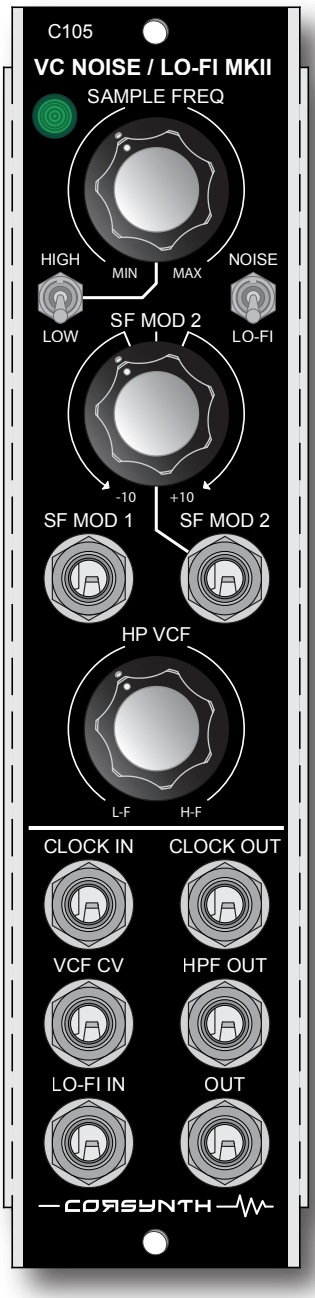
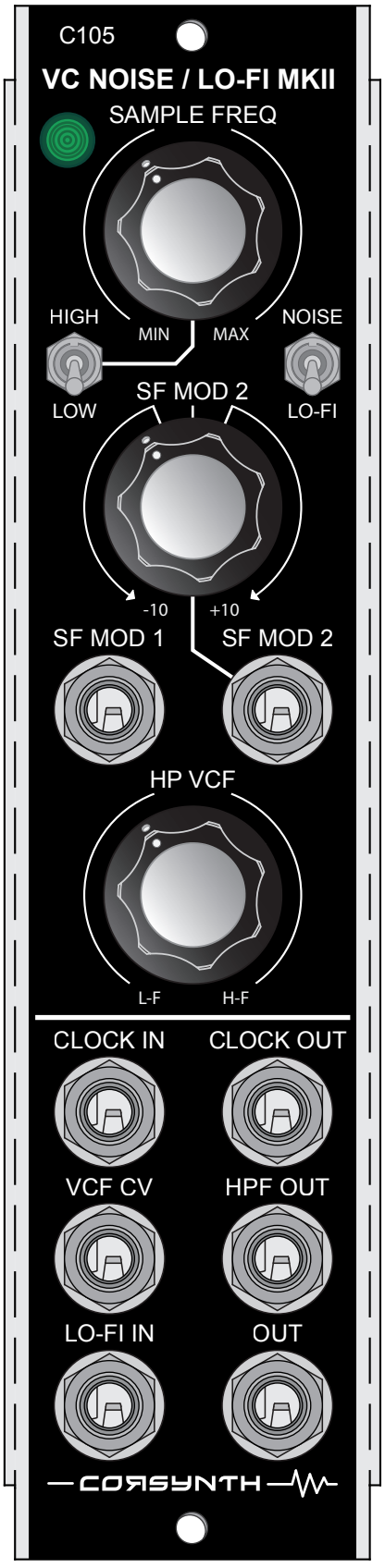
CORSYNTH

C105 VC NOISE / LO-FI MKII



USER MANUAL

C105 VC NOISE / LO-FI MKII



The C105 VC Noise / Lo-Fi Machine MKII is a voltage controlled analog sample rate reducer and a VC Nosie generator. This new MKII version expands the modules possibilities with new features that allows this module to be used in other ways not possible with the previous version. Now the C105 MKII can be used like a traditional sample and hold , a voltage controlled clock generator , a random gate / trigger generator or a 12 db VC High pass filter and even as a square wave VCO.

The C105 new characteristics are :

- The internal clock has a new LOW mode that allows to use it as a traditional sample and hold.
- The module now accepts external clock signals, so it can be synced to other modules.
- New clock output. Now the C105 can be used as a master clock.
- The passive first order HPF has been replaced for a voltage controlled second order HPF.

The C105 is based on a Sample and Hold with an internal clock that goes from 0,2Hz up to 44KHz and it can be voltage controlled. This wide frequency range and two FM inputs (one with a reversible attenuator) allow to create subtle or harsh digital and aliassing effects.

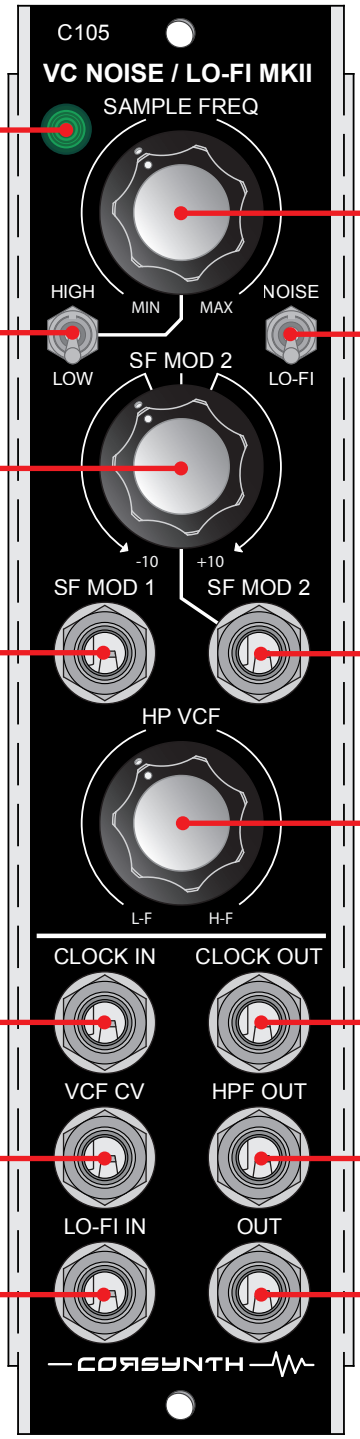
The internal noise generator in combination with the S&H make a perfect way to create pitched noises, random voltages, sound FXs etc.

In addition, there is also a 12db VC controlled high pass filter with an independent output.

C105 main characteristics

- Internal white noise generator.
- Voltage controlled clock with two ranges :
  * Low : 0,2Hz to 125Hz
  * High : 125Hz to 44KHz
- Clock input
- Clock Output
- 12db VC High Pass filter.

C105 VC NOISE / LO-FI MKII
Front Panel Description



Clock frequency LED

Sample frequency

Sample frequency range switch

Sample input selector switch

Sample frequency modulation 2 level

Sample frequency modulation 1 input

Sample frequency modulation 2 input

High Pass Filter cutoff frequency

Sample clock Input

Sample clock output

Cutoff frequency CV input

High pass filter ouput

LO-FI input

Ouput

CONTROL DESCRIPTION

SAMPLE FREQ

This control sets the clock frequency for the internal sample and hold circuit. The internal clock has two frequency ranges that can be selected using the range switch.

The frequency ranges are:

- HIGH : from 200Hz up to 44KHz
- LOW : from 0.2Hz to 149Hz

CLOCK LED

The led turn on every time a new clock pulse is received. It will follow the internal clock unless an external clock signal is patched to the CLOCK IN . The on time is determined by the on time of the clock signal.

INPUT SELECTOR SWITCH

This switch selects the signal to be sampled by the internal Sample and Hold. The two options available are :

NOISE : internal white noise generator.
LO-FI : LO-FI signal input.

SF MOD 2

Sample frequency modulation input 2. The SF MOD 2 potentiometer sets the amount of modulation. This potentiometter is a reversible attenuator, in center position there is no modulation , to the right attenuates the input signal and to the left attenuates an inverts the input signal. The input allow positive and negative signals which together with the value set by the SAMPLE FREQ potentiometer, the SF MOD 1 INPUT and the RANGE SWITCH sets the final value of the clock frequency for the internal sample and hold circuit.

SF MOD 1

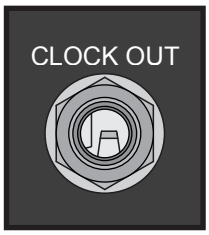
Sample frequency modulation input 1. The input allow positive and negative signals which together with the value set by the SAMPLE FREQ potentiometer, the SF MOD 2 and the RANGE SWITCH sets the final value of the clock frequency for the internal sample and hold circuit.

HP VCF

This control sets the cutoff frequency of the high pass filter. The frequencies below the cutoff frequency are attenuated at a rate of 12 db per octave.

CLOCK IN

Clock input. If a signal is patched to this input it will be used as clock for the internal sample and hold. Any signal with a possitive level higher 3V than can be used as clock input .



CLOCK OUT

Clock output. If nothing is patched to the CLOCK IN the output is the internal clock, a square wave from 0 to 10V. In case there is a signal patched to CLOCK IN the output will be a pulse wave from 0 to 10V with a ON period equal to the time that the input signal is above 3V.

VCF CV

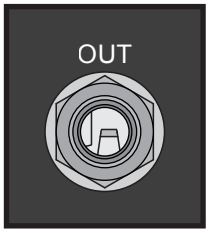
High pass filter cutoff modulation input. The input allow positive and negative signals which together with the value set by the HP VCF knob sets the final value of the cutoff frequency.

HPF OUT

High pass filter out. The filter's input signal is the output of the sample and hold circuit.

LO-FI IN

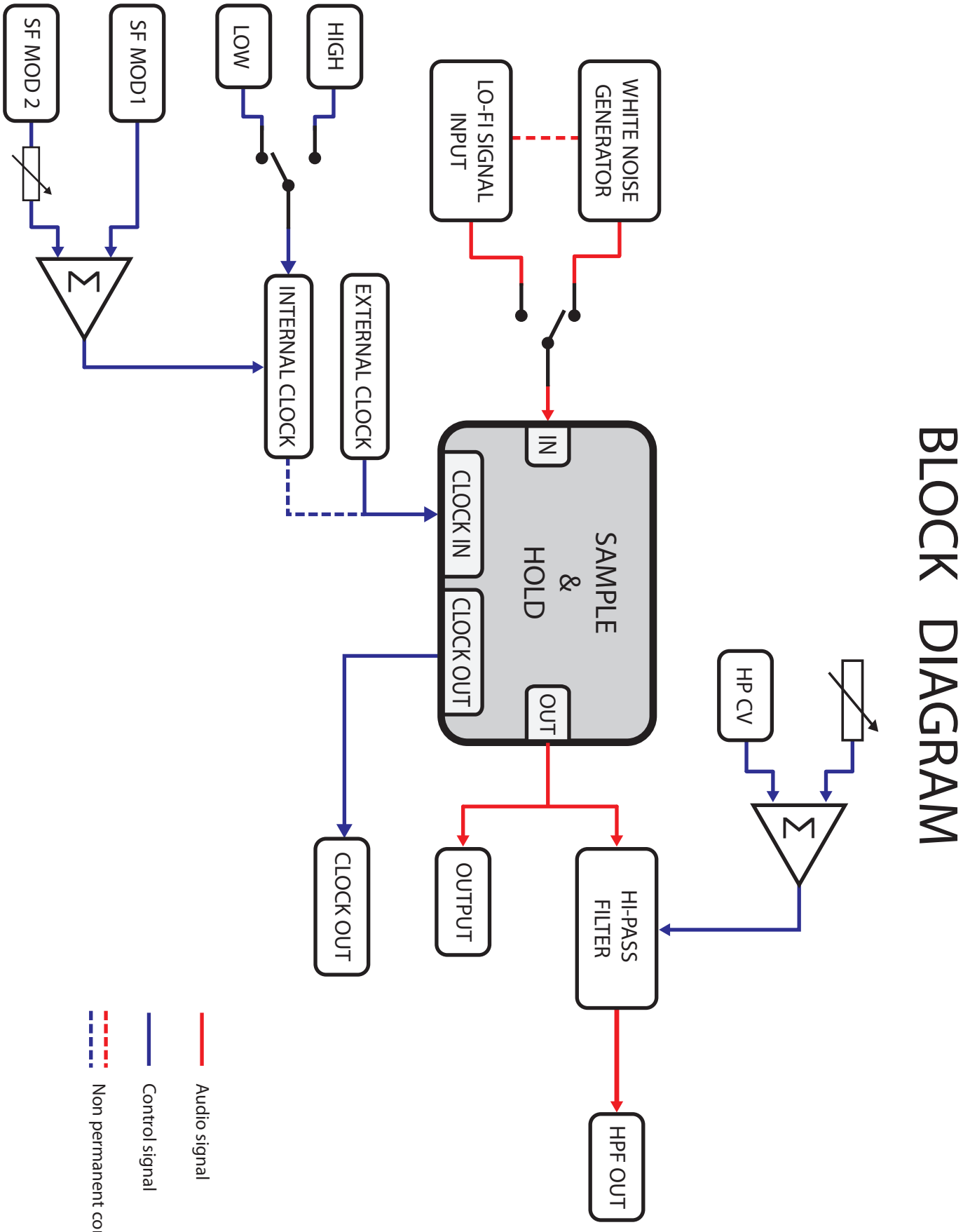
Input signal to be sampled. If nothing is patched to this input, the internal white noise generator is connected to it.



OUT

Output of the internal sample and hold circuit.

BLOCK DIAGRAM



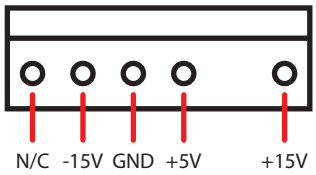
Trimmers and power connectors

IMPORTANT !!!!

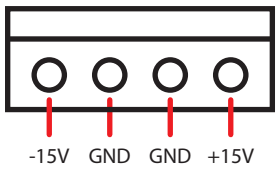
This module has two power connectors (Synthesizers.com and MOTM). Only one is needed to power the module. (Synthesizers.com or MOTM).

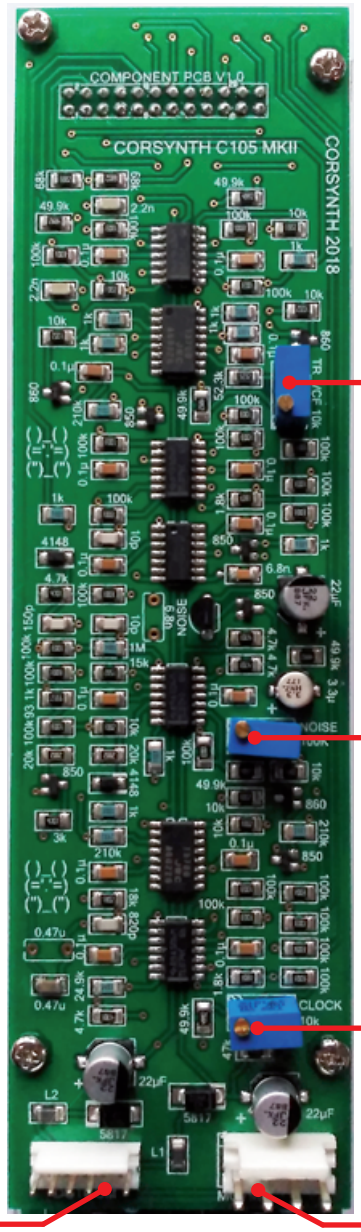
Never connect both at the same time.

Synthesizers.com



MOTM





HP filter cutoff

Noise level

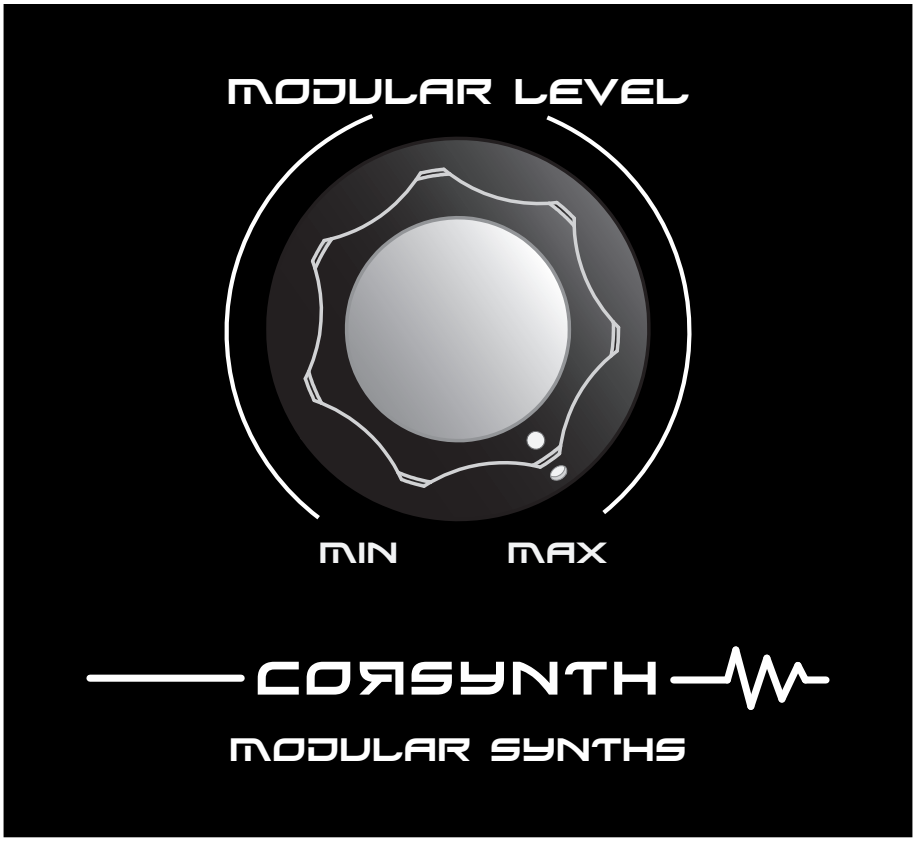
Clock frequency

Synthesizers.com power connector

MOTM power connector

TECHNICAL DATA

Module Format : 5U, MU format (Synthesizers.com, Moog)
Module Width : 1 MU (Moog unit)
Module Depth : 52 mm (2,05 inches)
Power : +15V@45mA , -15V@44mA
Power connectors : Synthesizers.com , MOTM (4 pin)


MODULAR LEVEL
MIN
MAX
CORSYNTH
MODULAR SYNTHS