



## D-RLC10, DB-RLC10, DS-RLC10

Remote Level Control - Rotary Optical Encoder



The **D SERIES-RLC10** is a rotary remote level control that provides user adjustment at single or multiple locations. Optical encoder technology allows continuous knob rotation with a comfortable adjustment rate and long-term trouble-free and noise-free operation. These controls directly connect to any RDL VCA and OEM equipment with 0 to 10 Vdc ramp inputs.

## DESCRIPTION

A single RLC10 may be connected to a ramp-controlled VCA using a single-pair shielded audio cable or unshielded cable. A rear-panel switch configures the control as the MASTER. The MASTER mode causes this control to drive the 0 to 10 Vdc ramp output and to monitor its pulse terminals in case any other RLC10 controls are connected.

As many as **nine additional** RLC10 controls may be wired in parallel with the MASTER control using UTP cable (CAT5, CAT6 or equivalent). The rear-panel MODE switch on each additional remote control is set to SLAVE mode. Multiple -RLC10 controls set to the SLAVE MODE may be connected to an RDL RU-VCA2A or RU-VCA6A, utilizing the VCA as the ramp generator. This connection is also possible with OEM equipment accepting open-collector pulses that are compatible with the RLC10 output pulse rate and width.

Operation is the same for a single control, or for each control connected in a multiple control point installation. The 0 to 10 Vdc ramp voltage is incremented up or down when the front-panel knob is rotated. Acceleration is provided so the rate of change is faster when the knob is rotated more rapidly, yielding a responsive feel and rapid elimination of acoustic feedback. The LED ring display encircling the control knob operates as a virtual pointer. When an RLC10 is not being adjusted, its display switches to a dim intensity to avoid being a visual distraction. The display returns to a bright intensity during adjustment. Upon power-up, the output will return to the last operating level.

## SPECIFICATIONS

### Ramp:

0 to 10 Vdc (Slave mode input; Master mode output)

### Pulse outputs (2):

Open-Collector @ 20 mA (UP, DOWN)

### Pulse duration:

500 uS (min.) to 4 mS (max.)

### Pulse interval:

500 uS (min., between consecutive pulses)

### Rotations, approximate min-to-max:

5 (slow rotation, no acceleration)

3 (medium rotation, with acceleration)

1 (fast rotation counterclockwise)

### Level control:

Optical rotary encoder

### Power requirement:

24 Vdc @ 50 mA, Ground-referenced

### Mounting:

Mounts in standard US electrical box, RDL WB- or SMB-series boxes; cover plate available separately

### Dimensions:

Height: 4.11 in. 10.44 cm; Width: 1.31 in. 3.33 cm; Depth: 0.98 in. 2.49 cm (w/o knob); Depth: 0.545 in. 3.93 cm (overall)

## FEATURES

- Rotary Optical Encoder Remote Level Control
- Single or Multiple Control Locations
- Up To Ten Remote Control Locations
- Integral 0 to 10 Vdc Ramp Generator
- Visual Level Display of Operating Level
- Display is Bright During Adjustment
- Display Dims After Adjustment
- Powers Up to Last Level Used
- Compatible with All RDL VCA Modules
- Available in Stainless Steel, Black and White

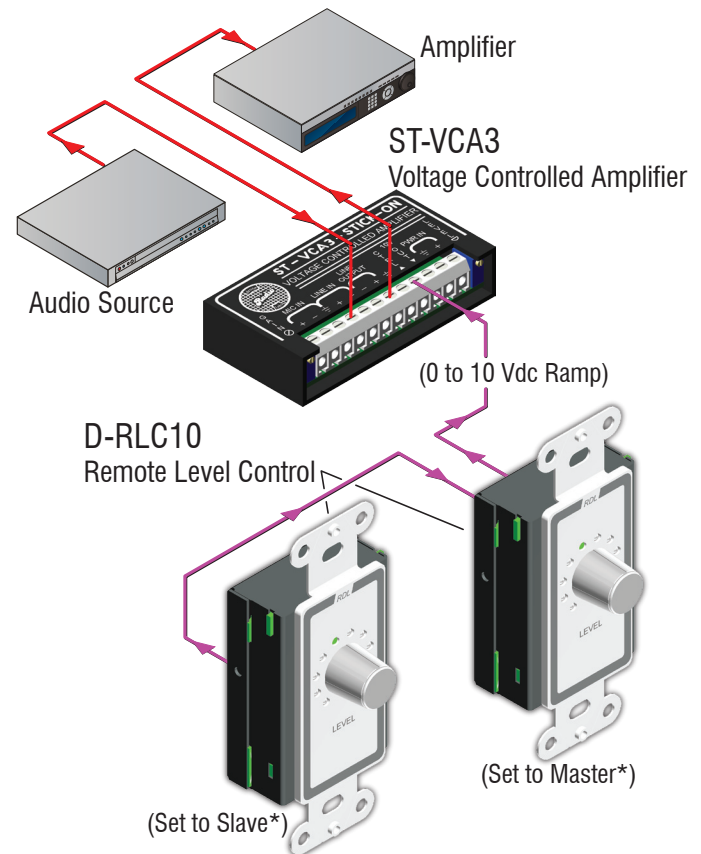
## CUSTOMIZABLE

The text on the front of this product may be customized using the customization tool at [rdlnet.com](http://rdlnet.com).



This product may share a common power supply with other RDL products. System energy efficiency is increased by powering multiple products from a single power supply.

## APPLICATION DIAGRAM



\* Each D-RLC10 may be set as Master or Slave on rear-panel switch; Master unit generates the 0 to 10 Vdc ramp.

### U.S. Sales Office

Phone: (800) 281-2683, (928) 443-9391  
Fax: (800) 289-7338, (928) 443-9392  
RDL, 659 6th Street, Prescott, AZ. 86301 USA

### U.S. Technical Support:

(800) 933-1780, (928) 778-3554  
Fax: (928) 778-3506  
RDL, 659 6th Street, Prescott, AZ. 86301 USA

### European Sales & Tech Support:

(31) 20-6238 983 Fax: (31) 20-6225 287  
RDL Europe BV, Gebouw Y-Tech, Van Diemenstraat 36,  
1013 NH Amsterdam, The Netherlands