CORSYNTH

DR-02 SNARE DRUM

USER MANUAL

DR-02 SNARE DRUM

The DR-02 Snare Drum is the second module in the DR series dedicated to analog drum synthesis.

This module is designed to synthesize electronic snare drum sounds of any kind. From the classic preset drum machines from the 70s to TR-XXX, electro snares, zaps...
But thanks to its 12 knobs and 3 CV inputs the DR-02 Snare Drum can synthesize much more than snare drums, sounds like hit-hats, toms, cymbals , congas, FXs are also possible and even it can be used as an oscillator.

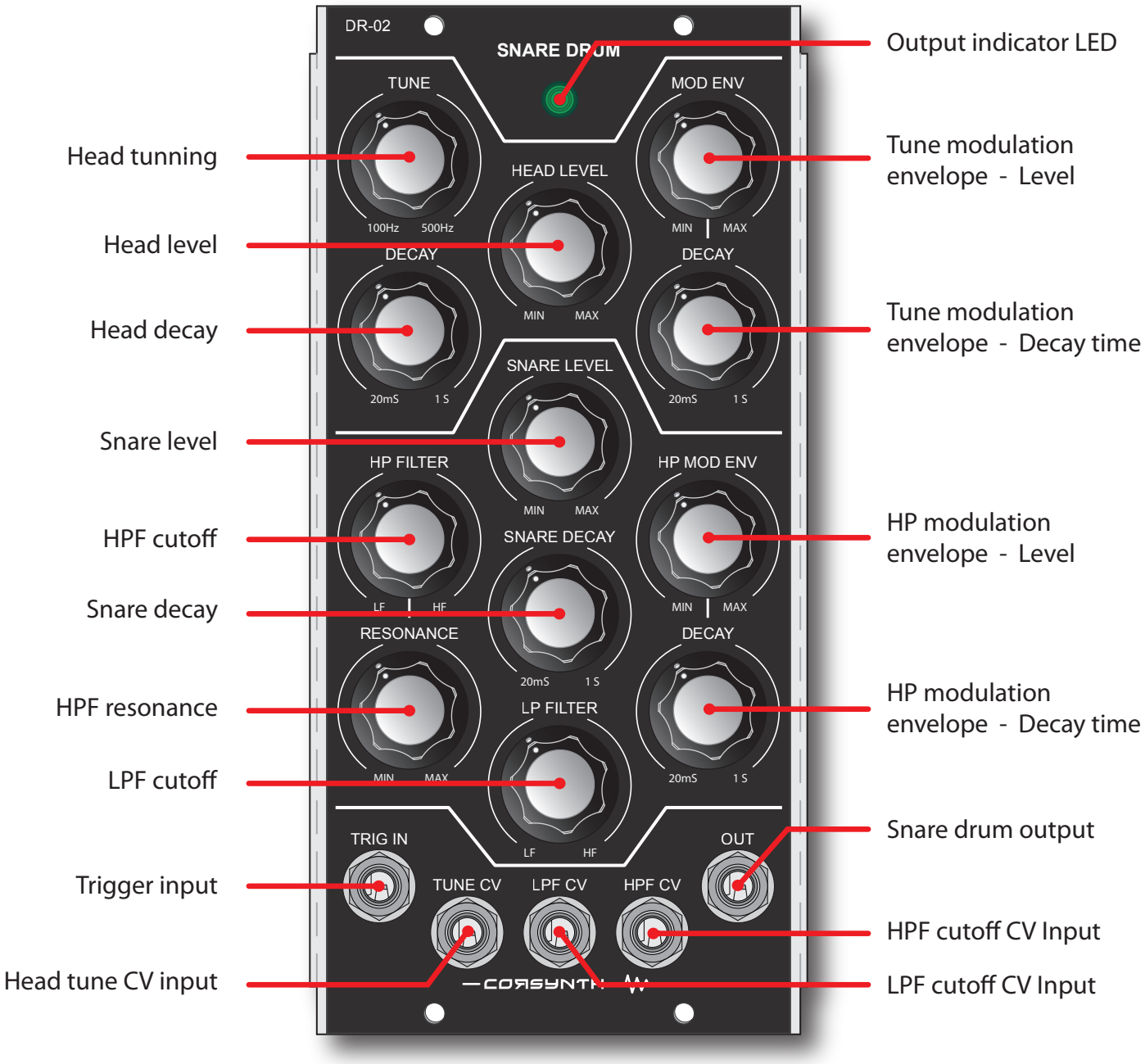
The DR-02 is composed for two different sections , Head and Snare each of them with its own volume control.

The Head section has two voltage controlled oscillators with a fixed frequency interval between them. One modulation envelope to modulate the oscillators tuning and one VCA with an AD envelope to control de decay of the snare head.

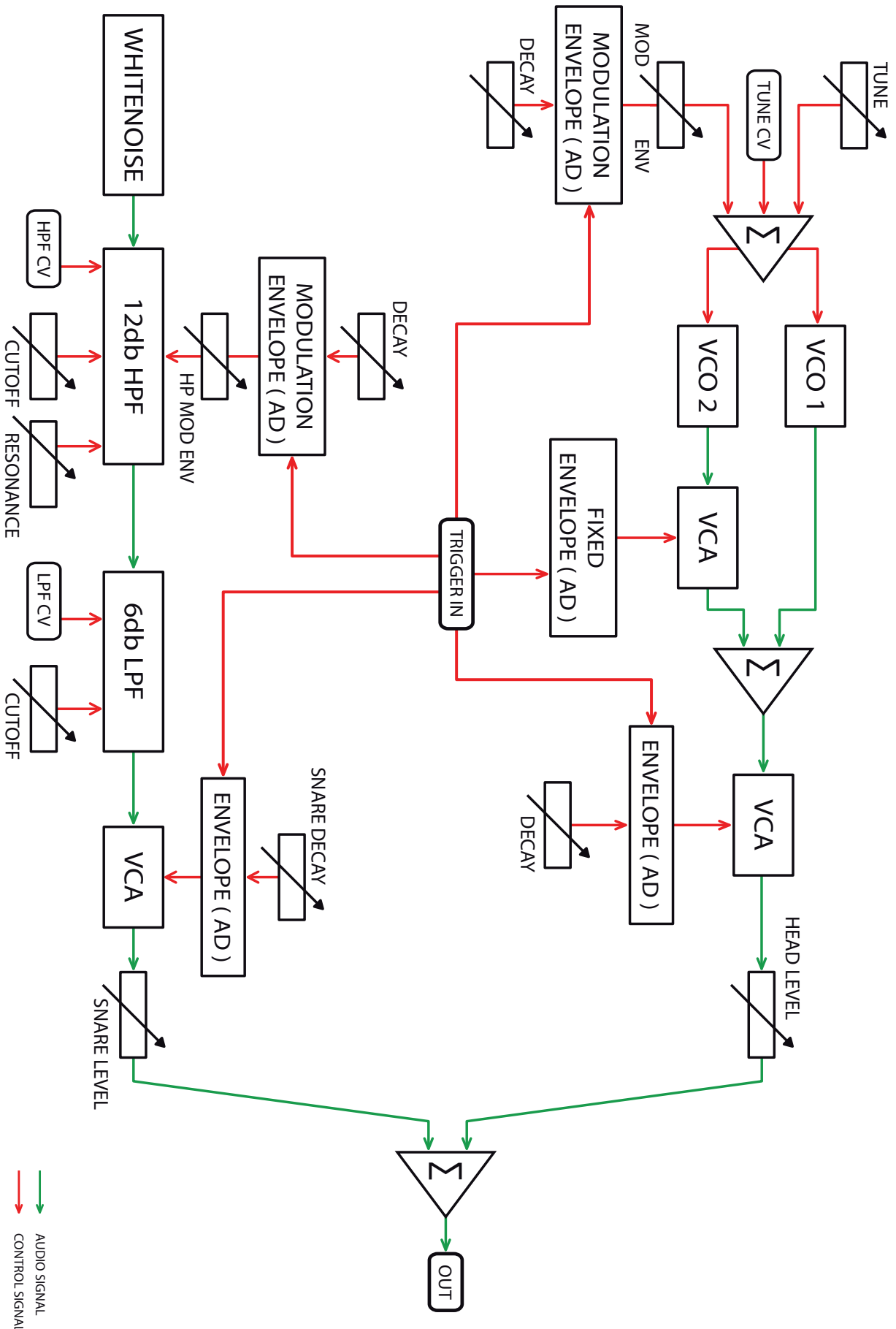
The Snare section is composed by a noise generator , two voltage controlled filters connected in series (one 12db resonant high pass filter and one 6db non- resonant low pass filter). One envelope to modulate the high pass filter cutoff frequency and one VCA with an AD envelope to control de decay of the snare.

All these components and the big amount of individual controls make the DR-02 a really versatile drum synthesizer.

DR-02 Snare Drum
Front Panel



DR-02 SNARE DRUM BLOCK DIAGRAM

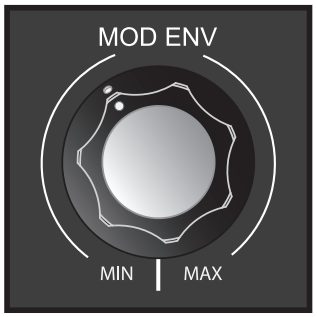


CONTROL DESCRIPTION

Head Controls

TUNE
This potentiometer sets the fundamental frequency of the snare drum head. The minimum frequency is 100Hz and the maximum 500Hz.

DECAY
This potentiometer sets the decay time of the snare drum head. It goes from 20 milliseconds up to 1 second.

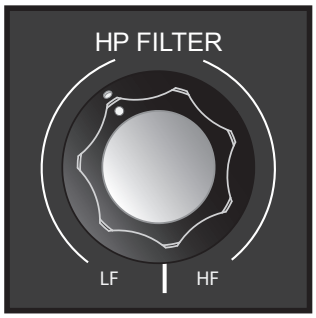


MOD ENV
This potentiometer sets the amount of modulation envelope that affects the snare drum head fundamental frequency.

DECAY
This potentiometer sets the decay time of the modulation envelope that affects the snare drum head fundamental frequency. It goes from 20 milliseconds up to 1 second.

HEAD LEVEL
This potentiometer sets the volume of the snare drum head.

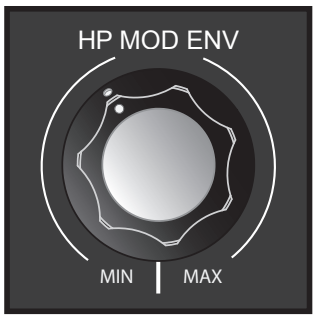
Snare Controls



HP FILTER
This potentiometer sets the cutoff frequency of the High Pass Filter.

RESONANCE
This potentiometer sets the amount of resonance of the High Pass Filter. At high resonance settings the filter will start to auto-oscillate.

LP FILTER
This potentiometer sets cutoff frequency of the Low Pass Filter. This filter is in series with the High Pass Filter.



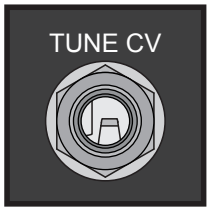
HP MOD ENV
This potentiometer sets the amount of modulation envelope that affects the HPF cutoff frequency

DECAY
This potentiometer sets the decay time of the modulation envelope that affects the HPF cutoff frequency. It goes from 20 milliseconds up to 1 second.

SNARE DECAY
This potentiometer sets the decay time of the snare. It goes from 20 milliseconds up to 1 second.

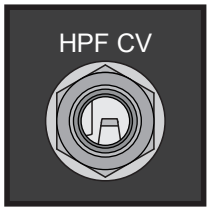
SNARE LEVEL
This potentiometer sets the volume of the snares.

TRIG IN
This input is used to trigger the snare drum. Any signal with a positive voltage higher that 3.5V can be used.

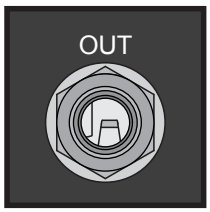


TUNE CV
This input allows to modulate the snare drum head fundamental frequency. It has a response of approximately 1V/ Oct

LPF CV
This input allows to modulate the low pass filter cutoff frequency.



HPF CV
This input allows to modulate the high pass filter cutoff frequency.



OUT
Snare drum output.

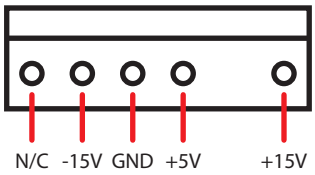
Trimmers and power connectors

IMPORTANT !!!!

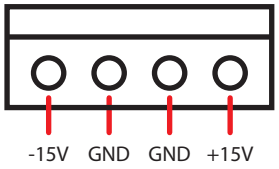
This module has two power connectors (MU and MOTM).
Only one is needed to power the module. (MU or MOTM).

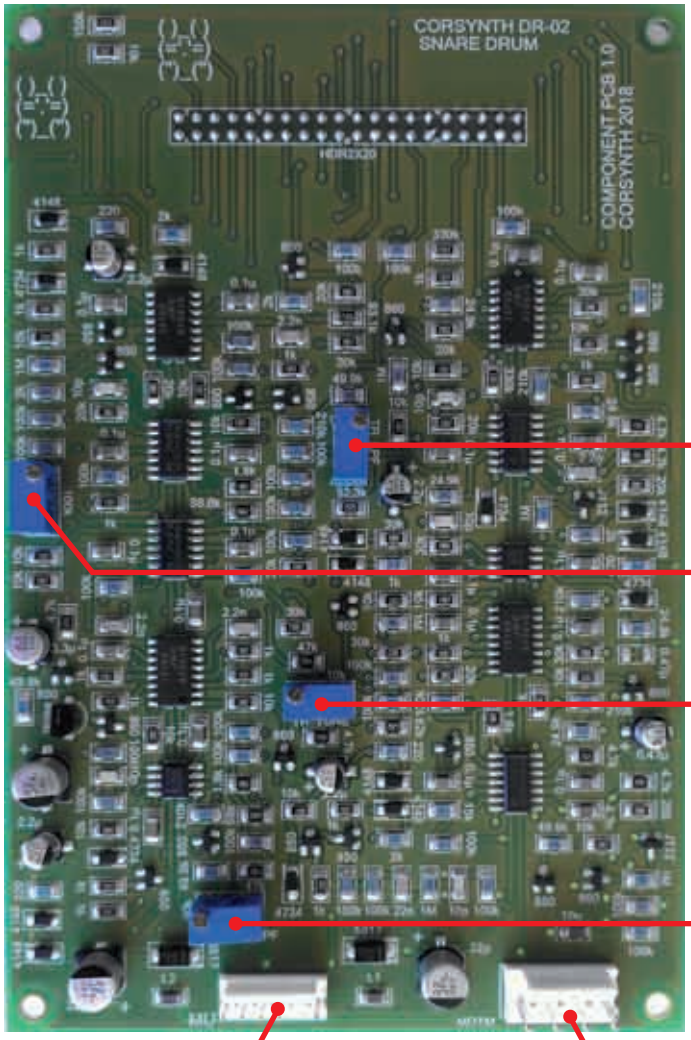
Never connect both at the same time.

MU



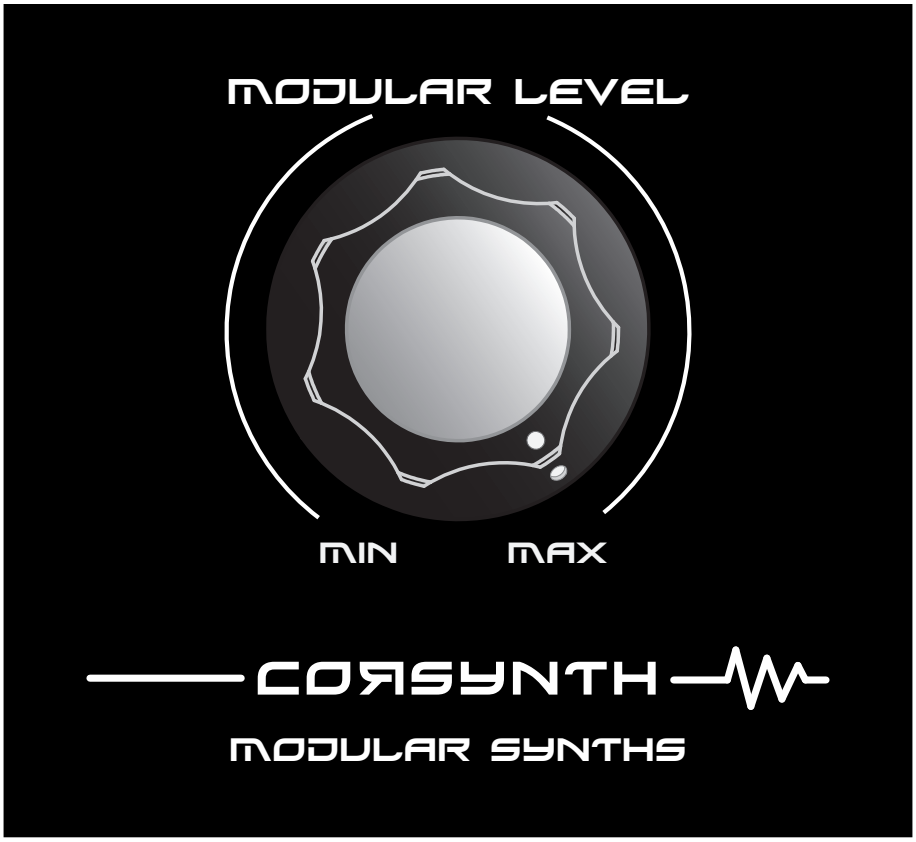
MOTM





TECHNICAL DATA

Module Format : 5U, MU format (Synthesizers.com, Moog)
Module Width : 2 MU (Moog unit)
Module Depth : 52 mm (2,05 inches)
Power : +15V@42mA , -15V@42mA
Power connectors : MU, MOTM (4 pin)


MODULAR LEVEL
MIN
MAX
CORSYNTH
MODULAR SYNTHS