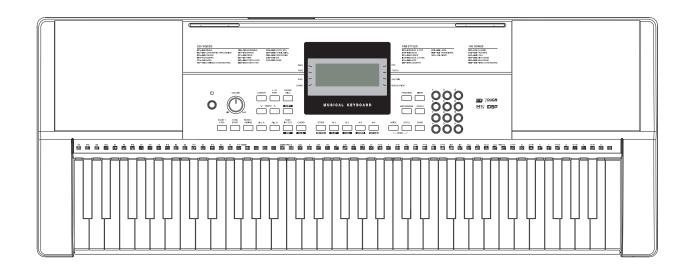




ELECTRONIC KEYBOARD

Owner's Manual









INFORMATION FOR YOUR SAFETY!

THE FCC REGULATION WARNING (for USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

CAUTION

The normal function of the product may be disturbed by Strong Electro Magnetic Interference. If so, simply reset the product to resume normal operation by following the owner's manual. In case the function could not resume, please use the product in other location.

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe place for future reference.

Power Supply

Please connect the designated AC adaptor to an AC outlet of the correct voltage.

Do not connect it to an AC outlet of voltage other than that for which your instrument is intended.

Unplug the AC power adaptor when not using the instrument, or during electrical storms.

Connections

Before connecting the instrument to other devices, turn off the power to all units. This will help prevent malfunction and / or damage to other devices.

Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage:

- Direct sunlight
- · Extreme temperature or humidity
- · Excessive dusty or dirty location
- · Strong vibrations or shocks
- · Close to magnetic fields

Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Cleaning

Clean only with a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

Do not apply excessive force to the switches or controls.

Do not let paper, metallic, or other objects into the instrument. If this happens, unplug the AC adaptor from the wall outlet. Then have the instrument inspected by qualified service personnel.

Disconnect all cables before moving the instrument.







•

Contents

Panel & Display Description
Front Panel4
Rear Panel4
Display5
Setup
Power Supply6
Connections
Connecting a Footswitch7
Connecting a pair of Headphones7
Connecting an Audio Equipment7
Connecting a Computer7
Playing the Demos8
Playing the Voices
Playing Voices8
Playing Voices8
Playing Voices
Playing Voices
Playing Voices
Playing Voices
Playing Voices 8 Playing Two Voice Simultaneously-DUAL 8 Lower 9 Touch 9 Sustain 9 DSP Effect 9 Auto Accompaniment
Playing Voices 8 Playing Two Voice Simultaneously-DUAL 8 Lower 9 Touch 9 Sustain 9 DSP Effect 9 Auto Accompaniment Play Auto Accompaniment 10
Playing Voices 8 Playing Two Voice Simultaneously-DUAL 8 Lower 9 Touch 9 Sustain 9 DSP Effect 9 Auto Accompaniment
Playing Voices 8 Playing Two Voice Simultaneously-DUAL 8 Lower 9 Touch 9 Sustain 9 DSP Effect 9 Auto Accompaniment 10 Playing a Fill 10
Playing Voices 8 Playing Two Voice Simultaneously-DUAL 8 Lower 9 Touch 9 Sustain 9 DSP Effect 9 Auto Accompaniment Play Auto Accompaniment 10 Playing a Fill 10 Intro/Ending 10
Playing Voices 8 Playing Two Voice Simultaneously-DUAL 8 Lower 9 Touch 9 Sustain 9 DSP Effect 9 Auto Accompaniment 10 Playing a Fill 10 Intro/Ending 10 Sync Start 11

Auto Bass Chord.....12

Function Menu	13
Mixer	14
Memory	
Memory	15
Chord Dictionary	15
Songs	
Listening to the Songs	16
Lesson Mode	
Song Recording	17
MIDI Functions	
What's MIDI?	1.9
MIDI Terminals	
WIET Terrimale	
Trouble Shooting	19
Specifications	19
A P	
Appendices	
Voice List	
Style List	
Song List	
MIDI Implementation Chart	24

Other Function



75



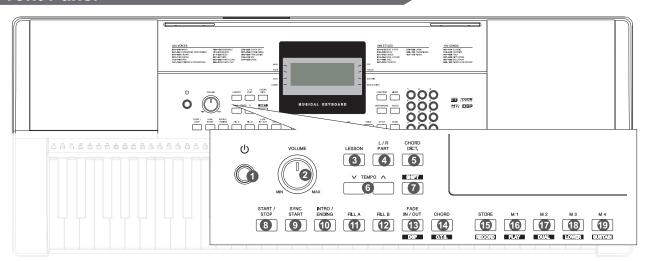






Panel & Display Description

Front Panel



1. POWER ON/OFF

Turn the power on or off.

2. MASTER VOLUME

Adjust the master volume.

3. LESSON

Enter the Lesson Mode.

4. L/R PART

Select the left / right-hand part in Lesson Mode.

5. CHORD DICT.

Enter the Chord Dictionary.

6. TEMPO + / -

Change the current tempo.

Press and hold it to access secondary functions of other buttons.

8. START/STOP

Start or stop playing the song in Song Mode. Start or stop playing the style in

Style Mode.

When the [SHIFT] button is released

13. FADE IN/OUT

Turn the Fade In or Fade Out on.

14. CHORD

Enter the chord mode.

15. STORE

Register the current panel settings.

16~19. M1-M4

Recall the memory settings.

9. SYNC START

Turn the SYNC START on or off.

10. INTRO / ENDING

Play the Intro or Ending.

11. FILL A

Play the fill-in pattern A.

12. FILL B

Play the fill-in pattern B.

When the [SHIFT] button is pressed

13. DSP

Turn the DSP effect on and off.

14. O.T.S.

Enter the One Touch Setting Mode.

15. RECORD

Start or stop real-time recording.

Play back the recorded user song.

17. DUAL

Turn the DUAL voice on or off.

18. LOWER

Turn the LOWER voice on or off.

19. SUSTAIN

Turn the Sustain effect on or off.

Rear Panel

28. USB

Connect to a computer.

29. SUSTAIN

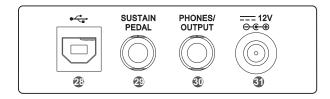
Connect a sustain pedal.

30. PHONE

Connect a pair of headphones.

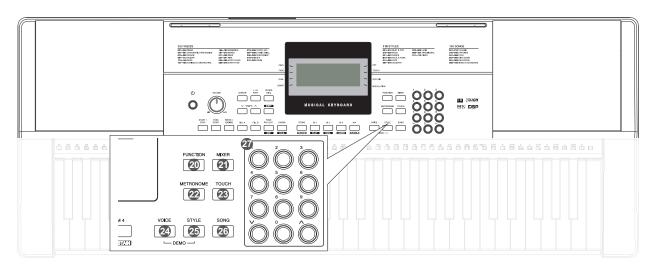
31. DC IN

Connect DC IN power adaptor (optional).









20. FUNCTION

Enter the Function Menu.

21. MIXER

Enter the Mixer Menu.

22. METRONOME

Turn the metronome on and off.

23. TOUCH

Turn the Touch response on and off.

24. VOICE

Enter the Voice Mode.

25. STYLE

Enter the Style Mode.

DFMC

Press VOICE and STYLE buttons simultaneously will start the DEMO playback.

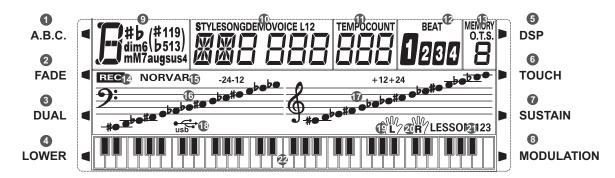
26. SONG

Enter the Song Mode.

27. +,-,NUMBER KEYS

Select the number or set parameters value.

Display



- 1. A.B.C.
- 2. FADE
- 3. DUAL
- 4. LOWER
- 5. DSP
- 6. TOUCH
- 7. SUSTAIN
- 8. MODULATION

- 9. CHORD
- 10. VOICE/STYLE/DEMO/SONG
- 11. TEMPO/COUNT
- 12. BEAT
- 13. STROE M1-M4/

ONE TOUCH SETTING

- 14. RECORD
- 15. NOR/VAR

- 16. BASS CLEF
- 17. TREBLE CLEF
- 18. USB CABLE
- 19. LEFT
- 20. RIGHT
- 21. LESSON 1/2/3
- 22. 61-KEY KEYBOARD

v

 $\overline{\Box}$



$\overline{\Psi}$

4

Setup

This section contains information about setting up your instrument and preparing to play. Please go through this section carefully before turning the power on.

Power Supply

You can power the unit either by batteries or by power adaptor. Follow the instructions described below.

Using Batteries

6 pieces of AA size (SUM-3 or Lr6) or equivalent alkaline batteries must first be installed into the battery compartment.

- Open the battery compartment cover located on the bottom of the instrument.
- Insert the batteries, carefully follow the polarity markings on the cabinet.
- 3. Replace the compartment cover, make sure it locks firmly in place.



Do not mix used and new batteries.

Always use same types of batteries.

Always remove the batteries from the unit when it is not used for an extended period of time.

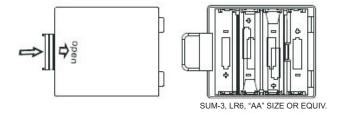
Using Power Adapter

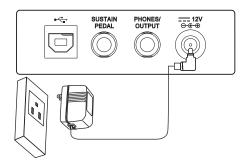
- First, please make sure that POWER ON/OFF switch of the instrument is set to OFF.
- 2. Connect the AC adaptor to the power supply jack.
- **3.** Plug the AC adaptor into an AC outlet. This will automatically cut off the battery power supply.
- **4.** Turn on the instrument.

Note:

When the keyboard is not in use or in the time of thunderstorm, please disconnect the power for safety purpose.

The instrument will automatically shut down in about 30 minutes if it is not used.



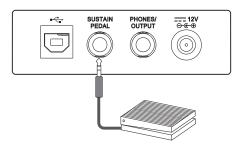






Connecting a Footswitch

An optional footswitch can be plugged into the sustain jack and be used to switch sustain on or off. Simply by pressing a sustain footswitch, you will have a natural sustain as you play.

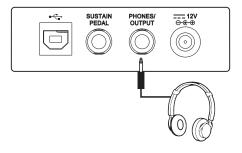


Connecting a pair of Headphones

A standard pair of stereo headphones can be connected to the PHONES jack for private practice or late-night playing. The internal stereo speaker system is automatically shut off when a pair of head phones is plugged into this jack.

Note:

Do not listen with the headphones at high volume for long periods of time. Doing so may cause hearing loss.

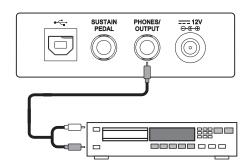


Connecting an Audio Equipment

The PHONES jack can be also connected with an audio equipment, such as an amplifier, mixer, recorder, etc.

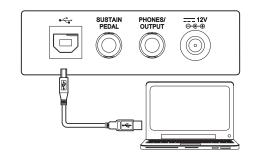
Note:

To avoid damaging the speakers, make sure the volume has been set to the minimum level before connecting the power and other devices.



Connecting a Computer

Use a USB cable to connect the instrument to a computer. The instrument receives and transmits MIDI messages via the USB connector.





__



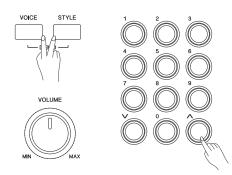
Playing the Demos

The instrument features 100 demo songs.

- 1. Press the [STYLE] and [VOICE] buttons simultaneously to start playing the demo.
- 2. Select a demo song. Use the data dial, the number keys, the [+] button or the [-] button to select the desired demo song.
- **3.** Adjust the volume with the [VOLUME] knob.
- 4. Press the [STYLE] and [VOICE] buttons simultaneously again or press the [START/STOP] button to stop playing and exit the demo



In the DEMO mode, all buttons except START/STOP, TEMPO+, TEMPO-, +, -, DSP, VOLUME, POWER ON/OFF will not be available.



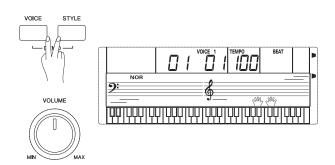
oices/

The keyboard has 320 remarkably realistic built-in voices, including Piano, Woodwind, Saxophone, Drum Kits and many more. Please refer to Voice List.

Playing Voices

- **1.** Press the [VOICE] button. Enter the VOICE mode. LCD shows "VOICE 1", the voice number.
- 2. Select a voice. Use the number keys, the [+] button or the [-] button to select the voice you want to play.
- 3. Play the voice. Play the keyboard and enjoy the wonderful voice.

When both Voice 1 and Voice 2 are on, you can press the [VOICE] button to shift between the two voices.





Playing Two Voice Simultaneously-DUAL

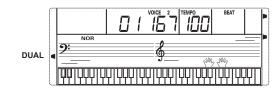
1. Holding down the [SHIFT] button and press the [DUAL] button to turn the function on. LCD shows "VOICE 2" and the dual voice number.







- Selecting a voice for VOICE 2. Use the data dial, the number keys, the [+] button or the [-] button to select the desired dual voice.
- Play the voices. You will hear two different voices layered together, just like two instruments playing at the same time.

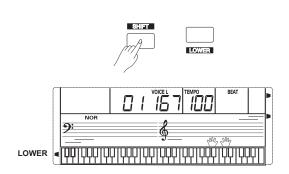


Lower

The lower function splits the keyboard into the left and the right hand areas, each with a different voice. The left hand voice is the lower voice "VOICE L".

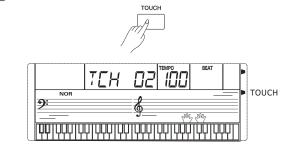
The default split point is #F3.

- 1. Holding down the [SHIFT] button and press the [LOWER] button to turn on the LOWER VOICE, LCD lights the LOWER VOICE icon and displays "VOICE L" and its number. When you play in real time, you can activate Split Mode simply by pressing this button.
- 2. Press [+]/[-] button, or numeric button to select the voice you want.



Touch

The keyboard is equipped with a touch response feature that lets you dynamically and expressively controls the level of the voice with your playing strength – just as on an acoustic instrument. Press the [TOUCH] button to adjust touch parameter: OFF, 1, 2,3. Press [+] and [-] buttons simultaneously to restore its default value.

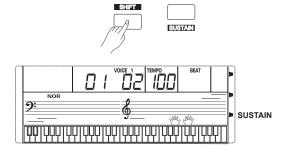


Sustain

When the Sustain feature is ON, all notes played on the keyboard would have a longer sustain. Holding down the [SHIFT] button and then press the [SUSTAIN] button to turn the SUSTAIN effect ON or OFF.

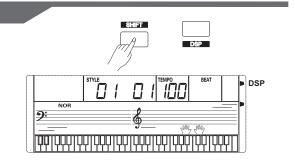
Note:

When you step on the "sustain pedal", the sustain effect is stronger than the effect by pressing the [SUSTAIN] button.



DSP Effect

The DSP simulates sounds in the real environment. With the DSP effect, you can add ambiance and depth to your performance. The DSP effect is set to ON when you turn on the instrument. Holding down the [SHIFT] button and then press the [DSP] button to turn on or off the DSP effect.





 \oplus





Auto Accompaniment

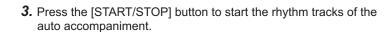
The instrument features 110 styles of different musical genres. Try selecting some of the different styles (Refer to *Style List*) and play with the auto accompaniment.

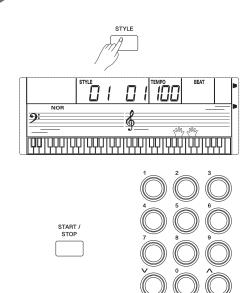
Play Auto Accompaniment

1. Press the [STYLE] button.

Enter the STYLE mode. LCD shows "STYLE", the style number.

2. Use the number keys, the [+] button, the [-] button to select the style you want to play.





Playing a Fill

Auto fill in function automatically adds a fill to your performance. When the fill-in is finished, accompaniment shifts to the Main section (A,B).

Note:

Hold down the FILL-IN A/B button when the style is playing, the selected FILL pattern repeats continuously until button is released. Press FILL-IN A/B when style stop, it will change to the normal section.

FILL A FILL B

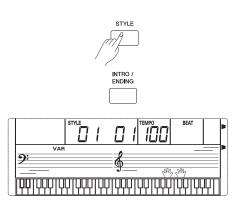
Intro/Ending

The intro is an opening section of the song. Each preset style features two different patterns. When the intro pattern finished, the system will automatically shift to the main section. Ending is used for the ending of the song. When the ending is finished, accompaniment automatically stops. The length of the ending differs depending on the selected style.

- 1. Press the [STYLE] button.
- 2. Select a style
- 3. Turn the Chord Mode on.
- 4. Turn SYNCHRONIZED START on.
- Press the [INTRO/ENDING], the "VAR" flashes on LCD, the style is ready to play.
- 6. It will start the accompaniment as soon as you start playing in Chord section. When the playback of the intro is finished, it automatically leads into main A or B section.
- **7.** Press the [INTRO/ENDING] again will lead it into the ending section. When the ending is finished, the auto accompaniment automatically stops.

Note:

Press [FILL A] or [FILL B] before the ending finished will lead it into main A or main B section.





Sync Start

While the style stops, press the [SYNC] button. The black dots below the tempo and the metronome flash, indicating the style is ready to play.

- **1.** If the Chord Mode is OFF, pressing any key will automatically begins to play the style (rhythm track).
- 2. If the Chord Mode is ON, pressing any key in the left-hand range of the keyboard will automatically begins to play the style (all tracks).

SYNC START

Fade In/Out

Fade In

Starting the style with fade in produces a smooth beginning, the volume increases from low to high.

Press the [FADE] button when Style is stopped, the fade indicator will light up on LCD. Now press [START/STOP] button to start the style playback, the fade indicator will flash.

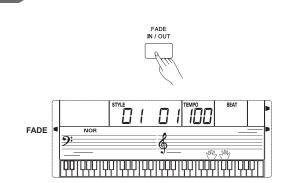
The Accompaniment Volume will change from 0 to the set value in about 8 seconds. The keyboard volume will change from 0 to default value at the same time.

Fade Out

Stopping the style with fade out produces a smooth ending, the volume decreases from high to low.

Press the [FADE IN/OUT] button during Style playing. The fade indicator will flash.

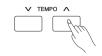
The Accompaniment Volume will decrease to 0 in about 8 seconds, and the style stops. The keyboard volume will change from default value to 0 at the same time.



Tempo

Each style of the instrument has been programmed with a default tempo; however, this can be changed by using the [TEMPO+] or [TEMPO-] buttons.

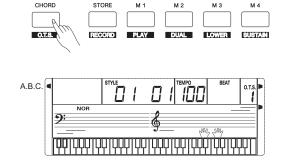
- **1.** Use the [TEMPO+] or [TEMPO-] button to change the tempo. The value ranges from 30 to 280.
- **2.** Hold down the [TEMPO] buttons can change the tempo quickly. While the tempo is flashing on LCD, you can also use the data dial to change the tempo quickly.
- Press the [TEMPO+] or [TEMPO-] buttons simultaneously to restore the default tempo setting.



One Touch Setting

When One Touch Setting is switched on, you can instantly recall all auto accompaniment related settings including voices selection and digital effects simply with a single touch of a button.

- Holding down the [SHIFT] button and then press the [O.T.S.] button to turns on the One Touch Setting for current style. LCD show O.T.S. 1.
- **2.** Press one of the [ONE TOUCH SETTING] buttons [M1]-[M4]. Voice match the selected style can be instantly recalled.
- **3.** Chord Mode is automatically turned on during O.T.S. mode.
- **4.** Holding down the [SHIFT] button and then press the [O.T.S.] button again to quit One Touch Setting mode, "O.T.S." disappears.



 $\overline{+}$



Auto Accompaniment

Auto Bass Chord

- 1. When the [CHORD] is switched on, the chords you played in the specified Chord section of the keyboard will be automatically detected and will be used to control the playback of the selected
- 2. Press the accompaniment keys, the corresponding chord will display on LCD.
- 3. Split Point Set

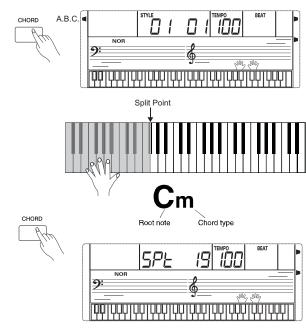
The default split key is F#3(19), Turn to "Function Menu" page for more detail. The split point key and the other keys on the left of it are accompaniment keys.

SINGLE FINGER

Single finger type not only can detect single finger but also can detect multi finger. And the single finger makes it easily to play chords through only one, two or three keys. Including major, minor, seventh, and minor seventh chord. Refer to relevant picture on the right for details.

MULTI FINGER

Multi finger type only can recognize those chords have listed in the chord list, and also can be found in the dictionary function.





Major Triad

Only press the root note on the keyboard.

Minor Triad

Press the root note and the nearest left black key simultaneously.

Seventh chord

Press the root note and the nearest left white key simultaneously.



Minor seventh chord

Press the root note and the nearest left white and black keys simultaneously.

0 C	1 C ₆	2 CM ₇	3 CM ₇ (#11)	4 CM(9)	5 CM ₇ ⁽⁹⁾
6 C ₆ ⁽⁹⁾	7 Caug	8 Cm	9 Cm ₆	10 Cm ₇	11 Cm ₇ ^(b5)
12 Cm(9)	13 Cm ₇ (9)	14 Cm ₇ (11)	15 CmM ₇	16 CmM ₇ (9)	17 Cdim *
18 Cdim ₇	19 C ₇	20 C _{7sus4}	21 C ₇ (b5)	22 C ₇ ⁽⁹⁾	23 C ₇ (#11)
24 C ₇ ⁽¹³⁾ * * * *	25 C ₇ (b9)	26 C ₇ (b13)	27 C ₇ (#9)	28 CM _{7aug}	29 C _{7aug}
30 Csus 4	31 C1+2+5				are optional; without them



Function Menu

Press [FUNCTION] button to enter the function menu. The default option of the menu is "Transpose". When you enter the menu next time, it will display the same option of you last operation. Press [FUNCTION] button repeatedly to select an option. Use [+]/[-] button to set the parameter.

The option and the parameters are as the follows:

Content	LCD Display	Range
Transpose	xPS 00	-12~0~12
Octave	OCt 00	-1~0~1
Modulation	Mod off	ON/OFF
Beat	bEt 04	0,29
Split Point	SPt 19	1~61
Tune	TUE 00	-50~50
MIDI Receive	CHI ALL	01~16,ALL
MIDI Transmit	CHo 01	01~16
Automatic Shutdown	PWF 30	30,60,OFF



It will automatically guit the function menu if there is no operation in 3 seconds.

TRANSPOSE

Press the [FUNCTION] button to set the transpose. The LCD displays the current transpose value. Use [+]/[-] button to set the transpose value over the range from -12 to +12.

Press [+] and [-] buttons simultaneously to set its default value "0".

OCTAVE

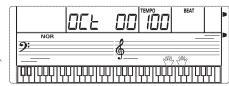
MODULATION

Press the [FUNCTION] button to set the octave. The LCD displays the current octave value. Use [+]/[-] button to set the octave value over the range from -1 to +1 octaves.

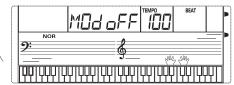
Press [+] and [-] buttons simultaneously to set its default value.

Press the [FUNCTION] button to set the modulation. The LCD currently display "MOD". Use [+]/[-] button to set modulation ON/ OFF.

Note: This modulation effect is unavailable to percussion.

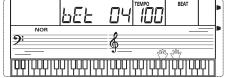


XP5



Press the [FUNCTION] button to set the beat function, LCD displays the current beat value. Press the [+] or [-] button to change the beat value: 0, 2, 3, 4, 5, 6, 7, 8, 9. The default value is 4.





SPLIT POINT

Press the [FUNCTION] button to enter SPLIT POINT sub-menu. The LCD displays the current split point value.

Use [+/YES] / [-/NO] button to adjust the split point value from 1 to 61. The keyboard can be also used to set the split point.

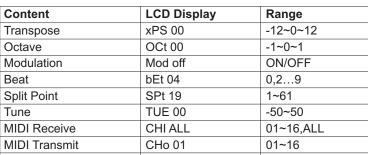
The key of the split point is the part of the left area.

The default setting is 019.











13

AW_M311_Manual_G05_160201 2



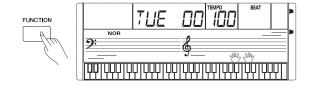
Other Function

TUNE

Press the [FUNCTION] button to select the Tune menu. The LCD displays the tune value. Use [+]/[-] to change the tune value. Its range is from -50 to +50 cents. Press [+] and [-] buttons together will set the TUNE to its default value.

Note:

The tune setting will apply to both keyboard and style.



MIDI SETTING

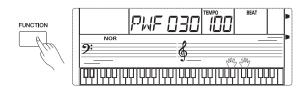
- 1. Press the [FUNCTION] button to select the MIDI IN/OUT menu. LCD displays "CHI ALL" or "CHo 01" respectively.
- 2. Use the [+]/[-] button to select a desired channel. Channels for MIDI IN: 1~16, ALL, the default setting is All. Channels for MIDI OUT: 1~16, the default setting is 01.

Automatic Power Off

- 1. Press the [FUNCTION] button repeatedly until the LCD displays "PWF 30".
- 2. The LCD displays the time value. The options are OFF, 30 and 60, the default value is 30.
- 3. Use [+] or [-] button to change the Power Off time value. Press [+] and [-] simultaneously to restore the default value: 30.







Mixer

Press [MIXER] button to enter the Mixer menu. The default option of the menu is "Accomp", When you enter this menu next time, it will display the same option of your last operation. Press [MIXER] button, select the option you want to set. Use [+]/[-] to set the parameter.

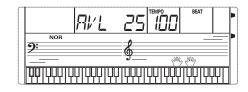
The option and the parameters are as the follows:

Content	LCD Display	Range
Accompaniment VOLUME	AVL 25	0-32
Rhythm Main VOLUME	RTh 31	0-32
Bass VOLUME	bAS 31	0-32
Chord 1 VOLUME	CH1 31	0-32
Chord 2 VOLUME	CH2 31	0-32
Chord 3 VOLUME	CH3 31	0-32
Voice R1 VOLUME	UP1 28	0-32
Voice R2 VOLUME	UP2 20	0-32
Voice L VOLUME	LOE 20	0-32

Note:

It will quit the Mixer menu if there is no operation in 3 seconds. Press [+] and [-] buttons simultaneously, the LCD displays "OFF", it means this parameter volume is turned off. Press [+] and [-] buttons simultaneously again, the LCD will display the last volume level.









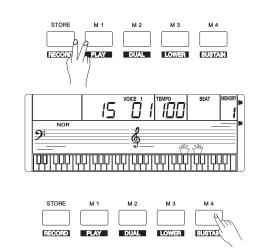
There are 4 memories (M1-M4).

- 1. While holding the [STORE] button, press one of the MEMORY buttons: [M1] [M4] to register the panel settings. The new settings will replace the previous memory data. LCD show "Mem Stor". The settings include voice number, style number, tempo, beat value, sustain effect, etc.
- **2.** Press one of the MEMORY buttons: [M1] [M4] to recall the panel settings.

Note:

The stored settings can not be recalled when the One Touch Setting function is on.

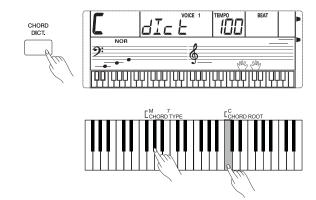
The stored settings will be returned to the default settings after you turned off the power.



Chord Dictionary

If you know the name of a chord but don't know how to play it, you can use the Chord Dictionary function.

- **1.** Press the [CHORD DICT.] button to enter this mode. The LCD displays the Chord Type and Chord Notes.
- 2. The keys on and above the C4 are used to assign the Chord Type, the keys on and above C5 are used to assign the Chord Root. When the chord Type and Chord Root are confirmed, the LCD will display the Chord and its staff position.
- **3.** Play the chords on the keyboard according to the display. If you press the correct notes, you will hear a prompt applause sound.
- 4. Press the [CHORD DICT.] button again to exit this mode.



24 Chords will be displayed in the dictionary mode as follows:

Note	Chord root	Note	Chord root	Note	Chord root
C6	С	C4	M	C5	7(b9)
C#6	C#/Db	C#4	M(9)	C#5	7(9)
D6	D	D4	6	D5	7(#9)
Eb6	Eb/D#	Eb4	mM7	Eb5	7(b13)
E6	E	E4	M7	E5	7(13)
F6	F	F4	m	F5	7(#11)
F#6	F#/Gb	F#4	m(9)	F#5	dim7
G6	G	G4	m6	G5	dim
Ab6	Ab/G#	Ab4	m7(9)	Ab5	7aug
A6	Α	A4	m7	A5	aug
Bb6	Bb/A#	Bb4	m7b5	Bb5	7sus4
В6	В	B4	7	B5	sus4



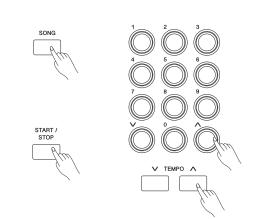
4

Song

The instrument features 100 songs (Refer to Song List). Each song can be practiced in LESSON mode.

Listening to the Songs

- Press the [SONG] button to enter the song mode. It will play all songs circularly. Press the [SONG] button again, it will stop the song and exit the song mode.
- 2. In song mode, use the number keys and [+] or [-] button to select a song.
- Once you start playing a song by pressing [START/STOP] button, it will play current song repeatedly. Press the [START/STOP] button again, it will stop the current song but not exit the song mode.
- **4.** Use the [TEMPO+] or [TEMPO-] button to change the tempo of the current song.
- When the song is stopped, press [STYLE], [VOICE], [SHIFT]+[DUAL], [SHIFT]+[LOWER], [M1] - [M4] to exit the song mode.



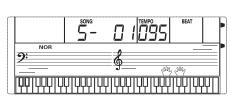
Lesson Mode

In the instrument, there are 3 different ways to practice the songs: time value training, note correction training, melody off. The grading system will help you keep track of your progress.

- In Song mode, press the [LESSON] button to enter the lesson mode or switch the lesson mode.
- **2.** Press the [START/STOP] button to start learning. The LCD will display the note to play.
- 3. Press the [START/STOP] button again to stop learning.
- 4. There are 3 lesson modes and a grading system.
 - **Lesson 1:** you need to play at the correct time value. As long as you play any key at the right time, the correct note will sound
 - **Lesson 2:** you need to play the correct notes. The lesson will continue only when you have played the note displayed on LCD, otherwise the song will stop and wait.
 - **Lesson 3:** the keyboard will score your practice by the correction of the time value and note.
 - **Grade:** In lesson mode, each time when you finish a lesson, the keyboard will play the prompt sound to tell you the level
 - you get. **Level 1:** Ok **Level 2:** Good
 - Level 3: Very Good Level 4: Excellent

After grading, the song will be playing again, you can learn it again.







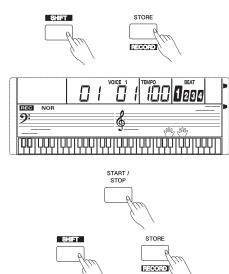


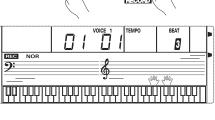
Song Recording

You can record your performance (up to 350 notes), and the accompaniment.

- 1. Holding down the [SHIFT] button and press the [RECORD] button, the record flag appears on the LCD, the beat flashes.
- 2. Play the notes you want to record or press the [START/STOP] button to start recording. To record accompaniment, turn on the chord mode, and play the chords on the left of the keyboard.
- 3. Holding down the [SHIFT] button and press the [RECORD] button again to stop recording. The record flag disappears.
- 4. Holding down the [SHIFT] button and press the [PLAY] button to play the notes you recorded.
- 5. Holding down the [SHIFT] button and press the [PLAY] button again to stop it.
- 6. During recording, holding down the [SHIFT] button and press the [PLAY] button can stop recording and play the notes you recorded.

If you turned off the keyboard, the data you have recorded will be lost.















MIDI Functions

By using the MIDI functions you can expand your musical possibilities. This section explains what MIDI is, and what it can do, as well as how you can use MIDI on your instrument.

What's MIDI?

MIDI (short for Musical Instrument Digital Interface) allows a wide variety of electronic musical instruments, computers and other related devices to connect and communicate with one another. MIDI carries event messages that specify notation, pitch and velocity, control signals for parameters such as volume, vibrato, audio panning, and program change information to change the voice selections.

The instrument can output the real-time playback information via MIDI messages and control external MIDI devices. The instrument can also accept incoming MIDI messages and generate sound accordingly.

MIDI Terminals

MIDI Connection

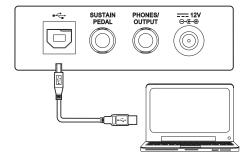
The electronic keyboard is equipped with a standard USB interface instead of conventional MIDI IN and MIDI out connectors. The USB interface allows the keyboard to be connected to a computer without the need to separately purchase a MIDI interface for the computer. Most computers will automatically recognize the keyboard as a MIDI interface, allowing MIDI messages to be received from, or sent to, music programs running on the computer.

To connect the keyboard to a computer you will need a standard USB A-B cable and suitable software such a music sequencing program.

Note:

Activate the computer from a sleep/suspended/standby mode before connecting the USB cable.

Connect the USB cable to the instrument and a computer before turning the power of the instrument on.







Trouble Shooting

Problem	Possible Cause and Solution
The speakers produce a "pop" sound whenever the power is turned ON or OFF.	This is normal and is no cause for alarm.
No sound results when the keyboard is played.	Make sure the master volume is set at appropriate levels.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the instrument may produce interference. To prevent this, turn off the mobile phone or use it further away from the instrument.
The auto accompaniment does not play back even Sync is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Sync Start, make sure to play a key in the left-hand range of the keyboard.

Specifications

Keyboard

61

Display

Multi-functional LCD

Polyphony

32

320, including 4 drum kits

Style

110

Song

100

Demo

100

Tempo

30-280

Registration Memory

Control button

Power on/off switch, Function, Mixer, Tempo+/-, ChordDict, Lesson, L/R Part, DSP, Style, Voice, Song, Memory, M1-M4, O.T.S., Dual, Sustain, Touch, Metro,Lower

Accompaniment Control

Start/Stop, Sync Start, Intro/Ending, Fill A, Fill B, Fade In/Out, Chord

Record Function

Record, Play

Connectors

DC IN, Phones, USB, Sustain

Power Supply

DC IN 12V

Speaker

 4Ω 3W + 3W

Dimensions

940(W) x 360(D) x 145(H)mm

Weight

4.5kg(without batteries)



^{*} All specifications and appearances are subject to change without notice.



4

Voice List

No	Name	LCD Name
PIAI		
1	Acoustic Grand Piano 1	GrandPn1
2	Acoustic Grand Piano 2	GrandPn2
3	Acoustic Grand Piano (dark)	GrandPnD
4	Octave Grand Piano 1	OctPno1
5	Octave Grand Piano 2	OctPno2
6	Octave Grand Piano 3	OctPno3
7	Piano & Choir	Pno&Cho
8	Acoustic Grand Piano (wide)	
9	Bright Acoustic Piano 1	BritPno1
10	Bright Acoustic Piano 2	BritPno2
11	Bright Acoustic Piano 3	BritPno3
12	Bright Acoustic Piano 4	BritPno4
13	Bright Acoustic Piano 5	BritPno5
14	Bright Piano (stereo) 1	BritPnS1
15	Bright Piano (stereo) 2	BritPnS2
16	Detuned Electric Piano 1	
17		DetunEP1
18	Detuned Electric Piano 2	DetunEP2
	Chorus Piano	ChoruPno
19	Bright Acoustic Piano (wide)	
20	Bright Acoustic Piano (wide)	
21	Piano & Vibraphone	Pno&Vib
22	Electric Grand Piano	E.Grand
23	Electric Grand Piano (wide)	E.GrandW
24	Honky-tonk Piano	HnkyTonk
25	Honky Tonk Piano (dark)	HnkTonkD
26	Honky Tonk Piano (wide) 1	HnkyTkW1
27	Honky Tonk Piano (wide) 2	HnkyTkW2
28	Electric Piano 1	E.Piano1
29	Electric Piano (stereo)	E.PianoS
30	50's Electric Piano	50'sEP
31	Electric Piano (wide) 1	EPianoW1
32	Electric Piano (wide) 2	EPianoW2
33	Electric Piano (wide) 3	EPianoW3
34	Electric Piano (wide) 4	EPianoW4
35	Electric Piano 2	E.Piano2
36	Detuned Electric Piano 1	DetunEP1
37	Detuned Electric Piano 2	DetunEP2
38	Harpsichord	Harpsi
39	Harpsichord (wide)	HarpsiW
40	Harpsichord (octave mix) 1	HarpsiO1
41	Harpsichord (octave mix) 2	HarpsiO2
42	Harpsichord (with key off)	HarpsiOf
43	Clavi	Clavi
44	Clavi (stereo)	ClaviS
	Clavi (wide)	ClaviW
45		
46	Wah Clavi	WahClavi
46 CHF	Wah Clavi COMATIC PERCUSSION	WahClavi
46 CHR 47	Wah Clavi COMATIC PERCUSSION Celesta	WahClavi Celesta
46 CHF 47 48	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark)	WahClavi Celesta CelestaD
46 CHF 47 48 49	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine	WahClavi Celesta CelestaD Cele&Sin
46 CHR 47 48 49 50	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell	WahClavi Celesta CelestaD Cele&Sin ReBell
46 CHR 47 48 49 50 51	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell Celesta & Music Box	VahClavi Celesta CelestaD Cele&Sin ReBell Cel&Mbox
46 CHR 47 48 49 50 51 52	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell Celesta & Music Box Glockenspiel	Celesta CelestaD Cele&Sin ReBell Cel&Mbox Glocken
46 CHR 47 48 49 50 51 52 53	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell Celesta & Music Box Glockenspiel Glockenspiel & Sine	VahClavi Celesta CelestaD Cele&Sin ReBell Cel&Mbox Glocken Glkn&Sin
46 CHR 47 48 49 50 51 52 53 54	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell Celesta & Music Box Glockenspiel Glockenspiel & Sine Music Box	WahClavi Celesta CelestaD Cele&Sin ReBell Cel&Mbox Glocken Glkn&Sin MusicBox
46 CHR 47 48 49 50 51 52 53 54 55	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell Celesta & Music Box Glockenspiel Glockenspiel & Sine	VahClavi Celesta CelestaD Cele&Sin ReBell Cel&Mbox Glocken Glkn&Sin
46 CHR 47 48 49 50 51 52 53 54	Wah Clavi COMATIC PERCUSSION Celesta Celesta (dark) Celesta & Sine Reecho Bell Celesta & Music Box Glockenspiel Glockenspiel & Sine Music Box	VahClavi Celesta CelestaD Cele&Sin ReBell Cel&Mbox Glocken Glkn&Sin MusicBox

58	Vibraphone & Harpsichord	Vibr&Hrp	
59	Marimba	Marimba	
60	Marimba (wide) MarimbaW		
61	Sine Marimba SinMarmb		
62	Marimba (stereo)	MarimbaS	
63	Marimba & Vibraphone	Marm&Vib	
64	Wood Drum	WoodDrum	
65	Xylophone	Xylophon	
66	Tubular Bells 1	TubuBel1	
67	Tubular Bells 2	TubuBel2	
68	Tubular Bells 3	TubuBel3	
69	Dulcimer	Dulcimer	
ORG	AN		
70	Drawbar Organ	DrawOrgn	
71	Drawbar Organ (stereo)	DrawOrgS	
72	Soft Stereo Drawbar Organ	DrawOgSf	
73	Mellow Drawbar Organ	MellDOrg	
74	Bright Drawbar Organ	DrawOrgB	
75	Percussive Organ	PercOrgn	
76	Detuned Percussive Organ	DePerOrg	
77	Rock Organ	RockOrgn	
78	Church Organ	ChurOrgn	
79	Detuned Church Organ	DeChuOrg	
80		1 ChrOrgO1	
81	0 (/	2 ChrOrgO2	
82	0 (,	ReedOrgn	
	Reed Organ		
83	Reed Organ (stereo)	ReedOrgS	
	Accordion 1	Acordin1	
85	Accordion 2	Acordin2	
86	Accordion (stereo)	AcordinS	
87	Harmonica	Harmnica	
88	Harmonica (dark)	HarmnicD	
89	Tango Accordion	TangoAcd	
90	Tango Accordion (dark)	TangAcdD	
GUI			
91	Acoustic Guitar (nylon) 1	NylnGtr1	
92	Acoustic Guitar (nylon) 2	NylnGtr2	
93	Chorus Nylon Guitar 1	NyInGtC1	
94	Chorus Nylon Guitar 2	NylnGtC2	
95	Nylon Guitar (stereo) 1	NylnGtS1	
96	Nylon Guitar (stereo) 2	NyInGtS2	
97	Acoustic Guitar (steel) 1	SteelGt1	
98	Acoustic Guitar (steel) 2	SteelGt2	
99	12-Strings Guitar	12StrGtr	
100	Detuned Steel Guitar	DetStlGt	
101	Electric Guitar (jazz) 1	JazzGtr1	
102	Electric Guitar (jazz) 2	JazzGtr2	
103	Electric Guitar (clean)	CleanGtr	
104	Clean Guitar (stereo)	CleanGtS	
105	Soft Clean Guitar	ClnGtSof	
106	Chord Clean Guitar	ClnGtCho	
107	Electric Guitar (muted)	MutedGtr	
108	Stereo Muted Guitar	MutedGtS	
109	Chord Muted Guitar	MutGtCho	
110	Overdriven Guitar	Ovrdrive	
111	Distortion Guitar	DistGtr	
112	Guitar Harmonics	GtrHarmo	
BAS			
113	Acoustic Bass 1	AcoBass1	
		. 10024001	

114 Acoustic Bass 2

AcoBass2

115	Acoustic Bass 3	AcoBass3
116	Acoustic Bass 4	AcoBass4
117	Acoustic Bass Detuned	DetAcoBs
118	Velocity Crossfade Bass	VelCroBs
119	Jazz Style	JazzSty
120	Acoustic Bass & Mute Guita	r ABs&MtGT
121	Electric Bass (finger) 1	FngrBs1
122	Electric Bass (finger) 2	FngrBs2
123	Electric Bass (finger) 3	FngrBs3
124	Electric Bass (finger) 4	FngrBs4
125	Finger Bass (dark) 1	FngrBsD1
126	Finger Bass (dark) 2	FngrBsD2
127	Detuned Finger Bass 1	DeFngBs1
128	Detuned Finger Bass 2	DeFngBs2
129	Velocity Bass	VelBass
130	Bass & Distortion Guitar	Bs&DisGt
131	Electric Bass (pick) 1	PickBs1
132	Electric Bass (pick) 2	PickBs2
133	Mute Pick Bass	PickBsM
134	Pick & Finger Bass	Pk&FgBs
135	Pick Bass & Clean Guitar	PBs&ClGt
136	Detuned Pick Bass	DetPkBs
137	Fretless Bass 1	Fretles1
138	Fretless Bass 2	Fretles2
139	Slap Bass 1	SlapBas1
140	Slap Bass 2	SlapBas2
141	Slap Bass 3	SlapBas3
142	Slap Bass 4	SlapBas4
143	Synth Bass 1	SynBass1
144	Synth Bass 2	SynBass2
145	Cumth Dags 2	CumDeee2
143	Synth Bass 3	SynBass3
146	Synth Bass 3 Synth Bass 4	SynBass3 SynBass4
146	-	SynBass4
146	Synth Bass 4 INGS & ORCHESTRAL IN	SynBass4
146 STR	Synth Bass 4 INGS & ORCHESTRAL IN	SynBass4
146 STR 147	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2	SynBass4 ISTRUMENTS Violin1
146 STR 147 148 149 150	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2	SynBass4 NSTRUMENTS Violin1 Violin2
146 STR 147 148 149	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln
146 STR 147 148 149 150	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1
146 STR 147 148 149 150 151	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2
146 STR 147 148 149 150 151 152	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola
146 STR 147 148 149 150 151 152 153 154 155	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1
146 STR 147 148 149 150 151 152 153 154 155 156	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2
146 STR 147 148 149 150 151 152 153 154 155 156 157	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2
146 STR 147 148 149 150 151 152 153 154 155 156 157 158	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Orchestral Harp 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo)	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo)	SynBass4 Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2 HarpS
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 ENS	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 2 Pizzicato Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE	SynBass4 Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2 HarpS Timpani1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 2 Pizzicato Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2 HarpS Timpani1 Timpani2 Strings1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 ENS	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 2 Pizzicato Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE	SynBass4 Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2 HarpS Timpani1 Timpani2
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 ENSS	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 2 Pizzicato Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE Strings Ensemble 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2 HarpS Timpani1 Timpani2 Strings1 Strings2 Strings3
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 169 161 162 163 164 165 ENS 166 167	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 2 Pizzicato Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE Strings Ensemble 1 Strings Ensemble 2	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr2 Harp1 Harp2 HarpS Timpani1 Timpani2 Strings1 Strings2
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 160 161 162 163 164 165 ENS 166 167 168 169 170	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE Strings Ensemble 1 Strings Ensemble 3 Strings Ensemble 4 Stereo Strings 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr1 Harp2 Harp3 Timpani1 Timpani2 Strings1 Strings2 Strings4 Strings1
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 ENS 166 167 168 169	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 1 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE Strings Ensemble 1 Strings Ensemble 3 Strings Ensemble 4	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr1 Harp2 Harp3 Timpani1 Timpani2 Strings1 Strings3 Strings4
146 STR 147 148 149 150 151 152 153 154 155 156 157 158 160 161 162 163 164 165 ENS 166 167 168 169 170	Synth Bass 4 INGS & ORCHESTRAL IN Violin 1 Violin 2 Two Violin Viola 1 Viola 2 Two Viola Cello 1 Cello 2 Contrabass 1 Contrabass 2 Tremolo Strings 1 Tremolo Strings 1 Pizzicato Strings 2 Pizzicato Strings 2 Orchestral Harp 1 Orchestral Harp 2 Orchestral Harp 2 Orchestral Harp (stereo) Timpani 1 Timpani 2 EMBLE Strings Ensemble 1 Strings Ensemble 3 Strings Ensemble 4 Stereo Strings 1	SynBass4 NSTRUMENTS Violin1 Violin2 TwoVioln Viola1 Viola2 TwoViola Cello1 Cello2 Contrbs1 Contrbs2 TremStr1 TremStr2 PizzStr1 PizzStr1 Harp2 Harp3 Timpani1 Timpani2 Strings1 Strings2 Strings4 Strings1







Voice List

173	Synth Strings 2	SynStrs2
174	Synth Strings 3	SynStrs3
175	Synth Strings (stereo) 1	SynStrS1
176	Synth Strings (stereo) 2	SynStrS2
177	Choir Aahs	ChoirAah
178	Choir Aahs (dark)	ChoAahD
179	Stereo Aahs 1	ChoAhS1
180	Stereo Aahs 2	ChoAhS2
181	Mellow Choir Aahs	ChoAhMel
182	Aahs & Synth Strings	Ah&SyStr
183	Big Aahs	BigAahs
184	Voice Oohs	VoiceOoh
185	Synth Voice 1	SynVoic1
186	Synth Voice 2	SynVoic2
187	Synth Voice (stereo)	SynVoicS
188	Orchestra Hit	OrchHit
189	Orchestra Hit (stereo)	OrchHitS
190	Octave Orchestra Hit	HitOctO
BRA	SS	'
191	Trumpet 1	Trumpet1
192	Trumpet 2	Trumpet2
193	Trumpet (dark)	TrumpetD
194	Wah Trumpet	TrumpetW
195	Trombone 1	Trmbone1
196	Trombone 2	Trmbone2
197	Tuba 1	Tuba1
198	Tuba 2	Tuba2
199	Muted Trumpet 1	MuteTrp1
200	Muted Trumpet 2	MuteTrp2
201	French Horn 1	FrHorn1
202	French Horn 2	FrHorn2
203	Fifth Horn Orchestra	5thHorn
204	Brass Section	Brass
205	Synth Brass 1	SynBras1
206	Synth Brass 2	SynBras2
207	Synth Brass 3	SynBras3
208	Synth Brass 4	SynBras4
209	Synth Brass 5	SynBras5
210	Octave Synth Brass	SynBrasO
REE		
211	Soprano Sax 1	SprnSax1
212	Soprano Sax 2	SprnSax2
213	Alto Sax 1	AltoSax1
214	Alto Sax 2	AltoSax2
215	Tenor sax 1	TenoSax1
216	Tenor sax 2	TenoSax2
217	Baritone Sax 1	BariSax1
	Baritone Sax 2	BariSax2
218	Daniello Can Z	
218	Ohne	Ohoe
219	Oboe Sweet Oboe	Oboe SwetOboe
	Oboe Sweet Oboe English Horn 1	Oboe SwetOboe EngHorn1

223	Bassoon 1	Bassoon1
224	Bassoon 2	Bassoon2
225	Clarinet 1	Clarine1
226	Clarinet 2	Clarine2
PIPE		_
227	Piccolo	Piccolo
228	Flute 1	Flute1
229	Flute 2	Flute2
230	Recorder 1	Recordr1
231	Recorder 2	Recordr2
232	Pan Flute 1	PanFlut1
233	Pan Flute 2	PanFlut2
234	Blown Bottle 1	Bottle1
235	Blown Bottle 2	Bottle2
236	Shakuhachi 1	Shakchi1
237	Shakuhachi 2	Shakchi2
238	Whistle 1	Whistle1
239	Whistle 2	Whistle2
240	Ocarina 1	Ocarina1
241	Ocarina 2	Ocarina2
SYN	TH LEAD	
242	Lead 1 (square) 1	SquarLd1
243	Lead 1 (square) 2	SquarLd2
244	Lead 1 (square) 3	SquarLd3
245	Lead 1b (sine)	SineLead
246	Slow Square Lead	SawLead
247	Thick Square	ThickSq
248	Quint	Quint
249	Sine Solo	SineSolo
250	Lead 2 (sawtooth) 1	SawLead1
251	Lead 2 (sawtooth) 2	SawLead2
252	Stereo Sawtooth 1	SawLdS1
253	Stereo Sawtooth 2	SawLdS2
254	Fifth Sawtooth	5thSaw
255	Lead 3 (calliope) 1	CalipLd1
256	Lead 3 (calliope) 2	CalipLd2
257	Lead 4 (chiff) 1	ChiffLd1
258	Lead 4 (chiff) 2	ChiffLd2
259	Lead 5 (charang) 1	CharnLd1
260	Lead 5 (charang) 2	CharnLd2
261	Lead 6 (voice) 1	VoiceLd1
262	Lead 6 (voice) 2	VoiceLd2
263	Lead 7 (fifths)	FifthsLd
264	Lead 8 (bass + lead) 1	Bs&Lead1
265	Lead 8 (bass + lead) 2	Bs&Lead2
SYN	TH PAD	
266	Pad 1 (new age) 1	NewAgPd1
267	Pad 1 (new age) 2	NewAgPd2
268	Pad 2 (warm) 1	WarmPad1
269	Pad 2 (warm) 2	WarmPad2
270	Pad 3 (polysynth) 1	PlySyPd1
271	Pad 3 (polysynth) 2	PlySyPd2

ad1 ad2 Pad1 Pad2 Pad ad Pad ad brad brad brad brad brad brad brad
Pad1 Pad2 Pad Pad Pad Pad Prad I
Pad2 Pad2 Pad Pad Pad Pad Itrk
Pad ad Pad n trk
n trk
Pad n trk
n trk
trk I
trk I
I
phr
s
s
ar
<u> </u>
4
sn1
sn2
a1
a2
е
i
ell
um
rum
Blok
um
Tom
um
mbl
2
3
5

,
Set
Set et









Style List

No	Name	LCD Name		
BEA	BEAT & POP			
1	8Beat 1	8Beat1		
2	8Beat 2 8Beat2			
3	8Beat 3	8Beat3		
4	8Beat 4	8Beat4		
5	60's 8Beat	60's8Bt		
6	8Beat Ballad	8BtBalld		
7	8Beat Rock	8BtRock		
8	16Beat 1	16Beat1		
9	16Beat 2	16Beat2		
10	Pop 16Beat	Pop16Bt		
11	16Beat Shuffle	16BtShfl		
12	Ballad	Ballad		
13	Slow Ballad	SlowBald		
14	16Beat Ballad	16BtBald		
15	Unplugged	Unpluged		
RO	CK			
16	Rock	Rock		
17	Pop Rock	PopRock		
18	Fast Rock	FastRock		
19	Slow Rock 1	SlwRock1		
20	Slow Rock 2	SlwRock2		
21	Rock & Roll	RockRoll		
22	Heavy Metal	HavyMetl		
23	Blues Boogie	BluBogie		
24	Blues	Blues		
25	Shuffle	Shuffle		
26	Blues Shuffle	BlusShfl		
27	Rock Shuffle	RockShfl		
28	Charlston	Charston		
29	Old Rock	OldRock		
30	Easy Rock	EasyRock		
DAN	ICE			
31	Disco 1	Disco1		
32	Disco 2	Disco2		
33	Disco Funk	DiscFunk		
34	Dance	Dance		
35	House 1	House1		
36	House 2	House2		
37	Rap	Rap		
38	Euro Dance	EuroDanc		

39	Нір Нор	HipHop
40	Techno	Techno
41	Euro Dance	EuroDanc
42	Garage	Garage
sou	JL & FUNK	
43	Pop Funk	PopFunk
44	Jazz Funk	JazzFunk
45	Cool Funky	CoolFunk
46	Soul 1	Soul1
47	Soul 2	Soul2
48	Soul Shuffle	SoulShfl
49	Soul Blues	SoulBlus
50	R&B	R&B
51	6/8 Gospel	6/8Gospl
52	Pop Groove	PopGrove
53	Gospel Swing	GopSwing
54	Gospel	Gospel
JAZ	Z	
55	Swing	Swing
56	Cool Jazz	CoolJazz
57	Pop Swing	PopSwing
58	Swing Fox	SwingFox
59	Big Band	BigBand
60	Big Band Meduim	BBandMed
61	Jazz Waltz	JazzWltz
62	Ragtime	Ragtime
63	Dixeland	Dixeland
64	Quick Step	QuickStp
65	Guitar Swing 1	GtSwing1
66	Swing Shuffle	SwingSfl
COL	JNTRY	
67	Country 1	Country1
68	Country 2	Country2
69	Country Pop	CntryPop
70	Country Rock	CtryRock
71	Country Folk	CtryFolk
72	3/4 Country	3/4Ctry
73	Country Waltz	CtryWltz
74	Country Shuffle	CtryShfl
75	Country Boogie	CtyBogie
76	Country Blues	CtyBlues
77	Country Quick Step	CtryStep

78	Bluegrass	Bluegras		
LAT	LATIN			
79	Bossa Nova 1	Bossa1		
80	Bossa Nova 2	Bossa2		
81	Rumba	Rumba		
82	Pop Rumba	PopRumba		
83	Cha Cha	ChaCha		
84	Pop Cha Cha	PChaCha		
85	Tango	Tango		
86	Jazz Samba	JazSamba		
87	Reggae	Reggae		
88	Pop Reggae	PReggae		
TRA	DITIONAL			
89	March 1	March1		
90	March 2	March2		
91	German March	GerMarch		
92	6/8 March 1	6/8March		
93	Polka	Polka		
94	Pop Polka	PopPolka		
95	Waltz	Waltz		
96	Slow Waltz	SloWaltz		
97	Vienna Waltz	VieWaltz		
98	Musette	Musette		
99	Party Polka	PtyPolka		
100	Mazurka	Mazurka		
PIAI	NO			
101	8Beat	Pno8Beat		
102	Ballad	PnoBald		
103	Boogie	PnoBogie		
104	Jazz	PnoJazz		
105	Piano Swing	PnoSwing		
106	Waltz Jazz	WltzJazz		
107	Twist	PnoTwist		
108	March	PnoMarch		
109	6/8 March 2	Pno6/8Mr		
110	Piano Waltz	PnoWaltz		











Song List

No.	Name	LCD Name
CLA	SSIC	
1	Cannon	Cannon
2	Meditation	Meditati
3	Old French Song	France
4	Minuet In G	Minuet
5	Ode To Joy	OdeToJoy
6	Wiegenlied	WieGenli
7	The Surprise Symphony	Surprise
8	Swan Lake	SwanLake
9	The Four Seasons	F.Season
10	Carmen	Carmen
11	Joy To The World	JoyWorld
12	Toy Symphony	Toy
13	Humoreske	Humoresk
14	Kuckucks Walzer	Kuckucks
FAV	ORITE	
15	It's Been A Long, Long Time	LongAgo
16	Old Folks At Home	OldFolks
17	Oh! Susanna	Susanna
18	Jeanie With The Light Brown Hair	Jeannie
19	Bill Bailey, Won't You Please Come Home?	Billhome
20	Annie Laurie	Annielau
21	From The New World	NewWorld
22	The Yellow Rose Of Texas	RoseTexa
23	Ave Maria	AveMaria
24	My Old Kentucky Home	Kentucky
25	Turkey In The Straw	Turkey
26	Deck The Halls	DeckHall
27 27	Grandfather's Clock	G'sClock
28	America The Beautiful	America
29	The Sideway	Sideway
30	The Entertainer	Entertai
31	The Old Gray Mare	GrayMare
32	Aloha Oe	AlohaOe
33	Solvejg's Cradle Song	Solveig
34	Camptown Races	C.Races
35	Carry Me Back To Old Virginny	Viginia
36	The Blue Bells Of Scotland	BlueBell
37	O Sole Mio	OsoloMio
38	Jingle Bells	JingBell
39	Battle Hymn Of The Republic	Battle
39 40	Silent Night	SltNight
40 F OL		Sidvigit
FOL 41	Огонек	Ogoniok
41 42	Aura Lea	Ogoniok AulaLee
42 43		HouseSun
43 44	House Of The Rising Sun	
	Danny Boy	DannyBoy
45	l've Been Working On The Railroad	WorkRail
46	With Games	WithGame
47	Way Home	WayHome
48	Parting	Parting
49	Yankee Doodle	YankeeD
50	Red River Valley	RedRiver

		1	
No.	Name	LCD Name	
51	Auld Lang Syne	AuldLang	
52	When The Saints Go Marching In	Marching	
53	Twinkle Twinkle Little Star	Twinkle	
54	Happy Birthday To You	Birthday	
55	Little Brown Jug	BrownJug	
56	Michael Row The Boat Ashore	RowBoat	
57	Old King Cole	KingCole	
58	Jamaica Farewell	Jamaica	
59	Тройка	Troika	
60	Cielito Lindo	Cielito	
61	If You're Happy And You Know It	ClapHand	
62	American Patrol	A.Patrol	
63	When Johnny Comes Marching Home	ComeHome	
64	Green Sleeves	Sleeves	
65	Santa Lucia	SantaLu	
66	Sweet Waltz	SweetWal	
KID'	S SONG		
67	Angels We Have Heard On High	Angels	
68	Skip To My Lou	SkipMyLo	
69	London Bridge Is Falling Down	Bridge	
70	Humpty Dumpty	HumptyD	
71	Home On The Range	HomeRang	
72	This Old Man	OldMan	
73	Star Bright	StarBri	
74	Ten Little Indians	TenIndia	
75	Polly Wolly Doodle	PlyWlyDo	
76	Santa Claus Is Coming To Town	SantaCla	
77	Sippin' Cider Through A Straw	SipinCid	
78	La Cucaracha	Cucaraca	
79	Home Sweet Home	SwetHome	
80	Up On The House Top	HouseTop	
	LROOM	Trodoc top	
81	Kuerchake Dance	Kulzak	
82	Samba	Samba	
83	Tango	Tango	
84	Kazakhstan Dance	Kazakhst	
85	Naughty Polka	Polka	
	NO & KEYBOARD	Polka	
		FourSwap	
86	Four Little Swans	FourSwan	
87	Did You Ever See A Lassie	Lassie	
88	Spring	Spring	
89	Impromptu	Imprompt	
90	Gavotte	Gavotte	
91	Nocturne	Nocturne	
92	Pizzicato Polka	Pizicato	
93	Moment Musical	M.Moment	
94	The Rag-Time Dance	Rag-Time	
95	Love	Love	
96	Valse No.6 "Petit Chien"	ValseNo6	
97	Rondeau	Rondeau	
98	The Chrysanthemum	Chrysanf	
99	Invention A 2 Voix	Invetion	
	Afternoon	Afternoo	









\oplus

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic	Default	1ch	ALL	
Channel	Changed	×	×	
	Default	×	1	
Mode	Messages	×	×	
	Altered	******	×	
Note	Note	18—114	0—127	
Number	:True voice	******	0—127	
Velocity	Note on	○ 9nH,V=1-127	○ 9nH,V=1-127	
	Note off	× (9nH,V=0)	×(9nH,V=0; 8nH,V=0-127)	
After	key's	×	×	
Touch	Ch's	×	×	
Pitch Bend		0	0	
Control	0	0	0	Bank Select
Change	1	×	0	Modulation
90	5	×	×	Portamento Time
	6	×	0	Data Entry
	7	×	0	Volume
	10	×	0	Pan
	11	×	0	Expression
	64	0	0	Sustain Pedal
	65	×	×	Portamento ON/OFF
	66	×	0	Sostenuto Pedal
	67	×	0	Soft Pedal
	80	×	0	Reverb Program
	81	×	0	Chorus Program
	91	×		Reverb Level
	93		0	Chorus Level
	120	×	0	All Sound Off
	121		0	
	123	X	0	Reset All Controllers
Duaguaga	123	0	0	All Notes Off
Program	:true	******	0 407	
Change			0-127 ×	
System Exc	:SongPosition	×		
System	:Song Select	×	×	
Common	:Tune	×	×	
Overte :	:Clock	×	×	
System	:Commands	×	×	
Real Time	:LOCAL ON/OFF	×	×	
Aux		×	×	
	:All Notes Off	0	0	
Messages	:Active sense	×	0	
	:Reset	×	0	

• Mode 1: OMNI ON, POLY

• Mode 2: OMNI ON, MONO

• Mode 3: OMNI OFF, POLY

Mode 4: OMNI OFF, MONO

o: YES ×: NO

M311_G05



AW_M311_Manual_G05_160201

•