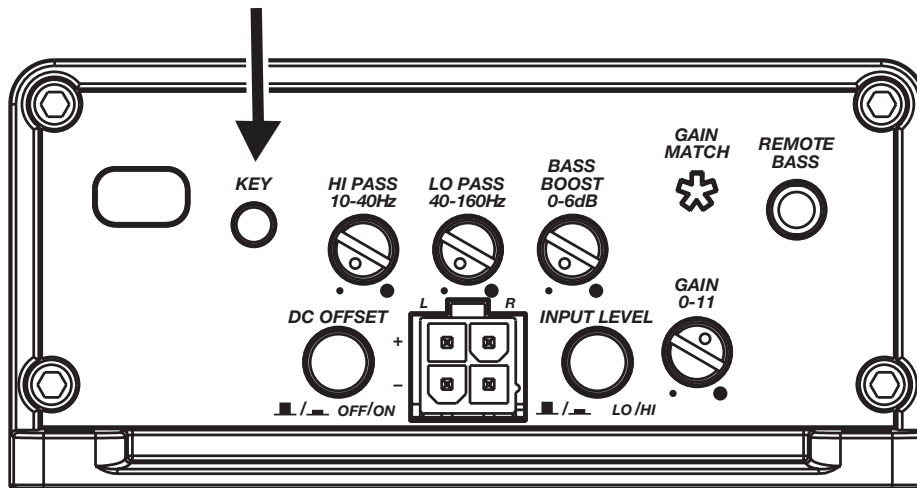


output level of the amplifier remotely. To surface-mount the remote bass level control, simply screw the remote to the chosen location, then run the cable from the controller to the “Remote Bass” jack on the amplifier panel. Once the amplifier’s gain has been properly set, this bass level control allows you to decrease or increase the subwoofer level up to the point of maximum, unclipped (non-distorted) output.

KEY Auto Setup

The KEY Activation Button is a multi-function button that will begin the Auto Setup process, enter Gain Match Mode, toggle between Auto Setup optimized audio and the original audio once the Auto Setup process has been completed, or clear previous Auto Setup settings.

Make sure the vehicle’s [active noise cancellation](#) and [active noise enhancement](#) are disabled beforehand. You will need to load a source for the KEY500.1 test tracks from your head unit, whether CD, MP3, AUX, Bluetooth, USB etc. Uncompressed audio is recommended for best results, as this will ensure full amplitude across the frequency spectrum. Visit <https://www.kicker.com/test-tones> or the KEY500.1 product page and download both the “Key500.1 Gain Match” and the “Key500.1 Sweep” tracks, then proceed with the following steps.



Gain Match: Turn the source unit up to about 3/4 volume or just before the output starts to clip (if the source unit goes to 30, turn it to 23). Press and hold the KEY button for 3 seconds until the gain match LED flashes quickly 3 times. Start the “Key500.1 Gain Match” track (The amplifier mutes its outputs during the Setup process so there will be no sound from the amplifier during setup).

(if the CXARC remote bass has been installed, make sure it is turned up to maximum output)

- 1.** With the gain knob all the way down, slowly turn the input gain up (clockwise) until you see the Gain Match LED light up.
- 2.** Turn it down until the LED no longer flashes.
- 3.** Once the gain has been set, stop the Gain Match track and quickly press the KEY button to exit Gain Match Mode.

KEY Algorithm: You are now ready to start running the KEY algorithm. Press and hold the KEY button for 5 seconds until the Gain Match LED slowly flashes, then release the button. Start the “Key500.1 Sweep” track. While the KEY algorithm is running the Gain Match LED will flash slowly. This process will take about 1.5 minutes and is very loud. After the sweep track finishes, pause the audio. The Gain Match LED will go dark while it is calculating the corrections. This takes about 30 seconds. If the algorithm runs through successfully the Gain Match LED will begin to flash rapidly for 1.5 seconds. If the algorithm fails, the Gain Match LED will go solid.

In the event of a failure you will need to short press the KEY button to exit the KEY Setup. If the algorithm fails:

- 1.** Make sure that the Left and Right input are in phase with each other.
- 2.** It is likely that the source unit's output is clipping in the bass frequency range. If you have an oscilloscope, play [KICKER's 20hz to 20khz frequency sweep](#) while measuring the signal.
- 3.** If the source unit's signal is clipping on the oscilloscope (squared off), lower the volume on the source unit until the signal is no longer squared off (clipping) and shows a smooth sine wave during the sweep.

4. If you do not have an oscilloscope, lower the volume 30% from its current setting and run the KEY algorithm again. You may need to lower the source unit's volume by another 30%, as some source units begin clipping at 1/3rd volume.

After the algorithm has been run successfully you can do a single button press of the Key button to A/B the Key audio output in original and corrected form. A single flash indicates corrections are ON, and a double flash indicates corrections are OFF. To reset the KEY algorithm, press and hold programming button 10 seconds. The Gain Match LED will flash 5 times indicating the KEY Algorithm has been reset.