

## INTRODUCTION

For anyone who has ever struggled with finding their way around a Eurorack synthesiser on a dark stage or a dimly lit studio, Dim 2 presents an illuminating experience. In just 4 HP, it provides a complete solution to upgrade your modular system with a pair of dimmable console lights.

The set contains of a purpose-designed dimming module and two black anodised aluminium BNC LED lamps.

The module's high-efficiency PWM dimmers run at high frequency, ensuring flicker-free and noise-free operation. Additionally, extensive line filtering keeps your Eurorack power supply happy and clean.

Not limited to just manual control, both dimmer channels also feature control voltage (CV) inputs, turning the connected lamps from simple light sources to voltage controlled audio-visual spectacles.

While the use of the included LED lamps is recommended in order to keep power consumption low, halogen lamps may be used as well. Provided your power supply is beefy enough, up to 6 W of power may be drawn from each output. This even makes it possible to drive 12 V LED strips, truly making your patches shine bright.

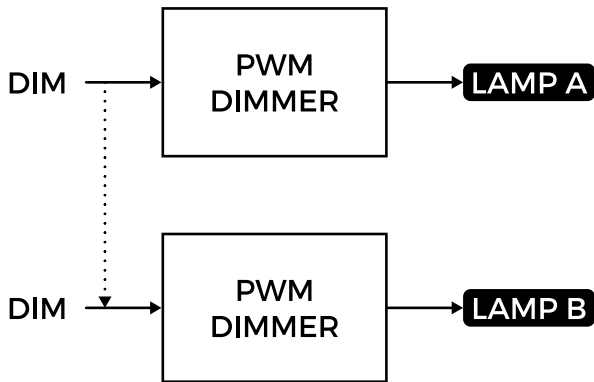
## CONTENTS

In the Dim 2 box, you'll find:

- Product card, stating serial number and production batch.
- 16-to-10-pin Eurorack power cable.
- Mounting hardware: two black M3 x 6 mm hex screws, two black nylon washers and a hex key.
- Two BNC LED gooseneck lamps, in a protective cotton bag.
- The Dim 2 module itself, in a protective cotton bag.

If any of these items are missing, please contact your dealer or [support@joranalogue.com](mailto:support@joranalogue.com).

## SIGNAL FLOW



## CONTROLS & CONNECTIONS

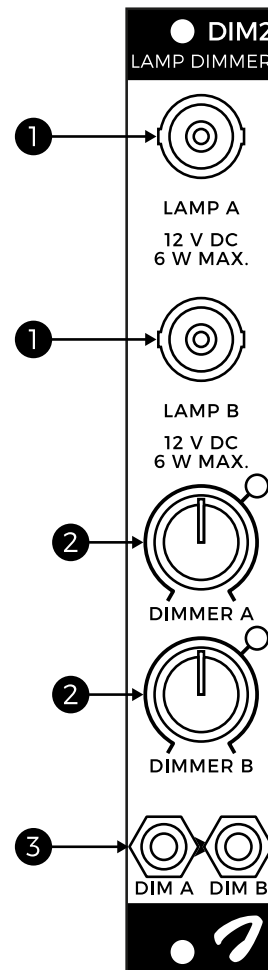
### 1 BNC LAMP OUTPUTS

The two BNC outputs each provide up to 6 W of power, PWM-dimmable between 0 V and +12 V.

To connect a lamp, first line its connector up with the notches on the socket, then rotate it clockwise by 90° until the BNC connector locks in place. To release a lamp, push the BNC connector towards the front panel and then rotate it anticlockwise by 90°.

Use of the included LED lamps is recommended. However, it is possible to connect any standard BNC lamp, including halogen types. Note that some aftermarket LED BNC lamps are not dimmable, although they can be used normally when the dimmer knob is set to 100 %.

LED strips or other 12 V lamps can be connected, either by using suitable BNC adapters or, if your external lamp has a 2.1 mm barrel plug input socket, by plugging into the exposed 2.1 mm barrel DC output sockets through a male-to-male coupler. In this case, keep in mind that all current will be drawn from the system's +12 V rail, which should have sufficient power reserve available.



## **2 DIMMER KNOBS AND LEDS**

Each BNC output has an associated dimmer knob, which will adjust the lamp's brightness from 0 to 100 %. The current status of each dimmer is displayed on the adjacent LED.

The dimmers use a logarithmic control law, which results in a more natural perceived brightness curve as the knobs are turned up.

When any of the CV inputs are in use, the corresponding knob becomes an attenuator for the incoming CV signal.

## **3 DIMMER CV INPUTS**

These input sockets are used to provide direct voltage control over the brightness of the lamps, with a range of 0V to +5V when the corresponding knob is set to its maximum setting. When the B input socket is not used, it will receive its CV from input A.

! CAUTION: rapidly flashing lights may trigger seizures in people with photosensitive epilepsy.

! CAUTION: attached lamps may become hot to the touch after prolonged use at high intensity.

## **SPECIFICATIONS**

### **Module format**

Doepfer A-100 'Eurorack' compatible module  
3 U, 4 HP, 30 mm deep (inc. power cable)  
Milled 2 mm aluminium front panel with non-erasable graphics

### **Maximum current draw**

+12 V: 150 mA (with included LED lamps)  
+12 V: 1000 mA (at maximum load)  
-12 V: 5 mA

### **Power protection**

Reverse polarity (MOSFET)  
Independent output overcurrent protection

### **I/O impedance**

All inputs: 100 k $\Omega$

### **Outer dimensions (H x W x D)**

128.5 x 20 x 43 mm

### **Mass**

Module: 55 g  
Including packaging and accessories: 320 g

## **SUPPORT**

As all Joranalogue Audio Design products, Dim 2 is designed, manufactured and tested with the highest standards, to provide the performance and reliability music professionals expect.

In case your module isn't functioning as it should, make sure to check your Eurorack power supply and all connections first.

If the problem persists, contact your dealer or send an email to [support@joranalogue.com](mailto:support@joranalogue.com). Please mention your serial number, which can be found on the product card or on the module's rear side.

With compliments to the following fine people,  
who helped to make Dim 2 a reality!

Ben 'DivKid' Wilson Bernhard Rasinger

Björn Jauss Boris Uytterhaegen

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*21<sup>st</sup> Century Analogue Synthesis—Made in Belgium*

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*Joranalogue*  
AUDIO DESIGN

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