

CMP 4a / Music Tec 2a – (008)

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LOGIC PRO / MIDI CLASS – Part 08

Automation Modes:



Read, Touch, Latch & Write are **TRACK AUTOMATION MODES**. This is Logic Pro's automation system for **internal Instruments** and **Plug-Ins**.

In Logic Pro **MIDI** mode is also known as **REGION AUTOMATION**. It is strictly MIDI data. Track automation data must be converted to Region Automation data for use by external MIDI Instruments.

Off: Disables Automation data without deleting it.

Read: Automation is Active but any control changes are not recorded even though you can hear the effect of changes. This is useful for trying out a new automation sequence.

Touch: If you TOUCH a fader or dial control then Automation is updated to reflect the value changes for as long as you are touching the control. When you let go, the Automation value returns to the value it was at before you touched the controller.

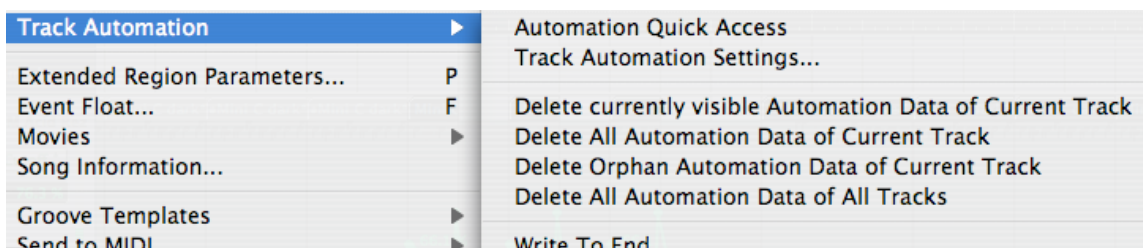
Options > Track Automation > Track Automation Settings > Ramp Time determines the time it takes for an adjusted control to return to its previous value.

Latch: After adjusting a control the most recent value continues to replace existing automation data. In Latch Mode **editing stops when you stop recording or playback.**

Write: Any existing Automation data is erased as the Song Position Line passes over it. If you move a control then those movements are recorded.

MIDI: Enables **Region Based Automation** (see below) and Mixer Controls are disconnected from Track Automation Mode.

Deleting Automation Data: Select a choice via *Options > Track Automation...*



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Region Based Automation

Set Automation mode of a channel strip to **MIDI**.

Automation data is written directly into Regions as MIDI data.

Logic must be in RECORD mode (*with the exception of Audio Tracks*).

Instrument and Insert settings can be recorded, as can any environment faders attached to an instrument.

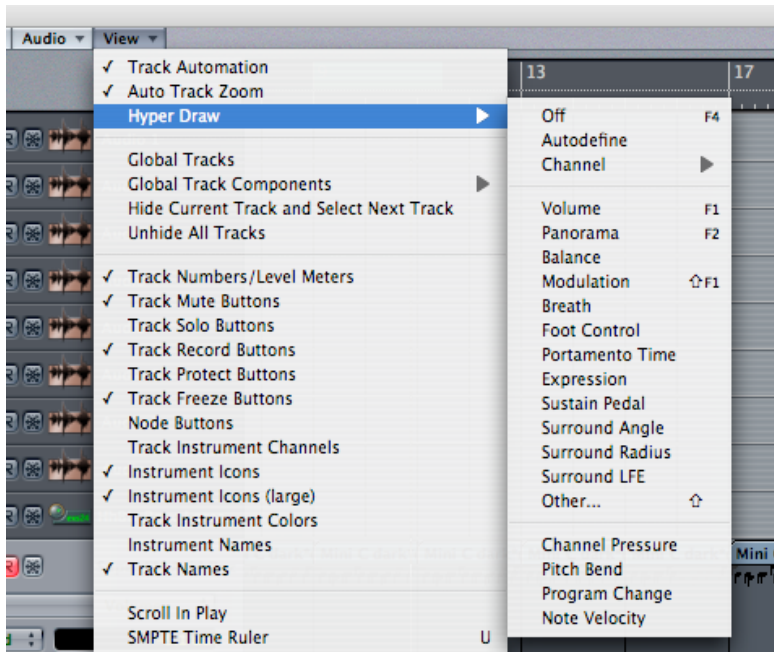
In the case of Instrument channel strips Midi channel data is assigned as follows:

- **Channel 1: Volume and Pan data.**
- **Channel 2: Instrument controller data**
- **Channel 3: Insert 1**
- **Channel 4: Insert 2**
- **Channel 5: Insert 3 etc...**

Note: Select a newly recorded MIDI data Region and open the **Event List** to inspect how Logic assigns Midi Controller data to its instruments and Plug-ins.

- **Tip:** When preparing to record Region Based Automation MIDI data, create a duplicate track in the Arrange Window Track > **create** (*My Key Command is set to Shift + Return.*) for each Controller. Otherwise you will have to deal with MIDI Controller regions overlapping note data. You can of course merge regions but initially this is a neater way to work.

HyperDraw



Use HyperDraw to manually create and edit Automation data in the Arrange window.

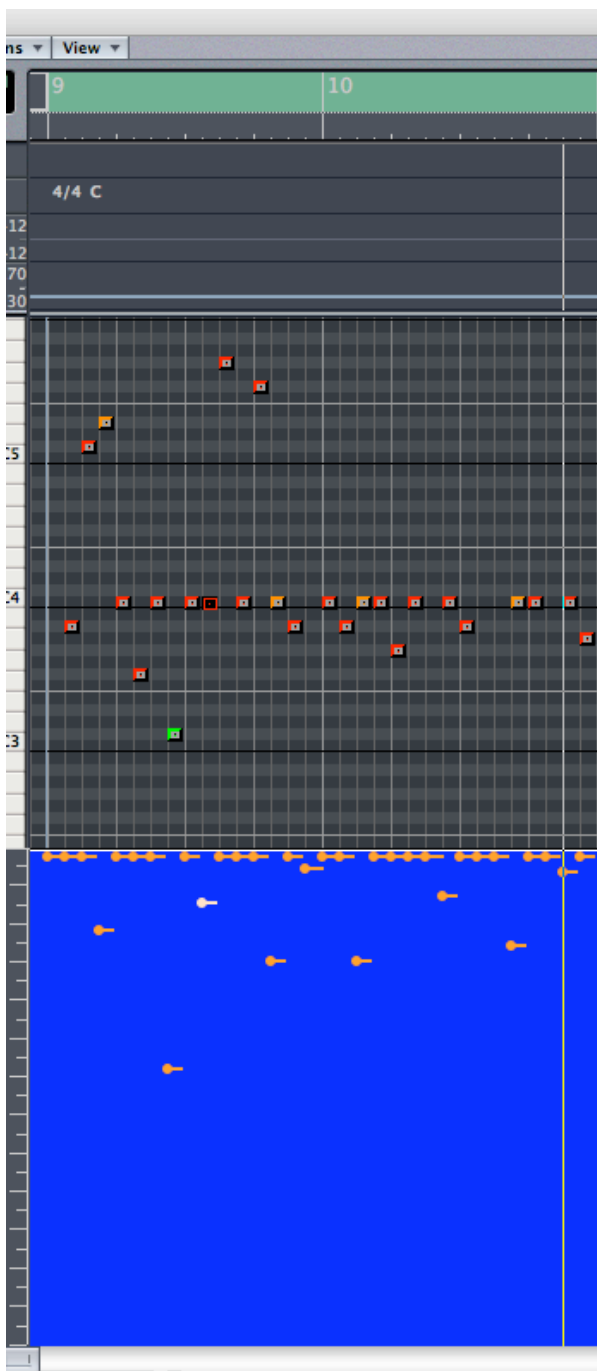
It's actually pretty much the same for Track Automation as it is for Region Automation. Break Point or Node editing and application of curves in between break points if relevant are created in the same way.

HyperDraw can be activated in the Matrix Editor via *view > HyperDraw...*

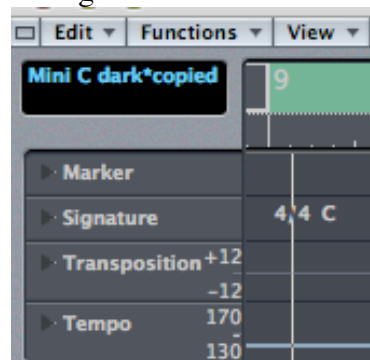
- (Try pressing the **F1**, **F2** and **F3** keys to access the main controllers – Volume, Pan and Note Velocity).

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Note: Global Track views to the right.



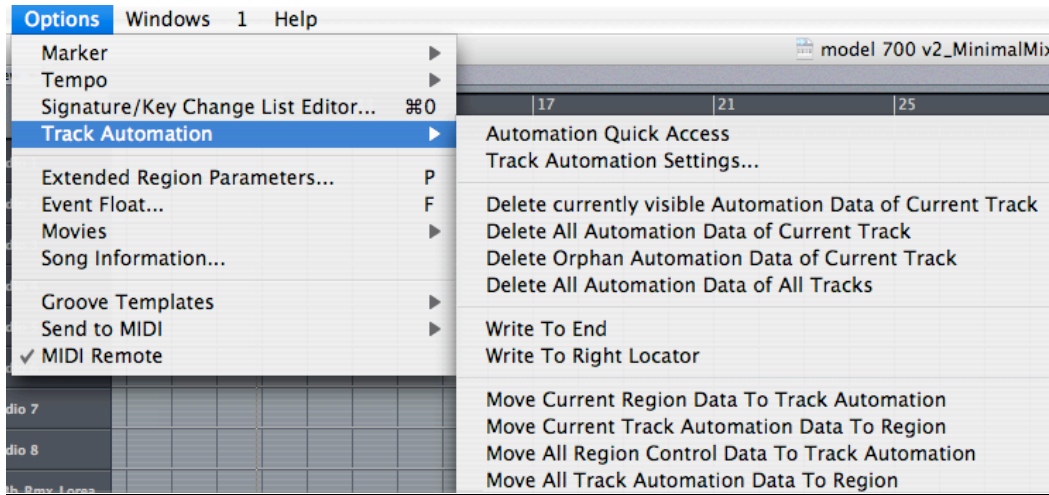
Matrix Editor displaying Note Velocities.

HyperDraw Editing takes place in the blue area

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You can convert between Track Based Automation Data and Region Based Automation Data



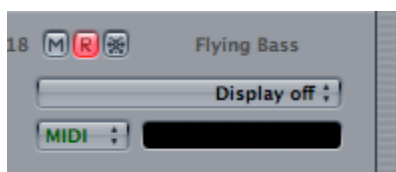
Choose from the bottom 4 options to convert back & forth.

To view Controller data other than that available in the HyperDraw List do the following:

1. Select the relevant region
2. Move Current Track Automation to Region (Region turns Blue)
3. From the HyperDraw list select **Autodefine**
4. **Autodefine** makes the 1st event in the region visible, which is why it is good practice perhaps, and certainly less confusing, to have different controller data in separate regions on duplicated tracks as mentioned above.
5. **The alternative approach** (sometimes a little confusing) is to convert data to region data and then select '**Other**' from the HyperDraw List. You can then select the controller number and channel from the resulting window (see below).

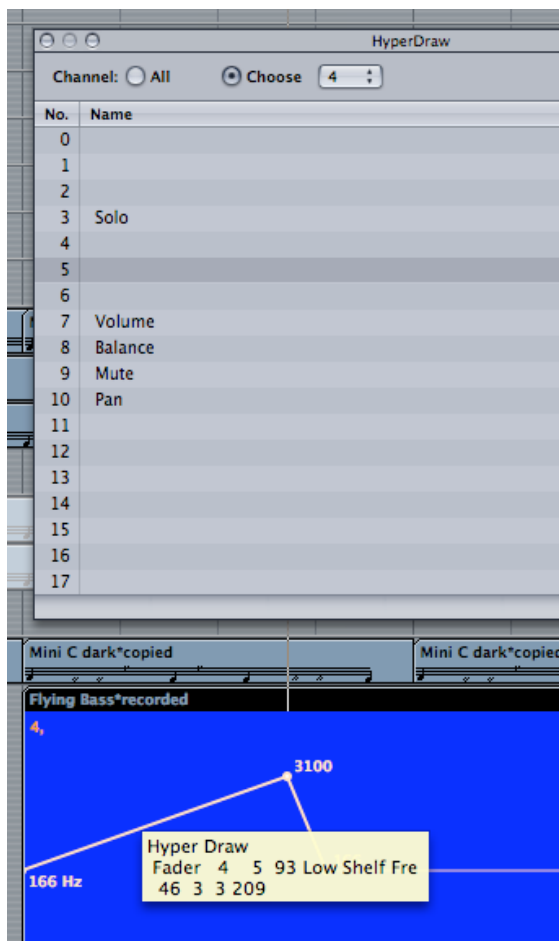
This works well when all controller data is merged in to one region. You can simply scroll down the controller list (**make sure you choose the correct channel**).

6. ***** **Make sure that Track Automation Display is switched off**...so that you can view HyperDraw data in region mode. *****



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In this HyperDraw Control Window I have selected **Channel 4, Controller 5**.

If the channel number is greater than 1 then Solo (3), Volume (7), Balance (8), Mute (9) and Pan (10) labels are void. **They are superseded by controller info unique to the instrument or inserted plug-in.**

Note: Channel 4 means Insert Slot 2. Remember that ch 1 is for the primary channel strip parameters vol & pan etc, ch 2 is reserved for the Instrument slot, ch 3 = Insert slot 1, ch 4 = Insert slot 2 and so on.

If you are unsure of the controller number and channel simply click and hold a node to see a yellow info box as illustrated above, otherwise with the region still selected, open the **event list** window to reveal this information.

Here we can see Hyper Draw information for a Fader assigned to channel 4 (**Insert Slot 2**). The controller number is 5 and the MIDI value of the currently selected node is 93 (in a range of 1 –127). You can see that this represents the Low Shelf Frequency value for my Channel EQ.

- REMEMBER: You'll know that you are in Region Automation Data mode with HyperDraw correctly enabled, as the region turns blue and controller nodes and lines are turquoise.**