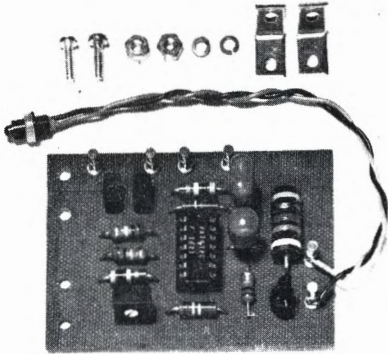


If You Didn't Get This From My Site,  
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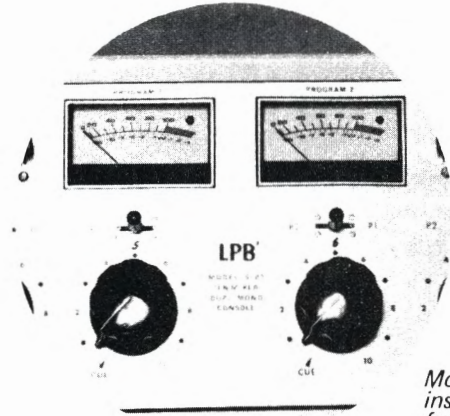
[www.SteamPoweredRadio.Com](http://www.SteamPoweredRadio.Com)

# LPB<sup>®</sup>

## LED PEAK LEVEL INDICATOR MODEL SA-1



Model SA-1 Kit



Model SA-1 as  
installed in meter  
faces of LPB  
Audio Consoles

### FEATURES

*Available installed in LPB consoles or in kit form  
Utilizes ultra-high luminance light emitting diode  
Adjustable peak level trigger  
Pulse stretcher enhances display of rapid transients*

The LPB Model SA-1 LED Peak Level Indicator is designed to allow the operator of Audio Control equipment to be aware of actual peak levels at and beyond a pre-set reference level. This indication, especially when used in conjunction with an audio console will show how "hard" a peak signal limiter is being driven.

Although designed primarily to be connected across a VU meter, the SA-1 may be connected across virtually any audio source providing a signal of 0.4 to 6 VRMS without unbalancing or loading that source. +24 VDC is required for powering the SA-1, which draws nominally 15 ma. The LED display may be panel or meter mounted through a .189 diameter hole (#12 drill). When installed in LPB consoles, the LED display is mounted in the VU meter.

#### SPECIFICATIONS:

INPUT IMPEDANCE: 500,000 ohms bridging, balanced or unbalanced

INPUT SIGNAL REQUIRED: 0.4 to 6 VRMS

TRIGGER LEVEL RANGE: Adjustable +3dBm to +28dBm

POWER SUPPLY REQUIREMENTS: Nom. 24 VDC at 15 ma. avg. (5 ma to 30 ma peak)

SIZE AND MOUNTING: Circuit board 2-1/8" x 3" with 90° MTG BKTS on 1-5/8 centers, .187 red LED, mounts in panel thickness 1/16 to 3/16

#### SET-UP (Audio Console or similar 600 ohm referenced audio equipment)

Connect a sine wave generator set at 1 kHz to the console input. Set the generator or console gain level to provide the peak output level you wish to monitor. Adjust the potentiometers so that the LED just lights (do not turn beyond this point). Example: On a typical console (0 VU = +8dBm), the generator level should be set for a console output of +16dBm. With this setting, the LED will illuminate whenever a peak reaches or exceeds 8 VU. NOTE: The VU meter will be reading off scale at this level.

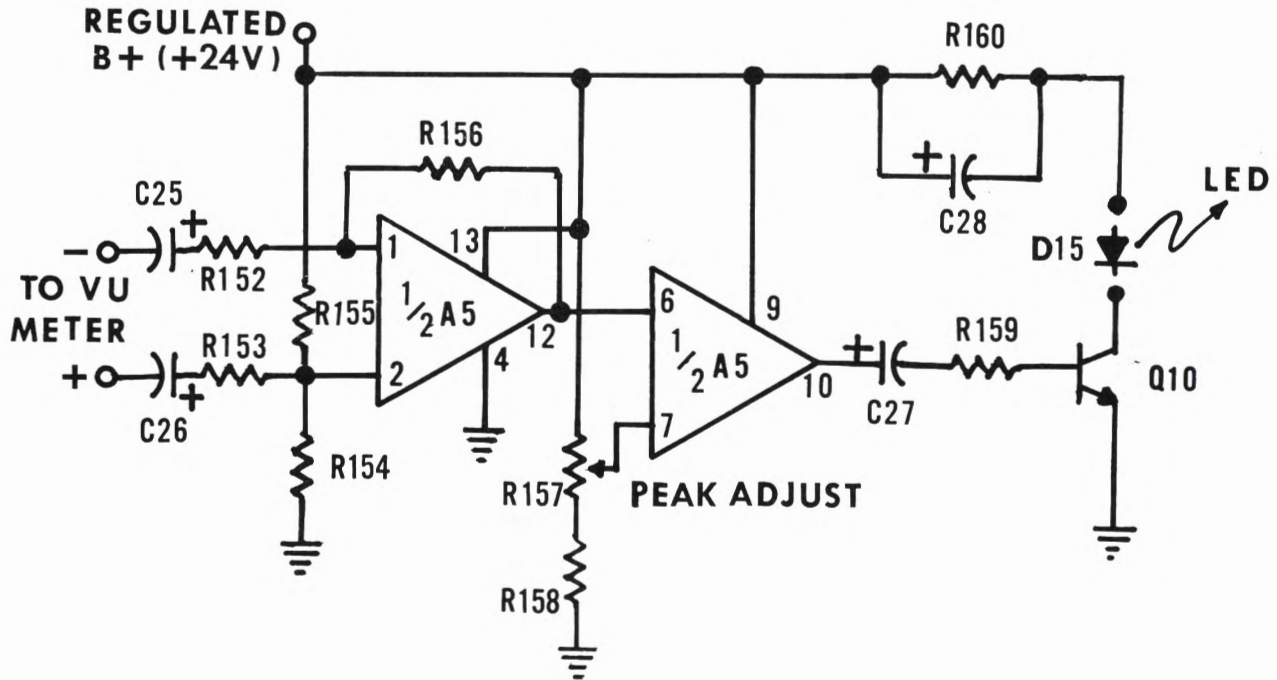
Other methods to adjust for peak signal detection would be to set the trigger level to coincide with 100% transmitter modulation or 3% THD level for recording.

# LPB<sup>®</sup>

LPB Inc.  
28 Bacton Hill Road, Frazer, PA. 19355 (215) 644-1123



# LED PEAK LEVEL INDICATOR MODEL SA-1



## PARTS LIST

R152, 153	Resistor, 100K ohm, 1/2w, 5%
R154, 155	" , 300K ohm, 1/2w, 5%
R156	" , 150K ohm, 1/2w, 5%
R157	Potentiometer; 10K ohm, linear taper
R158	Resistor, 12K ohm, 1/2w, 5%
R159	" , 10K ohm, 1/2w, 5%
R160	" , 470 ohm, 2w, 5%
C25, 26	Capacitor, 1.0 mfd, 20 vdc, electrolytic
C27	" , 100 mfd, 20 vdc, electrolytic
C28	" , 47 mfd, 35 vdc, electrolytic
A5	Dual Op Amp, uA747PC (or equivalent)
Q10	Transistor, 2N3904
D15	LED, high intensity, red, 2 vdc

3/77

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