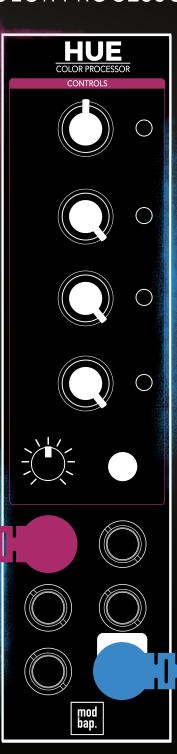
# HUE

### COLOR PROCESSOR



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### **About Us**

#### MODBAP MODULAR BY BEATPPL

Modbap Modular is a line of eurorack modular synthesizers and electronic music instruments by Beatppl. Founded by Corry Banks (Bboytech), Modbap Modular was born of the Modbap Movement with a simple mission to dev tools for beat driven hiphop leaning modular artists. It is our goal to develop eurorack modules from the beatmaker's perspective while adding value for music makers of all genres.

It's almost impossible to explain Modbap Modular without answering the questions; "So, what is ModBap?" MODBAP is the fusion of modular synthesis and boom-bap (or any form of hiphop) music production. The term was created by BBoyTech as a denotation of his experiments with modular synthesis and boombap music production. From that point forward, a movement was born where like minded creatives built a community around idea of Modbap. Modbap Modular is in effect, the result of that movement in a space where we'd previously not existed.

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www.modbap.com

### Overview

#### Hue

HUE is a 6hp Eurorack audio color processing effect comprising of a chain of four effects and one compressor all aimed to color the sound. Each effect imparts a particular coloration, tone, distortion, or texture to the source audio. The initial concept was born of a debate about the techniques and processes used to make drum machines sound big, bold, and delicious. The sounds that tug at the hearts of boombap, LoFi, and subsequently modbap, enthusiasts are those that have great texture, lush degradation, soft distortion, and big bold strokes of color. The classic beloved drum machines were often processed with outboard gear, recorded to tape, pressed to vinyl, played in big booming systems, sampled, and resampled and on and on. Ultimately, those are the sounds that become nostalgic and reminiscent of all that we love about classic LoFi boombap production. Hue's layout positions the DJ style filter knob for ease of tweaking. Drive boosts and lightly distorts the signal, while Shift+Drive adjusts the Drive tone. The Filter is a low pass filter to the left and a high pass filter to the right. Tape effect is intended to impart cassette tape saturation, while Shift+Tape adjusts the intensity. LoFi adjusts bit depth, while Shift+LoFi adjusts sample rate. Lastly, the one knob compressor serves as the final glue in the signal path. HUE is a textural beast when creative modulation is thrown at it. HUE puts the power to shape and transform your sound at your fingertips, is great for beefing up drums and equally magical on melodic content. HUE can be the glue that brings it all together. It also, pairs well with Trinity and Osiris.

#### WHAT'S IN THE BOX?

The Hue package comes with the following items included:-

- Hue module.
- · Eurorack IDC power ribbon cable
- 2 x 3m mounting screws.
- Quick reference guide.
- Sticker.

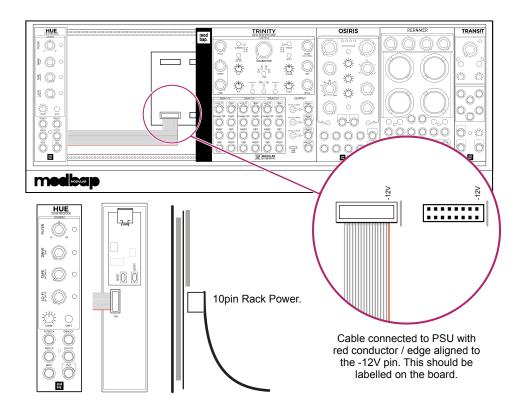
#### SPECIFICATION AND CORE FEATURES

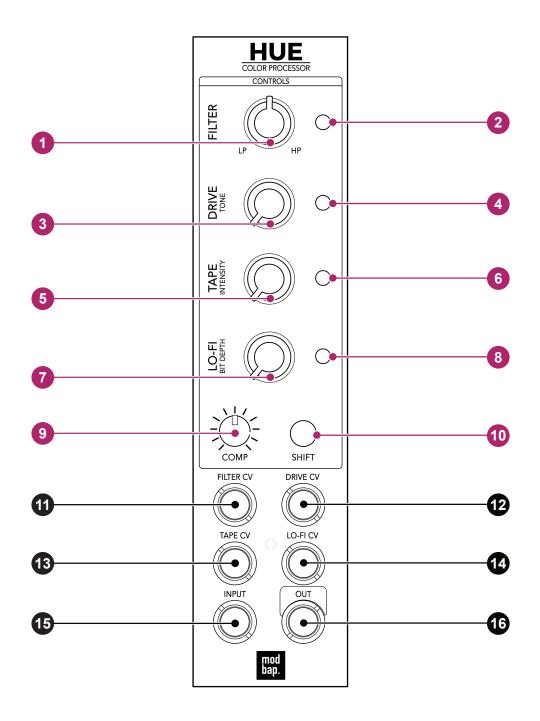
- Module size. 3U, 6 HP, Depth 28mm
- +12V current demand 104mA.
- -12V current demand 8mA
- +5V current demand 0mA
- 5 effects (Drive, Filter, Tape Saturation, LoFi, Compressor.)
- 4 CV inputs for modulating the effects
- Audio mono channel input and output

#### INSTALLATION

Follow the installation instructions carefully to avoid module or rack damage.

- 1. Ensure the power connection is disconnected before installing the device.
- 2. Identify a 6HP free location in the rack to install the module.
- 3. Connect the 10 pin connector from the IDC ribbon power cable to the header on the rear side of the module. Ensure that the pins are aligned correctly with the red stripe on the ribbon conductor closest to the -12V pin on the header.
- 4. Insert the cable to the rack and connect the 16 pin side of the IDC ribbon cable to the rack power supply header. Ensure that the pins are aligned correctly with the red stripe on the ribbon conductor closest to the -12V pin on the header.
- 5. Mount and position the module into the dedicated rack position.
- 6. Attach the 2 x M3 screws by screwing into the 4 locator holes and the rack mount. Do not over tighten.
- 7. Power up the rack and observe the module start up.







Press or Turn

Plug and Patch

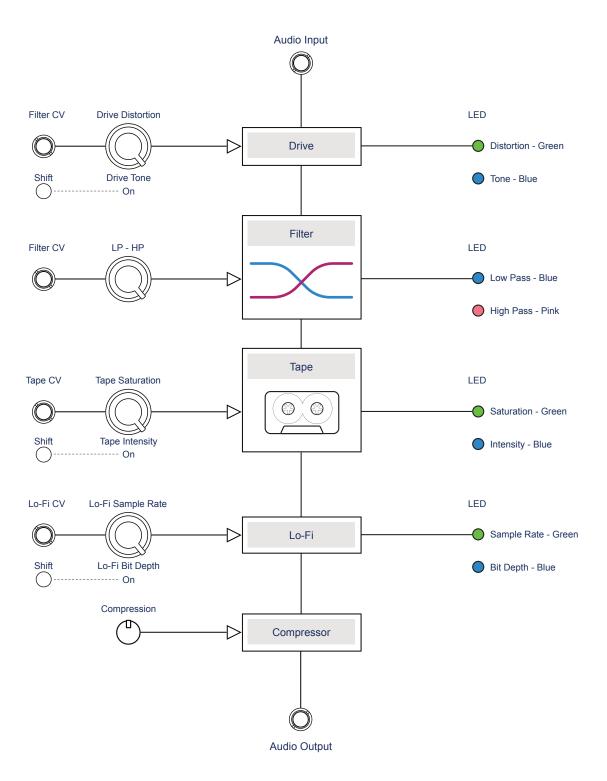


- DJ Style Filter. Low Pass 0-50%, High Pass 50%-100%
- Filter LED Indicator \*. Low Pass LED is Blue, High Pass LED is pink.
- 3 Drive. Signal boost & light distortion. Shift ON to change the tone.
- 4 Drive LED Indicator \*. Boost / Distort LED is green, Tone LED is blue.
- Tape. Cassette tape saturation. Shift ON to change the intensity.
- 6 Tape LED Indicator \*. Saturation LED is green, Intensity LED is blue.
- Lo-Fi. Sample rate. Shift ON to change the Bit depth.
- 8 Lo-Fi LED Indicator \*. Sample rate LED is green, Bit depth LED is blue.
- 9 Compression.
- Shift. Used in conjunction with controls to access secondary function.
- Filter CV. Modulation input for control of the filter parameter.
- Drive CV. Modulation input for control of the drive parameter.
- Tape CV. Modulation input for control of the tape parameter.
- Lo-Fi CV. Modulation input for control of the Lo-Fi parameter.
- Audio Input Mono.
- Audio Output Mono. Affected audio.
  - \* The brighter the LED, the more effect is applied.

Default / Starting State

Knobs all shown in default starting state. Filter at mid, 12 o'clock. All other main and shifted knobs fully counter clockwise. Ensure an audio input is connected and audio output to speakers. No CV inputs connected.





#### INPUT / OUTPUT ASSIGNMENTS

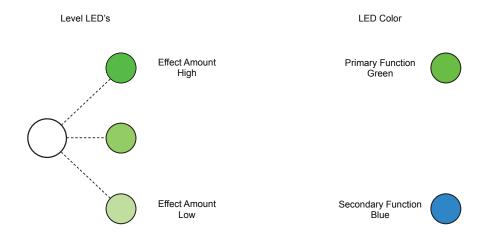
Hue has one mono audio input and a mono audio output. There are 4 CV input used for modulation of the four primary effects

	Filter	Drive	Tape	Lo-Fi
CV / Gate	+/-5V	+/-5V	+/-5V	+/-5V

	Function
Input	Mono In
Output	Mono Out - Effects applied

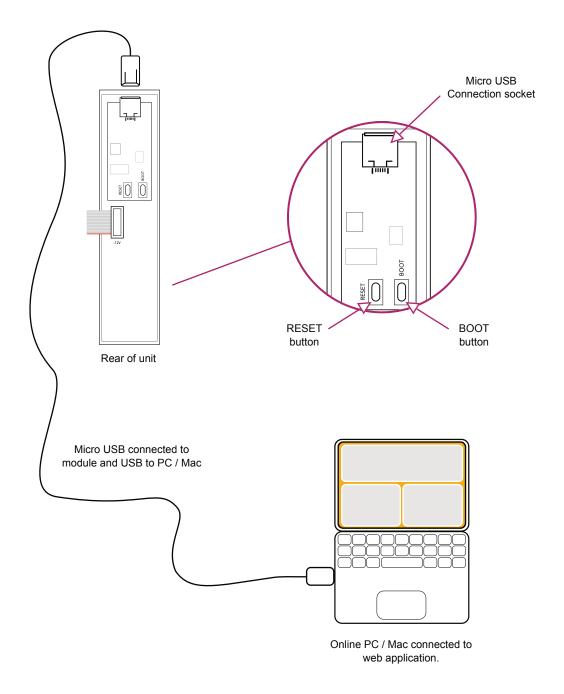
A subtle saturation is applied when a really hot signal is connected to the input. Lower input levels will generate a cleaner output.

Control levels are reflected in the respective LED's. Generally speaking the primary effect will be shown with the LED lit green and the secondary function lit blue. The amount of effect applied is represented by the brightness of the LED.



#### FIRMWARE UPDATES

Occasionally firmware updates are available. This maybe to provide improvements to the functionality, fix bugs or add new features. Updates are applied using the micro USB connector on the rear of the unit and connecting to a PC or Mac.



#### **UPDATING THE FIRMWARE - MAC**

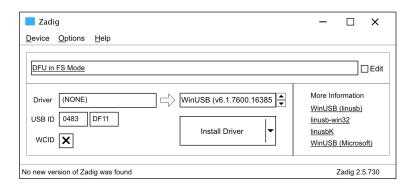
The instructions below are a guide. Always follow the instructions that are provided with each update.

- 1. Download the firmware update.
- 2. Remove the device from the rack and ensure power is disconnected.
- 3. Connect device using a micro usb connection to the module and USB to a mac. The module LED will illuminate. Power for the programming function is provided by the USB connection to the Mac.
- 4. Open the programming utility at <u>electro-smith github</u> within the Mac browser. It is recommended to use Chrome browser.
- 5. On the module, firstly hold the boot button and then press the reset button. The module will enter boot mode and the LED may appear slightly brighter.
- 6. On the programming page, press 'Connect'.
- 7. The option pop up box will open and select 'DFU in FS Mode'.
- 8. Click the bottom left option to select a file using the browser. Select the .bin firmware update file from the Mac.
- 9. Click 'program' in the bottom programming section window. The status bar indicators will show erase status followed by upload status.
- 10. When complete disconnect the usb connection and reinstall into the rack.
- 11. Power on the rack and module.

#### UPDATING THE FIRMWARE - PC WINDOWS

The instructions below are a guide, follow the instructions provided with each update.

 Windows PC's may need the original WinUSB drivers installed. It is recommended to install Zadig, a utility which reinstalls windows drivers, before updating. This can be downloaded from <a href="https://www.zadig.akeo.ie">www.zadig.akeo.ie</a>.



- 1. Download the firmware update.
- 2. Remove the device from the rack and ensure power is disconnected.
- Connect device using a micro usb connection to the module and USB to a PC.
   The module LED will illuminate. Power for the programming function is provided by the USB connection to the PC.
- 4. Open the programming utility at <u>electro-smith github</u> within the PC browser. It is recommended to use Chrome browser.
- 5. On the module, firstly hold the boot button and then press the reset button. The module will enter boot mode and the LED may appear slightly brighter.
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- 9. Click 'program' in the bottom programming section window. The status bar indicators will show erase status followed by upload status.
- 10. When complete disconnect the usb connection and reinstall into the rack.
- 11. Power on the rack and module.

#### TIPS WHEN UPDATING THE FIRMWARE

There are several things to consider when updating the firmware from a PC or Mac. These tips will help to avoid any problems when updating.

- PC users may need WinUSB driver installed to use the electro-smith utility. A
  PC application called Zadig may help install generic windows drivers. This is
  available from www.zadig.akeo.ie.
- 2. Ensure the USB is the correct type for data use. Some devices such as mobile phones are supplied with a Micro USB cable for charging purposes. The USB cable needs to be a fully featured USB cable. Any connected device may not be recognised by the web app if the cable is incompatible.
- 3. Use a browser that is compatible with running scripts. Chrome is a robust browser recommended for this purposes. Safari and Explorer are less reliable for script based web applications.
- 4. Ensure the PC or Mac USB supply power. Most modern devices have USB powered but some older PC/Mac's may not supply power. Use a USB connection that can supply power to Per4mer.

#### **Limited Warranty**

Modbap Modular warrants all products to be free of manufacturing defects related to materials and/or construction for a period of one (1) year following the product's purchase date by the original owner as certified by proof of purchase (i.e. receipt or invoice).

This non-transferrable warranty does not cover any damage caused by misuse of the product, or any unauthorized modification of the product's hardware or firmware.

Modbap Modular reserves the right to determine what qualifies as misuse at their discretion and may include but is not limited to damage to the product caused by 3rd party related issues, negligence, modifications, improper handling, exposure to extreme temperatures, moisture, and excessive force.

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All rights reserved. This manual is designed to be used with Modbap modular devices and as a guide and aid to working with the eurorack range of modules. This manual or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of the publisher except for personal use and for brief quotations in a review.

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(Firmware Version 1.0.1)

Manual designed by Synthdawg www.synthdawg.com





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Firmware V1.0.1



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