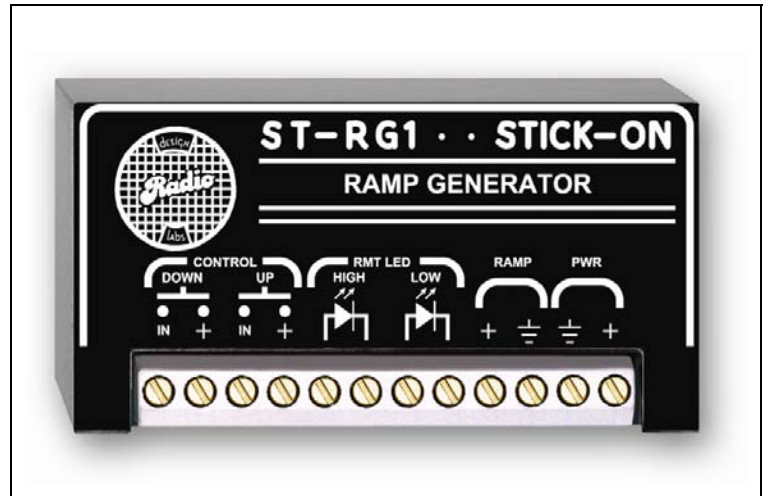# STICK-ON® SERIES
Model ST-RG1
Ramp Generator

ANYWHERE YOU NEED...

- Ramp Generator with 0 to 10 Volt Output
- Remote Control of RDL VCA Products
- Multiple VCA Remote Control Points
- Dual LED Outputs for Position Indication
- Ramp Output Capable of Driving Six VCAs
- Buffered, De-Bounced Switch Inputs

You Need The ST-RG1!

The ST-RG1 is a digitally generated 0 to 10 volt Ramp Generator in the group of STICK-ON series products by Radio Design Labs. These products are designed for quick, convenient installation and reliable operation in a variety of control applications.

APPLICATION: The ST-RG1 provides a 0 to 10V output is the ideal interface to remotely control Voltage Controlled Amplifiers, such as RDL's popular VCA Modules. A single VCA may now be controlled from several locations. Only a pair of buttons (**UP** and **DOWN**) is required at each control location, or RDL's RLC2 Remote Level Control. LED level indicator driver circuitry is included in the ST-RG1.

The ST-RG1 provides terminals for connection of two momentary buttons; one to ramp up, the other to ramp down. This is usually accomplished with RDL's RLC2 Remote Level Control. When power is applied to the ST-RG1, the output terminal is at its lowest (0 volt) point. When the **UP** button is pushed, the output ramps upward. When the **UP** button is released, the output remains stable at the voltage present when the button was released. When the **DOWN** button is depressed, the output ramps downward as long as the button is held in. When the ST-RG1 output reaches either minimum or maximum, it remains there until the opposite button (or closure) is applied. If the remote button is pushed momentarily and not held in, the ramp will step 200 millivolts nominal in the selected direction.

Two LED outputs are provided. A red LED connects to the **LOW** output; a green connects to the **HIGH** output. When the ramp is fully on (10 volts), the **HIGH** indicator is fully on, and the **LOW** is fully off. When the ramp is at minimum, the **LOW** is fully on and the **HIGH** is fully off. The circuit is designed to vary the current to each LED in proportion to the relative position of the ramp. If the ramp is at 5 volts then both indicators are equally illuminated. With this system, only two LEDs are required for full visual level indication!

The ST-RG1 provides the ideal interface for audio volume control through RDL VCA Modules. The ST-RG1 is a ground-referenced product, which may operate from the same power supply as the RDL VCA modules. Any number of **UP** and **DOWN** buttons may be connected to the ST-RG1, allowing VCA control from multiple locations. The output drive current from the ST-RG1 is more than sufficient to drive six monaural RDL VCA Modules for stereo applications.

All this is available in the unbelievable compactness and convenience of the RDL STICK-ONs. Put them right where you need them, or design them in with our optional racking or mounting kits. Anytime you need a 0 to 10 volt ramp generator, your simple, cost-effective solution is found in the ST-RG1!
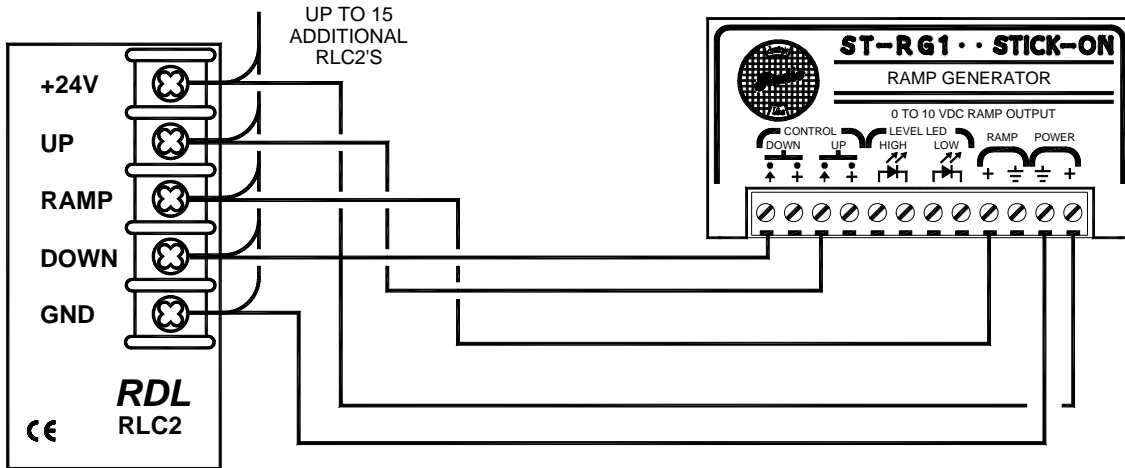
STICK-ON® SERIES
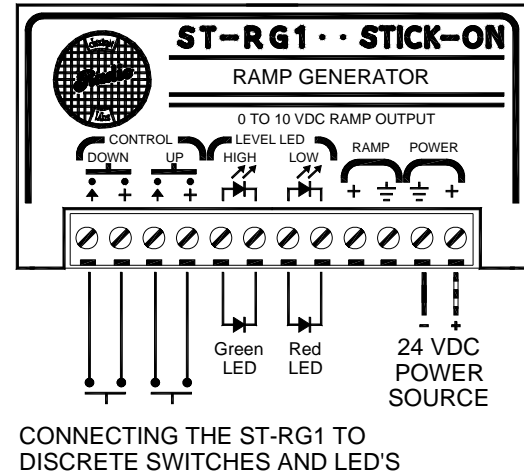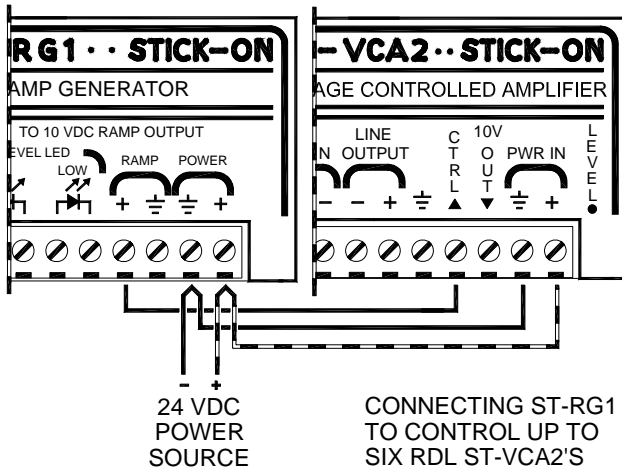
Model ST-RG1
Ramp Generator

Installation/Operation

CONNECTING ST-RG1 TO RDL'S RLC2s

24 VDC POWER SOURCE

CONNECTING ST-RG1 TO CONTROL UP TO SIX RDL ST-VCA2'S

CONNECTING THE ST-RG1 TO DISCRETE SWITCHES AND LED'S

TYPICAL PERFORMANCE

Control Inputs:	1 to ramp **up**, 1 to ramp **down**
Input Logic:	External closure pulls normally low input to +15 Vdc to activate **up** or **down** function
Indicator Outputs:	1 to drive low LED, partial to fully Off
	1 to drive high LED partial to fully On
LED Output Current:	0 to 3 mA (to drive low current, high intensity LEDs)
Ramp Output:	0 to 10 Volts nominal, (typical < 0.1 V to > 9.8 V under ST-VCA1 load)
Minimum Step:	200 mV nominal
Ramp Time:	5 seconds (fully off to fully on; or fully on to fully off)
Power Requirement:	24 to 33 Vdc @ 40 mA, Ground-referenced