

M-AUDIO

HyperControl
for Cubase

User Guide

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What is HyperControl?

HyperControl is a powerful new technology that automatically maps your Axiom Pro controls (i.e., knobs, buttons, sliders¹, etc.) to the on-screen controls of Cubase and all of its VST/AU plug-ins and virtual instruments. 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 Cubase always remain synchronized with each other. For example, if a knob is turned on Axiom Pro, its corresponding knob in Cubase will update. Alternatively, if an on-screen knob is turned within Cubase (using the mouse), the corresponding knob position of Axiom Pro (as shown on the LCD display) updates as well. If a new instrument (or a different preset within the same instrument) is loaded, the parameter names and various button, knob, and slider 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 Cubase and always reflect what is currently happening within your software.

Finally, HyperControl allows for more than just MIDI data to be sent from Axiom Pro—ASCII keystrokes can also be sent, emulating Cubase keyboard shortcuts. This allows the controller to have “deep” integration into Cubase, and allows things like zooming, markers, copy, undo and many other features to be controlled right from Axiom Pro. This minimizes the amount of time you must spend using a mouse to control your software.

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

¹ Only available on Axiom 49/61

HyperControl Requirements

Cubase 4 Software:

Please note that HyperControl requires Cubase version 4.0 or later. Earlier versions of Cubase are not supported for use with HyperControl.

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

✓ **NOTE:** *If Cubase is running, close the application before beginning the HyperControl installation procedure. The instructions below will indicate when Cubase should be launched.*

1. HyperControl technology requires an Axiom Pro “personality” file to be added into one of the Cubase sub-folders. To install this file, run the Axiom Pro Cubase HyperControl installer and follow the on-screen instructions.
2. Once the installation is complete, launch Cubase.
3. Select “Device Setup” from the Device menu.
4. Select “Remote Devices” from the box on the left side of the window.
5. Click the “+” button at the top-left of the screen and select “M-Audio Axiom Pro.”
6. Click the “MIDI Input” drop-down menu and select the “Axiom Pro HyperControl In”² port.
7. Next, click the “MIDI Output” drop-down menu and select the “Axiom Pro HyperControl Out”² port.

Once steps above are completed, click “OK.” You can now control Cubase with your Axiom Pro using HyperControl technology.

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.

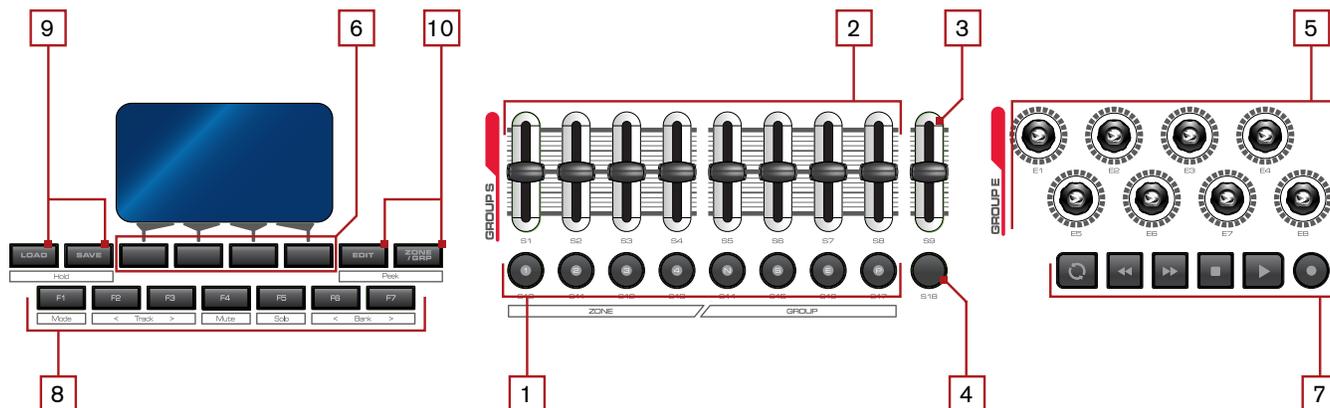
Axiom Pro Class-Compliant Port Names per Operating System

Macintosh		
Axiom Pro MIDI Input Ports	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		
Axiom Pro MIDI Input Ports	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.

HyperControl with Axiom Pro Hardware



1. **Slider Buttons⁴** – These buttons let you select, mute, solo, or record arm tracks within Cubase. By default, these buttons select channels, however, pressing the Flip button **4** lets you step through the three other functions: mute, solo, or record arm.

You can select multiple mixer channels by holding down the Control key on your computer keyboard while pressing the Slider Buttons; holding the “Shift” key of your computer keyboard while pressing these buttons will select a range of mixer channels. For example, holding the Control key (Command key on Mac) and pressing “1” and “5” will select the first and fifth mixer channels in Cubase; holding the Shift key and pressing “1” and “5” will select channels one through five on the Cubase mixer.

✓ **TIP:** It is possible to set the Drum Pads or Numerical Keypad of your Axiom Pro to replicate keystrokes of your standard computer keyboard (such as “Ctrl” or “Shift”). This will allow you to select multiple Cubase mixer channels using only the Axiom Pro keyboard (i.e., no computer keyboard is required). Please refer to the “Edit Mode > Control” section of the Axiom Pro User Guide to learn how to do this.

2. **Sliders⁴** – These sliders control their corresponding bank of eight faders in the Cubase mixer. Note that all Cubase track names that are currently under the control of Axiom Pro are highlighted in white, as shown below:



Selected Bank of Tracks (Controlled by Axiom Pro)

Unselected Bank of Tracks

3. **Master Fader⁴** – This slider automatically maps to the Master Fader track of your Cubase session.

⁴ Only available on Axiom Pro 49/61.

4. **Flip Button**⁵ – Axiom Pro can operate in two different modes when using HyperControl: Mixer Mode and Instrument Mode. The functionality of the Flip button varies depending on the mode that you are in (the “F1” F-Key selects the mode; see the “F-Keys” section below for more information).

Mixer Mode:

When Axiom Pro is in Mixer Mode, the flip button determines the function of the Slider buttons **1**. By default, the Slider buttons choose channels within your Cubase session. However, pressing the Flip button **4** lets you step through the other functions that the Slider buttons can perform (i.e., record arm, mute, solo). When you press the Flip button, the functionality of the Slider Buttons is listed near the lower-left side of the display.

Insert / Instrument Modes:

When Axiom Pro is in Instrument Mode, the Axiom Pro Sliders **2** control Cubase track volume settings whereas the Encoder knobs **5** control the parameters of your selected insert plug-in or virtual instrument. The Flip Button can be used to exchange (or “flip”) the function of the Encoder knobs and the Sliders. This lets you use the Axiom Pro sliders to adjust insert or virtual instrument settings, while using the Encoder knobs to set track levels.

Use this button to engage and disengage fader flipping. When engaging this mode, “Flip Faders On” is displayed in the lower-left side of the screen.

✓ **NOTE:** *Switching back to Mixer Mode will cancel Flip Faders mode.*

5. **Encoder Knobs** – These knobs automatically map to the parameters of the Cubase tracks (i.e., pan, send level, etc.), insert plug-ins, or virtual instrument controls that are currently selected through Axiom Pro. The “Using Cubase with HyperControl” section of this guide describes how you can select different kinds of track, insert, and virtual instrument parameters for these knobs to control.
6. **Soft-Keys** – These four buttons correspond to the “Pages” displayed along the bottom of the LCD screen and let you access various parameters of your Cubase tracks (i.e., pan, EQ, insert/send settings, etc.) and virtual instrument settings. The “HyperControl Display and Soft-Keys” section covers these buttons in detail.
7. **Transport Controls** – These buttons map to the Cubase Transport and perform the following functions:

Axiom Pro Control	Functionality within Cubase
	Engage Loop. This button engages and disengages looping between the Left Locator and Right Locator positions as specified in the Cubase transport. The button is illuminated when looping is engaged.
	Rewind. Tapping this button causes the transport to rewind until the button is tapped again. Holding this button causes the transport to rewind until the button is released.
	Fast Forward. Tapping this button causes the transport to fast forward until the button is tapped again. Holding the button causes the transport to fast forward until the button is released.
	Stop. This buttons stops recording or playback. Pressing this button a second time resets the song position to the point at which recording or playback originally began. This makes it easy to re-record a take, or to hear a section again.
	Play. This button begins playback.
	Record. This button begins recording on all record-enabled tracks.

⁵ Only available on Axiom Pro 49/61.

- 8. F-Keys** – These buttons let you navigate through Cubase and accomplish several tasks without using a mouse or computer 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 “F1-4” Function button on the top row. Note that Axiom Pro 25 only supports F-Keys 1 through 4 (Mode, < Track, Track >, and Mute); it does not have F-keys 5-7 (Solo, < Bank, and Bank >).

- F1 (Mode)** Axiom Pro can operate in two different modes when using HyperControl: Mixer Mode and Instrument Mode. This button toggles between the two modes.
- F2 (< Track)** This button selects and record-enables the previous track within Cubase. For example, if track 8 is currently selected, pressing this button will select track 7 and enable recording for that track. The currently selected track is highlighted in white.
- F3 (Track >)** This button selects and record-enables the next track within Cubase. For example, if track 1 is currently selected, pressing this button will select track 2 and enable recording for that track. The currently selected track is highlighted in white.
- F4 (Mute)** This button mutes the track that is currently selected within Cubase.
- F5 (Solo)** This button solos the track that is currently selected within Cubase.
- F6 (< Bank)** All Cubase track names that are currently under the control of Axiom Pro are highlighted in white. This button selects the previous bank of eight tracks. For example, if tracks 9-16 are currently outlined, pressing this button will select tracks 1-8.
- F7 (Bank >)** All Cubase track names that are currently under the control of Axiom Pro are outlined in white. This button selects the next bank of eight tracks. For example, if tracks 1-8 are currently outlined, pressing this button will select tracks 9-16.

✓ **Note to Axiom Pro 25 users:**

While Axiom Pro 25 does not feature Bank buttons, bank selection can still be performed using the “< Track” and “Track >” (F2, F3) buttons and selecting the track beyond the bounds of the currently selected bank. For example, if the right-most track of the current bank is selected and the “Track >” button is pressed, the next bank of tracks will become active. Alternatively, if the left-most track of a current bank is selected and the “< Track” button is pressed, the previous bank will become active.

9. **Load Button** – This button brings up a prompt allowing you to load stored Axiom Pro patches. 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 used. 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.

In certain cases, you may want to “hold” the information on the LCD, preventing the screen from updating when a control of a different group 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 near the bottom of the display, but the remainder of the display will not update.

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, there are some cases in which you may need to use customized patches:

1. Using external MIDI hardware. If you are using Cubase to control hardware MIDI devices (synthesizers, samplers, etc.), you will need to load a customized patch that assigns MIDI CC values of Axiom Pro controls (encoder knobs, sliders⁶, etc.) to the parameters of your hardware device.

✓ **NOTE:** *When controlling external MIDI devices, the “HyperControl” parameter must be set to “Transport.” Please refer to the “Edit Mode (Main Menu)” section of the Axiom Pro User Guide to learn how to do this.*

2. Assigning the performance controls (drum pads, keyboard zones, sustain/expression pedals, etc.) and the numerical keypad⁶.

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 Cubase 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. Please see the Axiom Pro User Guide to learn how to do this.

3. Running Cubase and other audio applications concurrently. It is possible to simultaneously use Cubase and other audio applications at the same time. When working in this configuration, Cubase makes use of HyperControl technology while your other audio applications are controlled using standard MIDI messages (i.e., Axiom Pro acts as a “traditional” MIDI controller keyboard).

✓ **NOTE:** *When controlling audio applications that are running alongside Cubase, the “HyperControl” parameter within Axiom Pro must be set to “Transport.” Please refer to the “Edit Mode (Main Menu)” section of the Axiom Pro User Guide to learn how to do this.*

⁶ 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 keypad **12** and performance controls (the 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 Cubase while allowing all other control groups (encoder knobs, sliders⁷, buttons, etc.) to function like a traditional MIDI controller. This is useful when working with MIDI tracks that route to external MIDI hardware devices (e.g. synthesizers) as it allows transmission of customized MIDI messages such as standard MIDI CC data*

To do this, enter Edit Mode and change the “HyperControl” parameter (of 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 “normal” HyperControl assignments and an additional set of your own custom controller assignments that you can specifically tailor to the external MIDI devices you wish to control.

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 greater detail.

Peek (Edit + Zone/Group Buttons) – Regardless of what is currently displayed on the Axiom Pro LCD, you can always bring the list of encoder knob assignments in view by simultaneously pressing the Edit and Zone/Group buttons. For example, if knob positions are being displayed on screen but you would like to return to the “home” screen that shows Cubase track names or the knob assignments of insert/virtual instrument plug-ins press the Edit and Zone/Group buttons.

The Peek function also lets you check the current value of a specific knob without changing its corresponding Cubase parameter. To do this, press and hold the Edit and Zone/Group buttons while moving the desired control. This will list the moved control’s current value without causing any changes to your Cubase track, insert, or virtual instrument.

⁷ Only available on Axiom Pro 49/61.

- 12. Numerical Keypad**⁸ – The numerical keypad buttons can be programmed to send MIDI commands as well as ASCII keystrokes (just like a computer keyboard). These ASCII keystrokes can correspond to your audio application’s “keyboard shortcuts” allowing you to access various features of your software straight from Axiom Pro (i.e., without having to touch your computer keyboard).

Axiom Pro ships with a variety of pre-programmed presets that map these buttons to popular audio applications (a detailed list of these presets can be found in Appendix A of the Axiom Pro User Guide). For example, when using HyperControl with Cubase, the numerical keypad can be used to perform the following by loading preset 16 (PC users) or preset 15 (Mac users):

Axiom Keypad	Default shortcut within Cubase ⁹ (Preset 15 for Mac; Preset 16 for Windows)
1	Save session
2	Undo
3	Toggle Mixer View
4	Duplicate selection
5	Goto Song start
6	Loop Selection
7	Hold while pressing Axiom Pro keypad “8” and “9” to set the L and R locator points, respectively.
8	Goto L
9	Goto R
– (Minus)	Zoom out (horizontal)
0	Toggle click on/off
+ (Plus)	Zoom in (horizontal)

See the “Edit Mode > Control” section of the Axiom Pro User Guide to learn how to make customized patches for these buttons.

- ✓ **TIP:** When working in Edit Mode, these buttons allow Axiom Pro 49/61 users to enter numerical values quickly. Axiom Pro 25 users can enter values by using the black piano keys (the keys range from 0-9 as you move from left to right on the keyboard).

⁸ Only available on Axiom Pro 49/61.

⁹ **NOTE:** The Axiom Pro presets are designed to work with the default shortcuts of Cubase. If you have customized your shortcuts, you will need to reprogram your Axiom Pro keypad buttons to match your custom shortcuts. See the “Edit Mode > Control” section of the Axiom Pro User Guide to learn how to do this.

Using Cubase with HyperControl

General Overview

HyperControl is designed to let you intuitively control Cubase, its plug-ins, and its virtual instruments with little or no use of your computer's mouse or keyboard.

The Transport Controls ⁷ give you instant access to the Cubase transport and let you start, stop, record, loop, as well as perform various other tasks straight from the Axiom Pro keyboard:

The F1-F7 F-Keys (F1-F4 on Axiom Pro 25) ⁸ let you select, solo, and mute tracks within your Cubase project without having to use a mouse. When a track is selected using the F2-F3 (Track) keys, the track is highlighted in white within Cubase and it is automatically record-enabled to help you begin recording quickly. These keys are covered in further detail on page 8.

The Slider buttons ¹⁰ ¹ can be used in conjunction with the Flip button ¹⁰ ⁴ button to select, record arm, mute, or solo channels within the Cubase Mixer. See the "Flip Button" section on page 7 to learn how to do this.

The eight Sliders ¹⁰ ² of Axiom Pro usually control the levels of the selected tracks within the Cubase mixer. You can use the F2-F3 (Track) or F6-F7 (Bank) F-Keys to select which Cubase channels are currently being controlled by the sliders of Axiom Pro (the names of active channels are highlighted in white within Cubase).

The right-most fader ¹⁰ of Axiom Pro ³ will control the level of the Master Fader in the Cubase mixer.

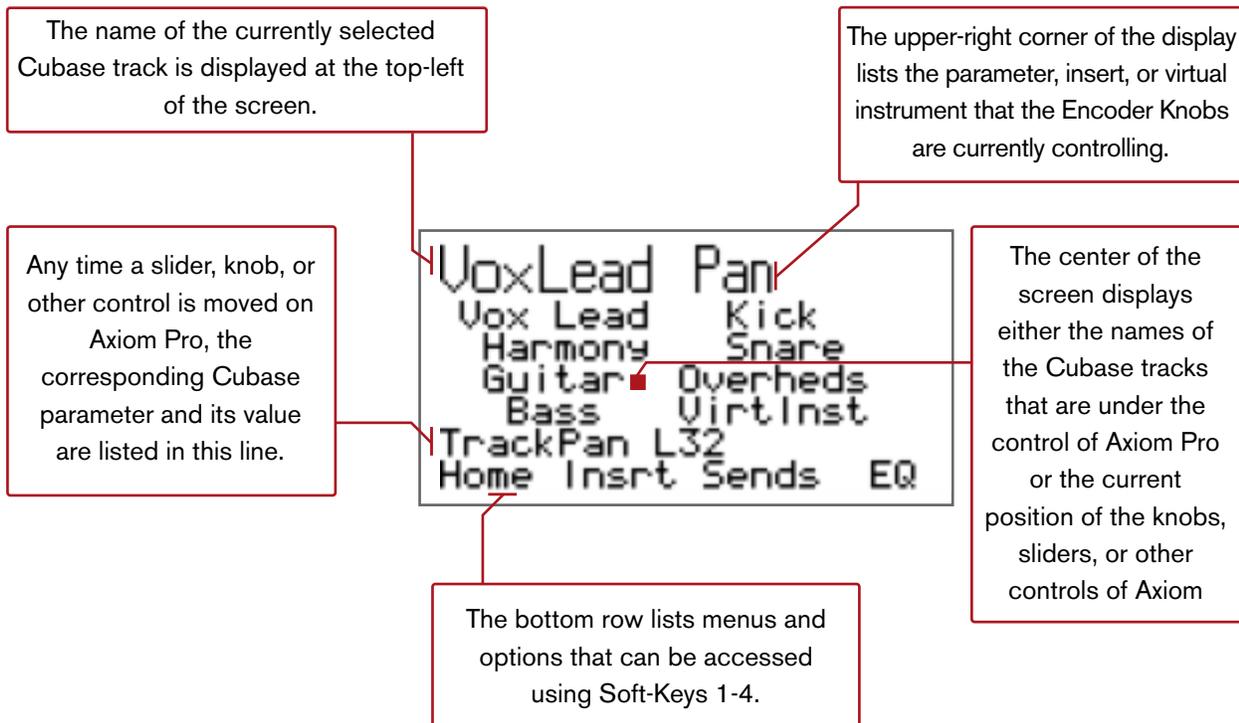
Finally, any time you switch to a new page using the soft-keys (i.e., to the "Home", "Ins", "Sends", and "Chan" pages), the LCD screen will show a list of Cubase track names or insert/virtual instrument parameters that will be controlled by the Encoder knobs ⁵. If any of the Axiom Pro controls (i.e., pads, sliders ¹⁰, or numerical keypad ¹⁰) are moved, the LCD screen will update to show the position of the currently used control and its group, however the encoder knobs will continue to control the parameters that were shown on the "Home" screen. If you would like to return to the home screen that shows the assignment of each encoder knob, simultaneously press the "Edit" and "Zone/Group" buttons on Axiom Pro.

¹⁰ Only available on Axiom Pro 49/61

HyperControl Display and Soft-Keys

HyperControl can control Cubase from any window within the DAW regardless of whether the “Project,” “Mix,” or plug-in/ virtual instrument window is currently selected. However, Axiom Pro is ideally suited to control Cubase when in a sequencing environment (i.e., while working within the “Arrange” window) since the Axiom Pro display and controls can handle Cubase mixing functions while your computer monitor lets you arrange your music.

The default “Home” screen is shown below:



As indicated in the top-right corner of the example screen shown above, this page allows you to set Pan positions of your Cubase tracks by using the Encoder knobs. The two columns display the track names of your Cubase session

(“Vox Lead” through “VirtInst” in this example). These tracks are currently under the control of the Axiom Pro encoders: the left column (Vox Lead, Harmony, Guitar, Bass) always corresponds to Encoder knobs E1-E4 whereas the right column (Kick, Snare, Overheds, VirtInst) corresponds to Encoder knobs E5-E8.

The Soft-Keys of Axiom Pro allow you to select the four different HyperControl pages that are listed along the bottom of the display (“Home,” “Insrt,” “Sends,” and “EQ”). When a new page is loaded, the Encoder knobs automatically map to the parameters listed on the newly loaded page. For example, in the picture shown above, pressing Soft-Key 3 (Sends) accesses the Send page of HyperControl and lets you use the Encoder knobs to control send levels that you’ve assigned in the Cubase mixer.

Note that if the Encoder knobs are not assigned to control any parameters within Cubase, turning a knob will have no effect on your Axiom Pro display or Cubase session.

✓ What about the Axiom Pro 49/61 Sliders?

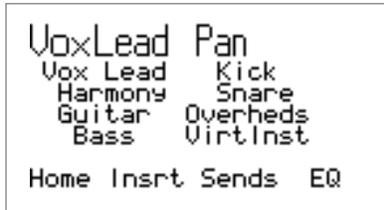
The Axiom Pro 49/61 Sliders always control the volume faders of your selected tracks within Cubase. This happens regardless of what page is currently loaded using Soft-Keys 1-4 (the loaded page only affects the Encoder knobs).

The only exception to this rule is if Axiom Pro is either in “Instrument” or “Insert” mode and flip faders mode is activated. When flip faders mode is activated, the Sliders are used to control insert and virtual instrument parameters, while the Encoder knobs are used to set track levels.

Mixer Mode

The HyperControl menus are as follows:

1. “Home” Page

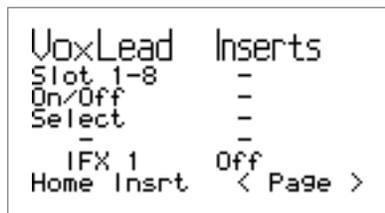


This is the default “Home” page of HyperControl. On the Home page, the Encoder knobs of Axiom Pro are assigned to control the pan position of your selected Cubase mixer channels.

Since Axiom Pro 25 does not feature any faders, pressing the “Home” Soft-Key lets you use the Encoder knobs to control both track level and pan position by toggling between the ‘Home’ (Track Volume control) and ‘Pan’ (Pan control) pages.

Soft-Keys 2-4 (Insrt, Sends, EQ) will take you to the Inserts, Sends, and EQ HyperControl pages. These are explained below.

2. “Insrt” Page



The “Insrt” page lets you call up and control insert plug-ins using your Axiom Pro.

When Soft-Key 2 (Insrt) is pressed, a “menu” screen (shown above) appears on the Axiom Pro LCD. This screen lets you choose the insert slot, select any of the available plug-ins, and switch that plug-in on or off:

- Selecting an insert slot:

The Cubase mixer has eight insert slots per channel. Use Encoder Knob E1 to select the slot in which you would like to insert the plug-in effect. The slot number is displayed at the lower-left of the screen (i.e., “IFX 1”, “IFX 2”, etc.)

- If you select a slot that does not contain a plug-in, the words “No Effec” will briefly appear at the lower-right of the display.
- If you select an insert slot that already contains a plug-in, the name of that plugin will appear at the lower-right of the screen.

- Selecting a plug-In:

Use Encoder Knob E3 to scroll through all of the plug-ins that are available to Cubase. Once the encoder knob has stopped turning for approximately one second (i.e., the knob has been released), Cubase loads the chosen plug-in and displays it on your computer’s monitor.

✓ **TIP:** To remove a plug-in, turn Encoder Knob E3 counter-clockwise until “No Effec” appears on the display. This will remove plug-ins from the insert slot.

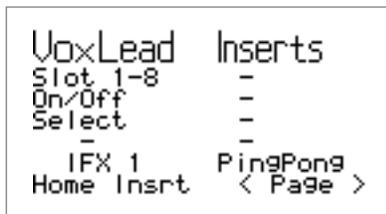
- Switching plug-ins on or off.

If you have selected an insert slot that contains a plug-in, you can use Encoder Knob E2 to switch the plug-in on and off. Turn the encoder counter-clockwise to switch off the plug-in; turn the encoder clockwise to switch on the plug-in.

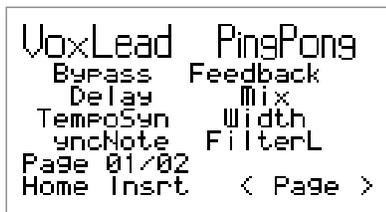
✓ **NOTE:** *If the selected insert slot does not contain a plug-in, turning Encoder Knob E2 will have no effect.*

- Controlling a plug-in with the Axiom Pro Encoder knobs

- Select the insert slot containing your desired plug-in by using Encoder Knob E1. For this example (shown below), the Cubase PingPong Delay plug-in was loaded:



- Press Soft-Key 4 (Page >) to view the parameters of the plug-in, as shown below:



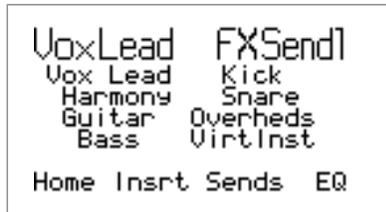
The parameters of the plug-in are listed in two columns and are automatically mapped to the Axiom Pro Encoder knobs. The left column is mapped to knobs E1-E4 whereas the right column is mapped to knobs E5-E8. For example, if you would like to change the delay time of the plug-in, turn Encoder Knob E2; if you'd like to change the feedback amount, turn Encoder Knob E5.

If a plug-in features multiple pages of parameters, use Soft-Keys 3-4 (“< Page” and “Page >”) to step through all of the pages of parameters. The page number is listed near the lower-left of the screen.

- To return to the insert “menu” screen, go to the first page of plug-in parameters and press Soft-Key 3 (Page <) again.

Pressing Soft-Key 1 (Home) will return you to the HyperControl Home page.

3. “Sends” Page



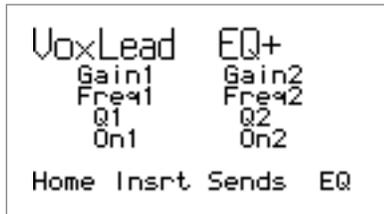
The Sends page lets you use the Encoder knobs to set effect send levels for your Cubase mixer tracks. You can step through the eight effect send slots by repeatedly pressing Soft-Key 3 (Sends). The current effect send slot is listed on the top-right of the screen (i.e., FXSend1, FXSend2, etc.).

Note that the Encoder knobs control the same Send slot across the selected bank of Cubase channels. For example, if “FXSend1” is selected for tracks 1 – 8, turning Encoder Knob E1 will affect the first channel's first send (labeled “s 1” in the Cubase mixer), Encoder Knob E2 will affect the second channel's “s 1” send, and so on.

✓ **NOTE:** *You must first assign a send on your Cubase mixer channel before you can use this page. If no send has been assigned, turning an Encoder Knob will not have any effect within Cubase (or the Axiom Pro display).*

Pressing Soft-Key 1 (Home) or Soft-Key 2 (Insrt) will take you to the Home and Insert HyperControl pages, respectively.

4. “EQ” Page



The EQ page allows you to access the Cubase mixer's four-band channel EQ.

Note that HyperControl has two EQ pages: The first page controls the first and second bands of the Cubase EQ whereas the second page controls the third and fourth bands. Pressing Soft-Key 4 (EQ) lets you toggle between the pages for bands 1-2 and 3-4.

The left column is assigned to Encoder knobs E1-E4 (EQ band 1 or 3) whereas the right column is assigned to Encoder knobs E5-E8 (EQ band 2 or 4).

Each band contains four parameters:

- Gain** This parameter controls the gain level of the associated EQ Band. Turn Encoder Knob E1/E5 clockwise to raise the gain or counter-clockwise to reduce the gain level.
- Freq** This parameter controls the center-frequency of the associated EQ Band. Turn Encoder Knob E2/E6 clockwise to raise the center-frequency or turn counter-clockwise to reduce the center frequency.
- Q** This parameter controls the width or “Q” of the associated EQ Band. Turn Encoder Knob E3/E7 clockwise to increase the Q of the filter (i.e., to make it narrower) or turn counter-clockwise to reduce the Q of the filter (i.e., to make it wider).
- On** This parameter engages and disengages the associated band of the EQ. Turn Encoder Knob E4/E8 clockwise to switch on an EQ band or turn the knob counter-clockwise to bypass that band.

✓ **TIP:** By default, the Cubase EQs are configured so that the first and fourth bands are low-shelf and high-shelf whereas the second and third bands are parametric). The EQ bands can be changed to suit your needs. Please refer to the Cubase documentation to learn how to do this.

Pressing Soft-Key 1 (Home), Soft-Key 2 (Insrt), or Soft-Key 3 (Sends) will take you to the Home, Insert, and Sends HyperControl pages, respectively.

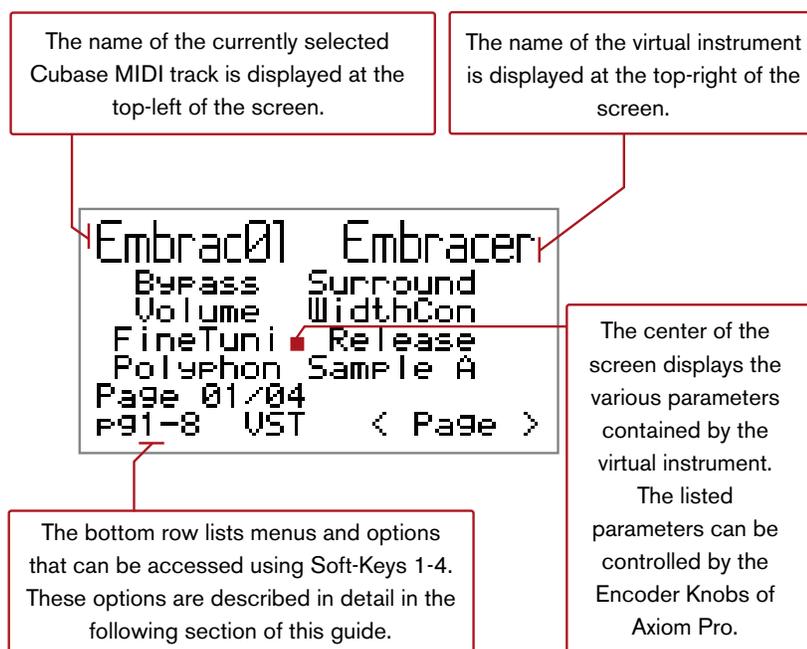
Instrument Mode

Axiom Pro can operate in two different modes when using HyperControl: Mixer Mode and Instrument Mode. The previous sections of this User Guide have covered Mixer Mode. This section covers Instrument mode and describes how HyperControl and Axiom Pro can be used to give you “hands-on” control over your virtual instrument plug-ins.

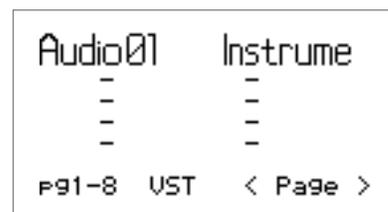
To use Instrument Mode, you must first:

1. Create a virtual instrument within Cubase (refer to the Cubase documentation to learn how to do this). Cubase will ask if you would like to create a MIDI track assigned to your chosen plug-in. Click “Create.”
2. Make sure that the track containing your virtual instrument is selected within Cubase (for example by using the F2 and F3 ‘Track’ keys on Axiom Pro or by clicking the name of the MIDI track in Cubase that is assigned to your virtual instrument).
3. Finally, press the F1 (Mode) F-key to enter Instrument mode. (Pressing this button again will return you to Mixer Mode).

The name and parameters of your chosen virtual instrument will now appear on the Axiom Pro LCD. As an example, Cubase’s Embracer virtual instrument is shown below:



✓ **NOTE:** If you are in Instrument Mode and select a track that is not assigned to a virtual instrument, the Axiom Pro display will appear mostly blank. For example if you select an audio or group track (or a MIDI track that is not routed to a virtual instrument within Cubase), you will see a screen similar to the following:



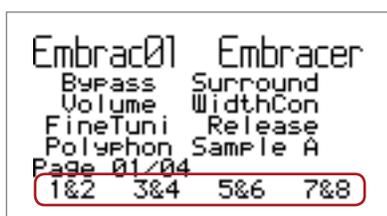
Instrument Mode cannot be used to control these tracks; to use Instrument Mode, you must select a MIDI track that is assigned to a virtual instrument.

Using Instrument Mode:

The parameters of your virtual instrument are listed on screen and are automatically mapped to the eight Encoder knobs of Axiom Pro. The parameters in the left column are mapped to Encoder knobs of the top row whereas the right column parameters are mapped to Encoder knobs on the bottom row.

Pressing Soft-Key 2 (VST) will open and close your virtual instrument on your computer monitor. If the instrument is currently minimized, pressing this button will open it. If the instrument is on-screen, pressing this button will minimize it.

If a virtual instrument contains more than eight parameters, the controls are listed on multiple pages that can be accessed by using Soft-Keys 3-4 (labeled "< Page" and "Page >" on the LCD screen). Alternatively, if you are viewing the Instrument Mode default page, you can press Soft-Key 1 (labeled "1-8" on the LCD screen) for quick access to the first eight pages of the virtual instrument's parameters, as shown below:



Once the "1-8" Soft-Key is pressed, the first Soft-Key (labeled "1&2") lets you access the first two pages (press once for page one; press twice for page two). Similarly, the second, third, and fourth Soft-Keys let you access pages 3-4, 5-6, and 7-8 respectively.

To exit the "1-8" page and return to the standard Instrument view (i.e., "pg1-8," "VST," "< Page," and "Page >" listed along the bottom of the screen), press the F1 (Mode) button twice.

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