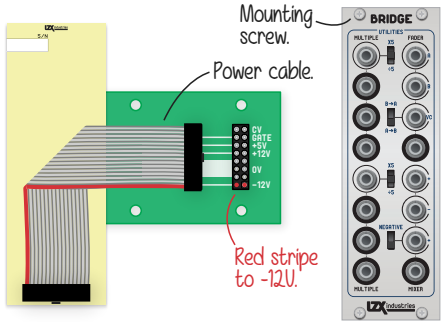
BEFORE YOU BEGIN

Take a moment to familiarize yourself with our website lzxindustries.net. You'll find documentation, instructional videos, links to community forums, and other user resources. Register your product's serial number with us to aid any future technical support requests. Some synthesists will find everything they need to learn this module in this reference card, but don't forget there are videos and patch tips online. If you get stuck, have questions, or need help of any kind -- please write to us.

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.



STAIRCASE SPECIFICATIONS

FORMAT
3U EuroRack Synth Module

WIDTH	DEPTH
8HP	31.75mm

MAX POWER DRAW	
+12V	30mA
-12V	30mA
+5V	N/A

OUTPUT LEVELS
0-1V

VC CONTROL RANGE
0-1V

MAX INPUT VOLTAGE
+/-12V

INPUT TERMINATION
100K ohms

OUTPUT RESISTANCE
499 ohms

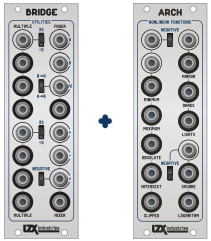
ONE YEAR LZX industries WARRANTY

MADE IN PORTLAND, OR USA

TIPS & TECHNIQUES

- The Fader section can be patched as a crossfader or a VCA/2-quadrant multiplier. This is one of the most useful functions in your video synthesis arsenal, as it allows you to switch between and mix 2 different input signals. Don't forget that you can also use it for image multiplication for techniques such as image brightness restoration or controlled by a key generator as a keying function.

YOUR NEXT MODULE?



Arch and Bridge are the Expedition Series' utility modules -- swiss army knives that serve as glue between modules in larger patches, or enabling more advanced techniques requiring access to simple core functions. While they may look nonassuming, don't underestimate them!

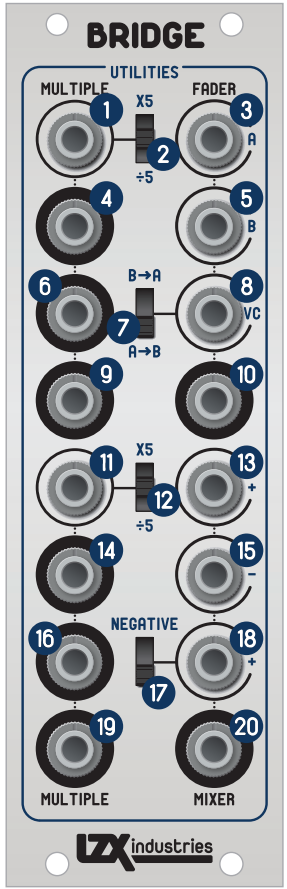
LZX-BR-URC
Written by Lars Larsen
Illustrated by Dave Larsen
First Printing, September 2017

BRIDGE

USER REFERENCE CARD

LZX industries

BR



CONTROLS & CONNECTIONS

	MULTIPLE/SCALER 1	
1	Input	+/- 1V/5V
2	Gain	÷5 1 X5
4	Buffered output 1	
6	Buffered output 2	
9	Buffered output 3	

	FADER	
3	Channel A	0-1V FS
5	Channel B	0-1V FS
7	Direction	B→A A→B
8	VC input	0-1V FS
10	Output	1V DC

	MULTIPLE/SCALER 2	
11	Input	+/- 1V/5V
12	Gain	÷5 1 X5
14	Buffered output 1	
16	Buffered output 2	
19	Buffered output 3	

	MIXER	
13	Add	0-1V FS
15	Subtract	0-1V FS
17	Mode	OFF NEGATIVE 18
18	Add/Negative	0-1V FS
20	Output	1V DC

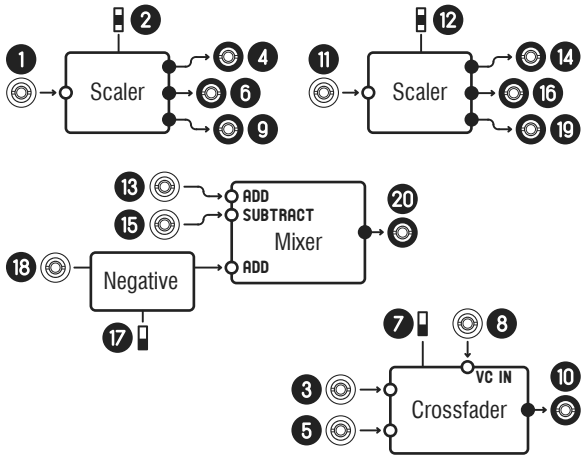
SCALING SIGNALS FROM AUDIO SYNTHESIZERS

Bridge is often used to convert between the voltage ranges used by audio synthesizers and video synthesis modules. To accomplish this, patch your source signal into one of the Multiple/Scaler section inputs. Set the gain switch to Divide-By-5 to convert audio synthesizer signals to video synthesis scale. Set the gain switch to Multiply-By-5 to onvert video synthesis signals to audio synthesizer ranges.

VIDEO SYNTH TYPICAL RANGES	
All signals	0-1V

AUDIO SYNTH TYPICAL RANGES	
Unipolar CV & Logic	0-5V
Bipolar CV & Audio	+/-5V

SIGNAL PATH BLOCK DIAGRAM



MULTING: A CORE PATCHING TECHNIQUE

“Multing” is the process of splitting an output in order to send a signal to multiple destinations in parallel. It is one of the most important core patching techniques of a video synthesis system, and is used in almost any advanced patch. Multing can be done passively with stackable cables or splitters, but Bridge offers two buffered multiples/scalers. A buffered multiple will ensure there is no signal or bandwidth lost which may occur as a result of passive multing. A dedicated mult module (1 in, multiple outputs) also allows you to mult your signals with normal patch cables.