

PART 3. Wave Table

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1. Introduction

The AudioPlus 3200 Wave on board supports the Dream Wave Table synthesizer module. It is compatible with General MIDI and Roland GS drumsets. Its state-of-the-art design not only fulfills all requirements of Microsoft MPC3 specifications but also realize astonishing dream sound effect when you play PC video game of multimedia CD titles.

AudioPlus 3200 Wave has also built in the MPU-401 MIDI interface. It offers you over 250 high quality wave table sounds on board with GS drumsets and MT32 instrument compatibility. It's the best choice both in multimedia PC education and entertainment applications. It definitely will turn your PC to the most powerful multimedia computer.

1.1 Feature:

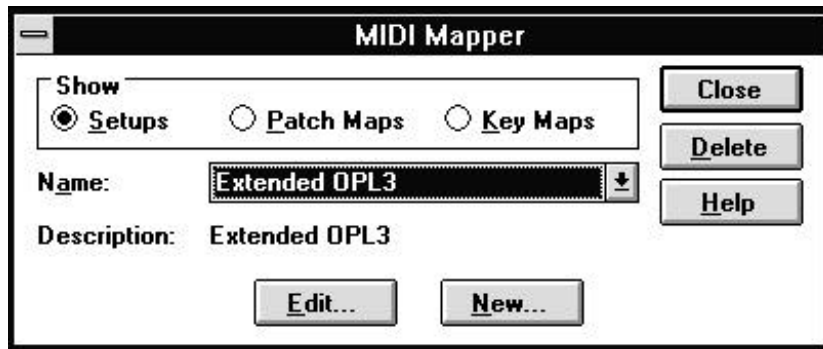
- ☐ Uses high integration DREAM wavetable synthesizer
- ☐ 32 voices wavetable polyphony
- ☐ Total of 343 sounds (190 instrument sounds, 107 drum sounds, 46 effect sounds)
- ☐ 16 parts multi-timbral (with one or two rhythm parts)
- ☐ 8 drum kits, 1 sound effects kit
- ☐ Professional sound quality: stereo 16 bit oversampling DAC
- ☐ GM/GS compatibility
- ☐ Roland MPU-401 compatibility
- ☐ Roland Canvas SC-55 sound list comp

2. Windows MIDI Environment Configuration

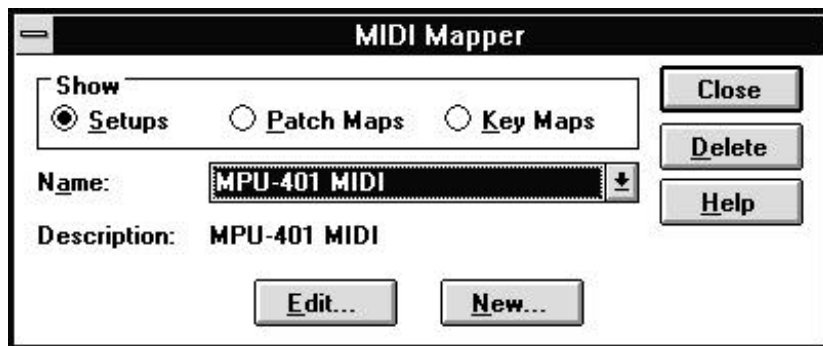
In Windows, the MIDI driver is defaulted MPU-401 MIDI when AudioPlus 3200 Wave Windows Driver installed. Following is the indication of how to set MPU-401 MIDI driver in Windows. The MIDI Sound effect can be compared by changing the setting of MIDI driver into OPL3 and MPU-401.

MIDI Environment Configuration of the AudioPlus 3200 Wave for Sound Blaster and its compatible Sound Cards are as follows:

1. Double Click Windows Control Panel to open Control Panel window. Select MIDI Mapper.
2. The MIDI Mapper Dialog Box will appear.

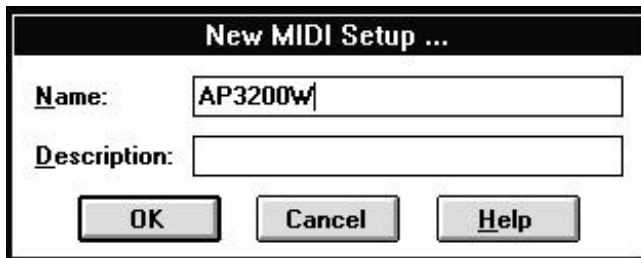


3. Configure the MIDI Mapper.
The default value of Windows MIDI Mapper is OPL3. For the MIDI to be directly outputted to the AudioPlus 3200 Wave, the MIDI Mapper must be set to the **MPU-401 MIDI**.



MIDI Environment Configuration of the AudioPlus 3200 Wave for other types of sound cards:

1. Double click the Windows **Control Panel** to open the Control Panel Window. Double click the **Drivers** icon and click the **ADD** button to open the ADD dialogue box. Select **Roland MPU-401** and click OK button.
2. From the Control Panel Window. Select **MIDI Mapper**.
3. The MIDI Mapper Dialog Box will appear. Click the **New Button** .



4. Type in **AP3200W** (or any name) in the Box designated for item **Name** and click **OK** Button.
5. The MIDI Setup "AP3200W" Dialogue Box will appear. Type in or Select **Roland MPU-401** in the **Port Name Section** of the MIDI Setup "AP3200W" Dialogue Box.

MIDI Setup: 'AP3200W'

Src Chan	Dest Chan	Port Name	Patch Map Name	Active
1	1	Roland MPU-401	[None]	☒
2	2	Roland MPU-401	[None]	☒
3	3	Roland MPU-401	[None]	☒
4	4	Roland MPU-401	[None]	☒
5	5	Roland MPU-401	[None]	☒
6	6	Roland MPU-401	[None]	☒
7	7	Roland MPU-401	[None]	☒
8	8	Roland MPU-401	[None]	☒
9	9	Roland MPU-401	[None]	☒
10	10	Roland MPU-401	[None]	☒
11	11	Roland MPU-401	[None]	☒
12	12	Roland MPU-401	[None]	☒
13	13	Roland MPU-401	[None]	☒
14	14	Roland MPU-401	[None]	☒
15	15	Roland MPU-401	[None]	☒
16	16	Roland MPU-401	[None]	☒

OK Cancel Help

3. DOS Environment.

From the Sound Source Option of your game or multi-media package, please select the **General MIDI** or **MT32**. In this way, your AudioPlus 3200 Wave Table will be activated replacing the FM Sound of OPL3.

4. Playing MIDI Files from Windows

To play MIDI Files from Windows, please follow the procedures below:

1. From the Program Manager, Double Click the Accessories Button to open the Accessories Window. Double Click the Media Player Icon to open the Media Player Window.



2. From the **File** menu, select **Open**. The Open Dialogue Box will appear. From the **List Type of Files** Item, select **MIDI Sequencer**. Type in the MIDI File Name at the box indicated **File Name**.
3. Press the **Play** Button  (located in the Media Player Window) to play your MIDI File.

5. General MIDI Overview

The General MIDI or GM system is a set of standard shared tone generator specifications specially designed for MIDI usage that was jointly formulated by the Japan MIDI Standard Committee and the U.S. MMA for the purpose of allowing performance data with a high level of compatibility to be created using any type of tone generator.

The basic specifications of GM Tone Generators as specified by the GM System are as follows: the number of voices (performances), sound mapping (sound set), and mapping of rhythm sounds on the keyboard (percussion maps).

The Tone Generator Manufacturer has the liberty to determine what kind of sound will be produced with respect to the sound name of a particular tone generator. The different kinds of built-in effects and effect configurations differ from one tone generator to the other. In this way, performances will sound differently to a certain extent on different tone generators.

For the Tone Generator manufacturers to maintain sufficient compatibility with the GM sound generators, the sounds and specifications must be determined to some degree. It should also be noted that programmers play a vital role in this matter. The programmers must cooperate in the quest for high grade compatibility, examining different kinds of GM Tone Generators and giving in if necessary during the creation of their sequences. For anybody who programs their own MIDI sequence data that are to be issued out as GM system data, maintaining sufficient amount of compatibility with the existing GM sound generators should be taken into consideration.

For cases when the MIDI data was produced for copyrighted pieces, the data cannot be distributed without proper authorization from the person owning the copyright.

5.1 Drum Preset Map

	Prog 1/33: Standard Set/ Jazz set	Prog 9: Room set	Prog 17: Power set	Prog 25: Electr. set	Prog 26: TR-808 set	Prog 41: Brush set	Prog 49: Orchestr set
27 - D#1	High Q						Close Hi Hat
28 - E1	Slap						Pedal Hi-Hat
29 - F1	Scratch Push						Open Hi Hat
30 - F#1	Scratch Pull						Ride Cymbal
31 - G1	Sticks						
32 - G#1	Square Click						
33 - A1	Metronome Click						
34 - F1	Metronome Bell						
35 - B1	Kick drum2						
36 - C2	Kick drum1		Power Kick		808 Bass Drum		
37 - C#2	Side Stick				808 Rim shot		
38 - D2	Snare Drum 1		Gated Snare		808 snare Drum	Brush Tap	Concert SD
39 - D#2	Hand Clap					Brush Slap	Castanets
40 - E2	Snare Drum 2			Gated Snare		Brush Swirl	Concert SD
41 - F2	Low Floor Tom	Room Low Tom2	Room Low Tom2	Elec. Low Tom2	808 Low Tom2		Timpani F
42 - F#2	Closed HiHat[Exc1]						Timpani F#
43 - G2	High Floor Tom	Room Low Tom1	Room Low Tom1	Elec. Low Tom1	808 Low Tom1		Timpani G
44 - G#2	Pedal Hi-Hat[Exc1]						Timpani G#
45 - A2	Low Tom	Room Mid Tom2	Room Mid Tom2	Elec. Mid Tom2	808 Mid Tom2		Timpani A
46 - A#2	Open Hi-Hat[Exc1]						Timpani A#
47 - B2	Low-Mid Tom	Room Mid Tom1	Room Mid Tom1	Elec. Mid Tom1	808 Mid Tom1		Timpani B
48 - C3	Hi Mid Tom	Room Hi Tom2	Room Hi Tom2	Elec. Hi Tom2	808 Tom2		Timpani c
49 - C#3	Crash Cymbal 1						Timpani c#
50 - D3	High Tom	Room Hi Tom1	Room Hi Tom1	Elec. Hi Tom1	808 Hi Tom1		Timpani d
51 - D#3	Ride Cymbal 1						Timpani d#
52 - E3	Chinese Cymbal			Reverse Cymbal			Timpani e
53 - F3	Ride Bell						Timpani f
54 - F#3	Tambouring						
55 - G3	Splash Cymbal						
56 - G#3	Cowbell						
57 - A3	Crash Cymbal 2						
58 - A#3	Vibraslap						
59 - B3	Ride Cymbal 2						
60 - C4	Hi Bongo						
61 - C#4	Low Bongo						
62 - D4	Mute Hi Conga				808 High Conga		
63 - D#4	Open Hi Conga				808 Mid Conga		
64 - E4	Low Conga				808 Low Conga		
65 - F4	High Timbale						
66 - F#4	Low Timbale						
67 - G4	High Agogo						
68 - G#4	Low Agogo						
69 - A4	Cabasa						
70 - A#4	Maracas						
71 - B4	Short Whistle[Exc2]						
72 - C5	Long Whistle[Exc2]						
73 - C#5	Short Guiro [Exc3]						
74 - D5	Long Guiro [Exc3]						
75 - D#5	Claves						
76 - E5	Hi Wood Block						
77 - F5	Low Wood Block						
78 - F#5	Mute Cuica [Exc4]						

79 - G5	Open Cuica [Exc4]						
80 - G#5	Mute Triangle [Exc5]						
81 - A5	Open Triangle [Exc5]						
82 - A#5	Shaker						
83 - B5	Jingle Bell						
84 - C6	Belltree						
85 - C#6	Castanets						
86 - D6	Mute Surdo [Exc6]						
87 - D#6	Open Surdo [Exc6]						
88 - E6							

Notes: Blank: Same Sound as “Standard Set”

[Exc]: Sounds with same Exc number are mutually exclusive

5.2 Main Sound - General MIDI (all channels except 10)

PC	General MIDI	PC	General MIDI	PC	General MIDI
1	(Grand) Piano 1	44	Contrabass	87	Lead 7 (fifths)
2	(Bright) Piano 2	45	Tremolo Strings	88	Lead 8 (bass+lead)
3	(El. Grd) Piano 3	46	Pizzicato Strings	89	Pad 1 (fantasia)
4	Honky-Tonk Piano	47	Orchestral Harp	90	Pad 2 (warm)
5	El. Piano 1	48	Timpani	91	Pad 3 (Polysynth)
6	El. Piano 2	49	String Ensemble 1	92	Pad 4 (choir)
7	Harpsichord	50	String Ensemble 2	93	Pad 5 (bowed)
8	Clavi	51	Synth Strings 1	94	Pad 6 (metallic)
9	Celesta	52	Synth Strings 2	95	Pad 7 (Halo)
10	Glockenspiel	53	Choir Aahs	96	Pad 8 (Sweep)
11	Music Box	54	Voice Oohs	97	FX1 (rain)
12	Vibraphone	55	Synth Voice	98	FX 2 (soundtrack)
13	Marimba	56	Orchestra Hit	99	FX 3 (crystal)
14	Xylophone	57	Trumpet	100	FX 4 (atmosphere)
15	Tubular Bells	58	Trombone	101	FX 5 (brightness)
16	Santur	59	Tuba	102	FX 6 (goblins)
17	Drawbar Organ	60	Muted Trumpet	103	FX 7 (echoes)
18	Percussive Organ	61	French Horn	104	FX 8 (sci-fi)
19	Rock Organ	62	Brass Section	105	Sitar
20	Church Organ	63	Synth Brass 1	106	Banjo
21	Reed Organ	64	Synth Brass 2	107	Shamisen
22	Accordion (French)	65	Soprano Sax	108	Koto
23	Harmonica	66	Alto Sax	109	Kalimba
24	Tango Accordion	67	Tenor Sax	110	Bag Pipe
25	Ac. Guitar (nylon)	68	Baritone Sax	111	Fiddle
16	Ac. Guitar (steel)	69	Oboe	112	Shanai
27	El. Guitar (jazz)	70	English Horn	113	Tinkle Bell

28	El. Guitar (clean)	71	Bassoon	114	Agogo
29	El. Guitar (muted)	72	Clarinet	115	Steel Drums
30	Overdriven Guitar	73	Piccolo	116	Woodblock
31	Distortion Guitar	74	Flute	117	Taiko Drum
32	Guitar Harmonics	78	Recorder	118	Melodic Tom
33	Acoustic Bass	76	Pan Flute	119	Synth Drum
34	Elec. Bass (finger)	77	Blown Bottle	120	Reverse Cymbal
35	Elec. Bass (pick)	78	Shakuhachi	121	Gt. Fret Noise
36	Fretless Bass	79	Whistle	122	Breath Noise
37	Slap Bass 1	80	Ocarina	123	Seashore
38	Slap Bass 2	81	Lead 1 (square)	124	Bird Tweet
39	Synth Bass 1	82	Lead 2 (sawtooth)	125	Teleph. Ring
40	Synth Bass 2	83	Lead 3 (calliope)	126	Helicopter
41	Violin	84	Lead 4 (chiff)	127	Applause
42	Viola	85	Lead 5 (charang)	128	Gunshot
43	Cello	86	Lead 6 (Voice)		

PC: Program change

5.3 MT32 Compatible Mode (MIDI Channels 1-9 11-16) Variation (MIDI control 0):127

PC#	Instrument	PC#	Instrument	PC#	Instrument
1	Piano1	2	Piano 2	3	Piano3
4	Detuned EP1	5	E. Piano 1	6	E. Piano 2
7	Detuned EP2	8	Honky-Tonk	9	Organ 1
10	Organ 2	11	Organ 3	12	Detuned Or.1
13	Church Org. 2	14	Church Org.	15	Church Org.
16	Accordion Fr.	17	Harpsichord	18	Coupled Hps.
19	Coupled Hps.	20	Clav.	21	Clav.
22	Clav.	23	Celesta	24	Celesta
25	Synth Brass 1	26	Synth Brass 2	27	Synth Brass 3
28	Synth Brass 4	29	Synth Bass 1	30	Synth Bass 2
31	Synth Bass 3	32	Synth Bass 4	33	Fantasia
34	Syn Calliope	35	Choir Aahs	36	Bowed Glass
37	Soundtrack	38	Atmosphere	39	Crystal
40	Bag Pipe	41	Tinkle Bell	42	Ice Rain
43	Oboe	44	Pan Flute	45	Saw Wave
46	Charang	47	Tubular Bells	48	Square Wave
49	Strings	50	Tremolo Str.	51	Slow Strings
52	Pizzicato Str.	53	Violin	54	Viola
55	Cello	56	Cello	57	Contrabass
58	Harp	59	Harp	60	Nylon-Str. Gt.
61	Steel-Str. Gt.	62	Chorus Gt.	63	Funk Gt.
64	Sitar	65	Acoustic Bs.	66	Fingered Bs.
67	Picked Bs.	68	Fretless Bs.	69	Slap Bs.1
70	Slap Bs. 2	71	Fretless Bs.	72	Fretless Bs.
73.	Flute	74	Flute	75	Piccolo
76	Piccolo	77	Recorder	78	Pan Flute
79	Soprano Sax	80	Alto Sax	81	Tenor Sax
82	Baritone Sax	83	Clarinet	84	Clarinet
85	Oboe	86	English Horn	87	Bassoon
88	Harmonica	89	Trumpet	90	Muted Trumpet
91	Trombone	92	Trombone	93	French Horn
94	French Horn	95	Tuba	96	Brass 1
97	Brass 2	98	Vibraphone	99	Vibraphone

100	Kalimba	101	Tinkle Bell	102	Glockenspiel
103	Tubular-Bell	104	Xylophone	105	Marimba
106	Koto	107	Taisho Koto	108	Shakuhachi
109	Whistle	110	Whistle	111	Bottle Blow
112	Pan Flute	113	Timpani	114	Melo Tom
115	Concert BD	116	Synth Drum	117	Melo Tom
118	Taiko	119	Taiko	120	Reversed Cym.
121	Castanets	122	Tinkle Bell	123	Orchestra Hit
124	Telephone	125	Bird	126	Helicopter
127	Bowed Glass	128	Ice Rain		

Note: This mode guarantees only the basic compatibility with MT32 by mapping GM instruments with the MT32 sound list.