



One Touch 535/735 Cubase Plugin User's Guide

Midi Melodies Creation



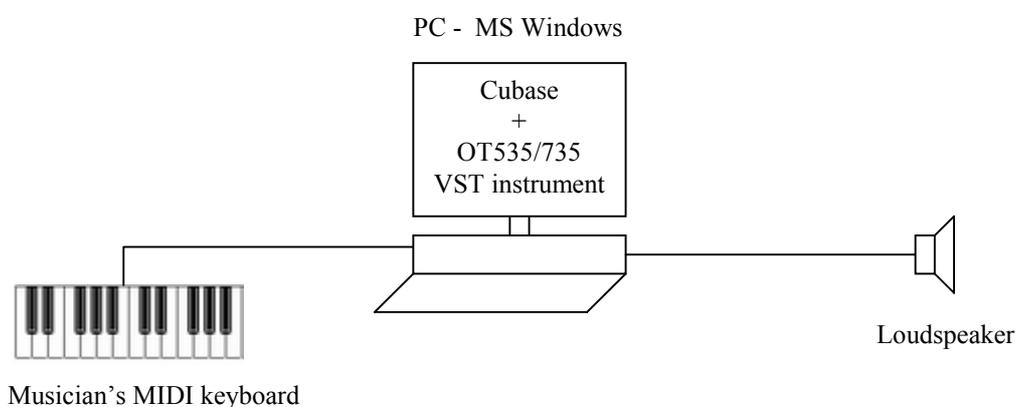


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1 Introduction

For its new range of mobile phone Alcatel has developed, with the support of Steinberg, one of the most famous Midi software editor, a plugin to facilitate the composition of ring tones dedicated to the Alcatel's mobiles One touch 535/735.

Using one of the Steinberg musical software, you will be able, installing this specific tool, to reproduce accurately the tones of the MIDI synthesizer embedded in Alcatel One Touch 535/735 mobile phones. Moreover with a MIDI key board, it will be possible to compose, hearing the tones played straight with the One Touch 535/735 acoustics.



The VST-instrument will handle real-time MIDI event and transpose them into comprehensive instructions for the OT535/735 synthesizer audio engine.

2 Installation

Before installing the plugin, check your system configuration

Hardware requirements

Depending on your Cubase version, please check on www.steinberg.de site

Recommended : Pentium/Athlon 1GHz / 256Mo RAM / Sounblaster Live soundcard / DirectX 9

Software requirements

Windows 98, Windows Me, Windows 2000 and Windows XP

The Alcatel VST-instrument is not available for MacOS

Midi Editor : Cubasis, Cubase VST, Cubase SL/SX

Download the file Cubase Plugin.zip from the One Touch Ahead site, unzip and copy the file « alcatel.dll » to the directory « VST plugins » of the Cubase installation directory.

Ex : C:\Program Files\Steinberg\Cubase\VST Plugins



3 Getting Started

Launch your Cubase software, open a Cubase project file (.cpr) or import a MIDI file (.mid) in the « File » menu.

Open the « Peripherals » menu then click on « VST Instruments » (or shortcutkey F11)

Click on the first free box named « No VST Instrument » and choose « alcatel ».

To assign the plugin to a MIDI channel, click on his left box « out » and choose « alcatel ».

TIPS : to assign the plugin to all the MIDI channels in one step, hold the « ctrl » key and choose « alcatel » in the « out » box.

4 Guidelines for MIDI composition on mobile

Mobile phones have tiny loudspeaker which explains the poor bass rendering. Though, there are some tips to improve this limitation.

3.1 Double MIDI channels :

In order to obtain a sufficient sound level on the output of the mobile's loudspeaker, we recommend to double (or even sometimes triple or quadruple) some of the MIDI channels.

This technic is particularly efficient when you have an instrument playing in the bass frequencies or if you want stress a specific instrument or a melodic phrase.

Besides, if your melody is composed with only one instrument, the output volume will be approximately 1/8 of the max volume you should get, in that case recopy (up to 8 times) the monophonic MIDI track to obtain a satisfying sound level.

3.2 Transpose the MIDI channels in the high frequencies :

Some instruments may be playing so much in the bass frequencies that you can't even hear them on the mobile's loudspeaker. You must transpose these MIDI channels by one or two octaves in order to make them sound louder.

5 Technical limitations of the OT535/735 synthesizer

Here is a list of some limitations of the synthesizer to take into account.

4.1 Mapping :

The OT535/735 synthesizer has 31 melodic instrument and 29 percussives instruments (drumkit), mapped on the 128 melodic + 47 percussive of the General MIDI 1.

4.2 Bandwith :

The OT535/735 synthesizer uses a 8KHz sampling rate so it can only produce sounds up to the MIDI note no 107.

4.3 Aliasing :

For some instruments, the sounds produced after certain MIDI notes present some audible degradations. Here is the list of the maximum MIDI note playable without any major degradation for each instrument :

MELODIC : 31 One Touch 535/735 instruments

PC#	GM1 Instrument	535/735 Instrument	Max note without aliasing
1.	Acoustic Grand Piano	Honky-tonk Piano	101
2.	Bright Acoustic Piano	Honky-tonk Piano	101
3.	Electric Grand Piano	Piano	100
4.	Honky-tonk Piano	Honky-tonk Piano	101
5.	Electric Piano 1	Electric Piano 1	81
6.	Electric Piano 2	Electric Piano 1	81
7.	Harpsichord	Piano	100
8.	Clavi	Piano	100
9.	Celesta	Vibraphone	97
10.	Glockenspiel	Vibraphone	97
11.	Music Box	Vibraphone	97
12.	Vibraphone	Vibraphone	97
13.	Marimba	Percussive	96
14.	Xylophone	Xylophone	105
15.	Tubular Bells	Vibraphone	97
16.	Dulcimer	Vibraphone	97
17.	Drawbar Organ	Organ	76
18.	Percussive Organ	Organ	76
19.	Rock Organ	Organ	76
20.	Church Organ	Organ	76
21.	Reed Organ	Organ	76
22.	Accordion	Organ	76
23.	Harmonica	Organ	76
24.	Tango Accordion	Organ	76
25.	Acoustic Guitar (nylon)	Guitar	85
26.	Acoustic Guitar (steel)	Guitar	85
27.	Electric Guitar (jazz)	Guitar	85
28.	Electric Guitar (clean)	Guitar	85
29.	Electric Guitar (muted)	Guitar	85
30.	Overdriven Guitar	Distorsion Guitar	86
31.	Distortion Guitar	Distorsion Guitar	86
32.	Guitar harmonics	Guitar	85
33.	Acoustic Bass	Bass	77
34.	Electric Bass (finger)	Bass	77
35.	Electric Bass (pick)	Elec Bass	59
36.	Fretless Bass	Guitar	85
37.	Slap Bass 1	Bass	77
38.	Slap Bass 2	Bass	77
39.	Synth Bass 1	Guitar	85
40.	Synth Bass 2	Guitar	85
41.	Violin	Strings	67

42.	Viola	Strings	67
43.	Cello	Cello	59
44.	Contrabass	Contrabass	62
45.	Tremolo Strings	Ensemble	72
46.	Pizzicato Strings	Vibraphone	97
47.	Orchestral Harp	Vibraphone	97
48.	Timpani	Percussive	96
49.	String Ensemble 1	Ensemble	72
50.	String Ensemble 2	Ensemble	72
51.	SynthStrings 1	Ensemble	72
52.	SynthStrings 2	Ensemble	72
53.	Choir Aahs	Synth Pad	71
54.	Voice Oohs	Synth Pad	71
55.	Synth Voice	Synth Pad	71
56.	Orchestra Hit	Percussive	96
57.	Trumpet	Brass	60
58.	Trombone	Brass	60
59.	Tuba	Tuba	77
60.	Muted Trumpet	Brass	60
61.	French Horn	Brass	60
62.	Brass Section	Brass	60
63.	SynthBrass 1	Brass	60
64.	SynthBrass 2	Tuba	77
65.	Soprano Sax	Reed	68
66.	Alto Sax	Reed	68
67.	Tenor Sax	Reed	68
68.	Baritone Sax	Reed	68
69.	Oboe	Reed	68
70.	English Horn	Reed	68
71.	Bassoon	Reed	68
72.	Clarinet	Clarinet	72
73.	Piccolo	Pipe	86
74.	Flute	Pipe	86
75.	Recorder	Pipe	86
76.	Pan Flute	Pipe	86
77.	Blown Bottle	Pipe	86
78.	Shakuhachi	Pipe	86
79.	Whistle	Whistle	95
80.	Ocarina	Pipe	86
81.	Lead 1 (square)	Synth Lead	79
82.	Lead 2 (sawtooth)	Synth Lead	79
83.	Lead 3 (calliope)	Calliope	98
84.	Lead 4 (chiff)	Synth Lead	79
85.	Lead 5 (charang)	Synth Lead	79
86.	Lead 6 (voice)	Calliope	98
87.	Lead 7 (fifths)	Synth Lead	79
88.	Lead 8 (bass + lead)	Synth Lead	79
89.	Pad 1 (new age)	FX 8 (sci-fi)	83

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90.	Pad 2 (warm)	Synth Pad	71
91.	Pad 3 (polysynth)	Synth Pad	71
92.	Pad 4 (choir)	Synth Pad	71
93.	Pad 5 (bowed)	Pad 6 (metallic)	71
94.	Pad 6 (metallic)	Pad 6 (metallic)	71
95.	Pad 7 (halo)	Pad 6 (metallic)	71
96.	Pad 8 (sweep)	Synth Pad	71
97.	FX 1 (rain)	Synth Pad	71
98.	FX 2 (soundtrack)	FX 8 (sci-fi)	83
99.	FX 3 (crystal)	FX 3 (crystal)	106
100.	FX 4 (atmosphere)	FX 4 (atmosphere)	84
101.	FX 5 (brightness)	FX 4 (atmosphere)	84
102.	FX 6 (goblins)	FX 8 (sci-fi)	83
103.	FX 7 (echoes)	FX 4 (atmosphere)	84
104.	FX 8 (sci-fi)	FX 8 (sci-fi)	83
105.	Sitar	Guitar	85
106.	Banjo	Guitar	85
107.	Shamisen	Guitar	85
108.	Koto	Guitar	85
109.	Kalimba	Vibraphone	97
110.	Bag pipe	Organ	76
111.	Fiddle	Strings	67
112.	Shanai	Reed	68
113.	Tinkle Bell	Vibraphone	97
114.	Agogo	Low Agogo	107
115.	Steel Drums	Percussive	96
116.	Woodblock	Low Agogo	107
117.	Taiko Drum	Percussive	96
118.	Melodic Tom	Percussive	96
119.	Synth Drum	Synth Drum	105
120.	Reverse Cymbal	Helicopter	to avoid or 50
121.	Guitar Fret Noise	Telephone Ring	to avoid or 50
122.	Breath Noise	Seashore	107
123.	Seashore	Seashore	107
124.	Bird Tweet	Telephone Ring	to avoid or 50
125.	Telephone Ring	Telephone Ring	to avoid or 50
126.	Helicopter	Helicopter	to avoid or 50
127.	Applause	Helicopter	to avoid or 50
128.	Gunshot	Helicopter	to avoid or 50

DRUMKIT : 29 instruments

Key#	GM1 Instrument	535/735 Instrument
35	Acoustic Bass Drum	Bass Drum
36	Bass Drum 1	Bass Drum
37	Side Stick	Side Stick
38	Acoustic Snare	Electric Snare
39	Hand Clap	Tambourine
40	Electric Snare	Electric Snare
41	Low Floor Tom	High Mid Tom
42	Closed Hi Hat	Closed Hi Hat
43	High Floor Tom	High Floor Tom
44	Pedal Hi-Hat	Closed Hi Hat
45	Low Tom	Low Tom
46	Open Hi-Hat	Open Hi-Hat
47	Low-Mid Tom	High Mid Tom
48	Hi Mid Tom	High Floor Tom
49	Crash Cymbal 1	Crash Cymbal
50	High Tom	High Tom
51	Ride Cymbal 1	Ride Cymbal 1
52	Chinese Cymbal	Ride Cymbal 2
53	Ride Bell	Ride Cymbal 1
54	Tambourine	Tambourine
55	Splash Cymbal	Open Hi-Hat
56	Cowbell	Cowbell
57	Crash Cymbal 2	Crash Cymbal
58	Vibraslap	Open Hi-Hat
59	Ride Cymbal 2	Ride Cymbal 2
60	Hi Bongo	Hi Bongo
61	Low Bongo	Low Bongo
62	Mute Hi Conga	Open Hi Conga
63	Open Hi Conga	Mute Hi Conga
64	Low Conga	Low Conga
65	High Timbale	High Timbale
66	Low Timbale	High Timbale
67	High Agogo	Low Agogo
68	Low Agogo	Low Agogo
69	Cabasa	Cabasa
70	Maracas	Maracas
71	Short Whistle	Closed Hi Hat
72	Long Whistle	Open Hi-Hat
73	Short Guiro	Maracas
74	Long Guiro	Open Hi-Hat
75	Claves	Claves
76	Hi Wood Block	Hi Wood Block
77	Low Wood Block	Low Wood Block

78	Mute Cuica	Mute Hi Conga
79	Open Cuica	Low Conga
80	Mute Triangle	Mute Triangle
81	Open Triangle	Open Triangle

Note : you can however play notes out of these limits without hearing any degradation if the sound is masked by another for example. Besides, the degradation is not always very important. These are general recommendations but you should try by yourself to create the best acoustics for your composition !

4.4 Polyphony :

The polyphony of the O535/735 synthesizer is dependant of the instruments used. The average value is between 7 and 10 with a maximum at 24 with one of the instrument (FX 3 (crystal)).

4.4 Velocity :

The O535/735 synthesizer put the MIDI velocity to the maximum value (127) when it plays the sounds in order to obtain the maximum volume on the mobile loudspeaker even when playing monophonic instruments.

So tuning the velocity of the notes of a MIDI file is useless. The better way to play on the volume is to change the channel volume.

END OF DOCUMENT