# Owner's Manual DLS On-wall speakers

# Flatsub 8 Flatsub 8 Large



since 1979

#### Introduction!

Please read this manual fully before unpacking and installing the product. It will help you to optimise the performance of your speakers.

# **Unpacking and maintenance**

Your speaker should be treated with the same care you would treat a piece of furniture. Use only a piece of soft cloth to clean the loudspeakers. After unpacking, we suggest you retain all packing material for future transports.

# Running-in period

The performance of the speaker will change subtly during the listening period.

Please allow your new speakers to play about 20 hours of music at normal listening level before doing any critical listening.

#### System

DLS Flatsub 8 is an efficient, active subwoofer with a built-in 100 W analogue power amplifier. The loudspeaker unit is a specially developed, 8", long-stroke woofer with a powerful magnetic system.

DLS subwoofer is designed to interact with Hi-Fi equipment, surround installations and multi-media systems. The subwoofer allows great freedom in placement. With the control you can adjust phase, crossover frequency and level, which makes it easy to adjust for the acoustics in your listening room.

## Connecting power supply

The switch "Power" is the on/off switch for the subwoofer. Normal position is AUTO ON which makes the subwoofer start with the rest of your system, POWER LED glows green. After a period without input signal the amplifier atomatically reverts to standby, POWER LED glows red. The power switch "OFF" position is used when the subwoofer should not be used for some time.

#### **CAUTION!**

If you hear distortion when you increase the volume this is normally a sign of overloading the subwoofer and you should immediately reduce the level. We recommend that you use the volume control with care.

#### Service

Should your DLS loudspeaker system require service, or if you have difficulty in achieving the fine performance of which your DLS loudspeaker system is capable, consult the DLS dealer from whom the system was purchased. Your dealer has the knowledge required to provide expert advice and assistance. In case the DLS dealer is unable to assist you, you are welcome to contact the DLS Technical Department.

### Warranty

This DLS loudspeaker is warranted to the original purchaser, against factory defect in material or workmanship, for a period of one (1) year from the date of original purchase. This warranty is valid only in the country of purchase, to the original purchaser and is non-transferable.

DLS loudspeakers are music listening devices and should be used for listening purposes only

They must not be connected to any other equipment than amplifiers within the specified power range.

DLS cannot be held responsible for damage or injuries caused by improper use, or use in violation with the recommendations in this leaflet.

## **IMPORTANT!**

Before connecting electricity to the power supply, it is important that the POWER switch is **OFF** and check that the AC switch 115V - 230 V is set at correct voltage for your country

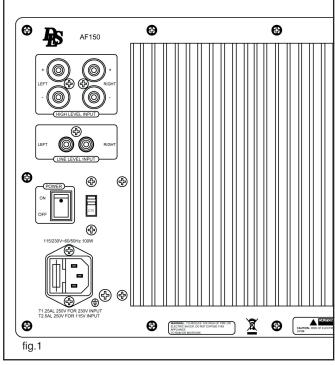
Connect the subwoofers input signals before you switch the POWER switch to AUTO ON.



Marking by the "CE" symbol indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community



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



#### **DESCRIPTION OF SUBWOOFER AMPLIFIER**

Fig. 1, Rear amplifier panel.

#### **LINE LEVEL INPUT**

RCA socket for line low level input

#### **HIGH LEVEL INPUT**

For connection from the amplifier speaker outputs

#### **POWER**

Main power switch

# POWER INPUT SOCKET

Power input socket with fuse holder

# VOLTAGE SELECTOR SWITCH

To adjust amplifier for 115 or 230 Volt connection

## Fig.2, Front panel behind the speaker grill.

#### **POWER LED**

Red for standby and Green for subwoofer active

#### VOLUME

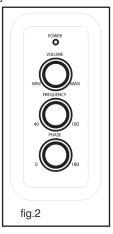
Control for adjusting subwoofer level to system

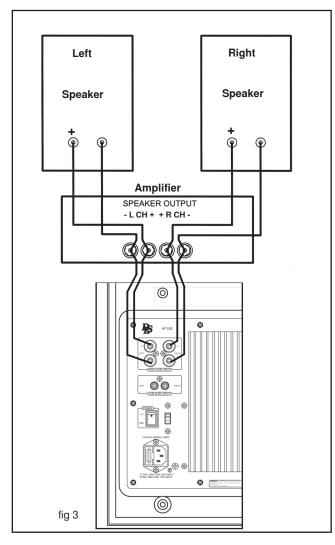
# FREQUENCY

Control for adjusting the x-over frequency to the subwoofer.

#### PHASE

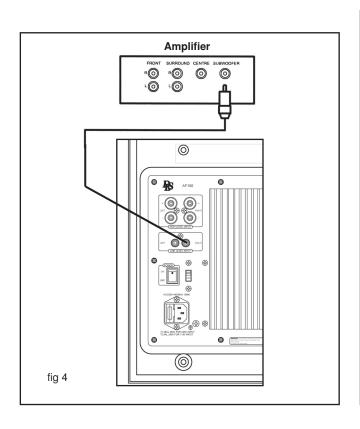
Control for phase shifting the subwoofer sound





#### Technical data for amplifier module AF-150

Output power: Woofer unit Q-sub 8: Cross-over frequencys: Sensitivity, line in: Sensitivity, high level in: Phase: 150 Watts class AB 8" / 20 cm 40-150 Hz 200 mV / 12 kohm 4V / 15 kohm 0° to180° continuously



#### **CONNECTION ALTERNATIVES:**

#### -SPEAKER LEVEL INPUT

Connect the speaker outputs of the stereo power amplifier to "left (L) & right (R) "HIGH LEVEL INPUT" respectively, fig. 3

#### - SURROUND SYSTEM CONNECTIONS

Surround amplifiers provide a separate subwoofer line output, use a "Line Cable" from this output to **LINE LEVEL INPUT** right (R), fig. 4. You can also use a "Split Cable" to connect the subwoofer line output to both **LINE LEVEL INPUT**, left (L) and right (R), fig.5. The sensitivity then increases with 6 dB.

#### 2-CHANEL STEREO CONNECTIONS

#### -Line level input

Should your amplifier have separate pre-amplifier outputs, you should connect those to **LINE LEVEL INPUT**, left (L) and right (R). Use a "Stereo Line Cable". Your front speakers remain connected to the loudspeaker outputs of the stereo amplifier.

#### **SOUND ADJUSTMENTS**

#### **VOLUME** control

This control is used to adjust the balance between subwoofer and front or satellite speakers. Once you have found a pleasant balance there should be little need for further adjustments. Trust your ears and your personal taste to find the correct setting.

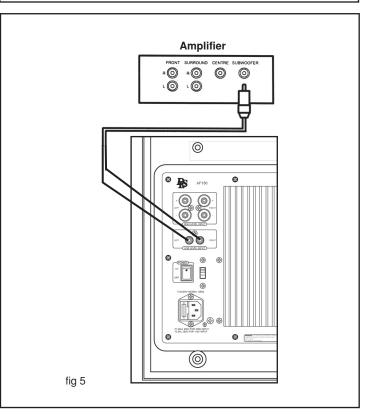
#### LOW-PASS FREQUENCY control.

The active crossover network of the DLS Flatsub 8 can be continuously adjusted from 40 to 150 Hz. This frequency is the split frequency between the subwoofer and the front or satellite speakers. A higher crossover frequency eases the load of the front speakers while a lower crossover improves the stereo image. As with the level control you need to try out what suits your equipment, room and ears the best.

#### PHASE control.

This switch changes the phase of the subwoofer sound continuously from 0 to  $180^\circ$ . Normal position is  $0^\circ$ , but for reasons of placement it could occur that subwoofer and front speakers are out of phase at the crossover frequency.

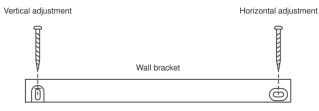
You recognize this as weak bass reproduction that just barely can be adjusted with the level control. Instead you adjust the phase. Turn the control slowly clockwise while playing music until you here the bass sound improve, your ears are the proper instrument to decide when the sound is correct.

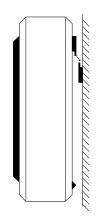


#### Placing in the room

The Flatsub 8 is designed for hanging on a wall, down near the floor as in the photo, or any other position on the wall. A wall bracket is included with the speaker. The wall bracket is attached on the wall as in the drawing below.

Another way is to place it lying under a furniture, for example a sofa.



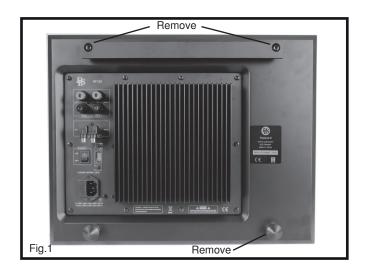




## Change of hanging direction

The hanging direction of Flatsub 8 wall can be changed by moving the wall bracket as described below.

- 1. This photo shows the original placing of the wall bracket. Fig 1.
- Remove the bracket by removing it from the rear side using a T30 torx screw driver.
   Remove the lower right removable foot. See figure. 1& 2
- 3. Remount the bracket and adjustable foot as in figure 3.





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