

# KEY REASONS TO BUY THE **DQDX**<sup>TM</sup>

## Performance Digital Signal Sound Processor with Equalization, Crossover and Signal Delay

### Key Features of the DQDX

- Six input and output channels with level controls
- Independent Front, Rear, and Subwoofer equalization
- 24dB / Octave Linkwitz-Riley selectable crossover
- High voltage Line Driver
- Signal Delay to put the speakers in acoustical alignment

### Signal Delay

Because of speaker placement limitations and the seating positions in a car, it is almost always the case that the driver of the vehicle is in an incorrect acoustic alignment. This exists because the sound from the left side arrives at the driver of the vehicle much sooner than the sound from the right side. By delaying the appropriate speakers for just a few milliseconds, the AudioControl DQDX is able to allow the signals from each speaker to arrive at the same time thus putting the driver in perfect acoustical alignment.

### Equalization for Maximum Control and Performance

Like all of AudioControl's high performance signal processors, the DQDX is designed specifically to offer maximum audio performance and control. All 6 output channels are equipped with seven highly accurate graphic equalization filters. This equalization allows for the taming of even the most demanding car acoustical challenges.

### 24 dB / octave Linkwitz-Riley crossover

The AudioControl DQDX uses a 24 dB / octave Linkwitz-Riley alignment crossover to separate the bass frequencies from the midrange and high frequencies. The crossover in the DQDX gives you a flat response without any peak or dip around the crossover frequency. In addition, the 24dB crossover makes the transition without the phase irregularities you get in most other configurations. Our crossover selector is exact so it completely eliminates the guess work during the installation.

### High Voltage Line Driver

Our high voltage, low impedance outputs make a huge difference in how your system's amplifiers will perform. First, our high voltage pre-out means your amplifier can reach full power without having to turn up the amplifier's input gain controls. This means you get more volume with less noise and less distortion. At AudioControl we are all about 'Making Good Sound Great' and with the built in Line Driver in the DQDX you will be sending the best possible quality signal into your amplifiers.

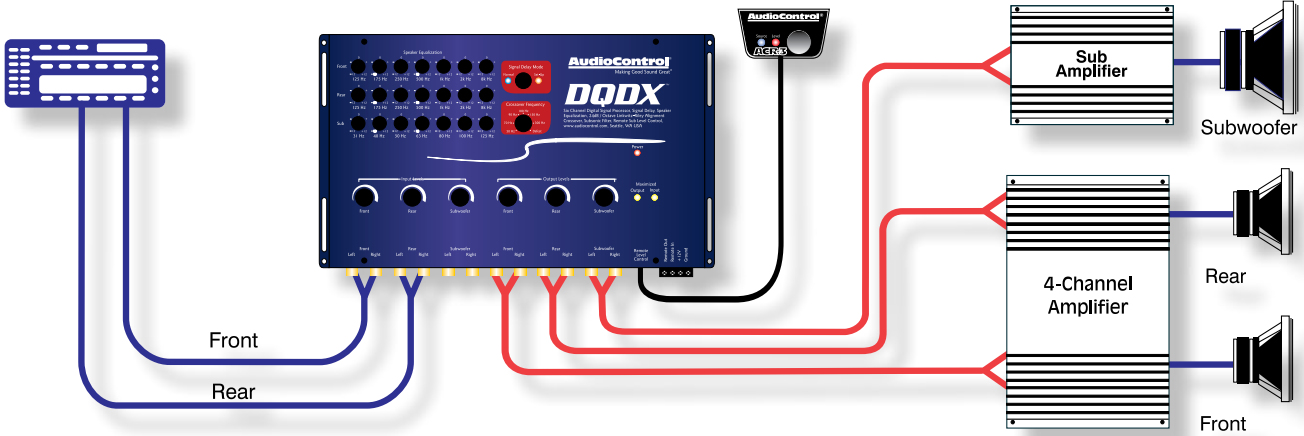


# System Diagrams

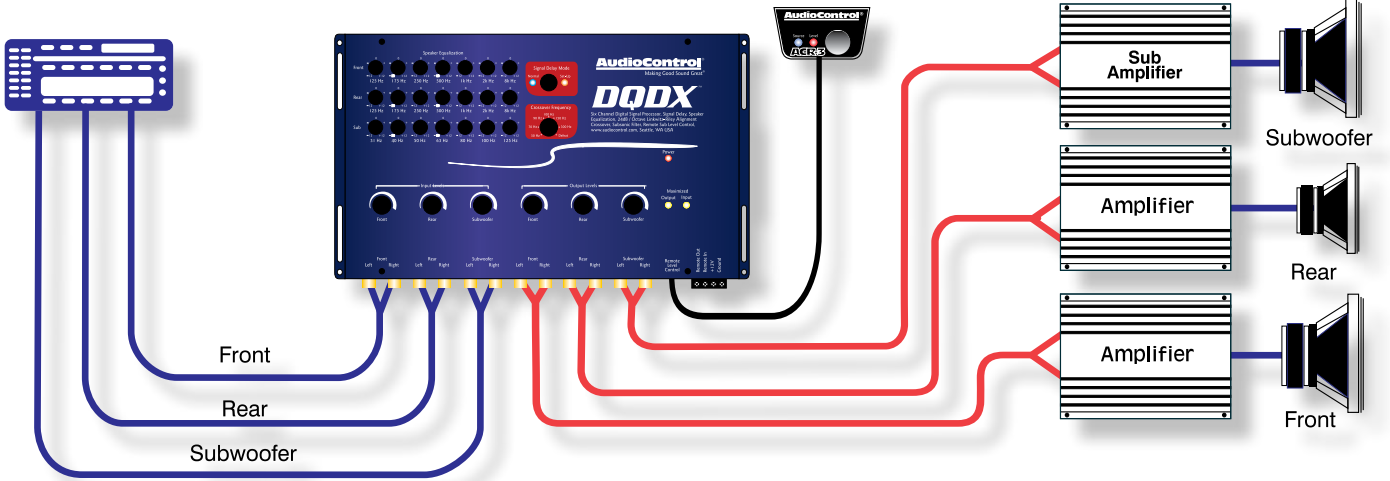
DQDX SALES NOTE

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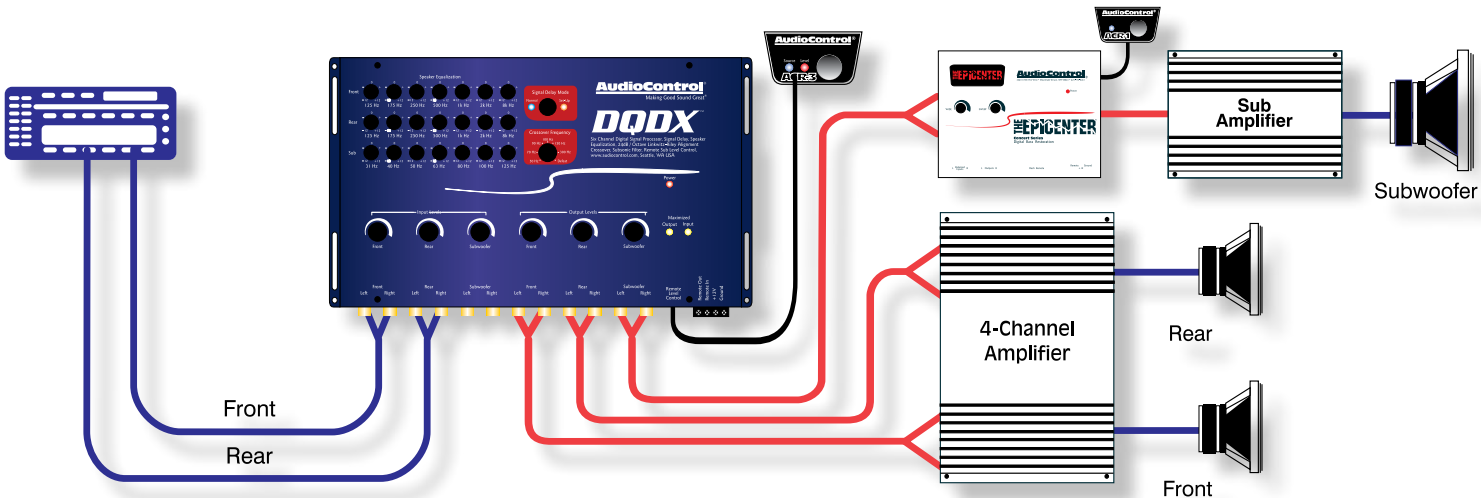
**System #1** - Basic DQDX installation using 4 channel input and 6 channel output



**System #2** - Typical DQDX installation



**System #3** - Using a DQDX and The Epicenter from AudioControl to achieve maximum sound quality and bass



# Key Features of the **DQDX™** Performance Signal Processor

**Crossover Controls** - Selectable crossover allows you to choose your exact crossover frequency between 50Hz and 500Hz.

**Equalization Controls** - Separate Front, Rear, and Subwoofer equalizers for complete sound control.

**Signal Delay Mode** - Allows you to put the speakers in acoustical alignment.

## ACR3 System Control Knob -

Dash mountable control knob so you can adjust the delay for the speakers in Program mode or the Sub Level in Music mode.



**6 Channel Balanced Differential Preamp Inputs**

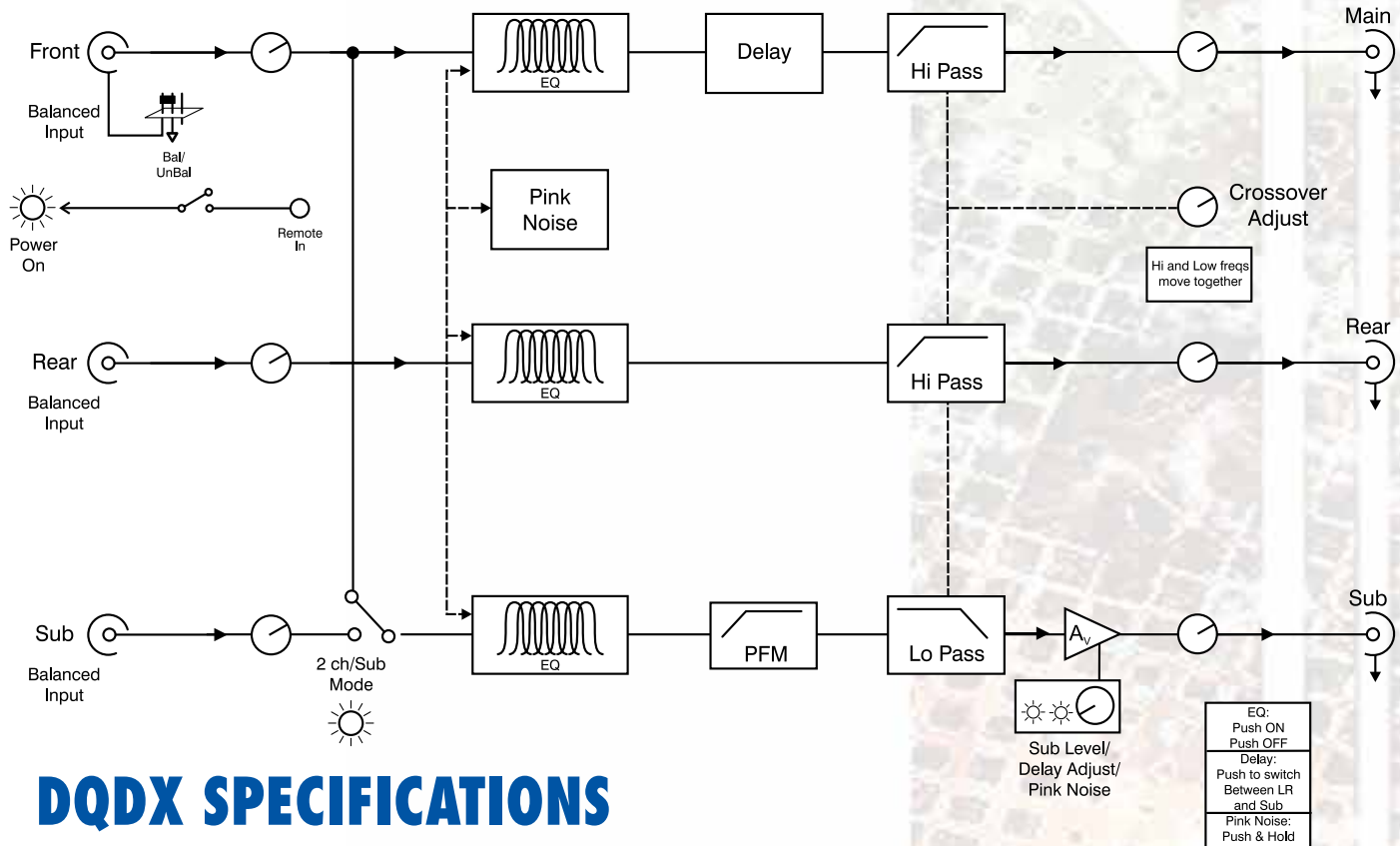
**6 Channel Preamp Outputs** - RCA output to amplifiers up to an 8 Volt Line Driver.

**Level Matching Controls** - Independent input and output level controls allow you to maximize and balance the signal level that comes from your source to your amplifiers.

## Why do you need Signal Delay (or an Equalizer for that matter)

Putting the driver in perfect acoustical alignment definitely has its challenges in a vehicle. In home audio it is generally easy to just move a speaker forward or backward or to the left or to the right to help make sure you hear both speakers at the same time. In a vehicle, we are typically stuck with the speaker locations that the vehicle manufacturers has supplied us with. This usually created a whole slew of issues when you add amplifier power, new speakers, and subwoofers. Which is why signal delay and equalization are so critical. Equalization helps match all your new components together so they sound great and signal delay helps all that great sound arrive at you, the driver at the same time.

## DQDX BLOCK DIAGRAM



## DQDX SPECIFICATIONS

All specifications are measured at 14.4 VDC (standard automotive voltage). As technology advances, AudioControl reserves the right to continuously change our specifications, like our Pacific Northwest weather, although we are working on changing that as well.

Maximum output level	7.5Vrms
Output gain	+/-12 dB
Frequency response	10Hz-22kHz
Total harmonic distortion	0.01%
Input Impedance	20 Kohms
Equalization Frequencies	
Front/Rear	125Hz, 175Hz, 250Hz, 500Hz, 1kHz, 2kHz, 8kHz
Sub Output	31.Hz, 40Hz, 50Hz, 63Hz, 80Hz, 100Hz, 125Hz
Signal Delay	
Left/Right Max Delay	10ms
Front/Sub Max Delay	35ms
Crossover	50-500 selectable on/off
Output Impedance	150 Ohms
Power supply	High headroom PWM switching
Power draw	350mA
Recommended fuse rating	2 Amps
Remote trigger max output current	1 Amp
Size	9.25"L x 5.75"W x 1.25H"
Weight	3 lbs

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Making Good Sound Great<sup>®</sup>

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