

*Symphonia*

SXP 511  
SXP 411  
SXP 311  
SXP 321  
SXP 211

SAMICK  
**DIGITAL PIANO**

**OWNER'S MANUAL**

## CONGRATULATIONS!

We greatly appreciate your purchase of the SAMICK SXP511, 411, 311 Digital Piano.

The SXP511, 411, 311 is a Digital Piano that has a beautiful, realistic sound created using E-MU's highly acclaimed sampling technology.

Before you play the piano, we suggest reading this manual thoroughly. Specific attention should be given to "Section 2-Safety & Precautions". Also included in this manual are some simple trouble-shooting instructions to assist with any minor operational problems. Your patronage is highly valued and we hope the SAMICK SXP511, 411, 311 will give you many years of superb musical enjoyment.

## TABLE OF CONTENTS

1. Safety Instructions .....	1
2. Features .....	2
3. Trouble shooting .....	3
4. Control functions .....	4~6
5. Using the SXP controls .....	7~22
6. Auxilliary input and output ports .....	23~24
7. General MIDI Program Map .....	25
8. Drum Map .....	26
9. About MIDI .....	27~30
10. MIDI implementation chart .....	31
11. Specifications .....	32



## IMPORTANT SAFETY INSTRUCTIONS

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, or near a swimming pool, or the like.
4. This product should be used only with a cart or stand that is recommended by the manufacturer.
5. 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.
6. The product should be situated so that its location or position does not interfere with its proper ventilation.
7. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. 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.
10. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
11. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
12. The product should be serviced by qualified service personnel if ;
  - A. The power-supply cord or the plug have 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.
13. Do not attempt to service the product beyond that which is described in the user-maintenance instructions.  
All other servicing should be referred to qualified service personnel.



## I. FEATURES

The Samick digital piano series features incredibly accurate reproduction of acoustic piano sounds with the control and nuance of a traditional grand piano.

There are 128 different voices available in the SXP Digital Piano. Some are samples (digital recordings) of musical instruments, some are samples of human voices, some are synthesized (electronically created) musical sounds, and some are special effects, like 'Gun Shot' or 'Applause'. Additionally, there are 61 drum and rhythm instrument sounds. You can access Voices by pressing the buttons labeled with musical instrument names to the right of this screen.

The Sequencer allows you to record songs containing up to 20,000 notes, on up to 8 separate tracks. The Disk Drive allows you to save recordings or Panel Memories to a disk, and to recall (load) recordings or Panel Memories from a disk.

The Samick digital pianos feature a host of computerized functions that make it both convenient to operate and great fun to play.

The Samick digital pianos feature weighted key actions that are specially balanced to duplicate the expressive qualities of the traditional acoustic piano. The instruments are fully touch sensitive, equipped with soft, sostenuto and sustain pedals and are educator approved for learning and performance use.

The design and features of the Samick digital pianos make them the most versatile instruments for the home available today. The Samick digital pianos are permanently tuned at the factory and provide the ability to practice in private with stereo headphones. From the piano student to the working professional, the Samick pianos bring the future into your home today!

### Primary Features of the SXP series Digital Piano:

- The piano touch, 88 keys and 3 pedals offer you the feeling as of acoustic piano.
- 32 voice polyphony
- The keyboard can be split across the full keyboard range.(user selectable split point)
- 128 Performance sounds with GM/GS compatibility
- 38 built-in Rhythms
- Digital recorder which can record and playback your playing in much the same way as a tape recorder.
- 2D or 2HD floppy disk interface
- karaoke functions
- Metronome
- Versatile graphic LCD
- Transpose is adjusted in the range of  $\pm 12$  semitones, and tuning of  $\pm 50$  cents.
- 8 Panel memories
- Data wheel
- MIDI In/Out/Thru ports enable the SXP to be connected with other MIDI instruments.
- Line In and Line Out enable mixers, power amplifiers, or audio recorders to be connected.
- Mic jack allows the piano to function as a microphone amplifier.
- 2 stereo headphone jacks allow you to enjoy playing without disturbing others.



## 2. TROUBLE SHOOTING INSTRUCTIONS

Should your SXP511, 411, or 311 fail to operate properly, check these few simple points before calling a service technician:

### No Sound is Generated

- CAUSE

- a. The Master Volume control is set to the minimum position.
- b. The headphone is connected.

- WHAT TO DO

- a. Set the Master Volume control to the correct setting.
- b. Unplug the headphone from the phone jack.

### Unfamiliar Noise

- CAUSE

- a. Noise caused by other electronic equipment, i. e., refrigerators or microwaves.

- WHAT TO DO

- a. Plug the power supply cord into another electrical outlet.

### Radio And Television Interference

- CAUSE

- a. Television broadcasting or a radio station located nearby.
- b. Headphone or Line Out plug is not completely plugged into the jack.

- WHAT TO DO

- a. Relocate the position of the instrument. For example, if the instrument is located on an outside wall next to a window, move it away from the window. If the problem persists, call your local Samick dealer's authorized technician.
- b. Remove the plug.

### If the piano is connected to an external amplifier and there is no sound or the instrument is not function properly

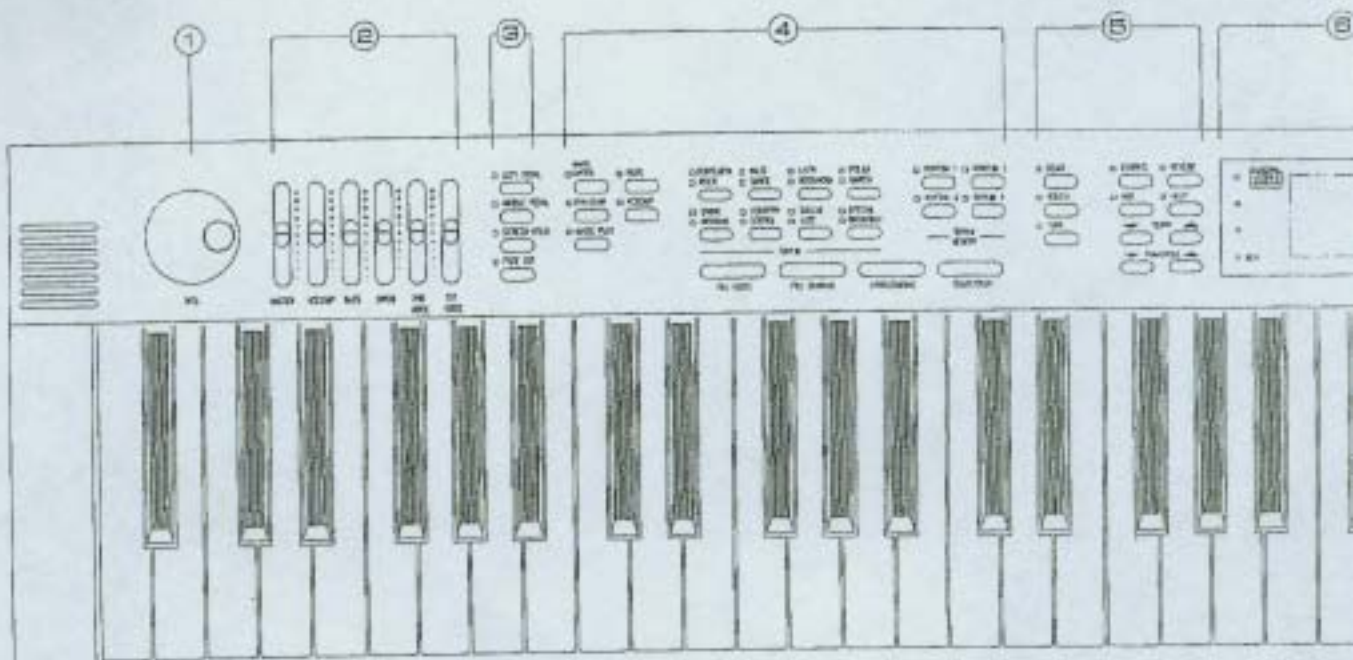
- CAUSE

- a. The Volume control is set the minimum level.
- b. The cord connected to the amplifier is defective.

- WHAT TO DO

- a. Set the Volume control to the correct setting.
- b. Replace the defective cord.

## 3. CONTROL FUNCTIONS



### 1. DATA WHEEL

Rotate Data Wheel to select among options on the display screen.

### 2. VOLUME SLIDERS

These six sliders control the volume levels of the various parts. As you raise the slider, the volume will increase.

### 3. PEDAL FUNCTIONS, SCREEN HOLD and FADE OUT

Left Pedal and Middle Pedal buttons access various pedal functions.

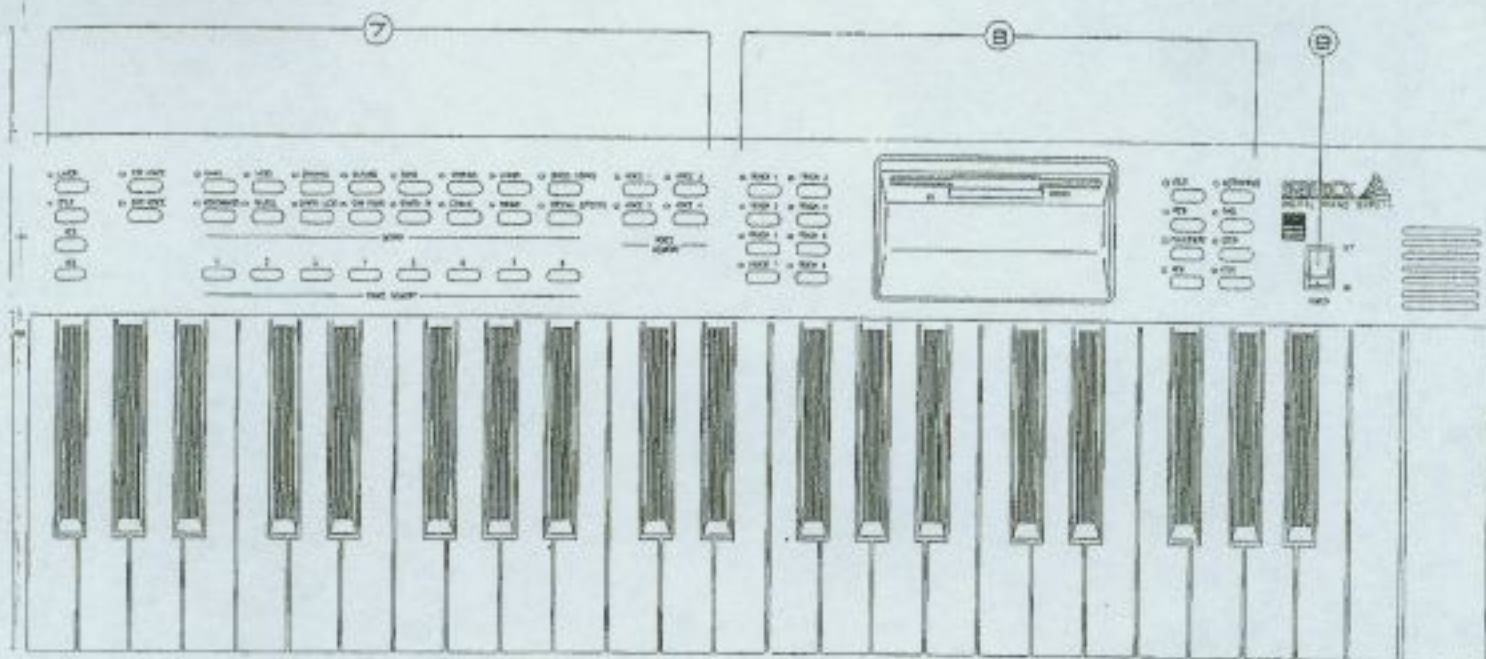
SCREEN HOLD gives you an additional time to make a selection.

FADE OUT reduce gradually the volume while you continue the play.

### 4. RHYTHM PROGRAMS

38 rhythm programs provide musical accompaniment of various styles.





## 5. MISCELLANEOUS FUNCTION

Use these functions to control various effects and sounds or set up the system parameters.

## 6. GRAPHIC DISPLAY SCREEN

The LCD(Liquid Crystal Display) displays important functions information and varies according to function selected.

## 7. SOUND

Used to select one among the 128 GM sounds.

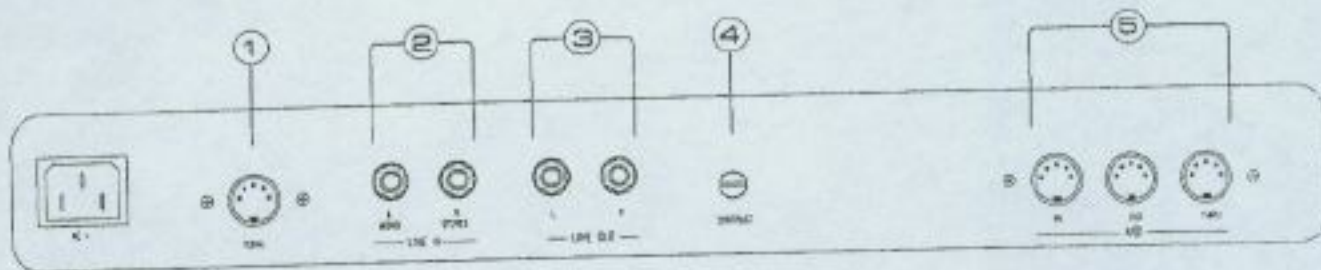
## 8. SEQUENCER

Digital Recorder used to record and play back songs.

## 9. POWER

This switch turns the instrument on and off.

**CONTROL FUNCTIONS**



**1. PEDAL JACK(SXP-511)**

Used to connect factory supplied pedal.

**2. LINE IN JACK**

For audio input from external sound sources such as cassette or CD players.

**3. LINE OUT JACK**

For audio output to external amplifiers or recorders.

**4. Graphic LCD Contrast**

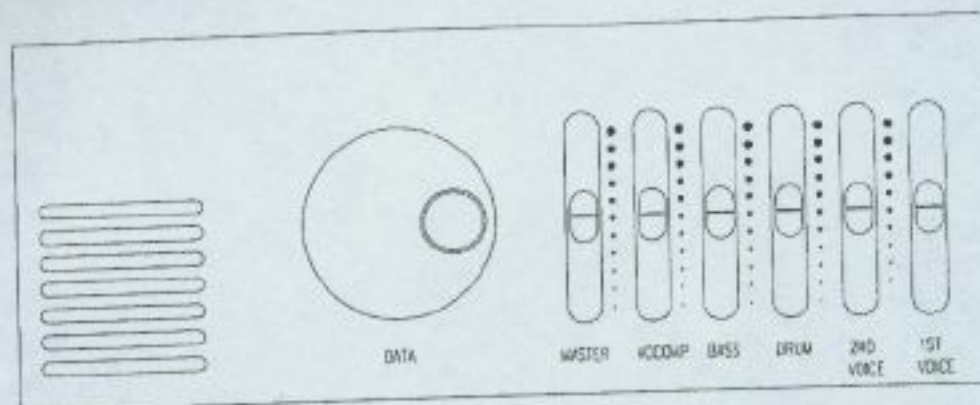
To adjust the contrast of graphic LCD(Liquid Crystal Display) in front panel.

**5. MIDI IN, OUT and THRU JACKS**

For connecting piano to various types of MIDI compatible products such as synthesizers, sequencers, drum machines or computers.



## 4. Using the SXP controls



### 1. DATA

Rotate Data Wheel to select among options on the display screen.

### 2. MASTER VOLUME

This slider controls the overall volume of your instrument. As you slide the lever to the up, the volume will increase.

The Master Volume slide controls the volume level of the speakers, headphone, and Line Out.

### 3. ACCOMPANIMENT VOLUME

This slider controls the volume level of the Accompaniment instruments in the selected rhythm.

### 4. BASS VOLUME

This slider controls the volume level of the Bass in the selected rhythm.

### 5. DRUM VOLUME

This slider controls the volume level of the Drums in the selected rhythm.

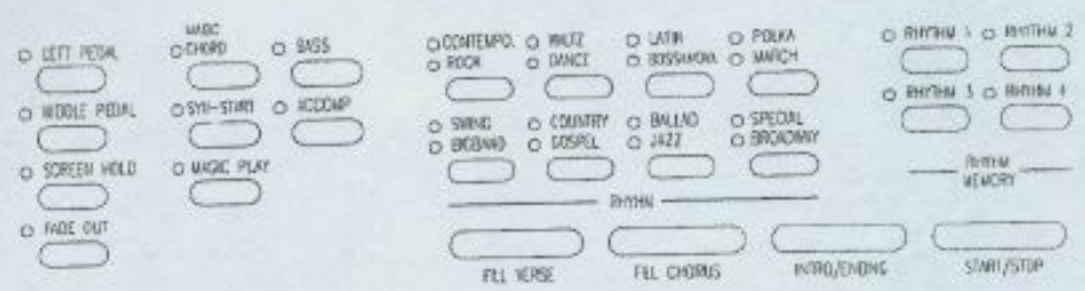
### 6. 2ND VOICE

This slider controls the volume level of the Left part of the keyboard in split mode or second voice in layer mode.

### 7. 1ST VOICE

This slider controls the volume level of the Right part of the keyboard in split mode or first voice in layer mode.

## Using the SXP controls



### 8. LEFT PEDAL

LEFT PEDAL allows you to assign the left pedal to control various functions as an alternative to its traditional 'Soft' function. After pressing LEFT PEDAL, follow the instructions on the screen. Use the Data Wheel to highlight your selection.

- Assign : 1. Soft Pedal ← default  
 2. Pitch Bend Down  
 3. Pedal Reverb  
 4. Organ Tremolo  
 5. Fill to Chorus  
 6. Rhythm Ending  
 7. Start/Stop

### 9. MIDDLE PEDAL

MIDDLE PEDAL allows you to assign the middle pedal to control various functions as an alternative to its traditional 'Sostenuto' function. After pressing MIDDLE PEDAL, follow the instructions on the screen. Use Data Wheel to highlight your selection.

- Assign : 1. Sustenuto ← default  
 2. Pitch Bend Up  
 3. Chorus Effect  
 4. Magic Harmony  
 5. Fill to Verse  
 6. Fade Out

### 10. SCREEN HOLD

SCREEN HOLD prevents the screen from returning to the Main Menu. Use this feature when you need additional time to make a selection.



## Using the SXP controls

### 11. FADE OUT

FADE OUT enables you to reduce the volume of the SXP Digital Piano to zero while you continue to play. It is normally used at the end of a song. Fade Out can be activated by pressing FADE OUT during a performance or by pressing the Middle Pedal if it has been assigned to Fade Out.

### 12. MAGIC CHORD

MAGIC CHORD allows the SXP Digital Piano to play a musical background accompaniment based on the chord (keys) you have played. The musical background programs are called Automatic Chord Accompaniments. Magic Chord will only function when the Rhythm has been activated, either by pressing START/STOP or by pressing SYN-START followed by a Key. Magic Chord has 3 modes. Single Finger Chord, Fingered Chord, and Full Keyboard Chord. Single Finger Chord and Fingered Chord will cause the keyboard to 'Split', allowing you to play the Automatic Chord Accompaniment with your left hand and the melody with your right hand. Full Keyboard Chord will allow you to play Automatic Chord Accompaniments without splitting the keyboard. This option is often preferred by musicians who play traditional piano styles.

#### 12-1. SINGLE FINGER CHORD

SINGLE FINGER CHORD allows you to hear an Automatic Chord Accompaniment on a major chord by playing any one key on the left side of the keyboard Split. To form a minor chord, play a key and the third key to its right concurrently.

To form a seventh(7) chord, play a key and the second key to its left concurrently. To form a minor seventh (m7) chord, play a key, the third key to its right and the second key to its left concurrently.

To form a major seventh (M7) chord, play a key and the key immediately to its left concurrently.

It is not necessary to hold the keys down after they have been played. The accompaniment will continue until you play a new chord

Remember: Magic Chord only works when the Rhythm has been activated, either by pressing START/STOP or by pressing SYN/START followed by a Key.

#### 12-2. FINGERED CHORD

FINGERED CHORD will allow you to hear an Automatic Chord Accompaniment on any of the following chords by playing the appropriate keys on the left side of the keyboard Split:

- Major, Minor,
- Seventh, Sus 4th
- Minor Seventh
- Major Seventh
- Diminished,
- Augmented



## Using the SXP controls

and several others. It is not necessary to hold the keys down after they have been played. The accompaniment will continue until you play a new chord.

### 12-3. FULL KEYBOARD CHORD

FULL KEYBOARD CHORD will allow you to hear an Automatic Chord Accompaniment by playing the appropriate keys anywhere on the keyboard. It is not necessary to hold the keys down after they have been played. The accompaniment will continue until you play a new chord.

### 13. MAGIC HARMONY

MAGIC HARMONY allows you to hear harmony notes when you play a single melody note. Single Fingered Chord or Fingered Chord must be engaged for this feature to work. To operate, press MAGIC CHORD and rotate the Data Wheel to select Magic Harmony. Press YES to turn Magic Harmony on or off, Press NO to return to the previous Menu

### 14. BASS & ACCOMP

BASS & ACCOMP buttons allow you to turn on or off the musical parts of the Magic Chord Automatic Chord Accompaniments. When Magic Chord is activated they will come on and the LED's will illuminate. To turn either or both of them off, press the respective button. The LED will go off. To turn them back on, press the button again.

### 15. SYN-START

SYN-START allows you to start the Rhythm Style and/or the Automatic Chord Accompaniment by playing a key, as an alternative to pressing START/STOP. SYN-START enables you to synchronize (SYN) the start of the accompaniment with the beginning of your song. When Syn-Start is engaged, the red LED (light) in the left of this screen will immediately flash the Tempo at which the Rhythm Style and/or the Automatic Chord Accompaniment will play. You can change the Tempo by pressing either of the TEMPO buttons.

### 16. MAGIC PLAY

MAGIC PLAY selects an appropriate Tempo, and melody Voice for the selected Rhythm Style. It also activates Magic Chord, Intro and Syn-Start. After pressing MAGIC PLAY, you need only to touch a key to begin playing.



**Using the SXP controls****17. FILL VERSE**

Each Rhythm Style (Contemp, Waltz, Latin, etc.) has two Rhythm Style and two Automatic Chord Accompaniment variations. They are called Verse and Chorus. Pressing FILL TO VERSE while the Rhythm and/or Automatic Chord Accompaniment are playing causes a Rhythm and/or Accompaniment fill to be heard and selects the Verse variation to immediately follow the fill.

**18. FILL CHORUS**

Pressing FILL TO CHORUS before pressing START/STOP selects the Chorus variation. Pressing FILL TO CHORUS while the Rhythm and/or Automatic Chord Accompaniment are playing causes a Rhythm and/or Accompaniment fill to be heard and selects the Chorus variation to immediately follow the fill.

**19. INTRO/ENDING**

Each Rhythm Style (Contemp, Waltz, Jazz Country, etc.) has an Automatic Chord Accompaniment introduction and ending. They are used to begin and end songs. Pressing INTRO/ENDING before pressing START/STOP causes introduction to be played when you press START/STOP. If you use SYN-START, the Intro will be heard using the chord you play. If you start by pressing START/STOP the Intro will be heard on a C chord.

Pressing INTRO-ENDING after the Rhythm Style and/or Automatic Chord Accompaniment has been started, causes Ending to be played.

**20. START/STOP**

Start/Stop will begin or end the Rhythm and/or Automatic Chord Accompaniment.

**21. RHYTHM STYLE**

Rhythm Style buttons each represent two categories of Rhythm Styles and Automatic Chord Accompaniments. Pressing a RHYTHM STYLE button once will access the first category and its LED will illuminate. Pressing RHYTHM STYLE again will access the second category and its LED will illuminate. To select a style, press a RHYTHM STYLE button. The Menu will display a Rhythm Style on the top line and will show additional choices on lower lines. Rotate the Data Wheel to make a new selection.

## Using the SXP controls

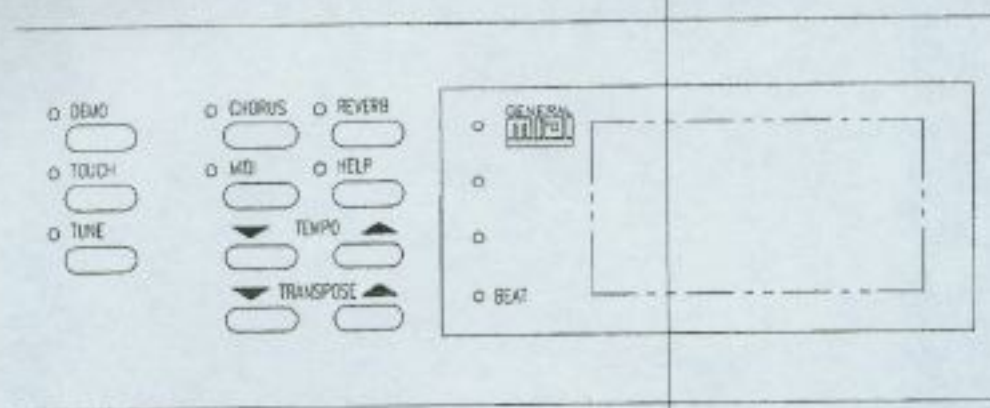
BUTTON	RHYTHMS	BUTTON	RHYTHMS
CONTEMPORARY	CONTEMPORARY POP BALLAD	SWING	SWING TEXAS SWING
ROCK	ROCK ROLL DISCO SLOW ROCK FUNKY	BIG BAND	BIG BAND BOOGIE
WALTZ	COUNTRY WALTZ BALLAD WALTZ SLOW WALTZ	COUNTRY	COUNTRY BLUEGRASS TRAIN COUNTRY ROCK
DANCE	DANCE SHUFFLE FOX TROT TANGO	GOSPEL	GOSPEL SLOW-GOSPEL FAST-GOSPEL
LATIN	LATIN CHA-CHA REGGAE SAMBA	BALLAD	SLOW BALLAD POP BALLAD
BOSSANOVA	BOSSANOVA SAMBA	JAZZ	JAZZ DIXIE
POLKA	POLKA FAST POLKA	SPECIAL	BAROQUE FUNKY
MARCH	MARCH MILITARY	BROADWAY	BROADWAY TANGO

**22. RHYTHM MEMORY**

RHYTHM MEMORY buttons enable you to store a Rhythm Style from within the Rhythm Style category Menu for instant recall. To store a style in RHYTHM MEMORY, select a style. Then press and hold a RHYTHM MEMORY button 1-4 for 3 seconds.



## Using the SXP controls



### 23. DEMO

The SXP Digital Piano contains demonstration songs that showcase its Voices, Rhythms, and Effects. To hear Demo songs, press DEMO and follow the instructions on the screen. If you select the Piano Demo, you can hear the demo played with various Voices by pressing VOICE keys after the Demo has been started. If you start with the Piano demo, the SXP Digital Piano will play all of the Demo songs consecutively and continue until you press STOP.

- List of Demo Song :
1. Piano ← default
  2. Dance
  3. Pop
  4. Star Man
  5. Style
  6. Symphony

### 24. TOUCH

TOUCH allows you to vary the response or touch sensitivity of the keyboard. To change the touch sensitivity press TOUCH and use the Data Wheel to select among option. Press YES to select the function. HARD will give the keyboard response characteristics similar to a concert piano. NORMAL will be similar to an upright piano. LIGHT will be similar to a spinet piano.

FLAT will remove all touch sensitivity and cause the keyboard to respond like an electronic organ or harpsichord

### 25. TUNE

TUNE allows you to alter the pitch of the SXP Digital Piano to conform to other musical instruments. To change the tuning, press the TUNE button. The screen will display the tuning value which can be adjusted by rotating the Data Wheel. When the

## Using the SXP controls

## 26. CHORUS

Chorus refers to a variety of digital effects that enhance the sound of a selected voice. Press CHORUS to turn the Chorus effect on. Its LED will illuminate and the Chorus Menu will display several variations of Chorus, Delay, Feedback and Flanger effects. To the right of each effect variation there is a number representing the depth, or amount of the effect. To change the depth of a Chorus effect, first rotate the Data Wheel to the desired effect variation. Press YES. Then rotate the Data Wheel to change the depth. The number displayed will change and you will be able to hear the change in the effect. Press NO to return to the Main Menu. There are no right or wrong applications. You should use Chorus the way you would use spices when cooking. Try an effect with a voice and see if you like it. Continue to experiment until you find sounds you enjoy. Chorus is particularly effective when used with the Electric Piano, Organ and Synth voices.

- Chorus Table :
1. Chorus 1
  2. Chorus 2 ← default
  3. Chorus 3
  4. Chorus 4
  5. Feedback
  6. Flanger
  7. Delay 1
  8. Delay 2

## 27. REVERB

Reverb refers to a variety of digital effects that simulate the natural acoustics of various rooms and halls. Reverb is particularly useful when the SXP Digital Piano is placed in homes with drapes or carpeting which diminish natural acoustic resonance. Press REVERB to turn the Reverb effect on. Its LED will illuminate and the Reverb Menu will be displayed. To the right of each effect variation there is a number displayed representing the depth of the effect. To change the depth of a Reverb effect, first rotate the Data Wheel to the desired effect variation. Press YES. Then rotate the Data Wheel to change the depth. The number will change and you will be able to hear a change in the effect. Press NO to return to the Main Menu. Like Chorus, there are no fixed rules for Reverb use. Experiment and find sounds that you like.

Many Automatic Chord Accompaniment programs contain specific Reverb and Chorus settings that may override user settings when you change a Rhythm selection. Magic Play or Magic Chord are engaged.

- Reverb Table :
1. Small Room ← default
  2. Medium Room
  3. Large Room
  4. Hall 1
  5. Hall 2
  6. Plate
  7. Delay
  8. Echo



**Using the SXP controls****28. MIDI (Musical Instrument Digital Interface)**

MIDI refers to a group of 16 channels on which the SXP Digital Piano can communicate with computers or other digital musical instruments and accessories. If you are not connecting your SXP Digital Piano to a computer or other digital musical instrument, you will have not need to use this feature. If you are connecting to a computer or other digital musical instrument, consult the MIDI implementation chart in the this manuals of each product models used and seek professional help from your dealer or other qualified personnel.

- MIDI Function Table :
1. Receive channel
  2. Transmit channel
  3. Multi mode
  4. Program change control
  5. Local control
  6. Pitch sensitivity
  7. Pitch Bend change rate
  8. Tremolo rate control
  9. Tremolo depth control

**29. HELP MENU**

Use the Data Wheel or backward in the text. The SXP Digital Piano contains a series of Help Menus designed to answer the most common questions and help you with its operation. To access specific Help Menus press the HELP button. The screen will display the Help Menu Directory. The Help Menu choice representing the feature button you have most recently pressed will be high lighted. Press YES to select that Help Menu, or use the Data Wheel to scroll among the other Help Menu choices. Press YES to select your choice. Press NO to return to the previous Menu. To aid your understanding of the Menus, the names of Features will be Capitalized and the names of PANEL CONTROL BUTTONS will be displayed in ALL CAPITAL LETTERS.

**30. TRANSPOSE**

Transpose to shift the key of the note(s) up or down in 1 key increments.  
Tuning to shift pitch of the note(s) up or down.

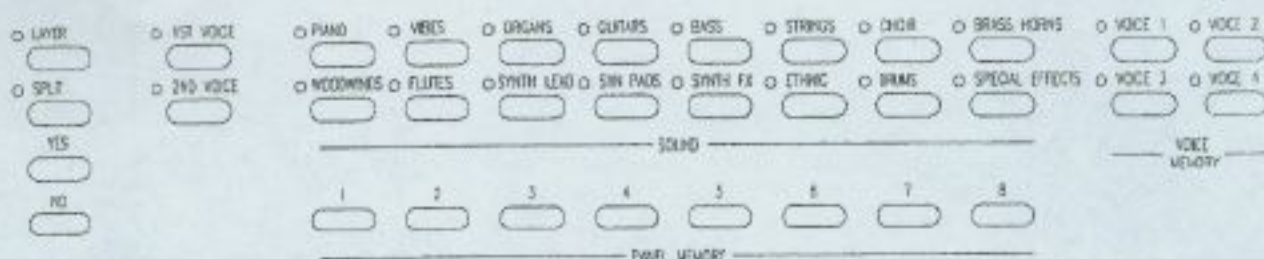
**31. TEMPO**

Tempo The speed, displayed as beats per minute, at which a Rhythm Style, recorded song or Metronome are played. You can increase or decrease the Tempo by pressing either of the TEMPO buttons.

\* Reset : To return the user modified settings to their initial condition. To access the Reset Menu, Press and hold NO. While holding NO play the first key on the left side of the keyboard and follow the instructions on the screen.



## Using the SXP controls

**32. LAYERING/ 1st VOICE, 2nd VOICE**

1st VOICE and 2nd VOICE will allow you to play two voices simultaneously. Pressing LAYER will assign the Grand Piano and String Ensemble Voices to sound together when a key is played. Grand Piano will be the 1st Voice and String Ensemble will be the 2nd Voice. To change Grand Piano to a different Voice, select a new Voice by pressing a VOICE button and rotating the Data Wheel. To change String Ensemble to a different Voice, press 2nd VOICE. While its LED is flashing, select a new Voice by pressing a VOICE button and rotating the Data Wheel. To change the 1st Voice again, press 1ST VOICE. While its LED is flashing select a new Voice by pressing a VOICE button and rotating the Data Wheel.

The slider controls located at the far left of the control panel, marked 1ST VOICE and 2nd VOICE, control the volume of their respective Voices and allow you to balance the volume of the two Voices comprising the Layer.

**33. SPLIT**

SPLIT allows you to play a Voice or a Layer on the right side of the keyboard and a different Voice or a Magic Chord option on the left side of the keyboard. Pressing SPLIT will assign Grand Piano to the right side of the keyboard and Acoustic Bass to the left side of the keyboard. The Split Point will be F#3 (the third F# key from the left side of the keyboard). To change the Split Point, press and hold SPLIT until its LED begins to flash. Then, release the button and press the key you want to be the lowest note of the right side of the Split. To change the Voice on the right side of the Split, select a new Voice by pressing a VOICE button and rotating the Data Wheel. To change the Voice on the left side of the Split, press 2nd VOICE. While its LED is flashing, select a new Voice by pressing a VOICE button and rotating the Data Wheel. To change the right Voice again, press 1st VOICE. While its LED is flashing, select a new Voice by pressing a VOICE button and rotating the Data Wheel.



## Using the SXP controls

The slider controls located at the far left of the control panel, marked 1st VOICE and 2nd VOICE, control the volume of their respective Voices and allow you to balance the volume of the two Voices comprising the Split. If Layer and Split are used together, the 1st VOICE slider controls the volume of the first Voice of the Layer. The 2nd VOICE slider controls the volume of both the second Voice of the Layer and the left Voice of the Split.

As a result of splitting the keyboard, you may find that Voices are playing too high or too low. The Split Menu contains instructions to shift the right side of the keyboard down 1 or 2 octaves, and to shift the left side of the keyboard up 1 or 2 octaves.

The Split Menu also gives you the option to use the Sustain Pedal on either or both sides of the Split. To use this feature, press SPLIT and rotate the Data Wheel to make your selection. Press YES to complete.

Split and Layer can be used together, however, you will only be able to make selections or set the balance on one feature at a time. Turn off the feature you are not selecting, and turn it back on when you are finished making your selection.

If you use Split in conjunction with Magic Chord, you will have to turn off MAGIC CHORD in order to make a 2nd Voice selection. You will probably want to shift the octave of the 2nd Voice. Press SPLIT and rotate the Data Wheel to make your selection. Press YES to complete.

### 34. VOICE MEMORY

VOICE MEMORY buttons enable you to store a Voice from within a Voice category Menu for instant recall. Additionally, Voice Memory 4 provides access to 8 Drum Kits. To store a Voice in Voice Memory, select a Voice and then press and hold a VOICE MEMORY button 1-4 for 3 seconds. Storing a Voice in VOICE MEMORY 4 will replace the Drum Kits, but they will be recovered the next time the SXP Digital Piano is turned on.

### 35. PANEL MEMORY

PANEL MEMORY buttons 1-8 allow you to store all of the settings of the SXP Digital Piano for instant recall. To store a Panel Memory, select all of the settings you desire. Then, press and hold one of the PANEL MEMORY buttons for 3 seconds. This feature is useful if you want to make quick Voice, Rhythm Variation, Tempo, or Transposition changes, or if you want to save your favorite set-ups for future reference. You can use the Disk option to save and recall Panel Memories. To save and recall Panel Memory settings, to and from a disk, press the DISK button and follow the instructions on the screen.



# SAMICK DIGITAL PIANO

## Using the SXP controls

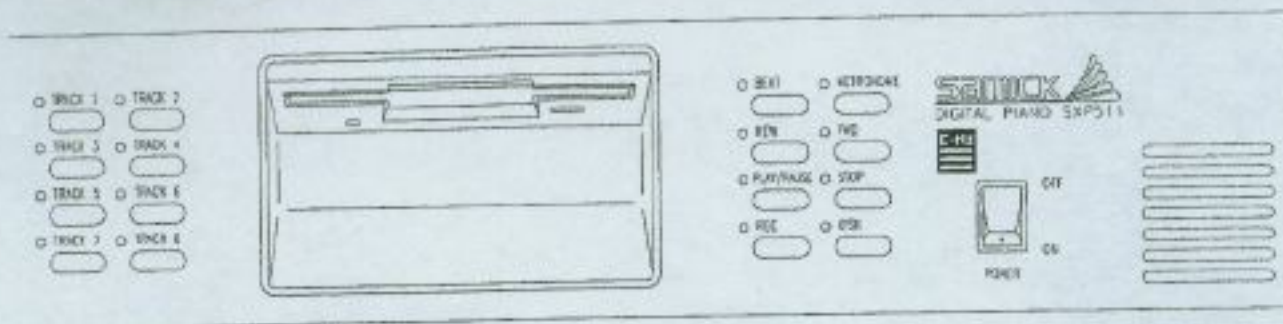
### 36. VOICE

VOICE select buttons each represent a category of Voices. The buttons are used in conjunction with the Data Wheel. To select a Voice from among the 128 sounds available, press a VOICE button. The Menu will display a Voice name on the top line. It will show additional choices on lower lines. Rotate the Data Wheel to make a new selection.

BUTTON	VOICES	BUTTON	VOICES	BUTTON	VOICES
PIANO	Grand Piano Upright Piano Rock Piano Honkytonk Piano E.Piano Rh E.Piano DX Harpichord Clavichord	CHOIR	Choir Aahs Vocal Do Vocal Ooh Orchestra Hit Solo Voice	SYNTH FX	Ice Rain Soundtrack Crystal Atmosphere Brightness Goblins Echoes Star Theme
VIBES	Celesta Glockenspiel Music Box Vibraphone Marimba Xylophone Chime Dulcimer Steel Drums	BRASS HORNS	Trumpet Trombone Tuba Muted Trumpet French Horn Brass Section 1 Synth Brass 1 Synth Brass 2	ETHNIC	Sitar Banjo Shamisen Koto Kalimba Bag Pipe Shanai
ORGANS	Pop Organ Jazz Organ Blues Organ Pipe Organ Reed Organ Accordion Harmonica Concertina	WOODWINDS	Soprano Sax Alto Sax Tenor Sax Baritone Sax Oboe English Horn Bassoon Clarinet	DRUMS	Tinkle Bell Agogo Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal Timpani
GUITARS	Classical Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics Orchestral Harp	FLUTES	Piccolo Flute Recorder Pan Flute Blown Bottle Shakuhachi Whistle Ocarina	SPECIAL EFFECTS	Guitar Fret Noise Breath Noise Seashore Bird Tweet Telephone Helicopter Applause Gun Shot
BASS	Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass1 Slap Bass2 Synth Bass1 Synth Bass2	SYNTH/LEAD	Square Wave Sawtooth Calliope Chiffer Charang 5th Saw Wave Bass Lead		
STRINGS	Violin Viola Cello Contrabass Tremolo Strings Pizzicato Strings String Ensemble1 String Ensemble2 Synth String1 Synth String2 Fiddle	SYNTH PADS	New Age Warm Pad Polysynth Space Voice Bowed Glass Metal Pad Halo Pad Sweep Pad		



## Using the SXP controls

**37. SEQUENCER, DISK DRIVE**

The Sequencer allows you to record songs containing up to 20,000 notes, on up to 8 separate tracks.

**38. DISK DRIVE**

The Disk Drive allows you to save recordings or Panel Memories to a disk, and to recall (load) recordings or Panel Memories from a disk.

**39. REC/Recording a Song**

To record a song, press the REC button. The Track 1 LED will flash. Playing a key begins recording. If you want to hear the Metronome while you are recording, press METRONOME. The Metronome will begin to click. You can adjust the speed of the Metronome with the TEMPO buttons, or you can turn it off by pressing METRONOME again. If your recording does not start on the first beat of a measure, you can begin recording by pressing PLAY/PAUSE. Begin to play your recording on the appropriate beat. When you have finished recording press STOP. The Track 1 LED will stop flashing and remain on indicating notes are recorded.

To hear your recording press PLAY/PAUSE. Press it again to pause the recording and press it again to continue playback from the point at which it was paused.

To stop playback of a recording and reset the sequencer to the beginning of the song, press STOP

To re-record Track 1 press REC. The Track 2 LED will flash indicating it is ready to record, and the Track 1 LED will be continuously on indicating it is ready to playback. Press TRACK 1. The screen will ask if you want to delete the notes previously recorded on Track 1. Press YES to re-record Track 1.

To record another Track, press REC. The Track 2 LED will flash indicating it is ready to record, and the Track 1 LED will be continuously on indicating it is ready to playback Track 1 while you record Track 2. You may, at this point, select a different Voice for Track 2 by following the Voice Select procedure. (see Voice Select Help Menu)

To begin recording, play a key.

To record Tracks 3-8 repeat the procedure for recording Track 2. The next available Track will always be set to record and its LED will flash.



## Using the SXP controls

### 40. BEAT

The Sequencer is set at the factory to record in the 4/4 time signature. To select another time signature, press BEAT. Use the Data Wheel to select a new time signature and follow the instructions on the screen.

### 41. Saving Panel Memory/Saving a Song

Disk to save a recording or Panel Memory settings to a disk, insert a formatted disk into the Disk Drive until you hear it click into place. Press the DISK button. The screen will give you several options. Use the Data Wheel, to select Save Song or Save Panel Memory. Press YES. The screen will next allow you to name your file using up to 8 characters. Follow the instructions on the screen. Selecting the period(.) ends naming and completes the Save procedure.

### 42. Formatting a Disk

To Format a disk, insert a disk into the Disk Drive until you hear it click into place. Press DISK. The screen will give you several options. Use the Data Wheel to select System. Press YES. Follow the instructions on the screen.

**Caution! Formatting will erase all data previously saved on a disk.**

**Note:** if the 'Write Protect' tab on your disk is engaged, the disk will not Save or Format.

### 43. Loading a Song/Loading Panel Memory

To Load a song or Panel Memory from a disk, insert a disk into the Disk Drive until you hear it click into place. Press DISK. Use the Data Wheel to select Song File or Panel Memory Data. Press YES. Use the Data Wheel to select Load. Press YES. The screen will display a directory of files on the disk either as names or numbers. Song file directories will begin with All, indicating all of the songs on the disk are to be played continuously. If you want to hear only one song, rotate the Data Wheel to make your selection. Press YES to begin loading. Please be patient, it will take several seconds for the loading process. The length of loading time is dependent on the length of the song.

### 44. PLAY/PAUSE, Playback a Song

If you have selected the All option, the first song will begin to play when the loading process is completed. If you have selected a single song, press PLAY/PAUSE to start or pause the song. Press STOP to stop the song and reset it to the beginning.



## Using the SXP controls

### 45. Karaoke

Karaoke allows you to remove one or more melody Tracks during playback. You can then sing the melody, or play it on the keyboard, accompanied by the recording stored in the sequencer. You will see the lyrics (words) of songs displayed on the screen during playback if they are recorded on the disk (The SXP 400 and 500 series Digital Pianos have a Microphone Input and Volume control to enable you to use the amplifier to enhance your singing.)

### 46. TRACK

When a song has been recorded into the sequencer, or loaded from a disk, the Track 1-8 LEDs will illuminate for each Track. You can turn off, or Mute, a Track by pressing a TRACK 1-8 button. The LED will go off and no sound will be heard from that Track. You can turn a Track back on by pressing its button again. Although you will know on which Track you have recorded your own melody, melody Tracks from commercially produced disks and other sources may have the melody on any of the Tracks. You may have to experiment by turning TRACK buttons off and on to find the melody Track.

### 47. FWD & REW

FWD&RED allow you to move forward or backward to a particular measure from which a song will be played. This feature operates similar to a VCR, CD or Cassette player. The screen displays a number after the word BAR. This number will be 000 at the beginning of a song.

FWD may be used to advance, and REW may be used to reverse the song to a particular measure or Bar, whether the song is playing or is Paused. REW cannot be used at the beginning of a song. To move forward one measure press the FWD button once. The display will read BAR 001. To move several measures, press and hold FWD. If the song is Paused, press PLAY/PAUSE to resume playing from the new measure number.

To move backward one measure, make sure the song is Paused and press the REW(rewind) button once. To move backward several measures, press and hold REW. To resume play from the new measure number, press PLAY/PAUSE.

### 48. METRONOME

METRONOME provides an audible beat in the form of a click. Its rate of speed can be controlled by pressing the TEMPO buttons located to the left of the screen. Use this feature as a tempo reference when practicing or when recording. To use this feature, press METRONOME once to start and again to stop.

**5. AUXILIARY INPUT AND OUTPUT PORTS**

**1. Headphone**

Two 1/4" stereo jack are provided for standard low impedance stereo headphones. Inserting a plug into the jack cancels the internal speakers. This feature permits you to play the instrument in complete privacy.



\* If you do not want the internal speaker to function, plug the headphone into the phone jack.

**2. Microphone**

This Microphone jack allows you to enjoy singing while playing this instrument. Insert the plug of Microphone and adjust the Mic volume to appropriate level.



**3. Line Out Terminals(L/R)**

Use these terminals to connect the piano to external amplifiers or recorder.



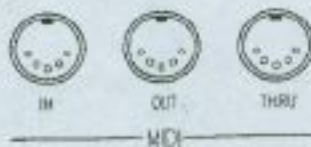
**4. Line In Terminals(L/MONO, R/STEREO)**

Use these terminals to connect the piano to external sound such as cassette or CD players.



**5. MIDI Terminals(IN/OUT/THRU)**

Terminals for connecting other MIDI compatible instruments such as a synthesizer sequencer, multimedia computer, or drum machine using a MIDI cable.





## 6. Pedals

The 3 pedals are Soft, Sostenuto, and Sustain pedals. These work in the same manner as if you were playing an acoustic piano.

### Soft Pedal

LEFT PEDAL allows you to assign the left pedal to control several features as an alternative to its traditional 'Soft' function. After pressing LEFT PEDAL, follow the instructions on the screen to use other functions.



### Sostenuto Pedal

MIDDLE PEDAL allows you to assign the middle pedal to control several features as an alternative to its traditional 'Sostenuto' function. After pressing MIDDLE PEDAL, follow the instructions on the screen to use other functions.



### Sustain Pedal

Pressing this pedal causes notes to sustain even when you lift your fingers from the keys.



## B. GENERAL MIDI PROGRAM MAP

Program Change	General MIDI Sound Name	Program Change	General MIDI Sound Name	Program Change	General MIDI Sound Name	Program Change	General MIDI Sound Name
1	Grand Piano 1	32	Acoustic Bass	64	Soprano Sax	96	Ice Rain
2	Grand Piano 2	33	Fingered Bass	65	Alto Sax	97	Soundtrack
3	Electric Grand	34	Picked Bass	66	Tenor Sax	98	Crystal
4	Honky Tonk	35	Fretless Bass	67	Baritone Sax	99	Atmosphere
5	Electric Piano 1	36	Slap Bass 1	68	Oboe	100	Brightness
6	Electric Piano 2	37	Slap Bass 2	69	English Horn	101	Goblin
7	Harpichord	38	Synth Bass 1	70	Bassoon	102	Echo Drops
8	Clavinet	39	Synth Bass 2	71	Clarinet	103	Star Theme
9	Celesta	40	Violin	72	Piccato	104	Sitar
10	Glockenspiel	41	Viola	73	Flute	105	Banjo
11	Music Box	42	Cello	74	Recorder	106	Shamisen
12	Vibraphone	43	Contrabass	75	Pan Flute	107	Koto
13	Marimba	44	Tremolo Strings	76	Bottle Chiff	108	Kalimba
14	Xylophone	45	Pizz Strings	77	Shakuhachi	109	Bag Pipe
15	Tubular Bells	46	Harp	78	Whistle	110	Fiddle
16	Dulcimar	47	Timpani	79	Ocarina	111	Shanai
17	Drawbar Organ	48	String	80	Square Wave	112	Tinkle Bell
18	Organ 2	49	Slow Strings	81	Saw Wave	113	Agogo
19	Organ 3	50	Synth Strings 1	82	Syn. Calliope	114	Steel Drums
20	Church Organ	51	Synth Strings 2	83	Chiffer Lead	115	Woodblocks
21	Reed Organ	52	Choir Asha	84	Charang	116	Taiko
22	Accordion	53	Voice Doo's	85	Solo Vox	117	Melo Tom 1
23	Harmonica	54	Synth Vox	86	5th Saw Wave	118	Synth Drum
24	Bandoneon	55	Orchestra Hit	87	Bass & Lead	119	Reverse Cym.
25	Nylon String Gtr	56	Trumpet	88	Fantasia	120	Gtr Fret Noise
26	Steel String Gtr	57	Trombone	89	Warm Pad	121	Breath Noise
27	Jazz Gtr	58	Tuba	90	Polysynth	122	Seashore
28	Clean Gtr	59	Muted Trumpet	91	Space Voice	123	Bird
29	Muted Gtr	60	French Horn	92	Bowed Glass	124	Telephone
30	Overdrive Gtr	61	Brass 1	93	Metal Pad	125	Helicopter
31	Distortion Gtr	62	Synth Brass 1	94	Halo Pad	126	Applause
32	Gtr Harmonics	63	Synth Brass 2	95	Sweep Pad	127	Genshot







## 8. ABOUT MIDI

MIDI stands for Musical Instrument Digital Interface. MIDI is a world wide standard that allows musical instruments and computers to exchange musical data. Most electronic musical instruments sold today are MIDI compatible. MIDI compatible devices have MIDI connectors which are used to physically link instruments (using special cables). MIDI does not transmit the sound of an instrument, but rather 'messages' in digital form that tell the receiving instrument to "do something". These are known as MIDI messages.

### MIDI can be used to do a variety of things

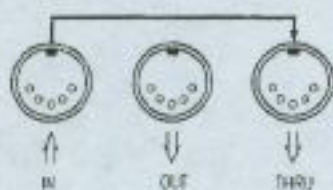
- Play the internal sounds of the SXP from other MIDI instruments.
- Play the sounds of other MIDI instruments or sound modules from the SXP's keyboard.

A sound module is a synthesizer or digital piano without a keyboard, ie., a box containing only sound producing circuitry. Sound modules produce sound in response to incoming MIDI message.

### MIDI connectors

Look at the rear panel of your piano.

The three MIDI connectors are used to connect the SXP to other MIDI instruments. Each connector has the following function:



#### MIDI IN connector

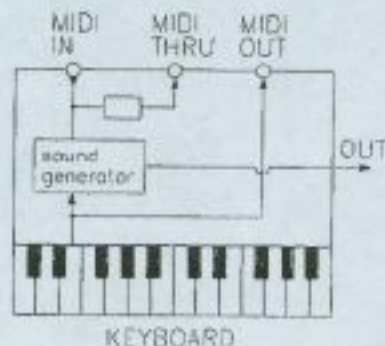
This connector receives incoming MIDI messages.

#### MIDI OUT connector

This connector transmits outgoing MIDI messages to other devices.

#### MIDI THRU connector

MIDI messages received at MIDI IN are re-transmitted by the MIDI THRU connector. (This connector **does not** transmit messages that originate inside the unit itself.)

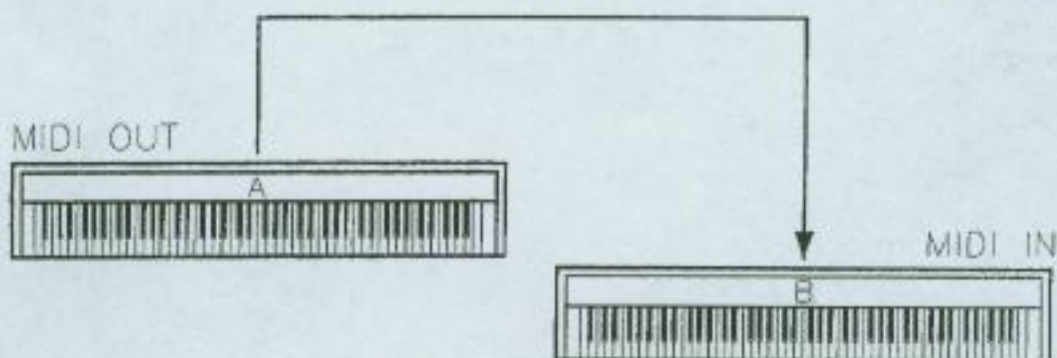




MIDI connectors accept MIDI cables with 5 pin DIN connectors. You may occasionally see similar connectors on other devices, but **be sure to use only cables that are intended specifically for MIDI.**

### MIDI connections

In this example, a MIDI cable connects two digital pianos, A and B.

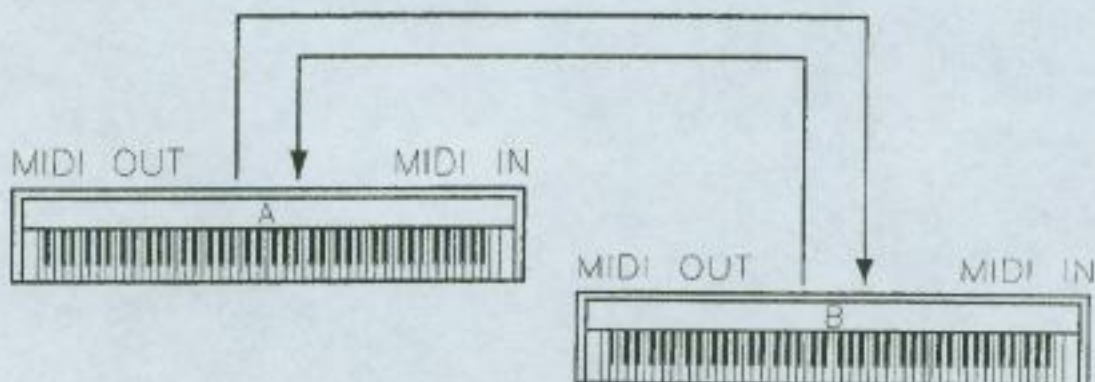


In this setup, playing the keyboard of A will cause the sound of keyboard B to be heard in unison with the sound of A. This is because when you play the note 'F#' on keyboard A, a message is sent from A to B saying "play the note 'F#' at such and such a loudness and hold the note until...now".

This is called a **Note message**, B receives this message and plays and releases the appropriate note with the appropriate loudness and timing.

### Master and Slave

When MIDI devices are connected, the device that sends the message saying "do this" is called the Master(the transmitter). The device that responds to this message is called the slave(the receiver). Since MIDI messages are always transmitted in one direction over a single cable, you will need to connect an additional MIDI cable from the output of B to the input of A if you want A and B respond to each other.



## CONGRATULATIONS!

We greatly appreciate your purchase of the SAMICK SXP511, 411, 311 Digital Piano.

The SXP511, 411, 311 is a Digital Piano that has a beautiful, realistic sound created using E-MU's highly acclaimed sampling technology.

Before you play the piano, we suggest reading this manual thoroughly. Specific attention should be given to "Section 2-Safety & Precautions". Also included in this manual are some simple trouble-shooting instructions to assist with any minor operational problems. Your patronage is highly valued and we hope the SAMICK SXP511, 411, 311 will give you many years of superb musical enjoyment.

## TABLE OF CONTENTS

1. Safety Instructions .....	1
2. Features .....	2
3. Trouble shooting .....	3
4. Control functions .....	4~6
5. Using the SXP controls .....	7~22
6. Auxilliary input and output ports .....	23~24
7. General MIDI Program Map .....	25
8. Drum Map .....	26
9. About MIDI .....	27~30
10. MIDI implementation chart .....	31
11. Specifications .....	32



## 2. TROUBLE SHOOTING INSTRUCTIONS

Should your SXP511, 411, or 311 fail to operate properly, check these few simple points before calling a service technician:

### No Sound is Generated

- CAUSE

- a. The Master Volume control is set to the minimum position.
- b. The headphone is connected.

- WHAT TO DO

- a. Set the Master Volume control to the correct setting.
- b. Unplug the headphone from the phone jack.

### Unfamiliar Noise

- CAUSE

- a. Noise caused by other electronic equipment, i. e., refrigerators or microwaves.

- WHAT TO DO

- a. Plug the power supply cord into another electrical outlet.

### Radio And Television Interference

- CAUSE

- a. Television broadcasting or a radio station located nearby.
- b. Headphone or Line Out plug is not completely plugged into the jack.

- WHAT TO DO

- a. Relocate the position of the instrument. For example, if the instrument is located on an outside wall next to a window, move it away from the window. If the problem persists, call your local Samick dealer's authorized technician.
- b. Remove the plug.

### If the piano is connected to an external amplifier and there is no sound or the instrument is not function properly

- CAUSE

- a. The Volume control is set the minimum level.
- b. The cord connected to the amplifier is defective.

- WHAT TO DO

- a. Set the Volume control to the correct setting.
- b. Replace the defective cord.

**Using the SXP controls****28. MIDI (Musical Instrument Digital Interface)**

MIDI refers to a group of 16 channels on which the SXP Digital Piano can communicate with computers or other digital musical instruments and accessories. If you are not connecting your SXP Digital Piano to a computer or other digital musical instrument, you will have not need to use this feature. If you are connecting to a computer or other digital musical instrument, consult the MIDI implementation chart in the this manuals of each product models used and seek professional help from your dealer or other qualified personnel.

- MIDI Function Table :
1. Receive channel
  2. Transmit channel
  3. Multi mode
  4. Program change control
  5. Local control
  6. Pitch sensitivity
  7. Pitch Bend change rate
  8. Tremolo rate control
  9. Tremolo depth control

**29. HELP MENU**

Use the Data Wheel or backward in the text. The SXP Digital Piano contains a series of Help Menus designed to answer the most common questions and help you with its operation. To access specific Help Menus press the HELP button. The screen will display the Help Menu Directory. The Help Menu choice representing the feature button you have most recently pressed will be high lighted. Press YES to select that Help Menu, or use the Data Wheel to scroll among the other Help Menu choices. Press YES to select your choice. Press NO to return to the previous Menu. To aid your understanding of the Menus, the names of Features will be Capitalized and the names of PANEL CONTROL BUTTONS will be displayed in ALL CAPITAL LETTERS.

**30. TRANSPOSE**

Transpose to shift the key of the note(s) up or down in 1 key increments.  
Tuning to shift pitch of the note(s) up or down.

**31. TEMPO**

Tempo The speed, displayed as beats per minute, at which a Rhythm Style, recorded song or Metronome are played. You can increase or decrease the Tempo by pressing either of the TEMPO buttons.

\* Reset : To return the user modified settings to their initial condition. To access the Reset Menu, Press and hold NO. While holding NO play the first key on the left side of the keyboard and follow the instructions on the screen.



## Using the SXP controls

The slider controls located at the far left of the control panel, marked 1st VOICE and 2nd VOICE, control the volume of their respective Voices and allow you to balance the volume of the two Voices comprising the Split. If Layer and Split are used together, the 1st VOICE slider controls the volume of the first Voice of the Layer. The 2nd VOICE slider controls the volume of both the second Voice of the Layer and the left Voice of the Split.

As a result of splitting the keyboard, you may find that Voices are playing too high or too low. The Split Menu contains instructions to shift the right side of the keyboard down 1 or 2 octaves, and to shift the left side of the keyboard up 1 or 2 octaves.

The Split Menu also gives you the option to use the Sustain Pedal on either or both sides of the Split. To use this feature, press SPLIT and rotate the Data Wheel to make your selection. Press YES to complete.

Split and Layer can be used together, however, you will only be able to make selections or set the balance on one feature at a time. Turn off the feature you are not selecting, and turn it back on when you are finished making your selection.

If you use Split in conjunction with Magic Chord, you will have to turn off MAGIC CHORD in order to make a 2nd Voice selection. You will probably want to shift the octave of the 2nd Voice. Press SPLIT and rotate the Data Wheel to make your selection. Press YES to complete.

### 34. VOICE MEMORY

VOICE MEMORY buttons enable you to store a Voice from within a Voice category Menu for instant recall. Additionally, Voice Memory 4 provides access to 8 Drum Kits. To store a Voice in Voice Memory, select a Voice and then press and hold a VOICE MEMORY button 1-4 for 3 seconds. Storing a Voice in VOICE MEMORY 4 will replace the Drum Kits, but they will be recovered the next time the SXP Digital Piano is turned on.

### 35. PANEL MEMORY

PANEL MEMORY buttons 1-8 allow you to store all of the settings of the SXP Digital Piano for instant recall. To store a Panel Memory, select all of the settings you desire. Then, press and hold one of the PANEL MEMORY buttons for 3 seconds. This feature is useful if you want to make quick Voice, Rhythm Variation, Tempo, or Transposition changes, or if you want to save your favorite set-ups for future reference. You can use the Disk option to save and recall Panel Memories. To save and recall Panel Memory settings, to and from a disk, press the DISK button and follow the instructions on the screen.



# SAMICK DIGITAL PIANO

## Using the SXP controls

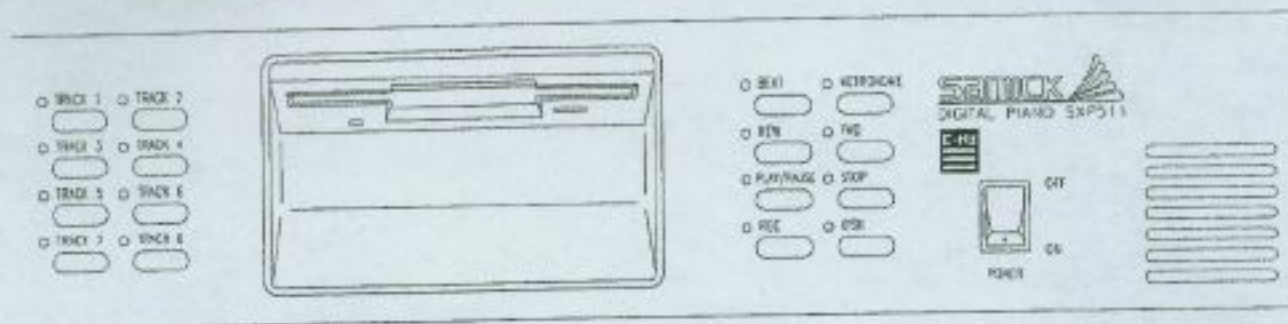
### 36. VOICE

VOICE select buttons each represent a category of Voices. The buttons are used in conjunction with the Data Wheel. To select a Voice from among the 128 sounds available, press a VOICE button. The Menu will display a Voice name on the top line. It will show additional choices on lower lines. Rotate the Data Wheel to make a new selection.

BUTTON	VOICES	BUTTON	VOICES	BUTTON	VOICES
PIANO	Grand Piano Upright Piano Rock Piano Honkytonk Piano E.Piano Rh E.Piano DX Harpichord Clavichord	CHOIR	Choir Aahs Vocal Do Vocal Ooh Orchestra Hit Solo Voice	SYNTH FX	Ice Rain Soundtrack Crystal Atmosphere Brightness Goblins Echoes Star Theme
VIBES	Celesta Glockenspiel Music Box Vibraphone Marimba Xylophone Chime Dulcimer Steel Drums	BRASS HORNS	Trumpet Trombone Tuba Muted Trumpet French Horn Brass Section 1 Synth Brass 1 Synth Brass 2	ETHNIC	Sitar Banjo Shamisen Koto Kalimba Bag Pipe Shanai
ORGANS	Pop Organ Jazz Organ Blues Organ Pipe Organ Reed Organ Accordion Harmonica Concertina	WOODWINDS	Soprano Sax Alto Sax Tenor Sax Baritone Sax Oboe English Horn Bassoon Clarinet	DRUMS	Tinkle Bell Agogo Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal Timpani
GUITARS	Classical Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics Orchestral Harp	FLUTES	Piccolo Flute Recorder Pan Flute Blown Bottle Shakuhachi Whistle Ocarina	SPECIAL EFFECTS	Guitar Fret Noise Breath Noise Seashore Bird Tweet Telephone Helicopter Applause Gun Shot
BASS	Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass1 Slap Bass2 Synth Bass1 Synth Bass2	SYNTH/LEAD	Square Wave Sawtooth Calliope Chiffer Charang 5th Saw Wave Bass Lead		
STRINGS	Violin Viola Cello Contrabass Tremolo Strings Pizzicato Strings String Ensemble1 String Ensemble2 Synth String1 Synth String2 Fiddle	SYNTH PADS	New Age Warm Pad Polysynth Space Voice Bowed Glass Metal Pad Halo Pad Sweep Pad		



## Using the SXP controls

**37. SEQUENCER, DISK DRIVE**

The Sequencer allows you to record songs containing up to 20,000 notes, on up to 8 separate tracks.

**38. DISK DRIVE**

The Disk Drive allows you to save recordings or Panel Memories to a disk, and to recall (load) recordings or Panel Memories from a disk.

**39. REC/Recording a Song**

To record a song, press the REC button. The Track 1 LED will flash. Playing a key begins recording. If you want to hear the Metronome while you are recording, press METRONOME. The Metronome will begin to click. You can adjust the speed of the Metronome with the TEMPO buttons, or you can turn it off by pressing METRONOME again. If your recording does not start on the first beat of a measure, you can begin recording by pressing PLAY/PAUSE. Begin to play your recording on the appropriate beat. When you have finished recording press STOP. The Track 1 LED will stop flashing and remain on indicating notes are recorded.

To hear your recording press PLAY/PAUSE. Press it again to pause the recording and press it again to continue playback from the point at which it was paused.

To stop playback of a recording and reset the sequencer to the beginning of the song, press STOP

To re-record Track 1 press REC. The Track 2 LED will flash indicating it is ready to record, and the Track 1 LED will be continuously on indicating it is ready to playback. Press TRACK 1. The screen will ask if you want to delete the notes previously recorded on Track 1. Press YES to re-record Track 1.

To record another Track, press REC. The Track 2 LED will flash indicating it is ready to record, and the Track 1 LED will be continuously on indicating it is ready to playback Track 1 while you record Track 2. You may, at this point, select a different Voice for Track 2 by following the Voice Select procedure. (see Voice Select Help Menu)

To begin recording, play a key.

To record Tracks 3-8 repeat the procedure for recording Track 2. The next available Track will always be set to record and its LED will flash.



## Using the SXP controls

### 45. Karaoke

Karaoke allows you to remove one or more melody Tracks during playback. You can then sing the melody, or play it on the keyboard, accompanied by the recording stored in the sequencer. You will see the lyrics (words) of songs displayed on the screen during playback if they are recorded on the disk (The SXP 400 and 500 series Digital Pianos have a Microphone Input and Volume control to enable you to use the amplifier to enhance your singing.)

### 46. TRACK

When a song has been recorded into the sequencer, or loaded from a disk, the Track 1-8 LEDs will illuminate for each Track. You can turn off, or Mute, a Track by pressing a TRACK 1-8 button. The LED will go off and no sound will be heard from that Track. You can turn a Track back on by pressing its button again. Although you will know on which Track you have recorded your own melody, melody Tracks from commercially produced disks and other sources may have the melody on any of the Tracks. You may have to experiment by turning TRACK buttons off and on to find the melody Track.

### 47. FWD & REW

FWD&RED allow you to move forward or backward to a particular measure from which a song will be played. This feature operates similar to a VCR, CD or Cassette player. The screen displays a number after the word BAR. This number will be 000 at the beginning of a song.

FWD may be used to advance, and REW may be used to reverse the song to a particular measure or Bar, whether the song is playing or is Paused. REW cannot be used at the beginning of a song. To move forward one measure press the FWD button once. The display will read BAR 001. To move several measures, press and hold FWD. If the song is Paused, press PLAY/PAUSE to resume playing from the new measure number.

To move backward one measure, make sure the song is Paused and press the REW(rewind) button once. To move backward several measures, press and hold REW. To resume play from the new measure number, press PLAY/PAUSE.

### 48. METRONOME

METRONOME provides an audible beat in the form of a click. Its rate of speed can be controlled by pressing the TEMPO buttons located to the left of the screen. Use this feature as a tempo reference when practicing or when recording. To use this feature, press METRONOME once to start and again to stop.



**5. AUXILIARY INPUT AND OUTPUT PORTS**

**1. Headphone**

Two 1/4" stereo jack are provided for standard low impedance stereo headphones. Inserting a plug into the jack cancels the internal speakers. This feature permits you to play the instrument in complete privacy.



\* If you do not want the internal speaker to function, plug the headphone into the phone jack.

**2. Microphone**

This Microphone jack allows you to enjoy singing while playing this instrument. Insert the plug of Microphone and adjust the Mic volume to appropriate level.



**3. Line Out Terminals(L/R)**

Use these terminals to connect the piano to external amplifiers or recorder.



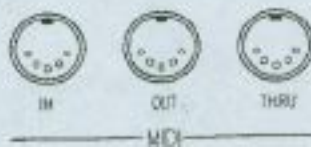
**4. Line In Terminals(L/MONO, R/STEREO)**

Use these terminals to connect the piano to external sound such as cassette or CD players.



**5. MIDI Terminals(IN/OUT/THRU)**

Terminals for connecting other MIDI compatible instruments such as a synthesizer sequencer, multimedia computer, or drum machine using a MIDI cable.



## 6. Pedals

The 3 pedals are Soft, Sostenuto, and Sustain pedals. These work in the same manner as if you were playing an acoustic piano.

### Soft Pedal

LEFT PEDAL allows you to assign the left pedal to control several features as an alternative to its traditional 'Soft' function. After pressing LEFT PEDAL, follow the instructions on the screen to use other functions.



### Sostenuto Pedal

MIDDLE PEDAL allows you to assign the middle pedal to control several features as an alternative to its traditional 'Sostenuto' function. After pressing MIDDLE PEDAL, follow the instructions on the screen to use other functions.



### Sustain Pedal

Pressing this pedal causes notes to sustain even when you lift your fingers from the keys.





## B. GENERAL MIDI PROGRAM MAP

Program Change	General MIDI Sound Name	Program Change	General MIDI Sound Name	Program Change	General MIDI Sound Name	Program Change	General MIDI Sound Name
1	Grand Piano 1	32	Acoustic Bass	64	Soprano Sax	96	Ice Rain
2	Grand Piano 2	33	Fingered Bass	65	Alto Sax	97	Soundtrack
3	Electric Grand	34	Picked Bass	66	Tenor Sax	98	Crystal
4	Honky Tonk	35	Fretless Bass	67	Baritone Sax	99	Atmosphere
5	Electric Piano 1	36	Slap Bass 1	68	Oboe	100	Brightness
6	Electric Piano 2	37	Slap Bass 2	69	English Horn	101	Goblin
7	Harpichord	38	Synth Bass 1	70	Bassoon	102	Echo Drops
8	Clavinet	39	Synth Bass 2	71	Clarinet	103	Star Theme
9	Celesta	40	Violin	72	Piccato	104	Sitar
10	Glockenspiel	41	Viola	73	Flute	105	Banjo
11	Music Box	42	Cello	74	Recorder	106	Shamisen
12	Vibraphone	43	Contrabass	75	Pan Flute	107	Koto
13	Marimba	44	Tremolo Strings	76	Bottle Chiff	108	Kalimba
14	Xylophone	45	Pizz Strings	77	Shakuhachi	109	Bag Pipe
15	Tubular Bells	46	Harp	78	Whistle	110	Fiddle
16	Dulcimar	47	Timpani	79	Ocarina	111	Shanai
17	Drawbar Organ	48	String	80	Square Wave	112	Tinkle Bell
18	Organ 2	49	Slow Strings	81	Saw Wave	113	Agogo
19	Organ 3	50	Synth Strings 1	82	Syn. Calliope	114	Steel Drums
20	Church Organ	51	Synth Strings 2	83	Chiffer Lead	115	Woodblocks
21	Reed Organ	52	Choir Asha	84	Charang	116	Taiko
22	Accordion	53	Voice Doo's	85	Solo Vox	117	Melo Tom 1
23	Harmonica	54	Synth Vox	86	5th Saw Wave	118	Synth Drum
24	Bandneon	55	Orchestra Hit	87	Bass & Lead	119	Reverse Cym.
25	Nylon String Gtr	56	Trumpet	88	Fantasia	120	Gtr Fret Noise
26	Steel String Gtr	57	Trombone	89	Warm Pad	121	Breath Noise
27	Jazz Gtr	58	Tuba	90	Polysynth	122	Seashore
28	Clean Gtr	59	Muted Trumpet	91	Space Voice	123	Bird
29	Muted Gtr	60	French Horn	92	Bowed Glass	124	Telephone
30	Overdrive Gtr	61	Brass 1	93	Metal Pad	125	Helicopter
31	Distortion Gtr	62	Synth Brass 1	94	Halo Pad	126	Applause
32	Gtr Harmonics	63	Synth Brass 2	95	Sweep Pad	127	Genshot







## 8. ABOUT MIDI

MIDI stands for Musical Instrument Digital Interface. MIDI is a world wide standard that allows musical instruments and computers to exchange musical data. Most electronic musical instruments sold today are MIDI compatible. MIDI compatible devices have MIDI connectors which are used to physically link instruments (using special cables). MIDI does not transmit the sound of an instrument, but rather 'messages' in digital form that tell the receiving instrument to "do something". These are known as MIDI messages.

### MIDI can be used to do a variety of things

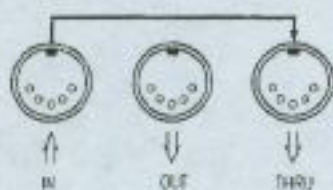
- Play the internal sounds of the SXP from other MIDI instruments.
- Play the sounds of other MIDI instruments or sound modules from the SXP's keyboard.

A sound module is a synthesizer or digital piano without a keyboard, ie., a box containing only sound producing circuitry. Sound modules produce sound in response to incoming MIDI message.

### MIDI connectors

Look at the rear panel of your piano.

The three MIDI connectors are used to connect the SXP to other MIDI instruments. Each connector has the following function:



#### MIDI IN connector

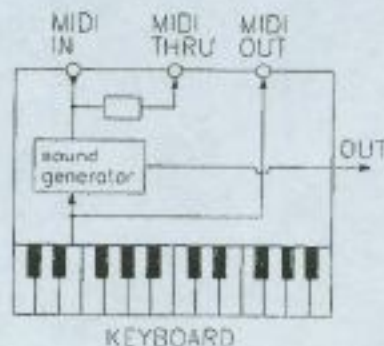
This connector receives incoming MIDI messages.

#### MIDI OUT connector

This connector transmits outgoing MIDI messages to other devices.

#### MIDI THRU connector

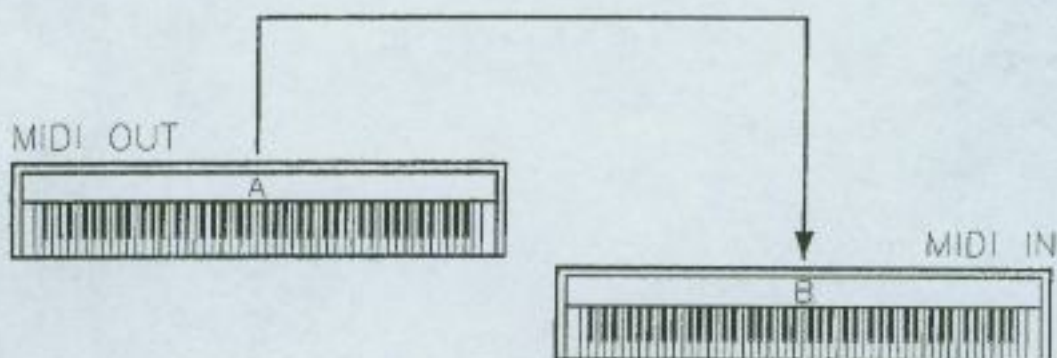
MIDI messages received at MIDI IN are re-transmitted by the MIDI THRU connector. (This connector **does not** transmit messages that originate inside the unit itself.)



MIDI connectors accept MIDI cables with 5 pin DIN connectors. You may occasionally see similar connectors on other devices, but **be sure to use only cables that are intended specifically for MIDI.**

### MIDI connections

In this example, a MIDI cable connects two digital pianos, A and B.

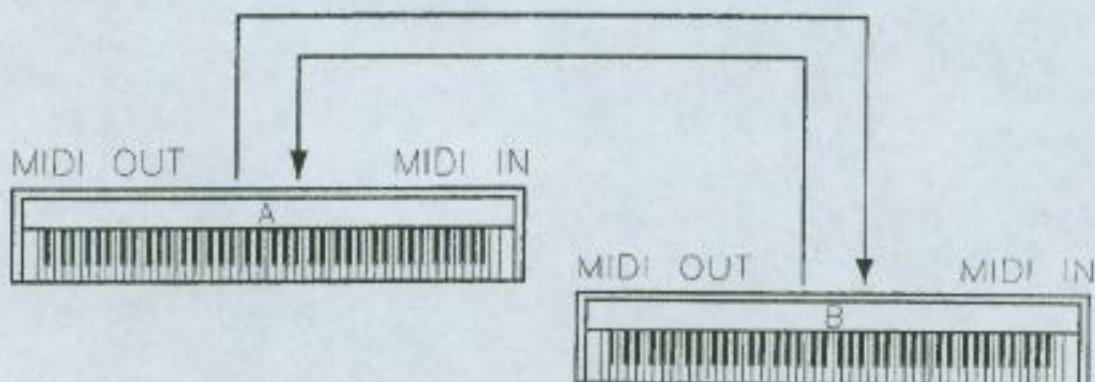


In this setup, playing the keyboard of A will cause the sound of keyboard B to be heard in unison with the sound of A. This is because when you play the note 'F#' on keyboard A, a message is sent from A to B saying "play the note 'F#' at such and such a loudness and hold the note until...now".

This is called a **Note message**, B receives this message and plays and releases the appropriate note with the appropriate loudness and timing.

### Master and Slave

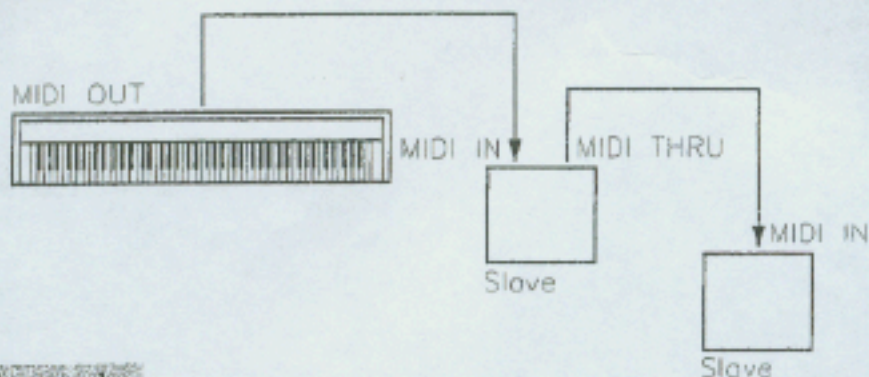
When MIDI devices are connected, the device that sends the message saying "do this" is called the Master(the transmitter). The device that responds to this message is called the slave(the receiver). Since MIDI messages are always transmitted in one direction over a single cable, you will need to connect an additional MIDI cable from the output of B to the input of A if you want A and B respond to each other.





## MIDI THRU Connector

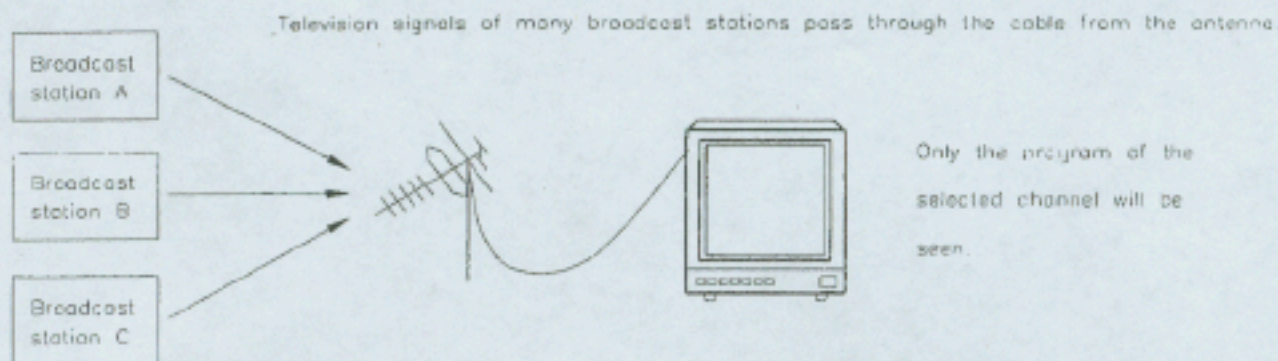
When transmitting the same MIDI messages to two or more slaves, use the MIDI THRU connector(s).



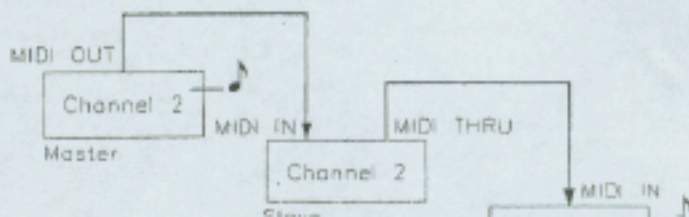
## MIDI channels

MIDI uses "channel" to independently control many devices through a single cable. MIDI channels are easy to understand if we use the analogy of television broadcasting. Many television programs are broadcast from many TV stations and your TV antenna receives them all.

By setting your television to a specific channel, you can watch only the desired program. The same idea applies to MIDI channels. The master device is somewhat like the broadcast station, and the slave device is like a television set. The MIDI messages carried by the MIDI cable are like the programs that are transmitted from the broadcast stations.



If two or more slaves are connected, set the MIDI channel of each slave device to match that of the master device.





## Program Change messages

Program Change messages are MIDI messages that select sounds. Actually, these messages tell the receiving device to "switch to sound number X", not to "switch to a piano sound"(for example). The sounds of MIDI instruments are numbered from 1 to 128(these are referred to as program numbers), and when a program change message is received, the sound of the corresponding program number is selected. This means that even for the same program number, different instruments and sound modules will produce different sounds. Make sure you know the relationship between the program numbers and the sounds of the slave device before you transmit program change messages.

## MIDI Implementation chart

MIDI has made it possible for a wide variety of devices to exchange information, but it is not always true that all types of MIDI messages can be exchanged between all types of devices. For example, if you use a synthesizer as a master device to control a digital piano, the pitch bender(the lever or wheel that modifies the pitch)of the synthesizer will have no effect on the sound of the piano.

The important thing to keep in mind when using MIDI is that the slave device must be able to 'understand' what the master is 'saying'. In other words, the MIDI messages must be common to both master and slave.



## 9. MIDI IMPLEMENTATION CHART

Function		Transmitted	Recognized	Selectable
Basic Channel	:Default :Message	YES 1~16	1~16 1~16	Selectable
Mode	:Default :Message	X X	3 OMNI ON/OFF	Modes : 1,3
Note Number	:True :Voice	0~127	0~127	
Velocity	:Note ON :Note OFF	0~127	0~127	
After Touch	:Key's :Ch's	X X	X O	
Pitch Bend		X	O	
Control Change	0	X	O	Bank select
	1	X	O	Modulation
	6, 38	X	O	Data Entry
	7	X	O	Main Volume
	10	X	O	Pan
	11	X	O	Expression
	64	O	O	Hold Pedal
	66	O	O	Sostenuto Pedal
	67	O	O	Soft Pedal
	91	X	O	Reverb Depth
	93	X	O	Chorus Depth
	98	X	O	NRPN LSB
	99	X	O	NRPN MSB
	100	X	O	RPN LSB
101	X	O	RPN MSB	
120	X	O	All sound off	
121	X	O	Reset controller	
123	X	O	All notes off	
Program Change		O	O	0~127

- Notes :
1. Default Pitch Bend = 1 semitone
  2. Mode 1 : OMNI ON, POLY
  3. Mode 3 : OMNI OFF, POLY



10. SPECIFICATIONS

	SXP311	SXP411	SXP511
Keyboard	88 Weighted Key, Touch sensitive		88 Hammered Key, Touch sensitive
Touch Sensitivity	4 position : Hard, Mid, Soft, Flat		
Tone Generator	PCM with GM/GS format Compatible Sounds		
Maximum Polyphony	32 Voices		
Voice	128 Instrument Sounds + 61 Drum sounds		
Voice Controls	16 buttons, 4 Sound Memory Bank, Alpha dial, 1st Voice, 2nd Voice, 1st Voice volume, 2nd Voice Volume		
Rhythm	38 Stores(4 Rhythm Memory)		
Rhythm Controls	Magic chord, Magic play, Synchro Start, Accomp., Bass, Fill to Verse, Fill to Chorus, Intro/Ending, Start/Stop, Drum volume, Accomp volume, Bass volume		
MIDI Mode	GS, GM, MT-32		
Effects	1. Reverb : Small Room, Medium Room, Large Room, Hall 1, Hall 2, Plate, Delay, Echo		
	2. Chorus : Chorus 1, Chorus 2, Chorus 3, Chorus 4, Feedback, Delay 1, Delay 2		
Play Mode	Full, Split, Layer		
Sequences	Beat, Metronome, Rwd, Fwd, Play/Pause, Stop, Rec, Disk		
Storage Media	Approx. 20,000 notes, 8 Tracks, 3.5" 2DD/2HD disk drive		
Memory Backup	Panel Memory x 8		
Pedal Control	Sustain, Sostenuto, Soft, Left Pedal Assign : Soft Pedal, Pitch Bend Down, Pedal Reverb, Organ Tremolo, Fill to Chorus, Rhythm Ending, Start/Stop Middle Pedal : Susternto, Pitch Bend Up, Chorus Effect, Magic Harmony, Fill to Verse, Fade Out		
Other Controls	Master volume, Transpose, Tune, Tempo, Yes, No, Help, Midi, Touch, Demo		
Connectors	Headphone x 2, Audio IN(L/R), Audio OUT(L/R), Mic IN, MIDI (IN,OUT,THRU)		
Display	Graphic LCD(128 x 64 dots)		
Output	45W + 45W 4 Speakers (6.5"x2 woofers, 3.5"x2 tweeters)	45W + 45W 4 Speakers (8"x2 woofers, 3.5"x2 tweeters)	45W + 45W 4 Speakers (10"x1, 6.5"x1 woofers, 3.5"x2 tweeters)
Dimensions (WxDxH)	1384 x 520 x 780 mm	1440 x 600 x 940 mm	1400 x 860 x 920 mm
Weight	57 kg	100 kg	87 kg