

ARK-2173

61-Key Multi-function Teaching-Type Digital Electronic Organ

OPERATION INSTRUCTIONS

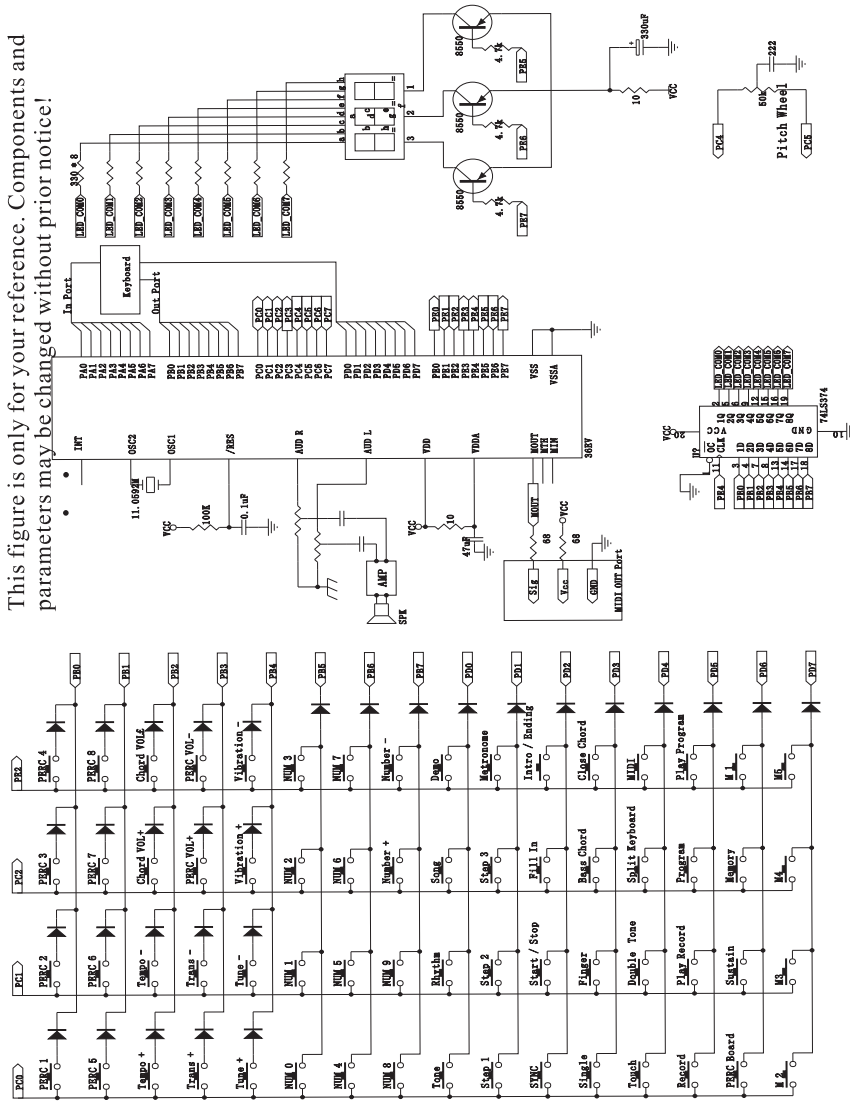
Thank you very much for selecting Model ARK-2173 Teaching-type digital electronic organ!

Please carefully read this operation instruction before use for better performance and keep it properly for future reference.



61 STANDARD TOUCH PIANO KEYS
LED DISPLAY
128GM TONES+1DRUM KIT
100 SELECTED AUTO ACCOMPANIMENTS
REAL-TIME RECORD AND PLAY
RHYTHM PROGRAM AND REPLAY
DEMO SONGS, INTELLIGENT GUIDE
5 MEMORY GROUP
SUSTAIN, VIBRATO, TRANSPOSE, FINE TUNING
TOUCH, DUAL VOICE, KEYBOARD SPLIT
SYNC , START/STOP, FILL IN
ENTRO/END, TEMPO
SINGLE CHORD, FINGER CHORD, BASS CHORD
CHORD VOLUME, METRONOME, CHORD CLEAR
MASTER VOLUME, CHORD VOLUME, ACCOMPANIMENT VOLUME
MIDI OUT\HEADPHONE\LEFT AND RIGHT SOUND TRACK

This figure is only for your reference. Components and parameters may be changed without prior notice!



Caution

Please observe the following rules in use so as to avoid the possible hurt to operator and anybody else as well as damage to the electric organ and other peripheral equipment. The cautions needed but not limited to are as follows:

- ◆ Do not open the casing of electronic organ and try to disassemble any part of it, nor make any change to it. Should any abnormal function occur in use, please stop operating it immediately and send it for repair by qualified servicemen.
- ◆ Please use specified voltage, otherwise the electronic organ may be damaged, overheated or wow may occur.
- ◆ You shall close all power sources before connecting the electronic organ to other electronic appliances and adjust volume potentiometer.
- ◆ Do not place AC adapter or power cord near heating source such as central heating or heat radiator. Do not overbend wire and place heavy matters on wire or wind wire with other matters to avoid damaging wire.
- ◆ Do not connect the plug of electronic organ in blanket socket to avoid overheating socket. When you do not use it for a long term or in thunder days, close off the power and pull off the AC adapter or power plug. To pull out power plug, hold the plug proper instead of wire.
- ◆ Do not place the electronic organ in an environment of dusty, vibrating, low or high temperature (such as exposed to direct sunshine, near central heat or in the car exposed under sunshine) to avoid damaging appearance or internal part.
- ◆ Do not put the electronic organ in an unstable place to avoid falling. Do not sit or put heavy matters on the electronic organ.
- ◆ Protect the electronic organ from raining or wetting. Do not put any vessel holding liquid on the electronic organ to avoid liquid flowing in it and impairing internal part.
- ◆ Please pull out power plug first before cleaning the electronic organ. Do not insert or pull out power plug with wet hand. Regularly examine the power plug and clean the dirt on its surface.
- ◆ To clean the body of the electronic organ, wipe it with dry soft cloth. Do not use paint, dope, organic solvent or chemically impregnated cloth. Do not put vinyl products on it to avoid the panel or keyboard of electronic organ from fading.
- ◆ Do not perform the organ with the loudest or uncomfortable volume to avoid decline in hearing. The package shall be opened by adult to avoid the danger of suffocating infant or children. Please properly store or dispose the plastic package after unpacking.

- Specifications are subject to change without notice.
- Should any description of product function be not specified in detail or some typing error occur, please forgive us.

Table of contents

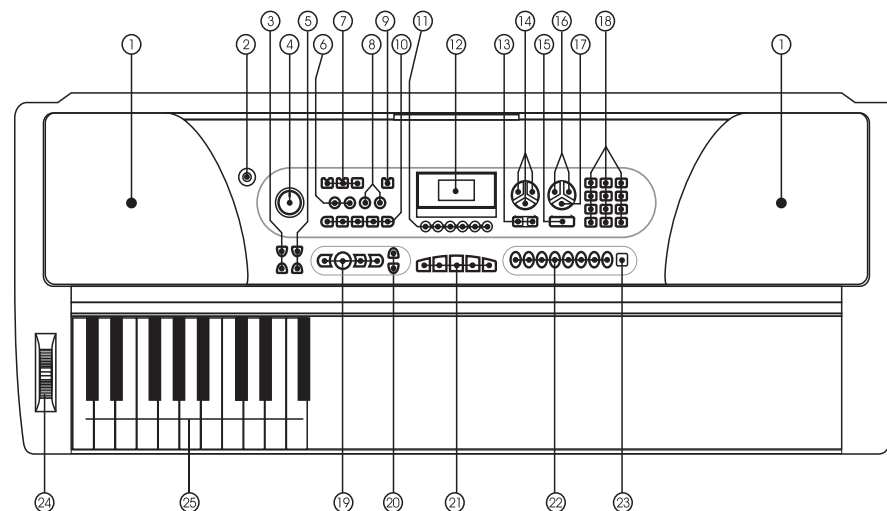
Panel control and External Function	1
1.Front Panel Control	1
2.External Function	1
Preparation before Performance	2
1.Power Supply	2
2.Use of Headphone	2
3.Connection with amplifier or Hi-Fi equipment	2
4.MIDI Output	2
Basic Operation	3
I. Basic Operation	3
1.Turn on power switch	3
2.Adjustment of Master Volume	3
3.Adjustment of Rhythm Volume	3
4.Adjustment of Chord Volume	3
II. Voice and Effect	3
1.Voice Select	3
2.Dual Voice	4
3.Keyboard Split	4
4.Keyboard Touch	4
5.Panel drums	4
6.Keyboard drums	4
7.Pitch Bend	4
8.Transpose	5
9.Sustain	5
10.Vibrato	5
11.Fine Tuning	5
III. Auto Rhythm	5
1.Rhythm Select	5
2 Rhythm Play	6
3. Intro/End	6
4. Fill In	6
5.Sync	6
6.Tempo Adjustment	6
IV. Auto Bass Chord	6
1.Single Chord	6
2.Finger Chord	7
3. Bass Chord	7
4.Metronome	7
5.Chord Clear	7
V. Memory	7
VI. Record and Program	7
1.Record	7
2.Rhythm Program	8
VII. Intelligent Guide Function	8
1.Demo Song Playing And Selection	8
2.Guide Function	8
VIII. MIDI Output	8
Appendix I. Table of Voice	9
Appendix II. Table of Rhythm	10
Appendix III. Demo Song Table	11
Appendix IV. Table of Panel Drums	11
Appendix V. Table of 61 Keyboard Drums	11
Appendix VI. Trouble Shooting	12
Appendix VII. Technical Specifications	13
Appendix VIII. Schematic Circuit	14

Appendix VII. Technical Specifications 13

Keyboard	61-key standard touch keyboard
Display	LED display
Voice	128 GM standard tones +1 drum kit
Style	100 well-chosen auto accompaniments
Demo Song	12 stereo demo songs
Memory	5 Status Memory
Effect Control	Sustain、Vibrato、Transpose、Fine tuning、Touch、Dual voice、Keyboard Split
Record	Real-time record and play、Rhythm program and play
Drums	8 panel drums、61 keyboard drums
Accompaniment control	Start/stop,Sync,Fill-in,Intro/End,Tempo
Chord Control	Single Chord、Finger Chord、Bass Chord,metronome,Chord clear
Intelligent Guide	Guide 1、Guide 2、Guide 3
Other controls	Master Volume、Rhythm Volume、Chord Volume
External Port	Headphone jack\left and right sound track jack\MIDI jack
Diapason	C2~C7
Accuracy in musical tuning	≤3cent
Specification	955mm x380mm x 135 mm
Weight	5KGS
DC Input	DC 9 V
Output power	6W x 2
Quiescent current	100mA
Parts provided with electronic organ	AC/DC adapter、music stand and Operation Instructions

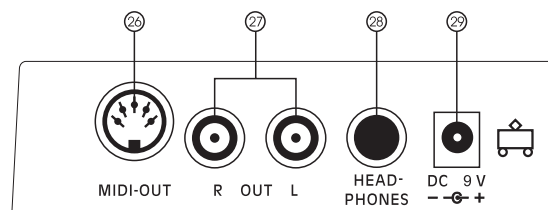
Trouble	Possible reason/eliminating method
Accompanying a little noise in turning ON/OFF power.	Normal phenomenon. Please do not worry.
After turning on power, press keyboard but no sound can be emitted.	Check whether volume control key is at proper position or headphone jack is held by other equipment to break off built-in speaker system.
Distorted or discontinued sound, or even system halted.	Using unqualified AC adapter or low batteries. Please use the AC adapter provided with this electronic organ or replace batteries.
The note and its tone for a same voice are a little different.	This is normal phenomenon caused by different voice sampling diapason.
When using Sustain function, some tones have long sustain but some have short sustain.	This is normal phenomenon since the sustains of different tones are set to optimum lengths.
Abnormal in volume or accompaniment volume.	Check whether volume control and accompaniment volume control are in proper setting.
In SYNC status, auto accompaniment does not work.	Check whether Single chord or Finger chord is set, now pressing a note at left-hand keyboard area (19 keys in the left of keyboard)
When using mobile phone, the electronic organ will emit noise.	Mobile phone can disturb the electronic organ. To avoid the noise, turn off the mobile phone or use it far away.
When using AC adapter, the electronic organ does not emit sound after startup and indicating LCD does not light up.	Check whether power socket is energized, AC adapter is well plugged, poor connection of power socket or inadequate power voltage.
When using batteries, the electronic organ does not emit sound after startup and indicating LCD does not light up.	Check whether battery polarity is correct and batteries have run down.
The pitch of note is not correct.	Check whether the parameter of Transpose is "000".
In band concert, the pitch of electronic organ has a deviation from other musical instruments of the band	Check whether the parameter of transpose is "000" or read just transpose function to match other musical instruments of the band.

1. Front Panel Control



- | | | |
|--------------------------------------|--|---|
| 1. Speaker | 10. Single Chord, Finger Chord, Bass Chord, Chord Clear, Metronome | 19. Sync, Start/Stop, Fill in, Intro/End |
| 2. Power Switch | 11. Memory, M1, M2, M3, M4, M5 | 20. Tempo |
| 3. Chord Vol+/- | 12. LED nixie tube display | 21. Guide 1, Guide 2, Guide 3
Fine tuning+/- |
| 4. Volume | 13. Transpose+/- | 22. 8 Panel Drums |
| 5. Rhy Vol+/- | 14. Vibrato, Sustain | 23. Keyboard Drums |
| 6. Record, Rcc. Play | 15. Demo | 24. Pitch Bend |
| 7. Touch, Dual Voice, Keyboard Split | 16. Voice, Style | 25. Auto Chord Keyboard |
| 8. Rhy Edit, Rhy Edit. Play | 17. Song | |
| 9. MIDI | 18. Numeric Keyboard area | |

2. External Function



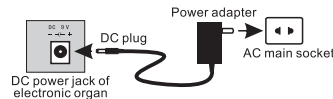
26. MIDI output jack
27. Left and right channel audio output jack
28. Headphone audio output jack
29. DC 9 V input jack

Preparation before Performance

1. POWER SUPPLY

① Use AC/DC power adapter:

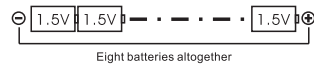
Please use the special AC/DC power adapter provided with this electronic organ or the power adapter with DC 9V voltage and 500mA input current and with central anode. Connect the DC plug of power adapter into the DC 9V power socket in the rear of electronic organ, then connect the other end into AC power main socket (see that the Input voltage of power adapter conform to the voltage of electric supply), finally turn on power switch and start performance.



Caution: When you do not use this electronic organ for a long term, you should pull out the plug of power adapter from main socket safely to avoid possible Causing trouble of part or other accident in Long-term charging.

② Use of Batteries:

Open the battery lid in the bottom of electronic organ and load eight 1.5V size D batteries, ensuring the Polarity Should conform to the direction marked on battery lid. Replace the lid after loading batteries.

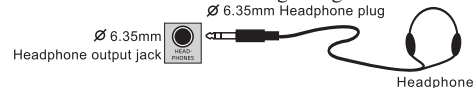


Eight batteries altogether

Caution: Do not use batteries of different kinds and mix new and old batteries. Low batteries will cause Low Volume or poor timbre and replace batteries at that time. To avoid possible damage caused by battery liquid leakage, Please take out batteries if you will not use the electronic organ for a long term.

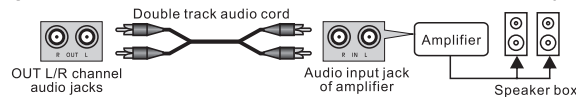
2. Use of Headphone:

Connect headphone plug into headphone jack in the rear of electronic organ. Now the internal speakers are automatically switched off. Use of headphone in performance does not interfere with anybody else, suiting Personal monitor and exercising at night.



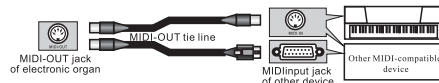
3. Connection with amplifier or Hi-Fi equipment:

This electronic organ has built-in speaker system. Alternatively, it can also be connected to any external Amplifier or Hi-Fi equipment. First turn off the switch of electronic organ and external Equipment, Then Insert one end of stereo audio cable into OUT L/R jacks in rear panel Of electronic Organ and connect the Other End into LINE IN or AUX IN jack of other Hi-Fi equipment.



4. MIDI Output:

By Linking MIDI tie line, you may connect MIDI-OUT jack to another MIDI-compatible device to transfer MIDI data of the electronic organ. When you perform a note, the corresponding MIDI data will be transferred. You can also control other MIDI devices by transferring program changing data.



Note: the above external accessories do not include in this product, users have to buy them by himself/herself pls understand.

Appendix III, IV, V

Appendix III. Table Demo Song

01	For Elise	07	Meacham American Patrol
02	Turkey March	08	Red River Valley
03	Susanna	09	Russia Dance
04	Fantaisie Impromptu	10	Katyusha
05	Canon	11	Radetzky March
06	Thorntree	12	Spanish bullfighter

Appendix IV. Table of Panel Drums

Bass Drum	Side Stick	Snare	Hand Clap	Crash Cymbal	Tambourine	High Timbale	Claves

Appendix V. Table of 61 Keyboard Drums

No.	Notes	Symbol	Percussion name	No.	Notes	Symbol	Percussion name
01	C1		Click (Square Wave)	32	G3		Splash Cymbal
02	C#1		Brush Tap	33	G#3		Cowbell
03	D1		Brush Swirl	34	A3		Crash Cymbal 2
04	D#1		Brush Slap	35	A#3		Vibraslap
05	E1		Brush Swirl W/Arttack	36	B3		Ride Cymbal 2
06	F1		Snare Roll	37	C4		Bongo H
07	F#1		Castanet	38	C#1		Bongo L
08	G1		Snare H Soft	39	D4		Conga H Mute
09	G#1		Sticks	40	D#4		Conga H Open
10	A1		Bass Drum H Soft	41	E4		Conga L
11	A#1		Open Rim Shot	42	F4		Timbale H
12	B1		Bass Drum L	43	F#4		Timbale L
13	C2		Bass Drum H Hard	44	G4		Agogo H
14	C#2		Closed Rim Shot	45	G#4		Agogo L
15	D2		Snare L	46	A4		Cabasa
16	D#2		Hand Clap	47	A#4		Maracas
17	E2		Snare H Hard	48	B4		Samba Whistle H
18	F2		Floor Tom L	49	C5		Samba Whistle L
19	F#2		Hi-Hat Closed	50	C#5		Guiro Short
20	G2		Floor Tom H	51	D5		Guiro Long
21	G#2		Hi-Hat Pesal	52	D#5		Claves
22	A2		Low Tom	53	E5		Wood Block H
23	A#2		Hi-Hat Open	54	F5		Wood Block L
24	B2		Mid Tom L	55	F#5		Cuica Mute
25	C3		Mid tom H	56	G5		Cuica Open
26	C#3		Crash Cymbal 1	57	G#5		Triangle Mute
27	D3		High Tom	58	A5		Triangle Open
28	D#3		Ride Cymbal 1	59	A#5		Shaker
29	E3		Chinese Cymbal	60	B5		Jingle Bell
30	F3		Ride Cymbal Cup	61	C6		Bell Tree
31	F#3		Tambourine				

No	Name of Style	No	Name of Style	No	Name of Style	No	Name of Style
	Soul		Ballad	54	Reggae 1	81	March 3
00	Soul 1	28	Love Ballad 1	55	Reggae 2	82	Polka 1
01	Soul 2	29	Love Ballad 2	56	Jorpo	83	Polka 2
02	Soul 3	30	Love Ballad 3		Tango	84	Polka 3
03	Soul 4	31	Euro Beat	57	Tango 1	85	C & W 1
04	Slow Soul 1	32	House 1	58	Tango 2	86	C & W 2
05	Slow Soul 2	33	House 2	59	Tango 3	87	Bluegrass
06	Powerful soul 1	34	Swing Beat	60	Mambo 1	88	Country 1
07	Powerful soul 2		Band	61	Mambo 2	89	Country 2
08	Powerful soul 3	35	Big Band 1		Rhumba		Traditional
09	Compaction soul 1	36	Big Band 2	62	Rhumba 1	90	Middle East
10	Compaction soul 2	37	Cobmo 1	63	Rhumba 2	91	China 1
11	Compaction soul 3	38	Cobmo 2	64	Rhumba 3	92	China 2
12	Euro Soul		Swing	65	Rhumba 4	93	China 3
	AOR	39	Swing 1	66	Rhumba 5	94	Thailand
13	AOR 1	40	Swing 2		Dance		Waltz
14	AOR 2	41	Swing 3	67	Bequine	95	Waltz 1
15	16 Beat	42	Swing 4	68	Salsa	96	Waltz 2
16	16 Ballad	43	Swing 5	69	Merengue 1	97	Waltz 3
17	Pop Dance 1	44	Swing 6	70	Merengue 2	98	Jazz Waltz
18	Pop Dance 2	45	Baiao	71	Vallenato	99	Country Waltz
19	Pop Dance 3	46	Bolero	72	Plena		
20	Shuffle 1		Bossanova	73	Lambada		
21	Shuffle 2	47	Bossanova 1	74	Bachata		
22	8 Shuffle	48	Bossanova 2	75	Samba		
23	Hard Rock	49	Bossanova 3	76	Pop Samba 1		
24	Slow Rock	50	Bossanova 4	77	Pop Samba 2		
25	Blues	51	Bossanova 5	78	Jazz Samba		
26	Twist	52	Calypso	79	March 1		
27	Hard 3 Beat	53	Habanera	80	March 2		

I. Basic Operation:

1. Turn on Power Switch:

After AC/DC adapter is connected or batteries installed correctly, press power button to turn on The electronic organ, Press power button once again to turn off power of electronic organ



2. Adjustment of Volume:

You may adjust volume by rotating VOLUME Knob, clockwise to increase volume and counter clockwise to decrease volume, and meanwhile accompanying volume is correspondingly changed.



3. Adjustment of rhythm volume :

The default rhythm volume is 007. By pressing RhyVol"+/-" button, you can adjust 8 levels of Rhythm volume. In the adjustment, LED gives corresponding display. Press RhyVol"+/-" simultaneously to restore default RhyVol setting automatically.



4. Adjustment of Chord Volume:

The default chord volume is 007. By pressing CHORD VOLUME +/- button, you can adjust 8 levels of chord volume. In the adjustment, LED nixie tube gives corresponding display. The adjustment of chord volume does not work on keyboard split volume. Press CHORD VOLUME + and - keys simultaneously to restore the default chord volume setting automatically.



II. Voice and Effect

1. Voice Select:

This Electronic organ has 128 voices for your choice. For detailed information, refer to Appendix I.

The default status at startup is PIANO, LED nixie tube displays current voice number "000". If current status is not "VOICE", you need to press voice button. To select a voice throughout 00-99, pls input two digits with numeric keyboard (as shown in the figure: VOICE number is 19); To select a voice throughout 100-128, press voice button once again and input "99", then press "+" or "-" button to get the voice number.



Basic Operation

2. Dual Voices:

When you perform in the mode of dual voices ,two different voices can be emitted simultaneously. The first voice is the one before you press “DUAL VOICE”button ,the second voice is the one you select after pressing “DUAL VOICE”.



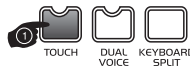
3. Keyboard Split:

Press “KEYBOARD SPLIT”button ,LED will display **50%** ,the whole keyboard will be divided into left and right areas.the left 24 keys is the left area.The left area keyboard voice is the one that selected before starting keyboard split ,but only right area keyboard voice can be selected after starting .Press keyboard split button again to exit the function ,LED will display **OFF** .



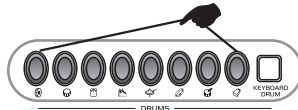
4. Keyboard Touch:

This electronic organ is provided with touch keyboard. Upon starting, touch function will be automatically started.Now when you perform the keyboard with different touches, the electronic organ will emit different volumes. By pressing TOUCH button, the touch function will be cancelled and LED nixie tube will display **OFF** . By pressing TOUCH button Once again, the touch function will be restarted and LED nixie tube will display **ON** .



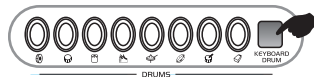
5. Panel Drums:

Press“PANEL DRUM”(total eight panel drums as shown below or refer to AppendixV)to respond Relevant drums and insert relevant drums according to your need to enhance performance effect.



6. Keyboard drums:

When you press KEYBOARD DRUMS button and LED nixie tube displays **FELL** , the keyboard is Changed to keyboard drums. Each key corresponds to one drum (61 B/W keys correspond to 61 keyboard Drums as shown above keyboard or refer to Appendix V). Press KEYBOARD DRUMS button once again to restore original voice and LED nixie tube displays **HELL** .



7. Pitch Bend:

When you push“PITCH BEND”wheel during performance,the note emitted from keyboard Will produce an effect of pitch bend.By pushing the wheel upwards or downwards,note will Gradually change higher or lower.Looseen the wheel to restore original standard tone.

Appendix I. Table of Voice

No.	Name of Voice	No.	Name of Voice	No.	Name of Voice
	Piano	046	Orchestral Harp	092	Pad 5 (bowed)
000	Acoustic Grand Piano	047	Timpani	093	Pad 6 (metallic)
001	Bright Acoustic Piano		Ensemble	094	Pad 7 (halo)
002	Electric Grand Piano	048	String Ensemble 1	095	Pad 8 (sweep)
003	Honky-tonk Piano	049	String Ensemble 2		Synth effects
004	Rhodes Piano	050	Synth Strings 1	096	FX 1 (rain)
005	Chorused Piano	051	Synth Strings 2	097	FX 2 (soundtrack)
006	Harpsichord	052	Choir Aahs	098	FX 3 (crystal)
007	Clavichord	053	Voice Oohs	099	FX 4 (atmosphere)
	Chromatic Percussion	054	Synth Voice	100	FX 5 (brightness)
008	Celesta	055	Orchestra Hit	101	FX 6 (goblins)
009	Glockenspiel		Brass	102	FX 7 (echoes)
010	Music box	056	Trumpet	103	FX 8 (sci-fi)
011	Vibraphone	057	Trombone		Ethnic
012	Marimba	058	Tuba	104	Sitar
013	Xylophone	059	Muted Trumpet	105	Banjo
014	Tubular Bells	060	French Horn	106	Shamisen
015	Dulcimer	061	Brass Section	107	Koto
	Organ	062	Synth Brass 1	108	Kalimba
016	Hammond Organ	063	Synth Brass 2	109	Bagpipe
017	Percussive Organ		Reed	110	Fiddle
018	Rock Organ	064	Soprano Sax	111	Shanai
019	Church Organ	065	Alto Sax		Percussive
020	Reed Organ	066	Tenor Sax	112	Tinkle Bell
021	Accordian	067	Baritone Sax	113	Agogo
022	Harmonica	068	Oboe	114	Steel Drums
023	Tango Accordian	069	English Horn	115	Woodblock
	Guitar	070	Bassoon	116	Taiko Drum
024	Acoustic Guitar (nylon)	071	Clarinet	117	Melodic Tom
025	Acoustic Guitar (steel)		Pipe	118	Synth Drum
026	Electric Guitar (jazz)	072	Piccolo	119	Reverse Cymbal
027	Electric Guitar (clean)	073	Flute		Sound Effects
028	Electric Guitar (muted)	074	Recorder	120	Guitar Fret Noise
029	Overdriven Guitar	075	Pan Flute	121	Breath Noise
030	Distortion Guitar	076	Bottle Blow	122	Seashore
031	Guitar Harmonics	077	Shakuhachi	123	Bird Tweet
	Bass	078	Whistle	124	Telephone Ring
032	Acoustic Bass	079	Ocarina	125	Helicopter
033	Electric Bass(finger)		Synthlead	126	Applause
034	Electric Bass (pick)	080	Lead 1 (square)	127	Gunshot
035	Fretless Bass	081	Lead 2 (sawtooth)	128	Drum Kit
036	Slap Bass 1	082	Lead 3 (caliope lead)		
037	Slap Bass 2	083	Lead 4 (chiff lead)		
038	Synth Bass 1	084	Lead 5 (charang)		
039	Synth Bass 2	085	Lead 6 (voice)		
	Solo Strings	086	Lead 7 (fifths)		
040	Violin	087	Lead 8 (bass+lead)		
041	Viola		Synth Pad		
042	Cello	088	Pad 1 (new age)		
043	Contrabass	089	Pad 2 (warm)		
044	Tremolo Strings	090	Pad 3 (polysynth)		
045	Pizzicato Strings	091	Pad 4 (choir)		

Basic Operation

2. Rhythm Program:

Press RHYTHM EDIT button to enter the function of rhythm program. By pressing eight panel drums or pressing B/W keys under keyboard drums mode, you can record at most 32 drum beats. When drum beats record is full, LED nixie tube will display **FFF** and automatically exit rhythm program.

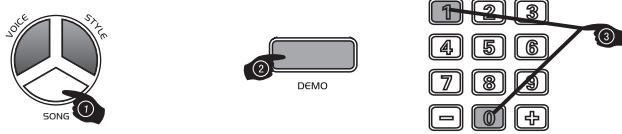
After program is ended, press RHY EDIT.PLAY button to play programmed drums consequently and form a self-programmed rhythm. By adjusting TEMPO +/- button, you can obtain optimal rhythm effect. During rhythm program playing, press START/STOP button to stop playing and LED nixie tube will display **FFF**.



VII. Intelligent Guide Function

1. Demo song playing and selection:

This electronic organ has 12 demo songs (00~11). For the table of demo songs, refer to Appendix III. Press DEMO button to play current demo song. LED nixie tube will display the number of current demo song. After a song comes to an end, it will play next song. During playing, pressing START/STOP button to stop playing. This key is a sequential Key. Press Once to play, once more to stop, once more again to play next demo song. During playing, you can select demo songs by numeric keyboard or +/- buttons. (as shown in the figure: selected demo song is 10)



2. Guide Function

Press "Guide 1" or "Guide 2" or "Guide 3" button to enter guide function. After finishing learning one demo it will repeat the same demo song again. by pressing the "SONG" button to select the numeric button (for Example: input 05) to chose the demo song as guide demo song. Under guide mode, press "start/stop" button to exit the guide function.

Guide 1:

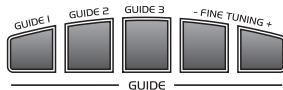
When you press any key, no matter correct or not, the electronic organ shall emit correct melody note and repeat its accompaniment in one-key-one-note mode.

Guide 2:

Press the correct note to follow the demo song, otherwise, it will have a temporary stop.

Guide 3:

When you press any key, melody will be blocked to be similar to karaoke. The accompaniment of the demo song will continue automatically without stop.



VIII. MIDI Output

Press MIDI buttons to start MIDI output function. LED nixie tube will display **OFF**. Press MIDI button once again to close MIDI output function and LED nixie tube will display **OFF**.



Basic Operation

8. Transpose:

By pressing TRANSPOSE +/- buttons, you can heighten or lower a tone at ± 6 levels altogether. This function can only be effective in normal performance and normal tone is displayed as **FFF** on LED nixie tube. Press TRANSPOSE +/- buttons simultaneously to restore default keyboard tone.



9. Sustain:

When you press SUSTAIN button to start Sustain function and LED nixie tube displays **FFF**, performing keyboard will produce Sustain effect. Press SUSTAIN button once again to cancel the function and LED nixie tube displays **FFF**.



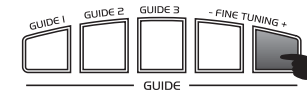
10. Vibrato:

Press VIBRATO + button to make vibrato effect with 7 adjustable levels. Press VIBRATO - button to lower vibrato level until cancelling the function. When LED nixie tube displays **FFF**, you can press VIBRATO +/- buttons simultaneously to cancel the vibrato function.



11. Fine Tuning:

Press "TUNING +/-" buttons to adjust Fine Tuning in the range of ± 99 . Press "TUNING +/-" button without release can continuously increase/decrease Fine Tuning Value. Press Tuning +/- buttons simultaneously to restore preset value.



III. AUTO RHYTHM

1. Rhythm Select:

This electronic organ has 100 rhythms (00~99) for your choice. For detailed rhythm table, refer to Appendix II.

Press "STYLE" button to enter the mode of style function, LED will display the current style number. To select a rhythm throughout 00-99, input two digits (as shown in the figure: rhythm selected is "01"). Selecting rhythm can also be realized by pressing "+, -" buttons.



Basic Operation

2. Rhythm Play :

After selecting rhythm, press START/STOP button to start rhythm. Press START/STOP button again to stop the rhythm. Under normal state of rhythm, without chord function, B/W key 1~19 produce normal tones. After starting chord function, B/W key 1~19 have turned to chord area keyboard (also as Sync function key area).



3. Intro/End :

When you press INTRO/END button, LED nixie tube will display 'I-n-E'. Press START/STOP button again, an intro will be played, and then restore to normal rhythm play; when you press INTRO/END button during rhythm play, the rhythm play will be finished after an end is played and LED nixie tube will display 'E-F-E'.



4. Fill In :

During rhythm play, fill-in will be inserted and then restore to the former main rhythm play.



5. Function of Sync :

Press SYNC button to start SYNC function and LED nixie tube will flash beat point, if a rhythm is being played, press SYNC button to stop rhythm and start sync accompaniment function; if sync function has been started, press SYNC button to exit sync function.

After starting SYNC function, press any key in the chord area of 19 keys (C2~F3#) to start accompaniment simultaneously; if chord function has already been started, Pressing any key in the chord area will start chord function simultaneously.



6. Tempo Regulation :

Under the mode of rhythm, song or metronome, you can regulate tempo by pressing TEMPO +/- buttons in the range of 40~280 beats/min, and LED nixie tube will display the tempo value of current rhythm, song or metronome. Press TEMPO +/- buttons simultaneously to restore the default tempo of system 'E-F-E'.



IV. Auto Bass Chord

1. Single Chord :

When rhythm is started, press "SINGLE CHORD" button to enter the function of finger auto Bass chord. LED nixie tube will display 'E-F-E'. Now in chord area (1-19 keys), apply different fingerings to hear different chord accompaniments. Press "START/STOP" button to exit this function. and LED nixie tube will display 'E-F-E'.



Basic Operation

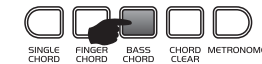
2. Finger Chord :

When rhythm is started, press "FINGER CHORD" button to enter the function of finger auto bass chord. LED nixie tube will display 'E-F-E'. Apply different fingerings to hear different chord accompaniments. Press "START/STOP" button to exit this function. and LED nixie tube will display 'E-F-E'.



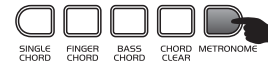
3. Bass Chord :

Under Chord state, press "Bass Chord" button to change the effect of bass.



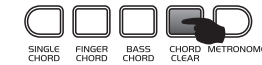
4. Metronome :

Press METRONOME button to start metronome function. when it is started, press Metronome button continuously to adjust the beat Number of metronome (2~8).



5. Chord Clear :

Under chord state, press CHORD CLEAR button (LED nixie tube will display 'E-F-E') to stop chord accompaniment and rhythm plays continuously.



V. Memory :

This instrument is provided with registration memory function that can be used to save your favorite setting in the memory groups for the purpose of recalling them easily and LED display shows the memory groups S-1-S-2-S-3-S-4-S-5 in cycle for your choice. By pressing and holding MEMORY button, press any key of M1-M5 to execute data saving operation (panel parameters to be saved: style and related function, voice and effect control). If you save the panel setting in the memory position including previous data, the new data will replace the previous data.



VI. Record and Program

1. Record Function

Press "RECORD" button to enter the mode of record and press any key to start record. The maximum recorded notes is 88, after 88 notes are fully recorded, no more notes will be recorded. During recording, you may press PLAY button to play the record at any time. Press RECORD button again will delete the former record and start the new record mode.

