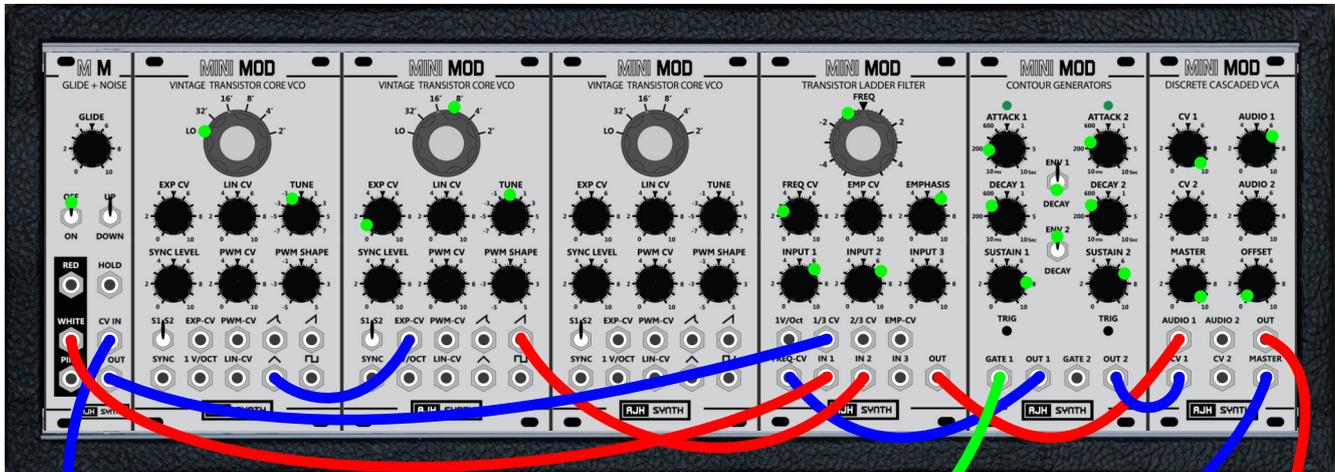


## 'Shine On You Crazy Minimoog'



— Audio  
— CV  
— Gate

Keyboard CV      Keyboard Gate      Keyboard Mod      Audio Out

Green dots show approximate pot and switch positions. Pots and switches that do not have green dots are not used in this patch, and should be left at their zero or off positions.

This patch uses only the modules contained within a standard MiniMod voice, which is the equivalent of a Minimoog, simply for a little more authenticity, as this is the synth that was believed to be used on the original Pink Floyd recording. The version here is our interpretation of it, and not intended to be an exact match, so opinions will differ as to the setting used, but we feel it's pretty close. For example, it's possible the Minimoog's MOD MIX control was used on the original to mix VCO 3 and Noise modulation to affect the pitch and filter, but here it would require an additional module to mix both signals, and simply adding Noise as audio sounds very similar, whilst allowing greater control of both.

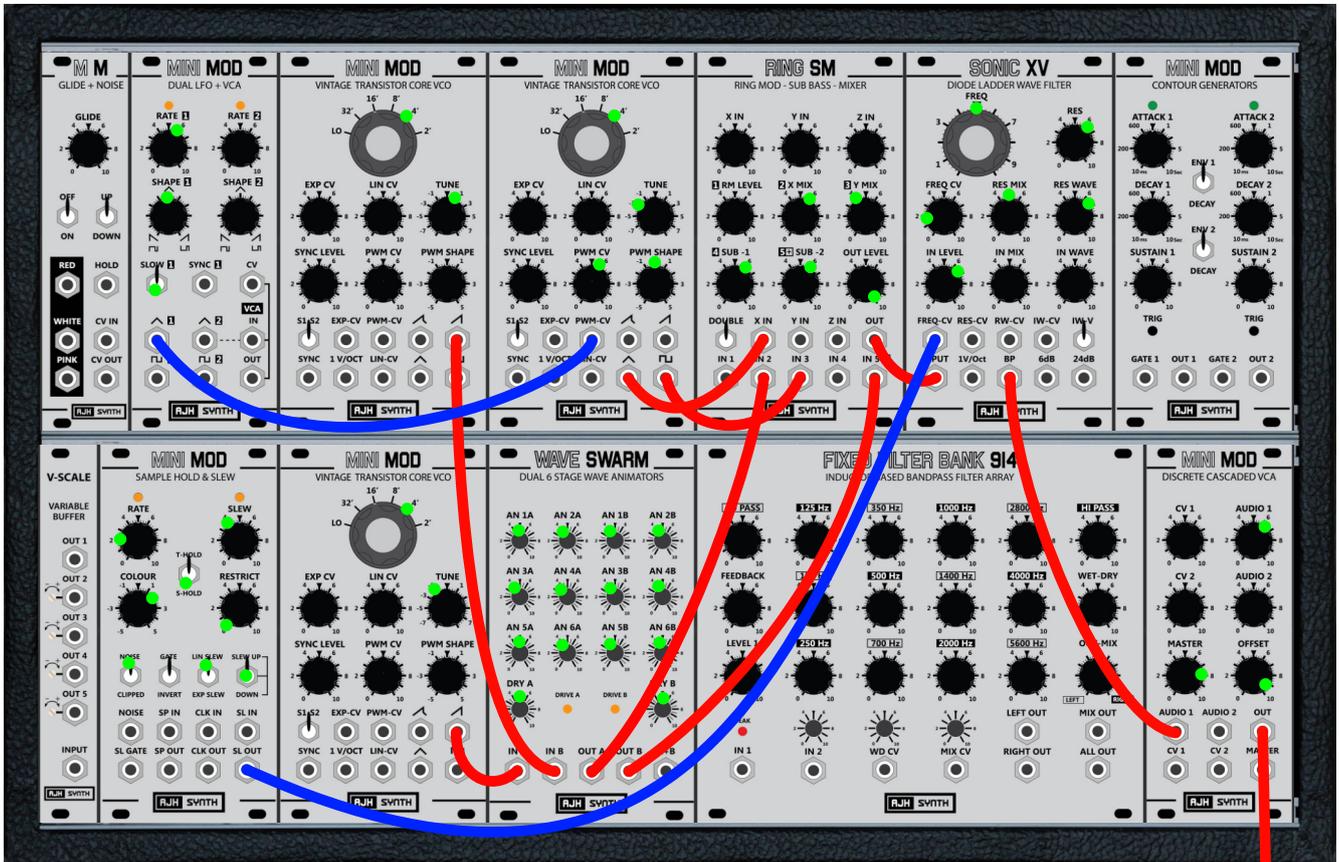
**Glide + Noise:** In the video I'm using the Glide + Noise MkII module to access the CV Bus, allowing me to control the 2 VCOs from one input/cable. If you are not able to use the CV Bus you will need to use a multiple or stacking cables to connect the keyboard to each VCO's 1V/Oct input, as is usual with a fully modular synth. This module is also supplying white noise to the Ladder Filter, but additionally supplying 1V/Oct to the 1/3 CV input of the Ladder Filter, mimicking a function achievable on the Minimoog via switches. The result is that it moderately affecting filter frequency as keyboard changes pitch. The MkI version of this module can also be used for these last two functions, it only lacks access to the CV Bus.

**VCO:** The first VCO is used as an LFO, but is still receiving CV from the keyboard, increasing or decreasing LFO speed as keyboard pitch rises and falls. It may be necessary to change the octave of your controller keyboard to obtain a suitable range of LFO speed - I have the Keystep set to -1 octave. The second VCO needs EXP-CV raised just slightly, as the pitch modulation from the first VCO should be subtle.

**VCF:** The levels are raised to a point where the incoming signals are overdriven a little, which seems to sound closer to the character of the original sound.

Modules used from top-left to bottom-right: Glide + Noise, Vintage Transistor Core VCO x2, Transistor Ladder Filter, Contour Generators, Discrete Cascaded VCA.

## 'Shine On...' backing drone



Cables: █ Audio  
█ CV

Audio Out

This diagram differs from the video, as I replaced the Precision Voltages with the Dual LFO. This is because I was simply using the Precision Voltages to allow easy experimentation with different VCO pitches during the composition, but it isn't needed to recreate this patch. Also, I was using the Dual LFO to modulate the PWM of the square wave VCO, but this module was located in the other case..

VCO: The position of VCO's in this rack is arbitrary, but just mirrors what was seen in the video. Their tuning is essentially free-running, so they don't need to be connected to anything at their 1V/Oct inputs. One VCO is providing a square wave to the Ring SM's mixer, whilst also providing a triangle for the Ring SM to generate a -1 sub-octave. The sawtooths from the other two VCO's go into separate channels on the Wave Swarm, allowing more separation between them, and then output to separate channels on the Ring SM via Out A & Out B so their volume levels can be adjusted independently.

Sample Hold & Slew: This is used to provide some random, but gradual modulation of the filter frequency, by using the Slew function to smooth off the transitions between the randomly generated voltages. This is optional, and subtle, but adds some more organic variation to the drone.

Modules used from top-left to bottom-right: Dual LFO + VCA, Vintage Transistor Core VCO (x3), Ring SM, Sonic XV, Sample Hold & Slew, Wave Swarm, Discrete Cascaded VCA.