Eclipse PX
Surround Panning Joystick Controller

User Manual for OS X
Eclipse PX User Manual for Apple OS X

May 1, 2014

Part Number 932134-MAC

©2014 JLCooper Electronics
142 Arena St, El Segundo, CA, 90245, USA

Phone: +1 (310) 322-9990   Fax: +1 (310) 335-0110
web:  www.jlcooper.com   email: info@jlcooper.com

Nuage Panner and Eclipse PX are trademarks of JLCooper Electronics.
All other brand names are property of their respective owners.
# Table Of Contents

Introduction ............................................................................................................. 4
Configuring the Hardware ....................................................................................... 5
Software Installation and Setup ............................................................................. 6
  If the Panner is Connected Through a Router ...................................................... 7
  If the Panner is Not Connected Through a Router ............................................. 9
Using the Nuage Panner / Eclipse PX with Nuendo ............................................. 11
  Panner Operation in Nuendo .............................................................................. 12
  The Display ....................................................................................................... 13
JLCooper Limited Warranty .................................................................................... 14
Introduction

The Nuage Panner and the Eclipse PX are identical functionally.

The Nuage Panner’s form factor is intended to fit into a Yamaha/Steinberg Nuage Console System. The labels for its various controls reflect the function of those controls when used with Steinberg Nuendo software.

The Eclipse PX is designed to sit on a desktop, and its labels reflect its use as a general purpose device.

However, from a software standpoint, they are completely interchangeable. Consequently, the term “panner” will often be used in this guide to refer to either one.
Configuring the Hardware

The unit has an Ethernet Interface that can be configured directly from the front panel of the unit.

To configure the Ethernet Interface from the front panel of the unit, do the following:

1. Turn unit off or remove power plug.
2. Press and hold the Enable and S1 (↔) buttons.
3. Turn unit on or insert power plug.
4. Release the buttons.
5. The unit will display the firmware version for a few seconds.
6. After that, the display shows the first number of the IP address.
7. To show or modify the first number of the IP address, press the S1 (↔) button.
8. To show or modify the second number of the IP address, press the S2 (↕) button.
9. To show or modify the third number of the IP address, press the S3 (↦) button.
10. To show or modify the last number of the IP address, press the S4 (↘) button.
11. Turn the encoder labelled E1 or FrontDivergence/Width to adjust the IP address.
12. To store the IP address, press the Enable button.
13. To load the new IP address, power cycle the unit.
When you first launch the application **JLCooper Nuage Panner-Eclipse PX Setup**, the app will install some necessary files then display the following screen:
If the Panner is Connected Through a Router

If your panner is connected to your Mac through a router, setup is almost automatic. Click on the network interface to which your panner is connected (most likely Ethernet, but it might be Ethernet 2 or WiFi), then click on Locate Panner.

The software should find the attached panner and change its address to one that works on your network. Click on Finish and you’re done.

In the unlikely event that the software was unable to find a panner, or if you want to use a different address, you can click on Go Back. This will return you to the list of network addresses. If the software had failed to find a panner, it’s possible that you clicked on the wrong address. Try a different one and click on Locate again.

If you already know that the address of your panner is valid for the interface it’s connected to, you can click on Manual IP Address instead of Locate then enter the address of the panner.
The software will attempt a connection to the panner and display the following screen if it succeeded:

![Connection established](image)

or this screen if it failed:

![Connection failed](image)

You can click **Back** if you entered the wrong address and try again.
Most of the time, just clicking the **Locate Panner** button will set things up with the least amount of effort.

**If the Panner is Not Connected Through a Router**

If your panner is plugged directly into the computer or is connected to the computer through an ethernet switch, there are a few more steps to perform, but they only need to be done once.

On the first screen, if you click on an address that doesn’t have a router connected, this sheet will open up:

![Image of setup sheet]

It describes the exact steps you need to take in order to complete the setup. First, open System Preferences from the Apple menu, and click on Network. Next click on Ethernet in the left hand column.

Choose "Manually" from the Configure IPv4 popup menu and enter 169.254.107.90 into the IP Address field. Type 255.255.255.0 into the Subnet Mask Field. Click on Apply.

Now turn off your panner (Eclipse PX) or remove it's power connection (Nuage Panner). Hold down the Enable Button and the button directly below it and turn the panner back on (Eclipse PX) or reconnect the power (Nuage Panner). Release the buttons when the display lights up.

After a moment the display will show the first three digits of the panner's IP address.

Change the panner's IP address to 169.254.107.91 using the

[Don’t show again] [OK]
Choose "Manually" from the Configure IPv4 popup menu and enter 169.254.107.90 into the IP Address field. Type 255.255.255.0 into the Subnet Mask Field. It is especially important that the Subnet Mask is entered correctly. Click on Apply.

![Configure IPv4 Popup Menu](image)

Now turn off your panner (Eclipse PX) or remove it's power connection (Nuage Panner). Hold down the Enable Button and the button directly below it and turn the panner back on (Eclipse PX) or reconnect the power (Nuage Panner). Release the buttons when the display lights up.

After a moment the display will show the first three digits of the panner's IP address.

Change the panner's IP address to 169.254.107.91 using the first row of buttons to choose a field, and the first knob to adjust the value. Once the address is set briefly press the ENABLE button once more to accept your changes. Remove then reconnect power to the panner.

Click on **OK** then on **Locate Panner**. The software should detect your panner and change its address if necessary to avoid conflicts with other devices.
Using the Nuage Panner / Eclipse PX with Nuendo

After setting up the panner, launch Nuendo. Choose Device Setup from the Devices menu. In the sidebar on the left, select JLCooper Nuage Panner/Eclipse PX under Remote devices. For MIDI Input and MIDI Output choose Nuage Panner/Eclipse PX. Click on Apply then on OK. The panner should now be available in Nuendo.

To test the operation of the panner in Nuendo, open a Nuendo project then open the Mixer Console. Locate and select surround track and make sure the mini-surround panner is visible. Press the button on the JLCooper panner’s joystick then move the joystick and you should see the sound source move in the mini-panner.
Panner Operation in Nuendo

The **ENABLE** Button must be lit for the panner to have an effect on the software.

The joystick is used to position the sound source. The button at the top of the joystick is known as the **GRAB** button. To prevent accidentally knocking the joystick at an inopportune time, the joystick only has an effect while the **GRAB** button is pressed. This feature also allows you to position the joystick where you want ahead of some move, without affecting the mix.

As mentioned earlier, the front panel labels on the Nuage Panner correspond to Nuendo functions the various controls perform, while the labels on the Eclipse PX are more general purpose. Here is a comparison between the Nuage and PX labels:

The first row of four buttons with the arrow symbols above them on the Nuage (S1 - S4 on the Eclipse PX) set constraints on the movement of the sound source. These constraints are only in effect while the buttons are held down.

The first one is the **Constrain Horizontal** button. While it is held down, moving the joystick will only move the sound source left and right in relation to its current position.

The next button is the **Constrain Vertical** button and restricts the movement of the sound source to the front and rear of its current position.

The next two buttons only allow diagonal movement. The first is rear-left to front-right and the second is right-rear to front-left.

When the **FINE** button (S5 on the PX) is held down, the rotary encoders and joystick operate with greater precision.

The **COUNTER-SHOT** button (S6) rotates the sound source by 180°, effectively flipping the entire surround image to the opposite side.

When the **NULL** (S7) button is lit, the sound source always moves relative to its current position, no matter where the joystick happens to be when the **GRAB** button is pressed. For example, when the **NULL** button is not lit and the sound source is in the upper right quadrant while the joystick is in the lower left quadrant, pressing **GRAB** and moving the joystick will immediately cause the sound source to instantly move to the lower left quadrant. On the other hand, if **NULL** was lit in this same example, pressing **GRAB** and moving the joystick would cause the sound source to move smoothly from its original position.

The **RESET** button (S8) returns all of the surround parameters to Nuendo’s default settings.

The five rotary encoders are also push buttons. Each encoder’s function changes depending on whether it is pressed or not. The different functions are labeled on the Nuage front panel. For example, the first encoder (E1 on the Eclipse PX) controls **FRONT DIVERGENCE** when turned normally and **WIDTH** when turned while pressed.

The second encoder controls **REAR DIVERGENCE** and **DEPTH** when pressed.
the third encoder controls CENTER DISTRIBUTION when not pressed and RADIUS when pressed.

Likewise, encoder four’s two functions are FRONT-REAR DIVERGENCE and ROTATE.

Encoder five controls LFE Level and ORBIT.

The knob on the joystick is for GLOBAL DIVERGENCE, in other words, it controls front divergence, rear divergence and front-rear divergence all at once.

**The Display**

The panner’s display normally shows the number of the currently selected track, unless that happens to be an input or output channel, in which case it will read “i-o”.

Whenever you adjust a parameter with a rotary encoder, the display will show the value of that parameter. The encoders are touch sensitive, and their parameter’s value will be displayed for about a 3rd of a second after let go.

Please see the Nuendo Operation Manual for more information on using surround sound in Nuendo.
JLCooper Limited Warranty

JLCooper Electronics ("JLCooper") warrants this product to be free of defects in materials or workmanship for a period of 12 months from the date of purchase. This warranty is non-transferable and the benefits apply only to the original owner. Proof of purchase in the form of an itemized sales receipt is required for warranty coverage. To receive service under this warranty, customers in the United States should contact the JLCooper factory at +1-310-322-9990 and talk to a service technician. If necessary, a Return Authorization number may be issued. For our customers outside the United States, it is recommended that you first contact your Dealer or Distributor, since they may offer their own service or support policy. If local support is not obtainable, please send a FAX to JLCooper's Service Department at +1-310-335-0110 with a detailed description of the service required. Upon issuance of return authorization, the product should be packed in the original shipping materials and shipped prepaid and insured to: Service Department, JLCooper Electronics, 142 Arena Street, El Segundo, CA 90245. Please include the following: copy of the sales receipt, your name and address (no P.O. Boxes, please), a brief description of the problem, and any other related items discussed with the service department and considered necessary to evaluate the product or effect a repair. The return authorization number must be clearly written on the outside of the package. JLCooper will at its option, without charge for parts or labor, either repair or replace the defective part(s) or unit. Carriage, insurance, customs duties, impounds, tariffs, taxes, surcharges, brokerage fees and other shipping costs are not covered by this warranty. JLCooper's normal repair turn around time at the factory is approximately 15 business days from receipt of product to shipping. Your actual turn around time will include return shipping. Actual turn around time will vary depending upon many factors including the repeatability of the customer's reported complaint, the availability of parts required for repair, the availability of related products needed to evaluate the product if necessary. Priority services are available at additional cost. These should be discussed with the service technician at the time the return authorization is issued. This warranty provides only the benefits specified and does not cover defects or repairs needed as result of acts beyond the control of JLCooper including but not limited to: abuse, failure to operate in accordance with the procedures outlined in this owner's manual; nor does it cover damage from accident, negligence, using incorrect power supply, modification, alteration, improper use, unauthorized servicing, tampering, ingress of foreign matter; nor for damage from natural or man-made events such as, but not limited to flooding, lightning, electrostatic discharge, tornados, earthquake, fire, civil unrest, war, terrorism, etc.

THE DURATION OF ANY OTHER WARRANTIES, WHETHER IMPLIED OR EXPRESS, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. JLCOOPER HEREBY EXCLUDES INCIDENTAL AND CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO: LOSS OF TIME, INCONVENIENCE, DELAY IN PERFORMANCE OF THIS WARRANTY, THE LOSS OF USE OF THE PRODUCT OR COMMERCIAL LOSS, AND FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY APPLICABLE TO THIS PRODUCT. JLCOOPER SHALL NOT BE LIABLE FOR DAMAGES OR LOSS RESULTING FROM THE NEGLIGENT OR INTENTIONAL ACTS OF THE SHIPPER OR HIS CONTRACT AFFILIATES. THE CUSTOMER SHOULD CONTACT THE SHIPPER FOR PROPER CLAIMS PROCEDURES IN THE EVENT OF DAMAGE OR LOSS RESULTING FROM SHIPMENT. THIS WARRANTY SHALL BE GOVERNED BY THE LAWS OF THE STATE OF CALIFORNIA.