MIDIPLUS

EK490 plus
Owner's Manual

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Appendix：

Preface

Thank you for purchasing the MIDIPLUS EK490 Plus, an intelligent and versatile keyboard. We focused on improving the sound quality and weighted keys to make the playing experience better. The high-quality sounds of the EK490 Plus are compatible with the general MIDI format and other formats. It is designed to provide everything that the serious artist or amateur musician needs on stage or at home. When used with a computer with the appropriate music software, it becomes a more powerful musical instrument and workstation.

What's in the Box?

- **MIDIPLUS EK490 Plus** USB MIDI keyboard with styles
- Owner's manual
- 9V DC adaptor

EK490 Plus Overview：

The EK490 Plus includes the following features：
- 49-note semi-weighted piano type keyboard.
- Pitch bend wheel
- Modulation wheel
- Function buttons
- Sustain pedal interface (sustain pedal does not include).
- LCD display screen
- Multiple options for power supply: External 9V DC power adaptor, USB power or 6 C type batteries.

Chapter1.　Quick Start

1.1.　EK490 Plus Overview

1.1.1.　Front Panel
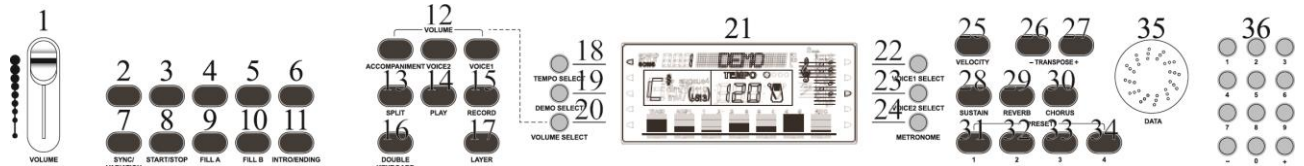
1. VOLUME sliders
2. RHYTHM SELECT button
3. NORMAL MODE button
4. ONE FINGER button
5. MULTI FINGER button
6. DRUMMER button
7. SYNC/VARIATION button
8. START/STOP button
9. FILL A button
10. FILL B button
11. INTRO/ENDING button
12. VOLUME button (VOICE1、VOICE2、ACCOMPANIMENT)
13. SPLIT button
14. PLAY button
15. RECORD button
16. DOUBLE KEYBOARD button
17. LAYER button
18. TEMPO SELECT button
19. DEMO SELECT button
20. VOLUME SELECT button
21. LCD display screen
22. VOICE1 SELECT button
23. VOICE2 SELECT button
24. METRONOME button
25. VELOCITY button
26. TRANSPOSE - button
27. TRANSPOSE + button
28. SUSTAIN button
29. REVERB button
30. CHORUS button
31. PRESET 1 button
32. PRESET 2 button
33. PRESET 3 button
34. PRESET 4 button
35. DATA encoder
36. Number buttons0~9，-、+
37. OVTAVE▲
38. OVTAVE▼
39. PITCH wheel
40. MODULATION wheel
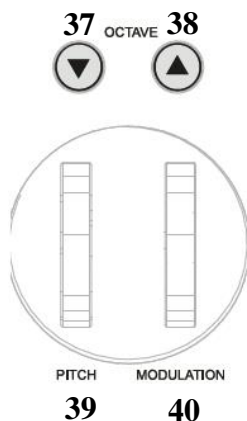
1.1.2. Rear Panel
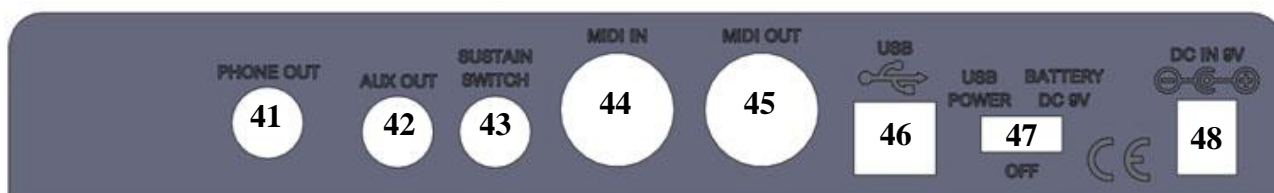
41. PHONE jack
42. AUX OUT jack
43. SUSTAIN SWITCH jack
44. MIDI IN jack
45. MIDI OUT jack

46. USB jack
47. Power switch (USB POWER /BATTERY or DC 9V)
48. DC IN 9V jack

1.2. Basic Functions

1.2.1. LCD Display screen

Menu/message display
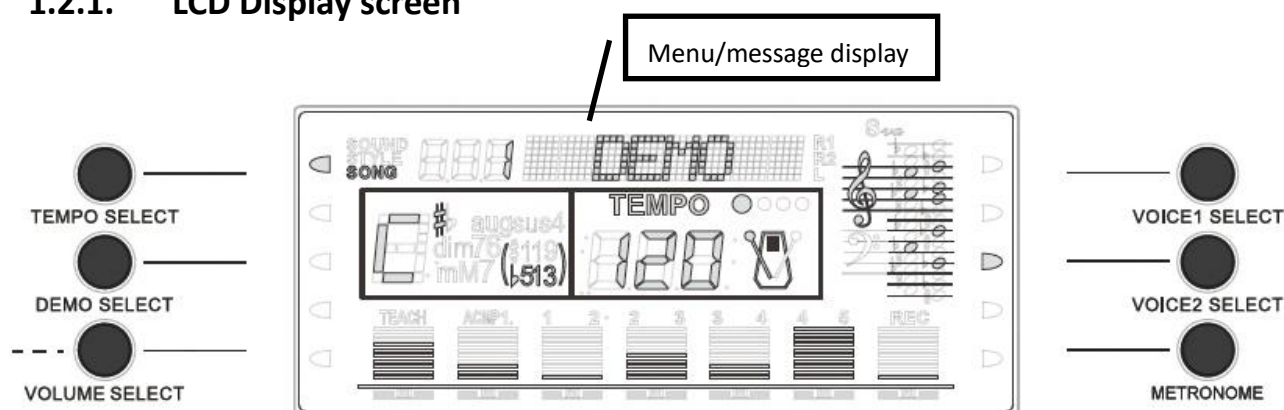
1.2.2. TEMPO SELECT

Select the tempo at which the rhythm accompaniment & DEMO is played.
- Press the【TEMPO SELECT】button.
- To select tempo:
- Option 1: Use the【DATA】selection wheel.
- Option 2: Use the【+/-】buttons.
- Option 3: Use the numerical keypad. The tempo will change within 3 seconds.
- Press the【+】and【-】buttons simultaneously to reset the tempo to the default.

1.2.3. DEMO SELECT

Select a demo track. The EK490 Plus contains 20 demo tracks that highlight different styles of music.

- Press the【DEMO SELECT】button.
- To select demo track:
- Option 1: Use the【DATA】selection wheel.
- Option 2: Use the【+/-】buttons.
- Option 3: Use the numerical keypad. The demo track will change within 3 seconds.

1.2.4.　VOLUME SELECT

Individually control the volume of VOICE1, VOICE2, and ACCOMPANIMENT.
- Press the【VOLUME SELECT】button.
- Press the【VOICE1】button,【VOICE2】button, or【ACCOMPANIMENT】button. Button will light up when pressed.
- To select volume:
- Option 1: Use the【DATA】selection wheel to select volume.
- Option 2: Use the【+/-】buttons.
- Option 3: Use the numerical keypad. The demo track will change within 3 seconds.

1.2.5.　VOLUME slider

Adjust the overall volume.

1.2.6.　OCTAVE up/down

Adjust the relative pitch one octave higher or lower.
Press both buttons simultaneously to reset to the default octave.

1.2.7.　PITCH wheel

Raise or lower the pitch continuously up to a whole step from the original pitch. The range of pitch values depends on the sound generator (sound card or module) being used.

1.2.8.　MODULATION wheel

Change the intensity of modulation (vibrato).

1.2.9.　VOICE SELECT

Select the voice for Voice1 or Voice2.
- Press the【VOICE1 SELECT】or 【VOICE2 SELECT】button.
- To select voice:
- Option 1: Use the【DATA】selection wheel to select volume.
- Option 2: Use the【+/-】buttons.
- Option 3: Use the numerical keypad. The demo track will change within 3 seconds.

Chapter2. Basic Operations

2.1. Playing Operation

2.1.1. VELOCITY

Toggle whether keyboard reads velocity (the initial force used to press the key). Velocity is read by default.

2.1.2. TRANSPOSE

Change the relative pitch of the keyboard.
- Press the TRANSPOSE 【+】or 【-】button. Each button press will transpose the keyboard by a semitone from –5 to +6.
- Press the TRANSPOSE【+】and【-】buttons simultaneously to reset the transpose value to the default ("C"). Button lights will turn off on reset.

2.1.3. LAYER

Layer Voice1 and Voice2 on top of each other, chosen using 【VOICE1 SELECT】 and 【VOICE2 SELECT】.

2.1.1. DOUBLE KEYBOARD

Split the keyboard into two voices, Voice2 (C1 – F#2) and Voice1 (G2 – C5). Raises Voice2 by two octaves. Modulation will only apply to Voice1.

2.1.2. SUSTAIN

Toggle sustain. Sustain is off by default.

2.1.3. REVERB

Toggle reverb. Reverb is off by default.

2.1.4. DOUBLE KEYBOARD

Split the keyboard into two voices, Voice2 (C1 – F#2) and Voice1 (G2 – C5). Raises Voice2 by two octaves. Modulation will only apply to Voice1.

2.1.5.   SUSTAIN

Toggle sustain. Sustain is off by default.

2.1.6.   REVERB

Toggle reverb. Reverb is off by default.

2.1.7.   CHORUS

Toggle chorus. Chorus is off by default.

2.1.8.   NORMAL MODE

When【NORMAL MODE】is pressed, the keyboard utilizes the selected voice (VOICE1 and/or VOICE2) to play standard pitches.

2.1.9.   DRUMMER

When【DRUMMER】 is pressed, notes on the keyboard correlate with unpitched percussion.

2.1.10.   RHYTHM SELECT

Select the rhythmic feel.
- Press the【RHYTHM SELECT】button.
- To select rhythm:
    - Option 1: Use the【DATA】selection wheel to select volume.
    - Option 2: Use the【+/-】buttons.
- Press【START/STOP】button

2.2.   AUTO ACCOMPANIMENT

The auto accompaniment feature puts a full backing band at your fingertips. To use it, all you have to do is play the chords with your left hand (C1 – F#2) and the selected accompaniment style matching your music will automatically play along. With auto accompaniment, even a solo performer can enjoy playing with the backing of an entire band or orchestra.

2.2.1.   SYNC/VARIATION

Control the harmony of auto accompaniment (sync) and toggle variations on the basic harmonies (variation).
- Sync

- Press the【ONE FINGER】or【MULTI FINGER】button. See sections 2.2.6 and 2.2.7 for details.
- Press the【SYNC/VARIATION】button.
- Play a note (if【ONE FINGER】selected) or chord (if【MULTI FINGER】selected) between C1 – F#2. Auto accompaniment will start, and the【SYNC/VARIATION】LED light will turn off.
- Variation
- While the accompaniment is playing, press the【SYNC/VARIATION】button. The 【SYNC/VARIATION】LED light will turn on.

2.2.2.　START/STOP

Start or stop the selected rhythm track.

2.2.3.　INTRO

Begin with an introduction customized for the selected rhythm track. When the intro finishes, the accompaniment will shift to the main section. The length of the intro (in measures) differs depending on the selected rhythm.
- Press the【INTRO/ENDING】button.
- Press the【START/STOP】button.

2.2.4.　ENDING

Finish the song with an outro customized for the selected rhythm track. When the ending is finished, the accompaniment will stop automatically. The length of the ending (in measures) differs depending on the selected rhythm.
- Press the【INTRO/ENDING】button to begin the outro.

2.2.5.　FILL A/B

Add one of four fills customized for the selected accompaniment.
- To access fills 1 and 2, press the【FILL A】or the【FILL B】button while the 【SYNC/VARIATION】LED is unlit
- To access fills 3 and 4, press the【FILL A】or the【FILL B】button while the 【SYNC/VARIATION】LED is lit

2.2.6.　ONE FINGER

Control the beautifully orchestrated auto accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys between C1 and F#2. See section 2.2.1 (SYNC/VARIATION).
The following abbreviated chord fingerings are used:
- For a major chord, press the root key only.

- For a seventh chord, simultaneously press the root key and the nearest white key to its left.
- For a minor chord, simultaneously press the root key and the nearest black key to its left.
- For a minor-seventh chord, simultaneously press the root key, the nearest white key to its left, and the nearest black key to its left.

2.2.7. MULTI FINGER

Take direct control over the harmonies of the auto accompaniment. See section 2.2.1 (SYNC/VARIATION).

When【MULTI FINGER】is selected, exactly three or four keys must be pressed to change the chord harmony.

2.3. Saving to the Registration Memory

2.3.1. PRESET

Save current settings to the registration memory for future use.
- To set a preset, hold the preset button【1】,【2】,【3】, or【4】button until there is a "ding" sound.

2.3.2. RECORD

Record music to registration memory.
- To start/stop recording, press the【RECORD】button. Recording begins when the【RECORD】LED light flashes three times.

2.3.3. PLAY

- Press the【PLAY】button to play back the recording. The【PLAY】LED light will not turn on.

Chapter3.   Auxiliary jack

3.1. Basic jacks

3.1.1.   PHONE jack

Connect external headphones (cord not provided). This jack is a 1⁄4 TRS stereo headphone output that plays the same signal as the main outputs.

3.1.2.   AUX OUT jack

Connect to an external speaker with an AUX cord (not provided).

3.1.3.   SUSTAIN SWITCH jack

Connect a sustain pedal (not provided).

3.1.4.   DC 9V jack

Use only the provided external 9V DC adaptor or one with the same voltage rating as the power supply in your area to prevent damage to internal components.

3.2. MIDI jacks

3.2.1.   MIDI OUT jacks

Sends MIDI messages to external devices.

3.2.2.   MIDI IN jacks

Receives external MIDI messages.

3.2.3.   USB port

Connect the keyboard with a computer (cord provided). The keyboard can use the computer for power and send MIDI messages directly to the sound card.

Appendix 1：Specification

Model	MIDIPLUS EK490 Plus
Description	PORTABLE E. PIANO
Keyboard	49 velocity sensitive piano-style key
Maximum Polyphony	64 notes
Instruments	128 GM list sound
Quickly Sound	x
Rhythm Style	64
Demo Song	20
Sound Effect	Velocity、Sustain、Reverb、Chorus、Split、Double keyboard、Double voice、Drum
Auto Accompaniment	Normal、One finger、Multi finger
Other Control	Transpose、Data Encoder、Numeric 0~9、+、-
LCD	Large LCD screen with blue back-light
Volume Control	Total、Accompaniment、Voice1、 Voice2
Record Control	Record、Play
Preset	5
Rhythm Control	Sync/variation、Start/Stop、Fill-in A、Fill-in B、Intro/Ending
Octave	Up、Down
Wheels	Pitch、Modulation
Tempo Control	30-250
MIDI	16 multi-timbre received，GM Level 1 standard
Socket	Sustain pedal input、Aux out、MIDI IN/OUT、USB to computer、Stereo headphone
Speaker Output	2W+2W
Power Adapter	DC 9V / 2A
Power Batteries	6 x AA or equivalent batteries (not included)
Dimensions	About 83 x 25.5 x 8 cm
Weight	About 3.6 kg (without batteries)

Appendix 2：Voice List

1	Acoustic Grand Piano	33	Acoustic Bass	65	Soprano Sax	97	Fx 1 (rain)
2	Bright Acoustic Piano	34	Finger Bass	66	Alto Sax	98	Fx 2 (soundtrack)
3	Electric Grand Piano	35	Picked Bass	67	Tenor Sax	99	Fx 3 (crystal)
4	Honky-Tonk Piano	36	Fretless Bass	68	Baritone Sax	100	Fx 4 (atmosphere)
5	Electric Piano 1	37	Slap Bass1	69	Oboe	101	Fx 5 (brightness)
6	Electric Piano 2	38	Slap Bass 2	70	English Horn	102	Fx 6 (goblins)
7	Harpsichord	39	Synth Bass 1	71	Bassoon	103	Fx 7 (echoes)
8	Clavichord	40	Synth Bass 2	72	Clarinet	104	Fx 8 (sci-fi)
9	Celesta	41	Violin	73	Piccolo	105	Sitar
10	Glockenspiel	42	Viola	74	Flute	106	Banjo
11	Music Box	43	Cello	75	Recorder	107	Shamisen
12	Vibraphone	44	Contrabass	76	Pan Flute	108	Koto
13	Marimba	45	Tremolo Strings	77	Blown Bottle	109	Kalimba
14	Xylophone	46	Pizzicato Strings	78	Shakuhachi	110	Bagpipe
15	Tubular Bells	47	Orchestral Harp	79	Whistle	111	Fiddle
16	Dulcimer	48	Timpani	80	Ocarina	112	Shanai
17	Drawbar Organ	49	String Ensemble 1	81	Lead 1(square)	113	Tinkle Bell
18	Percussive Organ	50	String Ensemble 2	82	Lead 2(sawtooth)	114	Agogo
19	Rock Organ	51	Synth Strings1	83	Lead 3 (calliope)	115	Steel Drums
20	Church Organ	52	Synth Strings2	84	Lead 4 (chiff)	116	Woodblock
21	Reed Organ	53	Choir Aahs	85	Lead 5 (charang)	117	Taiko Drum
22	Accordion	54	Voice Oohs	86	Lead 6 (voice)	118	Melodic Tom
23	Harmonica	55	Synth Voice	87	Lead 7 (fifths)	119	Synth Drum
24	Tango Accordion	56	Orchestra Hit	88	Lead 8 (bass+lead)	120	Reverse Cymbal
25	Acoustic Guitar (nylon)	57	Trumpet	89	Pad 1 (new age)	121	Gt. Fret Noise
26	Acoustic Guitar (steel)	58	Trombone	90	Pad 2 (warm)	122	Breath Noise
27	Electric Guitar (jazz)	59	Tuba	91	Pad 3 (polysynth)	123	Seashore
28	Electric Guitar (clean)	60	Muted Trumpet	92	Pad 4 (choir)	124	Bird Tweet
29	Electric Guitar (muted)	61	French Horn	93	Pad 5 (bowed)	125	Telephone Ring
30	Overdriven Guitar	62	Brass Section	94	Pad 6 (metallic)	126	Helicopter
31	Distortion Guitar	63	Synth Brass 1	95	Pad 7 (halo)	127	Applause
32	Guitar harmonics	64	Synth Brass 2	96	Pad 8 (sweep)	128	Gunshot

Appendix 3：Demo List

1	Balloon Flower	11	The Flute
2	Papaya Song	12	Fishing Village
3	The Bluebells Of Scotland	13	My hometown
4	The Linden Tree	14	Sunny-side-up
5	Sword Brake	15	Home On The Range
6	In The Sweet Bye And Bye	16	Long Long Ago
7	Coconut	17	River
8	Whispering Pines	18	The harmonious blacksmith
9	Lovely Rose	19	Flow Gently Sweet Afton
10	Mongolian Pastoral Song	20	Women are fickle

Appendix 4：Rhythm List

1	ROCK1	17	BOOGIE	33	BOSSA1	49	SL WALTZ
2	ROCK2	18	ROCK'N1	34	BOSSA2	50	SW WALTZ
3	RAP	19	ROCK'N2	35	LATIN	51	WALTZ
4	HOUSE	20	TWIST	36	CHA CHA	52	MARCH
5	TECHNO	21	SL ROCK1	37	RUMBA	53	FOXTROT
6	DANCE	22	SL ROCK2	38	POPROCK	54	POLKA
7	FUNK1	23	DISCO1	39	BEGUINE	55	BAROQUE
8	FUNK2	24	DISCO2	40	TANGO	56	COUNTRY
9	8BEAT1	25	SWING1	41	SAMBA1	57	SOUL CHA
10	8BEAT2	26	SWING2	42	SAMBA2	58	SL TANGO
11	8BEAT3	27	BLUES	43	SALSA	59	RUM-WAL
12	8BEAT4	28	SL SWING	44	MAMBO1	60	T-RUMBA
13	16BEAT1	29	BIG BAND	45	MAMBO2	61	T-SOUL
14	16BEAT2	30	SHUFFLE	46	CALYPSO	62	T-DISCO
15	16BEAT3	31	DIXIE	47	REGGAE	63	ENKA
16	16BEAT4	32	CHARLEST	48	FUSION	64	SANDI