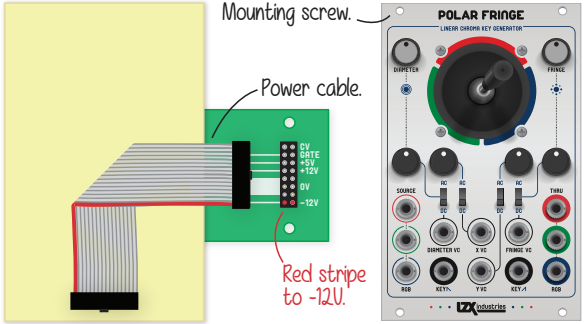
## INSTALLATION

Power down the EuroRack case and unplug it from the wall. Connect the provided EuroRack power cable to your module and then to your EuroRack power bus board as shown.




Mount the module in your case using the mounting screws provided by your case's manufacturer.

## POLAR FRINGE SPECIFICATIONS

| | |
|---|---|
| **FORMAT** | 3U EuroRack Synth Module |
| **WIDTH** | 16HP |
| **DEPTH** | 36mm |
| **MAX POWER DRAW** | |
| +12V | 200mA |
| -12V | 200mA |
| +5V | N/A |
| **OUTPUT LEVELS** | 0-1V |
| **VC CONTROL RANGE** | 0-1V |
| **MAX INPUT VOLTAGE** | +/-12V |
| **INPUT TERMINATION** | 100K ohms |
| **OUTPUT RESISTANCE** | 499 ohms |

ONE YEAR LZX industries WARRANTY

MADE IN PORTLAND, OR USA

## TIPS & TECHNIQUES

- While Polar Fringe is optimized for use as a dedicated, voltage controllable chroma keyer, in the modular domain it can easily become another kind of animal.
- Try thinking outside the box with how you include it in a patch -- for example, feeding ramp signals or horizontal and vertical waveshapes into the RGB inputs will transform it into a capable shape and pattern generator!

## YOUR NEXT MODULE?


Polar Fringe and Marble Index together form a unique and incredibly powerful analog video mixing and chroma keying workflow. These modules are meant to expand upon each other, offering a fully featured analog compositing environment.

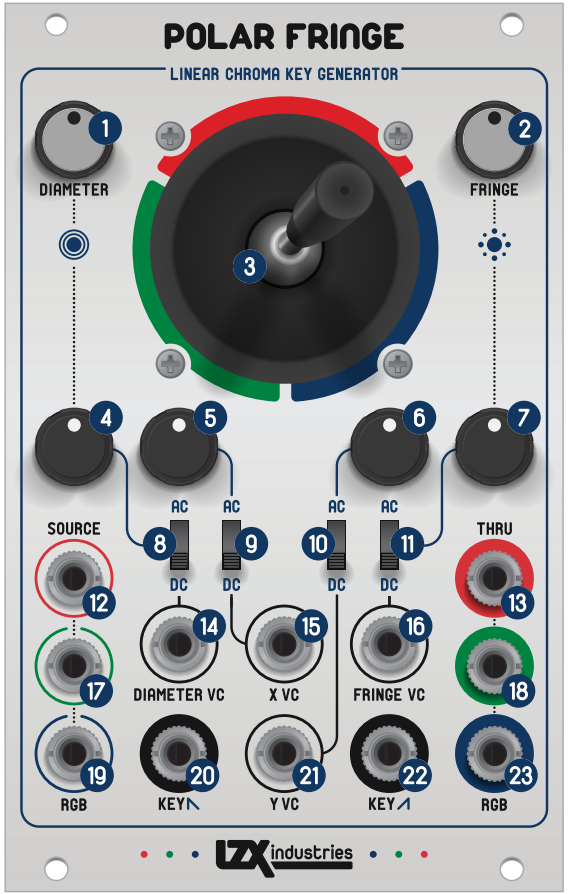
LZX-PF-URC
Written by Lars Larsen
Illustrated by Dave Larsen
First Printing, Nov 2017


# POLAR FRINGE

## USER REFERENCE CARD

LZX industries

PF




## CONTROLS & CONNECTIONS

| | CHROMA SELECTOR | |
|---|---|---|
| 3 | Chroma joystick | |
| 20 | Neg. key out | 1V DC |
| 22 | Pos. key out | 1V DC |
| 5 | X VC level | +/- |
| 6 | Y VC level | +/- |
| 9 | X Mode | AC DC |
| 10 | Y Mode | AC DC |
| 15 | X VC input | 0-1V DC |
| 21 | Y VC input | 0-1V DC |

| | FRINGE | |
|---|---|---|
| 2 | Control | +/- |
| 7 | Level | +/- |
| 11 | Mode | AC DC |
| 16 | VC Input | 0-1V DC |

| | DIAMETER | |
|---|---|---|
| 1 | Control | +/- |
| 4 | Level | +/- |
| 8 | Mode | AC DC |
| 14 | VC Input | 0-1V DC |

| | SOURCE | |
|---|---|---|
| 12 | Red Input | 0-1V DC |
| 13 | Red Thru | 1V DC |
| 17 | Green Input | 0-1V DC |
| 18 | Green Thru | 1V DC |
| 19 | Blue Input | 0-1V DC |
| 23 | Blue Thru | 1V DC |

## THE CHROMA KEY PATCH

- Set all controls and switches to the default settings shown on the frontpanel illustration to the left.
- Patch your RGB image source into the source inputs. Patch the RGB Thru outputs to your compositor module's RGB inputs (such as Visual Cortex or Marble Index.)
- Next, patch one of the Key outputs to the voltage control input on your compositor module (Visual Cortex or Marble Index.)
- Now you can use the joystick, Diameter, and Fringe controls to change the color and quality of the resulting key.

## SIGNAL PATH BLOCK DIAGRAM