



# ULTIMATE UP-SERIES CAR AUDIO SPEAKERS

UP5i  
UP6i  
UP8i

## WELCOME

Thank you for buying a DLS ULTIMATE UPi-series 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 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. For baffle installation see our advice on next page. 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.

The tweeter can be installed recessed in the door or A-pillar.

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 these high class speakers. The DLS SC or SCP cable is a perfect allround cables 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 tweeter installation is described on next page.

## TWO-WAY SYSTEM

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

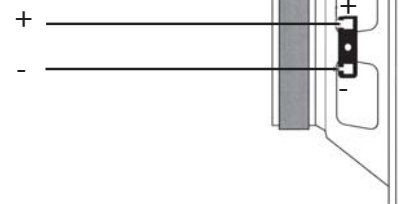
## RUNNING-IN PERIOD

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.

## 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](mailto:info@dls.se)

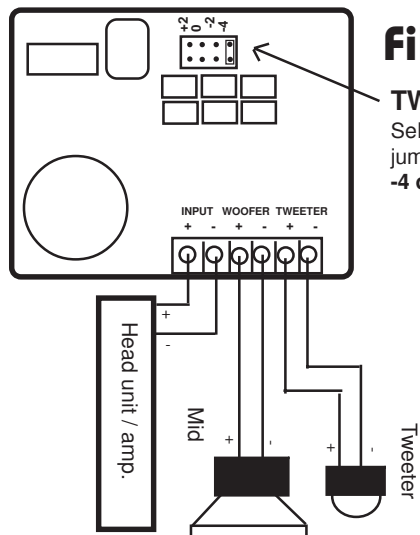
Information can also be found on our WEB-site [www.dls.se](http://www.dls.se) We follow a policy of continuous advancement in development. For this reason all or part of specifications & designs may be changed without prior notice.



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# SPEAKER FACTS FOR DLS ULTIMATE UP-SERIES

Model	Woofers	Mid	Tweeter	Nom. power	Max power	Sensitivity	Magnet size	Inst. depth	Mounting hole bass driver	Crossover
UP5i	13 cm / 5,25"		28 mm / 1,1"	120 W	180 W	89 dB	62 mm / 2,44"	58 mm / 2,28"	120 mm / 4,72"	Separate box
UP6i	16,5 cm / 6,5"		28 mm / 1,1"	150 W	180 W	88 dB	62 mm / 2,44"	63 mm / 2,6"	140 mm / 5,51"	Separate box
UP8i	20 cm / 8"		28 mm / 1,1"	150W	200W	89 dB	62 mm / 2,44"	68 mm / 2,7"	182 mm / 7,16"	Separate box



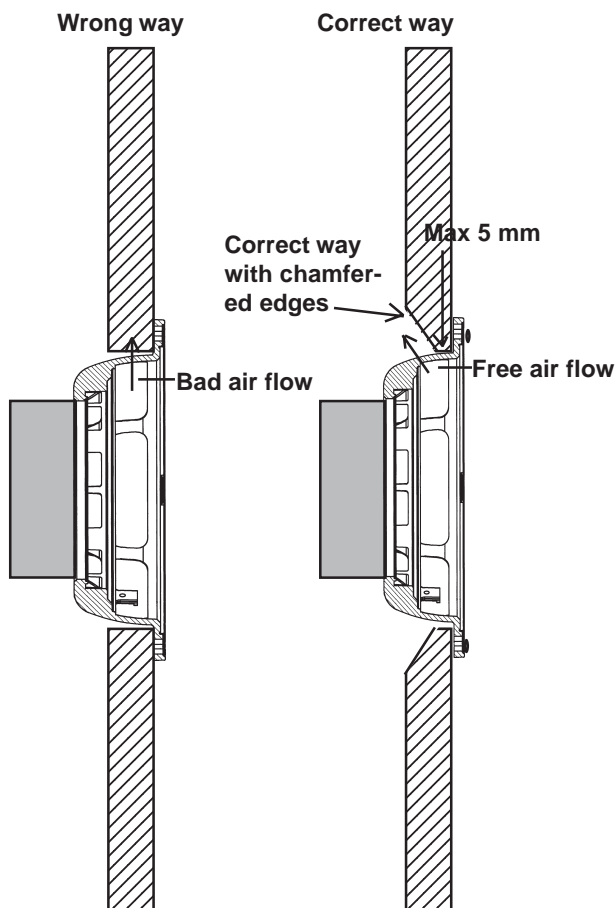
## Filter installation and connection.

### TWEETER LEVEL JUMPER

Select between four different tweeter levels by moving the small jumper inside the filter box.  
-4 dB, -2 dB, 0, +2 dB

## Installation in baffles:

It is very important that the baffle is stable, but it is just as important that it is shaped in a way that allows the driver to "breathe" backwards, otherwise there will be a lack in the drivers bass reproduction.



## Installation of tweeter:

### SURFACE MOUNTING:

For angled surface mount together with the angled cup:  
The tweeter element is attached to the cup by fitting the three wings on the angled cup into the tracks of the element and then turn it clockwise. When removing the element from the cup, turn it ccw and lift it up.



### RECESSED MOUNTING:

You need a hole with a diameter of 48 mm / 1,89" in the door side. Put the two metal wings through the two tracks in the center of the cup, just as the picture shows, and attach them with the M4 screw and nut through the center hole. The cup is attached to the door side when the metal wings is pressed to the back side of the door.

Put the tweeter element into the cup with the cable going out through the bottom hole. Then attach the element into the cup and turn it clockwise to attach to the cup. When removing the element from the cup, turn it ccw and lift it out



### FACTS ABOUT THE UP1i TWEETER

Size	28 mm / 1,1"
Nom. power (RMS)	50 Watts (80 Watts max)
Freq. range	1,5 kHz-20 kHz
Sensitivity	93 dB
Magnet diameter	28 mm / 1,1"
Mounting depth	18 mm / 0,71"
Mounting hole	48 mm / 1,89"
Cone material	Hand treated fabric