**M-AUDIO®**

# Axiom® DirectLink for Reason and Record
# User Guide

**Documentation Feedback**

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# Contents

# Chapter 1: Introduction

This guide covers DirectLink, which automatically maps Axiom® controls to common functions in Reason 4 and later, and in Record. DirectLink offers two-way communication with Reason and Record, featuring two distinct modes of operation with a level of integration that makes Axiom feel like a dedicated hardware controller.

DirectLink is activated as soon as either Reason or Record is launched. When DirectLink is active, selecting a sequencer track lets you control the instrument or device that is assigned to it. For example, selecting the sequencer track for a Reason Mixer maps Axiom faders, buttons and knobs to mixer functions such as channel and master volume, as well as the pan, track selection, mute, and solo, as explained in Chapter 3, "Axiom Controls with DirectLink."

Record works in a similar way. Each device must have its own dedicated track, and DirectLink lets you control a device once its corresponding track has been selected.

The first step towards controlling the various devices and effects in Reason and Record is selecting a "target" track in the sequencer using the dedicated Track "<" and ">" buttons. This determines which device or instrument DirectLink will control, and all Axiom controls will be mapped to the most useful parameters within the track.

By default, Axiom is in Instrument Mode, which lets you control the device on the target track. Pressing the Instrument button assigns all Axiom Encoder knobs to various global parameters. See "Instrument Mode Button (Inst)" on page 5. Pressing the Instrument button a second time switches DirectLink back to Instrument mode.

Whenever DirectLink is switched to Instrument mode, pressing the Patch Up and Down buttons scrolls through patches to audition and select sounds in the targeted device. Pressing either of the Track buttons targets an adjacent track, allowing you to switch from one instrument or device to another. The Axiom Transport buttons remain mapped to their counterparts.

Pressing certain Trigger pads lets you access and control additional parameters on the targeted device within both Reason and Record. Generally, the pads determine the "group"of parameters that Encoder knobs are mapped to. For example "Filter", "Osc 1", or "LFO1." When a pad is pressed, the Axiom LCD screen will display the name of the control group the Encoders mapped to. The control group assignments are consistent such that for devices which have Filter controls, the Filter group is always accessed by pressing Pad 1, Oscillator groups are on Pads 2 and 3. Velocity controls are accessed using Pad 4, and Modulators are on Pads 5 through 8.

With Axiom Preset 14 selected, pressing the Group P button reassigns the Trigger Pads to the first eight sounds within the ReDrum instrument. This lets you trigger the individual drum sounds while auditioning sounds or programming drum tracks. Further information about Axiom Presets can be found in the Axiom User Guide.

On Axiom 49 and 61, pressing Fader button F18 "flips" the Encoder knob mapping to the Faders. The Flip button illuminates to indicate that Axiom is in Flip mode. Pressing the Flip button a second "flips" the assignments back to the Encoders.

Although this introduction explains how DirectLink with Axiom can enhance your workflow, please take the time to read the rest of this User Guide. Combined with the Axiom User Guide, it will explain how to get the most out of your Axiom Keyboard in Reason and Record.

## DirectLink Requirements

### System Requirements

The latest system requirements can be found at www.m-audio.com.

### Reason and Record Software

DirectLink requires Reason version 4. Earlier versions of Reason do not support DirectLink. If you are using Record, DirectLink supports the application version 1.0 and higher. To learn more about upgrading your software, please visit http://www.propellerheads.se.

#### Axiom Drivers

Windows users should download and install the latest Axiom drivers from www.m-audio.com/support if you are planning to do any or all of the following:

- Control more than one application at the same time.
- Simultaneously use other class-compliant USB audio devices.
- Use long System Exclusive (SysEx) commands.

📋 *Refer to the Axiom User Guide for more information about Axiom installation.*

### Axiom Hardware

DirectLink requires that Axiom is connected to the host computer, and this guide assumes the process has already been completed. The installation and connection procedure is covered in the Axiom User Guide.

⚠️ *A list of qualified recording applications, along with current Windows drivers, DirectLink installers and User Guides can be found at www.m-audio.com.*

# Chapter 2: Installation and Configuration

Before beginning the DirectLink installation, make sure Axiom is properly installed and connected to the host computer, and that Reason and Record are *not* running. The instructions below will indicate when the applications should be launched.

**To install DirectLink for Reason and Record:**

**1** Download the latest DirectLink installer for Reason and Record from www.m-audio.com/drivers.

**2** Locate and double-click on the installer icon then follow the on-screen instructions.

**3** Once the installation is complete, launch Reason or Record.

**To configure Reason or Record:**

**1** *Mac OS X* Navigate to the Reason or Record menu > Preferences.

 **Windows** Navigate to the Edit menu > Preferences.

**2** Click the "Page" drop-down menu and select "Keyboard and Control Surfaces."

**3** Click "Auto-Detect Surfaces." Reason/Record will automatically find and configure Axiom.

**4** Close the Preferences dialog.

DirectLink will activate automatically and map Axiom controls whenever Reason or Record is launched.

# Chapter 3: Axiom Controls with DirectLink

Reason includes a variety of different "Devices" that can be created and added to the "virtual rack." New Devices are selected from the "Create" menu and fall under three basic categories:

- Mixers – These include Mixer 14:2 and the Line Mixer 6:2.
- Instruments – These include Subtractor, Thor, Malström, NN19, NN-XT, Dr. Rex, Redrum, Matrix and RPG-8.
- Effects – This category includes all Devices between "MClass" and "Spider" in the Create menu.

When using DirectLink, the functionality of the Axiom Faders and Fader buttons (Axiom 49 and 61), and Encoder knobs will vary based on the device contained within the selected (targeted) track in the Reason Sequencer.

> *Refer to Appendix A, "DirectLink Control Assignments" for a complete listing of how Axiom controls are mapped within Reason and Record.*

For example, if you have a new song with one NN-XT instrument and one Thor instrument, the Reason sequencer will have a track for each device. Axiom will target and control the "NN-XT" sequencer track when it is selected, whereas Thor will be targeted when its track selected.

> *Axiom will not control a Reason Device, unless it's assigned to a sequencer track. **All Devices must have a corresponding Sequencer Track**.*
>
> *When an instrument is created, a sequencer track is automatically created and assigned to it. However, when Mixer or Effects Devices are created, a sequencer track is not created. To create a track in this instance, right-click on the Device (Ctrl-Click for Mac OS X users) and select "Create Track" from the bottom of the menu that appears.*

This chapter provides an overview of how Axiom controls the Mixer, Instrument, and Device functions within Reason.
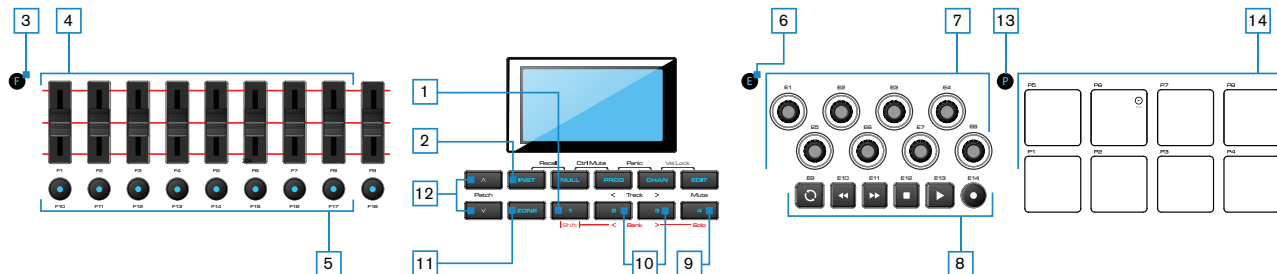
### 1  Shift Button

This button is used to access alternate functions of the Instrument Mode (Inst), Mute, Track (< and >) buttons.

### 2  Instrument Mode Button (Inst)

DirectLink is set to Instrument mode by default which lets you control the device on the targeted track. Pressing the Instrument button assigns all Axiom Encoder knobs to the following global parameters:

| Encoder | Global Parameter |
| --- | --- |
| E1 | Tempo BPM |
| E2 | Bar Position |
| E3 | Click On/Off |
| E4 | Click Level |
| E5 | Left Loop Bar |
| E6 | Left Loop Beat |
| E7 | Right Loop Bar |
| E8 | Right Loop Beat |

Pressing the Instrument button a second time switches DirectLink back to Instrument mode.

### 3  Group F Button (Axiom 49 and 61)

The Group F button is illuminated by default, indicating that all nine Axiom faders and fader buttons (F1–18) are in DirectLink mode. When this button is pressed, it is no longer lit, and the faders and buttons are released from their DirectLink assignments, and mapped according to the active Axiom preset.

Pressing the Group F button again returns all controls to their DirectLink assignments. The button also illuminates confirming the group is in DirectLink Mode.

**4 Faders**

There are 9 Faders (Axiom 49 and 61) that function based on the type of Reason Device or track selected.

When an Axiom fader is moved, the current function or parameter assignment, and its value will appear on the LCD screen. If the mouse is used to move the corresponding control in Reason, the LCD screen also updates with the current assignment and value.

**Mixer Devices**

On Axiom 49 and 61, the first eight Faders (F1 – F8) control the volume for the each channel in a selected bank of eight mixer channels. Banks of mixer channels are selected using a combination of the Axiom Track and Shift buttons. For more information on bank selection, See "Track Buttons" on page 9.

The right-most Fader (F9) maps to the Master Fader of a Reason Mixer.

Further information about how these Faders function with each mixer can be found in Appendix A, "DirectLink Control Assignments."

**Instrument Devices**

These Faders generally map to envelopes in synths and samplers, or volume controls in Drum machines. Further information about how these Faders function with each instrument can be found in Appendix A, "DirectLink Control Assignments."

**Effects Devices**

These Faders are unmapped and have no function in effects Devices.

**5 Fader Buttons**

There are 9 Fader buttons (Axiom 49 and 61) that function based on the type of Reason Device or track selected.

When an Axiom button is pressed, the current function or parameter assignment, and its value will appear on the LCD screen. If the mouse is used to press the corresponding button in Reason, the LCD screen also updates with the current assignment and value.

**Mixer Devices**

On Axiom 49 and 61, the first eight buttons (F10 – F17) map to the currently selected bank of eight tracks in Reason, and by default each button targets its corresponding mixer channel when pressed. Banks of mixer channels are selected using a combination of the Track and Shift buttons. For more information on bank selection, See "Track Buttons" on page 9.

Pressing button F18 switches buttons F10 – F17 to Mute mode. The LCD screen will display "MUTE," indicating the current mode of operation. Each button illuminates when pressed, and its corresponding channel is muted.

Pressing button F18 again switches buttons F10 – F17 to Solo mode, and the LCD screen will display "SOLO." Each button illuminates when pressed, and its corresponding channel is soloed while all others are muted.

Additional assignment changes are made using the Trigger Pads to map these buttons to additional mixer functions as described in Appendix A, "DirectLink Control Assignments." Pressing a Fader button with the shift button held down lets you "peek" at the parameter it is assigned to without changing the value.

**Instrument Devices**

These buttons map to parameters on certain instruments, and their function varies based on which Device is targeted in Reason.

Further information about how these Faders function with each instrument can be found in Appendix A, "DirectLink Control Assignments."

**Effects Devices**

These button do not map to functions in effects Devices.

## 6 Group E Button

The Group E button is illuminated by default, indicating that all eight Axiom Encoder knobs (E1–E8) are in DirectLink mode. When this button is pressed, it is no longer lit, and the knobs are released from their DirectLink assignments, and mapped according to the current active preset Patch.

Pressing the Group E button again returns all controls to their DirectLink assignments. The button also illuminates confirming the group is in DirectLink Mode.

⚠ *Pressing the Group E button does not release the Axiom Transport buttons from DirectLink.*

## 7 Encoder Knobs

There are 8 Encoder knobs which function based on the type of Reason Device or track selected.

When an Axiom knob is moved, the current function or parameter assignment, and its value will appear on the LCD screen. Moving an Encoder while holding down the shift button lets you "peek" at the parameter it is assigned to without changing the value.

**Mixer Devices**

By default, these knobs (E1 – E8) control the Pan knob for a targeted mixer channel in an active bank of channels. See "Track Buttons" on page 9 for more information on selecting banks and individual mixer channels. On Axiom 25, the Encoder knobs control track volumes by default.

Their assignments can be changed as a group using the Trigger Pads as described in Appendix A, "DirectLink Control Assignments" to control additional mixer functions such as EQ or Aux Sends.

**Instrument Devices**

These knobs map to parameters on the instrument Device within a targeted track in Reason.

The assignments can be changed by pressing the pads to alter the parameter group selected. When a pad is pressed, the Axiom LCD screen will display the name of the control group the Encoders mapped to. For example "Filter", "Osc1", or "LFO1."

The control group assignments are consistent such that for devices which have Filter controls, the Filter group is always accessed by pressing Pad 1, Oscillator groups are on Pads 2 and 3. Velocity controls are accessed on Pad 4, and Modulators are on Pads 5 through 8.

▤ *Refer to Appendix A, "DirectLink Control Assignments" for further information.*

**Effects Devices**

These knobs map to parameters on effects Devices.

Depending on the Device, additional assignment changes are made using the Trigger Pads to map these buttons to additional mixer functions as described in Appendix A, "DirectLink Control Assignments."

## 8   Transport Buttons

In both Mixer and Instrument modes, these buttons map to the Transport buttons within Reason and Record to control the functions described below.

**Engage Loop** - This button engages and disengages looping between the left and right locator positions specified in the Reason transport window. The button illuminates when looping is engaged

**Rewind** - Pressing this button skips to the beginning of the previous bar. Holding it down will rewind the transport until the button is released.

**Fast Forward** - Pressing this button skips to the beginning of the next bar. Holding it down will rewind the transport until the button is released.

**Stop** - This button stops recording or playback. Pressing it a second time returns the transport to the beginning of the song. In cycle mode, pressing it a second time returns the transport to the left locator. Pressing the Stop button a third time returns to the beginning of the song.

**Play** - This button starts song playback.

**Record** - Pressing this button begins recording on all record-enabled tracks.

## 9   Mute Button

Pressing this button mutes the targeted mixer channel in Reason or Record.

Pressing this button while holding down the Shift button controls the Solo button for the channel.

On all Axiom models the Track buttons (See "Track Buttons" below) can be used to target a Reason mixer channel, and the Mute button can be used to mute or solo the track as described above in this section.

**10  Track Buttons**

### Sequencer Track Selection

These buttons select the target track.

- **Track Selection** - The left Track button (<) targets the previous track. For example, if track 2 is currently targeted, pressing this button will target track 1. The right Track Button (>) targets the next track. For example, if track 2 is currently targeted, pressing this button will target track 3. The LCD screen will display the track name.

### Mixer Devices

These buttons select the target channel (default for the 14:2 and 6:2 Mixers) or banks of 8 channels in the Reason 14:2 Mixer.

The left Track button (<) targets the previous channel. For example, if channel 2 is currently targeted, pressing this button will target channel 1. The right Track Button (>) targets the next channel. For example, if channel 2 is currently targeted, pressing this button will target channel 3. The LCD screen will display the track name.

- **Bank Selection (16:2 Mixer)** - When the Shift Button is held down the left Track Button (<) selects the previous bank of 8 channels. For example, if the bank of channels 9 – 14 is currently selected, pressing this button when Shift is held down will select the bank of channels 1 – 8. The right Track Button (>) selects the next bank of 8 channels. For example, if the bank of channels 1 – 8 is currently selected, pressing this button when Shift is held down will select the bank of channels 9 – 14.

### Instrument Devices

- **ReDrum** - Holding down the Shift button and pressing either Track button lets you choose an individual drum sound that you want to edit. In this instance the Encoder knobs are mapped to various parameters for the selected drum.

*See "Editing Drum Sounds in ReDrum" on page 37 for more information.*

- **RPG-8** - Holding down the Shift button and pressing the Track "<"button maps Fader buttons F10 – F17 to the first bank of eight pattern steps. Pressing the Track ">" button with the shift button held down maps these buttons to the second back of eight pattern steps.

*See "Accessing the RPG-8 Pattern Steps" on page 39 for more information.*

### Effects Devices

While controlling the BV vocoder, holding down the shift button and pressing these buttons maps the Encoder knobs to each of the 8 band parameters.

**11  Zone Button**

This button is used for accessing the individual Zone buttons (1, 2, 3, and 4).

Zones are used to split or layer the keyboard. When the Zone button is active, Shift, Track and Mute buttons will not function in DirectLink Mode. Pressing the Zone button returns these buttons to DirectLink.

*For more information, refer to Chapter 7, "Keyboard Zones" of the Axiom User Guide.*

### 12 Patch Buttons

**Mixer Devices**

These button have no affect on mixer Devices.

**Instrument Devices**

These buttons are used for selecting sound patches within the targeted Reason instrument.

**Effects Devices**

These buttons are used for selecting Effects patches within the targeted Device.

### 13 Group P Button

The Group P button is illuminated by default, indicating that all eight Axiom Trigger pads (P1– P8) are in DirectLink mode. When this button is pressed, it is no longer lit, and the knobs are released from their DirectLink assignments, and mapped according to the current active preset Patch.

When Axiom preset 14 is selected, releasing the Trigger pads from DirectLink automatically maps them to the first eight sounds of the ReDrum instrument.

*Refer to the Axiom User Guide for more information about the Axiom presets.*

Pressing the Group P button a second time returns the Trigger pads to their DirectLink assignments. The button also illuminates confirming the pads is in DirectLink Mode.

### 14 Trigger Pads

In addition the functions described in the Axiom User Guide, the pads let you re-assign various Axiom controls to alternate functions as described in Appendix A, "DirectLink Control Assignments."

# Appendix A: DirectLink Control Assignments

The following tables list the default DirectLink control assignments for the various devices within Reason and Record. Where applicable, alternate control assignments that are accessed using the Trigger pads are included.

## Subtractor

| Fader | Parameter |
| --- | --- |
| F1 | Amp Env Attack |
| F2 | Amp Env Decay |
| F3 | Amp Env Sustain |
| F4 | Amp Env Release |
| F5 | Filter Env Attack |
| F6 | Filter Env Decay |
| F7 | Filter Env Sustain |
| F8 | Filter Env Release |
| F9 | n/a |

| Fader Buttons | Parameter |
| --- | --- |
| F10 | Filter Env Invert |
| F11 | Filter2 On/Off |
| F12 | Filter Link Freq On/Off |
| F13 | Filter Type |
| F14 | n/a |
| F15 | n/a |
| F16 | n/a |
| F17 | n/a |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when each of the Trigger pads have been pressed.

## Pad 1 - Filter

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Filter Freq |
| E2 | Filter Res |
| E3 | Filter2 Freq |
| E4 | Filter2 Res |
| E5 | Filter Kbd Track |
| E6 | Filter Freq Mod Wheel Amount |
| E7 | Filter Res Mod Wheel Amount |
| E8 | Filter Ext Mod |

## Pad 2 - Oscillator 1

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Osc1 Wave |
| E2 | Osc1 Octave |
| E3 | Osc1 Semitone |
| E4 | Osc1 Fine Tune |
| E5 | FM Amount |
| E6 | FM Vel Amount |
| E7 | Mix Vel Amount |
| E8 | Osc1 Mix |

## Pad 3 - Oscillator 2

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Osc2 Wave |
| E2 | Osc2 Octave |
| E3 | Osc2 Semitone |
| E4 | Osc2 Fine Tune |
| E5 | Osc2 Phase Diff |
| E6 | Noise Level |
| E7 | Noise Decay |
| E8 | Ring Mod |

## Pad 4 - Velocity

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Amp Vel Amount |
| E2 | FM Vel Amount |
| E3 | Mod Env Vel Amount |
| E4 | Phase Vel Amount |
| E5 | Filter Env Vel Amount |
| E6 | Filter Decay Vel Amount |
| E7 | Mix Vel Amount |
| E8 | Amp Att Vel Amount |

## Pad 5 - LFO 1

| Encoder Knob | Parameter |
|---|---|
| E1 | LFO1 Amount |
| E2 | LFO1 Rate |
| E3 | LFO1 Sync Enable |
| E4 | LFO1 Wave |
| E5 | LFO1 Dest |
| E6 | LFO1 Mod Wheel Amount |
| E7 | LFO1 Ext Mod |
| E8 | Portamento |

## Pad 6 - LFO 2

| Encoder Knob | Parameter |
|---|---|
| E1 | LFO2 Amount |
| E2 | LFO2 Rate |
| E3 | LFO2 Kbd Track |
| E4 | LFO2 Delay |
| E5 | LFO1 Dest |
| E6 | LFO1 Mod Wheel Amount |
| E7 | LFO1 Ext Mod |
| E8 | Portamento |

## Pad 7 - Modulator

| Encoder Knob | Parameter |
|---|---|
| E1 | Mod Env Attack |
| E2 | Mod Env Decay |
| E3 | Mod Env Sustain |
| E4 | Mod Env Release |
| E5 | Mod Env Dest |
| E6 | Mod Env Invert |
| E7 | Mod Env Vel Amount |
| E8 | Mod Env Gain |

## Pad 8 - Envelope (Axiom 25 Only)

| Encoder Knob | Parameter |
|---|---|
| E1 | Amp Env Attack |
| E2 | Amp Env Decay |
| E3 | Amp Env Sustain |
| E4 | Amp Env Release |
| E5 | Filter Env Attack |
| E6 | Filter Env Decay |
| E7 | Filter Env Sustain |
| E8 | Filter Env Release |

# Thor

| Fader | Parameter |
|-------|-----------|
| F1 | Amp Env Attack |
| F2 | Amp Env Decay |
| F3 | Amp Env Sustain |
| F4 | Amp Env Release |
| F5 | Osc1 and Ocs2 Balance |
| F6 | Osc1 and Osc2 Level |
| F7 | Rotary 1 |
| F8 | Rotary 2 |
| F9 | n/a |

| Fader Buttons | Parameter |
|---------------|-----------|
| F10 | Filter3 Global Env Invert |
| F11 | Filter3 Type |
| F12 | Filter1 Type |
| F13 | Filter2 Type |
| F14 | Osc1 to Filter1 Enable |
| F15 | Osc3 to Filter2 Enable |
| F16 | Button 1 |
| F17 | Button 2 |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when each of the Trigger pads have been pressed.

## Pad 1 - Filter

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Filter3 Freq |
| E2 | Filter3 Res |
| E3 | Filter3 Drive |
| E4 | Filter3 Global Env Amount |
| E5 | Filter1 Freq |
| E6 | Filter1 Res |
| E7 | Filter2 Freq |
| E8 | Filter 2 Res |

## Pad 2 - Oscillator 1 and 2

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Osc1 Octave |
| E2 | Osc1 Semitone |
| E3 | Osc1 Tune |
| E4 | Osc1 Type |
| E5 | Osc2 Oct |
| E6 | Osc2 Semitone |
| E7 | Osc2 Tune |
| E8 | Osc2 Type |

## Pad 3 - Oscillator 3

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Osc3 Octave |
| E2 | Osc3 Semitone |
| E3 | Osc3 Tune |
| E4 | Osc3 Type |
| E5 | Osc3 Kdb |
| E6 | Osc3 Param B |
| E7 | Osc3 Param C |
| E8 | Osc3 Level |

## Pad 4 - FX

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Delay Amount |
| E2 | Delay Rate |
| E3 | Delay Time |
| E4 | Delay Feedback |
| E5 | Chorus Amount |
| E6 | Chorus Rate |
| E7 | Chorus Delay |
| E8 | Chorus Feedback |

## Pad 5 - LFO 1 and 2

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | LFO1 Wave |
| E2 | LFO1 Rate |
| E3 | LFO1 Delay |
| E4 | LFO1 Kbd Follow |
| E5 | LFO2 Wave |
| E6 | LFO2 Rate |
| E7 | LFO2 Delay |
| E8 | LFO2 Key Sync |

## Pad 6 - Global Envelope

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Global Env Attack |
| E2 | Global Env Decay |
| E3 | Global Env Sustain |
| E4 | Global Env Release |
| E5 | Global Env Delay |
| E6 | Global Env Hold |
| E7 | Global Env Loop |
| E8 | Global Env Gate Trig On |

## Pad 7 - Modulator and Filter Envelope

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Mod Env Delay |
| E2 | Mod Env Attack |
| E3 | Mod Env Decay |
| E4 | Mod Env Release |
| E5 | Filter Env Attack |
| E6 | Filter Env Decay |
| E7 | Filter Env Release |
| E8 | Filter Env Sustain |

## Pad 8 - Globals (Axiom 25 Only)

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Amp Env Attack |
| E2 | Amp Env Decay |
| E3 | Amp Env Sustain |
| E4 | Amp Env Release |
| E5 | Osc1 and Osc2 Balance |
| E6 | Osc1 and Osc2 Level |
| E7 | Rotary 1 |
| E8 | Rotary 2 |

# Malström

| Fader | Parameter |
| --- | --- |
| F1 | Osc A Attack |
| F2 | Osc A Decay |
| F3 | Osc A Sustain |
| F4 | Osc A Release |
| F5 | Osc B Attack |
| F6 | Osc B Decay |
| F7 | Osc B Sustain |
| F8 | Osc B Release |
| F9 | n/a |

| Fader Buttons | Parameter |
| --- | --- |
| F10 | Filter Env Invert |
| F11 | Filter B On/Off |
| F12 | Filter B Env |
| F13 | Filter B Kbd Track |
| F14 | Filter A On/Off |
| F15 | Filter A Env |
| F16 | Filter A Kbd Track |
| F17 | Route Filter B to Shaper |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when each of the Trigger pads have been pressed.

## Pad 1 - Filter

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Filter B Freq |
| E2 | Filter B Res |
| E3 | Filter A Freq |
| E4 | Filter A Res |
| E5 | Filter B Mode |
| E6 | Filter A Mode |
| E7 | Shaper Mode |
| E8 | Shaper Amount |

## Pad 2 - Oscillator A

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Osc A Shift |
| E2 | Osc A Oct |
| E3 | Osc A Semitone |
| E4 | Osc A Cent |
| E5 | Route Osc A to Filter B |
| E6 | Osc A Motion |
| E7 | Osc A Index |
| E8 | Osc A Gain |

## Pad 3 - Oscillator B

| Encoder Knob | Parameter |
|---|---|
| E1 | Osc B Shift |
| E2 | Osc B Oct |
| E3 | Osc B Semitone |
| E4 | Osc B Cent |
| E5 | Route Osc B to Filter B |
| E6 | Osc B Motion |
| E7 | Osc B Index |
| E8 | Osc B Gain |

## Pad 4 - Velocity

| Encoder Knob | Parameter |
|---|---|
| E1 | Velocity Target |
| E2 | Velocity To Level A |
| E3 | Velocity To Level B |
| E4 | Velocity To Level B |
| E5 | Velocity To Filter Env |
| E6 | Velocity To Attack |
| E7 | Velocity Shift |
| E8 | Velocity To Mod |

## Pad 5 - Modulator A

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Mod A Target |
| E2 | Mod A Rate |
| E3 | Mod A One Shot |
| E4 | Mod A Curve |
| E5 | Mod A On/Off |
| E6 | Mod A to Pitch |
| E7 | Mod A To Index |
| E8 | Mod A To Shift |

## Pad 6 - Modulator B

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Mod B Target |
| E2 | Mod B Rate |
| E3 | Mod B To Motion |
| E4 | Mod B Curve |
| E5 | Mod B On/Off |
| E6 | Mod B To Level |
| E7 | Mod B To Filter |
| E8 | Mod B to Mod A |

## Pad 7 - Filter Envelope

| Encoder Knob | Parameter |
|---|---|
| E1 | Filter Env Attack |
| E2 | Filter Env Decay |
| E3 | Filter Env Sustain |
| E4 | Filter Env Release |
| E5 | Filter Env Amount |
| E6 | n/a |
| E7 | n/a |
| E8 | n/a |

## Pad 8 - Envelopes (Axiom 25 Only)

| Encoder Knob | Parameter |
|---|---|
| E1 | Osc A Attack |
| E2 | Osc A Decay |
| E3 | Osc A Sustain |
| E4 | Osc A Release |
| E5 | Osc B Attack |
| E6 | Osc B Decay |
| E7 | Osc B Sustain |
| E8 | Osc B Release |

# NN19

| Fader | Parameter |
|---|---|
| F1 | Amp Env Attack |
| F2 | Amp Env Decay |
| F3 | Amp Env Sustain |
| F4 | Amp Env Release |
| F5 | Filter Env Attack |
| F6 | Filter Env Decay |
| F7 | Filter Env Sustain |
| F8 | Filter Env Release |
| F9 | n/a |

| Fader Buttons | Parameter |
|---|---|
| F10 | Filter Env Invert |
| F11 | Filter On/Off |
| F12 | Filter Mode |
| F13 | LFO Wave |
| F14 | LFO Dest |
| F15 | LFO Sync Enable |
| F16 | Osc Kbd Track |
| F17 | n/a |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when each of the Trigger pads have been pressed.

## Pad 1 - Filter

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Filter Freq |
| E2 | Filter Res |
| E3 | Filter Kbd Track |
| E4 | Filter Env Amount |
| E5 | Filter Freq Ext Mod |
| E6 | Filter Freq Mod Wheel Amount |
| E7 | Filter Res Mod Wheel Amount |
| E8 | Filter Decay Mod Wheel Amount |

## Pad 2 - Oscillator

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Osc Oct |
| E2 | Osc Semitone |
| E3 | Osc Fine Tune |
| E4 | Osc Kbd Track *(Axiom 25 Only)* |
| E5 | Osc Env Amount |
| E6 | High Quality Interpolation |
| E7 | Sample start |
| E8 | Sample Start Velocity Amount |

## Pad 3 - N/A

| Encoder Knob | Parameter |
|---|---|
| E1 | n/a |
| E2 | n/a |
| E3 | n/a |
| E4 | n/a |
| E5 | n/a |
| E6 | n/a |
| E7 | n/a |
| E8 | n/a |

## Pad 4 - Velocity

| Encoder Knob | Parameter |
|---|---|
| E1 | Filter Env Vel Amount |
| E2 | Filter Decay Vel Amount |
| E3 | Amp Vel Amount |
| E4 | Amp Attack Vel Amount |
| E5 | Sample Start Vel Amount |
| E6 | n/a |
| E7 | n/a |
| E8 | n/a |

## Pad 5 - LFO

| Encoder Knob | Parameter |
|---|---|
| E1 | LFO Amount |
| E2 | LFO Rate |
| E3 | LFO Sync Enable *(Axiom 25 Only)* |
| E4 | LFO Dest *(Axiom 25 Only)* |
| E5 | LFO Wave *(Axiom 25 Only)* |
| E6 | LFO Mod Wheel Amount |
| E7 | LFO Ext Mod |
| E8 | Portamento |

## Pad 6 - N/A

| Encoder Knob | Parameter |
|---|---|
| E1 | n/a |
| E2 | n/a |
| E3 | n/a |
| E4 | n/a |
| E5 | n/a |
| E6 | n/a |
| E7 | n/a |
| E8 | n/a |

## Pad 7 - N/A

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | n/a |
| E2 | n/a |
| E3 | n/a |
| E4 | n/a |
| E5 | n/a |
| E6 | n/a |
| E7 | n/a |
| E8 | n/a |

## Pad 8 - Envelopes (Axiom 25 Only)

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Amp Env Attack |
| E2 | Amp Env Decay |
| E3 | Amp Env Sustain |
| E4 | Amp Env Release |
| E5 | Filter Env Attack |
| E6 | Filter Env Decay |
| E7 | Filter Env Sustain |
| E8 | Filter Env Release |

# NN-XT

⚠ *The following table lists all mapped Axiom controls for the NN-XT Sampler.*

| Encoder Knob | Parameter |
| --- | --- |
| E1 | Filter Freq |
| E2 | Filter Res |
| E3 | Mod Env Decay |
| E4 | High Quality Interpolation |
| E5 | Amp Env Attack |
| E6 | Amp Env Decay |
| E7 | Amp Env Release |
| E8 | n/a |

# Dr. Rex

⚠ *The following tables list all mapped Axiom controls for Dr. Rex.*

| Fader | Parameter |
| --- | --- |
| F1 | Amp Env Attack |
| F2 | Amp Env Decay |
| F3 | Amp Env Sustain |
| F4 | Amp Env Release |
| F5 | Filter Env Attack |
| F6 | Filter Env Decay |
| F7 | Filter Env Sustain |
| F8 | Filter Env Release |
| F9 | n/a |

| Fader Buttons | Parameter |
|---|---|
| F10 | n/a |
| F11 | Filter On/Off |
| F12 | Filter Mode |
| F13 | LFO1 Wave |
| F14 | LFO1 Dest |
| F15 | LFO Sync Enable |
| F16 | n/a |
| F17 | n/a |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when each of the Trigger pads have been pressed.

## Pad 1 - Global Controls

| Encoder Knob | Parameter |
|---|---|
| E1 | Filter Freq |
| E2 | Filter Res |
| E3 | Filter Env Amount |
| E4 | Osc Env Amount |
| E5 | LFO1 Amount |
| E6 | LFO1 Rate |
| E7 | Osc Octave |
| E8 | Osc Fine Tune |

## Pad 8 - Envelopes (Axiom 25 Only)

| Encoder Knob | Parameter |
|---|---|
| E1 | Amp Env Attack |
| E2 | Amp Env Decay |
| E3 | Amp Env Sustain |
| E4 | Amp Env Release |
| E5 | Filter Env Attack |
| E6 | Filter Env Decay |
| E7 | Filter Env Sustain |
| E8 | Filter Env Release |

## ReDrum

| Fader | Parameter |
| --- | --- |
| F1 | Drum 1 Level |
| F2 | Drum 2 Level |
| F3 | Drum 3 Level |
| F4 | Drum 4 Level |
| F5 | Drum 5 Level |
| F6 | Drum 6 Level |
| F7 | Drum 7 Level |
| F8 | Drum 8 Level |
| F9 | n/a |

| Fader Buttons | Parameter |
| --- | --- |
| F10 | Drum 1 Mute/Solo |
| F11 | Drum 2 Mute/Solo |
| F12 | Drum 3 Mute/Solo |
| F13 | Drum 4 Mute/Solo |
| F14 | Drum 5 Mute/Solo |
| F15 | Drum 6 Mute/Solo |
| F16 | Drum 7 Mute/Solo |
| F17 | Drum 8 Mute/Solo |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when Trigger pads 1 through 4 have been pressed.

## Pad 1 - Level (Axiom 25 Only)

| Encoder Knob | Parameter |
|---|---|
| E1 | Drum 1 Level |
| E2 | Drum 2 Level |
| E3 | Drum 3 Level |
| E4 | Drum 4 Level |
| E5 | Drum 5 Level |
| E6 | Drum 6 Level |
| E7 | Drum 7 Level |
| E8 | Drum 8 Level |

## Pad 2 - Pan

| Encoder Knob | Parameter |
|---|---|
| E1 | Drum 1 Pan |
| E2 | Drum 2 Pan |
| E3 | Drum 3 Pan |
| E4 | Drum 4 Pan |
| E5 | Drum 5 Pan |
| E6 | Drum 6 Pan |
| E7 | Drum 7 Pan |
| E8 | Drum 8 Pan |

## Pad 3 - Mixer Send 1

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Drum 1 Send 1 |
| E2 | Drum 2 Send 1 |
| E3 | Drum 3 Send 1 |
| E4 | Drum 4 Send 1 |
| E5 | Drum 5 Send 1 |
| E6 | Drum 6 Send 1 |
| E7 | Drum 7 Send 1 |
| E8 | Drum 8 Send 1 |

## Pad 4 - Mixer Send 2

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | Drum 1 Send 2 |
| E2 | Drum 2 Send 2 |
| E3 | Drum 3 Send 2 |
| E4 | Drum 4 Send 2 |
| E5 | Drum 5 Send 2 |
| E6 | Drum 6 Send 2 |
| E7 | Drum 7 Send 2 |
| E8 | Drum 8 Send 2 |

### Editing Drum Sounds in ReDrum

Holding down the Shift button and pressing the Track "<" or ">" button lets you choose an individual drum sound that you want to edit. In this instance the Encoder knobs are mapped to the parameters listed in the following table:

| Encoder Knob | Parameter |
|---|---|
| E1 | Pitch |
| E2 | Length |
| E3 | Decay/Gate Mode |
| E4 | Vel To Level |
| E5 | Tone/Sample Start/PB Rate |
| E6 | Vel To Tone, Sample Start or PB |
| E7 | PB Amount (Drums 6 and 7 Only) |
| E8 | Pan |

## Matrix

⚠ *The following table lists all mapped Axiom controls for the Matrix sequencer.*

| Axiom Control | Function |
|---|---|
| Trigger Pad 4 | Run |
| Encoder Knob E1 | Bank Select |
| Encoder Knob E2 | Pattern Select in Bank |
| Encoder Knob E3 | n/a |
| Encoder Knob E4 | n/a |
| Encoder Knob E5 | Resolution |
| Encoder Knob E6 | n/a |
| Encoder Knob E7 | n/a |
| Encoder Knob E8 | n/a |

# RPG-8

⚠ *The following tables list all Axiom control assignments for the RPG-8 Arpeggiator.*

| Trigger Pad | Function |
|---|---|
| P1 | Arpeggiator Enable |
| P2 | Single Note Repeat |
| P3 | Sync |
| P4 | Pattern Enable |

| Encoder Knob | Parameter |
|---|---|
| E1 | Velocity/Manual |
| E2 | Mode |
| E3 | Octave |
| E4 | Insert |
| E5 | Octave Shift |
| E6 | Rate |
| E7 | Gate Length |
| E8 | Pattern Step Count |

## Accessing the RPG-8 Pattern Steps

The following tables list the Fader button assignments when either of the Track buttons ("<" or ">")are pressed while the Shift button is held down.

### Shift + Track "<"

| Fader Buttons | Pattern Step |
| :---: | :---: |
| F10 | Pattern Step 1 |
| F11 | Pattern Step 2 |
| F12 | Pattern Step 3 |
| F13 | Pattern Step 4 |
| F14 | Pattern Step 5 |
| F15 | Pattern Step 6 |
| F16 | Pattern Step 7 |
| F17 | Pattern Step 8 |
| F18 | n/a |

### Shift + Track ">"

| Fader Buttons | Pattern Step |
| :---: | :---: |
| F10 | Pattern Step 9 |
| F11 | Pattern Step 10 |
| F12 | Pattern Step 11 |
| F13 | Pattern Step 12 |
| F14 | Pattern Step 13 |
| F15 | Pattern Step 14 |
| F16 | Pattern Step 15 |
| F17 | Pattern Step 16 |
| F18 | n/a |

# Record Devices

## Main Mixer Channels

| Fader | Parameter |
|---|---|
| F1 | FX1 Send Level |
| F2 | FX2 Send Level |
| F3 | FX3 Send Level |
| F4 | FX4 Send Level |
| F5 | FX5 Send Level |
| F6 | FX6 Send Level |
| F7 | FX7 Send Level |
| F8 | FX8 Send Level |
| F9 | n/a |

| Fader Buttons | Parameter |
|---|---|
| F10 | FX1 Send On |
| F11 | FX2 Send On |
| F12 | FX3 Send On |
| F13 | FX4 Send On |
| F14 | FX5 Send On |
| F15 | FX6 Send On |
| F16 | FX7 Send On |
| F17 | FX8 Send On |
| F18 | n/a |

The following tables list Axiom Encoder knob assignments when each of the Trigger pads have been pressed.

## Pad 1 - Home

| Encoder Knob | Parameter |
|---|---|
| E1 | Input Gain |
| E2 | Invert Phase |
| E3 | Insert Pre |
| E4 | Dyn Post EQ |
| E5 | Bypass Insert FX |
| E6 | n/a |
| E7 | Width |
| E8 | Pan |

## Pad 2 - Compressor

| Encoder Knob | Parameter |
|---|---|
| E1 | C Threshold |
| E2 | C Release |
| E3 | C Ratio |
| E4 | C Peak |
| E5 | C Fast Atk |
| E6 | n/a |
| E7 | n/a |
| E8 | Comp On |

## Pad 3 - Gate

| Encoder Knob | Parameter |
|---|---|
| E1 | G Threshold |
| E2 | G Hold |
| E3 | G Release |
| E4 | G Range |
| E5 | G Fast Atk |
| E6 | Expander |
| E7 | Key On |
| E8 | Gate On |

## Pad 4 - Sends (Axiom 25 Only)

| Encoder Knob | Parameter |
|---|---|
| E1 | FX1 Send Level |
| E2 | FX2 Send Level |
| E3 | FX3 Send Level |
| E4 | FX4 Send Level |
| E5 | FX5 Send Level |
| E6 | FX6 Send Level |
| E7 | FX7 Send Level |
| E8 | FX8 Send Level |

## Pad 5 - EQ Top

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | EQ On |
| E2 | EQ E Mode |
| E3 | n/a |
| E4 | Filters On S/C |
| E5 | LPF On |
| E6 | LPF Frequency |
| E7 | HPF On |
| E8 | HPF Frequency |

## Pad 6 - EQ Hi

| Encoder Knob | Parameter |
|:---:|:---:|
| E1 | HF Gain |
| E2 | HF Frequency |
| E3 | HF Bell |
| E4 | HF On |
| E5 | HMF Gain |
| E6 | HMF Frequency |
| E7 | HMF Q |
| E8 | HMF On |

## Pad 7 - EQ Low

| Encoder Knob | Parameter |
|---|---|
| E1 | LF Gain |
| E2 | LF Frequency |
| E3 | LF Bell |
| E4 | LF on |
| E5 | LMF Gain |
| E6 | LMF Frequency |
| E7 | LMF Q |
| E8 | LMF On |

## Pad 8 - N/A

| Encoder Knob | Parameter |
|---|---|
| E1 | n/a |
| E2 | n/a |
| E3 | n/a |
| E4 | n/a |
| E5 | n/a |
| E6 | n/a |
| E7 | n/a |
| E8 | n/a |