

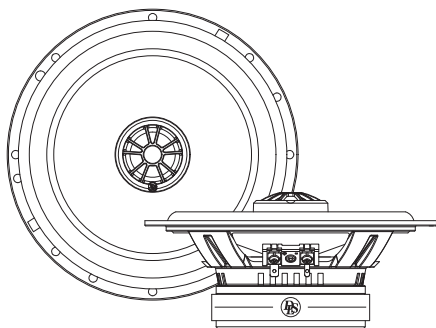
CRPP-U6CX

User Manual

Universal 4 Ohm 2-way Coaxial



CRUISE



Welcome to DLS!

Thank you for purchasing DLS Cruise CRPP-U6CX coaxial speakers. For us, it's all about the sound experience. We care deeply about sound and construction quality. In order for your experience to be as optimal as possible, it is important that you fully read this manual, preferably before you start your installation. Keep the manual in a safe and accessible place for future reference.

Your speakers must be installed correctly in order to work as intended. Make sure you have all necessary tools nearby before starting and that you are completely confident in how to proceed. If you feel the slightest uncertainty; feel free to take the help of an experienced installer or a car audio dealer.

Warranty

This coaxial speaker is covered by warranty, depending on the conditions in the country where it is sold. If the woofer is returned for service, please include the original dated receipt with the product.

DECLARATION OF CONFORMITY

DLS plug and play speakers 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 2012/19/EC. The products are also produced in accordance with the EU RoHS directive 2015/863/EU.

DLS CRUISE CRPP-U6CX

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DLS speakers are engineered by DLS Sweden,
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Designed & Sound tuned in Sweden.



Included parts

Included products:

2pcs Coaxial speakers

Included in box:

8pcs Screws

4pcs Fork terminals

4pcs Flat pin connectors

2pcs Stainless steel Cruise logo badges

2pcs Speaker grills

1pc PRY tool

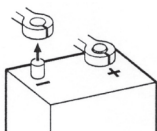
1pc Manual

Pre-installation

Disconnect Battery

Before you start the process of replacing speakers, disconnect and secure the negative terminal from your battery/power source. This will prevent the risk of damaging yourself or the products.

Place the disconnected terminal in a secure and isolated location away from any possible connection belonging to the battery/power source system.



General Info

Some sound systems may vary in size and impedance of the door speaker. Before you start the assembly, make sure that your vehicle has the same size and impedance as these speakers.

The installation process may vary depending on the car model, factory options and other factors.

Take care when removing panels, so there will be no marks. Use plastic pry tools to avoid marks on the panels and damaging the plastic clips.

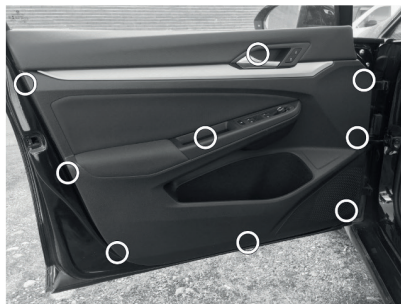
Installation

Disclaimer

Below is the assembly process for a typical application of the DLS CRPP-U6CX coaxial in place of a factory door speaker. However, as CRPP-U6CX is a fully universal woofer, your way of installing the speaker will vary depending on your vehicle and your chosen application.

Remove Door Panel

Disassemble the car door by removing the door panel cover.



Typically the clips/screws are located around the perimeter of the door panel; however this varies depending on the vehicle. Sometimes they are hidden under a plastic cover or behind another panel which can be removed using the included pry tool.



Unscrew any screws and store them in a safe place for later use when reinstalling the door panel.



Loosen the door panel by inserting the pry tool between the panel and the door. Pry the door panel gently, but firm, outward to release the clips.



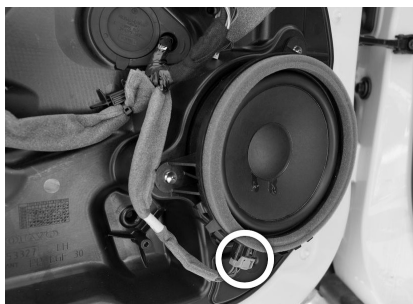
When the door panel is loose, start by softly lifting the panel straight up to remove it.



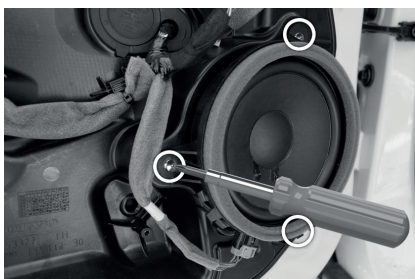
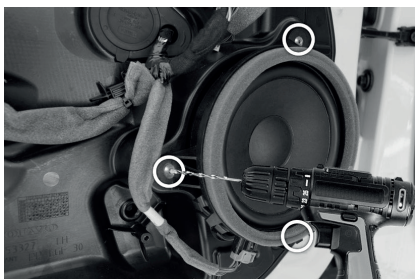
There are often several electrical and mechanical connectors installed in the door panel. Disconnect any connections and remove the door panel.

Remove Speaker

Start by disconnecting the factory speaker connector. In some cases, the speaker connector is located at the rear of the speaker, in which case the speaker needs to be removed from the door first.

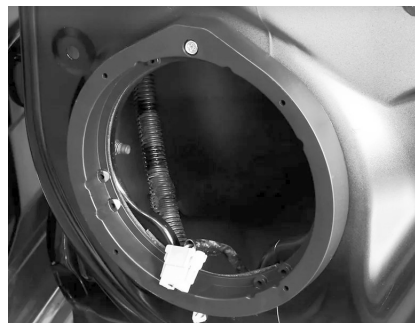


The speaker itself is usually fixed with screws, clips or rivets. Rivets need to be removed using a 4mm drill bit. Loosen any clips/screws/ rivets and the speaker will come loose.



Mount DLS Speaker

In most cases, the factory speaker will have a built-in spacer ring and a different bolt pattern than the DLS speaker. To safely mount the DLS speaker, speaker adapter rings are available separately for most vehicles. Install the speaker adapter ring in place of the factory speaker, either using the same size rivets or using the factory screws/clips.





The next step is to connect the speaker. This is often done by cutting the factory harness and installing the provided crimp terminals onto the factory wire, which are in turn installed on the speaker terminals. If you want to avoid modifying the factory harness, speaker adapter harnesses are available separately for most vehicles, in which case the positive and negative wire is clearly marked. Make sure the DLS speaker is connected with the correct polarity to avoid phasing issues.



Finally, install the DLS speaker in the speaker adapter ring using the provided screws.

Door Insulation (optional)

To achieve an optimal performance from the installed sound system in your vehicle, DLS recommends to complement your installation with separately purchased insulation/sound deadening material.

A good place to start is on the outer skin of the door, the inner sheet metal inside the door and the door panel itself. Using insulation/sound deadening prevents vibrations and rattling and other disturbing noises from plastic details in the doors. The result is less road noise, a quieter car environment along with an increased midbass output and cleaner midrange response. This allows your sound system to deliver the natural DLS sound of high quality for you to enjoy.

Please note that any included or separately purchased insulation material should not be installed in a way that risks interfering with the speaker's ventilation or moving parts. If you need help deciding what type of door insulation material you should use or how to install it properly, ask your DLS retailer for info and guidance.

Insulation is usually installed in two parts: sound deadening with butyl mat and sound insulation with a thicker, sound absorbing mat.

Below you can view examples of two types of soundproofing that is commonly used. **NOTE!** The sound proofing material shown in the examples are not included with the woofers, they are purchased separately.

Door with outer skin and inner sheet metal covered with sound deadening mat:



Door panel with sound isolating foam:





Remount Door Panel

Start the reassembly of the door panels. Follow this manual in reverse order. Reconnect all cables. Connect all plugs to the door panel, reconnect the door handle cable, place the door cover from the top by the window seal and push it down gently. Make sure the clips align with their holes and can engage. Give the door panel a push by the hand to attach to the clips. Mount and fasten all screws/bolts at the correct places.

Hint!

Take care when installing the door panel, to make sure no wires get squeezed and/or pressed against the woofer when it's installed in the door frame.

Run-in Period

To ensure optimal performance from your speakers, it's essential to allow for a proper run-in period. Fresh out of production, the moving parts like spider and suspension in a speaker can be stiff. A bit of exercise is necessary. Once they've had a chance to settle, you'll notice an improvement in sound quality.

Plan to let them play for a minimum of 15-20 hours. This can be achieved using a tone sweep or simply by playing music until they reach their intended performance.

Once the run-in period is completed the speakers now provide a more natural and enhanced music experience.

DLS Support

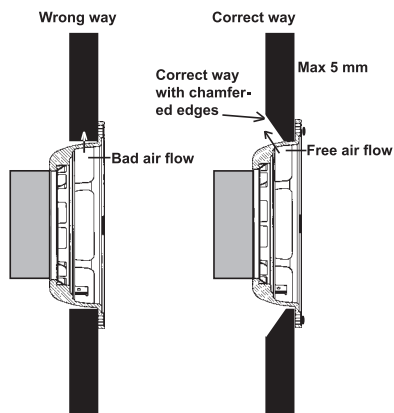
For technical assistance, ask your car audio dealer where the product was sold or the distributor in your country. You can always contact the DLS Support in Sweden via e-mail: info@dls.se. For more information regarding DLS and our products, visit our website: www.dls.se. We follow a policy of continuous advancement in development. For this reason, all or part of specifications and designs may be changed without prior notice.

Installation Tips

Custom Baffle Installation

If you want to improve the sound reinforcement in your installation, you can use a baffle of MDF-board or similar. For door placements, there are normally speaker rings that have to be used to make the speaker fit.

It is very important that the custom baffles are stable and fastened properly, but it is just as important that its shaped in a way that the driver is allowed to "breathe" correctly. Bass reproduction will be enhanced when the air flow is free.



Speaker Polarity

Make sure you connect the cables with correct polarity on the speaker terminals. Observe the markings and size differences on the connectors.

Speaker phasing

To ensure that the CRPP-U6CX coaxials are connected with the correct polarity (phase), you can easily check the phase using a 1.5 V battery.

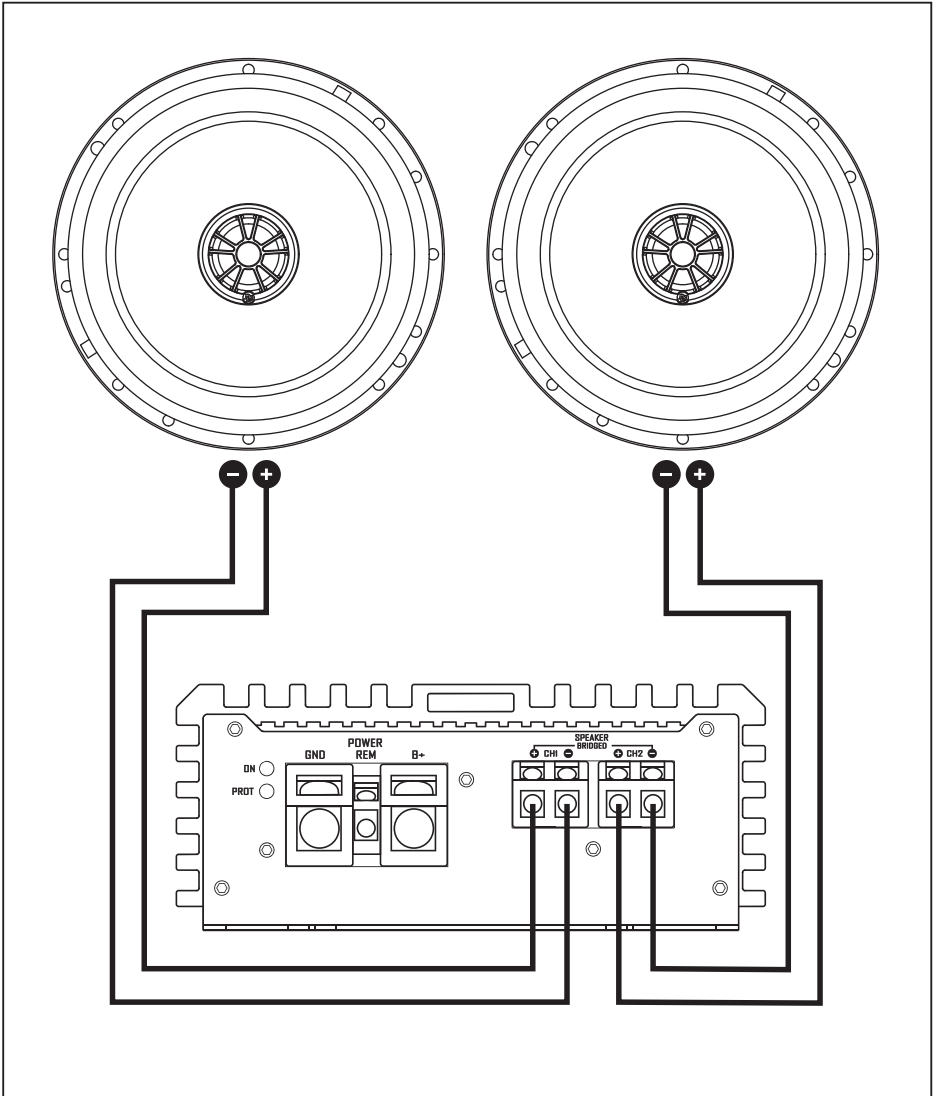
Connect the battery's positive and negative pole to the speaker cable. If the speaker is correctly connected the woofer cone should move outwards. This needs to be tested on all left/right pairs to make sure all drivers are in phase with each other.

Note!

Do not use this testing method on tweeters or other low excursion drivers without a correctly connected high pass crossover.



Wiring Diagram





Specifications

DLS Cruise CRPP-U6CX Coaxial Speaker Technical Specifications		
Size	6.5" / 165 mm woofer and 1" / 25 mm tweeter	
RMS Power	90 W	
MAX Power	180 W	
Impedance	4 Ohm	
Sensitivity	91 dB 1W/1m	
Freq. range	59 Hz - 23 kHz	
Crossover	4800 Hz 6 dB / Oct with Mundorf caps	

DLS Cruise CRPP-U6CX Woofer Technical Specifications		Electro-Acoustic Parameters	
Size	6.5" / 165 mm	Re	3.2 Ohm
Voice Coil Size	1" / 25 mm	Fs	67 Hz
Voice Coil Material	Copper wire / Kapton® former	Mms	14.7 gr
Basket	Glass Fiber Reinforced ABS	Cms	0.419
Magnet	Ferrite	Vas	13.1 L
Cone	Glass fiber	Qts	0.78
Suspension	Rubber	Qes	0.91
		Qms	6.3
		Bl	4.35 T.m
		Spl	88.5 dB 1W/1m
		Sd	139 cm²

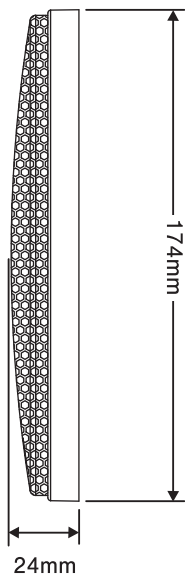
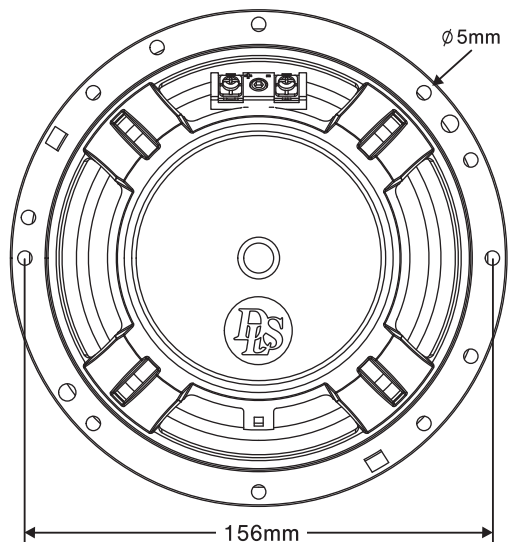
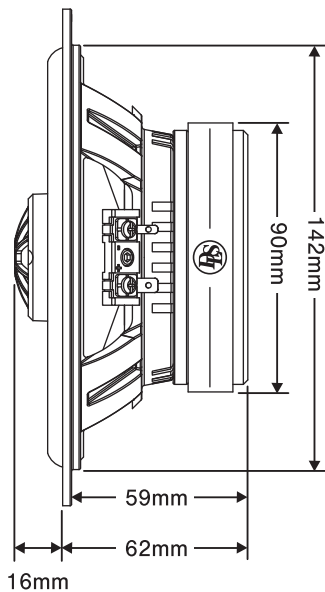
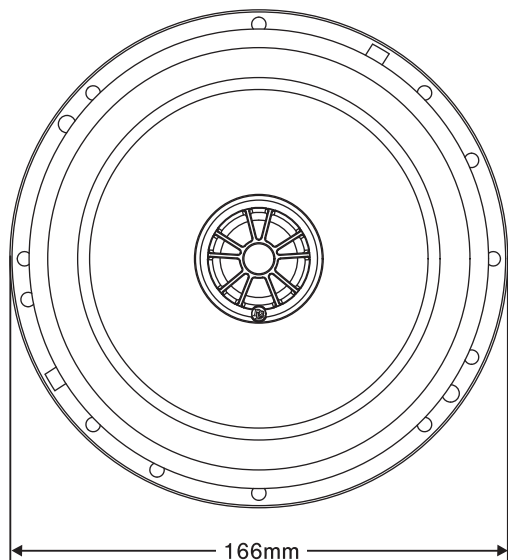
DLS Cruise CRPP-U6CX Tweeter Technical Specifications	
Size	1" / 25 mm
Voice Coil Material	CCA wire / Aluminum former
Frame	Glass Fiber Reinforced ABS
Magnet	Neodymium
Cone	Natural silk dome

Impedance vs. Frequency

Frequency (Hz)	Impedance (Ohm)
20	3.5
50	6.0
70	18.0
100	5.0
200	3.5
500	3.8
1000	5.0
2000	6.0
3000	7.0
5000	7.0
10000	5.0
20000	3.5



Dimensions





Product Markings



The crossed-out wheelee bin symbol means that the product, literature and packaging included must be taken to separate collection at the end of their working life. Do not dispose of these products as unsorted municipal waste: take them for recycling. For info on your nearest recycling point, check with your local waste authority.



This product has been granted with the CE certification mark to show that the product follows the health, safety, and environmental protection standards for products sold within the European Economic Area (EEA).



DLS products comply with the relevant provisions of the RoHS Directive for the European Union. In common with all Electrical and Electronic Equipment (EEE) the product should not be disposed of as household waste. Alternative arrangements may apply in other jurisdictions.



DLS is a global partner of the European Mobile Media Association, an organisation that focus on promoting the custom made mobile media installations to consumers.

We follow a policy of continuous advancement in development. For this reason all or part of specifications & designs may be changed without prior notice. We reserve for possible typos, factual or numeric errors that may have been printed on any products, package designs, user manuals and/or other included accessories.



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