



# MusicLab Fill-in Drummer version 2.0



## User's Manual

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# Table of Contents

<b>About Fill-in Drummer</b>	<b>4</b>
Fill-in Drummer - the Real-time MIDI FX Plug-in .....	4
<b>Interface overview</b>	<b>5</b>
Keyboard shortcuts .....	6
<b>Working with Fill-in Drummer</b>	<b>7</b>
Launching Fill-in Drummer.....	7
In Cakewalk .....	7
In Cubase SX .....	7
In DR-008 .....	8
Selecting Drum Fill.....	8
Fill Library .....	8
Selecting Fill .....	8
Assigning Measure .....	8
Playing Fill .....	8
Auditioning Fill Library .....	8
Using Track Masking Panel .....	9
Controlling Punch in/out Time Points .....	9
Controlling Note Mixing .....	9
Track+Plugin Mixer.....	9
Editing Fill .....	10
Editing beats.....	10
Snap to Grid feature .....	10
Transforming Instrumentation.....	10
Manual Transformation (Changing Drum set) .....	10
Automatic Transformation.....	11
Trimming fill .....	11
Adjusting Performance Controls.....	11
Modifying Dynamics.....	11
Creating Crescendo/Decrescendo.....	11
Adjusting Swing .....	11
Quantize .....	11
Individual Drum bar controls .....	11
Bar Inspector .....	11
Changing output Drum note.....	12
Using Quick Pads .....	12
Saving Fill .....	12
Exporting fill to MIDI track.....	12

In Cakewalk/SONAR .....	12
Using Drag and Drop .....	12
Using Apply MIDI Effects command .....	12
In Cubase SX .....	13
Converting to MIDI clip .....	13
Using Drag'n'Drop .....	13
Importing Fills to Fill- in Drummer Library .....	13
Options .....	13
<b>Using as DR-008 module</b>	<b>14</b>
Using Fill-in Drummer as FXpansion's DR-008 module .....	14
Loading Fill-in Drummer in to an empty pad.....	14
Embedding fills into drum part.....	15
Saving settings as DR-008 module presets .....	15
<b>Troubleshooting</b>	<b>16</b>
<b>Contact Info</b>	<b>16</b>
<b>How to Register</b>	<b>16</b>

# About Fill-in Drummer

## Fill-in Drummer - the Real-time MIDI FX Plug-in

A drum fill is a short (1 measure or so), but very important musical element. Without drum fills performed in appropriate places any basic rhythm part, even the most sophisticated one, would sound monotonous and uninteresting. Fills work as bridges between parts of a composition, 4 or 8-measure rhythm sections, or as intros or endings.

Creation of drum fills in a MIDI track (in practice a short solo part with lots of various drum instruments) is quite a complicated task even for an experienced musician, requiring quite a lot of hand work and time.

Fill-In Drummer is a unique and powerful MIDI tool specially developed for work with drum fills.

It includes a massive library of factory pre-recorded drum fills, intros, and endings and also lets you use your own fill libraries.

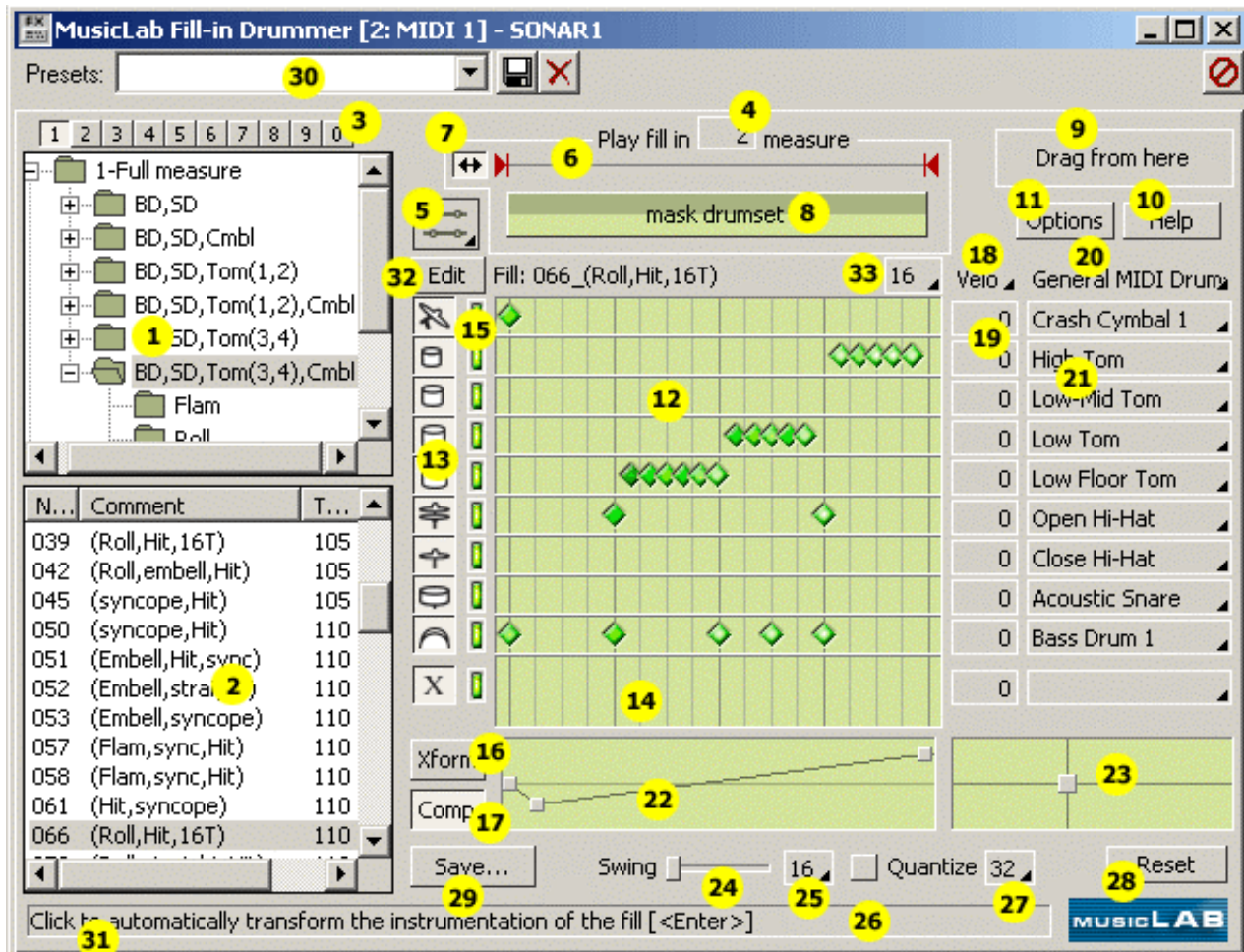
A unique Fill Modifying System has been developed, which allows you to easily transform instrumentation, trim length, and adjust dynamics of a drum fill to better fit it to your musical needs.

This provides you with practically unlimited number of variations and edits of the prerecorded drum fills and lets you quickly perfect your basic rhythm part with pro quality drum fills, breaks, intros, and endings you can ever imagine.

Special Mixing System has been incorporated in the program which allows you to intelligently combine drum fill with basic rhythm part easily controlling punch in/out time and avoiding undesirable rhythm 'gaps' and double drum notes in the resulting track.

All this does the drum fill related work easy and fascinating with the Fill-in Drummer.

## Interface overview



1. **Fill Library tree view** – select folder containing sets of prerecorded fills
2. **Fill List view** – select fill from the list
3. **Quick Pad Panel** – lets you quickly assign and select fills
4. **Measure box** – assign measure number for the plug-in to play the selected fill
5. **Track+Plugin Mixer** – select mode for mixing track and fill to play back
6. **Time Locators** – control masking time areas within the fill, as well as trim the fill from the beginning and/or the end
7. **Auto Locate button** – switches between automatic and manual mode for Time Locators activity
8. **Track Masking Panel** – filters backing track notes passing through the plug-in
9. **Drag from here** – pane for dragging out current drum fill to MIDI track
10. **Help button** – opens the Help file

11. **Options button** – opens Settings dialog
12. **Drum Instrument bar** – displays notes of individual drum part of the current fill
13. **Drum Button** – exclude/include drum instrument from/to Drum set
14. **Extra drum bar** – displays all unmapped drum notes of the fill
15. **LEDs** – mute/unmute/solo individual drum part
16. **Transform button** – transform the instrumentation of the fill
17. **Compare button** – compare with to the original instrumentation/revert to last edits
18. **Controls box** – select control displays for drum parts
19. **Control value box** – set control value for the part
20. **Note Names Definition box** – select Drumset Note Names definition from the list of available ones
21. **Note Name box** – select the output Drum sound/note for the part
22. **Velocity Envelope** – create automated crescendi/decrescendi for the fill
23. **Dynamics** – main dynamics 2D controller (x – change dynamics value, y – change dynamics center)
24. **Swing slider** – adds swing (shuffle) feel to even pairs of 8th or 16th notes (50% value gives triplet feel)
25. **Swing duration box** – select 8th or 16th note duration to apply swing feel to
26. **Quantize button** – sets exact timing for all note-ons
27. **Quantize resolution box** – select grid resolution (note duration) to apply quantization
28. **Reset button** – sets all parameters and edits to default values
29. **Save button** – click to save current fill to USER folder
30. **Presets** – combo box for saving all current settings (including global Options), as well as Pad Panel content as a Cakewalk plug-in preset
31. **Status bar** – displays main controller values and context help info
32. **Edit Button** – enables/disables beat edit mode
33. **Grid combo** – select snap interval

## Keyboard shortcuts

**F1** - open Help file

**Up/Down** arrow keys - Drum bar selection

+/- (numpad), mouse wheel – change focused control value

<Enter> - auto-transform fill

**M**, left click LED – mute/unmute selected drum bar

<Ctrl>+**M**, right-click LED – solo/unsolo selected drum bar

**1, 2, 3, 4..- 0** - Quick Pads remote selection

## Working with Fill-in Drummer

### Launching Fill-in Drummer

#### In Cakewalk

1. Launch Cakewalk.
2. Create a MIDI track with basic drum rhythm part (you can use MusicLab's SlicyDrummer plug-in patched to the same track as a real-time drum loop source)
3. Patch Fill-in Drummer plug-in to the track and open it:
  - in SONAR - right-click in Effect bin and select MusicLab/Fill- in Drummer;
  - in Cakewalk 9 - double-click in the Effects bar, right-click and select MusicLab/Fill- in Drummer, double-click Fill- in Drummer name;
  - in Cakewalk 8 - open Console view, right-click in track Effects zone and select MusicLab/Fill-in Drummer, double-click Fill-in Drummer name.
4. The plug-in opens its window and now is ready to work  
Note: If you use SlicyDrummer and Fill-in Drummer simultaneously on one track the order of plug-ins patched on the track is important – first should be SlicyDrummer, second – Fill- in Drummer.

#### In Cubase SX

In order to use Fill- in Drummer with Cubase SX you need to install MFX Wrapper from [Steinberg FTP](#).

1. Open project. Create MIDI track.
2. Open the Inspector for MIDI track by clicking Inspector icon on the Project window's toolbar.
3. Click Inserts tab to open Inserts section of the Inspector
4. Select MusicLab Fill- in Drummer from effects pop-up menu (this automatically opens Fill-in Drummer window)
5. Click Fill- in Drummer Options button to set the needed MIDI channel in the Output section of the opened Dialog box.

## **In DR-008**

Right-clicking an empty pad brings up a popup menu showing a list of currently available module objects. Simply select MusicLab Fill-in Drummer module from the menu, and it will be loaded in to the pad.

To open Fill-in Drummer window click the 'E' button. Right-clicking the upper blue area of editor window will trigger the Fill-in Drummer to playback the current drum loop. You can use as many instances of Fill-in Drummer module as you like by loading them in to different pads and assigning various drum loops for every individual pad.

## **Selecting Drum Fill**

### **Fill Library**

On the left hand side of the plug-in window there are Fill Library view consisting of Folder tree view pane and Fill List pane. Three upper folders of the tree view contain a few sets of factory prerecorded drum fills:

- 1.Full measure** – full measure fills
- 2.Intro** – 1-measure fills with the rests at the beginning
- 3.Ending** – 1-measure fills with the rests at the end

User folder is empty. You can copy there any favorite fill from the default Library, as well as create your own libraries by importing drum fills in Standard MIDI file format (you can create fill in a MIDI track and drag'n'drop it to the Fill Library view, or place the appropriate MIDI files directly to the User folder in Windows Explorer).

### **Selecting Fill**

1. Select the appropriate folder or subfolder in the Fill Library tree view. The list of available fills will load to the Fill List pane.
2. Select the fill from the Fill List by clicking its name. All notes of the fill will appear on the Drum instrument bars of the Fill view in the center of the plug-in window.

### **Assigning Measure**

Assign measure number in the Measure box in the upper part of the plug-in window.

Note that on starting the sequencer Fill-in Drummer will play the selected fill only once in the certain measure of the song you've previously assigned in the Measure box.

### **Playing Fill**

Start the sequencer and the Fill- in Drummer will play the selected fill in the assigned measure of the song.

### **Auditioning Fill Library**

You can easily audition all the fills of the Library one by one:

- Assign measure 1 in the Measure box of the plug-in,

- Loop Cakewalk between measures 1 and 2,
- Select various folders and drum fills along with the playback

## Using Track Masking Panel

In the upper part of the plug-in window there is Track Masking Panel, which allows you to intelligently mask (filter) notes of backing rhythm part passing through the Fill-in Drummer in various ways while the fill is playing.

NOTE. Track Masking Panel has no effect if there are no events in the track where the plug-in is patched. You only can use Time Locators for trimming the fill.

### Controlling Punch in/out Time Points

Move the red Time Locators to create Time Areas displaying punch in/out time points, i.e. time when backing track goes to fill (left Locator point) and time when the fill goes to backing track again (right Locator point). Dark color of Time Area shows that track is masked (is silent over the Area time), while light color appoints that track notes are passing through the plug-in. With Time Locators you can create up to three Time Areas: left, middle, and right, thus controlling punch in/out points within the measure.

Time Locators work in both automatic and manual modes. When the automatic mode is selected (pressed Auto Locate button to the left of Locator slider) the Locators will be set automatically on loading new fill: if there are rests at the beginning of the fill left Locator goes to the first note position; if there are rests at the end of the fill, right Locator goes to the last note position. In manual mode (Auto Locate button unpressed) the Locators don't change their positions on selecting fills.

### Controlling Note Mixing

Track Masking Panel also lets you mix notes playing from the track and the plug-in simultaneously in an intelligent way. This allows you to avoid 'gaps' in basic rhythm occurring if you simply mute the track while the fill is playing, and at the same time to avoid the double drum notes playing, which can cause undesirable 'chorus' effect. This can be done automatically in the Fill-in Drummer by using special note filtering adjustment – Mask Mode. You can assign Mask Mode for every Time Area individually. Clicking on Time Area pane switches between various available Mask Modes for the Area:

- Mask All (dark colored Area pane) – filters all notes playing from track
- Mask Drum set (half and light Area pane) – filters only notes mapped to currently active Drum set of the Fill view (all pressed Drum buttons)
- Mask Instrument (stripped Area pane) – filters only drum notes used in the current fill
- Through (light colored Area pane) – all notes of the track play through the plug-in untouched.

### Track+Plugin Mixer

To the left of Track Masking Panel there is Track+Plug-in Mixer allowing you to monitor the results of applying Track Masking Panel and fill editor. You can mute either backing track or the plug-in, otherwise let them play together by selecting various mixing modes:

Track+Plug-in – both backing track and fill are playing,

Track Only – mutes fill

Plug-in Only – mutes track

## Editing Fill

In the center of the plug-in window you see 10 horizontal bars representing individual drum instruments. To the left of the instrument bars there are buttons with drum icons showing the drum instrument the bar is mapped to: Bass Drum, Snare Drum, Close Hi- Hat, Open Hi- Hat, 4 Toms, and Crash Cymbal. X icon bar represents all unmapped drum notes. On selecting the fill its notes are displayed in the appropriate bar as diamonds colored relatively to their velocity values (the brighter the diamond - the higher velocity value of the note).

### Editing beats

Fill-in Drummer allows to insert/delete/move individual beats to create your own fills and save them within the plug-in for future use.

- press Edit button to enable edit mode
- click drum bar to insert beats
- double click the beat to delete it (alternatively <Ctrl>+click)
- drag the beat left or right to move it to a new location
- drag the beat up or down to change velocity value

### Snap to Grid feature

Fill-in Drummer allows to use snap grid that makes it easier to edit beats. Click Snap Grid resolution combo box and select standard note duration for the snap interval. From then on, when you insert or move beats, they will be snapped to the nearest point on the Snap Grid.

To disable the Snap Grid, select '--' item in the combo box menu.

### Transforming Instrumentation

Fill-in Drummer allows you to drastically modify the existing fill in various ways even without adding/deleting individual notes. This gives you practically endless amount of variations of the existing material and also lets you quickly adjust the fill to your musical needs.

#### Manual Transformation (Changing Drum set)

To change the current Drumset for the fill click Drum button to make it inactive. This will exclude the appropriate drum instrument from Drum set used for mapping fill notes. The fill will be rearranged automatically so that all notes of the excluded instrument(s) move to the relative drum(s). Click Drum button once more to make it active.

Right-clicking Drum button will Solo/Unsolo the instrument in the Drum set.

Changing the Drum set lets you force Fill-in Drummer to play any existing fill with the other drum instruments, never losing whole rhythm formula of the original fill, as well as keeping drum melody, dynamics and timing untouched. You can easily transform the instrumentation of the fill up to the single drum instrument to create numerous variations of the existing material.

Press Comp (Compare) button to hear the original instrumentation; unpress it to revert to last edits.

### **Automatic Transformation**

Click Xform (Transform) button. This will automatically rearrange the whole instrumentation of the fill and create a variation of the fill close by rhythm, polyphony, melody and dynamics to the original. Clicking Xform button over and over again allows you to momentarily create a lot of variations of the same fill.

Click Comp (Compare) button to hear the original instrumentation; unpress it to revert to last edits.

### **Trimming fill**

You can also modify any fill by trimming it from the beginning or/and the end with the help of left and right Time Locators. In this case the shaded notes of the fill outside Locators will not sound. This lets you easily create a lot of new variations of the fill playing in various sections of measure.

### **Adjusting Performance Controls**

#### **Modifying Dynamics**

Use Dynamics 2D controller to change the difference in velocity between loud and soft notes for all drum parts simultaneously. Drag the pointer with a mouse to change dynamics. Dragging by x-direction increases/decreases the dynamics value, while y-direction changes the dynamics center (threshold between the lowest and highest velocity value of notes).

#### **Creating Crescendo/Decrescendo**

Create automated crescendi/decrecendi by drawing velocity envelope by dragging any of three nodes to any direction. Right click to Envelope pane to disable/enable the envelope or switch between Velo+ and Real Velocity modes.

#### **Adjusting Swing**

Use Swing slider to add swing (shuffle) feel to the performance (50% value gives triplet feel).

In the Swing duration box select 8th or 16th note duration to apply swing feel to.

#### **Quantize**

Press Quantize button to set exact timing for all note-ons.

In the Resolution combo box select the appropriate grid resolution value (note duration) to apply quantization.

### **Individual Drum bar controls**

#### **Bar Inspector**

Adjust the sound of the fill using individual drum inspector controls at the right edge of every Drum bar:

- Select Velo control to add/reduce velocity value to the notes.
- Select Time control to apply offset to the start time of the notes.
- Select Dyn control to set the strength (in percents) of main Dynamics 2D controller adjustments for the part.

Use <+>/<-> (numpad) keys to change values for selected control of the drum bar. Enter desired value with numeric keys; change it with up/down arrow keys or mouse wheel

### **Changing output Drum note**

Drum sound name (the output note) is displayed in the Note Name box at the right edge of the Drum Instrument bar. You can easily change the output note for any drum part by clicking Note Name box and selecting the appropriate sound name from the popup menu.

You can assign the required Drumset Note Names definition by selecting it in the Note Names combo box at the upper right corner of plug-in's window. The assignment you make determines the drum note names that you see in the popup menu of Note Name box of the Drum Instrument bar.

## **Using Quick Pads**

At the left upper corner of Fill- in Drummer window there is Quick Pad panel which lets you quickly assign and select up to 10 Fills and variations.

Click any Pad of Quick Pad panel. Select fill from the Library, or copy/paste fill from other Pad. The fill and all edits are temporarily kept in the Pad before you close the plug-in. You can save the whole Pads content as a Cakewalk preset file in Presets combo box or within Cakewalk song document (\*.wrk).

Use computer keys (1, 2, 3...- 0) to select Pads.

## **Saving Fill**

Press Save button to save the fill to User folder

## **Exporting fill to MIDI track**

### **In Cakewalk/SONAR**

#### **Using Drag and Drop**

To export the current fill simply drag it from 'Drag from here' pane at the right corner of Fill-in Drummer window and drop it to the needed measure of a Cakewalk MIDI track (or to Windows for exporting fill as a Standard MIDI file).

#### **Using Apply MIDI Effects command**

1. Open the track view.
2. Select a Track.

3. Go to the Console view and click the FX button (In SONAR select Apply MIDI Effects from Edit menu)
4. A dialog appears asking if you want to remove the plug-in from the track insert. This prevents the plug-in and the track data from playing the same thing unnecessarily. Press OK. Now the current drum fill has been added to the track.

## **In Cubase SX**

### **Converting to MIDI clip**

1. Make sure to solo the MIDI track with Fill- in Drummer (other MIDI tracks should be muted)
2. Set up the left and right locator around the area you want to apply drum fill. Only events starting within this cycle area will be included.
3. Select the track on which you want the new part to be created. This could be a new track or an existing track. If there are data in the cycle area on the track, you can choose whether this should be kept or overwritten (see below).
4. Select Merge MIDI in Loop from the MIDI menu.
5. In the dialog that appears activate Include Inserts option.
6. Click OK.

A new part is created between the locators on the destination track, containing the Fill- in Drummer current drum fill.

### **Using Drag'n'Drop**

1. Drag current fill from 'Drag from here' pane of Fill- in Drummer to the empty place of Cubase window.
2. Cubase will open a new project with your drum fill in the MIDI track.
3. Drag the resulted MIDI clip from new project to your one.
4. Close new project.

## **Importing Fills to Fill- in Drummer Library**

You can create your own fill libraries in the USER folder and use them with the Fill- in Drummer (Standard MIDI file format only). To import fill to USER folder:

1. Create fill in a MIDI track and drag'n'drop it from the track to Fill- in Drummer's Fill Library view
2. Inside Fill- in Drummer drag the edited fill from the Drag from here pane of the plug-in directly to the Fill Library view.
3. Simply place Standard MIDI files with previously created fills to USER folder in WINDOWS Explorer.

## **Options**

Click Options button to make settings in the opening dialog:

Drum Map - create your output maps for drum sounds. All Drum maps will be automatically saved within the plug-in for future use

Set the needed Output Port and Channel (if disabled, Fill-in Drummer will use channel and output settings from Cakewalk track)

Instant/Buffered mode switch - switching between instant (real time, using Cakewalk stop/start) and buffered (using MIDI buffer adjustable in Cakewalk Global options) reaction of the plug-in to the edits.

Limit Velocity – set the range of output velocity values for main Dynamics controller

## Using as DR-008 module

### Using Fill-in Drummer as FXpansion's DR-008 module

Fill-in Drummer is fully integrated into FXpansion's DR-008 environment and can work within DR-008 as a multi-track Drum Deploy sequencer module. It can be loaded in to an empty pad of DR-008 and perform drum fill by triggering appropriate MIDI note from host sequencer or external MIDI keyboard. The playback automatically syncs to the tempo of the host application's song.

#### Loading Fill-in Drummer in to an empty pad

Right-clicking an empty pad brings up a popup menu showing a list of currently available module objects. Simply select MusicLab Fill-in Drummer name from the menu, and it will be loaded in to the pad.



To open Fill-in Drummer window click the 'E' button.

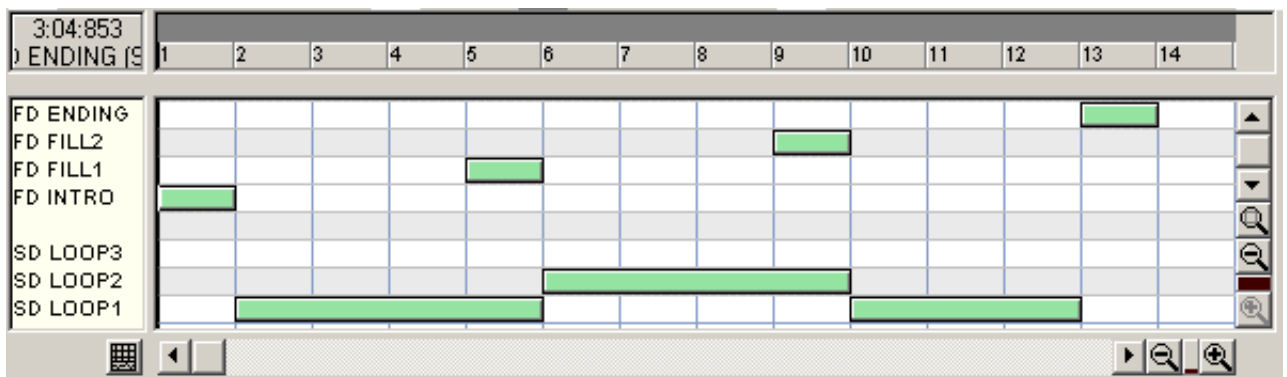
Right-clicking the upper blue area will trigger the Fill-in Drummer to playback the current fill.

You can use as many instances of Fill-in Drummer as you like by loading them in to different pads and selecting various drum fills for every individual pad.



### Embedding fills into drum part

Because Fill-in Drummer is triggered by MIDI note from your host sequencer, you can easily perfect your drum part with a number of fills, breaks, intros, and endings by writing appropriate notes in MIDI track to trigger different pads with Fill-in Drummer in the needed measures of the song.



### Saving settings as DR-008 module presets

Click disk icon in the upper left corner of the Fill-in Drummer editor window to save all current settings together with Quick Pad Panel content and drum map edits as a DR-008 preset (\*.drs).

NOTE: When using Fill-in Drummer together with SlicyDrummer within the same DR-008 environment it is recommended that you load all Fill-in Drummer instances in to higher pitch pads relative to the ones used for SlicyDrummer modules.



This will allow you to fully use the powerful Note Masking feature of Fill-in Drummer while triggering the fill along with the basic drum loop playing back by the SlicyDrummer module.

## Troubleshooting

**Problem:** The following real-time features don't work properly: selecting output device and channel from CW track properties; song position cursor in Pattern View.

**Solution:** These features are available only with supported Cakewalk builds. Check <http://www.musiclab.com/download/releases> for Fill-in Drummer update which supports your Cakewalk build

**Problem:** Cakewalk goes to the first measure all the time when selecting pattern in SlicyDrummer.

**Solution:** Disable instant mode in Fill-in Drummer Options Dialog.  
Alternatively, insert a dummy event somewhere after the supposed song end in any unused track.

## Contact Info

**Web site:** <http://www.musiclab.com/>

**Technical support:** <mailto:support@musiclab.com>

## How to Register

This is full-featured 14 days time limited version. Be sure to register if you wish to remove the time limitation.

Please visit <http://www.musiclab.com/shop> to register Fill-in Drummer.

# Index

## C

Contact Info .....	15
Copying Fill to User Folder .....	11

## D

DR-008 module.....	14
--------------------	----

## E

Editing Fill .....	8
Exporting fill to MIDI track.....	11

## H

How to register.....	15
----------------------	----

## I

Importing Fills to Fillin Drummer Library.....	12
Interface overview.....	4

## K

Keyboard shortcuts.....	5
-------------------------	---

## L

Launching Filli-in Drummer.....	6
---------------------------------	---

## O

Options .....	12
Overview.....	3

## S

Selecting Drum Fill.....	7
--------------------------	---

## T

Troubleshooting .....	15
-----------------------	----

## U

Using Quick Pads .....	10
Using Track Masking Panel.....	8

## W

Working with Fill-in Drummer .....	6
------------------------------------	---