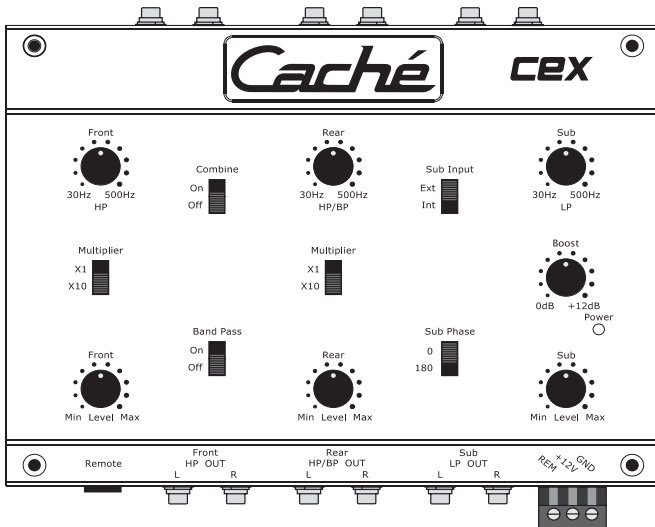


Caché

CEX



2/3-WAY ACTIVE CROSSOVER

OWNERS MANUAL

Greetings

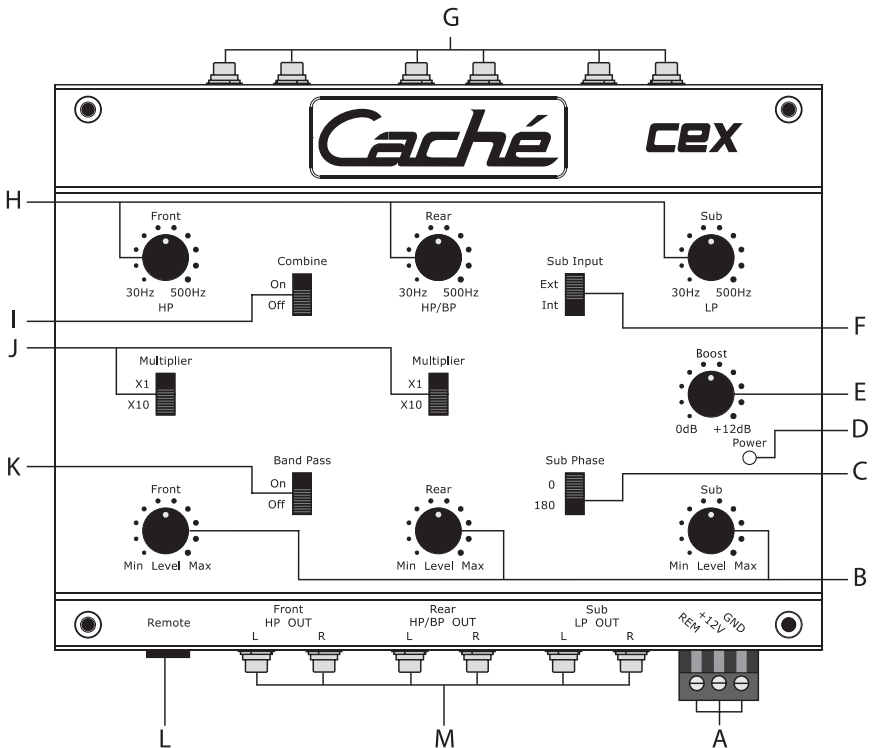
Welcome to Caché Audio Integration Solutions. We believe you will find our products to be as easy to install as they are to use. Our unique OEM integration products offer today's audio enthusiasts an alternative to replacing their factory installed CD receiver or Navigation unit and still enjoy world-class sound quality and performance.

All Caché Products Feature:

- Low Output Impedance
- High Input Impedance
- Flat Frequency Response
- High Output Voltages
- Excellent Signal To Noise Ratios
 - Panel Mount RCA's
- Poly Caps And Low Tolerance Resistors In All Signal Path Circuits
 - Power ON LED
- Removable Terminal Blocks For All Input Connections
 - Proudly Designed And Engineered In The USA

cex Specifications

•Maximum Input Voltage.....	6 V
•Maximum Output Voltage.....	7.5 V
•THD.....	0.01%
•Input Impedance.....	>20K ohms
•Output Impedance.....	<50 ohms
•Cross over Slopes.....	12dB
•Signal to Noise.....	>100dB



Operation and Function

- (A)** Power Connections- These connections are for input power, chassis ground, and remote turn-on. Use a minimum of 18 gauge wire for power and ground connections. The power wire should be fused with a 1 amp fuse.
- (B)** Input Gain Adjustment- This control matches the input level of your cex with the output level of your source unit.
- (C)** Phase Adjustment- This control allows you to adjust the phase of your subwoofer system to match the systems mid and high frequency speakers. Adjustment is 0 or 180 degrees.
- (D)** Power Indicator- This LED indicates when the cex is powered on.
- (E)** Bass Boost- After setting the input gain adjustment and crossover, you may choose to add a small amount of "boost" in the low frequency region. This bass boost adjustment is fixed at 45Hz and can provide up to +12dB of gain.
- (F)** EXT/INT (Internal / External) Sub Switch- This solves the problem of using an aftermarket head unit without a dedicated sub output and without the need of adding Y- adaptors. With the switch set to the INT position the front and rear channels are summed together and provide signal to the sub channels. When the switch is set to EXT the sub input provides signal to the sub output channels.
- (G)** RCA Inputs- These RCA input jacks allow for a normal left and right channel signal input from the source unit.
- (H)** Crossover Adjustment- Use this adjustment to select the crossover frequency for each set of channels. The range of the adjustment is dependant on the multiplier switch setting. See (J)
- (I)** Combine Signal Input- This solves the problem of using an aftermarket head unit with only one pair of low level (RCA) output channels and without the need of adding a y-adaptor. When the "Combine" switch is in the "ON" position the front input signal will also feed the rear input, giving you output on both the front and rear channels. When the combine switch is in the "OFF" position, front or rear input signal will feed the corresponding output seperately.
- (J)** Multiplier Switch- This is used in conjunction with the crossover adjustment to set the crossover frequency. With the multiplier switch set to "1X" the crossover adjustment range is from 30Hz to 500Hz. With the multiplier switch set to "10X" the crossover adjustment range is from 300Hz to 5KHz.
- (K)** Band Pass Switch- With the band pass switch turned on, the rear channels will be going through a BP filter. The high value of the band pass filter will be determined by the HP filter setting on the front channel and the low value of the band pass will be determined by the value of the filter setting on the rear channel.
- (L)** Remote Subwoofer Level Control- This port is for the remote level control (Included). This remote allows the user to control the level of gain on the subwoofer channel up to the maximum adjustment level set on the cex. This control does not add any additional gain, it only attenuates the level at which the cex was set.
- (M)** RCA Outputs- These RCA ouput jacks provide signal to your amplifiers.

Installation Guidelines

INSTALLATION PRECAUTIONS

- Always mount the unit in a fashion so that it can be easily accessible for making adjustments.
- Avoid mounting the unit to subwoofer enclosures or high vibration areas.
- Do not cover the unit with carpet or any other material.
- Do not mount the unit in the engine compartment or anywhere that it will be subject to high temperatures, (ie, direct sunlight or heater) moisture, dust or dirt.
- Use rubber or plastic grommets to protect wires when routing them through metal.
- Always keep signal wires away from high current power wires.
- The ground connection should always be the first connection made.

WIRING INSTRUCTIONS

Ground Connection (GND)

The main ground connection should be made between the Gnd terminal on the unit and a metal part of the vehicle close to the mounting location. This wire needs to be as short as possible to minimize the possibility of induced noise. You should use 18 gauge wire or larger for the ground connection. The metal point on the vehicle where the ground connection is made needs to have all paint removed and be scuffed down to the bare metal. The ground wire should have a ring terminal soldered to it and be bolted directly to the vehicle with the use of a star washer. Do not ground the unit near existing (factory) ground points. These areas generally have multiple devices grounded to them and can cause induced noise.

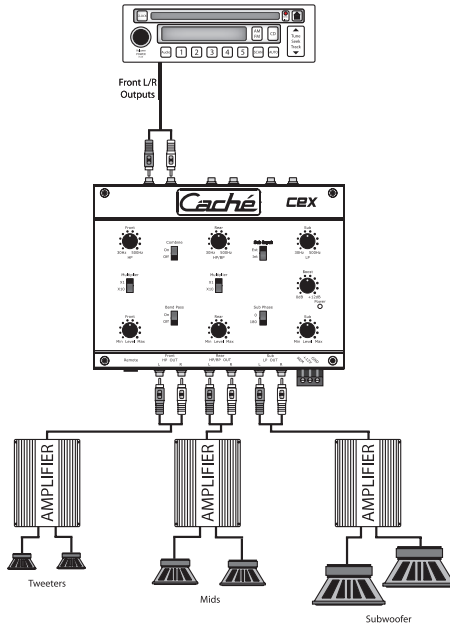
Power Connection (+12V)

The main power connection should be made at the battery. This will ensure that the unit receives the best possible connection to minimize noise. There must be an inline fuse (1 amp) placed in series with the unit. The fuse should be within 18" of the battery. You should use 18 gauge wire or larger for the power connection. The power wire should have a ring terminal soldered to it and be bolted to the vehicles battery. Do not install the fuse in the holder until all the systems connections have been made.

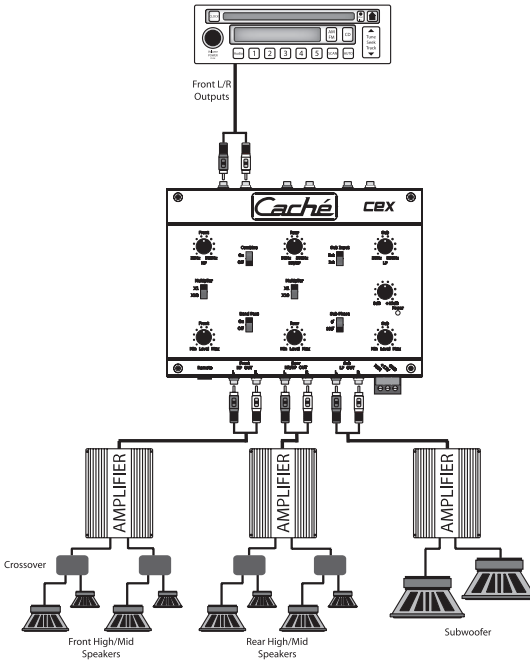
Remote In (REM)

This Caché unit is turned on by applying +12 VDC to the remote turn-on terminal. This terminal should be connected to the remote lead from the car stereo. This remote lead from the source unit will trigger a +12V output only when the car stereo is turned on. If the source unit does not provide a remote turn on you can use the accessory terminal in the cars fuse block. This will however turn the unit on and off with the key, regardless of whether the source unit is on or off.

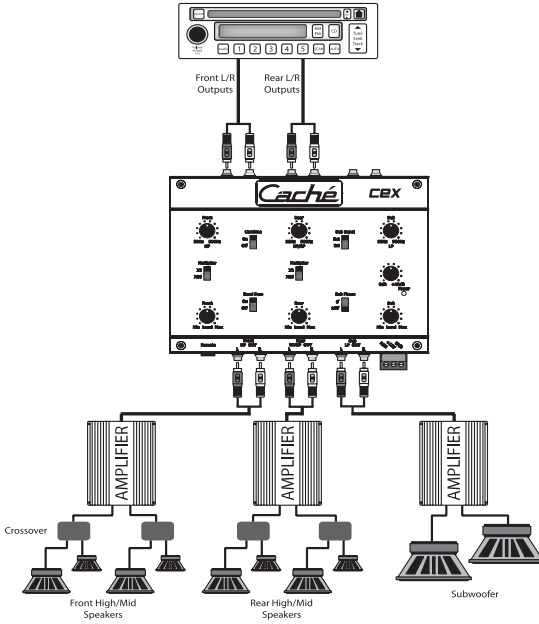
Example System #1



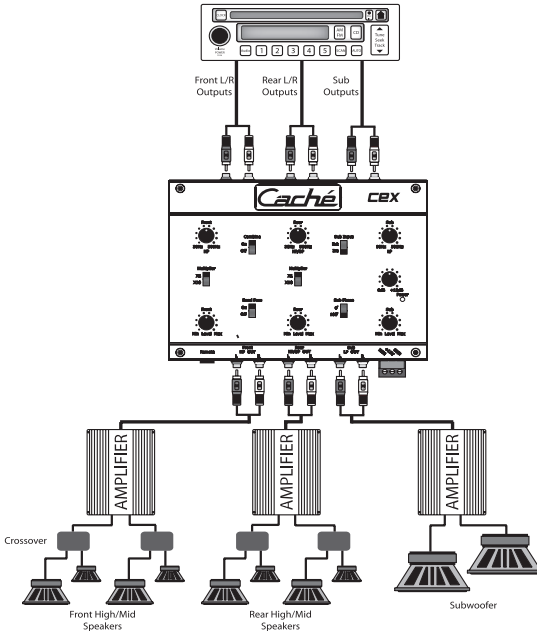
Example System #2



Example System #3



Example System #4



Caché Warranty

Caché warrants this product to be free from defects in material and workmanship for a period of one (1) year from the original date of purchase provided it was purchased from an authorized Caché retailer within the United States.

This warranty is valid only to the original purchaser and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether expressed implied, shall apply to this product there after. Some states do not allow limitations on implied warranties; therefore these exclusions may not apply to you.

This warranty gives you specific legal rights; however you may have other rights that vary from state to state. If your Caché device needs service, defective merchandise must be returned to your local Authorized Caché dealer for warranty. Non-defective items received will be returned freight collect. Freight damage and returns are not covered under warranty. Include proof-of-purchase. Warranty expiration on items returned without proof-of-purchase will be determined from the manufacturing date code. Any questions can be directed to the Warranty Department at (480) 305-8999. This warranty is valid only if the product is used for the purpose for which it was designed. This warranty does not cover:

The cost of shipping this product to the Caché Service Department
Damage through negligence, misuse, abuse or accident
Damage caused by exposure to water and/or excessive heat
Items scratched, dented, or physically damaged due to abuse
Items returned from unauthorized individuals or dealers
Items previously repaired by any unauthorized repair facility

International customers: please contact your International Caché dealer or distributor concerning specific procedures for your country's warranty policies. If you are not able to locate your local distributor, please contact Caché for assistance at +1(480) 305-8999.

Specifications subject to change without notice.

Cache

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