

**235L Noise Gate / Expander Module****Features**

- Threshold control from -45 to +25 dBu
- Variable Fine Adjustable Depth to -80dB
- Adjustable Release/Hold Time, 50m/sec to 3 sec.
- 2:1 Expander or Noise Gate Selection
- Release or Hold Switch for Release control knob
- Always at Unity Gain, Regardless of settings
- LED Gain Reduction Meter
- Uses the API 2510 and API 2520 Op-Amps
- Transformer Output, to +28dBu



The API 235L Noise Gate/Expander is a new product design, as API has not offered a gate module since 1974. The 235L is a great sounding gate/expander with the ability to reduce noise in any type of program. The 235L can open unusually fast, without losing any part of the sound. Its extreme flexibility, repeatable settings, and superb sound make it ideal for all studio, live sound, and broadcast applications.

The API 235L Noise Gate/Expander is one of the fastest noise gates manufactured today. When an engineer is faced with program material with a high level of background noise, the 235L can either Gate the signal at a preset Threshold, or with the use of the Expander function, can reduce the background noise to an almost undetectable level. This can be achieved without the typical loss of the program material caused by slow triggering of the signal, or "pinging" caused by false triggering.

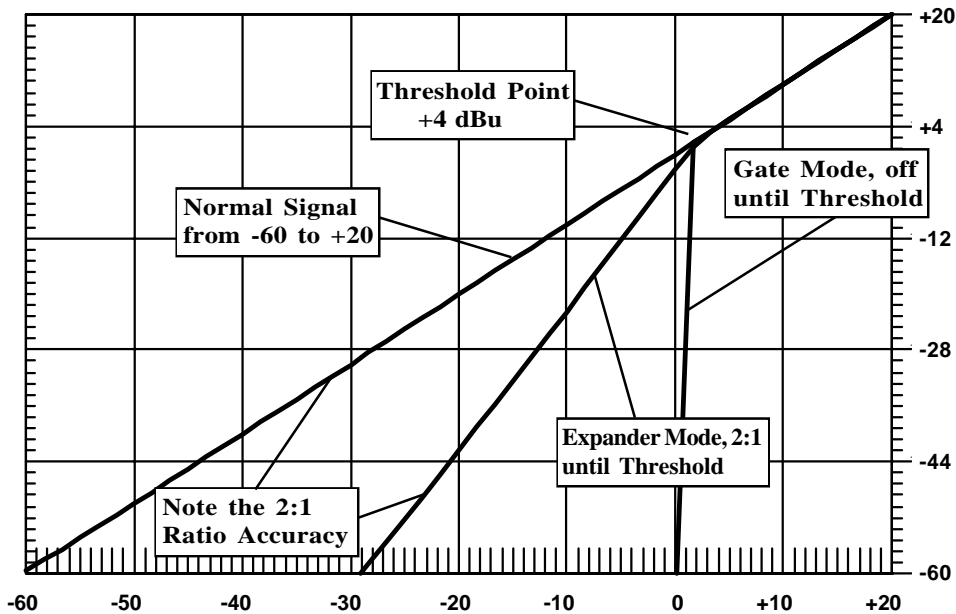
With a wide range of adjustment, the 235L can operate from -45 to +25 dBu, fitting into any audio situation regardless of program level. Once the Threshold level is set, the Attack time can be selected to react faster than 100 micro seconds or slightly slower than 25 milli-seconds to reduce false triggering. Although the Depth control has a full range of -80dB, the scale is expanded in the first half of rotation so 0 to 9dB is available for fine tuning of subtle, undetectable gating. The second half of rotation is from 10 to 80dB for more drastic noise reduction.

The Expander function is a 1:2 ratio, allowing the signal to "sneak up" to the full signal level without any loss of "under threshold" nuances of vocals and percussion. Setting the threshold in the Gate function to the desired level, then switching to the Expander mode is the perfect setup.

For special gating functions such as the famed "gated snare reverb", the Release function can be switched to Hold, and the Release control becomes the Hold time. In both functions, the unselected one has a set time of 100 m/sec.

When used with the other 200L series modules, a complete input strip can be built from input through dynamics, equalization, and final output.

The 225L Direct makes use of the 2510 and 2520 Op-amps and therefore exhibits the reliability, long life, and uniformity which are characteristic of API products.



## 235L Specifications

**Threshold Range:** -45dbu to +25 dBu  
**Depth Range:** 0 to -80dB, Fine adjust control, -9 at 50% rotation  
**Attack Time:** Fast=100u/sec, Normal=25m/sec, gate at 90% open  
**Release Time/Hold Time:** 50 m/sec to 3 sec.  
**Input Impedance:** >10K Ohms, Un-Balanced  
**Output Impedance:** 85 Ohms, Transformer coupled, Balanced  
**Nominal Levels:** -45 dBu to +20 dBu  
**Clipping Level:** +28 dBu  
**Frequency Response:** 0, -.3, 30 to 20kHz  
**Noise:** Gate Closed: -102 dBu, Unweighted  
 Gate Open: -90 dBu UnWeighted.  
**Distortion:** Gate Open: -40 dBu=.3%THD, -30=.1%, -20=.03%, -10=.01%, +4=.008%, +12=.01%, +28=.1%  
**Connectors:** .100 spaced ELCO  
**Size:** 1.25" X 2.65" X 6" Deep  
**Shipping/Actual Weight:** 1.5Lb/1Lbs  
**Power Consumption:** ±16 VDC, 100 mA max @ +24 dBu  
**Rack Frame and Power Supply Options:** Fits 200H (4 slot, internal power supply), L200 Rack (12 slot and requires API 200PS Power Supply, and API Legacy Consoles.

## Mounting Frame and Power Supply Options

### L200 Twelve Slot Rack



### L200PS Power Supply



### 200H Four Slot Rack



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