



# USING THE AKAI MPC WITH **REASON**

Reason & Akai MPC Tutorials Written By Andy Avgousti (MPC-Tutor)

**Using The Akai MPC With Reason**

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## **Introduction**

This book has been written as a guide for Akai MPC owners who wish to utilise Propellerhead Reason when creating beats. Throughout this book I assume that you are already familiar with the general usage of the MPC, so have a basic grasp of the main sequencer functions, like sequence recording, STEP EDIT, and adjusting MAIN page parameters like track program assignments etc. This book is not intended as a complete beginners guide to using the MPC itself (we already have those at <http://www.mpc-samples.com/section.php/8/0/> ).

Similarly, this book is not intended to be a complete guide to using Reason - that would require much longer book! In these 44 pages, we've concentrated only on the issues you need to learn to successfully use Reason as a sound module for the MPC, keeping it clear and jargon-free to help explain all the core principles and techniques.

We advise that you first locate the folder marked 'Tutorial Files' and transfer these sounds to your MPC's disc (CF card, zip, hard drive etc). This means you can quickly load up the relevant MPC files when working through each tutorial. If you need help transferring files, please consult the file transfer FAQ on our site here:

<http://www.mpc-samples.com/transfer.php>

Enjoy the book, and happy beat making!

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## 002 - Using Reason as a sound module

To enable the MPC to control playback of sounds within Reason, we need to apply some settings within the MPC and within Reason.

### Setting Up Reason – Software Settings

Please note that we are using Reason 5 in this tutorial, so there will be some differences if you are using an older version of Reason. Also be aware that Reason looks a little different on Mac and PC and some settings are accessed in different ways, but we'll cover all this for both platforms as we go along, although for consistency, I'll just use screen shots from the Mac version.

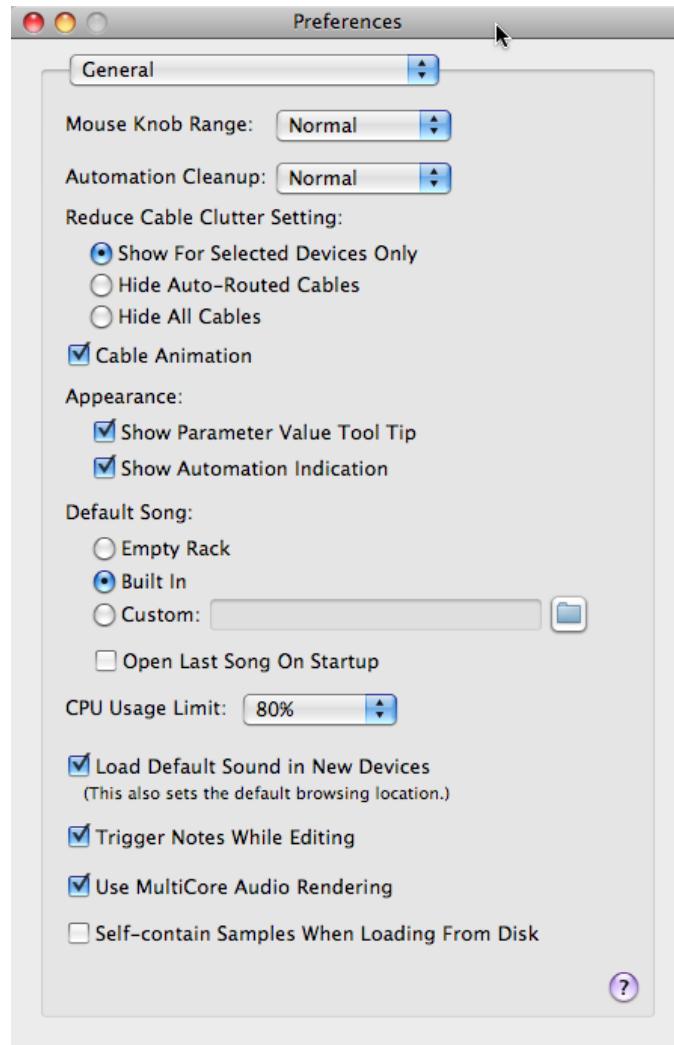
Open up Reason in your computer. You'll see something like the following (the default demo song):



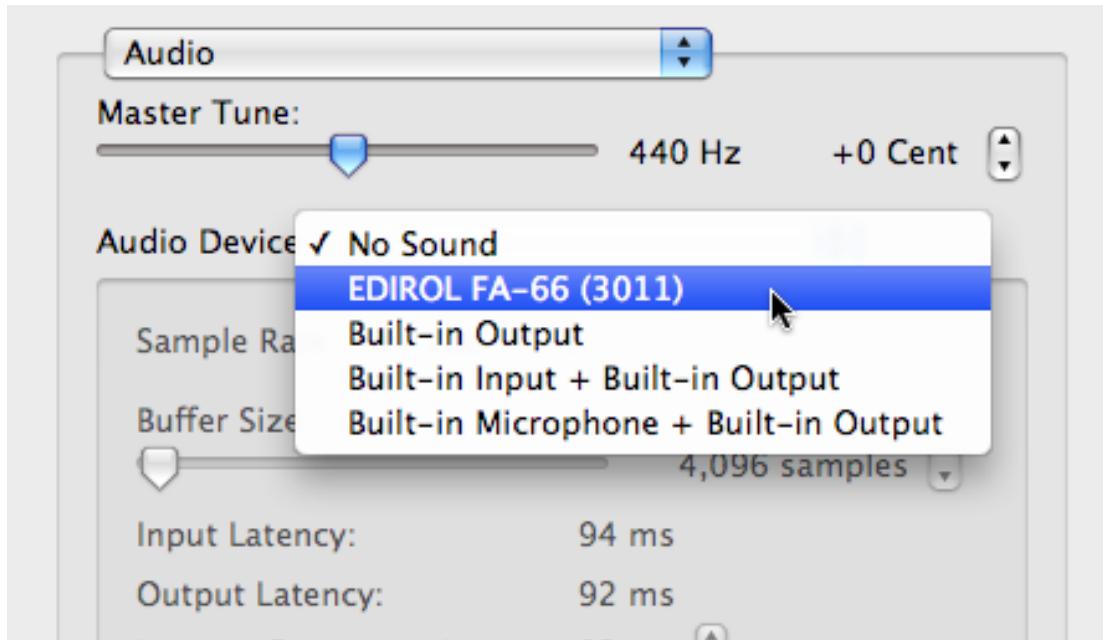
First, make sure your audio interface is being used as the primary audio source for Reason.

Mac: In the Finder bar, locate: Reason > Preferences  
PC: In the program bar, locate: Options > Preferences

You should see the following:

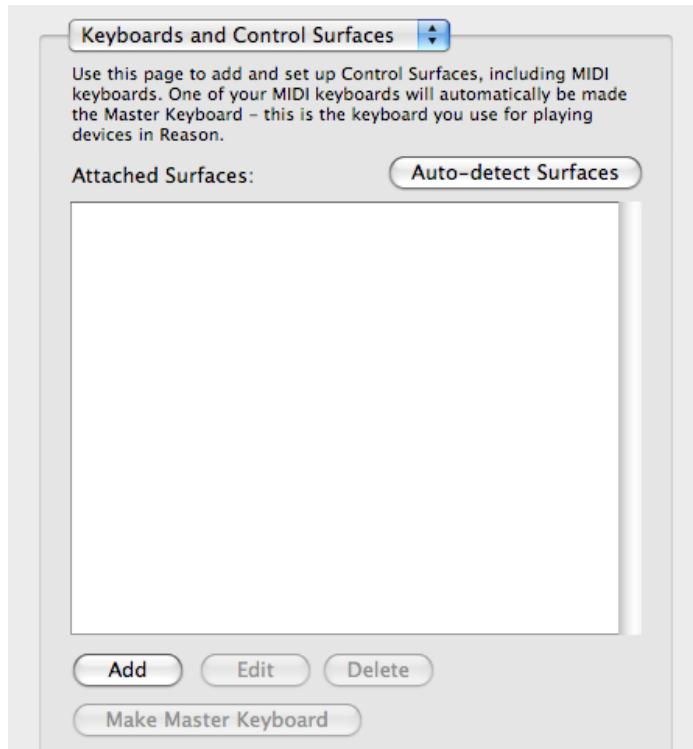


From the top select box, select 'Audio'. Under 'Audio Device', you should see your audio interface listed.



If the audio interface isn't listed, make sure it is connected and (if required), plugged in to the power supply. Also ensure that any required software drivers have been installed (you'll probably have to close down and restart Reason for it to recognise the audio interface).

Select your audio interface, and at this point, Reason will test the connection and give you a green tick. Now select 'Keyboards & Control Surfaces' from the top preference select box:



This shows you what keyboards or controllers have been set up to communicate with Reason. To add your MPC, press 'Add'. Under 'Manufacturer', you could select 'Akai', however the MPC is not listed as a possible 'Model' option (which may not be an issue for this chapter, but will cause problems in chapter 4 when dealing with MIDI control assignments).

Instead, select 'Other', and under 'Model' select 'MIDI Multichannel Control Keyboard' (the MPC in this example is effectively a keyboard, and as we'll see later, is going to transmit MIDI over multiple channels). You could alternatively assign the MPC as a control surface, it shouldn't actually make any difference to how Reason will recognise your MPC.

### **What is a control surface?**

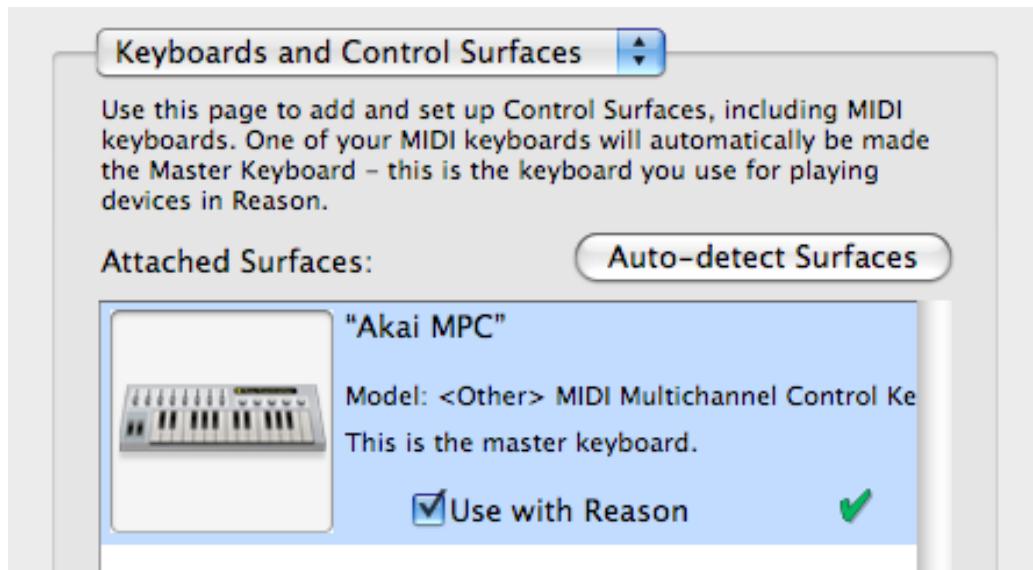
A control surface is simply a piece of hardware that lets you control the functions of software within your computer. So, rather than use your computer mouse to increase the volume of a particular synth in Reason, you could use a hardware controller and assign one of its knobs or sliders to control the synth volume dial in Reason.

It just gives you easier and more tactile control over your software. Advanced control surfaces feature many knobs and sliders – and as you can see in the preferences section, Reason is able to recognise many different hardware controllers with pre-configured knob and slider assignments. However, the MPC isn't included here – but this doesn't affect the MPC's ability to control Reason's sounds via MIDI, and if you have an MPC4000 or the JJ OS on your MPC, you'll be able to set up your MPC as a makeshift control surface, as we'll see later in this book!

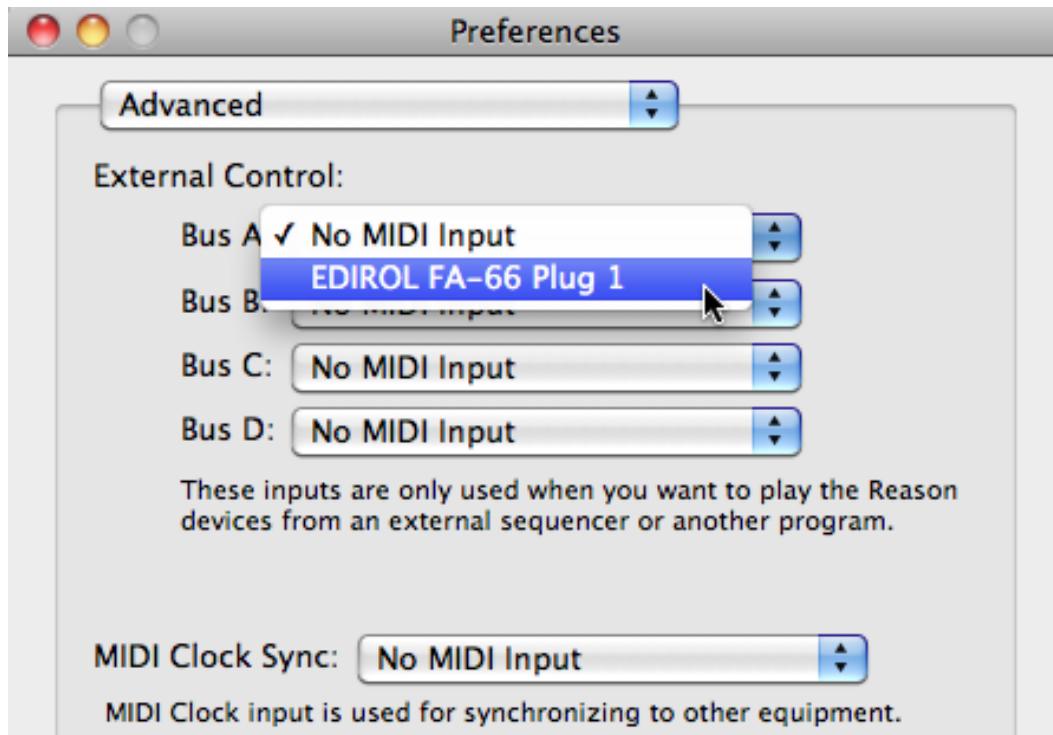
Pick a name, you could put your MPC model in here, such as 'Akai MPC1000', or just 'Akai MPC'. Finally for MIDI input, you should be able to select your audio interface from the select box.



You should now see the following:



Reason automatically assigns it as the 'Master Keyboard'. Now from the select box at the top, choose 'Advanced':



Under 'Bus A' select your MIDI interface. This tells Reason to search for incoming MIDI instructions from your audio interfaces primary MIDI input.

At this point, Reason is ready to recognise incoming MIDI instructions from your MPC. Let's now load up a few instruments into Reason; once these have been loaded, we can move over to the MPC and get that set up as well.

In Reason, create a new song: File > New. Now save this new song project, File > Save, and give it any name you wish.

A default new song will contain no instruments at all. To add instruments, go to 'Create' and click 'Malstrom Graintable Synthesizer':



Now click on the 'Browse Patch' icon:



Go to the 'Pads' folder and select the 'Sweeepy' patch. We'll use this for an eerie pad sound within our beat.

Finally, go to 'Create' and add a copy of the NNXT sampler. Here, use the 'B Grand Piano 1' patch. We'll use this for the main melody line in our beat.

With the two instruments loaded, go to the top of the screen in Reason, and under 'Hardware Interface', click on 'Advanced MIDI':



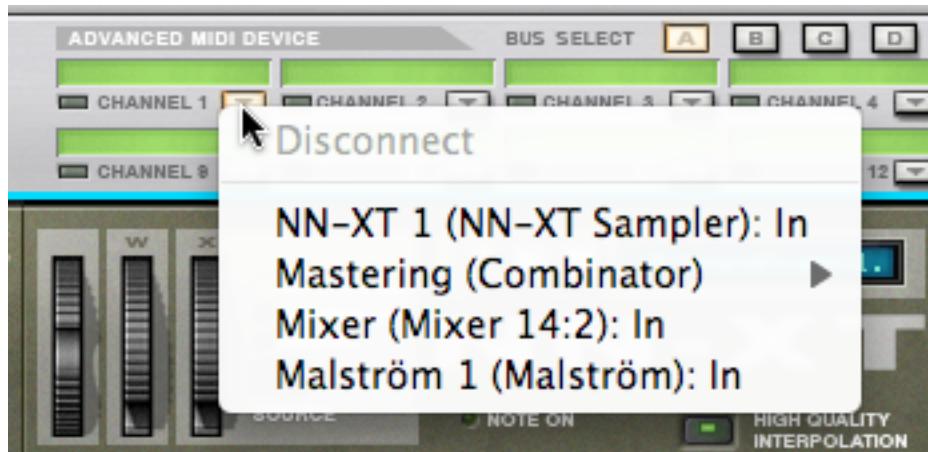
This reveals the MIDI assignment controls:



At the top there are four busses, where each bus would relate to a single MIDI IN on your audio interface. In this tutorial, I assume you have only one MIDI IN, so we'll only deal with the default 'A' bus.

Underneath the bus selection you'll see 16 green rectangles. Each one represents one of the 16 MIDI channels passing from the MIDI OUT A of your MPC to the MIDI IN of your audio interface.

Locate channel 1 and click the down arrow.



Here are a list of instruments that can be assigned to this MIDI channel. Select 'NN-XT 1'. Now, the NN XT sampler (the piano sound) will receive MIDI instructions on MIDI channel 1.

Go to the Channel 2 box and repeat this process, but this time select the Malstrom. At this point, save your project (CTRL & S, or on a Mac, Cmd & S)

Now that Reason has been initially configured, it's time to set up your MPC.

#### *Setting Up Your MPC*

To create our simple song, we're going to need a drum beat, piano and pads. The drum beat will be programmed and sequenced within the MPC using the built in sequencer and an MPC drum kit program. The other sounds will be provided by Reason – but we'll sequence the piano and pad parts within the MPC itself and have Reason play back the sounds via MIDI instructions.

I have already prepared an entire project file for this tutorial which can be found in the tutorial download files. For newer MPC owners, load up the '**REASON.prj**' project file. Users of older MPCs should load up the ALL files and APS/AKM files found in the correct folder for their MPC.

This will load up the following into your MPC:

- A drum kit and sound FX program called 'MPC-DRUMS.pgm'
- A blank program called 'BLANK.pgm' that re-orders the MPC pads into correct MIDI Note order (see notes below)
- All the sounds required by the program (kick, snare, hat, tambourine)
- A number of sequence files

From now on, when I refer to the 'REASON' project, these are the files I am referring to.

### **Why do we need BLANK.pgm?**

On a MIDI keyboard, the keys run in a standard numerical MIDI note order – i.e. the first white key would be MIDI note 36, followed by MIDI note 37, then 38, 39, 40, and so on. If you wish to play MIDI performances on your MPC pads, you need to be aware that the pads on all MPCs (except those running JJOS 2/XL/2XL) have a rather odd MIDI note order – basically the MIDI notes are all over the place, so it's very hard to play fluid musical performances with the pads.

For example, pad A1 is 37, A2 is 36, A3 is 42 and A4 is 82! BLANK.pgm simply loads up a customised blank program that reorders your MPC pads into numerical MIDI note order, starting at MIDI note 36 on pad A1, then 37 on pad A2, 38 on pad A3, and so on.

This workaround unfortunately does not work on the MPC2000/3000/60 due to limitations of the operating system, so you are stuck with the random pad order. For these MPCs, we recommend using a MIDI control keyboard to input your MIDI performances. Simply plug the MIDI OUT of your keyboard into any MIDI IN on your MPC and the keys you press on your keyboard will register MIDI events in your MPC sequences, and also pass through to Reason.



Go to the MAIN page (on an MPC500, press the SEQUENCE button, on older MPCs, this is the 'MAIN SCREEN' button) – this is the main sequencing page for your MPC.

Select sequence 1 (REASON1a) and press PLAY START. You should hear a drum beat; if you examine the tracks 1, 2, 3 and 4 (using the TR+ and TR- buttons) you'll

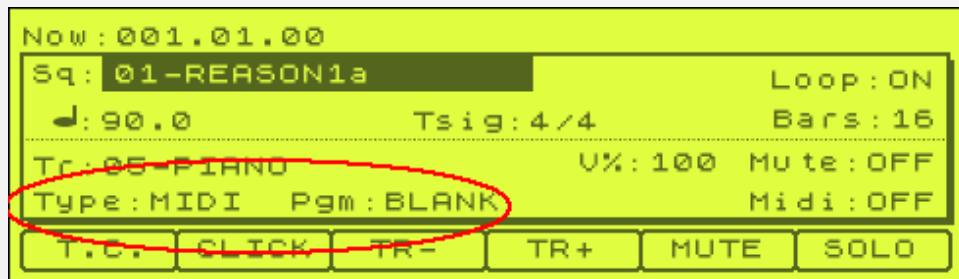
see I've placed the kick, hat, snare and tambourine separately on each track. Each of these tracks has been assigned to the 'MPC-DRUMS' program.

MPC500 users should select the TRACK button to view all the sequencer tracks, and then press PARAMS to view the assigned programs.

Select track 5 in your sequence. I've already named this 'Piano' and I have assigned our 'BLANK' program to this track to ensure our pads are in chromatic MIDI note order. We're now going to set up this track to be a MIDI track that sends MIDI note instructions to the NN-XT sampler within Reason.

Setting up a track as a MIDI track in your MPC sequencer is very simple.

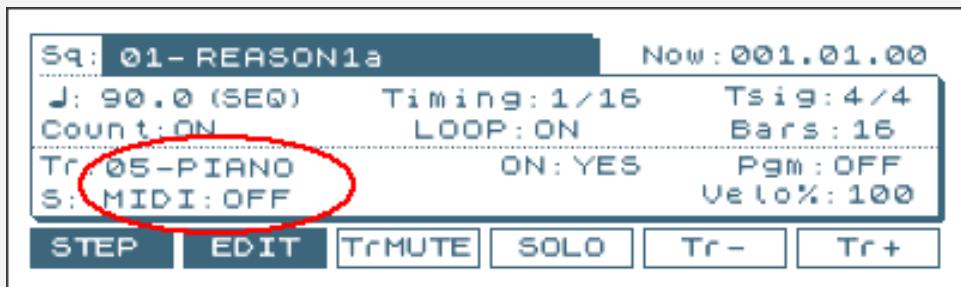
**MPC1000/2500/5000:** locate 'Type:DRUM' and change this to 'Type:MIDI'



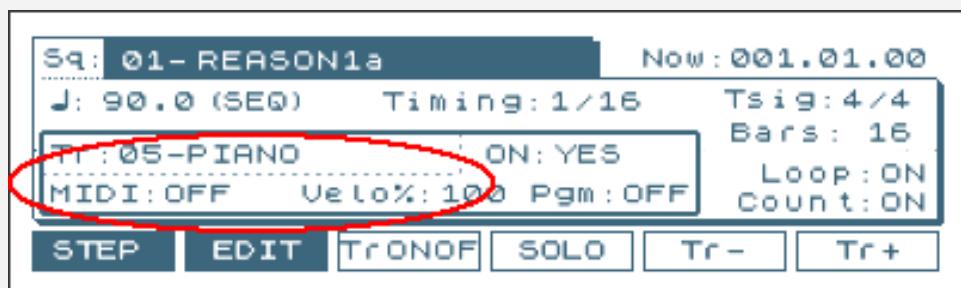
**MPC500:** press PARAMS and scroll to 'Track Type'.

The screenshot shows the MPC500's 'Track type' menu. It displays the text 'Track type' followed by 'Tr: A5: MIDI' in a large font. The background is blue.

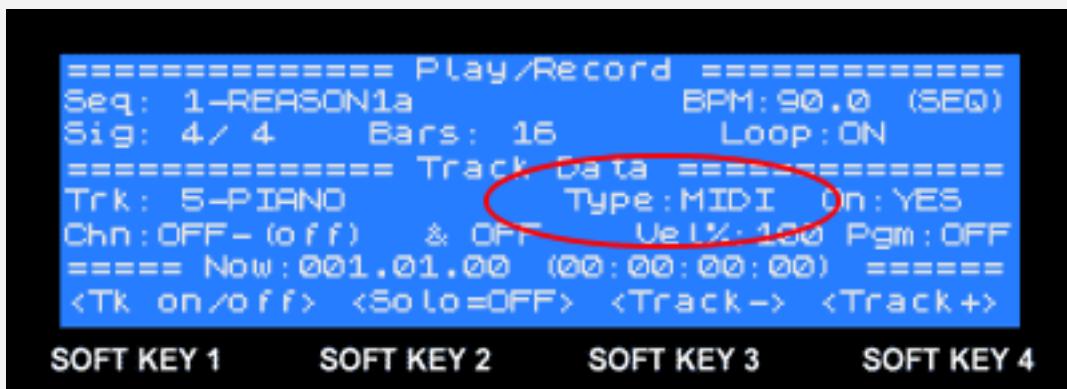
**MPC2000XL:** change 'S:DRUM3:OFF BLANK' to 'S:MIDI:OFF' by spinning the jog wheel to the left a few times.



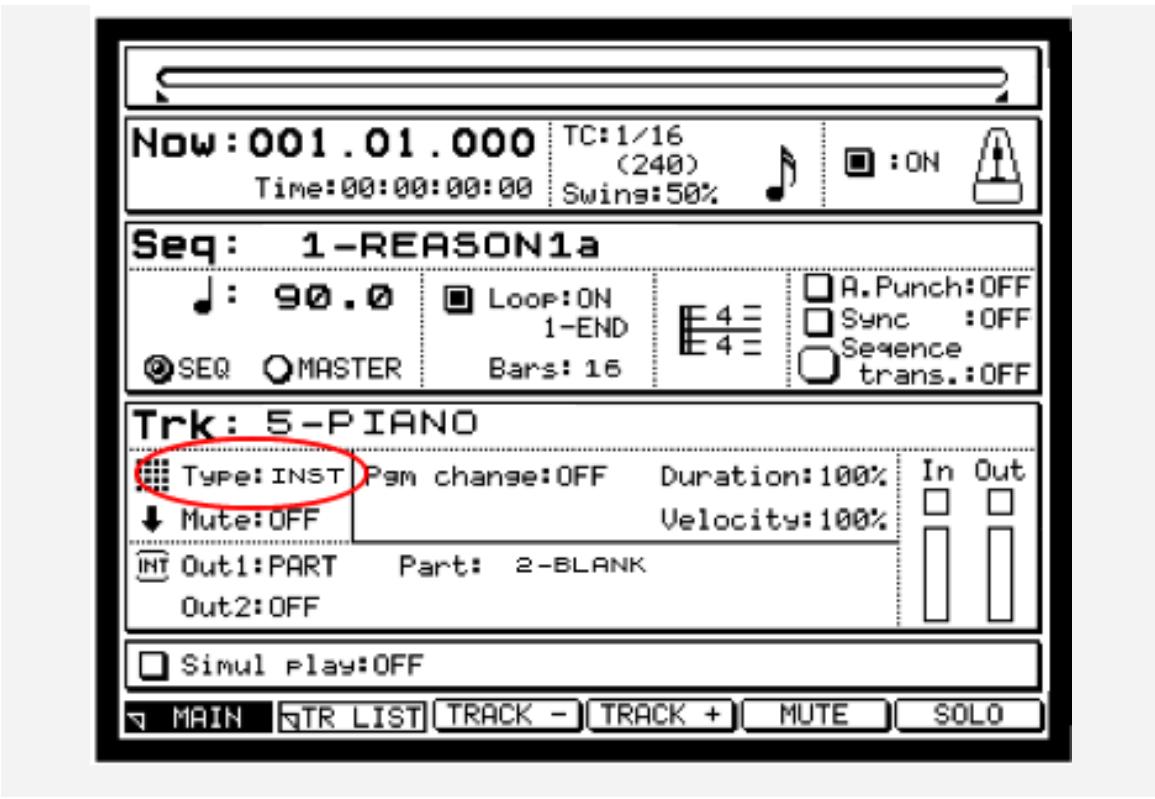
**MPC2000:** change 'DRUM:OFF to 'MIDI:OFF'.



**MPC3000/60:** Change 'Type:DRUM' to 'Type: MIDI'



**MPC4000:** Change 'Type:DRUM' to 'Type:INST'



This now means that any notes you record into the sequencer on this track will be recorded purely as MIDI notes with no pad information. So for example, when a track is set to DRUM, pressing pad A2 in step edit will be entered like this (with minor variations between different MPCs):

001.01.00 **P: A02( 37)** D: 34 V:127

But if the track is set to MIDI, it will be entered like this:

001.01.00 **N: 37(C#1)** D: 34 V:127

As you can see, for a MIDI track, there is no pad information just the MIDI note – 37(C#1). Please note that while this is the optimal setting, your MPC will still communicate with Reason if the track is set to 'Type:DRUM', as both track types contain a reference to the MIDI note number.

Now back on the MAIN screen for track 5, let's set the MIDI output for that track.

That's the end of this free preview of the **'Using the Akai MPC With Reason'** – you can purchase the full book at MPC-Tutor.com:

<http://www.mpc-tutor.com/product/using-the-akai-mpc-with-reason/>