

# OCTAMED 5.0 PLAYER COMMANDS

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1. Both the command type and the command level are in HEXADECIMAL.
2. Please note the following abbreviations:  
Level 1 = 1st command digit  
Level 2 = 2nd command digit
3. When entering commands, you can set the first command digit to 1 by holding down an Alt key. For example, to enter command 19, position the cursor over the second command digit and press Alt-9.

Player commands can be split into two groups: normal commands, and MIDI commands. This document doesn't include MIDI commands, however.

## Command **00** ARPEGGIO

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This command changes the pitch of the note quickly (once every tick).

It's usually used to create special effects. If you've ever listened to Commodore 64 music, you must have heard arpeggios!

The pitch is changed between three different pitches (1 to 3) during each note. Level 1 contains the number of halfsteps between pitch 1 and pitch 2, level 2 the number of halfsteps between pitch 1 and pitch 3.

For example, to create a C major arpeggio:

Pitch 1: C-2 (for example)  
Pitch 2: E-2 = 4 halfsteps higher than pitch 1  
Pitch 3: G-2 = 7 halfsteps higher than pitch 1

This produces: **C-2 10047**  
**--- 00047**  
**--- 00047** and so on... Note that the command level with a blank note continues the arpeggio.

As with most commands, experimentation often produces the best results. For instance, this effect can sound pretty bad with some instruments but pretty good with others. If the command level was 37, the arpeggio would be minor.

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## Commands **01/02** SLIDE PITCH UP and DOWN

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These two commands slide the pitch of the current track up or down. They actually work by changing the period of the note the amount of the command level every tick. Sounds rather technical? Dead right! It's best to leave the donkey work to the automatic slide creator.

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## Command **03** PORTAMENTO

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Again a slide command, and again it's best to use Edit menu > Pitch Slide > Type 1. The difference between this and commands **01** and **02** is that the latter replay the note they slide to; command 03 doesn't replay the note.

The command level is the slide speed. Here's an example:

```
C-2 50000 ; Note C is played  
E-2 50305 ; This note isn't played! Instead, the slide target note ...  
--- 00300 ; ... is set to E-2 with a slide speed of 5  
--- 00300 ; When the level is 00, the previous speed is used (5 in this case)
```

This example would slide from C-2 to E-2, but the slide stops exactly when a pitch of E-2 is reached (with commands **01** and **02** you can slide beyond the note).

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## Command **04** VIBRATO

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Level 1 = speed, level 2 = depth.

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## Command **05** SLIDE PITCH AND FADE

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This command combines commands **0300** and **0Dxx**. The slide continues at the last speed entered with command **03**, and the command level = the fade speed.

```
C-1 10000  
D-3 10303 ; Slide pitch at speed 3  
--- 00300 ; Continue sliding  
--- 00502 ; Continue sliding + fade at speed 2 (see command 0D later)
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## Command **06** VIBRATO AND FADE

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Combines commands **0400** and **0Dxx**. Again, the vibrato continues at the previous settings, and the command level is the fade speed.

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## Command **07** TREMOLO

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This command is a kind of volume vibrato. Level 1 is the tremolo speed (the higher the value, the greater the speed), and level 2 is the depth. The depth must be quite high before the effect is detectable (try A - F).

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## Command **08** HOLD AND DECAY

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Sets the hold and decay values for the note. Level 1 is the decay value, level 2 is the hold value.

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## Command **09** SECONDARY TEMPO

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This command sets the secondary tempo (number of ticks per note). The command level must be HEX 01-20.

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## Command **0A** VOLUME SLIDE

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This is exactly the same as command **0D**, for Sound/Noise/Protracker compatibility. However, please use command **0D** instead of this.

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## Command **0B** PLAYING SEQUENCE POSITION JUMP

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This command allows you to create songs that have an introduction, which is only played once, and a main part, which is repeated over and over again. The command level is the entry jumped to in the playing sequence. You must, however, remember that level 00 is the first entry, and 01 the second, so e.g. 03 will be the fourth.

```
--- 00B03 ; Jump to playing sequence entry 004
```

Note that when more than one playing sequence is defined (i.e. sections), the specified entry in the CURRENT playing sequence is jumped to. At present, no command exists to jump to an entry in the section list.

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## Command **0C** SET VOLUME

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Without doubt the most commonly-used player command. It overrides the default volume of the instrument. For example, **A-3 40C32** is played with volume 32. There are 65 volume levels (0 - 64): 0 = silent, 64 = max. You may enter the level in either decimal or hex, depending on the state of the cycle gadget in the Song Options window.

It's also possible to change the volume of an already played note:

```
A-3 40000  
--- 00000  
--- 00C10 ; Change volume to 10
```

In addition, with this command you may actually set the default instrument volume. The value MUST BE IN HEX, and is between 80 and C0: 80 = level \$0, C0 = level \$40 (hex). In other words, add 80 to the normal volume in hex.

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## Command **0D** VOLUME SLIDE

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You can increase or decrease volume smoothly with this command. Level 1 increases the volume, level 2 decreases the volume. If both level digits have a value greater than zero, level 2 is ignored.

```
C-2 30C32 ; Sets volume to 32  
--- 00D01 ; Decreases volume slightly  
--- 00D01 ; Decreases volume a little more  
--- 00D20 ; Increases volume back up to 32
```

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## Command **0E** SYNTH JUMP

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Only applies to synthetic or hybrid instruments. It is used to trigger a jump in the waveform sequence. The command level is the line number you wish to jump to.

**C-4 40000** ; Starts playing the synthetic or hybrid sound  
**--- 00000**  
**--- 00E05** ; Jumps to waveform line number 5

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## Command **0F** PRIMARY TEMPO / MISCELLANEOUS

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Command **0F** has many different actions depending on the command level.

- Level 00: causes an immediate jump to the next entry in the playing sequence (or to the beginning of the block if you are using Play Block). It's actually better to make the block shorter, as it takes less memory, so this function mainly exists for tracker compatibility.
- Levels 01 - F0: changes the primary tempo. Levels 01 - 0A really exist for tracker compatibility, but you should use command 09 instead as it's directly compatible (but make sure primary tempo = 33).

Commands **0FF1** - **0FFF** are reserved for special functions, most of which are currently in use: **0FF1** makes a single note play twice. Useful for creating fast rhythms. It's identical to command **1F03**.

With a secondary tempo of 6, **C-3 20FF1** is the same as **C-3 20000** with double tempo (i.e. 3)

**0FF2** delays the start of a note by half a line (as long as the sec. tempo is 6). It's identical to command **1F30**.

**0FF3** works like **0FF1** except the note is played three times! It's identical to command **1F02**.

**0FF4** delays the note one-third of a line.

**0FF5** delays the note two-thirds of a line. Commands **0FF4** and **0FF5** can be used, for example, to create triplets:

**C-2 10000** ; Here, the three notes will be evenly spaced throughout  
**D-2 10FF4** ; the four lines (they'll have a length of one-and-a-third  
**E-2 10FF5** ; lines each)  
**--- 00000**

The two commands only work accurately when the secondary tempo is divisible by 3 (3, 6, 9 etc.).

**0FF8** turns the low-pass filter off.

**0FF9** turns the low-pass filter on. Commands **0FF8** and **0FF9** work like the Audio Filter Active check box in the Song Options window.

**0FFA** (MIDI only) sends the MIDI hold pedal on command.

**0FFB** (MIDI only) sends the MIDI hold pedal off command.

**0FFD** (doesn't work with MIDI) causes the pitch of the previous note to be set to the new note, but it's not replayed.

**C-1 20000** ; Play note  
**--- 00000**  
**C-2 20FFD** ; Don't replay the note, just set the pitch to C-2

This is especially useful in playing long samples or samples with a loop set (such as strings and choirs), as the undesirable "click" that you can sometimes hear when playing a new note is eliminated.

**0FFE** stops the song playing. (When used in 5 - 8-channel mode, the song's notes are also stopped). Can be entered by shift-clicking STOP.

**0FFF** stops the note on the current track. Is almost like **0C00** with Amiga samples, but while **0C00** sets the note's volume to zero, **0FFF** turns the note off completely (there is a subtle difference :-).

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## Commands **11/12** SLIDE PITCH UP and DOWN ONCE

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Whereas commands **01** and **02** change the pitch on every tick, these commands only change the pitch on the first tick of each line (greater accuracy).

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## Command **14** PROTRACKER-STYLE VIBRATO

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Same as command **04**, except command **14's** depth levels produce exactly half the depth as command **04**. Protracker pioneered this more accurate command.

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## Command **15** SET FINETUNE

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Overrides the instrument's default finetune value. Since these are hex numbers, negative numbers must be entered as follows: **-1 = FF / -2 = FE / -3 = FD / -4 = FC / -5 = FB / -6 = FA / -7 = F9 / -8 = F8**

```
C#3 21503 ; Finetune +3
D-2 315F8 ; Finetune -8
```

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## Command **16** LOOP

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This interesting command enables you to set up a loop within a block.

```
004 C-3 11600 ; Command level = 00: mark loop beginning
005 D#2 10000
006 --- 11603 ; Command level = 03: repeat this section three times
```

When the loop has finished, the block continues. You can't nest loops!

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## Command **18** CUT NOTE

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Almost like HOLD (command **08**), except it sets the volume to zero instead of actually switching the note off. (Much the same as the difference between commands **0C00** and **0FFF**). The command level must be less than the secondary tempo for the command to function.

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## Command **19** SAMPLE START OFFSET

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When playing a sample, this command sets the starting byte in steps of 256 bytes (= \$100 in hex). Useful for speech samples.

```
C-2 11904 ; Play the sample starting at byte $400 = 1024
```

*Calculate the offset by selecting the range start point (ex. 10909). Divide this value by 256 = 42,9257... Round up or down to the nearest number and convert this value to hex. 43 decimal = \$2B hex. This will be the offset.*

## Commands **1A/1B** SLIDE VOLUME UP/DOWN ONCE

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Whereas command **0D** changes the volume on every tick, these commands only change the volume on the first tick of each line (for greater accuracy).

## Command **1D** JUMP TO NEXT PLAYING SEQUENCE ENTRY

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But doesn't command **0F00** jump to the next entry? Quite right. But with this command you can specify the line number of the first line to be played. The line number is (as usual) given in hex.

--- **01D0A** ; Jump to next playing seq entry, and start at line 010 (skip 000 - 009)

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## Command **1E** REPLAY LINE

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Replays the commands (not the notes) in the current line the specified number of times.

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## Command **1F** NOTE DELAY AND RETRIGGER

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Gives you accurate control over note playing. You can delay the note any number of ticks, and initiate fast retrigger. Level 1 = note delay value, level 2 = retrigger value.

<b>C-2 11F20 &lt;= Delay 2 ticks</b>		<b>C-2 11F02 &lt;= Retrig every second tick</b>
<b>=&gt; pulse 0 ---</b>		<b>=&gt; pulse 0 C-2</b>
<b>&gt; 1 ---</b>		<b>1 ---</b>
<b>&gt; 2 C-2</b>		<b>2 C-2</b>
<b>&gt; 3 --- etc.</b>		<b>3 ---</b>
		<b>4 C-2 etc.</b>

Command **0FF1** is equivalent to **1F03**, **0FF2** to **1F30**, and **0FF3** to **1F02**.

# PLAYER COMMANDS - QUICK REFERENCE

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Command(s)	Name	Command level
<b>00</b>	Arpeggio	Lvl 1: 1st pitch, lvl 2: 2nd
<b>01/02</b>	Slide pitch up / down	Pitch slide speed
<b>03</b>	Portamento	Pitch slide speed
<b>04</b>	Vibrato	Lvl 1: speed, lvl 2: depth
<b>05</b>	Slide pitch and fade	Fade speed
<b>06</b>	Vibrato and fade	Fade speed
<b>07</b>	Tremolo	Lvl 1: speed, lvl 2: depth
<b>08</b>	Hold and decay	Lvl 1: decay, lvl 2: hold
<b>09</b>	Secondary tempo	Tempo value
<b>0A</b>	Volume slide	Volume slide speed
<b>0B</b>	Playseq position jump	Position to jump to - 1
<b>0C</b>	Set volume	(Default) volume level
<b>0D</b>	Volume slide	Volume slide speed
<b>0E</b>	Synth jump	Waveform seq. line number
<b>0F</b>	Primary tempo / Miscell.	Various
<b>11/12</b>	Slide pitch up / down once	Pitch slide speed
<b>14</b>	Protracker-style vibrato	Lvl 1: speed, lvl 2: depth
<b>15</b>	Set finetune	Finetune value (signed hex)
<b>16</b>	Loop	Number of times (00 = start)
<b>18</b>	Cut note	Number of ticks
<b>19</b>	Sample start offset	Starting byte - 256
<b>1A/1B</b>	Slide volume up / down once	Volume slide speed
<b>1D</b>	Jump to next playseq entry	Starting line number
<b>1E</b>	Replay line	Number of times
<b>1F</b>	Note delay and retrigger	Lvl 1: delay, lvl 2: retrigger.