





**Terminal Connections** 

When making the terminal connections...

turning it in the direction as illustrated.

Properly fix the terminal with the screw provided by

tion of the terminal. Avoid over-tightening as it may

When you tighten the screw, make sure that the screw is securely fixed in place to prevent disconnec-

cause damage to the screw or its head slot.

# **Class-D MonoBlock Active Subwoofer**

### Installation

### PLACEMENT:

The following illustration shows a typical installation. To get the best performance from your CADENCE amplifiers, we strongly recommend that installation be entrusted to a qualified professional. Although these instructions explain how to install CADENCE amplifiers in a general sense, they do not show specific installation methods that may be required for your particular vehicle. If you do not have the necessary tools or experience, do not attempt the installation yourself. Instead, please ask your authorized CADENCE car audio dealer about professional installation.



- 1. Disconnect the negative (-) lead from your vehicle's battery.
- 2. At the installation sites, locate and make a note of all fuel lines, hydraulic brake lines, vacuum lines and electrical wiring. Use extreme caution when cutting or drilling in and around
- 3. Choose a safe mounting location away from moisture.
- 4. Make sure, there is sufficient air circulation at the mounting location for the amplifier to cool itself.
- 5. Mount the amplifier such as under the front seat, using the supplied hardware.

# Welcome

Thank you for purchasing a CADENCE product. Please read all instructions carefully before operation, to ensure you complete understanding and to obtain the best possible performance from

## For Safety

1. Playing loud music in an automobile can hinder your ability to hear traffic and permanently damage your hearing. We recommend listening at low or moderate levels while driving your car. CADENCE accepts no liability for hearing loss, bodily injury or property damage resulting from the use or misuse of this product. 2. Stop the car before performing any complicated operations.

### **Cautions and Notes**

This unit is designed to operate on 12V DC, NEGATIVE ground electrical systems.

- 1. This unit uses BTL (Balanced Transformer less) amplifier circuitry, i.e., floating ground system, so please comply with the following.
- 2. Cover the unused terminals with insulating tape to prevent them from short circuiting.
- 3. When an extension lead is used, it should be as thick and short as possible; connect it firmly with insulating tape.
- 4. Be sure to leave an appropriate space between the antenna (aerial) and the wires of this unit.
- 5. When replacing the fuse, only use one 25A fuse
- 6. Do not let pebbles, sand or metallic objects get inside the unit.
- 7. To keep the heat dissipation mechanism running effectively, wipe the accumulated dust off periodically.
- 8. Listening to the tape, radio, CD or MD, etc. with the volume on loud for a long period of time will exhaust the battery, while the engine is turned off or while the engine is idling.

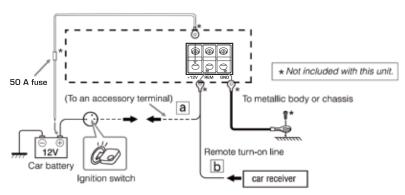
DO NOT disassemble the unit since there are no user serviceable parts inside.

### **Specifications**

P.W.M Input sensitivIty, RCA level Input sensitivIty, HIGH level Remote Control for Subwoofer level Phase switch Bass Boost Sub sonic filter LPF fiter T.H.D C.38% RMS power High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on Protection Circuit Short Protection CircuitS  Liiumination Singled-coil loud speaker Signal-to-noise ratio Frequency response Dimensions(LxWxH)mm  V D.2V-6V DV D.2V-6V D.2V-126 D.2	MODEL		XLERATOR80SA
Input sensitivity, HIGH level Remote Control for Subwoofer level Phase switch Bass Boost Sub sonic filter LPF fiter T.H.D C.0.38% RMS power MAX power High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on Protection Circuit Short Protection CircuitS  Liiumination Singled-coil loud speaker Signal-to-noise ratio Frequency response Slim Woofer  1V  00 1V 20 180 20 360 40 80 40 80 40 80 80 80 80 80 80 80 80 80 80 80 80 80			V
Remote Control for Subwoofer level  Phase switch  Bass Boost  Sub sonic filter  LPF fiter  T.H.D  RMS power  MAX power  High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on  Protection Circuit  Thermal Protection Circuit  Short Protection CircuitS  Liiumination  Singled-coil loud speaker  Signal-to-noise ratio Frequency response  Frequency response  Slim Woofer  Poder Alba of Tabor Circuit  Short Protection Circuit  Short Protection Circuit  Sababa  Frequency response  25A  Slim Woofer	Input sensitivIty, RCA level		0.2V-6V
Phase switch  Bass Boost  Sub sonic filter  LPF fiter  T.H.D  RMS power  High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on  Protection Circuit  Thermal Protection Circuit  Short Protection CircuitS  Liiumination  Singled-coil loud speaker  Signal-to-noise ratio Frequency response  Fuse rating  Substance 180°  Add Bar-12dB  20Hz-150Hz  180W  Add W  Add	Input sensitivIty, HIGH level		1V
Bass Boost Sub sonic filter LPF fiter Sub sonic filter LPF fiter Sub sonic filter Sub sonic	Remote Control for Subwoofer level		V
Sub sonic filter  LPF fiter  T.H.D  RMS power  High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on  Protection Circuit  Thermal Protection Circuit  Short Protection CircuitS  Liiumination  Singled-coil loud speaker  Signal-to-noise ratio Frequency response  Fuse rating  Sim Woofer  Singled-coil Sud speaker  Signal-to-noise ratio Frequency response  Silim Woofer  Signal-to-noise ratio	Phase switch		0°-180°
LPF fiter 50Hz-150Hz T.H.D < <0.38% RMS power 180W MAX power 360W High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on			0dB~+12dB
T.H.D < <0.38%  RMS power			20Hz-50Hz
RMS power 180W MAX power 360W High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on Protection Circuit Thermal Protection Circuit Short Protection CircuitS  V Iliumination Green-Power Red-Protect Led Singled-coil loud speaker Signal-to-noise ratio Frequency response Frequency response Slim Woofer Signal-to-moise Red-Protect Led Signal-to-noise Red-Protect Led Salable Red-Protect Led Salabl			50Hz-150Hz
MAX power High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on  Protection Circuit Thermal Protection Circuit Short Protection CircuitS  Liiumination Singled-coil loud speaker Signal-to-noise ratio Frequency response Frequency response Slim Woofer Signal-to-moise Red-Protect Led Signal-to-noise Red-Protect Led Salable Frequency Red-Protect Led Salable Salab			<0.38%
High Level Inputs with Auto Start Smart Turn-on Soft delayed remote turn-on  Protection Circuit  Thermal Protection Circuit Short Protection CircuitS  Liiumination  Singled-coil loud speaker Signal-to-noise ratio Frequency response Frequency response Slim Woofer  Fight Auto Start Smart Turn-on  Circuit			180W
Soft delayed remote turn-on Protection Circuit  Thermal Protection Circuit Short Protection CircuitS  V  Iliumination Green-Power Red-Protect Led Singled-coil loud speaker Signal-to-noise ratio Frequency response Frequency response Slim Woofer Soft delayed remote turn-on V  Green-Power Red-Protect Led V  Self and Sel			360W
Protection Circuit  Thermal Protection Circuit  Short Protection CircuitS  V  Iliumination  Green-Power Red-Protect Led  Singled-coil loud speaker  Signal-to-noise ratio  Frequency response  Fuse rating  Slim Woofer  Thermal Protection Circuit  V  Stream Power Red-Protect Led  Support Sequency Protect Led  2042-125Hz  25A  Slim Woofer			<b>✓</b>
liiumination  Green-Power Red-Protect Led  Singled-coil loud speaker  Signal-to-noise ratio  Frequency response  Fuse rating  Slim Woofer  Signal-to-noise atio  S88dB  Frequency response  20Hz-125Hz  Fuse rating  25A  Slim Woofer	Soft delayed remo	ote turn-on	<b>V</b>
liiumination  Green-Power Red-Protect Led  Singled-coil loud speaker  Signal-to-noise ratio  Frequency response  Fuse rating  Slim Woofer  Signal-to-noise ratio  S88dB  Frequency response  20Hz-125Hz  Fuse rating  25A  Slim Woofer	Protection Circuit	Thermal Protection Circuit	<b>V</b>
Singled-coil loud speaker  Signal-to-noise ratio  Frequency response  Fuse rating  Slim Woofer  Singled-coil loud speaker  V  Salab  888dB  Frequency response  20Hz-125Hz  55A  Slim Woofer  8"(4 Ohms)		Short Protection CircuitS	<b>✓</b>
Signal-to-noise ratio>88dBFrequency response20Hz-125HzFuse rating25ASlim Woofer8"(4 Ohms)			Green-Power Red-Protect Led
Frequency response 20Hz-125Hz Fuse rating 25A Slim Woofer 8"(4 Ohms)	Singled-coil loud speaker		✓
Fuse rating 25A Slim Woofer 8"(4 Ohms)			>88dB
Slim Woofer 8"(4 Ohms)			20Hz-125Hz
Dimensions(LxWxH)mm 248x255x250mm			8"(4 Ohms)
	Dimensions(LxWx	H)mm	248x255x250mm

### Installation

### **POWER SUPPLY:**



To prevent short circuits while making connections, keep the battery's negative terminal disconnected.

- 1. When installing the XLERATOR80SA. Use a 8 gauge powerkit of some sort, making sure the power wire is fused within 18" of the battery for best protection.
- 2.Connect the lead wire(purchased separately) through which power is supplied directly to the batterys "🕀" terminal only after all the other connections have been made.
- The lead wire connected to the +B terminal of this unit should have a cross-section of more than 5mm<sup>2</sup> or 18 Gauge. Be sure to use a ring terminal (optional) for secure connection.
- 3.If you have any questions regarding the thickness of the power cord, etc., consult your nearest CADENCE dealer.
- When connecting a unit without a remote lead (a), connect to the accessory circuit of the car which is activated by the ignition switch. In this case, noise may occur when the car receiver is turned on or off.
- To avoid this noise, do not turn on or off the car receiver itself. You can turn on or off the car receiver along with the on/off operation of

If you use car receiver with a remote lead (b), connect to the REM terminal o this unit.

If the PROTECT LED glows red, it indicates amplifier in protection mode.

In normal status, the POWER LED glows green. Please en sure correct speaker wiring and connections.

BEFORE CONNECTING: Securely connect all the parts. If the connections are loose, due to contact resistance etc., heat will break out and may cause an accident. Secure and cover the cords with insulating tape and run them under the car mats.



### **AUTO POWER ON WITH SMART SENSE**

The AUTO POWER ON feature works only with high level input.

Amplifier will detect high input signal automatically. Kindly make sure that REM connection is not connected while using SMART SENSE POWER ON feature.

### SUBSONIC FILTER:

Set the subsonic filter knob anticlockwise to filter out low frequencies up to 50Hz

### PHASE CONTROL:

Set the phase control switch to select phase of the amplifier output signal

### **REMOTE GAIN:**

User can use external remote control to imitate function of gain control knob

### BASS BOOST:

For adding low bass response, rotate the Knob clockwise to add 0dB-12dB of boost centering around 50Hz

### LOW PASS FILTER:

Rotate this Knob clockwise to set the required low frequency response from 50Hz to 150Hz

# Troubleshooting

For more details, consult CADENCE Authorized Service Center or CADENCE dealer

### THE POWER LED DOES NOT LIGHT

- 1. Check if the fuse is blown.
- 2. Check if the ground lead is connected securely to a metal part of the car.
- 3. Make sure that the equipment connected to this unit is turned on.
- 4. Use a relay if your system employs too many amplifiers.
- 5. Confirm the battery voltage(11V to 16V).

### THE PROTECT LED GLOWS RED AND/OR THE UNIT HEATS UP **ABNORMALLY**

Leave the unit turned off for a while as it cools down.

### NO SOUND IS HEARD

- 1. Check if the amplifier is powered on (POWER LED glows green)
- 2. Is the remote turn-on line lead connected correctly
- 3. Are RCA pin cords connected to the LOW INPUT jacks
- 4. Is the speaker input connector from the receiver connected to the HIGH INPUT terminal
- 5. Is this amplifier grounded ALTERNATOR NOISE IS HEARD
- 6. Keep the power connecting leads away from the RCA pin cords.
- 7. Keep the RCA pin cords away from other electrical cables in the car.
- 8. Check in High Level Input connector ground wire is properly grounded to metal part of the car.
- 9. Check head unit body is properly grounded with metal part of the car.
- 10. Check if the negative speaker leads are touching the car hassis.
- 11. Check if the noise originates in the receiver.
- 12. Replace the plugs or use plugs with load resistors.
- 13. Connect a bypass capacitor across the accessory switches(horn, fan,

### NOISE WHEN CONNECTED TO AM(MW/LW) TUNER Move the power leads away from the antenna(aerial) lead.

# **DISTORTED AUDIO**

- 1. Check if INPUT LEVEL is set properly.
- 2. Check if Amplifier of Source unit is defective.

# Low Level Input

### Controls

# High Level Input

### **SIGNAL INPUTS:**

These amplifiers have two different types of inputs: Low level Input through RCA jack and High Level Input through a four-pin modular connector. Low level inputs provide an exceptionally clean sound from a source unit through RCA jacks. High level inputs make your amplifier virtually adaptable to any source unit with the use of speaker outputs. High level inputs should only be used when RCA outputs are not available. Under no circumstances should both low level and high level inputs be used simu Itaneously.

### **LOW LEVEL INPUTS**

Choose the correct length and style of RCA patch cables for your needs. Better RCA's usually have gold plated connectors and multiple layers of shielding for better noise rejection(consult your dealer).

Be careful when running your RCA patch cables. Car environments are notorious for poorly insulated wires. This means that hiss, engine noise, and fan noise can easily be picked up through. RCA cables if run incorrectly. Avoid running your RCA's near large wire looms or electric fans if possible. Run your patch cables on the opposite side of the vehicle as you did the power wire. Be sure to check for correct balance (red is right and black or white is left).

### **HIGH LEVEL INPUTS**

Use the high level inputs only if your audio source unit does not have low level outputs. These inputs may be tapped to the closest left and right speaker wires available for greater convenience.

### **GAIN CONTROL**

This control allows you to match the input level of the amplifier to the output level of your source unit. Matching the input can be accomplished in three simple steps:

Turn gain control all the way down.

Turn on the source unit and adjust it to 2/3 of the max volume.

Adjust the gain control until desired volume is achieved without audible distortion.

Remember, the gain control is not a volume knob. Ignoring the three stepsabove may leave you with damaged speakers and probably a damaged amplifier.



//Features and specifications subject to change and or improvement without notice. Though we tried our ensure that this manual is free and clear of errors please don't hold us responsible for printing errors.//

> Copyright by Cadence Acoustics LTD. www.cadencesound.com