

OPERATION INSTRUCTION

ARK-2177

61-Key Multifunctional Teaching-Type Digital Electronic Organ



Notice

Please read this cautions carefully before use

Please observe the following notice(but are not limited to the following notice) so as to avoid the possible hurt to yourself or others and the damage of the electronic organ and other external equipment.

★Do not open the casing of electronic organ and try to disassemble any part of it, nor hage to the interior. Should any abnormal function occur in use, please stop operating it immediately and send it for maintenance personnel by qualified servicemen.

★Please use the specified power adapter ,the electronic organ will be damaged if you use the wrong power adapter.

★Do not place the power adapter or AC power cord near heating source such as central heating or heat radiator.Do not overbend the wire and place heavy object on it,wrap other objects with wire so as to avoid damage the wire.

★Do not insert the plug of the electronic organ to the multi-purpose socket so as to avoid causing the excess hot to the socketWhen you do not use it for a long term or in thunder days,close off the power and unplug the adapter or power plug. You should hold the plug when you unplug it and you shouldn't drag the wire directly.

★Do not place the electronic organ in an environment of dusty ,vibrating,low or high temperature(such as the place where the sunshine shines directly,the edge of the central heat or the car which is under the sunshine) so as to avoid damaging apperance and the internal parts.

★Do not put the electronic organ in an unstable place to avoid falling.Do not sit or put heavy objects on the electronic organ.

★Protect the electronic organ from raining or wetting. Do not put any vessel Containing liquid on the electronic organ to so as avoid liquid flowing in it and impairing internal part.

★Please unplug power plug first before cleaning the electronic organ. Do not insert or unplug 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 for a long time so as to avoid decline in hearing.The electronic organ can be used unless the adult open the package so as to avoid the danger of suffocating infant or children. Please store and discard the plastic package after it was disassembled.The small internal objects aren't suitable for the use of the child who is under three years old.

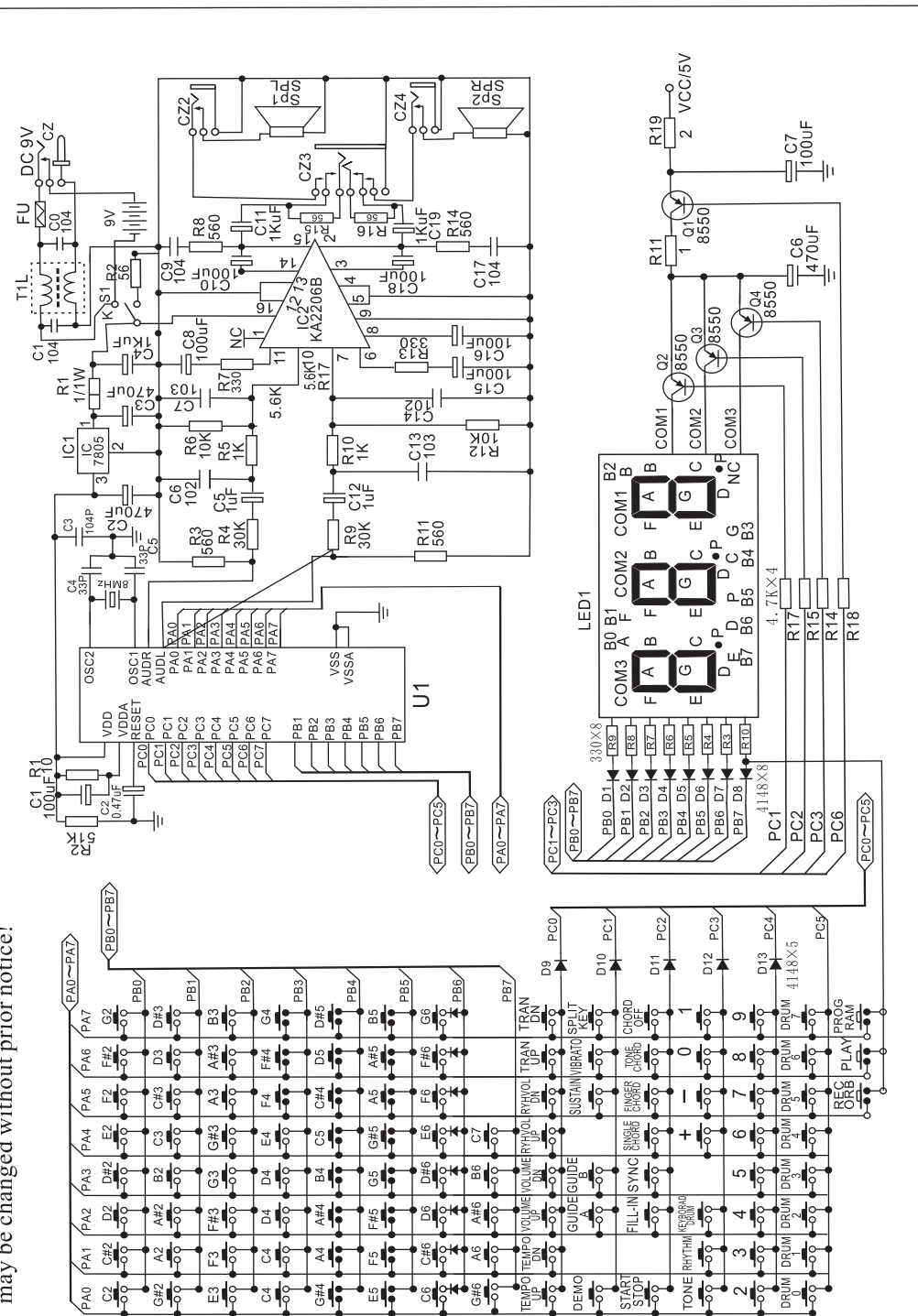
- The product technical specifications are subject to change without notice.
- If there is some description of the product function is not detailed or there is the printing error,please forgive us.



Appendix V II. Schematic Circuit

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



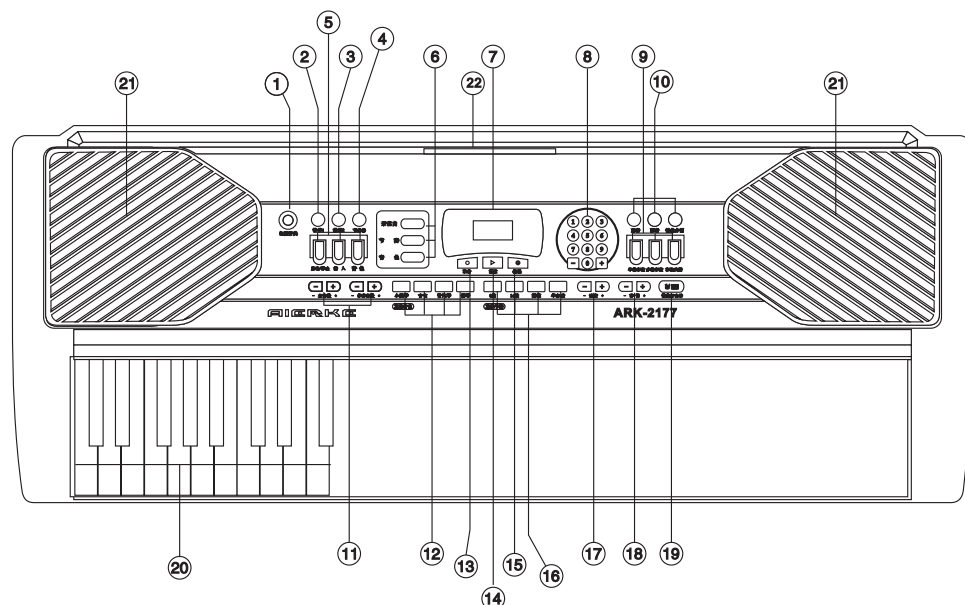
Appendix VI. Technical Specifications

Keyboard	61-key standard piano keyboard
Display	LED digital display
Voice	100 Voice
Style	100 well-chosen auto accompaniments
Demo song	8 stereo demo songs
Directly selected voices/ styles	Four directly selected voices/Four directly selected styles
Effect control	Sustain、Vibrato、Transpose、Keyboard split、Metronome
Record	Record、Play、Real-time record function
Program	Styles program function
Drums	8 panel drums
Accompaniment control	Start/stop、Sync、Fill-in、Tempo
Chord control	Single chord、Finger chord、Chord Clear
Intelligent guide	Demo song、Guide1、Guide2
Other controls	Power switch、Volume control、Accompany Vol
External Function	Power jack、Headphone jack、left and right sound track jack
Diapason	C2~C7
Accuracy in musical tuning	≤3cent
DV input	DC 9V
Output power	5W×2
Quiescent current	85mA
Specifications	955×380×135 (mm)
Weight	5Kg

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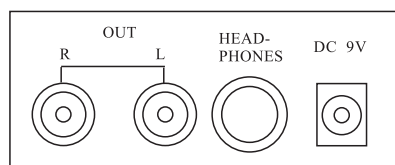
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1.Panel Control:



- | | | |
|---------------------------|---|--------------------------|
| 1.Power switch | 8.Digit Key/+-button | 15.Program |
| 2.Guide1 | 9.Single Chord/Finger Chord/Chord Clear | 16.Four panel percussion |
| 3.Guide2 | 10.Sustain/Vibrato/Keyboard split | 17.Tempo +/- |
| 4.Metronome | 11.Volume+/-/Accompany Vol+/- | 18.Transpose+/- |
| 5.Start/Stop/Fill-In/Sync | 12.Four panel percussion | 19.Dual voice |
| 6.Demo Song/Style/Voice | 13.Record | 20.Auto Chord keyboard |
| 7.LED Digital display | 14.Play | 21.LoudSpeaker |
| | | 22.Music stand entry |

2.External Functions:



- 23.Left/Right sound track audio frequency
 24.Headphone output
 25.DC 9V

Trouble	Possible reason/eliminating method
Accompanying a little noise in turning on/off power.	Normal condition. 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 breakoff built-in speaker system.
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.
Too low volume, abnormal 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 auto bass is set on Single or Finger chord position. Now only pressing the keyboard of auto bass chord key area can accompaniment be started.
Not all keys pressed produces sound. So long as you press keyboard, auto accompaniment function seems skipped.	You may have used too much notes than allowed quantity, including right-hand tone, left-hand tone, auto accompaniment and counterpoint note. The notes in excess of this limit will not produce sound.
The pitch of note is not correct.	Check whether the parameter of Transpose is "00".
When using batteries, the electronic organ does not emit sound after startup and indicating LED does not light up.	Check whether battery polarity is correct and batteries have run down.
When using AC adapter, you hear distorted or discontinued sound, or even the electronic organ may be halted in terrible case.	You have used unqualified AC adapter or low batteries. Please use the AC adapter provided with this electronic organ or replace batteries.
No sound for external loudspeaker or amplifier.	Check whether volume is set too low or wire connection is proper.

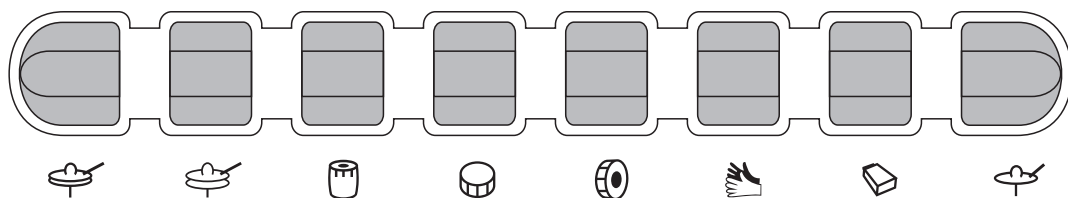
Note: Should the trouble of your electronic organ be unable to eliminate, please send it to franchiser or its maintenance service to repair. Do not disassembly without authorization.

Appendix III. Table of demo song

No.	Code of song	No.	Code of song
00	Turkey march	04	Red River Valley
01	Oh! SuSanna	05	KatyuSha
02	American patrol	06	Zmpromptu
03	Hawthorn	07	Toreador song

Appendix IV: Table of Panel Drums

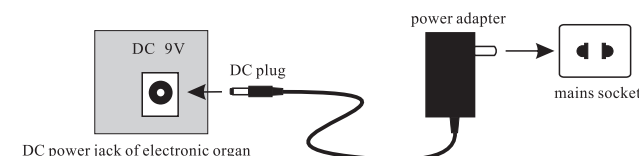
Number	Name of drums	Number	Name of drums
00	Hi-Hat Closed	04	Bass Drum
01	Hi-Hat Open	05	Hand Clap
02	Loe Tom	06	Hi-Hat Pedal
03	Snare	07	Slap Crash Cymbal



II . Preparation before Performance

1.Use AC-DC power adapter:

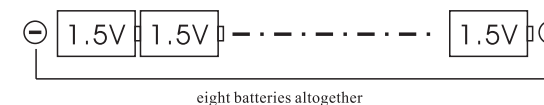
Please use the special AC -DC power adapter provided with this electronic organ or the power adapter with 9V DC output, 500mA output current and with central anode. Connect the DC plug of power adapter into the DC 9V power socket in the rear of electronic organ, then connect the other end main socket (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.



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.

3.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.

4.Connection of 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.

III. Basic Operation

1.Basic playing method:

1.Turn on power switch:

After AC adapter is connected or batteries installed correctly, press **POWER PLUG** button to turn on power switch. Press **POWER PLUG** button once again to turn off power switch of electronic organ.



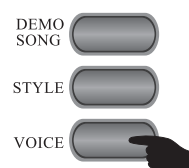
2.Adjustment of Volume:

This electronic organ is provided with 11-level volume from 01 to 11 for your choice. The default volume is **07**. Press **VOLUME +** or **-** button to increase or decrease the volume correspondingly and LED nixietube will give corresponding display. Press **VOLUME +** and **-** buttons simultaneously to restore its default volume value. Meanwhile the accompanying volume will be changed correspondingly.



3.Select Voice:

The default state is **VOICE**. To select a voice between 00 and 99, input two digits with numeric keyboard; when you press corresponding digit keys, LED nixietube will display corresponding voice code. In voice state, press **+** or **-** button to select next or previous voice.



4. Dual Voice

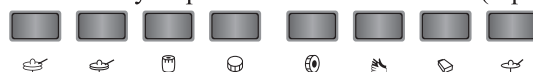
The keyboard enters into the dual voice model if you press the dual voice button. It is two voice combines one note. The first voice is the voice before pressing the dual voice button, the second voice is the choosed voice after the dual voice button was pressed.



5.Play Drums

Panel Drums.

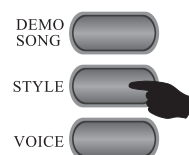
The relative percussion will occur if you pressed the drum button (8 panel drums together)



II. Auto Rhythm:

1.Select Style:

Press **STYLE** button to enter rhythm selection function. To select a rhythm between 00 and 99, input two digits with numeric keyboard; when you press corresponding digit keys, LED nixietube will display corresponding rhythm code. In rhythm state, press **+** or **-** button to select next or previous rhythm. After selecting rhythm, press **START/STOP** button to play rhythm. Press the button once again to exit rhythm function and LED nixietube will display **OFF**.



Appendix II. Table of Style

No.	Name of style	No.	Name of style	No.	Name of style	No.	Name of style
00	Rumba 1	25	Soul 1	50	House 1	75	Techno
01	Samba	26	Rap	51	Reggae 3	76	Ballad
02	Disco	27	Tango 2	52	Soul 2	77	Dixie 1
03	Tango 1	28	Reggae 2	53	Polka 2	78	Disco Queen
04	Rock 1	29	Rumba 2	54	Hip-hop 1	79	Rock 4
05	Swing	30	Rave	55	16-Beat 2	80	House 3
06	Country 1	31	Country 2	56	N. O. R&R	81	Blues 2
07	Waltz 1	32	Beat 1	57	Slowrock 3	82	Dance 3
08	Beguine	33	8-beat 1	58	8-Beat 2	83	Fusnshfl
09	Latin	34	Barrel House	59	Pasodob	84	8-Beat 4
10	March-polka	35	Slowrock 2	60	Dance 2	85	Dance 4
11	Bossanova	36	Trip Hop	61	Wordpop	86	Reggae 4
12	Salsa	37	Oldiepop	62	Slowrock 4	87	Happy Love
13	16-Beat 1	38	Rock 2	63	8-Beat 3	88	SKA
14	Reggae 1	39	Big Ballad	64	Quickstp	89	Chacha 2
15	Mambo	40	Merengue	65	Hip-hop 2	90	Brown
16	8-beat	41	Keroncong	66	March 1	91	March 2
17	ChaCha 1	42	Guaracha	67	Blues 1	92	16-Beat 3
18	Pops	43	Bigband	68	Charleston	93	California
19	Slowrock 1	44	Waltz 3	69	House 2	94	Cumbia
20	Waltz 2	45	Rock 3	70	Baroque	95	Bolero
21	Dance1	46	Punta	71	New Sai Di	96	Texmex
22	Loud Fusion	47	Jazz	72	Boogie	97	Rock 5
23	Polka 1	48	Beat 2	73	Disco Beat	98	Dixie 2
24	Eurb	49	Trance	74	Cantalp	99	Bolero

Appendix I. Table of Voice

No.	Name of voice	No.	Name of voice	No.	Name of voice	No.	Name of voice
00	Piano	25	Clean Guitar 1	50	Rock Organ	75	Accordion
01	Clarinet	26	Soprano Sax1	51	Piccolo 1	76	E-Piano 1
02	Vibraphone	27	Dulcimer	52	Steel Drums	77	Reed Organ 2
03	Trumpet	28	Strings1	53	Tuba	78	Harmonics 1
04	Ban Jo	29	Recorder	54	Halo Pad	79	Low Tom
05	Flute	30	Acoustic Grand Piano	55	Clavi	80	Soft Accord
06	Church Organ	31	English Horn	56	Fretless Bass	81	Shakhachi
07	Harmonica	32	Shanai 2	57	Kalimba	82	Xiao
08	Jazz Guitar	33	Clean Guitar 2	58	Contrabass	83	Harp
09	Synthstrs 1	34	Atmosphere	59	Nylon Guitar	84	E-Piano 2
10	Piano Bright	35	Viola	60	Piano Elec 1	85	Bass Lead 1
11	Brass Syn	36	Drawbar Organ2	61	Piccolo 2	86	Bass Lead 2
12	Synth Bass	37	Distortion Guitar	62	Synthstrs 2	87	Brass Syn
13	Lead Square	38	Steel Guitar	63	Pad	88	Baritone Sax
14	Marimba	39	Square	64	French Horn	89	Guzheng
15	Chorused Piano	40	Alto Sax	65	Electric Guitar	90	Celesta
16	Orchestral Harp	41	Acoustic Bass 2	66	Finger Bass 1	91	Xylophone
17	Saxophone	42	Sawtooth	67	Agogo 2	92	Finger Bass 2
18	Tango Accordion	43	Ocarina	68	Bassoon	93	Reed Organ 3
19	Steel Drums	44	Agogo 1	69	Fifths	94	Slap Bass 1
20	Honky-tonk Piano	45	Musicbox	70	Tenor Sax	95	Harmonics 2
21	Shanai 1	46	Strings 2	71	Tinkle Bell	96	Piano Elec 2
22	Trombone	47	Oboe	72	Glockenspiel	97	Str Syn 3
23	Acoustic Bass1	48	Reed Organ 1	73	Pipa	98	Slap Bass 2
24	Drawbar Organ1	49	Harpsichord	74	Pick Bass	99	Bassoon

III. Basic Operation

2.Fill in:

In rhythm play mode, press **FILL-IN** button to play a group of Fill-In and then continue to replay the rhythm.



3.Sync:

Press **SYNC** button to start sync accompaniment function and press any key to start rhythm simultaneously; if chord function has been started, press any of the 19 keys in chord area to start auto chord simultaneously; if a rhythm is being played, press **SYNC** button to stop rhythm and start sync accompaniment function; if sync accompaniment function has been started, press **SYNC** button to exit SYNC function.



4.Tempo:

The default tempo of system is **120**. Press **TEMPO** + or - button to increase or decrease the tempo. You can adjust the playing tempo of rhythm, metronome and demo song in 16 levels and LED nixietube will display corresponding value.



5.Accompany Vol:

The default rhythm volume of system is **07**. Press **ACCOMPANYING VOLUME** + or - button to increase or decrease the accompanying volume and LED nixietube will display corresponding value. The accompanying volume can be adjusted in the range of 01 to 11. Press **ACCOMPANYING VOLUME** + and- buttons simultaneously to restore to the default value of system.



6.METRONOME:

Press **METRONOME** button, you will hear a metronome voice, which is helpful in exercising unaccompanied (without rhythm) music. You can specify the number of beat of each measure in the range of 1 to 3.



III. Auto Bass Chord:

1.Single Chord:

Press **SINGLE CHORD** button in the state of rhythm play to enter the mode of single chord accompaniment, LED nixietube will display **001**. Press different single fingering in chord area (1-19 button), you will hear corresponding chord accompaniment. In normal mode, press **SINGLE CHORD** button to enter corresponding chord function. Press the button once again to exit the function and LED nixietube will display **0FF**.



III. Basic Operation

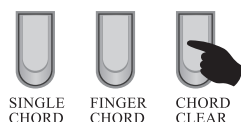
2.Finger Chord:

Press **FINGER CHORD** button in the state of rhythm play to enter the mode of finger chord accompaniment, LED nixietube will display **FF2**. Press different finger fingering in chord area (1-19 button), you will hear corresponding chord accompaniment. In normal mode, press **FINGERCHORD** button to enter corresponding chord function. Press the button once again to exit the function and LED nixietube will display **FFF**.



3.Chord Clear:

Press **CHORD CLEAR** button after chord is started, chord accompaniment will be stopped, while rhythm will be continued and LED nixietube will display **FFF**.



4.Sustain:

Press **SUSTAIN** key to start sustain function, function LED will light up and **FF1** will be displayed on LED display. Now the note of key produces a sustain effect. Press **SUSTAIN** key once again to exit sustain function. **FFF** will be displayed on LED display and key pronunciation will restore to its original tone.



5.Vibrato:

Press **VIBRATO** key to start vibrato function, function LED will light up and **FF2** will be displayed on LED display. Now the note of key produces a vibrato effect. Press **VIBRATO** key once again to exit vibrato function. **FFF** will be displayed on LED display and key pronunciation will restore to its original tone.



6.Keyboard Split:

Press **KEYBOARD SPLIT** button to divide the electronic organ into left and right keyboards, LED nixietube will display **SP1**. Now the left 24 buttons are split from the original keyboard and constitute double keyboards. The right keyboard can select another voice to perform two different voices with one keyboard. Press **KEYBOARD SPLIT** button once again to exit the function and LED nixietube will display **FFF**.



7.Transpose:

Press **TRANSPOSE** + or - button to upgrade or lower one level of keyboard tone in \pm 6 levels. Press **TRANSPOSE** + and - buttons simultaneously will restore to the default value of system. Transpose function is void in record mode/demo song mode.



III. Basic Operation

IV. Record Function:

Press **RECORD** button to enter record state, LED nixietube will display **FF1**. Now you can record the notes performed in the electronic organ. When the number of recorded note reaches the maximum value, LED nixietube will display **FFU** and record will be ended.



V. Program Function:

Press **PROGRAM** button to enter the function of rhythm program, LED nixietube will display **FF1**. You can program drums in the electronic organ with keyboard drums. When the number of recorded drums reaches the maximum value, LED nixietube will display **FFU** and program mode will be ended automatically. Now press **PLAY** button to play programmed drums in turn and constitute a self-programmed rhythm. You can adjust **TEMPO** +/- buttons for the optimum effect of rhythm play. During the play of programmed rhythm, press **PLAY** or **START/STOP** button to stop play. Press the key once again to exit program function and LED nixietube will display **FFF**.



VI. Intelligent Guide Function:

1.Demo Song:

This electronic organ is provided with eight demo songs. For detailed information, please refer to Appendix III.

Press **DEMO SONG** button to play current demo song and press it once again to play next demo song. During play, you can change the setting value of tempo in the range of 40~240. Some songs may change tempo during play to present a special music effect.



2.Guide Function:

Press Guide-1 or Guide-2 key to enter Guide function. During guide, unless a key be pressed, the song will not be continued. After a song is finished, repeat it again. You can select a demo song by Demo song key. In Guide mode, press Guide-1 or Guide-2 key to exit guide function.

Guide-1: No matter whether you perform correctly or not, the organ will emit correct notes, namely the type of one key one note.



Guide-2: The theme notes will be screened by the notes played and if you do not play for 3 seconds, the theme notes will be restored for guide purpose.

