OPL3 Synth

Use the OPL3 Synth option to configure the operation of your internal MIDI synthesis device. Choose one of the following options for information about the dialog box:

[+] Voice Mode
[+] Enable Stereo
[+] Patches
[+] Channel Config

See Also
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Patches

▶ Choose the Patches button to display the Patch Sets dialog.   Use the Patch Sets dialog to change a patch set used by the synthesis driver.

The Patches button is only displayed when extra patch sets are available.

Channel Config

▶   Choose the Channel Config button to display the channel options.   Use the Channel options to configure the operation of each MIDI channel.

Enable Stereo

The synthesis driver can be configured to play in stereo or mono.

▶ Choose the Channel Config button to enable/disable stereo operation.

When stereo operation is disabled the connection setting in the channel options is ignored.

Voice Mode

The synthesis driver can be configured to play in one of 8 modes.   Each mode selects a different number of voices available to a MIDI application.

▶   Change the voice mode by selecting a mode from the drop down list box.

About FM Synthesis

The OPL3 synthesizer is an FM synthesis module which provides a great amount of flexibility in the synthesis of MIDI music.   The synthesizer can operate in a number of modes combining, 4 Operator, 2 Operator, and Drum synthesis.   4 Operator synthesis typically provides a "richer" sounding instrument over 2 Operator synthesis.

Patch Options

The Patch Options dialogs allows you to select a new patch set for one of the three types of patches. Choosing Default for a patch set, will reset the patches for that set to the default patches stored in the OPL3 synthesis driver.

To change a patch set:

1) Select a new patch set from one of the drop down list boxes.
2) Press the OK button to allow your changes to take effect.

The Patches options are displayed only when extra patch sets are available.

Channel Options

The Channel Options allow you to specify how each MIDI channel will produce sound.
The MIDI channel options are:

Connect:
Specifies whether notes on the specified MIDI channel will sound from the left speaker, right speaker, or both (Center Channel).

Polyphony:
Specifies the maximum number of notes that can be on at one time for the specified channel.

2 Operator Enable:
Specifies whether 2 operator voices will be used on the specified channel.

4 Operator Enable:
Specifies whether 4 operator voices will be used on the specified channel.

To change a MIDI channel option:

1) Select the channel to configure from the Channel drop down list box.
2) Change the option either via a drop down list box or a check box.
3) Channel changes take effect when the OK button is pressed.

Voice Modes

The OPL3 synthesizer allows you to configure the synthesizer in 8 different modes.   Each mode has a different number of voices consisting of 2 operator, 4 operator, and drum sounds.   Typically 4 operator sounds will sound "fuller" than 2 operator sounds, however each 4 operator note takes up two 2 operator notes.

There are two drum generation methods for the voice modes, **Standard Drums** and **Melodic Drums**. Standard drums allows for 5 simultaneous drum sounds using only 3 2operator voices.   This allows for a large drum polyphony but also leads to a "thinner" drum sound.   Melodic drums uses 1 2 operator voice for each drum sound allowing less polyphony but a more realist sounding drum kit.

Typically the two best modes for synthesis are the **6-4Op 6-2Op Melodic Drums** mode and the **18-2Op Melodic Drums** mode.

The voice modes are as follows:

9-2Op Melodic Drums
9 2 operator voices are available for melodic notes.   Drum kit sounds are generated using 2 op melodic voices.

6-2Op Standard Drums
6 2 operator voices are available for melodic notes.   Drum kits sounds are generated using 1 op percussive voices.

18-2Op Melodic Drums
18 2 operator voices are available for melodic notes.   Drum kit sounds are generated using 2 op melodic voices.   This mode allows the greatest polyphony along with the more realistic drum sounds.

15-2Op Standard Drums
15 2 operator voices are available for melodic notes.   Drum kits sounds are generated using 1 op percussive voices.   This mode offers the most notes on at one time (15 melodic notes + 5 percussive notes)..

3-4Op 9-2Op Melodic Drums
3 4 operator voices and 9 2 operator voices are available for melodic notes.   Drum kit sounds are generated using 2 op melodic voices.

3-4Op 12-2Op Standard Drums
3 4 operator voices and 9 2 operator voices are available for melodic notes.   Drum kits sounds are generated using 1 op percussive voices.

6-4Op 3-2Op Standard Drums
9 2 operator voices are available for melodic notes.   Drum kits sounds are generated using 1 op percussive voices.

6-4Op 6-2Op Melodic Drums
6 4 operator voices and 9 2 operator voices are available for melodic notes.   Drum kit sounds are generated using 2 op melodic voices.   This mode offers the most notes while also providing the richness of 4 operator sound and realistic drum generation.