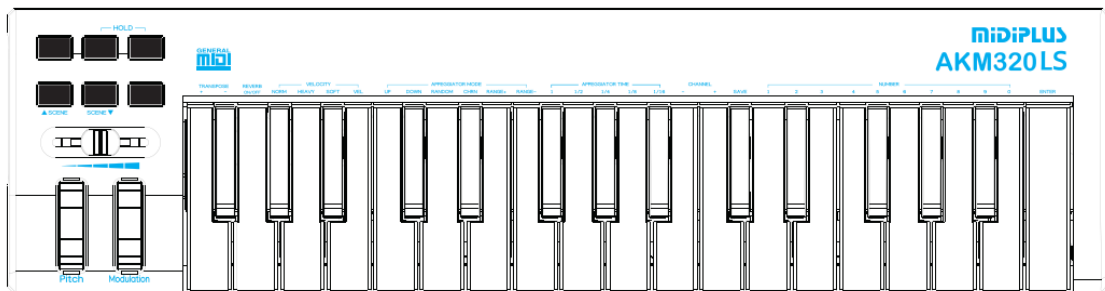


MIDIPLUS

AKM320LS Owner's Manual



Catalog

(1) Preface	4
(2) What's in the Box?	4
(3) Panel overview:	4
3.1 Front panel overview	4
3.2 Left side panel overview	5
(4) Functions overview:	5
4.1 TAP tempo	5
4.2 Arpeggiator (ARP):	5
4.3 CHORD:	6
4.4 Octave buttons (DOWN& UP):	6
4.5 SETUP & RESET:	6
4.6 Volume clipper potentiometer:	6
4.7 Pitch wheel:	6
4.8 Modulation wheel:	6
4.9 Transpose +/-:	6
4.10 REVERB ON/OFF:	7
4.11 VELOCITY Curve (NORM/HEAVY/SOFT/VEL):	7
4.12 ARP MODE:	7
4.13 Arpeggiator time (ARP TIME):	7
4.14 MIDI Channel +/-:	8
4.15 SAVE:	8
4.16 NUMBER 1...9...0:	8

4.17 ENTER:	8
4.18 32 - keyboard (Three triggered keyboard):	8
4.19 Pedal switch (SUSTAIN):	8
4.20 3.5 mm Headphone Jack:	8
4.21 USB - B:	8
4.22 POWER SWITCH:.....	8
(5) Minimum System Requirements:.....	9
(6) GM Sound List	10

(1) Preface

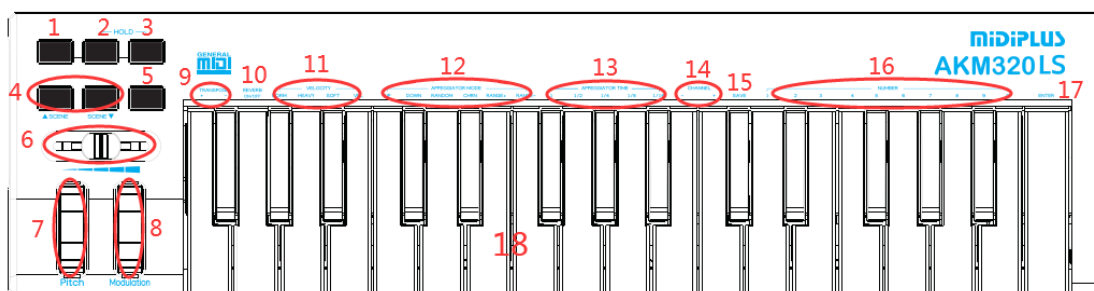
Congratulations on your purchase of MIDI PLUS AKM320LS. AKM320LS is a petite appearance and powerful MIDI keyboard, portable and powerful MIDI function, is a cost-effective product, worth you have. Next to introduce AKM320LS function and operating, it set powerful MIDI functions, Includes 32 key miniature keyboard (the keyboard has three induction points, so it can make the force change more sensitive and delicate), pitch and modulation wheels, volume clipper potentiometer , octave buttons (Up & Down), powerful arpeggiator, chord mode button, set button . The keys of composite function, includes transpose Buttons (Up & Down), reverb function selection, four velocity curve, arpeggiator mode, arpeggiator time , channel and sound selection; The left side board have pedal input jack , 3.5mm Headphone OUT , USB socket and power switch(power supply USB or dry battery) . AKM320LS support apple system and the Microsoft Windows XP/7/8/10 system, do not need to install the USB driver, the system can directly identify the MIDI USB devices.

(2) What's in the Box?

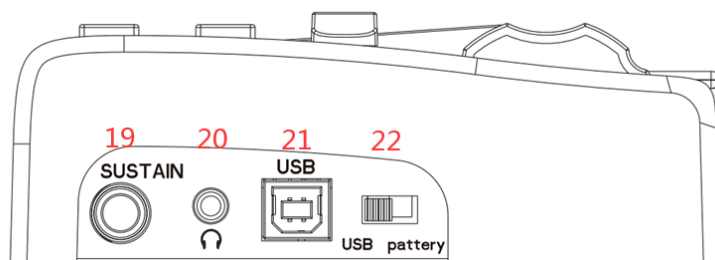
1. AKM320LS - 32 force sensing keys USB MIDI keyboard controller.
2. A standard manual.
3. A standard USB wire.
4. A 3.5mm MIDI cable.

(3) Panel overview:

3.1 Front panel overview



3.2 Left side panel overview



Function of the serial number
(1) Metronome (TAP)
(2) Arpeggiator (ARP)
(3) Chord
(4) Octave buttons(DOWN& UP)
(5) SETUP & RESET
(6) Volume clipper potentiometer
(7) Pitch wheel
(8) Modulation wheel
(9) Transpose+/-
(10) REVERB(ON/OFF)
(11) Velocity Curve(NORM/HEAVY/SOFT/VEL)
(12) Arpeggiator mode(ARP MODE)
(13) Arpeggiator time(ARP TIME)
(14) MIDI Channel -/+
(15) SAVE
(16) NUMBER 1...9...0
(17) ENTER
(18) 32 - Three induction points keyboard
(19) Pedal switch(SUSTAIN)
(20) 3.5mm Headphone
(21) USB-B
(22) Power switch (USB / dry battery)

(4) Functions overview:

4.1 TAP tempo

Edit arpeggio rhythm tempo. After opening the "ARP", "TAP" LED will be flash Blue, flashing rate associated with the current tempo, the user can repeat press this button ("TAP") adjust the tempo, repeated press rate is proportional to the tempo, the press rate faster, the faster tempo rhythm, LED blink rate faster, the faster the arpeggio sends, conversely the more slowly.

4.2 Arpeggiator (ARP):

Arpeggiator switch, When press the button to open the arpeggios, LED light Green, press the button, once again and arpeggio function will be closed, the LED put out, after the arpeggiator is ON, can be used together with the keyboard. Arpeggio function: If the

current press the keyboard of C2, will send C2, C3, C2,C3.....; If the current press D3 keys, will send D3, D4, D3, D4.....

4.3 CHORD:

Press the "CHORD", Chord is ON, LED light Sky blue. Press the button again, close the chord function, LED put out. In chord mode, through "the OCTAVE" and "OCTAVE >" button to change different chords, chord types including "Major", "Minor", "Minor 6", "Minor 7", "Augmented", "Major 6", "Major 7", "Suspended", "Diminished".

4.4 Octave buttons (DOWN& UP):

Octave buttons (DOWN& UP), can be used to enlarge the 0-key to 88-key or more. Every time to reduce or increase an octave (the default value of 4),

1. To reduce an octave (octave value less than 4)"OCTAVE UP" LED lights;
2. To increase an octave (octave is greater than 4) "OCTAVE DOWN"LED lights;
3. Octaves Value is 4, "OCTAVE UP" LED and "OCTAVE DOWN"LED will put out. At the same time press "OCTAVE DOWN" & "OCTAVE UP" buttons, the octaves value return to the default value(4).
4. Colors: Octave up LED : Green-octave 0, Red - 1, Sky blue – 2, Yellow – 3; Octave down LED: Yellow – 5, Sky blue – 6, Red – 7, Green - 8

4.5 SETUP & RESET:

SETUP: Composite keyboard mode switch, When press "SETUP" button, not loosen, LED light Yellow, the composite keyboard mode is ON, then press any keyboards and will make can reuse functions. For example: "SETUP" is ON, press the keys of the first (Transpose +), can Transpose +1.

Loosen the "SETUP" button will exit composite keyboard mode.

RESET: When the "OCTAVE DOWN" or "OCTAVE DOWN" or "TAP" or..... has change, If you enable "RESET" <RESET: Hold press the "SETUP" button before AKM320LS power on>, the parameters will be reset to the default state, all LEDs flash Red twice.

4.6 Volume clipper potentiometer:

The potentiometer can adjust the MIDI volume, adjust the volume potentiometer will transmit the MIDI messages.

4.7 Pitch wheel:

Pitch wheel: Transmits MIDI Pitch Bend information to raise or lower the pitch of a note temporarily.

4.8 Modulation wheel:

Modulation wheel: This wheel can be used to transmit continuous controller data (CC #1 or Modulation Depth).

4.9 Transpose+/-:

It is possible to transpose up or down by as much as 12 MIDI notes, "SETUP" LED flash Yellow once.

4.10 REVERB ON/OFF:

It is open and closed reverberation function, "SETUP" LED flash Green once when Reverb OFF, flash Red once when Reverb ON.

4.11 VELOCITY Curve (NORM/HEAVY/SOFT/VEL):

Choose velocity curve (standard/heavy/light/vel), the user can choose according to personal feel the velocity of the corresponding curve, "SETUP" LED flash Yellow once.

Ps. VEL is no change in velocity, all are max velocity 127.

4.12 ARP MODE:

When the "ARP" is ON, "ARP" LED light Green.

UP: Up mode, the arpeggiator will play the notes in increasing chromatic order. If a Cmaj chord is played, the pattern would be: C, E, G, C, E, G,

DOWN: Down mode, the arpeggiator will play the notes in decreasing chromatic order. If a Cmaj chord is played, the pattern would be: G, E, C, G, E, C,

RANDOM: RANDOM mode, arpeggiator playing notes random broadcast, not according to the notes in order to play, random play the notes.

CHRN: Order mode, the arpeggiator will play back the notes in the order that they were pressed. If the following notes were pressed and held in this order: C, G, E, B. The output of notes would follow that order and playback: C, G, E, B, C, G, E, B, C, G, E, B.....

RANGE+: Arpeggiator octave+1, since the default value(1) + 1, a maximum of 4. When the arpeggiator octave is 1, arpeggiator sent two notes. Press the "RANGE+", arpeggiator octave+1, the notes add an octave, then sent three arpeggio notes at the same time. For example, the arpeggiator octave is 1, sent C2,C3; The arpeggiator octave is 2, sent C2,C3,C4; The arpeggiator octave is 3, sent C2,C3,C4,C5.....

RANGE- : Arpeggiator octave-1, a minimum of 1. When the arpeggiator octave is 2, arpeggiator sent three notes. Press the "RANGE-", arpeggiator octave-1, the notes reduce an octave, then sent two arpeggio notes at the same time. For example, the arpeggiator octave is 1, sent C2,C3; The arpeggiator octave is 2, sent C2,C3,C4; The arpeggiator octave is 3, sent C2,C3,C4,C5.....

"SETUP" LED flash Yellow once.

4.13 Arpeggiator time (ARP TIME):

When the "ARP" is ON, ARP TIME---1~1/16: These keyboards are adjust fixed time for arpeggiator. Arp time: play arpeggiator notes of frequency. Here with the QN said that if

QN is a crotchet, so are defined as follows:

1 note = QN	
1/2 note = (QN/2)	1/4 note = (QN/4)
1/8 note = (QN/8)	1/16 note = (QN/16)

"SETUP" LED flash Yellow once

4.14 MIDI Channel -/+:

It can change the midi channel for AKM320LS, "SETUP" LED flash Yellow once. MIDI channel number: 1 ~ 16.

4.15 SAVE:

If you press "SAVE", the parameters will be save in AMK320LK, all LEDs flash Green twice.

4.16 NUMBER 1...9...0:

Change sound (1~128) of current MIDI channel. For example, change to Sound 120, "SETUP" is ON, + "Number 1" first, "Number 2" second, then "Number 0", press "Enter" button in the end, "SETUP" LED Flash Green once.

The Number in 1~128, press "Enter" button, "SETUP" LED flashes correct color Green. Otherwise, "SETUP" LED flash wrong color the Red.

4.17 ENTER:

Use with <Number 1,2,3,4,5,6,7,8,9,0>.

4.18 32 - keyboard (Three triggered keyboard):

The 32-keyboard has three induction points, it can make the force change more sensitive and delicate, more obvious when playing softly.

4.19 Pedal switch (SUSTAIN):

Connect the pedal to the pedal jack, if on the pedal, it can make the pedal MIDI value.

4.20 3.5 mm Headphone Jack:

Connect to headphone.

4.21 USB - B:

There will be a USB jack on the side of the unit. The unit will be a class compliant with both Mac and PC. It will mount as a USB-MIDI device. The unit will be fully powered by USB.

4.22 POWER SWITCH:

It can change the power supply mode is USB or dry battery.

(5) Minimum System Requirements:

If you are using your AKM320LS with a computer, the following minimum system requirements need:

Windows	Mac OS
Pentium 3 800MHz or higher	Macintosh G3*800/G4*733MHz or higher
CPU requirement may be higher laptops	CPU requirement may be higher for laptops
256 MB RAM	OS X 10.3.9 with 256MB RAM
Direct X 9.0b or higher	OS X 10.4.2 or greater with 512 MB RAM
Windows XP(SP2) or higher	*G3/G4 accelerator cards are not supported.
Windows 98, Me, NT or 2000 not supported	

(Attention: Window98/ ME or 2000 are not supported)

MIDIPLUS suggests that you connect directly to your computer built in USB ports.

(6) GM Sound List

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