



# HOW TO PUNCH C.L.E.A.N. SET-UP

## RFTECH:

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Rockford Fosgate's new integrated level setting technology called C.L.E.A.N. (Clipping Calibrated Level Eliminates Audible Noise) is a simple LED indicator system now available on new Punch amplifiers designed to help eliminate speaker damage. An input LED indicator helps match your source unit to the amplifier by identifying signal clipping from the audio source, while another LED monitors the output level to detect clipping sent to speakers. Using C.L.E.A.N., you can precisely set-up your input and output levels to eliminate clipping, which can ultimately cause speaker damage and/or failure.

### INPUT CLIP SETUP

- STEP 1.** Disconnect all speakers from the amplifier.
- STEP 2.** Turn on the source unit and set volume to zero.
- STEP 3.** Adjust Bass & Treble levels on the source unit to flat.
- STEP 4.** Insert test tone or music CD to play for setup. NOTE: Use 40Hz @ 0dB (Track 5) for subwoofer amplifiers or 1kHz @ 0dB (Track 7) for full-range amplifiers. Be sure x-over is set to appropriate setting.
- STEP 5.** Increase source unit volume until Input Clip Indicator illuminates red. NOTE: Input Clip can be viewed remotely with optional PLC2.
- STEP 6.** Decrease source unit volume slightly until LED turns off. This establishes your maximum source unit volume for adjusting the Output Clip Indicator. NOTE: Some source units will not clip.



**Included Level Setting Disc**

### Optional PLC2



clean signal      clipped signal

### Input Clip LED

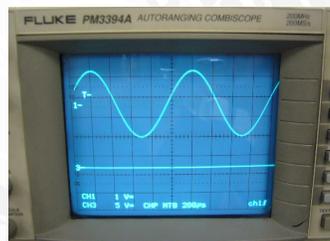


clean signal      clipped signal

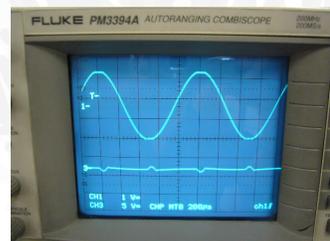
### OUTPUT CLIP SETUP

- STEP 7.** Be sure to disconnect PLC2 Punch Level Control (if equipped) from the amplifier.
- STEP 8.** Adjust Input Level knob until Output Clip LED illuminates to appropriate color. Repeat for all channel levels of input.
- STEP 9.** Turn the source unit volume down.
- STEP 10.** Reconnect all speakers and PLC2 Punch Level Control (if equipped) to amplifier. Be sure to maintain proper speaker polarity.

**0% THD**



**1% THD**



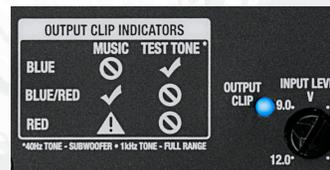
**5% THD**



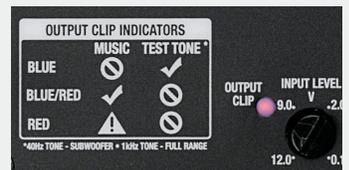
### Online Guide



No LED



Blue LED



Red/Blue LED

\*Above photos show output clip feature configured to a clean signal (0% THD), the threshold of clipping (1% THD), and full clipping (5% THD) using 1kHz @ 0dB.