



ULTIMATE Iridium SERIES CAR AUDIO SPEAKERS

Improved 2005 versions with diecast baskets

Iridium 6.2i
Iridium 8.2i
Iridium 6.3i
Iridium 8.3i
Iridium 3

WELCOME

Thank you for buying a DLS ULTIMATE Iridium speaker. This manual will show you how to do a correct installation. Please read the entire manual before beginning the installation. Install the speakers yourself if you feel confident with our instructions and if you have the proper tools. The ULTIMATE Iridium speakers are our best speaker line but a poor installation job can destroy the final result even from these speakers. So if you feel unsure, turn over the installation job to someone better suited to it.

INSTALLATION

Speaker drivers:

Mount the bass speakers in the door sides of your car. Normally they will fit in the factory pre-made mounting holes. If you want an improved sound reinforce with a baffle of MDF-board or similar. An installation high up on the door side is to be preferred. An alternative installation is in so called kick panels down on each side of the floor with the speakers facing up- and inwards towards the listener. You can also build a separate sealed box in the door side.

The tweeter can be installed on the dash-board, or recessed in the door using the accessories coming with the tweeter.

The 3" midrange driver in the 3-way systems can be installed in the same mounting hole as a normal 4" speaker.

It is important to fasten the speakers properly in order to avoid bad sound or rattling.

Filter boxes:

It's vital that the filter boxes are attached properly to the interior of the vehicle to avoid rattling. Don't place them close to the internal wiring of the car, this can cause interference.

Avoid to install filter boxes in the door sides because they can easily be broken because of rattling or moisture.

Wiring:

Use high quality speaker cables. Avoid using the factory pre-installed cabling, they will not give the sound reproduction that you should expect from the Iridium speakers. The DLS SCP cable is a perfect allround cable for all kind of speakers.

Make sure the cables don't get jammed causing a short circuit to ground. This can damage the output circuits of your head unit or amplifier.

The sealing strip coming with the bass drivers should be used for improved sealing between the bass element and the mounting surface.

The tweeter installation is described on page 3, or in the instruction sheet coming with the tweeter.

TWO-WAY SYSTEMS Iridium 6.2i & 8.2i

These 2-way systems have a separate 28 mm tweeter. The filters are combined lowpass and highpass in a plastic box with selectable tweeter level inside.

On the following pages you can see how to connect the filters.

The filters must be used, if you connect without them the sound becomes bad and you will destroy the tweeter. You don't have to use the passive crossover if the system is connected to separate amplifiers and an active crossover.

THREE-WAY SYSTEMS Iridium 6.3i & 8.3i

These 3-way systems have separate 28 mm tweeter and Iridium 3, 3" midrange. The filter components are mounted in two plastic boxes with selectable tweeter and midrange level inside. There is one box for the midrange driver and another box for bass and tweeter.

On the following pages you can see how to connect the filters.

The filters must be used, if you connect without them the sound becomes bad and you will destroy the tweeter. You don't have to use the passive crossover if the system is connected to separate amplifiers and an active crossover.

SPEAKER ENCLOSURES

If you want to install the speaker in an enclosure the recommended sizes are:

Iridium 6,5" bass driver in a kick panel:
min 4 liters (0,14 cuft) and max 6 liters (0,21 cuft).

Iridium 6,5" bass driver in door side: 6 liters (0,21 cuft) sealed box.

Iridium 8": Use open air mounting door side only. Boxes will be too big for door sides or kick panels.

WARRANTY SERVICE

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



Technical Assistance

For technical assistance ask the shop where the product was sold or the distributor in your very country. You can always phone the DLS Helpdesk in Sweden + 46 31 840060 or send an e-mail to info@dls.se

Information can also be found on our WEB-site www.dls.se
We follow a policy of continuous advancement in development. For this reason all or part of specifications & designs may be changed without prior notice.

SPEAKER FACTS FOR DLS ULTIMATE Iridium SERIES

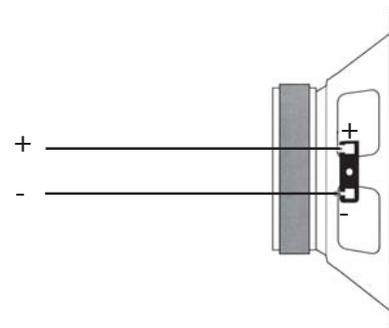
Model	Woofers	Mid	Tweeter	Nom. power	Max power	Sensitivity	Magnet size	Inst. depth	Mounting hole bass	Crossover
IR 6.2i IR 8.2i	16,5 cm / 6,5" 20 cm / 8"		28 mm / 1,1" 28 mm / 1,1"	100 W 100 W	160 W 160 W	91 dB 91 dB	85 mm / 3,35" 85 mm / 3,35"	65 mm / 2,56" 70 mm / 2,76"	140 mm / 5,51" 180 mm / 7,09"	Separate box Separate box
IR 6.3i IR 8.3i	16,5 cm / 6,5" 20 cm / 8"	IR 3" IR 3"	28 mm / 1,1" 28 mm / 1,1"	100 W 100 W	160 W 160 W	91 dB 91 dB	85 mm / 3,35" 85 mm / 3,35"	65 mm / 2,56" 70 mm / 2,76"	140 mm / 5,51" 180 mm / 7,09"	Separate box Separate box
IR 3		3"		100 W	160 W	91 dB	80 mm/3,15"	35 mm/1,38"	95 mm/ 3,74"	

RUNNING-IN PERIOD

Allow the speakers to play for at least 15-20 hours. After this time the performance is correct.

CONNECTION OF SPEAKERS

Make sure you connect the cables with correct polarity to the speakers. Observe the markings on the terminal. The small terminal is minus.

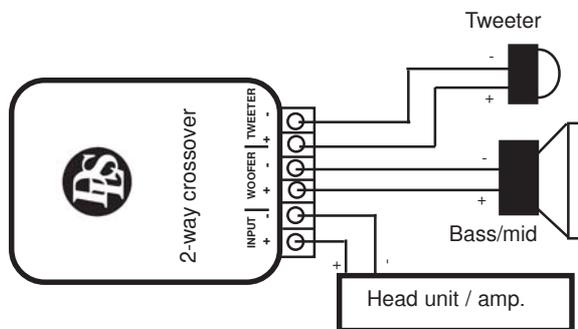


SPEAKER PHASING

To be sure to have the correct speaker polarity (phase) you can check this by using a 1,5 Volt battery. Connect a cable from the battery plus-pole to the speaker plus, and a cable from the battery minus to the speaker minus. If the speakers are correctly connected the speaker cone should move outwards on both right and left channel. This check must be made on the cables going from the speakers, to the output terminals of your car stereo or amplifier.

FILTER/CROSSOVER INSTALLATIONS

Filter installation and connection of Iridium 6.2i

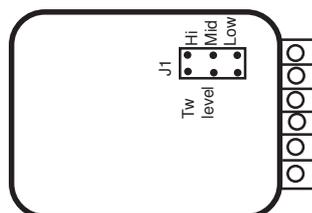


THE JUMPERS INSIDE THE FILTER:

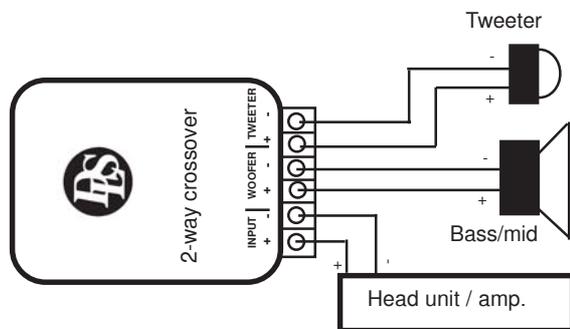
TWEETER LEVEL JUMPER

Select between three different tweeter levels by moving the small jumper J1 inside the filter box.

High level Mid level Low level



Filter installation and connection of Iridium 8.2i

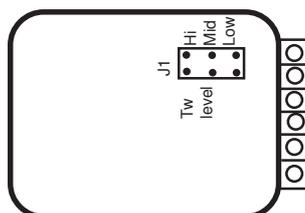


THE JUMPERS INSIDE THE FILTER:

TWEETER LEVEL JUMPER

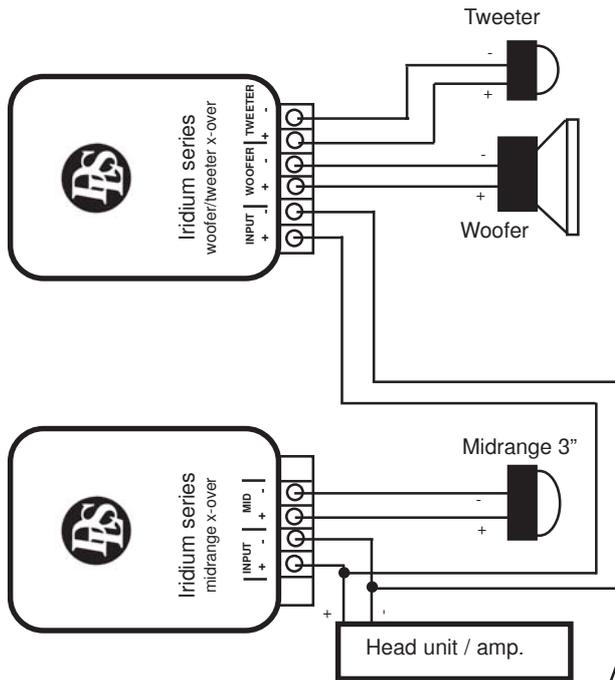
Select between three different tweeter levels by moving the small jumper J1 inside the filter box.

High level Mid level Low level



FILTER/CROSSOVER INSTALLATIONS

Filter installation and connection of ULTIMATE Iridium 6.3i and 8.3i three way systems



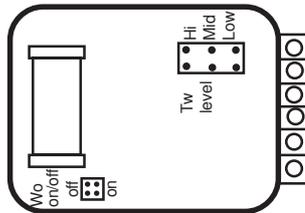
Jumper settings in filter boxes

There is one filter box for woofer and tweeter with the tweeter level adjustable in three steps.

TWEETER LEVEL JUMPER

Select tweeter level by moving the small jumper inside the filter box.

High level Mid level Low level

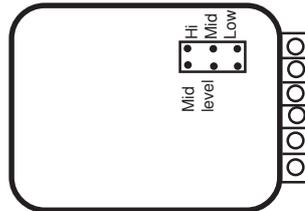


There is a second filter box only for the midrange with the midrange level adjustable in three steps.

MIDRANGE LEVEL JUMPER

Select midrange level by moving the small jumper inside the filter box.

High level Mid level Low level



Using active crossover to the midbass driver.

If you want to run the midbass driver with active crossover, not using the passive filter box, you must disconnect the midbass driver filter circuitry. This is done by moving the woofer jumper to OFF-position.

Tweeter installation Iridium 1i

RECESSED MOUNTING 1:

You need a hole with a diameter of 46 mm / 1,88" in the door side.



RECESSED MOUNTING 2:

Sometimes it's necessary to install the tweeter at places where you can't use the round flange. The flange (A) is possible to remove from the tweeter element (B) by turning it CCW.

If you prefer to install the tweeter with the flange attached to the tweeter element, we recommend you to add a string of strong glue on the bottom side, between flange and chamber, to secure it. This gives you the best sound reproduction in this installation.



FACTS ABOUT DLS Iridium 1i TWEETER

Art.no	10-255011
Size	28 mm
Nom. power (RMS)	50 Watts (80 Watts max)
Freq. range	1 kHz-25 kHz
Sensitivity	93 dB
Fs	900 Hz
Overall dimensions	62 mm / 2,44"
Magnet	28 mm / 1,1" neodymium
Mounting depth	26 mm / 1"
Mounting hole	46 mm / 1,81"
Cone material	Hand treated fabric



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