

M-AUDIO

HyperControl

for Ableton Live

English

User Guide

What Is HyperControl?	3
HyperControl Requirements	4
Ableton Live Software:	4
Axiom Pro Hardware:	4
HyperControl Installation	4
Controlling Live through Axiom Pro and HyperControl	4
Axiom Pro Hardware Controls	7
HyperControl Display and Soft-Keys	11
Live Device Mappings	12
Instrument Devices	12
Analog	12
Electric	13
Impulse	14
Operator	15
Simpler	16
Tension	17
Arpeggiator	18
Chord	19
Pitch & Random	20
Scale & Velocity	21
Auto Filter & Auto Pan	22
Beat Repeat	23
Chorus	24
Compressor I & Compressor II	25
EQ Four	26
EQ Three & Erosion	27
Filter Delay	28
Flanger	29
Gate & Grain Delay	30
Phaser	31
Ping Pong & Redux	32
Resonators	33
Reverb	34
Simple Delay & Utility	35
Vinyl Distortion	36

What Is HyperControl?

HyperControl is a powerful technology that automatically maps your Axiom Pro controls (i.e., knobs, buttons, etc.) to the on-screen controls of Live. This helps you make music more quickly since you no longer have to perform the tedious and time-consuming task of assigning MIDI controls.

Furthermore, since HyperControl is a two-way communication protocol, your Axiom Pro hardware and Live software always remain synchronized to each other. For example, if a knob is turned on Axiom Pro, its corresponding knob in Live will update. Alternatively, if an on-screen knob is turned within Live (using the mouse), the corresponding knob position of Axiom Pro (as shown on the LCD display) updates as well. If a new Live Device is selected (or a different Device within the same Chain), the parameter names and various button, knob, and slider¹ positions automatically update on the Axiom Pro display. This makes Axiom Pro feel like a “dedicated” hardware controller since the knobs and LCD screen are tightly integrated with Live and always reflect what is currently happening within the application.

Finally, the Axiom Pro controller can generate more than just MIDI commands—QWERTY key commands can also be sent, emulating Live keyboard shortcuts. This allows the controller to have “deep” integration into Live, and allows menu functions like copy, undo and many other features to be controlled right from Axiom Pro. This minimizes the amount of time you’ll spend using the mouse and computer keyboard to control your software.

In short, these features let you use Live more intuitively and give you more “hands on” control of your software to inspire your creativity.

¹ Only available on Axiom Pro 49/61.

HyperControl Requirements

Ableton Live Software:

Please note that HyperControl requires Live version 7.0.15 or later. Earlier versions of Live do not support HyperControl technology.

Axiom Pro Hardware:

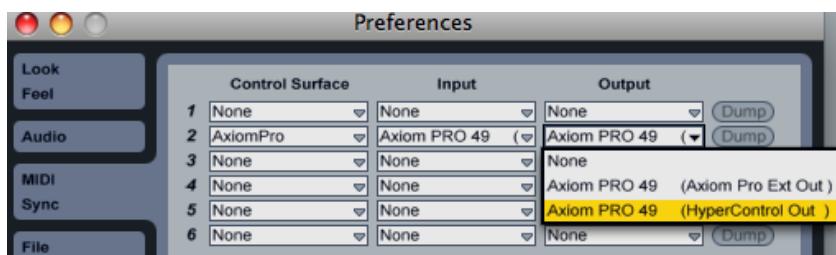
HyperControl requires the presence of an Axiom Pro controller on your computer and this document assumes your Axiom Pro keyboard has already been installed and connected to your system. To learn more about this installation procedure, please see the Axiom Pro Quick Start Guide.

HyperControl Installation

1. HyperControl is built into Live since version 7.0.15 and later. No additional driver or software installation is required.
2. To enable HyperControl in Live with Axiom Pro, choose Preferences from the Live menu (Mac) or Options menu (PC).
3. In the Control Surface column, choose “Axiom Pro” from an unused slot.



4. From the Input and Output columns, choose HyperControl² In and HyperControl Out² respectively.



5. Under MIDI Ports, turn on the Axiom Pro HyperControl and USB inputs for Track.

MIDI Ports	Track	Sync	Remote
▷ Input: Axiom Pro 49 (Axiom Pro USB A In)	On	Off	Off
▷ Input: AxiomPro Input (Axiom Pro 49 (Hype	On	Off	Off
▷ Input: Axiom Pro 49 (Axiom Pro Ext In)	Off	Off	Off

6. Close the Preferences window. You should now be able to control Live with HyperControl.

² Windows XP, Vista and Mac OS X 10.4 (Tiger) users:

When using Axiom Pro class-compliant (i.e. without installing the M-Audio driver) in Windows XP/Vista or in Mac OS X 10.4 (Tiger), the Axiom Pro MIDI ports will not be displayed with their proper port names.

Windows XP or Vista users:

Please follow the driver installation instructions found in the printed Quick Start Guide.

Mac OS X 10.4 (Tiger) users:

No Mac drivers are available, since the class-compliant MIDI driver built into Mac OS X supports all features of Axiom Pro. Please see the table below for more information on port naming.

Axiom Pro Class-Compliant Port Names per Operating System

Macintosh	Mac OS X 10.4 MIDI Input Ports	Mac OS X 10.5 MIDI Input Ports
Axiom Pro 61 ³ USB A In	Axiom Pro 61 Port 1	Axiom Pro 61 USB A In
Axiom Pro 61 ³ HyperControl In	Axiom Pro 61 Port 2	Axiom Pro 61 HyperControl In
Axiom Pro 61 ³ MIDI In	Axiom Pro 61 Port 3	Axiom Pro 61 MIDI In
Axiom Pro 61 ³ USB B In	Axiom Pro 61 Port 4	Axiom Pro 61 USB B In
Axiom Pro MIDI Output Ports	Mac OS X 10.4 MIDI Output Ports	Mac OS X 10.5 MIDI Output Ports
Axiom Pro 61 ³ MIDI Out	Axiom Pro 61 Port 1	Axiom Pro 61 MIDI Out
Axiom Pro 61 ³ HyperControl Out	Axiom Pro 61 Port 2	Axiom Pro 61 HyperControl Out

Windows	Windows XP MIDI Input Ports	Windows Vista MIDI Input Ports
Axiom Pro 61 ³ USB A In	USB Audio Device	Axiom Pro 61
Axiom Pro 61 ³ HyperControl In	USB Audio Device [2]	MIDIIN2 Axiom Pro 61
Axiom Pro 61 ³ MIDI In	USB Audio Device [3]	MIDIIN3 Axiom Pro 61
Axiom Pro 61 ³ USB B In	USB Audio Device [4]	MIDIIN4 Axiom Pro 61
Axiom Pro MIDI Output Ports	Windows XP MIDI Output Ports	Windows Vista MIDI Output Ports
Axiom Pro 61 ³ MIDI Out	USB Audio Device	Axiom Pro 61
Axiom Pro 61 ³ HyperControl Out	USB Audio Device [2]	MIDIOUT2 Axiom Pro 61

³ These MIDI port names will display the corresponding number of keys, based on the Axiom Pro model you use: 25, 49 or 61.

Controlling Live through Axiom Pro and HyperControl

Live includes a variety of different “Devices” and “Racks” that can be created and added to each track in your session. You can switch between controlling specific track Devices (and Devices within a Rack or “Chain” of effects) by using the Mode button on Axiom Pro. The Mode button will toggle between Mixer control (which lets you adjust track volume, pan and send amounts) and Device control, which automatically maps Macro and Device-specific parameters to the Axiom Pro encoder knobs.

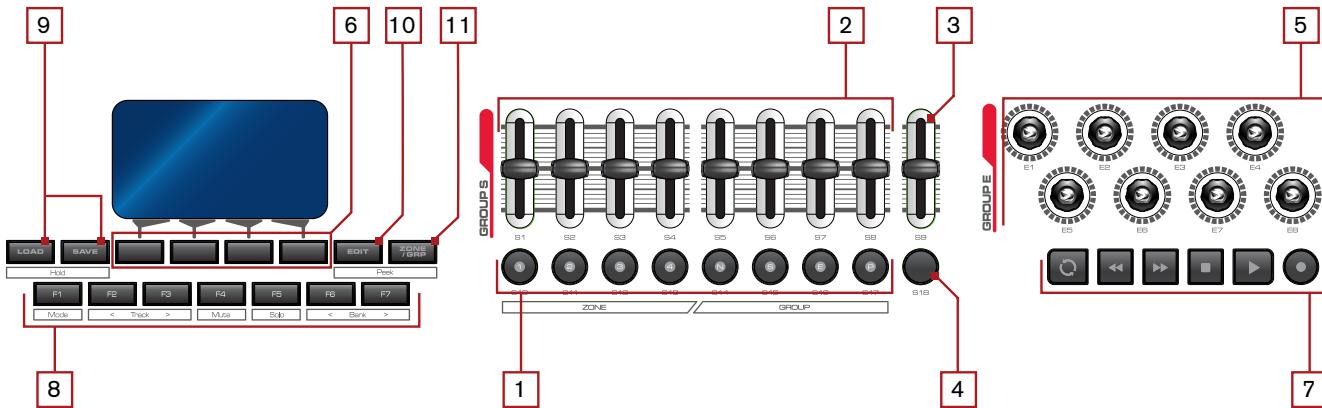
In Mixer mode, the Axiom Pro sliders⁴ and transport buttons will control track volume and Live’s transport, respectively. The encoders will automatically map to track Pan and Send parameters.⁵ The track < and > buttons will allow you to select the previous and next tracks in your session.

In Device mode, encoders are mapped to Rack Macro knobs by default. For tracks that use single Devices that are not combined within a Rack, the Axiom Pro knobs are mapped to the Device’s parameters. Additionally, the Axiom Pro knobs can automatically be linked to other Device parameters on a track simply by selecting the Device you wish to control from the Device pane below the Tracks in Session/Arrangement view. For example, if you wish to use HyperControl to control a track that uses Filter Delay, simply select the Filter Delay from the track’s chain of effects. The Axiom Pro controls will automatically map to the Filter Delay’s parameters.

⁴ Only available on Axiom Pro 49/61

⁵ On Axiom Pro 25, the encoders default to control track volume. The four soft keys give access to the Volume, Pan, Send A and Send B parameters respectively.

Axiom Pro Hardware Controls



- Slider Buttons⁶** – These can be used to select, record-arm, solo and mute tracks within Live. Repeatedly pressing the Flip button [4] cycles through the functions (track select, solo, etc.) for the slider buttons.
- Sliders⁶** – These automatically map to track volume within your Live session.
- Master Slider⁶** – This slider automatically maps to the master fader in your session.
- Flip Button⁶** – Use this to cycle among four modes for the slider buttons: Track-Select, Record-Arm, Mute, and Solo.
- Encoder Knobs** – The functionality of the encoder knobs varies depending whether you're in Mixer mode or Device mode.

Mixer mode:

In Mixer mode, the encoder knobs are automatically mapped to track Pan and Send A, B, and C levels (which is determined by selecting the Pan, Send A, Send B, and Send C soft-key buttons below the LCD).⁷

Device mode:

In Device mode, the encoder knobs automatically map to the currently selected Device on whatever track is selected in Live. When you select an Instrument or Drum Rack, the encoders map to the Rack's macro functions. When a single Device is selected, the encoders will map to the Device's specific parameters. The soft-keys below the LCD will toggle between multiple pages of parameters.

- Soft-Keys** – These four buttons access the HyperControl menus (known as "Pages") displayed along the bottom of the LCD screen. Each page contains various parameters that correspond to the on-screen parameters of Live Devices and Racks.

⁶ Only available on Axiom Pro 49/61.

⁷ On Axiom Pro 25, the encoders default to control track volume. The four soft keys give access to the Volume, Pan, Send A and Send B parameters respectively.

- 7. Transport Controls** – These buttons have different functions depending on whether you're in Session or Arrangement view.

Control		Mapping in Session View	Mapping in Arrangement View
	LOOP	TRIGGER SCENE	LOOP ON/OFF
	REWIND	SCENE UP	REWIND
	FAST FORWARD	SCENE DOWN	FAST FORWARD
	STOP	STOP	STOP
	PLAY	PLAY	PLAY
	RECORD	RECORD	RECORD

- 8. F-Keys** – These buttons let you navigate through your Live session quickly without having to use your QWERTY keyboard.

✓ **Axiom Pro 25 Users:**

Due to space limitations, Axiom Pro 25 does not feature dedicated F-Keys. Instead, the Soft-Keys on the bottom row can be converted to F-Keys by pressing the “F1-F4” Function button on the top row. Note that Axiom Pro 25 only has hardware buttons for F-Keys 1-4 (the functions for F-Keys F5-F7 can be accessed by simultaneously holding F-Key F1 and pressing F2-F4).

F1 (Mode) Switch between Mixer and Device modes

F2 (< Track) Select previous track

F3 (> Track) Select next track

F4 (Mute) Mute selected track

F5 (Solo) Solo selected track

✓ **Axiom Pro 25 Users:**

Holding Mode (F1) and pressing F4 will replicate the function of F5.

F6 (< Bank) Select previous bank

✓ **Axiom Pro 25 Users:**

Holding Mode (F1) and pressing F2 will replicate the function of F6.

F7 (> Bank) Select next bank

✓ **Axiom Pro 25 Users:**

Holding Mode (F1) and pressing F3 will replicate the function of F7.

9. Load Button – This button brings up a prompt allowing you to load patches stored in Axiom Pro. Loading of patches is covered in the “Function Buttons and Soft Keys” section of the Axiom Pro User Guide.

Save Button – This button brings up a prompt allowing you to save the current settings of your Axiom Pro. Saving of patches is covered in the “Function Buttons and Soft Keys” section of the Axiom Pro User Guide.

Hold (Load + Save Buttons) – By default, the LCD screen displays the position and status of the last control that was moved. For example, if the screen is displaying the status of the drum pad group and you turn an encoder knob, the LCD will immediately switch to the encoder group, highlight the encoder that was turned, and display that encoder’s associated parameter and value on the lower-left side of the screen.

Whenever you change pages using the Soft-Keys, the LCD screen displays the parameter names assigned to each encoder knob. In certain cases, you may wish to “hold” this information on the LCD screen, preventing the screen from changing to a graphical representation when a control is moved. To do this, simultaneously press and hold the Save and Load buttons.

When the display is locked, if you move a control outside the “locked” group, you will still see the control’s parameter name and value in the display, but the text on the LCD screen will remain in place.

Pressing the Save and Load buttons again will disable the Hold feature.

✓ Why do I need patches?

Doesn’t HyperControl assign controls automatically?

HyperControl technology automatically handles the assignment of most Axiom Pro controls and in many cases, you will not need to load or save any Axiom Pro patches.

However, HyperControl technology does not assign the performance controls (drum pads, keyboard zones, sustain/expression pedals, etc.) and the numerical keypad⁸.

The numerical keypad is not automatically assigned, so that you can still customize some of the Axiom Pro controls to your preference even if HyperControl is in use. For example, you can assign Ableton Live keyboard shortcuts to the buttons of the Axiom Pro keypad. Before you begin customizing the keypad, note that Axiom Pro ships from the factory with a number of useful patches that may already assign the numerical keypad to functions you wish to use. Please see Appendix A at the end of the Axiom Pro User Guide to learn how each factory patch is configured.

The performance controls are not automatically assigned by HyperControl so that you can set note, zone, and other assignments to your preference. For example, your virtual instrument may require you to assign the pads to send specific MIDI note or velocity values. Alternatively, you may wish to configure keyboard zones in a specific way to help you accomplish a specific task. This can be done through Edit mode on Axiom Pro. Please see the Axiom Pro User Guide to learn how to do this.

⁸ Only available on Axiom Pro 49/61.

10. Edit Button – This button lets you enter and exit Edit mode.

When using HyperControl, many of the Axiom Pro controls (i.e., buttons, knobs, transport controls, etc.) are automatically assigned to the on-screen controls of your software. These automatic assignments cannot be edited. However, you can customize the numerical keypad⁹ and performance controls (drum pads, keyboard zones, sustain/expression pedals, etc.) to your personal preference by using Edit mode.

This mode is covered in greater detail in the “Edit Mode” section of the Axiom Pro User Guide.

 **NOTE:** *It is possible to set HyperControl to only map the Axiom Pro transport controls to your software while allowing all other control groups (encoder knobs, buttons, etc.) to function like a conventional MIDI controller. This is useful for users who have created their own fully-customized Axiom Pro patches for their audio applications but would still like the Axiom Pro transport controls to automatically map to the software that they are using.*

To do this, enter Edit mode and change the “HyperControl” parameter (from the main menu) from “Normal” to “Transport.” For more information, see the “Edit Mode” section of the Axiom Pro User Guide.

Note that HyperControl “Transport” and “Normal” modes can be toggled on the fly while HyperControl is active. This lets you switch between HyperControl’s automatic track and plug-in parameter mapping to your own custom controller assignments and MIDI mappings. This gives you even more hands-on control over Live features that you frequently use.

11. Zone/Group Button – This button switches the functionality of the buttons beneath the sliders (on Axiom Pro 49/61) or Transport control (on Axiom Pro 25) and allows you to select the Performance Groups and Zones. When the button is not illuminated (i.e., not pressed), the associated buttons send out HyperControl commands. When the button is pressed, it becomes illuminated, and the associated buttons can then be used to activate/deactivate Zones and Groups. The “Edit Mode > Zones” section of the Axiom Pro User Guide covers this subject in great detail.

Peek (Edit + Zone/Grp Buttons) – You can return to view knob assignments at any time by simultaneously pressing the Edit and Zone/Grp buttons. For example, if knob positions are being displayed on screen but you would like to return to the top level screen that shows the encoder assignments press the Edit and Zone/Grp buttons.

The Peek function also lets you check the current value of a specific knob without changing its corresponding Live parameter. To do this, press and hold the Edit and Zone/Grp buttons while moving the desired control. This will display the control’s current value without causing any changes to your Live Devices or tracks.

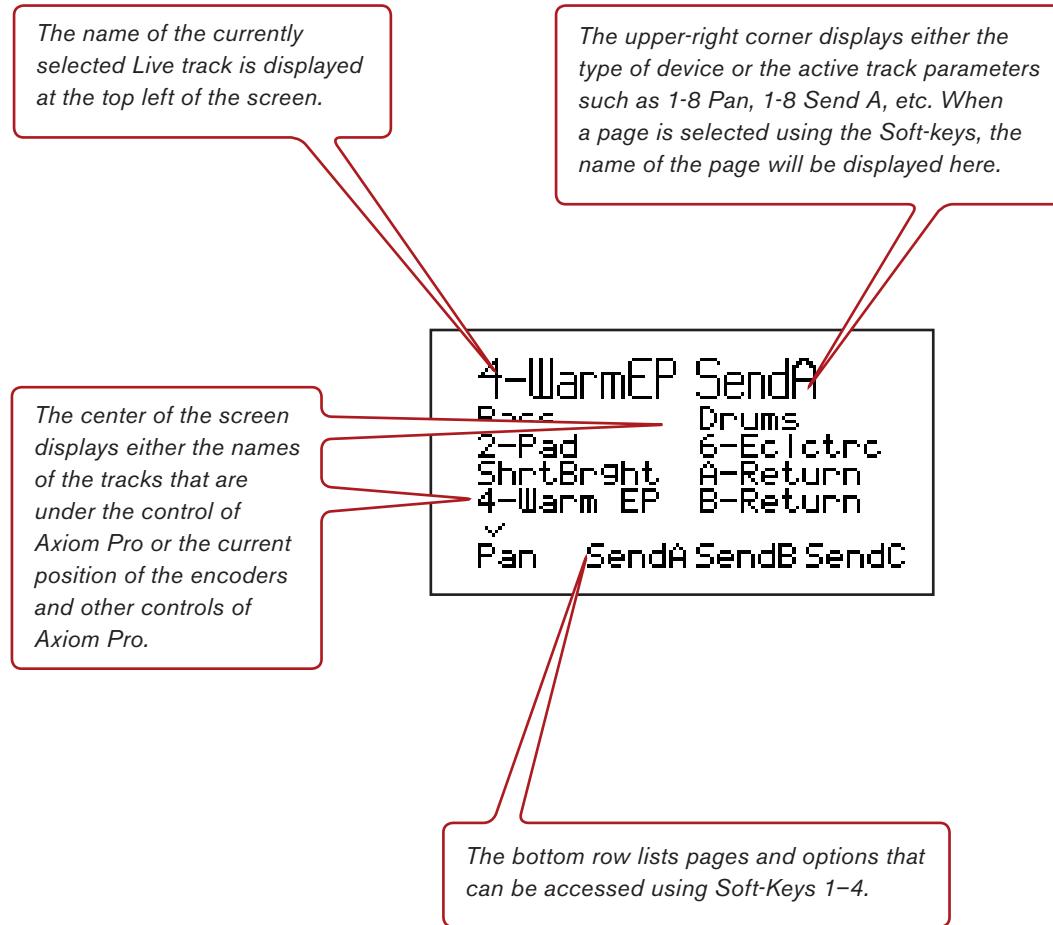
12. Numerical Keypad⁵ – The numerical keypad buttons can be programmed to send MIDI commands as well as QWERTY keystrokes (just like a computer keyboard). These QWERTY keystrokes can correspond to your audio application’s “keyboard shortcuts” allowing you to access various functions of your software directly from Axiom Pro (i.e., without having to touch your computer keyboard).

Axiom Pro ships with a variety of pre-programmed patches that map the numerical keypad buttons to popular DAWs (a detailed list of these patches can be found in Appendix A of the Axiom Pro User Guide). See the “Edit Mode > Control” section of the Axiom Pro User Guide to learn how to make customized patches for these buttons.

⁹ Only available on Axiom Pro 49/61.

HyperControl Display and Soft-Keys

The Axiom Pro display indicates what Device or Track is currently selected within Live and how the encoder knobs map to that Device's or Track's on-screen parameters. Below is an example of how Tracks appear on the LCD.



Live Device Mappings

Instrument Devices

Analog

Each time you select a track associated with Analog and you press the Mode button to enter Device mode, your Axiom Pro controls map to the default assignments listed in the table below. You can use the 4 soft-keys below the Axiom Pro LCD to toggle between Osc 1/2, Filter 1/2, LFO 1/2, and Amp 1/2 pages.



Axiom Pro Assignments

Page 1: Oscillators		Page 2: Filters	
Knob E1	OSC 1 Level	Knob E1	F1/F2 Mix for OSC 1
Knob E2	OSC 1 Octave	Knob E2	F1 Freq
Knob E3	OSC 1 Semi	Knob E3	F1 Reso
Knob E4	OSC 1 Shape	Knob E4	F1 Type
Knob E5	OSC 2 Level	Knob E5	F1/F2 Mix for OSC 2
Knob E6	OSC 2 Octave	Knob E6	F2 Freq
Knob E7	OSC 2 Semi	Knob E7	F2 Reso
Knob E8	OSC 2 Shape	Knob E8	F2 Type
Page 3: Filter Envelope		Page 4: Filter Modulation	
Knob E1	F1 Attack	Knob E1	F1 On/Off
Knob E2	F1 Decay	Knob E2	F1 Frequency < LFO1
Knob E3	F1 Sustain	Knob E3	F1 Frequency < Env
Knob E4	F1 Release	Knob E4	F1 Resonance < LFO1
Knob E5	F2 Attack	Knob E5	F2 On/Off
Knob E6	F2 Decay	Knob E6	F2 Frequency < LFO2
Knob E7	F2 Sustain	Knob E7	F2 Frequency < Env
Knob E8	F2 Release	Knob E8	F2 Resonance < LFO2
Page 5: Volume Envelopes		Page 6: Mix	
Knob E1	AMP1 Attack	Knob E1	AMP1 Level
Knob E2	AMP1 Decay	Knob E2	AMP1 Pan
Knob E3	AMP1 Sustain	Knob E3	LFO1 Shape
Knob E4	AMP1 Release	Knob E4	LFO1 Rate
Knob E5	AMP2 Attack	Knob E5	AMP2 Level
Knob E6	AMP2 Decay	Knob E6	AMP2 Pan
Knob E7	AMP2 Sustain	Knob E7	LFO2 Level
Knob E8	AMP2 Release	Knob E8	LFO2 Rate
Page 7: Output			
Knob E1	Volume		
Knob E2	Noise On/Off		
Knob E3	Noise Volume		
Knob E4	Noise Color		
Knob E5	Uni On/Off		
Knob E6	Uni Detune		
Knob E7	Vib On/Off		
Knob E8	Vib Amount		

Electric

Each time you select a track associated with Electric and you press the Mode button to enter Device mode, your Axiom Pro controls map to the default assignments listed in the table below. You can use the 4 soft-keys below the Axiom Pro's LCD to access parameters for Mallet, Fork, Damp, and Pickup.



Axiom Pro Assignments

Page 1: Mallet and Tine

Knob E1	Mallet Stiffness
Knob E2	Mallet Strength
Knob E3	Noise Pitch
Knob E4	Noise Decay
Knob E5	Noise Level
Knob E6	Fork Tine Color
Knob E7	Fork Tine Decay
Knob E8	Fork Tine Level

Page 2: Tone and Damper

Knob E1	Fork Tone Decay
Knob E2	Fork Tone Level
Knob E3	Fork Release
Knob E4	Damper Tone
Knob E5	Damper Att/Rel
Knob E6	Damper Level
Knob E7	OFF
Knob E8	OFF

Page 3: Pickup

Knob E1	Symmetry
Knob E2	Distance
Knob E3	Input
Knob E4	Output
Knob E5	Pickup Type
Knob E6	OFF
Knob E7	OFF
Knob E8	OFF

Page 4: Modulation

Knob E1	Mallet Stiffness < Velocity
Knob E2	Mallet Stiffness < Key
Knob E3	Mallet Strength < Velocity
Knob E4	Mallet Strength < Key
Knob E5	Noise < Key
Knob E6	Fork Tine < Key
Knob E7	Pickup Output < Key
Knob E8	OFF

Page 5: Global

Knob E1	Volume
Knob E2	Polyphony
Knob E3	Semitone
Knob E4	Detune
Knob E5	Keyboard Stretch
Knob E6	Pitchbend Range
Knob E7	OFF
Knob E8	OFF

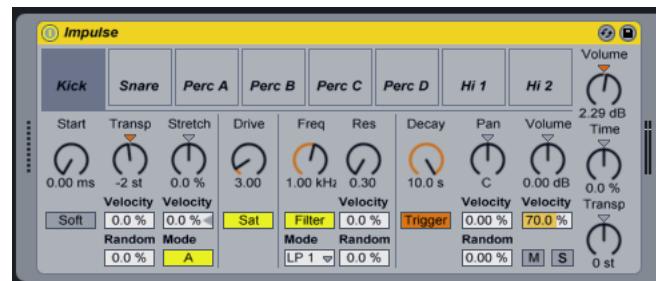
Impulse

Each time you select a track associated with Impulse and you press the Mode button to enter Device mode, your Axiom Pro controls map to the default assignments listed in the table below. You can use the 4 soft-keys below the Axiom Pro LCD to access parameters for Pad 1&2, Pad 3&4, Pad 5&6, and Pad 7&8.

Axiom Pro Assignments

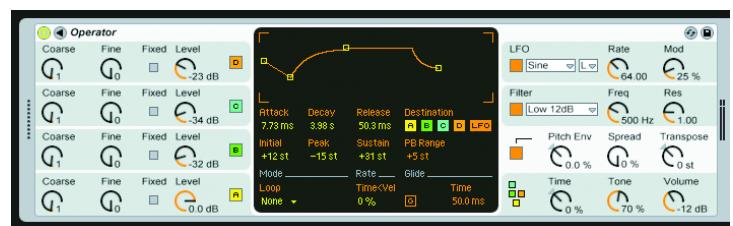
Page 1: Pads 1-8

Knob E1	Start
Knob E2	Transp (Transposition)
Knob E3	Stretch
Knob E4	Drive
Knob E5	Freq (Filter cutoff frequency)
Knob E6	Res (Filter resonance)
Knob E7	Pan
Knob E8	Pad Volume



Operator

Each time you select a track associated with Operator and you press the Mode button to enter Device mode, your Axiom Pro controls map to the default assignments listed in the table below. You can use the 4 soft-keys below the Axiom Pro LCD to toggle between parameters for Osc A/B/C/D, and access parameters for Filter, LFO, and Pitch.



Axiom Pro Assignments			
Page 1: Oscillators 1-4		Page 2: LFO	
Knob E1	Attack	Knob E1	Attack
Knob E2	Decay	Knob E2	Decay
Knob E3	Sustain	Knob E3	Sustain
Knob E4	Release	Knob E4	Release
Knob E5	Coarse	Knob E5	Rate
Knob E6	Fine	Knob E6	Mod (Modulation amount)
Knob E7	Level<Vel	Knob E7	Waveform
Knob E8	Level	Knob E8	Rate<Key
Page 3: Filter		Page 4: Pitch Mod	
Knob E1	Attack	Knob E1	Attack
Knob E2	Decay	Knob E2	Decay
Knob E3	Sustain	Knob E3	Sustain
Knob E4	Release	Knob E4	Release
Knob E5	Freq (Filter cutoff frequency)	Knob E5	Initial
Knob E6	Res (Filter resonance)	Knob E6	Time (Glide Time)
Knob E7	Freq<Vel	Knob E7	Pitch Env (Pitch envelope amount)
Knob E8	Envelope	Knob E8	Spread
Page 8: Routing			
Knob E1	Time<Key		
Knob E2	Pan		
Knob E3	Key (Key<Pan)		
Knob E4	Rnd (Rnd<Pan)		
Knob E5	Algorithm		
Knob E6	Time		
Knob E7	Tone		
Knob E8	Volume		

Simpler

Each time you select a track associated with Simpler and you press the Mode button to enter Device mode, your Axiom Pro controls map to the default assignments listed in the table below. You can use the 4 soft-keys below the Axiom Pro LCD to access parameters for Amp, Filt, LFO, and Pitch.



Axiom Pro Assignments

Page 1: Volume Envelope Loop		Page 2: Filt	
Knob E1	Attack	Knob E1	Attack
Knob E2	Decay	Knob E2	Decay
Knob E3	Sustain	Knob E3	Sustain
Knob E4	Release	Knob E4	Release
Knob E5	Start	Knob E5	Freq
Knob E6	Loop	Knob E6	Res
Knob E7	Length	Knob E7	Vel
Knob E8	Fade	Knob E8	Env
Page 3: LFO		Page 4: Pitch Envelope Global	
Knob E1	Attack	Knob E1	Attack
Knob E2	Rate	Knob E2	Decay
Knob E3	Key	Knob E3	Sustain
Knob E4	Type	Knob E4	Release
Knob E5	Volume < LFO	Knob E5	Glide Time
Knob E6	Filter cutoff < LFO	Knob E6	Spread
Knob E7	Pitch < LFO	Knob E7	Pan
Knob E8	Pan < LFO	Knob E8	Volume

Tension

Each time you select a track associated with Tension and you press the Mode button to enter Device mode, your Axiom Pro controls map to the default assignments listed in the table below. You can use the 4 soft-keys below the Axiom Pro LCD to access parameters for String, Filt, LFO, and Env.



Axiom Pro Assignments

Page 1: Excitator and String		Page 2: Damper	
Knob E1	Excitator Type	Knob E1	Damper On/Off
Knob E2	String Decay Time	Knob E2	Damper Mass
Knob E3	String Inharmonicity	Knob E3	Damper Stiffness
Knob E4	String Damping Amount	Knob E4	Damper Velocity
Knob E5	Mass/Protrusion/Force	Knob E5	Damper Position
Knob E6	Friction/Stiffness	Knob E6	Damper Damping
Knob E7	Excitator Velocity	Knob E7	Damper Position < Velocity
Knob E8	Excitator Position	Knob E8	Position On/off
Page 3: Termination and Pickup		Page 4: Body	
Knob E1	Termination On/Off	Knob E1	Body On/Off
Knob E2	Finger Mass	Knob E2	Body Type
Knob E3	Finger Stiffness	Knob E3	Body Size
Knob E4	Fret Stiffness	Knob E4	Body Decay
Knob E5	Pickup On/Off	Knob E5	Body Low Cut
Knob E6	Pickup Position	Knob E6	Body high Cut
Knob E7	Finger Mass < Vel.	Knob E7	String/Body Balance
Knob E8	Finger Mass < Key	Knob E8	Global Vol.
Page 5: Vibrato		Page 6: Filter	
Knob E1	Vibrato On/Off	Knob E1	Filter On/Off
Knob E2	Vib Delay	Knob E2	Filter Type
Knob E3	Vib Attack	Knob E3	Freq
Knob E4	Vib Rate	Knob E4	Reso
Knob E5	Vib Amount	Knob E5	Env < Cutoff
Knob E6	Vib > Mod Wheel Amount	Knob E6	Cutoff < LFO
Knob E7	Vib Error	Knob E7	Env < Reso
Knob E8	Global Volume	Knob E8	Reso < LFO
Page 7: Envelope and LFO		Page 8: Global	
Knob E1	Env On/Off	Knob E1	Unison On/Off
Knob E2	Attack	Knob E2	Fine Tuning (Detune)
Knob E3	Decay	Knob E3	Portamento On/Off
Knob E4	Sustain	Knob E4	Portamento Time
Knob E5	Release	Knob E5	Voices (Polyphony)
Knob E6	LFO On/Off	Knob E6	Keyboard Octave
Knob E7	LFO Type	Knob E7	Keyboard Semitone
Knob E8	LFO Rate	Knob E8	Volume

Arpeggiator

Each time you select Arpeggiator from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments			
Page 1: Style		Page 2: Pitch/Velocity	
Knob E1	Style	Knob E1	Transpose
Knob E2	Groove	Knob E2	Key
Knob E3	Offset	Knob E3	Steps
Knob E4	Rate	Knob E4	Distance
Knob E5	Retrigger	Knob E5	Velocity Decay
Knob E6	Retrigger no.	Knob E6	Target
Knob E7	Repeat	Knob E7	Velocity On/Off
Knob E8	Gate	Knob E8	Velocity Retrigger

Chord

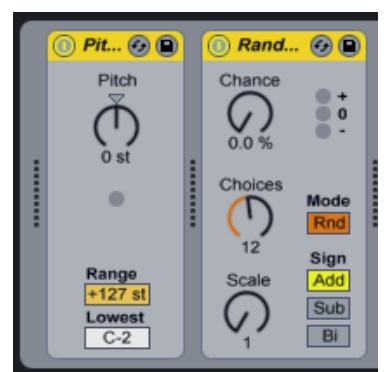
Each time you select Chord from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments			
Page 1: Shift		Page 2: %	
Knob E1	Shift 1	Knob E1	Shift % 1
Knob E2	Shift 2	Knob E2	Shift % 2
Knob E3	Shift 3	Knob E3	Shift % 3
Knob E4	Shift 4	Knob E4	Shift % 4
Knob E5	Shift 5	Knob E5	Shift % 5
Knob E6	Shift 6	Knob E6	Shift % 6
Knob E7	OFF	Knob E7	OFF
Knob E8	OFF	Knob E8	OFF

Pitch & Random

Each time you select Pitch and Random from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.

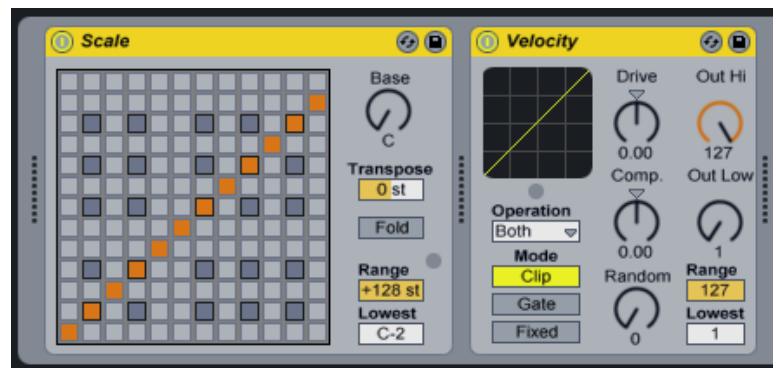


Axiom Pro Assignments

<i>Pitch</i>		<i>Random</i>	
Knob E1	Pitch	Knob E1	Chance
Knob E2	Range	Knob E2	Choices
Knob E3	Lowest	Knob E3	Scale
Knob E4	OFF	Knob E4	Sign
Knob E5	OFF	Knob E5	OFF
Knob E6	OFF	Knob E6	OFF
Knob E7	OFF	Knob E7	OFF
Knob E8	OFF	Knob E8	OFF

Scale & Velocity

Each time you select Scale and Velocity from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments

Scale		Velocity	
Knob E1	Bass	Knob E1	Drive
Knob E2	Transpose	Knob E2	Comp.
Knob E3	Range	Knob E3	Random
Knob E4	Lowest	Knob E4	Mode
Knob E5	OFF	Knob E5	Out Hi
Knob E6	OFF	Knob E6	Out Low
Knob E7	OFF	Knob E7	Range
Knob E8	OFF	Knob E8	Lowest

Auto Filter & Auto Pan

Each time you select Auto Filter and Auto Pan from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.

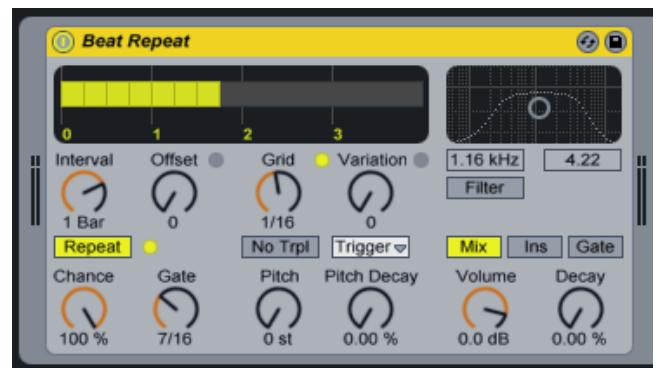


Axiom Pro Assignments

Auto Filter		Auto Pan	
Knob E1	Freq	Knob E1	Amount
Knob E2	Q	Knob E2	Rate
Knob E3	Attack	Knob E3	Phase
Knob E4	Release	Knob E4	Shape
Knob E5	Env. Amount	Knob E5	Shape Select
Knob E6	LFO Amount	Knob E6	Rate (Note)
Knob E7	Rate	Knob E7	Offset
Knob E8	Phase	Knob E8	Width

Beat Repeat

Each time you select Beat Repeat from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments

Page 1: Repeat Rate

Knob E1	Interval
Knob E2	Offset
Knob E3	Grid
Knob E4	Variation
Knob E5	Filter Freq
Knob E6	Filter Res
Knob E7	Volume
Knob E8	Decay

Page 2: Gate/Pitch

Knob E1	Chance
Knob E2	Gate
Knob E3	Pitch
Knob E4	Pitch Decay
Knob E5	Filter Freq
Knob E6	Filter Res
Knob E7	Volume
Knob E8	Decay

Chorus

Each time you select Chorus from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.

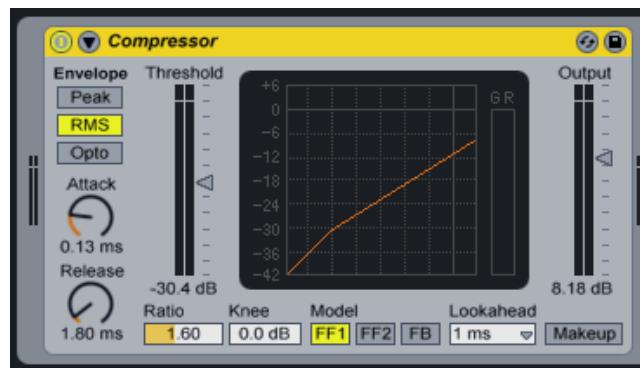
Axiom Pro Assignments

Knob E1	Delay 1 Time
Knob E2	Delay 2 Time
Knob E3	Mod Amount
Knob E4	Dry/Wet
Knob E5	Delay 1 HP
Knob E6	Delay 2 Mode
Knob E7	Mod Rate
Knob E8	Feedback



Compressor I & Compressor II

Each time you select Compressor I and Compressor II from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments							
Page 1: Compression				Page 2: Side Chain			
Knob E1	Threshold	Knob E1	External In On/Off				
Knob E2	Ratio	Knob E2	External In Gain				
Knob E3	Attack	Knob E3	External In Mix				
Knob E4	Release	Knob E4	Side Listen				
Knob E5	Knee	Knob E5	EQ On				
Knob E6	EF Mode	Knob E6	EQ Frequency				
Knob E7	Look Ahead	Knob E7	EQ Q				
Knob E8	Model	Knob E8	EQ Mode				
Page 3: Output							
Knob E1	EQ Gain						
Knob E2	Makeup Gain						
Knob E3	Output Gain						
Knob E4	OFF						
Knob E5	OFF						
Knob E6	OFF						
Knob E7	OFF						
Knob E8	OFF						

EQ Four

Each time you select EQ Four from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments

Page 1: EQ 1 & 2		Page 2: EQ 3 & 4	
Knob E1	Freq EQ1	Knob E1	Freq EQ3
Knob E2	Gain EQ1	Knob E2	Gain EQ3
Knob E3	Q EQ1	Knob E3	Q EQ3
Knob E4	Master Gain	Knob E4	Master Gain
Knob E5	Freq EQ2	Knob E5	Freq EQ4
Knob E6	Gain EQ2	Knob E6	Gain EQ4
Knob E7	Q EQ2	Knob E7	Q EQ4
Knob E8	OFF	Knob E8	OFF

EQ Three & Erosion

Each time you select EQ Three and Erosion from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.

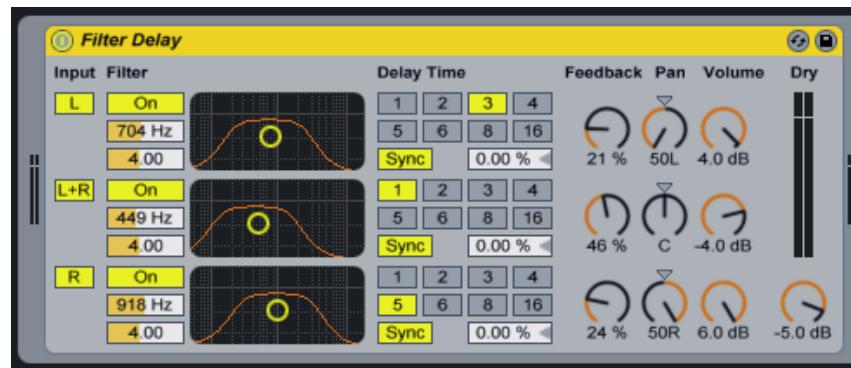


Axiom Pro Assignments

EQ Three		Erosion	
Knob E1	Gain Low	Knob E1	Freq
Knob E2	Gain Mid	Knob E2	Width
Knob E3	Gain Hi	Knob E3	Amount
Knob E4	OFF	Knob E4	Noise Wide Noise Sine
Knob E5	Freq Low	Knob E5	OFF
Knob E6	Freq Hi	Knob E6	OFF
Knob E7	Slope	Knob E7	OFF
Knob E8	OFF	Knob E8	OFF

Filter Delay

Each time you select a track associated with Filter Delay from Device Mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments							
Page 1: Input L Filter				Page 2: Input L+R Filter			
Knob E1	Freq			Knob E1	Freq		
Knob E2	Res			Knob E2	Res		
Knob E3	Delay Time			Knob E3	Delay Time		
Knob E4	Sync %			Knob E4	Sync %		
Knob E5	Feedback			Knob E5	Feedback		
Knob E6	Pan			Knob E6	Pan		
Knob E7	Volume			Knob E7	Volume		
Knob E8	Overall			Knob E8	Overall		
Page 3: Input R Filter							
Knob E1	Freq						
Knob E2	Res						
Knob E3	Delay Time						
Knob E4	Sync %						
Knob E5	Feedback						
Knob E6	Pan						
Knob E7	Volume						
Knob E8	Overall						

Flanger

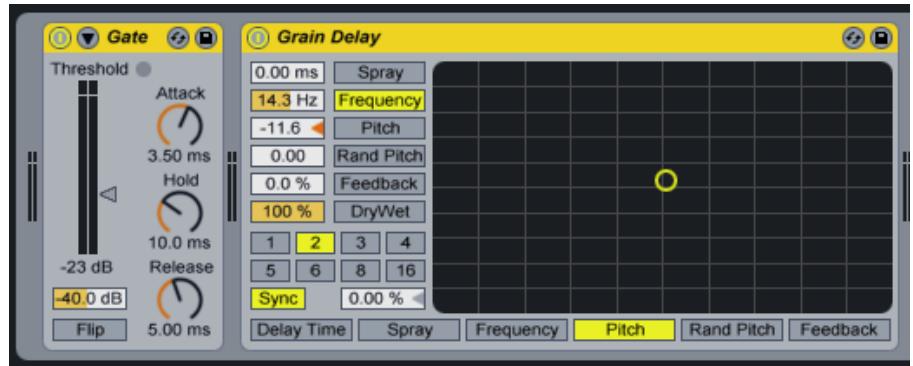
Each time you select Flanger from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments			
Page 1: Frequency Controls		Page 2: LFO/S&H	
Knob E1	Hi Pass	Knob E1	Amount
Knob E2	Dry/Wet	Knob E2	Rate
Knob E3	Delay Time	Knob E3	Phase
Knob E4	Feedback	Knob E4	Hz/note
Knob E5	Envelope	Knob E5	Offset
Knob E6	Attack	Knob E6	Note Rate
Knob E7	Release	Knob E7	Width
Knob E8	OFF	Knob E8	Shape

Gate & Grain Delay

Each time you select Gate and Grain Delay from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.

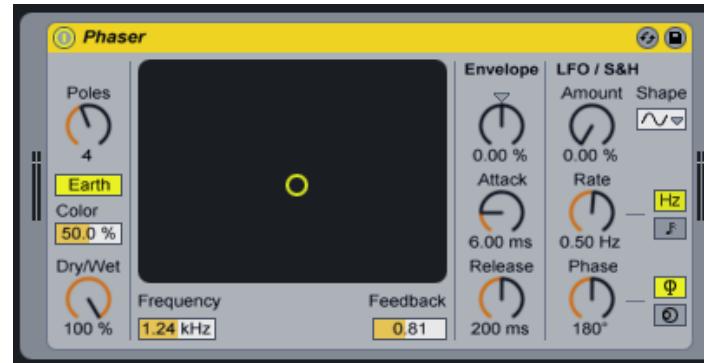


Axiom Pro Assignments

Gate		Grain Delay	
Knob E1	Threshold	Knob E1	Spray Time
Knob E2	Gain	Knob E2	Frequency
Knob E3	OFF	Knob E3	Pitch
Knob E4	OFF	Knob E4	Rand Pitch
Knob E5	Attack	Knob E5	Feedback
Knob E6	Hold	Knob E6	Dry/Wet
Knob E7	Release	Knob E7	Sync %
Knob E8	OFF	Knob E8	Time

Phaser

Each time you select Phaser from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments			
Page 1: Frequency Controls		Page 2: LFO/S&H	
Knob E1	Poles	Knob E1	Amount
Knob E2	Color	Knob E2	rate
Knob E3	Dry/Wet	Knob E3	Phase
Knob E4	Frequency	Knob E4	Hz/Beat-time
Knob E5	Env. Amount	Knob E5	Offset
Knob E6	Attack	Knob E6	Rate (Beat-time)
Knob E7	Release	Knob E7	Spin
Knob E8	Feedback	Knob E8	Shape

Ping Pong & Redux

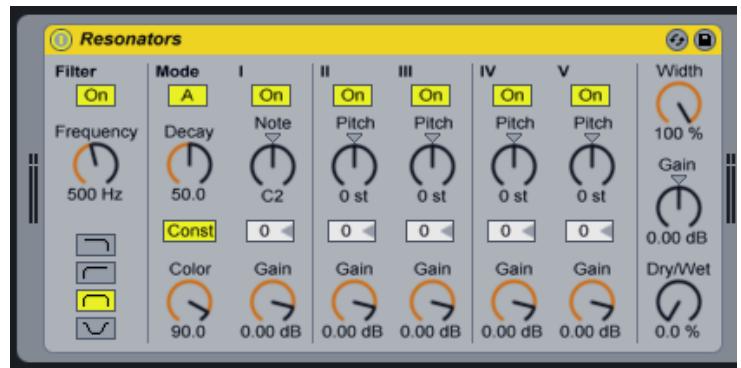
Each time you select Ping Pong and Redux from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments			
Ping Pong		Redux	
Knob E1	Frequency	Knob E1	Bit Reduce
Knob E2	Width	Knob E2	Hard/Soft
Knob E3	Time (ms)	Knob E3	D. sample Hard
Knob E4	Synced Delay Time (1-16)	Knob E4	D. sample Soft
Knob E5	Swing	Knob E5	Bit Reduce ON
Knob E6	Mode (Sync/Time)	Knob E6	OFF
Knob E7	Feedback	Knob E7	OFF
Knob E8	Dry/Wet	Knob E8	OFF

Resonators

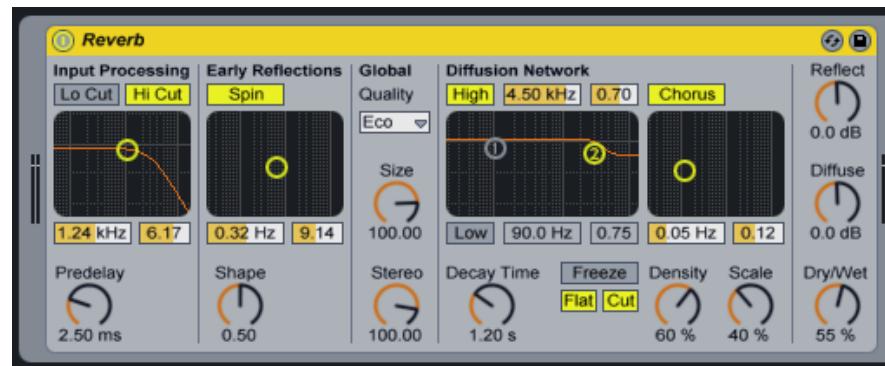
Each time you select Phaser from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments							
Page 1: General/Mode I				Page 2: Mode II - V			
Knob E1	Filter Freq	Knob E1	II Gain				
Knob E2	Width	Knob E2	III Gain				
Knob E3	Gain	Knob E3	IV Gain				
Knob E4	Dry/Wet	Knob E4	V Gain				
Knob E5	Decay	Knob E5	II Pitch				
Knob E6	Note	Knob E6	III Pitch				
Knob E7	Color	Knob E7	IV Pitch				
Knob E8	I Gain	Knob E8	V Pitch				

Reverb

Each time you select a track associated with Reverb from Device Mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments							
Bank 1: Ref.		Bank 2: Diff.					
Knob E1	Filter Freq	Knob E1	High Freq				
Knob E2	Filter Res	Knob E2	Low Freq				
Knob E3	PreDelay	Knob E3	Chorus Freq				
Knob E4	Spin	Knob E4	Density				
Knob E5	ref. Freq	Knob E5	High Res				
Knob E6	ref. Res	Knob E6	Low Res				
Knob E7	ref. Shape	Knob E7	Chorus Res				
Knob E8	Diff. Decay	Knob E8	Scale				
Bank 3: Glob.							
Knob E1	Decay Time						
Knob E2	Freeze						
Knob E3	Room Size						
Knob E4	Stereo Image						
Knob E5	Reflect Level						
Knob E6	Diffuse Level						
Knob E7	Dry/Wet						
Knob E8	Global Select						

Simple Delay & Utility

Each time you select a track associated with Simple Delay and Utility from Device Mode, your Axiom Pro controls map to the default assignments listed in the table below.



Axiom Pro Assignments			
Simple Delay		Utility	
Knob E1	Delay Time L	Knob E1	Width
Knob E2	Sync %	Knob E2	Panorama
Knob E3	Time mS L	Knob E3	Mute
Knob E4	Dry/Wet	Knob E4	Block DC
Knob E5	Delay Time R	Knob E5	Mode
Knob E6	Sync % R	Knob E6	Gain
Knob E7	Time mS R	Knob E7	Phz-L
Knob E8	Feedback	Knob E8	Phz-R

Vinyl Distortion

Each time you select Vinyl Distortion from Device mode, your Axiom Pro controls map to the default assignments listed in the table below.

Axiom Pro Assignments	
Vinyl Distortion	
Knob E1	Tracing Freq
Knob E2	Tracing B
Knob E3	Amount
Knob E4	Crackle
Knob E5	Pinch Freq
Knob E6	Pinch B
Knob E7	Pinch Amount
Knob E8	Crackle Vol.





www.m-audio.com

M-AUDIO
5795 Martin Road
Irwindale, CA 91706, USA

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