 2000C/2000CD+ goes further, providing dazzling accompaniments recorded by orchestras and bands. Many of the CDs have vocal tracks recorded by noted artists. The expansive CD library will satisfy your every musical wish.

Choosing a Good Location

To prevent excessive internal heat buildup in the electronic components, place the piano in a location with sufficient air circulation.

Do not install the piano:

- Near heat sources such as radiators or hot air ducts.
- In direct sunlight.
- In places where excessive dust, mechanical vibrations or shocks exist.

Precautions

Operate the unit only on 120 Volts AC, 60 Hz.

Unplug the unit from the wall outlet if it is not going to be used for an extended period.

NOTE: If the unit is plugged into an AC power source, it is still energized, even when the switch is off.

Mail in your registration

Please take a few moments right now to fill in and mail the Registration Card. Doing so will entitle you to full warranty protection, and enables us to better serve you.

Review all safety information

Please review all care and safety information included in this manual. This includes information provided as part of compliance with UL and FCC standards.

Warnings

FCC INFORMATION

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**

This product, when installed as indicated in the Installation Manual, meets FCC requirements. Modifications not expressly approved by QRS Music Technologies, Inc. may void your authority, granted by the FCC, to use this product.

2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cables supplied with this product **MUST** be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the United States of America.

3. **NOTE:** This product has been tested and found to comply with the requirements listed in the FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the Installation Manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

- Relocate either this product or the device that is being affected by the interference.
- Utilize power outlets that are on different circuits (circuit breaker or fuse) or install AC line filters.

If these corrective measures do not produce satisfactory results, please contact the local authorized distributor, or contact QRS Music Technologies, Inc. 2011 Seward Ave. Naples, FL 34109.



INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

GROUNDING INSTRUCTIONS: This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Important Safety Instructions

This instrument is capable of producing extremely high volume levels. Adjust the MASTER VOLUME to the softest position before turning on or playing the piano. Gradually adjust the volume to suit your taste by adjusting the MASTER VOLUME while playing the instrument. You can damage your hearing by playing this instrument too loud. When using this instrument at high-volume levels, such as public performance, use appropriate ear protection.

WARNING: When using electric products, basic precautions should always be followed, including the following:

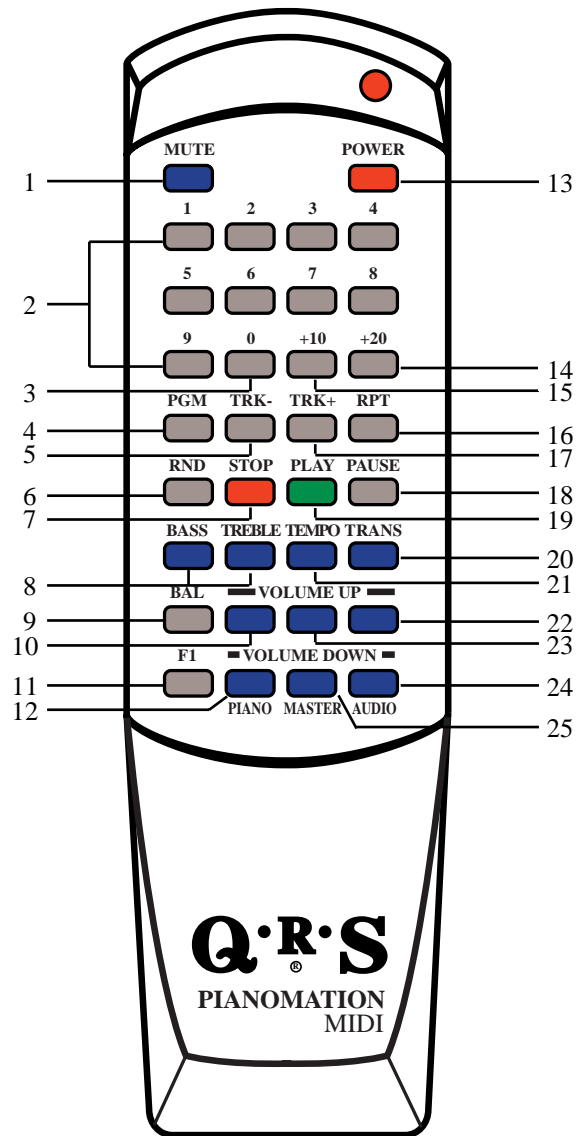
1. Read all instructions before using the product.
2. To reduce the risk of injury, close supervision is necessary when a product is used near children.
3. Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, in a wet basement, near a swimming pool, or the like.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. This product should only be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should only be connected to the type of power supply described in the operating instructions or as marked on the product.
8. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
10. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
11. The product should be serviced by qualified service personnel when:
 - A) The power-supply cord or the plug has been damaged; or
 - B) Objects have fallen, or liquid has been spilled into the product; or
 - C) The product has been exposed to rain; or
 - D) The product does not appear to operate normally or exhibits a marked change in performance; or
 - E) The product has been dropped, or the enclosure damaged.
12. Do not attempt to service the product beyond that described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

SAVE THESE INSTRUCTIONS

Remote Control Features

1. Mutes audio and piano tracks.
Displays Mu then track number.
2. To select Track # 1 - 9.
3. To select Track # 10 or 20,
press +10 or +20, then 0.
4. Allows you to program a sequence
of tracks to play.
(See right column - Program.)
5. Return to beginning of track or
to previous track.
6. Starts random play.
To quit random play, press STOP.
7. STOP.
8. Adjusts audio bass and treble.
Press once, then use volume UP arrows.
9. See left column (Balance).
10. Increases piano volume.
11. See right column (F1).
12. Decreases piano volume.
13. Turns complete system ON/OFF.
14. To select Track # 21 through 29.
(To select track 21, press this button
[+20], then 1.)
15. To select Track # 11 through 19.
(To select Track 15, press this button
[+10], then 5.)
16. Repeat. This will repeat the whole CD.
17. Move to beginning of next track.
18. PAUSE. Track number flashes until
Pause or Play is pressed.
19. PLAY.
20. Transpose music. (Not Available.)
21. Tempo control for the speed of the song.
(Not Available.)
22. Increases audio volume only.
23. Increases piano and audio volume.
24. Decreases audio volume.
25. Decreases piano and audio volume.

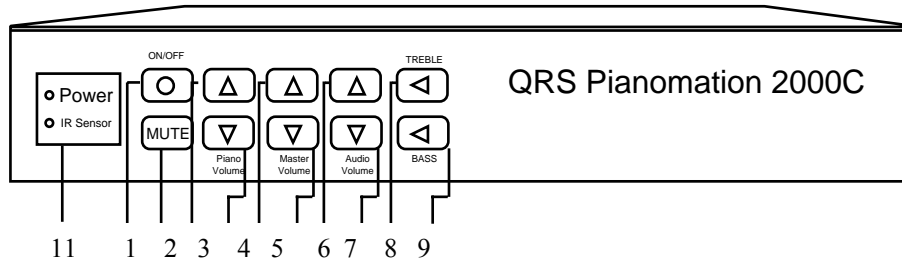
The Pianomation™ 2000CD will “remember” all the settings after you turn the system off. If the power cord is unplugged and plugged back again, the system will power up with the



Balance	
Pressed 1 time:	Balances between left and right for stereo audio CD (not Pianomation CD). Use with any up and down volume key for panning left/right.
Pressed 2 times:	Display reads d4 - Indicates no delay between audio & piano play. Note: For speakers that are far from piano, adjustment will be required. To adjust the synchronization of audio & piano play, use the track selection numbers: 0 to 3 decreases delay time; 5 to 9 increases delay time.
Press 3 times then press any Volume UP arrow:	For recommended concert level playback.

Program	
Display reads Pr. To set program, press desired track numbers, then Play. To	
F1 Control	
Pressed 1 time:	Recognizes the 2000CD player. Displays "Cd".
Pressed 2 times:	Recognizes an auxiliary CD changer. Displays "Ln".
Pressed 3 times:	Recognizes an auxiliary CD changer with a wireless receiver. Displays "rF".

2000C Front Panel Description



TIP: When adjusting parameters, briefly tap the buttons to make changes one increment at a time. Pressing and holding a button will step through its entire range rapidly.

- 1 Pressing this button will power the entire system “ON” or “OFF”.
- 2 Use the “MUTE” button to silence both the piano and the orchestration.
- 3 Pressing the “PIANO VOLUME UP” button will increase the volume of the piano.
- 4 Pressing the “PIANO VOLUME DOWN” button will decrease the volume of the piano.
TIP: Pressing both buttons simultaneously will return the piano to the default level.
- 5 The “MASTER VOLUME UP” button increases the volume of the piano and orchestration.
- 6 The “MASTER VOLUME DOWN” button decreases the volume of the piano and orchestration.
TIP: Pressing both simultaneously will return all levels to their default volume.
- 7 Use the “AUDIO VOLUME UP” button to increase the volume of the orchestration.
- 8 Use the “AUDIO VOLUME DOWN” button to decrease the volume of the orchestration.
TIP: Pressing both of these buttons simultaneously will return the orchestration to its default value.
- 9 Press the “TREBLE” button and use the “AUDIO VOLUME UP or DOWN” button to boost or cut the high end frequencies of orchestration.
- 10 Press the “BASS” button and the “AUDIO VOLUME UP or DOWN” button to boost or cut the low frequencies of the orchestration.
TIP: Press the “TREBLE and BASS” buttons simultaneously to return to their default value.
- 11 This red LED indicates power ON, and when entering “TREBLE or BASS” mode will turn off, indicating that you have entered the BASS or TREBLE adjust mode.

This is the “Infrared Sensor” that picks up your remote control commands. To avoid problems with the remote control function, do not block this window.

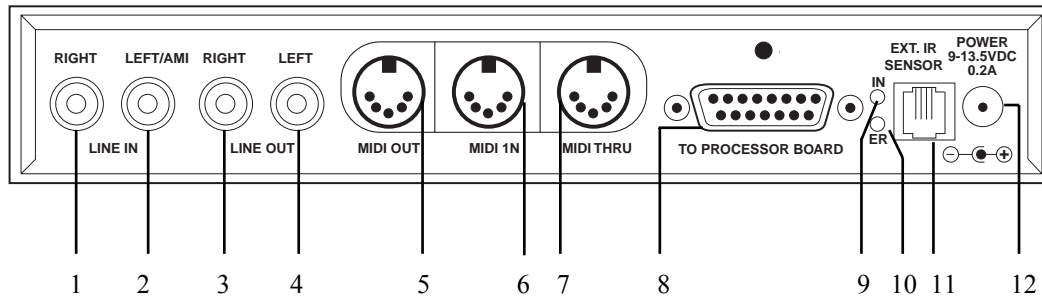
Special function: “Piano Sync” (piano to orchestration synchronization) can be varied (+/-) 50 milliseconds to compensate for large separations in piano and speaker placement. This adjustment is not recommended for normal system configurations because misadjustment of sync will cause deterioration of the overall sound quality.

To enter sync mode, press the “PIANO DOWN” and the “MASTER UP” buttons simultaneously. The red power LED will turn off indicating you have entered sync mode.

While in the sync mode, use the “PIANO UP” and “PIANO DOWN” buttons to make adjustments.

TIP: While in sync mode, pressing the “PIANO UP” and “PIANO DOWN” buttons simultaneously will set the sync back to the default settings.

2000C Back Panel Description



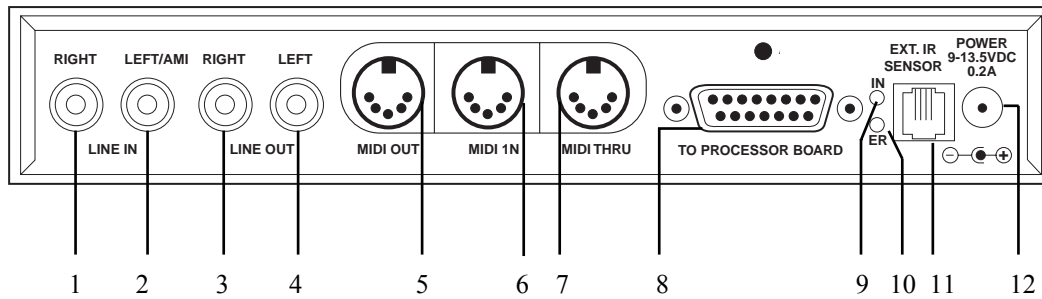
NOTE: MAKE SURE POWER TO ENTIRE SYSTEM IS TURNED OFF BEFORE CONNECTING OR DISCONNECTING ANY OF THESE CABLES.

TIP: Your 2000C has been designed to recognize the difference between a QRS MIDI signal and a standard music signal at the line input jacks. This means if your system is configured for stereo sound you will be able to enjoy your standard compact disc library in true stereo without having to push buttons. When you are playing QRS compact discs, the audio will be heard in "emulated stereo" taking advantage of the stereo configuration.

NOTE: When using standard music discs through the 2000C, depending on the actual music, you may notice the very beginning of the first song of the disc being clipped off. This is especially true for very slow fade ins. This is because the onboard computer does not know what signal is coming in until it actually sees it. This possible muting is normal and helps assure that when the 2000C is being driven with standard QRS MIDI discs, you won't hear a burst of the MIDI data at the beginning of the song.

- 1 Right channel line input. Connect to the right channel output of your CD player, VCR etc.
- 2 Left \ AMI channel line input. Connect to the left channel output of your CD player, VCR etc.
- 3 Right channel output. Connect to the right channel input of your powered speaker or stereo amplifier \ receiver. This connection would be used as a single (mono) speaker.
- 4 Left Channel output. Connect to channel input of your powered speaker or stereo amplifier \ receiver. This connection would be used as a single (mono) speaker.
- 5 MIDI OUT port. Connect to the MIDI input of any standard MIDI device. The MIDI source for the port is derived from the left "LINE IN" \ AMI signal.
- 6 MIDI IN port. Connect to the MIDI output of any standard MIDI device.
TIP: When driving the Pianomation by means of the "MIDI IN" port, make sure that the device connected to the "LINE IN" ports are not active. This will prevent 2 songs from playing at the same time.
- 7 MIDI THRU port. Connect to the "MIDI IN" port of the 2000C.
- 8 TO PROCESSOR BOARD port. This DB-15 connector is the port that connects to your Pianomation processor. Under no circumstances should this connector be interfaced with any other device.
- 9 IN. This light is used to confirm that there is "AMI" signal present at the "LEFT/AMI" line in jack. This indicator is very useful for basic system trouble shooting.
- 10 ER. This light indicates a condition has occurred within the Pianomation system. It is normal for this light to turn on initially after powering the system on. The "ER" light should turn off within 3 seconds after turning the system on.

2000C Back Panel Description



NOTE: It is normal for this ER light to remain on when the power is turned off as well as when the 2000C is powered on without being connected to the Pianomation processor.

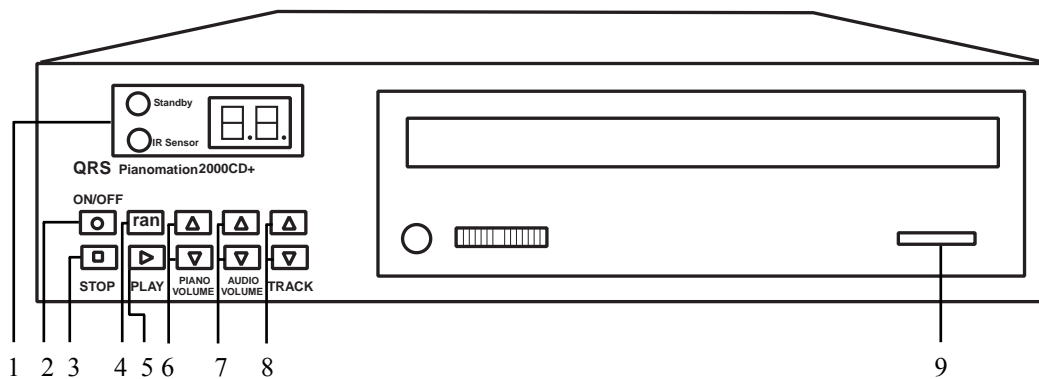
TIP: If the piano system will not play, check to make sure this light is not flashing. If it is flashing, a condition has occurred in the Pianomation system. Unplug the system from the AC outlet, wait 2 minutes and reconnect. Power up the system and if the condition occurs again, call your dealer or QRS tech support for instructions.

- 11 EXT IR SENSOR. This port provides you with the ability to add an optional remote control sensor. This is convenient when you want to hide the 2000C under the piano while retaining remote control functionality.
- 12 Power Inlet. This is where the low voltage end of the AC adaptor plugs in.

NOTE: Use only the power adaptor provided by QRS. An adaptor with the incorrect characteristics could result in damage to your system.

NOTES

2000CD Front Panel Description



Overview - The keypad is used for entering commands to the system. All of the main functions can be accessed from this keypad. These functions are repeated on the handheld remote control. (See the remote control manual for a description of remote control functions).

The Display Area provides the following information to the user:

Standby indicator lights when power is off. When power is turned on the two digit display lights up and standby light goes out.

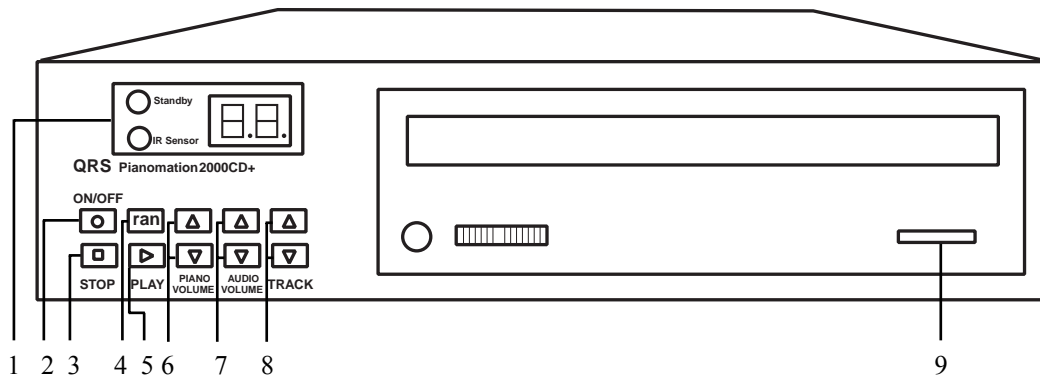
The two segment LED displays how many tracks are on a disc, which track is currently playing or a mode and value when an adjust mode is active such as Bass, Treble, Volume etc.

Included at the bottom corner of each display segment is a LED dot. The left most segment dot blinks when the 2000CD+ is receiving IR signal from the remote control and the right most segment dot blinks when the CD is being played, indicating the drive is active.

Also included in the display area is the IR Sensor. There is no light associated with this sensor but be aware not to cover or block this area as it will inhibit the remote control function.

- 1 The Standby Light is lit when the system is off. It will turn off when the ON/OFF button is pressed to turn the Pianomation system ON.
- 2 POWER - When in standby mode, pressing this button will power the Pianomation system ON. When the Pianomation system is ON, pressing this button will shut system off and the standby light will turn on.
- 3 STOP - Stops the compact disc when playing from the internal CD drive.
- 4 RAN - Use this button to enter random play mode. The CD will play once through the disc in a random order. Pressing STOP will cancel the random play mode.
- 5 PLAY -When in stop mode, pressing this button will start playing track one of the CD. Pressing the Play button when the disc is playing will enter the PAUSE mode. Press play one more time to start the disc playing. When in PAUSE, the two digit display flashes every second to indicate that the unit is paused.

2000CD+ Front Panel Description



- 6 PIANO VOLUME UP and DOWN - Pressing these buttons will raise and lower the piano volume respectively. Pressing both buttons simultaneously will reset the piano to its optimum performance setting.
- 7 AUDIO VOLUME UP and DOWN - Pressing these buttons will raise and lower the audio volume respectively. Pressing both buttons simultaneously will reset the audio to its optimum performance setting.

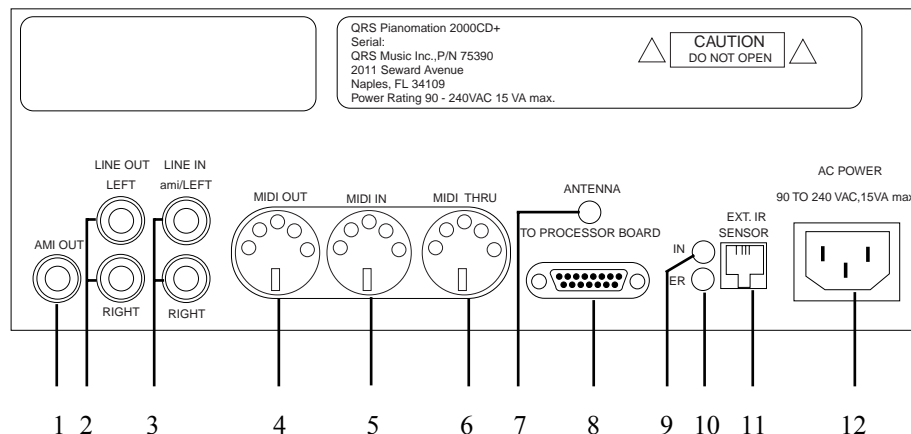
NOTE: (To make small adjustments, quickly tap the buttons. Holding the buttons down for any length of time will scan through the volume range rapidly.)

- 8 TRACK UP and TRACK DOWN - Pressing these buttons will skip through each track of the CD respectively.

NOTE: (To select one track at a time, quickly tap the buttons. Holding the buttons down for any length of time will scan through the discs tracks rapidly.)

- 9 EJECT - This button will open and close the CD tray.

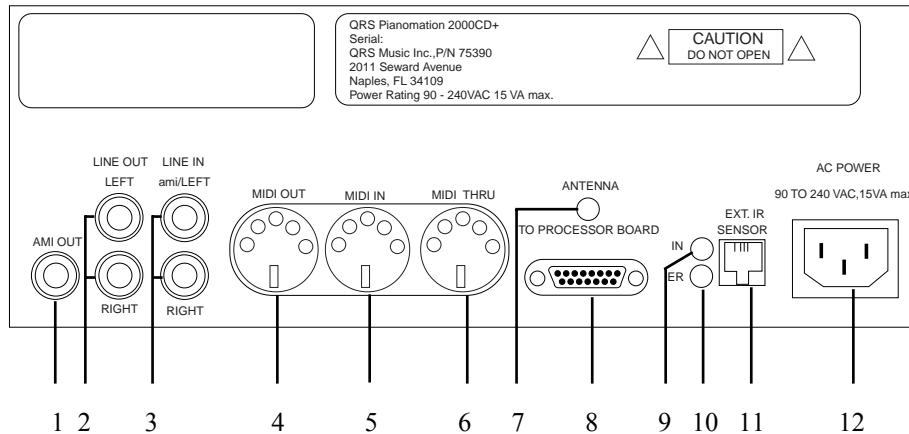
2000CD+ Back Panel Description



- 1 AMI OUT - This RCA connector provides access to the AMI signal. The AMI is the encoded MIDI information that makes the piano play. Use this connection to interface with a wireless transmitter, QRS coin-op equipment or recording equipment. This signal is output at a nominal level of 150mv.
- 2 LINE OUT/ LEFT and RIGHT - This pair of RCA connectors provides standard line level signal to feed an amplifier / speaker system such as a home entertainment system or powered speakers. The signal at these connectors is dual mono when playing a QRS Pianomation disc and true stereo when playing a standard music CD or when receiving a non QRS signal from an external source. Whatever the input source, the 2000CD+ applies volume and tone control to these outputs.
- 3 LINE IN, AMI / LEFT - This connector provides a means of receiving an AMI signal from an external source such as a VCR or remotely located CD player. When an external source is received at this connector and is recognized as an AMI signal, the 2000CD+ automatically switches its LINE OUTPUT (2 & 3) to dual mono. This allows both left and right speakers in a system to produce sound without the need for a manual source selector. When the signal is a standard music source not containing an AMI signal, the LINE OUTPUT (2 & 3) automatically switches to true stereo.

LINE IN RIGHT - This connector is used for the right channel of an external source. This input does not detect for AMI signal but only provides a way of bringing in the right channel music of a QRS CD or standard music CD. NOTE: For the LINE INPUT to be functional, you must select "IN" from the F1 menu or press STOP then TRACK on the front panel.
- 4 MIDI OUT - is a standard MIDI output to drive external devices. Its source is either the internal CD or LEFT/AMI LINE INPUT.
- 5 MIDI IN - is a standard MIDI input. Use this input to drive the Pianomation system from an external MIDI source such as a computer. NOTE: This input is always active, Using this input at the same time the 2000CD+ is receiving signal from its internal CD or an external source is not recommended.

2000CD+ Back Panel Description



6. MIDI THRU - is a duplicate of the MIDI being received at the MIDI IN connector.
7. ANTENNA - For future use.
8. TO PROCESSOR BOARD - This DB-15 connector is connected to the Pianomation processor.
NOTE: DO NOT CONNECT THIS TO ANY OTHER DEVICE AS DAMAGE TO THE UNIT WILL OCCUR.
9. IN - This indicator light should be lit whenever the 2000CD+ is playing from its internal CD or when it is receiving AMI signal at its LEFT/AMI LINE IN. This light is helpful in troubleshooting problems such as defective audio cables, CDs, external CD players, etc.
10. ER - This indicator should remain off during normal use of the Pianomation system. The ER light does not indicate any conditions with the 2000CD+. When "on", this light indicates a condition with the Pianomation system itself. See Pianomation user manual for error descriptions.
11. EXT. IR SENSOR - This port makes it possible to locate the 2000CD+ in a hidden position and still maintain line of sight operation from the hand held remote control.
12. AC POWER - Connect the 2000CD+ to your 120 VAC wall outlet with the provided power cable only. This IEC power inlet is compatible with line voltage ranging from 90 to 240 AC, 50 or 60hz. This wide input range makes international usage trouble free.

Warranty

Limited Warranty

2000C/2000CD+™ Limited Warranty

QRS Music Technologies, Inc. (Manufacturer) warrants 2000C/2000CD+ products to be free of manufacturing defects in material or workmanship as described below:

If your 2000C/2000CD+ product should prove defective in material or workmanship within two (2) years from the date of purchase, manufacturer will provide replacement parts without charge, upon verification and presentation of satisfactory proof of purchase.

Manufacturer will provide, or arrange for, service (labor) to correct defects in workmanship for a period of one (1) year at no cost.

This warranty does not apply to defects resulting from abuse, neglect, accident, improper repair, modification or unreasonable use of the unit resulting in cracked or broken case parts or units damaged by excessive heat or humidity.

This warranty also does not cover routine tuning or adjustments required because of normal use and wear or damage caused by any repair or service by anyone other than a 2000C/2000CD+ dealer.

This warranty, and the extent of the responsibility of the Manufacturer hereunder, are subject to the following conditions and limitations:

This warranty is non-transferable and extends only in favor of the original owner and shall be valid only if the product is purchased from an authorized 2000C/2000CD+ dealer and remains in the possession of the original owner. It is the owner's responsibility to establish the date and place of purchase.

This warranty is void if the serial number has been altered or removed, if the product is modified in any manner which Manufacturer concludes, after inspection, affects the reliability of the product, if the product has been repaired or serviced by anyone other than a 2000C/2000CD+ dealer or if the product is damaged because of improper operation and/or maintenance in accordance with the owner's manual.

Manufacturer reserves the right to make changes in design and/or improvements upon its products without obligation to include these changes in any products previously manufactured.

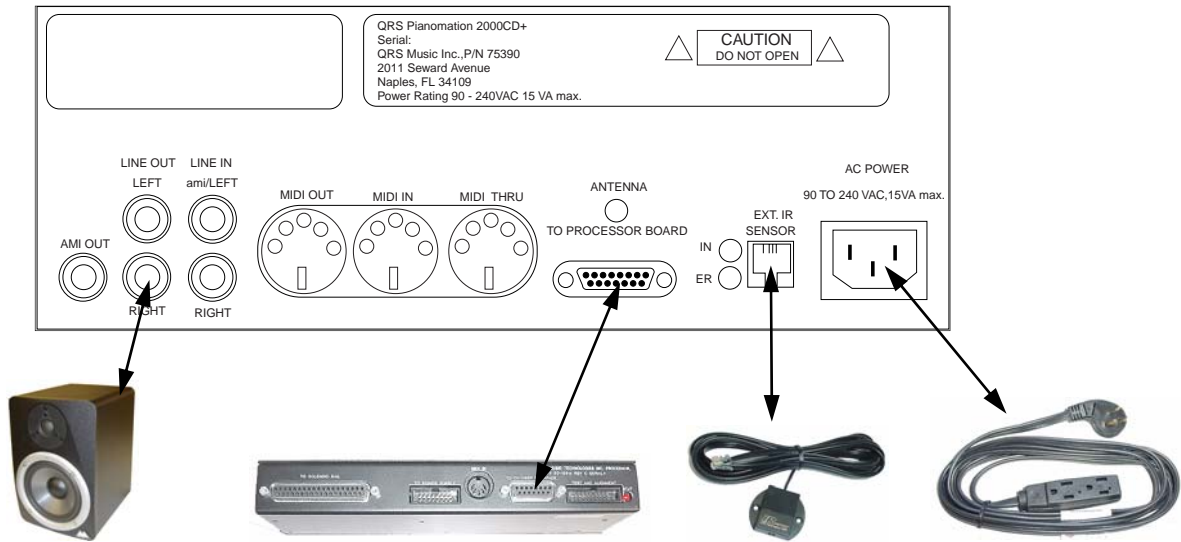
Except to the extent prohibited by applicable law, all implied warranties made by Manufacturer in connection with this product are limited in duration to the applicable warranty period set forth before, and no warranties, whether expressed or implied, including warranties of MERCHANTABILITY or fitness for particular purposes, shall apply to this product after said has expired. The consumer's sole remedy shall be such replacement of defective parts as is expressly provided above; and under no circumstances shall manufacturer be liable for any special, incidental, or consequential loss or damage. Some states do not allow limitations on how long an implied warranty lasts or the exclusion of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you also may have other rights which vary from state to state.

This warranty is the only one you will receive and no other warranty is made to you. Manufacturer does not authorize any person to modify, either orally or in writing, the terms of this warranty.

To obtain warranty service for your 2000C/2000CD+ product:

- 1 Contact the 2000C/2000CD+ dealer from whom you purchased the product, or the nearest authorized dealer.
- 2 If no dealer is near you, call Manufacturer at (239)597-5888.
- 3 Do not attempt to repair or disassemble product yourself. Do not ship product without prior written authorization from the Manufacturer.
- 4 Do not dispose of this warranty after it expires. In the event your product requires service, these instructions should be helpful in enabling you to obtain proper service.

Basic 2000CD+ Piano Hookup



The self amplified speaker (Cat. No. 71040) is mounted on one of the beams under the piano. It is connected by a standard RCA audio cable. The power cord from the speaker is plugged into the Pianomation power supply.

The 2000CD+ must be connected to the Pianomation Processor. (cat. No. 60108) This is done with a DB15 User Box Cable (Cat. No. 811460). The Processor is mounted on the one of the beams under the piano.

Optional External IR Sensor (Cat. No. 70394) This can be mounted anywhere on the piano to make it more convenient for you to use your remote to control the 2000CD+. It plugs in like a phone jack.

This cord provides power to the 2000CD+ and the Pianomation System. It must be plugged into the extension cord provided. **DO NOT PLUG IT INTO THE POWER SUPPLY.**

Cables Required

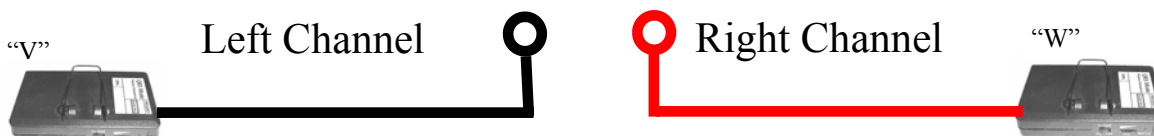
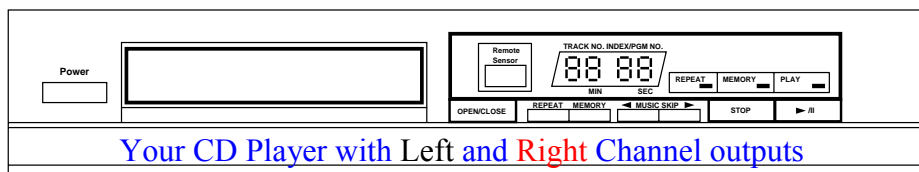
Item	Cat. No.
6 Ft Male RCA to Male RCA cable	70131
User Box Cable	70329
Power Cord	70214
Extension Cord	70348

Basic 2000CD+ Piano Hookup W/Dual Wireless

This hookup is used if you want to use an external CD Player to operate your Pianomation System. It will transmit the piano signal and the background music to the piano wirelessly.

Parts required: Cat. No. 50088 & 50089 Transmitters and Receivers.

A Smart Switch (Cat. No. 78000) can be used with a multi disc player if you want to mix normal CDs with Pianomation CDs. This requires no button pushing to eliminate the piano signal from the speakers.



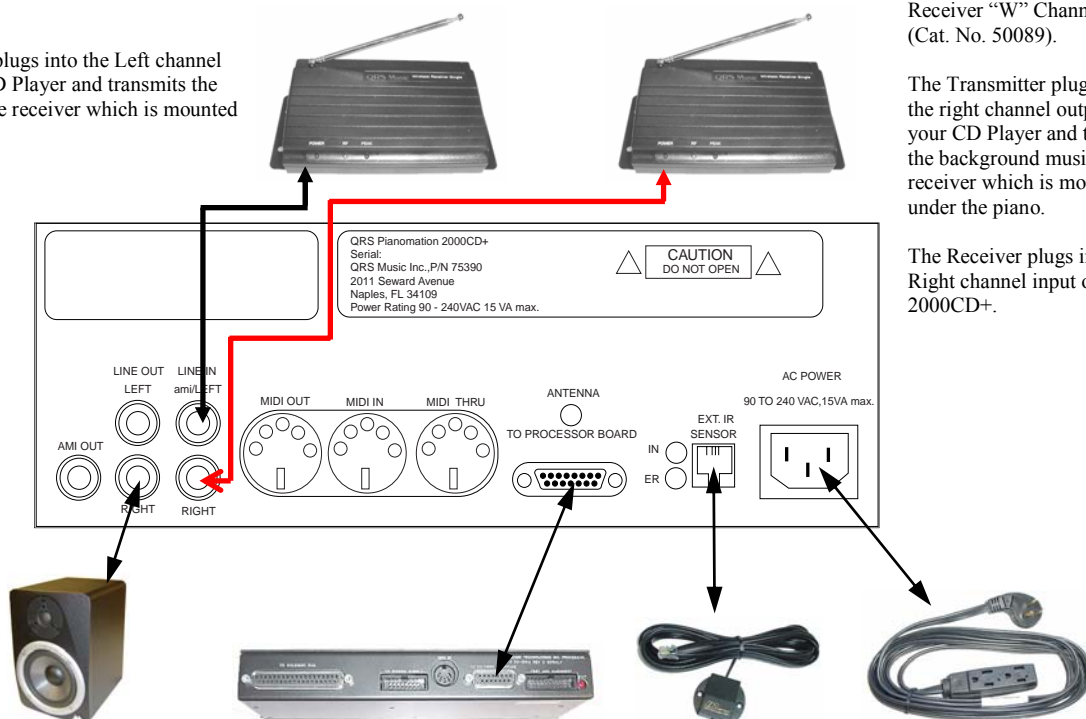
Wireless Transmitter / Receiver "V" Channel (Cat. No. 50088).

The Transmitter plugs into the Left channel output of your CD Player and transmits the piano signal to the receiver which is mounted under the piano.

Wireless Transmitter / Receiver "W" Channel (Cat. No. 50089).

The Transmitter plugs into the right channel output of your CD Player and transmits the background music to the receiver which is mounted under the piano.

The Receiver plugs into the Right channel input on the 2000CD+.



The self amplified speaker (Cat. No. 71040) is mounted on one of the beams under the piano. It is connected by a standard RCA audio cable. The power cord from the speaker is plugged into the Pianomation power supply.

The 2000CD+ must be connected to the Pianomation Processor. (cat. No. 60108) This is done with a DB15 User Box Cable (Cat. No. 811460). The Processor is mounted on the one of the beams under the piano.

Optional External IR Sensor (Cat. No. 70394) This can be mounted anywhere on the piano to make it more convenient for you to use your remote to control the 2000CD+. It plugs in like a phone jack.

This cord provides power to the 2000CD+ and the Pianomation System. It must be plugged into the extension cord provided. **DO NOT PLUG IT INTO THE POWER SUPPLY.**

Basic 2000CD+ Piano Hookup W/Wireless Transmission From Your Computer.

This hookup is used if you want to use a computer to operate your Pianomation System from another room. It will transmit the piano signal to the piano wirelessly.

Parts required:

Cat. No. 50088 Transmitter / Receivers.

Cat. No. 50060 AMI

Cat. No. 50105 Female Midi Game Cable.

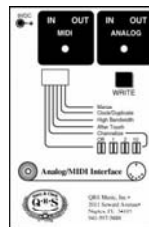


Step 1
Plug cable into
Sound Card



MIDI Game Cable
Cat. No. 50105

Step 2
Plug male MIDI
connector into
MIDI IN on the AMI

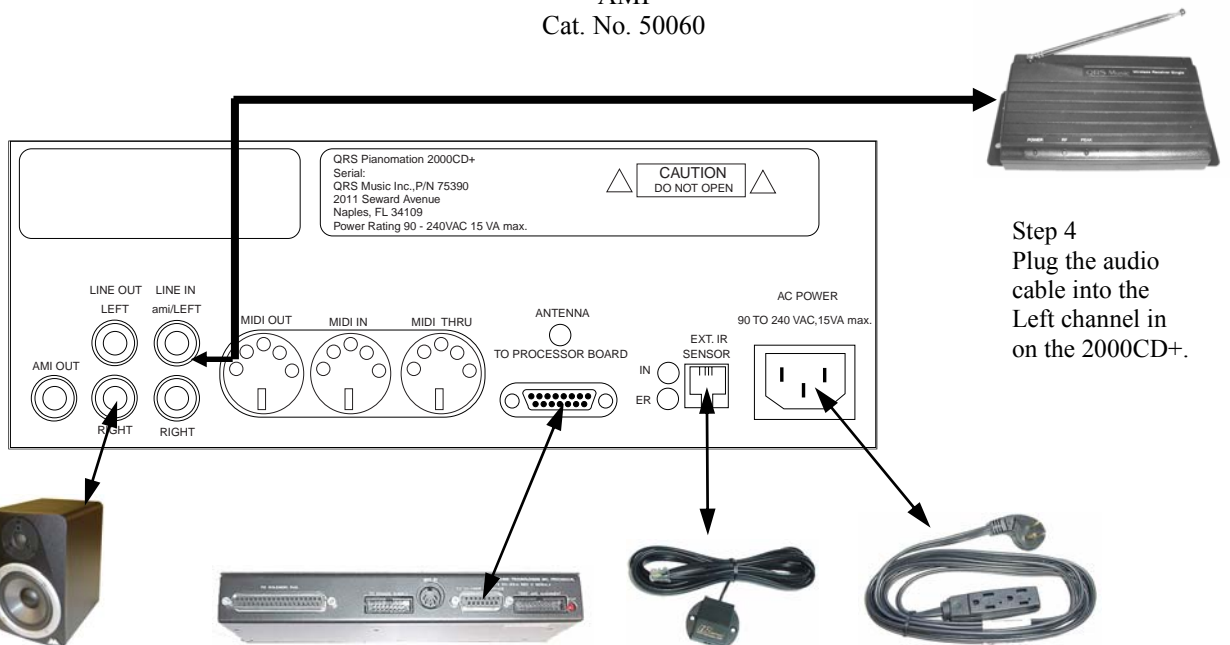


AMI
Cat. No. 50060

Step 3
Plug the audio
cable into the
tape out of the
AMI



Wireless
Transmitter /
Receiver
Cat. No. 50088



Step 4
Plug the audio
cable into the
Left channel in
on the 2000CD+.

The self amplified speaker (Cat. No. 71040) is mounted on one of the beams under the piano. It is connected by a standard RCA audio cable. The power cord from the speaker is plugged into the Pianomation power supply.

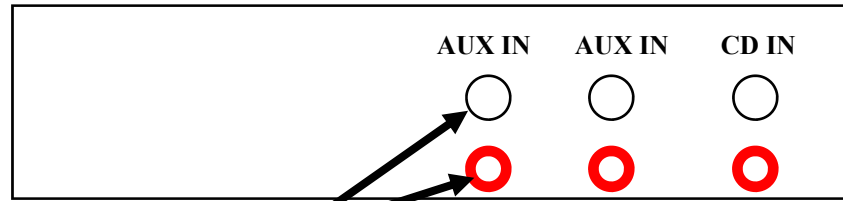
The 2000CD+ must be connected to the Pianomation Processor. (cat. No. 60108) This is done with a DB15 User Box Cable (Cat. No. 811460). The Processor is mounted on the one of the beams under the piano.

Optional External IR Sensor (Cat. No. 70394) This can be mounted anywhere on the piano to make it more convenient for you to use your remote to control the 2000CD+. It plugs in like a phone jack.

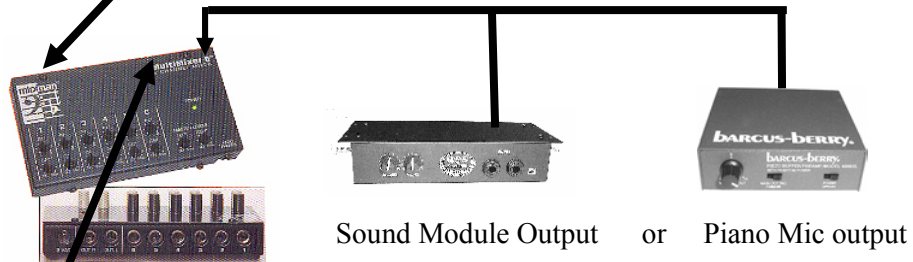
This cord provides power to the 2000CD+ and the Pianomation System. It must be plugged into the extension cord provided. **DO NOT PLUG IT INTO THE POWER SUPPLY.**

Adding an external sound module or a microphone, mixing with the background music to broadcast through the home or establishment.

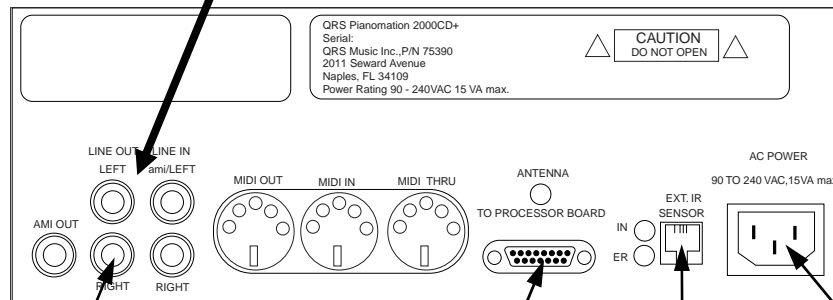
Amplifier



Audio Output plugs into the audio input of the mixer



Background Music plugs into the mixer input.



The self amplified speaker (Cat. No. 71040) is mounted on one of the beams under the piano. It is connected by a standard RCA audio cable. The power cord from the speaker is plugged into the Pianomation power supply.



The 2000CD+ must be connected to the Pianomation Processor. (cat. No. 60108) This is done with a DB15 User Box Cable (Cat. No. 811460). The Processor is mounted on the one of the beams under the piano.



Optional External IR Sensor (Cat. No. 70394) This can be mounted anywhere on the piano to make it more convenient for you to use your remote to control the 2000CD+. It plugs in like a phone jack.



This cord provides power to the 2000CD+ and the Pianomation System. It must be plugged into the extension cord provided. **DO NOT PLUG IT INTO THE POWER SUPPLY.**

QRS Player Accessories

1. Self-Powered Speaker (Cat. No. 71040)

USE: This speaker mounts under the piano and amplifies the orchestrated music. Mounting Bracket included.



2. Wireless Transmitter/Receiver (Cat. No. 50088 or 50288)

USE: This unit is used for home hookups using the customer's CD Player to send the MIDI signal to the piano.



3. Wireless Transmitter/Receiver (Cat. No. 50089 or 50289)

USE: This unit is used for home hookups, using the customer's CD Player to send the audio background music to the piano's speaker.



4. IR Sensor (Cat. No. 70394)

USE: The IR sensor can be located anywhere on the piano to extend the use of the remote control to different parts of the room.



5. Pedal Solenoid (Cat. No. 70130)

USE: Raises and lowers the damper tray.



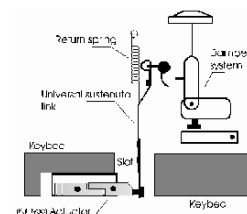
6. Sostenuto Cable Trap work

Push Type (Cat. No. 70895)

Pull Type (Cat. No. 70896)

Steinway Type (Cat. No. 70897)

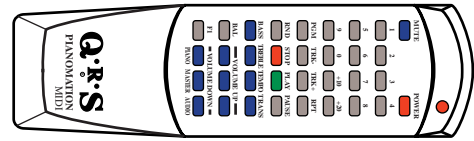
USE: To make the sostenuto functional.



QRS Player Accessories

1. Remote control (Cat. No. 71398)

USE: Controls the Serenade CD



2. Opto Isolator (Cat. No. 70411)

USE: This unit is used for home hookups when the CD player is connected to the QRS Player System with a hard wire setup. Used in the case where a hard wire setup results in sporadic play, eliminating grounding issues.



3. Smart Switch (Cat. No. 78000)

USE: This device will automatically switch from several different sources (i.e., CD player, VCR, PC...). Will also switch between audio CDs and Pianomation CDs.



4. Barcus Berry Piano Mic (Cat. No. 70046)

USE: Picks up the piano sound off the soundboard. Used for amplifying the piano/orchestrated music through a stereo.



5. Piano / Audio Mixer (Cat. No. 70530)

USE: Balances the background music with the piano music for amplifying the piano sound through a stereo.



6. PianoTunes (Cat. No. 78500)

USE: Does your MIDI player piano play too loud? PianoTunes will give you the volume control of a stereo. Consists of Mute Rail and Sound Module. Speaker required



To order call 1-800-247-6557

QRS Player Accessories

1. CD Keyboard Player (Cat. No. 70381)

USE: This allows QRS CDs to be played on non Pianomation systems. (i.e., MIDI keyboards, Disklavier, Pianodisc).



2. Analog to MIDI Interface (Cat. No. 50060)

USE: To make your own Pianomation CDs or used for transmitting MIDI wirelessly from a computer (MIDI Interface required).



3. Macintosh MIDI Interface (Cat. No. 50096)

USE: Connects to a Macintosh printer or modem port and provides MIDI IN and MIDI OUT capabilities.



4. PC/Windows MIDI Interface (Cat. No. 50123)

USE: Connects to the USB of a PC and provides MIDI IN and MIDI OUT capabilities.



5. Sound Card MIDI Cable (Male) (Cat. No. 50105)

USE: Connects to the joy stick port of your PC's sound card and gives you the capability of MIDI IN and OUT.



6. Sound Card MIDI Cable (Female) (Cat. No. 50115)

USE: Connects to the joy stick port of your PC's sound card and gives you the capability of MIDI IN and OUT. MIDI cable required.



7. MIDI Cables

1 ft (Cat. No. 70150) - 3 ft (Cat. No. 70151) - 5 ft (Cat. No. 70371) - 10 ft (Cat. No. 70152) - 20 ft (Cat. No. 70153) - 50 ft (Cat. No. 70154) - 100 ft (Cat. No. 70155)

USE: Generally used to connect PCs/Floppy disk players to QRS Player System or Directly to the Pianomation MIDI Processor.



QRS Player Accessories

1. Orchestrated Cable Pack (Cat. No. 70207)

USE: This pack is used for home hookups. It allows the customer to select between audio CDs and QRS CDs on their stereo amplifier.



2. Audio Cables Male to Male RCA

3ft (Cat. No. 70133) - 6ft (Cat. No. 70131) - 12ft (Cat. No. 70134) - 20ft (Cat. No. 70135)

USE: For connecting CD, Video & DVD Players to The QRS Player System.



3. Audio cables Twin Male RCA to RCA (Cat. No. 70209)

USE: For connecting CD, Video & DVD Players to QRS Player System. This is for both left and right channels.



4. Audio Cable Splitter 1 Male to 2 Females (Cat. No. 70213)

USE: For splitting the outputs of the CD, Video & DVD players.



5. Mini Stereo cable to Left & Right Male RCA (Cat. No. 70367)

USE: Plugs into a portable CD player and splits the cable into left & right male RCA connectors.



6. RCA Barrel Connector (Cat. No. 70166)

USE: Joins 2 male audio cables together.



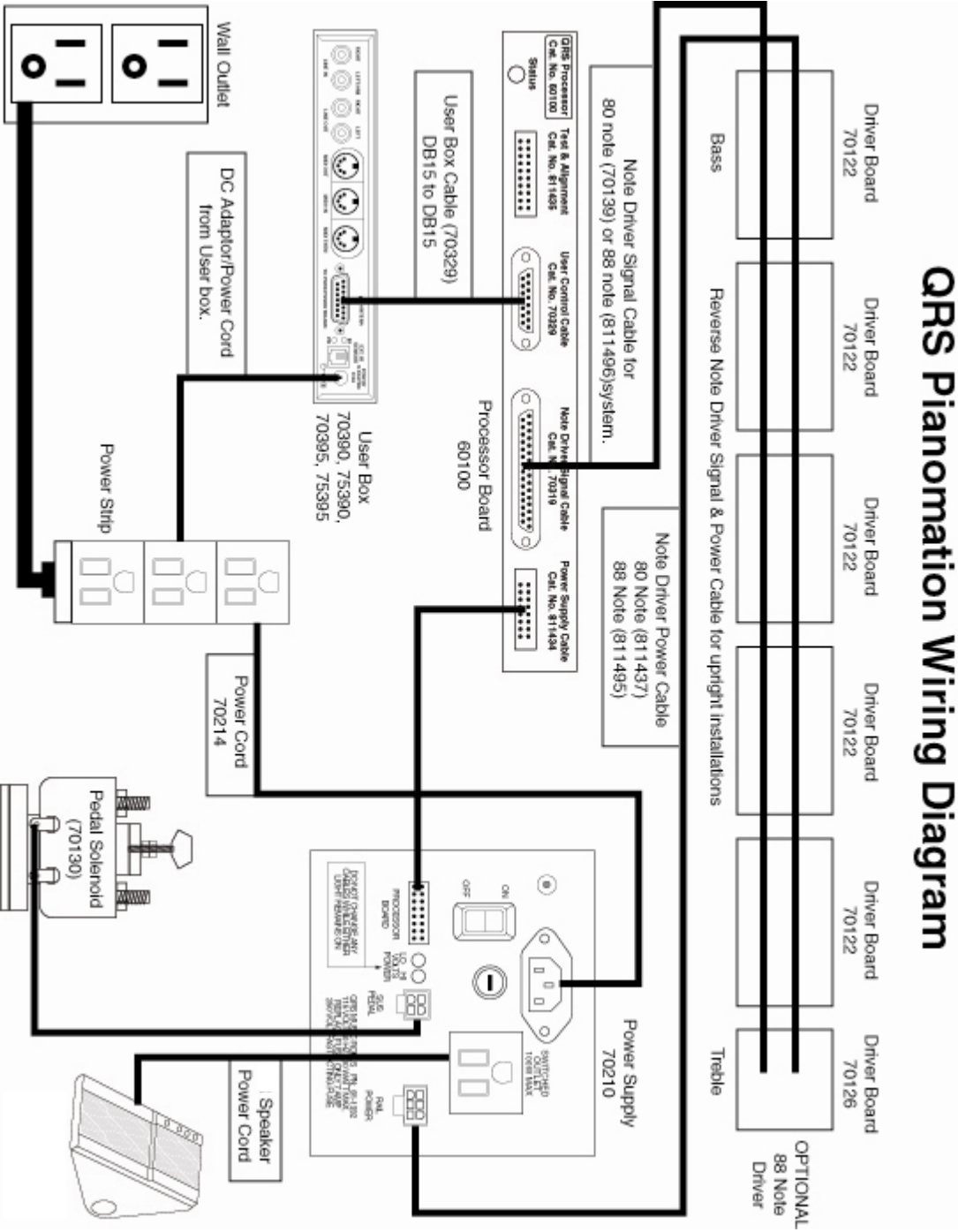
7. MIDI Barrel Connector (Cat. No. 70158)

USE: Joins 2 MIDI cables together. USE: This pack is used for home hookups. It allows the customer to select between audio CDs and QRS CDs on their stereo amplifier.



To order call 1-800-247-6557

Pianomation Wiring Diagram



Helpful Hints

Troubleshooting

If you have difficulty operating your 2000C, 2000CD+, thoroughly read the Owner's Guide. If you cannot locate and solve the problem, it is suggested that all accessible cables be checked for proper and tight connections. If one CD does not function properly, you should try another CD to see if the problem is related to the CD that you are attempting to play. Next, see if any of the symptoms listed below apply to your situation. Some symptoms apply only to the 2000CD+. If not, you may call your local dealer or QRS Music Technologies, Inc. at 239-597-5888.

IMPORTANT CAUTION:

Take precautions when working close to high-performance audio equipment because very high sound pressure levels can be unexpectedly produced. Temporary or even permanent hearing damage may result. Turn the power off whenever you are checking connections or control positions in, under, or close to the player system. Any testing, adjustments, or service not described herein must be referred to a qualified service technician.

Symptom	Remedy
2000C/2000CD+ will not power on from the power button on the front of the unit or the remote.	<ul style="list-style-type: none"> • Make sure the power cord is plugged into a functioning AC receptacle. • Make sure the power supply connector is firmly plugged into the jack on the back of the 2000C/2000CD+ labeled "DC 12 V 1A". • Make sure the power switch on the power strip mounted on the underside of the piano (grand pianos) is in the ON position.
2000C/2000CD+ will power on from the power button on the front of the unit but NOT from the remote.	<ul style="list-style-type: none"> • Make sure you aim the remote at the front of the 2000C/2000CD+ when you press the POWER button. • Replace batteries in the remote with two AAA alkaline batteries.
2000C/2000CD+ display functions but piano keys will not move and there is no sound from the speaker after a CD is inserted into the player.	<ul style="list-style-type: none"> • Press the PLAY button. Current track is displayed and right period flashes. • Press the VOLUME UP button on the remote control several times until the display reads U7. If piano begins to play, adjust volume to the desired level. • Make sure the CD SOURCE has been selected. Press the CD button on the remote until C1 or C2 is displayed. • Switch the 2000C/2000CD+ OFF. Make sure that the solenoid system cord is connected to the back of the 2000C/2000CD+ at the connector labeled "TO PROCESSOR".
2000C/2000CD+ will not respond to the remote, or does so intermittently.	<ul style="list-style-type: none"> • Make sure the remote is pointed towards the front of the 2000C/2000CD+ when pressing the buttons. • Replace batteries in the remote with two AAA alkaline batteries.
Piano keys move but there is NO SOUND from the speaker – the background orchestration is not present.	<ul style="list-style-type: none"> • Press the BALANCE UP button on the remote until the display shows b7 or higher. • Switch the Serenade CD OFF. Make sure the speaker audio cable is plugged into the OUT L jack on the back of the Serenade CD . • Make sure the CD you are playing has orchestration (See Software Catalog for description). • Switch the 2000C/2000CD+ OFF. Make sure the speaker is plugged into the power strip and the speaker power switch is turned on. Also check that the volume control of the speaker is set at about ¾ of full clockwise rotation.
Some piano notes will not play properly.	<ul style="list-style-type: none"> • Increase the volume setting to at least half volume. • Contact the dealer and arrange to have a 2000C/2000CD+ technician recalibrate your player using a specially designed Calibration Box.
The speaker produces an irritating "squeal" during play.	<ul style="list-style-type: none"> • 2000C/2000CD+ can play two types of player piano CD formats. Usually, the player is able to automatically detect which type has been loaded. Some CDs may "fool" the auto detection process, most often because of the presence of dirt or scratches on the CD. A squeal-like noise is the result. When this happens it is necessary to manually select the correct CD format referred to as C1 or C2 on the display of the Serenade CD . Press the CD source button repeatedly to select the alternate CD source.
CD will not eject.	<ul style="list-style-type: none"> • Lightly press a stout wire, such as a straightened paper clip into the hole in the front of the drive door. The drive door will unlatch and the CD can be removed. If problem persists, call service.
CD play "skips" or is erratic.	<ul style="list-style-type: none"> • Check that the CD playing surface is clean and free of scratches. Use CD cleaner if necessary. • Check that the CD drive is clean, free of dust, dirt, lint, hair, etc. Use a CD drive cleaner if necessary. • Check that there are rubber grommets between the piano keybed and the 2000C/2000CD+ mounting brackets, if not, call service.

Pianomation/Piano Information

Date: _____

Type of piano _____

Make of piano _____

Finish of piano _____

Serial number of piano _____

Piano purchased from: _____

Piano Tuner/Tech. _____

Pianomation Tech. _____

Serial number of Pianomation _____

Serial number control box _____

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