

Kicker SUM8 OEM integration solution

The Kicker SUM8 is a device that will allow easy integration between a factory installed OEM audio system and aftermarket (preferably Kicker) amplifiers. It has the ability to match up to 8 separate audio input channels into a single pair of outputs. The purpose of this device is to integrate aftermarket products into some of today's more complicated audio systems do not have a single full range audio output. The Bose systems in some of the newer cars do not have an analog signal between the head unit and the factory amplifier. They use a digital link that is decoded in the external amplifier which is then crossed over and then amplified before signal is sent to the speakers. Some of the Bose systems also use a combination of an external amplifier that power speakers directly and low level signal that is sent to amplifiers built into each speaker. In some cases such as Ford's Mach systems, the head unit has an internal amplifier that power speakers directly with a high pass floating ground output and it also has a single ended low level output that feeds low frequency signals to external amplifiers. The SUM8 will allow you to match, combine and send signal to any aftermarket amplifier to obtain the crossover frequencies you choose and to add external speakers and amplifiers to the existing audio system. The SUM8 can also be used as a simple high quality 8 channel LOC (line output converter) without any summing of the signals. This would eliminate the need to use 4 separate LOC devices if you just wanted to add external amplification without changing crossover points from the factory settings.

The SUM8 features the ability to sum any combination of channels 2, 3, or 4 to channel 1 with separate level controls for each input channel. This will allow the connection and summing of almost any situation without the need to be specific what signal is connected to which input. Since you can adjust the level for each of the inputs you can match both low and high level signals together to a single full range output to feed your amplifier.

The SUM8 also features an auxiliary audio input to add external audio sources such as MP3 players or video and gaming systems. The audio level is then adjusted from the device that you are using for a source

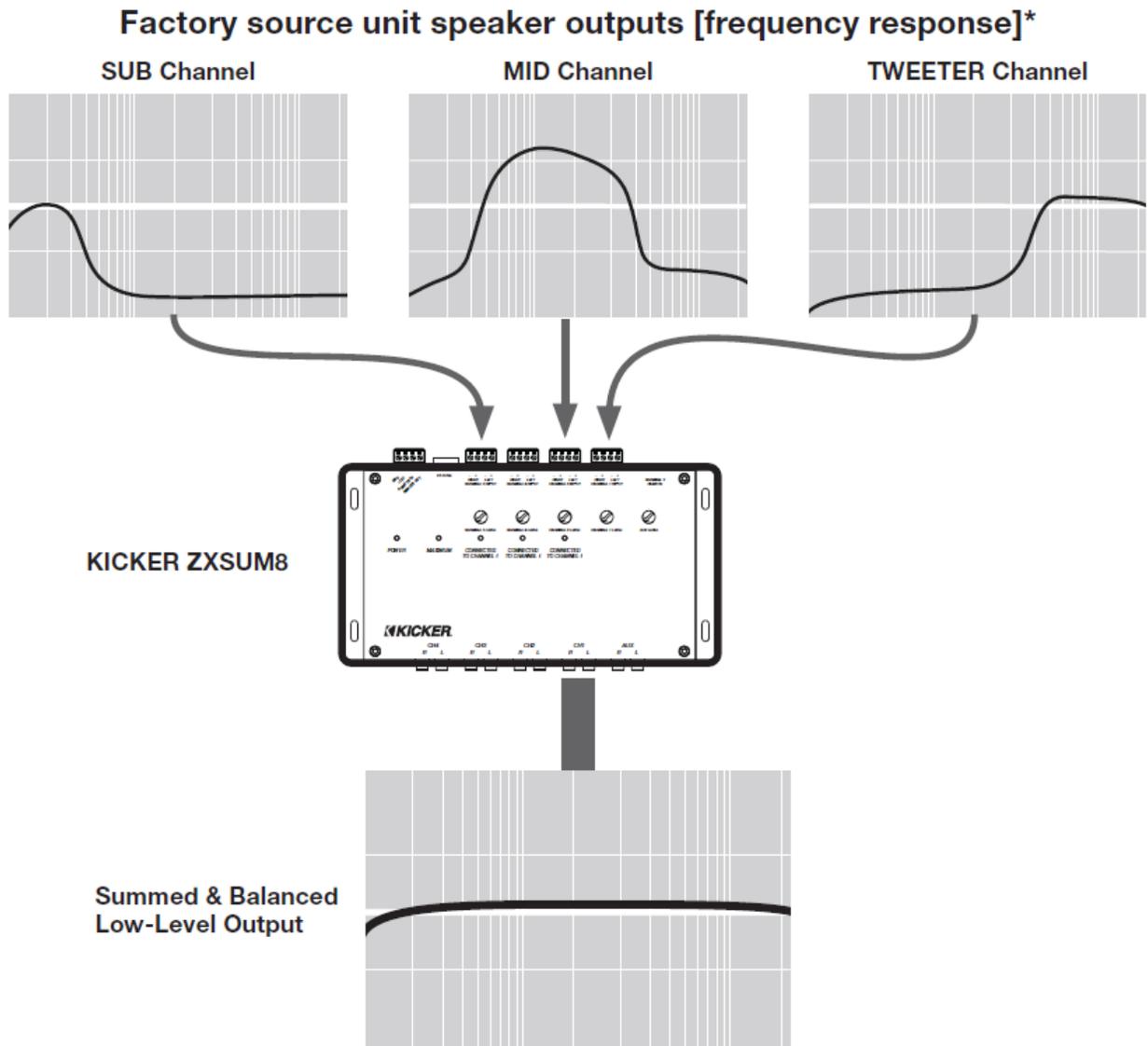
In many today's vehicles rely on the digital data bus to turn on the audio system and no switched 12 volt source is available. Rather than cutting the wires in the steering column or adding an expensive controller to obtain a switched 12 volt source, the SUM8 will sense DC voltage on the factory speaker leads and turn on automatically. It will then allow you to connect the remote trigger of your aftermarket devices to the SUM8 to give them the switched signal they need to operate properly.

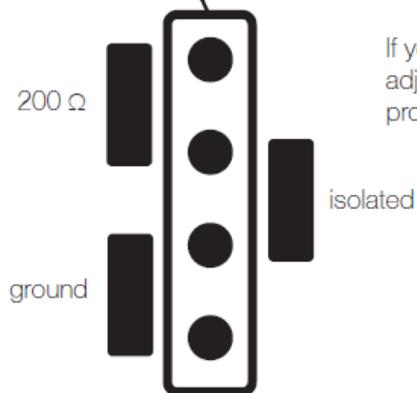
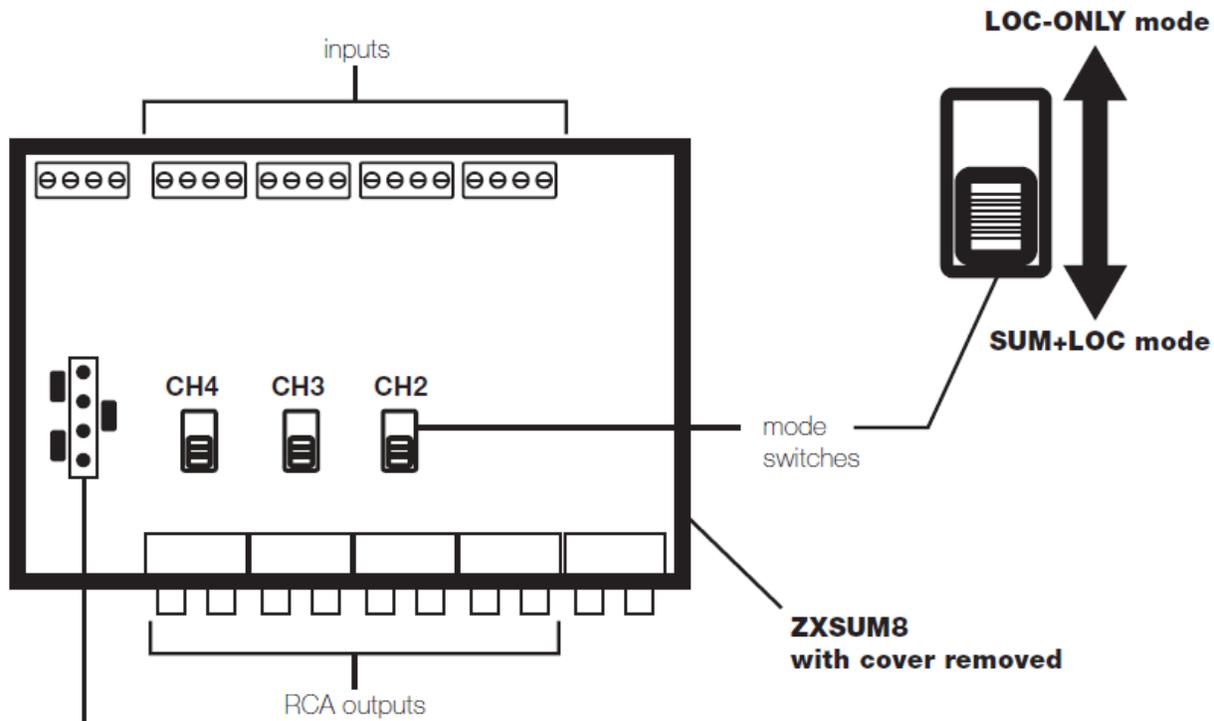
Connection is very simple. Connect the speaker outputs or signal outputs of the factory system to the inputs of the SUM8. Connect the RCA outputs to the aftermarket amplifiers and set your crossover points and gain controls accordingly. Use the channel 4 output for your subwoofer amplifier so you can use the supplied level control to adjust the bass level with a simple dial. Use the summing switches to select channels to sum together to the channel 1 RCA output that will feed your aftermarket amplifier. Then use the level controls to match the signal levels to obtain the desired balance of the 4

inputs. Connect the remote output from the SUM8 to the remote inputs of the aftermarket amplifiers to give them the switched 12 volt signal they need to operate.

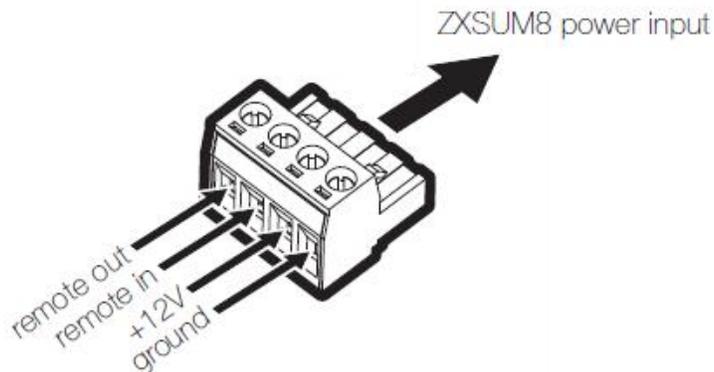
If you do encounter any engine noise, you can select any of the three settings for the signal ground to eliminate the noise by moving the position of the grounding jumper inside the unit. You have settings for isolation (no signal ground), 200Ω buffer, or direct signal grounding. This will ensure you have a clean signal with no engine noise.

ZXSUM8 FUNCTIONAL EXAMPLE

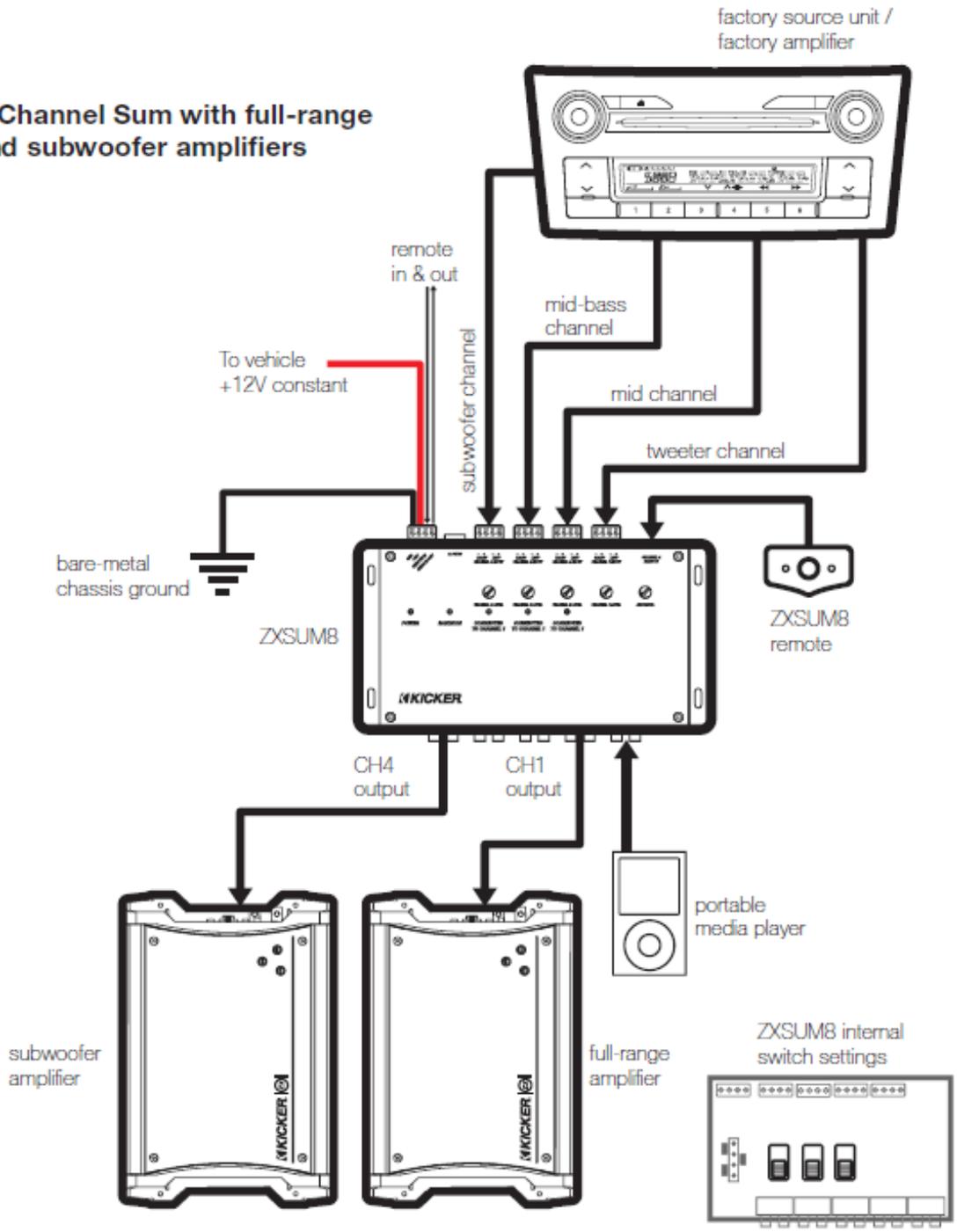


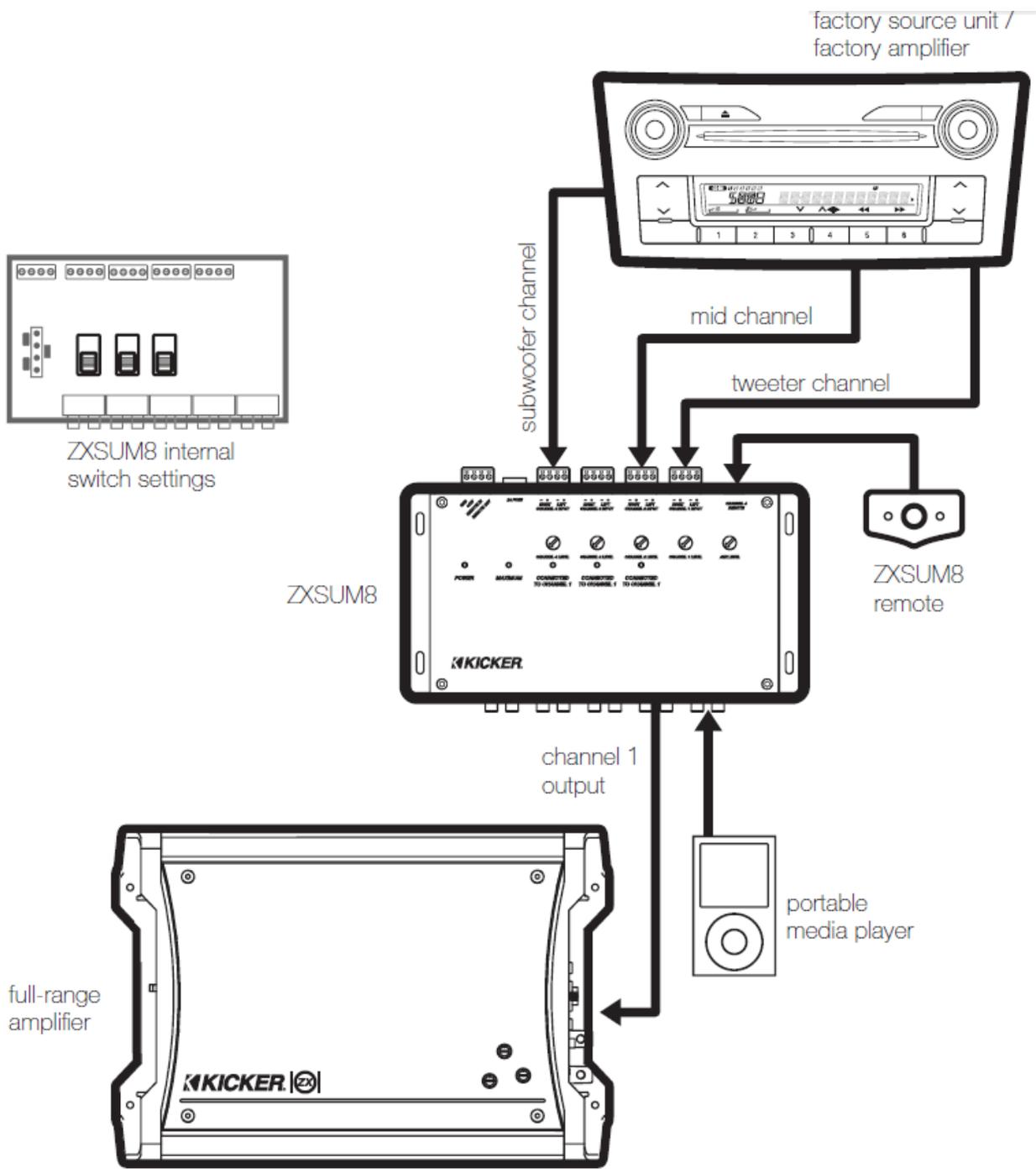


If you experience noise after installing the ZXSUM8, try adjusting the ground isolation jumper to the position that provides the least amount of noise.



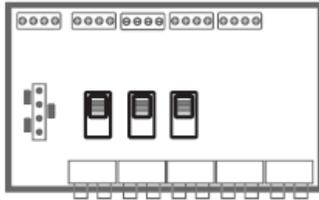
8-Channel Sum with full-range and subwoofer amplifiers



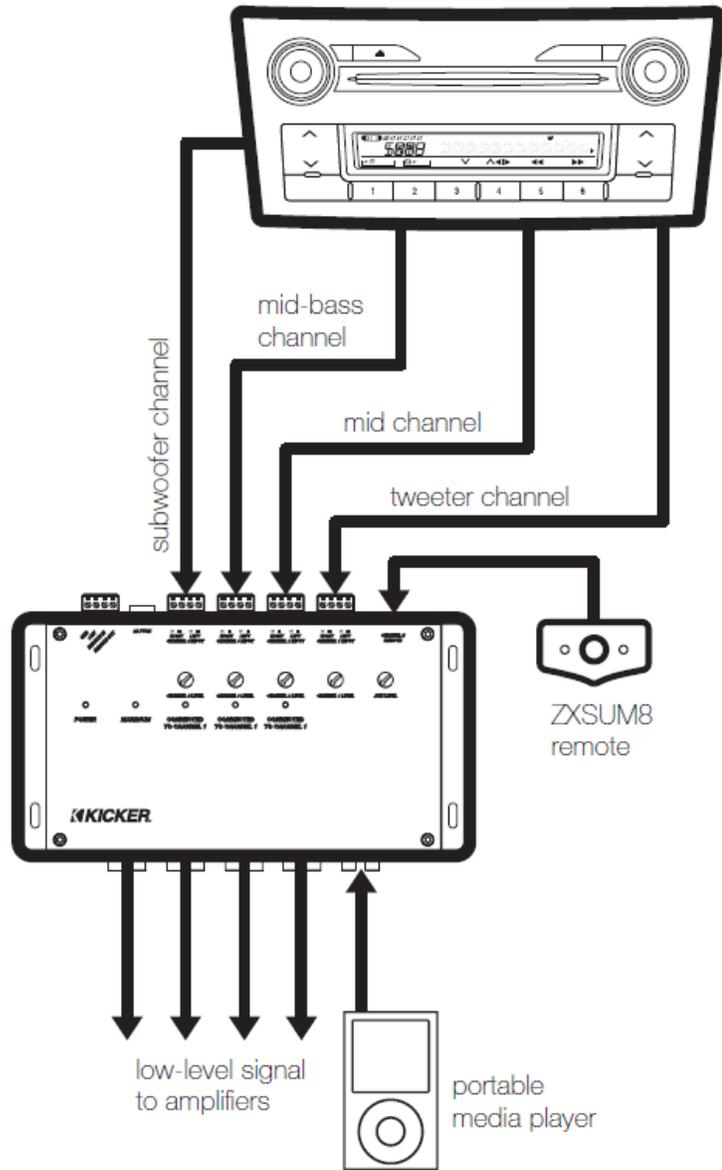


8-Channel LOC

ZXSUM8 internal switch settings



factory source unit /
factory amplifier



low-level signal
to amplifiers

portable
media player