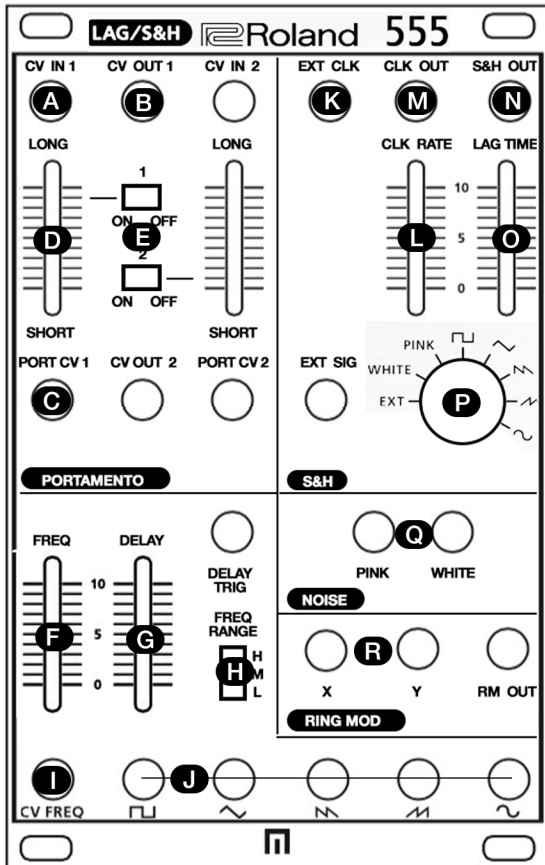


# ROLAND SYSTEM-500 MODULE 555

## DUAL VOLTAGE CONTROL FILTER

The SYS-555 contains both traditional and non-traditional modulation sources. Offering ring modulation, sample and hold with seven waveforms and internal LPF, pink and white noise modes, LFO with internal ENV and VCA, and two CV controlled portamento circuits.



**A** PORTAMENTO CV IN 1/2  
Input point for the signals to which to apply portamento.

**B** PORTAMENTO CV OUT 1/2  
Output the waveform with portamento applied.

**C** PORTAMENTO CV 1/2  
These jacks input a voltage used to control LONG / SHORT from an external source.

**D** LONG / SHORT  
These sliders adjust the amount of portamento. As the slider approaches SHORT, the signal approaches the original waveform

**E** ON / OFF  
These switches turn portamento on/off.

**F** LFO FREQUENCY  
Specifies the frequency of the LFO.

**G** LFO DELAY  
When a signal is input to DELAY TRIG, the output amplitude from the LFO temporarily becomes 0, and gradually returns to its original amplitude according to the setting of the DELAY slider.

**H** LFO FREQUENCY RANGE  
This switch specifies the LFO's frequency range.

**I** LFO CV FREQUENCY  
This jack inputs a voltage used to control the LFO's frequency from an external source.

**J** LFO WAVEFORM  
These jacks output a pulse wave, triangle wave, sawtooth wave, reverse sawtooth wave, and sine wave.

**K** S&H EXTERNAL CLOCK  
Input a clock signal to this jack if you want to use a clock from an external source, instead of using the internal LFO.

**L** S&H CLOCK RATE  
This slider specifies the frequency of the internal LFO that is used for HOLD. The frequency is indicated by the blinking of the LED.

**M** S&H CLOCK OUT  
The CLK OUT jack output the clock signal of the internal LFO. If EXT CLK is being input, a clock signal is output at its frequency.

**N** S&H OUT  
This jack outputs a voltage that is held from the input signal. By adjusting the LAG TIME you can smooth the changes in the CV waveform that is output.

**O** LAG TIME  
S&H contains an internal LPF. The output signal goes through the LPF before it is output. This slider specifies the cutoff frequency of the LPF.

**P** SAMPLE SELECTOR  
This switch selects the input signal (SAMPLE). You can choose from internally-generated pink noise, white noise, LFO output waveforms, or EXT SIG from an external source.

**Q** NOISE  
The PINK jack outputs pink noise, and the WHITE jack outputs white noise.

**R** RING MOD  
The waveforms of X and Y are multiplied and output from the RM OUT jack.

### SPECIFICATIONS

#### CONTROLLERS

PORTAMENTO 1 SLIDER  
PORTAMENTO 1 SWITCH  
PORTAMENTO 2 SLIDER  
PORTAMENTO 2 SWITCH  
CLOCK RATE SLIDER  
LAG TIME SLIDER  
SAMPLE & HOLD KNOB  
FREQUENCY SLIDER  
DELAY SLIDER  
FREQUENCY RANGE SWITCH

#### INDICATORS

PORTAMENTO 1 INDICATOR  
PORTAMENTO 2 INDICATOR

#### CONNECTORS

CLOCK RATE INDICATOR  
CV IN 1 & 2 JACK  
CV OUT 1 & 2 JACK  
PORTAMENTO CV IN1 & 2  
EXTERNAL CLOCK IN JACK  
CLOCK OUT JACK

POWER SUPPLY  
CURRENT DRAW

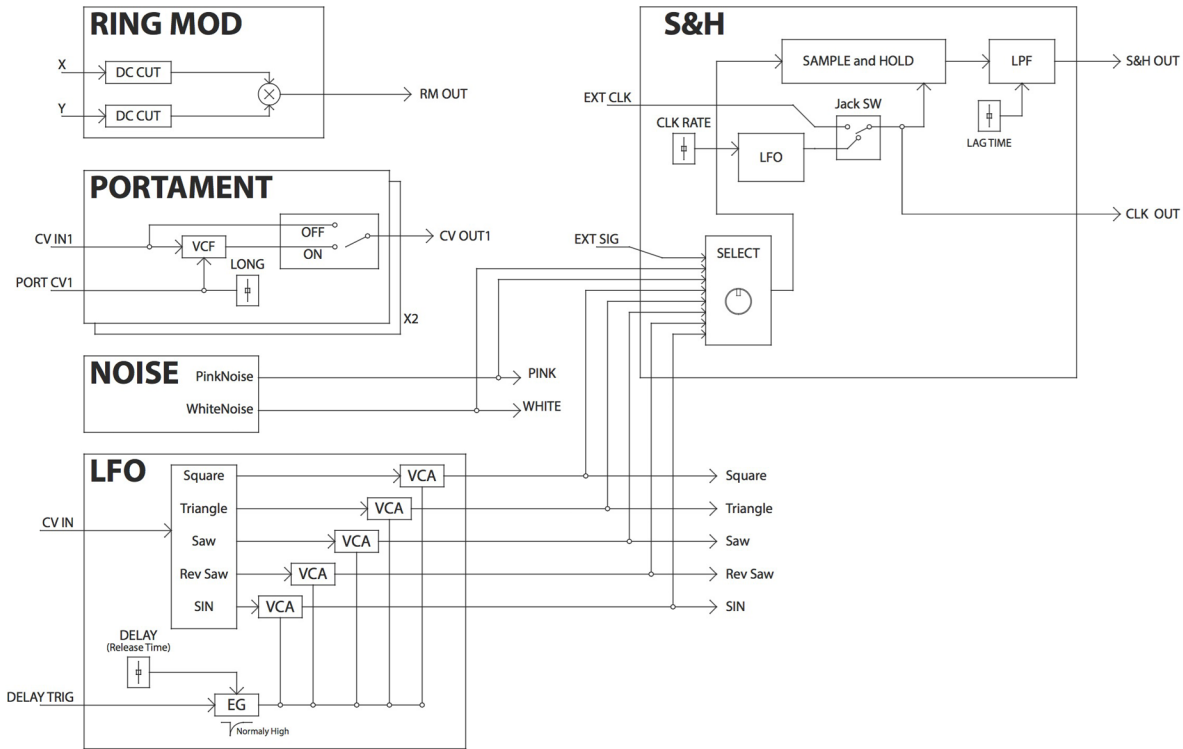
#### ACCESSORIES

SAMPLE & HOLD OUT JACK  
EXTERNAL SIGNAL IN JACK  
DELAY TRIGGER JACK  
CV IN JACK  
SQUARE JACK  
TRIANGLE JACK  
SAW JACK  
INVERTED SAW JACK  
SINE WAVE JACK  
PINK & WHITE NOISE JACKS (2)  
RING MOD X, Y, OUT IN JACKS (3)  
EURORACK POWER  
110 MA (+12 V)  
85 MA (-12 V)  
OWNER'S MANUAL  
LEAFLET "USING THE UNIT SAFELY"  
EURORACK INSTALLATION SCREWS  
EURORACK POWER CABLE

# ROLAND SYSTEM-500 MODULE 555

## DUAL VOLTAGE CONTROL FILTER

### BLOCK DIAGRAM



### ABOUT SAMPLE AND HOLD

S&H is a function that remembers (samples) an input signal and maintains (holds) its level as specified by a clock signal. As the input signal, the S&H of the SYS-555 can use its own LFO output waveform, pink noise, white noise, or the EXT SIG input signal. It holds this input signal as specified by the internal clock signal of the S&H or an EXT CLK.

By combining various input signals and clock signals, you can create a CV that is unpredictable yet has regularity.

By adjusting the LAG TIME you can smooth the changes in the CV that is output.

### ABOUT LFO

The LFO of the 555 can output five types of waveform, and also contains a delay function.

When a signal enters the DELAY TRIG jack, the output amplitude from the LFO temporarily becomes 0, and gradually returns to the original amplitude according to the setting of the DELAY slider.

By using this in conjunction with the VCO, you can create delayed vibrato in which vibrato is applied a little while after the sound begins.