DLS ACW10 Flat Active Subwoofer User Manual

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DLS ACW10 Flat Active Subwoofer

Product Information

The ACW10 is a vehicle accessory that requires proper installation and connection to function effectively. It is designed to be connected to the vehicle battery and provide power for various applications. The product includes a fuse holder and a cable for connection.

Product Usage Instructions

1. Locate the vehicle battery and identify the positive terminal (+).
2. Connect the fuse holder as close to the positive terminal of the vehicle battery as possible.
3. Connect the cable on the rear panel of the ACW10 to the fuse holder.
4. Securely attach a ring crimp terminal connector to the battery's positive terminal.
5. Find a suitable chassis ground point on the vehicle.
6. Ensure that the ground connection point is clean and unpainted metal to ensure a good electrical connection.
7. Use a wire brush, scraper, or abrasive sheet to clean the metal surface where the ground connection will be made.
8. Connect the ground wire from the ACW10 to the chosen chassis ground point.

Following these instructions will ensure proper installation and connection of the ACW10, allowing it to function as intended.

Welcome!

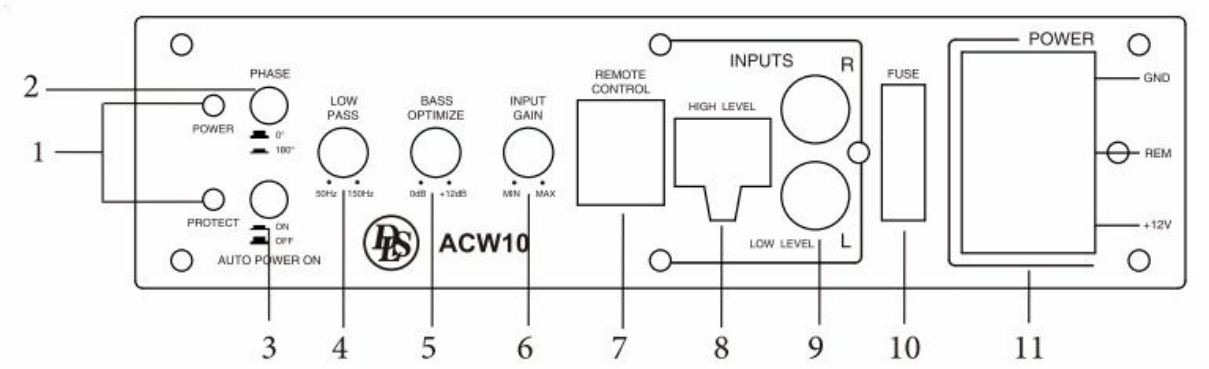
This owner's manual is written in easy English and IJ98S has a lot of drawings ID 91mply the lens! Blallon and use of 1he above amplifiers. Your DLS amplifiers must be installed correctly to perform at their best. Thi8 manual will show you how to Install the amplifier Ilk& a pro. Plaua 11111.d Iha entire manual is beginning the Installation. Install the amplifier yourself If you feel confident with our infections and have the proper tools. However if you feel unsure, tum over 1ha In&!Bllatlon Job ID flOffIElona bllllar sultad to It.

Warranty Service

This amplifier Is covered byW811'811\y, depending ~ on the preconditions In the country where It Is sold. If the Subwoofer is returned for service, please include Iha Original dated receipt with the product.

Technical Assistance

For terms: all assistance ask the shop where Iha product was sold or the distributor in your very country. Information can also be found on our WEB-Alta **www.dlue** We follow a policy of continuous advancement In development. For this reason all or part of specialty: actions & d&lligns may be changed without prior notice.



1. **Power Status Lad**

   This bi-color LED glows green when power is on and no problems are present. If one of the protection circuits comes on, it will change to red.
2. **Phase Shift**

   Use this switch to help compensate for time alignment problems in the system. Such problems usually result from having the subwoofer at a different distance from the listener than the other speakers in the system.
3. **Auto Power On**

   The auto power on (ON/OFF) Is tor high-level (speaker-level) connections. When the switch is in the “ON” position, the subwoofer auto power on when there is signal input. If the amplifier detects no signal input, the amplifier will auto tum off. If you prefer to use the remote to turn on/ off the connection, set the switch in the off position

   Note: Please connect the remote terminal to the remote output of the head unit as Fig.4. When you turn on/off the head unit a receipt pulse can be heard from the subwoofer.
4. **Low Pass Filter**

   This control permits you to define the frequency range you want the subwoofer amplifier to receive. The subwoofer will reproduce all sounds BELOW the frequency you set.

   Note: The low pass filter frequency can be higher or lower than the visual scale.
5. **Bass Optimize**

   The bass optimizes control feature will enable fine tuning of the deepest bass frequencies.
6. **Input Gain Control**

   After you have installed your system, turn this control to a minimum. Turn the head unit on (and the subwoofer will turn on via the remote connection). Turn the head unit volume to about 2/3 full level. Slowly turn up the subwoofer input and gain control until you hear a small amount of distortion. Then reduce the level until the distortion is completely gone. Leave the control in this setting.
7. **Remote Level Control**

   Port Attach the included remote level control to control the volume level of the subwoofer from the dashboard.
8. **High-Level Input**

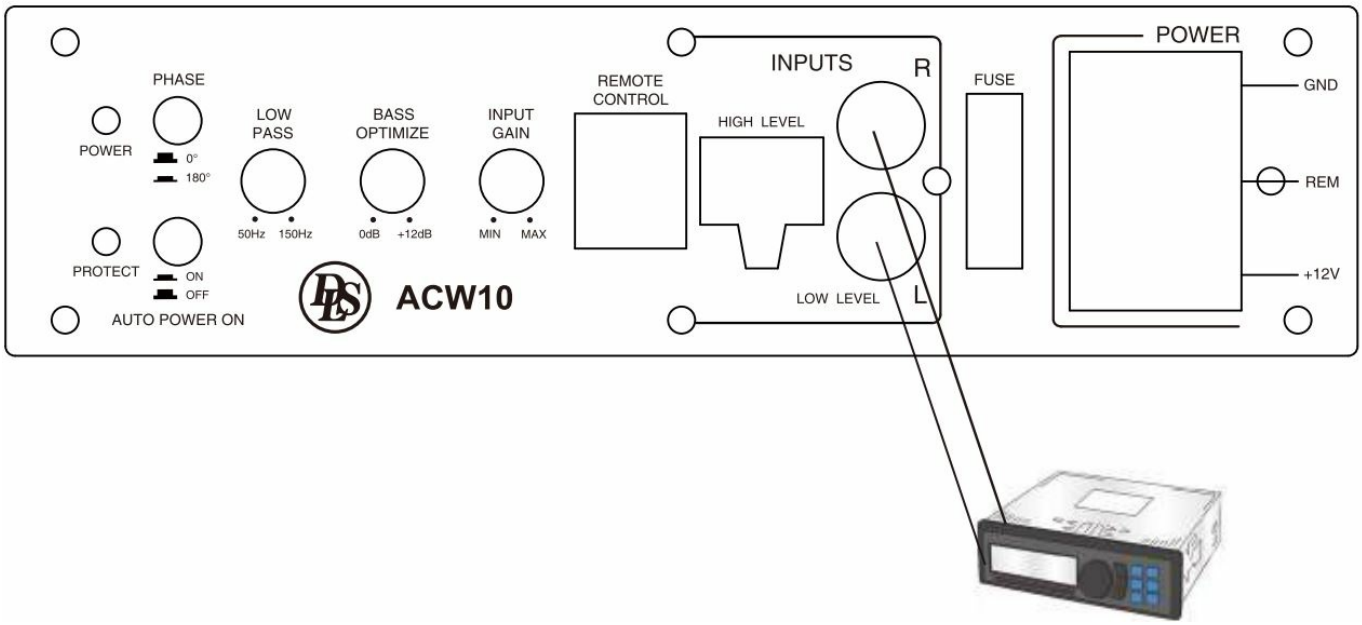
   If your head unit does not have RCA outputs you can use the speaker outputs for the audio source for the subwoofer. Use the supplied cable and wire harness and connect the outputs properly as shown in the connection diagram.
9. **Low-Level Input**

   Low-level inputs are the recommended way to input the audio signal to the subwoofer if RCA outputs are present on your head unit or another signal source (such as a sound processor).
10. **Fuse**
11. **Power Input Terminal**

NOTE: Do not connect BOTH the high level land low-level inputs from your receiver to your amplifier at the same time.

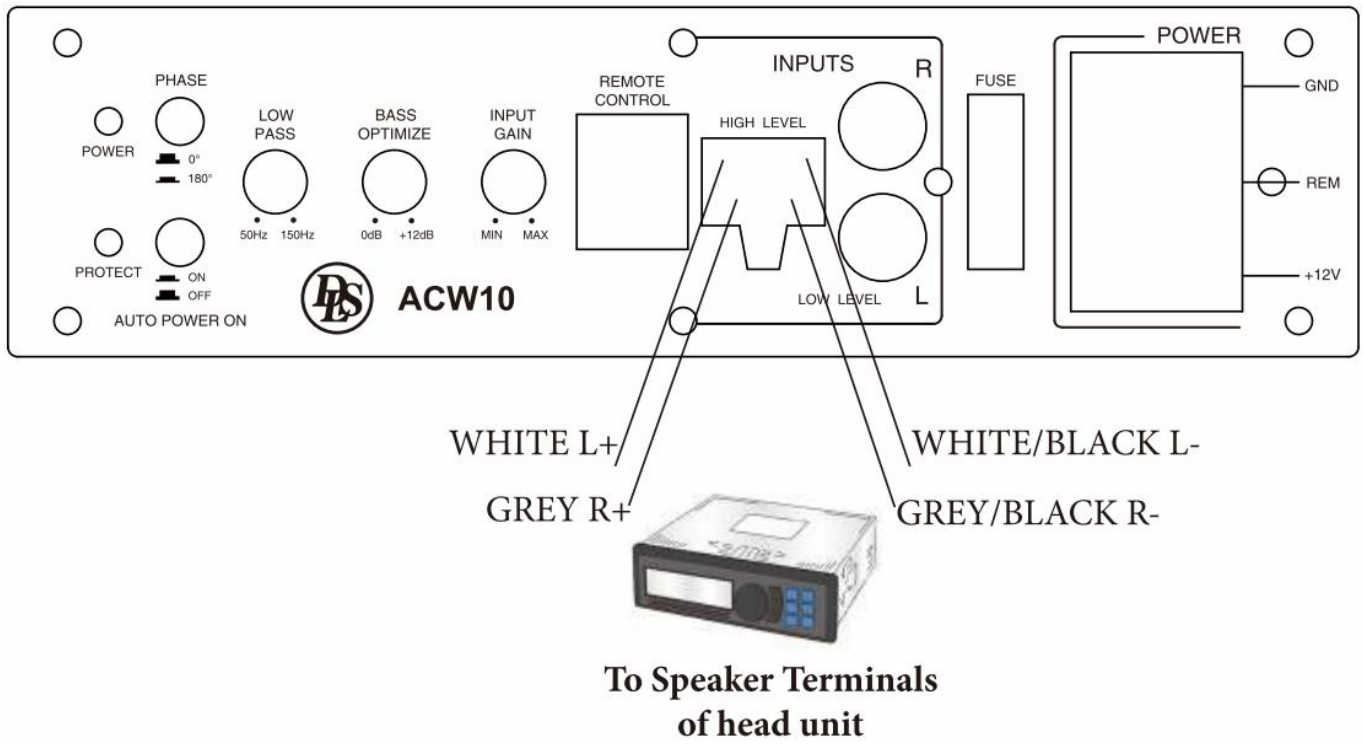
Low-Level Input Wiring

Low-level (RCA) input wiring is preferred for best audio performance. Most trunk or hatchback installations will require a 15-20 feet RCA cable, while pickup trucks and under-seat installations will require a 6-12 feet RCA cable. Always use a high-quality cable



High-Level Input Wiring

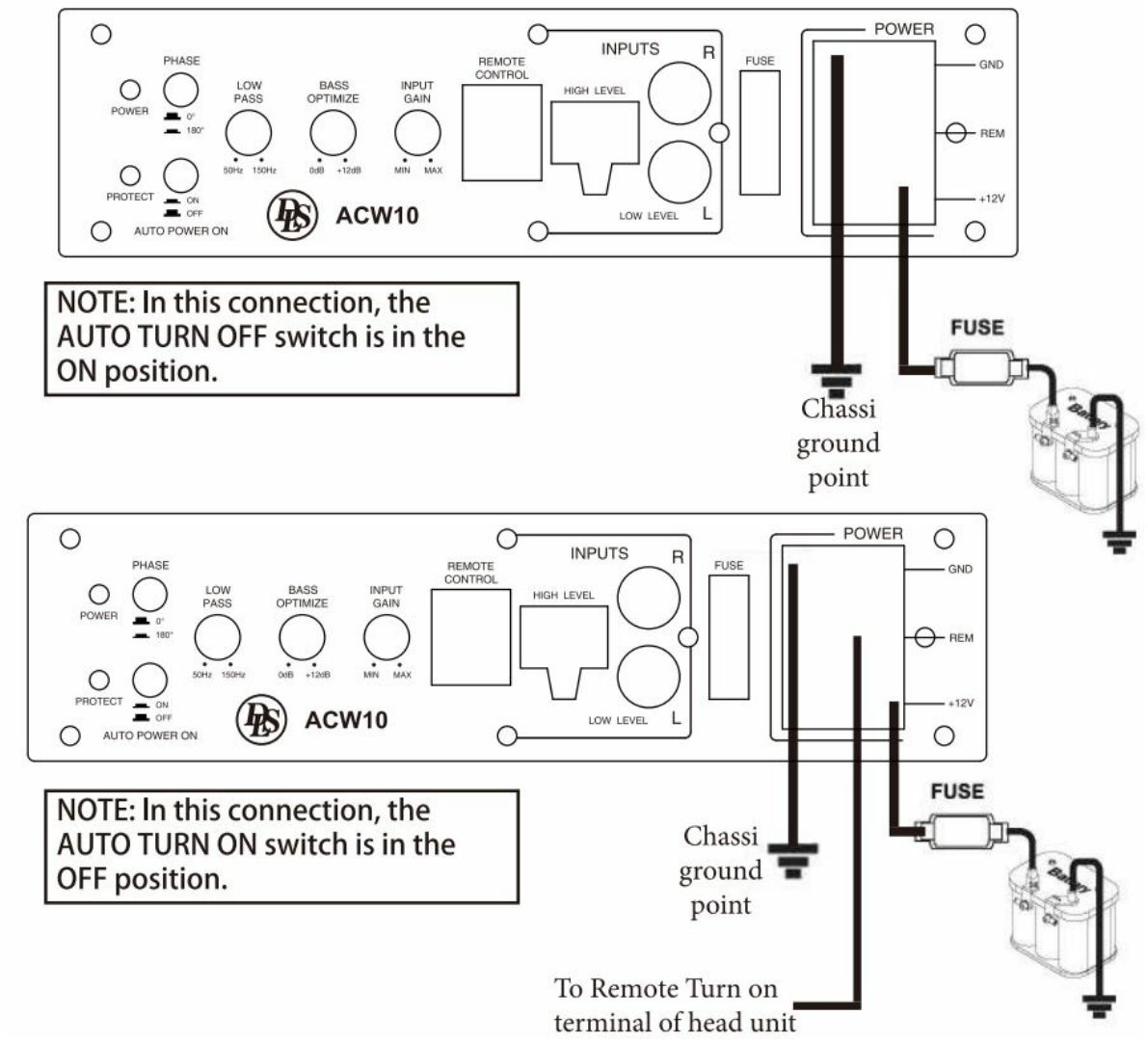
Most head units are pre-installed from the car factory and have no RCA output, in this case, you can use the signal from the speaker output. Connect left and right speaker wires coming from the car stereo to the high-level input as shown. Be sure to observe polarity to avoid audio phase problems.



Power Terminal
Connect the fuse holder as close to the vehicle battery + as possible and connect the cable on the rear panel of the ACW10. Use a ring crimp terminal connector to the battery. to

Remote Terminal
Connect the remote terminal to the remote output of the head unit. This turns on the amplifier whenever the car stereo is turned on.

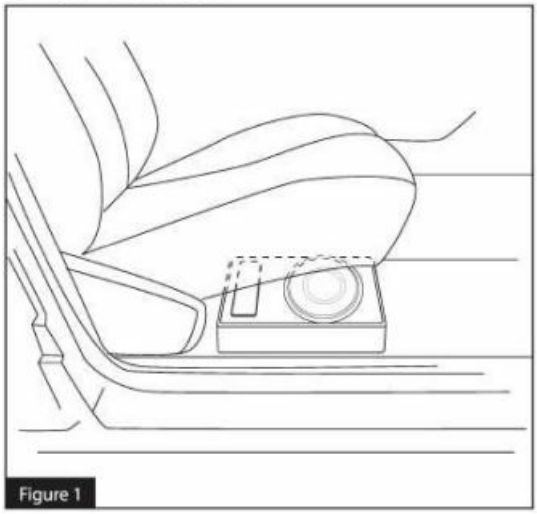
Ground Terminal
Connect to a good chassis ground. The ground connection should be clean, unpainted metal to provide a good electrical connection. Use a wire brush, a scraper, or a piece of an abrasive sheet to clean the metal.



Installation

We include a fixing kit to ensure the subwoofer remains securely mounted. Two types of installation are possible.

Under the seat



1. The seat must be positioned in its normal fixed position.
2. Decide the best location possible that suits your automobile and the space available, checking that the enclosure doesn't restrict the seat mobility. (See Figure 1)
3. Ensure the area for the subwoofer location is clean and tidy. Any loose objects must be removed.
4. Once the location has been decided, mark the screw hole positions for the fixing brackets.

5. Drill holes of 2 mm for the 4 fixing brackets, at your defined locations.
6. Fix the clamps to the subwoofer case with the four screws M6*8 (the fixing clamps have a mounting direction system) see (Figures 2 & 3)
7. Position the subwoofer so that the holes correspond to the metal supplied screws and fix it. (Figure 4) & . Dlanco molo curo the subwoofer enclosure is tightly field

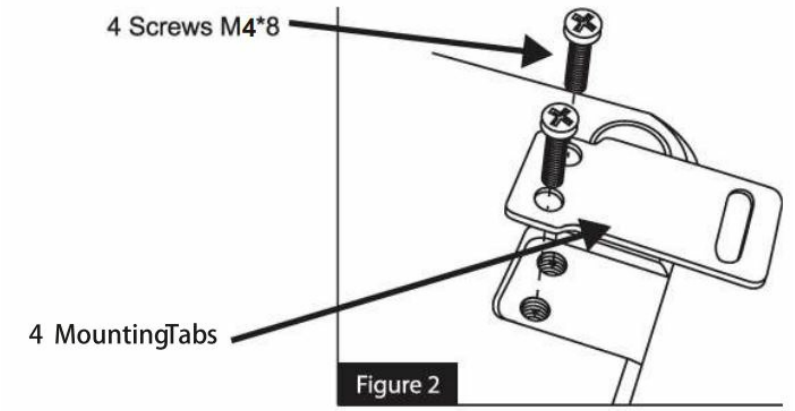


Figure 2

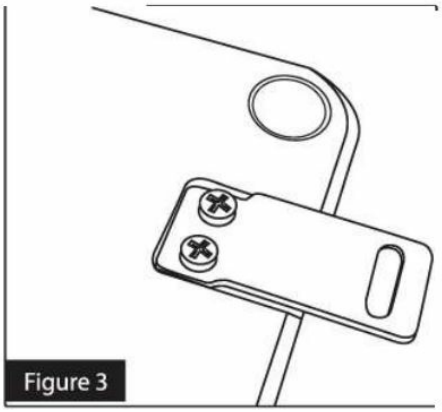


Figure 3

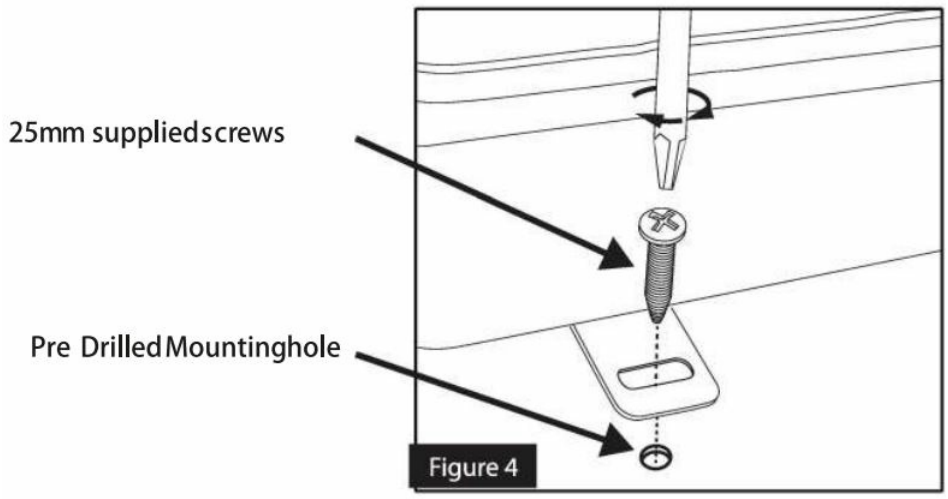
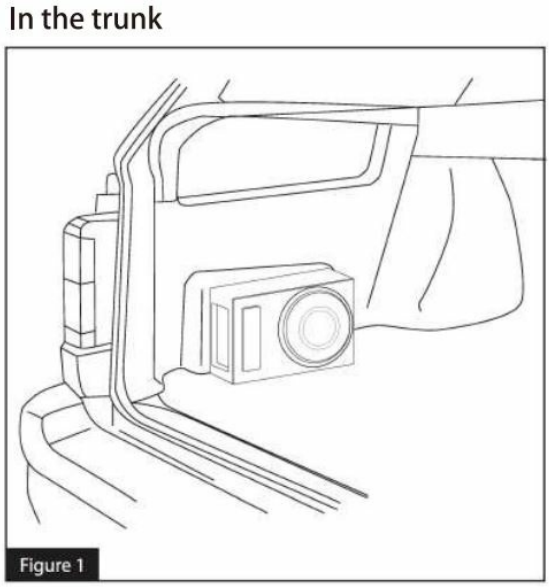
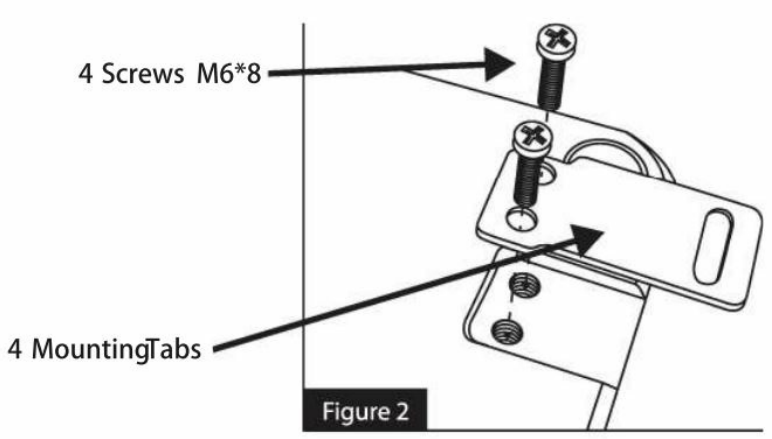
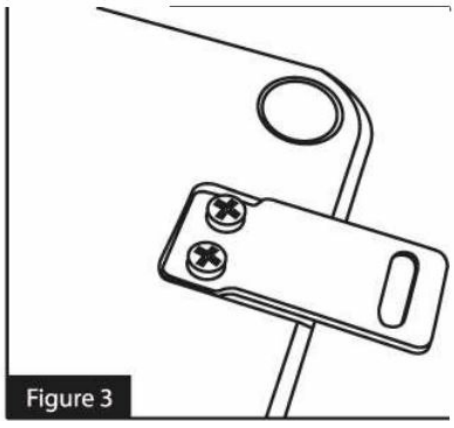


Figure 4



1. Rear seats must be positioned in their normal fixed position.
2. Decide the best location possible that suits your automobile and the space available. The best and most secure location for optimum sound quality is behind the rear seats, on the trunk floor (see Figure 1).
3. Ensure the area for the subwoofer location is clean and tidy. Any loose objects must be removed, as they could knock and damage the subwoofer.
4. Once the location has been decided, mark the screw hole positions for the fixing brackets.
5. Drill holes of 2 mm for the 4 fixing brackets, at your defined locations.
6. Fix the clamps to the subwoofer basket with the four screws M6*8 (the fixing clamps have a mounting direction system) see (Figures 2 & 3)





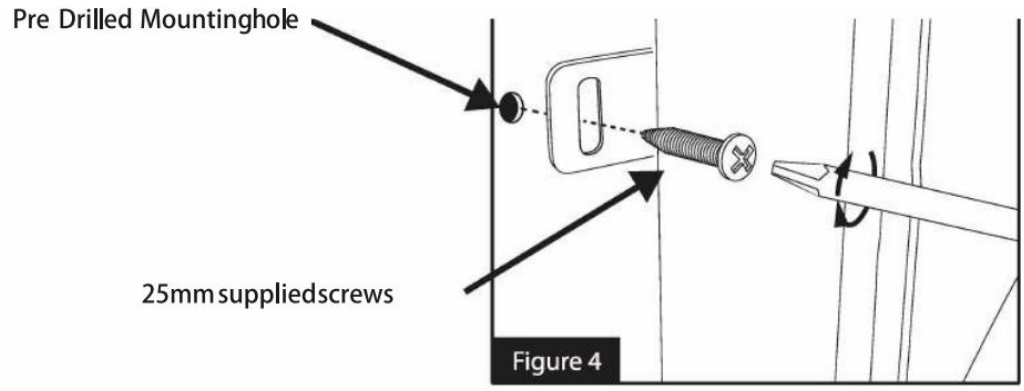


Figure 4

Troubleshooting Testing

If you experience operation or performance problems with this product, compare your installation with the electrical wiring diagram on the previous page: If problems persist, read the following troubleshooting tips which may help eliminate the problems.

The amplifier will not power up.	Check to make sure you have a good ground connection. Check that the Re mote Input {Turn-On) has at least 5VDC. Check that there is battery power on the(+) terminal. Check that there is at least 12v. Check all fuse, and replace if necessary. Make sure that the Protection LED is not illuminated. If it is lit, shut off the am plifier briefly, and then repower it.
Protection **LED** comes on when the amplifier is powered up.	Check for short circuits on the speaker leads. Tum down the volume control on the head unit to prevent overdriving. Remot e speaker leads, and reset the amplifier. If the Protection LED still comes on, then the amplifier is faulty and needs servicing.
No output.	Check that all fuses are OK. Check that unit is properly grounded. Check that the Remote Input {Turn-On) has at least 5VDC. Check that the RCA audio cables are plugged into the proper inputs. Check all speaker wiring.
Low output.	Reset the Level control. Check the crossover control settings.
High hiss in the sound	Disconnect all RCA inputs to the power sub's control panel. If the hiss disapp ears, then plug in the component driving the amplifier and unplug its inputs. if the hiss disappears at this point, go on until the faulty noisy component is fou nd. It is best to set the amplifier's input level control as low as possible. The b est subjective signal-to-noise ratio is achieved in this manner. Try to set the h ead unit as high as possible
Engine noise. (static type)	This is usually caused by poor-quality RCA cables, which can pick up radiate d noise. Use only the best quality cables, and route them away from power c ables.
Engine noise. (alternator whine)	Check that the RCA grounds are not shorted to the vehicle chassis Check th at the head unit is properly grounded.
The amplifier gets very hot.	Check that there is good air circulation around the amp. In some applications, it may be necessary to add an external cooling fan.

Professional Tip:

NOISE PROBLEMS WHINING NOISE VARYING WITH ENGINE REVOLUTIONS:

Do this:

1. 1. Rewire the power supply (12 V) to source the unit direct from the battery.
2. 2. Rewire the ground wire from the source unit to clean the position on the chassis.
3. 3. Check all power connections to ensure that they are clean and tight.
4. 4. Check the quality of the system ground connection.

5. 5. Install a Power Cap capacitor. This can be helpful against most noise problems.

CONSTANT WHINING

NOISE: Do this:

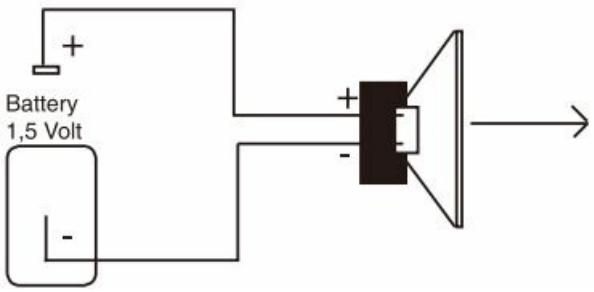
1. Ensure that all equipment has a common ground point.
2. Check the quality of the earth strap connection from the battery negative terminal to the chassis.
3. Disconnect signal cables from the amplifier to see if the noise disappears. If so the leads are picking up noise. Test this by laying a new cable over the seats and reconnecting to the amplifier. If the noise does not return, re-route the original cable away from the source of interference. If noise remains regardless of cable position, try to use so-called Quasi- balanced signal cables. DLS PRO- cables are Quasibalanced.

Installing in trunk
When installing the amplifier in the trunk, run the power wires along the same path as the other vehicle wiring. Many cars have insulated channels for wiring. you will have to remove the door sill trim and the carpet.

SPEAKER POLARITY CHECK

All speakers in a car audio system should be connected in phase (the same polarity). All speaker cones must move in the same direction. Out of phase speakers will cause a lack of bass and a poor stereo soundstage.

Checking polarity:
Hold the connection of the speaker wire to the terminal of a 1,5 Volt flashlight battery. Tap the + wire onto the + terminal of the battery, and observe the movement of the cone. The cone should move outwards when the wire touches the battery, and inwards
when the battery is removed. If it is the other way around, the speaker has been connected backward and it must be removed and connected correctly. If your system also has a subwoofer connected through a passive 6 or 12 dB crossover, try to connect this with various polarities and judge what sounds best. The phase shift in passive crossovers sometimes makes it necessary to change polarity.



NOTE! Tweeters can not be tested this way, double-check the connections instead

Speaker and power wires
Do not run the speaker and power wires next to each other. Power wires can generate a “siren” sound in the speakers. Run the speaker and power wires or opposite sides of the car.

Specifications

1. MODEL: DLS ACW10
2. Power: 200W RMS/450W
3. THD: MAX <0.4%

4. Signal-to-noise ratio: 900B
5. Frequency response: 30Hz-150Hz
6. Input sensitivity, high level: 0.9V
7. Input sensitivity, low level: 300mV
8. Low Pass Filter: 50H2-150H2
9. Bass optimized: Oto+12dB
10. Subsonic Filter: 30Hz
11. Fuse rating: 25A
12. Subwoofer: 10inch,26hm
13. Dimensions(L x W × H) inches/mm: 13.6″345) X 9.6 245) X261

We follow a policy of continuous advancement in development For this reason all or part of the special & designs may be changed without prior notice **www.dls.se**

This product must be returned to the separate collection system for electronic products. Do not dispose of this product together with general household waste.

DECLARATION OF CONFORMITY
DLS amplifiers for vehicles are manufactured in accordance with the EU directive EEC 95/54 (72/245/ EEC) and are marked with the approval number. They are also marked in accordance with the WEEE- directive 2002/96/EC. The products are also produced in accordance with the EU RoHS directive 2002/95/EC.

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- **www.dis.se**

Documents / Resources

	**DLS ACW10 Flat Active Subwoofer** [pdf] User Manual ACW10, ACW10 Flat Active Subwoofer, Flat Active Subwoofer, Active Subwoofer, Subwoofer