61-Key Multi-functional Electronic Keyboard

ARK-2170

Operation Instruction

**61-Key Multifunctional Teaching-Type
Digital Electronic Keyboard**

Caution

Be sure to obey the following basic notice so as not to harm yourself or others and damage this instrument or other external equipment.These notice includes(but are not limited to) the following:

⚠ Note

Power Adapter:
· Please use specified AC/DC Adapter, otherwise fault adapter can cause the damage of the electronic keyboard.
· 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 objects on wire or wind wire with other objects, to avoid damaging wire.
· Check power plug and clean its surface dirt regularly. Do not insert and unplug power plug with wet hand.

Do not open the body of electronic keyboard:
· Do not open the electronic keyboard and try to disassemble any parts of it, nor make any change to The inside. There is the abnormal function in use, please stop operating it and send it for overhauling by qualified serviceman.

The circumstance of using electronic keyboard:
· Do not place the electronic keyboard in an environment of dusty, vibrating, low or high temperature (such as the place where the sunshine shines directly, the neighbouring place of the central heat or the car in the sunshine)to avoid damaging appearance or internal parts.
· Do not put the electronic keyboard in an unstable place to avoid falling. Do not put any vessel holding liquid on the electronic keyboard to avoid liquid flowing in it and impairing internal parts.

Maintanence:
· To clean the body of the electronic keyboard, wipe it with dry and soft cloth. Do not use paint, dope,organic solvent or chemically impregnated cloth to wipe it.

Connection :
· In order to prevent speaker from damaging, please adjust the volume of peripheral device to the lowest and adjust the volume to appropriate volume gradually when the music plays.

The notice in operation:
· Do not perform the keyboard with the loudest or uncomfortable volume for long time to avoid hearing decline.
· Do not stress the electronic keyboard or place heavy objects on it, nor press keyboard, switch and socket with heavy force.
· The package shall be opened by adult to avoid the danger of suffocating infant or children. Please store properly or dispose the plastic package after the dismantlement.The inner small objects are not suitable for use of the children under 3 years old.

⚠ Statement
· Specifications are subject to change without notice.
· If there is undetailed description about the product function or the printing errors, Please forgive us.
· We retain the modification right and the final explanation right based on the obligation requirement.

■**Carried Standard**
· GB 8898-2011 GB13837-2012 GB17625. 1-2012

■**Display**
· LED display

■**Tone**
· 100 kinds of Tone

■**Rhythm**
· 100 kinds of auto accompaniment

■**Demo**
· 12 Kinds of demo

■**Effect control**
· Keyboard split、Dual Voice、Sustain、Vibrato、Transpose

■**Recording and Programming**
· Recording、Playback、Programming

■**Percussion**
· 8 kinds of panel percussion

■**Accompaniment control**
· Start/Stop、Sync、Fill-in, Tempo

■**Chord control**
· Single Finger、Fingered、Bass Chord、Chord Close

■**Intelligent Teaching**
· Metronome、 A/B two kinds of teaching function

■**Other control**
· Power Switch、Master Volume 、Accompaniment volume

■**External Jacks**
· DC 12V power input、Head phone output、Line out

■**Diapason**
· C2~C7

■**Intonation**
· ≤3cent

■**Specification**
· 980×390×130(mm)

■**Weight**
· 5. 4Kg

■**DC input**
· DC12V

■**Power Adaptor**
· DC12V,500mA

■ **Output Power**
· 6W×2

■**Quiescent current**
· 130mA

■**Accessories were equipped with electronic Keyboard**
· Power Adapter、music stand and Operation Instruction

Appendix III. Table of Demo

NO.	Code of song	NO.	Code of song
00	For ilise	06	American patrol
01	Radeski March	07	Red river valley
02	Mozart Piano Sonatas	08	Green sleeves
03	The Toreador's Song	09	Hawthorn
04	Turkish March	10	Susanna
05	Toreador	11	Katyusha

Appendix IV. Trouble Shooting

Trouble	Possible Reason/Solution
Accompanying a slight noise in turning ON/OFF power.	Normal phenomenon. Please do not worry.
After turned on power, pressed keyboard there was no sound.	Check whether the master volume knob is set at proper position or headphone output jack is connect with other equipment so that the built-in speaker system cut off automatically.
Sound distortion or interruption, seriously, the electronic keyboard cann't work	Used unqualified power adapter or the electric power of the battery is not enough.please use the power adapter was equipped with this electronic keyboard or replace the batteries.
The note and the timbre of the note has the slight difference in a tone	This is normal phenomenon caused by different voice sampling diapason.
When you use sustain function,some tone has the long sustain but some has the short sustain.	This is normal phenomenon because the best length of the sustain of different tone has been setted.
The overall volume or the accompaniment volume is abnormal	Check whether master volume control and accompaniment volume control are set at proper position.
In SYNC status, auto accompament does not work.	Check whether Single Finger or Fingered is set, now Play a note at left-hand keyboard area (19 keys in the left of keyboard)
When use the external power, there was no sound when the electronic keyboard was open, LCD didn't display anything.	Check whether power socket has the electricty, the power adapter was well insertted, the power jack has the poor contact or the voltage is not enough.
When use batteries,there was no sound When the electronic keyboard was open, the LCD didn't display anything	Check whether battery polarity is correct and batteries have been run out.
The pitch of note is not correct.	Check whether the parameter of transpose is"00".
When use mobile phone,the electronic keyboard has the noise.	Mobile phone can disturb the electronic keyboard. To avoid the noise,please turn off the mobile phone or use it in far place.

Table of Contents

Panel Control

1. Power
2. Master volume
3. Teaching A、B
4. Accompaniment Volume+ / −
5. Transpose +/−
6. Tempo +/− Button
7. Single Finger/Fingered/
   Bass Chord
8. Tone/Song/Rhythm
9. LED display
10. Recording/Playback/Programming
11. Digit Key0～9/+、−
12. Panel Percussion
13. Keyboard Split/Dual Voice/Sustain
    /Vibrato/Demo
14. Sync/Start/Stop/Fill in/Metronome
    /Chord Close
15. Chord Area
16. Loudspeaker

External Function
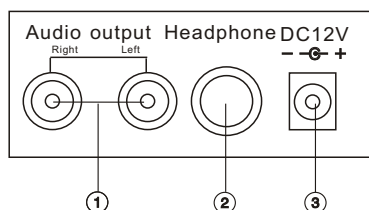
1. Left/Right Track Audio Out
2. Headphone Output
3. DC12V Power Input

Preparation before performance

POWER

1. Use AC/DC power adapter:

Please use the special AC/DC power adapter was equipped with this electronic keyboard or the power adapter with DC12V output voltage and 500mA output current and with central anode plug. connect the DC plug of power adapter into the DC12V power socket in panel of the rear of electronic keyboard.then connect the other end into Mains jack(Please notice: the input voltage of power adapter must conform to the voltage of Mains), finally turn on power switch and start performance.

No.	Name of Rhythm	No.	Name of Rhythm	No.	Name of Rhythm	No.	Name of Rhythm
00	Piano	25	Bagpipe	50	French horn	75	Synth brass
01	Harpsichord	26	Mute Piano	51	Nylon guitar	76	Clean shamisen
02	Clavichord	27	Ancient piano	52	Acoustic piano	77	Pop guitar
03	Reed Organ	28	Clear guitar	53	America banjo	78	Piccolo
04	Electric Guitar(jazz)	29	Synth guitar	54	Nationality flute	79	Modern piano
05	Electric Guitar(Muted)	30	Atmosphere	55	Mute chord	80	Bassoon
06	Guitar Harmonics	31	Trumpet	56	French guitar	81	Chord sitar
07	Acoustic Bass	32	Steel piano	57	Glockenspiel	82	Accordion
08	Cello	33	Synth sitar	58	Japan koto	83	Vibraphone
09	Muted Trumpet	34	Koto	59	Pick piano	84	Synth agogo
10	Baritone Sax	35	Mute agogo	60	Violin	85	English horn
11	English Horn	36	Chorused piano	61	Clean sitar	86	Austria piano
12	Flute	37	Pock organ	62	Hammond organ	87	Oboe
13	Celesta	38	Overdriven guitar	63	Pop sax	88	Sweet guitar
14	Sawtooth	39	Pick bass	64	Japan shannai	89	xylophone
15	Sitar	40	Trombone	65	Ballad guitar	90	Warm
16	Banjo	41	Chord guitar	66	Short piano	91	Low guitar
17	Shamisen	42	Mixer	67	Music box	92	Percussive organ
18	Shanai	43	Hammond organ	68	Halo pad	93	Bright piano
19	Agogo	44	Fifths	69	Fiddle	94	Distortion guitar
20	Pad 3	45	Europe sax	70	Steel guitar	95	Gentle guitar
21	Clarinet	46	Synth bass	71	Joyous agogo	96	Chorused piccolo
22	Pan flute	47	Church organ	72	Finger bass	97	Orchestral hard
23	Leed 2	48	Clean bell	73	Newage	98	Metallic pad
24	Dulcimer	49	Bright sitar	74	Honke-tonk piano	99	Mute bass

No.	Name of Tone	No.	Name of Tone	No.	Name of Tone	No.	Name of Tone
00	Country	25	Europe rhumba	50	bluegrass polka	75	pattern mambo
01	Samba	26	jazz swing	51	rock salsa	76	jazz 8 beat
02	Disco	27	bluegrass tango	52	Europe 8 beat	77	jazz cha cha
03	Pops	28	rock latin	53	single 16 beat	78	Argentina waltz
04	Rock	29	bluegrass beguine	54	classical beguine	79	bluegrass reggae
05	Swing	30	country bossanova	55	Brazil mambo	80	jazz polka
06	Rhumba	31	classical polka	56	mix bossanova	81	jazz 16 beat
07	Tango	32	Hard salsa	57	bluegrass cha cha	82	jazz disco
08	Beguine	33	POP reggae	58	bluegrass slow rock	83	Brazil pops
09	Lation	34	POP 16 beat	59	Europe swing	84	classical reggae
10	March-polka	35	POP 8 beat	60	pattern bossanova	85	jazz mambo
11	Bossanova	36	POP mambo	61	bluegrass salsa	86	classical 8 beat
12	Salsa	37	Brazil cha cha	62	country classical	87	country cha cha
13	16-beat	38	country slow rock	63	Europe rock	88	hard waltz
14	Reggae	39	classical waltz	64	classical disco	89	jazz slowrock
15	Mambo	40	rock samba	65	bluegrass swing	90	country bluegrass
16	8-beat	41	Hard pops	66	classical rhumba	91	Europe samba
17	Cha cha	42	single rock	67	Brazil tango	92	Jazz bossanova
18	Waltz	43	Lieder counter	68	Rock beguine	93	latin salsa
19	Slow-rock	44	rock disco	69	jazz latin	94	bluegrass rock
20	classical samba	45	country waltz	70	South africa polka	95	classical swing
21	country south africa	46	jazz rhumba	71	swing 16 beat	96	bluegrass rhumba
22	Europe disco	47	classical tango	72	classical slow rock	97	jazz tango
23	lieder rock	48	Brazil latin	73	jazz samba	98	jazz beguine
24	lieder POP	49	Europe reggae	74	Indonesia POP	99	pattern latin
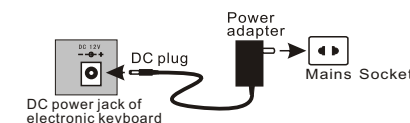
Caution: When you do not use this electronic keyboard, you should unplug the plug of power adapter from power socket safely to avoid the parts trouble or other accident for long-term charging.

2. Use of Batteries:

Open the battery lid at the bottom of electronic keyboard and load 8 pcs of 1.5V Size D batteries,Ensure the polarity of the batteries should conform to the anode and cathode direction of batteries marked on battery lid.Cover the battery lid after the installation.


Eight batteries altogether
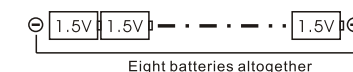
Caution: Do not use different kinds of batteries at the same time and mix new and old batteries for use. The volume will go down and the timbre become bad if the electrical quantity of batteries is not enough,You have to replace the new batteries now.Please take out the batteries as to avoid the possible damage caused by the batteries leakage if you don't use the electric keyboard for long time.

The Jacks of the Accessories

1.Use of headphone：

Connect headphone plug into"**HEADPHONE**"jack in the rear of electronic keyboard. Now the internal speaker system cuts off automatically.Use of headphone during performance does not interfere with others,it is special for personal monitor and exercising at night.
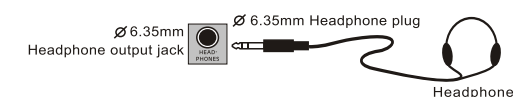
2.Connection with Amplifier or Hi-Fi Equipment

This electronic keyboard has built-in speaker system.Alternatively,it can be connected with other external amplifier or hi-fi equipment for use.First turn off the power of electronic keyboard and external equipments,then insert one end of stereo audio cable into LINE IN or AUXIN jack of other hi-fi equipment and connect the other end into L/R audio out jack in the panel of the rear of the electronic keyboard.
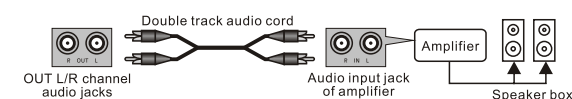
III、Basic Operation

1. Turn on power :

After AC/DCadapteris connectedwellorbatteries wereinstalledcorrectly,press [POWER] button to turn on "POWER " .Then,Press this button again,he power was closed.

Power

2. Adjustment of the Master Volume :

This electronic keyboard has 8 levels "VOLUME," from 1to 8 for your choice .The Default of the Master Volume **is 7** ,Press [**MASTER VOLUME+/-**]button,the master volume has the corresponding increase or decrease.The volume will recover the default automatically if you press the [**MASTER VOLUME+/-**] button at the same time.

MASTER
VOLUME

TONE

Tone Selection :

The default status is "TONE"when the electronic keyboard is open.You need to press the [**TONE**] button if the present status isn't the tone status.You can select the tone through the direct input by the digit 0-9 buttons or by the [**+/-**]buttons.

As shown in the figure :05

TONE SONG RHYTHM

| 1 | 2 | 3 |
4	5	6
7	8	9
-	0	+

Effect & Control

1. Keyboard Split :

In ″**KEYBOARD SPLIT**″model,LED display ″spl″The keyboard splits into dual voice keyboard from the 24th key In the left.You can adjust the voice in right keyboard by pressing the digit 0-9 buttons.The voice of the left 24 pcs keys is the adjusted voice in advance.

KEYBOARD DUAL VOICE SUSTAIN VIBRATO DEMO
SPLIT
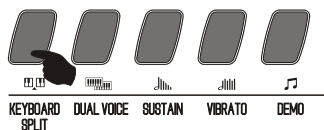
Demo

1.Press[DEMO]button to play song,LED display "dxx","xx"stand for Demo number.by pressing numeric button or "+","-button to chose the sone.the keybaord will repeatedly play the current demo.Press "DEMO"again to exit the function

KEYBOARD DUAL VOICE SUSTAIN VIBRATO DEMO
SPLIT
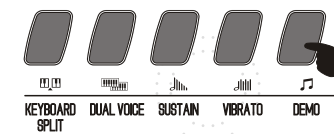
The Playback of the Song

Press [**SONG**] button to enter the song selection model,you can select the song by pressing The digit 0-9 buttons or +/- buttons. Such as 04、05,the song will play directly if you press the [**DEMO**] button. Press [**START/STOP**] button to exit the song playback function.

TONE SONG RHYTHM

Teaching

Press [**TEACHING**] button to enter the teaching function,to select different songs by pressing numeric button or"+""-" button. Press [TEACHING] button again to exit the teaching function.

1.[**TEACHING A**]: Press the [**TEACHING A**] button to enter the teaching mode,LED display"dxx" About 2 seconds or so the beat point will followthe beat to flash,this time press any key to start song and no main medoly then.pressany key again,keyboard emit correct main medoly and repeat its accompaniment .Namely one key one note.

TEACHING A TEACHING B

2.[**TEACHING B**] Press [TEACHING B] button to enter the teaching mode.LED display "dxx",about 2 seconds or so beat point will follow the beat to flash.This time press any key to start song and no main medoly then,chose different,voice to play the main medoly based on the accompaniment.

TEACHING A TEACHING B

3. Single Finger :

　　When rhythm is started, press〔SINGLE FINGER〕button to enter the function of single auto chord , Now in 1~19keys of the chord keyboard area,applying different fingerings.You can hear different chord accompa niment .Press[START/STOP] button to exit the single finger.

SINGLE FINGER ・ FINGERED ・ BASS CHORD　　　　C　　　Cm　　　C7　　　Cm7
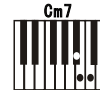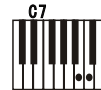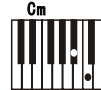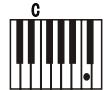
4. Fingered :

　　When rhythm is started,press[FINGERED]button to enter the function of Fingered auto bass chord.Now in 1-19keys of chord keyboard area,applying different fingerings, You can hear different chord accompaniments.Press [START/STOP]button to exit the fingered function.

SINGLE FINGER ・ FINGERED ・ BASS CHORD　　　　C　　　Cm　　　Cm7　　　C7
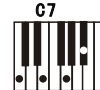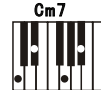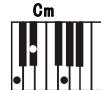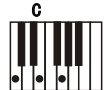
Recording Function

　　1. Press〔RECORDING〕button to enter the recording mode and metronome sound sounds. The default of tempo is 120.Now press any key to start recording.The maximum recording quantity is 53 kinds of notes.When the recording is full,LED displays"FUL"and it can not continue to record the next note. During recording,you can press[RECORDING] to play anytime.Everytime you press the [RECORDING] button,the previous memory will be cleared and the keyboard   will enter the recording mode again.

RECORDING ・ PLAYBACK ・ PROGRAMMING

　　2. Press〔PLAYBACK〕button to play the recorded notes.

RECORDING ・ PLAYBACK ・ PROGRAMMING

　　3. Press[PROGRAMMING]button to enter the rhythm editing function.LED display "prg".You can edit a paragraph of rhythm through pressing the 8 kinds of panel percussion of the Keyboard.The maximum recording quantity is 32 drums.After finishing programming, press"playback"to Play programmed drums in sequence and form a self-programmed rhythm.By adjusting tempo"+/-"to reach the optimal effec.Everytime press the [PROGRAMMING] button,the previous recording will be cleared,the electronic keyboard will enter into the programming mode again.

RECORDING ・ PLAYBACK ・ PROGRAMMING

2. Dual voice :

　　In normal status, press〔DUAL INVOICE〕button, the keyboard enters the dual voice model.That is:One note is composed of two kinds of voice.The first kind of voice is the voice before you pressed the [DUAL VOICE] button,The second kind of voice is the selected voice after you pressed the [DUAL VOICE],You can change the second kind of voice by pressing the digit 0-9 buttons.

KEYBOARD SPLIT　DUAL VOICE　SUSTAIN　VIBRATO　DEMO
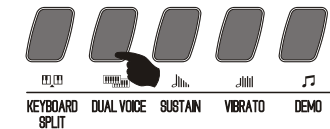
3. Sustain :

　　Press〔SUSTAIN〕button to start sustain function.The performance produces the prolonged effect if you play with the black and white keys at the same time.Press the[SUSTAIN] button again to exit the sustain function.

KEYBOARD SPLIT　DUAL VOICE　SUSTAIN　VIBRATO　DEMO
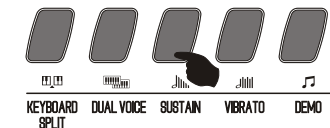
4. Vibrato :

　　Press〔VIBRATO〕button to start vibrato function.The trembling effect tone will produce If you play with the black and white keys at the same time.Press[VIBRATO] button again to exit the vibrato function.

KEYBOARD SPLIT　DUAL VOICE　SUSTAIN　VIBRATO　DEMO
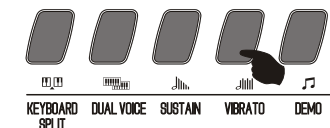
5.Transpose:

　　Press[TRANSPOSE]+or-button,the corresponding musical scale goes up or goes down for one note when you play with the black and white keys . You can adjust the musical scale for 6 levels upwards and downwards.The system will recover the default keyboard tone automatically if you press the[TRANSPOSE]+/-button at the same time.

+
TRANSPOSE
−
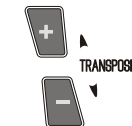
6. Metronome :

　　After pressed〔METRONOME〕button,the tick-tock beat sound will occur.There are four kinds of beats can be choosen. The metronome effect will be added when you perform. Press the[METRONOME] button repeatedly,the effect will be the 1/4 beat-2/4 beat-3/4 beat-4/4.After LED exit display of beat,press"METRONOME"button to exit "METRONOME" function.

SYNC　START/STOP　FILL−IN　METRONOME　CHORD CLOSE
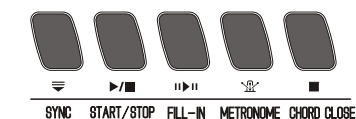
7. Panel Percussion Instruments：

Press [**PANEL PERCUSSION**] button（there are 8 kinds of panel percussion instruments in total）the corresponding percussion can occur.You can fill in the corresponding percussion to enhance the performance effect based on your requirement.
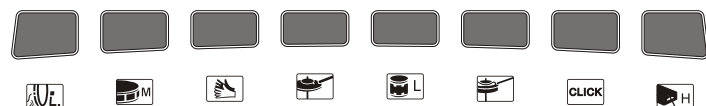
1	2	3	4	5	6	7	8
						CLICK	
Bass Drum	Side Stick	Snare Drum	Closed Hi-Hat	Open Hi-Hat	Low Mid Tom	Hi Mid Tom	Crash Cymbal

Rhythm & The Relative Function of the Rhythm

1. Selecting Rhythm：

This electronic keyboard has 100 kinds of rhythm for your choice.For detailed rhythm table,please refer the Appendix. Press [**RHYTHM**] button to enter Rhythm Selection function. LED displays current rhythm number.You can choose the rhythm through inputting two-digit number by the digit 0-9 buttons or by +/- buttons.

TONE   SONG   RHYTHM

2. Start/Stop：

In default status when the electronic keyboard is open.Press[**START/STOP**]button to play the rhythm,Press[**START/STOP**]button again,it will exit the rhythm playback.

SYNC   START/STOP   FILL-IN   METRONOME   CHORD CLOSE

3. Sync：

Press [**SYNC**] button to start sync accompaniment function and press any key of 19 keys in left hand to start rhythm synchronously.If chord function has started,press The corresponding key in 19 keys in chord area ,the auto chord will start synchronously.If the previous 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.

SYNC   START/STOP   FILL-IN   METRONOME   CHORD CLOSE
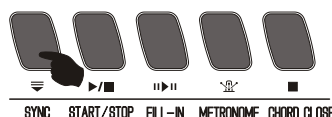
4. Fill-in：

You can fill in a length of interlude to enhance the performance effect if you press the [**FILL-IN**] button during the rhythm playback,then,the rhythm will continue to perform based on the original rhythm.

SYNC   START/STOP   FILL-IN   METRONOME   CHORD CLOSE

5. Accompaniment Volume Adjustment

The default [**ACCOMPANIMENT VOLUME**]is 07,the accompaniment volume can be adjusted by [**ACCOMPANIMENT VOLUME**] +/- buttons.During the adjustment,L**ED** gives corresponding display.The system will recover the default accompaniment volume automatically if you press the [**ACCOMPANIMENT VOLUME**]+/- buttons at the same time. The adjustment range is 00-07.

ACCOMP VOLUME   +   –

6. Tempo Adjustment

Press [**Tempo**] +/-buttons to adjust the playing tempo of rhythm,metronome and demo .The adjustment range is 40-240.

◄ – TEMPO + ►

Chord Accompaniment

1. Bass Chord.

In the chord state, press [**BASS CHORD**] button, the chord voice can be changed. It has 4 kinds of chord for your choice At the time when LED do not exit chord display,continue to press"Bass Chord"button,the chord will change circularly .

SINGLE FINGER • FINGERED • BASS CHORD

2. Chord Close：

Press the[**CHORD CLOSE**]button after the chord was started,the chord accompaniment sound stops,the rhythm continues to play.

SYNC   START/STOP   FILL-IN   METRONOME   CHORD CLOSE